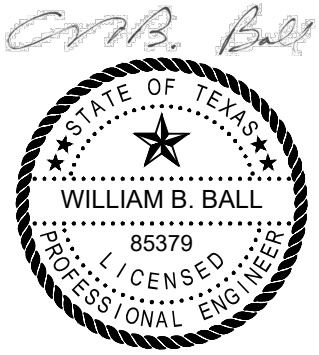
CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR
SEGMENT 2

Texas Water Development Board
Clean Water SRF – Project No. 73819

CITY COUNCIL

Bill Foulds, Jr.	**Mayor**
Taline Manassian	**Mayor Pro Tem**
Wade King	**Place 2**
Geoffrey Tahuahua	**Place 3**
Travis Crow	**Place 4**
Sherrie Parks	**Place 5**

City Administrator
Michelle Fischer



09/23/2025

SEPTEMBER 2025

PREPARED BY

BURGESS & NIPLE
Engineers ■ Planners

235 Ledge Stone Dr,
Austin, Texas 78737
(512) 432-1000

B&N Job No.: 39676 Firm Registration No. F-10834

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NOTICE TO BIDDERS

The **City of DRIPPING SPRINGS** will receive sealed Bids for **CITY OF DRIPPING SPRINGS TWDB – CWSRF PROJECT NO. 73819 – WEST INTERCEPTOR SEGMENT 2** until **10:00 AM, local time, October 24th, 2025** in person at the Office of the Engineer: Burgess & Niple, Inc, 235 Ledge Stone Drive Austin, TX 78737. All Bids will be publicly opened and read aloud at **10:00 AM, local time, October 24th, 2025.** A non-mandatory Pre-Bid will occur at **2:00 PM, local time, October 17th, 2025** in person at the Office of the Engineer: Burgess & Niple, Inc. (**235 Ledge Stone Drive, Austin, Texas 78737)**.

The work to be performed includes furnishing all materials, equipment, tools, and labor necessary for the construction of approximately 7,996 linear feet of 12 to 24" gravity sewer line. The gravity main will cross Onion Creek by way of banked retaining wall to convey the new line. Lastly, protection and removal of select trees along the new gravity line alignment will be required.

Contract Documents, including Drawings and Technical Specifications, are on file at the office of Burgess & Niple, Inc., 235 Ledge Stone Drive, Austin, Texas 78737 and the **City of Dripping Springs**. Physical Copies of the Contract Documents may be purchased for $200.00 from Burgess & Niple, Inc. (Ph #512-432-1000) for each set of documents obtained. No refunds will be made. Documents may be acquired digitally from www.civcastusa.com or https://www.cityofdrippingsprings.com/requestforbids for free.

A certified check or bank draft, payable to the order of the OWNER, negotiable U.S. Government bond (at par value) or a satisfactory Bid Bond executed by the Bidder and an acceptable Surety in an amount equal to five percent (5%) of the total Bid cost shall be submitted with each Bid.

Any contract or contracts awarded under this Request for Bids (RFP) are expected to be funded in part by grants/loans from the Texas Water Development Board (TWDB). Neither the State of Texas nor any of its departments, agencies, or employees are or will be a party to this RFP, or any resulting contract.

This RFP is issued in accordance with Section 2269 Subchapter D of the Texas Government Code (Competitive Sealed Bid Method) and Title 41 CFR Part 105.71 (Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments)

This procurement is subject to the Environmental Protection Agency's (EPA) "fair share policy," which includes EPA-approved "fair share goals" for Minority Business Enterprise (MBE) & Women Business Enterprise (WBE) firms in the Construction, Supplies, Equipment, and Services procurement categories. EPA's policy requires that applicants and prime contractors make a good faith effort to award a fair share of contracts, subcontracts, and procurements to SMWBEs. Although EPA's policy does not mandate that the fair share goals be achieved, it does require applicants and prime contractors to demonstrate use of the six affirmative steps. The current fair share goals for the State of Texas are as follows:

MBE: CONSTRUCTION 24.50%; NON-CONSTRUCTION 24.05%; TOTAL COMBINED CONSTRUCTION AND NON-CONSTRUCTION 24.16%.
WBE: CONSTRUCTION 11.34%; NON-CONSTRUCTION 19.35%; TOTAL COMBINED CONSTRUCTION AND NON-CONSTRUCTION 17.38%.

All qualified Applicants will receive consideration for employment without regard to race, color, religion, sex, age, handicap, or national origin. Bidders on this work will be required to comply with the President's Executive Order No. 11246, as amended by Executive Order 11375, and as supplemented in Department of Labor regulations 41 CFR Part 60. Small, minority, and women owned business enterprises are encouraged to respond.

Attention is called to the fact that all laborers and mechanics working on the work site and employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the Drinking Water State Revolving Fund shall be paid wages in compliance with the prevailing (Davis-Bacon) wage rate, as issued by the Department of Labor, and as set forth in the Contract Documents.

Any contract(s) awarded under this Invitation for Bids is/are subject to the American Iron and Steel (AIS) requirements of federal law, including federal appropriation acts.

All contractors/subcontractors which are debarred, suspended or otherwise excluded from or ineligible for participation on federal assistance programs may not undertake any activity in part or in full under this project.

All nonresident contractors/subcontractors submitting a bid proposal must abide by Texas Government Code Section 2252.002. Texas Government Code Section 2252.002 provides that in order for nonresident bidders to be awarded a governmental contract, the bidder must bid projects for construction, improvements, supplies, or services in Texas at an amount lower than the lowest Texas resident bidder by the same amount that a Texas resident bidder would be required to underbid the nonresident bidder in order to obtain a comparable contract in the nonresident bidder's state.

The **City of Dripping Springs** reserves the right to reject any and/or all Bids, to waive technicalities, to re-advertise, and to proceed otherwise when the best interests of the city will be realized hereby.

The Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of OWNER.

SECTION 00100
INSTRUCTIONS TO BIDDERS

I. REQUEST FOR PROPOSAL DATED SEPTEMBER 24, 2025

The City of Dripping Springs ("Owner") invites the submittal of responses to this "Request for Proposals" (RFP) from qualified Contractors ("Offerors" "Bidders" or "Respondents") interested in providing construction services in accordance with Chapter 2269 of the Texas Government Code in connection with the construction of a wastewater project more specifically described in section 1.0 below.

1.0 SCOPE OF WORK

The City of Dripping Springs, Texas will accept competitive sealed proposals for construction of its West Interceptor Segment 2. The PROJECT will consist of construction of approximately 7,996 linear feet of 12 to 24" gravity sewer line. The gravity main will cross Onion Creek going southeast. This project includes the removal of trees along the installation of gravity sewer and protection of existing trees along the same corridor.

Work in this Contract is generally described by the Contract Documents; titled as follows:

City of Dripping Springs
West Interceptor
Segment 2

The City of Austin Standard Construction Specifications current at the time of bidding shall govern materials and methods used to do the work, and are made a part of this Contract. Whenever the term "City of Austin" is used in the City of Austin Specifications, it shall be construed to mean "OWNER, and or its designated representative." Whenever the term "ENGINEER" is used in the City of Austin Specifications, it shall be construed to mean Burgess & Niple, Inc. Technical Specifications provided are intended to supplement the City Standard Specifications, not to replace them. Any discrepancies between the City Standard Specifications and the terms of this Contract shall be reported to the Engineer, who shall determine which specification shall govern.

2.0 SELECTION PROCESS

Selection of Contractor will follow the process set forth in subchapter D of chapter 2269 of the Texas Government Code.

From a review of the proposals received, Owner will evaluate and rank each proposal no later than forty-five (60) days following the opening of the bids.

The preferred Offeror then will negotiate with Owner on contract conditions. If a contract cannot be successfully negotiated with the Offeror of choice, in the opinion of the Owner, negotiations will proceed with the next highest ranked Offeror until a mutually agreed contract can be negotiated. Owner intends to use modified EJCDC forms for the Agreement between Owner and Contractor as well as the General Conditions of the Contract. The selected Offeror will have an opportunity to review and negotiate the terms of the Agreements prior to executing the contract documents.

VI. EVALUATION CRITERIA

The criteria used to evaluate the RFP responses will include, but not be limited to, the following (items listed below are not listed in order of importance):

A. **Qualifications of Contractor and Experience on Similar Projects**. Qualifications of firm in executing similar projects (emphasis on last five (5) years), as well as related municipal project experience, including completed and ongoing projects of the firm(s) and individuals who would be assigned to this Project.

B. **Experience on Public Projects**. Related project experience on non-wastewater extension projects with other public owners including municipalities, school districts, and other local governmental entities, as well as experience with local subcontractors, with particular attention to individuals who would be assigned to this Project.

C. **Available Resources to Complete Project**. This criterion would include personnel, resources and methodologies commonly used by your firm that may be applicable to the project categories.

D. **Corporate history and stability.** This criterion includes the historical stability of the Offeror, its corporate structure and longevity, its history involving litigation or arbitration with owners and subcontractors, and a statement of any liquidated damages that have previously been withheld by public owner clients of the Offeror on projects in the last five (5) years.

E. **Overall Responsiveness to the RFP.**

F. **References.**

G. **Cost.** This criterion includes the cost of all work, including any alternates, inclusive of all Offeror’s general conditions and fees.

Item	Weighting
A. Qualifications of Contractor and Experience on Similar Projects	20%
B. Experience on Public Projects	15%
C. Available Resources to Complete Project	15%
D. Corporate history and stability	5%
E. Overall Responsiveness to the RFP	5%
F. References	5%
G. Cost	35%

3.0 PREPARATION OF PROPOSAL

In preparing the Proposal, Offeror is to reference the definitions located in the General Conditions and Supplemental Conditions of this Proposal package. All blanks on the Proposal Form provided shall be completed by printing in ink or by typewriter and the Proposal signed. A price shall be indicated for each item, alternate item, and optional item listed therein, or the words "No Proposal," "No Change," or "Not Applicable" entered.

The Proposal shall be executed with the complete and correct name of the individual, partnership, firm, corporation or other legal entity. A copy of Articles of Partnership or Incorporation and resolution, or corporate board minutes empowering signatory to bind Offeror, attested by an officer of Offeror and affixed with the seal of the corporation, shall be submitted with Proposal.

Any corrections to the Proposal shall be initialed by person(s) signing Proposals. Proposals tendered after due date and time designated in these Instructions to Bidders will not be accepted. Alternate proposals will not be considered unless called for. No oral, telegraphic or telephone proposals or modifications will be considered.

4.0 CONTRACT DOCUMENTS AND SITE

Before submitting a Proposal, the Offeror shall carefully examine the Contract Documents, Plans and Specifications, site of the proposed Work, and other conditions that may affect the performance of the Work. Therefore, it will be understood that the Offeror has investigated and is satisfied as to the conditions to be encountered; the

character, quality and quantities of Work to be performed and materials to be furnished, and the requirements of the Contract Specifications and Drawings. Submission of a Proposal shall be conclusive evidence that the Offeror has complied with these requirements.

Should an Offeror find discrepancies in, or omissions from the Plans, Specifications or other Contract Documents, or should he be in doubt as to their meaning, he should at once notify the Engineer in order that a written Addendum may be sent to all Bidders. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the Bidding Documents (5) days before the opening of Proposals. The proposal as submitted by the Contractor will be so constructed as to include any Addenda if such are issued by the Engineer twenty-four (24) hours before the opening of Proposals. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

If any conflicts, errors, ambiguities, or discrepancies are discovered in or between any of the Bid Documents, Contract Documents, and/or related documents, and if said conflicts, errors, ambiguities, or discrepancies have not been resolved by Engineer by an Addenda, as set forth above, the Offeror shall include in the Proposal the greater quantity or better quality of work, or compliance with the more stringent requirement resulting in a greater cost. Such greater cost shall be included in the Proposal.

5.0 PROPOSAL GUARANTY

All Bids must be accompanied by Bid Security made payable to OWNER in an amount of five percent (5%) of Offeror's maximum Price and in the form of a cashier's check made payable to The City of Dripping Springs or a Bond (on the attached Bid Bond form) issued by a surety meeting the requirements of paragraphs 5.01 and 5.02 of the General Conditions.

The Bid security of the Successful Offeror will be retained until such Offeror has executed the Contract Documents, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid Security will be returned. If the Successful Offeror fails to execute and deliver the Contract Documents and furnish the required contract security within 30 days after Owner releases its rankings of Offerors, Bid Security of that Offeror will be forfeited. If the Owner terminates the negotiations within the 30 day period, Bid Security of that Offeror will be returned. The Proposal Security of other Bidders whom OWNER believes to have a reasonable chance of receiving the award may be retained by OWNER until the earlier of 30 days after notification of selection of the Offeror or 90 days after the release of rankings, whereupon Proposal Security furnished by such Bidders will be returned.

Proposal Security of other Bidders whom OWNER believes do not have a reasonable chance of receiving the award will be returned within 10 days after release of rankings.

6.0 PERFORMANCE & PAYMENT BONDS

Performance and payment bonds shall each be issued in an amount equal to 100% of the Contract Amount as security for all the CONTRACTOR's obligations under the Contract Documents. Performance and payment bonds (on bond forms provided with the Contract Documents or otherwise acceptable to Owner) shall be issued by a solvent company approved by OWNER and authorized to do business in the State of Texas, and shall meet any other requirements by law or by OWNER pursuant to applicable law.

7.0 INSURANCE REQUIREMENTS

CONTRACTOR will be required to maintain insurance in the types and amounts required by the Insurance Rider to the General Conditions. Such Insurance Rider may be requested by Offerors prior to the opening of proposals if done so in writing and directed to the Engineer.

8.0 BASIS OF PROPOSAL AND CONSIDERATION OF PROPOSAL AMOUNT

Bidders shall submit a Proposal as described in paragraph 3 above. Submission of a Proposal on any section signifies Offeror's willingness to enter into a Contract for that section alone at the price(s) offered.

For the purpose of Proposal Evaluation, the Offeror should include with the Bid Form herein, sufficient information that in Offeror's determination will provide sufficient information for the Owner to evaluate it in accordance with the Selection Criteria. OWNER reserves the right to reject any or all Bids, or to waive any informalities and irregularities. To meet the overall Project budget and schedule, OWNER also reserves right to delete separate Proposal Items submitted for execution of a Contract, to consider Project completion schedule in determining the highest ranked Offeror, and/or to award each phase of the work to separate contractors. The OWNER shall also reserve the right to waive informalities, technical defects, to reject any and all bids, and to accept the Proposal most advantageous to the Project.

If there are discrepancies in the Total Proposal amount written on the Proposal Form and the sum of the subtotals on the Proposal Form, the written Total Proposal amount shall govern.

9.0 SUBMISSION OF PROPOSAL

Proposal shall be enclosed in an opaque sealed envelope plainly marked with the Project Title, the name and address of Offeror, and shall be accompanied by the Proposal Security and other required documents. If a Proposal is sent by mail or other delivery system, the sealed envelope containing the Proposal shall be enclosed in a separate envelope plainly marked on the outside with the notation "Proposal ENCLOSED." Multiple envelopes/packages submitted shall be marked with the envelope number and the total number of envelopes for the Proposal (i.e. Envelope 1 of 2, if two envelopes are submitted).

Bids shall be addressed and mailed or hand delivered to:

Burgess & Niple, Inc.
235 Ledge Stone
Austin, Texas 78737
(512) 432-1000
512-432-1015 (fax)

ALL BIDS ARE DUE BY 10:00 A.M. ON THE 24TH DAY OF OCTOBER, 2025 AND WILL BE OPENED AND READ ALOUD AT THAT LOCATION AND TIME.

10.0 WITHDRAWAL OF PROPOSAL

A Proposal may be withdrawn by a Offeror, provided an authorized individual of the Offeror submits a written request to withdraw the Proposal before the time set for opening the Bids.

11.0 REJECTION OF BIDS

The following may be cause to reject a Proposal:

(a) Bids containing omissions, alterations of form, qualifications or conditions not called for by OWNER, incomplete Bids, or Bids which are not accompanied by an acceptable Proposal Guaranty, will be considered in noncompliance and may be rejected. In any case of ambiguity or lack of clarity with the Proposal the OWNER reserves right to determine the most advantageous Proposal or to reject the Proposal.

(b) Unreasonable or unbalanced Unit Proposal Prices.

(c) More than one Proposal for same Work from an individual, firm, partnership or corporation.

(d) Evidence of collusion among Bidders.

OWNER may conduct such investigations as OWNER deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities to perform the Work in accordance with the Contract Documents during the forty-five (45) day ranking period.

12.0 AWARD AND EXECUTION OF CONTRACT

Award of Contract will be to the highest ranked Offeror in accordance with the provision of this Section 00100. However, OWNER reserves the right to reject any or all Proposals, including without limitation, nonconforming, non-responsive, unbalanced, or conditional Proposals. OWNER further reserves the right to reject the Proposal of any Offeror whom it finds, after reasonable inquiry and evaluation, to be non-responsible. The OWNER also reserves the right to waive informalities, to reject any and all Proposals, and to accept the Proposal most advantageous to the public interest. Further, the OWNER also reserves the right to waive all formalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Offerror.

Award of Contract will occur within the period identified herein, unless mutually agreed between the parties. Contract will not be binding on OWNER until it has been executed by both parties. OWNER will process the Contract expeditiously; however, OWNER will not be liable for any delays prior to the award or execution of the Contract.

13.0 CONTRACT SCHEDULE

The Work shall be substantially complete no later than **300** calendar days after the date when the Contract Times commence to run and finally completed and ready for final payment no later than **360** calendar days after the date when the Contract Times commence to run.

Substantially complete shall mean completing the improvements, including the passage of all testing and completion of any necessary adjustments or corrections required by failure to pass any required tests so that the planned improvements are in operation.

Along with the Proposal, the Offeror shall provide a proposed time line schedule (measured in days) indicating milestones for this Contract for each contract duration. The schedule shall begin with award and include time for developing shop drawing, materials purchase and delivery, mobilization to the site, site work, gravity line installation, force main installation, pump station installation, treated effluent line installation, testing, and startup. This schedule will be included in the Contract documents.

14.0 SUBCONTRACTORS AND SUPPLIERS

Each Offeror shall submit with its Proposal names of proposed subcontractors with a description of work to be performed and/or equipment/materials to be supplied, with contact names, phone numbers, and addresses for those to be used on this Project, and a proposed time line schedule.

15.0 SUBMITTALS TO BE INCLUDED WITH BIDS

Each Offeror shall submit the following with its Proposal:

- Required Proposal Guarantee on Proposal Bond Form Provided;

- Names of proposed subcontractors, suppliers, and manufacturers with a description of work to be performed and/or equipment/materials to be supplied, with contact names, phone numbers, and addresses for those to be used on this Project;
- Estimated Project Schedule;
- Resolution of Contractor
- Proposed locations of laydown/equipment storage and temporary offices to be used during this Contract
- Contractor Qualifications Form

Bidders may be requested to respond to a request for information (RFI) from the Engineer for clarification or interpretation of items listed for the purpose of evaluating Bids.

16.0 PRE-PROPOSAL CONFERENCE

A non-mandatory pre-Proposal conference will be held at the Burgess & Niple at the address below at **10:00 A.M. on October 17th, 2025**. Representatives of the Owner and Engineer will be present to discuss the PROJECT. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Any question or comments regarding the Work of Contract shall be made in writing. Oral statements may not be relied upon and will not be binding or legally effective. Attendance is not mandatory.

Burgess & Niple
235 Ledge Stone Drive
Austin, Texas 78737
(512) 432-1000

17.0 SITE AND OTHER AREAS

The Site is identified in the Bidding Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by CONTRACTOR.

The Site is identified in the Bidding Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by OWNER unless otherwise provided in the Bidding Documents. Along with the Proposal, Offeror shall identify the proposed locations of laydown/equipment storage and temporary offices to be used during this Contract if different from that identified in the Project Documents.

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

BID FORM FOR CONSTRUCTION CONTRACT

Prepared By

EJCDC®
ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

ACEC
AMERICAN COUNCIL OF ENGINEERING COMPANIES

ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

NSPE®
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

Endorsed By

CSI®
Building Knowledge
Improving Project Delivery

NUCA
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BID FORM FOR CONSTRUCTION CONTRACT

The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 1—OWNER AND BIDDER

1.01 Sealed bids in envelopes are due at the Office of the Engineer: Burgess & Niple, Inc. located at 235 Ledge Stone Drive, Austin, Texas 78737, (512) 432-1000 no later than 10:00 a.m. on Friday, October 24, 2025.

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

2.01 The following documents are submitted with and made a condition of this Bid:

A. Required Bid security;

B. List of Proposed Subcontractors;

C. List of Proposed Suppliers;

D. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids; Notably, SAM authorization.

E. Contractor’s license number as evidence of Bidder’s State Contractor’s License or a covenant by Bidder to obtain said license within the time for acceptance of Bids;

F. Required Bidder Qualification Statement with supporting data; and

G. Proposer's Certifications (WRD-255) regarding Equal Employment Opportunity and Non-Segregated Facilities

H. Affirmative Steps Solicitation Report (TWDB-0216)

I. Participation Summary (TWDB-0373)

J. Prime Contractor Affirmative Steps Certification and Goals (TWDB-0217)

K. Vendor Compliance with Non-Resident Bidding Requirements (TWDB-0459)

L. Certification Regarding Debarment, Suspension and Other Responsibility Matters, SRF-404

M. Certification Regarding Lobbying (WRD-213)

N. Disclosure Of Lobbying Activity (SF-LLL)

O. Certification Of Interested Parties (Texas Ethics Commission Form 1295) – completed online

P. Conflict of Interest Form

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ARTICLE 3—BASIS OF BID—UNIT PRICES

3.01 *Unit Price Bids*

A. Bidder will perform the following Work at the indicated unit prices:

	Bid Items	Unit	No.	Unit Price	Subtotal
1.	Mobilization	LS	1		
	SITEWORK / EARTHWORK & CONTROLS				
2.	Stabilized Construction Entrance	EA	5		
3.	Storm Water Pollution Prevention Plan	LS	1		
4.	Clearing & Grubbing	AC	20		
5.	Subgrade Preparation	SY	251		
6.	8” Compacted Road Base	SY	251		
7.	Dry 6” Rock Rip Rap, on Filter Fabric	SY	23		
8.	Silt Fencing	LF	7,708		
9.	Rock Berm	LF	120		
10.	Barbed Wire and Woven Fence	LF	1,141		
11.	Barbed Wire and Woven Fence Gate	EA	4		
12.	Temporary Commercial Driveway Excavation and Embankment	LS	1		
13.	Drainage Crossings	EA	4		
14.	Concrete Washout Pit	EA	5		
15.	Traffic Control	LS	1		
16.	Hot Mix Asphaltic Concrete pavement, 2” Type D	SY	141		
17.	Tree Removal	LS	1		
18.	Reinforced Creek Crossing Structure (Including cofferdam, dewatering, and all related items)	LS	1		
19.	10’ x 14’ Receiving Pit located Concrete Drive & Restoration	EA	1		

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20.	35’ x 14’ Bore Pit & Restoration	EA	1		
21.	Revegetate Cypress Fork Ranch – Giant Coastal Bermuda	SY	365		
22.	Trench Dam	EA	17		
	COLLECTION SYSTEM				
23.	12” PVC Gravity Main (0’-6’)	LF	68		
24.	12” PVC Gravity Main (16’-18’)	LF	64		
25.	15” PVC Gravity Main (10’-12’)	LF	33		
26.	15” PVC Gravity Main (12’-14’)	LF	50		
27.	15” PVC Gravity Main (14’-16’)	LF	17		
28.	15” PVC Gravity Main (16’-18’)	LF	28		
29.	16” HDPE Gravity Main (0’-8’)	LF	197		
30.	18” PVC Gravity Main (10’-12’)	LF	278		
31.	18” PVC Gravity Main (12’-14’)	LF	1,087		
32.	18” PVC Gravity Main (14’-16’)	LF	464		
33.	18” PVC Gravity Main (16’-18’)	LF	1,330		
34.	18” PVC Gravity Main (18’-20’)	LF	171		
35.	21” PVC Gravity Main (10’-12’)	LF	567		
36.	21” PVC Gravity Main (12’-14’)	LF	852		
37.	21” PVC Gravity Main (14’-16’)	LF	619		
38.	21” PVC Gravity Main (16’-18’)	LF	436		
39.	21” PVC Gravity Main (18’-20’)	LF	713		
40.	24" PVC Gravity Main (8'-10')	LF	379		
41.	24" PVC Gravity Main (10'-12')	LF	84		
42.	24" PVC Gravity Main (12'-14')	LF	107		
43.	24" PVC Gravity Main (14'-16')	LF	94		

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44.	24" PVC Gravity Main (16'-18')	LF	234		
45.	24" PVC Gravity Main (18'-20')	LF	192		
46.	12” PVC Stub-Out (10’-12’) Connect to Manhole W-30	LF	10		
47.	Bore & Jack 30” Steel Casing/15” PVC Carrier w/ Joint Restraints	LF	92		
48.	24” HDPE Casing Pipe w/ Spacers	LF	197		
49.	35’ x 14’ Bore Pit	EA	1		
50.	10’ X 14’ Receiving Pit	EA	1		
51.	4’ Manhole (Extra Depth)	VF	36		
52.	Standard Precast Manhole w/ Precast Base, 5’ Diameter	EA	16		
53.	Standard Precast Vented Manhole w/ Precast Base, 5’ Diameter	EA	6		
54.	External Drop Manhole, 5’ Diameter	EA	1		
55.	5’ Manhole (Extra Depth)	VF	138		
56.	Tie Into Existing (4’) Manhole	EA	1		
57.	Free Standing Livestock Fencing	LF	280		
58.	Trench Safety	LF	7,714		
59.	Television Testing	LF	7,996		
60.	Mandrel Testing	LF	7,714		
61.	Manhole Vacuum Testing	EA	23		
	ALTERNATE BID ITEMS				
62.	Dewater Wastewater Trench for Flows Above 350 gpm.	LF			
	OPTIONAL BID ITEMS SUBTOTAL				

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Bid Items Notes

1. All excess material will be hauled offsite & disposed of - no separate pay.
2. Per specifications an optional bid item is provided for flowrates above 350 gpm
3. Bypass pumping is based on an Onion Creek flow rate of 1 cfs.
4. Contractor to verify quantities during the bid process. No adjustments will be made for discrepancies between the plans and quantities.

B. Bidder acknowledges that:

1. Each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and

2. Estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

3. Alternate work items are not part of the "Total Bid Price", but may be added to the work at the discretion of the owner

3.02 *Total Bid Price*

Total Bid Price (Total of all Unit Price Bids Items 1 – 61)	$

ARTICLE 4—TIME OF COMPLETION

4.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

4.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 5—BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

5.01 *Bid Acceptance Period*

A. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

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5.02 *Instructions to Bidders*

A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

5.03 *Receipt of Addenda*

A. Bidder hereby acknowledges receipt of the following Addenda:

Addendum Number	Addendum Date

ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

6.01 *Bidder's Representations*

A. In submitting this Bid, Bidder represents the following:

1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.
7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.

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8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.

9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.

10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

6.02 *Bidder's Certifications*

A. The Bidder certifies the following:

1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.

2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.

3. Bidder has not solicited or induced any individual or entity to refrain from bidding.

4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:

a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.

b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.

c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.

d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

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The remainder of this page has been left blank

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BIDDER hereby submits this Bid as set forth above:

Bidder:

_____

(typed or printed name of organization)

By: _____

(individual's signature)

Name: _____

(typed or printed)

Title: _____

(typed or printed)

Date: _____

(typed or printed)

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest: _____

(individual's signature)

Name: _____

(typed or printed)

Title: _____

(typed or printed)

Date: _____

(typed or printed)

Address for giving notices:

_____

_____

Bidder's Contact:

Name: _____

(typed or printed)

Title: _____

(typed or printed)

Phone: _____

Email: _____

Address:

_____

_____

_____

Bidder's Contractor License No.: (if applicable) _____

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BID BOND (PENAL SUM FORM)

Prepared By

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ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

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BID BOND (PENAL SUM FORM)

Bidder Name: Address *(principal place of business)*:	**Surety** Name: Address *(principal place of business)*:
Owner Name: **City of Dripping Springs, Texas** Address *(principal place of business)*: **PO Box 384** **511 Mercer Street** **Dripping Springs, TX 78620**	**Bid** Project: City of Dripping Springs West Interceptor Segment 2: CWSRF Project No. 73819 Bid Due Date: **10/24/2025**
Bond Penal Sum: Date of Bond:	
Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth in this Bid Bond, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.	
Bidder	Surety
_____ *(Full formal name of Bidder)*	_____ *(Full formal name of Surety) (corporate seal)*
By: _____ *(Signature)*	By: _____ *(Signature) (Attach Power of Attorney)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title: _____	Title: _____
Attest: _____ *(Signature)*	Attest: _____ *(Signature)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title:	Title:
Notes: (1) Note: Addresses are to be used for giving any required notice. (2) Provide execution by any additional parties, such as joint venturers, if necessary.	

EJCDC® C-430, Bid Bond (Penal Sum Form).
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1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond will be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder occurs upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation will be null and void if:
    3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
    3.2. All Bids are rejected by Owner, or
    3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions does not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
6. No suit or action will be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety, and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond will be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder must be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Postal Service registered or certified mail, return receipt requested, postage pre-paid, and will be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond will be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute governs and the remainder of this Bond that is not in conflict therewith continues in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

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QUALIFICATIONS STATEMENT

Prepared By

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ARTICLE 1—GENERAL INFORMATION

1.01 Provide contact information for the Business:

Legal Name of Business:			
Corporate Office			
Name:		Phone number:	
Title:		Email address:	
Business address of corporate office:			
Local Office			
Name:		Phone number:	
Title:		Email address:	
Business address of local office:			

1.02 Provide information on the Business's organizational structure:

Form of Business:	☐ Sole Proprietorship ☐ Partnership ☐ Corporation		
☐ Limited Liability Company ☐ Joint Venture comprised of the following companies:			
	1.		
	2.		
	3.		
Provide a separate Qualification Statement for each Joint Venturer.			
Date Business was formed:		State in which Business was formed:	
Is this Business authorized to operate in the Project location?		☐ Yes ☐ No ☐ Pending	

1.03 Identify all businesses that own Business in whole or in part (25% or greater), or that are wholly or partly (25% or greater) owned by Business:

Name of business:		Affiliation:	
Address:			
Name of business:		Affiliation:	
Address:			
Name of business:		Affiliation:	
Address:			

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1.04 Provide information regarding the Business's officers, partners, and limits of authority.

Name:		Title:	
Authorized to sign contracts: ☐ Yes ☐ No		Limit of Authority:	$
Name:		Title:	
Authorized to sign contracts: ☐ Yes ☐ No		Limit of Authority:	$
Name:		Title:	
Authorized to sign contracts: ☐ Yes ☐ No		Limit of Authority:	$
Name:		Title:	

ARTICLE 2—LICENSING

2.01 Provide information regarding licensure for Business:

Name of License:			
Licensing Agency:			
License No:		Expiration Date:	
Name of License:			
Licensing Agency:			
License No:		Expiration Date:	

ARTICLE 3—DIVERSE BUSINESS CERTIFICATIONS

3.01 Provide information regarding Business's Diverse Business Certification, if any. Provide evidence of current certification.

Certification	Certifying Agency	Certification Date
☐ Disadvantaged Business Enterprise		
☐ Minority Business Enterprise		
☐ Woman-Owned Business Enterprise		
☐ Small Business Enterprise		
☐ Disabled Business Enterprise		
☐ Veteran-Owned Business Enterprise		
☐ Service-Disabled Veteran-Owned Business		
☐ HUBZone Business (Historically Underutilized) Business		
☐ Other		
☐ None		

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ARTICLE 4—SAFETY

4.01 Provide information regarding Business's safety organization and safety performance.

Name of Business's Safety Officer:		
Safety Certifications		
Certification Name	Issuing Agency	Expiration

4.02 Provide Worker's Compensation Insurance Experience Modification Rate (EMR), Total Recordable Frequency Rate (TRFR) for incidents, and Total Number of Recorded Manhours (MH) for the last 3 years and the EMR, TRFR, and MH history for the last 3 years of any proposed Subcontractor(s) that will provide Work valued at 10% or more of the Contract Price. Provide documentation of the EMR history for Business and Subcontractor(s).

Year									
Company	EMR	TRFR	MH	EMR	TRFR	MH	EMR	TRFR	MH

ARTICLE 5—FINANCIAL

5.01 Provide information regarding the Business's financial stability. Provide the most recent audited financial statement, and if such audited financial statement is not current, also provide the most current financial statement.

Financial Institution:		
Business address:		
Date of Business's most recent financial statement:		☐ Attached
Date of Business's most recent audited financial statement:		☐ Attached
Financial indicators from the most recent financial statement		
Contractor's Current Ratio (Current Assets ÷ Current Liabilities)		
Contractor's Quick Ratio ((Cash and Cash Equivalents + Accounts Receivable + Short Term Investments) ÷ Current Liabilities)		

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ARTICLE 6—SURETY INFORMATION

6.01 Provide information regarding the surety company that will issue required bonds on behalf of the Business, including but not limited to performance and payment bonds.

Surety Name:			
Surety is a corporation organized and existing under the laws of the state of:			
Is surety authorized to provide surety bonds in the Project location?	☐ Yes ☐ No		
Is surety listed in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" published in Department Circular 570 (as amended) by the Bureau of the Fiscal Service, U.S. Department of the Treasury? ☐ Yes ☐ No			
Mailing Address (principal place of business):			
Physical Address (principal place of business):			
Phone (main):		Phone (claims):	

ARTICLE 7—INSURANCE

7.01 Provide information regarding Business's insurance company(s), including but not limited to its Commercial General Liability carrier. Provide information for each provider.

Name of insurance provider, and type of policy (CLE, auto, etc.):			
Insurance Provider		Type of Policy (Coverage Provided)	
Are providers licensed or authorized to issue policies in the Project location?			☐ Yes ☐ No
Does provider have an A.M. Best Rating of A-VII or better?			☐ Yes ☐ No
Mailing Address (principal place of business):			
Physical Address (principal place of business):			
Phone (main):		Phone (claims):	

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ARTICLE 8—CONSTRUCTION EXPERIENCE

8.01 Provide information that will identify the overall size and capacity of the Business.

Average number of current full-time employees:	
Estimate of revenue for the current year:	
Estimate of revenue for the previous year:	

8.02 Provide information regarding the Business's previous contracting experience.

Years of experience with projects like the proposed project:				
As a general contractor:		As a joint venturer:		
Has Business, or a predecessor in interest, or an affiliate identified in Paragraph 1.03:				
Been disqualified as a bidder by any local, state, or federal agency within the last 5 years? ☐ Yes ☐ No				
Been barred from contracting by any local, state, or federal agency within the last 5 years? ☐ Yes ☐ No				
Been released from a bid in the past 5 years? ☐ Yes ☐ No				
Defaulted on a project or failed to complete any contract awarded to it? ☐ Yes ☐ No				
Refused to construct or refused to provide materials defined in the contract documents or in a change order? ☐ Yes ☐ No				
Been a party to any currently pending litigation or arbitration? ☐ Yes ☐ No				
Provide full details in a separate attachment if the response to any of these questions is Yes.				

8.03 List all projects currently under contract in Schedule A and provide indicated information.

8.04 List a minimum of three and a maximum of six projects completed in the last 5 years in Schedule B and provide indicated information to demonstrate the Business's experience with projects similar in type and cost of construction.

8.05 In Schedule C, provide information on key individuals whom Business intends to assign to the Project. Provide resumes for those individuals included in Schedule C. Key individuals include the Project Manager, Project Superintendent, Quality Manager, and Safety Manager. Resumes may be provided for Business's key leaders as well.

ARTICLE 9—REQUIRED ATTACHMENTS

9.01 Provide the following information with the Statement of Qualifications:

A. If Business is a Joint Venture, separate Qualifications Statements for each Joint Venturer, as required in Paragraph 1.02.

B. Diverse Business Certifications if required by Paragraph 3.01.

C. Certification of Business's safety performance if required by Paragraph 4.02.

D. Financial statements as required by Paragraph 5.01.

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E. Attachments providing additional information as required by Paragraph 8.02.

F. Schedule A (Current Projects) as required by Paragraph 8.03.

G. Schedule B (Previous Experience with Similar Projects) as required by Paragraph 8.04.

H. Schedule C (Key Individuals) and resumes for the key individuals listed, as required by Paragraph 8.05.

I. Additional items as pertinent.

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This Statement of Qualifications is offered by:

Business: _____
(typed or printed name of organization)

By: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Date: _____
(date signed)

(If Business is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Address for giving notices:

_____

_____

_____

Designated Representative:

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Address:

_____

_____

_____

Phone: _____

Email: _____

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Schedule A—Current Projects

Name of Organization				
Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

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Schedule B—Previous Experience with Similar Projects

Name of Organization				
Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

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Schedule B—Previous Experience with Similar Projects

Name of Organization				
Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

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Schedule C—Key Individuals

Project Manager			
Name of individual			
Years of experience as project manager			
Years of experience with this organization			
Number of similar projects as project manager			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Candidate's role on project		Candidate's role on project	
Project Superintendent			
Name of individual			
Years of experience as project superintendent			
Years of experience with this organization			
Number of similar projects as project superintendent			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Candidate's role on project		Candidate's role on project	

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Safety Manager			
Name of individual			
Years of experience as project manager			
Years of experience with this organization			
Number of similar projects as project manager			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Candidate's role on project		Candidate's role on project	

Quality Control Manager			
Name of individual			
Years of experience as project superintendent			
Years of experience with this organization			
Number of similar projects as project superintendent			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Candidate's role on project		Candidate's role on project	

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BIDDER'S CERTIFICATIONS

Project Name: City of Dripping Spring West Interceptor

Project Number: TWDB CW-SRF No. 73819

Contract For: City of Dripping Springs

The following certifications must be completed by the bidder for each contract.

A. EQUAL EMPLOYMENT OPPORTUNITY:

☐ I have developed and have on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-1.7.

I have:

( ) participated in previous contract(s) or subcontract(s) subject to the equal opportunity clause under Executive Orders 11246 and 11375. I have filed all notices, contract specifications, and compliance reports due under the requirements contained in 41 CFR Part 60-4.

( ) **not** participated in previous contracts(s) subject to the equal opportunity clause under Executive Orders 11246 and 11375 and 41 CFR Chapter 60.

B. NONSEGREGATED FACILITIES

☐ I certify that I do not and will not maintain any facilities provided for my employees in a segregated manner, or permit my employees to perform their services at any location under my control where segregated facilities are maintained; and that I will obtain a similar certification prior to the award of any federally assisted subcontract exceeding $10,000 which is not exempt from the equal opportunity clause as required by 41 CFR Part 60-1.8.

I will obtain a similar certification from any proposed subcontractor(s), when appropriate.

I understand that a false statement on this certification may be grounds for rejection of this bid proposal or termination of the contract award.

_____

Typed Name and Title of Bidder's Authorized Representative

_____

Signature of Bidder's Authorized Representative Date

_____

Name and Address of Bidder

FOR OFFICE USE ONLY:
Commitment # _____

TWDB-0217
Revised 04/01/2024

TWDB-0217
TEXAS WATER DEVELOPMENT BOARD (TWDB)
PRIME CONSULTANT/CONTRACTOR CERTIFICATION

I. PROJECT INFORMATION

TWDB Project Number	Applicant/Entity Name	Total of TWDB Funding	Program Type (insert "X" for all that apply)	
73819	City of Dripping Springs	$43,395,000.00	☐	Drinking Water SRF (DWSRF)
			☒	Clean Water SRF (CWSRF)

Prime Consultant/Contractor: _____

Contract Number: _____ **Contract Amount:** _____

II. GOOD FAITH EFFORT (Applicable to all subcontracts awarded by the prime contractor/consultant)

I understand that it is my responsibility to comply with all state and federal regulations and guidance in the utilization of Minority and Women-owned Businesses in procurement. I certify that I will make a "good faith effort" to afford opportunities for Minority Business Enterprise (MBE), and Women-owned Business Enterprise (WBE) by:

1.	Including qualified MBEs and WBEs on procurement solicitation lists
2.	Soliciting potential MBEs and WBEs
3.	Reducing contract size/quantities when economically feasible to permit maximum participation by MBEs and WBEs
4.	Establishing delivery schedules to encourage participation by MBEs and WBEs
5.	Using the services and assistance of the Small Business Administration, Minority Business Development Agency, U.S. Department of Commerce, and Texas Marketplace
6.	Submitting documentation to the Applicant/Entity to verify good faith effort, steps 1-5.
☐	**EXCEPTION**: As the Prime Consultant/Contractor, I certify that I have reviewed the contract requirements and found no available subcontracting opportunities. I also certify that I will fulfill 100 percent of the contract requirements with my own employees and resources. (Check if applicable)

Signature – Prime Consultant/Contractor	Title (print legibly)	Certification Date

I. PROJECT PARTICIPATION ESTIMATES

The Cost Categories mentioned below are goals. These goals are neither standards nor quotas. Recipients of financial assistance are not required to meet the fair share objectives. They must, however, acknowledge that they are aware of and are actively pursuing the fair share objectives with their procurements.

	Potential **MBE** Participation	Potential **WBE** Participation
Cost Category	**Goal**	**Goal**
Construction	**24.50%**	**11.34%**
Non-Construction	**25.05%**	**19.35%**
Total Combined Construction and Non-Construction	**24.16%**	**17.38%**

The fair share goals listed above are required by 40 CFR Part 33 Subpart D and are directly negotiated with EPA Region 6. Entities receiving federal financial assistance are subject to the TWDB's goals and may not be substituted with other agency or program goals.

IV. TWDB APPROVAL SIGNATURE

Signature indicates the form meets DBE Requirements.

DBE Coordinator	Approval Date

Debarment / Suspension Certification

I, _____, hereby certify that I have checked on the federal
(Authorized Representative of Recipient)
System for Award Management (www.sam.gov) website and determined that
_____ is not shown as an "excluded party" that is debarred,
(Name of entity)
suspended or otherwise excluded from or ineligible for participation in federal assistance programs under Executive Order 12549. (See 2 CFR Part 180 and 2 CFR Part 1532 for additional information on the federal governmentwide debarment and suspension system for nonprocurement programs and activities.)

I understand that a false statement herein may subject me to penalties under federal and state laws relating to filing false statements and other relevant statutes.

_____ _____
Signature Date

_____
Title

_____
Name of Recipient

Verifying prime contractors and subcontractors for construction, equipment, supplies and services: Using the www.sam.gov website, the recipient must verify prior to awarding the contract that the prime contractor is not listed as an "excluded party" that is debarred, suspended or otherwise excluded from or ineligible. Once any subcontractors are known, they also must be verified as not listed as an "excluded party" prior to award of a subcontract. The recipient must print a dated record of the verification from the www.sam.gov website and retain a copy that is available for review by TWDB. The prime contractors and subcontractors must be verified prior to the contract award or the costs may be disallowed.

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL "Disclosure Form to Report Lobbying," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 United States Code (U.S.C.), Chapter 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

_____ _____

Head of Agency or Organization Date

_____

Type Name and Title

_____

Name and address of Agency/Organization

DISCLOSURE OF LOBBYING ACTIVITIES

Approved by OMB
0348-0046

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure.)

1. Type of Federal Action:	2. Status of Federal Action:	3. Report Type:
☐ a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance	☐ a. bid/offer/application b. initial award c. post-award	☐ a. initial filing b. material change **For Material Change Only:** year _____ quarter _____ date of last report _____

4. Name and Address of Reporting Entity:	5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime:
☐ **Prime** ☐ **Subawardee** Tier _____, *if known*: **Congressional District**, *if known*:	 **Congressional District**, *if known*:
6. Federal Department/Agency:	**7. Federal Program Name/Description:** CFDA Number, *if applicable*: _____
8. Federal Action Number, *if known*:	**9. Award Amount,** *if known*: $
10. a. Name and Address of Lobbying Registrant (*if individual, last name, first name, MI*):	**b. Individuals Performing Services** (*including address if different from No. 10a*) (*last name, first name, MI*):
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.	Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____
Federal Use Only:	Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

PRINT

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employeeof a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.

2. Identify the status of the covered Federal action.

3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.

4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.

5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.

6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizationallevel below agency name, if known. For example, Department of Transportation, United States Coast Guard.

7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.

8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."

9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.

10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.

    (b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).

11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503.

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

4 Name of Interested Party	City, State, Country (place of business)	Nature of Interest (check applicable)	
		Controlling	Intermediary

Must file online at www.ethics.state.tx.us/File

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

_____
Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20 _____ , to certify which, witness my hand and seal of office.

_____ _____ _____
Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

ADD ADDITIONAL PAGES AS NECESSARY

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

NOTICE OF AWARD

Prepared By

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NOTICE OF AWARD

Date of Issuance:			
Owner:	City of Dripping Springs	Owner's Project No.:	No. 73819
Engineer:	Burgess & Niple, Inc	Engineer's Project No.:	PR39676.1
Project:	City of Dripping Springs West Interceptor Segment 2		
Contract Name:	TWDB CW-SRF No. 73819		
Bidder:			
Bidder's Address:			

You are notified that Owner has accepted your Bid dated _____ for the above Contract, and that you are the Successful Bidder and are awarded a Contract for:

Providing the City of Dripping Springs with the installation of West Interceptor Segment 2 by furnishing all materials, equipment, tools, and labor necessary for the construction of approximately 7,996 linear feet of 12 to 24" gravity sewer line. The gravity main will cross Onion Creek going southeast. This project includes the removal of trees along the installation of gravity sewer and protection of existing trees along the same corridor.

The Contract Price of the awarded Contract is $_____. Contract Price is subject to adjustment based on the provisions of the Contract, including but not limited to those governing changes, Unit Price Work, and Work performed on a cost-plus-fee basis, as applicable.

[6] unexecuted counterparts of the Agreement accompany this Notice of Award, and one copy of the Contract Documents accompanies this Notice of Award, or has been transmitted or made available to Bidder electronically.

☐ Drawings will be delivered separately from the other Contract Documents.

You must comply with the following conditions precedent within 15 days of the date of receipt of this Notice of Award:

1. Deliver to Owner **[6]** counterparts of the Agreement, signed by Bidder (as Contractor).
2. Deliver with the signed Agreement(s) the Contract security (such as required performance and payment bonds) and insurance documentation, as specified in the Instructions to Bidders and in the General Conditions, Articles 2 and 6.
3. Other conditions precedent (if any): **[None]**

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within 10 days after you comply with the above conditions, Owner will return to you one fully signed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.02 of the General Conditions.

Owner: **City of Dripping Springs**

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By *(signature)*: _____

Name *(printed)*: _____

Title: City Administrator

Copy: Engineer

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SECTION 00500
STANDARD FORM OF AGREEMENT
BETWEEN OWNER AND CONTRACTOR

This **AGREEMENT** is by and between **The City of Dripping Springs** (hereinafter called OWNER) and _____**.** (hereinafter called CONTRACTOR).

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1 - WORK

1.01 CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents.

The work to be performed includes furnishing all materials, equipment, tools, and labor necessary for the construction of approximately 7,996 linear feet of 12 to 24" gravity sewer line. The gravity main will cross Onion Creek going southeast. This project includes the removal of trees along the installation of gravity sewer and protection of existing trees along the same corridor.

ARTICLE 2 - THE PROJECT

2.01 This project is for construction of the City of Dripping Springs West Interceptor Segment 2.

ARTICLE 3 - ENGINEER

3.01 The Project has been designed by Burgess & Niple, Inc., 235 Ledge Stone, Austin, TX, 78737, 512/432-1000 (phone), 512/432-1015 (fax) who is hereinafter called ENGINEER and who is to act as OWNER's representative, assume all duties and responsibilities, and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4- CONTRACT TIMES

4.01 Time of the Essence

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 Days to Achieve Substantial Completion and Final Payment

A. After completion of street subgrade cut and fill by the subdivision contractor, Contractor will be issued a notice to proceed. The installation of mains, manholes and related appurtenances shall be completed in 300 calendar days and be ready for street construction by the subdivision contractor. Contractor will be issued another notice to

proceed when the time comes to adjust and line manholes and for final testing. This work shall be completed in 30 calendar days

4.03 Liquidated Damages

A. CONTRACTOR and OWNER recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in paragraph 4.02 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty), CONTRACTOR shall pay OWNER **$500.00** for each day that expires after the time specified in paragraph 4.02 for Substantial Completion until the Work is substantially complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by OWNER, CONTRACTOR shall pay OWNER the same amount specified for liquidated damages for each day that expires after the time specified in paragraph 4.02 for completion and readiness for final payment until the Work is completed and ready for final payment.

ARTICLE 5 - CONTRACT PRICE

5.01 OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to paragraph 5.01.A below:

A. For all Work, an amount equal to the sum of the established unit price for each identified item times the estimated quantity of that item as indicated in the Bid Form:

There are no cash allowances for this Contract as described in paragraph 11.02 of the General Conditions.

ARTICLE 6 - PAYMENT PROCEDURES

6.01 Submittal and Processing of Payments

A. CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 Progress Payments; Retainage

A. OWNER shall make partial payments as the Work progresses on account of the

Contract Price on the basis of CONTRACTOR's Applications for Payment on or about the 30th day of each month during performance of the Work as provided in paragraphs 6.02.A.1 and 6.02.A.2 below. All such payments will be measured by the schedule of values established in paragraph 2.07.A of the General Conditions:

1. Prior to Final Completion and acceptance of the Work, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or OWNER may withhold, in accordance with paragraph 14.02 of the General Conditions:

    a. 95% of Work completed (with the balance being retainage); and

    b. 95% of the cost of materials and equipment not incorporated in the Work (but delivered, suitably stored and accompanied by documentation satisfactory to the OWNER as provided in paragraph 14.2 (with the balance being retainage).

6.03 Final Payment

Upon final completion and acceptance of the Work in accordance with paragraph 14.07 of the General Conditions, OWNER shall pay the remainder of the Contract Price.

ARTICLE 7 - INTEREST

7.01 All moneys not paid when due, excluding retainage, as provided in Article 14 of the General Conditions shall bear interest at the rate of 6.0%. Owner shall pay interest on retainage when required by the laws of the State of Texas.

ARTICLE 8 - CONTRACTOR'S REPRESENTATIONS

8.01 In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

A. CONTRACTOR has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents, including Addendums.

B. CONTRACTOR has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. CONTRACTOR is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.

D. CONTRACTOR acknowledges that OWNER and Engineer do not assume responsibility for the accuracy or completeness of information and data shown or

indicated in the Contract Documents with respect to Underground Facilities at or contiguous to the Project site.

E. CONTRACTOR has obtained and carefully studied (or assumes responsibility for having done so) all examinations, investigations, explorations, tests, studies, and data concerning conditions which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR, including applying the specific means, methods, techniques, sequences, and procedures of construction, if any, expressly required by the Contract Documents to be employed by CONTRACTOR, and safety precautions and programs incident thereto.

F. CONTRACTOR does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.

G. CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the Site that relates to the Work as indicated in the Contract Documents.

H. CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.

I. CONTRACTOR has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that CONTRACTOR has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to CONTRACTOR.

J. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

K. Where conflicts, errors, ambiguities or discrepancies have been discovered in or between Contract Documents and/or other related documents, and where said conflicts, etc., have not been resolved through the interpretations or clarifications by Engineer as described in the Instructions to Bidders, because of insufficient time or otherwise, CONTRCTOR has included in the Bid the greater quantity or better quality of Work, or compliance with the more stringent requirement resulting in a greater cost.

K. CONTRACTOR agrees that no contractor, subcontractor, material supplier, vendor, laborer, mechanic, or other person can or will contract for or in any other manner acquire any lien upon the building or works covered by the Agreement, or the land upon which the same is situated.

SECTION 00500
STANDARD FORM OF AGREEMENT
BETWEEN OWNER AND CONTRACTOR

ARTICLE 9 - CONTRACT DOCUMENTS

9.01 Contents

A. The Contract Documents consist of all of the following:

1. This Agreement.

2. Bonds:

   a. Performance bond (together with power of attorney).

   b. Payment bond (together with power of attorney).

3. General Conditions.

4. Supplementary Conditions.

5. Specifications as listed in the table of contents of the project manual (copy of list attached).

6. Drawings listed on the attached sheet index.

7. Addenda: **[NONE]**

8. Exhibits to this Agreement (enumerated as follows):

   a. **[NONE]**

9. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:

   a. Notice to Proceed.

   b. Work Change Directives.

   c. Change Orders.

   d. Field Orders.

B. The Contract Documents listed in Paragraph 7.01.A are attached to this Agreement (except as expressly noted otherwise above).

C. There are no Contract Documents other than those listed above in this Article 7.

D. The Contract Documents may only be amended, modified, or supplemented as provided in paragraph 3.04 of the General Conditions.

ARTICLE 10 - MISCELLANEOUS

10.01 Terms

A. Terms used in this Agreement will have the meanings indicated in the General Conditions and Supplemental Conditions.

10.02 Assignment of Contract

A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 Successors and Assigns

A. OWNER and CONTRACTOR each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 Severability

A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and CONTRACTOR, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 Law

A. The agreement shall be interpreted according to the laws of the State of Texas.

10.06 Venue

A. If any lawsuit is filed relating to the agreement, venue shall be in Hays County, Texas.

10.07 Modification of Agreement

A. This is the entire agreement between the parties. This agreement cannot be amended except in writing, signed by both parties.

SECTION 00500
STANDARD FORM OF AGREEMENT
BETWEEN OWNER AND CONTRACTOR

ARTICLE 11 – INDEMNIFICATION OF OWNER AND ENGINEER BY CONTRACTOR

11.01 As is provided in Section 6.20 of the General Conditions, CONTRACTOR agrees to indemnify and hold harmless OWNER, ENGINEER, ENGINEER's consultants and the officers, directors, employees, agents and other consultants of each and any of them from and against all claims, costs, losses, and damages caused by or arising out of or resulting from the performance of the Work, provided that any such claim, cost, loss, or damage: (i) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself), including loss or use therefrom and (ii) is caused in whole or in part by any act or omission of the CONTRACTOR, any Subcontractor, any Supplier or any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone else for whose acts any of them may be liable, **REGARDLESS OF WHETHER OR NOT CAUSED BY ANY NEGLIGENCE OR OMISSION OF OWNER, ENGINEER OR ANY OF THE OTHER PERSONS LISTED ABOVE TO BE INDEMNIFIED HEREUNDER OR WHETHER LIABILITY IS IMPOSED UPON SUCH INDEMNIFIED PARTY BY LAWS AND REGULATIONS REGARDLESS OF THE NEGLIGENCE OF SUCH PERSON OR ENTITY.**

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement of **Two (2)** Originals. One counterpart each has been delivered to OWNER and CONTRACTOR. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR or on their behalf.

This Agreement will be effective on _____, _____ (which is the Effective Date of the Agreement).

OWNER:	CONTRACTOR:
City of Dripping Springs	
By: _____	By _____
Mayor	[CORPORATE SEAL]
Attest: _____	Attest _____
Address for giving notices:	Address for giving notices:
City of Dripping Springs **P.O. Box 384** **511 Mercer Street** **Dripping Springs, Texas 78620**	_____

SECTION 00500
STANDARD FORM OF AGREEMENT
BETWEEN OWNER AND CONTRACTOR

License No. _____

Agent for service of process: _____

_____

Designated Representative:

Name: **Michelle Fischer**
Title: **City Administrator**

Address:
City of Dripping Springs
P.O. Box 384
511 Mercer Street
Dripping Springs, Texas 78620

Phone: **(512) 858-4725**

Fax: **(512) 858-5646**

Designated Representative:

Name
Title

Address:

_____

Phone

Fax

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

PAYMENT BOND

Prepared By

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PAYMENT BOND

Contractor Name: Address *(principal place of business)*:	**Surety** Name: Address *(principal place of business)*:
Owner Name: **City of Dripping Springs, TX** Mailing address *(principal place of business)*: **PO Box 384** **511 Mercer Street** **Dripping Springs, 78620**	**Contract** Description: Wastewater Gravity Main **The work to be performed includes furnishing all materials, equipment, tools, and labor necessary for the construction of approximately 7,996 linear feet of 12 to 24" gravity sewer line. The gravity main will cross Onion Creek going southeast. This project includes the removal of trees along the installation of gravity sewer and protection of existing trees along the same corridor. Contractor to perform all work under contract according to approved plans and specifications and in accordance with sound construction principles and practices.** Contract Price: **$** Effective Date of Contract:

Bond

Bond Amount:

Date of Bond:

(Date of Bond cannot be earlier than Effective Date of Contract)

Modifications to this Bond form:

☐ None ☐ See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Payment Bond, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

Contractor as Principal	Surety
_____ *(Full formal name of Contractor)*	_____ *(Full formal name of Surety) (corporate seal)*
By: _____ *(Signature)*	By: _____ *(Signature)(Attach Power of Attorney)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title: _____	Title: _____
Attest: _____ *(Signature)*	Attest: _____ *(Signature)*

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Name:	_____	Name:	_____
	(Printed or typed)		*(Printed or typed)*
Title:	_____	Title:	_____

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

    a. The performance bond must include without limitation guarantees that work done under the contract will be completed and performed according to approved plans and specifications and in accordance with sound construction principles and practices;

    b. The performance and payment bonds must be in a penal sum of not less than 100 percent of the contract price and remain in effect for two years beyond the date of approval by the consulting engineer of the political subdivision; and

    c. The contractor must utilize a surety company which is authorized to do business in Texas in accordance with Surety Bond and Related Instruments, Chapter 3503 of the Insurance Code.

2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond will arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.

4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.

5. The Surety's obligations to a Claimant under this Bond will arise after the following:

    a. Claimants who do not have a direct contract with the Contractor

        5.a.1. have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and

        5.a.2. have sent a Claim to the Surety (at the address described in Paragraph 13).

    b. Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).

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6. If a notice of non-payment required by Paragraph 5.a.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.a.1.

7. When a Claimant has satisfied the conditions of Paragraph 5.a or 5.b, whichever is applicable, the Surety shall within seven days and at the Surety's expense take the following actions:

    a. Send an answer to the Claimant, with a copy to the Owner, within ten (10) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

    b. Pay or arrange for payment of any undisputed amounts.

    c. The Surety's failure to discharge its obligations under Paragraph 7.a or 7.b will not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.a or 7.b, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

8. The Surety's total obligation will not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.c, and the amount of this Bond will be credited for any payments made in good faith by the Surety.

9. Amounts owed by the Owner to the Contractor under the Construction Contract will be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfying obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.

11. The Surety hereby waives notice of any change, extension of time, alteration, omissions, addition or other modification to the Construction Contract or to related subcontracts, purchase orders, and other obligations. The penal limit of this bond shall automatically be increased by the amount of any such change, extension of time, alteration, omission, addition or other modification that increases the price of the Construction Contract.

12. No suit or action will be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.a.2 or 5.b, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) occurs last. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit will be applicable.

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13. Notice and Claims to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, will be sufficient compliance as of the date received.

14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted here from and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.

15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

16. The Surety acknowledges that its obligations under this Bond and as detailed herein and in the Construction Contract are not conditioned on a termination of the Contractor by the Owner. Surety further acknowledges and agrees that Surety shall obtain the Owner's approval and consent with respect to the contractor(s) that Surety may retain to replace defaulted Contractor or otherwise honor the obligations under this Bond.

17. The Surety acknowledges and represents and warrants that it is duly authorized to do business in the State of Texas, that it is authorized and admitted to write surety bonds in the State of Texas, and that its obligations under this Bond are intended to be in all respects in full and complete compliance with every law, charter, rule or regulation that this Bond may be subject to. If the Surety's obligation under this Bond is in an amount in excess of ten percent (10%) of Surety's capital and surplus, Surety shall immediately upon the effective date of this Bond furnish written certification to City that the Surety has reinsured the portion of risk that exceeds ten percent (10%) of the Surety's capital and surplus with one or more reinsurers who are duly authorized, accredited or trusteed to do business in the State of Texas. In addition to the foregoing, If this Bond is in an amount in excess of $100,000, the Surety also warrants and represents that it holds a certificate from the United States Secretary of the Treasury to qualify as a surety on obligations permitted or required under federal law or that it has obtained reinsurance for any liability in excess of $100,000 from a reinsurer that is authorized and admitted as a reinsurer in the State of Texas and is the holder of a certificate of authority from the United States Secretary of the Treasury to qualify as a surety or reinsurer on obligations permitted or required under federal law. In such event, the Surety shall also furnish to the City immediately upon the effective date of this Bond a list of companies which includes the Surety or reinsurer holding such certificates of authority as acceptable sureties and reinsurers on federal bonds published in the Federal Register by the United States Department of the Treasury.

18. Definitions

    a. *Claim*—A written statement by the Claimant including at a minimum:

        18.a.1. The name of the Claimant;

        18.a.2. The name of the person for whom the labor was done, or materials or equipment furnished;

        18.a.3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;

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18.a.4. A brief description of the labor, materials, or equipment furnished;

18.a.5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;

18.a.6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;

18.a.7. The total amount of previous payments received by the Claimant; and

18.a.8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.

b. *Claimant*—An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has asserted a claim under an applicable lien or recorded a lis pendens against the real property upon which the Project is located. The intent of this Bond is to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a lien may be asserted or a lis pendens may be recorded in the jurisdiction where the labor, materials, or equipment were furnished.

c. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

d. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

e. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.

19. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.

20. Modifications to this Bond are as follows: **None**

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PERFORMANCE BOND

Prepared By

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PERFORMANCE BOND

Contractor Name: Address *(principal place of business)*:	**Surety** Name: Address *(principal place of business)*:
Owner Name: **City of Dripping Springs, TX** Mailing address *(principal place of business)*: **PO Box 384** **511 Mercer Street** **Dripping Springs, 78620**	**Contract** Description: Wastewater Gravity Main **The work to be performed includes furnishing all materials, equipment, tools, and labor necessary for the construction of approximately 7,996 linear feet of 12 to 24" gravity sewer line. The gravity main will cross Onion Creek going southeast. This project includes the removal of trees along the installation of gravity sewer and protection of existing trees along the same corridor. Contractor to perform all work under contract according to approved plans and specifications and in accordance with sound construction principles and practices.** Contract Price: **$** Effective Date of Contract:

Bond

Bond Amount:

Date of Bond:

(Date of Bond cannot be earlier than Effective Date of Contract)

Modifications to this Bond form:

☐ None ☐ See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Payment Bond, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

Contractor as Principal	Surety
(Full formal name of Contractor)	*(Full formal name of Surety) (corporate seal)*
By: _____ *(Signature)*	By: _____ *(Signature)(Attach Power of Attorney)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title: _____	Title: _____
Attest: _____ *(Signature)*	Attest: _____ *(Signature)*

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Name:	_____ *(Printed or typed)*	Name:	_____ *(Printed or typed)*
Title:	_____	Title:	_____

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.

The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

1. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.

    a. The performance bond must include without limitation guarantees that work done under the contract will be completed and performed according to approved plans and specifications and in accordance with sound construction principles and practices;

    b. The performance and payment bonds must be in a penal sum of not less than 100 percent of the contract price and remain in effect for two years beyond the date of approval by the consulting engineer of the political subdivision; and

    c. The contractor must utilize a surety company which is authorized to do business in Texas in accordance with Surety Bond and Related Instruments, Chapter 3503 of the Insurance Code.

2. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond will arise after:

    a. The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice may indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 2.a will be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement does not waive the Owner's right, if any, subsequently to declare a Contractor Default;

    b. The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

    c. The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

3. Failure on the part of the Owner to comply with the notice requirement in Paragraph 2.a does not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

4. When the Owner has satisfied the conditions of Paragraph 2, the Surety shall promptly and at the Surety's expense take one of the following actions:

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a. Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

b. Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

c. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

d. Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

5. If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 4.d, and the Owner refuses the payment, or the Surety has denied liability, in whole or in part, without further notice, the Owner shall be entitled to enforce any remedy available to the Owner.

6. If the Surety elects to act under Paragraph 4.a, 4.b, or 4.c, then the responsibilities of the Surety to the Owner will not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety will not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:

a. the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

b. additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and

c. liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

7. If the Surety elects to act under Paragraph 4.a, 4.c, or 5.d, the Surety's liability is limited to the amount of this Bond.

8. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price will not be reduced or set off on account of any such unrelated obligations. No right of action will accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

9. The Surety hereby waives notice of any change, extension of time, alteration, omissions, addition or other modification to the Construction Contract or to related subcontracts, purchase orders, and

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other obligations. The penal limit of this bond shall automatically be increased by the amount of any such change, extension of time, alteration, omission, addition or other modification that increases the price of the Construction Contract.

10. Any proceeding, legal or equitable, under this Bond must be instituted in any court of competent jurisdiction in the location in which the work is principally located and must be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs last. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit will be applicable.
11. Notice to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears.

12. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted therefrom and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.
13. The Surety acknowledges that its obligations under this Bond and as detailed herein and in the Construction Contract are not conditioned on a termination of the Contractor by the Owner. Surety further acknowledges and agrees that Surety shall obtain the Owner's approval and consent with respect to the contractor(s) that Surety may retain to replace defaulted Contractor or otherwise honor the obligations under this Bond.

14. The Surety acknowledges and represents and warrants that it is duly authorized to do business in the State of Texas, that it is authorized and admitted to write surety bonds in the State of Texas, and that its obligations under this Bond are intended to be in all respects in full and complete compliance with every law, charter, rule or regulation that this Bond may be subject to. If the Surety's obligation under this Bond is in an amount in excess of ten percent (10%) of Surety's capital and surplus, Surety shall immediately upon the effective date of this Bond furnish written certification to City that the Surety has reinsured the portion of risk that exceeds ten percent (10%) of the Surety's capital and surplus with one or more reinsurers who are duly authorized, accredited or trusteed to do business in the State of Texas. In addition to the foregoing, If this Bond is in an amount in excess of $100,000, the Surety also warrants and represents that it holds a certificate from the United States Secretary of the Treasury to qualify as a surety on obligations permitted or required under federal law or that it has obtained reinsurance for any liability in excess of $100,000 from a reinsurer that is authorized and admitted as a reinsurer in the State of Texas and is the holder of a certificate of authority from the United States Secretary of the Treasury to qualify as a surety or reinsurer on obligations permitted or required under federal law. In such event, the Surety shall also furnish to the City immediately upon the effective date of this Bond a list of companies which includes the Surety or reinsurer holding such certificates of authority as acceptable sureties and reinsurers on federal bonds published in the Federal Register by the United States Department of the Treasury
15. Definitions
    a. *Balance of the Contract Price*—The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for

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the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

b. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

c. *Contractor Default*—Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

d. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

e. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.

16. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.

17. Modifications to this Bond are as follows: **None**

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ED-005
12/16

GUIDELINES
FOR
INSPECTOR QUALIFICATIONS

GENERAL:

Texas Administrative Codes 371.80, 375.101 & 363.51 state that the applicant for all financial assistance programs shall provide for the adequate qualified inspection of the project under the supervision of a registered professional engineer and the executive administrator is authorized to inspect the construction and material of any project at any time. The qualifications and organization of the inspection team provided by the owner or consultant are vital to the success of the construction project.

Competent and adequate inspection is in the best interest of the owner to ensure that construction is in accordance with the contract documents as well as to avoid disputes over payments to the contractor. Good documentation and communication will also aid in prevention and resolution of contractor claims.

TIME:

The amount of time and number of inspectors required on a project depends on the scope of work, number of contracts and the pace of construction. Consideration should be given to the number and nature of contracts that will be active at the same time. An inspector should observe all significant construction events.

SUGGESTED QUALIFICATIONS:

As a minimum, inspectors should possess experience and knowledge comparable to the size, scope and complexity of the project they will be assigned to inspect. In general, inspectors should also have a thorough understanding of soils, concrete, surveys, pipe-laying, testing, mechanical and electrical. For relatively large or complex projects (e. g. treatment plants greater than $5-$10 million) it may be beneficial to have a resident engineer assigned to the project.

RESPONSIBILITIES:

The inspector, resident engineer or resident project representative's duties, responsibilities and limitations should be clearly defined in the contract documents.

TEXAS WATER DEVELOPMENT BOARD GUIDANCE:

For questions relating to the inspection effort required or the inspector's qualifications for each contract, contact your regional team.

STATE OF TEXAS §
§
COUNTY OF _____ §

SITE
CERTIFICATE

Before me, the undersigned notary, on this day personally appeared _____, a person whose identity is known to me or who has presented to me a satisfactory proof of identity. After I administered an oath, this person swore to the following:

(1) My name is_____. I am over 18 years of age and I am of sound mind, and capable of swearing to the facts contained in this Site Certificate. The facts stated in this certificate are within my personal knowledge and are true and correct.

(2) I am an authorized representative of _____, an entity that has filed an application for financial assistance with the Texas Water Development Board for a (water) (wastewater) project.

Please complete only those sections that apply to your project:

LEGAL CERTIFICATION – LEASE/CONTRACT

I certify that: _____
(Legal Name of Applicant, i.e., City, District, etc.)

has executed a written lease or other contractual agreement to use the property needed for this (water)(wastewater) project that extends through _____(date), the life of the Texas Water Development Board loan or grant that will be used to finance this project, either in whole or in part. A copy of this lease or agreement is attached hereto.

LEGAL CERTIFICATION – PROPERTY EASEMENT

I certify that: _____
(Legal Name of Applicant, i.e., City, District, etc.)

has executed an express easement to use the property needed for this (water) (wastewater) project that extends through the life of the Texas Water Development Board loan or grant that will be used to finance this project, either in whole or in part. The express easement to use the property needed for this (water) (wastewater) project extends through _____ (date). A copy of the express easement agreement is attached hereto.

LEGAL CERTIFICATION – OWNERSHIP INTEREST

I certify that_____
(Legal Name of Applicant, e.g. City, District, etc.)

◯ Option A: has acquired the necessary real property interest, as evidenced by fee simple purchase, deed, fully executed earnest money contracts, or completion of eminent domain proceedings; that such acquisition will guarantee access and egress; and such interest will contain the necessary easements, rights of way, or unrestricted use as is required for the project being financed by the Texas Water Development Board. The legal description is referenced below.

◯ Option B: is in the process of acquiring the necessary real property interest, as evidenced by earnest money contracts, contracts for sale, firm option agreements to purchase the subject property, or the initiation of eminent domain procedures; that such acquisition will guarantee access and egress; and such interest will contain the necessary easements, rights of way, or unrestricted use as is required for the project being financed by the Texas Water Development Board. The legal description is referenced below. The anticipated date of acquisition is: _____.

The property has been/will be acquired with the use of eminent domain: ◯ True ◯ False

Location and Description of Property Interests acquired for Project:

Any deeds or other instruments required to be recorded to protect the title(s) held by _____ (Legal Name of Applicant) have been recorded or filed for the record in the County deed records or other required location. The following documents are attached hereto:

Description of documents that were used or will be used to acquire the property:

EXECUTED this_____day of _____, 20_____.

_____ (Signature)

_____ (Print Name)

_____ (Title)

Sworn to and subscribed before me by _____ on this _____ day of_____,20_____.

_____(Notary Public in and for the State of Texas)

[SEAL]

CONTRACTOR'S ACT OF ASSURANCE

STATE OF TEXAS §
§
COUNTY OF_____§

BEFORE ME _____, a Notary Public duly commissioned and qualified in and for the County of _____ in the State of Texas came and appeared _____, as represented by _____, the Corporation's _____, who declares he/she is authorized to represent _____ pursuant to provisions of a resolution adopted by said Corporation on the _____ day of _____, 20_____(a duly certified copy of such resolution is attached to and is hereby made a part of this document).

_____, as the representative of, _____declares that _____ assures the Texas Water Development Board that it will construct _____ project at _____, Texas, in accordance with sound construction practice, all laws of the State of Texas, and the rules of the Texas Water Development Board.

GIVEN UNDER MY HAND and seal of office this _____ day of _____, 20_____.

_____ (Notary Public in and for the State of Texas)

_____ (Print Name)

[SEAL]

CONTRACTOR'S ACT OF ASSURANCE RESOLUTION

I hereby certify that it was RESOLVED by a quorum of the directors of the _____(Name of Corporation), meeting on the_____day of _____ 20_____, that:

Authorized Representative(s):

be, and hereby is/are authorized to act on behalf of _____ (Name of Corporation), as its representative in all business transactions conducted in the State of Texas, and;

That all above resolution was unanimously ratified by the Board of Directors at said meeting and that the resolution has not been rescinded or amended and is now in full forces and effect; and;

In authentication of the adoption of this resolution, I subscribe my name and affix the seal of the Corporation this _____ day of _____, 20_____.

_____(Secretary)

[SEAL]

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

NOTICE TO PROCEED

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NOTICE TO PROCEED

Owner:	City of Dripping Springs	Owner's Project No.:	No. 73819
Engineer:	Burgess & Niple, Inc	Engineer's Project No.:	PR39676.1
Contractor:		Contractor's Project No.:	
Project:	City of Dripping Springs West Interceptor Segment 2		
Contract Name:	TWDB CW-SRF No. 73819		
Effective Date of Contract:			

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on _____ pursuant to Paragraph 4.01 of the General Conditions.

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work will be done at the Site prior to such date.

In accordance with the Agreement:

The number of days to achieve Substantial Completion is **300** from the date stated above for the commencement of the Contract Times, resulting in a date for Substantial Completion of _____; and the number of days to achieve readiness for final payment is **360** from the commencement date of the Contract Times, resulting in a date for readiness for final payment of _____.

Before starting any Work at the Site, Contractor must comply with the following:

Contractor to field verify location and elevations of existing utilities prior to construction. Contractor should verify tree removals with the owner prior to the start of clearing.

Owner:	**City of Dripping Springs, TX**
By *(signature)*:	
Name *(printed)*:	
Title:	City Administrator
Date Issued:	

Copy: City of Dripping Springs
TWDB

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STANDARD GENERAL CONDITIONS
OF THE CONSTRUCTION CONTRACT

CITY OF DRIPPING SPRINGS
SOUTH REGIONAL WASTEWATER SYSTEM

WEST INTERCEPTOR SEGMENT 2

THE GENERAL CONDITIONS OF THE AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT WILL BE THE STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT PREPARED BY THE ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE (EJCDC C-700, VERSION 2018) WITH MODIFICATIONS MADE BY OWNER.

GENERAL CONDITIONS

Prepared By

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B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times and Contractor's ability to demonstrate effect on Contractor's then established critical path. 22

C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, unusually severe and abnormal weather conditions such as tropical storms, hurricanes, or tornados, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times and Contractor's ability to demonstrate effect on Contractor's then established critical path. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this sub-Paragraph. The occurrence of flooding or other effects of storms or severe weather such as thunderstorms or ordinarily experienced rain events shall not trigger an adjustment of the Contract Time pursuant to this Section. Rain events and other anticipated weather that may result in delays to Contractor's performance are addressed in the following paragraphs D and E. 22

D. The procedure for the determination of time extensions for unusually severe weather. In order for the Owner to award a time extension under this clause, the following conditions must be satisfied: 23

1. The weather experienced at the Project site during the Contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the Project location during any given month; and 23

2. The unusually severe weather must actually cause a delay to the completion of the Project. 23

The following schedule of monthly anticipated adverse weather delays is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the Project location and will constitute the base line for monthly weather time evaluations. The Contractor's activity durations provided in the progress schedule must reflect these anticipated adverse weather delays in all-weather dependent activities. 23

E. For the duration of the Contract, the Contractor shall maintain in its daily reports an accurate and contemporaneous record of the occurrence of adverse weather and resultant impact to normally scheduled Work. Delay from adverse weather shall not qualify as an adverse weather delay unless Work on the overall Project's critical activities is prevented for 50 percent or more of the Contractor's scheduled work day. The number of actual adverse weather days shall be calculated monthly. If the number of actual adverse weather delay days in a month exceeds the number of days for that month as referenced above, the Owner upon notification by the Contractor, will convert any qualifying delays to calendar days, giving full consideration for equivalent fair weather work days, and a Modification shall be issued in accordance with the Contract. 23

F. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration

or other dispute resolution costs) sustained by Contractor on or in connection with the Project or any other project or anticipated project. 24

G. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor. 24

H. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 4. 24

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involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment , a Claim may be made therefor as provided in Paragraph 10.05. 50
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DOCUMENT 00700

GENERAL CONDITIONS

Article 2 — **DEFINITIONS AND TERMINOLOGY**

1.01 Defined Terms

A. Wherever used in the Request for Proposals (RFP), Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids or Proposals which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
2. *Agreement*—The written instrument that sets forth the Contract Price, Contract Times, identifies the parties and evidences the agreement between the Owner and the Contractor for performance of the Work.
3. *Application for Payment*—The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
5. *Bidder*—An individual or entity that submits a Bid to Owner.
6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
7. *Bidding Requirements*—The Advertisement or invitation to bid, instructions to bidders, RFP, bid bond or other bid security, if any, the bid form, and any attachments or supplements to the Bidding Documents.
8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both.
10. *Claim*—A demand or assertion by the Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.

12. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract. Contract Documents include the Agreement, the General Conditions, any Supplemental, Supplementary and Special Conditions, if any, the Insurance Rider (Exhibit A), and the performance and payment bonds, along with any other documents specifically listed in the Agreement as a Contract Document. Only those documents listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
15. *Contract Time(s)*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
20. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.
21. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.
22. *Engineer*—The individual or entity named as such in the Agreement.
23. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
24. Final Completion - The Work is complete when it is ready for final payment as established by the Engineer's written recommendation of final payment as set forth in Paragraph 15.06.

25. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.
    a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.
    b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
    c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
26. *Hazardous Waste*–The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
27. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
28. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
29. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.
30. *Notice of Award*—The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.
31. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
32. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
33. *Owner's Representative* - The individual or entity will be responsible for administration of the Contract as a representative of the Owner. Owner has designated Carollo Engineers to provide construction management services with duties, responsibilities, and limitations therein as required by Contract. Where, in the Contract Documents, certain rights, responsibilities, actions, or obligations are required of Owner, either the Owner or the Owner's Representative may exercise and act on Owner's behalf.
34. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor's plan to accomplish the Work within the Contract Times.
35. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.

36. *Project Manual*–The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.
37. *Related Entity* – An officer, director, partner, employee, agent, consultant, or subcontractor.
38. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.
39. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
40. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals.
41. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
42. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
43. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.
44. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
45. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
46. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers' instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.
47. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be

utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion of such Work.

48. *Successful Bidder*—The Bidder having submitted a responsive Bid to which the Owner makes an award of contract.
49. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
50. *Supplier*—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
51. *Technical Data*
    a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.
    b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.
    c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.
52. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
53. *Unit Price Work*—Work to be paid for on the basis of unit prices.
54. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
55. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract

Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 Terminology

A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.

B. *Intent of Certain Terms or Adjectives*: The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.

C. *Day*: The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. *Defective*: The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:
   1. does not conform to the Contract Documents;
   2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
   3. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).

E. *Furnish, Install, Perform, Provide*
   1. The word "furnish," when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
   2. The word "install," when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
   3. The words "perform" or "provide," when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.
   4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words "furnish," "install," "perform," or "provide," then Contractor shall

furnish and install said services, materials, or equipment complete and ready for intended use.

F. *Contract Price or Contract Times*: References to a change in "Contract Price or Contract Times" or "Contract Times or Contract Price" or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term "or both" is not expressed.

G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

Article 3 — **PRELIMINARY MATTERS**

2.01 Delivery of Performance and Payment Bonds; Evidence of Insurance

A. *Performance and Payment Bonds*: Contractor shall deliver to Owner such bonds as Contractor may be required to furnish within ten (10) days of the date on which Contractor signs the Agreement. Contractor shall not be permitted to commence performance until the bonds have been delivered even though the Contract time may have commenced..

B. *Evidence of Contractor's Insurance*: Before any Work at the Site may commence, Contractor shall deliver to the Owner certificates of insurance and policy endorsements pages for all insurance policies that may be required of Contractor by the Contract Documents evidencing compliance with the Owner's insurance requirements as required in Article 6 and Exhibit A, Owner's Insurance Requirements, to these General Conditions..

2.02 Copies of Documents

A. Owner shall furnish to Contractor 3 printed copies of conformed documents incorporating and integrating all Addenda and any amendments negotiated prior to the Effective Date of the Contract (including 1 fully signed counterpart of the Agreement), and 1 copy in electronic portable document format (PDF). Additional printed copies of the conformed documents will be furnished upon request at the cost of reproduction.

B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence upon issuance of a Notice to Proceed by the Owner.

2.04 Commencement of Performance

A. Contractor may commence performance upon receipt of the Notice to Proceed and in accordance with any terms and dates contained therein

2.05 Before Starting Construction

A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
   1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
   2. a preliminary Schedule of Submittals; and
   3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

B. Contractor represents that Contractor's preliminary Progress Schedule has been prepared and is based upon Contractor's own knowledge, understanding, and judgment of conditions and hazards, known and anticipated, and does not rely on any representations by Owner

2.06 Preconstruction Conference; Designation of Authorized Representatives

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work, and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings, Samples, and other Submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.

2.07 Designation of Authorized Representatives

A. Prior to or within three (3) days of the Notice to Proceed, the Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.08 Acceptance of Schedules

A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.
   1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
   2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.
4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

2.09 Electronic Transmittals

A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.

B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.

C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

2.10 Electronic Data

A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.
1. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

Article 4 — **CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE**

3.01 Intent

A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as

being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.

C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.

D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.

E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

3.02 Reference Standards

A. *Standards Specifications, Codes, Laws and Regulations*

1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
2. No provision of any such standard specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, Contractor, or Engineer from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 Reporting and Resolving Discrepancies

A. *Reporting Discrepancies*

1. *Contractor's Verification of Figures and Field Measurements*: Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.
2. *Contractor's Review of Contract Documents*: If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard

specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof. Should Contractor perform the Work after discovery of such a conflict without reporting the conflict or before receipt of a clarification or interpretation by Engineer, Contractor will be solely liable for any correction or other measures that may be required to overcome the conflict or bring the Work into compliance with the Contract Documents.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
   a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
   b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 Requirements of the Contract Documents

A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work. Owner shall have sole authority to accept the Work.

B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal.

C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

D. If the Work required by a Drawing or Specification identifies or requires a specific piece of equipment, such Drawing or Specification shall indicate the manufacturer's

part number or reference data. If specific equipment is required, the Drawings or Specifications shall indicate the design dimensions and the minimum and maximum allowable operating tolerances for any such equipment, where applicable.

3.05 Reuse of Documents

A. Contractor and its Subcontractors and Suppliers shall not:
   1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
   2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.

B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes Contractor from retaining copies of the Contract Documents for record purposes.

3.06 Amending and Supplementing Contract Documents

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways: (1) a Field Order; (2) Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or (3) Engineer's written interpretation or clarification.

Article 5 — **COMMENCEMENT AND PROGRESS OF THE WORK**

4.01 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence to run on the 30th day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed.

4.02 Starting the Work

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work may be done at the Site prior to such date. Any Work performed by the Contractor before the Contract Time commences shall not be charged against the Contract Time.

4.03 Reference Points

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor, by or through a registered professional land surveyor (RPLS) or other qualified professional, shall be responsible for laying out

the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by and RPLS or other professionally qualified personnel.

B. Contractor shall note the location of all reference points and controls on a set of red-lined drawings or exhibits to be maintained at all time on the jobsite or the location of Contractor's project management personnel.

4.04 Progress Schedule

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
   1. Contractor shall submit to Engineer for Owner's acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.
   2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11. Adjustments in Contract Times may only be made by a Change Order.

B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 Delays in Contractor's Progress

A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, weather conditions, or acts of God.

B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times and Contractor's ability to demonstrate effect on Contractor's then established critical path.

C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, unusually severe and abnormal weather conditions such as tropical storms, hurricanes, or tornados, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an

equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times and Contractor's ability to demonstrate effect on Contractor's then established critical path. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this sub-Paragraph. The occurrence of flooding or other effects of storms or severe weather such as thunderstorms or ordinarily experienced rain events shall not trigger an adjustment of the Contract Time pursuant to this Section. Rain events and other anticipated weather that may result in delays to Contractor's performance are addressed in the following paragraphs D and E.

D. The procedure for the determination of time extensions for unusually severe weather. In order for the Owner to award a time extension under this clause, the following conditions must be satisfied:

1. The weather experienced at the Project site during the Contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the Project location during any given month; and

2. The unusually severe weather must actually cause a delay to the completion of the Project.

The following schedule of monthly anticipated adverse weather delays is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the Project location and will constitute the base line for monthly weather time evaluations. The Contractor's activity durations provided in the progress schedule must reflect these anticipated adverse weather delays in all-weather dependent activities.

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY
WORK DAYS BASED ON FIVE (5) DAY WORK WEEK

JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
(5)	(4)	(5)	(4)	(5)	(6)	(4)	(4)	(5)	(5)	(4)	(4)

E. For the duration of the Contract, the Contractor shall maintain in its daily reports an accurate and contemporaneous record of the occurrence of adverse weather and resultant impact to normally scheduled Work. Delay from adverse weather shall not qualify as an adverse weather delay unless Work on the overall Project's critical activities is prevented for 50 percent or more of the Contractor's scheduled work day. The number of actual adverse weather days shall be calculated monthly. If the number of actual adverse weather delay days in a month exceeds the number of days for that month as referenced above, the Owner upon notification by the Contractor, will convert any qualifying delays to

calendar days, giving full consideration for equivalent fair weather work days, and a Modification shall be issued in accordance with the Contract.

F. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with the Project or any other project or anticipated project.

G. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

H. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 4.

I. Contractor must submit any Change Proposal seeking an adjustment in Contract Times under this Paragraph 12.03 within 30 days of the commencement of the delaying, disrupting, or interfering event.

J. Contractor expressly waives any right to an adjustment in Contract Price for any event of delay. Contractor's sole remedy for any delay shall be limited to an adjustment in Contract Time.

ARTICLE 5 — SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 Availability of Lands

A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Times as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in the Contract Documents.

B. Owner shall provide any easements for ingress or egress necessary for access to the Site

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment for which the Site and any Owner-provided easements do not provide.

5.02 Use of Site and Other Areas

A. *Limitation on Use of Site and Other Areas*

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

B. *Removal of Debris During Performance of the Work*: During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.

C. *Cleaning*: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. *Loading of Structures*: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor

subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 Subsurface and Physical Conditions

A. Contractor accepts the responsibility to satisfy itself as to the soil conditions and nature and type of geological formations in and through which this Project will be constructed. Such information as may be obtained from the test borings and accompanying notations shown on the plans is merely for the guidance of the Contractor and is not to be construed in any manner as a guarantee by the Owner that such conditions of sub-surface strata are infallible.

B. Contractor waives any and all rights to make a claim against Owner relating to representations related to geotechnical data provided in the Contract Documents, plans and specifications. The locations of the test holes, if applicable, are shown in the Geotechnical Report. Logs of these test holes are included in the Geotechnical Report. Test holes information represents subsurface characteristics to the extent indicated and only for the point location of the test hole. Contractor shall make its own interpretation of the character and condition of the materials, which will be encountered. Contractor may, at its own expense, make additional surveys and investigations as it may deem necessary to determine conditions, which will affect performance of the Work.

C. *Reports and Drawings*: The Supplementary Conditions identify:
   1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;
   2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data; and
   3. Technical Data contained in such reports and drawings.

D. *Underground Facilities*: Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

E. *Limited Reliance by Contractor on Technical Data*:
   1. Contractor may rely upon the general accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.

F. *Limitations of Other Data and Documents*: Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
   1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

Contractor waives and expressly acknowledges that it does not possess and may not maintain any claims against Owner due to the inclusion or omission from the bid documents or the Contract Documents any data concerning geotechnical, hydrological or other similar data and studies that may be known to the Owner or its Engineer, regardless of whether such data was considered in the design.

5.04 Differing Subsurface or Physical Conditions

A. *Notice by Contractor*: If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site:
5. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;
6. is of such a nature as to require a change in the Drawings or Specifications;
7. differs materially from that shown or indicated in the Contract Documents; or
8. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

B. *Engineer's Review*: After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.

C. *Owner's Statement to Contractor Regarding Site Condition*: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.

D. *Early Resumption of Work*: If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior

to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.

E. *Possible Price and Times Adjustments*
   a. The Contract Times will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's time required for performance of the Work; subject, however, such condition must meet any one or more of the categories described in Paragraph 5.04.A.
   2. Contractor shall not be entitled to any adjustment in the Contract Times with respect to a subsurface or physical condition if:
      a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;
      b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
      c. Contractor failed to give the written notice required by Paragraph 5.04.A.
   3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Times, then any such adjustment will be set forth in a Change Order.
   4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

F. *Underground Facilities; Hazardous Environmental Conditions*: Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 Underground Facilities

A. *Contractor's Responsibilities*: Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for:
   1. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
   2. complying with applicable state and local utility damage prevention Laws and Regulations;
   3. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;
   4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and

5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.

B. *Notice by Contractor*: If an Underground Facility is uncovered or revealed at or contiguous to the Site was not shown or indicated with reasonable accuracy on the Drawings, then Contractor shall, promptly, but in no instance more than three (3) days after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.

C. *Engineer's Review*: Following receipt of said written notice, Engineer will:
1. promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

D. *Early Resumption of Work*: If at any time Engineer determines that Work in connection with the Underground Facility may resume without a change to the Drawings and without a resulting Change Order or Work Change Directive, then the Engineer may at its discretion instruct Contractor to resume such Work.

E. *Possible Price and Times Adjustments:* If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Times, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Times, Contractor may make a Claim therefor as provided in Paragraph 10.05.

5.06 Hazardous Environmental Conditions at Site

A. *Reports and Drawings*: Reference is made to the Supplementary Conditions for identification of, if any:
1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;
2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
3. Technical Data contained in such reports and drawings.

B. *Limited Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the general accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. Contractor waives and acknowledges that it may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques,

sequences and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.

D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.

E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.

F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.

G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.

H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such

Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.

I. TO THE FULLEST EXTENT PERMITTED BY LAWS AND REGULATIONS, CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS OWNER AND ENGINEER, AND THE OFFICERS, DIRECTORS, MEMBERS, PARTNERS, EMPLOYEES, AGENTS, CONSULTANTS, AND SUBCONTRACTORS OF EACH AND ANY OF THEM, FROM AND AGAINST ALL CLAIMS, COSTS, LOSSES, AND DAMAGES (INCLUDING BUT NOT LIMITED TO ALL FEES AND CHARGES OF ENGINEERS, ARCHITECTS, ATTORNEYS, AND OTHER PROFESSIONALS AND ALL COURT OR ARBITRATION OR OTHER DISPUTE RESOLUTION COSTS) ARISING OUT OF OR RELATING TO THE FAILURE TO CONTROL, CONTAIN, OR REMOVE A CONSTITUENT OF CONCERN BROUGHT TO THE SITE BY CONTRACTOR OR BY ANYONE FOR WHOM CONTRACTOR IS RESPONSIBLE, OR TO A HAZARDOUS ENVIRONMENTAL CONDITION CREATED BY CONTRACTOR OR BY ANYONE FOR WHOM CONTRACTOR IS RESPONSIBLE. NOTHING IN THIS PARAGRAPH 5.06.J OBLIGATES CONTRACTOR TO INDEMNIFY ANY INDIVIDUAL OR ENTITY FROM AND AGAINST THE CONSEQUENCES OF THAT INDIVIDUAL'S OR ENTITY'S OWN NEGLIGENCE.

J. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6 — BONDS AND INSURANCE

6.01 Performance, Payment, and Other Bonds

A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall be in accordance with Texas Government Code Chapters 2253 and 2269.
   1. A Performance Bond in the amount of one hundred percent (100%) of the contract price will be required (if the contract exceeds $100,000).
   2. A Payment Bond in the amount of one hundred percent (100%) of the contract price will be required (if the contract amount exceeds $50,000).
   3. Contractor will be required to furnish performance and payment bonds, if required as stated above, in the contract amount in the Contract Agreement, the Project specifications, or the latest edition issued with the contract at the time of award. The bonds must be issued by one or more corporate sureties authorized to do business in Texas as acceptable to the Owner.

B. All bonds shall be in the form prescribed by the Owner in the Contract Documents. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.

C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements above, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving

rise to such notification, provide another bond and surety, both of which shall comply with the requirements above.

D. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 15.

6.02 Licensed Sureties and Insurers

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Insurance Rider (Exhibit A).

6.03 Certificates of Insurance

A. Contractor shall provide insurance in accordance with Owner's Insurance Requirements of Contractor that is Exhibit A to these General Conditions.

B. Contractor shall deliver to Owner, with copies to each additional insured identified in **Exhibit A** to the Contract, certificates of insurance, policy endorsements page (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain..

6.04 Waiver of Rights

A. Owner and Contractor intend that all policies purchased will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Insurance Rider to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. Upon receipt of payment for any loss or damage covered by an insurance policy required by the Insurance Rider or this Agreement, the Owner and Contractor waive all rights against each other and their respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against all other individuals or entities identified in the Insurance Rider to be listed as insured or additional insured (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

ARTICLE 7 — CONTRACTOR'S RESPONSIBILITIES

7.01 Contractor's Means and Methods of Construction

A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.

B. Unless noted in the Contract Documents, professional engineering or other design services that may, in the Contractor's determination, become necessary to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety are the Contractor's responsibility and the Contractor shall cause such services to be provided by a properly licensed design professional at Contractor's expense. If noted in the Contract Documents, then the services shall be included in the Contract Price and no Change Order or increase in the Contract Price shall be due to Contactor upon performance of those professional services.

7.02 Contractor's Standard of Care; Supervision and Superintendence

A. The Contractor shall prosecute the Work in a good and workmanlike manner, continuously and diligently in accordance with generally accepted standards for projects similar to the Project, using qualified, careful, and efficient workers, in conformity with the provisions of the Agreement and in strict compliance with the Contract Documents and with Laws and Regulations.

B. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.

C. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written consent of Owner. Such consent shall not be unreasonably withheld. Contractor shall not employ any superintendent on the Project, whether initially or as a replacement, against whom Owner may have reasonable objection. The superintendent shall fluently speak the English language. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or received from the superintendent shall be binding on Contractor

7.03 Labor; Working Hours

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.

B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of Suppliers and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor's own acts and omissions.

C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. Contractor will not perform overtime Work or Work on a Saturday, Sunday, or any legal holiday without Owner's written consent, which will not be unreasonably withheld.

7.04 Services, Materials, and Equipment

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.

B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 "Or Equals"

A. *Contractor's Request; Governing Criteria*: Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.

1. If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an "or equal" item. For the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:
    a. in the exercise of reasonable judgment Engineer determines that the proposed item:
        1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
        2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
        3) has a proven record of performance and availability of responsive service; and
        4) is not objectionable to Owner.

b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:
    1) there will be no increase in cost to the Owner or increase in Contract Times; and
    2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.

B. *Contractor's Expense*: Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.

C. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal," which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.

D. *Effect of Engineer's Determination*: Neither approval nor denial of an "or-equal" request will result in any change in Contract Price. The Engineer's denial of an "or-equal" request will be final and binding, and may not be reversed through an appeal under any provision of the Contract.

E. *Treatment as a Substitution Request*: If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 Substitutes

A. *Contractor's Request; Governing Criteria*: Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.
    1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of equipment or material from anyone other than Contractor.
    2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
    3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:
        a. will certify that the proposed substitute item will:
            1) perform adequately the functions and achieve the results called for by the general design;
            2) be similar in substance to the item specified; and
            3) be suited to the same use as the item specified.

b. will state:
    1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;
    2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
    3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
c. will identify:
    1) all variations of the proposed substitute item from the item specified; and
    2) available engineering, sales, maintenance, repair, and replacement services.
d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.

B. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.

C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

D. *Reimbursement of Engineer's Cost*: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.

F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding, and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 Concerning Subcontractors and Suppliers

A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work, but the Contractor shall not employ any Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, against whom Owner may have reasonable objection. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in strict accordance with the Contract Documents.

B. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.

C. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor may be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.

D. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in strict accordance with the Contract Documents.

E. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.

F. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.

G. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.

H. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.

I. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.

J. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 Patent Fees and Royalties

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed in the Contract Documents.

B. TO THE FULLEST EXTENT PERMITTED BY LAWS AND REGULATIONS, CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS OWNER AND ENGINEER, AND THE OFFICERS, DIRECTORS, MEMBERS, PARTNERS, EMPLOYEES, AGENTS, CONSULTANTS AND SUBCONTRACTORS OF EACH AND ANY OF THEM, FROM AND AGAINST ALL CLAIMS, COSTS, LOSSES, AND DAMAGES (INCLUDING BUT NOT LIMITED TO ALL FEES AND CHARGES OF ENGINEERS, ARCHITECTS, ATTORNEYS, AND OTHER PROFESSIONALS AND ALL COURT OR ARBITRATION OR OTHER DISPUTE RESOLUTION COSTS) ARISING OUT OF OR RELATING TO ANY INFRINGEMENT OF PATENT RIGHTS OR COPYRIGHTS INCIDENT TO THE USE IN THE PERFORMANCE OF THE WORK OR RESULTING FROM THE INCORPORATION IN THE WORK OF ANY INVENTION, DESIGN, PROCESS, PRODUCT, OR DEVICE NOT SPECIFIED IN THE CONTRACT DOCUMENTS.

7.09 Permits

A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner may assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Contractor shall pay all charges of utility owners for connections for providing permanent service to the Work.

7.10 Taxes

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

B. The Owner enjoys tax-exempt status as a public entity. To enjoy the cost-savings benefits of its tax-exempt status, the Owner will provide a Tax Exemption Certificate to the Contractor for use on the Project. The Contractor shall use that certificate to exempt any purchases made for the Work from taxes. All savings for the tax-exempt status will be passed on to the Owner by the Contractor. The Contractor agrees to bind all Subcontractors of any tier to the obligation to present and use the Tax Exemption Certificate and pass all savings to the Owner

7.11 Laws and Regulations

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Neither Owner nor Engineer

shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear and be liable for all claims, costs, expenses, losses, and damages (including but not limited to all fees and charges of engineers, architects, consultants, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It is not Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve Contractor of its obligations under Paragraph 3.03.

7.12 Record Documents

A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Owner. Delivery of a complete set of record documents to Owner is a condition precedent to Final Completion.

7.13 Safety and Protection

A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.

B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.

C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
   1. all persons on the Site or who may be affected by the Work;
   2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
   3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly,

in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.

F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.

G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.

H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.

I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).

J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 Hazard Communication Programs

A. Contractor shall be responsible for coordinating any exchange of safety data sheets (formerly known as material safety data sheets) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 Emergencies

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency, or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.16 Submittals

A. *Shop Drawing and Sample Requirements*
   1. Before submitting a Shop Drawing or Sample, Contractor shall:
      a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
      b. determine and verify:
         1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;
         2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
         3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
      c. confirm that the Submittal is complete with respect to all related data included in the Submittal.
   2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.
   3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.

B. *Submittal Procedures for Shop Drawings and Samples*: Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.
   1. *Shop Drawings*
      a. Contractor shall submit the number of copies required in the Specifications.
      b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.
   2. *Samples*
      a. Contractor shall submit the number of Samples required in the Specifications.
      b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.
   3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. *Engineer's Review of Shop Drawings and Samples*

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.
5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.
6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.
8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. *Resubmittal Procedures for Shop Drawings and Samples*

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals.
2. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required approval of an item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved Shop Drawing or Sample, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due Contractor

to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

E. *Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs*
   1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:
      a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.
      b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.
      c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.
      d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance, and resubmit an acceptable document.
   2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03. 2.04, and 2.05.

F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 Contractor's General Warranty and Guarantee

A. The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will strictly conform to the requirements of the Contract Documents and will be performed in a good and workmanlike manner, and will be free from defects. Work, materials, or equipment not conforming to these requirements may be considered defective.

B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
   1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
   2. normal wear and tear under normal usage.

C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:
   1. Observations by Engineer;
   2. Recommendation by Engineer or payment by Owner of any progress or final payment;
   3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;

4. Use or occupancy of the Work or any part thereof by Owner;
5. Any review and approval of a Shop Drawing or Sample submittal;
6. The issuance of a notice of acceptability by Engineer;
7. The end of the correction period established in Paragraph 15.08;
8. Any inspection, test, or approval by others; or
9. Any correction of defective Work by Owner.

D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

E. The Contractor warrants and guarantees for one (1) year from Final Completion, or for a longer period if expressly stated in the Contract Documents, the Work. This includes a Warranty and Guarantee against any and all defects. The Contractor must correct any and all defects in material or workmanship which may appear during the Warranty and Guarantee period, or any defects that occur within one (1) year of Final Completion even if discovered more than one (1) year after Final Completion, by repairing (or replacing with new items or new materials, if necessary) any such defect at no cost to the Owner, within a reasonable period of time, and to the Owner's satisfaction.

7.18 Indemnification

A. TO THE FULLEST EXTENT PERMITTED BY LAWS AND REGULATIONS, AND IN ADDITION TO ANY OTHER OBLIGATIONS OF CONTRACTOR UNDER THE CONTRACT OR OTHERWISE, CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS OWNER AND ENGINEER, AND THE OFFICERS, DIRECTORS, MEMBERS, PARTNERS, EMPLOYEES, AGENTS, CONSULTANTS AND SUBCONTRACTORS OF EACH AND ANY OF THEM, FROM LOSSES, DAMAGES, COSTS, AND JUDGMENTS (INCLUDING BUT NOT LIMITED TO ALL FEES AND CHARGES OF ENGINEERS, ARCHITECTS, ATTORNEYS, AND OTHER PROFESSIONALS, AND ALL COURT OR ARBITRATION OR OTHER DISPUTE RESOLUTION COSTS) ARISING FROM THIRD-PARTY CLAIMS OR ACTIONS RELATING TO OR RESULTING FROM THE PERFORMANCE OR FURNISHING OF THE WORK, PROVIDED THAT ANY SUCH CLAIM, ACTION, LOSS, COST, JUDGMENT OR DAMAGE IS ATTRIBUTABLE TO BODILY INJURY, SICKNESS, DISEASE, OR DEATH, OR TO DAMAGE TO OR DESTRUCTION OF TANGIBLE PROPERTY (OTHER THAN THE WORK ITSELF), INCLUDING THE LOSS OF USE RESULTING THEREFROM, BUT ONLY TO THE EXTENT CAUSED, IN WHOLE OR IN PART, BY ANY NEGLIGENT ACT OR OMISSION OF CONTRACTOR, ANY SUBCONTRACTOR, ANY SUPPLIER, OR ANY INDIVIDUAL OR ENTITY DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM TO PERFORM ANY OF THE WORK, OR ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE.

B. IN ADDITION TO THE ABOVE AND ANY OTHER OBLIGATIONS OF CONTRACTOR UNDER THE CONTRACT DOCUMENTS, CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS OWNER FROM LOSSES, EXPENSES, DAMAGES, COSTS, CLAIMS, CAUSES OF ACTION, AND JUDGMENTS (INCLUDING BUT NOT LIMITED TO ALL FEES AND CHARGES OF ENGINEERS, ARCHITECTS, CONSULTANTS, EXPERT WITNESSES, ATTORNEYS, AND

OTHER PROFESSIONALS, AND ALL COURT, ARBITRATION, OR OTHER DISPUTE RESOLUTION COSTS) ARISING FROM ACTIONS RELATING TO OR RESULTING FROM THE FAILURE TO PERFORM MATERIAL OBLIGATIONS REQUIRED BY THE CONTRACT DOCUMENTS OR THE FURNISHING OF THE WORK.

7.19 Delegation of Professional Design Services

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.

B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional..

C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.

D. Owner shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under a delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.

E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an delegated design will be only for the following limited purposes:
   1. Checking for conformance with the requirements of this Paragraph 7.19;
   2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
   3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.

F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.

G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8 — OTHER WORK AT THE SITE

8.01 Other Work

A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be

performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.

B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.

C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.

D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.

E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 Coordination

A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
   1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
   2. An itemization of the specific matters to be covered by such authority and responsibility; and
   3. The extent of such authority and responsibilities.

B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 Legal Relationships

A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Times. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.

1. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.

B. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS OWNER AND ENGINEER, AND THE OFFICERS, DIRECTORS, MEMBERS, PARTNERS, EMPLOYEES, AGENTS, CONSULTANTS AND SUBCONTRACTORS OF EACH AND ANY OF THEM FROM AND AGAINST ANY SUCH CLAIMS, AND AGAINST ALL COSTS, LOSSES, AND DAMAGES (INCLUDING BUT NOT LIMITED TO ALL FEES AND CHARGES OF ENGINEERS, ARCHITECTS, ATTORNEYS, AND OTHER PROFESSIONALS AND ALL COURT OR ARBITRATION OR OTHER DISPUTE RESOLUTION COSTS) ARISING OUT OF OR RELATING TO SUCH DAMAGE, DELAY, DISRUPTION, OR INTERFERENCE.

ARTICLE 9 — OWNER'S RESPONSIBILITIES

9.01 Communications to Contractor

A. For all Project and performance of Work matters, Owner will issue all communications to Contractor through Engineer. However, Owner may, at its discretion, issue communications related to the Project directly to Contractor. In all such direct communications, Owner will endeavor to copy Engineer.

9.02 Replacement of Engineer

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer, whose status under the Contract Documents shall be that of the former Engineer.

9.03 Furnish Data

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 Pay When Due

A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 Lands and Easements; Reports, Tests, and Drawings

A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.

B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.

C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 Insurance

A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6 and Exhibit A to the Contract Agreement.

9.07 Change Orders

A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 Inspections, Tests, and Approvals

A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 Limitations on Owner's Responsibilities

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 Undisclosed Hazardous Environmental Condition

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 Evidence of Financial Arrangements

A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract (including obligations under proposed changes in the Work).

9.12 Safety Programs

A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.

B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10 — ENGINEER'S STATUS DURING CONSTRUCTION

10.01 Owner's Representative

A. Engineer will assist the Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner and Engineer. Engineer shall not have the authority to bind the Owner as that authority lies with the Owner's representative designated in Paragraph 2.07, but Engineer may communicate on behalf of Owner in all Project matters.

10.02 Visits to Site

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 Resident Project Representative

A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary or Special Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09.

B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions or elsewhere in the Contract Documents.

10.04 Engineer's Authority

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the

Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

B. Engineer's authority as to Submittals is set forth in Paragraph 7.16.

C. Engineer's authority as to design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.

D. Engineer's authority as to changes in the Work is set forth in Article 11.

E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 Determinations for Unit Price Work

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the Contract Documents.

10.06 Decisions on Requirements of Contract Documents and Acceptability of Work

A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work.

B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Article 12.

C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of the Contract Documents.

D. When functioning as interpreter and judge under this Paragraph, Engineer will not show partiality to Owner or Contractor.

10.07 Authorized Variations in the Work

A. Owner and Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on

entitlement to or on the amount or extent, if any, of any such adjustment , a Claim may be made therefor as provided in Paragraph 10.05.

10.08 Compliance with Safety Program

A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs of which Engineer has been informed.

10.09 Limitations on Engineer's Authority and Responsibilities

A. Engineer's authority, responsibility, or actions as Owner's representative shall not give rise to any liability to Contractor. Contractor expressly waives any claims it has against Engineer for the performance of its responsibilities as Owner's representative.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto.

C. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07 will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.

D. The limitations upon authority and responsibility set forth in this Paragraph shall also apply to, the Resident Project Representative, if any, and assistants, if any.

ARTICLE 11 — CHANGES TO THE CONTRACT

11.01 Amending and Supplementing the Contract

A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.

B. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 Change Orders

A. Owner and Contractor shall execute appropriate Change Orders covering:
   1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
   2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
   3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as

set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and

4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.

B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.

11.03 Work Change Directives

A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.

B. If Owner has issued a Work Change Directive and:

1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.
2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall indicate the basis and scope of said adjustment in the Work Change Directive or associated documents, or, in the alternative, the Owner may, but is not required to, submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 Field Orders

A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.

B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.05 Owner-Authorized Changes in the Work

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.

B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.

C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 Unauthorized Changes in the Work

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 Change of Contract Price

A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.

B. An adjustment in the Contract Price will be determined as follows:
   1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);
   2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
   3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).

C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit will be determined as follows:
   1. A mutually acceptable fixed fee; or
   2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
      a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;
      b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;
      c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be

based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;

d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and
f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 Change of Contract Times

A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.

B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 Change Proposals

A. *Purpose and Content*: Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.

B. *Change Proposal Procedures*
   1. *Submittal*: Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
   2. *Supporting Data*: The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.

a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.
b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

3. *Engineer's Initial Review*: Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.
4. *Engineer's Full Review and Action on the Change Proposal*: Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either recommend approval or denial of the Change Proposal in whole or in part and in any combination thereof.

C. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal.

ARTICLE 12 — CLAIMS

12.01 Claims

A. *Claims Process*: The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
1. Appeals by Owner or Contractor of Engineer's recommendations or decisions regarding Change Proposals;
2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;
3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and

B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim.

C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim

through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.

D. *Mediation*
   1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.
   2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.
   3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.

E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.

F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding and the party asserting the Claim shall be deemed to have expressly waived such Claim, unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes, subject to controlling Laws and Regulations.

G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13 — COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 Cost of the Work

A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
   1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
   2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any

such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.

B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:
   1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.
   2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All trade discounts accrue to Owner, and Contractor shall make provisions so that they may be obtained.
   3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
   4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.
   5. Other costs consisting of the following:
      a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
      b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
         1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.
      c. *Construction Equipment Rental*
         1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as

to price (including any surcharge or special rates applicable to overtime use of the construction equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
e. The cost of utilities, fuel, and sanitary facilities at the Site.
f. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *Costs Excluded*: The term Cost of the Work does not include any of the following items:
1. Payroll costs and other compensation of Contractor's employees, agents, and other personnel not specifically included in Paragraph 13.01.B.1 whether at the Site or in Contractor's principal or branch office for general administration of the Work, all of which are to be considered administrative costs covered by the Contractor's fee.
2. The cost of purchasing, renting, or furnishing small tools and hand tools.
3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
6. Expenses incurred in preparing and advancing Claims.
7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee*
1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:
   a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.
   b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:
      1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.
      2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.
2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other

adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.

E. *Documentation and Audit*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. *Cash Allowances*: Contractor agrees that:
   1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
   2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.

C. *Owner's Contingency Allowance*: Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 Unit Price Work

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 10.05.

C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

D. Adjustments in Unit Price

1. Contractor or Owner may make a Claim for an adjustment in the unit price with respect to an item of Unit Price Work if:
    a. the quantity of the item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
    b. there is no corresponding adjustment with respect any other item of Work; and
    c. the cost to perform the item of Unit Price Work have changed materially as a result of the quantity change.
2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14 — TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 Notice of Defects

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

14.02 Access to Work

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.03 Tests, Inspections, and Approvals

A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.

B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
   1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
   2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
   3. by manufacturers of equipment furnished under the Contract Documents;
   4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
   5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

   Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.

F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.04 Defective Work

A. *Contractor's Obligation*: It is Contractor's obligation to assure that the Work is not defective.

B. *Engineer's Authority*: In addition to the Owner, Engineer has the authority to determine whether Work is defective, and to reject defective Work.

C. *Notice of Defects*: Written notice of defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.

D. *Correction, or Removal and Replacement*: Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.

E. *Preservation of Warranties*: When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

F. *Costs and Damages*: In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall be liable for and shall pay all expenses, claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, any professional costs, expenses and fees associated with any aspect of identification, evaluation, a correction of defective work, any fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work.

14.05 Acceptance of Defective Work

A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so subject to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety. Contractor shall pay all expenses, fees, claims, costs, losses, and damages of any kind attributable to Owner's evaluation of and determination to accept such defective Work, and for the diminished value of the Work to the extent not otherwise paid by Contractor.

14.06 Uncovering Work

A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.

C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
   1. If it is found that the uncovered Work is defective, Contractor's obligations shall be as provided in section 14.03D and F.
   2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.07 Owner May Stop the Work

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated.

14.08 Owner May Correct Defective Work

A. If Contractor fails within a reasonable time after written notice from Engineer or Owner to correct defective Work, or to remove and replace rejected or defective Work as required by Owner or Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents then Owner may, after 7 days' written notice to Contractor cure such default, make demand on Contractor's surety to perform as required in the performance bond issued for the Work, utilize its own forces, or hire a supplemental or replacement contractor to correct or remedy any such deficiency. In electing to exercise any remedy allowed under this Paragraph, Owner is not required to terminate Contractor's rights of continued performance for the entirety of the Work but may eliminate such scope of work from Contractor as may be necessary to exercise its rights under this section.

B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.

C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15 — PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 Progress Payments

A. *Basis for Progress Payments*: The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.

B. *Applications for Payments*

1. At least 30 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear

of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

3. Payments for stored materials and equipment shall be based only upon the actual cost of the materials and equipment to Contractor and shall not include any overhead or profit to Contractor. Partial payments will not be made for undelivered materials or equipment, except for payments associated with prepurchase vendor contracts initiated by Owner and assigned to Contractor.
4. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
5. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. Review of Applications

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
    a. the Work has progressed to the point indicated;
    b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
    c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
    a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
    b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.

5. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
    a. the Work is defective, requiring correction or replacement;
    b. the Contract Price has been reduced by Change Orders;
    c. Owner has been required to correct defective Work or has accepted defective Work;
    d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
    e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due*
1. Thirty days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. Reductions in Payment by Owner
1. Owner is entitled to impose a set-off against payment or refuse to make payment as recommended by Engineer based on any of the following:
    a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work;
    b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
    c. Contractor has failed to provide and maintain required bonds or insurance;
    d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
    e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
    f. The Work is defective, requiring correction or replacement;
    g. Owner has been required to correct defective Work or has accepted defective Work;
    h. The Contract Price has been reduced by Change Orders;
    i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;
    j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
    k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or
    l. Other items entitle Owner to a set-off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so

withheld. Owner shall promptly pay Contractor the amount so withheld if Contractor remedies the reasons for such action.

15.02 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than the time of payment by Owner.

15.03 Substantial Completion

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as Incomplete) and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.

B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. At that inspection, Owner and Engineer will review, supplement, and edit the initial punch list prepared by Contractor or prepare an additional punch list. If Owner or Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

1. If some or all of the Work has been determined not to be at a point of Substantial Completion, Contractor shall reimburse Owner for any costs and expenses incurred by Owner for re-inspection or re-testing by Engineer, such costs to be set off against subsequent payments or memorialized in a Change Order in accordance with section 15.01.E.1.l.

C. If Owner and Engineer consider the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.

D. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.

E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 Partial Use or Occupancy

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:

1. At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through 15.03.E for that part of the Work.
2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
4. No use or occupancy or separate operation of part of the Work will relieve Contractor of its insurance obligations under these Contract Documents.

15.05 Final Inspection

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

B. If some or all of the Work has been determined not to be at a point of Final Completion, Contractor shall reimburse Owner for any costs and expenses incurred by Owner for re-inspection or re-testing by Engineer, such costs to be set off against subsequent payments or memorialized in a Change Order in accordance with section 15.01.E.1.l.

15.06 Final Payment

A. Application for Payment

5. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.
6. The final Application for Payment must be accompanied (except as previously delivered) by:
    a. all documentation called for in the Contract Documents;
    b. consent of the surety, if any, to final payment;
    c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
    d. a list of all duly pending Change Proposals and Claims; and
    e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
7. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

B. *Engineer's Review of Final Application and Recommendation of Payment*: If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. *Final Payment Becomes Due*: Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner

shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 Waiver of Claims

A. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner unless Contractor has previous reserved its rights for any specific Claims.

15.08 Correction Period

A. If within two years after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), or by any specific provision of the Contract Documents, any Work is found to be defective,, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
   1. correct the defective repairs to the Site or such adjacent areas;
   2. correct such defective Work;
   3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
   4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.

B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) shall be paid by Contractor.

C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.

D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16 — SUSPENSION OF WORK AND TERMINATION

16.01 Owner May Suspend Work

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. Any Change Proposal seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 Owner May Terminate for Cause

A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
   1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);
   2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
   3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
   4. Contractor's disregard of the authority of Owner or Engineer.

B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
   1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and
   2. enforce the rights available to Owner under any applicable performance bond.

C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work and all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient. Owner shall have the right with respect to Contractor and Contractor's surety to demand performance of said surety within ten (10) days following termination. Further, Owner shall have the right to determine and/or approve and replacement contractor desired by Surety to correct and complete the Work

D. Contractor's services will not be terminated pursuant to Paragraph 16.02.B if Contractor commences curative measures within 7 days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure.

E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by

Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed nor shall Owner be required to publicly bid any completion work should Owner exercise its right to complete the Work on its own as completion work shall be deemed by the Owner, Contractor, Contractor's surety, and Engineer to qualify for an exemption to public bidding as found in the Texas Local Government Code chapter 252.

F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.

16.03 Owner May Terminate for Convenience

A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
   1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
   2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
   3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.

B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 Contractor May Stop Work or Terminate

A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in

Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17 — FINAL RESOLUTION OF DISPUTES

17.01 Methods and Procedures

A. *Disputes Subject to Final Resolution*: The following disputed matters are subject to final resolution under the provisions of this article:
   1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and
   2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.

B. *Final Resolution of Disputes*: For any dispute subject to resolution under this article, Owner or Contractor may:
   1. For any disputes subject to this Article, Owner and Contractor shall endeavor to resolve their Claims by mediation. The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction.
   2. For any claim not resolved by mediation, the parties agree to submit such claims to the jurisdiction of the State District Court of Hays County, Texas, which is the exclusive venue for final dispute resolution.

ARTICLE 18 — MISCELLANEOUS

18.01 Giving Notice

A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
   1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
   2. by registered or certified mail, postage prepaid, to the recipient's place of business; or
   3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line or with a corresponding confirmation of delivery or read receipt to the individual or to a member of the firm or to an officer of the corporation for whom it is intended..

18.02 Computation of Times

A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 Cumulative Remedies

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions

of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 Limitation of Damages

A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

B. The Contractor and Owner waive claims against each other for the following enumerated consequential damages arising out of or relating to this Contract. This mutual waiver includes and is expressly limited to the following:
   1. damages incurred by the Owner for lost revenue, profit, financing costs, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
   2. damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, bonding capacity, business and reputation, and for loss of profit except anticipated profit arising directly from the Work

18.05 No Waiver

A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 Survival of Obligations

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

18.07 Controlling Law

A. This Contract is to be governed by the law of the State of Texas without regard to its conflict of law principals.

18.08 Assignment of Contract

A. Contractor shall not, without the written consent of the Owner assign, transfer or sublet any portion or part of the Work or the obligations required by the Contract Documents, other than to an affiliate. An assignment to an affiliate shall not relieve the assignor of its obligations under this Agreement.

18.09 Successors and Assigns

A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 Headings

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

18.11 Prevailing Wage

A. Contractor shall provide and pay for labor in accordance with the prevailing wage in the locality and shall not pay less than the prevailing wage.

18.12 Right to Audit

A. Whenever the Owner enters into any type of contractual arrangement with the Contractor, then the Contractor's "records" shall upon reasonable notice be open to inspection and subject to audit and/or reproduction during normal business working hours. The Owner's representative, or an outside representative engaged by the Owner, may perform such audits. The Contractor shall maintain all records relating to this Agreement for four (4) years from the date of final payment under this Agreement.

B. The Owner shall have the exclusive right to examine the records of the Contractor. The term "records" as referred to herein shall include any and all information, materials and data of every kind and character, including without limitation records, books, papers, documents, contracts, schedules, commitments, arrangements, notes, daily diaries, reports, drawings, receipts, vouchers and memoranda, and any and all other agreements, sources of information and matters that may, in the Owner's judgment, have any bearing on or pertain to any matters, rights, duties or obligations under or covered by any contract document. Such records shall include (hard copy, as well as computer-readable data if it can be made available), written policies and procedures, time sheets, payroll registers, cancelled checks, personnel file data, correspondence, general ledger entries, and any other record in the Contractor's possession which may have a bearing on matters of interest to the Owner in connection with the Contractor's dealings with the Owner (all of the foregoing are hereinafter referred to as "records"). In addition, the Contractor shall permit interviews of employees as well as agents, representatives, vendors, subcontractors and other third parties paid by the Contractor to the extent necessary to adequately permit evaluation and verification of the following:
   1. The Contractor's compliance with contract requirements;
   2. The Contractor's compliance with the Owner's business ethics policies; and
   3. If necessary, the extent of the Work performed by the Contractor at the time of contract termination.

C. The Contractor shall require all payees (examples of payees include subcontractors, insurance agents, material suppliers, etc.) to comply with the provisions of this Article 17.10 by securing the requirements hereof in a written agreement between the Contractor and payee. Such requirements include a flow-down right of audit provision in contracts with payees that also apply to subcontractors and sub-subcontractors, material suppliers, etc. The Contractor shall cooperate fully and shall require Related Parties and all of the Contractor's subcontractors to cooperate fully in furnishing or in making available to the Owner from time to time whenever requested, in an expeditious manner, any and all such information, materials, and data.

D. The Owner's authorized representative or designee shall have reasonable access to the Contractor's facilities, shall be allowed to interview all current or former employees to discuss matters pertinent to the performance of this Agreement, and shall be provided adequate and appropriate work space in order to conduct audits in compliance with this Article 17.10.

E. If an audit inspection or examination in accordance with this Article 17.10 discloses overpricing or overcharges of any nature by the Contractor to the Owner in excess of one-half of one percent (.5%) of the total contract billings, then the reasonable actual cost of the Owner's audit shall be reimbursed to the Owner by the Contractor. Any adjustments or payments, which must be made as a result of any such audit or inspection of the Contractor's invoices or records, shall be made within a reasonable amount of time (not to exceed 90 days) from presentation of the Owner's findings to the Contractor

18.13 Trust Funds

A. This Project is subject to the Texas Trust Fund Statute, Chapter 162 of the Texas Property Code, and the Parties acknowledge that the payment obligations contained herein for the Contractor to receive funds from the Owner and then use those funds to pay such Subcontractors, Suppliers, Vendors, Consultants, and the like, are subject to the Trust Fund Statute and the Owner's audit rights outline in this Article 18

18.14 Severability

A. If any provision or any part of a provision of the Contract Documents shall be finally determined to be superseded, invalid, illegal, or otherwise unenforceable pursuant to any applicable Legal Requirements, such determination shall not impair or otherwise affect the validity, legality, or enforceability of the remaining provision or parts of the provision of the Contract Documents, which shall remain in full force and effect as if the unenforceable provision or part were deleted

18.15 Amendments

A. The Contract Documents may not be changed, altered, or amended in any way except in writing signed by a duly authorized representative of each party

18.16 Confidential Information

A. Confidential Information is defined as information which is determined by the transmitting party to be of a confidential or proprietary nature and: (a) the transmitting party identifies as either confidential or proprietary; (b) the transmitting party takes steps to maintain the confidential or proprietary nature of the information; and (c) the document is not otherwise available in or considered to be in the public domain. The receiving party agrees to maintain the confidentiality of the Confidential Information and agrees to use the Confidential Information solely in connection with the Project.

B. A party receiving Confidential Information may disclose the Confidential Information as required by law or court order, including a subpoena or other form of compulsory legal process issued by a court or governmental entity. A party receiving Confidential Information may also disclose the Confidential Information to its employees, consultants or contractors in order to perform services or work solely and exclusively for the Project, provided those employees, consultants and contractors are subject to the restrictions on the disclosure and use of Confidential Information as set forth in this Contract.

C. Any information deemed to be confidential or proprietary by the Contractor should be clearly annotated on the pages where confidential or proprietary information is contained. The Owner cannot guarantee that it will not be required to disclose all or part of any public record under Texas Public Information Act ("TPIA"), since information deemed to be confidential or proprietary by the Contractor may not be confidential or proprietary under Texas Law, or pursuant to a Court order. Pursuant to SB 943, the Owner must disclose certain contracting information and the law presumes that most contracting information is public. Certain types of contracting information must generally be released under the TPIA: overall price; price and description of items or services to be delivered; delivery and service deadlines; remedies for breach of contract; identity of the parties to a contract; execution and effective dates; and information connected to a vendor or contractor's performance on the contract. Additionally, information regarding performance under the contract, including breaches of contract, contract variances, amendments, liquidated damages, and other penalties for non-performance, must generally be released under the TPIA

18.17 Texas Public information Act Requests

A. The Contractor recognizes that this Project is publicly owned and the Owner is subject to the disclosure requirements of the TPIA. As part of its obligations within the Contract Documents, the Contractor agrees, at no additional cost to the Owner, to cooperate with the Owner for any particular needs or obligations arising out of the Owner's obligations under the TPIA. This acknowledgement and obligation are in addition to and complimentary to the Owner's audit rights in section 17.10.

B. This provision applies if the Contract has a stated expenditure of at least $1 million in public funds for the purchase of goods or services by Owner or results in the expenditure of at least $1 million in public funds for the purchase of goods or services by Owner in a fiscal year of the Owner. The Contractor must (1) preserve all contracting information related to the Contract as provided by the records retention requirements applicable to Owner for the duration of the Contract; (2) promptly provide to Owner any contracting information related to the contract that is in the custody or possession of the entity on request of Owner; and (3) on completion of the contract, either:

1. provide at no cost to Owner all contracting information related to the Contract that is in the custody or possession of the entity; or

2. preserve the contracting information related to the Contract as provided by the records retention requirements applicable to Owner.

C. The requirements of Subchapter J, Chapter 552, Government Code, may apply to this Contract and the contractor or vendor agrees that the Contract can be terminated if the contractor or vendor knowingly or intentionally fails to comply with a requirement of that subchapter.

END OF DOCUMENT

DOCUMENT 00800-1

SUPPLEMENTARY CONDITIONS TO GENERAL CONDITIONS

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These Supplementary Conditions amend or supplement Document 00700 - General Conditions. The General Conditions remain in full force and effect except as amended.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added—for example, “Paragraph SC-4.05.”

ARTICLE 1 — DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

SC-1.01 Add to Paragraph 1.01.A by inserting the following as new numbered items in their proper alphabetical positions:

Construction Manager - The individual or entity will be responsible for administration of the Contract as a representative of the Owner. Owner has designated Burgess & Niple Engineers to provide construction management services with duties, responsibilities, and limitations therein as required by Contract.

Final Completion - The Work is complete when it is ready for final payment as established by the Engineer’s written recommendation of final payment as set forth in Paragraph 15.06.

ARTICLE 2 — PRELIMINARY MATTERS

2.09 Electronic Transmittals

SC-2.09 Delete Paragraphs 2.06.B and 2.06.C in their entirety and insert the following in their place:

B. Electronic Documents Protocol: The parties shall conform to the following provisions in Paragraphs 2.06.B and 2.06.C, together referred to as the Electronic Documents Protocol (“EDP” or “Protocol”) for exchange of electronic transmittals.

1. Basic Requirements

a. To the fullest extent practical, the parties agree to and will transmit and accept Electronic Documents in an electronic or digital format using the procedures described in this Protocol. Use of the Electronic Documents and any information contained therein is subject to the requirements of this Protocol and other provisions of the Contract.

b. The contents of the information in any Electronic Document will be the responsibility of the transmitting party.

c. Electronic Documents as exchanged by this Protocol may be used in the same manner as the printed versions of the same documents that are exchanged using non-electronic format and methods, subject to the same governing requirements, limitations, and restrictions, set forth in the Contract Documents.

d. Except as otherwise explicitly stated in this Document, the terms of this Protocol will be incorporated into any other agreement or subcontract

between a party and any third party for any portion of the Work on the Project, or any Project-related services, where that third party is, either directly or indirectly, required to exchange Electronic Documents with a party or with Engineer. Nothing herein will modify the requirements of the Contract regarding communications between and among the parties and their subcontractors and consultants.

e. When transmitting Electronic Documents, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the receiving party's use of software application packages, operating systems, or computer hardware differing from those established in this Protocol.

f. Nothing herein negates any obligation 1) in the Contract to create, provide, or maintain an original printed record version of Drawings and Specifications, signed and sealed according to applicable Laws and Regulations; 2) to comply with any applicable Law or Regulation governing the signing and sealing of design documents or the signing and electronic transmission of any other documents; or 3) to comply with the notice requirements of General Conditions, Paragraph 18.01.

2. System Infrastructure for Electronic Document Exchange

   a. Each party will provide hardware, operating system(s) software, internet, e-mail, and large file transfer functions ("System Infrastructure") at its own cost and sufficient for complying with the EDP requirements. With the exception of minimum standards set forth in this EDP, and any explicit system requirements specified by attachment to this EDP, it is the obligation of each party to determine, for itself, its own System Infrastructure.

      1) The maximum size of an email attachment for exchange of Electronic Documents under this EDP is 50 MB. Attachments larger than that may be exchanged using large file transfer functions or physical media.

      2) Each Party assumes full and complete responsibility for any and all of its own costs, delays, deficiencies, and errors associated with converting, translating, updating, verifying, licensing, or otherwise enabling its System Infrastructure, including operating systems and software, for use with respect to this EDP.

   b. Each party is responsible for its own system operations, security, back-up, archiving, audits, printing resources, and other Information Technology ("IT") for maintaining operations of its System Infrastructure during the Project, including coordination with the party's individual(s) or entity responsible for managing its System Infrastructure and capable of addressing routine communications and other IT issues affecting the exchange of Electronic Documents.

   c. Each party will operate and maintain industry-standard, industry-accepted, ISO-standard, commercial-grade security software and systems that are intended to protect the other party from: software viruses and other malicious software like worms, Trojans, adware; data breaches; loss of confidentiality; and other threats in the transmission to or storage of

information from the other parties, including transmission of Electronic Documents by physical media such as CD/DVD/flash drive/hard drive. To the extent that a party maintains and operates such security software and systems, it shall not be liable to the other party for any breach of system security.

d. In the case of disputes, conflicts, or modifications to the EDP required to address issues affecting System Infrastructure, the parties shall cooperatively resolve the issues; but, failing resolution, the Owner is authorized to make and require reasonable and necessary changes to the EDP to effectuate its original intent. If the changes cause additional cost or time to Contractor, not reasonably anticipated under the original EDP, Contractor may seek an adjustment in price or time under the appropriate process in the Contract.

e. Each party is responsible for its own back-up and archive of documents sent and received during the term of the contract under this EDP, unless this EDP establishes a Project document archive, either as part of a mandatory Project website or other communications protocol, upon which the parties may rely for document archiving during the specified term of operation of such Project document archive. Further, each party remains solely responsible for its own post-Project back-up and archive of Project documents after the term of the Contract, or after termination of the Project document archive, if one is established, for as long as required by the Contract and as each party deems necessary for its own purposes.

f. If a receiving party receives an obviously corrupted, damaged, or unreadable Electronic Document, the receiving party will advise the sending party of the incomplete transmission.

g. The parties will bring any non-conforming Electronic Documents into compliance with the EDP. The parties will attempt to complete a successful transmission of the Electronic Document or use an alternative delivery method to complete the communication.

h. The Owner will operate a Project information management system (also referred to in this EDP as “Project Website”) for use of Owner, Engineer and Contractor during the Project for exchange and storage of Project-related communications and information. Except as otherwise provided in this EDP or the General Conditions, use of the Project Website by the parties as described in this Paragraph will be mandatory for exchange of Project documents, communications, submittals, and other Project-related information. The following conditions and standards will govern use of the Project Website:

    1) Describe the period of time during which the Project Website will be operated and be available for reliance by the parties;

    2) Provide any minimum system infrastructure, software licensing and security standards for access to and use of the Project Website;

    3) Describe the types and extent of services to be provided at the Project Website (such as large file transfer, email, communication and document archives, etc.); and

4) Include any other Project Website attributes that may be pertinent to Contractor's use of the facility and pricing of such use.

C. Software Requirements for Electronic Document Exchange; Limitations

1. Each party will acquire the software and software licenses necessary to create and transmit Electronic Documents and to read and to use any Electronic Documents received from the other party (and if relevant from third parties), using the software formats required in this section of the EDP.

a. Prior to using any updated version of the software required in this section for sending Electronic Documents to the other party, the originating party will first notify and receive concurrence from the other party for use of the updated version or adjust its transmission to comply with this EDP.

2. The parties agree not to intentionally edit, reverse engineer, decrypt, remove security or encryption features, or convert to another format for modification purposes any Electronic Document or information contained therein that was transmitted in a software data format, including Portable Document Format (PDF), intended by sender not to be modified, unless the receiving party obtains the permission of the sending party or is citing or quoting excerpts of the Electronic Document for Project purposes.

3. Software and data formats for exchange of Electronic Documents will conform to the requirements set forth in Table 1, including software versions, if listed.

Table 1. Software Requirements for Electronic Document Exchange

Item	**Electronic Documents**	**Transmittal Means**	**Data Format**	**Note (1)**
a.1	General communications, transmittal covers, meeting notices and responses to general information requests for which there is no specific prescribed form.	EADOC	EADOC	
a.2	Meeting agendas, meeting minutes, RFI's and responses to RFI's, and Contract forms.	EADOC	PDF	(2)
a.3	Contactors Submittals (Shop Drawings, "or equal" requests, substitution requests, documentation accompanying Sample submittals and other submittals) to Owner and Engineer, and Owner's and Engineer's responses to Contractor's Submittals, Shop Drawings, correspondence, and Applications for Payment.	EADOC	PDF	

Item	Electronic Documents	Transmittal Means	Data Format	Note (1)
a.4	Correspondence; milestone and final version Submittals of reports, layouts, Drawings, maps, calculations and spreadsheets, Specifications, Drawings and other Submittals from Contractor to Owner or Engineer and for responses from Engineer and Owner to Contractor regarding Submittals.	EADOC	PDF	
a.5	Layouts and drawings to be submitted to Owner for future use and modification.	Email with Attachment	DWG	
a.6	Correspondence, reports and Specifications to be submitted to Owner for future word processing use and modification.	Email with Attachment	DOC	
a.7	Spreadsheets and data to be submitted to Owner for future data processing use and modification.	Email with Attachment	EXC	
a.8	Database files and data to be submitted to Owner for future data processing use and modification.	Email with Attachment	DB	

Notes:

1. All exchanges and uses of transmitted data are subject to the appropriate provisions of Contract Documents.
2. Transmittal of written notices is governed by General Conditions, Paragraph 18.01.

Key:

DB	Microsoft® Access .mdb format, Version 2013
DGN	Microstation .dgn format, Version V8i
DOC	Microsoft® Word .docx format, Version 2013
DWG	Autodesk® AutoCAD .dwg format, Version 2024
EADOC	Web-Based Construction Document Management System
Email	Standard Email formats (.htm, .rtf, or .txt). Do not use stationery formatting or other features that impair legibility of content on screen or in printed copies
EXC	Microsoft® Excel .xls or .xml format, Version 2013
LFE	Agreed upon Large File Exchange method (FTP, CD, DVD, hard drive)
PD	Portable Document Format readable by Adobe® Acrobat Reader, Version 2020 or later

ARTICLE 3 — CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

SC-3.01 Add the following new paragraphs immediately after Paragraph 3.01.G:

H. This Contract is subject to the requirements of the Texas Water Development Board (TWDB) Drinking Water State Revolving Fund (DW-SRF). The TWDB DW-SRF Rules, Regulations, and Requirements shall supersede any provisions of the Contract Documents with which they conflict.

1. The TWDB Supplemental Construction Contract Conditions, Publication TWDB-0550, Revision 06/24, is added to the Contract Documents in its entirety.

ARTICLE 4 — COMMENCEMENT AND PROGRESS OF THE WORK

No suggested Supplementary Conditions in this Article.

ARTICLE 5 — SITE, SUBSURFACE AND PHYSICAL CONDITIONS, HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 Availability of Lands

SC-5.01 Add the following new paragraph immediately after Paragraph 5.01.C:

D. Any Work performed in public rights-of-way, in addition to conforming to the Contract Documents, shall be done in accordance with the requirements of the permit issued by the public agency in whose right-of-way the Work is located.

ARTICLE 6 — BONDS AND INSURANCE

6.01 Performance, Payment, and Other Bonds

6.03 Contractor's Insurance

SC-6.03 Add the following new paragraphs immediately after Paragraph 6.03.C.5:

D. Other Additional Insureds: As a supplement to the provisions of General Conditions, Paragraph 6.03.C, the commercial general liability, automobile liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies must include as additional insureds (in addition to Owner and Engineer).

E. Workers' Compensation and Employer's Liability: Contractor shall purchase and maintain workers' compensation and employer's liability insurance, including, as applicable, United States Longshoreman and Harbor Workers' Compensation Act, Jones Act, stop-gap employer's liability coverage for monopolistic states, and foreign voluntary workers' compensation (from available sources, notwithstanding the jurisdictional requirement of Paragraph 6.02.B of the General Conditions).

F. Commercial General Liability—Claims Covered: Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against claims for:

1. damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees,

2. damages insured by reasonably available personal injury liability coverage, and

3. damages because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.

G. Commercial General Liability—Form and Content: Contractor's commercial liability policy must be written on a 1996 (or later) Insurance Services Organization, Inc. (ISO) commercial general liability form (occurrence form) and include the following coverages and endorsements:

1. Products and completed operations coverage.

a. Such insurance must be maintained for 3 years after final payment.

b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and 3 years thereafter.

2. Blanket contractual liability coverage, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.

3. Severability of interests and no insured-versus-insured or cross-liability exclusions.

4. Underground, explosion, and collapse coverage.

5. Personal injury coverage.

6. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together). If Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available, then Contractor may satisfy this requirement by providing equivalent endorsements.

7. For design professional additional insureds, ISO Endorsement CG 20 32 07 04 "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.

H. Commercial General Liability—Excluded Content: The commercial general liability insurance policy, including its coverages, endorsements, and incorporated provisions, must not include any of the following:

1. Any modification of the standard definition of "insured contract" (except to delete the railroad protective liability exclusion if Contractor is required to indemnify a railroad or others with respect to Work within 50 feet of railroad property).

2. Any exclusion for water intrusion or water damage.

3. Any provisions resulting in the erosion of insurance limits by defense costs other than those already incorporated in ISO form CG 00 01.

4. Any exclusion of coverage relating to earth subsidence or movement.

5. Any exclusion for the insured's vicarious liability, strict liability, or statutory liability (other than worker's compensation).

6. Any limitation or exclusion based on the nature of Contractor's work.

7. Any professional liability exclusion broader in effect than the most recent edition of ISO form CG 22 79.

I. Commercial General Liability—Minimum Policy Limits

J. Automobile Liability: Contractor shall purchase and maintain automobile liability insurance for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy must be written on an occurrence basis.

K. Using Umbrella or Excess Liability Insurance to Meet CGL and Other Policy Limit Requirements: Contractor may not meet the policy limits specified for employer's liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policy's policy limits and partial attribution of the policy limits of an umbrella or excess liability policy.

M. Contractor's Pollution Liability Insurance: Contractor shall purchase and maintain a policy covering third-party injury and property damage, including cleanup costs, as a result of pollution conditions arising from Contractor's operations and completed operations. This insurance must be maintained for no less than 3 years after final completion.

N. Contractor's Professional Liability Insurance: If Contractor will provide or furnish professional services under this *Contract*, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance must cover negligent acts, errors, or omissions in the performance of professional design or related services by the insured or others for whom the insured is legally liable. The insurance must be maintained throughout the duration of the Contract and for a minimum of 2 years after Substantial Completion. The retroactive date on the policy must pre-date the commencement of furnishing services on the Project.

P. Unmanned Aerial Vehicle Liability Insurance: If Contractor uses unmanned aerial vehicles (UAV—commonly *referred* to as drones) at the Site or in support of any aspect of the Work, Contractor shall obtain UAV liability insurance in the amounts stated; name Owner, Engineer, and all individuals and entities identified in the Supplementary Conditions as additional insureds; and provide a certificate to Owner confirming Contractor's compliance with this requirement. Such insurance will provide coverage for property damage, bodily injury or death, and invasion of privacy.

ARTICLE 7 — CONTRACTOR'S RESPONSIBILITIES

SC-7.03 Add the following new subparagraphs immediately after Paragraph 7.03.C:

1. Regular working hours will be 8 am to 5 pm.

2. Owner's legal holidays are: New Year's Eve and New Year's Day, Martin Luther King Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day and the day after, Christmas Eve and Christmas Day.

7.09 Permits

SC-7.09 Add the following new paragraphs immediately after paragraph 7.09.A:

B. Owner will provide the following permits:

1. Edwards Aquifer Protection Plan.
2. City Building Permit.

7.10 Taxes

SC-7.10 Add the following new paragraph immediately after Paragraph 7.10.A:

7.19 Delegation of Professional Design Services

SC-7.19 Add the following new subparagraph immediately after 7.19.A.

1. Where the technical specs require the Contractor to provide professional design services and to submit signed and sealed documents from a registered Professional Engineer.

ARTICLE 8 — OTHER WORK AT THE SITE

No suggested Supplementary Conditions in this Article.

ARTICLE 9 — OWNER'S RESPONSIBILITIES

No suggested Supplementary Conditions in this Article.

ARTICLE 10 — ENGINEER'S STATUS DURING CONSTRUCTION

10.03 Resident Project Representative

SC-10.03 Add the following new paragraphs immediately after Paragraph 10.03.B:

C. The Resident Project Representative (RPR) will be Engineer's representative at the Site. RPR's dealings in matters pertaining to the Work in general will be with Engineer and Contractor. RPR's dealings with Subcontractors will only be through or with the full knowledge or approval of Contractor. The RPR will:

1. Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings (but not including Contractor's safety meetings), and as appropriate prepare and circulate copies of minutes thereof.
2. Safety Compliance: Comply with Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site.
3. Liaison
    a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Contract Documents.
    b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.

c. Assist in obtaining from Owner additional details or information, when required for Contractor's proper execution of the Work.

4. Review of Work; Defective Work

   a. Conduct on-Site observations of the Work to assist Engineer in determining, to the extent set forth in Paragraph 10.02, if the Work is in general proceeding in accordance with the Contract Documents.

   b. Observe whether any Work in place appears to be defective.

   c. Observe whether any Work in place should be uncovered for observation, or requires special testing, inspection or approval.

5. Inspections and Tests

   a. Observe Contractor-arranged inspections required by Laws and Regulations, including but not limited to those performed by public or other agencies having jurisdiction over the Work.

   b. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Work.

6. Payment Requests: Review Applications for Payment with Contractor.

7. Completion

   a. Participate in Engineer's visits regarding Substantial Completion.

   b. Assist in the preparation of a punch list of items to be completed or corrected.

   c. Participate in Engineer's visit to the Site in the company of Owner and Contractor regarding completion of the Work, and prepare a final punch list of items to be completed or corrected by Contractor.

   d. Observe whether items on the final punch list have been completed or corrected.

D. The RPR will not:

1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).

2. Exceed limitations of Engineer's authority as set forth in the Contract Documents.

3. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers.

4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction.

5 Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.

6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.

7. Authorize Owner to occupy the Project in whole or in part.

ARTICLE 11 — CHANGES TO THE CONTRACT

11.02 Change Orders

SC-11.02 Insert the following new subparagraphs immediately following Paragraph 11.02.A.4:

5. In signing a Change Order, the Owner and Contractor acknowledge and agree that:

    a. the stipulated compensation (Contract Price or Contract Times, or both) set forth in the Change Order includes not only all direct costs of Contractor such as labor, material, job overhead, and profit markup, but also includes any costs for modifications or changes in sequence of work to be performed, delays, rescheduling, disruptions, extended direct overhead or general overhead, acceleration, material or other escalation which includes wages and other impact costs. This document will become a supplement to the Contract and all Contract provisions will apply hereto. It is understood that this Change Order shall be effective on the date approved by the Owner's Representative;

    b. the Change Order constitutes full mutual accord and satisfaction for the change to the Work;

    c. no reservation of rights to pursue subsequent claims on the Change Order will be made by either party; and

    d. no subsequent claim or amendment of the Contract Documents will arise out of or as a result of the Change Order.

11.08 Change of Contract Times

SC-11.08 Add the following new paragraphs immediately after Paragraph 11.08.B:

C. Use of Float:

1. A request for adjustment of Contract Times (or Milestones), otherwise allowable under the Contract Documents, shall be granted only when the time lost or gained exceeds the float for the activity at the time of the event giving rise to the claim. Float, the amount of time between the early start date and the late start date, or the early finish date and the late finish date, is jointly owned by both Owner and Contractor whether expressly disclosed or implied in any manner.

2. Contractor shall not use float suppression techniques (including, but not limited to, preferential sequencing caused by late starts of follow-up trades, unreasonably small crews, extended durations, or imposed dates) in information provided to Engineer.

ARTICLE 12 — CLAIMS

No suggested Supplementary Conditions in this Article.

ARTICLE 13 — COST OF WORK; ALLOWANCES, UNIT PRICE WORK

13.01 Cost of the Work

SC-13.01 Adding the following new language at the end of Paragraph 13.01.C.2:

a. Costs will include the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, shall cease to accrue when the use thereof is no longer necessary for the changed Work. For purposes of this paragraph, “small tools and hand tools” means any tool or equipment whose current price if it were purchased new at retail would be less than $500.

ARTICLE 14 — TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

No suggested Supplementary Conditions in this Article.

ARTICLE 15 — PAYMENTS TO CONTRACTOR, SET OFFS; COMPLETIONS; CORRECTION PERIOD

No suggested Supplementary Conditions in this Article.

ARTICLE 16 — SUSPENSION OF WORK AND TERMINATION

No suggested Supplementary Conditions in this Article.

ARTICLE 17 — FINAL RESOLUTIONS OF DISPUTES

Not used.

ARTICLE 18 — MISCELLANEOUS

SC-18.11 Add the following new paragraphs immediately after paragraph 18.10.

18.11 American Iron and Steel

A. The Contractor acknowledges to and for the benefit of the Applicant (“Purchaser”) and the Texas Water Development Board (TWDB) that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund that have statutory requirements commonly known as “American Iron and Steel;” that requires all of the iron and steel products used in the project to be produced in the United States (“American Iron and Steel Requirement”) including iron and steel products provided by the Contactor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the TWDB that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Purchaser or the TWDB. Notwithstanding any other provision of this Agreement, any failure to

comply with this paragraph by the Contractor shall permit the Purchaser to enforce this Agreement and recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Purchaser resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the TWDB or any damages owed to the TWDB by the Purchaser). While the Contractor has no direct contractual privity with the TWDB, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the TWDB is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the TWDB.

18.12 Environmental Mitigation

A. This project is subject to the requirements of the National Environmental Policy Act which includes requirements for compliance with multiple Acts of Congress and numerous federal laws including, but not limited to, the Endangered Species Act and the National Historic Preservation Act. A list of required environmental mitigation measures is included in these contract documents and shall be adhered to by the Contractor. These mitigation measures are not comprehensive and may be amended subject to the encountering of conditions governed by the National Environmental Policy Act.

END OF DOCUMENT

SECTION 00800-2
SUPPLEMENTAL CONDITIONS

1.0 SCOPE OF WORK

The City of Dripping Springs will accept sealed bids for the construction of the City of Dripping Springs West Interceptor Segment 2. The work to be performed includes furnishing all materials, equipment, tools, and labor necessary for the construction of approximately 7,996 linear feet of 12 to 24" gravity sewer line. The gravity main will cross Onion Creek going southeast. This project includes the removal of trees along the installation of gravity sewer and protection of existing trees along the same corridor.

The City of Austin Standard Construction Specifications current at the time of bidding shall govern materials and methods used to do the work, and are made a part of this Contract. Whenever the term "City of Austin" is used in the City of Austin Specifications, it shall be construed to mean "OWNER, and or its designated representative." Whenever the term "ENGINEER" is used in the City of Austin Specifications, it shall be construed to mean Burgess & Niple, Inc. Technical Specifications provided are intended to supplement the City Standard Specifications, not to replace them. Any discrepancies between the City Standard Specifications and the terms of this Contract shall be reported to the Engineer, who shall determine which specification shall govern.

2.0 ENGINEER (Reference 1.01.A.22 in the General Conditions)

The term "Engineer" in these specifications shall be understood as referring to Burgess & Niple, Inc., 235 Ledge Stone Drive, Austin, Texas 78737, or such other Engineer, Superintendent, or Inspector as may be authorized by said OWNER to act in any particular.

3.0 OWNER (Reference 1.01.A.32 in General Conditions)

The term "OWNER" shall mean The City of Dripping Springs.

4.0 EXAMINATION OF SITE OF PROJECT

CONTRACTOR shall make a careful examination of the site of the Project, soil and water conditions to be encountered, improvements to be protected, disposal sites for surplus materials not designated to be salvaged materials, and the method of providing ingress and egress to the work sites and private properties, and the methods of handling traffic during construction of the entire Project.

5.0 CONSTRUCTION PLANS AND SPECIFICATIONS (Reference 2.02 of the General Conditions)

Construction plans are furnished herewith and made a part of these specifications, the same as if they were written herein. The CONTRACTOR will be furnished three (3) sets Project Documents at no expense to him.

The documents are intended to agree and be mutually explanatory, and they shall be accepted and used as a whole and not separately. Should any item be omitted from the drawing and be herein specified, or vice versa, it shall be executed in the same way as if both shown and specified. Should contradiction be found, definite provisions of the specifications will be referred to the requirements of the drawings; however, the decision of the Engineer shall be final.

Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:

1. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
2. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

Where reference is made in these specifications to specifications compiled by other agencies, organizations or departments, such reference is made for expediency and standardization. Such specifications referred to are hereby made a part of these specifications.

6.0 RECORD DRAWINGS/AS-BUILT PLANS (Reference 7.12 of the General Conditions)

Prior to commencing any portion of the Work, the CONTRACTOR will be furnished two (2) sets of construction plans in the form of blueline prints to be used as a daily record of the Work as constructed on which it shall indicate changes made during construction. All notes and comments necessary to give a clear conception of exactly how all items were constructed including locations shall be shown. As-built plans shall also be provided for all shop drawings submitted by CONTRACTOR if the shop drawings were constructed differently than that approved. The furnished sets of drawings shall be identified on the front lower right-hand corner of each sheet by a rubber stamp impression reading as follows:

"RECORD PRINTS"
"TO BE USED FOR RECORDING AUTHORIZED FIELD MODIFICATIONS AND DIMENSIONAL DATA ONLY"

One set of "Record Prints" shall be submitted to the Engineer for review at the time of Substantial Completion and must be approved prior to final payment. The Engineer will return these drawings to the CONTRACTOR who shall transfer in indelible red ink all the information onto the clean set of blueline prints for the OWNER's use. After

recording information on the prints, the CONTRACTOR shall stamp each print "Record Drawings" and certify in writing on each print by his signature that the indications are a true and accurate record. CONTRACTOR shall deliver both the jobsite marked-up prints and the "Record Drawings" prints to the Engineer. These "Record Drawings" prints delivered for the OWNER's use is a condition of final acceptance and payment.

As the work progresses, the CONTRACTOR shall update the "Record Prints" on a daily basis as required to maintain an accurate dimensional record of the work as constructed, including:

1. Exact locations and elevations of all underground and buried portions of the Work.

2. All changes and corrections to dimensions.

3. All changes of materials and finishes.

4. Location, size and arrangement of all concealed items of mechanical and electrical portions of the work, including outlets, piping conduit, valves, dampers, duct work and equipment.

5. Location, size and arrangement of exposed piping, valves, conduit, equipment, and other utilities.

6. All changes and deviations in the work from that indicated and specified in the Contract Documents including Addenda, Change Orders, and field modifications.

Field measurements shall be made of work in place and the proper dimensions indicated on the "Record Prints" to clearly and accurately delineate the work as constructed.

Equipment identification plates, valve tags, fixture types and other identification designations shall be clearly marked on the "Record Prints" as to location and designation using symbols corresponding to symbols used in the Contract Documents.

The preparation of "Record Prints" showing changes and deviations in the Work does not grant the CONTRACTOR the authority to make changes in the Work without the expressed written approval of the Engineer and OWNER in each and every case.

7.0 COMMENCING WORK (Reference 2.03 of the General Conditions)

The CONTRACTOR is required to notify the Engineer at least 48 hours prior to the date work is to commence under this Contract and at least 48 hours prior to implementing any change in the work schedule.

No Person shall have the authority to verbally alter, modify, expand or reduce the requirements of the drawings or specifications. Verbal modifications shall not be binding on the OWNER or CONTRACTOR until specifically confirmed in writing by the ENGINEER. The CONTRACTOR shall bear full responsibility for nonconforming work

initiated by a verbal request in the field. All modifications affecting cost, scope, quality or time shall be made a part of the contract by a "Change in Contract" approved by OWNER.

8.0 QUANTITIES (Reference 13.03 of the General Conditions)

The CONTRACTOR shall check and verify all dimensions shown on the drawings and shall report in writing any inconsistencies to the Engineer before submitting a Bid, or include in the Bid the greater quantity or better quality of work, or compliance with the more stringent requirement resulting in a greater cost as described in the Instructions to Bidders. In addition, the CONTRACTOR shall check and verify all dimensions shown on the drawings and shall report in writing any inconsistencies to the Engineer before proceeding with any work or ordering of materials. The CONTRACTOR shall verify all measurements and shall be responsible for the correctness of the same. Any difference which may be found shall be submitted in writing to the Engineer for consideration before proceeding with the Work.

The CONTRACTOR shall calculate all quantities for the work to be performed based on the construction drawings and specifications. The cost for all work required to complete the Work shall be included in the Contract Price. No incidental items of work will be paid for unless there is an item in the proposal for such work. It must be strictly understood that the prices bid are for complete and acceptable work, and CONTRACTOR will not be paid for any materials on hand or stored at the job site.

9.0 STAKING FOR CONSTRUCTION

Construction staking for the alignment and location of all proposed improvements shall be the responsibility of the CONTRACTOR. The proposed improvements shall be located as shown on the construction plans and in reference to benchmarks identified by the Engineer. The OWNER reserves the right to check the CONTRACTOR’s lines, grades, levels, etc. at any time. No direct or separate payment will be made for construction staking or restaking.

10.0 CONSTRUCTION SCHEDULE (Reference 1.10(A).34 of the General Conditions)

Prior to commencing work, the CONTRACTOR shall submit a schedule illustrating the working day progress of the work to its completion within the time frame allotted in the Contract. This schedule shall be revised by the CONTRACTOR monthly and submitted with monthly pay estimates to the Engineer.

11.0 CONTRACTOR' S RESPONSIBILITY AND LIABILITY FOR PERFORMANCE OF WORK (Reference Article 7 of the General Conditions)

It is expressly understood and agreed to by the CONTRACTOR that, regardless of the extent of inspection and supervision provided by the OWNER and the Engineer, it is the CONTRACTOR's responsibility to perform and complete work in accordance with the

drawings and specifications, and that the OWNER and Engineer have no liability or responsibility whatever to the CONTRACTOR for any work performed by the CONTRACTOR which is not in accordance with the drawings and specifications regardless of the time when discovered and whether discovered at any time during the course of construction or after acceptance of the Work.

The Engineer shall inform the CONTRACTOR of any Work that is not in accordance with the drawings and specifications when it becomes known to him. If any Work is performed which is not in accordance with the drawings and specifications and is not discovered until a later time, neither the OWNER nor the Engineer shall have any responsibility to the CONTRACTOR, or be liable to the CONTRACTOR for the correction or removal of the unsatisfactory portion of the Work or of any portion of the Work subsequently performed or affected by it. The correction or removal of such unsatisfactory Work and the replacement with satisfactory Work shall be performed by the CONTRACTOR at his own expense, and is understood to be fully included in his contract requirements, without any additional compensation or claims upon the OWNER or Engineer.

12.0 BOUNDARIES OF WORK

The CONTRACTOR is required to use only the area designated by the OWNER as working areas. All work shall be done in such a manner as not to interfere with normal activities occurring outside of the work area.

The OWNER will provide land and rights-of-way for the Work specified in this Contract and make suitable provisions for ingress and egress, and the CONTRACTOR shall not enter on or occupy with men, tools, equipment, or materials, any ground outside the Site or property of the OWNER without the written permission of the owner of such other property.

13.0 EXISTING UTILITIES

Existing surface and subsurface structures (gas mains, water mains, sewer mains, storm sewers, telephone cables, electrical lines, etc.) are shown on the plans if their location has been determined, but it shall be the responsibility of the CONTRACTOR to avoid damaging these existing structures whether or not they are shown on the plans. The OWNER and Engineer assume no responsibility for failure to show any or all of the structures on the plans or to show them in their exact location. It is mutually agreed that such failure to show these structures will not be considered sufficient basis for claims for additional compensation for extra work or for increasing the pay quantities in any manner whatsoever. If any structure is damaged by the CONTRACTOR it shall be his responsibility to repair the damage at his own expense and restore the structure to its functional use.

The CONTRACTOR shall be responsible for the protection of all existing utilities or service lines crossed by its construction operations. Where existing utilities or service lines are cut, broken, or damaged, the CONTRACTOR shall replace or repair the utilities

or service lines with the same type of origina1 material and construction, or better, at his own cost and expense.

Protection of poles and landscaping shall be done at no expense to the OWNER.

14.0 PUBLIC UTILITIES AND OTHER PROPERTY TO BE CHANGED

In case it is necessary to change or move the property of any owner or of a public utility, such property shall not be moved or interfered with, until ordered to do so by the Engineer. The right is reserved by the owner of public utilities to enter upon the limits of the Project for the purpose of making such changes or repairs to their property that may become necessary by the performance of this Contract.

15.0 CONTRACTOR'S INSURANCE (Reference Insurance Rider and Attachment B Insurance Requirements)

CONTRACTOR shall, at its sole cost and expense, procure and maintain in effect during the term of this Agreement the insurance coverage in the amounts set forth herein.

16.0 SUPERINTENDENT (Reference 7.02 of the General Conditions)

A full time field superintendent with a minimum of five (5) years of experience in a similar type of construction must be present at all times, regardless of the amount of work, and must be capable of making decisions on the CONTRACTOR’s behalf.

17.0 LABOR FORCE

The CONTRACTOR may bring his superintendent, foreman, sub-foreman, machine operators, and sufficient key men to round his organization. The CONTRACTOR shall abide by the Wage and Hour Laws of the State and must not pay less than the rates legally prescribed.

CONTRACTOR shall not use in the performance of the Work any personnel, whether employed by CONTRACTOR or its subcontractors, deemed by OWNER to be incompetent, careless, unqualified to perform the work assigned, or otherwise unsatisfactory to OWNER, and shall at OWNER's request remove any such person from the Project.

18.0 MATERIALS AND WORKMANSHIP

The CONTRACTOR shall furnish all materials for a complete job as shown on the plans and as required by the specifications. No material which has been used by the CONTRACTOR for any temporary purpose whatever is to be incorporated in the permanent structure without written consent of the Engineer.

The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, or those substitute or "or-equal" materials and

equipment approved by Engineer and OWNER and identified by Addendum.

Where material or equipment is specified by a trade or brand name, it is not the intention of the OWNER to discriminate against an equal product or another manufacturer, but rather to set a definite standard of performance and to establish an equal basis for the evaluation of bids. Where the words “equivalent", “proper”, or “equal to” are used, they shall be understood to mean that the article or process is equal, in the opinion or judgment of the Engineer, to the article or process specified by name. Unless otherwise specified, all materials shall be the best of its respective kind and shall be in all cases fully equal to approved samples. No item of material or equipment will be considered by Engineer as a substitute or "or-equal" unless written request for approval has been submitted by CONTRACTOR and has been received by Engineer at least 10 days prior to the date for receipt of Bids. Each such request shall conform to requirements of paragraph 6.05 of the General Conditions. Engineer’s decision of approval or disapproval of a proposed item will be final. If Engineer approves any proposed item, such approval will be set forth in an Addendum.

19.0 SUBCONTRACTORS

CONTRACTOR must submit to OWNER and Engineer a list of all subcontractors for approval prior to commencing work. During the course of construction any changes in subcontractors must have prior written approval by the OWNER and Engineer.

20.0 PERMITS, CERTIFICATES, LAWS, AND ORDINANCES

The CONTRACTOR shall, at his own expense, procure any and all permits, certificates and licenses required of him by law or local ordinance for the execution of his work, including any permits required for transport of equipment or supplies for this Contract. Construction shall not commence on the Project until all applicable permits are obtained by the CONTRACTOR.

All work shall be done in strict accordance with all applicable Laws and Regulations of any regulatory agency having jurisdiction over this Work or the Site. It is not the intention of this Contract to violate the Laws and Regulations of any regulatory agencies having jurisdiction over this Work. This Contract indicates only the minimum quantity or quality acceptable to regulatory agencies having jurisdiction over this Work or the Site. If the codes, etc. call for greater quality or quantity, that greater quality or quantity shall be the basis for the bid.

All costs of labor, materials and fees for obtaining permits, utility taps and hookups, etc. shall be included in the Contract Price.

21.0 SALES TAX (Reference 7.10 of the General Conditions)

The CONTRACTOR will be responsible for the payment of all taxes in compliance with the laws of the State of Texas and the United States. However, this Contract is to be performed for a tax-exempt organization. The CONTRACTOR may purchase all materials incorporated into realty in the performance of this Contract without paying sales tax. The OWNER is exempt from paying sales tax on services required as an integral portion of the Contract. The CONTRACTOR will be liable for the payment of limited sales tax if the CONTRACTOR uses the tangible personal property in some other use than the reason listed above, and shall pay the tax based on the price for the tangible personal property.

22.0 REPLACEMENT OF MISCELLANEOUS IMPROVEMENTS/CLEAN UP

The CONTRACTOR shall repair or replace all fences, landscaping, mailboxes, light poles, concrete walls, sidewalks, driveways, drainage ways, utilities, concrete curbs and concrete pavement, signs, culverts, asphalt pavement, building walls and attachments and other miscellaneous improvements damaged by the CONTRACTOR due to his operations on this Project, to a condition equal to or better than its condition before construction, at no expense to the OWNER. No direct payment will be made for this item.

During construction, the CONTRACTOR shall maintain the Site in an orderly, neat, and presentable manner. Scraps and debris shall not be left scattered but shall be assembled together and to the extent unusable shall be moved from the Site or disposed of to the satisfaction of the Engineer. After the Work is completed and before final acceptance of the Work by OWNER, CONTRACTOR shall remove all debris from the construction site. Temporary structures, forms, equipment, objectionable rocks, concrete and other debris shall be removed in such manner as to leave the construction site in a neat and presentable condition throughout. Earthwork shall be smoothed and graded to the lines shown on the construction plans. No direct payment will be made for cleanup.

During construction the CONTRACTOR shall keep the Site free and clean from all rubbish and debris and shall clean up the Site promptly and when notified to do so by the Engineer or OWNER.

The CONTRACTOR shall, at his own expense, maintain the streets and roads free from dust, mud, excess earth or debris which constitutes a nuisance or danger to the public using the thoroughfare, or the occupants of adjacent properties. Care shall be taken to prevent spillage or debris deposited on streets, due to the CONTRACTOR's operations, and shall be immediately removed.

The CONTRACTOR shall coordinate his operations in such a manner as to prevent the amount of clean up and completion of back work from becoming excessive. Should such a condition exist, the Engineer may order all or portions of the Work to cease, and refuse to allow any Work to commence until the cleanup and back work is done to the Engineer's satisfaction.

The CONTRACTOR shall do such grading in the area adjacent to streets and drainage facilities as may be necessary to leave the area in a neat and satisfactory condition approved by the Engineer. In addition, CONTRACTOR shall clean and remove sediment from the storm sewer facilities deposited as a result of construction to a satisfactory condition approved by the Engineer.

23.0 EXISTING CONDITIONS

The CONTRACTOR shall be responsible for any loss or damage caused by it or its workmen to the property of OWNER and shall immediately repair or replace such loss or damage under the direction and to the complete satisfaction of the OWNER.

24.0 PROTECTION OF THE SITE AND LAYDOWN/STORAGE AREAS

The CONTRACTOR shall protect all structures, utilities and pipelines, trees, shrubbery, lawns, and other improvements during the progress of his work and shall remove from the Site and laydown/storage areas all debris and unused materials.

The CONTRACTOR shall at all times provide protection against weather such as rain, wind, storms, frost, or heat so as to maintain all work and materials free from injury or damage. At the end of the day's work, all new work likely to be damaged shall be

covered. Any materials damaged by failure to provide protection as required, shall be removed and replaced with new materials at the CONTRACTOR's expense.

25.0 TRENCH EXCAVATION SAFETY PROTECTION

Trench protection for all trenches over five (5) feet in depth shall be accomplished by the CONTRACTOR in accordance with all provisions of Part 1926, Subpart P - Excavations, Trenching, and Shoring of the Occupational Safety and Health Standards and Interpretations (OSHA), or any updated and subsequent version thereof.

OSHA requirements are to be strictly enforced by the CONTRACTOR. Any dangerous situation which has been brought to the attention of the CONTRACTOR and which has not been corrected, will be sufficient grounds for stopping the work.

It is the sole duty, responsibility, and prerogative of the CONTRACTOR, not the OWNER or Engineer, to determine the specific applicability of a trench safety system to each field condition encountered on the project. It will be the CONTRACTOR's responsibility to identify the soil type and to accurately adjust his trench safety methods according to the OSHA requirements.

The CONTRACTOR shall indemnify and hold harmless the OWNER and Engineer, its employees and agents, from any and all damages, costs (including, without limitation, legal fees, court costs, and the cost of investigation), judgments or claims by anyone for injury or death of persons resulting from the collapse or failure of trenches constructed under this Contract.

The CONTRACTOR acknowledges and agrees that this indemnity provision provides indemnity for the OWNER and Engineer in case the OWNER or Engineer is negligent either by act or omission in providing for trench safety, including, but not limited to, inspections, failure to issue stop work orders, and the hiring of the CONTRACTOR.

26.0 CONTRACTOR LAYDOWN AREA

The CONTRACTOR shall notify the OWNER as to the preferred laydown/equipment storage areas to be used by CONTRACTOR and which must be approved by OWNER. Any temporary security fencing constructed around or within the laydown area(s) shall be approved by OWNER. CONTRACTOR shall completely restore the laydown area to its original condition prior to demobilization. Site restoration shall include removing and properly disposing of all trash and debris, and repairing any roadways used for access to the site damaged by CONTRACTOR. Any temporary security fencing installed for convenience of the CONTRACTOR shall be removed.

27.0 GUARANTEE

The CONTRACTOR shall guarantee the Work against defective workmanship and materials for a period of two (2) years from the date of final acceptance of the Work by the OWNER. The determination of the necessity during the warranty period for the

CONTRACTOR to repair or replace the Work in whole or in part shall rest with the Engineer and OWNER, whose decision in the matter shall be final and obligatory upon the CONTRACTOR.

Where defective workmanship and/or materials are discovered requiring repairs to be made under this guaranty, all such repair work shall be done by the CONTRACTOR at his own expense within five (5) days after written notice of such defect has been given to him by the OWNER. Should the CONTRACTOR fail to repair or correct such defective workmanship and/or materials within five (5) days after being notified, the OWNER may make the necessary repairs and charge the CONTRACTOR and/or his Surety with the actual cost of all labor and materials required.

28.0 MANUFACTURER'S CERTIFICATES

All manufacturer's certificates and guarantees required herein are to be furnished by the CONTRACTOR at its own expense.

29.0 WORK IN PROGRESS BY OTHER CONTRACTORS

CONTRACTOR is hereby advised that other contractors will be working at the site to complete the overall Project objectives. Other contractors and employees or agents of the OWNER may, for all necessary purposes, enter upon the Work and Site used by the CONTRACTOR, and the CONTRACTOR shall conduct his work so as not to impede unnecessarily any work being done by others on or adjacent to the sites.

30.0 TESTING OF MATERIALS

All testing of materials required under these specifications shall be performed by an approved agency for testing materials. The nomination of the laboratory and the payment for such services shall be made by the OWNER, unless specified otherwise. Any retest required because of failure of the initial test will be paid for by the CONTRACTOR and shall be included in the total Contract Price. OWNER will deduct cost of retesting from the CONTRACTOR's partial Pay Request.

31.0 GUARANTEE INSPECTION

Immediately prior to expiration of the two-year guarantee period, the CONTRACTOR shall make an inspection of the Work in the company of the Engineer and the OWNER. The Engineer and the OWNER shall be given not less than 10 days notice prior to the anticipated date of Guarantee expiration.

Where any portion of the Work has proven to be defective and requires replacement, repair or adjustment, the CONTRACTOR shall immediately provide materials and labor necessary to remedy such defective work and shall prosecute such work without delay until completed to the satisfaction of the Engineer and the OWNER, even though the date of completion of the corrective work may extend beyond the expiration date of the guarantee period.

The CONTRACTOR shall not be responsible for correction of work which has been damaged because of neglect or abuse.

32.0 REJECTED MATERIALS

All materials which have been rejected or condemned by the OWNER shall be immediately removed from the Site.

33.0 DISPUTE RESOLUTION AGREEMENT

OWNER and CONTRACTOR hereby agree that Article 17 of the General Conditions to the Agreement between OWNER and CONTRACTOR is amended to include the following agreement of the parties:

(a) All claims, disputes and other matters in question between OWNER and CONTRACTOR arising out of or relating to the Contract Documents or the breach thereof (except for claims which have been waived by the making and acceptance of final payment) shall be subject to mediation as a condition precedent to binding dispute resolution which, unless the parties mutually agree otherwise, shall be in accordance with the Construction Industry Mediation Rules of the American Arbitration Association then obtaining, subject to the limitations of this Supplemental Condition. The parties shall share the mediator's fee and filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof. For any claim subject to, but not resolved by mediation, the method of binding dispute resolution shall be litigation in a court of competent jurisdiction.

(b) No request for mediation of any claim, dispute or other matter that is required to be referred to ENGINEER initially for decision in accordance with the Agreement will be made until the earlier of (a) the date on which ENGINEER has rendered a written decision or (b) the thirty-first day after the parties have presented their evidence to ENGINEER if a written decision has not been rendered by ENGINEER before that date. No request for mediation of any such claim, dispute or other matter will be made later than one hundred and eighty days after the date on which ENGINEER has rendered a written decision in respect thereof in accordance with the Agreement and the failure to request mediation within said thirty days' period will result in ENGINEER'S decision being final and binding upon OWNER and CONTRACTOR. No request for mediation of any written decision of ENGINEER rendered in accordance with the Agreement will be made later than sixty days after the party making such request has delivered written notice of intention to appeal as provided in the Agreement.

(c) Notice of the request for mediation will be filed in writing with the other party to the Agreement and with the American Arbitration Association, and a copy will be sent to ENGINEER for information. The request for medication will be made within the one hundred and eighty day or sixty day period specified in subparagraph (b) above as

applicable, and in all other cases within a reasonable time after the claim, dispute or other matter in question has arisen, and in no event shall any such request be made after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable state of limitations.

34.0 BARRICADES AND DANGER SIGNALS/TRAFFIC CONTROL

The CONTRACTOR shall provide in a manner satisfactory to OWNER the uninterrupted passage of traffic at all times and provide for traffic to and from private property where existing facilities cannot be used due to construction operations.

Where the Work is in, or adjacent to any street, alley, or public place, the CONTRACTOR shall be responsible for furnishing, erecting, and maintaining, at no expense to the OWNER, all traffic control measures, including suitable barricades, warning lights, warning signs, flares, barriers, cones, lights, flags signals, flagmen and other traffic control devices as are or may be necessary to adequately protect the Work and warn of the Project, including, but not limited to, sections of the Project which the CONTRACTOR closes to traffic. Warning devices shall be installed as described in the Texas Manual on Uniform Traffic Control Devices.

The CONTRACTOR will be held responsible for all damage to the work due to the failure of barricades, signs, lights and watchmen to protect it, and whenever evidence is found of such damage, the OWNER may order the damaged portion immediately removed and replaced by the CONTRACTOR at his cost and expense. The CONTRACTOR's responsibility for the maintenance of barricades, signs and lights and for providing watchmen, shall not cease until the Work has been accepted by the OWNER.

Unless otherwise set forth in these specifications, the CONTRACTOR shall receive no direct compensation for furnishing, erecting and maintaining the necessary barricades, lights, flares, signs or for any other materials necessary for the good and proper safety, convenience and direction of traffic during the period prior to final inspection and acceptance by the OWNER.

35.0 TERMINATION OF CONTRACT IN CASE OF NATIONAL EMERGENCY

Whenever, because of a national emergency so declared by the President of the United States or other lawful authority, it becomes impossible for the CONTRACTOR to obtain all of the necessary labor, material and equipment for the prosecution of the Work with reasonable continuity for a period of two months, or to complete the Work if Substantial Completion is expected in less than two (2) months, the CONTRACTOR shall within seven (7) days notify the OWNER in writing, giving a detailed statement of the efforts which have been made and listing all necessary items of labor, material and equipment not obtainable. If after investigation, the OWNER finds that such conditions exist and that the inability of the CONTRACTOR to proceed is not attributable in whole or in part to the fault or neglect of the CONTRACTOR, then if the OWNER cannot after

reasonable effort assist the CONTRACTOR in procuring and making available the necessary labor, materials, and equipment within 30 days, the CONTRACTOR may request the OWNER to terminate the Contract and the OWNER shall within 30 days comply with the request, and the termination shall be based on a final settlement, which shall include, but not be limited to, the payment for the portion of the Work completed and approved.

36.0 WATER

Water required for water jetting, flooding, testing, flushing, disinfecting, and construction shall be obtained at the CONTRACTOR's expense and shall be included (subsidiary to contract) in the Contract prices. CONTRACTOR shall provide all labor, materials, and equipment for making connections (temporary or permanent) to existing water facilities, for metering the water used, and for removal of temporary connections.

37.0 ELECTRICITY

Electricity may not be available at the site at the time of construction. CONTRACTOR shall make all temporary power connections at the existing power poles along the site and shall make provisions to furnish other power as required to complete the specified work at this site.

38.0 WORKING HOURS

The CONTRACTOR shall submit to the OWNER prior to construction, a construction schedule which shall meet the OWNER's approval before construction can begin. The CONTRACTOR shall perform all construction activities between 8:00 a.m. to 5:00 p.m., Monday through Friday. However, the CONTRACTOR may be allowed to work weekends and holidays upon the OWNER's written approval.

39.0 SANITARY FACILITIES

The CONTRACTOR shall provide chemical toilet facilities for the use of his forces. Adequacy of these facilities will be subject to the approval of the Engineer and maintenance of same must be satisfactory to the Engineer at all times. All sanitary facilities shall be the sole responsibility of the CONTRACTOR and shall be included in the Contract Price, and no separate payment shall be made.

40.0 PARKING

The CONTRACTOR shall be responsible for the expense of parking its and its employees' vehicles in a legal manner at no expense or inconvenience to OWNER or other Contractors in the area.

41.0 MEASUREMENT AND PAYMENT

Unless otherwise stated, it is understood that all payments made are for finished work and include all labor, tools, materials, appurtenances, constructing and completing the item on which payment is made.

42.0 DRUG AND FIREARM POLICY

OWNER has advised CONTRACTOR of OWNER's policy pursuant to which OWNER prohibits the use, possession, sale, transfer, and/or storage of firearms, prohibited drugs or alcohol on its premises by its employees. Further no hunting is allowed on the premises. This policy also applies to those employees of CONTRACTOR who perform work for OWNER. CONTRACTOR specifically acknowledges its understanding of and familiarity with OWNER's policies, procedures and restrictions concerning the influence, use or presence of drugs, alcohol, and/or firearms at the Project and agrees to be bound by and fully comply with the same. Further, CONTRACTOR agrees that the foregoing shall apply to its employees and those of its subcontractors and hereby agrees to insure that all personnel engaged in the Work are aware of and familiar with OWNER's policies, procedures and restrictions and to remove from the Project and replace any personnel CONTRACTOR believes to be in violation thereof. It is understood and agreed that OWNER shall have the right to require the removal and replacement of any person or entity not adhering to such requirements. CONTRACTOR shall include the foregoing provisions in each of its subcontracts relating to the Project in order that the terms of this Section 50 shall fully apply to such parties.

43.0 PERFORMANCE AND PAYMENT BONDS

It is further agreed by the Parties to this CONTRACT that the CONTRACTOR will execute separate Performance and Payment Bonds. The Performance and Payment Bonds shall be in a sum equal to 100% of the total CONTRACT price and remain in effect for two years beyond the date of approval by the consulting engineer. All bonds shall be in standard forms for this purpose guaranteeing payment to all persons supplying labor and materials or furnishing him any equipment in the execution of the CONTRACT. It is agreed that the CONTRACT shall not be in effect until such performance and payment bonds are furnished and approved by OWNER and that final retainage shall not be paid until such maintenance bond is furnished and approved by the OWNER. The cost of the premium for the performance, payment and maintenance bonds shall be included in the price bid by the CONTRACTOR FOR work under this CONTRACT, and no extra payment for such bonds will be made by the OWNER. The surety company or companies underwriting the performance, payment, and maintenance bonds shall be acceptable according to the latest list of companies holding certificates of authority from the Secretary of the Treasury of the United States. Furthermore, the surety company or companies shall be duly authorized to act under the laws of the State of Texas as Surety, and shall be approved by the OWNER. The maintenance bond may also include naming any governmental authority required for final approval and or acceptance. The

maintenance bond shall be effective for a period of 1 year after the date of final acceptance.

44.0 SCHEDULE OF VALUES

The CONTRACTOR shall submit a schedule of values at the request of the OWNER or the ENGINEER. The schedule of values is defined as a breakdown of any bid item into its individual component costs. The costs include, but are not limited to, bonds, separate work items, labor, and material.

45.0 CONTRACT DELAYS AND REINSPECTION

The CONTRACTOR shall reimburse OWNER for all additional Engineering and Inspection Cost that are a result of failed test or incorrect work where re-inspections or re-testing and or more field observations are required or where the work extends past the allotted time resulting in a longer period of Construction Services by the ENGINEER. Each month ENGINEER will invoice OWNER separately for re-inspections and re-testing. Such invoice amounts will be deducted from CONTRACTOR's Partial Pay Requests.

Exhibit A to Contract Agreement
Owner's Insurance Requirements of Contractor

1. Specific Insurance Requirements

The following insurance shall be maintained in effect with limits not less than those set forth below at all times during the term of this Agreement and thereafter as required:

Insurance	Coverage/Limits	Other Requirements
Commercial General Liability (Occurrence Basis)	Amounts of coverage shall be no less than: ▪ $1,000,000 Per Occurrence ▪ $2,000,000 General Aggregate ▪ $2,000,000 Products/Completed Operations Aggregate ▪ $1,000,000 Personal and Advertising Injury ▪ Designated Construction Project(s) General Aggregate Limit	▪ Current ISO edition of CG 00 01 ▪ Additional insured status shall be provided in favor of Owner Parties on a combination of ISO forms CG 20 10 04 13 and CG 20 37 04 13. ▪ This coverage shall be endorsed to provide primary and non-contributing liability coverage. It is the intent of the parties to this Agreement that all insurance coverage required herein shall be primary to and will not seek contribution from any other insurance held by Owner Parties, with Owner Parties' insurance being excess, secondary and non-contributing. ▪ Stop Gap coverage shall be provided if any work is to be performed in a monopolistic workers' compensation state. ▪ The following exclusions/limitations (or their equivalent(s), are prohibited: o Contractual Liability Limitation CG 21 39 o Amendment of Insured Contract Definition CG 24 26 o Limitation of Coverage to Designated Premises or Project, CG 21 44 o Exclusion-Damage to Work Performed by Subcontractors on Your Behalf, CG 22 94 or CG 22 95 o Exclusion-Explosion, Collapse and Underground Property Damage Hazard, CG 21 42 or CG 21 43 o Any Classification limitation o Any Construction Defect Completed Operations exclusion o Any endorsement modifying the Employer's Liability exclusion or deleting the exception to it o Any endorsement modifying or deleting Explosion, Collapse or Underground coverage o Any Habitational or Residential exclusion applicable to the Work o Any "Insured vs. Insured" exclusion except Named Insured vs. Named Insured o Any Punitive, Exemplary or Multiplied Damages exclusion o Any Subsidence exclusion

Business Auto Liability	Amount of coverage shall be no less than: ▪ $1,000,000 Per Accident	▪ Current ISO edition of CA 00 01 ▪ Arising out of any auto (Symbol 1), including owned, hired and non-owned
Workers' Compensation and Employer's Liability	Amounts of coverage shall be no less than: ▪ Statutory Limits ▪ $1,000,000 Each Accident and Disease ▪ Alternate Employer endorsement ▪ USL&H must be provided where such exposure exists.	▪ The State in which work is to be performed must listed under Item 3.A. on the Information Page ▪ Such insurance shall cover liability arising out of the Contractor's employment of workers and anyone for whom the Contractor may be liable for workers' compensation claims. Workers' compensation insurance is required, and no "alternative" forms of insurance shall be permitted. ▪ Where a Professional Employer Organization (PEO) or "leased employees" are utilized, Contractor shall require its leasing company to provide Workers' Compensation insurance for said workers and such policy shall be endorsed to provide an Alternate Employer endorsement in favor of Contractor and Owner. Where Contractor uses leased employees with Workers' Compensation insurance provided by a PEO or employee leasing company, Contractor is strictly prohibited from subletting any of its work without the express written agreement of Owner.
Excess Liability (Occurrence Basis)	Amounts of coverage shall be no less than: ▪ $5,000,000 Each Occurrence ▪ $5,000,000 Annual Aggregate	▪ Such insurance shall be excess over and be no less broad than all coverages described above. ▪ Drop-down coverage shall be provided for reduction and/or exhaustion of underlying aggregate limits and shall include a duty to defend any insured.
Professional Liability	Amounts of coverage shall be no less than: ▪ $1,000,000 Each Occurrence ▪ $2,000,000 Annual Aggregate ▪ If a combined Contractor's Pollution Liability and Professional Liability policy is utilized, the limits shall be $3,000,000 Each Loss and Aggregate. ▪ Such insurance shall cover all services rendered by the Contractor and its consultants under the Agreement, including but not limited to design or design/build services. ▪ Policies written on a Claims-Made basis shall be maintained for at least two years beyond termination of the Agreement.	▪ Such insurance shall cover all services rendered by the Contractor and its subcontractors under the Agreement. ▪ This insurance is not permitted to include any type of exclusion or limitation of coverage applicable to claims arising from: o bodily injury or property damage where coverage is provided in behalf of design professionals or design/build contractors o habitational or residential operations o mold and/or microbial matter and/or fungus and/or biological substance o punitive, exemplary or multiplied damages. ▪ Any retroactive date must be effective prior to beginning of services for the Owner. ▪ Policies written on a Claims-Made basis shall have an extended reporting period of at least

		two years beyond termination of the Agreement. Vendor shall trigger the extended reporting period if identical coverage is not otherwise maintained with the expiring retroactive date.
Contractors Pollution Liability	Amounts of coverage shall be no less than: ▪ $1,000,000 Each Loss ▪ $2,000,000 Annual Aggregate ▪ If a combined Contractor's Pollution Liability and Professional Liability policy is utilized, the limits shall be $3,000,000 Each Loss and Aggregate. ▪ The policy must provide coverage for: o the full scope of the named insured's operations (on-going and completed) as described within the scope of work for this Agreement o loss arising from pollutants including but not limited to fungus, bacteria, biological substances, mold, microbial matter, asbestos, lead, silica and contaminated drywall o third party liability for bodily injury, property damage, clean up expenses, and defense arising from the operations; o diminution of value and Natural Resources damages o contractual liability o claims arising from non-owned disposal sites utilized in the performance of this Agreement.	▪ The policy must insure contractual liability, name Owner Parties as an Additional Insured, and be primary and noncontributory to all coverage available to the Additional Insured. ▪ This insurance is not permitted to include any type of exclusion or limitation of coverage applicable to claims arising from: o Insured vs. insured actions. However, exclusion for claims made between insured within the same economic family are acceptable. o impaired property that has not been physically injured o materials supplied or handled by the named insured. However, exclusions for the sale and manufacture of products are allowed. Exclusionary language pertaining to materials supplied by the insured shall be reviewed by the certificate holder for approval. o property damage to the work performed by the contractor o faulty workmanship as it relates to clean up costs o punitive, exemplary or multiplied damages o work performed by subcontractors ▪ If coverage is provided on a Claims Made basis, coverage will at least be retroactive to the earlier of the date of this Agreement or the commencement of contractor services relation to the Work. ▪ The policy will offer an extended discovery or extended reporting clause of at least three (3) years. ▪ Completed Operations coverage shall be maintained through the purchase of renewal policies to protect the insured and additional insured for at least two (2) years after the property owner accepts the project or this contract is terminated. The purchase of an extended discovery period or an extended reporting period on a Claims Made policy or the purchase of occurrence-based Contractors Environmental Insurance will not be sufficient to meet the terms of this provision.

Builders Risk	▪ Coverage shall be provided in an amount equal at all times to the full contract value, including change orders, and cost of debris removal for any single occurrence. ▪ Coverage shall be at least as broad as an unmodified ISO Special form, shall be provided on a completed-value basis, and shall be primary to any other insurance coverage available to the named insured parties, with that other insurance being excess, secondary and non-contributing. ▪ The policy must provide coverage for: o Agreed Value — Included o Damage arising from error, omission or deficiency in construction methods, design, specifications, workmanship or materials, including collapse — Included o Debris removal additional limit — $1,000,000 o Earthquake and Earthquake Sprinkler Leakage — $5,000,000 o Flood — $5,000,000 o Freezing — Included o Mechanical breakdown including hot & cold testing — Included o Ordinance or law — $1,000,000 o Pollutant clean-up and removal — $ 25,000 o Preservation of property — Included o Theft — Included • Deductible shall not exceed — $10,000 o All Risks of Direct Damage, Per Occurrence, except — 2% subject to $50,000 minimum o Named Storm, Earthquake and Earthquake Sprinkler Leakage, Per Occurrence — $100,000 o Flood, Per Occurrence or excess of NFIP if in Flood Zone A or V — $100,000	▪ Insureds shall include Owner, General Contractor, all Loss Payees and Mortgagees, and subcontractors of all tiers in the Work as Insureds. ▪ Such insurance shall cover: o all structure(s) under construction, including retaining walls, paved surfaces and roadways, bridges, glass, foundation(s), footings, underground pipes and wiring, excavations, grading, backfilling or filling; all temporary structures (e.g., fencing, scaffolding, cribbing, false work, forms, site lighting, temporary utilities and buildings) located at the site; o all property including materials and supplies on site for installation; o all property including materials and supplies at other locations but intended for use at the site; o all property including materials and supplies in transit to the site for installation by all means of transportation other than ocean transit; and o other Work at the site identified in the Agreement to which this Exhibit is attached. • No protective safeguard warranty shall be permitted. • The termination of coverage provision shall be endorsed to permit occupancy of the covered property being constructed. This insurance shall be maintained in effect, unless otherwise provided for the Agreement Documents, until the earliest of: o the date on which all persons and organizations who are insureds under the policy agree that it shall be terminated; o occupancy, in whole or in part; o the date on which release of substantial completion is executed; or o the date on which the insurable interests of Contractor in the Covered Property has ceased. • A waiver of subrogation provision shall be provided in favor of all insureds.

2. General Insurance Requirements

A. Definitions. For purposes of this Agreement:

i. "ISO" means Insurance Services Office.

ii. "Contractor" shall include the Builder and its subcontractors of any tier.

iii. "Owner Parties" means (a) City of Dripping Springs, Texas (collectively referred to as "Owner"), (b) the Project, (c) any lender whose loan is secured by a lien against the Work, (d) their respective shareholders, members, partners, joint venturers, affiliates, subsidiaries, successors and assigns, (e) any directors, officers, employees, or agents of such persons or entities, and (f) others as required by the Contract Documents.

B. Policies.

i. Contractor shall maintain such Excess Liability, Professional and Pollution insurance in identical coverage, form and amount, including required endorsements, for at least two (2) years following Date of Substantial Completion of the Work to be performed under this Agreement. Contractor shall maintain such General Liability insurance in identical coverage, form and amount, including required endorsements, for at least ten (10) years following Date of Substantial Completion of the Work to be performed under this Agreement. Contractor shall provide written representation to Owner stating Work completion date.

ii. All policies must:

a. Be written through insurance companies authorized to do business in the State in which the work is to be performed and rated no less than A-: VII in the most current edition of A. M. Best's Key Rating Guide at all times Work is to be performed.

b. Provide a waiver of subrogation in favor of Owner Parties on all insurance coverage carried by Contractor, whether required herein or not.

c. Contain an endorsement providing for thirty (30) days prior written notice of cancellation to Owner.

d. Be provided to the Owner Parties in compliance with the requirements herein and shall contain no endorsements that restrict, limit, or exclude coverage required herein in any manner without the prior express written approval of the Owner.

iii. Failure of any Owner Party to demand such certificate or other evidence of full compliance with these insurance requirements or failure of any Owner Party to identify a deficiency from evidence that is provided shall not be construed as a waiver of the Contractor's obligation to maintain such insurance.

iv. Contractor shall provide to the Owner a certified copy of all insurance policies required herein within ten (10) days of any such request. Renewal policies, if necessary, shall be delivered to the Owner prior to the expiration of the previous policy.

v. Commencement of Work without provision of the required certificate of insurance, evidence of insurance or required endorsements, or without compliance with any other provision of this Agreement, shall not constitute a waiver by any Owner Party of any rights. The Owner shall have the right, but not the obligation, of prohibiting the Contractor or any subcontractor from performing any Work until such certificate of insurance, evidence of insurance and/or required endorsements are received and approved by the Owner.

C. Limits, Deductibles and Retentions

i. The limits of liability may be provided by a single policy of insurance or by a combination of primary and excess policies, but in no event shall the total limits of liability available for any one occurrence or accident be less than the amount required herein.

ii. No deductible or self-insured retention shall exceed $25,000 without prior written approval of the Owner, except as otherwise specified herein. All deductibles or retentions shall be paid by, assumed by, for the account of, and at the Contractor's sole risk. The Contractor shall not be reimbursed for same.

D. Forms

i. If the forms of policies, endorsements, certificates or evidence of insurance required by this Exhibit A are superseded or discontinued, Owner will have the right to require other equivalent forms.

ii. Any policy or endorsement form other than a form specified in this Exhibit A must be approved in advance by Owner.

E. **Evidence of Insurance**. Insurance must be evidenced as follows:
   i. ACORD Form 25 Certificate of Liability Insurance for liability coverages.
   ii. ACORD Form 28 Evidence of Commercial Property Insurance for property coverages.
   iii. Evidence shall be provided to Owner prior to commencing Work and prior to the expiration of any required coverage.
   iv. ACORD Forms specify:
      a. Owner as certificate holder at Owner's mailing address;
      b. Insured's name, which must match that on this Agreement;
      c. Insurance companies producing each coverage and the policy number and policy date of each coverage;
      d. Producer of the certificate with correct address and phone number and have the signature of the authorized representative of the producer;
      e. Additional Insured status in favor of Owner Parties;
      f. Amount of any deductible or self-insured retention in excess of $25,000;
      g. Designated Construction Project(s) General Aggregate Limit;
      h. Primary and non-contributory status;
      i. Waivers of subrogation; and
      j. All exclusions and limitations added by endorsement to the General Liability coverage. This can be achieved by attachment of the Schedule of Forms and Endorsements page.
   v. Copies of the following shall also be provided:
      a. General Liability Additional insured endorsement(s);
      b. General Liability Schedule of Forms and Endorsements page(s); and
      c. 30 Day Notice of Cancellation endorsement applicable to all required policies.

F. Contractor Insurance Representations to Owner Parties
   i. It is expressly understood and agreed that the insurance coverages required herein (a) represent Owner Parties' minimum requirements and are not to be construed to void or limit the Contractor's indemnity obligations as contained in this Agreement nor represent in any manner a determination of the insurance coverages the Contractor should or should not maintain for its own protection; and (b) are being, or have been, obtained by the Contractor in support of the Contractor's liability and indemnity obligations under this Agreement. Irrespective of the requirements as to insurance to be carried as provided for herein, the insolvency, bankruptcy or failure of any insurance company carrying insurance of the Contractor, or the failure of any insurance company to pay claims accruing, shall not be held to affect, negate or waive any of the provisions of this Agreement.
   ii. Failure to obtain and maintain the required insurance shall constitute a material breach of, and default under, this Agreement. If the Contractor shall fail to remedy such breach within five (5) business days after notice by the Owner, the Contractor will be liable for any and all costs, liabilities, damages and penalties resulting to the Owner Parties from such breach, unless a written waiver of the specific insurance requirement(s) is provided to the Contractor by the Owner. In the event of any failure by the Contractor to comply with the provisions of this Agreement, the Owner may, without in any way compromising or waiving any right or remedy at law or in equity, on notice to the Contractor, purchase such insurance, at the Contractor's expense, provided that the Owner shall have no obligation to do so and if the Owner shall do so, the Contractor shall not be relieved of or excused from the obligation to obtain and maintain such insurance amounts and coverages.
   iii. This Exhibit A is an independent contract provision and shall survive the termination or expiration of the Contract Agreement.

G. Insurance Requirements of Contractor's Subcontractors

i. Insurance similar to that required of the Contractor shall be provided by all subcontractors (or provided by the Contractor on behalf of subcontractors) to cover operations performed under any subcontract agreement. The Contractor shall be held responsible for any modification in these insurance requirements as they apply to subcontractors. The Contractor shall maintain certificates of insurance from all subcontractors containing provisions similar to those listed herein (modified to recognize that the certificate is from subcontractor) enumerating, among other things, the waivers of subrogation, additional insured status, and primary liability as required herein, and make them available to the Owner upon request.

ii. The Contractor is fully responsible for loss and damage to its property on the site, including tools and equipment, and shall take necessary precautions to prevent damage to or vandalism, theft, burglary, pilferage and unexplained disappearance of property. Any insurance covering the Contractor's or its subcontractor's property shall be the Contractor's and its subcontractor's sole and complete means or recovery for any such loss. To the extent any loss is not covered by said insurance or subject to any deductible or co-insurance, the Contractor shall not be reimbursed for same. Should the Contractor or its subcontractors choose to self-insure this risk, it is expressly agreed that the Contractor hereby waives, and shall cause its subcontractors to waive, any claim for damage or loss to said property in favor of the Owner Parties.

H. Use of the Owners Equipment

The Contractor, its agents, employees, subcontractors or suppliers shall use the Owners equipment only with express written permission of the Owners designated representative and in accordance with the Owners terms and condition for such use. IF THE CONTRACTOR OR ANY OF ITS AGENTS, EMPLOYEES, SUBCONTRACTORS OR SUPPLIERS UTILIZE ANY OF THE OWNERS EQUIPMENT FOR ANY PURPOSE, INCLUDING MACHINERY, TOOLS, SCAFFOLDING, HOISTS, LIFTS OR SIMILAR ITEMS OWNED, LEASED OR UNDER THE CONTROL OF THE OWNER, THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND BE LIABLE TO THE OWNER PARTIES FOR ANY AND ALL LOSS OR DAMAGE WHICH MAY ARISE FROM SUCH USE.

I. Release and Waiver

The Contractor hereby releases, and shall cause its subcontractors to release, the Owner Parties from any and all claims or causes of action whatsoever which the Contractor or its subcontractors might otherwise now or hereafter possess resulting in or from or in any way connected with any loss covered by insurance, whether required herein or not, or which should have been covered by insurance required herein, including the deductible or uninsured portion thereof, maintained or required to be maintained by the Contractor or its subcontractors pursuant to this Agreement. **THE FOREGOING RELEASE AND WAIVER APPLY EVEN IF THE LOSS OR DAMAGE IS CAUSED IN WHOLE OR IN PART BY THE FAULT OR NEGLIGENCE OR STRICT LIABILITY OF THE OWNER PARTIES.**

ATTACHMENT "B"

CITY OF DRIPPING SPRINGS CONTRACTOR INSURANCE REQUIREMENTS:

Firm providing goods, materials and services for the City of Dripping Springs shall, during the term of the contract with the City of Dripping Springs or any renewal or extension thereof, provide and maintain the types and amounts of insurance set forth herein. All insurance and certificate(s) of insurance shall contain the following provisions:

1. Name the City of Dripping Springs as additional named insured as to all applicable coverage.

2. Provide for at least thirty (30) days prior written notice to the City of Dripping Springs for cancellation, non-renewal, or material change of the insurance.

3. Provide for a waiver of subrogation against the City of Dripping Springs for injuries, including death, property damage, or any other loss to the extent the same is covered by the proceeds of insurance.

Insurance Company Qualification: All insurance companies providing the required insurance shall be authorized to transact business in Texas and rated at least "A" by AM Best or other equivalent rating service.

Certificate of Insurance: Certificates of Insurance evidencing all of the required insurance coverages shall be submitted with the Firm's submission. Copies of any modifications, amendments, renewals, or terminations of any coverage shall be promptly submitted to the City. If the contract is extended by the City of Dripping Springs, certificates of insurance evidencing all of the required insurance coverages shall be provided to the City prior to the date the contract is extended.

Type of Contract and Amount of Insurance:

- Statutory Workers Compensation insurance as required by state law.
- Commercial General Liability minimum limits of $500,000 per occurrence for bodily injury, personal injury, and property damage.
- Automobile Liability with a minimum of $500,000 Dollars combined single limit.

TWDB-0551
Rev. 10/24



Texas Water Development Board Supplemental Construction Contract Conditions

For Non-Equivalency Projects under the Clean Water State Revolving Fund and Drinking Water State Revolving Fund Programs

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I. INSTRUCTIONS TO APPLICANT

1. Applicability

These Supplemental Conditions contain provisions that are worded to comply with certain statutes and regulations which specifically relate to Clean Water State Revolving Fund (CWSRF) Non-Equivalency Program and Drinking Water State Revolving Fund (DWSRF) Non-Equivalency Program projects. Provisions that are applicable to the project's dollar value of the contract are so noted within these provisions.

Construction projects which are considered Equivalency projects do not use these conditions but instead use Texas Water Development Board (TWDB) Supplemental Conditions TWDB-0550. Projects with State Loan funding use Supplemental Conditions TWDB-0552.

2. Use of Conditions

The conditions and forms listed under ***Section II: Instructions to Bidders*** are to be included in the instructions to bidders for construction services. The provisions listed under ***Section III: Construction Contract Supplemental Conditions,*** must be included, in their entirety, with the other general and special conditions that are typically included in the construction contract documents by the Consulting Engineer[1].

3. Modifications to Provisions

The Applicant may need to modify parts of these provisions to better fit the other provisions of the construction contract; however, everything herein must be included in the contract documents. The Applicant and the Consulting Engineer should carefully study these provisions before incorporating them into the construction contract documents. In particular, Water Districts and other types of districts should be aware of statutes relating to their creation and operation which may affect the application of these conditions. The Texas Water Development Board (TWDB) Project Engineer/Reviewer should be consulted if the Applicant thinks there is a need to modify parts of these provisions.

Section III, Supplemental Condition No. 13 (Archeological Discoveries and Cultural Resources) and Section III, Supplemental Condition No. 14 (Threatened and Endangered Species) may be superseded or modified by project-specific environmental conditions established during the environmental review process.

These documents may confer certain duties and responsibilities on the Consulting Engineer that are beyond, or short of, what the Applicant intends to delegate. The Applicant should ensure that the contractual agreement with the Consulting Engineer provides for the appropriate services. Otherwise, the Applicant should revise the wording in these special conditions to agree with actually delegated functions.

[1] Throughout this document “Consulting Engineer” is used to mean Design Engineer/Engineer of Record, Prime Engineer, or Owner’s Engineer, depending on the contract type between the Applicant and the Engineer and depending on the phase of the project (i.e., planning, design, or construction).

4. Good Business Practices

There are other contract provisions that the Applicant and Consulting Engineer need to include as a matter of good business practices. It is recommended that provisions addressing the following matters be included in the construction contract:

(a) Specifying the time frame for accomplishing the Construction of the project, and the consequences of not completing construction on time, including liquidation damages.

(b) Specifying the type and dollar value of and the documentation of insurance the Contractor is to carry. At a minimum the Contractor should carry worker's compensation, liability, and builder's risk insurance that will meet state statutory limits.

(c) Identifying the responsibility of the Contractor - responsibility and warranty of work.

(d) Price reductions for defective pricing of negotiated costs.

(e) Differing site conditions - notice and claims regarding site conditions differing from indicated conditions.

(f) Specifying maximum time allowed to submit an official Change Order after a field change has been authorized and implemented.

(g) Covenants against contingent fees – prohibit contingent fees for securing business.

(h) Gratuities - prohibitions against offering and accepting gratuities.

(i) Auditing and accessing records.

(j) Suspension of work - conditions under which the Applicant may suspend work.

(k) Termination - conditions under which the Applicant may terminate.

(l) Remedies - how disputes will be remedied.

5. Other Requirements

If applicable, Trench Safety requirements shall adhere to the Health and Safety Code Chapter 756, Subchapter C, which includes reference to the Occupational Safety and Health Administration (OSHA) standards for trench safety in effect during the period of construction of the project and Owner's Geotechnical information to assist Contractor in design of Trench Safety System.

There may be other local government requirements and applicable Federal and State statutes and regulations that are not accommodated by these conditions. It is the Applicant's responsibility to ensure that the project and all contract provisions are consistent with all relevant statutes and regulations.

6. Advertisements for Bids

State procurement statutes **require advertising a contract for bid at least once a week for at least two (2) consecutive weeks**[2]. If this requirement is not followed, the project may need to be re-advertised (i.e., rebid). The official advertisement for bids that is published in the newspaper should include certain information such as, but not limited to, the following:

(a) A clear description of what is being procured.

(b) How to obtain plans and specifications (P&S), necessary forms, and information.

(c) The date and time by which bids are to be submitted (deadline).

(d) The address where bids are to be provided.

(e) A statement that the contract is contingent upon release of funds from the TWDB.

(f) A statement that any contract(s) or contracts awarded under this Invitation for Bids (IFB), Request for Proposals (RFP), or Request for Qualifications (RFQ) is/are expected to be funded in part by financial assistance from the TWDB. Neither the U.S. Environmental Protection Agency (EPA) or the State of Texas, nor any of its departments, agencies, or employees are or will be a party to this IFB, RFP, RFQ or any resulting contract.

(g) For CWSRF, include - Any contract(s) awarded under this Invitation for Bids is/are subject to the American Iron and Steel (AIS) requirements of federal law, including federal appropriation acts and/or Section 608 of the Federal Water Pollution Control Act.

(h) *The following is specific text that should be included as-is:* Equal Opportunity in Employment - All qualified applicants will receive consideration for employment without regard to race, color, religion, sex (including pregnancy), sexual orientation, gender identity, national origin, age (40 or older), disability or genetic information. Bidders on this work will be required to comply with the Department of Labor regulations at 41 CFR Part 60-4, relating to Construction Contractors--Affirmative Action Requirements, which include the President's Executive Order No. 11246, as amended by Executive Order 11375 and Executive Order No. 13672, in the award and administration of contracts awarded under TWDB financial assistance agreements. Failure by the Contractor to carry out these requirements is a material breach, which may result in the termination of the awarded financial assistance.

(i) Acknowledgement of any specific requirements such as mandatory pre-bid conference.

[2] From LGC 252.041, Municipalities are required to advertise in a newspaper at least once a week for two consecutive weeks.

(j) Affirmative Action requirements, requiring no discrimination on the basis of race, color, national origin, or sex (40 CRF Part 7).

(k) Right to reject any and all bids.

(l) A statement that Davis-Bacon prevailing wage requirements apply to the construction, alteration or repair of treatment works carried out, in whole or in part, with assistance made available by the Clean or Drinking Water State Revolving Fund Programs (CWSRF or DWSRF).

(m) For additional information on Davis-Bacon Wage Rate Requirements and its applicability to this contract, please consult TWDB Guidance No. DB-0156.

7. Bid Proposal

The Bid proposal form should account for the following:

(a) If a lump sum bid, include a list of the materials used and associated costs.

(b) Distinguish Eligible and Ineligible items.

(c) Accommodate Trench Safety requirements with separate per unit pay item for trench excavation safety protection in accordance with Health and Safety Code Chapter 756, Subchapter C and as briefly noted below:.

i. Separate pay item for special shoring requirements, and

ii. Separate pay item for trench excavation safety protection.

(d) Include space for the Contractor to acknowledge receipt of each Addendum issued during the bidding process.

8. Bidding Process

The Plans and Specifications (P&S) should include an explanation of how the bids will be processed. The explanation should include the following components:

(a) Whether a Pre-bid Conference will be held, whether it is optional or mandatory, and where and when it will be held. If possible, it is recommended to hold the pre-bid via Zoom, Microsoft Teams or other online platform, as well as in person. The TWDB Project Engineer/Reviewer is to be invited to the Pre-Bid Conference.

(b) Specify the criteria and process for determining responsiveness and responsibility of the bidder.

(c) Specify the method of determining the successful bidder and award (e.g., award to the lowest responsive, responsible bidder, accounting for any multiple parts to bids), and accounting for non-resident bidder reciprocity requirements (TWDB-0459).

(d) Allow for withdrawal of a bid due to a material mistake.

(e) Identify the time frame that the bids may be held by the Applicant before awarding a contract (i.e., typically for 60 or 90 days).

(f) Acknowledge the right of the Applicant to reject any and all bids.

9. Release of Funds

Prior to the TWDB authorization for the Applicant to issue a notice to proceed (NTP) and subsequent release of funds for construction (according to program specific requirements), the Applicant and its consultant must provide the following bid documents for TWDB review:

(a) **Submittal of Bid Documents to TWDB Project Engineer/Reviewer to allow contingent award of contract**:

- Advertisement and Affidavit of Advertisement (for municipalities, the project must be bid at least once a week for two (2) consecutive weeks in a newspaper),
- Bid tabulation,
- All Addenda submitted and approved for the contract,
- Bid proposal of apparent low bidder (or chosen bidder with explanation), including the Contractor's bid guarantee or bid bond,
- Site Certificate (ED-101),
- Consulting Engineer's recommendation to award letter,
- A description of any bidding irregularities,
- Construction inspection proposal,
- Reciprocity of Non-Resident Bidder Form (TWDB-0459), and
- Bidder's Certifications Form (WRD-255).

Then the TWDB can issue authorization for the Applicant to issue the contingent Notice of Award for the construction contract.

(b) Once the Applicant has issued their contingent Notice of Award of the construction contract, they must submit a bound copy (single file PDF document) of the **executed contract documents (including specifications**) and a bound copy (single file PDF document) of the **Approved Plan Set**. A complete set of bound executed contract documents should include:

- Front-End Documents, Addenda, Executed Agreement, and Technical Specifications as approved by the TWDB and TCEQ (as applicable),
- Contractor's Act of Assurance (TWDB Form ED-103),

- Contractor's Act of Assurance Resolution (TWDB Form ED-104),
- Payment and Performance Bonds (must be executed on or after the date of the agreement),
- Contractor's Wage Rate Determination(s),
- Contractor's Certificate of Insurance, and
- **If applicable**, the Applicant's **Sufficiency of Funds letter**.

After reviewing and approving the executed contract documents, the TWDB will issue an authorization for the Applicant to issue a Notice to Proceed (NTP). At this time, TWDB staff can begin releasing construction funds **in accordance with program requirements**.

Once construction begins, the Applicant must submit **monthly**, Outlay Requests. Outlay Request that includes requests for construction funds must include the following documents:

- DB-0154 - Monthly Davis Bacon Wage Rate Certificate of Compliance.
- TWDB-1106-A – Monthly American Iron and Steel Certificate.

Failure to provide these certificates will result in denial of release of funds.

For any questions and proposed modifications to these conditions, contact your TWDB Project Engineer/Reviewer.

II. INSTRUCTIONS TO BIDDERS

The language and conditions listed in this section must be included in the "Instructions to Bidders" section of the construction contract documents.

1. Contingent Award of Contract

This contract is contingent upon release of funds from the Texas Water Development Board (TWDB). Any contract(s) awarded under this Invitation for Bids is/are expected to be funded in part by a loan or loan with principal forgiveness from the TWDB and a grant from the United States Environmental Protection Agency (EPA). Neither the State of Texas, the EPA, nor any of its departments, agencies, or employees, are or will be a party to this Invitation for Bids or any resulting contract.

2. Davis-Bacon Wage Rate Requirements

Davis-Bacon prevailing wage requirements apply to the construction, alteration or repair of treatment works carried out, in whole or in part, with assistance made available by the Clean Water State Revolving Fund (CWSRF) or a construction project financed, in whole or in part, from the Drinking Water State Revolving Fund (DWSRF).

The Davis-Bacon prevailing wage requirements apply to Contractors and Subcontractors performing on federally funded or assisted contracts in excess of $2,000 for the construction, alteration or repair (including painting) of a treatment works project under the CWSRF or a construction project under the DWSRF.

For prime contracts in excess of $100,000, Contractors and Subcontractors must also, under the provisions of the Contract Wage Hours and Safety Standards Act (CWHSSA), as amended, pay laborers and mechanics, including guards and watchmen, at least one and one-half times their regular rate of pay for all hours worked over 40 in a workweek. The Fair Labor Standards Act may also apply to Davis-Bacon covered contracts.

Any contracts in excess of $2,000 must include the provisions of the Davis-Bacon Wage Rate Requirements. See Section III, Paragraph 10, Option 1 (governmental entities) and Option 2 (non-governmental entities) for contract clauses required for Davis-Bacon requirements. This information is also included in TWDB Guidance DB-0156, as follows (Applicant = Owner (sub-recipient)):

- If the Owner (sub-recipient) is a governmental entity such as a city or district, it must insert in full the contract clauses found in TWDB Guidance DB-0156, Appendix 1, Section 3, Section 4 (if the contract exceeds $100,000), and Section 5.

- If the Owner (sub-recipient) is a non-governmental entity such as a water supply corporation or a private company, it must insert in full the contract clauses found in TWDB Guidance DB-0156, Appendix 2, Section 3, Section 4 (if the contract exceeds $100,000), and Section 5.

The Owner (sub-recipient) must ensure all prime contracts require the same full text in any subcontracts. See TWDB Guidance DB-0156 for the text of the contract language that must be included.

Additional information on Davis-Bacon Wage Rate Requirements and its applicability to this contract can be found in TWDB Guidance DB-0156.

3. American Iron and Steel Requirements

Any contract(s) awarded under this Invitation for Bids is/are subject to the American Iron and Steel (AIS) requirements of 33 U.S.C §1388 for Clean Water State Revolving Fund projects or Public Law 114-113, Consolidated Appropriations Act, 2016, or subsequent appropriations acts, for Drinking Water State Revolving Fund projects. The Contractor must complete the statement of understanding regarding this requirement, found in Section III Supplemental Contract Conditions, Item No. 9. The statement of understanding must be signed by the Contractor.

4. Equal Employment Opportunity and Affirmative Action

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex (including pregnancy), sexual orientation, gender identity, national origin, age (40 or older), disability or genetic information. Bidders on this work will be required to comply with the Department of Labor regulations at 41 CFR Part 60-4, relating to Construction Contractors--Affirmative Action Requirements, which include the President's Executive Order No. 11246, as amended by Executive Order 11375 and Executive Order No. 13672, in the award and administration of contracts awarded under TWDB financial assistance agreements. Failure by the Contractor to carry out these requirements is a material breach, which may result in the termination of the awarded financial assistance.

5. Bid Guarantee

Each bidder shall furnish a bid guarantee equivalent to five percent (5%) of the bid price (Water Code 17.183). If a bid bond is provided, the Contractor shall utilize a surety company that is authorized to do business in Texas in accordance with Surety Bonds and Related Instruments, Chapter 3503 of the Insurance Code.

6. Award of Contract to Nonresident Bidder

A governmental entity may not award a governmental contract to a nonresident bidder unless the nonresident underbids the lowest bid submitted by a responsible resident bidder by an amount that is not less than the amount by which a resident bidder would be required to underbid the nonresident bidder to obtain a comparable contract in the state in which the nonresident's principal place of business is located. A nonresident bidder is a Contractor whose corporate offices or principal place of business is outside of the state of Texas (Source: Texas Government Code, Chapter 2252, Subchapter A, Nonresident Bidders, § 2252.002).

The bidder will complete form TWDB-0459, Vender Compliance with Reciprocity on Nonresident Bidders, which must be submitted with the bid.

7. Summary of Forms to be submitted with the Bid Documents:

- WRD-255, Bidder's Certifications regarding Equal Employment Opportunity and Non-Segregated Facilities
- TWDB-0459, Vendor Compliance with Reciprocity on Non-Resident Bidder.

III. SUPPLEMENTAL CONTRACT CONDITIONS

1. Supersession

The Owner and the Contractor agree that the TWDB Supplemental Conditions apply to that work eligible for TWDB assistance to be performed under this construction contract and these clauses supersede any conflicting provisions of this contract.

2. Privity of Contract

Funding for this project is expected to be provided in part by the TWDB. Neither the State of Texas, nor any of its departments, agencies or employees is, or will be, a party to this contract or any lower-tier contract. This contract is subject to applicable provisions 31 TAC Chapters 358 and 363, 31 TAC Chapter 371 (DWSRF), and 31 TAC Chapter 375 (CWSRF) in effect on the date of the assistance award for this project.

3. Definitions

(a) The terms “Owner” or “Applicant” means the local entity contracting for the construction services.

(b) The term "TWDB" means the Executive Administrator of the Texas Water Development Board, or another person who may be at the time acting in the capacity or authorized to perform the functions of such Executive Administrator, or the authorized representative thereof.

(c) The term “Consulting Engineer” means the engineer the Owner has authorized to work on the project.

4. Laws to be Observed

In the execution of the Contract, the Contractor must comply with all applicable Local, State and Federal laws, including but not limited to laws concerned with labor, safety, minimum wages, and the environment. The Contractor shall make himself familiar with and at all times shall observe and comply with all Federal, State, and Local laws, ordinances and regulations which in any manner affect the conduct of the work, and must indemnify and save harmless the Owner, TWDB, and their representatives against any claim arising from violation of any such law, ordinance or regulation by the Contractor, their Subcontractor or their employees.

5. Review by Owner and TWDB

(a) The Owner, authorized representatives and agents of the Owner and TWDB must, at all times have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this Contract, provided, however that all instructions and approval with respect to the work will be given to the Contractor only by the Owner through authorized representatives or agents.

(b) Any such inspection or review by the TWDB must not subject the State of Texas, or its representatives, to any action for damages.

6. Performance and Payment Bonds

Each Contractor awarded a construction contract must furnish performance and payment bonds that include the following explicit conditions in the body of the bond:

(a) The performance bond must include without limitation guarantees that work done under the contract will be completed and performed according to approved plans and specifications and in accordance with sound construction principles and practices.

(b) The performance and payment bonds must be in a penal sum of not less than 100 percent of the contract price and remain in effect for one year beyond the date of approval by the Consulting Engineer of the political subdivision; and

(c) The Contractor must utilize a surety company which is authorized to do business in Texas in accordance with Surety Bonds and Related Instruments, Chapter 3503 of the Insurance Code.

7. Payment Schedule and Cost Breakdown

(a) The Contractor must submit for approval immediately after execution of the Agreement, a carefully prepared Progress Schedule, showing the proposed dates of starting and completing each of the various sections of the work.

(b) The following paragraph applies only to contracts awarded on a lump sum contract price:

COST BREAKDOWN - The Contractor must submit to the Owner a detailed breakdown of the estimated cost of all work to be accomplished under the contract, arranged and itemized as to meet the approval of the Owner or funding agencies. This breakdown must be submitted promptly after execution of the agreement and before any payment is made to the Contractor for the work performed under the contract. After approval by the Owner the unit prices established in the breakdown must be used in estimating the amount of the partial payments to be made to the Contractor.

8. Workman's Compensation Insurance Coverage (as applicable, consistent with Texas Labor Code § 406.096)

(a) The Contractor must certify in writing that the Contractor provides workers' compensation insurance coverage for each employee of the Contractor employed on the public project.

(b) Each Subcontractor on the public project must provide such a certificate relating to coverage of the Subcontractor's employees to the general Contractor, who shall provide the Subcontractor's certificate to the governmental entity.

(c) A Contractor who has a contract that requires workers' compensation insurance coverage may provide the coverage through a group plan or other method satisfactory to the governing body of the governmental entity.

(d) The employment of a maintenance employee by an employer who is not engaging in building or construction as the employer's primary business does not constitute engaging in building or construction.

(e) In this section:

i. "Building or construction" includes:

- erecting or preparing to erect a structure, including a building, bridge, roadway, public utility facility, or related appurtenance.
- remodeling, extending, repairing, or demolishing a structure; or
- Otherwise improving real property or an appurtenance to real property through similar activities.

ii. "Governmental entity" means this state or a political subdivision of this state. The term includes a municipality.

9. American Iron and Steel

The following statement must be completed by the Contractor and made a part of the agreement between the Owner and the Contractor. The statement must be on a dedicated page within the contract that includes the Contractor signature and date; or the Contractor can choose to sign this page of the TWDB-0550.

The Contractor acknowledges to and for the benefit of the Owner ("Purchaser") that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund or the Drinking Water State Revolving Fund that have statutory requirements commonly known as "American Iron and Steel" that requires all of the iron and steel products used in the project to be produced in the United States ***("American Iron and Steel Requirement")*** *including iron and steel products provided by the Contactor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Owner that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Owner. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Owner to enforce this Agreement and recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Owner resulting from any such failure (including without limitation attorney's fees) incurred by the Owner resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the TWDB or any damages owed to the Owner).*

Additional information on the American Iron and Steel (AIS) requirement and its applicability to this contract can be found in the TWDB-1106 guidance.

The Owner must receive and maintain files documenting the Contractor's use of AIS. Monthly compliance with the AIS must be verified by the Owner through the submittal of the TWDB form TWDB-1106-A.

10. Davis-Bacon Wage Rate Requirements

a. Compliance Procedures

To be held in compliance and satisfy this federal requirement, the following must be fulfilled:

i. **Wage Determinations** - U.S. Department of Labor (DOL) wage determination must be included in the bidding and contract documents. DOL wage determinations may be obtained online at https://sam.gov/content/wage-determinations. Once it is determined that Davis-Bacon wage rates will apply to a construction contract, the Owner must state in the solicitation that Davis-Bacon prevailing wage rates are applicable and bid packages must include the current Davis-Bacon general wage determination for the area where construction will occur. While the solicitation remains open, the Owner must monitor https://sam.gov/content/wage-determinations on a weekly basis to ensure that the wage determination contained in the solicitation remains current. The Owner must amend the solicitation if the DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the Owner may request a finding from the TWDB that there is not a reasonable amount of time to notify interested Contractors of the modification of the wage determination.

If a contract is not awarded within 90 days after bid opening, any revised general wage determination issued prior to award of the contractor is effective for that contract; unless the TWDB, at the request of the Owner, requests and obtains an extension of the 90-day period from DOL (29 CFR 1.6(c)(2)(ii)(D)).

Wage determinations must be updated after contract award when (1) the contract has a change order that adds substantial construction, alternation, and/or repair work not within the original scope and the contract time is extended, or (2) the contract is a "work order" type contract (a general commitment to construction as the need arises, but exact construction is not necessarily specified). For "work order" type contracts, the most recent revision(s) of any applicable wage determination(s) on each anniversary date of the contract's award (or each anniversary date of the beginning of construction when there is no award). (29 CFR 1.6(c)(2)(iii))

ii. **Insert wage rate requirements in full for all contracts and subcontracts in excess of $2,000** - If the Owner is a governmental entity such as a city or district, it must insert in full the contract clauses shown herein as Option 1: Section 3, Section 4 (if the contract exceeds $100,000), and Section 5.

If the Owner is a non-governmental entity such as a water supply corporation or a private company, it must insert in full the contract clauses shown herein as Option 2: Section 3, Section 4 (if the contract exceeds $100,000), and Section 5.

The Owner must ensure all prime contracts require the same full text in any subcontracts. Davis Bacon applies regardless of whether the terms and conditions are included or not in all contracts and subcontracts. **Include the following text in all contracts:** "By accepting this award, the EPA Subrecipient acknowledges and agrees to the terms and conditions provided in the DBRA requirements for contractors."

iii. **Monthly Certification** – The Owner must complete and submit monthly a Davis Bacon Wage Rate Certificate of Compliance once construction has begun. **(Use Monthly Davis Bacon Wage Rate Certificate of Compliance Submittal by Owner (Sub-recipient) DB-0154).**

iv. **Contractor Payroll Requirements** - The Contractor is required to pay the prevailing wage rates on a weekly basis to laborers and mechanics in accordance with the requirements of 29 CFR 5.5, which are incorporated into the actual construction contract. Contractors/Subcontractors must furnish weekly a statement with respect to the wages paid to each employee during the preceding week. The signature by the contractor, subcontractor, or authorized officer/employee must be an original handwritten signature or a legally valid electronic signature (e.g., DocuSign). They may use the Department of Labor (DOL) Payroll Form WH-347 and weekly Statement of Compliance on the reverse, or their own payroll form with all of the same data elements as the DOL Payroll Form WH-347, and the TWDB's form, Statement of Compliance Certification by Contractor for SRF, DB-0155. The DOL Payroll Form WH-347 can be found under the forms section of this document or at the following link: www.dol.gov/agencies/whd/government-contracts/construction/payroll-certification. **(See DOL Payroll Form WH-347)**

v. **Interviews -** The Owner must periodically interview a sufficient number of employees entitled to the Davis-Bacon prevailing wages to verify that Contractors or Subcontractors are paying the appropriate wage rates. All interviews must be conducted in confidence. The Owner must use Standard Form 1445 (SF 1445), found at the following link: https://www.gsa.gov/system/files/SF_1445.pdf, or equivalent documentation to memorialize the interviews. The Owner must establish and follow an interview schedule based on its assessment of the risks of noncompliance with Davis- Bacon posed by Contractors or Subcontractors and the duration of the contract or subcontract. The Owner must conduct more frequent interviews if the initial interviews or other information indicated that there is a risk that the Contractor or Subcontractor is not complying with Davis-Bacon. The Owner must immediately conduct interviews in response to an alleged violation of the prevailing wage requirements. (See Section 5 of Option 1 [governmental entities] and Option 2 [non-governmental entities]).

vi. **Payroll Records** - Certified payroll must be delivered by the Contractor or Subcontractor within seven (7) days after the regular payment date of the payroll period. Certified payroll records are required to be retained by the Owner and Contractor for three (3) years after completion of the construction project. The Owner must periodically conduct spot checks of a representative sample of weekly payroll data to verify that Contractors or Subcontractors are paying the appropriate wage rates. (See Section 5 of Options 1 and 2).

The payroll records must include the following: the name, Social Security number, last known address, telephone number, and email address of each laborer and mechanic; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

vii. **Wage Rate Poster** – The Contractor must post the required Poster (WH-1321) and applicable wage rates at the construction site in a prominent and accessible place where it can be easily seen by the workers. The wage rate poster may be found at http://www.dol.gov/whd/programs/dbra/wh1321.htm. **(See Davis-Bacon Wage Rate Poster, WH-1321)**

viii. **Report Violations** – The Owner must immediately report violations of the Davis- Bacon prevailing wage requirements to the EPA Davis-Bacon Coordinator listed in the assistance agreement and to the appropriate DOL WHD Office listed at http://www.dol.gov/whd/america2.htm.

b. Subcontracts

The Contractor will insert in full the required wage rate requirement in any subcontract in excess of $2,000 as specified in (a)(ii) of this section. Davis Bacon applies regardless of whether the terms and conditions are included or not in all contracts and subcontracts. **Include the following text in all contracts:** "By accepting this award, the EPA Subrecipient acknowledges and agrees to the terms and conditions provided in the DBRA requirements for contractors."

c. Davis-Bacon General Wage Determinations

A "wage determination" is the listing of wage and fringe benefit for each classification of laborers and mechanics which the Administrator of the Wage and Hour Division of the U.S. DOL has determined to be prevailing in a given area for a particular type of construction. In general, the project area is the county where the project will take place. For the type of construction, the Davis-Bacon Wage Determinations are classified by the nature of the construction projects performed, specifically listed as "schedules": residential, building, highway, and heavy construction. A brief outline of the definitions for each schedule is listed below.

Construction Type: Residential determination
This determination includes the construction, alteration or repair of single-family houses, apartment buildings of no more than four stories in height. This includes all incidental items such as site work, parking areas, utilities, streets, and sidewalks.

Construction Type: Building determination
This determination includes construction of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment or supplies; all construction of such structures; the installation of utilities and of equipment, both above and below grade levels; as well as incidental grading, utilities and paving. Such structures need not be "habitable" to be building construction. Also, the installation of heavy machinery and/or equipment does not generally change the project's character as a building.

Construction Type: Highway determination
This determination includes construction, alteration or repair of roads, streets, highways, runways, taxiways, alleys, trails, paths, parking areas, and other similar projects not incidental to building or heavy construction.

Construction Type: Heavy determination
This determination includes those projects that are not properly classified as either "building," "highway," or "residential." Unlike these classifications, heavy construction is not a homogenous classification. Because of this catch-all nature, projects within the heavy classification may sometimes be distinguished on the basis of their particular project characteristics, and separate schedules may be issued for dredging projects, water and sewer line projects, dams, major bridges, and flood control projects.

The Owner should review their Contractor's wage decisions and confirm they provide an adequate classification of the labor required for the specific construction contract. Most CWSRF and DWSRF projects will fall under the "Heavy" construction type, but Owners should ask their Consulting Engineers if unsure.

Some contracts or projects may require more than one general schedule to be included depending on the nature and extent of the work (i.e. a building is constructed in a water treatment facility). This is described in more detail in DOL's All Agency Memorandum 130 with Addendum 131. See the DOL's website http://www.dol.gov/whd/programs/dbra/memorand.htm. In such cases, the contracting agency must incorporate the applicable wage determination for each type of construction involved that is anticipated to be substantial. The contracting agency is responsible for designating the specific work for which each incorporated wage determination applies ((29 CFR 1.6(b)(1)). The contracting agency should designate the work to which each wage determination or part thereof applies per Federal Acquisition Regulations (FAR) 22.404-2 thru 404-3 (www.acquisition.gov/far/22.404-2). Should overlaps occur in the wage classification schedules for the contract(s), the Owner may consider adopting the higher rate classification.

In all cases, the Owner is responsible to ensure an adequate classification is provided for compliance with the law. Where a Contractor alerts the Owner that the classification is inadequate, the Owner should work with the Contractor and the DOL to address any valid concerns.

All questions regarding Davis-Bacon guidance can be directed to: U.S. Department of Labor Wage and Hour Division1-866-4USWAGE (1-866-487-9243), TTY: 1-877-889-5627, Monday-Friday 8 a.m. to 8 p.m. Eastern Time.

If you require further information about Davis-Bacon and how to apply it to your project, please contact the TWDB Regional Water Project Development (RWPD) Team Manager for your region.

The Owner and Contractor may obtain additional information on the Davis-Bacon Wage Rates requirements in the TWDB's Guidance DB-0156 – *"Guidance on Davis-Bacon Wage Rate Requirements".*

Option 1 – Applies to Governmental Entities (such as Cities and Districts)

1. **Applicability of the Davis-Bacon and Related Acts Prevailing Wage Requirements.**
   Davis-Bacon and Related Acts (DBRA) prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by the Clean Water State Revolving Fund and to any construction project carried out in whole or in part by assistance made available by the Drinking Water State Revolving Fund. If an Owner encounters a unique situation at a site that presents uncertainties regarding DBRA applicability, the Owner must discuss the situation with the TWDB before authorizing work on that site.

2. **Obtaining Wage Determinations.**
   (a) Owners shall obtain the wage determination for the locality in which a covered activity subject to DBRA will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DBRA. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that Subcontractors follow the wage determination incorporated into the prime contract.

   i. While the solicitation remains open, the Owner shall monitor https://sam.gov/content/wage-determinations weekly to ensure that the wage determination contained in the solicitation remains current. The recipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the subrecipients may request a finding from the TWDB that there is not a reasonable time to notify interested contractors of the modification of the wage determination. In the request, the subrecipient shall include documentation of the bid date and time and

the DOL wage modification date. The TWDB will review the documentation and provide a report of its findings to the subrecipient. The subrecipient shall keep the report in the project contract file.

ii. If the Owner does not award the contract within 90 days of the bid opening, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the TWDB, at the request of the Owner, obtains an extension of the 90 day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The Owner shall monitor https://sam.gov/content/wage-determinations on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.

(b) If the Owner carries out activity subject to DBRA by issuing a task order, work assignment or similar instrument to an existing Contractor (ordering instrument) rather than by publishing a solicitation, the Owner shall insert the appropriate DOL wage determination from https://sam.gov/content/wage-determinations into the ordering instrument. For "work order" type contracts, the most recent revision(s) of any applicable wage determination(s) on each anniversary date of the contract's award (or each anniversary date of the beginning of construction when there is no award). (29 CFR 1.6(c)(2)(iii))

(c) Owners shall review all subcontracts subject to DBRA entered into by Prime Contractors to verify that the Prime Contractor has required its Subcontractors to include the applicable wage determinations.

(d) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to an Owner's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the Owner has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the Owner shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The Owner's Contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

3. **Contract and Subcontract provisions.**
The subrecipient shall insert in full in any contract to which Davis-Bacon and Related Acts apply, the following clauses. Reference to www.epa.gov/grants/contract-provisions-davis-bacon-and-related-acts and 29 CRF 5.5.

The Contractor acknowledges that by entering into this contract with a contracting agency, funded by an EPA Assistance agreement (grant), the Contractor agrees to comply with the following terms and conditions in accordance with 29 CFR 5.5, if this contract is for activities covered under Davis-Bacon and Related Acts (DBRA) and exceeds (or will exceed) $2,000. Definitions for many of the terms used below are provided in 29 CFR 5.2.

(1) Minimum Wages.

(i) Wage rates and fringe benefits

All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

As provided in paragraphs (d) and (e) of this section, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(v) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4).

Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, that the employer's payroll records accurately set forth the time spent in each classification in which work is

performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(iii) of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii) Frequently recurring classifications

(A) In addition to wage and fringe benefit rates that have bene determined to be prevailing under the procedures set forth in 29 CFR Part 1, a wage determination may contain, pursuant to 29 CFR 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to 29 CFR 5.5(a)(1)(iii), provided that:

(1) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(2) The classification is used in the area by the construction industry; and

(3) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(B) The Administrator will establish wage rates for such classifications in accordance with 29 CFR 5.5(a)(1)(iii)(A)(3) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

(iii) Conformance

(A) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is used in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(C) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to the TWDB. The TWDB will transmit the request to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the TWDB or will notify the TWDB within the 30-day period that additional time is necessary.

(D) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the TWDB will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(E) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs (a)(1)(iii)(C) and (D) of this section. The contractor must furnish a written copy of such determination to each affected worker, or it must be posted as part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph (a)(1)(iii)(C) or (D) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iv) Fringe benefits not expressed as an hourly rate

Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(v) Unfunded plans

If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing

bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in 29 CFR 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(vi) Interest

In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

(2) Withholding.

(i) Withholding requirements

The EPA, grant recipient, subrecipient at any tier, and/or contracting agency upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in paragraph (a) of this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in 29 CFR 5.2).

The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work (or otherwise working in construction or development of the project under a development statute) all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in 29 CFR 5.5(a)(3)(iv) of this section, the **EPA, grant recipient, subrecipient at any tier, and/or contracting agency** may on its own initiative and after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(ii) Priority to withheld funds

The Department has priority to funds withheld or to be withheld in accordance with 29 CFR 5.5(a)(2)(i) or 29 CFR 5.5(b)(3)(i) of this section, or both, over claims to those funds by:

(A) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(B) A contracting agency for its reprocurement costs;

(C) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(D) A contractor's assignee(s);

(E) A contractor's successor(s); or

(F) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

(3) Records and certified payrolls

(i) Basic record requirements

(A) Length of record retention

All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least three (3) years after all the work on the prime contract is completed.

(B) Information required

Such records must contain the name; Social Security number; last known address, telephone number, and email of each such worker; each worker’s correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(C) Additional records relating to fringe benefits

Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(v) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor

must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(D) Additional records relating to apprenticeship.

Contractors with apprentices working under approved programs must maintain written evidence of the apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

(ii) Certified payroll requirements

(A) Frequency and method of submission

The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts- covered work is performed, certified payrolls to the **contracting agency** if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the certified payrolls to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to the **contracting agency.** The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least three (3) years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(B) Information required

The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i)(B), except that full Social Security numbers and las known addresses, telephone numbers, and email addresses must not be included on the weekly transmittals. Instead the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last

known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the sponsoring government agency (or the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records).

(C) Statement of Compliance

Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(1) That the certified payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(iii), and such information and records are correct and complete;

(2) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(D) Use of Optional Form WH-347

The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by 29 CFR 5.5(a)(3)(ii)(C).

(E) Signature

The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(F) Falsification

The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.

(G) Length of certified payroll retention

The contractor or subcontractor must preserve all certified payrolls during the course of the work for a period of three (3) years after all the work on the prime contract is completed.

(iii) Contracts, subcontracts, and related documents

The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of three (3) years after all the work on the prime contract is completed.

(iv) Required disclosures and access

(A) Required record disclosure and access to workers

The contractor or subcontractor must make the records required under paragraph (a)(3)(i) through (iii) of this section, and any other documents that the **EPA, recipient, or subrecipient at any tier, and/or contracting agency**, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable 29 CFR 5.1, available for inspection, copying, or transcription by authorized representatives of the **TWDB, EPA, recipient, or subrecipient at any tier, and/or contracting agency,** or the Department of Labor, and must permit such representatives to interview workers during working hours on the job

(B) Sanctions for non-compliance with records and worker access requirements

If the contractor or subcontractor fails to submit the required records or to make them available, or refuse to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to 29 CFR 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine

the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(C) Required information disclosures

Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the Environmental Protection Agency if the agency is a party to the contract, or to the Wage and Hour Division of the Department of Labor. If the Federal agency is not such a party to the contract, the contractor, subcontractor, or both, must, upon request, provide the full Social Security number and last known address, telephone number, and email address of each covered worker to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to the EPA, recipient, or subrecipient at any tier, contracting agency, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

(4) Apprentices and Equal Employment Opportunity

(i) Apprentices

(A) Rate of pay

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(B) Fringe benefits

Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(C) Apprenticeship ratio

The allowable ratio of apprentices to journey workers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to 29 CFR 5.5(a)(4)(i)(D). Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in 29 CFR 5.5(a)(4)(i)(A), must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(D) Reciprocity of ratios and wage rates

Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journey worker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

(ii) Equal employment opportunity

The use of apprentices and journey workers under this part must be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) Is reserved.

(6) Subcontracts

The contractor or subcontractor must insert in any subcontracts the clauses contained in paragraphs (a)(1) through (11) of this section or a link to the **DBRA Requirements for Contractors and Subcontractors Under EPA Grants** document on EPA's Contract Provisions for Davis-Bacon and Related Acts webpage, along with the applicable wage determination(s) and such other clauses or contract modifications as the Environmental Protection Agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the Prime Contractor and any Subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier Subcontractors, and may be subject to debarment, as appropriate.

(7) – (9) are reserved.

(10) Certificate of Eligibility

(i) By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

(iii) The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

(11) Anti-Retaliation

It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

(i) Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

(ii) Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

(iii) Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or (iv) Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

4. Contract Provision for Contracts in Excess of $100,000.

For contracts over $100,000, additional Terms and Conditions apply. The DBRA Requirements for Contracts in Excess of $100,000 Under EPA Grants document is available on EPA's Contract Provisions for Davis-Bacon and Related Acts webpage provides the additional requirements provided under 29 CFR 5.5. This information is included as follows:

(b) Contract Work Hours and Safety Standards Act. The subrecipient shall insert the following clauses set forth in paragraphs (b)(1) through (5) of this section in full in any contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29

CFR 5.5(a), above or 29 CFR 4.6. As used in this paragraph, the terms "laborers and mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which they are employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in 29 CFR 5.5(b)(1) the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchpersons and guards, employed in violation of the clause set forth in 29 CFR 5.5(b)(1), in the sum of $32 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in 29 CFR 5.5(b)(1).

(3)Withholding for unpaid wages and liquidated damages.

(i) Withholding process. The subrecipient may, upon its own action, or must upon the request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this 29 CFR 5.5(b) on this contract, any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, that is held by the same prime contractor (as defined in 29 CFR 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

(ii) Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with 29 CFR 5.5(a)(2)(i) or 29 CFR 5.5(b)(3)(i) of this section, or both, over claims to those funds by:

(A) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(B) A contracting agency for its reprocurement costs;

(C) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(D) A contractor's assignee(s);

(E) A contractor's successor(s); or

(F) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

(4) Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in 29 CFR 5.5(b)(1) through (5) and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in 29 CFR 5.5(b)(1) through (5). In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

(5) Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

(i) Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

(ii) Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

(iii) Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

(iv) Informing any other person about their rights under CWHSSA or this part.

(c) CWHSSA required records clause. In addition to the clauses contained in 29 CFR 5.5(b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other laws referenced by 29 CFR 5.1, the Subrecipient must insert a clause requiring that the contractor or subcontractor must maintain payrolls and basic records during the course of the work and must preserve them for a period of three (3) years after all the work on the prime contract is completed for all laborers and mechanics, including guards and watchpersons, working on the contract. Such records must contain the name; last known address, telephone number, and email address; and social security number of each such worker; each workers' correct classification(s) of work actually performed, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Subrecipient must insert in any such contract a clause providing that the records to be maintained under this paragraph must be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the EPA, TWDB, and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

(d) Incorporation of contract clauses and wage determinations by reference. Although agencies are required to insert the contract clauses set forth in this section, along with appropriate wage determinations, in full into covered contracts, and contractors and subcontractors are required to insert them in any lower-tier subcontracts, the incorporation by reference of the required contract clauses and appropriate wage determinations will be given the same force and effect as if they were inserted in full text.

(e) Incorporation by operation of law. The contract clauses set forth in this section (or their equivalent under the Federal Acquisition Regulation), along with the correct wage determinations, will be considered to be a part of every prime contract required by the applicable statutes referenced by 29 CFR 5.1 to include such clauses, and will be effective by operation of law, whether or not they are included or incorporated by reference into such contract, unless the Administrator grants a variance, tolerance, or exemption from the application of this paragraph. Where the clauses and applicable wage determinations are effective by operation of law under this paragraph, the prime contractor must be compensated for any resulting increase in wages in accordance with applicable law.

5. Compliance Verification and Enforcement

(a) Agency responsibilities.

(1)(i) The Federal agency has the initial responsibility to ascertain whether the clauses required by 29 CFR 5.5 and the appropriate wage determination(s) have been incorporated into the contracts subject to the labor standards provisions of the laws referenced by 29 CFR 5.1. Additionally, a Federal agency that provides Federal financial assistance that is subject to the labor standards provisions of the Act must

promulgate the necessary regulations or procedures to require the recipient or sub-recipient of the Federal assistance to insert in its contracts the provisions of 29 CFR 5.5. No payment, advance, grant, loan, or guarantee of funds will be approved by the Federal agency unless it ensures that the clauses required by 29 CFR 5.5 and the appropriate wage determination(s) are incorporated into such contracts. Furthermore, no payment, advance, grant, loan, or guarantee of funds will be approved by the Federal agency after the beginning of construction unless there is on file with the Federal agency a certification by the contractor that the contractor and its subcontractors have complied with the provisions of 29 CFR 5.5 or unless there is on file with the Federal agency a certification by the contractor that there is a substantial dispute with respect to the required provisions.

(ii) If a contract subject to the labor standards provisions of the applicable statutes referenced by 29 CFR 5.1 is entered into without the incorporation of the clauses required by 29 CFR 5.5, the agency must, upon the request of the Administrator or upon its own initiative, either terminate and resolicit the contract with the required contract clauses, or incorporate the required clauses into the contract (or ensure they are so incorporated) through supplemental agreement, change order, or any and all authority that may be needed. Where an agency has not entered directly into such a contract but instead has provided Federal financial assistance, the agency must ensure that the recipient or sub-recipient of the Federal assistance similarly incorporates the clauses required into its contracts. The method of incorporation of the correct wage determination, and adjustment in contract price, where appropriate, should be in accordance with applicable law. Additionally, the following requirements apply:

(A) Unless the Administrator directs otherwise, the incorporation of the clauses required by 29 CFR 5.5 must be retroactive to the date of contract award or start of construction if there is no award.

(B) If this incorporation occurs as the result of a request from the Administrator, the incorporation must take place within 30 days of the date of that request, unless the agency has obtained an extension from the Administrator.

(C) The contractor must be compensated for any increases in wages resulting from incorporation of a missing contract clause.

(D) If the recipient refuses to incorporate the clauses as required, the agency must make no further payment, advance, grant, loan, or guarantee of funds in connection with the contract until the recipient incorporates the required clauses into its contract, and must promptly refer the dispute to the Administrator for further proceedings under 29 CFR 5.13.

(E) Before terminating a contract pursuant to this section, the agency must withhold or cross-withhold sufficient funds to remedy any back wage liability resulting from the failure to incorporate the correct wage determination or otherwise identify and obligate sufficient funds through a termination settlement agreement, bond, or other satisfactory mechanism.

(F) Notwithstanding the requirement to incorporate the contract clauses and correct wage determination within 30 days, the contract clauses and correct wage determination will be effective by operation of law, retroactive to the beginning of construction, in accordance with 29 CFR 5.5(e).

(2) (i) Certified payrolls submitted pursuant to 29 CFR 5.5(a)(3)(ii) must be preserved by the Federal agency for a period of three (3) years after all the work on the prime contract is completed, and must be produced at the request of the Department of Labor at any time during the 3-year period, regardless of whether the Department of Labor has initiated an investigation or other compliance action.

(ii) In situations where the Federal agency does not itself maintain certified payrolls required to be submitted pursuant to 29 CFR 5.5(a)(3)(ii), upon the request of the Department of Labor the Federal agency must ensure that such certified payrolls are provided to the Department of Labor. Such certified payrolls may be provided by the applicant, sponsor, owner, or other entity, as the case may be, directly to the Department of Labor, or to the Federal agency which, in turn, must provide those records to the Department of Labor.

(3) The Federal agency will cause such investigations to be made as may be necessary to assure compliance with the labor standards clauses required by 29 CFR 5.5 and the applicable statutes referenced in 29 CFR 5.1. Investigations will be made of all contracts with such frequency as may be necessary to assure compliance. Such investigations will include interviews with workers, which must be taken in confidence, and examinations of certified payrolls, regular payrolls, and other basic records required to be maintained under 29 CFR 5.5(a)(3). In making such examinations, particular care must be taken to determine the correctness of classification(s) of work actually performed, and to determine whether there is a disproportionate amount of work by laborers and of apprentices registered in approved programs. Such investigations must also include evidence of fringe benefit plans and payments thereunder. Federal agencies must give priority to complaints of alleged violations.

(4) In accordance with normal operating procedures, the contracting agency may be furnished various investigatory material from the investigation files of the Department of Labor. None of the material, other than computations of back wages, liquidated damages, and monetary relief for violations of 29 CFR 5.5(a)(11) or (b)(5), and the summary of

back wages due, may be disclosed in any manner to anyone other than Federal officials charged with administering the contract or program providing Federal assistance to the contract, without requesting the permission and views of the Department of Labor.

(b) Department of Labor Investigations and other compliance actions.

(1) The Administrator will investigate and conduct other compliance actions as deemed necessary in order to obtain compliance with the labor standards provisions of the applicable statutes referenced by 29 CFR 5.1, or to affirm or reject the recommendations by the Agency Head with respect to labor standards matters arising under the statutes referenced by 29 CFR 5.1.

(2) Federal agencies, contractors, subcontractors, sponsors, applicants, owners, or other entities, as the case may be, must cooperate with any authorized representative of the Department of Labor in the inspection of records, in interviews with workers, and in all other aspects of the investigations or other compliance actions.

(3) The findings of such an investigation or other compliance action, including amounts found due, may not be altered or reduced without the approval of the Department of Labor.

(4) Where the underpayments disclosed by such an investigation or other compliance action total $1,000 or more, where there is reason to believe that the contractor or subcontractor has disregarded its obligations to workers or subcontractors, or where liquidated damages may be assessed under CWHSSA, the Department of Labor will furnish the Federal agency an enforcement report detailing the labor standards violations disclosed by the investigation or other compliance action and any action taken by the contractor or subcontractor to correct the violations, including any payment of back wages or any other relief provided workers or remedial actions taken for violations of 29 CFR 5.5(a)(11) or (b)(5). In other circumstances, the Department of Labor will furnish the Federal agency a notification summarizing the findings of the investigation or other compliance action.

(c) Confidentiality requirements. It is the policy of the Department of Labor to protect from disclosure the identity of its confidential sources and to prevent an unwarranted invasion of personal privacy. Accordingly, the identity of a worker or other informant who makes a written or oral statement as a complaint or in the course of an investigation or other compliance action, as well as portions of the statement which would tend to reveal the identity of the informant, will not be disclosed in any manner to anyone other than Federal officials without the prior consent of the informant. Disclosure of such statements is also governed by the provisions of the “Freedom of Information Act” (5 U.S.C. 552, see part 70 of this subtitle) and the “Privacy Act of 1974” (5 U.S.C. 552a, see part 71 of this subtitle).

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Option 2 – Applies to Non-Governmental Entities (such as Water Supply Corporations and Private Companies)

1. Applicability of the Davis-Bacon (DB) Prevailing Wage Requirements. DB prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by a State water pollution control revolving fund and to any construction project carried out in whole or in part by assistance made available by a drinking water treatment revolving loan fund. If a subrecipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the subrecipient must discuss the situation with the TWDB before authorizing work on that site.

2. Obtaining Wage Determinations.
(a) Owner must obtain proposed wage determinations for specific localities at https://sam.gov/content/wage-determinations. After the Owner obtains its proposed wage determination, it must submit the wage determination to the TWDB for approval prior to inserting the wage determination into a solicitation, contract or issuing task orders, work assignments or similar instruments to existing contractors (ordering instruments unless subsequently directed otherwise by the TWDB.)

(b) Owner shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that subcontractors follow the wage determination incorporated into the prime contract.

(i) While the solicitation remains open, the Owner shall monitor https://sam.gov/content/wage-determinations on a weekly basis to ensure that the wage determination contained in the solicitation remains current. The recipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the subrecipients may request a finding from the TWDB that there is not a reasonable time to notify interested contractors of the modification of the wage determination. The TWDB will provide a report of its findings to the subrecipient.

(ii) If the Owner does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the TWDB, at the request of the Owner, obtains an extension of the 90 day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The Owner shall monitor https://sam.gov/content/wage-determinations on a weekly basis if it does not award the contract within 90 days of closure of the solicitation

to ensure that wage determinations contained in the solicitation remain current.

(c) If the Owner carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing Contractor (ordering instrument) rather than by publishing a solicitation, the Owner shall insert the appropriate DOL wage determination from https://sam.gov/content/wage-determinations into the ordering instrument.

(d) Owners shall review all subcontracts subject to DB entered into by prime Contractors to verify that the prime Contractor has required its Subcontractors to include the applicable wage determinations.

(e) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to an Owner's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the Owner has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the Owner shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The Owner's Contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

3. Contract and Subcontract Provisions.
The subrecipient(s) shall insert in full in any contract in excess of $2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a public building or public work, or building or work financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in 29 CFR 5.1, the following clauses:

(1) Minimum wages.

(i) Wage rates and fringe benefits.

All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and

mechanics.

As provided in paragraphs (d) and (e) of this section, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(v); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CRF 5.5(a)(1)(iii)) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Subrecipients may obtain wage determinations from the U.S. Department of Labor's web site, https://sam.gov/content/wage-determinations.

(i) Frequently recurring classifications.

(A) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR Part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to 29 CFR Part 5.5(a)(1)(iii), provided that:

(1) The work to be performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(2) The classification is utilized in the area by the construction industry; and

(3) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(B) The Administrator will establish wage rates for such classifications in accordance with 29 CFR 5.5(a)(1)(iii)(A)(3). Work performed in such

a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

(ii) Conformance.

(A) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is used in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(C) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Owner(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the Owner(s) to the TWDB. The TWDB will transmit the request, to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor via email to DBAconformance@dol.gov, and to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the TWDB or will notify the TWDB within the 30-day period that additional time is necessary.

(D) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the Owner(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the TWDB will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the TWDB, to the Administrator for determination. The request shall be sent to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the

TWDB or will notify the TWDB within the 30-day period that additional time is necessary.

(E) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under 29 CFR 5.5(a)(1)(iii)(C) and (D). The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to 29 CFR 5.5(a)(1)(iii)(C) and (D) must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iv) Fringe benefits not expressed as an hourly rate. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(v) Unfunded plans. If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the Contractor, in accordance with t criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(vi) Interest. In the event of a failure to pay all or part of the wages required by the contract, the Contractor will be required to pay interest on any underpayment of wages.

(2) Withholding

(i) Withholding requirements. The Owner(s) may, upon its own action or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor, so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the Prime Contractor or any Subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in 29 CRF 5.5(a) for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same Prime Contractor (as defined in § 5.2). The necessary funds may be withheld from the Contractor under this contract, any other Federal contract with the same Prime Contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same Prime

Contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the Contractor liability for which the funds were withheld. In the event of a Contractor's failure to pay laborers and mechanics, including any apprentice or helper working on the site of the work (or otherwise working in construction or development of the project under a development statute) all or part of the wages required by the contract, or upon the Contractor's failure to submit the required records as discussed in 29 CFR 5.5(a)(3)(iv), the EPA may, on its own initiative and after written notice to the Contractor, sponsor, applicant, owner, or other entity, as the case may be, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(ii) Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with 29 CFR (a)(2)(i) or (b)(3)(i), or both, over claims to those funds by:

(A) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(B) A contracting agency for its reprocurement costs;

(C) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(D) A contractor's assignee(s);

(E) A contractor's successor(s); or

(F) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

(3) Records and certified Payrolls.

(i) Basic Record requirements.

(A) Length of record retention. All regular payrolls and other basic records must be maintained by the Contractor any Subcontractor during the course of the work and preserved for all laborers and mechanics working at the stie of the work (or otherwise work in construction or development of the project under a development statute) for a period of at least three (3) years after all the work on the prime contract is completed.

(B) Information required. Such records shall contain the name, last known address, Social Security Number, telephone number, and email address of each such worker, each worker’s correct classification(s) of work actually performed, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash

equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act), daily and weekly number of hours actually worked in total and on each covered contract, deductions made, and actual wages paid.

(C) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(v) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the Contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(D) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

(ii) Certified payroll requirements.

(A) Frequency and method of submission. The Contractor or Subcontractor must submit weekly, for each week in which any DBA-or Related Acts-covered work is performed, certified payrolls to the Owner, that is, the entity that receives the funds from the TWDB. The Prime Contractor is responsible for the submission of all certified payrolls by Subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature (e.g., DocuSign); the system allows the Contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least three (3) years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system. Such documentation shall be available on request of the TWDB or EPA.

(B) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i)(B), except that full Social Security Numbers and last known addresses, telephone numbers, and email addresses must not be included on the weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the employee's social security number). The required weekly certified

payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division (WHD) Web site at https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf or its successor site. It is not a violation of this section for a Prime Contractor to require a Subcontractor to provide full Social Security Numbers and last known addresses, telephone numbers, and email addresses to the Prime Contractor for its own records, without weekly submission by the Subcontractor to the TWDB (or the applicant, sponsor, owner, or other entity as the case may be, that maintains such records).

(C) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the Contractor or Subcontractor or their agent who pays or supervises the payment of the persons working on the contract and must certify the following:

(1) That the certified payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information and basic records are being maintained under 29 CFR 5.5 (a)(3)(i), and that such information and records are correct and complete;

(2) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(D) Use of the Optional Form WH-347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 29 CFR 5.5(a)(3)(ii)(C).

(E) Signature. The signature by the Contractor, Subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature (e.g DocuSign).

(F) Falsification. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 3729 of title 31 of the United States Code.

(G) Length of certified payroll retention. The Contractor or Subcontractor must preserve all certified payrolls during the course of the work and for a period of three (3) years after all the work on the prime contract is completed.

(iii) Contracts, subcontracts, and related documents. The Contractor or Subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The Contractor or Subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of three (3) years after all the work on the prime contract is completed.

(iv) Required disclosures and access.

(A) Required record disclosures and access to workers. The Contractor or Subcontractor must make the records required under 29 CRF 5.5 (a)(3)(i) through (iii) of this section, and any other documents that the EPA or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statues referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the TWDB, EPA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(B) Sanctions for non-compliance with records and worker access requirements. If the Contractor or Subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to 29 CRF 5.12. In addition, any Contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(C) Required information disclosures. Contractors and Subcontractors must maintain the full Social Security Number and last known address,

telephone number, and email address of each covered worker, and must provide them upon request to the EPA if the agency is a party to the contract, or to the Wage and Hour Division of the Department of Labor. If the Federal agency is not such a party to the contract, the Contractor, Subcontractor, or both, must, upon request, provide the full Social Security Number and last known address, telephone number, and email address of each covered worker to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to the TWDB, EPA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

(4) Apprentices and equal employment opportunity

(i) Apprentices.

(A) Rate of pay. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(B) Fringe benefits. Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(C) Apprenticeship ratio. The allowable ratio of apprentices to journeymen on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to 29 CFR 5.5(a)(4)(i)(D) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in 29 CRF 5.5(a)(4)(i)(A) of this section, must be paid not less than the applicable wage rate on the

wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(D) Reciprocity of rations and wage rates. Where a Contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) applicable within the locality in which construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the Contractor's registered program must be observed.

(ii) Equal employment opportunity. The use of apprentices and journeymen under this part must be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The Contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The Contractor or Subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (11) along with the applicable wage determination(s) and such other clauses or contract modifications as the EPA determines may by appropriate instructions require, and a clause requiring the Subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The Prime Contractor is responsible for the compliance by any Subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5. In the event of any violations of these clauses, the prime Contractor and any Subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate.

(7) Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a Contractor and a Subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include

disputes between the contractor (or any of its subcontractors) and Owner(s), TWDB, EPA, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the Contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or 29 CFR 5.12(a).

(ii) No part of this contract shall be Subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or 29 CFR 5.12(a).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001

(11) Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

(i) Notifying any Contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

(ii)Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

(iii) Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or

(iv) Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

4. Contract Provision for Contracts in Excess of $100,000

(b) Contract Work Hours and Safety Standards Act. The Owner shall insert the following clauses set forth in paragraphs (b)(1) through (5) of this section in full in any contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms “laborers and mechanics” include watchmen and guards.

(1) Overtime requirements. No Contractor or Subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or

mechanic in any workweek in which they are employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in 29 CFR 5.5(b)(1) the Contractor and any Subcontractor responsible therefore shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such Contractor and Subcontractor shall be liable to the United States, for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchpersons and guards, employed in violation of the clause set forth in 29 CFR 5.5(b)(1), in the sum of $32 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in 29 CFR 5.5(b)(1).

(3) Withholding for unpaid wages and liquidated damages.

(ii) Withholding process. The Owner may, upon its own action, or must upon the request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the Prime Contractor or any Subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in 29 CFR 5.5(b), any other Federal contract with the same Prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, that is held by the same Prime Contractor (as defined in 29 CFR 5.2). The necessary funds may be withheld from the Contractor under this contract, any other Federal contract with the same Prime Contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

(ii) Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with 29 CFR 5.5(a)(2)(i) or 29 CFR 5.5(b)(3)(i) of this section, or both, over claims to those funds by:

(A) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(B) A contracting agency for its reprocurement costs.

(C) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate.

(D) A contractor's assignee(s).

(E) A contractor's successor(s); or

(F) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

(4) Subcontracts. The Contractor or Subcontractor must insert in any subcontracts the clauses set forth in 29 CFR 5.5(b)(1) through (5) and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in 29 CFR 5.5(b)(1) through (5). In the event of any violations of these clauses, the Prime Contractor and any Subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

(5) Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

(i) Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part.

(ii) Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part.

(iii) Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

(iv) Informing any other person about their rights under CWHSSA or this part.

(c) CWHSSA required records clause. In addition to the clauses contained in 29 CFR 5.5(b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other laws referenced by 29 CFR 5.1, the Owner must insert a clause requiring that the Contractor or Subcontractor must maintain payrolls and basic records during the course of the work and must preserve them for a period of three (3) years after all the

work on the Prime Contract is completed for all laborers and mechanics, including guards and watchpersons, working on the contract. Such records must contain the name; last known address, telephone number, and email address; and Social Security Number of each such worker; each workers' correct classification(s) of work actually performed, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Owner must insert in any such contract a clause providing that the records to be maintained under this paragraph must be made available by the Contractor or Subcontractor for inspection, copying, or transcription by authorized representatives of the EPA, TWDB, and the Department of Labor, and the Contractor or Subcontractor will permit such representatives to interview employees during working hours on the job.

(d) Incorporation of contract clauses and wage determinations by reference. Although agencies are required to insert the contract clauses set forth in this section, along with appropriate wage determinations, in full into covered contracts, and Contractors and Subcontractors are required to insert them in any lower-tier subcontracts, the incorporation by reference of the required contract clauses and appropriate wage determinations will be given the same force and effect as if they were inserted in full text.

(e) Incorporation by operation of law. The contract clauses set forth in this section (or their equivalent under the Federal Acquisition Regulation), along with the correct wage determinations, will be considered to be a part of every prime contract required by the applicable statutes referenced by 29 CFR 5.1 to include such clauses, and will be effective by operation of law, whether or not they are included or incorporated by reference into such contract, unless the Administrator grants a variance, tolerance, or exemption from the application of this paragraph. Where the clauses and applicable wage determinations are effective by operation of law under this paragraph, the prime contractor must be compensated for any resulting increase in wages in accordance with applicable law.

5. Compliance Verification and Enforcement

(a) Agency responsibilities.

(1)(i) The Federal agency has the initial responsibility to ascertain whether the clauses required by 29 CFR 5.5 and the appropriate wage determination(s) have been incorporated into the contracts subject to the labor standards provisions of the laws referenced by 29 CFR 5.1. Additionally, a Federal agency that provides Federal financial assistance that is subject to the labor standards provisions of the Act must promulgate the necessary regulations or procedures to require the recipient or sub-recipient of the Federal assistance to insert in its contracts the provisions of 29 CFR 5.5. No payment, advance, grant, loan, or guarantee of funds will be approved by the Federal agency unless it ensures that the clauses required by 29 CFR 5.5 and the appropriate wage determination(s) are incorporated into such contracts. Furthermore,

no payment, advance, grant, loan, or guarantee of funds will be approved by the Federal agency after the beginning of construction unless there is on file with the Federal agency a certification by the contractor that the contractor and its subcontractors have complied with the provisions of 29 CFR 5.5 or unless there is on file with the Federal agency a certification by the contractor that there is a substantial dispute with respect to the required provisions.

(ii) If a contract subject to the labor standards provisions of the applicable statutes referenced by 29 CFR 5.1 is entered into without the incorporation of the clauses required by 29 CFR 5.5, the agency must, upon the request of the Administrator or upon its own initiative, either terminate and resolicit the contract with the required contract clauses, or incorporate the required clauses into the contract (or ensure they are so incorporated) through supplemental agreement, change order, or any and all authority that may be needed. Where an agency has not entered directly into such a contract but instead has provided Federal financial assistance, the agency must ensure that the recipient or sub-recipient of the Federal assistance similarly incorporates the clauses required into its contracts. The method of incorporation of the correct wage determination, and adjustment in contract price, where appropriate, should be in accordance with applicable law. Additionally, the following requirements apply:

(A) Unless the Administrator directs otherwise, the incorporation of the clauses required by 29 CFR 5.5 must be retroactive to the date of contract award or start of construction if there is no award.

(B) If this incorporation occurs as the result of a request from the Administrator, the incorporation must take place within 30 days of the date of that request, unless the agency has obtained an extension from the Administrator.

(C) The contractor must be compensated for any increases in wages resulting from the incorporation of a missing contract clause.

(D) If the recipient refuses to incorporate the clauses as required, the agency must make no further payment, advance, grant, loan, or guarantee of funds in connection with the contract until the recipient incorporates the required clauses into its contract, and must promptly refer the dispute to the Administrator for further proceedings under 29 CFR 5.13.

(E) Before terminating a contract pursuant to this section, the agency must withhold or cross-withhold sufficient funds to remedy any back wage liability resulting from the failure to incorporate the correct wage determination or otherwise identify and obligate sufficient funds through a termination settlement agreement, bond, or other satisfactory mechanism.

(F) Notwithstanding the requirement to incorporate the contract clauses and correct wage determination within 30 days, the contract clauses and correct wage determination will be effective by operation of law, retroactive to the beginning of construction, in accordance with 29 CFR 5.5(e).

(2) (i) Certified payrolls submitted pursuant to 29 CFR 5.5(a)(3)(ii) must be preserved by the Federal agency for a period of three (3) years after all the work on the prime contract is completed, and must be produced at the request of the Department of Labor at any time during the 3-year period, regardless of whether the Department of Labor has initiated an investigation or other compliance action.

(ii) In situations where the Federal agency does not itself maintain certified payrolls required to be submitted pursuant to 29 CFR 5.5(a)(3)(ii), upon the request of the Department of Labor the Federal agency must ensure that such certified payrolls are provided to the Department of Labor. Such certified payrolls may be provided by the applicant, sponsor, owner, or other entity, as the case may be, directly to the Department of Labor, or to the Federal agency which, in turn, must provide those records to the Department of Labor.

(3) The Federal agency will cause such investigations to be made as may be necessary to assure compliance with the labor standards clauses required by 29 CFR 5.5 and the applicable statutes referenced in 29 CFR 5.1. Investigations will be made of all contracts with such frequency as may be necessary to assure compliance. Such investigations will include interviews with workers, which must be taken in confidence, and examinations of certified payrolls, regular payrolls, and other basic records required to be maintained under 29 CFR 5.5(a)(3). In making such examinations, particular care must be taken to determine the correctness of classification(s) of work actually performed, and to determine whether there is a disproportionate amount of work by laborers and of apprentices registered in approved programs. Such investigations must also include evidence of fringe benefit plans and payments thereunder. Federal agencies must give priority to complaints of alleged violations.

(4) In accordance with normal operating procedures, the contracting agency may be furnished various investigatory material from the investigation files of the Department of Labor. None of the material, other than computations of back wages, liquidated damages, and monetary relief for violations of 29 CFR 5.5(a)(11) or (b)(5), and the summary of back wages due, may be disclosed in any manner to anyone other than Federal officials charged with administering the contract or program providing Federal assistance to the contract, without requesting the permission and views of the Department of Labor.

(b) Department of Labor Investigations and other compliance actions.

(5) The Administrator will investigate and conduct other compliance actions as deemed necessary in order to obtain compliance with the labor standards provisions of the applicable statutes referenced by 29 CFR 5.1, or to affirm or reject the recommendations by the Agency Head with respect to labor standards matters arising under the statutes referenced by 29 CFR 5.1.

(6) Federal agencies, contractors, subcontractors, sponsors, applicants, owners, or other entities, as the case may be, must cooperate with any authorized representative of the Department of Labor in the inspection of records, in interviews with workers, and in all other aspects of the investigations or other compliance actions.

(7) The findings of such an investigation or other compliance action, including amounts found due, may not be altered or reduced without the approval of the Department of Labor.

(8) Where the underpayments disclosed by such an investigation or other compliance action total $1,000 or more, where there is reason to believe that the contractor or subcontractor has disregarded its obligations to workers or subcontractors, or where liquidated damages may be assessed under CWHSSA, the Department of Labor will furnish the Federal agency an enforcement report detailing the labor standards violations disclosed by the investigation or other compliance action and any action taken by the contractor or subcontractor to correct the violations, including any payment of back wages or any other relief provided workers or remedial actions taken for violations of 29 CFR 5.5(a)(11) or (b)(5). In other circumstances, the Department of Labor will furnish the Federal agency a notification summarizing the findings of the investigation or other compliance action.

(c) Confidentiality requirements. It is the policy of the Department of Labor to protect from disclosure the identity of its confidential sources and to prevent an unwarranted invasion of personal privacy. Accordingly, the identity of a worker or other informant who makes a written or oral statement as a complaint or in the course of an investigation or other compliance action, as well as portions of the statement which would tend to reveal the identity of the informant, will not be disclosed in any manner to anyone other than Federal officials without the prior consent of the informant. Disclosure of such statements is also governed by the provisions of the “Freedom of Information Act” (5 U.S.C. 552, see part 70 of this subtitle) and the “Privacy Act of 1974” (5 U.S.C. 552a, see part 71 of this subtitle).

11. Payments

(a) Progress Payments:

i. The Contractor shall prepare their requisition for progress payment as of the last day of the payment month and submit it, with the required number of copies, to the Owner/Consulting Engineer for review. Except as provided in Paragraph (iii) of this subsection, the amount of the payment due to the Contractor shall be determined by:

- Adding to the total value of work completed to date,
- The value of materials properly stored on the site, and
- Deducting (1) five percent (5%) minimum of the total amount, as a retainage and (2) the amount of all previous payments.

The total value of work completed to date shall be based on the actual or estimated quantities of work completed and on the unit, prices contained in the agreement (or cost breakdown approved pursuant to Section 7.b relating to lump sum bids) and adjusted by approved Change Orders. The value of materials properly stored on the site shall be based upon the estimated quantities of such materials and the invoices prices.

Copies of all invoices shall be available for inspection by the TWDB Project Engineer/Reviewer.

ii. The Contractor shall be responsible for the care and protection of all materials and work upon which payments have been made until final acceptance of such work and materials by the Owner. Such payments shall not constitute a waiver of the right of the Owner to require the fulfillment of all terms of the contract and the delivery of all improvements embraced in the contract complete and satisfactory to the Owner in all details.

iii. Only one of the following clauses applies:

- This clause applies to contracts when the Owner is a District or Authority. The retainage shall be ten (10%) percent minimum of the amount otherwise due until at least fifty (50%) of the work has been completed. After the project is fifty (50%) percent completed, and if the District or Authority's Board finds that satisfactory progress is being made, then the District may authorize any of the remaining progress payments to be made in full. The District is not obligated to pay interest earned on the first 50% of work completed (Texas Water Code Sec. 49.276(d)).

- This clause applies to contracts when the Owner is a Public Entity (i.e., not a District and not an Authority). The five (5%) percent retainage of the progress payments due to the Contractor may not be reduced until the building of the project is substantially complete and a reduction in the retainage has been authorized by the TWDB.

(b) Withholding Payments.

The Owner may withhold from any payment otherwise due to the Contractor so much as may be necessary to protect the Owner, and if so elects, the Owner may also withhold any amounts due from the Contractor to any Subcontractors or material dealers for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the Owner and will not require the Owner to determine or adjust any claims or disputes between the Contractor and Subcontractors or material dealers, or to withhold any monies for their protection unless the Owner elects to do so.

The failure or refusal of the Owner to withhold any monies from the Contractor shall in no way impair the obligations of any surety or sureties under any bond or bonds furnished under this contract.

(c) Payments Subject to Submission of Certificates.

Each payment to the Contractor by the Owner shall be made subject to submission by the Contractor of all written certifications required of the Subcontractors by general and special conditions pertaining to this contract.

(d) Final Payment.

i. Upon satisfactory completion of the work performed under this contract, as a condition before final payment under this contract or as a termination settlement under this contract the Contractor shall execute and deliver to the Owner a release of all claims against the Owner arising under, or by virtue of, this contract, except claims which are specifically exempted by the Contractor to be set forth therein. Unless otherwise provided in this contract, by State law or otherwise expressly agreed to by the parties to this contract, final payment under this contract or settlement upon termination of this contract shall not constitute a waiver of the Owner's claims against the Contractor or his sureties under this contract or applicable performance and payment bonds.

ii. After final inspection and acceptance by the Owner of all work under the Contract, the Contractor shall prepare his requisition for final payment which shall be based upon the carefully measured or computed quantity of each item of work at the applicable unit prices stipulated in the Agreement or cost breakdown (if lump sum), as adjusted by approved Change Orders. The total amount of the final payment due to the Contractor under this contract shall be the amount computed as described above less all previous payments.

iii. The retainage and its interest earnings, if any, shall not be paid to the Contractor until the TWDB has authorized a reduction in, or release of, retainage on the contract work. (See Section 19, Close-Out Procedures.)

iv. Withholding of any amount due to the Owner, under general and/or special conditions regarding "Liquidated Damages," shall be deducted from the final payment due the Contractor.

12. Equal Employment Opportunity and Affirmative Action

This provision applies to Clean Water State Revolving Fund Program projects and Drinking Water Revolving Fund Program projects where the contract agreement is for more than $10,000.

During the performance of this contract, the Contractor agrees as follows:

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex (including pregnancy), sexual orientation, gender identity, national origin, age (40 or older), disability, or genetic information. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

(2) The Contractor will, in all solicitations or advancements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.

(4) The Contractor will send to each labor union or representative of workers with which the Contractor has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The Contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The Contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The Contractor will include the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each Subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a Subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of these specifications and the notice which contains the applicable goals set for minority and female participation and which is set forth in the solicitations from which this contract resulted.

13. Archeological Discoveries and Cultural Resources

No activity which may affect properties listed or properties eligible for listing in the National Register of Historic Places or eligible for designation as a State Archeological Landmark is authorized until the Owner has complied with the provisions of the National Historic Preservation Act and the Antiquities Code of Texas.

The Owner has previously coordinated with the appropriate agencies and impacts to known cultural or archeological deposits have been avoided or mitigated. However, the Contractor may encounter unanticipated cultural or archeological deposits during construction.

If archeological sites or historic structures which may qualify for designation as a State Archeological Landmark according to the criteria in 13 TAC Chapter 26, or that may be eligible for listing on the National Register of Historic Places in accordance with 36 CFR Part 800, are discovered after construction operations are begun, the Contractor shall immediately cease operations in that particular area and notify the Owner, the TWDB, and the Texas Historical Commission, P.O. Box 12276, Capitol Station, Austin, Texas 78711-2276.

The Contractor must take reasonable steps to protect and preserve the discoveries until they have been inspected by the Owner's representative and the TWDB. The Owner will promptly coordinate with the State Historic Preservation Officer, the Texas Historical Commission, and any other appropriate agencies to obtain any necessary approvals or permits to enable the work to continue. The Contractor must not resume work in the area of the discovery until authorized to do so by the Owner.

14. Threatened and Endangered Species

No activity is authorized that is likely to jeopardize the continued existence of a threatened or endangered species as listed or proposed for listing under the Federal Endangered Species Act (ESA), or the State of Texas Parks and Wildlife Code on threatened, endangered, or state-listed species, or to destroy or adversely modify the habitat of such species.

If a threatened, endangered, or state-listed species is encountered during construction, the Contractor must immediately cease work in the area of the encounter, avoid disturbance of the animal or plant, and notify the TWDB and the Owner, who will immediately implement actions in accordance with the ESA and applicable State statutes. These actions must include reporting the encounter to the TWDB, the U. S. Fish and Wildlife Service, and the Texas Parks and Wildlife Department, obtaining any necessary approvals or permits to enable the work to continue, and implementing other mitigation actions as directed. The Contractor must not resume construction in the area of the encounter until authorized to do so by the Owner.

15. Hazardous Materials

Materials utilized in the project must be free of any hazardous materials, except as may be specifically provided for in the specifications.

If the Contractor encounters existing hazardous material on sites owned or controlled by the Owner or in material sources that are suspected by visual observation or smell to contain hazardous materials, the Contractor must immediately cease work in the area of the encounter, take steps needed to prevent contact with the materials, and notify the Consulting Engineer and the Owner who will immediately notify TWDB and appropriate authorities, depending on the circumstances, such as local emergency responders, the Texas Commission on Environmental Quality (TCEQ), The U.S. Environmental Protection Agency (EPA), and others.

Unless otherwise directed by appropriate authorities, the Owner will be responsible for the testing for and removal or disposal of hazardous materials on sites owned or controlled by the Owner and may suspend the work in the area of the encounter, wholly or in part during the testing, removal or disposal operations.

Funding from the TWDB must not be used for sampling, testing, removing, or disposing of contaminated soils or media at the project site, except for an LSLR project or associated activity directly connected to the identification, planning, design, and replacement of lead service lines. The Obligations within the contract must include an environmental indemnification provision wherein the Owner/Applicant agrees, and agrees to cause its construction contractors, to indemnify, hold harmless and protect the TWDB from any and all claims, causes of action, or damages arising from activities performed during the project funded by TWDB, including their officials and employees, in connection with the project, to the extent permitted by law

16. Changes

*Provisions identified with an asterisk below are consistent with Local Government Code 271.060. Counties and Municipalities may modify the identified provisions, when applicable, to conform to Local Government Code 262.031 (Counties) or 252.048 (Municipalities).

(a) The Owner may at any time, without notice to any surety, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including but not limited to changes:

i. In the specifications (including drawings and designs);

ii. In the time, method or manner of performance of the work.

iii. To decrease or increase the quantity of work to be performed or materials, equipment or supplies to be furnished.

(b) *The total price of a contract may not be increased by a change order unless provision has been made for the payment of the added cost by the appropriation of current funds or bond funds for that purpose, by the authorization of the issuance of certificates, or by a combination of those procedures.

(c) *A contract with an original contract price of $1 million or more may not be increased by more than 25 percent. If a change order for a contract with an original contract price of less than $1 million increases the contract amount to $1 million or more, subsequent change orders may not increase the revised contract amount by more than 25 percent.

(d) *A governing body may grant authority to an official or employee responsible for purchasing or for administering a contract to approve a change order that involves an increase or decrease of $50,000 or less.

(e) Changes that involve an increase in price will be supported by documentation of the cost components. For projects funded through the EDAP program, or with grant proceeds, TWDB staff may request this information to be provided in a format equivalent to the Cost and Pricing Information form (No. WRD-277).

(f) Any change orders involving a change in the project requiring a relocation of project components, sizing, or process may require additional environmental approval. A map and description of the proposed changes should be sent to the TWDB Environmental Reviewer for coordination and approval as soon as possible to avoid any delay.

17. Operation and Maintenance Manuals and Training

(a) The Contractor shall obtain installation, operation, and maintenance manuals from manufacturers and suppliers for equipment furnished under the contract. The Contractor must submit an electronic copy (e.g., PDF) with bookmarks of each complete manual to the Owner's Consulting Engineer within 90 days after approval of shop drawings, product data, and samples, and not later than the date of shipment of each item of equipment to the project site or storage location. One (1) hard copy, with divider tabs in a binder, must be submitted to the Owner's Consulting Engineer upon request.

(b) The Owner shall require their Consulting Engineer to promptly review each manual submitted, noting necessary corrections and revisions. If the Owner's Consulting Engineer rejects the manual, the Contractor must correct and resubmit the manual until it is acceptable to Consulting Engineer as being in conformance with the design concept of the project and for compliance with information given in the Contract Documents. Owner may assess the Contractor a charge for reviews of the same items in excess of two (2) times. Such procedures shall not be considered cause for delay.

(c) Acceptance of the manuals by Owner's Consulting Engineer does not relieve Contractor of any requirements on terms of Contract.

(d) The Contractor shall provide the services of trained, qualified technicians to check final equipment installation, to assist as required in placing same in operation, and to instruct operating personnel in the proper manner of performing routine operation and maintenance of the equipment.

(e) Operations and maintenance manuals specified hereinafter are in addition to any operation, maintenance, or installation instructions required by the Contractor to install, test, and start-up the equipment. Each manual is to be bound in a folder and labeled to identify the contents and project to which it applies. The manual shall contain the following applicable items:

i. A listing of the manufacturer's identification, including order number, model, serial number, and location of parts and service centers.

ii. A list of recommended stock of parts, including part number and quantity.

iii. Complete replacement parts list.

iv. Performance data and rating tables.

v. Specific instructions for installation, operation, adjustment, and maintenance.

vi. Exploded view drawings for major equipment items.

vii. Lubrication requirements.

viii. Complete equipment wiring diagrams and control schematics with terminal identification.

18. As-Built Dimensions and Record Drawings

(a) The Contractor shall make appropriate daily measurements of facilities constructed and keep accurate records of location (horizontal and vertical) of all facilities.

(b) Upon completion of each facility, the Contractor shall furnish the Owner with one (1) set of full-size direct prints, marked with red pencil, to show as-built dimensions and locations of all work constructed (Record Drawings) and one (1) full-size electronic set of these drawings (e.g., PDF). As a minimum, the Record Drawings shall include the following:

i. Horizontal and vertical locations of work.

ii. Changes in equipment and dimensions due to substitutions.

iii. "Nameplate" data on all installed equipment.

iv. Deletions, additions, and changes to scope of work.

v. Any other changes made.

19. Close-Out Procedures

To close-out the construction contract and release final retainage, the following steps must be completed:

(a) TWDB Staff must conduct a construction contract Final Site Visit (FSV) and issue a FSV Report.

(b) The following submittals must be received, reviewed, and accepted by the TWDB:

i. The final change order, adjustment of quantities, or a statement that all change orders have previously been submitted and there will be no more change orders.

ii. The final pay request from the Contractor.

iii. An affidavit by the Contractor that all bills have been paid.

iv. Certification by the Consulting Engineer that the work has been completed and was constructed in accordance with the approved plans and specifications and sound engineering principles and construction practices;

v. Certification by the Owner that the work has been completed and was constructed in accordance with the approved plans and specifications.

vi. Acceptance of the project by the Owner in the form of a written resolution, or other formal action.

vii. A warranty statement from the Consulting Engineer with a duration of at least 12 months from the date of the project's completion is required; and the warranty's start date specified;

viii. The Owner's Final AIS Certification (TWDB-1106-C).

ix. Confirmation that the Owner has received the Record Drawings from the Contractor; and

x. If CWSRF or DWSRF funds were used by the entity to prepare a Fiscal Sustainability Plan (FSP) or an Asset Management Plan (AMP), then the Owner must submit a copy of the applicable plan.

(c) Once items (a) and (b) have been completed, the TWDB will be able to issue a Certificate of Approval, which will then allow the release of the construction contract's retainage.

20. Additional Forms and Guidance:

The forms and guidance documents, mentioned throughout this guidance and below, are available at the following TWDB website:
http://www.twdb.texas.gov/financial/instructions/index.asp

Search by either the document number or name.

Forms:

- Contractor's act of Assurance (ED-103)
- Contractor's Resolution on Authorized Representative (ED-104)
- Vendor Compliance with Reciprocity on Non-Resident Bidders (TWDB-0459)
- Bidder's Certification - EEO (WRD-255)
- Monthly American Iron and Steel Certificate (TWDB-1106-A)
- American Iron and Steel (AIS) De Minimis Log (TWDB-1106-B)
- Final AIS Certification by Owner (TWDB-1106-C)
- Monthly Davis Bacon Wage Rate Certificate of Compliance Submittal by Owner (Sub- Recipient) (DB-0154)

Guidance Documents:

- CWSRF Guidance Manual (TWDB-0100)
- DWSRF Guidance Manual (TWDB-0115)
- Requirements for American Iron and Steel (AIS) Guidance (TWDB-1106)
- Guidance on Davis-Bacon Wage Rate Requirements for State Revolving Fund Projects (DB-0156)

TWDB-0459
Rev 01/17

VENDOR COMPLIANCE WITH RECIPROCITY ON NON- RESIDENT BIDDERS

Texas Government Code Section 2252.002 provides that in order for nonresident bidders to be awarded a governmental contract, the bidder must bid projects for construction, improvements, supplies, or services in Texas at an amount lower than the lowest Texas resident bidder by the same amount that a Texas resident bidder would be required to underbid the nonresident bidder in order to obtain a comparable contract in the nonresident bidder's state. A nonresident bidder is a person, including a contractor, whose principal place of business or corporate office is outside of the state of Texas. This requirement does not apply to a contract involving Federal funds. The appropriate blanks in Section A must be filled out by all nonresident bidders in order for your bid to meet specifications. The failure of a nonresident bidder to do so will automatically disqualify that bidder. Resident bidders must check the blank in Section B.

A. Non-resident vendors in _____(give state), our principal place of business, are required to be _____percent lower than resident bidders by state law. A copy of the statute is attached.

   Non-resident vendors in _____ (give state), our principal place of business, are not required to underbid resident bidders.

B. Our principal place of business or corporate office is in the state of Texas:_____.

BIDDER:

_____
Company

_____
City State Zip

_____
By (print name)

_____
Signature

_____
Title (print)

THIS FORM MUST BE RETURNED WITH THE BID

TEXAS WATER DEVELOPMENT BOARD



Disadvantaged Business Enterprises for State Revolving Fund Projects

210-Guidance

DBE Guidance
TWDB–0210 April 1, 2024

Updates to this guidance include:

- *Replaced current 8% Minority Business and Women's Business Enterprise (MBE/WBE) Goals with EPA's Negotiated- Approved Goals starting April 1, 2024. (pg.2)*
- *Updated TWDB-0215 (Attachment 1)*
- *Updated TWDB-0217 (Attachment 3)*
- *Replaced Fiscal Year 2018 Negotiated Minority Business Enterprise and Women's Business Enterprise (MBE/WBE) Goals (pg. 2)*
- *Updated language: Introduction to Federal Requirements (pg. 2)*
- *Updated EPA's 2019 Approved Class Exception RAIN (pg. 2)*
- *Updated Current Negotiated Fair Share Goals for Categories (pg. 7)*
- *Updated definition for Trade Association method (pg. 9)*
- *Updated DBE Program Links (pg. 16)*
- *Updated Appendix A-page 1: Defined Construction / Non-Construction*
- *Updated TWDB-0215 (Attachment 1)*
- *Updated TWDB-0216 (Attachment 2)*
- *Updated TWDB-0217 (Attachment 3)*
- *Updated TWDB-0373 (Attachment 4)*

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

TWDB-0210 GUIDANCE

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Attachments (examples of required forms):

1. TWDB-0215
2. TWDB-0216
3. TWDB-0217
4. TWDB-0373

INTRODUCTION TO FEDERAL REQUIREMENTS

The Texas Water Development Board (TWDB) intends to ensure that applicants, consultants and contractors are provided with information and guidance to successfully meet the U.S. Environmental Protection Agency's (EPA) Disadvantaged Business Enterprise (DBE) program requirements.

The TWDB's Clean and Drinking Water State Revolving Fund programs receive federal funding from the EPA to provide financial assistance for water and wastewater projects. Recipients of financial assistance (e.g., municipalities, towns, public water systems) and their sub-recipients (e.g., prime consultants, prime contractors, purchase order vendors) are **required** to make a "Good Faith Effort" to award a fair share of work to contractors who are certified as Minority Business Enterprises (MBE) and Women-owned Business Enterprises (WBE) whenever procuring construction, supplies, services, and equipment (40 CFR, Section 33.301). This requirement currently applies to Clean Water State Revolving Fund Equivalency projects and all Drinking Water State Revolving Fund Equivalency projects. . Recipients of financial assistance are required to show evidence that they have performed the six steps showing a "Good Faith Effort" (referred to as the Six Good Faith Efforts) for all procurements (40 CFR, Section 33.301).

The DBE program is an outreach, education, and goal-oriented program designed to increase the participation of MBEs and WBEs in procurements funded by EPA assistance agreements through the State Revolving Funds. The DBE program goals, also referred to as Fair Share Objectives, are negotiated every three years between the TWDB and the EPA. ***The TWDB's current negotiated fair share goals are effective 04/01/2024 till 05/01/2027:***

	Potential **MBE** Participation	Potential **WBE** Participation
Cost Category	**Goal**	**Goal**
Construction	**24.50%**	**11.34%**
Non-Construction	**24.05%**	**19.35%**
Total Combined Construction and Non-Construction	**24.16%**	**17.38%**

The MBE/WBE goals are neither standards nor quotas; they are goals. Recipients of financial assistance are not required to meet the fair share objectives. They must, however, acknowledge that they are aware of and are actively pursuing the fair share objectives with their procurements.

Recipients of financial assistance **must** maintain all records documenting compliance with all applicable federal and state requirements. They are also subject to additional contract administration requirements (40 CFR, Section 33.302).

This guide will cover the Six Good Faith Efforts, procurement instructions, and the TWDB's DBE review process. All of the required DBE forms as well as a few situational examples are included for reference. Clear definitions of all of the terms used throughout the guidance document may be found within the Glossary (Appendix A). The terms "recipient of financial assistance", "applicant", or "entity" may be used interchangeably.

COMPLIANCE WITH THE REQUIREMENTS

Compliance is achieved by: 1) applying the Six Good Faith Efforts to all procurements utilizing applicable State Revolving Fund program funds, 2) submitting TWDB's DBE forms in a timely manner, 3) ensuring all necessary documentation and language is included in bid advertisements and solicitations, and 4) maintaining detailed documents showing compliance with the DBE requirements. In the event that a recipient of financial assistance fails to comply with any of the DBE program requirements, EPA may take remedial action under 40 CFR, Section 33.105. A failure to comply with the legally required federal regulations at 40 CFR Part 33 may result in remedial actions including, but not limited to: Temporarily withholding cash payments pending correction of the deficiency by the recipient or more severe enforcement action by EPA; Disallowing all or part of the cost of the activity or action not in compliance; Wholly or partly suspending or terminating the current award; or Withholding further awards for the project or program.

SIX GOOD FAITH EFFORTS

The Six Good Faith Efforts undertaken by a recipient of financial assistance and its prime consultant(s)/contractor(s) ensures that DBE businesses are made aware of procurement opportunities.

According to 40 CFR § 33.301, a recipient of financial assistance is required to complete the following Six Good Faith Efforts whenever procuring construction, equipment, services and supplies under an EPA financial assistance agreement:

(1) Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State and Local and Government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.

(2) Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.

(3) Consider in the contracting process whether businesses competing for large contracts could subcontract with DBEs. For Indian Tribal, State and local Government recipients, this will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.

(4) Encourage contracting with a consortium of DBEs when a contract is too large for one of these businesses to handle individually.

(5) Use the services and assistance of the Small Business Administration (SBA) and the Minority Business Development Agency of the Department of Commerce.

(6) If the Prime Contractor awards subcontracts, require the prime contractor to take the complete steps (1) through (5) listed above.

Note: Step-by-step guides are available in future sections of this guidance to explain these six steps (pp. 7-15).

WHEN TO SUBMIT

Recipients of financial assistance through the SRF Programs will be required to submit DBE documentation at different phases during the project's lifecycle (Application, Prior to Closing, Release of Planning/Design funds, and Construction Contract Phases). *Note: Submitting DBE forms to the TWDB alone will not meet EPA's fair share policy. Review the section, Required Documentation, for the additional steps that **must** be completed.*

Application (must be submitted with a financial application)

- **TWDB-0215 (from Applicant/Entity)** certifies that the entity understands they **must** follow the Six Good Faith Efforts and attempt to meet the Fair Share Objectives for MBE/WBE participation.

Prior to Closing (must be submitted, reviewed and approved by TWDB staff prior to closing)

- **TWDB-0216 (from Applicant/Entity)** identifies the methods of solicitation used for procurements, all businesses directly solicited for procurement (at this stage, typically the Financial Advisor, Bond Counsel, and Engineer), their contact information, and their MBE/WBE status.
- **TWDB-0373 (from Applicant/Entity)** identifies the businesses awarded a contract, their contact information, their MBE/WBE status, an actual or anticipated executed contract date, and contract amount. *Note: Any businesses operating as brokers may not be listed on the TWDB-0373 as an MBE or WBE.*[1]
- **TWDB-0217 (from Prime Consultants)** certifies that the Prime Consultant (at this stage, typically the Financial Advisor, Bond Counsel, and Engineer) understand they **must** follow the Six Good Faith Efforts and attempt to meet the Fair Share Objectives for MBE/WBE participation.

Release of Planning/Design Phase funds

- **TWDB-0216 (from Applicant/Entity)** identifies the methods of solicitation used for procurements, all businesses directly solicited for procurement, their contact information, and their MBE/WBE status. This form is required at this stage only, if the entity pursues procuring additional businesses (e.g., Environmental, Other Legal Services, Surveying) for construction (if applicable), equipment, services, or supplies after closing.
- **TWDB-0373 (from Applicant/Entity)** identifies the businesses awarded a contract, their contact information, their MBE/WBE status, an actual or anticipated executed contract date, and contract amount. This form is required, at this step only, if the entity pursues procuring additional businesses (e.g., Environmental, Other Legal Services, Surveying) for construction (if applicable), equipment, services, or supplies after closing. *Note: Any businesses operating as brokers may not be listed on the TWDB-0373 as an MBE or WBE.*[1]
- **TWDB-0216 (from Prime Consultants/Contractors)** indicates all businesses solicited for procurement, their contact information, and their MBE/WBE status.

[1] *A broker is a business that does not perform, manage, or supervise the work of its sub/contract in a manner consistent with the normal business practices for sub/contractors in its line of business.*

- **TWDB-0373 (from Prime Consultants/Contractors)** identifies all businesses awarded a subcontract, their contact information, their MBE/WBE status, an actual or anticipated executed contract date, and contract amount. *Note: Any businesses operating as brokers may not be listed on the TWDB-0373 as an MBE or WBE.* [2]

Construction Contracts

- **TWDB-0216 (from Applicant/Entity)** identifies the methods of solicitation used for procurements, all businesses directly solicited for procurement (at this stage, typically a construction contractor), their contact information, and their MBE/WBE status.
- **TWDB-0373 (from Applicant/Entity)** identifies the businesses awarded a contract, their contact information, their MBE/WBE status, an actual or anticipated executed contract date, and contract amount.
- **TWDB-0216 (from Prime Consultants/Contractors)** indicates all businesses solicited for procurement, their contact information, and their MBE/WBE status.
- **TWDB-0217 (from Prime Contractor)** certifies that the Prime Contractor understands they **must** follow the Six Good Faith Efforts and attempt to meet the Fair Share Objectives for MBE/WBE participation.
- **TWDB-0373 (from Prime Contractor)** identifies all businesses awarded a contract, their contact information, their MBE/WBE status, an actual or anticipated executed contract date, and contract amount. *Note: Any businesses operating as brokers may not be listed on the TWDB-0373 as an MBE or WBE.* [2]

REQUIRED DOCUMENTATION

In addition to the forms that **must** be submitted to the TWDB for review and approval prior to a project progressing through its lifecycle, recipients of financial assistance are required to maintain the following sets of documents or files related to the DBE program for the duration of the project:

- All copies of advertisements, solicitation postings, and communications to publish public solicitation including publishers' affidavits, U.S. certified mail receipts, and emails.
- Bidder's List(s) of Prime Contracts if procurement was through an open-competitive bidding process.
- All forms submitted to the TWDB and the EPA for the DBE program.
- All documentation submitted by the Prime Consultant(s) and Contractor(s) depicting their compliance with EPA's fair share policy (review the section, Procurement Steps, for more details).

SPECIAL CIRCUMSTANCES

In some circumstances, a recipient of financial assistance may not be able to make a good faith effort in procuring DBEs. If this circumstance is encountered, communication with the TWDB's DBE Coordinator should take place well in advance of making the decision to execute a procurement/contract not following the TWDB's DBE program. The DBE Coordinator will determine whether the circumstance may qualify for a **sole-source** method of procurement. The sole-source method requires that the recipient of financial assistance produce a letter explaining why they were unable to follow the DBE program, submit the documentation to the TWDB for official review, and retain a copy of the letter within the project file.

[2] *A broker is a business that does not perform, manage, or supervise the work of its sub/contract in a manner consistent with the normal business practices for sub/contractors in its line of business.*

Example:

After pilot testing a specific treatment process for a treatment plant, the Texas Commission on Environmental Quality (TCEQ) has required a specific piece of equipment that only a single manufacturer produces, or a sole-source. In this instance, two key items are needed for DBE program compliance: a letter from the recipient of financial assistance detailing the circumstances related to the sole-source, and the exemption letter from the TCEQ identifying the specific equipment. These items should be sent to the TWDB and saved within the recipient of financial assistance's project file. Communication should be given to the TWDB's DBE Coordinator upon receipt and review of the TCEQ's exemption letter.

There may be instances when a recipient of financial assistance would like to contract for services or contract with a supplier(s) for an extended period of time. These **multi-year contracts** are allowed and acceptable under the EPA's DBE program, so long as certain steps are followed. When the TWDB's DBE Coordinator reviews any submitted DBE documentation, they will ensure the solicitation language contains the expected scope of work and the applicable timeframes of the contract. The solicitation should also reference the TWDB's negotiated fair share objectives through use of the TWDB's solicitation statement within the advertisement. Including the solicitation statement ensures the multi-year contract is procured under the TWDB's current negotiated fair share objectives. If any of this information is missing, the TWDB's DBE Coordinator may not be able to approve the submitted DBE documentation and may require additional steps in order to meet compliance.

The recipient of financial assistance **must** follow the EPA's DBE process in procuring the multi-year contract(s). A multi-year contract will not be accepted if the contract solicitation and award date occurred more than three years from the date of submission to the TWDB's DBE Coordinator. Multi-year contracts exceeding this timeframe may be evaluated by the TWDB on a case-by-case basis. Advanced notice of this type of procurement should be given to the TWDB's DBE Coordinator before making the decision to execute a procurement/contract.

Example:

The Town of Medgar (Town), is preparing to execute a contract with a consultant engineering firm for engineering services covering all line replacement work within its public water supply system. The Town has drafted a solicitation for water line replacement work for all projects that are or may possibly be funded through the TWDB's Drinking Water State Revolving Fund (DWSRF) and has received an approval for use by the TWDB's DBE Coordinator. The multi-year contract is structured to be in effect for no longer than three years. Following the standard DBE process, the Town posts the solicitation, awards the contract, and then submits the applicable forms to the TWDB for review. Three years later, the Town chooses to take on additional water line replacement work funded through new DWSRF financing. To show compliance, they submit the DBE forms showing their original procurement of the engineering firm to the TWDB's DBE Coordinator. Following this process allows the Town to utilize one consultant engineering firm for all water line replacement projects within the system that are planned and/or implemented within the three years after executing the contract.

In instances where a recipient of financial assistance wants their own staff to perform services, their approval process would follow a **force account** process. Under a force account, the recipient of financial assistance submits a written request to the TWDB's DBE Coordinator describing the scope of work covered by their staff and indicating their participation through the force account process. This letter should remain within their project files. The TWDB's DBE Coordinator will acknowledge its receipt, review for applicability, and respond with a determination before any work proceeds.

PROCUREMENT STEPS

Included in these instructions are steps to successfully perform your DBE solicitation. Please read them carefully. These steps should be taken when procuring construction, equipment, services, and/or supplies. The terms "recipients of financial assistance", "applicant", or "entity" may be used interchangeably. The term "Prime(s)" refers to both "Consultants" and "Contractors".

STEP 1. DETERMINE YOUR PROCUREMENT NEEDS

For all of the categories listed below, you are required to solicit by any of the listed methods identified in Step 2 DBE businesses qualified and capable of completing the work requested. You should also determine whether it is economically feasible to divide the proposed project into smaller tasks or quantities to permit maximum participation by DBE businesses.

Procurement Categories

Construction contracts generally relate to the bidding process for a prime contractor. **Equipment** contracts relate to the purchase of equipment from vendors. **Service** contracts relate to the hiring of consultants or any other service related work. **Supply** contracts relate to the purchase of supplies directly from vendors. Procurements are classified in two categories: **Construction** & **Non-Construction**.

Examples

1. If your project consists of one general construction contract, you will need to solicit DBE prime contractors within the regional vicinity of the project that are capable of completing the work.

2. If your own workforce will be performing all of the work, but you will need to purchase supplies or equipment, then you will need to solicit DBE vendors within the regional project area capable of providing supplies or equipment to your proposed project.

STEP 2. DETERMINE YOUR METHODS OF SOLICITATION

You may choose from a list of seven methods of solicitation. At least TWO methods **must** be chosen. These may be performed in conjunction with any required local or state procurement laws:

- Newspaper Advertisements
- Direct Contact by Phone, Fax, USPS Mail, Email (any combination of these still counts as ONE method)
- Meetings or Conferences
- Minority Media Postings
- Internet Website Postings
- Trade Association Publications (i.e., publishing a solicitation within a newsletter, email list, webpage, etc. for a grouping of all who come together in an organized attempt to interest, persuade, or influence the actions, policies, or decisions of government officials, for the advancement and recruitment of contracting opportunities.)
- Other Government Publications (i.e., publishing a solicitation within other governmental publications)

If you choose to solicit via direct contact, additional steps are required to ensure fairness (see Step 2B. Directly Solicit Businesses). To reiterate, depending on your entity or businesses' makeup, you **must** ensure that you meet all applicable local and state procurement laws.

STEP 2A. ADVERTISE YOUR PROJECT

Draft the content of your solicitation. Example advertisement and request for qualifications language is available in appendix B.

To be compliant with the DBE program, all solicitations, both publicly advertised and via direct contact, should address 1) fair share goals; 2) good faith efforts; 3) the involvement of federal EPA funding; and 4) encouragement of MBEs, WBEs, and other DBEs to bid on prime and subcontracts.

To ensure compliance, the TWDB **recommends** including the following solicitation statement in all solicitations:

> *This contract is subject to the Environmental Protection Agency's (EPA) Disadvantaged Business Enterprise (DBE) Program, which includes EPA-approved fair share goals toward procurement of Minority and Women-owned Business Enterprise (M/WBE) businesses. EPA rules require that applicants and prime contractors make a good faith effort to award a fair share of contracts, subcontracts, and procurements to M/WBEs through demonstration of the six affirmative steps. For more details of the DBE Program and the current, applicable fair share goals, please visit www.twdb.texas.gov/dbe.*

The TWDB encourages you to publish your solicitation at least 30 days prior to the bid closing date to allow sufficient time for potential prime or subconsultants/contractors to submit bids and proposals. The solicitation statement may be used within a newspaper advertisement, a posting to minority media or internet website, or posting within any other trade association or government publications. A copy of the actual solicitation found within/on the publication or web page **must** be kept with the project files and submitted along with the form TWDB-0216.

When advertising your project through a newspaper, it is important to retrieve a publisher's affidavit showing the dates of the posting(s) and the content of the advertisement. This support information **must** be saved with the project files and submitted along with the form TWDB-0216. For entities and projects required by state procurement law to perform an open competitive bidding process (i.e., political subdivisions of the state or districts soliciting for contract(s) more than a specific dollar amount as directed by state procurement law), a posting at least once a week, for two consecutive weeks, in a newspaper published in the municipality (or county) in which the district is located is required (TEX. LOC. GOV'T CODE § 252.041 and TEX. WATER CODE § 49.273).

Note: Sufficient documentation for meetings or conferences held as a method of solicitation include announcements of the meeting or meeting minutes AND a sign-in sheet. Posting items to a government-run plan room is considered the "Other Government Publications" method listed within the previous step. Posting items to a privately-run plan room is considered the "Trade Association Publications" method listed within the previous step. Conducting and submitting a search of businesses does not count as any one of the methods listed within the previous step. Search results are only accepted when accompanied with a detailed, signed explanation to document your inability to locate DBE businesses meeting the qualifications solicited and/or their inability to bid on your project.

STEP 2B. DIRECTLY SOLICIT BUSINESSES

You may directly solicit businesses utilizing phone, fax, USPS mail, or email communications. All documentation of such activity **must** be saved with the project files. When communicating via phone, an electronic or hand-written call log may be used as support. Remember to document the name of the firm solicited, the person contacted, a telephone number, their MBE/WBE status, and the category of work requested.

You **must** make contact with at least three qualified businesses for the specific procurement and **at least one** of those businesses **must** be a certified MBE/WBE business. **DBE businesses/firms may be contacted by TWDB to certify "direct contact" method**. An example of submitted direct solicitation documentation is available in Appendix D. To determine a business' certification, review Step 3. Determining a Business' DBE Status.

STEP 3. DETERMINING A BUSINESS' DBE STATUS

A DBE is a business owned by a socially and economically disadvantaged individual and certified as such by the EPA or another organization whose certification standards meet or exceed that of the EPA's (See Appendix A for a full definition of DBE). To assist you in identifying, soliciting, and utilizing qualified DBE businesses, the TWDB encourages you to refer to the following list of acceptable DBE certification agencies made available at the local, statewide, and national levels.

- Texas Procurement and Support Services (TPASS) The **Centralized Master Bidders List (CMBL) – Historically Underutilized Business (HUB) Directory Search** is a statewide database managed by the TPASS. This database contains contact information on all vendors registered to do business with the State, including TPASS-certified HUB vendors. The CMBL & HUB search is an online system available to the public free of charge.
- Small Business Administration
- Texas Department of Transportation

- City of Austin Located on the right-hand side of the webpage are links to the MBE/WBE/DBE Certified Vendor Search and SBE Certified Vendors directories.
- City of Houston

A list of other Minority & Women-owned Business Organizations that you may contact directly to obtain a list of qualified vendors for your procurement opportunities may be found at *www.twdb.texas.gov/dbe*.

Please note that MBE, WBE, or Historically Underutilized Business (HUB) certifications provided by the Texas Small Businesses Association or the Texas Certification Directory **will not** be accepted by the TWDB or the U.S. Environmental Protection Agency (EPA) as they do not meet EPA certification requirements.

STEP 4. UNDERSTANDING ROLES AND RESPONSIBILITIES

For Applicants:

As the recipient of financial assistance, you are responsible for ensuring that your project meets EPA's fair share policy for all procurements funded utilizing State Revolving Fund program funds. This includes the subcontracts of your Prime Consultant(s) and Contractor(s). You should review the Prime Consultant's and Contractor's DBE documentation and determine them to be in compliance before you submit the TWDB forms and support for official review.

You may request DBE documentation from your Prime Consultant(s) and Contractor(s) at the time of bid or after you have awarded a contract. Keep in mind your project schedule and the timeframes in which you need to obtain TWDB's approvals to continue progressing with your project. Receiving and reviewing forms earlier ensures that you receive approval well in advance of critical deadlines.

If your Prime Consultant's and Contractor's documented DBE process comes back with any errors, it is your responsibility to work with them to achieve compliance. Be mindful that contracts procured without following requirements may result in the need for re-procurement or be funded utilizing an alternate source of funds other than State Revolving Fund program funds. The TWDB's DBE Coordinator is available to assist you in correcting any deficiencies of your Prime Consultant's and Contractor's procurements. For more detailed instructions, review the section, Applicant's Review of Prime Consultant's/Contractor's Procurements.

If the contract amount for any of your Prime Consultant(s)/Contractor(s) changes from the time of your initial DBE submission, you **must** submit an updated TWDB-0373 listing the final, actual contract dollar amounts.

Note: In the event you change your Prime Consultant/Contractor or any subcontractors, for any reason, you or your Prime Consultant/Contractor must follow the DBE process when re-procuring. This will require you to re-submit a new TWDB-0373 reflecting actual contract dollar amounts and any supporting certification documentation.

For the Prime:

As the Prime, you are responsible for ensuring that your project meets EPA's fair share policy for all procurements funded utilizing State Revolving Fund program funds. You should review the subcontractors' DBE documentation and determine them to be in compliance before you submit the TWDB forms and support to the Entity awarding you a contract.

You may request DBE documentation from your subcontractor(s) at the time of bid or after you have been awarded a contract. Keep in mind your project schedule and the timeframes in which you need to obtain TWDB's approvals to continue progressing with your project. Receiving and reviewing forms earlier ensures that you receive approval well in advance of critical deadlines.

Be mindful that should any DBE forms or support documentation come back with any errors, it is your responsibility to correct any deficiencies to achieve compliance. A contract procured without following all of the necessary requirements may result in the need for re-procurement or be funded utilizing an alternate source of funds other than State Revolving Fund program funds. The TWDB's DBE Coordinator is available to assist you in correcting any deficiencies.

If the contract amount for any of your subcontractors change from the time of your initial DBE submission, you **must** submit an updated TWDB-0373 listing the final, actual contract dollar amounts.

Note: In the event you change any of your subcontractors, for any reason, you must follow the DBE process when re-procuring. This will require you to re-submit a new TWDB-0373 reflecting actual contract dollar amounts and any supporting certification documentation.

STEP 5. CREATING A BIDDERS LIST (APPLICANTS-ONLY)

As a recipient of financial assistance, you **must** create and maintain a Bidders List **if** your solicitation is subject to competitive bidding requirements. The list must include all firms that bid or quote on contracts and/or subcontracts. You **must** keep the bidders list until the project is complete, the project period has expired, and you are no longer receiving EPA funding under the financing agreement.

The following information **must** be retained on the Bidders List:

- The firm's name with point of contact
- The firm's mailing address, telephone number and email address
- The procurement on which the firm bid or quoted, and when
- The firm's status as an MBE/WBE.

The TWDB's form, Affirmative Steps Solicitation Report (TWDB-0216), may be used as the official Bidders List.

You may be exempt from the Bidders List requirement if you have received no more than $250,000 for any single EPA financial assistance agreement OR no more than a combined total of $250,000 for multiple EPA financial assistance agreements within any one federal fiscal year.

STEP 6. COMPLETING THE NECESSARY DBE FORMS

If you are completing these steps **prior to closing** on a TWDB financial assistance award:

Applicant: The forms you must complete and sign are the TWDB-0216 and TWDB-0373. These forms document the methods of solicitation used, who was directly solicited and/or made a bid, and who was ultimately awarded a contract. You may have chosen one or more Prime Consultants (typically an Engineer, Financial Advisor, and/or Bond Counsel).

Prime(s): You must complete and sign the TWDB-0217 acknowledging you understand the DBE program requirements.

All three of these forms are needed well in advance of your (applicant's) anticipated closing date, as they must be reviewed and approved by TWDB staff before the closing is initiated. Confirm all forms are accurately completed, the required support documentation has been attached, and dated signatures from the appropriate authorized representatives are included.

If you are completing these steps for the **release funds for the planning, acquisition, and/or design phases**:

Prime(s): In addition to having the above referenced forms completed, you will need to complete and submit additional forms if you have selected subcontractors. Forms TWDB-0216 and TWDB-0373 should be completed and submitted to the Entity awarding you a contract. These forms document the methods of solicitation used, who was directly solicited and/or made a bid, and who was ultimately awarded a contract. All of these forms are needed in advance of the desired date for release of funds, as they **must** be reviewed and approved by TWDB staff before the release is initiated. Confirm that all forms are accurately completed, the required support documentation has been attached, and dated signatures from the appropriate authorized representatives are included.

If you are completing these steps for a **construction contract(s)**:

Applicant: Forms TWDB-0216 and TWDB-0373 are required showing your selection process for a Prime Contractor(s).

Prime(s): Form TWDB-0217 **must** be completed acknowledging that you understand the DBE program requirements. If subcontractors are utilized, complete forms TWDB-0216 and TWDB-0373 showing your selection process.

These forms are needed in advance of the desired date for release of funds, as they **must** be reviewed and approved by TWDB staff before the release is initiated. Confirm that all forms are accurately completed, the required support documentation has been attached, and dated signatures from the appropriate authorized representatives are included.

Note: In the event you change any of your subcontractors, for any reason, you must follow the DBE process when re-procuring. This will require you to re-submit a new TWDB-0373 reflecting actual contract dollar amounts and any supporting certification documentation.

In the event you run out of space on any of the TWDB forms, you can use your own additional spreadsheet or word document and attach.

STEP 7. SUMMARIZING THE PROCESS

The following is a summary of the necessary steps to complete in order to receive a notice of compliance with the DBE program requirements.

- Applicant: Publish, post, contact, and/or distribute advertisements soliciting for a Prime Consultant(s)/Contractor(s) for the proposed project. It is recommended that this occur at least

30-days prior to the close of accepting bids. The solicitation advertisement should contain the TWDB's recommended solicitation statement.

- Applicant: If applicable, create and retain a copy of a Bidders List (refer to Step 5).
- Primes: Complete and submit the Prime Consultant/Contractor Certification form (TWDB-0217) to the Entity awarding you a contract. If instructed to do so by the Entity, also submit the completed form to the TWDB Review Engineer. If sent electronically, copy DBE@twdb.texas.gov.
- Primes: If subcontracting, publish, post, contact, and/or distribute advertisements soliciting subcontractor(s) for the proposed project. It is recommended that this occur at least 30-days prior to the close of accepting bids. The solicitation advertisement should contain the TWDB's recommended solicitation statement.
- All: Save all copies, correspondence, etc. documenting the solicitation(s).
- All: Based upon the stage of the project, complete all necessary forms associated with the solicitation and award of the contract(s) for Prime Consultant(s)/Contractor(s) or subcontractor(s) (refer to Step 6 for the required forms).
- All: Compile all necessary forms from your selected Prime Consultant(s)/Contractor(s) or subcontractor, based upon the stage of the project. Ensure accuracy and completeness of the forms. Coordinate with the submitter should there be any errors.
- All: Submit all required documentation to the TWDB Project Reviewer / Engineer assigned to the project. If submitting electronically, copy DBE@twdb.texas.gov with the submission.

STEP 8. CHANGES TO SELECTED CONSULTANTS OR CONTRACTORS

In the event there is a change of Consultant(s)/Contractor(s) or any subcontractor(s), you **must** follow the DBE process when re-procuring.

APPLICANT'S REVIEW OF PRIME CONSULTANT'S/CONTRACTOR'S PROCUREMENTS

Before submitting any DBE documentation to the TWDB for an official review, look over the DBE documentation from your Prime Consultants/Contractors to confirm the documents are in order and the procurements are in compliance.

As a recipient of financial assistance, it is important to remember you are responsible for the Prime Consultant's/Contractor's soliciting of DBE businesses (DBE includes both MBEs and WBEs) for any procurements needed to complete your proposed project. This includes all construction, services, supplies and/or equipment.

If you encounter any errors, most can be corrected for compliance after the bid opening date as long as no awards have been made.

If you are unsure of any information presented to you during the review of the Prime Consultant(s)/Contractor(s) efforts, please contact the TWDB's DBE Coordinator for further instruction or recommendation at (512) 463-0991 or at DBE@twdb.texas.gov.

Included in these instructions are steps to successfully perform your review of your Prime Consultant(s)/Contractor(s) DBE documentation for this project. Please read them carefully. The term

Prime(s) refers to both Consultants and Contractors. The terms recipient of financial assistance, applicant, or entity may be used interchangeably.

STEP 1. REVIEW ANY DRAFT SOLICITATIONS

Prior to the Prime Consultant(s)/Contractor(s) making any solicitations for subcontractor opportunities, you should review the draft solicitation to ensure that the TWDB's recommended solicitation statement, or the statement with the required solicitation components (see p. 8) is included. For reference, the following should appear in all solicitations:

> *This contract is subject to the Environmental Protection Agency's (EPA) Disadvantaged Business Enterprise (DBE) Program, which includes EPA-approved fair share goals toward procurement of Minority and Women-owned Business Enterprise (M/WBE) businesses. EPA rules require that applicants and prime contractors make a good faith effort to award a fair share of contracts, subcontracts, and procurements to M/WBEs through demonstration of the six affirmative steps. For more details of the DBE Program and the current, applicable fair share goals, please visit www.twdb.texas.gov/dbe.*

If this or another form of acceptable language is not included, procurements made through the solicitation may not be compliant with the EPA's DBE Program.

STEP 2. ENSURE THAT ALL DOCUMENTATION HAS BEEN PROVIDED BY THE PRIME(S)

The Prime Consultant(s)/Contractor(s) should provide you, the Applicant:

- TWDB-0217 This form acknowledges that the Prime Consultant/Contractor understands that they **must** follow the DBE program when soliciting for subcontractors.
- TWDB-0216 If subcontractors are utilized, this form should be submitted. The form indicates all businesses solicited for procurement, their contact information, and their MBE/WBE status. The Prime Consultant/Contractor **must** include support documentation demonstrating they have met the Six Good Faith Efforts and followed the correct steps for their selected method(s) of solicitation.
- TWDB-0373 If subcontractors are utilized, this form should be submitted. The form identifies the businesses awarded a procurement contract, their contact information, their MBE/WBE status, an actual or anticipated executed contract date, and contract amount. If any MBE/WBE businesses are contracted, the Prime Consultant/Contract should include the DBE certification along with the form as support documentation. You **must** review the certification to ensure that the certification comes from an agency acceptable to the EPA. A list of acceptable DBE certification agencies may be found at www.twdb.texas.gov/dbe. *Note: Any businesses operating as brokers may not be listed on the TWDB-0373 as an MBE or WBE.* [3]

STEP 3. REVIEW THE SUPPORTING SOLICITATION DOCUMENTATION

The DBE solicitation should specifically describe the construction work, supplies, equipment, or services that are being solicited, and include the following required DBE language:

[3] *A broker is a business that does not perform, manage, or supervise the work of its sub/contract in a manner consistent with the normal business practices for sub/contractors in its line of business.*

This contract is subject to the Environmental Protection Agency's (EPA) Disadvantaged Business Enterprise (DBE) Program, which includes EPA-approved fair share goals toward procurement of Minority and Women-owned Business Enterprise (M/WBE) businesses. EPA rules require that applicants and prime contractors make a good faith effort to award a fair share of contracts, subcontracts, and procurements to M/WBEs through demonstration of the six affirmative steps. For more details of the DBE Program and the current, applicable fair share goals, please visit www.twdb.texas.gov/dbe.

Similar to the solicitation you performed for your Prime Consultant(s)/Contractor(s), the TWDB recommends solicitations for subcontractors be published at least 30 days prior to the bid closing date to allow sufficient time for potential subcontractors to submit bids and proposals. You should ensure that a copy of the actual solicitation found within/on the publication or web page is kept with their and your project files. This information will be needed for submission to the TWDB for official review of DBE compliance.

If the Prime Consultant(s)/Contractor(s) is advertising through a newspaper, it is important to ensure that they have retained a publisher's affidavit showing the dates of the posting(s) and the content of the advertisement. You should also ensure that this support information is saved with their and your project files, as the information will be needed for submission to the TWDB for official review. Be mindful of your applicable local and state procurement laws as they relate to your Prime Consultant's/Contractor's solicitation of subcontractors.

STEP 3A. REVIEW PHONE LOGS, FAX TRANSMITTAL LOGS, EMAIL DELIVERY RECIEPTS, MEETING SIGN-IN SHEET, MINORITY MEDIA POSTING, INTERNET & WEB POSTINGS, TRADE ASSOCIATION PUBLICATIONS AND OTHER GOVERNMENT PUBLICATIONS

If the Prime Consultant(s)/Contractor(s) chose one of the solicitation methods mentioned above, they are **required** to provide support documentation showing that the TWDB's required solicitation statement was included or mentioned. Review all support documentation to ensure that this requirement was met.

STEP 4. CLOSE COORDINATION

It is important for you and your Prime Consultant(s)/Contractor(s) to coordinate closely during all phases of your project to ensure that all DBE requirements have been met. Failure to do so may result in project delays or the inability to make use of State Revolving Fund program funds.

STEP 5. NOW THAT YOU HAVE COMPLETED YOUR REVIEW

Once you have completed your review of the Prime Consultant's/Contractor's solicitation efforts and have determined that they are in compliance, you should keep all documentation on file in the event it is requested for review by the TWDB or the U.S. Environmental Protection Agency. All of the Prime Consultant's/Contractor's DBE solicitation documentation should be included in the DBE compliance package submitted to TWDB.

CONTRACT ADMINISTRATION REQUIREMENTS

Each procurement contract signed by a recipient of financial assistance must include the following term and conditions:

> The contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The contractor shall carry out applicable requirements of 40 CFR Part 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the contractor to carry out these requirements is a material breach of this contract which may result in the termination of this contract or other legally available remedies.

Additionally, the following U.S. EPA DBE regulations apply:

- A recipient **must** require its Prime Contractor to pay its subcontractor for satisfactory performance no more than 30 days from the Prime Contractor's receipt of payment from the recipient.
- A recipient **must** be notified in writing by its Prime Contractor prior to any termination of a DBE subcontractor for convenience by the Prime Contractor.
- If a DBE subcontractor fails to complete work under the subcontract for any reason, the recipient must require the Prime Contractor to employ the Six Good Faith Efforts described in 40 CFR § 33.301 if soliciting a replacement subcontractor.
- A recipient **must** require its Prime Contractor to employ the Six Good Faith Efforts even if the Prime Contractor has achieved its fair share objectives.

DBE PROGRAM LINKS

TWDB DBE Program Webpage: www.twdb.texas.gov/dbe
DBE Rules (40 CFR Parts 33, 35, and 40): www.epa.gov/sites/production/files/2013-09/documents/final_dbe_rule.pdf
How do I get DBE Certified & Finding Certified firms: https://19january2017snapshot.epa.gov/sites/production/files/2013-09/documents/dbe_certification_process.pdf
DBE Frequently Asked Questions: https://www.epa.gov/grants/frequently-asked-questions-disadvantaged-business-enterprises
Recipient/Applicant Information Notice: https://www.epa.gov/grants/rain-2019-g10

APPENDIX A. GLOSSARY

- **Applicant** – a public or private utility seeking Equivalency funding from the Clean Water State Revolving Fund or the Drinking Water State Revolving Fund.
- **Broker** – a business that does not perform, manage, or supervise the work of its contract or subcontract in a manner consistent with the normal business practices for contractors or subcontractors in its line of business.
- **Construction** – the erection, alteration, or repair (including dredging, excavating, and painting) of buildings, structures, or other improvements to real property, and activities in response to a release or a threat of release of a hazardous substance into the environment, or activities to prevent the introduction of a hazardous substance into a water supply.
- **Non Construction** – not of, relating to, or involving the construction work.
- **Disadvantaged Business Enterprises (DBE)** – an entity owned or controlled by a socially and economically disadvantaged individual as described by Public Law 102-389 (42 U.S.C. §4370d) or an entity owned and controlled by a socially and economically disadvantaged individual as described by Title X of the Clean Air Act Amendments of 1990 (42 U.S.C. §7601 note); a Small Business Enterprise (SBE); a Small Business in a Rural Area (SBRA); or a Labor Surplus Area Firm (LSAF), a Historically Underutilized Business (HUB) Zone Small Business Concern, or a concern under a successor program. This term includes Minority Business Enterprises (MBE) and Women-owned Business Enterprises (WBE).
- **Entity** – See "Applicant".
- **Equipment** – items procured under a financial assistance agreement as defined by applicable regulations for the particular type of financial assistance received.
- **Equivalency funding** – a term used to categorize projects within the Clean Water State Revolving Fund program identified by the TWDB whose cumulative funding is in an amount equal to the capitalization grant awarded by EPA to the TWDB.
- **Fair Share Goals / Objectives** – are goals based upon the capacity and availability of qualified, certified MBEs and WBEs within the state for the procurement categories of construction, equipment, services, and supplies, compared to the number of all qualified entities within the state for the same procurement categories. The goals are negotiated every three years between the TWDB and EPA. A fair share objective is not a quota; a recipient cannot be penalized for not meeting its fair share objectives; and, once negotiated, fair share objectives remain in place for three years.
- **Fair Share Policy** – a policy maintained by the EPA relating to the "Good Faith Effort" to award a fair share of the work to contractors who are certified as Minority Business Enterprises (MBEs) and Women-owned Business Enterprises (WBEs) whenever procuring construction, supplies, services and equipment. The TWDB's current negotiated fair share goals are available on page 2. Recipients are not required to meet the fair share goals; however, the EPA may take remedial action under 40 CFR §33.105 for failure to comply with DBE program requirements.
- **Financial Assistance Agreement** – a binding legal agreement between the recipients of financial assistance and the TWDB outlining the terms and conditions for the funding provided and the recipient's obligations.

- **Force Account** – the part of the expense account of a public body (as a municipality) resulting from the employment of a labor force usually distinguished from the part resulting from contracting similar services with commercial agencies
- **Historically Underutilized Business (HUB)** – a small business organization that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.
- **Minority Business Enterprises (MBE)** – a Disadvantaged Business Enterprise (DBE) owned and/or controlled by a socially and economically disadvantaged individual other than a Small Business Enterprise (SBE), Labor Surplus Area Firm (LSAF), Small Business in Rural Areas (SBRA), or Women-owned Business Enterprise (WBE).
- **Prime Consultant** – consultants awarded a contract by the recipient of financial assistance, typically during the initial phases of a project; primarily the project's consulting Engineer, Financial Advisor, and Bond/Legal Counsel.
- **Prime Contractor** – contractors awarded a contract by the recipient of financial assistance, typically during the construction phase of a project.
- **Construction Procurement** – the act of obtaining construction work.
- **Non Construction Procurement**- the act of obtaining and/or purchasing equipment, services, or supplies.
- **Recipient** – See "Applicant".
- **Services** – a contractor's labor, time or efforts provided in a manner consistent with normal business practices which do not involve the delivery of a specific end item, other than documents (e.g., reports, design drawings, specifications).
- **Six Affirmative Steps** – also referred to as the Six Good Faith Efforts, are the steps every recipient of financial assistance through the State Revolving Fund must follow, along with their Prime Consultant(s)/Contractor(s), in order to adequately offer the opportunity to make bids for work paid using these funds.
- **Six Good Faith Efforts** – See "Six Affirmative Steps".
- **Small Business Enterprises (SBE)** – an organization, including its affiliates, independently owned and operated, not dominant in the field of operation in which it is bidding, and qualified as a small business under the criteria and size standards in 13 CFR Part 121.
- **Subcontractor** – a business awarded a contract by a Prime Consultant/Contractor for specific work, services, supplies, or equipment.
- **Supplies** – items procured under a financial assistance agreement as defined by applicable regulations for the particular type of financial assistance received.
- **Women-owned Business Enterprises (WBE)** – a business which is at least 51% owned or controlled by women for purposes of EPA's 8% statute or a business concern which is at least 51% owned and controlled by women for purposes of EPA's 10% statute. Determination of ownership by a married woman in a community property jurisdiction will not be affected by her husband's 50% interest in her share. Similarly, a business which is more than 50% owned by a married man will not become a qualified WBE by virtue of his wife's 50% interest in his share.

APPENDIX B. EXAMPLE ADVERTISEMENTS (REQUEST FOR QUALIFICATIONS)

ADVERTISEMENT / INVITATION FOR BIDS REQUEST FOR SEALED PROPOSALS

The City of ___ will receive bids for the Lift Station and Sanitary Sewer Rehabilitation Project at ____ City Hall until 3:00 p.m., on the _____ day of_____, 2011, at the City _____ City Hall located on 123 Example St., _____, Texas 78516, at which time all bids will be received and publicly opened and read. Bids received after the closing time will be returned unopened. NO PRE-BID CONFERENCE WILL BE CONDUCTED.

This contract is subject to the Environmental Protection Agency's (EPA) Disadvantaged Business Enterprise (DBE) Program, which includes EPA-approved fair share goals toward procurement of Minority and Women-owned Business Enterprise (M/WBE) businesses. EPA rules require that applicants and prime contractors make a good faith effort to award a fair share of contracts, subcontracts, and procurements to M/WBEs through demonstration of the six affirmative steps. For more details on the DBE Program and the current, applicable fair share goals, please visit www.twdb.texas.gov/dbe.

This contract is to be funded through a loan obtained from the Texas Water Development Board as part of the Clean Water State Revolving Fund. There are a number of special provisions for this funding that bidders, by submitting a bid, acknowledge understanding, including the following: A contract is contingent upon release of funds from the TWDB. Any contract or contracts awarded under this Notice to Bidders are expected to be funded in part by financial assistance from the TWDB. Neither the State of Texas nor any of its departments, agencies, or employees are or will be a party to this Invitation for Bids or any resulting contract.

Equal Opportunity in Employment - All qualified applicants will receive consideration for employment without regard to race, color, national origin, sex, religion, age, or handicap. The contractor shall carry out applicable requirements of 40 CFR Part 33 in the award and administration of contracts awarded under TWDB financial assistance agreements. Failure by the contractor to carry out these requirements is a material breach, which may result in the termination of the awarded financial assistance.

The project will consist of the following:
The City of ____ intends to replace/install/upgrade electrical controls and minor rehab for eight (8) lift stations remove and replace approx. 616 linear feet of 8" sanitary sewer line, remove and replace approx. 1,758 linear feet of 12" clay sanitary sewer line with a 15" PVC sanitary sewer line, remove and replace ten (10) 48" brick manholes with 48" fiberglass manholes.

Contract Documents, including Drawings and Technical Specifications are on file at the City of _____ City Hall or at the office of _____, at ____, ____. Please direct questions to _____.

Copies of the Contract Documents and Construction Plans can be examined at _____. Bidders, suppliers or sub-contractors may obtain copies of the Contract Documents for bidding purposes at ____ for a non-refundable payment of $100.00 per set, checks made payable to _____. A Certified check or bank draft, payable to the order of City of _____ or negotiable U.S. Government Bonds (at par value) or a satisfactory Bid Bond executed by the Bidder of an acceptable surety in an amount equal to five percent (5%) of the total bid shall be submitted with each bid.

The City of _____ reserves the right to reject any or all bids or to waive any informality in the bidding. Bids may be held by the City of _____ for a period not to exceed sixty (60) days from the date of the bid opening for the purpose of reviewing the bids and investigating the bidders' qualifications prior to the contract award.
Small and minority firms are encouraged to submit bids for this project.

ENGINEER, BOND COUNSEL, and FINANCIAL ADVISOR - REQUEST FOR QUALIFICATIONS

The City of _____ requests the submission of qualifications statements, which will lead to the possible award of a contract to provide _____ services for a project involving the City's Water Treatment Facilities.

Scope of Work

The services to be obtained for the **Engineer** require:_____

The services to be obtained for the **Bond Counsel** require:_____

The services to be obtained for the **Financial Advisor** require:_____

Guidelines for Content of Qualification Statements

DO NOT INCLUDE COST INFORMATION with the qualification statement. Responses that include cost or pricing information will be rejected and will not be considered by the City.

Detailed instructions on preparation of the qualification statement must be obtained from the City. For more information on preparing and submitting the qualification statement, contact _____, City Administrator, at_____. This information should be requested as soon as possible in order to allow time to prepare the document and comply with the procedures.

Submittal Deadline

Three copies of the qualifications statement must be filed with the City by: _____.

Minimum Qualifications and Selection Criteria

The City will evaluate the proposals to determine which firm has the best qualifications.

Contract Terms and Negotiation Schedule

The consultant for *Bond Counsel*, *Financial Advisor*, *Engineering* and *Rate Consultant* services is expected to negotiate an agreement for services that is acceptable to the City. If an acceptable contract cannot be negotiated, the City may formally end negotiations and begin negotiating with the next highest qualified person or firm.

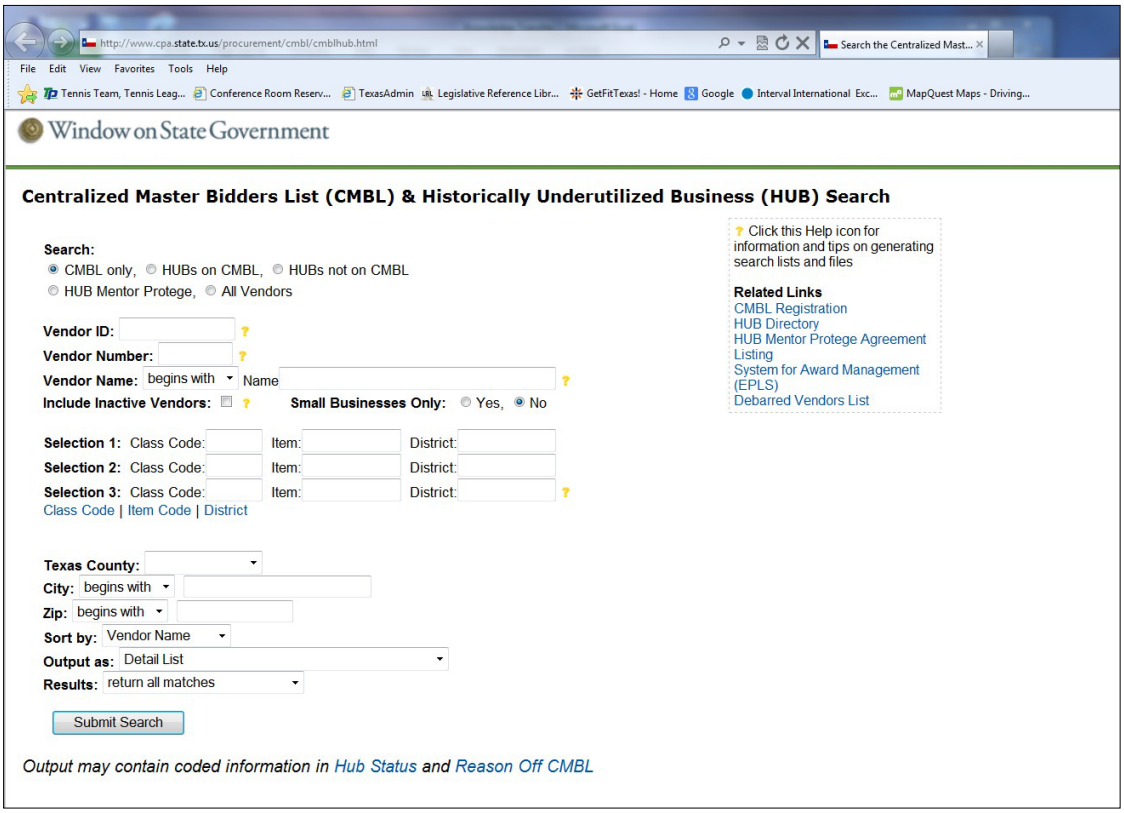
This contract is contingent upon release of funds from the Texas Water Development Board (TWDB). Any contract or contracts awarded under this Invitation for Bid (IFB) or Request for Qualifications (RFQ) are expected to be funded in part by a loan from the TWDB. Neither the State of Texas nor any of its departments, agencies, or employees are or will be a party to this IFB, RFQ, or any resulting contract. RFQ's are issued in accordance with Section 2254 of the Texas Government Code (Professional Services Act).

This contract is subject to the Environmental Protection Agency's (EPA) Disadvantaged Business Enterprise (DBE) Program, which includes EPA-approved fair share goals toward procurement of Minority and Women-owned Business Enterprise (M/WBE) firms. EPA rules require that applicants and prime contractors make a good faith effort to award a fair share of contracts, subcontracts, and procurements to M/WBEs through demonstration of the six affirmative steps. For more details of the DBE Program and the current, applicable fair share goals, please visit www.twdb.texas.gov/dbe.

The City of _____ is an affirmative action/equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, handicap or national origin. Small, minority, and women-owned business enterprises are encouraged to submit proposals.

APPENDIX C. HOW TO SEARCH THE CMBL AND HUB DIRECTORY

Visit the Texas Procurement and Support Services (TPASS) website at https://mycpa.cpa.state.tx.us/tpasscmblsearch/index.jsp.



NIGP Class-Item Codes contain 5-digits. To obtain the five-digit code, combine the three-digit class code with its corresponding two-digit item number.

Step 1: Go to the TPASS website.

Step 2: Select the type of business search: CMBL only, HUBs on CMBL, HUBs not on CMBL, HUB mentor protégé, or all vendors.

Step 3: Enter the respective commodity class, item and district codes (please see next page for related water and wastewater commodities) and click on Search.

Step 4: On the following page, select the information you would like to obtain from the database: contact information, address, business description, gender, ethnicity, and website.

Step 5: Search Results will appear with the requested information.

Step 6: Click on the Vendor ID or business name to pull up detailed vendor information to confirm HUB status (A = Active, N = Not HUB), contact information, and registered commodities.

Step 7: Gather physical or email contact information from the search results list.

Example National Institute of Government Purchasing (NIGP) Commodity Codes

Class	Item(s)	Description
890 (Water Supply, Groundwater, Sewage Treatment, and Related Equipment)	01 - 95	Equipment (various)
907 (Architectural and Engineering Services – Non-Professional)	42	Geotechnical – Soils
907 (Architectural and Engineering Services – Non-Professional)	75	Site Assessment and Site Field Observation
907 (Architectural and Engineering Services – Non-Professional)	83	Testing Services
912 (Construction Services, General)	16	Boring, Drilling, Testing, Soundings
912 (Construction Services, General)	23	Construction, General (Backfill Services, Digging, Ditching, Road Grading, Rock Stabilization)
912 (Construction Services, General)	40	Demolition Services
912 (Construction Services, General)	44	Excavation Services
912 (Construction Services, General)	75	Quality Control Testing Services
913 (Construction Services, Heavy – Including Maintenance and Repairs)	39	Construction, Pipe Culvert
913 (Construction Services, Heavy – Including Maintenance and Repairs)	40	Construction, Pipeline
913 (Construction Services, Heavy – Including Maintenance and Repairs)	45	Construction, Sewer and Storm Drain
913 (Construction Services, Heavy – Including Maintenance and Repairs)	47	Construction, Sidewalk and Driveway
913 (Construction Services, Heavy – Including Maintenance and Repairs)	56	Construction, Utility/Underground Projects
913 (Construction Services, Heavy – Including Maintenance and Repairs)	59	Construction and Upgrades, Wastewater Treatment Plant
913 (Construction Services, Heavy – Including Maintenance and Repairs)	60	Construction, Water System/Plants, Main and Service Line
913 (Construction Services, Heavy – Including Maintenance and Repairs)	63	Lime Slurry Removal Services
913 (Construction Services, Heavy – Including Maintenance and Repairs)	77	Maintenance and Repair, Pipe Culvert
913 (Construction Services, Heavy – Including Maintenance and Repairs)	78	Maintenance and Repair, Pipeline (Includes Removal and Relocation)
913 (Construction Services, Heavy – Including Maintenance and Repairs)	81	Maintenance and Repair, Sewer and Storm Drain (Including Removal)
913 (Construction Services, Heavy – Including Maintenance and Repairs)	82	Maintenance and Repair, Sidewalk and Driveway (Including Removal)
913 (Construction Services, Heavy – Including Maintenance and Repairs)	89	Maintenance and Repair, Utility/Underground Projects
913 (Construction Services, Heavy – Including Maintenance and Repairs)	91	Maintenance and Repair, Wastewater Treatment Plant
913 (Construction Services, Heavy – Including Maintenance and Repairs)	92	Maintenance and Repair, Water System, Main and Service Line
914 (Construction Services, Trade (New Construction))	27 -88	Construction Trades (various)
918 (Consulting Services)	16	Archeological Consulting
918 (Consulting Services)	41	Energy Conservation Consulting

Class	Item(s)	Description
918 (Consulting Services)	42	Engineering Consulting
918 (Consulting Services)	43	Environmental Consulting
918 (Consulting Services)	46	Feasibility Studies (Consulting)
918 (Consulting Services)	55	Geological Consulting and Study
918 (Consulting Services)	72	Lakes, Rivers, and Other Waterway Management Consulting Services
918 (Consulting Services)	74	Legal Consulting
918 (Consulting Services)	97	Utilities: Gas, Water, Electric Consulting
925 (Engineering Services, Professional)	17	Civil Engineering
925 (Engineering Services, Professional)	24	Desalination (Process and Facilities) Engineering
925 (Engineering Services, Professional)	28	Drainage Engineering
925 (Engineering Services, Professional)	33	Engineer Services, Professional
925 (Engineering Services, Professional)	34	Energy Management Engineering
925 (Engineering Services, Professional)	35	Environmental Engineering
925 (Engineering Services, Professional)	36	Engineering Services (Not Otherwise Classified)
925 (Engineering Services, Professional)	37	Facilities Design Services, Engineering
925 (Engineering Services, Professional)	44	General Construction: Management, Scheduling, Cost Estimation – Engineering
925 (Engineering Services, Professional)	45	Geological Engineering
925 (Engineering Services, Professional)	46	Geotechnical Engineering
925 (Engineering Services, Professional)	58	Irrigation; Drainage: Flood Control/Engineering
925 (Engineering Services, Professional)	61	Land Development and Planning/Engineering
925 (Engineering Services, Professional)	70	Municipal Engineering
925 (Engineering Services, Professional)	77	Pollution Control Engineering
925 (Engineering Services, Professional)	78	Power Generation, Transmission, Distribution - Engineering
925 (Engineering Services, Professional)	83	Sanitary Engineering
925 (Engineering Services, Professional)	87	Sewage Collection, Treatment, and Disposal Engineering
925 (Engineering Services, Professional)	96	Waste Water Treatment Engineering
925 (Engineering Services, Professional)	97	Water Supply, Treatment, and Distribution/Engineering
926 (Environmental and Ecological Services)	14	Air Pollution Control Services (Including Data Collection Research and Development, etc.)
926 (Environmental and Ecological Services)	23	Auditing Services, Environment
926 (Environmental and Ecological Services)	29	Contaminated Groundwater Services (Including Discharge Pipe Installation)
926 (Environmental and Ecological Services)	40	Ecological Services
926 (Environmental and Ecological Services)	41	Ecosystem Development, Management and Protection Services
926 (Environmental and Ecological Services)	42	Environmental Services (Not Otherwise Classified)
926 (Environmental and Ecological Services)	52	Impact Studies, Environmental
926 (Environmental and Ecological Services)	62	Noise Testing Services
926 (Environmental and Ecological Services)	70	Permitting Services, Environmental
926 (Environmental and Ecological Services)	72	Planning and Advisory Services, Environmental
926 (Environmental and Ecological Services)	83	Site Assessment, Environmental
926 (Environmental and Ecological Services)	85	Soil, Soil Vapor, and Groundwater Sampling and Analysis (Including Disposal)
926 (Environmental and Ecological Services)	88	Storm Water Discharge Testing Services
926 (Environmental and Ecological Services)	90	Subsurface Testing, Environmental

Class	Item(s)	Description
926 (Environmental and Ecological Services)	91	Tank Testing and Disposal Services, Storage (Including Underground Types)
926 (Environmental and Ecological Services)	94	Water Pollution Services
926 (Environmental and Ecological Services)	95	Water/Wastewater Conservation Services
926 (Environmental and Ecological Services)	96	Wetland Delineations (Including Assessments)
946 (Financial Services)	25	Banking Services
946 (Financial Services)	30	Cash/Securities and Bonding Services
946 (Financial Services)	38	Custom Brokerage Services (Including Stocks and Bonds)
946 (Financial Services)	48	Financial Advisor
946 (Financial Services)	49	Financial Services (Not Otherwise Classified)
946 (Financial Services)	56	Investment Management Services
946 (Financial Services)	60	Loan Administration
946 (Financial Services)	66	Monetary Systems (Including Analysis, Liquidity, Policy, etc.)
946 (Financial Services)	75	Securities and Commodities Market Services (Including Direct or Indirect Purchases, Sales and Transactions of Equities, Fixed Income, Options, and Derivatives on an Agency and Principal Basis)
946 (Financial Services)	85	Trusts, Estates and Agency Accounts
958 (Management Services)	05	Asset Management Services
958 (Management Services)	12	Bio-Solids Management Services
958 (Management Services)	26	Construction Management Services
958 (Management Services)	39	Financial Management Services
958 (Management Services)	77	Project Management Services
958 (Management Services)	85	Soil and Land Management Services (Including Testing, Protection, Preparation, Planning, etc.)
961 (Miscellaneous Services, No 1. (Not Otherwise Classified))	01	Archeological Services
961 (Miscellaneous Services, No 1. (Not Otherwise Classified))	32	Environmental Impact Studies
961 (Miscellaneous Services, No 1. (Not Otherwise Classified))	49	Legal Services, Attorney
961 (Miscellaneous Services, No 1. (Not Otherwise Classified))	85	Utility Services, Water
961 (Miscellaneous Services, No 1. (Not Otherwise Classified))	91	Water and Petroleum Pipeline Services
962 (Miscellaneous Services, No 2. (Not Otherwise Classified))	14	Blue Printing Services: Blue Prints, Blue Line, Large Engineering
962 (Miscellaneous Services, No 2. (Not Otherwise Classified))	39	Hauling Services
962 (Miscellaneous Services, No 2. (Not Otherwise Classified))	50	Leak Detection Services: Gas, Water, Chemical
962 (Miscellaneous Services, No 2. (Not Otherwise Classified))	52	Mapping Services (Including Cartography and Surveying Services (Not Aerial – See 902-33 and 905-10 for Aerial Mapping and Surveying Services)
962 (Miscellaneous Services, No 2. (Not Otherwise Classified))	92	Video Scanning of Sewers, Water Wells, etc.
962 (Miscellaneous Services, No 2. (Not Otherwise Classified))	94	Water Services, Bottled and Bulk Delivery (Tanker Services)

Class	Item(s)	Description
962 (Miscellaneous Services, No 2. (Not Otherwise Classified))	**96**	**Well Services (Including Oil, Gas, and Water): Drilling, Plugging, Consulting, Maintenance and Repair**
968 (Public Works and Related Services)	**18**	**Back Flow Preventer Testing Services**
968 (Public Works and Related Services)	**47**	**Inspection Services, Construction Type**
968 (Public Works and Related Services)	**63**	**Relocation and/or Removal Services for Utility Works**
968 (Public Works and Related Services)	**66**	**Right of Way Services (Including Title, Appraisal, Negotiation, Closing, Relocation, Condemnation, etc.)**
968 (Public Works and Related Services)	**73**	**Storm Drain Cleaning, Repair, and Sludge Removal Services**
968 (Public Works and Related Services)	**78**	**Tank Installation, Removal, Disposal, and Related Services (Including Septic and Underground Type)**
968 (Public Works and Related Services)	**91**	**Water Supply Analysis, Infrastructure Analysis, Water Quality Analysis, and Long-Term Planning**
968 (Public Works and Related Services)	**92**	**Water Supply Plant Operating and Monitoring System Services (Including Water Resources Development and Water Quality Management Services)**
968 (Public Works and Related Services)	**96**	**Water and Wastewater Treatment Services**

APPENDIX D. EXAMPLES OF DIRECT SOLICITATIONS

Example Call/Fax Log

For facsimiles, a copy of one of the faxed information should be provided with the completed TWDB-0216 form submission.

DBE Call Log
City of Yaleville Water Treatment Plant Project
DWSRF

Date: 10/15/16	Date:
Contact: Carl Sagan, Manager	Contact:
Company: Goldberg Instruments LLC	Company:
Phone No.: 313.555.7199	Phone No.:
Certification: Not a MBE/WBE	Certification:
Comments: Requested a quote on lab equipment for water quality testing. Emailed me ad used in The Yaleville Hollar classifieds.	Comments:
Date: 10/15/16	Date:
Contact: Neil deGrasse Tyson, Owner	Contact:
Company: N.E.G. Instruments, LLC	Company:
Phone No.: 313.555.1000	Phone No.:
Certification: MBE, Certified by City of Austin	Certification:
Comments: Requested a quote on lab equipment for water quality testing. Emailed me ad from The Yaleville Hollar classifieds.	Comments:
Date: 10/16/16	Date:
Contact: Michio Kaku, President	Contact:
Company: Bohm Page Instrument Company	Company:
Phone No.: 313.559.4322	Phone No.:
Certification: MBE, Certified by Texas D.O.T.	Certification:
Comments: Requested a quote on lab equipment for water quality testing.	Comments:
Date:	Date:
Contact:	Contact:
Company:	Company:
Phone No.:	Phone No.:
Certification:	Certification:
Comments:	Comments:
Date:	Date:
Contact:	Contact:
Company:	Company:
Phone No.:	Phone No.:
Certification:	Certification:
Comments:	Comments:

Example Email

From: Felix Stanton
Sent: Monday, November 28, 2016 4:32 PM
To: Rose Mendoza (rmendoza@shiplap.com)
Subject: Yaleville WTP RFT

Importance: High

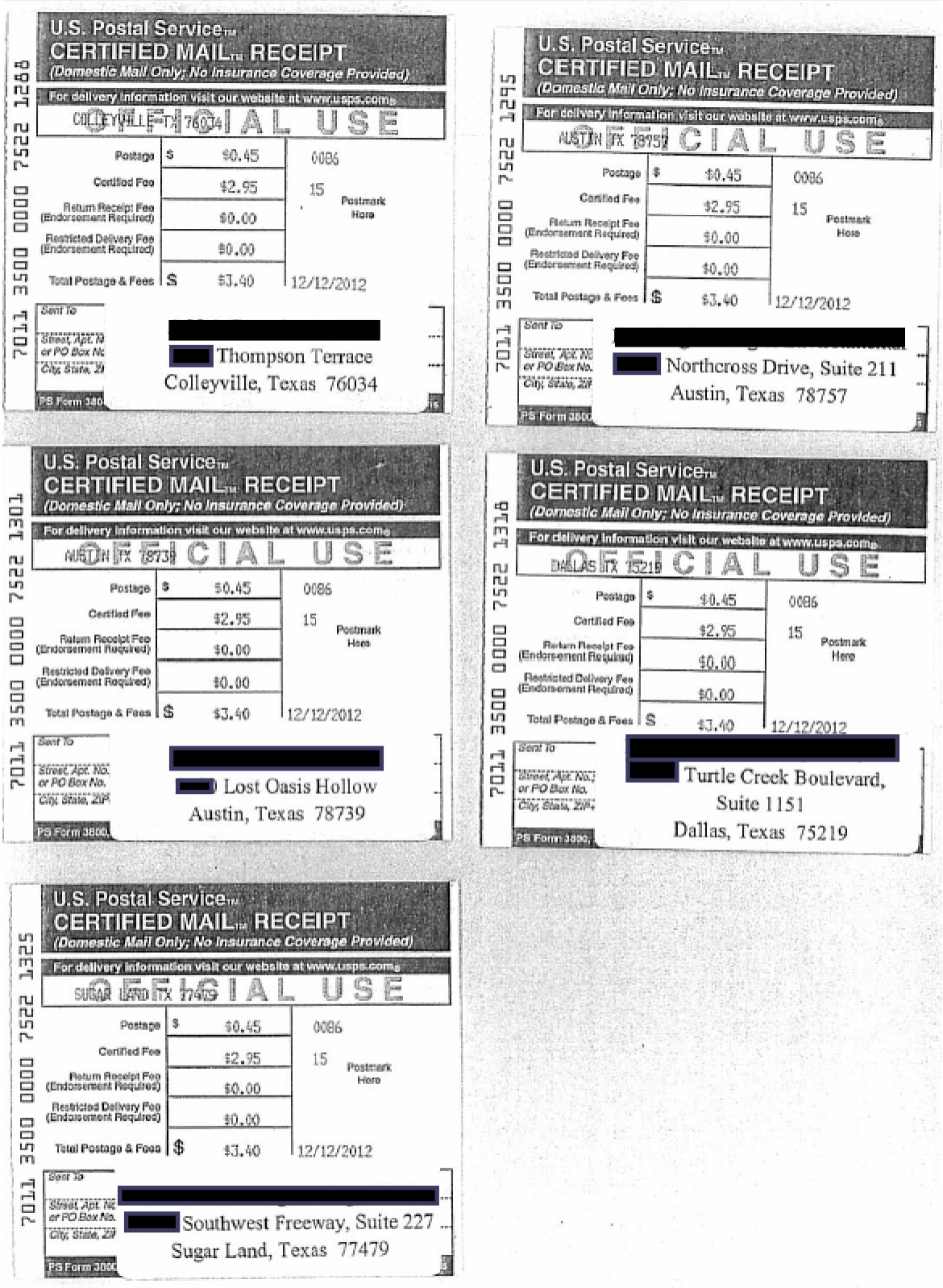
Attachments: Yaleville WTP Project RFT

Ms. Mendoza,

The City of Yaleville is seeking a response to this Request for Tender (RFT) for lab equipment for water quality testing.

Example US Mail

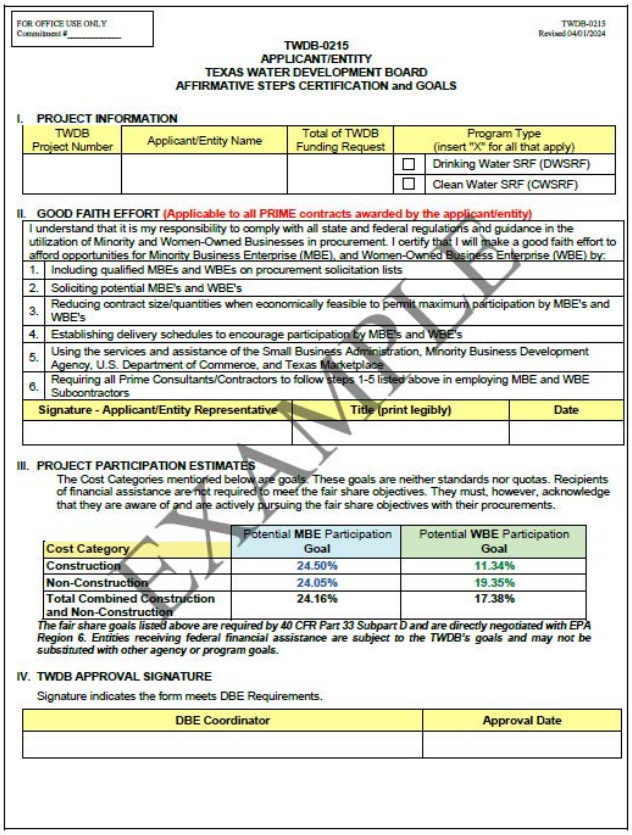
Along with the Certified mail receipts (shown below), a copy of one of the mailed letters should be provided with the completed TWDB-0216 form submission.



f

ATTACHMENT 1 – AFFIRMATIVE STEPS CERTIFICATION AND GOALS (TWDB-0215)

To download this document, view TWDB-0215 from the TWDB website



FOR OFFICE USE ONLY
Commitment #_____

TWDB-0215
Revised 04/01/2024

TWDB-0215
APPLICANT/ENTITY
TEXAS WATER DEVELOPMENT BOARD
AFFIRMATIVE STEPS CERTIFICATION and GOALS

I. PROJECT INFORMATION

TWDB Project Number	Applicant/Entity Name	Total of TWDB Funding Request	Program Type (insert "X" for all that apply)	
			☐	Drinking Water SRF (DWSRF)
			☐	Clean Water SRF (CWSRF)

II. GOOD FAITH EFFORT (Applicable to all PRIME contracts awarded by the applicant/entity)

I understand that it is my responsibility to comply with all state and federal regulations and guidance in the utilization of Minority and Women-Owned Businesses in procurement. I certify that I will make a good faith effort to afford opportunities for Minority Business Enterprise (MBE), and Women-Owned Business Enterprise (WBE) by:

1. Including qualified MBEs and WBEs on procurement solicitation lists
2. Soliciting potential MBE's and WBE's
3. Reducing contract size/quantities when economically feasible to permit maximum participation by MBE's and WBE's
4. Establishing delivery schedules to encourage participation by MBE's and WBE's
5. Using the services and assistance of the Small Business Administration, Minority Business Development Agency, U.S. Department of Commerce, and Texas Marketplace
6. Requiring all Prime Consultants/Contractors to follow steps 1-5 listed above in employing MBE and WBE Subcontractors

Signature - Applicant/Entity Representative	Title (print legibly)	Date

III. PROJECT PARTICIPATION ESTIMATES

The Cost Categories mentioned below are goals. These goals are neither standards nor quotas. Recipients of financial assistance are not required to meet the fair share objectives. They must, however, acknowledge that they are aware of and are actively pursuing the fair share objectives with their procurements.

Cost Category	Potential **MBE** Participation Goal	Potential **WBE** Participation Goal
Construction	**24.50%**	**11.34%**
Non-Construction	**24.05%**	**19.35%**
Total Combined Construction and Non-Construction	**24.16%**	**17.38%**

The fair share goals listed above are required by 40 CFR Part 33 Subpart D and are directly negotiated with EPA Region 6. Entities receiving federal financial assistance are subject to the TWDB's goals and may not be substituted with other agency or program goals.

IV. TWDB APPROVAL SIGNATURE

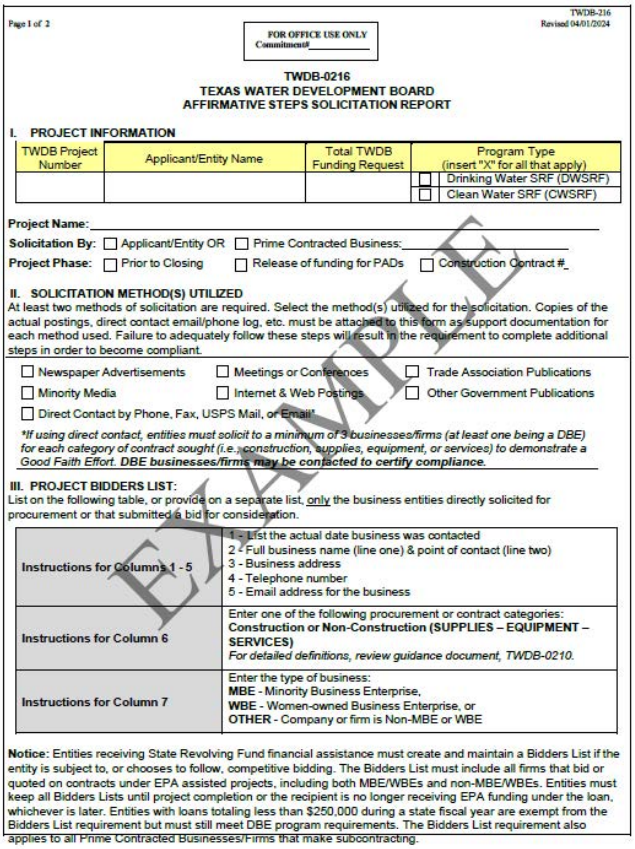
Signature indicates the form meets DBE Requirements.

DBE Coordinator	Approval Date

EXAMPLE

ATTACHMENT 2 – AFFIRMATIVE STEPS CERTIFICATION AND GOALS (TWDB-0216)

To download this document, view TWDB-0216 from the TWDB website.



Page 1 of 2

TWDB-216
Revised 04/01/2024

FOR OFFICE USE ONLY
Commitment#_____

TWDB-0216
TEXAS WATER DEVELOPMENT BOARD
AFFIRMATIVE STEPS SOLICITATION REPORT

I. PROJECT INFORMATION

TWDB Project Number	Applicant/Entity Name	Total TWDB Funding Request	Program Type (insert "X" for all that apply)
			☐ Drinking Water SRF (DWSRF) ☐ Clean Water SRF (CWSRF)

Project Name:_____

Solicitation By: ☐ Applicant/Entity OR ☐ Prime Contracted Business:_____

Project Phase: ☐ Prior to Closing ☐ Release of funding for PADs ☐ Construction Contract #_

II. SOLICITATION METHOD(S) UTILIZED

At least two methods of solicitation are required. Select the method(s) utilized for the solicitation. Copies of the actual postings, direct contact email/phone log, etc. must be attached to this form as support documentation for each method used. Failure to adequately follow these steps will result in the requirement to complete additional steps in order to become compliant.

☐ Newspaper Advertisements ☐ Meetings or Conferences ☐ Trade Association Publications
☐ Minority Media ☐ Internet & Web Postings ☐ Other Government Publications
☐ Direct Contact by Phone, Fax, USPS Mail, or Email*

If using direct contact, entities must solicit to a minimum of 3 businesses/firms (at least one being a DBE) for each category of contract sought (i.e., construction, supplies, equipment, or services) to demonstrate a Good Faith Effort. **DBE businesses/firms may be contacted to certify compliance.*

III. PROJECT BIDDERS LIST:

List on the following table, or provide on a separate list, only the business entities directly solicited for procurement or that submitted a bid for consideration.

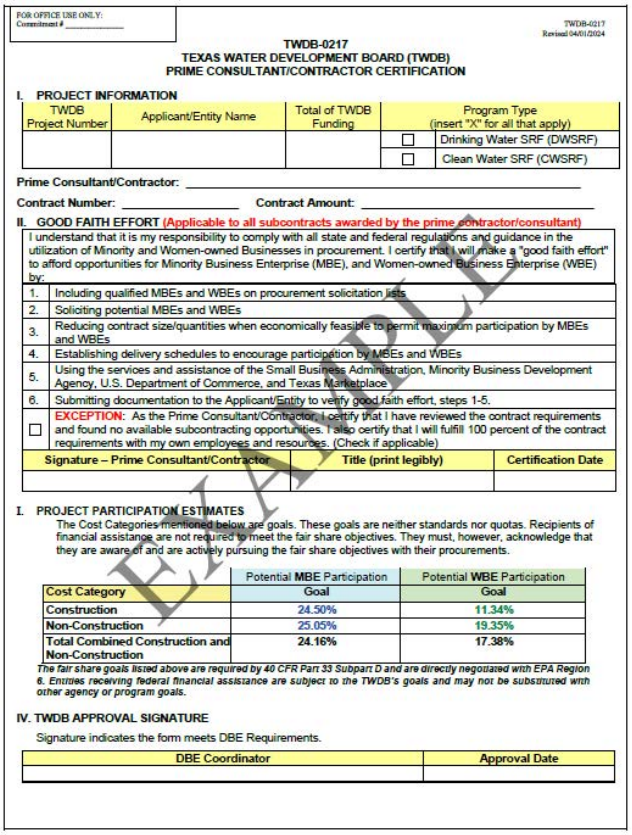
Instructions for Columns 1 - 5	1 - List the actual date business was contacted 2 - Full business name (line one) & point of contact (line two) 3 - Business address 4 - Telephone number 5 - Email address for the business
Instructions for Column 6	Enter one of the following procurement or contract categories: **Construction or Non-Construction (SUPPLIES – EQUIPMENT – SERVICES)** *For detailed definitions, review guidance document, TWDB-0210.*
Instructions for Column 7	Enter the type of business: **MBE** - Minority Business Enterprise, **WBE** - Women-owned Business Enterprise, or **OTHER** - Company or firm is Non-MBE or WBE

Notice: Entities receiving State Revolving Fund financial assistance must create and maintain a Bidders List if the entity is subject to, or chooses to follow, competitive bidding. The Bidders List must include all firms that bid or quoted on contracts under EPA assisted projects, including both MBE/WBEs and non-MBE/WBEs. Entities must keep all Bidders Lists until project completion or the recipient is no longer receiving EPA funding under the loan, whichever is later. Entities with loans totaling less than $250,000 during a state fiscal year are exempt from the Bidders List requirement but must still meet DBE program requirements. The Bidders List requirement also applies to all Prime Contracted Businesses/Firms that make subcontracting.

EXAMPLE

ATTACHMENT 2 – AFFIRMATIVE STEPS CERTIFICATION AND GOALS (TWDB-0217)

To download this document, view TWDB-0217 from the TWDB website.



FOR OFFICE USE ONLY:
Commitment # _____

TWDB-0217
Revised 04/01/2024

TWDB-0217
TEXAS WATER DEVELOPMENT BOARD (TWDB)
PRIME CONSULTANT/CONTRACTOR CERTIFICATION

I. PROJECT INFORMATION

TWDB Project Number	Applicant/Entity Name	Total of TWDB Funding	Program Type (insert "X" for all that apply)	
			☐	Drinking Water SRF (DWSRF)
			☐	Clean Water SRF (CWSRF)

Prime Consultant/Contractor: _____

Contract Number: _____ **Contract Amount:** _____

II. GOOD FAITH EFFORT (Applicable to all subcontracts awarded by the prime contractor/consultant)

I understand that it is my responsibility to comply with all state and federal regulations and guidance in the utilization of Minority and Women-owned Businesses in procurement. I certify that I will make a "good faith effort" to afford opportunities for Minority Business Enterprise (MBE), and Women-owned Business Enterprise (WBE) by:

1.	Including qualified MBEs and WBEs on procurement solicitation lists
2.	Soliciting potential MBEs and WBEs
3.	Reducing contract size/quantities when economically feasible to permit maximum participation by MBEs and WBEs
4.	Establishing delivery schedules to encourage participation by MBEs and WBEs
5.	Using the services and assistance of the Small Business Administration, Minority Business Development Agency, U.S. Department of Commerce, and Texas Marketplace
6.	Submitting documentation to the Applicant/Entity to verify good faith effort, steps 1-5.
☐	EXCEPTION: As the Prime Consultant/Contractor, I certify that I have reviewed the contract requirements and found no available subcontracting opportunities. I also certify that I will fulfill 100 percent of the contract requirements with my own employees and resources. (Check if applicable)

Signature – Prime Consultant/Contractor	Title (print legibly)	Certification Date

I. PROJECT PARTICIPATION ESTIMATES

The Cost Categories mentioned below are goals. These goals are neither standards nor quotas. Recipients of financial assistance are not required to meet the fair share objectives. They must, however, acknowledge that they are aware of and are actively pursuing the fair share objectives with their procurements.

Cost Category	Potential **MBE** Participation Goal	Potential **WBE** Participation Goal
Construction	24.50%	11.34%
Non-Construction	25.05%	19.35%
Total Combined Construction and Non-Construction	**24.16%**	**17.38%**

The fair share goals listed above are required by 40 CFR Part 33 Subpart D and are directly negotiated with EPA Region 6. Entities receiving federal financial assistance are subject to the TWDB's goals and may not be substituted with other agency or program goals.

IV. TWDB APPROVAL SIGNATURE

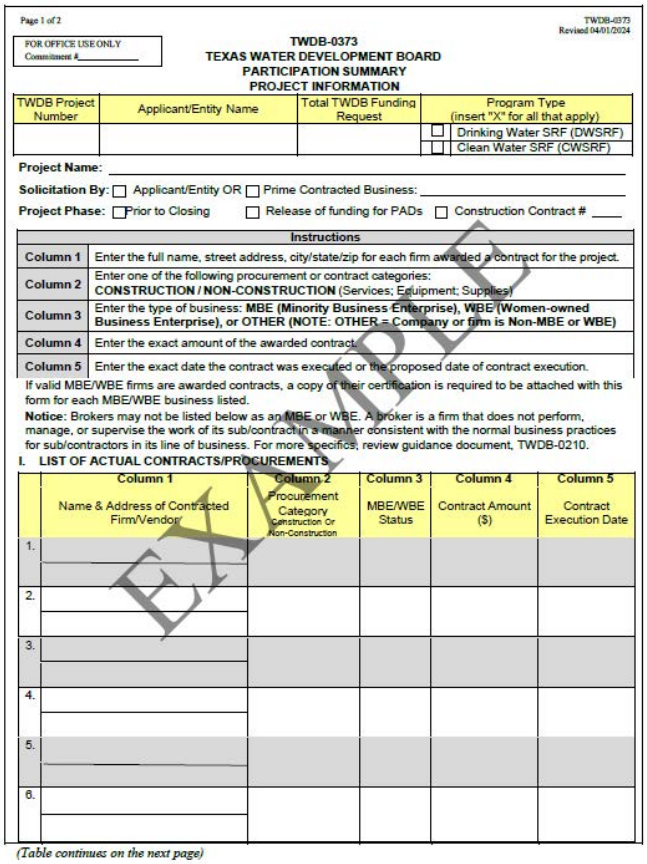
Signature indicates the form meets DBE Requirements.

DBE Coordinator	Approval Date

EXAMPLE

ATTACHMENT 4 – PARTICIPATION SUMMARY (TWDB-0373)

To download this document, view TWDB-0373 from the TWDB website.



Page 1 of 2

TWDB-0373
Revised 04/01/2024

FOR OFFICE USE ONLY
Commitment #_____

TWDB-0373
TEXAS WATER DEVELOPMENT BOARD
PARTICIPATION SUMMARY
PROJECT INFORMATION

TWDB Project Number	Applicant/Entity Name	Total TWDB Funding Request	Program Type (insert "X" for all that apply)
			☐ Drinking Water SRF (DWSRF)
			☐ Clean Water SRF (CWSRF)

Project Name: _____

Solicitation By: ☐ Applicant/Entity OR ☐ Prime Contracted Business: _____

Project Phase: ☐ Prior to Closing ☐ Release of funding for PADs ☐ Construction Contract # ____

Instructions	
Column 1	Enter the full name, street address, city/state/zip for each firm awarded a contract for the project.
Column 2	Enter one of the following procurement or contract categories: **CONSTRUCTION / NON-CONSTRUCTION** (Services; Equipment; Supplies)
Column 3	Enter the type of business: **MBE (Minority Business Enterprise), WBE (Women-owned Business Enterprise), or OTHER (NOTE: OTHER = Company or firm is Non-MBE or WBE)**
Column 4	Enter the exact amount of the awarded contract.
Column 5	Enter the exact date the contract was executed or the proposed date of contract execution.

If valid MBE/WBE firms are awarded contracts, a copy of their certification is required to be attached with this form for each MBE/WBE business listed.

Notice: Brokers may not be listed below as an MBE or WBE. A broker is a firm that does not perform, manage, or supervise the work of its sub/contract in a manner consistent with the normal business practices for sub/contractors in its line of business. For more specifics, review guidance document, TWDB-0210.

I. LIST OF ACTUAL CONTRACTS/PROCUREMENTS

	Column 1 Name & Address of Contracted Firm/Vendor	Column 2 Procurement Category Construction Or Non-Construction	Column 3 MBE/WBE Status	Column 4 Contract Amount ($)	Column 5 Contract Execution Date
1.					
2.					
3.					
4.					
5.					
6.					

EXAMPLE

(Table continues on the next page)

"General Decision Number: TX20250007 01/03/2025

Superseded General Decision Number: TX20240007

State: Texas

Construction Types: Heavy and Highway

Counties: Atascosa, Bandera, Bastrop, Bell, Bexar, Brazos, Burleson, Caldwell, Comal, Coryell, Guadalupe, Hays, Kendall, Lampasas, McLennan, Medina, Robertson, Travis, Williamson and Wilson Counties in Texas.

HEAVY (excluding tunnels and dams, not to be used for work on Sewage or Water Treatment Plants or Lift / Pump Stations in Bell, Coryell, McClennon and Williamson Counties) and HIGHWAY Construction Projects

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least $17.75 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least $13.30 per hour (or the applicable wage rate listed on this wage determination,

		if it is higher) for all hours spent performing on that contract in 2025.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number: 0
Publication Date: 01/03/2025

SUTX2011-006 08/03/2011

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER (Paving and Structures)	$ 12.56 **	
ELECTRICIAN	$ 26.35	
FORM BUILDER/FORM SETTER		
Paving & Curb	$ 12.94 **	
Structures	$ 12.87 **	
LABORER		
Asphalt Raker	$ 12.12 **	
Flagger	$ 9.45 **	
Laborer, Common	$ 10.50 **	
Laborer, Utility	$ 12.27 **	
Pipelayer	$ 12.79 **	
Work Zone Barricade Servicer	$ 11.85 **	
PAINTER (Structures)	$ 18.34	
POWER EQUIPMENT OPERATOR:		
Agricultural Tractor	$ 12.69 **	
Asphalt Distributor	$ 15.55 **	
Asphalt Paving Machine	$ 14.36 **	
Boom Truck	$ 18.36	

Broom or Sweeper.....$ 11.04 **
Concrete Pavement
Finishing Machine.....$ 15.48 **
Crane, Hydraulic 80 tons
or less.....$ 18.36
Crane, Lattice Boom 80
tons or less.....$ 15.87 **
Crane, Lattice Boom over
80 tons.....$ 19.38
Crawler Tractor.....$ 15.67 **
Directional Drilling
Locator.....$ 11.67 **
Directional Drilling
Operator.....$ 17.24 **
Excavator 50,000 lbs or
Less.....$ 12.88 **
Excavator over 50,000 lbs...$ 17.71 **
Foundation Drill, Truck
Mounted.....$ 16.93 **
Front End Loader, 3 CY or
Less.....$ 13.04 **
Front End Loader, Over 3 CY.$ 13.21 **
Loader/Backhoe.....$ 14.12 **
Mechanic.....$ 17.10 **
Milling Machine.....$ 14.18 **
Motor Grader, Fine Grade....$ 18.51
Motor Grader, Rough.....$ 14.63 **
Pavement Marking Machine....$ 19.17
Reclaimer/Pulverizer.....$ 12.88 **
Roller, Asphalt.....$ 12.78 **
Roller, Other.....$ 10.50 **
Scraper.....$ 12.27 **
Spreader Box.....$ 14.04 **
Trenching Machine, Heavy....$ 18.48

Servicer.....$ 14.51 **

Steel Worker
Reinforcing.....$ 14.00 **
Structural.....$ 19.29

TRAFFIC SIGNALIZATION:
Traffic Signal Installation
Traffic Signal/Light Pole
Worker.....$ 16.00 **

TRUCK DRIVER
Lowboy-Float.....$ 15.66 **
Off Road Hauler.....$ 11.88 **
Single Axle.....$ 11.79 **

Single or Tandem Axle Dump
Truck.....$ 11.68 **
Tandem Axle Tractor w/Semi
Trailer.....$ 12.81 **

WELDER.....$ 15.97 **

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

==========

** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 ($17.75) or 13658 ($13.30). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications

and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates

reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION"

DB-0156
Rev 6/24



Texas Water Development Board Guidance on Davis-Bacon Wage Rate Requirements for State Revolving Fund Programs

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Forms and Guidance:

The Texas Water Development Board (TWDB) forms and guidance documents noted in this instruction document may be accessed through the TWDB Financial Assistance website at:

http://www.twdb.texas.gov/financial/instructions/index.asp

Search by either the document number or name.

I. OVERVIEW

Davis-Bacon and Related Acts (Davis-Bacon) prevailing wage requirements apply to the construction, alteration, or repair of treatment works carried out, in whole or in part, with assistance made available by the Clean Water State Revolving Fund (CWSRF) and to any construction project carried out, in whole or in part, by assistance made available by the Drinking Water State Revolving Fund (DWSRF). The Lead Service Line Replacement (LSLR) Program and Emerging contaminants (EC) Programs are funded under DWSRF (LSLR and EC) and CWSRF (EC) and are subject to Davis-Bacon.

For the CWSRF and DWSRF programs, the Davis-Bacon prevailing wage requirements apply to contractors and subcontractors performing on federally funded or assisted contracts in excess of $2,000 for the construction, alteration, or repair, including painting and decorating, of public buildings or public works. This includes any treatment works project under the CWSRF or any construction project under the DWSRF.

Contractors and subcontractors must pay their laborers and mechanics employed under the contract no less than the locally prevailing wages and fringe benefits for corresponding work on similar projects in the area. The prevailing wage requirements apply to all State Revolving Fund (SRF) financial assistance projects, under which the Environmental Protection Agency assists through federal grants and loans, and loan guarantees.

For prime contracts in excess of $100,000, contractors and subcontractors must also, under the provisions of the Contract Work Hours and Safety Standards Act (CWHSSA), as amended, pay laborers and mechanics, including guards and watchmen, at least one and one-half times their regular rate of pay for all hours worked over 40 in a workweek. The overtime provisions of the Fair Labor Standards Act may also apply to Davis-Bacon covered contracts.

II. ROLES AND RESPONSIBILITIES

The following generally lists the roles and responsibilities. The responsibilities are not all-inclusive, but a general summary for each party.

TWDB Responsibilities include:

- Verify bidding documents include wage determinations.
- Verify prime contractor contacts contain wage determinations and labor provisions.
- Responsible for reviewing weekly contractor certified payroll submissions.
- Conduct onsite interviews with laborers and mechanics.
- Conduct spot-check reviews of payrolls and related records, as necessary.
- Report potential violations.
- Maintain full documentation for at least 3 years.

Applicant/Subrecipient Responsibilities include:

- Obtaining Department of Labor's wage determinations from the SAM.gov website.
- Verify bidding documents include wage determinations.
- Verify prime contractor contacts contain wage determinations and labor provisions.
- Responsible for reviewing weekly contractor certified payroll submissions.
- Conduct onsite interviews with laborers and mechanics.
- Conduct spot-check reviews of payrolls and related records, as necessary.
- Report potential violations.
- Maintain full documentation for at least 3 years.

Prime Contractor Role Responsibilities Include:

- Post Davis-Bacon Posters at the job site.
- Post prevailing wage rates at the job site.
- Provide confidential space for interviews.
- Provide records upon request.
- Prepares and submits certified payrolls for its own employees to contracting officer weekly.
- Submits certified payrolls for all subcontractor employees to contracting officer weekly.
- Reviews wage determination and works with contracting officer to request additional classifications when needed.
- Provides subcontractors with labor standards, guidance, and responsibilities concerning Davis-Bacon requirements.

Subcontractor Role Responsibilities Include:

- Prepares & submits certified payrolls each week for its own employees to prime contractor.
- Provides lower tier subcontractors with labor standards, guidance, and responsibilities concerning Davis-Bacon requirements.
- Reviews wage determination and works with prime contractor to obtain additional classifications if needed.
- Posts Davis-Bacon Poster and wage determinations on job site.
- Gives interviewer confidential access to employees onsite.

III.WAGE RATE REQUIREMENTS

The following wage rate requirements apply to entities receiving financial assistance under the CWSRF and DWSRF programs and will be incorporated into the associated legal instruments. **These entities, such as cites, districts, water supply corporations or private companies, are referred to as "subrecipients" within this document.**

Subrecipients must adhere to the requirements in Sections 1-5 in Appendix 1 (for governmental entities) or Appendix 2 (for non-governmental entities).

1. CWSRF

A subrecipient must comply with the requirements of section 513 of the Federal Water Pollution Control Act (33 U.S.C. 1372) in all procurement contracts and must require contractors to include compliance with section 513 of the Federal Water Pollution Control Act in all subcontracts and other lower tiered transactions. All contracts and subcontracts for the treatment works construction project must contain in full in any contract in excess of $2,000 the wage rate requirements contract clauses prescribed by TWDB. Section 513 requires compliance with 40 U.S. Code Sections 3141 to 3144, 3146, and 3147 covering wage rate requirements.

2. DWSRF

A subrecipient must comply with the requirements of section 1452(a)(5) of the Safe Drinking Water Act (42 U.S.C.300j-12(a)(5)) in all procurement contracts and must require contractors to include compliance with section 1452(a)(5) of the Safe Drinking Water Act in all subcontracts and other lower tiered transactions. All contracts and subcontracts for the construction project must contain in full in any contract in excess of $2,000 the wage rate requirements contract clauses prescribed by TWDB. Section 1452(a)(5) (42 U.S.C.300j-12(a)(5)) requires compliance with 42 U.S.C.300j-9(e) which in turn requires compliance with 40 U.S. Code Sections 3141 to 3144, 3146, and 3147 covering wage rate requirements.

IV. COMPLIANCE PROCEDURES

To be held in compliance and satisfy this federal requirement, entities will need to do the following:

1. Wage Determination

U.S. Department of Labor (DOL) wage determination must be included in the bidding and contract documents. DOL wage determinations may be obtained online at https://sam.gov/content/wage-determinations. Once it is determined that Davis-Bacon wage rates will apply to a construction contract, the subrecipient's contracting organization must state in the solicitation that Davis-Bacon prevailing wage rates are applicable and bid packages must include the current Davis-Bacon general wage determination for the area where construction will occur (generally this is the project county). While the solicitation remains open, the subrecipient must monitor https://sam.gov/content/wage-determinations on a weekly basis to ensure that the wage determination contained in the solicitation remains current. The subrecipients must amend the solicitation if the DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the subrecipient may request a finding from TWDB that there is not a reasonable time to notify interested contractors of the modification of the wage determination.

If a contract is not awarded within 90 days after bid opening, any revised general wage determination issued prior to award of the contractor is effective for that contract; unless the TWDB, at the request of the subrecipient, requests and obtains an extension of the

90-day period from DOL (29 CFR 1.6(c)(2)(ii)(D)).

Wage determinations must be updated after contract award when (1) the contract has a change order that adds substantial construction, alternation, and/or repair work not within the original scope and the contract time is extended, or (2) the contract is a "work order" type contract (a general commitment to construction as the need arises, but exact construction is not necessarily specified). For "work order" type contracts, the most recent revision(s) of any applicable wage determination(s) on each anniversary date of the contract's award (or each anniversary date of the beginning of construction when there is no award). (29 CFR 1.6(c)(2)(iii))

2. Insert wage rate requirements in full for all contracts and subcontracts in excess of $2,000

The subrecipient must ensure all prime contracts require the same full text in any subcontracts. Davis Bacon applies regardless of whether the terms and conditions are included or not in all contracts and subcontracts. **Include the following text in all contracts**, "By accepting this award, the EPA Subrecipient acknowledges and agrees to the terms and conditions provided in the DBRA requirements for contractors."

If the subrecipient is a governmental entity such as a city or district, it must insert in full the contract clauses found in Appendix 1, Section 3, Section 4 (if the contract exceeds $100,000), and Section 5.

If the subrecipient is a non-governmental entity such as a water supply corporation or a private company, it must insert in full the contract clauses found in Appendix 2, Section 3, Section 4 (if the contract exceeds $100,000), and Section 5.

3. Monthly Certification

A Monthly Davis Bacon Wage Rate Certificate of Compliance must be completed by the subrecipient of the SRF funding and submitted monthly to TWDB once construction has begun. **(Use Monthly Davis Bacon Wage Rate Certificate of Compliance Submittal by Owner (Subrecipient) DB-0154).**

4. Contractor Payroll Requirements

The contractor is required to pay the prevailing wage rates on a weekly basis to laborers and mechanics in accordance with the requirements of 29 CFR 5.5, which are incorporated into the actual construction contract. Contractors/subcontractors must furnish weekly a statement with respect to the wages paid to each employee during the preceding week. The signature by the contractor, subcontractor, or authorized officer/employee must be an original handwritten signature or a legally valid electronic signature (e.g., DocuSign). They may use the Department of Labor (DOL) Payroll Form WH-347 and weekly Statement of Compliance on the reverse, or their own payroll form with all of the same data elements as the DOL Payroll Form WH-347, and the TWDB's form, Statement of Compliance Certification by Contractor for SRF, DB-0155. The DOL Payroll Form WH-347 can be found under the forms section of this document or at the following link: www.dol.gov/agencies/whd/government-contracts/construction/payroll-certification. **(See DOL Payroll Form WH-347)**

5. Interviews

The subrecipient must periodically interview a sufficient number of employees entitled to the Davis-Bacon prevailing wages to verify that contractors or subcontractors are paying the appropriate wage rates. All interviews must be conducted in confidence. The subrecipient must use Standard Form 1445 (SF 1445) found at the following link: https://www.gsa.gov/system/files/SF_1445.pdf or equivalent documentation to memorialize the interviews. The subrecipient must establish and follow an interview schedule based on its assessment of the risks of noncompliance with Davis-Bacon posed by contractors or subcontractors and the duration of the contract or subcontract. Subrecipients must conduct more frequent interviews if the initial interviews or other information indicated that there is a risk that the contractor or subcontractor is not complying with Davis-Bacon. Subrecipients must immediately conduct interviews in response to an alleged violation of the prevailing wage requirements. (See Section 5 of Appendix 1 [governmental entities] and Appendix 2 [non-governmental entities]).

6. Payroll Records

Certified payroll must be delivered by the contractor or subcontractor within seven (7) days after the regular payment date of the payroll period. Certified payroll records are required to be retained by the subrecipient and contractor for three (3) years after completion of the construction project. The subrecipient must periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. (See Section 5 of Appendix 1 and 2).

The payroll records must include the following: the name, Social Security number, last known address, telephone number, and email address of each laborer and mechanic; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

7. Wage Rates Poster

Post the required Poster (WH-1321) and applicable wage rates at the construction site in a prominent and accessible place where it can be easily seen by the workers. The wage rate poster may be found at www.dol.gov/whd/programs/dbra/wh1321.htm. **(See Davis-Bacon Wage Rate Poster, WH-1321)**

8. Report Violations

Subrecipients must immediately report violations of the Davis-Bacon prevailing wage requirements to the EPA Davis-Bacon Coordinator listed in the assistance agreement and to the appropriate DOL Wage and Hour Division (WHD) Office listed at http://www.dol.gov/whd/america2.htm. (See Section 5 of Appendix 1 and Appendix 2.)

V. DAVIS-BACON GENERAL WAGE DETERMINATIONS

A "wage determination" is the listing of wage and fringe benefit for each classification of laborers and mechanics which the Administrator of the Wage and Hour Division of the U.S. DOL has determined to be prevailing in a given area for a particular type of construction.

In general, the project area is the county where the project will take place. For the type of construction, the Davis-Bacon Wage Determinations are classified by the nature of the construction projects performed, specifically listed as "schedules": residential, building, highway, and heavy construction. A brief outline of the definitions for each schedule is listed below.

- **Construction Type: Residential determination**
  This determination includes the construction, alteration or repair of single-family houses, apartment buildings of no more than four stories in height. This includes all incidental items such as site work, parking areas, utilities, streets, and sidewalks.

- **Construction Type: Building determination**
  This determination includes construction of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment or supplies; all construction of such structures; the installation of utilities and of equipment, both above and below grade levels; as well as incidental grading, utilities and paving. Such structures need not be "habitable" to be building construction. Also, the installation of heavy machinery and/or equipment does not generally change the project's character as a building.

- **Construction Type: Highway determination**
  This determination includes construction, alteration or repair of roads, streets, highways, runways, taxiways, alleys, trails, paths, parking areas, and other similar projects not incidental to building or heavy construction.

- **Construction Type: Heavy determination**
  This determination includes those projects that are not properly classified as either "building," "highway," or "residential." Unlike these classifications, heavy construction is not a homogenous classification. Because of this catch-all nature, projects within the heavy classification may sometimes be distinguished on the basis of their particular project characteristics, and separate schedules may be issued for dredging projects, water and sewer line projects, dams, major bridges, and flood control projects.

Entities should review their contractor’s wage decisions and confirm they provide an adequate classification of the labor required for the specific construction contract. Most CWSRF and DWSRF projects will fall under the “Heavy” construction type, but entities should ask their consulting engineers if unsure.

Some contracts or projects may require more than one general schedule to be included depending on the nature and extent of the work (i.e. a building is constructed in a water

treatment facility). This is described in more detail in DOL's All Agency Memorandum 130 with Addendum 131. See the DOL's website http://www.dol.gov/whd/programs/dbra/memorand.htm. In such cases, the contracting agency must incorporate the applicable wage determination for each type of construction involved that is anticipated to be substantial. The contracting agency is responsible for designating the specific work for which each incorporated wage determination applies (29 CFR 1.6(b)(1)). The contracting agency should designate the work or part thereof applies per Federal Acquisition Regulations (FAR) 22.404-2 thru 404-3 (www.acquisition.gov/far/22.404-2). Should overlaps occur in the wage classification schedules for the contract(s), the Owner may consider adopting the higher rate classification.

https://www.acquisition.gov/browse/index/far

In all cases, the entity is responsible to ensure an adequate classification is provided for compliance with the law. Where Contractors alert the Owner that the classification is inadequate, the Owner should work with the Contractor and the DOL to address any valid concerns. See the Contact Information in Section VI, herein, for additional resources.

VI. REQUESTING ADDITIONAL WAGE DETERMINATION (USING SF-1444)

If the wage determinations found at https://sam.gov/content/wage-determinations are missing a wage rate needed for the specific job classification, construction type, and/or project location, it will be necessary to seek a conformance from U.S. Department of Labor (DOL). A conformance is a customized wage rate generally negotiated by the contractor and his or her employee(s) and approved by DOL and is only valid for the particular project for which it is granted.

Contractors are responsible for (1) determining the appropriate staffing necessary to perform the contract work, (2) complying with minimum wage and benefits requirements for each classification performing work; and (3) initiating the request for approval for additional classification along with the proposed wage and benefit rates.

The awarded Contractor initiates the request to prepare the form SF 1444. Ideally, the conformance process should be initiated after the bid is awarded, but before work has started on the project. Once the bid is awarded, the subrecipient should ask the winning bidder to review the wage determination to assess whether any job classifications necessary for the completion of the project are missing from the DOL's wage determination for the project's area.

The prime contractor for the SRF construction contract initiates the conformance request by completing a Standard Form (SF) 1444 – Request for Authorization of Additional Classification and Rate.

See Appendix 3 for instructions on completing SF 1444 – Request for Authorization of Additional Classification and Rate.

VII. CONTACT INFORMATION

All questions regarding Davis-Bacon guidance can be directed to:

- U.S. Department of Labor Wage and Hour Division
  1-866-4USWAGE (1-866-487-9243), TTY: 1-877-889-5627,
  Monday-Friday 8 a.m. to 8 p.m. Eastern Time.

If you require further information about Davis-Bacon and how to apply it to your project, please contact the Texas Water Development Board Project Team Manager for your region.

Additional Resources:

1. For Wage Determinations applicable to construction projects in Texas:
   https://sam.gov/content/wage-determinations

2. For more information on prevailing wage and wage determinations visit the Prevailing Wage Resources: www.dol.gov/agencies/whd/government-contracts/construction/seminars/resources

3. The United States Department of Labor website:
   www.dol.gov/whd/govcontracts/dbra.htm

   The webpage provides an overview, compliance assistance material, poster information, recordkeeping, DOL contact information and more.

4. Davis-Bacon and Related Acts (DBRA) Frequently Asked questions
   More in-depth information can be accessed at the Department of Labor (DOL) website:
   www.dol.gov/whd/programs/dbra/faqs.htm

5. All Agency Memorandum No. 244 Final Rule: Updating the Davis-Bacon and Related Acts Regulations at DOL website:
   www.dol.gov/sites/dolgov/files/WHD/AAM/AAM244.pdf

   Memorandum No. 244 provides an overview of the most significant provisions of the Department's recently published final rule, Updating the Davis-Bacon and Related Acts Regulations, as well as an explanation of when the various provisions became effective.

   All Agency Memoranda are available on the DOL website:
   www.dol.gov/agencies/whd/government-contracts/construction/all-agency-memorandum.

6. Updating the Davis-Bacon and Related Acts Regulations on the DOL website:
   www.dol.gov/agencies/whd/government-contracts/construction/rulemaking-davis-bacon

   This webpage provides additional information on the Final Rule for the Davis-

Bacon and Related Acts, that took effect on October 23, 2023. It includes a webinar, comparison chart, and text of the final rule.

7. Davis-Bacon and Related Acts for EPA grant awards including links to EPA requirements for subrecipients and contract provisions for Contractors and Subcontractors on EPA website: www.epa.gov/grants/davis-bacon-and-related-acts-dbra

1. Contact Information – Department of Labor Texas Offices

Dallas District Office US Dept. of Labor Wage & Hour Division 575 S. Griffin, Ste. 707 Dallas, TX 75202	Phone: (817) 861-2150 1-866-4-USWAGE (1-866-487-9243)	Jesus Valdez District Director
Houston District Office US Dept. of Labor Wage & Hour Division 8701 S. Gessner Drive, Suite 1164 Houston, TX 77074-2944	Phone: (713) 339-5500 1-866-4-USWAGE (1-866-487-9243)	Robin Mallet District Director
McAllen District Office US Dept. of Labor Wage & Hour Division 1101 E. Hackberry Ave., Suite 400 McAllen, TX 78501	Phone: (956) 682-4631 1-866-4-USWAGE (1-866-487-9243)	Cynthia Cantu-Flores District Director
Corpus Christi Area Office US Dept. of Labor Wage & Hour Division Wilson Plaza 606 N. Carancahua, Suite 618 Corpus Christi, Texas 78401	Phone: (361) 888-3152 1-866-4-USWAGE (1-866-487-9243)	Vacant District Director
San Antonio District Office US Dept. of Labor Wage & Hour Division Northchase 1 Office Building 10127 Morocco, Suite 140 San Antonio, TX 78216	Phone: (210) 308-4515 1-866-4-USWAGE (1-866-487-9243)	Cynthia Ramos District Director
Austin District Office US Dept. of Labor Wage & Hour Division Thornberry Federal Building 903 San Jacinto Blvd., Suite 1600 Austin, TX 78701	Phone: (512) 916-5638 1-866-4-USWAGE (1-866-487-9243)	Nicole Sellers District Director
El Paso Area Office US Dept. of Labor Wage & Hour Division 700 E. San Antonio St., Rm. B-400 El Paso, TX 79901	Phone: 915-534-6426 1-866-4-USWAGE (1-866-487-9243)	Jacobo Valenzuela District Director
Lubbock Area Office US Dept. of Labor Wage & Hour Division 71205 Texas Ave., Room 607 Lubbock, TX 79401	Phone: 806-472-6450 1-866-4-USWAGE (1-866-487-9243)	Ryan Martin District Director

Reference: www.dol.gov/agencies/whd/contact/local-offices#tx

VIII. FORMS

The following forms are available on the TWDB Program Guidance & Manuals website at www.twdb.texas.gov/financial/instructions/index.asp

- Monthly Davis-Bacon Wage Rate Certificate of Compliance Submittal by Owner (Subrecipient), DB-0154
- Statement of Compliance Certification by Contractor for State Revolving Funds Federal Davis-Bacon Requirements, DB-0155

The following forms are available on the Department of Labor website at www.dol.gov/agencies/whd/government-contracts/construction/forms

- Standard Form 1445, Labor Standards Interview
- U.S. Department of Labor Payroll form WH-347

The following poster is available on the Department of Labor website at www.dol.gov/whd/programs/dbra/wh1321.htm

- Davis-Bacon Poster, WH-1321

IX. Appendix 1 – Applies to Governmental Entities (such as Cities and Districts)

1. Applicability of the Davis-Bacon and Related Acts (DBRA) Prevailing Wage Requirements

DBRA prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by the Clean Water State Revolving Fund and to any construction project carried out in whole or in part by assistance made available by the Drinking Water State Revolving Fund. If a subrecipient encounters a unique situation at a site that presents uncertainties regarding DBRA applicability, the subrecipient must discuss the situation with the TWDB before authorizing work on that site.

2. Obtaining Wage Determinations

(a) Subrecipients shall obtain the wage determination for the locality in which a covered activity subject to DBRA will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DBRA. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that Subcontractors follow the wage determination incorporated into the prime contract.

(i) While the solicitation remains open, the subrecipient shall monitor https://sam.gov/content/wage-determinations weekly to ensure that the wage determination contained in the solicitation remains current. The recipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the subrecipients may request a finding from the TWDB that there is not a reasonable time to notify interested contractors of the modification of the wage determination. In the request, the subrecipient shall include documentation of the bid date and time and the DOL wage modification date. The TWDB will review the documentation and provide a report of its findings to the subrecipient. The subrecipient shall keep the report in the project contract file.

(ii) If the subrecipient does not award the contract within 90 days of bid opening, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the TWDB, at the request of the subrecipient, obtains an extension of the 90-day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The subrecipient shall monitor https://sam.gov/content/wage-determinations on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.

(b) If the subrecipient carries out activity subject to DBRA by issuing a task order, work assignment or similar instrument to an existing contractor (ordering instrument) rather

than by publishing a solicitation, the subrecipient shall insert the appropriate DOL wage determination from https://sam.gov/content/wage-determinations into the ordering instrument. For “work order” type contracts, the most recent revision(s) of any applicable wage determination(s) on each anniversary date of the contract’s award (or each anniversary date of the beginning of construction when there is no award). (29 CFR 1.6(c)(2)(iii))

(c) Subrecipients shall review all subcontracts subject to DBRA entered into by prime contractors to verify that the prime contractor has required its subcontractors to include the applicable wage determinations.

(d) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to a subrecipient’s contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the subrecipient has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the subrecipient shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL’s wage determination retroactive to the beginning of the contract or ordering instrument by change order. The subrecipient’s contractor must be compensated for any increases in wages resulting from the use of DOL’s revised wage determination.

3. Contract and Subcontract Provisions

The subrecipient shall insert in full in any contract to which Davis-Bacon and Related Acts apply the following clauses. Reference to www.epa.gov/grants/contract-provisions-davis-bacon-and-related-acts and 29 CRF 5.5.

The Contractor acknowledges that by entering into this contract with a contracting agency, funded by an EPA Assistance agreement (grant), the Contractor agrees to comply with the following terms and conditions in accordance with 29 CFR 5.5, if this contract is for activities covered under Davis-Bacon and Related Acts (DBRA) and exceeds (or will exceed) $2,000. Definitions for many of the terms used below are provided in 29 CFR 5.2.

(1) Minimum wages.

(i) Wage rates and fringe benefits

All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

As provided in paragraphs (d) and (e) of this section, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(v) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4).

Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage

determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(iii) of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii) Frequently recurring classifications

(A) In addition to wage and fringe benefit rates that have bene determined to be prevailing under the procedures set forth in 29 CFR Part 1, a wage determination may contain, pursuant to 29 CFR 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to 29 CFR 5.5(a)(1)(iii), provided that:

(1) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(2) The classification is used in the area by the construction industry; and

(3) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(B) The Administrator will establish wage rates for such classifications in accordance with 29 CFR 5.5(a)(1)(iii)(A)(3) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

(iii) Conformance

(A) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is used in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(C) If the contractor and the laborers and mechanics to be employed in the

classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to the TWDB. The TWDB will transmit the request to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the TWDB or will notify the TWDB within the 30-day period that additional time is necessary.

(D) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the TWDB will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(E) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs (a)(1)(iii)(C) and (D) of this section. The contractor must furnish a written copy of such determination to each affected worker, or it must be posted as part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph (a)(1)(iii)(C) or (D) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iv) Fringe benefits not expressed as an hourly rate

Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(v) Unfunded plans

If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in 29 CFR 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(vi) Interest

In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

(2) Withholding.

(i) Withholding requirements

The EPA, grant recipient, subrecipient at any tier, and/or contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in paragraph (a) of this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in 29 CFR 5.2).

The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work (or otherwise working in construction or development of the project under a development statute) all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in 29 CFR 5.5(a)(3)(iv) of this section, the **EPA, grant recipient, subrecipient at any tier, and/or contracting agency** may on its own initiative and after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(ii) Priority to withheld funds

The Department has priority to funds withheld or to be withheld in accordance with 29 CFR 5.5(a)(2)(i) or 29 CFR 5.5(b)(3)(i) of this section, or both, over claims to those funds by:

(A) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(B) A contracting agency for its reprocurement costs;

(C) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(D) A contractor's assignee(s);

(E) A contractor's successor(s); or

(F) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

(3) Records and certified payrolls

(i) Basic record requirements

(A) Length of record retention

All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least three (3) years after all the work on the prime contract is completed.

(B) Information required

Such records must contain the name; Social Security number; last known address, telephone number, and email of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(C) Additional records relating to fringe benefits

Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(v) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(D) Additional records relating to apprenticeship.

Contractors with apprentices working under approved programs must maintain written evidence of the apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

(ii) Certified payroll requirements

(A) Frequency and method of submission

The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts- covered work is performed, certified payrolls to the **contracting agency** if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the certified payrolls to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to the **contracting agency.** The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least three (3) years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(B) Information required

The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i)(B), except that full Social Security numbers and las known addresses, telephone numbers, and email addresses must not be included on the weekly transmittals. Instead the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the sponsoring government agency (or the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records).

(C) Statement of Compliance

Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(1) That the certified payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(iii), and such information and

records are correct and complete;

(2) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(D) Use of Optional Form WH-347

The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by 29 CFR 5.5(a)(3)(ii)(C).

(E) Signature

The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(F) Falsification

The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.

(G) Length of certified payroll retention

The contractor or subcontractor must preserve all certified payrolls during the course of the work for a period of three (3) years after all the work on the prime contract is completed.

(iii) Contracts, subcontracts, and related documents

The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of three (3) years after all the work on the prime contract is completed.

(iv) Required disclosures and access

(A) Required record disclosure and access to workers

The contractor or subcontractor must make the records required under

paragraph (a)(3)(i) through (iii) of this section, and any other documents that the **EPA, recipient, or subrecipient at any tier, and/or contracting agency**, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable 29 CFR 5.1, available for inspection, copying, or transcription by authorized representatives of the **TWDB, EPA, recipient, or subrecipient at any tier, and/or contracting agency,** or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(B) Sanctions for non-compliance with records and worker access requirements

If the contractor or subcontractor fails to submit the required records or to make them available, or refuse to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to 29 CFR 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(C) Required information disclosures

Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the Environmental Protection Agency if the agency is a party to the contract, or to the Wage and Hour Division of the Department of Labor. If the Federal agency is not such a party to the contract, the contractor, subcontractor, or both, must, upon request, provide the full Social Security number and last known address, telephone number, and email address of each covered worker to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to the EPA, recipient, or subrecipient at any tier, contracting agency, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

(4) Apprentices and Equal Employment Opportunity

(i) Apprentices

(A) Rate of pay

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(B) Fringe benefits

Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(C) Apprenticeship ratio

The allowable ratio of apprentices to journey workers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to 29 CFR 5.5(a)(4)(i)(D). Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in 29 CFR 5.5(a)(4)(i)(A), must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(D) Reciprocity of ratios and wage rates

Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journey worker’s hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

(ii) Equal employment opportunity

The use of apprentices and journey workers under this part must be in conformity

with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) Is reserved.

(6) Subcontracts

The contractor or subcontractor must insert in any subcontracts the clauses contained in paragraphs (a)(1) through (11) of this section or a link to the **DBRA Requirements for Contractors and Subcontractors Under EPA Grants** document on EPA's Contract Provisions for Davis-Bacon and Related Acts webpage, along with the applicable wage determination(s) and such other clauses or contract modifications as the Environmental Protection Agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the Prime Contractor and any Subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier Subcontractors, and may be subject to debarment, as appropriate.

(7) – (9) are reserved.

(10) Certificate of Eligibility

(i) By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

(iii) The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

(11) Anti-Retaliation

It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

(i) Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

(ii) Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

(iii) Cooperating in any investigation or other compliance action, or testifying in any

proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or (iv) Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

4. Contract Provisions for Contracts in Excess of $100,000

For contracts over $100,000, additional Terms and Conditions apply. The DBRA Requirements for Contracts in Excess of $100,000 Under EPA Grants document is available on EPA's Contract Provisions for Davis-Bacon and Related Acts webpage provides the additional requirements provided under 29 CFR 5.5. This information is included as follows:

(b) Contract Work Hours and Safety Standards Act. The subrecipient shall insert the following clauses set forth in paragraphs (b)(1) through (5) of this section in full in any contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a), above or 29 CFR 4.6. As used in this paragraph, the terms "laborers and mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which they are employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in 29 CFR 5.5(b)(1) the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchpersons and guards, employed in violation of the clause set forth in 29 CFR 5.5(b)(1), in the sum of $32 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in 29 CFR 5.5(b)(1).

(3) Withholding for unpaid wages and liquidated damages.

(i) Withholding process. The subrecipient may, upon its own action, or must upon the request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this 29 CFR 5.5(b) on this contract, any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, that is held by the same prime contractor (as defined in 29 CFR 5.2). The necessary funds may be

withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

(ii) Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with 29 CFR 5.5(a)(2)(i) or 29 CFR 5.5(b)(3)(i) of this section, or both, over claims to those funds by:

(A) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(B) A contracting agency for its reprocurement costs;

(C) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(D) A contractor's assignee(s);

(E) A contractor's successor(s); or

(F) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

(4) Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in 29 CFR 5.5(b)(1) through (5) and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in 29 CFR 5.5(b)(1) through (5). In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

(5) Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

(i) Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

(ii) Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

(iii) Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

(iv) Informing any other person about their rights under CWHSSA or this part.

(c) CWHSSA required records clause. In addition to the clauses contained in 29 CFR 5.5(b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other laws referenced by 29 CFR 5.1, the Subrecipient must insert a clause requiring that the contractor or subcontractor must maintain payrolls and basic records during the course of the work and must preserve them for a period of three (3) years after all the work on the prime contract is completed for all laborers and mechanics, including guards and watchpersons, working on the contract. Such records must contain the name; last known address, telephone number, and email address; and social security number of each such worker; each workers' correct classification(s) of work actually performed, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Subrecipient must insert in any such contract a clause providing that the records to be maintained under this paragraph must be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the EPA, TWDB, and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

(d) Incorporation of contract clauses and wage determinations by reference. Although agencies are required to insert the contract clauses set forth in this section, along with appropriate wage determinations, in full into covered contracts, and contractors and subcontractors are required to insert them in any lower-tier subcontracts, the incorporation by reference of the required contract clauses and appropriate wage determinations will be given the same force and effect as if they were inserted in full text.

(e) Incorporation by operation of law. The contract clauses set forth in this section (or their equivalent under the Federal Acquisition Regulation), along with the correct wage determinations, will be considered to be a part of every prime contract required by the applicable statutes referenced by 29 CFR 5.1 to include such clauses, and will be effective by operation of law, whether or not they are included or incorporated by reference into such contract, unless the Administrator grants a variance, tolerance, or exemption from the application of this paragraph. Where the clauses and applicable wage determinations are effective by operation of law under this paragraph, the prime contractor must be compensated for any resulting increase in wages in accordance with applicable law.

5. Compliance Verification and Enforcement

(a) Agency responsibilities.

(1)(i) The Federal agency has the initial responsibility to ascertain whether the clauses required by 29 CFR 5.5 and the appropriate wage determination(s) have been incorporated into the contracts subject to the labor standards provisions of the laws referenced by 29 CFR 5.1. Additionally, a Federal agency that provides Federal financial assistance that is subject to the labor standards provisions of the Act must promulgate the necessary regulations or procedures to require the recipient or sub-recipient of the Federal assistance to insert in its contracts the provisions of 29 CFR 5.5. No payment, advance, grant, loan, or guarantee of funds will be approved by the Federal agency unless it ensures that the clauses required by 29 CFR 5.5 and the appropriate wage determination(s) are incorporated into such contracts. Furthermore, no payment, advance, grant, loan, or guarantee of funds will be approved by the Federal agency after the beginning of construction unless there is on file with the Federal agency a certification by the contractor that the contractor and its subcontractors have complied with the provisions of 29 CFR 5.5 or unless there is on file with the Federal agency a certification by the contractor that there is a substantial dispute with respect to the required provisions.

(ii) If a contract subject to the labor standards provisions of the applicable statutes referenced by 29 CFR 5.1 is entered into without the incorporation of the clauses required by 29 CFR 5.5, the agency must, upon the request of the Administrator or upon its own initiative, either terminate and resolicit the contract with the required contract clauses, or incorporate the required clauses into the contract (or ensure they are so incorporated) through supplemental agreement, change order, or any and all authority that may be needed. Where an agency has not entered directly into such a contract but instead has provided Federal financial assistance, the agency must ensure that the recipient or sub-recipient of the Federal assistance similarly incorporates the clauses required into its contracts. The method of incorporation of the correct wage determination, and adjustment in contract price, where appropriate, should be in accordance with applicable law. Additionally, the following requirements apply:

(A) Unless the Administrator directs otherwise, the incorporation of the clauses required by 29 CFR 5.5 must be retroactive to the date of contract award or start of construction if there is no award.

(B) If this incorporation occurs as the result of a request from the Administrator, the incorporation must take place within 30 days of the date of that request, unless the agency has obtained an extension from the Administrator.

(C) The contractor must be compensated for any increases in wages resulting from incorporation of a missing contract clause.

(D) If the recipient refuses to incorporate the clauses as required, the agency must make no further payment, advance, grant, loan, or guarantee of funds in connection with the contract until the recipient incorporates the required clauses into its contract, and must promptly refer the dispute to the Administrator for further proceedings under 29 CFR 5.13.

(E) Before terminating a contract pursuant to this section, the agency must withhold or cross-withhold sufficient funds to remedy any back wage liability resulting from the failure to incorporate the correct wage determination or otherwise identify and obligate sufficient funds through a termination settlement agreement, bond, or other satisfactory mechanism.

(F) Notwithstanding the requirement to incorporate the contract clauses and correct wage determination within 30 days, the contract clauses and correct wage determination will be effective by operation of law, retroactive to the beginning of construction, in accordance with 29 CFR 5.5(e).

(2) (i) Certified payrolls submitted pursuant to 29 CFR 5.5(a)(3)(ii) must be preserved by the Federal agency for a period of three (3) years after all the work on the prime contract is completed, and must be produced at the request of the Department of Labor at any time during the 3-year period, regardless of whether the Department of Labor has initiated an investigation or other compliance action.

(ii) In situations where the Federal agency does not itself maintain certified payrolls required to be submitted pursuant to 29 CFR 5.5(a)(3)(ii), upon the request of the Department of Labor the Federal agency must ensure that such certified payrolls are provided to the Department of Labor. Such certified payrolls may be provided by the applicant, sponsor, owner, or other entity, as the case may be, directly to the Department of Labor, or to the Federal agency which, in turn, must provide those records to the Department of Labor.

(3) The Federal agency will cause such investigations to be made as may be necessary to assure compliance with the labor standards clauses required by 29 CFR 5.5 and the applicable statutes referenced in 29 CFR 5.1. Investigations will be made of all contracts with such frequency as may be necessary to assure compliance. Such investigations will include interviews with workers, which must be taken in confidence, and examinations of certified payrolls, regular payrolls, and other basic records required to be maintained under 29 CFR 5.5(a)(3). In making such examinations, particular care must be taken to determine the correctness of classification(s) of work actually performed, and to determine whether there is a disproportionate amount of work by laborers and of apprentices registered in approved programs. Such investigations must also include evidence of fringe benefit plans and payments thereunder. Federal agencies must give priority to complaints of alleged violations.

(4) In accordance with normal operating procedures, the contracting agency may be furnished various investigatory material from the investigation files of the Department of Labor. None of the material, other than computations of back wages, liquidated damages, and monetary relief for violations of 29 CFR 5.5(a)(11) or (b)(5), and the summary of back wages due, may be disclosed in any manner to anyone other than Federal officials charged with administering the contract or program providing Federal assistance to the contract, without requesting the permission and views of the Department of Labor.

(b) Department of Labor Investigations and other compliance actions.

(1) The Administrator will investigate and conduct other compliance actions as deemed necessary in order to obtain compliance with the labor standards provisions of the applicable statutes referenced by 29 CFR 5.1, or to affirm or reject the recommendations by the Agency Head with respect to labor standards matters arising under the statutes referenced by 29 CFR 5.1.

(2) Federal agencies, contractors, subcontractors, sponsors, applicants, owners, or other entities, as the case may be, must cooperate with any authorized representative of the Department of Labor in the inspection of records, in interviews with workers, and in all other aspects of the investigations or other compliance actions.

(3) The findings of such an investigation or other compliance action, including amounts found due, may not be altered or reduced without the approval of the Department of Labor.

(4) Where the underpayments disclosed by such an investigation or other compliance action total $1,000 or more, where there is reason to believe that the contractor or subcontractor has disregarded its obligations to workers or subcontractors, or where liquidated damages may be assessed under CWHSSA, the Department of Labor will furnish the Federal agency an enforcement report detailing the labor standards violations disclosed by the investigation or other compliance action and any action taken by the contractor or subcontractor to correct the violations, including any payment of back wages or any other relief provided workers or remedial actions taken for violations of 29 CFR 5.5(a)(11) or (b)(5). In other circumstances, the Department of Labor will furnish the Federal agency a notification summarizing the findings of the investigation or other compliance action.

(c) Confidentiality requirements. It is the policy of the Department of Labor to protect from disclosure the identity of its confidential sources and to prevent an unwarranted invasion of personal privacy. Accordingly, the identity of a worker or other informant who makes a written or oral statement as a complaint or in the course of an investigation or other compliance action, as well as portions of the statement which would tend to reveal the identity of the informant, will not be disclosed in any manner to anyone other than Federal officials without the prior consent of the informant. Disclosure of such statements is also governed by the provisions of the “Freedom of Information Act” (5 U.S.C. 552, see part 70 of this subtitle) and the “Privacy Act of 1974” (5 U.S.C. 552a, see part 71 of this subtitle).

X. Appendix 2 – Applies to Non-Governmental Entities (such as Water Supply Corporations and Private Companies)

1. Applicability of the Davis-Bacon (DB) prevailing wage requirements

DB prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by a State water pollution control revolving fund and to any construction project carried out in whole or in part by assistance made available by a drinking water treatment revolving loan fund. If a subrecipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the subrecipient must discuss the situation with the TWDB before authorizing work on that site.

2. Obtaining Wage Determinations

(a) Subrecipients must obtain proposed wage determinations for specific localities at https://sam.gov/content/wage-determinations. After the subrecipient obtains its proposed wage determination, it must submit the wage determination to the TWDB for approval prior to inserting the wage determination into a solicitation, contract or issuing task orders, work assignments or similar instruments to existing contractors (ordering instruments unless subsequently directed otherwise by the TWDB.)

(b) Subrecipients shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that subcontractors follow the wage determination incorporated into the prime contract.

(i) While the solicitation remains open, the subrecipient shall monitor https://sam.gov/content/wage-determinations on a weekly basis to ensure that the wage determination contained in the solicitation remains current. The recipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the subrecipients may request a finding from the TWDB that there is not a reasonable time to notify interested contractors of the modification of the wage determination. The TWDB will provide a report of its findings to the subrecipient.

(ii) If the subrecipient does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the TWDB, at the request of the subrecipient, obtains an extension of the 90 day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The subrecipient shall monitor https://sam.gov/content/wage-determinations on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.

(c) If the subrecipient carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing contractor (ordering instrument) rather than by publishing a solicitation, the subrecipient shall insert the appropriate DOL wage determination from https://sam.gov/content/wage-determinations into the ordering instrument.

(d) Subrecipients shall review all subcontracts subject to DB entered into by prime contractors to verify that the prime contractor has required its subcontractors to include the applicable wage determinations.

(e) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to a subrecipient's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the subrecipient has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the subrecipient shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The subrecipient's contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

3. Contract and Subcontract Provisions

The subrecipient(s) shall insert in full in any contract in excess of $2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a public building or public work, or building or work financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in 29 CFR 5.1, the following clauses:

(1) Minimum wages.

(i) Wage rates and fringe benefits.

All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

As provided in paragraphs (d) and (e) of this section, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(v); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CRF 5.5(a)(1)(iii)) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Subrecipients may obtain wage determinations from the U.S. Department of Labor's web site, https://sam.gov/content/wage-determinations.

(ii) Frequently recurring classifications.

(A) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR Part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to 29 CFR Part 5.5(a)(1)(iii), provided that:

(1) The work to be performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(2) The classification is utilized in the area by the construction industry; and

(3) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(B) The Administrator will establish wage rates for such classifications in accordance with 29 CFR 5.5(a)(1)(iii)(A)(3). Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

(iii) Conformance.

(A) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is used in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(C) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the subrecipient(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the subrecipient(s) to the TWDB. The TWDB will transmit the request, to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor via email to DBAconformance@dol.gov, and to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the TWDB or will notify the TWDB within the 30-day period that additional time is necessary.

(D) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the subrecipient(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the TWDB will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the TWDB, to the Administrator for determination. The request shall be sent to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the TWDB or will notify the TWDB within the 30-day period that additional time is necessary.

(E) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under 29 CFR 5.5(a)(1)(iii)(C) and (D). The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to 29 CFR 5.5(a)(1)(iii)(C) and (D) must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iv) Fringe benefits not expressed as an hourly rate. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(v) Unfunded plans. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with t criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met.

The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(vi) Interest. In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

(2) Withholding.

(i) Withholding requirements. The subrecipient(s) may, upon its own action or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor, so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in 29 CRF 5.5(a) for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay laborers and mechanics, including any apprentice or helper working on the site of the work (or otherwise working in construction or development of the project under a development statute) all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in 29 CFR 5.5(a)(3)(iv), the EPA may, on its own initiative and after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(ii) Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with 29 CFR (a)(2)(i) or (b)(3)(i), or both, over claims to those funds by:

(A) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(B) A contracting agency for its reprocurement costs;

(C) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(D) A contractor's assignee(s);

(E) A contractor's successor(s); or

(F) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

(3) Records and certified Payrolls.

(i) Basic Record requirements.

(A) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor any subcontractor during the course of the work and preserved for all laborers and mechanics working at the stie of the work (or otherwise work in construction or development of the project under a development statute) for a period of at least three (3) years after all the work on the prime contract is completed.

(B) Information required. Such records shall contain the name, last known address, social security number, telephone number, and email address of each such worker, each worker's correct classification(s) of work actually performed, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act), daily and weekly number of hours actually worked in total and on each covered contract, deductions made, and actual wages paid.

(C) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(v) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(D) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

(ii) Certified payroll requirements.

(A) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the subrecipient, that is, the entity that receives the funds from the TWDB. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature (e.g. DocuSign); the system allows the contractor, the contracting agency, and the Department

of Labor to access the certified payrolls upon request for at least three (3) years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system. Such documentation shall be available on request of the TWDB or EPA.

(B) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i)(B), except that full social security numbers and last known addresses, telephone numbers, and email addresses must not be included on the weekly transmittals. Instead the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the employee's social security number). The required weekly certified payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf or its successor site. It is not a violation of this section for a prime contractor to require a subcontractor to provide full social security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the TWDB (or the applicant, sponsor, owner, or other entity as the case may be, that maintains such records).

(C) Statement of Compliance. Each certified payroll submitted must be accompanied by a “Statement of Compliance,” signed by the contractor or subcontractor or their agent who pays or supervises the payment of the persons working on the contract and must certify the following:

(1) That the certified payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information and basic records are being maintained under 29 CFR 5.5 (a)(3)(i), and that such information and records are correct and complete;

(2) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(D) Use of the Optional Form WH-347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347

will satisfy the requirement for submission of the “Statement of Compliance” required by paragraph 29 CFR 5.5(a)(3)(ii)(C).

(E) Signature. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature (e.g., DocuSign).

(F) Falsefication. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 3729 of title 31 of the United States Code.

(G) Length of certified payroll retention. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of three (3) years after all the work on the prime contract is completed.

(iii) Contracts, subcontracts, and related documents. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of three (3) years after all the work on the prime contract is completed.

(iv) Required disclosures and access.

(A) Required record disclosures and access to workers. The contractor or subcontractor must make the records required under 29 CFR 5.5(a)(3)(i) through (iii) of this section, and any other documents that the EPA or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statues referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the TWDB, EPA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(B) Sanctions for non-compliance with records and worker access requirements. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to 29 CRF 5.12. In addition, any Contractor or other person that fails to submit the required records or make those records available to TWDB and WHD within the time TWDB/WHD requests that the records be produced will be precluded from introducing as evidence in an administrative

proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(C) Required information disclosures. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the EPA if the agency is a party to the contract, or to the Wage and Hour Division of the Department of Labor. If the Federal agency is not such a party to the contract, the contractor, subcontractor, or both, must, upon request, provide the full Social Security number and last known address, telephone number, and email address of each covered worker to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to the TWDB, EPA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

(4) Apprentices and equal employment opportunity

(i) Apprentices.

(A) Rate of pay. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(B) Fringe benefits. Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(C) Apprenticeship ratio. The allowable ratio of apprentices to journeymen on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to 29 CFR 5.5(a)(4)(i)(D) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in 29 CRF 5.5(a)(4)(i)(A) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(D) Reciprocity of rations and wage rates. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) applicable within the locality in which construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

(ii) Equal employment opportunity. The use of apprentices and journeymen under this part must be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (11) along with the applicable wage determination(s) and such other clauses or contract modifications as the EPA determines may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate.

(7) Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1,

3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and Subrecipient(s), TWDB, EPA, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or 29 CFR 5.12(a).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or 29 CFR 5.12(a).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001

(11) Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

(i) Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

(ii) Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

(iii) Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or

(iv) Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

4. Contract Provision for Contracts in Excess of $100,000

(b) Contract Work Hours and Safety Standards Act. The subrecipient shall insert the following clauses set forth in paragraphs (b)(1) through (5) of this section in full in any contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a), above or 29 CFR 4.6. As used in this paragraph, the terms “laborers and mechanics” include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which they are employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in 29 CFR 5.5(b)(1) the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchpersons and guards, employed in violation of the clause set forth in 29 CFR 5.5(b)(1), in the sum of $32 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in 29 CFR 5.5(b)(1).

(3)Withholding for unpaid wages and liquidated damages.

(ii) Withholding process. The subrecipient may, upon its own action, or must upon the request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this 29 CFR 5.5(b) on this contract, any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, that is held by the same prime contractor (as defined in 29 CFR 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

(ii) Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with 29 CFR 5.5(a)(2)(i) or 29 CFR 5.5(b)(3)(i) of this section, or both, over claims to those funds by:

(A) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(B) A contracting agency for its reprocurement costs;

(C) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(D) A contractor's assignee(s);

(E) A contractor's successor(s); or

(F) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

(4) Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in 29 CFR 5.5(b)(1) through (5) and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in 29 CFR 5.5(b)(1) through (5). In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

(5) Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

(i) Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

(ii) Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

(iii) Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

(iv) Informing any other person about their rights under CWHSSA or this part.

(c) CWHSSA required records clause. In addition to the clauses contained in 29 CFR

5.5(b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other laws referenced by 29 CFR 5.1, the Subrecipient must insert a clause requiring that the contractor or subcontractor must maintain payrolls and basic records during the course of the work and must preserve them for a period of three (3) years after all the work on the prime contract is completed for all laborers and mechanics, including guards and watchpersons, working on the contract. Such records must contain the name; last known address, telephone number, and email address; and social security number of each such worker; each workers' correct classification(s) of work actually performed, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Subrecipient must insert in any such contract a clause providing that the records to be maintained under this paragraph must be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the EPA, TWDB, and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

(d) Incorporation of contract clauses and wage determinations by reference. Although agencies are required to insert the contract clauses set forth in this section, along with appropriate wage determinations, in full into covered contracts, and contractors and subcontractors are required to insert them in any lower-tier subcontracts, the incorporation by reference of the required contract clauses and appropriate wage determinations will be given the same force and effect as if they were inserted in full text.

(e) Incorporation by operation of law. The contract clauses set forth in this section (or their equivalent under the Federal Acquisition Regulation), along with the correct wage determinations, will be considered to be a part of every prime contract required by the applicable statutes referenced by 29 CFR 5.1 to include such clauses, and will be effective by operation of law, whether or not they are included or incorporated by reference into such contract, unless the Administrator grants a variance, tolerance, or exemption from the application of this paragraph. Where the clauses and applicable wage determinations are effective by operation of law under this paragraph, the prime contractor must be compensated for any resulting increase in wages in accordance with applicable law.

5. Compliance Verification and Enforcement

(a) Agency responsibilities.

(1)(i) The Federal agency has the initial responsibility to ascertain whether the clauses required by 29 CFR 5.5 and the appropriate wage determination(s) have been incorporated into the contracts subject to the labor standards provisions of the laws referenced by 29 CFR 5.1. Additionally, a Federal agency that provides Federal financial assistance that is subject to the labor standards provisions of the Act must promulgate the necessary regulations or procedures to require the recipient or sub-recipient of the Federal assistance to insert in its contracts the provisions of 29 CFR 5.5. No payment, advance, grant, loan, or guarantee of funds will be approved by the Federal agency unless it ensures that the clauses required by 29 CFR 5.5 and the appropriate wage determination(s) are incorporated into such contracts. Furthermore, no payment, advance, grant, loan, or guarantee of funds will be approved by the Federal agency after the beginning of construction unless there is on file with the Federal agency a certification by the contractor that the contractor and its subcontractors have complied with the provisions of 29 CFR 5.5 or unless there is on file with the Federal agency a certification by the contractor that there is a substantial dispute with respect to the required provisions.

(ii) If a contract subject to the labor standards provisions of the applicable statutes referenced by 29 CFR 5.1 is entered into without the incorporation of the clauses required by 29 CFR 5.5, the agency must, upon the request of the Administrator or upon its own initiative, either terminate and resolicit the contract with the required contract clauses, or incorporate the required clauses into the contract (or ensure they are so incorporated) through supplemental agreement, change order, or any and all authority that may be needed. Where an agency has not entered directly into such a contract but instead has provided Federal financial assistance, the agency must ensure that the recipient or sub-recipient of the Federal assistance similarly incorporates the clauses required into its contracts. The method of incorporation of the correct wage determination, and adjustment in contract price, where appropriate, should be in accordance with applicable law. Additionally, the following requirements apply:

(A) Unless the Administrator directs otherwise, the incorporation of the clauses required by 29 CFR 5.5 must be retroactive to the date of contract award or start of construction if there is no award.

(B) If this incorporation occurs as the result of a request from the Administrator, the incorporation must take place within 30 days of the date of that request, unless the agency has obtained an extension from the Administrator.

(C) The contractor must be compensated for any increases in wages resulting from incorporation of a missing contract clause.

(D) If the recipient refuses to incorporate the clauses as required, the agency must make no further payment, advance, grant, loan, or guarantee of funds in connection with the contract until the recipient incorporates the required clauses

into its contract, and must promptly refer the dispute to the Administrator for further proceedings under 29 CFR 5.13.

(E) Before terminating a contract pursuant to this section, the agency must withhold or cross-withhold sufficient funds to remedy any back wage liability resulting from the failure to incorporate the correct wage determination or otherwise identify and obligate sufficient funds through a termination settlement agreement, bond, or other satisfactory mechanism.

(F) Notwithstanding the requirement to incorporate the contract clauses and correct wage determination within 30 days, the contract clauses and correct wage determination will be effective by operation of law, retroactive to the beginning of construction, in accordance with 29 CFR 5.5(e).

(2) (i) Certified payrolls submitted pursuant to 29 CFR 5.5(a)(3)(ii) must be preserved by the Federal agency for a period of three (3) years after all the work on the prime contract is completed, and must be produced at the request of the Department of Labor at any time during the 3-year period, regardless of whether the Department of Labor has initiated an investigation or other compliance action.

(ii) In situations where the Federal agency does not itself maintain certified payrolls required to be submitted pursuant to 29 CFR 5.5(a)(3)(ii), upon the request of the Department of Labor the Federal agency must ensure that such certified payrolls are provided to the Department of Labor. Such certified payrolls may be provided by the applicant, sponsor, owner, or other entity, as the case may be, directly to the Department of Labor, or to the Federal agency which, in turn, must provide those records to the Department of Labor.

(3) The Federal agency will cause such investigations to be made as may be necessary to assure compliance with the labor standards clauses required by 29 CFR 5.5 and the applicable statutes referenced in 29 CFR 5.1. Investigations will be made of all contracts with such frequency as may be necessary to assure compliance. Such investigations will include interviews with workers, which must be taken in confidence, and examinations of certified payrolls, regular payrolls, and other basic records required to be maintained under 29 CFR 5.5(a)(3). In making such examinations, particular care must be taken to determine the correctness of classification(s) of work actually performed, and to determine whether there is a disproportionate amount of work by laborers and of apprentices registered in approved programs. Such investigations must also include evidence of fringe benefit plans and payments thereunder. Federal agencies must give priority to complaints of alleged violations.

(4) In accordance with normal operating procedures, the contracting agency may be furnished various investigatory material from the investigation files of the Department of Labor. None of the material, other than computations of back wages, liquidated damages, and monetary relief for violations of 29 CFR 5.5(a)(11) or (b)(5), and the summary of back wages due, may be disclosed in any manner to anyone other than Federal officials charged with administering the contract or program providing

Federal assistance to the contract, without requesting the permission and views of the Department of Labor.

(b) Department of Labor Investigations and other compliance actions.

(5) The Administrator will investigate and conduct other compliance actions as deemed necessary in order to obtain compliance with the labor standards provisions of the applicable statutes referenced by 29 CFR 5.1, or to affirm or reject the recommendations by the Agency Head with respect to labor standards matters arising under the statutes referenced by 29 CFR 5.1.

(6) Federal agencies, contractors, subcontractors, sponsors, applicants, owners, or other entities, as the case may be, must cooperate with any authorized representative of the Department of Labor in the inspection of records, in interviews with workers, and in all other aspects of the investigations or other compliance actions.

(7) The findings of such an investigation or other compliance action, including amounts found due, may not be altered or reduced without the approval of the Department of Labor.

(8) Where the underpayments disclosed by such an investigation or other compliance action total $1,000 or more, where there is reason to believe that the contractor or subcontractor has disregarded its obligations to workers or subcontractors, or where liquidated damages may be assessed under CWHSSA, the Department of Labor will furnish the Federal agency an enforcement report detailing the labor standards violations disclosed by the investigation or other compliance action and any action taken by the contractor or subcontractor to correct the violations, including any payment of back wages or any other relief provided workers or remedial actions taken for violations of 29 CFR 5.5(a)(11) or (b)(5). In other circumstances, the Department of Labor will furnish the Federal agency a notification summarizing the findings of the investigation or other compliance action.

(c) Confidentiality requirements. It is the policy of the Department of Labor to protect from disclosure the identity of its confidential sources and to prevent an unwarranted invasion of personal privacy. Accordingly, the identity of a worker or other informant who makes a written or oral statement as a complaint or in the course of an investigation or other compliance action, as well as portions of the statement which would tend to reveal the identity of the informant, will not be disclosed in any manner to anyone other than Federal officials without the prior consent of the informant. Disclosure of such statements is also governed by the provisions of the “Freedom of Information Act” (5 U.S.C. 552, see part 70 of this subtitle) and the “Privacy Act of 1974” (5 U.S.C. 552a, see part 71 of this subtitle).

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XI. Appendix 3 – Requesting Additional Wage Determinations

As discussed in Section V, Requesting Additional Wage Determination, herein, the awarded contractor initiates the request for preparing an SF 1444. The prime contractor for the SRF construction contract initiates the conformance request by completing a **Standard Form (SF) 1444 – Request for Authorization of Additional Classification and Rate** (found at the end of this document and at https://www.gsa.gov/system/files/2023-10/SF1444-23.pdf).

The following is an overview of the process that the TWDB and its subrecipients are required by EPA and DOL to follow:

1. Prime Contractor completes the SF 1444 and submits the fully executed form, along with the applicable existing DOL Wage Decision for the area, to the subrecipient (such as the City, District, or Water Supply Corporation).
2. Subrecipient reviews and, if it concurs, submits the SF 1444 and existing DOL Wage Decision for the area to the TWDB by emailing a scan of the completed form and Wage Decision to Wages@twdb.texas.gov.
3. TWDB reviews and submits the request to the DOL, along with a copy to EPA.
4. DOL responds to the TWDB with a decision.
5. TWDB informs the subrecipient of DOL's decision to approve, modify or deny the request.
6. Subrecipient incorporates the approved conformance wage determination into the construction contract and awards the contract within 180 days of the conformance issuance date. Copies of the conformance approval should be maintained with Davis-Bacon records.

Questions: Email TWDB at Wages@twdb.texas.gov

Before completing and submitting the SF 1444, please note:

All classes of laborers or mechanics that are not listed in an existing DOL wage determination and that are to be employed under the contract must be classified in conformance with the existing DOL wage determination for the area. Therefore, any additional classification, along with the associated wage rate and fringe benefits, may only be approved by DOL when the following have been met:

(1) The work to be performed by the classification being requested on the SF 1444 is not performed by a classification that is already in an existing DOL wage determination;

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any fringe benefits, bears a reasonable relationship to the wage rates contained in the existing DOL wage determination for the area.

Instructions for boxes on SF 1444:

Check “Construction Contract” at the top of the form

Box 2. Insert the following:

Texas Water Development Board
Austin, TX

Box 3. Prime Contractor’s name

Box 4. Date the signed form was emailed to TWDB

Box 5. TWDB’s Project Number

Box 6. The date the bid was opened (Bid letting date)

Box 7. The date the contract was awarded.

Box 8. The actual date the contractor will be starting or started work.

Box 9. *Leave blank - this section is not applicable.*

Box 10. List all subcontractors that will utilize the labor classification listed in box 13a. If none, enter "N/A."

Box 11. Project title and description of the project work.

Box 12. Location of project (include city, county and state).

Box 13. The information for “Number” and “Date” are found on the front page of the DOL’s General Decision for the area.

Number: Look for the "General Decision Number" (for example: TX180116).

Dated: The date is immediately after the General Decision Number.

Box 13a. List all jobs for which you are requesting a wage (for either the prime or the subcontractor). **Include a detailed job description and duties to be performed. (Note: If the proposed job classification is not one that is commonly used by DOL in their Wage Determination in Texas, such as a "CARPENTER", "ELECTRICIAN", or "TRUCK DRIVER", it is important to include a detailed description with the initial request. The DOL needing to follow up with a request for a detailed job description for a new classification name will delay their review and response significantly.)**

Boxes 13b and 13c. The proposed wage and fringe rates should bear a reasonable likeness to the category classification wage and fringe rates (operator, laborer, truck driver, etc.) listed in the existing DOL wage determination for the area.

Box 14. If there is a subcontractor listed on line 10, its representative signs on this line (include title).

Box 15. The prime contractor's representative must sign on this line (include title).

Box 16. If the prime contractor or subcontractor has a specific employee who will be performing the labor classification(s) listed in box 13a, or if the employees' have legal representation (such as a union), the employee or representative must sign and include their title. (Note: the designated representative of an existing employee cannot be the contractor's personnel office or any other contractor representative.) If no existing employee is known or identified to perform work under the listed classification, then enter "Unknown" in Box 16. The "Agree" or "Disagree" boxes are checked by anyone signing in boxes 14, 15, and 16.

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Rev. 6/24

TEXAS WATER DEVELOPMENT BOARD

American Iron and Steel (AIS) Guidance for Clean Water and Drinking Water State Revolving Fund Projects

This document is not a comprehensive representation of the federal requirements. For complete details of the federal requirements visit:
https://www.epa.gov/cwsrf/state-revolving-fund-american-iron-and-steel-ais-requirement

In any instance when there may be a discrepancy between this guidance and the actual federal requirements, program participants must adhere to the federal requirements.

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Forms and Guidance

The Texas Water Development Board (TWDB) forms and guidance documents noted in this instruction document may be accessed through the TWDB Financial Assistance website at:

https://www.twdb.texas.gov/financial/instructions/index.asp

Search by either the document number or name.

I. Overview

It is the intent of the Texas Water Development Board (TWDB) to ensure that Applicants, Consultants and Contractors are provided with procedures and recommendations for implementation of the American Iron and Steel (AIS) provisions for the Clean and Drinking Water State Revolving Funds. These provisions are currently contained in Section 608 of the Federal Water Pollution Control Act (33 U.S.C. §1388) for the Clean Water State Revolving Fund (CWSRF) program and in federal laws, including the federal appropriation acts and Section 1452(a)(4) of the Safe Drinking Water Act (42 U.S.C. §300j-12(a)(4)), as applicable, for the Drinking Water State Revolving Fund (DWSRF) program.

The AIS provisions require CWSRF and DWSRF Applicants to use iron and steel products that are produced in the United States for projects for the construction, alteration, maintenance, or repair of a public water system or treatment works. For the CWSRF program, the AIS requirements apply only to the construction, alteration, maintenance, or repair of treatment works[1] projects. For the DWSRF program, the AIS requirements apply to all public water system projects. Based on the statutory provisions, the effective date depends on the date the TWDB loan was closed and varies by program.

In this document, the Applicant refers to the entity, or recipient, that receives funding from the TWDB.

II. Effective Dates

Effective dates for AIS provisions are as follows.

CWSRF

If the loan closes on or after October 1, 2014:	
(a) If the Plans and Specifications for the project were approved by TWDB prior to June 10, 2014	Exempt from AIS
(b) If the Plans and Specifications for the project were approved by TWDB on or after June 10, 2014	AIS applies

DWSRF

The American Iron and Steel provisions generally apply to any financial assistance closed on or after January 17, 2014. There may be statutory exceptions to the AIS requirements based on the date of approval of plans and specifications by a state agency. The Applicant should contact the project's TWDB Project Manager if there are questions regarding AIS exceptions.

[1] "Treatment works" is defined in 33 U.S. Code §1292 (2).

CWSRF and DWSRF

Planning, Acquisition, and Design funded separately from the Construction Phase:

If the original loan for the planning and/or design of a project closed prior to January 17, 2014, then the AIS provision would not apply to the construction phase of the same project.

III. United States (U.S.) Environmental Protection Agency (EPA) Guidance

EPA has provided guidance through the following resources:

1. American Iron and Steel Requirement Guidance (March 20, 2014) www.epa.gov/sites/default/files/2015-09/documents/ais-final-guidance-3-20-14.pdf (**Attachment 1**)
2. Questions and Answers Part 1: Valves and Hydrants (May 30, 2014) www.epa.gov/sites/default/files/2018-05/documents/qa_part_1.pdf (**Attachment 2**)
3. Questions and Answers Part 2: Products, Projects and Process (September 10, 2014) www.epa.gov/sites/default/files/2015-09/documents/ais-qanda-part-2_sept102014_final_0.pdf (**Attachment 3**)
4. Questions and Answers Part 3: Plans and specifications dates, Refinancing and Coatings (March 16, 2015) www.epa.gov/sites/default/files/2015-09/documents/ais-qanda-part-3-mar-2015_final-for-posting_0.pdf (**Attachment 4**)
5. EPA's American Iron and Steel webpage, https://www.epa.gov/cwsrf/state-revolving-fund-american-iron-and-steel-ais-requirement

Please contact TWDB with any questions regarding the applicability of AIS requirements.

IV. Covered Iron and Steel Products

If the project receiving CWSRF or DWSRF funds must comply with the AIS requirements, then all covered iron and steel products must be made in the United States, no matter whether the CWSRF or DWSRF was the source of funds used to purchase a particular covered iron and steel product. The Applicant may not use funds from non-State Revolving Fund sources, including the Applicant's own funds, to pay for a non-compliant iron or steel product used in the project.

AIS requirements apply to the following products made primarily of iron or steel, permanently incorporated into the public water system or treatment works:

- Lined or unlined pipes or fittings;
- Manhole Covers;
- Municipal Castings;
- Hydrants;
- Tanks;
- Flanges;
- Pipe clamps and restraints;
- Valves;
- Structural steel;
- Reinforced precast concrete; and
- Construction materials.

Mechanical and electrical components, equipment, and systems are not considered iron and steel products, and are exempt from AIS requirements. Mechanical equipment is typically that which has motorized parts and/or is powered by a motor. Electrical equipment is typically any machine powered by electricity and includes components that are part of the electrical distribution system.

V. Waivers

AIS provisions permit EPA to issue waivers for a case or category of cases where EPA finds (1) that applying these requirements would be inconsistent with the public interest; (2) iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or (3) inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

EPA has granted nationwide waivers, which are attached hereto as **Attachment 5:**

1. De Minimis waiver pursuant to Section 436 of P.L. 113-76, Consolidated Appropriations Act (CAA) (April 15, 2014). The De Minimis waiver permits the use of products when they occur in de minimis incidental components to the project. Funds used for de minimis incidental components cumulatively may not exceed 5% of the total cost of the materials used in and incorporated into the project; the cost of an individual item may not exceed 1% of the total cost of materials used in and incorporated into the project.

2. Nationwide Plans and Specs waiver pursuant to Section 436 of P.L. 113-76, Consolidated Appropriations Act (CAA). (April 15, 2014)

3. National Product Waiver for Pig Iron and Direct Reduced Iron (February 18, 2015).

4. National Product Waiver for Minor Components in Iron and Steel Products (with Cost Ceiling) (October 27, 2015).

5. ***Expired*** Final Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (August 24, 2018). *The Final Extension for short-term National Product Waiver for Stainless Steel Nuts and Bolts used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles short-term American Iron and Steel (AIS) waiver for stainless steel nuts and bolts expired on February 24, 2020. All coupling type products specifically mentioned in the waiver (couplings flanges restraints, etc.) that contain non-domestic stainless steel nuts and bolts should have been purchased by the project/SRF recipient before the expiration date.* ***If purchased after the expiration date, the stainless steel nuts and bolts in those specific products are no longer covered by a waiver****.*

EPA's American Iron and Steel webpage includes any waivers issued – www.epa.gov/cwsrf/state-revolving-fund-american-iron-and-steel-ais-requirement with approved national waivers at www.epa.gov/cwsrf/american-iron-and-steel-requirement-approved-national-waivers-0. The following waivers are expired, but still available for viewing on the EPA's website:

1. ***Expired*** Short-Term National Product Waiver for Stainless Steel Nuts and Bolts used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (February 18, 2015) *This national waiver was extended each year for five years but has now expired, see Item 5, above.*

2. ***Expired*** One-Year Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (February 22, 2016). *This national waiver has now expired, see Item 5, above.*

3. ***Expired*** One-year Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (January 18, 2017). *This national waiver has now expired, see Item 5, above.*

1. Waiver Process

EPA has implemented a waiver application process to allow the State, on behalf of the Recipient, to apply for waivers of the AIS requirement directly to EPA Headquarters. Only waiver requests received from the State (e.g., TWDB) will be considered. A waiver application may be submitted at any time during the project, however until a waiver is granted by EPA, the AIS requirement stands.

To apply for a project waiver, the Recipient should email the request in the form of a Word document (.doc) to the TWDB Project Manager. Proper and sufficient documentation must be provided by the Recipient, refer to **Attachment 6**.

After receiving an application for waiver of the AIS requirements, EPA Headquarters will publish the request on its website for 15 days and receive informal comment. EPA Headquarters will then determine whether the application properly and adequately documents and justifies the statutory basis cited for the waiver – that it is quantitatively and qualitatively sufficient – and to determine whether or not to grant the waiver.

EPA will notify TWDB that a waiver request has been approved or denied as soon as such a decision has been made. Approved waivers will be posted on the EPA website. The Recipient should keep a copy of the signed waiver in their AIS Certification File.

2. Compliance

To ensure compliance with the AIS requirement, specific AIS contract language must be included in each contract, including the construction material purchase agreements. The Applicant should be aware that AIS requirements will apply to the project through the TWDB commitment resolution. Sample Construction Contract Language is included in **Attachment 7.**

It is the Recipient's responsibility to (1) ensure that all construction and purchase contracts are executed in compliance with AIS, and (2) maintain a record of all forms and certifications necessary to demonstrating compliance with AIS. To demonstrate compliance with AIS requirements either the final manufacturer that delivers the iron or steel product to the worksite, vendor, or contractor, may provide a certification asserting that all manufacturing processes occurred in the United States, or the Recipient may use step certification process, similar to the Federal Highway Administration (See Attachment 8). The Recipient is responsible for monitoring De Minimis Logs to ensure all iron and steel products listed on the log meet the requirements of the EPA's De Minimis waiver.

TWDB relies on self-certification by the Recipient to document compliance with AIS, and requires the Recipient to submit a Monthly American Iron and Steel Certificate of Compliance Submittal (TWDB-1106-A) with **each outlay report** covering requests for funds associated within construction contracts. Failure to submit the Monthly American Iron and Steel Certificate of Compliance could delay the release of funds.

3. TWDB Compliance Procedures

To be in compliance and satisfy TWDB's requirements for implementation of AIS requirements, Recipients need to do the following:

1. The Recipient shall prepare and submit any waiver request to the TWDB Project Manager. TWDB will forward all requests to EPA. **Any waiver to the AIS requirements must be issued by the EPA**. Until a waiver is approved by EPA, all AIS requirements must be met. A checklist detailing the types of information required for a waiver to be processed, and EPA's waiver determination checklist is attached as **Attachment 6**.

2. Recipients **shall** include the following language in the Advertisement for Bids for all applicable construction contracts funded by the TWDB's CWSRF or DWSRF:

   For CWSRF
   Any contract(s) awarded under this Invitation for Bids is/are subject to the American Iron and Steel (AIS) requirements of Section 608 of the Federal Water Pollution Control Act (33 U.S.C. §1388).

   For DWSRF
   Any contract(s) awarded under this Invitation for Bids is/are subject to the American Iron and Steel (AIS) requirements of federal law, including federal appropriation acts and Section 1452(a)(4) of the Safe Drinking Water Act (42 U.S.C. §300j-12(a)(4)), as applicable.

3. Recipients **shall** include the AIS requirements in all applicable construction contracts. Sample contract language is included in **Attachment 7**.

4. Recipients **shall** include the following language on the General Notes Plan Sheet(s).

   For CWSRF
   This project is subject to the American Iron and Steel (AIS) requirements of Section 608 of the Federal Water Pollution Control Act (33 U.S.C. §1388). All iron and steel products for construction, alteration, maintenance, or repairs incorporated in these plans must be produced in the United States.

   For DWSRF
   This project is subject to the American Iron and Steel (AIS) requirements of federal law, including federal appropriation acts and Section 1452(a)(4) of the Safe Drinking Water Act (42 U.S.C. §300j-12(a)(4)), as applicable. All iron and steel products for construction, alteration, maintenance, or repairs incorporated in these plans must be produced in the United States.

5. The Recipient, thru the Prime Construction Contractor, must obtain certifications from the final manufacturer that delivers the iron and steel product to the worksite, vendor, or contractor asserting that all manufacturing processes occurred in the United States (Version 1 of the sample letter in **Attachment 8**). For products not delivered to the project site, the Recipient, thru the Prime

Contractor, must obtain the Final Manufacturer's certification from the supplier (Version 2 of the sample letter in **Attachment 8**). The supplier must certify that the products being provided to the Contractor for the project are AIS compliant and the Contractor and Recipient must retain copies of the supplier's certification. **Note**: EPA has determined that a comparable manufacturer's certification letter that makes reference to the USDA Rural Utilities Service Water and Environmental Programs' American Iron & Steel requirements instead of EPA's AIS requirements would be acceptable.

6. The Prime Construction Contractor and Recipient are responsible for inspecting iron and steel products for any readily visible identification labels indicating the country of origin. Note: A country of origin stamp alone is not sufficient verification of compliance with AIS and should not be solely relied upon to ensure compliance.

7. The Prime Construction Contractor and Recipient will be required to maintain a file that contains the certifications from the final manufacturers, any approved waivers, and the De Minimis log. This file must be available for review by TWDB representatives. Sample Certification letters, step certification log, and De Minimis Log are included in **Attachment 8**.

8. The Recipient must submit a Monthly American Iron and Steel Certificate of Compliance Submittal (TWDB-1106-A) with each outlay report requesting funds associated with construction contracts (i.e., covering construction-related invoices), attached as **Attachment 9**.

9. The Recipient will provide a final certification (TWDB-1106-C), after the completion of the construction contract and prior to issuance of a Certificate of Approval by the TWDB, stating the project was completed in compliance with the AIS requirements, **Attachment 10**.

4. Recommendations and Best Management Practices

The following recommendations are not required but should be considered by the applicant in implementation of the AIS requirements:

1. AIS requirements should be addressed in the engineering feasibility study to determine availability of AIS products and determine if any requests for waivers need to be initiated.

2. While a waiver application may be submitted at any time during the project, the Applicant should consider EPA's review schedule (15-day comment period plus review time) when scheduling projects. It is not recommended to request a waiver after the advertisement for bids or start of construction.

3. Develop procedures for maintaining a record of AIS documentation.

4. Distinguish separate bid items that must comply with AIS requirements on the Bid Form.

5. Consideration of AIS compliance documentation when developing the contractor submittal procedures for shop drawings, material lists, and manufacturer certifications, etc.

6. Discuss AIS requirements during pre-bid conference and pre-construction meetings, to address contractor’s responsibilities, and availability of iron and steel products needed to complete the project.

Attachment 1 – American Iron and Steel Requirement Guidance (March 20, 2014)

(Double click on the embedded Acrobat version below for a clear copy of the document, available at www.epa.gov/sites/default/files/2015-09/documents/ais-final-guidance-3-20-14.pdf)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 20 2014

OFFICE OF WATER

MEMORANDUM

SUBJECT: Implementation of American Iron and Steel provisions of P.L. 113-76, Consolidated Appropriations Act, 2014

FROM: Andrew D. Sawyers, Director
Office of Wastewater Management (4201M)

Peter C. Grevatt, Director
Office of Ground Water and Drinking Water (4601M)

TO: Water Management Division Directors
Regions I - X

P.L. 113-76, Consolidated Appropriations Act, 2014 (Act), includes an "American Iron and Steel (AIS)" requirement in section 436 that requires Clean Water State Revolving Loan Fund (CWSRF) and Drinking Water State Revolving Loan Fund (DWSRF) assistance recipients to use iron and steel products that are produced in the United States for projects for the construction, alteration, maintenance, or repair of a public water system or treatment works if the project is funded through an assistance agreement executed beginning January 17, 2014 (enactment of the Act), through the end of Federal Fiscal Year 2014.

Section 436 also sets forth certain circumstances under which EPA may waive the AIS requirement. Furthermore, the Act specifically exempts projects where engineering plans and specifications were approved by a State agency prior to January 17, 2014.

The approach described below explains how EPA will implement the AIS requirement. The first section is in the form of questions and answers that address the types of projects that must comply with the AIS requirement, the types of products covered by the AIS requirement, and compliance. The second section is a step-by-step process for requesting waivers and the circumstances under which waivers may be granted.

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Attachment 2 – Questions and Answers Part 1: Valves and Hydrants (May 30, 2014, updated October 27, 2015)

(Double click on the embedded Acrobat version below for a clear copy of the document, available at https://www.epa.gov/sites/default/files/2018-05/documents/qa_part_1.pdf)

May 30, 2014

American Iron & Steel (AIS) Requirement of the Consolidated Appropriations Act of 2014 (Public Law 113-76) Q&A Part 1: Valves and Hydrants

Q1: Does the AIS requirement of the Consolidated Appropriations Act of 2014 require minor, miscellaneous components within a covered valve or hydrant, such as nuts, bolts and washers, to be made in the U.S.?

A1: The definition of "iron and steel products" that must either be domestically produced or subject to a waiver in order to comply with the AIS requirement of the Consolidated Appropriations Act of 2014

Question 1 has been superseded by the *National Minor Components* Waiver signed on October 27, 2015. This waiver can be found here: *https://www.epa.gov/sites/production/files/2015-10/documents/minor_components_waiver_signed_10_27_15_508.pdf*

products" that must either be made domestically, or otherwise must comply with the AIS requirement. The minor components represent a very small percentage of the iron and steel in the hydrants and valves that are defined as "iron and steel products." These minor components, which EPA has learned through our research are currently difficult to find domestically in sufficient quantity, such as minor nuts, bolts, and washers, are not required to be of U.S. origin.

Q2: Do the actuators/control systems attached to valves have to comply with the AIS requirement, or just the valve itself?

A2: The AIS requirement of the Consolidated Appropriations Act of 2014 includes valves in its definition of "iron and steel products" that recipients must make certain are either domestically made or subject to a waiver in order to comply with the AIS requirement. Actuators and control systems are not included in the definition. Only the valve itself is required to be either domestically produced or subject to a waiver in order to be compliant with the AIS requirement. Absent a waiver, EPA considers valves and hydrants to be domestically produced if the significant iron and steel components of a covered valve or hydrant – the body, bonnet, shoe, stem, and wedge/disc/gate/ball – if made of iron or steel, is produced in the U.S. See Q1 above for a discussion about minor components. The valves and actuators, while often purchased and shipped together, are two unique products that are manufactured separately and typically attached together during the final step of the process. Valves are included in the definition of "iron and steel products" in the AIS requirement. Actuators, whether manual, electric, hydraulic or pneumatic, are not listed as an "iron and steel product" under the AIS requirement of the Consolidated Appropriations Act of 2014, nor are they considered construction materials. Therefore, they do not need to be domestically produced in the U.S. in order to comply with the requirement.

Attachment 3 – Questions and Answers Part 2: Products, Projects, and Process (September 10, 2014)

(Double click on the embedded Acrobat version below for a clear copy of the entire document, available at https://www.epa.gov/sites/default/files/2015-09/documents/ais-qanda-part-2_sept102014_final_0.pdf)

September 10, 2014

American Iron & Steel (AIS) Requirement of the Consolidated Appropriations Act of 2014
(Public Law 113-76)

Q&A Part 2

PRODUCT QUESTIONS

1. **Q: Do all fasteners qualify for de minimis exemption?**

   A: No. There is no broad exemption for fasteners from the American Iron and Steel (AIS) requirements. Significant fasteners used in SRF projects are not subject to the de minimis waiver for projects and must comply with the AIS requirements. Significant fasteners include fasteners produced to industry standards (e.g., ASTM standards) and/or project specifications, special ordered or those of high value. When bulk purchase of unknown-origin fasteners that are of incidental use and small value are used on a project, they may fall under the national de minimis waiver for projects. The list of potential items could be varied, such as big-box/hardware-store-variety screws, nails, and staples. The key characteristics of the items that may qualify for the de minimis waiver would be items that are incidental to the project purpose (such as drywall screws) and not significant in value or purpose (such as common nails or brads). See the following: http://water.epa.gov/grants_funding/upload/Deminimis-Waiver-04-15-14.pdf.

   EPA also clarifies that minor components of two listed products – valves and hydrants – may not need to meet the AIS requirements if the minor components compromise a very small quantity of minor, low-cost fasteners that are of unknown origin. See EPA's questions and answers on the subject at the following: http://water.epa.gov/grants_funding/upload/AIS-QandA-Part-1-Valves-and-Hydrants-final.pdf.

2. **Q: Does PCCP pipe have to be domestically produced?**

   A: Yes. Pre-stressed concrete cylinder pipe (PCCP) or other similar concrete cylinder pipes would be comparable to pre-cast concrete which is specifically listed in the Consolidated Appropriations Act of 2014 as a product subject to the AIS requirement.

3. **Q: If the iron or steel is made from recycled metals will the vendor/supplier have to provide a certification document certifying that the recycled metals are domestically produced?**

   A: No. Recycled source materials used in the production of iron and steel products do not have to come from the U.S. Iron or steel scrap, for instance, are considered raw materials that may come from anywhere. While certification is not required for the raw material, EPA does recommend that additional final processing of iron and steel be certified to have occurred in the U.S.

4. **Q: Do tanks used for filtration systems, if delivered to the construction site separately and then filled with filtration media onsite, have to be domestically produced?**

Attachment 4 – Questions and Answers Part 3: Plans and Specifications Dates, Refinancing and Coatings (March 16, 2015)

(Double click on the embedded Acrobat version below for a clear copy of the entire document, available at https://www.epa.gov/sites/default/files/2015-09/documents/ais-qanda-part-3-mar-2015_final-for-posting_0.pdf)

March 2015

American Iron & Steel Requirement for the Clean Water and Drinking Water State Revolving Funds

Q&A Part 3

*For CWSRF and DWSRF: On **January 17, 2014**, Public Law 113-76, the "Consolidated Appropriations Act, 2014," was enacted and included an American Iron and Steel requirement for the Clean Water and Drinking Water State Revolving Fund programs through the end of fiscal year 2014. Since then, the AIS requirement has continued for both programs, but through different statutes, with a few changes as described in the questions and answers provided below.*

*For CWSRF: On **June 10, 2014**, the Water Resources Reform and Development Act amended the Clean Water Act to include permanent requirements for the use of AIS products in CWSRF assistance agreements. Section 608 of the CWA now contains requirements for AIS that repeat those of the Consolidated Appropriations Act, 2014. All CWSRF assistance agreements must comply with Section 608 of the CWA for implementation of the permanent AIS requirement.*

*For DWSRF: On **December 16, 2014**, the President signed Public Law 113- 235, the "Consolidated and Further Continuing Appropriations Act, 2015," which provides fiscal year 2015 full-year appropriations through September 30, 2015. This law continues the requirement for the use of AIS products in DWSRF assistance agreements through September 30, 2015.*

CWSRF PROGRAM

1. **Q: The Water Resources Reform and Development Act amended the Clean Water Act to include permanent requirements for the use of AIS for CWSRF funded assistance agreements. Does the CWA include an exemption for plans and specifications approved prior to the enactment of the legislation similar to the exemption included in the Consolidated Appropriations Act (CAA) 2014?**

   A: Yes. The WRRDA amendment to the CWA, which included AIS requirements, included a similar exemption as the CAA 2014. For any CWSRF assistance agreement signed on or after October 1, 2014, if the plans and specifications were approved prior to June 10, 2014 (the enactment of WRRDA), then the project is exempt from AIS requirements. For assistance agreements signed prior to October 1, 2014, the previous dates in the CAA 2014 apply (see March 20, 2014, AIS guidance document).

   If a project does not require approved engineering plans and specifications, the bid advertisement date will count in lieu of the plans and specifications approval date for purposes of this exemption in Section 608 (f).

   The following table summarizes AIS exemptions based on the plans and specifications approval date for CWSRF funded projects.

Attachment 5 – EPA Approved Waivers

1. De Minimis Waiver pursuant to Section 436 of P.L. 113-76, Consolidated Appropriations Act (CAA) (April 15, 2014)

(Double click on the embedded Acrobat version below for a clear copy of the entire document, available at https://www.epa.gov/cwsrf/de-minimis-waiver-pursuant-section-436-pl-113-76-consolidated-appropriations-act)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF WATER

DECISION MEMORANDUM

SUBJECT: De Minimis Waiver of Section 436 of P.L. 113-76, Consolidated Appropriations Act (CAA), 2014

FROM: Nancy K. Stoner
Acting Assistant Administrator

The EPA is hereby granting a nationwide waiver pursuant to the "American Iron and Steel (AIS)" requirements ofP.L. 113-76, Consolidated Appropriations Act, 2014 (Act), section 436 under the authority of Section 436(b)(1) (public interest waiver) for de minimis incidental components of eligible water infrastructure projects. This action permits the use of products when they occur in de minimis incidental components of such projects funded by the Act that may otherwise be prohibited under section 436(a). Funds used for such de minimis incidental components cumulatively may comprise no more than a total of 5 percent of the total cost of the materials used in and incorporated into a project; the cost of an individual item may not exceed 1 percent of the total cost of the materials used in and incorporated into a project.

P.L. 113-76, Consolidated Appropriations Act, 2014 (Act), includes an "American Iron and Steel" (AIS) requirement in section 436 that requires Clean Water State Revolving Loan Fund (CWSRF) and Drinking Water State Revolving Loan Fund (DWSRF) assistance recipients to use specific domestic iron and steel products that are produced in the United States if the project is funded through an assistance agreement executed beginning January 17, 2014 (enactment of the Act), through the end of Fiscal Year 2014, unless the agency determines it necessary to waive this requirement based on findings set forth in Section 436(b). The Act states, "[the requirements] shall not apply in any case or category of cases in which the Administrator of the Environmental Protection Agency...finds that-(1) applying subsection (a) would be inconsistent with the public interest" 436(b)(1).

In implementing section 436 of the Act, the EPA must ensure that the section's requirements are applied consistent with congressional intent in adopting this section and in the broader context of the purposes, objectives, and other provisions applicable to projects funded under the SRF. Water infrastructure projects typically contain a relatively small number of high-cost components incorporated into the project. In bid solicitations for a project, these high-cost components are generally described in detail via project specific technical specifications. For these major components, utility owners and their contractors are generally familiar with the conditions of availability, the potential alternatives for each detailed specification, the approximate cost, and the country of manufacture of the available components.

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2. Nationwide Plans and Specifications Waiver pursuant to Section 436 of P.L. 113-76, Consolidated Appropriations Act (CAA) (April 15, 2014)

(Double click on the embedded Acrobat version below for a clear copy of the entire document, available at https://www.epa.gov/cwsrf/nationwide-plans-and-specs-waiver-pursuant-section-436-pl-113-76-consolidated-appropriations)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF WATER

DECISION MEMORANDUM

SUBJECT: Plans and Specifications Waiver of Section 436 of P.L. 113-76, Consolidated Appropriations Act (CAA), 2014

FROM: Nancy K. Stoner
Acting Assistant Administrator

The EPA is hereby granting a nationwide waiver of the American Iron and Steel requirement pursuant to Section 436(b)(1) (public interest waiver), of the Consolidated Appropriations Act (CAA), 2014, for eligible projects that had engineering plans and specifications submitted to an appropriate state agency prior to and including January 17, 2014, the date of enactment of the CAA, and approved between and including January 17, 2014, and the date of this waiver, where the state agency that approved such plans and specifications did so under the normal course of business for that agency. This action permits the use of non-domestic iron and steel products in such projects funded by a Clean or Drinking Water State Revolving Fund that may otherwise be prohibited under section 436.

If a project does not require approved engineering plans and specifications, the bid advertisement date will count in lieu of the plans and specifications approval date for purposes of this national waiver.

The basis for the nationwide waiver is that due to the uncertainty about whether an American Iron and Steel requirement would be included in this year's appropriation, potential assistance recipients did not have the opportunity to plan for a possible American Iron and Steel requirement. Until detailed guidance was issued, potential assistance recipients were unable to solicit bids from construction firms with appropriate definitions of key terms contained in the CAA language. Additionally, projects that submitted engineering plans and specifications prior to and including January 17, 2014, without knowledge of the American Iron and Steel requirement, and with the anticipation that such plans would be quickly approved, but such approval did not occur until on or after January 17, 2014, would be required to redesign elements of the project, investigate potential domestic products, revise engineering drawings and bid specifications, and resubmit such plans and specifications for approval, thereby delaying the initiation of construction substantially. Those projects which do not require approved plans and specifications, but were bid prior to the guidance being issued, also could be required to rebid the project or submit change orders to comply with the new requirements, which would also delay initiation of construction.

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3. National Product Waiver for Pig Iron and Direct Reduced Iron (February 18, 2015)

(Double click on the embedded Acrobat version below for a clear copy of the entire document, available at https://www.epa.gov/cwsrf/national-product-waiver-pig-iron-and-direct-reduced-iron)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 18 2015

OFFICE OF WATER

DECISION MEMORANDUM

SUBJECT: National Product Waiver for Pig Iron and Direct Reduced Iron for State Revolving Fund Projects

FROM: Ellen Gilinsky for Kenneth J. Kopocis
Deputy Assistant Administrator

The U.S. Environmental Protection Agency is hereby granting a national product waiver pursuant to the "American Iron and Steel" provisions of the Clean Water Act and Public Law 113-235, the "Consolidated and Further Continuing Appropriations Act, 2015," for certain intermediate goods used in the manufacture of iron and steel products.[1] This waiver permits the use of pig iron and direct reduced iron manufactured outside of the United States in domestic manufacturing processes for iron and steel products used in projects funded by a Clean Water or Drinking Water State Revolving Fund that may otherwise be prohibited absent this waiver. The waiver is retroactive and thus also applies to the use of non-domestic pig iron and direct reduced iron before the signature date.

Background: Pig iron and direct reduced iron are intermediate products of iron and steel manufacturing used as material feed sources in iron and steel foundries and steel mills. Pig iron is a product of iron ore smelting in a blast furnace. It is made from molten iron, which has been cast in the shape of "pigs" as it comes from the blast furnace. Direct reduced iron ore is produced from iron ore, pellets or fines, which are reduced in a solid state using natural gas. Hot briquetted iron, or HBI, is a compacted form of direct reduced iron with enhanced physical characteristics for shipment and storage.

Coverage: This waiver permits the use of iron and steel products that were manufactured using non-domestic pig iron and direct reduced iron in projects that receive funds from either the CWSRF or DWSRF. Any project that received or will receive funds from the CWSRF or DWSRF beginning with the enactment of P.L. 113-76, the "Consolidated Appropriations Act, 2014," may use this waiver for iron and steel that use these intermediate goods.

Rationale: The AIS provisions require CWSRF and DWSRF assistance recipients to use specific domestic iron and steel products that are produced in the United States if the project is funded

[1] Absent a waiver, all treatment works and drinking water facilities that are constructed, in whole or in part, with funds from the CWSRF or the DWSRF, must use American made iron and steel. EPA is allowed under certain circumstances to provide waivers of this requirement.

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4. National Product Waiver for Minor Components in Iron and Steel Products (with Cost Ceiling) (October 27, 2015)

(Double click on the embedded Acrobat version below for a clear copy of the entire document, available at https://www.epa.gov/cwsrf/national-product-waiver-minor-components-iron-and-steel-products)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 27 2015

OFFICE OF WATER

DECISION MEMORANDUM

SUBJECT: National Product Waiver for Minor Components within Iron and Steel Products (with Cost Ceiling) for State Revolving Fund Projects

FROM: Kenneth J. Kopocis
Deputy Assistant Administrator

The U.S. Environmental Protection Agency is hereby granting a national product waiver pursuant to the "American Iron and Steel" provisions of the Clean Water Act and Public Law 113-235, the "Consolidated and Further Continuing Appropriations Act, 2015," (hereinafter referred to as "the Acts") for minor components within a product under an established cost ceiling.[1] The waiver will permit projects funded by the Clean Water State Revolving Fund or Drinking Water State Revolving Fund to use non-domestically produced miscellaneous minor components within an otherwise domestically produced iron and steel product for up to 5 percent of the total material cost of the product. These products could be prohibited absent this waiver. This waiver is retroactive, and so also applies to products purchased before the signature date of this waiver.

Coverage: The items covered by this waiver include miscellaneous minor components within iron and steel products as defined in the AIS provisions of the Acts. The specific minor components in covered iron and steel products will vary by product and manufacturer. Pursuant to this waiver, non-domestically produced miscellaneous minor components comprising up to 5 percent of the total material cost of an otherwise domestically produced iron and steel product may be used. This waiver does not exempt the whole product from the AIS requirements, and the primary iron or steel components of the product must be produced domestically. Unless subject to a separate waiver, all other iron and steel components in these products must still meet the AIS requirements. Valves and hydrants are also subject to the cost ceiling requirements described here. This waiver supersedes the EPA's previous guidance issued on May 30, 2014, (Question 1) related to minor components in valves and hydrants.

The coverage of this waiver is different from that of the existing national de minimis waiver. While the national de minimis waiver covers entire products (when those products are generally of low cost and incidental to the construction of the project), this waiver covers minor components within an iron and steel product. In addition, the national de minimis waiver is intended for assistance recipients to use for their projects, while this minor components waiver is intended to allow manufacturers to certify that their products comply with the AIS requirements.

[1] Absent a waiver, all treatment works and drinking water facilities that are constructed, in whole or in part, with funds from the CWSRF or the DWSRF, must use American made iron and steel. The EPA is allowed under certain circumstances to provide waivers of this requirement.

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5. (Expired) Final Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (August 24, 2018)

(Double click on the embedded Acrobat version below for a clear copy of the entire document, available at https://www.epa.gov/cwsrf/final-18-month-extension-national-product-waiver-stainless-steel-nuts-and-bolts-august-24)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 24 2018

DECISION MEMORANDUM

OFFICE OF WATER

SUBJECT: Final Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles for State Revolving Fund Projects

FROM: David P. Ross
Assistant Administrator

The U.S. Environmental Protection Agency (EPA) hereby grants an extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles for State Revolving Fund Projects, pursuant to the "American Iron and Steel" (AIS) requirements of the Clean Water Act. The original waiver was signed on February 18, 2015, and was granted a one-year extension on February 22, 2016. A second extension was granted until February 18, 2018. With this third and final extension, the waiver will retroactively cover nuts and bolts purchased since February 18, 2018, and be extended 18 months from the signing date of this waiver (sunset date). This waiver will not be renewed after the sunset date. This waiver permits the purchase and use of non-domestically produced stainless steel nuts and bolts in bolting-type pipe couplings, restraints, joints, and repair saddles in iron and steel products for projects funded by a Clean Water State Revolving Fund (CWSRF) or Drinking Water State Revolving Fund (DWSRF) that may otherwise be prohibited absent this waiver.

The original, approved waiver provides details regarding the specific types of products covered by and the rationale for issuance of the waiver (see: https://www.epa.gov/sites/production/files/2015-09/documents/short-term-natl-waiver-for-ss-nuts-bolts-021815.pdf). This national product waiver extension is short-term, applying to the covered products if those products are purchased by the assistance recipient or their representatives (i.e. construction contractor) up until the sunset date.

The EPA is granting this national product waiver extension on a short-term basis in order to provide the time U.S. manufacturers need to increase the domestic production of the specified stainless steel nuts and bolts. Upon the production of these parts, the EPA stands ready to provide assistance to states and others to help identify AIS compliant products consistent with the April 2017 Buy American and Hire American Executive Order.

Attachments:
1. Rationale and Legal Authority
2. Summary of Comments Received During 15-Day Informal Public Input Period on Short-Term Waiver Extension for Stainless-Steel Nuts and Bolts used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles for State Revolving Fund (SRF) Projects

Internet Address (URL) • http://www.epa.gov
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Attachment 6 – EPA Waiver Request

1. Information Checklist for Waiver Request

The purpose of this checklist is to help ensure that all appropriate and necessary information is submitted to EPA. EPA recommends that States review this checklist carefully and provide all appropriate information to EPA. This checklist is for informational purposes only and does not need to be included as part of a waiver application.

Items	☐	Notes

General
• Waiver request includes the following information:
  ○ Description of the foreign and domestic construction materials
  ○ Unit of measure
  ○ Quantity
  ○ Price
  ○ Time of delivery or availability
  ○ Location of the construction project
  ○ Name and address of the proposed supplier
  ○ A detailed justification for the use of foreign construction materials
• Waiver request was submitted according to the instructions in the memorandum
• Assistance Applicant made a good faith effort to solicit bids for domestic iron and steel products, as demonstrated by language in requests for proposals, contracts, and communications with the prime contractor		

Cost Waiver Requests
• Waiver request includes the following information:
  ○ Comparison of overall cost of project with domestic iron and steel products to overall cost of project with foreign iron and steel products
  ○ Relevant excerpts from the bid documents used by the contractors to complete the comparison
  ○ Supporting documentation indicating that the contractor made a reasonable survey of the market, such as a description of the process for identifying suppliers and a list of contacted suppliers		

Availability Waiver Requests
• Waiver request includes the following supporting documentation necessary to demonstrate the availability, quantity, and/or quality of the materials for which the waiver is requested:
  o Supplier information or pricing information from a reasonable number of domestic suppliers indicating availability/delivery date for construction materials
  o Documentation of the assistance Applicant's efforts to find available domestic sources, such as a description of the process for identifying suppliers and a list of contacted suppliers.
  o Project schedule
  o Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of construction materials
• Waiver request includes a statement from the prime contractor and/or supplier confirming the non-availability of the domestic construction materials for which the waiver is sought
Has the State received other waiver requests for the materials described in this waiver request, for comparable projects?		

2. EPA Checklist for Waiver Request

Instructions: To be completed by EPA. Review all waiver requests using the questions in the checklist, and mark the appropriate box as Yes, No or N/A. Marks that fall inside the shaded boxes may be grounds for denying the waiver. If none of your review markings fall into a shaded box, the waiver is eligible for approval if it indicates that one or more of the following conditions applies to the domestic product for which the waiver is sought:

1. The iron and/or steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality.
2. The inclusion of iron and/or steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

Review Items	Yes	No	N/A	Notes
Cost of Waiver Request • Does the waiver request include the following information? o Comparison of overall cost of project with domestic iron and steel products to overall cost of project with foreign iron and steel products				
o Relevant excerpts from the bid documents used by the contractors to complete the comparison				
o A sufficient number of bid documents or pricing information from domestic sources to constitute a reasonable survey of the market				
• Does the Total Domestic Project exceed the Total Foreign Project Cost by more than 25%?				
Availability Waiver Requests • Does the waiver request include supporting documentation sufficient to show the availability, quantity, and/or quality of the iron and/or steel product for which the waiver is requested? o Supplier information or other documentation indicating availability/delivery date for materials o Project schedule o Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of materials • Does supporting documentation provide sufficient evidence that the				
• Contractors made a reasonable effort to locate domestic suppliers of materials, such as a description of the process for identifying suppliers and a list of contacted suppliers?				
• Based on the materials delivery/availability date indicated in the supporting documentation, will the materials be unavailable when they are needed according to the project schedule? (By item, list schedule date and domestic delivery quote date or other relevant information)				

• Is EPA aware of any other evidence indicating the non-availability of the materials for which the waiver is requested? Examples include: o Multiple waiver requests for the materials described in this waiver request, for comparable projects in the same State o Multiple waiver requests for the materials described in this waiver request, for comparable projects in other States o Correspondence with construction trade associations indicating the non-availability of the materials • Are the available domestic materials indicated in the bid documents of inadequate quality compared those required by the project plans, specifications, and/or permits?				

Attachment 7 – Construction Contract Language

The following language must be included in all construction and purchase contracts associated with a TWDB CWSRF or DWSRF loan:

The Contractor acknowledges to and for the benefit of the ***Owner*** ("Purchaser") that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund or Drinking Water State Revolving Fund that have statutory requirements commonly known as "American Iron and Steel;" that requires all of the iron and steel products used in the project to be produced in the United States ("American Iron and Steel Requirement") including iron and steel products provided by the Contactor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Purchaser that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Purchaser. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser to enforce this Agreement and recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Purchaser resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the TWDB, or any damages owed to the Purchaser).

NOTE: It is required that the Owner receive and maintain files documenting the Contractor's use of AIS. Monthly compliance with AIS must be verified by the Owner through the submittal of the TWDB form TWDB-1106-A.

Attachment 8 – Sample Certifications

AIS Certification must document the location of the manufacturing process involved with the production of steel and iron materials. Each handler (supplier, fabricator, manufacturer, processor, etc.) of the iron and steel products and their step in the process must be recorded and certified as domestically performed.

The applicant may utilize either

1) a Final Manufacturer Certification process, in which the final manufacturer that delivers the iron or steel product to the worksite, vendor, or contractor, may provide a certification identifying all handlers of the iron or steel product, and asserting that all manufacturing processes occurred in the US; or

2) a Step Certification process in which each handler of the iron or steel product provides a separate certification letter certifying that their step in the process was domestically performed.

1. Final Manufacturer Certification – Version 1 – AIS Products Delivered to Project Site

The following information is provided as a sample letter of certification for AIS compliance. Documentation must be provided on company letterhead. The Final Manufacturer's Certification should list everyone who has handled the product, starting with the processor of the raw iron or steel through the contractor who installs the final product.

Date

Company Name
Company Address
City, State Zip

Subject: American Iron and Steel Certification for Project (XXXXX)

I, (company representative), certify that the following products and/or materials shipped/provided to the project site below are in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Project Site location (City, State): _____

Project's Prime Contractor Name: _____

List for all Items, Products and/or Materials (Include all the predecessor manufacturing processes before the final manufacturer for each item on the list):

Item 1: _____
Predecessor Manufacturing Process: _____
Manufacturer's Name: _____
Manufacturing location (City, State): _____

Predecessor Manufacturing Process: _____
Manufacturer's Name: _____
Manufacturing location (City, State): _____

Item 2: _____
Predecessor Manufacturing Process: _____
Manufacturer's Name: _____
Manufacturing location (City, State): _____

Predecessor Manufacturing Process: _____
Manufacturer's Name: _____
Manufacturing location (City, State): _____

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the project engineer.

Signed by company representative

2. Final Manufacturer Certification – Version 2 – AIS Products Purchased from Supplier

The Final Manufacturer's Certification should list everyone who has handled the product, starting with the processor of the raw iron or steel through to the Supplier.

Date

Company Name
Company Address
City, State Zip

Subject: American Iron and Steel Certification for Project (XXXXX)

I, (company representative), certify that the following products and/or materials shipped/provided to the Supplier listed below are in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Supplier: _____
Address: _____

List for all Items, Products and/or Materials (Include all the predecessor manufacturing processes before the final manufacturer for each item on the list):

Item 1: _____
Predecessor Manufacturing Process: _____
Manufacturer's Name: _____
Manufacturing location (City, State): _____

Predecessor Manufacturing Process: _____
Manufacturer's Name: _____
Manufacturing location (City, State): _____

Item 2: _____
Predecessor Manufacturing Process: _____
Manufacturer's Name: _____
Manufacturing location (City, State): _____

Predecessor Manufacturing Process: _____
Manufacturer's Name: _____
Manufacturing location (City, State): _____

If any of the above compliance statements change while providing material to this project we will immediately notify the Supplier.

Signed by company representative

3. Step Certification

A step certification is a process under which each handler (supplier, fabricator, manufacturer, processor, etc.) of the iron and steel products certifies that their step in the process was domestically performed. The Step Certification process requires you receive a separate letter from everyone who handles the product, starting with the processor of the raw iron or steel through the contractor who installs the final product.

4. Step Certification Letter

The following information is provided as a sample letter of step certification for AIS compliance. Documentation must be provided on company letterhead of each handler responsible for that process of the iron or steel product.

Date

Company Name
Company Address
City, State ZIP Code

Subject: American Iron and Steel Step Certification for Project (XXXXXXXXXX)

I, (company representative), certify that the (melting, bending, coating, galvanizing, cutting, etc.) process for (manufacturing or fabricating) the following products and/or materials shipped or provided for (project site _____ or to _____ company) is in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item 1: _____
Manufacturing location (City, State): _____

Item 2: _____
Manufacturing location (City, State): _____

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

5. Step Certification Log

The following information is provided as a sample log to keep track of step certification for AIS compliance. The TWDB makes no claims regarding the legality of the step certification log with respect to AIS compliance.

American Iron and Steel
Step Certification Log for

_____

(Iron or Steel Product)

Contractor: _____ _____
(Name) (Item)

Supplier: _____ _____
(Name) (Item)

Final Manufacturer: _____ _____ _____
(Name) (Item) (Process)

Predecessor Manufacturer 1: _____ _____ _____
(Name) (Item) (Process)

Predecessor Manufacturer 2: _____ _____ _____
(Name) (Item) (Process)

Processor (e.g., foundry): _____ _____ _____
(Name) (Item) (Process)

6. *De Minimis* Log

The following information is provided as a sample De Minimis log for AIS compliance (TWDB-1106-B). The TWDB makes no claims regarding the legality of the De Minimis log with respect to AIS compliance.

Figure 1 - Information contained in the log example: Owner Name, Project Name, TWDB SRF Number, Contractor Name, Total Project Cost, Total Material Cost followed by data entered for each of the following categories: Item Number, Iron or Steel Product, Unit Cost, Quantity, Total Cost, Percent of Total Material Cost Less Than One Percent, Cumulative Cost, Percent of Total Material Cost Less Than Five Percent.

American Iron and Steel
de minimis log

Owner Name:	City	Total Project Cost:	$130,000.00
Project Name:	CID 01 - Project	Total Material Cost:	$100,000.00
TWDB SRF No.:	####		
Contractor Name:	Contractor		

Item No.	Iron or Steel Product	Unit Cost	Quantity	Total Cost	% Mat Cost (< 1%)	Cum Cost	% Mat Cost (< 5%)
1	Steel Door	$400.00	1	$ 400.00	0.40%	$ 400.00	0.40%
2	Bolts	$100.00	1	$ 100.00	0.10%	$ 500.00	0.50%
3	Welding rods	$30.00	1	$ 30.00	0.03%	$ 530.00	0.53%
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							

Attachment 9 – Monthly American Iron and Steel Certificate Form 1106-A

Compliance Submittal by Owner (Sub-Recipient)

TWDB Project No. _____
Loan No. _____

This executed certificate must be submitted with each Outlay report requesting funds associated with construction contracts for all iron and steel products and/or materials included within the project's construction contracts.

I, _____, _____ of
(Name) (Title)
_____ hereby certify that all iron and steel products and/or materials incorporated into the construction, alteration, maintenance, or repair of the subject project are in full compliance with the American Iron and Steel requirements of Section 608 of the Federal Water Pollution Control Act (33 U.S.C. §1388) for the Clean Water State Revolving Fund or federal law, including federal appropriation acts and Section 1452(a)(4) of the Safe Drinking Water Act (42 U.S.C. §300j-12(a)(4)), as applicable, for the Drinking Water State Revolving Fund, or comply with waivers granted by the U.S. Environmental Protection Agency.

I understand that a false statement herein may subject me to penalties under federal and state laws relating to filing false statements and other relevant statutes.

_____ _____
Signature **Date**

Attachment 10 – Final American Iron and Steel Certificate Form 1106-C

Compliance Submittal by Owner (~~Sub~~-Recipient)

TWDB Project No. _____
Loan No. _____

This executed certification must be submitted after the completion of the construction contract and prior to issuance of a Certificate of Approval by the TWDB, stating the project was completed in compliance with the AIS requirements.

I, _____, _____ of
(Name) (Title)
_____ hereby certify that all iron and steel products and/or materials incorporated into the construction, alteration, maintenance, or repair of the subject project were in full compliance with the American Iron and Steel requirements of Section 608 of the Federal Water Pollution Control Act (33 U.S.C. §1388) for the Clean Water State Revolving Fund or federal law, including federal appropriation acts and Section 1452(a)(4) of the Safe Drinking Water Act (42 U.S.C. §300j-12(a)(4)), as applicable, for the Drinking Water State Revolving Fund, or comply with waivers granted by the U.S. Environmental Protection Agency.

I understand that a false statement herein may subject me to penalties under federal and state laws relating to filing false statements and other relevant statutes.

_____ _____
Signature **Date**

TWDB-1106-A
Rev. 6/24

Monthly American Iron and Steel Certificate

Compliance Submittal by Owner (Sub-Recipient)

TWDB Project No. 73819
Loan No. _____

This executed certificate must be submitted with each Outlay report requesting funds associated with construction contracts for all iron and steel products, and/or materials included within the project's construction contracts.

I, _____, _____ of
(Name) (Title)

_____
(Name of Entity)

hereby certify that all iron and steel products and/or materials incorporated into the construction, alteration, maintenance, or repair of the subject project are in full compliance with the American Iron and Steel requirements of Section 608 of the Federal Water Pollution Control Act (33 U.S.C. §1388) for the Clean Water State Revolving Fund or applicable federal law, including federal appropriation acts and Section 1452(a)(4) of the Safe Drinking Water Act (42 U.S.C. §300j-12(a)(4)), as applicable, for the Drinking Water State Revolving Fund, or comply with waivers granted by the U.S. Environmental Protection Agency.

I understand that a false statement herein may subject me to penalties under federal and state laws relating to filing false statements and other relevant statutes.

_____ _____
Signature Date

TWDB-1106-B
Revised: 09/09/2016

American Iron and Steel
de minimis log

Owner Name: City of Dripping Springs
Project Name: West Interceptor Segment 2
TWDB SRF Number: 73819
Contractor Name:

Total Project Cost: $0.00
Total Material Cost:

Item No.	Iron or Steel Product	Unit Cost	Quantity	Total Cost	% Material Cost (< 1%)	Cumulative Cost	% Material Cost (< 5%)
1				$ -			
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							

Final American Iron and Steel Certificate

Compliance Submittal by Owner (Sub-Recipient)

TWDB Project No. 73819

Loan No. _____

This executed certification must be submitted after the completion of the construction contract and prior to issuance of a Certificate of Approval by the TWDB, stating the project was completed in compliance with the AIS requirements.

I, _____ _____ of
(Name) (Title)

_____
(Name of Entity)

hereby certify that all iron and steel products and/or materials incorporated into the construction, alteration, maintenance, or repair of the subject project were in full compliance with the American Iron and Steel requirements of Section 608 of the Federal Water Pollution Control Act (33 U.S.C. §1388) for the Clean Water State Revolving Fund or federal law, including federal appropriation acts and Section 1452(a)(4) of the Safe Drinking Water Act (42 U.S.C. §300j-12(a)(4)), as applicable, for the Drinking Water State Revolving Fund, or comply with waivers granted by the U.S. Environmental Protection Agency.

I understand that a false statement herein may subject me to penalties under federal and state laws relating to filing false statements and other relevant statutes.

_____ _____
Signature Date

SAVE A COPY | CLEAR SIDE

TEXAS SALES AND USE TAX EXEMPTION CERTIFICATION

Name of purchaser, firm or agency	
Address *(Street & number, P.O. Box or Route number)*	Phone *(Area code and number)*
City, State, ZIP code	

I, the purchaser named above, claim an exemption from payment of sales and use taxes (for the purchase of taxable items described below or on the attached order or invoice) from:

Seller: _____

Street address: _____ City, State, ZIP code: _____

Description of items to be purchased or on the attached order or invoice:

_____

_____

_____

Purchaser claims this exemption for the following reason:

_____

_____

_____

I understand that I will be liable for payment of all state and local sales or use taxes which may become due for failure to comply with the provisions of the Tax Code and/or all applicable law.

I understand that it is a criminal offense to give an exemption certificate to the seller for taxable items that I know, at the time of purchase, will be used in a manner other than that expressed in this certificate, and depending on the amount of tax evaded, the offense may range from a Class C misdemeanor to a felony of the second degree.

Purchaser	Title	Date
sign here ▶		

NOTE: This certificate cannot be issued for the purchase, lease, or rental of a motor vehicle.

THIS CERTIFICATE DOES NOT REQUIRE A NUMBER TO BE VALID.

Sales and Use Tax "Exemption Numbers" or "Tax Exempt" Numbers do not exist.

This certificate should be furnished to the supplier. Do **not** send the completed certificate to the Comptroller of Public Accounts.

REQUIRED ENVIRONMENTAL MITIGATION MEASURES

The following is a list of mitigation measures that are recommended for all construction projects. All mitigation measures must be adhered to during construction.

1. Cultural Materials: If cultural materials are encountered during construction, work will cease in the immediate area of the discovery. Work may continue in those project locations outside of the discovery area, with written approval from the Texas Water Development Board. In the event of discovery, the contractor must immediately notify the Owner, Project Engineer, the Texas Historical Commission (512) 463-6100, and the TWDB.

2. Threatened or Endangered Species: If a threatened or endangered species is encountered during construction, work will cease in the immediate area of the discovery. Work may continue in those project locations outside of the discovery area, with written approval from the Texas Water Development Board. In the event of discovery, the contractor must immediately notify the Owner, Project Engineer, Texas Parks and Wildlife, and the TWDB.

3. Texas Horned Lizard: To avoid potential harm to the Texas Horned Lizard (THL), the Consultant Engineer and City of Toyah will be responsible for implementing the following measures:

    a. All construction personnel will be instructed to avoid killing, injuring, or any type harmful disturbance to the THL during construction;

    b. Pipeline trenches which remain open overnight, and or for more than two daylight hours will be inspected for the presence of the THL prior to backfilling;

    c. Texas Horned Lizards discovered in any open trench will be carefully removed and relocated safely away from the construction area by approved individuals;

    d. Any THL relocation(s) by approved individuals will be reported to the Consulting Engineer.

4. Native Species Re-Vegetation: In accordance with Executive Order 13112 on Invasive Species and the Executive Memorandum on Beneficial Landscaping, re-seeding landscaping will be limited to seeding and replanting with native species, where possible. A mixture of grasses and fobs appropriate to address potential erosion problems and long-term cover will be planted when seed is reasonably available and the drought conditions have eased.

5. Migratory Bird Treaty Act: To comply with the Migratory Bird Treaty Act;

    a. Vegetation disturbances will either avoid the general nesting period of March 1st through August 31st, or,

    b. Areas proposed for disturbance will be inspected for nesting birds immediately prior to construction activities, in order to avoid the inadvertent destruction of nests, eggs, etc.

    c. Any nests discovered which may be disturbed or destroyed should be reported to the U.S. Fish and Wildlife Service for further guidance.

6. Prairie Dogs: If prairie dog burrows are present in the construction area, non-harmful exclusion methods will be used to encourage the animals to vacate the area prior to disturbance of their habitat and discourage them from returning to the area during construction. Should these methods prove unsuccessful, the Texas Parks and Wildlife Department will be contacted for guidance. If prairie dog burrows are present in the construction area, they will be surveyed for the presence of burrowing owls. If nesting owls are found, disturbance will be avoided until the eggs have hatched and the young have fledged.

SCHEDULE OF DRAWINGS

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Storm Water Pollution Prevention Plan 3
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SUPREMACY OF STANDARD GENERAL CONDITIONS

(1) These General Construction Matters provide specific guidance to the Contractor for situations which may commonly arise during the construction of the project. These General Construction Matters do not modify nor supersede the Standard General Conditions of the Construction Contract. Should any apparent conflicts arise between these General Construction Matters and the Standard General Conditions of the Construction Contract, the Standard General Conditions of the Construction Contract shall control in all cases.

RIGHT-OF-WAY

(2) The Owner will furnish the Contractor with all necessary rights-of-way for the prosecution of his work as outlined in Article 5.01 of the Standard General Conditions of the Construction Contract. The right-of-way herein referred to is understood to mean only the permission to use and pass through the location or space in any street or highway, or through any public or private property in which the Contractor is to construct the work. The removal of any buildings, works or structures of any kind, including telephone and telegraph poles, power cables and wires, or other structures in, on, or over the public streets and roads, is a duty which the law imposes upon the owners of said structures, and the Contractor shall make arrangements with the owners for their removal; upon the failure or refusal of the owners to comply, they shall be removed at the expense of the Owners; provided said structures interfere with the normal construction operations.

(3) The Contractor shall cut, trim, damage or uproot trees and shrubbery necessitated by construction only.

OBSTRUCTION OF STREETS, PREMISES, ETC.

(4) All material excavated and equipment used shall be placed so as to interfere as little as possible with public travel and to permit the passage of emergency vehicles at all times. At such street

crossings and other points as may be directed by the Engineer the trenches shall be bridged in a proper and secure manner so as to prevent any serious interruption of travel upon the roadway or sidewalk and also to afford necessary access to particular public or private premises. The cost of all such work must be included in the prices bid for the various items of the contract.

(5) Alternate streets crossing the work must be kept open unless otherwise permitted by the Engineer. The Engineer's rulings on this matter will be as liberal to the Contractor as conditions permit. The Contractor, must notify the Owner in charge of streets as far in advance as possible, at any rate not less than twenty-four (24) hours, before the closing to traffic of any street and must notify the Agency again when the street is open to traffic.

(6) Special care must be taken to give free access at all times to all fire hydrants, water valves, fire alarm boxes, mail boxes and, as far as possible, all driveways. In case the Contractor shall fail to keep open streets, sidewalks, approaches to premises, etc., and shall refuse or neglect to open them within twelve (12) hours after written notification by the Engineer or shall fail to afford proper and necessary access to fire hydrants, water valves, fire alarm boxes, mail boxes or driveways and shall neglect or refuse to afford such access within three (3) hours of receiving either oral or written notice to do so, the Engineer shall be, and he is hereby, authorized and empowered to put on such forces and equipment as may be necessary and to open the required passage ways to provide the required access, deducting the actual cost thereof from any money which may be due or may become due the Contractor.

CONFLICT WITH SURFACE OBSTRUCTIONS

(7) The Contractor shall be responsible for all poles, posts, gallery supports or any other structures or objects (except as otherwise specified in Paragraph No. 2, above,) existing along the line of his work within or without the limits of the excavation. He shall shore or otherwise support them when necessary and shall repair and make good any damage caused thereto by his work. The Owner will not bear the expense of supporting or removing and replacing any such visible structures. All culverts, bridge plates, crossing stones, etc., destroyed or disturbed in the execution of the contract shall be properly replaced by the Contractor as part of his obligations under the contract with no direct payment therefore.

CONFLICT WITH SUB-SURFACE OBSTRUCTION

(8) Care must be taken not to injure any gas or water pipe or sewer or drain or service pipes therewith or conduits or other underground structures, and the Contractor must repair or have repaired at once, at his own cost, any public or private structure damaged by or in the course of his work unless the Owner should decide to exercise the right reserved in Paragraph No. 9, just below. Should the Contractor fail to repair or have repaired such damage or injury within a reasonable time the Engineer may, after twenty-four (24) hours written notice, have such repairs made and submit the actual cost of the repairs as a claim against the contractor as provided in the Standard General Conditions of the Construction Contract.

(9) The Owner reserves the right to repair with its own forces any damage done to sewers, water mains, drain pipes, connections thereto, hydrants, valves, cable conduits or other structures belonging to the Owner. If the Owner exercises this right, he will make all necessary repairs, allowing the Contractor full opportunity for inspecting and checking the cost of the work, and submit the actual cost the repairs as a claim against the contractor as provided in the Standard General Conditions of the Construction Contract. These repairs will include everything necessary to restore the damaged structure to as good condition in all respects as prior to the Contractor's work. This may include the use of foundation material where none had been used before or different materials or types of construction from the original if these should be necessary to provide a new structure as stable and substantial as the one damaged.

(10) Nothing in Paragraph No. 9, just above shall be construed as forbidding the Contractor to cut and restore drainage canals or other structures of the Owner's where the Drawings or the Engineer's orders required such cutting as a part of the Contractor's work.

(11) Should the location or position of any gas or water pipe, sewer, drain, conduit or other publicly or privately owned facility within the limits of the trench be such that it conflicts otherwise so as, in the opinion of the Engineer, to require its removal, realignment or change in order that the work being

done under the contract may proceed according to the Drawings, such removal, realignment or change will be made in compliance with Article 5 of the Standard General Conditions of the Construction Contract. When, however, such gas or water pipe or other obstruction shall come within the limits of the excavation for the work the Contractor shall be responsible for stripping and/or uncovering the facility as part of his work in excavating.

(12) In case any pipe or other obstruction so located as to interfere with the work is unexpectedly encountered the Contractor shall be at once notify the Engineer of the locality and circumstance and the work shall be stopped until satisfactory arrangements for avoiding the conflict are made in compliance with the Standard General Conditions of the Construction Contract.

(13) The Engineer will in all cases be the judge of the necessity or expediency of any change or rearrangement of any underground structures which may interfere with the construction of the work of this contract.

(14) The Contractor shall take all risks and be responsible for all expense and damage attending the presence or proximity of any gas or water pipes, sewer, drains, conduits or other underground structures where such pipes or other structures cross the trench or appear in the trench in such a manner as not to demand their rearrangement or realignment; also of all structures as are approximately parallel with the trench or adjacent to it but outside of the trench.

(15) Where a pipe, a conduit or some other structure comes within the limits of the trench, such pipe or other structure shall be supported properly, and the Engineer shall have the right to direct the manner in which it shall be supported. Any lumber used for such purposes shall be left in the trench without any payment being made for it as the Contractor is responsible for the care of conflicting underground structures.

CROSSING OF DRAINAGE CANALS, ETC.

(16) The fact that a sewer or some other structure being installed under this contract according to the Drawings crosses over or under a waterway, either natural or artificial, a railroad track, a pipe or culvert or any other structure or condition tending to make its installation more costly than normal shall not be cause for any extra charge above the price bid for the said sewer, or structure. The bidder is required to take note of such conditions when making his bid. If however, such a crossing is brought about by a change in the location of the sewer, etc., after the bids have been received, then the sewer, etc., will be paid for at the prices bid for such work and materials, or may be judged as extra work and paid for in accordance with procedure set out in Article 11, Changes in the Work, of the General Contract Conditions.

(17) Natural or artificial streams or lagoons, drainage or navigation canals, gutters or culverts, shall not be unreasonably blocked or obstructed or prevented from carrying their customary drainage or traffic and shall be replaced by the Contractor in as good condition as they were originally without separate charge to the Owner. The Contractor shall be responsible for any damage of any kind resulting from interference with or obstruction of any drainage canal of their waterway. The Owner will secure the permits for crossing canals, streams or other waterways but the Contractor will be held to a strict compliance with the terms under which such permits may be issued.

CROSSING UNDER TRACKS

(18) When any railroad tracks are encountered in the course of the work done under the contract the Contractor shall take utmost precautions to avoid injury to the roadbed or tracks of such railroads and to avoid any unnecessary delays or interruptions of traffic. The Engineer shall have the right to forbid the use of any methods or details of construction that he may deem unsafe or unwise but the Contractor will be held fully responsible for all risks and damages attending such work. The Contractor shall notify the Owner or lessor of any railroad or switch track of the contemplated crossing of the track at least forty-eight (48) hours in advance.

(19) The Owner has the right to require that any tracks in dedicated streets be supported by the owner of the tracks over the excavations of the Owner or the Owner's Contractor in the said streets and under the said tracks. If the Engineer shall require the structure being built under this contract to be laid in an open trench under any such track or tracks, the Owner will call on the owner of each track to support his track over the Contractor's excavation without cost to the Contractor, the type

of support being determined by the owner of each track. However, the Contractor must provide for the safety of his excavation and must sheet the sides or otherwise secure them. If the Engineer shall require the Contractor to install his structures under tracks in the manner just described, the payment for the work done will be at the prices bid for the units of work involved, no extra charge for added difficulty or cost of crossing under an obstruction will be allowed, the added cost being included in the unit prices bid.

(20) The Contract may require pipe sewers, pipe drains, water mains or similar structures to be jacked into place under railroad tracks so as to avoid interruption and hazard to rail traffic. In such cases the work will be paid for at the prices bid for such pipes, etc., jacked into place and explanatory drawings will be provided.

HANDLING AND DISPOSAL OF WATER

(21) The Contractor shall pump, or otherwise remove, any standing water encountered in the area of his work or water accumulating in his excavations and shall do all the work necessary to keep his excavations free of water while the work is in progress. He shall keep his completed work free from excessive quantities of water and shall free it entirely for the purpose of inspection etc., at such times as the Engineer may direct.

(22) Gutters or drains parallel with the trench or crossing the trench must be maintained unobstructed; when necessary, proper platforms shall be built over them to carry the excavated material or suitable flumes or diversion channels must be built so as to permit the free passage of all drainage water without interference. The Contractor must use due vigilance and care so that no water originating on his work or dammed up by his work or which he is obligated to handle and dispose of under his contract, shall be discharged upon the works or into the premises or structures of another party unless by mutual agreement of the parties affected.

(23) The cost of all such handling and disposing of water as is outlined in paragraphs No. 21, and 22, just above, shall be included in the prices bid for the work being done. Separate payment will not be made.

CLEANING UP, REMOVING SURPLUS EARTH, ETC.

(24) The hardest and driest of the excavated material -- the broken pavement material if the trench is in a pavement -- shall be set aside until the trench has been backfilled and then it shall be placed on top of the tamped backfill and tamped so as to provide promptly a surface as good and serviceable as possible for temporary traffic or pedestrian use, or used otherwise as is directed in Paragraph No. 26 below. The Contractor shall not, without the permission of the Engineer, remove from the line of the work any earth excavated therefrom which may be suitable for backfilling or surfacing until the excavation has been refilled and surfaced. Any surplus earth which may be left on the street after the excavations have been completely backfilled and compacted shall be regarded as the property of the Contractor and disposed of as approved by the Owner at no additional cost.

(25) Overhaul, when required, will be performed as described elsewhere in the Contract Documents.

CARE OF SURFACES IN UNIMPROVED STREETS

(26) Excavations in undeveloped areas where the streets have not been opened to traffic must be thoroughly backfilled and tamped, the backfill must be crowned well above the level of the adjacent ground surface and topped as required in the opening sentence of Paragraph No. 24, above. Settlement of the backfill below the adjacent surface must be refilled promptly. The cost of such care must be included in the price bid for laying the sewers, the drains, the water mains, etc. The Engineer will designate streets that may be treated in this manner.

(27) Excavations in streets that have been opened for traffic and are in use by vehicles and pedestrians but have not been given any surface improvement must be treated as is specified just above in this paragraph except that the crowned, tamped, and topped backfilling must not stand more than six (6) inches above the level of the adjoining ground surface. The backfilling in these streets must be kept filled and compacted so that traffic across the trench is possible at all times. The cost of all such care must be included in the prices bid for laying the sewer, the drains, the water mains, etc. The Engineer may direct the Contractor to furnish caliche, and to place, spread, and compact over

the excavations so as to form a good surface, usable for traffic, over a specified area. For furnishing, placing, spreading, and compacting caliche, to such thickness as the Engineer shall direct, the Contractor will be paid for the quantity actually placed (measured in the truck before dumping) at the price bid for caliche, as the case may be, in the Proposal, or may be classified as extra work and paid for in accordance with procedure set out in Article 11, Changes in the Work, of the General Contract Conditions.

(28) Such surfaces as are described in this Paragraph No. 26 are known as "unimproved surfaces". All partially improved surfaces shall be maintained as specified above.

CARE OF SURFACES IN PARTIALLY IMPROVED STREETS

(29) When an excavation has been made in a street which has been paved with gravel or caliche or some similar material, or in a street which has not been paved but has been filled with broken concrete, caliche, gravel or similar materials or combinations thereof so as to make a hard usable surface for roadway or sidewalk, the Contractor shall carefully remove and set aside this hard material and use it for backfilling the upper part of the trench above the embedment, to nine (9) inches below the general street surface. On this selected backfilling, after it has been well tamped, the Contractor shall place caliche to a depth of one (1) foot leaving the top of the caliche about three (3) inches above the general street surface. The Engineer may direct that the edges of the trench be cut back from the authorized side of the ditch, if he considers it necessary, before the caliche is put in place. For trimming the edges of the trench when so ordered and for furnishing and placing the caliche as described above the Contractor will be paid the price per square yard bid for restoring partially improved surfaces. Measurement will be for the actual width of caliche placed up to a maximum of nine (9) inches on each side beyond the authorized trench width.

(30) Later settlement of the trench area or of immediately adjoining areas shall be filled with caliche and kept filled. All such subsequent repairs must be made by the Contractor at his own expense.

(31) The Contractor is fully responsible for all damages done to surfaces outside the line of work and must restore such surfaces to good condition and so maintain them at his own expense. Each city block will be treated as a unit.

(32) Such surfaces as are described in this Paragraph No. 29 are known as "partially improved surfaces". All partially improved surfaces shall be maintained as specified above.

(33) If the Engineer shall decide that traffic or other conditions make it desirable that an application of oil should be made to the caliche surface of a cut in an unimproved street or in a partial improved street on which oil had not previously been placed, he may order the new surfacing to be oiled in such a manner as he directs. The cost of the oil and its application according to his directions may be classified as extra work and paid for in accordance with procedure set out in Article 11, Changes in the Work, of the General Contract Conditions.

(34) If the Engineer directs that a coating of asphalt, frequently called "Blacktop", should be placed on the caliche surface of a cut in a partially improved street on which blacktopping had not previously been placed he may order the blacktopping be furnished and placed in such a manner as he desires. This work may be classified as extra work and paid for in accordance with procedure set out in Article 11, Changes in the Work, of the General Contract Conditions.

CUTTING AND REPLACING BLACKTOP ROADWAY SURFACE

(35) Blacktop roadway which has been cut or broken in the course of the work shall be restored by the Contractor as follows:

(36) The embedment used below and above the sewer, the drain or the water pipe shall be thoroughly tamped. Backfilling above the embedment shall be selected excavated material or, on order of the Engineer, shall be river sand or lake sand. This backfill, well compacted, shall be brought up to ten (10) inches below the underside of the adjoining, undisturbed blacktopping. If the backfilling of the trench has been of the excavated material, decking to the full width of the trench shall be placed over its whole surface. If the backfilling has been with sand, the Engineer will decide whether or not the decking shall be used.

(37) Caliche shall then be placed in the widened area filling it to the undisturbed street surface. The contractor shall maintain the caliche surface in good condition, suitable for traffic, until the Engineer shall order the Blacktop Surface to be placed. This will ordinarily be not less than thirty (30) days nor more than sixty (60) days after the completion of the backfilling of the trench between two consecutive manholes for sewer lines and after the completion of the backfilling of a block of trench for water lines.

(38) When the order for repavement is given, the Contractor shall within 10 days but with due allowance being made for bad weather, trim the caliche down to 2 inches below the surface of the blacktop, cut back any broken or depressed blacktopping. He shall then place and compact the new blacktop surface course flush with the undisturbed surface.

(39) All the materials used and the method of their installation shall be the same as those employed by the Owner making street repairs or improvements of a similar nature.

(40) The thickness of the blacktop course laid by the Contractor shall not anywhere be less than two (2) inches; caliche shall be used, to provide for the proper base.

(41) The measurement for payment will be for the full length of the trench and for that portion of the authorized trench width which required cutting and replacing, plus twelve (12) inches on each affected side.

(42) Payment for all this work and all the materials, in place, except for the decking, will be made at the price per square yard bid for cutting and replacing blacktop pavement. The requirements for decking and compensation therefor is described elsewhere in this section.

REMOVAL AND REPLACING CONCRETE SURFACES

(43) Roadway surfaces that have been paved with concrete, either plain or reinforced, or with asphalt or similar material, vitrified bricks, granite blocks or any other surfacing material laid on a concrete base or that have been paved with asphalt, etc., are termed "paved surfaces". Sidewalk or driveway surfaces of concrete or reinforced concrete, either monolithic or divided into blocks, or of flagstones, bricks or any other hard paving substance are included in the term "paved surfaces". The Engineer will determine, where there is any doubt, under which classification any roadway or sidewalk or driveway surface is to be placed.

(44) The Owner will specify in each contract whether restoration of pavement cut or broken in the course of the work of the contract will be an obligation of the Contractor or whether such pavement will be restored by other forces. Paragraphs No. 45-59, both included, govern the cutting and restoration of the pavement by the Contractor or its restoration by other forces.

(45) If the Contractor is to replace the pavement, the cost of cutting it out must be included in the price bid for removing and replacing pavement of each class. The cutting must be done by a concrete saw.

(46) In the replacement of all pavements the material and workmanship shall be in conformity with the original specifications for the pavement that has been disturbed unless the said original specifications shall be obsolete in which case the materials and workmanship shall be in conformity with the current practices of the Owner. Except, however, that (A) High Early Strength Cement shall be used wherever concrete is required for repaving cuts in street intersections and across roadways, and (B) welded steel fabric or expanded metal shall be used as reinforcement. The said reinforcement shall weigh not less than 75 pounds per 100 square feet. The prices bid per square yard for restoration of pavements shall include the cost of the steel reinforcement and the additional cost of High Early Strength Cement.

(47) In bidding on pavements made up of two or more courses all the courses shall be considered as integral parts of the pavements; the price bid shall be for replacement of the pavement complete, including foundation, intermediate course (if present) and surface.

(48) Roadway pavement of concrete or of a surface course with a concrete base shall be repaved as shown in Detailed Drawing. Such pavement cut by the Contractor in making excavations will be paid for, at the prices per square yard bid for pavements of the various type, up to the width of

excavation authorized by the Engineer but pavement that cracks or settles beyond the edges of these authorized by the Engineer shall be removed and replaced by the Contractor at his own expense. The bid price must include the undercutting, the furnishing and placing of the additional concrete needed for repaving according to the details including the steel reinforcement and the use of High Early Strength Cement as indicated on the drawing. The Engineer may require concrete pavements to be cut back beyond the edges of the cuts to nearby expansion joints; such additional pavement will be paid for at the price bid for cutting and replacing pavement. The materials for the expansion joint may be classified as extra work and paid for in accordance with procedure set out in Article 11, Changes in the Work, of the General Contract Conditions.

(49) The Contractor shall not make any continuous open cut more than twenty (20) feet in length through any concrete roadway pavement or roadway pavement with a concrete base except with the specific consent of the Engineer. Braces of undisturbed pavement not less than two (2) feet in width shall be left across the trench at such intervals as the Engineer may direct when replacement is to take place. These braces shall be removed and the concrete base replaced as a monolith over the entire area of the cut. This paragraph applies also to cuts in large areas of driveways or other concrete pavement in sidewalk areas as well as in roadways.

(50) In replacing vitrified brick, small granite block or creosoted wood block pavement, no brick or block which has been broken or chipped will be permitted to be replaced. All bricks or blocks, before being reused, must be thoroughly cleaned of all cement or pitch. The Contractor shall supply all deficiencies, the cost thereof shall be included in the price bid for each pavement.

(51) The area of concrete or concrete-base roadway pavement that will be paid for at the price bid per square yard is specified in Paragraph No. 48, above. Artificial stone, flagging or any concrete pavement which is cut or divided into blocks or stones shall be removed entirely and replaced entirely; the area actually replaced will be paid for at the price bid per square yard, except that stones unnecessarily cut or broken shall be replaced at the Contractor's expense. The large heavy blocks forming driveways, etc., may be excepted from these requirements; however, the Engineer may, at his discretion, order the edges of trenches cut through such stones to be neatly trimmed and portions of stones to be replaced. The area repaved will be paid for at the price bid per square yard, while the cost of trimming may be classified as extra work and paid for in accordance with procedure set out in Article 11, Changes in the Work, of the General Contract Conditions.

(52) Where it is necessary to remove and replace curbs or gutter bottoms which cross the excavation these items will be paid for per linear foot measured along the curb or gutter bottom for the authorized width of the excavation. If a joint in the curb or gutter bottom is so close to the trench as to make it advisable, in the opinion of the Engineer, to take out the curb, etc. to the joint the measurement will be extended to the joint. All of the applicable requirements of these specifications concerning restoration and maintenance of pavement apply also to curbing and gutter bottoms.

(53) Should the street or sidewalk pavements, curbs, gutters, culverts, etc., outside the limits specified above, be damaged, cracked, settled, or disturbed, or injured in any manner by the work of the Contractor, such damage or injury must be repaired and made good and such pavements, gutter, etc., restored to their former condition by the Contractor without additional compensation therefore. Damages caused by the Contractor's equipment shall be considered as damage to be repaired under the terms of this paragraph. The provisions of this Paragraph No. 53 apply to unimproved surfaces and partially improved surfaces as well as to paved surfaces.

(54) Pavements having a concrete base must be restored in not less than one (1) month nor more than two (2) months from the time the backfilling of the trench is completed, except by permission or direction of the Engineer. Cuts in unimproved roadways, partially improved roadways or sidewalks not having a concrete base must be restored within one (1) month from the time the backfilling of the trench is completed unless the Engineer otherwise orders.

(55) The Owner will relieve the Contractor of all obligations to secure permits from the appropriate agency from the cutting and restoration of streets and sidewalks, paved or unpaved. The Contractor must, however, observe the requirements as to the temporary planking of the cuts in paved streets and sidewalks pending the restoration of the pavements.

(56) Should the Contractor neglect to put an adequate force to work on any surface restoration within twenty-four (24) hours after written notice to do so the Owner may execute the work of restoring

the surface at the expense of the Contractor whether it be an unimproved surface, a partially improved surface or a paved surface, deducting the cost thereof from the money due or to become due the Contractor. Such action by the Owner shall not relieve the Contractor from any responsibility for maintenance of surfaces so restored.

(57) When the Contractor has restored the surface (whether it be "unimproved", "Partially improved" or "Paved") over one whole "block" of his excavation it will be inspected and if it is found to be satisfactory it will be included for payment in the monthly estimate. All restored surfaces shall be maintained by the Contractor in good condition.

(58) As soon as the roadway or sidewalk which is disturbed by the Contractor has been repaired, all refuse or surplus material deposited or left by the Contractor on the street shall be removed therefrom and the street restored in all respects to as good a condition as before the trenching was commenced.

(59) In case any pavement cut or broken by the Contractor in the course of his work is still in the maintenance period of the paving contractor who built that pavement, it is the entire responsibility of this Project's Contractor to arrange for its restoration. It is also his responsibility to work out a written agreement, satisfactory to the Owner, with the paving contractor defining maintenance period responsibility for the restored pavement in conformance with Article 7.17 of the Standard General Conditions of the Construction Contract. The Owner is responsible only for paying the Contract Price for removal and/or replacement of the pavement.

(60) If the pavement is to be restored by forces other than those of the Contractor the cost of cutting out the pavement shall be included in the prices bid for laying the sewer, the drain, the water main, etc.

(61) The Contractor shall restrict his excavations to the limits set by the Engineer in each case, and also observe the requirements of Paragraphs Nos. 48 and 49, above. Any pavement, curbing, gutter bottom or other surface improvements unnecessarily broken by the Contractor, cut in excess of the Engineer's directions or cracked, settled, displaced or otherwise damaged by or in the course of the work of this contract shall be replaced at the cost of the Contractor. The last two sentences in Paragraph No. 53, above, apply also to the contract under which restoration of surfaces is to be done by forces other than those of the Contractor.

(62) The Contractor shall consolidate the backfilling in his excavations as required by the Engineer so that the cuts may be repaved within the time limits set in Paragraph No. 54, above. At any time prior to repaving the Engineer may call on the Contractor to make temporary repairs over these cuts as required in Paragraph No. 26 for unimproved surfaces.

DECKING UNDER SURFACING MATERIALS

(63) Where the Engineer shall require it the Contractor shall place wood decking in partially backfilled trenches at such depths below the surface as the Engineer designates so as to form a separation between the backfilling and the paving or the surfacing material. This decking shall be of low grade lumber of an inch (1") thickness and not less than five (5) inches in width. It must be capable of serving the purpose for which it is ordered. Decking will be paid for as follows:

a. When listed as a separate pay item in the Proposal, it will be paid for at the unit price per square foot named therein, or

b. When stated that the decking will be subsidiary work to surfacing materials, its cost will be included in their unit prices in the Proposal with no separate payment being made, or

c. When neither of the above controls, decking may be classified as extra work and paid for in accordance with procedure set out in Article 11, Changes in the Work, of the Standard General Conditions of the Construction Contract.

EXTRA WORK

(64) The term "Extra Work" as used in these General Construction Matters shall be as defined in the Standard General Conditions of the Construction Contract.

COMPLIANCE WITH LAWS

(65) The Contractor shall fully comply with all local state and federal laws, including all codes, ordinances and regulations applicable to this contract and the work to be done thereunder, which exist or which may be enacted later by governmental bodies having jurisdiction or authority for such enactment.

(66) The Contractor shall secure and pay for all permits and licenses necessary for the execution of the work and shall fully comply with all their terms and conditions.

(67) All work under this Contract shall comply with all requirements of law, regulation, permit or license. If the Contractor finds that there is a variance, he shall immediately report this to the Owner for resolution.

PROTECTION OF WORK AND OF PERSONS AND PROPERTY

(68) During performance and up to date of final acceptance, the Contractor shall be under the absolute obligation to protect the finished work against any damage, loss or injury. In the event of such damage, loss or injury, the Contractor shall promptly replace or repair such work, whichever the Owner shall determine to be preferable. The obligation to deliver finished work in strict accordance with the Contract prior to final acceptance shall be absolute and shall not be affected by the Owner's approval or failure to prohibit means and methods of construction used by the Contractor. All risk of loss or damage to the work shall be borne solely by the Contractor until final completion and acceptance of all work by the Owner, as evidenced the Owner's issuance of a certificate of acceptance.

(69) The Contractor shall have the responsibility to provide and maintain all warning devices and take all precautionary measures required by law or otherwise to protect persons and property while said persons or property are approaching, leaving or within the work site or any area adjacent to said work site. No separate compensation shall be paid to the Contractor for the installation or maintenance of any warning devices, barricades, lights, signs or any other precautionary measures required by law or otherwise for the protection of persons property.

(70) The Contractor shall assume all duties owed by the Owner to the general public in connection with the general public's immediate approach to and travel throughout the work site and the area adjacent to said work site.

(71) Where the work is carried on in or adjacent to any street, alley, sidewalk, public right-of-way or public place, the Contractor shall at his own cost and expense provide such flagmen and watchmen and furnish, erect and maintain such warning devices, barricades, lights, signs, and other precautionary measures for the protection of persons or property as may be prudent or necessary, or as are required by law. The Contractor's responsibility for providing and maintaining flagmen, watchmen, warning devices, barricades, signs and lights and other precautionary measures shall not cease until the project shall have been completed and accepted by the Owner.

(72) If the Owner discovers that the Contractor has failed to comply with the applicable federal and state law (by failing to furnish the necessary flagmen, warning devices, barricades, lights, signs or other precautionary measures for the protection of persons or property), The Owner may order the Contractor to take such additional precautionary measures as required by law to be taken to protect persons and property.

(73) In addition, the Contractor shall be held responsible for all damages to the work and other public or private property due to the failure of warning devices, barricades, signs, lights or other precautionary measure in protecting said property; and whenever evidence is found of such damage, the Owner may order the damaged portion immediately removed and replaced by and at the cost and expense of the Contractor.

(74) Minimum standards for safeguarding pedestrian and vehicular traffic are contained in the "Manual of Uniform Traffic Control Devices," Federal Highway Administration of the U.S. Department of Transportation, and the "Texas Manual of Uniform Traffic Control Devices," Texas Department of Transportation.

WATER AND ELECTRICITY DURING CONSTRUCTION:

(75) Arrangements with the appropriate utility company shall be made by the Contractor to obtain the necessary supply of electricity. Water lines will be made available at the site and it shall be the responsibility of the Contractor to obtain the water necessary to meet the requirements. All costs relative to obtaining (and consumption of) the necessary electricity and water shall be borne by the Contractor during the course of construction.

SANITARY FACILITIES:

(76) The Contractor shall build and maintain or utilize sanitary facilities at a location satisfactory to the Owner, for use by the employees of the Contractor, and by the Engineer. They shall be well ventilated, but provide proper concealment, and shall be kept scrupulously clean at all times by the Contractor. The temporary facilities shall be removed and the site restored to its original condition upon the completion of the work. All such facilities shall conform to the requirements of the State and Local Health Authorities, Ordinances and Law.

SURVEYS, PERMITS AND REGULATIONS:

(77) The Contractor shall be responsible for establishing all lines and grades necessary to control the work and shall be responsible for the precise location of all facilities. He shall also protect any control points and replace at no cost to the Owner if destroyed by his equipment or personnel. The Contractor shall be responsible for all surveying cost during construction.

(78) The Engineer may make checks as the work progresses to verify lines and grades constructed by the Contractor to determine the conformance of the completed work as it progresses with the requirements of the Contract Documents. Such checking by the Engineer shall not relieve the Contractor of his responsibility to perform all work in conformance with the Contract Documents and the lines and grades shown therein.

CLEAN-UP:

(79) The Contractor shall at all times keep the site and structures of facilities thereon, free from accumulations of waste material, debris or rubbish caused by his employees or work. At the completion of the work, he shall remove from the site all his tools, scaffolding, surplus material, debris, and shall leave the site and his work "broom clean" or its equivalent, unless otherwise specified by the Owner.

CUTTING, PATCHING, AND FITTING:

(80) The Contractor shall perform all cutting, patching or fitting of his work that may be required to make its several parts come together properly and fit it to receive or be received by work of others shown on, or reasonably implied by the Contract Documents for the completed facility. The Contractor shall not endanger any work by cutting, digging, or otherwise and shall not cut or alter the work of others unless specifically noted on the Drawings and Specifications or permitted by the Engineer.

STORAGE OF MATERIALS:

(81) Water-tight storage facilities of suitable size with floors raised above the ground, shall be provided for all types of materials liable to damage from exposure to the weather. Other materials shall be stored on blocks off the ground. Materials shall be so placed as to permit easy access for proper inspection and identification. Any material which has deteriorated, become damaged or otherwise unfit for use, shall not be used in the work. Upon completion of all work, or when directed by the Engineer, the Contractor shall remove the storage facility from the construction site.

SALVAGED MATERIALS AND EQUIPMENT:

(82) All material and equipment shall be salvaged during the course of construction and remains the property of the Owner and shall be removed and stored at a location within the site designated by the Owner or disposed of as directed by Owner.

FENCES, DRAINAGE, CHANNELS, AND CROP DAMAGE:

(83) Boundary fences or other improvement removed by the Contractor to permit the installation of the desired facilities shall be replaced by him in the same location and left in a condition as good or better than that in which they were found.

(84) Where surface drainage is disturbed or blocked during construction, it shall be restored to the original condition of grade and cross-section after the work of construction is completed.

(85) The Contractor shall not be held liable for unfavorable damage to crops provided such damage occurs within the construction easement provided by the Owner.

DISPOSAL OF WASTE AND SURPLUS EXCAVATION:

(86) All trees, stumps, slashings, brush and other debris removed from the construction site as a preliminary to the installation shall be removed from the property and/or disposed of in a manner satisfactory to the Engineer by the Contractor.

(87) All excavated earth in excess of that required for backfilling shall be removed from adjacent to the new structures and disposed of by spreading and grading in a manner satisfactory to the Engineer at locations on the property of the Owner by the Contractor.

(88) Any material from the excavation deemed by the Engineer to be unsuited for placement on the property shall be removed from the site and disposed of, in a manner approved by the Engineer, by the Contractor.

SECTION 01000
GENERAL REQUIREMENTS

1.0 SCOPE OF WORK

The work to be performed includes furnishing all materials, equipment, tools, and labor necessary for the construction of approximately 7,996 linear feet of 12 to 24" gravity sewer line. The gravity main will cross Onion Creek going southeast. This project includes the removal of trees along the installation of gravity sewer and protection of existing trees along the same corridor.

2.0 GOVERNING TECHNICAL SPECIFICATIONS

The City of Austin Standard Construction Specifications current at the time of bidding shall govern materials and methods used to do the work, and are made a part of this Contract. Whenever the term "City of Austin" is used in the City of Austin Specifications, it shall be construed to mean "OWNER, and or its designated representative." Whenever the term "ENGINEER" is used in the City of Austin Specifications, it shall be construed to mean Burgess & Niple, Inc. Technical Specifications provided are intended to supplement the City Standard Specifications, not to replace them. Any discrepancies between the City Standard Specifications and the terms of this Contract shall be reported to the Engineer, who shall determine which specification shall govern.

2.01 Safety Precautions, Programs and Trench Safety Systems

It shall be the duty and responsibility of the CONTRACTOR and all of its subcontractors to be familiar and comply with all requirements of Public Law 91-596, 29 U.S.C. Secs. 651 et. seq., the Occupational Safety and Health Act of 1970 (OSHA) and all amendments thereto, and to enforce and comply with all provision of this act.

The CONTRACTOR and all of its subcontractors shall comply with all requirements of 29 C.F.R. Secs. 1926.652 and 1926.653, OSHA Safety and Health Standards, and H.B. 662, Acts of the 70th Legislature, Regular Session, and shall submit a unit price for the particular safety systems to be utilized by the CONTRACTOR for all trench excavations which exceed a depth of five feet (5'), even if not shown on the Bid Form.

Before commencing any trench excavation, which will exceed a depth of five feet, the CONTRACTOR shall provide the ENGINEER and OWNER with detailed plans and specifications regarding the safety systems to be utilized. Said plans and specifications shall include a certification from a registered professional engineer indicating full compliance with the OSHA provisions cited above.

2.02 Scope, Nature, & Intent of Specifications and Plans

The Specifications and Plans are intended to supplement but not necessarily duplicate each other. Any work exhibited in the one and not the other shall be executed as if it had been set for in both.

Should anything necessary for a clear understanding of the work be omitted from the Plans and Specifications, or should the requirements appear to be in conflict, the CONTRACTOR shall secure written instructions from the ENGINEER before proceeding. It is understood and agreed that the work shall be performed according to the intent of the Contract Documents. The CONTRACTOR shall notify the ENGINEER of any discrepancy between the Plans and the conditions on the ground, or any error or omission in Plans, or in layout or instructions, which may be discovered in the course of the work. The CONTRACTOR will not take advantage of any error or omission in the Plans or Contract Documents. Full instructions will be furnished by the ENGINEER should any error or omission be discovered.

2.03 Materials

These Specifications are intended to be so written that only materials of the best quality and grade will be furnished. The fact that the Specifications may fail to be sufficiently complete in some detail will not relieve the CONTRACTOR of full responsibility for providing material of high quality and protecting them adequately until incorporation in the structure. The Specifications for materials set out the minimum standard of quality which the OWNER believes necessary to produce a satisfactory project. No substitutions will be permitted until the CONTRACTOR has received written permission of the ENGINEER to make a substitution for the material which has been specified.

2.04 Reference Standards

Reference to the standard technical society, organization, or association, or to codes of local and state authorities, shall mean the latest standard, code, specification, or tentative specification adopted and published at the date of taking bids, unless specifically stated otherwise. Reference to technical society, organization or body is made in Specifications in accordance with the following abbreviations:

AASHO	American Association of State Highway Officials
AIA	American Institute of Architects
ACI	American Concrete Institute
AGA	American Gas Association
AGMA	American Gear Manufacturer's Association
AISI	American Institute and Steel Institute
AISC	American Institute of Steel Construction
AMCA	Air Moving and Conditioning Association
ANSI	American National Standard Institute
API	American Petroleum Institute
ASA	American Standards Association
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers

ASME	American Society of Mechanical Engineers
ASTM	American Society of Testing Materials
AWSC	American Welding Society Code
AWWA	American Water Works Association
CSI	Construction Specification Institute
FIA	Factory Insurance Association
FM	Factory Manual
FS	Federal Specification
IEEE	Institute of Electrical and Electronic Engineers
IPCEA	Insulated Power Cable Engineers Association
NAAMM	National Association of Architectural Metal Manufacturers
NBFU	National Board of Fire Underwriters
NEC	National Electric Code
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
NBS	National Bureau of Standards
OSHA	Federal Occupational Safety & Health Act, 1970
PCI	Prestressed Concrete Institute
SMACNA	Sheet Metal and Air Conditioning Contractors National Association, Incorporated
SPR	Simplified Practice Recommendation
UBC	Uniform Building Code
UL	Underwriters Laboratory

2.05 Conflicts

All construction shall be in accordance with the requirements of the City of Dripping Springs, Hays County and in accordance with City of Austin Standard Specifications. In case of conflicts between these requirements, the following priority shall be applied:

1. Plans
2. Technical Specifications
3. Supplemental Conditions
4. City of Austin Standard Specifications
5. Texas Commission on Environmental Quality
6. Hays County

The Contractor shall notify the Engineer of any conflicts that arise.

3.0 MOBILIZATION AND DEMOBILIZATION

3.01 Mobilization

CONTRACTOR shall mobilize all required material, equipment, and labor to the site and place in an operational mode. This may include establishment of an office trailer and/or storage area for CONTRACTOR's use at the site, and mobilization of health and safety equipment, fuel, water, wastewater, and trash handling facilities, and all other equipment necessary to complete the specified work. If a construction trailer is used, CONTRACTOR shall be responsible for connection and disconnection of all utilities services and temporary sewage holding tank (if used) for the trailer. The office trailer shall be kept clean, dry, and serviceable by the CONTRACTOR throughout the duration of the Contract. Measurement Payment of the Specification Item, "Mobilization", will be by the "Lump Sum", as the Work progresses and as described below:

a. Mobilization shall not be greater than 10% of the Contract amount.

b. Upon presentation of a paid invoices for the Payment Bond, Performance Bond, and/or required insurance, the Contractor will be paid that cost from the Lump Sum amount bid for Mobilization.

3.02 Demobilization

Upon completion of the Work in this Contract, CONTRACTOR shall demobilize all materials and debris, equipment, storage facilities, office trailer and related items, and labor from the job site, including concrete footings and slabs, and temporary erosion control devices. In addition, all office, storage, and work areas shall be smoothed and graded in a manner to conform to the natural appearance of surrounding landscape. Where unnecessary destruction, scarring, damage, or defacing may have occurred as a result of the CONTRACTOR's operations, the same shall be repaired, replanted, reseeded, or otherwise corrected at the CONTRACTOR's expense.

4.0 CLEAN UP

4.01 Construction Site

During construction the CONTRACTOR shall keep the site free and clean from all rubbish and debris and shall clean up the site promptly and when notified to do so by the Engineer or OWNER.

The CONTRACTOR shall, at his own expense, maintain the streets and roads free from dust, mud, excess earth or debris which constitutes a nuisance or danger to the public, or the occupants of adjacent properties. Care shall be taken to prevent spillage or debris deposited on streets, due to the CONTRACTOR's operations, and such spillage or debris shall be immediately removed.

4.02 Back Work

The CONTRACTOR shall coordinate his operations in such a manner as to prevent the amount of clean up and completion of back work from becoming excessive. Should such a condition exist, the Engineer may order all or portions of the work to cease and refuse to allow any work to commence until the back work is done to the Engineer's satisfaction.

4.03 Payment

Costs for clean up shall be at the CONTRACTOR's sole expense. No separate payment shall be made for Clean Up.

5.0 MEASUREMENT and PAYMENT

Unless stated otherwise in the contract documents, it is understood that all payments made are for finished work and include all labor, tools, materials, appurtenances, constructing and completing the item on which payment is made.

6.0 STANDARD CONDITIONS

a. To ensure compliance with the Migratory Bird Treaty Act, vegetation clearing will not be performed, if possible, during the migratory bird nesting period from March 15 through September 15, to avoid adverse impacts to breeding birds. If clearing vegetation during the migratory bird nesting season is unavoidable, then a survey of the proposed project area will be conducted to ensure that no nests with eggs or young will be disturbed by operations. A minimum 150-foot buffer of vegetation remain around any nests that are observed prior to disturbance. Any vegetation (such as trees, shrubs, and grasses) or other open areas where occupied nests are located will not be disturbed until the eggs have hatched and the young have fledged;

b. Compliance with the terms and conditions of United States Army Corps of Engineers Nationwide Permit 12 for Utility Line Activities (USACE Project Number SWF-2020-00075);

c. In order to comply with requirements of the Federal Emergency Management Agency regarding implementation of the Flood Insurance Act, Flood Disaster Protection Act, National Flood Insurance Reform Act, Federal Executive Orders 11988 and 11990, and to comply with related state statutes, proponents of construction projects in special flood hazard areas must coordinate in advance with the local floodplain administrator and obtain a floodplain development permit prior to construction;

d. Standard emergency condition for the discovery of threatened and endangered species; and

e. Standard emergency condition for the discovery of cultural resources.

SECTION 01300
SUBMITTALS

PART 1: GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

A. The CONTRACTOR shall furnish submittals for any and all such parts of the work and equipment as set forth in the specifications and indicated on the plans. The procedures for review of the submittals shall be as described herein.

B. The CONTRACTOR's Bid shall include the costs associated with preparation of and processing all required submittals. This includes all costs associated with providing information required to meet the requirements specified herein.

C. All submittals shall be individually identified by reference to Specification Section, Paragraph, Drawing Number or Detail as applicable.

D. This Section specifies the general methods and requirements of submissions applicable to the following work-related submittals for the General Contractor: Shop Drawings, Product Data, Samples, Mock Ups, and Construction or Submittal Schedules. Detailed submittal requirements may be further specified in the technical specification sections. Subcontractor and suppliers will be required to assist the CONTRACTOR with submittal preparation as described herein for all supplied equipment.

1.02 SHOP DRAWINGS, PRODUCT DATA, SAMPLES

A. Shop Drawings

1. Shop drawings, as specified in individual work Sections include, but are not necessarily limited to, custom-prepared data such as fabrication and erection/installation (working) drawings, scheduled information, setting diagrams, actual shopwork manufacturing instructions, custom templates, special wiring diagrams, coordination drawings, design calculations, individual system or equipment inspection, and test reports including performance curves and certifications, as applicable to the Work.

2. All shop drawings as described above shall be signed and sealed by a Licensed Engineer in the State of Texas.

3. All shop drawings submitted by subcontractors and/or suppliers for approval shall be sent directly to the CONTRACTOR for checking. The CONTRACTOR shall be responsible for their submission at the proper time so as to prevent delays in delivery of materials.

4. The CONTRACTOR shall check all subcontractor and supplier shop drawings regarding measurements, size of members, materials, and details to satisfy him or herself that they conform to the intent of the Drawings and Specifications. Shop drawings found to be inaccurate or otherwise in error shall be returned to the subcontractors by CONTRACTOR for correction before submission thereof.

5. All details on shop drawings submitted for approval shall show clearly the relation of the various parts to the main members and lines of the structure, and where correct fabrication of the work depends upon field measurements such measurements shall be made and noted on the drawings before being submitted for approval.

B. Product Data

1. Product data as specified in individual Sections, include, but are not necessarily limited to, standard prepared data for manufactured products (sometimes referred to as catalog data and/or cut sheets), such as the manufacturer's product specification and installation instructions, availability of colors and patterns, manufacturer's printed statements of compliances and applicability, roughing-in diagrams and templates, catalog cuts, product photographs, standard wiring diagrams, printed performance curves and operational-range diagrams, production or quality control inspection and test reports and certifications, mill reports, product operating and maintenance instructions and recommended spare-parts listing and printed product warranties, as applicable to the Work.

C. Samples

1. Samples specified in individual Sections, include, but are not necessarily limited to, physical examples of the work such as sections of manufactured or fabricated work, small cuts or containers of materials, complete units of repetitively-used products, color/texture/pattern swatches and range sets, specimens for coordination of visual effect, graphic symbols and units of work to be used by the Engineer or OWNER for independent inspection and testing, as applicable to the Work.

1.03 CONTRACTOR'S RESPONSIBILITIES

A. The CONTRACTOR shall review shop drawings, product data and samples, including those by subcontractors, prior to submission to determine and verify the following:

1. Field measurements
2. Field construction criteria
3. Catalog numbers and similar data
4. Conformance with the Specifications

B. Each shop drawing, sample and product data submitted by the CONTRACTOR shall have affixed to it the following Certification Statement including the CONTRACTOR's Company name and signed by the CONTRACTOR:

"Certification Statement: by this submittal, I hereby represent that I have fulfilled all obligations regarding verifying and determining field measurements, field construction criteria, materials, dimensions, catalog numbers and similar data and other applicable approved shop drawings."

Shop drawings and product data sheets 11" x 17" and smaller shall be bound together in an orderly fashion and bear the above Certification Statement on the cover sheet. The cover sheet shall fully describe the packaged data and include a listing of all items within the package. Provide to the Resident Project Representative a copy of each submittal transmittal sheet for shop drawings, product data and samples at the time of submittal of said drawings, product data and samples to the Engineer.

C. The CONTRACTOR shall utilize an 8-character submittal identification numbering system in the following manner:

1. The first five digits shall be the applicable Specification Section Number.
2. The next two digits shall be the numbers 01-99 to sequentially number each initial separate item or drawing submitted under each specific Section number.
3. The last character shall be a letter, A-Z, indicating the submission, or resubmission of the same Drawing (i.e. A=1st submission, B=2nd submission, C=3rd submission, etc.). A typical submittal number would be as follows:

03300-08-B

03300 = Specification Section for Concrete
08 = The eighth initial submittal under this specification section
B = The second submission (first resubmission) of that particular shop drawing

D. Notify the Engineer in writing, at the time of submittal, of any deviations in the submittals from the requirements of the Contract Documents.

E. The review and approval of shop drawings, samples or product data by the Engineer shall not relieve the CONTRACTOR from his/her responsibility with regard to the fulfillment of the terms of the Contract. All risks of error and omission are assumed by the CONTRACTOR and the Engineer will have no responsibility therefor.

F. No portion of the work requiring a shop drawing, sample, or product data shall be started nor shall any materials be fabricated or installed prior to the approval or qualified approval of such item. Fabrication performed, materials purchased or on-site construction accomplished which does not conform to approved shop drawings and data shall be at the CONTRACTOR's risk. The OWNER or Engineer will not be liable for any expense or delay due to corrections or remedies required to accomplish conformity.

G. Project work, materials, fabrication, and installation shall conform to approved shop drawings, applicable samples, and product data.

1.04 SUBMISSION REQUIREMENTS

A. Submittals shall be made promptly in accordance with approved schedule, and in such sequence as to cause no delay in the Work or in the work of any other contractor. All submittals shall be accompanied by a letter of transmittal, which shall be of the form supplied by or approved by the Engineer.

B. Number of submittals required:

1. Shop Drawings, Product Data, and Performance data for equipment: The CONTRACTOR shall submit to the Engineer for his review, four (4) sets, plus the number of sets the CONTRACTOR desires to be returned to himself.
2. Samples: CONTRACTOR shall submit three (3) sets of all required samples.

C. Submittals shall contain:

1. The date of submission and the dates of any previous submissions.
2. The Project title and number.
3. CONTRACTOR identification.
4. The names of:
   a. CONTRACTOR
   b. Supplier
   c. Manufacturer
5. Identification of the product, with the specification section number, page and paragraph(s).
6. Field dimensions, clearly identified as such.
7. Relation to adjacent or critical features of the Work or materials.
8. Applicable standards, such as ASTM or Federal Specification numbers.
9. Identification of deviations from Contract Documents.
10. Identification of revisions on resubmittals.
11. An 8”x 3” blank space for CONTRACTOR and Engineer stamps.

1.05 REVIEW OF SHOP DRAWINGS, PRODUCT DATA, WORKING DRAWINGS AND SAMPLES

A. The review of shop drawings, data, and samples will be for general conformance with the design concept and Contract Documents. They shall not be construed as:

1. Permitting any departure from the Contract requirements;
2. Relieving the CONTRACTOR of responsibility for any errors, including details, dimensions, and materials; and/or
3. Approving departures from details furnished by the Engineer, except as otherwise provided herein.

B. The CONTRACTOR remains responsible for details and accuracy, for coordinating the work with all other associated work and trades, for selecting fabrication processes, for techniques of assembly, and for performing work in a safe manner.

C. If the shop drawings, data or samples as submitted describe variations and show a departure from the Contract requirements which Engineer finds to be in the interest of the OWNER and to be so minor as not to involve a change in Contract Price or time for performance, the Engineer may return the reviewed drawings without noting an exception.

D. Submittals will be returned to the CONTRACTOR under one of the following:

1. "APPROVED" is assigned when there are no notations or comments on the submittal. When returned under this code the CONTRACTOR may release the equipment and/or material for manufacture.

2. "APPROVED AS NOTED" is assigned when a confirmation of the notations and comments IS NOT required by the CONTRACTOR. The CONTRACTOR may release the equipment or material for manufacture; however, all notations and comments must be incorporated into the final product.

3. "APPROVED AS NOTED/CONFIRM" is assigned when a confirmation of the notations and comments IS required by the CONTRACTOR. The CONTRACTOR may release the equipment or material for manufacture; however, all notations and comments must be incorporated into the final product. This confirmation shall specifically address each omission and nonconforming item that was noted. Confirmation is to be received by the Engineer within 15 calendar days of the date of the Engineer's transmittal requiring the confirmation.

4. "REVISE AND RESUBMIT" is assigned when notations and comments are extensive enough to require a resubmittal of the package. Resubmittal is to be received by the Engineer within 15 calendar days of the date of the Engineer's transmittal requiring the resubmittal.

4. "NOT APPROVED" is assigned when the submittal does not meet the intent of the Contract Documents. The CONTRACTOR must resubmit the entire package revised to bring the submittal into conformance. It may be necessary to resubmit using a different manufacturer/vendor to meet the Contract Documents.

E. Resubmittals will be handled in the same manner as first submittals. On resubmittals the CONTRACTOR shall direct specific attention, in writing on the letter of transmittal and on resubmitted shop drawings by use of revision triangles or other similar methods, to revisions other than the corrections requested by the Engineer, on previous submissions. Any such revisions which are not clearly identified shall be made at the risk of the CONTRACTOR. The CONTRACTOR shall make corrections to any work done because of this type revision that is not in accordance to the Contract Documents as may be required by the Engineer.

F. Partial submittals may not be reviewed. The Engineer will be the only judge as to the completeness of a submittal. Submittals not complete will be returned to the CONTRACTOR, and will be considered "Not Approved" until resubmitted. The Engineer at his/her option may provide a list or mark the submittal directing the CONTRACTOR to the areas that are incomplete.

G. If the CONTRACTOR considers any correction indicated on the shop drawings to constitute a change to the Contract Documents, the CONTRACTOR shall give written notice thereof to the Engineer at least seven working days prior to release for manufacture.

H. When the shop drawings have been completed to the satisfaction of the Engineer, the CONTRACTOR shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions from the Engineer.

I. When submittals are returned to the CONTRACTOR, the number of prints the CONTRACTOR desires returned to him will be stamped or marked as described above and will be returned to the CONTRACTOR by letter.

1.06 DISTRIBUTION

A. Distribute reproductions of approved shop drawings and copies of approved product data and samples, where required, to the job site file and elsewhere as directed by the Engineer. Number of copies shall be as directed by the Engineer but shall not exceed the number specified in Paragraph 1.04B.

1.07 GENERAL PROCEDURES FOR SUBMITTALS

A. Coordination of Submittal Times: Prepare and transmit each submittal sufficiently in advance of performing the related work or other applicable activities, or within the time specified in the individual work sections of the Specifications, so that the installation will not be delayed by processing times including disapproval and resubmittal (if required), coordination with other submittals, testing, purchasing, fabrication, delivery and similar sequenced activities. No extension of time will be authorized because of the CONTRACTOR's failure to transmit submittals sufficiently in advance of the Work.

B. The CONTRACTOR shall allow sufficient time for preliminary review, correction and resubmission, and final review of all working (shop) drawings. The CONTRACTOR should allow not more than fourteen (14) days for each preliminary review.

C. Each submittal, appropriately coded, will be returned no later than 30 calendar days following receipt of submittal by the Engineer. Drawings of items critical to job progress, when requested in writing by the CONTRACTOR, may be given priority review.

PART 2: PRODUCTS (NOT USED)

PART 3: EXECUTION (NOT USED)

END OF SECTION

SECTION 01600
DELIVERY, STORAGE, AND HANDLING

PART 1: GENERAL

1.01 SCOPE OF WORK

A. Contractor shall be required to deliver all materials and equipment to the job site and shall be responsible for unloading and inspecting the equipment shipment, as well as storage and protection of the equipment upon delivery as specified herein. Equipment manufacturers' shall also perform an inspection of the equipment and provide written certification to the Engineer that the condition of the equipment has not been detrimentally affected by the equipment storage techniques and periods as specified herein.

B. This Section specifies the general requirements for the delivery handling, storage and protection for all items required in the construction of the work.

1.02 TRANSPORTATION AND DELIVERY

A. Transport and handle items in accordance with manufacturer's instructions.

B. Schedule delivery to reduce long-term on-site storage prior to installation and/or operation. Under no circumstances shall equipment be delivered to the site more than one month prior to installation without written authorization from the Engineer.

C. Coordinate delivery with installation to ensure minimum holding time for items that are hazardous, flammable, easily damaged or sensitive to deterioration.

D. Deliver products to the site in manufacturer's original sealed containers or other packing systems, complete with instructions for handling, storing, unpacking, protecting and installing.

E. All items delivered to the site shall be unloaded and placed in a manner which will not hamper the normal construction operation or those of subcontractors and other contractors and will not interfere with the flow of necessary traffic.

F. Provide necessary equipment and personnel to unload all items delivered to the site.

G. Promptly inspect shipment to assure that products comply with requirements, quantities are correct, and items are undamaged. For items furnished by others (i.e. OWNER, other Contractors), perform inspection in the presence of the Engineer. Notify Engineer verbally, and in writing, of any problems.

1.03 STORAGE AND PROTECTION

A. Store and protect products in accordance with the manufacturer's instructions, with seals and labels intact and legible. Storage instructions shall be studied and understood by the CONTRACTOR and reviewed with the manufacturer and Engineer.

SECTION 01600
DELIVERY, STORAGE, AND HANDLING

Manufacturer's instructions shall be carefully followed and a written record of this kept by the CONTRACTOR. Arrange storage to permit access for inspection.

B. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.

C. All structural and miscellaneous steel shall be stored off the ground or otherwise to prevent accumulations of dirt or grease, and in a position to prevent accumulations of standing water and to minimize rusting.

D. All mechanical and electrical equipment and instruments subject to corrosive damage by the atmosphere if stored outdoors (even though covered by canvas) shall be stored in a weather-tight building to prevent injury. Due to available space at the existing site, CONTRACTOR may have to provide a temporary structure (with approval from the City of Austin) on the site or storage offsite, but it must be satisfactory to the Engineer and/or OWNER. Any storage building used shall be placed within the Limits of Construction shown on the plans, and provided with adequate ventilation to prevent condensation. Maintain temperature and humidity within range required by manufacturer.

1. All equipment shall be stored fully lubricated with oil, grease and other lubricants unless otherwise instructed by the manufacturer.

2. Moving parts shall be rotated a minimum of once weekly to insure proper lubrication and to avoid metal-to-metal "welding". Upon installation of the equipment, the CONTRACTOR shall start the equipment, at least half load, once weekly for an adequate period of time to ensure that the equipment does not deteriorate from lack of use.

3. Lubricants shall be changed upon completion of installation and as frequently as required thereafter during the period between installation and acceptance. New lubricants shall be put into the equipment at the time of acceptance.

4. Prior to acceptance of the equipment, the CONTRACTOR shall have the manufacturer inspect the equipment and certify that its condition has not been detrimentally affected by the storage period. Such certifications by the manufacturer shall be deemed to mean that the equipment is judged by the manufacturer to be in a condition equal to that of equipment that has been shipped, installed, tested and accepted in a minimum time period. As such, the manufacturer will guaranty the equipment equally in both instances. If such a certification is not given, the equipment shall be judged to be defective. It shall be removed and replaced at the CONTRACTOR's expense.

E. If a temporary onsite building is not or cannot be used for storage, CONTRACTOR shall store materials and equipment offsite and shall allow Engineer and

OWNER access for inspections.

PART 2: PRODUCTS (NOT USED)

PART 3: EXECUTION (NOT USED)

END OF SECTION

SECTION 01300
SUBMITTALS

PART 1: GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

A. The CONTRACTOR shall furnish submittals for any and all such parts of the work and equipment as set forth in the specifications and indicated on the plans. The procedures for review of the submittals shall be as described herein.

B. The CONTRACTOR's Bid shall include the costs associated with preparation of and processing all required submittals. This includes all costs associated with providing information required to meet the requirements specified herein.

C. All submittals shall be individually identified by reference to Specification Section, Paragraph, Drawing Number or Detail as applicable.

D. This Section specifies the general methods and requirements of submissions applicable to the following work-related submittals for the General Contractor: Shop Drawings, Product Data, Samples, Mock Ups, and Construction or Submittal Schedules. Detailed submittal requirements may be further specified in the technical specification sections. Subcontractor and suppliers will be required to assist the CONTRACTOR with submittal preparation as described herein for all supplied equipment.

1.02 SHOP DRAWINGS, PRODUCT DATA, SAMPLES

A. Shop Drawings

1. Shop drawings, as specified in individual work Sections include, but are not necessarily limited to, custom-prepared data such as fabrication and erection/installation (working) drawings, scheduled information, setting diagrams, actual shopwork manufacturing instructions, custom templates, special wiring diagrams, coordination drawings, design calculations, individual system or equipment inspection, and test reports including performance curves and certifications, as applicable to the Work.

2. All shop drawings as described above shall be signed and sealed by a Licensed Engineer in the State of Texas.

3. All shop drawings submitted by subcontractors and/or suppliers for approval shall be sent directly to the CONTRACTOR for checking. The CONTRACTOR shall be responsible for their submission at the proper time so as to prevent delays in delivery of materials.

4. The CONTRACTOR shall check all subcontractor and supplier shop drawings regarding measurements, size of members, materials, and details to satisfy him or herself that they conform to the intent of the Drawings and Specifications. Shop drawings found to be inaccurate or otherwise in error shall be returned to the subcontractors by CONTRACTOR for correction before submission thereof.

5. All details on shop drawings submitted for approval shall show clearly the relation of the various parts to the main members and lines of the structure, and where correct fabrication of the work depends upon field measurements such measurements shall be made and noted on the drawings before being submitted for approval.

B. Product Data

1. Product data as specified in individual Sections, include, but are not necessarily limited to, standard prepared data for manufactured products (sometimes referred to as catalog data and/or cut sheets), such as the manufacturer's product specification and installation instructions, availability of colors and patterns, manufacturer's printed statements of compliances and applicability, roughing-in diagrams and templates, catalog cuts, product photographs, standard wiring diagrams, printed performance curves and operational-range diagrams, production or quality control inspection and test reports and certifications, mill reports, product operating and maintenance instructions and recommended spare-parts listing and printed product warranties, as applicable to the Work.

C. Samples

1. Samples specified in individual Sections, include, but are not necessarily limited to, physical examples of the work such as sections of manufactured or fabricated work, small cuts or containers of materials, complete units of repetitively-used products, color/texture/pattern swatches and range sets, specimens for coordination of visual effect, graphic symbols and units of work to be used by the Engineer or OWNER for independent inspection and testing, as applicable to the Work.

1.03 CONTRACTOR'S RESPONSIBILITIES

A. The CONTRACTOR shall review shop drawings, product data and samples, including those by subcontractors, prior to submission to determine and verify the following:

1. Field measurements
2. Field construction criteria
3. Catalog numbers and similar data
4. Conformance with the Specifications

B. Each shop drawing, sample and product data submitted by the CONTRACTOR shall have affixed to it the following Certification Statement including the CONTRACTOR's Company name and signed by the CONTRACTOR:

"Certification Statement: by this submittal, I hereby represent that I have fulfilled all obligations regarding verifying and determining field measurements, field construction criteria, materials, dimensions, catalog numbers and similar data and other applicable approved shop drawings."

Shop drawings and product data sheets 11" x 17" and smaller shall be bound together in an orderly fashion and bear the above Certification Statement on the cover sheet. The cover sheet shall fully describe the packaged data and include a listing of all items within the package. Provide to the Resident Project Representative a copy of each submittal transmittal sheet for shop drawings, product data and samples at the time of submittal of said drawings, product data and samples to the Engineer.

C. The CONTRACTOR shall utilize an 8-character submittal identification numbering system in the following manner:

1. The first five digits shall be the applicable Specification Section Number.
2. The next two digits shall be the numbers 01-99 to sequentially number each initial separate item or drawing submitted under each specific Section number.
3. The last character shall be a letter, A-Z, indicating the submission, or resubmission of the same Drawing (i.e. A=1st submission, B=2nd submission, C=3rd submission, etc.). A typical submittal number would be as follows:

03300-08-B

03300 = Specification Section for Concrete
08 = The eighth initial submittal under this specification section
B = The second submission (first resubmission) of that particular shop drawing

D. Notify the Engineer in writing, at the time of submittal, of any deviations in the submittals from the requirements of the Contract Documents.

E. The review and approval of shop drawings, samples or product data by the Engineer shall not relieve the CONTRACTOR from his/her responsibility with regard to the fulfillment of the terms of the Contract. All risks of error and omission are assumed by the CONTRACTOR and the Engineer will have no responsibility therefor.

F. No portion of the work requiring a shop drawing, sample, or product data shall be started nor shall any materials be fabricated or installed prior to the approval or qualified approval of such item. Fabrication performed, materials purchased or on-site construction accomplished which does not conform to approved shop drawings and data shall be at the CONTRACTOR's risk. The OWNER or Engineer will not be liable for any expense or delay due to corrections or remedies required to accomplish conformity.

G. Project work, materials, fabrication, and installation shall conform to approved shop drawings, applicable samples, and product data.

1.04 SUBMISSION REQUIREMENTS

A. Submittals shall be made promptly in accordance with approved schedule, and in such sequence as to cause no delay in the Work or in the work of any other contractor. All submittals shall be accompanied by a letter of transmittal, which shall be of the form supplied by or approved by the Engineer.

B. Number of submittals required:

1. Shop Drawings, Product Data, and Performance data for equipment: The CONTRACTOR shall submit to the Engineer for his review, four (4) sets, plus the number of sets the CONTRACTOR desires to be returned to himself.
2. Samples: CONTRACTOR shall submit three (3) sets of all required samples.

C. Submittals shall contain:

1. The date of submission and the dates of any previous submissions.
2. The Project title and number.
3. CONTRACTOR identification.
4. The names of:
   a. CONTRACTOR
   b. Supplier
   c. Manufacturer
5. Identification of the product, with the specification section number, page and paragraph(s).
6. Field dimensions, clearly identified as such.
7. Relation to adjacent or critical features of the Work or materials.
8. Applicable standards, such as ASTM or Federal Specification numbers.
9. Identification of deviations from Contract Documents.
10. Identification of revisions on resubmittals.
11. An 8”x 3” blank space for CONTRACTOR and Engineer stamps.

1.05 REVIEW OF SHOP DRAWINGS, PRODUCT DATA, WORKING DRAWINGS AND SAMPLES

A. The review of shop drawings, data, and samples will be for general conformance with the design concept and Contract Documents. They shall not be construed as:

1. Permitting any departure from the Contract requirements;
2. Relieving the CONTRACTOR of responsibility for any errors, including details, dimensions, and materials; and/or
3. Approving departures from details furnished by the Engineer, except as otherwise provided herein.

B. The CONTRACTOR remains responsible for details and accuracy, for coordinating the work with all other associated work and trades, for selecting fabrication processes, for techniques of assembly, and for performing work in a safe manner.

C. If the shop drawings, data or samples as submitted describe variations and show a departure from the Contract requirements which Engineer finds to be in the interest of the OWNER and to be so minor as not to involve a change in Contract Price or time for performance, the Engineer may return the reviewed drawings without noting an exception.

D. Submittals will be returned to the CONTRACTOR under one of the following:

1. "APPROVED" is assigned when there are no notations or comments on the submittal. When returned under this code the CONTRACTOR may release the equipment and/or material for manufacture.

2. "APPROVED AS NOTED" is assigned when a confirmation of the notations and comments IS NOT required by the CONTRACTOR. The CONTRACTOR may release the equipment or material for manufacture; however, all notations and comments must be incorporated into the final product.

3. "APPROVED AS NOTED/CONFIRM" is assigned when a confirmation of the notations and comments IS required by the CONTRACTOR. The CONTRACTOR may release the equipment or material for manufacture; however, all notations and comments must be incorporated into the final product. This confirmation shall specifically address each omission and nonconforming item that was noted. Confirmation is to be received by the Engineer within 15 calendar days of the date of the Engineer's transmittal requiring the confirmation.

4. "REVISE AND RESUBMIT" is assigned when notations and comments are extensive enough to require a resubmittal of the package. Resubmittal is to be received by the Engineer within 15 calendar days of the date of the Engineer's transmittal requiring the resubmittal.

4. "NOT APPROVED" is assigned when the submittal does not meet the intent of the Contract Documents. The CONTRACTOR must resubmit the entire package revised to bring the submittal into conformance. It may be necessary to resubmit using a different manufacturer/vendor to meet the Contract Documents.

E. Resubmittals will be handled in the same manner as first submittals. On resubmittals the CONTRACTOR shall direct specific attention, in writing on the letter of transmittal and on resubmitted shop drawings by use of revision triangles or other similar methods, to revisions other than the corrections requested by the Engineer, on previous submissions. Any such revisions which are not clearly identified shall be made at the risk of the CONTRACTOR. The CONTRACTOR shall make corrections to any work done because of this type revision that is not in accordance to the Contract Documents as may be required by the Engineer.

F. Partial submittals may not be reviewed. The Engineer will be the only judge as to the completeness of a submittal. Submittals not complete will be returned to the CONTRACTOR, and will be considered "Not Approved" until resubmitted. The Engineer at his/her option may provide a list or mark the submittal directing the CONTRACTOR to the areas that are incomplete.

G. If the CONTRACTOR considers any correction indicated on the shop drawings to constitute a change to the Contract Documents, the CONTRACTOR shall give written notice thereof to the Engineer at least seven working days prior to release for manufacture.

H. When the shop drawings have been completed to the satisfaction of the Engineer, the CONTRACTOR shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions from the Engineer.

I. When submittals are returned to the CONTRACTOR, the number of prints the CONTRACTOR desires returned to him will be stamped or marked as described above and will be returned to the CONTRACTOR by letter.

1.06 DISTRIBUTION

A. Distribute reproductions of approved shop drawings and copies of approved product data and samples, where required, to the job site file and elsewhere as directed by the Engineer. Number of copies shall be as directed by the Engineer but shall not exceed the number specified in Paragraph 1.04B.

1.07 GENERAL PROCEDURES FOR SUBMITTALS

A. Coordination of Submittal Times: Prepare and transmit each submittal sufficiently in advance of performing the related work or other applicable activities, or within the time specified in the individual work sections of the Specifications, so that the installation will not be delayed by processing times including disapproval and resubmittal (if required), coordination with other submittals, testing, purchasing, fabrication, delivery and similar sequenced activities. No extension of time will be authorized because of the CONTRACTOR's failure to transmit submittals sufficiently in advance of the Work.

B. The CONTRACTOR shall allow sufficient time for preliminary review, correction and resubmission, and final review of all working (shop) drawings. The CONTRACTOR should allow not more than fourteen (14) days for each preliminary review.

C. Each submittal, appropriately coded, will be returned no later than 30 calendar days following receipt of submittal by the Engineer. Drawings of items critical to job progress, when requested in writing by the CONTRACTOR, may be given priority review.

PART 2: PRODUCTS (NOT USED)

PART 3: EXECUTION (NOT USED)

END OF SECTION

APPENDIX A

TO ALL PROPOSERS:

Documents to be turned in at the proposal opening include:

1. Bid Form (EJCDC NO. C-410)
2. Bid Bond (EJCDC NO. C-430)
3. Qualification Statement (EJCDC No. C-451)
4. Bidder Certification (WRD-255)
5. Prime Contractor Affirmative Steps Certification and Goals (TWDB-0217)
6. Certification Regarding Debarment, Suspension, and other Responsibility Matters (SRF-404)
7. Certification Regarding Lobbying (WRD-213)
8. Standard Form LLL, Disclosure of Lobbying Activities (if Required)
9. Certification of Interested Parties (Form 1295)
10. A Tabulation of Subcontractors, Suppliers and other individuals and entities required to be identified in this Bid.
11. Proof of Worker's Compensation Coverage.

APPENDIX B

Other Documents and Forms Associated with this Contract:

1. Change Order (EJCDC No. C-941)
2. Contractor's Application for Payment (EJCDC No. C-620)
3. Certificate of Substantial Completion (EJCDC No. C-625)
4. Loan/Grant Participation Summary (TWDB-0373)
5. Affirmative Steps Solicitation Report (TWDB-0216)
6. Release of Lien Form
7. American Iron and Steel Requirements (TWDB-1106)

City ofThis document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

CHANGE ORDER

Prepared By

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CHANGE ORDER NO.: [Number of Change Order]

Owner:	City of Dripping Springs	Owner's Project No.:	73819
Engineer:	Burgess & Niple, Inc	Engineer's Project No.:	PR39676.1
Contractor:		Contractor's Project No.:	
Project:	City of Dripping Springs West Interceptor Segment 2		
Contract Name:	TWDB CW-SRF No. 73819		
Date Issued:		Effective Date of Change Order:	

The Contract is modified as follows upon execution of this Change Order:

Description:

[Description of the change]

Attachments:

[List documents related to the change]

Change in Contract Price	**Change in Contract Times [State Contract Times as either a specific date or a number of days]**
Original Contract Price: $ _____	Original Contract Times: Substantial Completion: _____ Ready for final payment: _____
[Increase] [Decrease] from previously approved Change Orders No. 1 to No. **[Number of previous Change Order]**: $ _____	**[Increase] [Decrease]** from previously approved Change Orders No.1 to No. **[Number of previous Change Order]**: Substantial Completion: _____ Ready for final payment: _____
Contract Price prior to this Change Order: $ _____	Contract Times prior to this Change Order: Substantial Completion: _____ Ready for final payment: _____
[Increase] [Decrease] this Change Order: $ _____	**[Increase] [Decrease]** this Change Order: Substantial Completion: _____ Ready for final payment: _____
Contract Price incorporating this Change Order: $ _____	Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for final payment: _____

	Recommended by Engineer (if required)	Authorized by Owner
By:	_____	_____
Title:	_____	_____
Date:	_____	_____

	Authorized by Owner	Approved by Funding Agency (if applicable)
By:	_____	_____
Title:	_____	_____
Date:	_____	_____

EJCDC® C-941, Change Order.
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CITY OF DRIPPING SPRINGSWEST INTERCEPTOR SEGMENT 2 CHANGE ORDER NO. _____					
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
BASE BID ITEMS					
CO1-1					$0.00
CO1-2					$0.00
CO1-3					$0.00
TOTAL CHANGE ORDER NO. 1					**$0.00**

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

APPLICATION FOR PAYMENT

Prepared By

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Contractor's Application for Payment

Owner:	City of Dripping Springs	**Owner's Project No.:**	73819
Engineer:	Burgess & Niple, Inc.	**Engineer's Project No.:**	PR39676.1
Contractor:		**Contractor's Project No.:**	
Project:	City of Dripping Springs West Interceptor Segment 2		
Contract:	TWDB CW-SRF No. 73819		
Application No.:		**Application Date:**	
Application Period:	**From**	**to**	

1. Original Contract Price				#REF!
2. Net change by Change Orders				#REF!
3. Current Contract Price (Line 1 + Line 2)				#REF!
4. Total Work completed and materials stored to date (Sum of Column G Lump Sum Total and Column J Unit Price Total)				#REF!
5. Retainage				
a.	X	#REF!	Work Completed	#REF!
b.	X	#REF!	Stored Materials	#REF!
c. Total Retainage (Line 5.a + Line 5.b)				#REF!
6. Amount eligible to date (Line 4 - Line 5.c)				#REF!
7. Less previous payments (Line 6 from prior application)				
8. Amount due this application				#REF!
9. Balance to finish, including retainage (Line 3 - Line 4)				#REF!

Contractor's Certification

The undersigned Contractor certifies, to the best of its knowledge, the following:

(1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;

(2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such liens, security interest, or encumbrances); and

(3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

Contractor:

Signature: **Date:**

Recommended by Engineer		**Approved by Owner**	
By:		**By:**	
Title:		**Title:**	
Date:		**Date:**	
Approved by Funding Agency			
By:		**By:**	
Title:		**Title:**	
Date:		**Date:**	

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Progress Estimate - Unit Price Work

Contractor's Application for Payment

Owner: City of Dripping Springs
Engineer: Burgess & Niple, Inc.
Contractor:
Project: City of Dripping Springs West Interceptor Segment 2
Contract: TWDB CW-SRF No. 73819

Owner's Project No.: 73819
Engineer's Project No.: PR39676.1
Contractor's Project No.:

Application No.: **Application Period:** **From** **to** **Application Date:**

A	B	C	D	E	F	G	H	I	J	K	L
		Contract Information				Work Completed					
Bid Item No.	Description	Item Quantity	Units	Unit Price ($)	Value of Bid Item (C X E) ($)	Estimated Quantity Incorporated in the Work	Value of Work Completed to Date (E X G) ($)	Materials Currently Stored (not in G) ($)	Work Completed and Materials Stored to Date (H + I) ($)	% of Value of Item (J / F) (%)	Balance to Finish (F - J) ($)
Original Contract											
					-		-		-		-
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				Original Contract Totals	$ -		$ -	$ -	$ -		$ -

EJCDC C-620 Contractor's Application for Payment
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Progress Estimate - Unit Price Work

Contractor's Application for Payment

Owner:	City of Dripping Springs	**Owner's Project No.:**	73819
Engineer:	Burgess & Niple, Inc.	**Engineer's Project No.:**	PR39676.1
Contractor:		**Contractor's Project No.:**	
Project:	City of Dripping Springs West Interceptor Segment 2		
Contract:	TWDB CW-SRF No. 73819		

Application No.: _____ **Application Period:** **From** _____ **to** _____ **Application Date:** _____

A	B	C	D	E	F	G	H	I	J	K	L
		Contract Information				Work Completed					
Bid Item No.	Description	Item Quantity	Units	Unit Price ($)	Value of Bid Item (C X E) ($)	Estimated Quantity Incorporated in the Work	Value of Work Completed to Date (E X G) ($)	Materials Currently Stored (not in G) ($)	Work Completed and Materials Stored to Date (H + I) ($)	% of Value of Item (J / F) (%)	Balance to Finish (F - J) ($)
Change Orders											
					-		-		-		-
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					-		-		-		-
				Change Order Totals	$ -		$ -	$ -	$ -		$ -
Original Contract and Change Orders											
				Project Totals	$ -		$ -	$ -	$ -		$ -

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CERTIFICATE OF SUBSTANTIAL COMPLETION

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CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner:	City of Dripping Springs	Owner's Project No.:	73819
Engineer:	Burgess & Niple, Inc	Engineer's Project No.:	PR39676.1
Contractor:		Contractor's Project No.:	
Project:	City of Dripping Springs West Interceptor Segment 2		
Contract Name:	TWDB CW-SRF No. 73819		

This ☐ Preliminary ☒ Final Certificate of Substantial Completion applies to:

☒ All Work ☐ The following specified portions of the Work:

Furnishing all materials, equipment, tools, and labor necessary for the construction of approximately 7,996 linear feet of 12 to 24" gravity sewer line. The gravity main will cross Onion Creek by way of banked retaining wall to convey the new line. Lastly, protection and removal of select trees along the new gravity line alignment will be required.

Date of Substantial Completion: **[Enter date, as determined by Engineer]**

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Work or portion thereof designated above is hereby established, subject to the provisions of the Contract pertaining to Substantial Completion. The date of Substantial Completion in the final Certificate of Substantial Completion marks the commencement of the contractual correction period and applicable warranties required by the Contract.

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

Amendments of contractual responsibilities recorded in this Certificate should be the product of mutual agreement of Owner and Contractor; see Paragraph 15.03.D of the General Conditions.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work must be as provided in the Contract, except as amended as follows:

Amendments to Owner's Responsibilities: ☒ None ☐ As follows:

Amendments to Contractor's Responsibilities: ☒ None ☐ As follows:

The following documents are attached to and made a part of this Certificate:

[None]

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract Documents.

Engineer

By *(signature)*: _____

Name *(printed)*: _____

Title: _____

EJCDC® C-625, Certificate of Substantial Completion.
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TWDB-0373
Revised 04/01/2024

FOR OFFICE USE ONLY
Commitment #_____

TWDB-0373
TEXAS WATER DEVELOPMENT BOARD
PARTICIPATION SUMMARY
PROJECT INFORMATION

TWDB Project Number	Applicant/Entity Name	Total TWDB Funding Request	Program Type (insert "X" for all that apply)
73819			☐ Drinking Water SRF (DWSRF) ☒ Clean Water SRF (CWSRF)

Project Name: City of Dripping Springs West Interceptor

Solicitation By: ☐ Applicant/Entity OR ☐ Prime Contracted Business: _____

Project Phase: ☐ Prior to Closing ☐ Release of funding for PADs ☐ Construction Contract # ____

Instructions	
Column 1	Enter the full name, street address, city/state/zip for each firm awarded a contract for the project.
Column 2	Enter one of the following procurement or contract categories: **CONSTRUCTION / NON-CONSTRUCTION** (Services; Equipment; Supplies)
Column 3	Enter the type of business: **MBE (Minority Business Enterprise), WBE (Women-owned Business Enterprise), or OTHER (NOTE: OTHER = Company or firm is Non-MBE or WBE)**
Column 4	Enter the exact amount of the awarded contract.
Column 5	Enter the exact date the contract was executed or the proposed date of contract execution.

If valid MBE/WBE firms are awarded contracts, a copy of their certification is required to be attached with this form for each MBE/WBE business listed.

Notice: Brokers may not be listed below as an MBE or WBE. A broker is a firm that does not perform, manage, or supervise the work of its sub/contract in a manner consistent with the normal business practices for sub/contractors in its line of business. For more specifics, review guidance document, TWDB-0210.

I. LIST OF ACTUAL CONTRACTS/PROCUREMENTS

	Column 1	Column 2	Column 3	Column 4	Column 5
	Name & Address of Contracted Firm/Vendor	Procurement Category Construction Or Non-Construction	MBE/WBE Status	Contract Amount ($)	Contract Execution Date
1.					
2.					
3.					
4.					
5.					
6.					

(Table continues on the next page)

	Column 1	Column 2	Column 3	Column 4	Column 5
	Name & Address of Contacted Firm/Vendor	Procurement Category Construction Or Non-Construction	MBE/WBE Status	Contract Amount ($)	Contract Execution Date
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					

Use additional sheets if necessary

Signature – Authorized Representative	Title (print legibly)	Date

II. TWDB APPROVAL SIGNATURE

Signature indicates the form meets DBE requirements.

DBE Coordinator	Approval Date

TWDB-216
Revised 04/01/2024

FOR OFFICE USE ONLY
Commitment#_____

TWDB-0216
TEXAS WATER DEVELOPMENT BOARD
AFFIRMATIVE STEPS SOLICITATION REPORT

I. PROJECT INFORMATION

TWDB Project Number	Applicant/Entity Name	Total TWDB Funding Request	Program Type (insert "X" for all that apply)
73819			☐ Drinking Water SRF (DWSRF) ☐ Clean Water SRF (CWSRF)

Project Name: City of Dripping Springs West Interceptor

Solicitation By: ☐ Applicant/Entity OR ☐ Prime Contracted Business:_____

Project Phase: ☐ Prior to Closing ☐ Release of funding for PADs ☐ Construction Contract #_

II. SOLICITATION METHOD(S) UTILIZED

At least two methods of solicitation are required. Select the method(s) utilized for the solicitation. Copies of the actual postings, direct contact email/phone log, etc. must be attached to this form as support documentation for each method used. Failure to adequately follow these steps will result in the requirement to complete additional steps in order to become compliant.

☐ Newspaper Advertisements ☐ Meetings or Conferences ☐ Trade Association Publications

☐ Minority Media ☐ Internet & Web Postings ☐ Other Government Publications

☐ Direct Contact by Phone, Fax, USPS Mail, or Email*

If using direct contact, entities must solicit to a minimum of 3 businesses/firms (at least one being a DBE) for each category of contract sought (i.e., construction, supplies, equipment, or services) to demonstrate a Good Faith Effort.* ***DBE businesses/firms may be contacted to certify compliance.*

III. PROJECT BIDDERS LIST:

List on the following table, or provide on a separate list, only the business entities directly solicited for procurement or that submitted a bid for consideration.

Instructions for Columns 1 - 5	1 - List the actual date business was contacted 2 - Full business name (line one) & point of contact (line two) 3 - Business address 4 - Telephone number 5 - Email address for the business
Instructions for Column 6	Enter one of the following procurement or contract categories: **Construction or Non-Construction (SUPPLIES – EQUIPMENT – SERVICES)** *For detailed definitions, review guidance document, TWDB-0210.*
Instructions for Column 7	Enter the type of business: **MBE** - Minority Business Enterprise, **WBE** - Women-owned Business Enterprise, or **OTHER** - Company or firm is Non-MBE or WBE

Notice: Entities receiving State Revolving Fund financial assistance must create and maintain a Bidders List if the entity is subject to, or chooses to follow, competitive bidding. The Bidders List must include all firms that bid or quoted on contracts under EPA assisted projects, including both MBE/WBEs and non-MBE/WBEs. Entities must keep all Bidders Lists until project completion or the recipient is no longer receiving EPA funding under the loan, whichever is later. Entities with loans totaling less than $250,000 during a state fiscal year are exempt from the Bidders List requirement but must still meet DBE program requirements. The Bidders List requirement also applies to all Prime Contracted Businesses/Firms that make subcontracting.

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
	Date of Contact Type of Contact	Business Name & Point of Contact name	Business Address	Telephone Number	E-Mail Address	Procurement Category Construction / Non-Construction	MBE/WBE/Other Status
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							

Use additional sheets if necessary

Signature – Authorized Representative	Title (print legibly)	Date

IV. TWDB APPROVAL SIGNATURE

Signature indicates the form meets DBE requirements

DBE Coordinator	Approval Date

RELEASE OF LIEN FORM

CONTRACTOR'S AFFIDAVIT, WARRANTY, AND LIEN WAIVER

STATE OF TEXAS §
§
COUNTY OF_____ §

THAT I, the undersigned, being duly sworn, do depose and say that I was contracted to construct the pipeline and pump stations for the water system improvements identified in **PROPOSED CITY OF DRIPPING SPRINGS– WEST INTERCEPTOR SEGMENT 2 - TWDB - CLEAN WATER SRF PROJECT NO. 73819**

THAT these improvements have been fully and satisfactorily completed in substantial conformity with the contracts.

THAT all the materials used in said improvement, all labor performed thereon, and all fees, insurance, and permits, in connection with the said improvements which might give rise to liens have been paid in full.

Listed below are all major subcontractors and suppliers included in this work. I have placed on file waivers of liens from all subcontractors listed below as substantiation of the above statement. These waivers of liens may be made available to the Owner at their request.

Name of Subcontractor and Address

Name	Address
_____	_____
_____	_____
_____	_____

THAT I hereby waive any lien or right to lien which he/she may have against the described improvements and warrants to save harmless **THE CITY OF DRIPPING SPRINGS, TEXAS** from any liens which are now in existence, or may hereafter arise by reason of said improvements, and cause the same to be released of accord immediately.

THAT the foregoing waiver and these statements are an express warranty and representation to **THE CITY OF DRIPPING SPRINGS, TEXAS** of the facts herein sworn to and is made for valuable consideration, receipt whereof I acknowledged.

_____
Signature

_____
Title

_____
Company/Firm

SUBSCRIBED AND SWORN to before me this day of_____.

_____
Notary Public

My commission Expires: _____

TWDB-1106-A
Rev. 6/24

Monthly American Iron and Steel Certificate

Compliance Submittal by Owner (Sub-Recipient)

TWDB Project No. _____
Loan No. _____

This executed certificate must be submitted with each Outlay report requesting funds associated with construction contracts for all iron and steel products, and/or materials included within the project's construction contracts.

I, _____, _____ of
(Name) (Title)

_____
(Name of Entity)

hereby certify that all iron and steel products and/or materials incorporated into the construction, alteration, maintenance, or repair of the subject project are in full compliance with the American Iron and Steel requirements of Section 608 of the Federal Water Pollution Control Act (33 U.S.C. §1388) for the Clean Water State Revolving Fund or applicable federal law, including federal appropriation acts and Section 1452(a)(4) of the Safe Drinking Water Act (42 U.S.C. §300j-12(a)(4)), as applicable, for the Drinking Water State Revolving Fund, or comply with waivers granted by the U.S. Environmental Protection Agency.

I understand that a false statement herein may subject me to penalties under federal and state laws relating to filing false statements and other relevant statutes.

_____ _____
Signature Date

TWDB-1106-B
Revised: 09/09/2016

American Iron and Steel
de minimis log

Owner Name: City of Dripping Springs
Project Name: West Interceptor
TWDB SRF Number: 73819
Contractor Name:

Total Project Cost: $0.00
Total Material Cost:

Item No.	Iron or Steel Product	Unit Cost	Quantity	Total Cost	% Material Cost (< 1%)	Cumulative Cost	% Material Cost (< 5%)
1				$ -			
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							

Final American Iron and Steel Certificate

Compliance Submittal by Owner (Sub-Recipient)

TWDB Project No. _____

Loan No. _____

This executed certification must be submitted after the completion of the construction contract and prior to issuance of a Certificate of Approval by the TWDB, stating the project was completed in compliance with the AIS requirements.

I, _____ _____ of
(Name) (Title)

_____
(Name of Entity)

hereby certify that all iron and steel products and/or materials incorporated into the construction, alteration, maintenance, or repair of the subject project were in full compliance with the American Iron and Steel requirements of Section 608 of the Federal Water Pollution Control Act (33 U.S.C. §1388) for the Clean Water State Revolving Fund or federal law, including federal appropriation acts and Section 1452(a)(4) of the Safe Drinking Water Act (42 U.S.C. §300j-12(a)(4)), as applicable, for the Drinking Water State Revolving Fund, or comply with waivers granted by the U.S. Environmental Protection Agency.

I understand that a false statement herein may subject me to penalties under federal and state laws relating to filing false statements and other relevant statutes.

_____ _____
Signature Date

APPENDIX C

APPENDIX D

Geotechnical Engineering Report

Wastewater Capital Improvement – Western WWL Alignment
Dripping Springs, Texas

October 24, 2022

Terracon Project No. 96195217A



Prepared for:

City of Dripping Springs
Dripping Springs, Texas

Prepared by:

Terracon Consultants, Inc.
Austin, Texas

October 24, 2022

City of Dripping Springs
PO Box 384
Dripping Springs, Texas 78620

Attn: Ms. Ginger Faught
P: (512) 858-4725
E: gfaught@cityofdrippingsprings.com

Re: Geotechnical Engineering Report
Wastewater Capital Improvement – Western WWL Alignment
Caliterra Parkway to Creek Road
Dripping Springs, Texas
Terracon Project No. 96195217A

Dear Ms. Faught:

We have completed a subsurface exploration and Geotechnical Engineering evaluation for the above referenced project. This study was performed in general accordance with Terracon Proposal No. P96195217 dated June 21, 2019. This report presents the findings of the subsurface exploration and provides geotechnical recommendations concerning earthwork, subgrade preparation, and the design and construction of foundations, and site improvements for the proposed project.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please contact us.

Sincerely,
Terracon Consultants, Inc.

Larson M. Snyder, P.E.
Project Engineer

STATE OF TEXAS
LARSON M. SNYDER
133600
LICENSED
PROFESSIONAL ENGINEER
10/24/2022

Bryan S. Moulin, P.E.
Senior Principal, Geotechnical Services

REPORT TOPICS

INTRODUCTION 1
SITE CONDITIONS 1
PROJECT DESCRIPTION 2
GEOTECHNICAL CHARACTERIZATION 3
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SLOPE STABILITY 16
GENERAL COMMENTS 17
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Note: This report was originally delivered in a web-based format. **Orange Bold** text in the report indicates a referenced section heading. The PDF version also includes hyperlinks which direct the reader to that section and clicking on the ***GeoReport*** logo will bring you back to this page. For more interactive features, please view your project online at client.terracon.com.

ATTACHMENTS

EXPLORATION AND TESTING PROCEDURES
SITE LOCATION AND EXPLORATION PLANS
EXPLORATION RESULTS
SUPPORTING INFORMATION

Note: Refer to each individual Attachment for a listing of contents

Geotechnical Engineering Report

Wastewater Capital Improvement – Western WWL Alignment
Caliterra Parkway to Creek Road
Dripping Springs, Texas

Terracon Project No. 96195217A
October 24, 2022

INTRODUCTION

This report presents the results of our subsurface exploration and geotechnical engineering services performed for the proposed Wastewater Capital Improvement – Western WWL Alignment project to be located at Caliterra Parkway to Creek Road in Dripping Springs, Texas. The purpose of these services is to provide information and geotechnical engineering recommendations relative to:

- Subsurface soil and rock conditions
- Groundwater conditions
- Site preparation and earthwork
- Excavation considerations
- Dewatering considerations
- Foundation design and construction
- Floor slab design and construction
- Seismic site classification
- Lateral earth pressures

The geotechnical engineering Scope of Services for this project included the advancement of eleven (11) test borings, designated WB-1 through WB-10 and LWC-1, to depths ranging from approximately 15 to 30 feet below existing site grades.

Maps showing the site and boring locations are shown in the **Site Location** and **Exploration Plan** sections, respectively. The results of the laboratory testing performed on soil samples obtained from the site during the field exploration are included on the boring logs and as separate graphs in the **Exploration Results** section.

SITE CONDITIONS

The following description of site conditions is derived from our site visit in association with the field exploration and our review of publicly available geologic and topographic maps.

Item	Description
Parcel Information	The wastewater alignment is located along Onion Creek from Caliterra Parkway to Creek Road in Dripping Springs, Texas. See **Site Location**
Existing Improvements	Undeveloped with the exception of areas where wastewater alignment crosses existing asphaltic roadways.
Current Ground Cover	Varies from open areas with grass and exposed limestone to densely vegetated areas with trees and brush.
Existing Topography	Based on the topographic profile provided by Burgess & Niple (formerly CMA Engineering, Inc.), the wastewater interceptor slopes from the highest elevation of EL ~1091 feet near STA 97+50 to the lowest elevation of EL ~1053 feet near STA 2+50.
Geology	Based on the available geologic information and the samples obtained, the subsurface profile along the wastewater alignment consists of alleviate soils overlying Glen Rose Group limestone. The Glen Rose Group limestone is comprised primarily of tan to gray limestone, dolomitic limestone, and marl in alternating hard and soft beds generally forming stair-step topography. The Glen Rose Group limestone is commonly overlain by a layer of variable plasticity clayey soils. Although solution cavities and voids are not very common in the Glen Rose Group, they can occur. If observed, Terracon should be contacted to evaluate the impact of the void on planned construction.

PROJECT DESCRIPTION

Our initial understanding of the project was provided in our proposal and was discussed during project planning. A period of collaboration has transpired since the project was initiated, and our final understanding of the project conditions is as follows:

Item	Description
Information Provided	The project information and topographic profiles were provided via e-mail on June 7 and 17, 2019 from Mr. Robby Callegari with CMA Engineering, Inc. An updated site plan for the western alignment was provided via e-mail on November 12, 2020 from Mr. Zachary Bonin with CMA Engineering, Inc.
Proposed Structures	The project includes the construction of an approximately 10,000 linear foot extension of the western wastewater interceptor. In addition, this project includes improvements to an existing low water crossing across Onion Creek to the south of Creek Road.

GEOTECHNICAL CHARACTERIZATION

We have developed a general characterization of the subsurface conditions based upon our review of the subsurface exploration, laboratory data, geologic setting and our understanding of the project. This characterization, termed GeoModel, forms the basis of our geotechnical calculations and evaluation of site preparation and foundation options. Conditions encountered at each exploration point are indicated on the individual logs. The individual logs can be found in the **Exploration Results** section and the GeoModel can be found in the **Figures** section of this report.

As part of our analyses, we identified the following model layers within the subsurface profile. For a more detailed view of the model layer depths at each boring location, refer to the GeoModel.

Model Layer	Layer Name	General Description
1 [1]	**Upper Fat Clays**	Brown, hard
2	**Lower Lean Clays, Sands, and Gravels**	Dark brown to brown to tan to light brown to light tan to light gray, medium stiff to very stiff; very loose to very dense
3	**Limestone Bedrock**	Glen Rose Formation; gray to light gray, slightly to extremely fractured

1. Stratum 1 soils only encountered in Boring WB-9.

Groundwater

The boreholes were observed while drilling and after completion for the presence and level of groundwater. In addition, groundwater should be expected, particularly, for any excavations extending below the Onion Creek water level along the proposed wastewater line alignment. The water levels observed in the boreholes can be found on the boring logs in **Exploration Results**, and are summarized below.

Boring Number	Date of Reading	Approximate Depth to Groundwater (feet) [1]	Approximate Groundwater Elevation (feet) [1]
WB-1	08/10/2021	13.0	1045.0
WB-9	08/06/2021	14.0	1071.5
WB-10	08/06/2021	4.0	1087.0
LWC-1	08/06/2021	4	1071.0

2. Below ground surface

Groundwater seepage is possible at this site, particularly in the form of seepage traveling along pervious seams/fissures in the soil, along the soil/limestone interface, and/or in fissures/fractures in the limestone. Groundwater also is quite frequently observed traveling along the softer and more pervious seams/beds (highly weathered limestone or residual soil layers) within the Glen Rose limestone. Groundwater seepage is frequently observed within temporary or permanent cuts in the Glen Rose limestone. Groundwater conditions should be evaluated immediately prior to construction.

Groundwater level fluctuations occur due to seasonal variations in the amount of rainfall, runoff and other factors not evident at the time the borings were performed. Therefore, groundwater levels during construction or at other times in the life of the project may be higher or lower than the levels indicated on the boring logs. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

GEOTECHNICAL OVERVIEW

The **Shallow Foundations** section addresses the support of manhole structures on a mat foundation bearing into Stratum 3 limestone or select fill/crushed limestone base. The **Subgrade Preparation Below Manholes** section addresses support of the structures.

We anticipate that construction of the proposed waterline will include open-cut trench excavations for the placement of the waterline and manholes and backfilling around these improvements with on-site soils. Lateral earth pressures are provided for on-site retaining walls in the **Lateral Earth Pressures** section. Slope inclinations and construction recommendations are addressed for temporary cut slopes in the **Slope Stability** section.

The **General Comments** section provides an understanding of the report limitations.

EARTHWORK

Earthwork is anticipated to include clearing and grubbing, excavations, and utility trench bedding and backfill placement. The following sections provide recommendations for use in the preparation of specifications for the work. Recommendations include critical quality criteria, as necessary, to render the site in the state considered in our geotechnical engineering evaluation for foundations.

Site Preparation

Construction areas along the wastewater line alignment should be stripped of all vegetation, loose soils, organic-laden soils, top soils, miscellaneous debris, and other unsuitable material currently present at the site. Roots of trees to be removed within construction areas, if any, should be grubbed to full depths, including the dry soil around the roots. If any unusual items are unearthed

during or after demolition, please contact us for further evaluation. Utilities to be abandoned, if any, should be completely removed from all proposed construction areas. If this is not feasible, then the abandoned utility piping should be filled with flowable fill (COA Item No. 402S or TxDOT Item No. 401) and plugged such that it does not become a conduit for water flow. Site stripping/excavation operations in cut areas will loosen limestone rocks/boulders which should either be properly broken down or removed from the site. We recommend that Terracon be retained to assist in evaluating exposed subgrades during earthwork so that unsuitable materials, if any, are removed at the time of construction.

Potential Issues with Coarse-Grained Soils

The sandy/gravelly soils observed at the site often contribute to a variety of difficulties during construction (such as equipment access problems during wet weather and difficulty in achieving compaction). The primary reason for that is that these soils generally possess a low strength due to a minimal amount of cohesive material (clay) and due to a lack of confinement near the surface. These soils can be extremely sensitive to changes in moisture content.

If difficulties develop during excavation/construction or periods of wet weather, subgrade areas requiring improvement may be treated with cement to aid in drying of the subgrade and to increase the support characteristics of the subgrade soils. It is the Contractor's responsibility to determine the means and methods of applying these additives to the site and effectively preparing the subgrade to provide a workable construction surface, equipment access, etc. The cement should be mixed into the subgrade to provide a uniform blend and depth of treatment across the affected areas, compacted, and allowed to cure for at least 24 hours. The affected areas should be treated with sufficient material such that the entire building/pavement subgrade area can be prepared to pass proof-rolling and achieve a proper level of compaction. The amount of cement and depth of treatment to produce a workable construction surface will likely vary with the moisture content and characteristics of the near-surface soils. Treated areas should be monitored to evaluate the effectiveness of the subgrade preparation. An alternative to treating these sandy soils would be to remove the affected soils (depending on access issues) and replace these soils with crushed limestone base material. A layer of base material also often helps to improve the access conditions and workability. Another option would be to possibly use geotextile fabric and/or geogrid to improve subgrade conditions.

Excavations

Excavation operations at this site will penetrate through the Stratum 2 soils and into the Stratum 3 limestone. While the Stratum 2 soils should be relatively easy to excavate in comparison to the underlying limestone, there is a probability of encountering limestone cobbles, boulders, seams, and layers within these soils. Our past experience with the Stratum 3 limestone, along with the data obtained during our field and laboratory programs (average compressive strength of 2,700 psi), indicates that the Stratum 3 limestone may require sawcutting, jackhammering, hoe-ramming, milling, or similar techniques to excavate.

Please note that although Stratum 3 limestone was encountered at varying depths ranging from 4 to 19 feet (elevations ranging from 1046.0 to 1078 feet) below existing grades across the site, the weathering profile of limestone can be unpredictable. The Contractor should be prepared to encounter and properly excavate near-surface limestone anywhere on this site.

Our comments on excavation are based on our experience with the rock formation. Rock excavation depends on not only the rock hardness, weathering and fracture frequency, but also the contractor's equipment, capabilities, and experience. Therefore, it should be the contractor's responsibility to determine the most effective methods for excavation. The above comments are intended for information purposes for the design team only and may be used to review the contractor's proposed excavation methods.

Surface Drainage & Temporary Groundwater Control

Surface drainage must be developed so that ponding of surface runoff adjacent to and within the open cut excavations does not occur. As observed in our test borings, and due to the proximity of Onion Creek, subsurface groundwater should be expected during excavation operations, particularly, in excavations extending below the Onion Creek water level along the proposed wastewater line alignment. The volume of groundwater seeping/flowing into the excavations will vary based on rainfall patterns before and during construction. Although groundwater control is the responsibility of the contractor, the use of sumps and sump pumps (placed periodically within the open excavations) is typically an effective means of temporarily dewatering the excavations should this occur.

Fill Material Types

Fill required to achieve design grade should be classified as select/structural fill and general fill. Select/structural fill is material used below manhole structures. General fill is material used to achieve grade in other general areas (non-structural areas beyond manholes). Earthen materials used for select fill and general fill should meet the following material property requirements:

Fill Type [1]	USCS Classification	Acceptable Specifications
Imported Select/Structural Fill [2,3,4]	CL, SC, and/or GC	■ TxDOT Item 247, Type A, Grade 3, OR ■ Percent Retained on No. 4 Sieve ≤ 40 percent with 5≤PI≤20 and rocks ≤ 4 inches in maximum dimensions, OR ■ Crushed concrete (TxDOT Item 247, Type D, Grade 3 or better)
General Fill [5]	CH, CL, SC and/or GC	■ On-Site Soils: Rocks ≤ 4 inches in maximum dimension ■ Imported Soils: PI ≤ 30; Rocks ≤ 4 inches in maximum dimension

1. Structural and general fill should consist of approved materials free of organic matter and debris. A sample of each material type should be submitted to the Geotechnical Engineer for evaluation prior to use on this site.
2. As an alternative to the Acceptable Specifications above, a low-plasticity granular material which does not meet these specifications may be used only if approved by Terracon.
3. Based on the laboratory testing performed during this exploration, the excavated Stratum 1 soils are not suitable for re-use as select fill. We do not recommend these soils be considered for re-use as select fill when planning budgets.
4. The excavated Stratum 2 soils and Stratum 3 limestone material should be acceptable for re-use as select fill provided that it is processed such that it meets one of the Acceptable Specifications above for Imported Select/Structural Fill. Please note that removal of higher plasticity layers (typically brown in color) will be necessary to maintain plasticity indices of the material within acceptable range. In some situations, the difference between more highly plastic clay, lower plasticity silty soils, and appropriate material may not be readily distinguishable without the performance of appropriate lab testing. After initial processing of the fill material, samples should be submitted to Terracon for evaluation of proper gradation, plasticity index, and maximum rock size prior to re-use as select fill. We recommend that periodic testing be performed throughout the material excavation phase to check for conformance with the select fill requirements given above.

   It has been our experience that proper processing of excavated limestone often involves such processes as breaking down of larger rock with equipment, screening, removal of more highly plastic clay layers, etc. The Contractor's proposed methods of processing these materials should be reviewed prior to initiation of construction to check that these methods will produce an acceptable select fill material. The relative ease of mining and segregating the materials is unknown at this time.
5. Excavated on-site soils, if free of organics, debris, and rocks larger than 4 inches may be considered for re-use as fill in pavement, landscape, or other general areas. Please note that the on-site soils exhibit high to very high shrink/swell potential. For economic reasons, expansive soils are often used in pavement and/or flatwork areas. The owner should be aware that the risk exists for future movements of the subgrade soils which may result in movement and/or cracking of pavement and/or flatwork. If paving fill is imported, the PI should not exceed 30.

Fill Compaction Requirements

Recommended compaction and moisture content criteria for engineered fill materials are as follows.

Material Type		Minimum Compaction Requirement (%)[1]	Moisture Content Range (%)	Maximum Loose Lift Thickness (in)[2]
Select/Structural Fill		95[3]	-3 to +3	8 inches
On-Site Soil Backfill	**PI ≤25**	95	-3 to +3	
	PI > 25	95	Optimum to +4	
General Fill	**PI ≤25**	95	-3 to +3	
	PI > 25	95	Optimum to +4	
Crushed Limestone Base (beneath pavements)		100[4]	-3 to +3	

1. Per the Standard Proctor Test (ASTM D 698).
2. Fill lift thickness must be reduced (typically 4 to 6 inches) if light compaction equipment is used, as is customary within a few feet of retaining walls and utility trenches.
3. **For fills greater than 5 feet in depth, if any, the compaction should be increased to at least 100 percent of the ASTM D 698 maximum dry unit weight.**
4. Per TEX-113-E.

Grading and Drainage

The performance of the proposed structures will not only be dependent upon the quality of construction, but also upon the stability of the moisture content of the near surface soils. Therefore, we highly recommend that site drainage be developed so that ponding of surface runoff near the structures does not occur. Accumulation of water near the structures may cause significant moisture variations in soils adjacent to the structures, thus increasing the potential for structural distress.

Effective drainage away from the structures must be provided during construction and maintained through the life of the proposed project. Infiltration of water into excavations should be prevented during construction. It is important that foundation soils are not allowed to become wetted. All grades must provide effective drainage away from the structures during and after construction. Exposed (unpaved) ground should be sloped at a minimum of 5 percent away from the structures for at least 10 feet beyond the perimeter of the structures. Locally, flatter grades may be necessary to transition ADA access requirement for flatwork.

Earthwork Construction Considerations

Upon completion of filling and grading, care should be taken to maintain the subgrade water content prior to construction of floor slabs. Construction traffic over the completed subgrades should be avoided as much as possible. The site should also be graded to prevent ponding of surface water on the prepared subgrades or in excavations. Water collecting over, or adjacent to, construction areas should be removed. If the subgrade desiccates, saturates, or is disturbed, the affected material should be removed, or the materials should be scarified, moisture conditioned, and recompacted, prior to floor slab construction.

As a minimum, excavations should be performed in accordance with OSHA 29 CFR, Part 1926, Subpart P, “Excavations” and its appendices, and in accordance with any applicable local, and/or state regulations.

Construction site safety is the sole responsibility of the contractor who controls the means, methods, and sequencing of construction operations. Under no circumstances shall the information provided herein be interpreted to mean Terracon is assuming responsibility for construction site safety, or the contractor's activities; such responsibility shall neither be implied nor inferred.

Construction Observation and Testing

The earthwork efforts should be documented under the direction of the Geotechnical Engineer. This should include documentation of adequate removal of vegetation and top soil, proof-rolling and mitigation of areas delineated by the proof-roll to require mitigation and density/moisture testing of subgrade and fills. In the event that unanticipated conditions are encountered, the Geotechnical Engineer should be contacted to evaluate the conditions.

Each lift of compacted fill should be tested, evaluated, and reworked as necessary until approved by the Geotechnical Engineer prior to placement of additional lifts. Fill should be tested for density and water content at a frequency of at least one test for every 100 linear feet of compacted waterline trench backfill.

In addition to the documentation of the essential parameters necessary for construction, the continuation of the Geotechnical Engineer into the construction phase of the project provides the continuity to maintain the Geotechnical Engineer’s evaluation of subsurface conditions, including assessing variations and associated design changes.

SHALLOW FOUNDATIONS

If the site has been prepared in accordance with the requirements noted in **Earthwork** and **Subgrade Preparation Below Manholes**, the following design parameters are applicable for shallow foundations.

Design Parameters

The proposed manhole structures may be supported on select fill, crushed limestone base, or Stratum 3 limestone at the bottom of the manhole excavations. Mats should bear on compacted select fill/crushed limestone base or Stratum 3 limestone, but not a combination of soil and Stratum 3 limestone materials within the building. If mats are to bear on soils and the Stratum 3 limestone is encountered during site preparation, the materials should be over-excavated as necessary to provide at least 12 inches of select fill under all mats.

Description	Design Parameter	
Bearing Stratum [1]	Select Fill/Crushed Limestone Base	Stratum 3 Limestone
Subgrade Modulus for Foundation	125 pci	400 pci
Minimum Embedment below Final Grade [2]	18 inches	-
Minimum Embedment into Bearing Stratum [2]	-	6 inches
Allowable Bearing Pressures	2,500	6,000
Approximate Total Movement [3]	<1-inch	<¾ -inch
Estimated Differential Movement [4]	Approximately ½ to ¾ of total settlement	
Nominal (unfactored) Passive Resistance [5]	360 psf per foot of depth	1,200 psf per foot of depth
Coefficient of Sliding Resistance [6]	0.35	0.7
Nominal (unfactored) Uplift Resistance [7]	Foundation Weight (150 pcf) & Soil Weight (120 pcf)	

1. Unsuitable or soft soils must be over-excavated and replaced per the recommendations presented in **Earthwork** and the building area should be prepared as per **Subgrade Preparation Below Manholes**.
2. To bear within select fill/crushed limestone base soils or Stratum 3 limestone. If mats are to bear on soils and the Stratum 3 limestone is encountered during site preparation, the materials should be over-excavated as necessary to provide at least 12 inches of select fill under all mats.
3. The estimated post-construction settlement of the shallow footings is assuming proper construction practices are followed.
4. Differential settlements may result from variances in subsurface conditions, loading conditions and construction procedures. The settlement response of the footings will be more dependent upon the quality of construction than upon the response of the subgrade to the foundation loads.
5. Passive resistance should be neglected in the first 12 inches below finished grades. Care should be taken to avoid disturbance of the footing bearing area since loose material could increase settlement and

Description	Design Parameter
decrease resistance to lateral loading. If the footing is formed during construction, the open space between the footings and the in-situ soils should be backfilled with concrete. 6. Lateral loads transmitted to the footings will be resisted by a combination of soil-concrete friction on the base of the footings and passive pressure on the side of the footings. We recommend that the allowable frictional resistance be limited to 500 psf in select fill/crushed limestone base and 1,500 psf in Stratum 3 limestone. 7. The nominal values should be reduced by an appropriate factor of safety to compute allowable values.	

Foundation Construction Observation

The performance of the foundation system for the proposed structure will be highly dependent upon the quality of construction. Thus, we recommend that the foundation construction be monitored by Terracon to identify the proper bearing strata and depths and to help evaluate foundation construction. We would be pleased to develop a plan for foundation observation to be incorporated in the overall quality assurance program.

SEISMIC CONSIDERATIONS

The seismic design requirements for buildings and other structures are based on Seismic Design Category. Site Classification is required to determine the Seismic Design Category for a structure. The Site Classification is based on the upper 100 feet of the site profile defined by a weighted average value of either shear wave velocity, standard penetration resistance, or undrained shear strength in accordance with Section 20.4 of ASCE 7 and the International Building Code (IBC). Based on the soil and bedrock properties encountered at the site and as described on the exploration logs and results, it is our professional opinion that the **Seismic Site Classification is B**. Subsurface explorations at this site were extended to a maximum depth of 30 feet. The site properties below the boring depth to 100 feet were estimated based on our experience and knowledge of geologic conditions of the general area. Additional deeper borings or geophysical testing may be performed to confirm the conditions below the current boring depth.

SUBGRADE PREPARATION BELOW MANHOLES

Based on information provided to us, the planned bottom of the manhole structures and water line are anticipated to range between 8 to 15 feet below existing grades. If this information changes, Terracon should be notified to review and modify or verify recommendations in writing.

Based on the estimated depths, the bottom of the manhole structures will likely bear directly upon the Stratum 3 limestone or a thin layer (3-4 inches) of non-reinforced concrete ("mud mat") may be used. If any excavations are shallow enough to bear in the overlying soils, we recommend that at least 6 inches of properly compacted select fill or crushed limestone base be placed below the bottom of the manhole structures. Water lines should be embedded with the minimum amount of bedding material required for each type of pipe.

COMMENTS ON EXCAVATION AND/OR TRENCH SAFETY

The following subsections present comments pertaining to the subsurface conditions encountered in the test borings drilled at the site and the effects these conditions may have upon excavation and/or trench safety. Our comments are based on the data obtained from the field and laboratory test programs, geologic conditions, and our experience with similar projects. We are providing general comments for the most common methods of excavation and/or trench safety, including sloping, benching, shoring, bracing, etc. The developer, design engineer, and/or contractor should decide which is the most feasible system for this site depending on space limitations, construction budget, construction schedule, etc.

General

OSHA Safety and Health Standards (29 CFR Part 1926) require that all trenches in excess of 5 feet deep be shored or appropriately sloped unless the sidewalls are comprised of "stable" rock. State of Texas legislation requires detailed plans and specifications for retention systems that meet OSHA standards for a safe construction environment during utilities installation. The following sections provide general information to aid in designing an excavation retention system for this project based on the subsurface conditions observed at our test boring locations. These comments are intended for use in conjunction with OSHA safety regulations and not in lieu of those regulations. Prior to utility line construction, an excavation/trench safety plan, which is designed by a registered Professional Engineer, should be completed.

Construction

As stated above, OSHA requires all trenches in excess of 5 feet in depth to be shored or appropriately sloped. Currently available and practiced methods for achieving slope and/or sidewall stability includes sloping, benching, combinations of sloping and benching, and installation of shoring systems (hydraulic, timber, etc.). Trench shields may also be considered for use. However, trench shields only provide protection to workers; they are not means for providing slope or sidewall stability.

Sloping and Benching

If right-of-way is available, sloping, benching, or a combination thereof could be considered. The slope angle and/or vertical height of the bench section will be dependent on the subsurface conditions. In general, temporary excavations may be cut at the slopes indicated previously in **Slope Stability**. We recommend that all sloping/benching be performed as directed by OSHA in 29 CFR, Part 1926.

During excavation, slopes or benches should be observed for possible signs of failure such as bulging of the vertical face of the bench, tension cracks at the slope crest and/or raveling of material down the slope. If precariously positioned boulders or rock fragments are encountered, they should be removed. Surcharge loading from spoil piles, traffic, or equipment loading closer than 6 feet from the crest of the slope, which might alter the stability of the slope, should be avoided. If such conditions are observed, workmen should not be permitted in the excavation until the conditions noted are corrected by the contractor. If such conditions cannot be avoided, further flattening of the slope may be required. Flattening of the slope may also be necessary if excess amounts of groundwater influx are observed.

Surface water runoff which flows down the slopes or benches and ponds at the toe or crest of an excavation may be detrimental to stability. The excavation slopes should be thoroughly evaluated following a rainfall event and prior to workmen entering the excavation.

Shoring

If desired, shoring may be utilized for excavation safety. Earth pressures for design of shoring should be based on a “worst case” condition from an earth pressure standpoint. The appropriate earth pressures to be utilized should be evaluated by the excavation safety system designer. Each strut or brace should be proportioned as if it would be subjected to the maximum lateral load.

Excavation safety systems may be subjected to surcharge loads in the form of construction equipment and/or spoil piles. Surcharge loads from soil surcharge should be considered when calculating earth pressures for the shoring systems. Equipment such as backhoes, front-end loaders, etc., should not operate within a distance of 6 feet from the excavation sidewall (and no vibrating equipment should be used) while workers are in the excavation. The excavation safety system designer should review the surcharge loads imposed on the excavation safety system.

Trench Shields

If sloping, benching, or shoring is not selected, trench shields may be considered to protect the workers from slope instability. As for shoring, the design of the trench shields should be based on a "worst case" earth pressure standpoint, with the appropriate earth pressures properly evaluated by the excavation safety system designer. We should note that trench shields only serve as a means for worker protection; they are not a means of excavation retention. Potential effects of sidewall caving and corresponding damage to adjacent property and personnel should be considered when considering the use of trench shields. As stated above for shoring, hydrostatic pressures and effects of spoil, equipment, and other surcharge loading should be considered.

Alternate Sidewall Protection Methods

Other equivalent methods of slope protection or shoring may be considered for this project. However, any excavation safety system to be utilized should fully comply with OSHA regulations.

Inspection of Excavation Safety System

Inspections of the excavations should be performed by a competent person to; (1) confirm that actual conditions are as anticipated from analysis of the borings; (2) to examine for the presence of faults or other geologic features that might be an indication of sidewall instability; (3) observe the presence of spoil piles or equipment which could cause surcharge loading; and, (4) to help ensure that the excavation safety system design is properly interpreted and incorporated into construction. The construction sequence should be planned so that an adequate inspection can be performed prior to personnel entering the excavation.

In addition, OSHA regulations require that inspections be made daily by a competent person for situations which could result in a possible cave-in, indications of failure of the protective systems, hazardous atmospheres, or other hazardous conditions. Workmen should not be permitted in the excavation until these conditions have been reviewed by a competent person on a daily basis. A competent person is defined within the OSHA Safety and Health Standards and Interpretations Part 1926 of 29 CFR, amended 2989, Subpart P - Excavations, as one who is capable of identifying existing and predictable hazards in the surrounding or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

Trench Dam Installation

In order to reduce the possibility of settlement of the wastewater line and overlying backfill due to the piping effects that can occur within the granular bedding material when significant groundwater flow penetrates into the trench, we recommend the installation of trench dams (aka, seepage-reducing collars) at approximately maximum 500-foot (or less) interval spacing along the alignment. The trench dam material should extend from the bottom of the trench, around the pipe, and above the pipe to at least 1-foot higher in elevation than the adjacent granular bedding material in the upgradient direction from the trench dam. We recommend that flowable fill (TxDOT Item 401) or concrete be used as the trench dam material. Flowable fill is desirable in that it should cure within a day, allowing for relatively quick completion. The flowable fill must have "clean contact" with the trench sidewalls/bottom (bedding material should not be located in areas between the flowable fill and trench sidewalls/bottom) and should extend to the top of the bedding material. If groundwater collects in the excavation, it should be pumped out prior to placement of the flowable fill trench dams. Please note that trench dams (aka, seepage-reducing collars) are not intended to address concerns regarding the utility installation interrupting or altering subsurface water flow from one side of the trench to the other.

BELOW-GRADE CONSTRUCTION CONSIDERATIONS

Presented below are comments addressing below-grade construction considerations for the proposed water line. For construction of the water line, the excavations may be performed as open cuts, as per OSHA guidelines.

Backfilling of the excavations around the water line should be completed with properly compacted on-site soils or crushed limestone base material, as outlined in **Earthwork**. As an alternative, flowable backfill may be used as per TxDOT Item 401.

A buffer area at least 10 feet wide should be maintained adjacent to streets or other facilities to accommodate localized sloughing. Subgrade loading from material spoil piles, traffic, or equipment loading closer than 6 feet from the crest of the slope should be avoided. In soil subgrade areas and in areas of limestone containing significant clay and/or weathered/fractured zones, the exposed slopes should be covered with plastic or other suitable protection to minimize erosion and drying out of surface soils. Any utilities or other critical facilities should be locally shored such that any sloughing of slopes will not undermine them.

If it is not possible to slope (or bench) portions of the excavations due to limited space restrictions, the excavation should be properly shored or braced. If temporary excavation retention systems are planned, the retention system should be designed by a registered Professional Engineer specialized in such design and should also comply with the applicable OSHA requirements.

SLOPE STABILITY

Slope Type	Maximum Slope Inclinations
Temporary	1½(H):1(V) in on-site Stratum 1 and 2 soils ½(H):1(V) in Stratum 3 limestone And as directed by OSHA in 29 CFR, Part 1926, whichever is flatter

Exposed cut slopes will also be susceptible to further erosion due to the nature of the on-site soils and limestone. Installation of erosion control measures in such areas would be beneficial in reducing the potential slope stability which could result from excessive erosion. In addition to initial erosion control measures, the cut slopes should be periodically checked for erosion (particularly after heavy rainfall events) and maintenance performed on areas exhibiting erosion.

In regard to worker safety, Occupation Safety and Health Administration (OSHA) Safety and Health Standards require the protection of workers adjacent to excavations. The OSHA guidelines and directives should be adhered by the Contractor during construction to provide a safe working environment.

Slope Drainage

In areas of near-surface limestone with ground sloping towards site improvements, it is common for excess water to infiltrate through the slopes and into the pavement base and underlying subgrade. Therefore, we recommend that an interceptor drain be placed at the toe of the slope (outside of the curb) at a minimum of 18 inches below the top of pavement and at least 12 inches wide. The trench should include a minimum 4-inch diameter perforated PVC pipe placed near the bottom, surrounded by filter fabric and clean gravel (ASTM C33, Grade 57, or similar). The drain should then be sloped sufficiently (at least 0.5%) to be collected in the storm drain system.

GENERAL COMMENTS

Our analysis and opinions are based upon our understanding of the project, the geotechnical conditions in the area, and the data obtained from our site exploration. Natural variations will occur between exploration point locations or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. Terracon should be retained as the Geotechnical Engineer, where noted in this report, to provide observation and testing services during pertinent construction phases. If variations appear, we can provide further evaluation and supplemental recommendations. If variations are noted in the absence of our observation and testing services on-site, we should be immediately notified so that we can provide evaluation and supplemental recommendations.

Our Scope of Services does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

Our services and any correspondence or collaboration through this system are intended for the sole benefit and exclusive use of our client for specific application to the project discussed and are accomplished in accordance with generally accepted geotechnical engineering practices with no third-party beneficiaries intended. Any third-party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our client. Reliance upon the services and any work product is limited to our client, and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

Site characteristics as provided are for design purposes and not to estimate excavation cost. Any use of our report in that regard is done at the sole risk of the excavating cost estimator as there may be variations on the site that are not apparent in the data that could significantly impact excavation cost. Any parties charged with estimating excavation costs should seek their own site characterization for specific purposes to obtain the specific level of detail necessary for costing. Site safety, and cost estimating including, excavation support, and dewatering requirements/design are the responsibility of others. If changes in the nature, design, or location of the project are planned, our conclusions and recommendations shall not be considered valid unless we review the changes and either verify or modify our conclusions in writing.

FIGURES

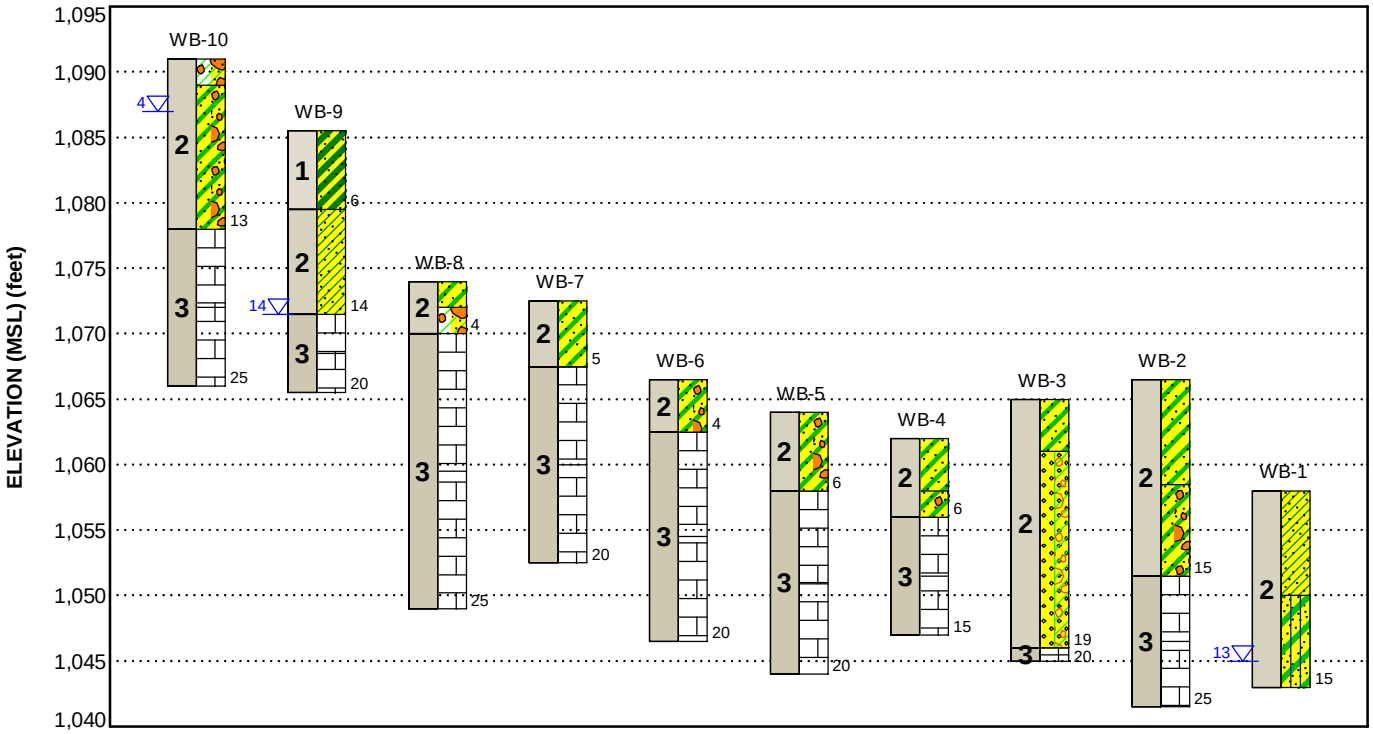
Contents:

GeoModel
Subsurface Profile

GEOMODEL

CoDS WW Capital Improvements ■ Dripping Springs, TX
Terracon Project No. 96195217

Terracon GeoReport



This is not a cross section. This is intended to display the Geotechnical Model only. See individual logs for more detailed conditions.

Model Layer	Layer Name	General Description
1	**Upper Fat Clays**	Brown, hard
2	**Lower Lean Clays, Sands, and Gravels**	Dark brown to brown to tan to light brown to light tan to light gray, medium stiff to very stiff; very loose to very dense
3	**Limestone Bedrock**	Glen Rose Formation; gray to light gray, slightly to extremely fractured

LEGEND

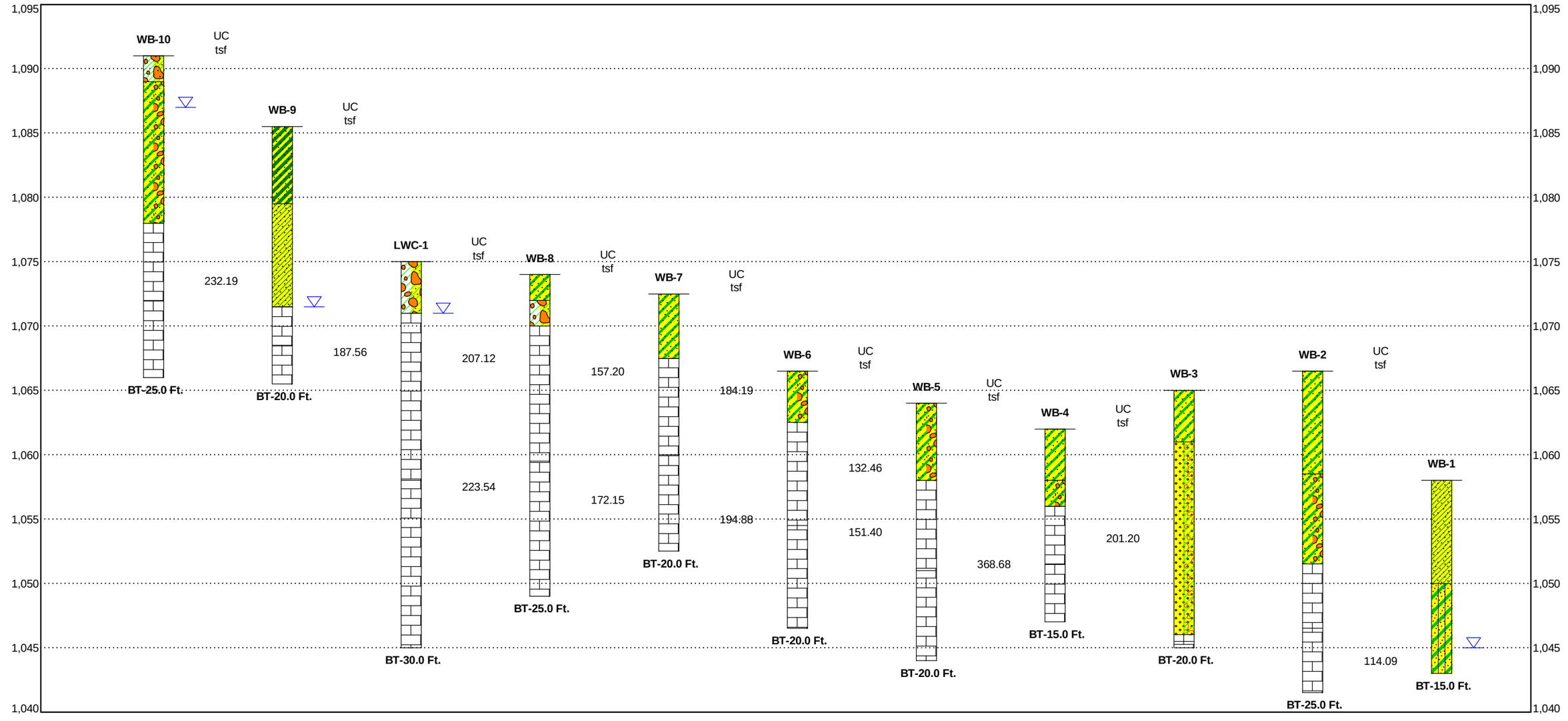
- Sandy Lean Clay
- Silty Clayey Sand
- Clayey Sand
- Clayey Sand with Gravel
- Limestone (Glen Rose Formation)
- Well-graded Sand with Clay and Gravel
- Clayey Gravel with Sand
- Sandy Fat Clay
- Gravelly Lean Caly with Sand

▽ First Water Observation

Groundwater levels are temporal. The levels shown are representative of the date and time of our exploration. Significant changes are possible over time.
Water levels shown are as measured during and/or after drilling. In some cases, boring advancement methods mask the presence/absence of groundwater. See individual logs for details.

NOTES:
Layering shown on this figure has been developed by the geotechnical engineer for purposes of modeling the subsurface conditions as required for the subsequent geotechnical engineering for this project.
Numbers adjacent to soil column indicate depth below ground surface.

◄ *Northwest* *Southeast* ►



Explanation

WB-1 — Borehole Number
Moisture Content — %w
LL PL — Liquid and Plastic Limits
Sampling (See General Notes)
Borehole Lithology
AR / BT — Borehole Termination Type

▽ Water Level Reading at time of drilling.

▼ Water Level Reading after drilling.

- Sandy Lean Clay
- Silty Clayey Sand
- Clayey Sand
- Clayey Sand with Gravel
- Limestone (Glen Rose Formation)
- Well-graded Sand with Clay and Gravel
- Clayey Gravel with Sand
- Sandy Fat Clay
- Gravelly Lean Caly with Sand

NOTES:

See Exploration Plan for orientation of soil profile.
See General Notes in Supporting Information for symbols and soil classifications.
Soils profile provided for illustration purposes only.
Soils between borings may differ
AR - Auger Refusal
BT - Boring Termination

Project No.: 96195217	Terracon 5307 Industrial Oaks Blvd Ste 160 Austin, TX	**SUBSURFACE PROFILE** WESTERN WWL ALIGNMENT CODS WW CAPITAL IMPROVEMENTS FM150 & RR12 DRIPPING SPRINGS, TX
Date: 2/10/2022		
Scale: N.T.S.		

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. SMART FENCE 96195217. CODS WW CAPITAL IMP BORING INFO.GPJ TERRACON_DATATEMPLATE.GDT 2/10/22

ATTACHMENTS

EXPLORATION AND TESTING PROCEDURES

Field Exploration

Proposed Western Wastewater Interceptor Extension			
Location	**Approx. STA Location**	**Planned Depth of Wastewater Line (feet)**	**Boring Depth (feet)** [1]
WB-1	5+00	9	15
WB-2	15+00	15	25
WB-3	25+00	13	20
WB-4	35+00	8	15
WB-5	43+50	10	20
WB-6	53+50	7	20
WB-7	63+00	11	20
WB-8	76+00	12	25
LWC-1	79+00	8	30
WB-9	86+00	17	20
WB-10	98+50	19	25
TOTAL	11 Borings		235 feet

1. Below ground surface.

Boring Layout and Elevations: Unless otherwise noted, Terracon personnel provided the boring layout. Coordinates were obtained with a handheld GPS unit (estimated horizontal accuracy of about ±10 feet) and approximate elevations were obtained by interpolation from the site plan provided to us. If elevations and a more precise boring layout are desired, we recommend borings be surveyed following completion of fieldwork.

Subsurface Exploration Procedures: Terracon's subcontractor advanced the borings with a truck-mounted, rotary drill rig using continuous flight augers (solid stem and/or hollow stem, as necessary, depending on soil conditions). Four to five samples were obtained in the upper 10 feet of each boring and at intervals of 5 feet thereafter (unless bedrock was encountered). Soil sampling was performed using thin-wall tube (shelby tubes) and/or split-barrel sampling procedures. The split-barrel samplers were driven in accordance with the standard test method for standard penetration test (SPT) and split-barrel sampling of soils (ASTM D1586/D1886M–18). Bedrock was sampled with either split-barrel-sampling spoons or continuously cored using NX wireline rock coring equipment. When sufficient bedrock was sampled, the borings were shallowed at the geotechnical engineer's discretion. We observed and recorded groundwater levels during drilling and sampling. For safety purposes, all borings were backfilled with auger

cuttings after their completion. Pavements were patched with cold-mix asphalt and/or pre-mixed concrete, as appropriate.

The sampling depths, penetration distances, and other sampling information were recorded on the field boring logs. The samples were placed in appropriate containers and taken to our soil laboratory for testing and classification by a Geotechnical Engineer. Our exploration team prepared field boring logs as part of the drilling operations. These field logs included visual classifications of the materials encountered during drilling and our interpretation of the subsurface conditions between samples. Final boring logs were prepared from the field logs. The final boring logs represent the Geotechnical Engineer's interpretation of the field logs and include modifications based on observations and tests of the samples in our laboratory.

Laboratory Testing

The project engineer reviewed the field data and assigned laboratory tests to understand the engineering properties of the various soil and rock strata, as necessary, for this project. Procedural standards noted below are for reference to methodology in general. In some cases, variations to methods were applied because of local practice or professional judgment. Standards noted below include reference to other, related standards. Such references are not necessarily applicable to describe the specific test performed.

- ASTM D2216 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
- ASTM D4318 Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
- ASTM D422 Standard Test Method for Particle-Size Analysis of Soils
- ASTM D7012, Method C Standard Test Method for Compressive Strength and Elastic Moduli of Intact Rock Core Specimens under Varying States of Stress and Temperatures

The laboratory testing program often included examination of soil samples by an engineer. Based on the material’s texture and plasticity, we described and classified the soil samples in accordance with the Unified Soil Classification System.

Rock classification was conducted using locally accepted practices for engineering purposes; petrographic analysis may reveal other rock types. Rock core samples typically provide an improved specimen for this classification. Boring log rock classification was determined using the Description of Rock Properties.

SITE LOCATION AND EXPLORATION PLANS

Contents:

Site Location Plan (2 Pages)
Exploration Plan (2 Pages)

Note: All attachments are one page unless noted above.

SITE LOCATION

Wastewater Capital Improvement – Western WWL Alignment ■ Dripping Springs, Texas
October 24, 2022 ■ Terracon Project No. 96195217A

Terracon GeoReport

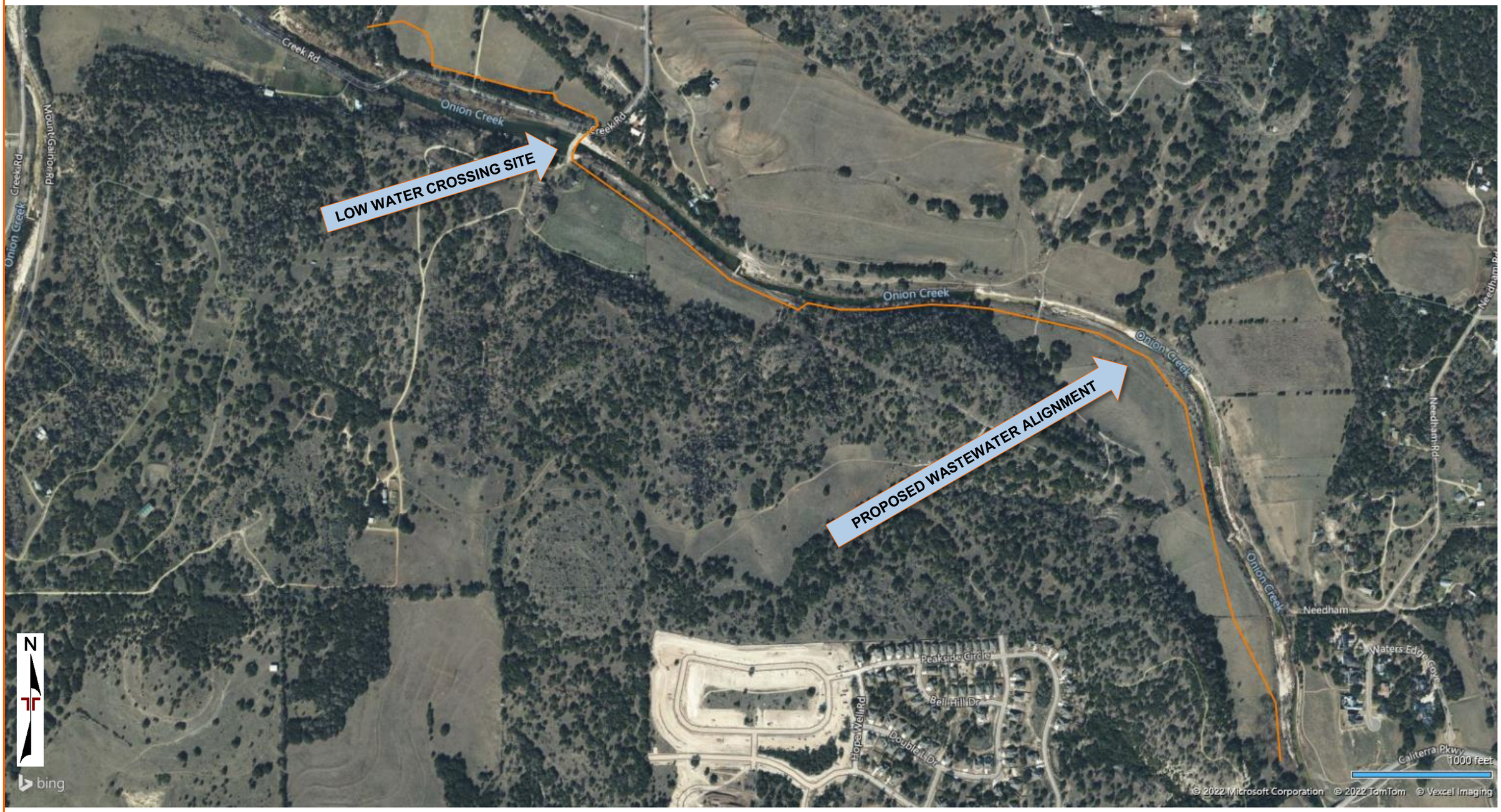


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

SITE LOCATION

Wastewater Capital Improvement – Western WWL Alignment ■ Dripping Springs, Texas
October 24, 2022 ■ Terracon Project No. 96195217A



DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

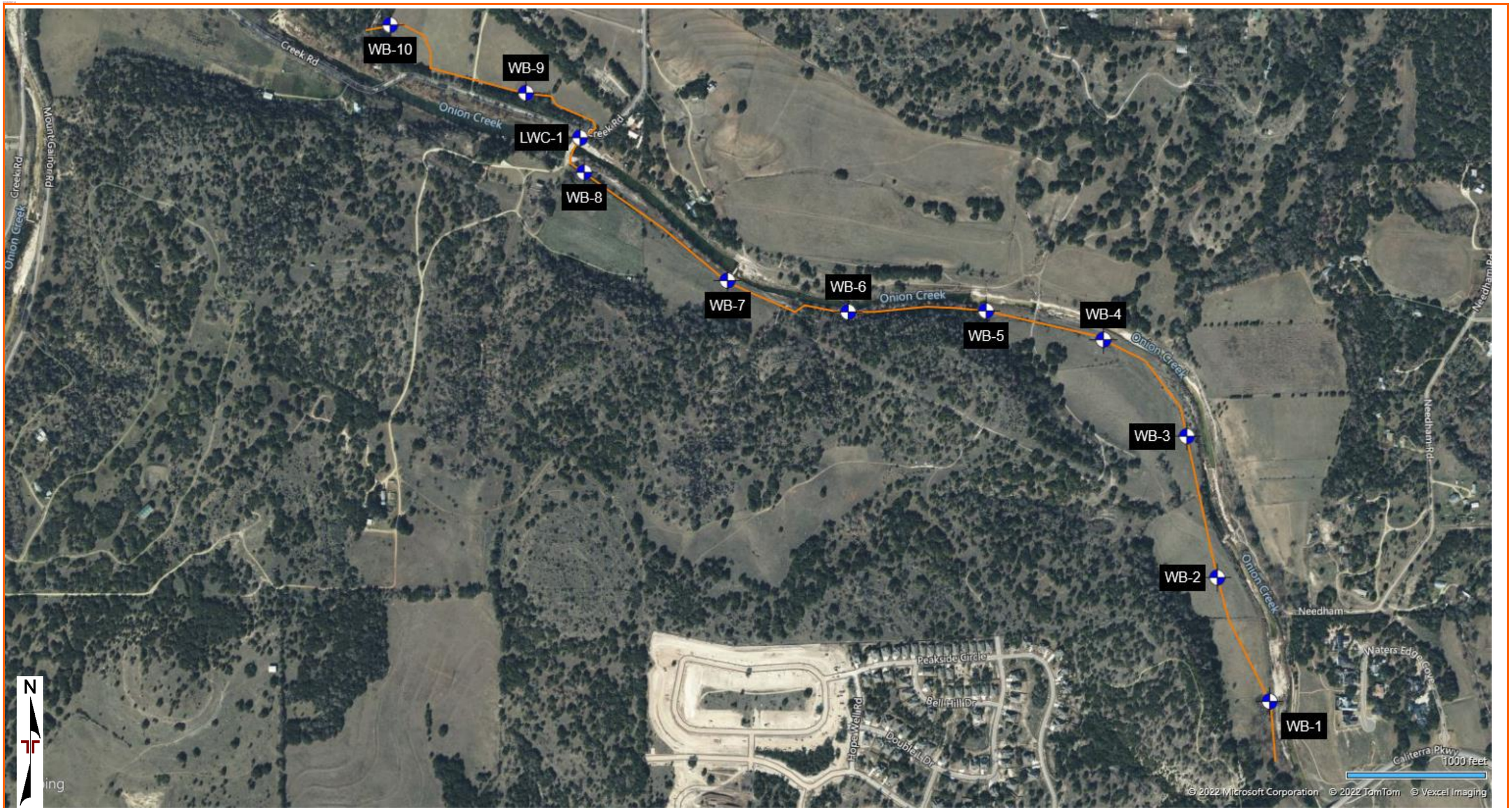


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MAP PROVIDED BY MICROSOFT BING MAPS



DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

EXPLORATION RESULTS

Contents:

Boring Logs WB-1 through WB-10 & LWC-1 (11 Pages)
Grain Size Distribution (2 Pages)
Atterberg Limits

Note: All attachments are one page unless noted above.

BORING LOG NO. WB-1

PROJECT: CoDS WW Capital Improvements

CLIENT: City of Dripping Springs TX
Dripping Springs, TX

SITE: FM150 & RR12
Dripping Springs, TX

LOCATION See Exploration Plan

Latitude: 30.1755° Longitude: -98.0955°

Approximate Surface Elev.: 1058.0 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	RECOVERY (%) RQD (%)	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
2		0.0	1058.0												
							2.5 tsf (HP)								
							3.5 tsf (HP)					12		34-16-18	52
				5			2.5 tsf (HP)								
							4-3-3 N=6								
							3-2-3 N=5					15			39
				10											
					▽										
							50/1"								
		8.0	1050+/-												
		15.0	1043+/-	15											

SANDY LEAN CLAY (CL), brown, medium stiff to very stiff, varies to Clayey Sand (SC)

SILTY CLAYEY SAND (CL), light brown to light gray, loose

- very dense below ~13 feet; Possible transition to limestone

Boring Terminated at 15 Feet

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Dry Augered to 15 feet

Abandonment Method:
Boring backfilled with Auger Cuttings and/or Bentonite

WATER LEVEL OBSERVATIONS

▽ *13.0 feet while Drilling*

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

Terracon
5307 Industrial Oaks Blvd Ste 160
Austin, TX

Boring Started: 08-10-2021 | Boring Completed: 08-10-2021

Drill Rig: CME 45 | Driller: Austin Geo-Logic

Project No.: 96195217

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 96195217. CODS WW CAPITAL IMP.BORING INFO.GPJ TERRACON_DATATEMPLATE.GDT 8/31/21

BORING LOG NO. WB-2

PROJECT: CoDS WW Capital Improvements

CLIENT: City of Dripping Springs TX
Dripping Springs, TX

SITE: FM150 & RR12
Dripping Springs, TX

LOCATION See Exploration Plan
Latitude: 30.1779° Longitude: -98.0966°
Approximate Surface Elev.: 1066.5 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	RECOVERY (%) RQD (%)	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
2		0.0	1066.5+/-	0			4.5 tsf (HP)								
							4.5+ tsf (HP)					9		40-18-22	48
				5			8-8-8 N=16								
		6.0	1060.5+/-												
		LEAN CLAY (CL), brown, stiff					6-6-8 N=14					17		39-16-23	
		8.0	1058.5+/-												
		CLAYEY SAND WITH GRAVEL (SC), light brown, dense to very dense													
				10			6-13-32 N=45					9			
		15.0	1051.5+/-				6-12-50/6"								
3		**LIMESTONE (GLEN ROSE FORMATION)**, gray to light gray, extremely fractured		15				90/0							
		- moderately fractured below ~20 feet		20				92/75	UC	114.09		4	133		
		25.0	1041.5+/-	25											
		Boring Terminated at 25 Feet													

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Dry Augered to 15 feet; Air Rotary from 15 to 25 feet

Abandonment Method:
Boring backfilled with Auger Cuttings and/or Bentonite

WATER LEVEL OBSERVATIONS

No free water observed

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

Terracon
5307 Industrial Oaks Blvd Ste 160
Austin, TX

Boring Started: 08-10-2021 | Boring Completed: 08-10-2021
Drill Rig: CME 45 | Driller: Austin Geo-Logic
Project No.: 96195217

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 96195217. CODS WW CAPITAL IMP.BORING INFO.GPJ TERRACON_DATATEMPLATE.GDT 8/31/21

BORING LOG NO. WB-3

PROJECT: CoDS WW Capital Improvements

CLIENT: City of Dripping Springs TX
Dripping Springs, TX

SITE: FM150 & RR12
Dripping Springs, TX

LOCATION See Exploration Plan

Latitude: 30.1807° Longitude: -98.0973°

Approximate Surface Elev.: 1065.0 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	RECOVERY (%) RQD (%)	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
2			**CLAYEY SAND (SC)**, brown, loose				N/A (Disturbed)								
		4.0	1061+/-				3-2-5 N=7					5			
			WELL GRADED GRAVEL (SC), light brown to light tan, medium dense	5			4-6-11 N=17								
							5-9-9 N=18					5		23-15-8	11
				10			3-6-13 N=19								
			- loose below ~13 feet				2-4-5 N=9								
		19.0	1046+/-	15											
3		20.0	**LIMESTONE (GLEN ROSE FORMATION)**, light tan to light gray	20			4-50/5"								
			Boring Terminated at 20 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Dry Augered to 20 feet

Abandonment Method:
Boring backfilled with Auger Cuttings and/or Bentonite

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed

Terracon
5307 Industrial Oaks Blvd Ste 160
Austin, TX

Boring Started: 08-10-2021 | Boring Completed: 08-10-2021

Drill Rig: CME 45 | Driller: Austin Geo-Logic

Project No.: 96195217

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 96195217. CODS WW CAPITAL IMP.BORING INFO.GPJ TERRACON_DATATEMPLATE.GDT 8/31/21

BORING LOG NO. WB-4

PROJECT: CoDS WW Capital Improvements

CLIENT: City of Dripping Springs TX
Dripping Springs, TX

SITE: FM150 & RR12
Dripping Springs, TX

LOCATION See Exploration Plan

Latitude: 30.1826° Longitude: -98.0992°

Approximate Surface Elev.: 1062.0 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	RECOVERY (%) RQD (%)	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
2							2.0 tsf (HP)								
							2-1-2 N=3					9		27-16-11	41
							25-16-16 N=32					5			
				5			50/2"								
3								100/81	UC	201.20		4	133		
				10				97/40							
		4.0	1058+/-												
		6.0	1056+/-												
		15.0	1047+/-	15											

CLAYEY SAND (SC), brown, very loose, varies to Sandy Lean Clay (CL)

CLAYEY SAND WITH GRAVEL (SC), light brown to light tan, dense

LIMESTONE (GLEN ROSE FORMATION), gray to light gray, slightly to moderately fractured

Boring Terminated at 15 Feet

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Dry Augered to 7 feet; Air Rotary from 7 to 15 feet

Abandonment Method:
Boring backfilled with Auger Cuttings and/or Bentonite

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed

Terracon
5307 Industrial Oaks Blvd Ste 160
Austin, TX

Boring Started: 08-10-2021 | Boring Completed: 08-10-2021

Drill Rig: CME 45 | Driller: Austin Geo-Logic

Project No.: 96195217

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 96195217. CODS WW CAPITAL IMP.BORING INFO.GPJ TERRACON_DATATEMPLATE.GDT 8/31/21

BORING LOG NO. WB-5

PROJECT: CoDS WW Capital Improvements

CLIENT: City of Dripping Springs TX
Dripping Springs, TX

SITE: FM150 & RR12
Dripping Springs, TX

LOCATION See Exploration Plan

Latitude: 30.1832° Longitude: -98.1019°

Approximate Surface Elev.: 1064.0 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	RECOVERY (%) RQD (%)	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
2		0.0	1064.0	0											
							3-4-4 N=8					6		37-17-20	27
							3-2-2 N=4					11			
				5			4-6-15 N=21					11			
							50/3"								
		6.0	1058+/-					76/40							
3				10				85/33	UC	368.68		1	138		
				15				100/70							
		20.0	1044+/-	20											

CLAYEY SAND WITH GRAVEL (SC), brown, loose to medium dense

LIMESTONE (GLEN ROSE FORMATION), gray to light gray, moderately to highly fractured

Boring Terminated at 20 Feet

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Dry Augered to 6½ feet; Air Rotary from 6½ to 20 feet

Abandonment Method:
Boring backfilled with Auger Cuttings and/or Bentonite

WATER LEVEL OBSERVATIONS

No free water observed

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

Terracon
5307 Industrial Oaks Blvd Ste 160
Austin, TX

Boring Started: 08-09-2021 | Boring Completed: 08-09-2021

Drill Rig: CME 45 | Driller: Austin Geo-Logic

Project No.: 96195217

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 96195217. CODS WW CAPITAL IMP.BORING INFO.GPJ TERRACON_DATATEMPLATE.GDT 8/31/21

BORING LOG NO. WB-6

PROJECT: CoDS WW Capital Improvements

CLIENT: City of Dripping Springs TX
Dripping Springs, TX

SITE: FM150 & RR12
Dripping Springs, TX

LOCATION See Exploration Plan

Latitude: 30.1832° Longitude: -98.105°

Approximate Surface Elev.: 1066.5 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	RECOVERY (%) RQD (%)	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
2							6-7-6 N=13					5			
							7-5-18 N=23								
							50/3"								
		4.0	1062.5+/-	5											
3								80/48	UC	132.46		1	134		
				10				93/58	UC	151.40		4	133		
				15				100/83							
		20.0	1046.5+/-	20											

CLAYEY SAND WITH GRAVEL (SC), brown to light brown, medium dense

LIMESTONE (GLEN ROSE FORMATION), gray to light gray, moderately to highly fractured

- slightly fractured below ~15 feet

Boring Terminated at 20 Feet

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Dry Augered to 5 feet; Air Rotary from 5 to 20 feet

Abandonment Method:
Boring backfilled with Auger Cuttings and/or Bentonite

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed

Terracon
5307 Industrial Oaks Blvd Ste 160
Austin, TX

Boring Started: 08-09-2021 | Boring Completed: 08-09-2021

Drill Rig: CME 45 | Driller: Austin Geo-Logic

Project No.: 96195217

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 96195217. CODS WW CAPITAL IMP.BORING INFO.GPJ TERRACON_DATATEMPLATE.GDT 8/31/21

BORING LOG NO. WB-7

PROJECT: CoDS WW Capital Improvements

CLIENT: City of Dripping Springs TX
Dripping Springs, TX

SITE: FM150 & RR12
Dripping Springs, TX

LOCATION See Exploration Plan

Latitude: 30.1838° Longitude: -98.1078°

Approximate Surface Elev.: 1072.5 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	RECOVERY (%) RQD (%)	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
2		0.0	1072.5+/-				4.5+ tsf (HP)					7		30-17-13	45
							6-6-4 N=10								
		4.0	1068.5+/-												
		5.0	1067.5+/-				22-50/1"								
3				5				87/53	UC	184.19		1	91		
				10				95/68							
				15				92/85	UC	194.88		3	140		
		20.0	1052.5+/-	20											

CLAYEY SAND (SC), brown, medium dense, varies to Sandy Lean Clay (CL)

CLAYEY GRAVEL WITH SAND (GC), brown to light brown, very dense

LIMESTONE (GLEN ROSE FORMATION), gray to light gray, moderately fractured

Boring Terminated at 20 Feet

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Dry Augered to 5 feet; Air Rotary from 5 to 20 feet

Abandonment Method:
Boring backfilled with Auger Cuttings and/or Bentonite

WATER LEVEL OBSERVATIONS

No free water observed

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

Terracon
5307 Industrial Oaks Blvd Ste 160
Austin, TX

Boring Started: 08-09-2021 | Boring Completed: 08-09-2021

Drill Rig: CME 45 | Driller: Austin Geo-Logic

Project No.: 96195217

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 96195217. CODS WW CAPITAL IMP.BORING INFO.GPJ TERRACON_DATATEMPLATE.GDT 8/31/21

BORING LOG NO. WB-8

PROJECT: CoDS WW Capital Improvements

CLIENT: City of Dripping Springs TX
Dripping Springs, TX

SITE: FM150 & RR12
Dripping Springs, TX

LOCATION See Exploration Plan

Latitude: 30.1859° Longitude: -98.111°

Approximate Surface Elev.: 1074.0 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	RECOVERY (%) RQD (%)	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
2		0.0	1074+/-												
			CLAYEY SAND (CL), brown				N/A (Disturbed)					6			
		2.0	1072+/-												
			CLAYEY GRAVEL WITH SAND (GC), light brown, medium dense				7-10-13 N=23								
		4.0	1070+/-												
3			**LIMESTONE (GLEN ROSE FORMATION)**, gray to light gray, moderately fractured	5			50/3"	100/68	UC	157.20		2	131		
				10				100/53							
			- slightly fractured below ~15 feet	15				100/90	UC	172.15		4	129		
				20				78/75							
		25.0	1049+/-	25											
			Boring Terminated at 25 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Dry Augered to 5 feet; Air Rotary from 5 to 25 feet

Abandonment Method:
Boring backfilled with Auger Cuttings and/or Bentonite

WATER LEVEL OBSERVATIONS

No free water observed

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

Terracon
5307 Industrial Oaks Blvd Ste 160
Austin, TX

Boring Started: 08-09-2021 | Boring Completed: 08-09-2021

Drill Rig: CME 45 | Driller: Austin Geo-Logic

Project No.: 96195217

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 96195217. CODS WW CAPITAL IMP.BORING INFO.GPJ TERRACON_DATATEMPLATE.GDT 8/31/21

BORING LOG NO. WB-9

PROJECT: CoDS WW Capital Improvements

CLIENT: City of Dripping Springs TX
Dripping Springs, TX

SITE: FM150 & RR12
Dripping Springs, TX

LOCATION See Exploration Plan

Latitude: 30.1875° Longitude: -98.1124°

Approximate Surface Elev.: 1085.5 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	RECOVERY (%) RQD (%)	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
1							4.5+ tsf (HP)					13		56-19-37	65
							11-13-16 N=29					9			
				5			7-9-13 N=22					16			
							8-10-13 N=23								
2				10			5-6-9 N=15					17		40-15-25	62
		14.0	1071.5+/-		▽		21-50/1"								
3				15				97/47	UC	187.56		3	139		
		20.0	1065.5+/-	20											

SANDY FAT CLAY (CH), brown, hard

- gravelly seam from ~2 to 4 feet

6.0 — 1079.5+/-

SANDY LEAN CLAY (CL), tan, very stiff

14.0 — 1071.5+/-

LIMESTONE (GLEN ROSE FORMATION), gray to light gray, moderately fractured

20.0 — 1065.5+/-

Boring Terminated at 20 Feet

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Dry Augered to 15 feet; Air Rotary from 15 to 20 feet

Abandonment Method:
Boring backfilled with Auger Cuttings and/or Bentonite

WATER LEVEL OBSERVATIONS

▽ *14.0 feet while Drilling*

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

Terracon
5307 Industrial Oaks Blvd Ste 160
Austin, TX

Boring Started: 08-06-2021 | Boring Completed: 08-06-2021

Drill Rig: CME 45 | Driller: Austin Geo-Logic

Project No.: 96195217

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 96195217. CODS WW CAPITAL IMP.BORING INFO.GPJ TERRACON_DATATEMPLATE.GDT 8/31/21

BORING LOG NO. WB-10

PROJECT: CoDS WW Capital Improvements

CLIENT: City of Dripping Springs TX
Dripping Springs, TX

SITE: FM150 & RR12
Dripping Springs, TX

LOCATION See Exploration Plan

Latitude: 30.1888° Longitude: -98.1155°

Approximate Surface Elev.: 1091.0 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	RECOVERY (%) RQD (%)	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
2		2.0	1089+/-				4.5+ tsf (HP)								
							13-12-13 N=25								
				5	▽		21-13-14 N=27					9			22
							25-14-12 N=26								
							7-7-14 N=21					7		27-17-10	41
				10											
		13.0	1078+/-				50/2"								
3				15				100/78	UC	232.19		2	57		
				20				95/95							
		25.0	1066+/-	25											

GRAVELLY LEAN CLAY WITH SAND (CL), dark brown, hard

CLAYEY SAND WITH GRAVEL (SC), light brown to light tan, medium dense

- light tan to pale brown, with decreasing gravel content below ~8 feet

LIMESTONE (GLEN ROSE FORMATION), gray to light gray, slightly fractured

Boring Terminated at 25 Feet

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Dry Augered to 15 feet; Air Rotary from 15 to 25 feet

Abandonment Method:
Boring backfilled with Auger Cuttings and/or Bentonite

WATER LEVEL OBSERVATIONS

▽ *4.0 feet while Drilling*

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

Terracon
5307 Industrial Oaks Blvd Ste 160
Austin, TX

Boring Started: 08-06-2021 | Boring Completed: 08-06-2021

Drill Rig: CME 45 | Driller: Austin Geo-Logic

Project No.: 96195217

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 96195217. CODS WW CAPITAL IMP.BORING INFO.GPJ TERRACON_DATATEMPLATE.GDT 8/31/21

BORING LOG NO. LWC-1

PROJECT: CoDS WW Capital Improvements

CLIENT: City of Dripping Springs TX
Dripping Springs, TX

SITE: FM150 & RR12
Dripping Springs, TX

LOCATION See Exploration Plan

Latitude: 30.1866° Longitude: -98.1111°

Approximate Surface Elev.: 1075.0 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	RECOVERY (%) RQD (%)	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS: LL-PL-PI	PERCENT FINES
2							1.0 tsf (HP)								
					▽		10-12-13 N=25					5			16
		4.0	1071+/-				50/2"								
3				5				97/80	UC	207.12		1	142		
				10				95/83							
				15				100/95	UC	223.54		2	136		
				20				100/95							
				25				85/67							
		30.0	1045+/-	30											

CLAYEY GRAVEL WITH SAND (GC), brown to light brown, medium dense

LIMESTONE (GLEN ROSE FORMATION), gray to light gray, slightly fractured

- moderately fractured, with marly seams and layers below ~25 feet

Boring Terminated at 30 Feet

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Dry Augered to 5 feet; Air Rotary from 5 to 30 feet

Abandonment Method:
Boring backfilled with Auger Cuttings and/or Bentonite

WATER LEVEL OBSERVATIONS

▽ *4.0 feet while Drilling*

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

Terracon
5307 Industrial Oaks Blvd Ste 160
Austin, TX

Boring Started: 08-06-2021 | Boring Completed: 08-06-2021

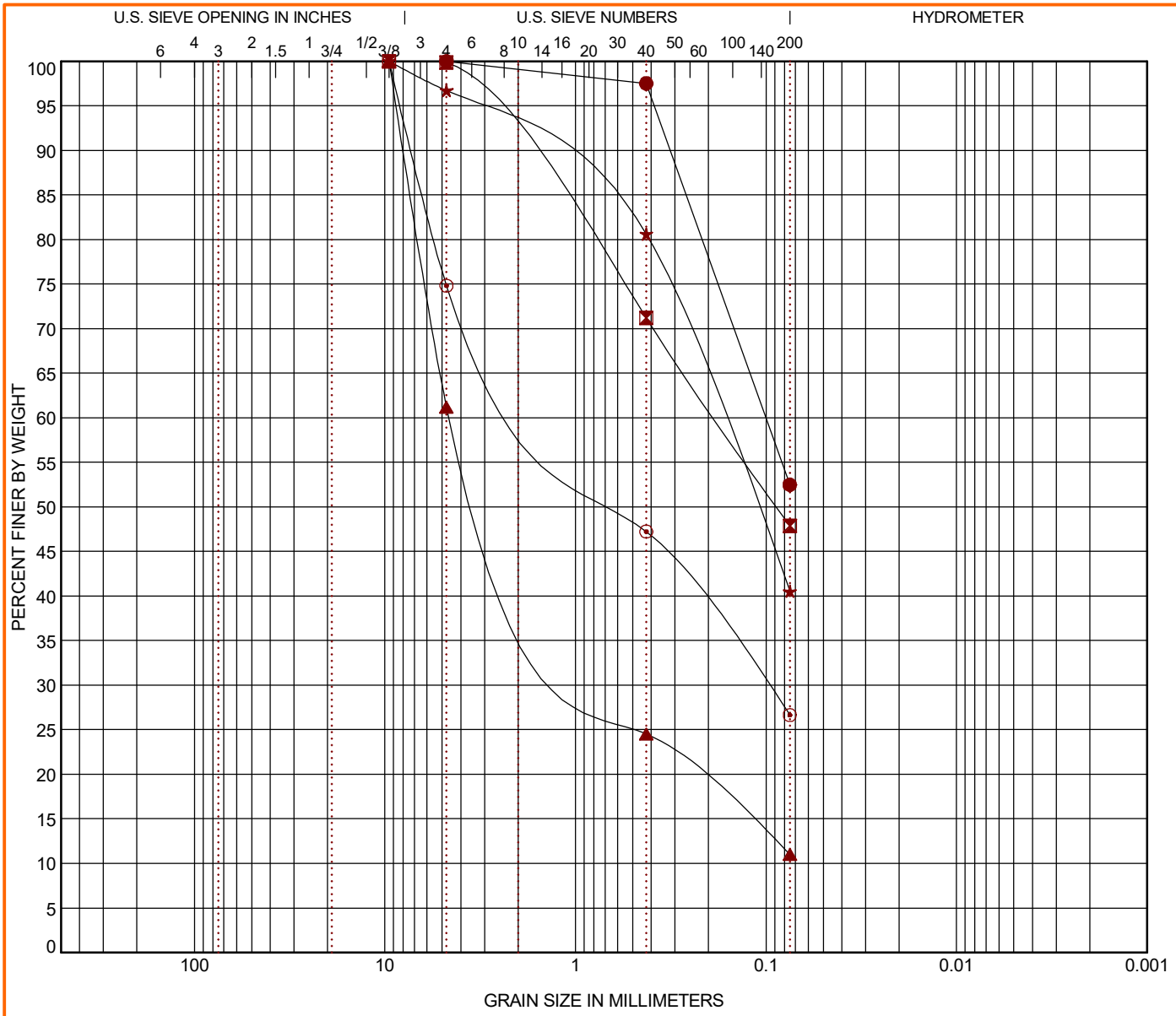
Drill Rig: CME 45 | Driller: Austin Geo-Logic

Project No.: 96195217

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 96195217. CODS WW CAPITAL IMP.BORING INFO.GPJ TERRACON_DATATEMPLATE.GDT 8/31/21

GRAIN SIZE DISTRIBUTION

ASTM D422 / ASTM C136



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Boring ID		Depth	USCS Classification	WC (%)	LL	PL	PI	Cc	Cu
●	WB-1	2 - 4	SANDY LEAN CLAY (CL)	12	34	16	18		
⊠	WB-2	2 - 4	CLAYEY SAND (SC)	9	40	18	22		
▲	WB-3	6 - 7.5	WELL-GRADED SAND with CLAY and GRAVEL (SW-SC)	5	23	15	8	1.28	66.37
★	WB-4	2 - 3.5	CLAYEY SAND (SC)	9	27	16	11		
⊙	WB-5	0 - 1.5	CLAYEY SAND with GRAVEL (SC)	6	37	17	20		

Boring ID		Depth	D_{100}	D_{60}	D_{30}	D_{10}	%Cobbles	%Gravel	%Sand	%Silt	%Fines	%Clay
●	WB-1	2 - 4	4.75	0.1			0.0	0.0	47.5		52.5	
⊠	WB-2	2 - 4	9.5	0.185			0.0	0.1	52.0		47.9	
▲	WB-3	6 - 7.5	9.5	4.39	0.61		0.0	38.8	50.2		11.0	
★	WB-4	2 - 3.5	9.5	0.174			0.0	3.3	56.2		40.5	
⊙	WB-5	0 - 1.5	9.5	1.298	0.099		0.0	25.2	48.2		26.6	

PROJECT: CoDS WW Capital Improvements

PROJECT NUMBER: 96195217

SITE: FM150 & RR12
Dripping Springs, TX

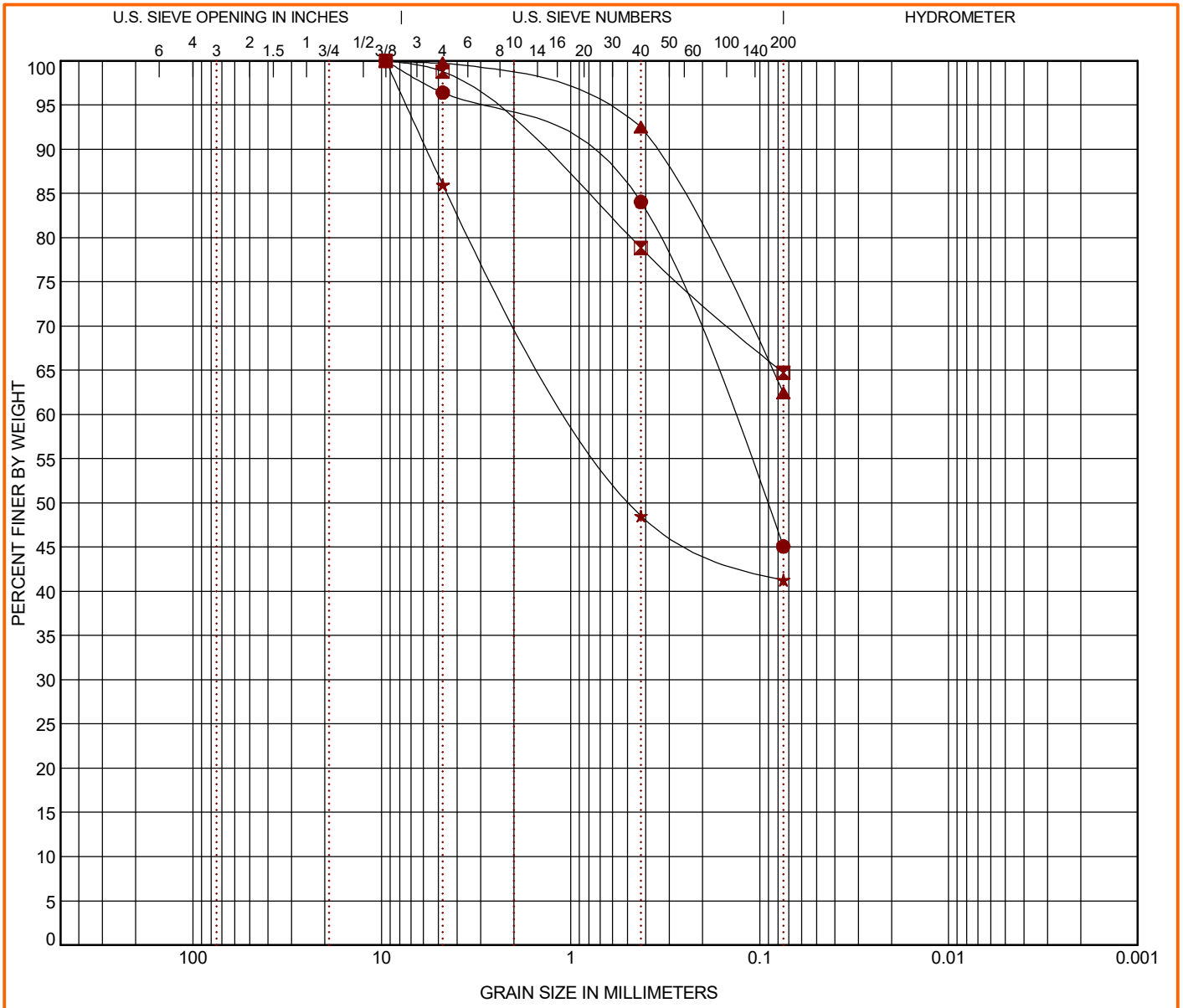
Terracon
5307 Industrial Oaks Blvd Ste 160
Austin, TX

CLIENT: City of Dripping Springs TX
Dripping Springs, TX

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GRAIN SIZE: USCS-2 96195217. CODS WW CAPITAL IMP.BORING INFO.GPJ TERRACON_DATATEMPLATE.GDT 8/31/21

GRAIN SIZE DISTRIBUTION

ASTM D422 / ASTM C136



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Boring ID		Depth	USCS Classification	WC (%)	LL	PL	PI	Cc	Cu
●	WB-7	0 - 2	CLAYEY SAND (SC)	7	30	17	13		
⊠	WB-9	0 - 2	SANDY FAT CLAY (CH)	13	56	19	37		
▲	WB-9	8.5 - 10	SANDY LEAN CLAY (CL)	17	40	15	25		
★	WB-10	8.5 - 10	CLAYEY SAND (SC)	7	27	17	10		

Boring ID		Depth	D_{100}	D_{60}	D_{30}	D_{10}	%Cobbles	%Gravel	%Sand	%Silt	%Fines	%Clay
●	WB-7	0 - 2	9.5	0.146			0.0	3.6	51.3		45.1	
⊠	WB-9	0 - 2	9.5				0.0	1.2	34.1		64.7	
▲	WB-9	8.5 - 10	9.5				0.0	0.2	37.3		62.4	
★	WB-10	8.5 - 10	9.5	0.89			0.0	14.0	44.7		41.3	

PROJECT: CoDS WW Capital Improvements

PROJECT NUMBER: 96195217

SITE: FM150 & RR12
Dripping Springs, TX

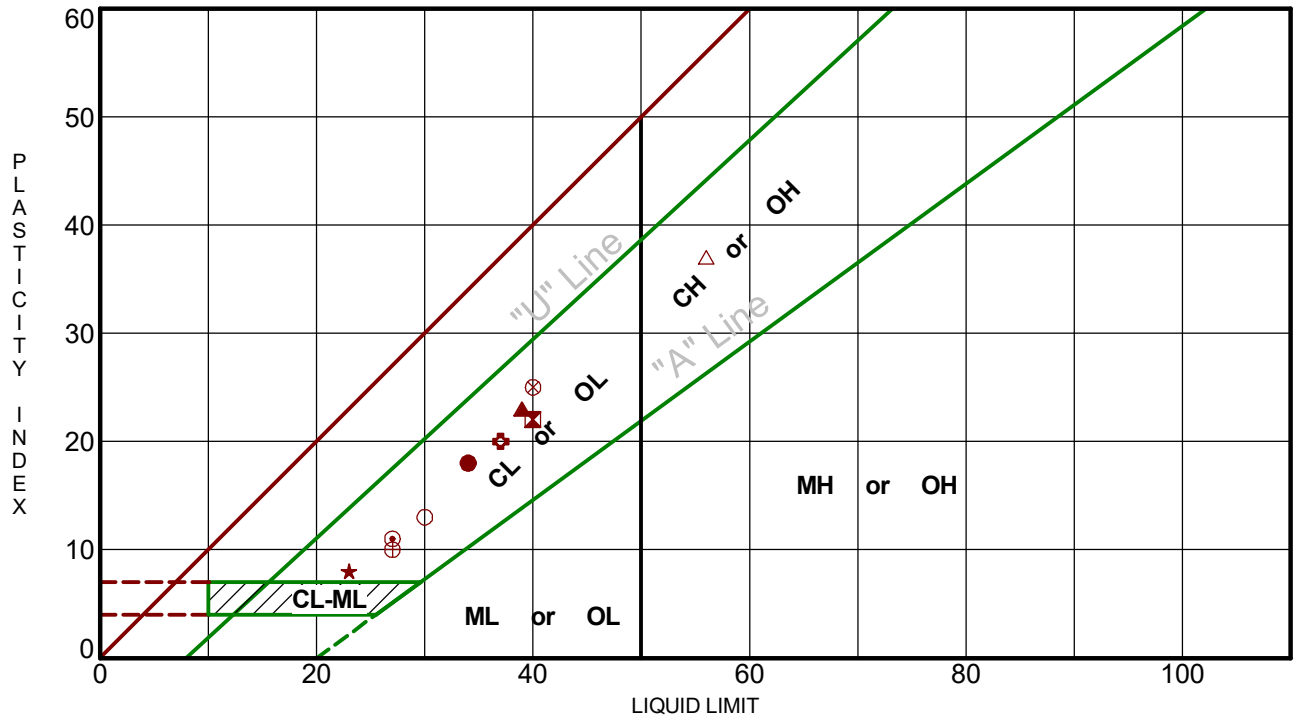
Terracon
5307 Industrial Oaks Blvd Ste 160
Austin, TX

CLIENT: City of Dripping Springs TX
Dripping Springs, TX

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GRAIN SIZE: USCS-2 96195217. CODS WW CAPITAL IMP.BORING INFO.GPJ TERRACON_DATATEMPLATE.GDT 8/31/21

ATTERBERG LIMITS RESULTS

ASTM D4318



Boring ID		Depth	LL	PL	PI	Fines	USCS	Description
●	WB-1	2 - 4	34	16	18	52.5	CL	SANDY LEAN CLAY
⊠	WB-2	2 - 4	40	18	22	47.9	SC	CLAYEY SAND
▲	WB-2	6 - 7.5	39	16	23			
★	WB-3	6 - 7.5	23	15	8	11.0	SW-SC	WELL-GRADED SAND with CLAY and GRAVEL
⊙	WB-4	2 - 3.5	27	16	11	40.5	SC	CLAYEY SAND
✿	WB-5	0 - 1.5	37	17	20	26.6	SC	CLAYEY SAND with GRAVEL
○	WB-7	0 - 2	30	17	13	45.1	SC	CLAYEY SAND
△	WB-9	0 - 2	56	19	37	64.7	CH	SANDY FAT CLAY
⊗	WB-9	8.5 - 10	40	15	25	62.4	CL	SANDY LEAN CLAY
⊕	WB-10	8.5 - 10	27	17	10	41.3	SC	CLAYEY SAND

PROJECT: CoDS WW Capital Improvements

PROJECT NUMBER: 96195217

SITE: FM150 & RR12
Dripping Springs, TX

Terracon
5307 Industrial Oaks Blvd Ste 160
Austin, TX

CLIENT: City of Dripping Springs TX
Dripping Springs, TX

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. ATTERBERG LIMITS 96195217. CODS WW CAPITAL IMP.BORING INFO.GPJ TERRACON_DATATEMPLATE.GDT 8/31/21

SUPPORTING INFORMATION

Contents:

General Notes
Unified Soil Classification System
Description of Rock Properties

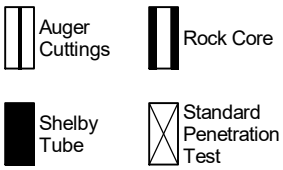
Note: All attachments are one page unless noted above.

GENERAL NOTES

DESCRIPTION OF SYMBOLS AND ABBREVIATIONS
CoDS WW Capital Improvements ■ Dripping Springs, TX
Terracon Project No. 96195217

Terracon GeoReport

SAMPLING



WATER LEVEL



Water Initially Encountered

Water Level After a Specified Period of Time

Water Level After a Specified Period of Time

Cave In Encountered

Water levels indicated on the soil boring logs are the levels measured in the borehole at the times indicated. Groundwater level variations will occur over time. In low permeability soils, accurate determination of groundwater levels is not possible with short term water level observations.

FIELD TESTS

N	**Standard Penetration Test Resistance (Blows/Ft.)**
(HP)	**Hand Penetrometer**
(T)	**Torvane**
(DCP)	**Dynamic Cone Penetrometer**
UC	**Unconfined Compressive Strength**
(PID)	**Photo-Ionization Detector**
(OVA)	**Organic Vapor Analyzer**

DESCRIPTIVE SOIL CLASSIFICATION

Soil classification as noted on the soil boring logs is based Unified Soil Classification System. Where sufficient laboratory data exist to classify the soils consistent with ASTM D2487 "Classification of Soils for Engineering Purposes" this procedure is used. ASTM D2488 "Description and Identification of Soils (Visual-Manual Procedure)" is also used to classify the soils, particularly where insufficient laboratory data exist to classify the soils in accordance with ASTM D2487. In addition to USCS classification, coarse grained soils are classified on the basis of their in-place relative density, and fine-grained soils are classified on the basis of their consistency. See "Strength Terms" table below for details. The ASTM standards noted above are for reference to methodology in general. In some cases, variations to methods are applied as a result of local practice or professional judgment.

LOCATION AND ELEVATION NOTES

Exploration point locations as shown on the Exploration Plan and as noted on the soil boring logs in the form of Latitude and Longitude are approximate. See Exploration and Testing Procedures in the report for the methods used to locate the exploration points for this project. Surface elevation data annotated with +/- indicates that no actual topographical survey was conducted to confirm the surface elevation. Instead, the surface elevation was approximately determined from topographic maps of the area.

STRENGTH TERMS

RELATIVE DENSITY OF COARSE-GRAINED SOILS (More than 50% retained on No. 200 sieve.) Density determined by Standard Penetration Resistance		CONSISTENCY OF FINE-GRAINED SOILS (50% or more passing the No. 200 sieve.) Consistency determined by laboratory shear strength testing, field visual-manual procedures or standard penetration resistance			BEDROCK	
Descriptive Term (Density)	**Standard Penetration or N-Value Blows/Ft.**	**Descriptive Term (Consistency)**	**Unconfined Compressive Strength Qu, (tsf)**	**Standard Penetration or N-Value Blows/Ft.**	**Standard Penetration or N-Value Blows/Ft.**	**Descriptive Term (Consistency)**
Very Loose	0 - 3	Very Soft	less than 0.25	0 - 1	< 20	Weathered
Loose	4 - 9	Soft	0.25 to 0.50	2 - 4	20 - 29	Firm
Medium Dense	10 - 29	Medium Stiff	0.50 to 1.00	4 - 8	30 - 49	Medium Hard
Dense	30 - 50	Stiff	1.00 to 2.00	8 - 15	50 - 79	Hard
Very Dense	> 50	Very Stiff	2.00 to 4.00	15 - 30	>79	Very Hard
		Hard	> 4.00	> 30		

RELEVANCE OF SOIL BORING LOG

The soil boring logs contained within this document are intended for application to the project as described in this document. Use of these soil boring logs for any other purpose may not be appropriate.

UNIFIED SOIL CLASSIFICATION SYSTEM

Terracon GeoReport

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests [A]					Soil Classification	
					Group Symbol	Group Name [B]
Coarse-Grained Soils: More than 50% retained on No. 200 sieve	**Gravels:** More than 50% of coarse fraction retained on No. 4 sieve	**Clean Gravels:** Less than 5% fines [C]	Cu ≥ 4 and 1 ≤ Cc ≤ 3 [E]		GW	Well-graded gravel [F]
			Cu < 4 and/or [Cc<1 or Cc>3.0] [E]		GP	Poorly graded gravel [F]
		Gravels with Fines: More than 12% fines [C]	Fines classify as ML or MH		GM	Silty gravel [F, G, H]
			Fines classify as CL or CH		GC	Clayey gravel [F, G, H]
	Sands: 50% or more of coarse fraction passes No. 4 sieve	**Clean Sands:** Less than 5% fines [D]	Cu ≥ 6 and 1 ≤ Cc ≤ 3 [E]		SW	Well-graded sand [I]
			Cu < 6 and/or [Cc<1 or Cc>3.0] [E]		SP	Poorly graded sand [I]
		Sands with Fines: More than 12% fines [D]	Fines classify as ML or MH		SM	Silty sand [G, H, I]
			Fines classify as CL or CH		SC	Clayey sand [G, H, I]
Fine-Grained Soils: 50% or more passes the No. 200 sieve	**Silts and Clays:** Liquid limit less than 50	**Inorganic:**	PI > 7 and plots on or above "A"		CL	Lean clay [K, L, M]
			PI < 4 or plots below "A" line [J]		ML	Silt [K, L, M]
		Organic:	Liquid limit - oven dried	< 0.75	OL	Organic clay [K, L, M, N]
			Liquid limit - not dried			Organic silt [K, L, M, O]
	Silts and Clays: Liquid limit 50 or more	**Inorganic:**	PI plots on or above "A" line		CH	Fat clay [K, L, M]
			PI plots below "A" line		MH	Elastic Silt [K, L, M]
		Organic:	Liquid limit - oven dried	< 0.75	OH	Organic clay [K, L, M, P]
			Liquid limit - not dried			Organic silt [K, L, M, Q]
Highly organic soils:	Primarily organic matter, dark in color, and organic odor				PT	Peat

[A] Based on the material passing the 3-inch (75-mm) sieve.

[B] If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

[C] Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

[D] Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay.

[E] $Cu = D_{60}/D_{10}$ $\quad Cc = \dfrac{(D_{30})^2}{D_{10} \times D_{60}}$

[F] If soil contains ≥ 15% sand, add "with sand" to group name.

[G] If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

[H] If fines are organic, add "with organic fines" to group name.

[I] If soil contains ≥ 15% gravel, add "with gravel" to group name.

[J] If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

[K] If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

[L] If soil contains ≥ 30% plus No. 200 predominantly sand, add "sandy" to group name.

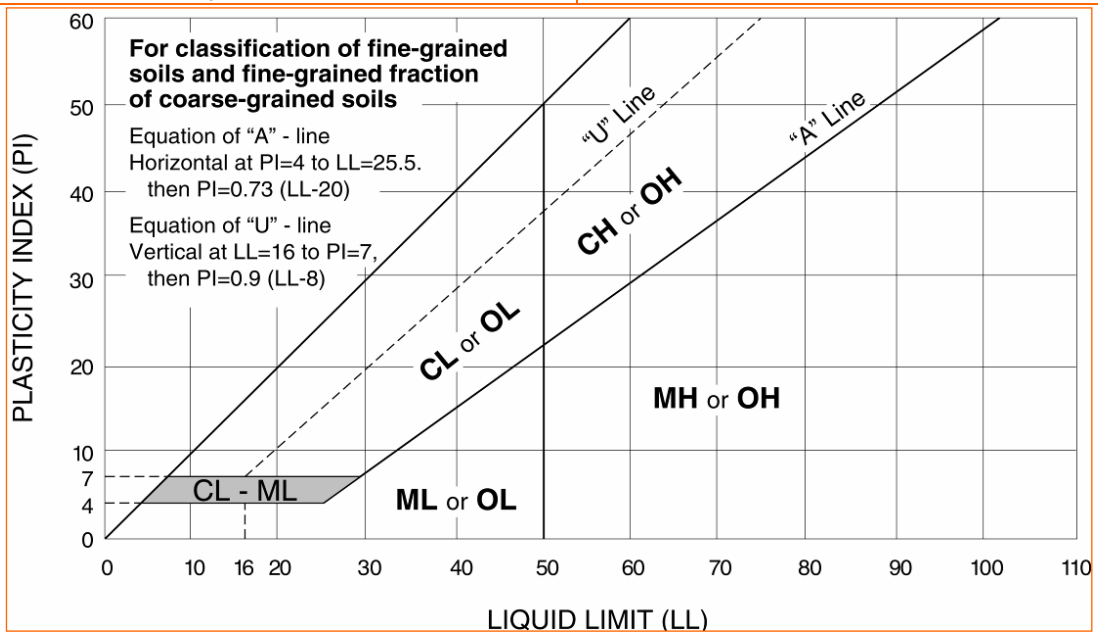
[M] If soil contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name.

[N] PI ≥ 4 and plots on or above "A" line.

[O] PI < 4 or plots below "A" line.

[P] PI plots on or above "A" line.

[Q] PI plots below "A" line.



DESCRIPTION OF ROCK PROPERTIES

WEATHERING	
Term	**Description**
Unweathered	No visible sign of rock material weathering, perhaps slight discoloration on major discontinuity surfaces.
Slightly weathered	Discoloration indicates weathering of rock material and discontinuity surfaces. All the rock material may be discolored by weathering and may be somewhat weaker externally than in its fresh condition.
Moderately weathered	Less than half of the rock material is decomposed and/or disintegrated to a soil. Fresh or discolored rock is present either as a continuous framework or as corestones.
Highly weathered	More than half of the rock material is decomposed and/or disintegrated to a soil. Fresh or discolored rock is present either as a discontinuous framework or as corestones.
Completely weathered	All rock material is decomposed and/or disintegrated to soil. The original mass structure is still largely intact.
Residual soil	All rock material is converted to soil. The mass structure and material fabric are destroyed. There is a large change in volume, but the soil has not been significantly transported.

STRENGTH OR HARDNESS		
Description	**Field Identification**	**Uniaxial Compressive Strength, psi (tsf)**
Extremely weak	Indented by thumbnail	40-150 (3.9-10.8)
Very weak	Crumbles under firm blows with point of geological hammer, can be peeled by a pocket knife	150-700 (10.8-50.4)
Weak rock	Can be peeled by a pocket knife with difficulty, shallow indentations made by firm blow with point of geological hammer	700-4,000 (50.4-288)
Medium strong	Cannot be scraped or peeled with a pocket knife, specimen can be fractured with single firm blow of geological hammer	4,000-7,000 (288-504)
Strong rock	Specimen requires more than one blow of geological hammer to fracture it	7,000-15,000 (504-1,080)
Very strong	Specimen requires many blows of geological hammer to fracture it	15,000-36,000 (1,080-2,592)
Extremely strong	Specimen can only be chipped with geological hammer	>36,000 (>2,592)

DISCONTINUITY DESCRIPTION			
Fracture Spacing (Joints, Faults, Other Fractures)		**Bedding Spacing (May Include Foliation or Banding)**	
Description	**Spacing**	**Description**	**Spacing**
Extremely close	< ¾ in (<19 mm)	**Laminated**	< ½ in (<12 mm)
Very close	¾ in – 2-1/2 in (19 - 60 mm)	**Very thin**	½ in – 2 in (12 – 50 mm)
Close	2-1/2 in – 8 in (60 – 200 mm)	**Thin**	2 in – 1 ft. (50 – 300 mm)
Moderate	8 in – 2 ft. (200 – 600 mm)	**Medium**	1 ft. – 3 ft. (300 – 900 mm)
Wide	2 ft. – 6 ft. (600 mm – 2.0 m)	**Thick**	3 ft. – 10 ft. (900 mm – 3 m)
Very Wide	6 ft. – 20 ft. (2.0 – 6 m)	**Massive**	> 10 ft. (3 m)

Discontinuity Orientation (Angle): Measure the angle of discontinuity relative to a plane perpendicular to the longitudinal axis of the core. (For most cases, the core axis is vertical; therefore, the plane perpendicular to the core axis is horizontal.) For example, a horizontal bedding plane would have a 0-degree angle.

ROCK QUALITY DESIGNATION (RQD) [1]	
Description	**RQD Value (%)**
Very Poor	0 - 25
Poor	25 – 50
Fair	50 – 75
Good	75 – 90
Excellent	90 - 100

1. The combined length of all sound and intact core segments equal to or greater than 4 inches in length, expressed as a percentage of the total core run length.

Reference: U.S. Department of Transportation, Federal Highway Administration, Publication No FHWA-NHI-10-034, December 2009
Technical Manual for Design and Construction of Road Tunnels – Civil Elements

APPENDIX E

TBPE Firm Registration No. 10834

235 Ledge Stone Drive | Austin, TX 78737 | 512.432.1000

July 14, 2025

Louis C. Herrin, III, P.E.
Texas Commission on Environmental Quality
Water Quality Division
Wastewater Permits Section
Plans and Specifications Review
MC 148
P.O. Box 13087
Austin, Texas 78711-3087

Re: Chapter 217 Summary Transmittal Letter
City of Dripping Springs
TCEQ Permit Numbers WQ0014488001 and WQ0014488003
TCEQ Reuse Authorization Numbers R14488001 and R14488003
City of Dripping Springs West Interceptor Segment 2
Burgess & Niple Job Number 39676
CMA Job Number 1950

Dear Mr. Herrin:

We are submitting this project under the provisions of 30 TAC §217. The purpose of this letter is to provide the TCEQ with the information necessary to comply with the requirements of §217.6(c) of the TCEQ's rules entitled, Design Criteria for Domestic Wastewater Systems. The necessary information includes:

(1) Name and address of the design firm:
Burgess & Niple, Inc, 235 Ledge Stone Drive, Austin, Texas 78737

(2) Name, phone number, facsimile number, and email; address of the design engineer:
Max Zekos-Sierra, P.E. (TSPE Registration No. 144656), phone number 512/432-1000, max.zekos-sierra@burgessniple.com, 235 Ledge Stone Drive, Austin, Texas 78737.

(3) County in which the project will be located:
Hays County, Texas.

(4) An identifying name for the project:
City of Dripping Springs West Interceptor Segment 2.

(5) Collection system or wastewater treatment plant facility owner's name, and if applicable, the wastewater treatment facility permit number and wastewater treatment facility name: City of Dripping Springs, permit numbers WQ0014488001 and WQ0014488003 (Reuse Authorizations R14488001 and R14488003), City of Dripping Springs South Regional Wastewater System.

(6) The plans and specifications for this project are in substantial compliance with all requirements of 30 TAC, Chapter 217.

(7) Any variance being requested will not threaten public health or the environment, based on the best professional judgement of the Engineer who prepared the engineering report and project plans and specifications. We are requesting a variance from TAC§217.53.(m)(2)(B) rule on accomplishing horizontal curves. Further explanation can be found in the attached letter.

(8) Brief description of the project scope:

(A) The proposed project consists of installing a new wastewater gravity line starting North of Caliterra Parkway in Dripping Springs to Cypress Fork Ranch Subdivision Lot 3 located on Creek Rd. The proposed gravity line will consist of 12, 15, 16, 18, and 21 inch pipes, with a total length of approximately 7,996. The flow within this gravity main will run southward and connect to the existing West Interceptor Segment 1. Ultimately, the wastewater will flow into the City of Dripping Springs Wastewater Treatment Plant located off of RR 12 and FM 150. Additionally, there will be a structural creek crossing design utilized to direct the line across Onion Creek which will be cased and follow the curvature of the existing low water crossing.

(B) The pipe slope across its entire length adheres to the minimum and maximum slope standards outlined by the Texas Commission on Environmental Quality (TCEQ) in section 217.53(1)(2)(A). The selected pipe material options include fiberglass, HDPE, and PVC.

We anticipate that construction of the proposed wastewater system improvements will begin in December 2025 and be completed in November 2026. If you have any questions or comments, please call me at (512) 432-1000.

Sincerely,



Max Zekos-Sierra, P.E.
Project Engineer

Xc: Susan Jablonski, P.E., TCEQ Region 11 Office
Shawn Stewart, Water Section Manager
Ginger Faught, City of Drippings Springs
Dane Sorensen, City of Dripping Springs

BURGESS & NIPLE

TBPE Firm Registration No. 10834

235 Ledge Stone Drive | Austin, TX 78737 | 512.432.1000

July 14, 2025

Louis C. Herrin, III, P.E.
Texas Commission on Environmental Quality
Water Quality Division
Wastewater Permits Section
Plans and Specifications Review
MC 148
P.O. Box 13087
Austin, Texas 78711-3087

Re: City of Dripping Springs West Interceptor Segment 2
TCEQ Permit Numbers WQ0014488001 and WQ0014488003
TCEQ Reuse Authorization Numbers R14488001 and R14488003
Burgess & Niple Job Number 39676

Dear Mr. Herrin:

We have designed the West Interceptor sewer main improvements for the City of Dripping Springs. Of the ±7,996 linear feet of proposed sewer main, a portion (Sta. 111+24.47 to STA. 113+21.08, 196.61 feet) is planned to be cased and horizontally curved to be aligned parallel with an existing easement across Onion Creek. In conformance with 30 TAC Chapter §217.53.(m)(2)(B), the horizontal curve will be achieved by heat fusing the segmented HDPE (High-Density Polyethylene) pipe. The specific method of heat fusion will be butt-fusion for the 40-foot segments. This method of construction will also be applied for the 24" HDPE casing around the 16" gravity sewer main.

To minimize the construction impact the sewer interceptor project would have on our Dripping Springs residents, the existing 30' water & wastewater easement was strategically placed to follow the curvature of the existing low water crossing and negotiated with the landowner. Attached is the recorded easement. The 16" gravity sewer main was designed to have a horizontal curvature from manhole 'W-29' to 'W-30', see attached plan and profile.

Both the casing pipe and gravity sewer main will be located within a concrete structural addition that serves to improve and expand the low water crossing width on Onion Creek. The casing pipe will be surrounded by compacted select fill and supported every 9 feet by a concrete pipe support that will be doweled into the retaining wall of the structural addition. See attached structural drawings.

Within the casing pipe, a support system will be installed to maintain centralization and clearance while also handling the curvature of both pipes. The Garlock - RANGER II® - MIDI-M (non-metallic casing spacer system) or equal, will be used with runner heights of 1.97" (attached). This system is compatible with HDPE pipes and will be installed above and below the carrier pipe. This will ensure that the carrier pipe outer diameter of 16" + (1.97" X 2) = 19.94" total outside diameter, is less than the inner diameter of

the casing pipe, 21.07". This also allows for the Garlock RANGER II® typical clearance of 1" minimum separation between the casing pipe and the runner.

In accordance with JM Eagle's (manufacturer) guidelines, HDPE pipes should be assembled above ground in a straight line, then curved and set on top of the concrete pipe supports. All curvature results from the bending of the pipe lengths, with no deflection at the joint. For the DR 17 (Dimension Ratio) 16" HDPE pipe, the minimum cold bend radius is 27 times the pipe outer diameter, 16", which results in 36 feet. The DR 17 HDPE 24" casing pipe has a minimum cold bend radius of 54 feet. The proposed plans call for a bend radius of 236 feet, thus compliant with the manufacturer's guidelines for both HDPE pipes. See attached calculations.

We formally request approval to implement a horizontal curved sewer solution by using butt fusion to obtain the required radius on the gravity sewer pipe.

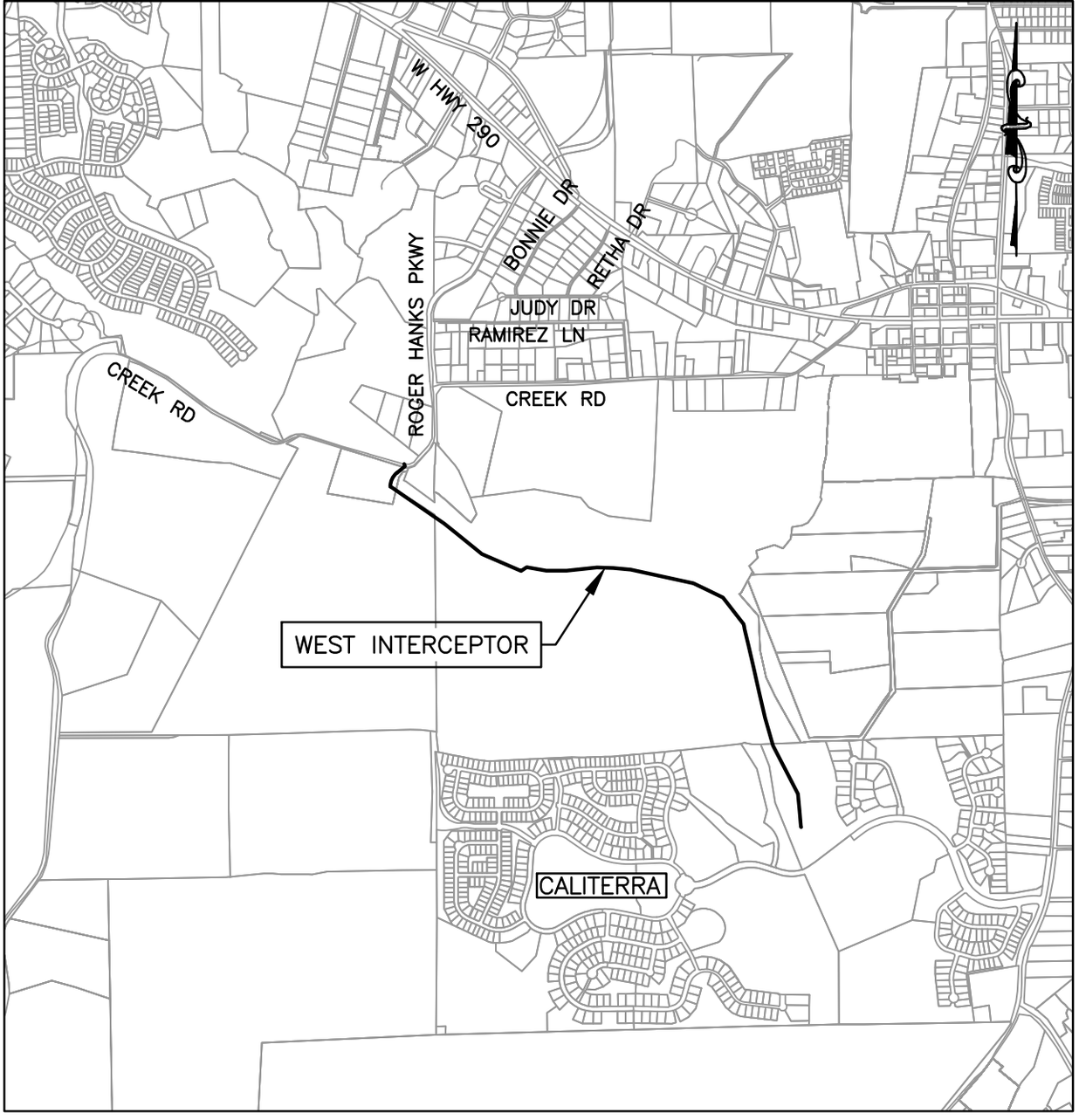
If you have any questions or comments, please email me at max.zekos-sierra@burgessniple.com or call me at (512) 432-1000.

Sincerely,



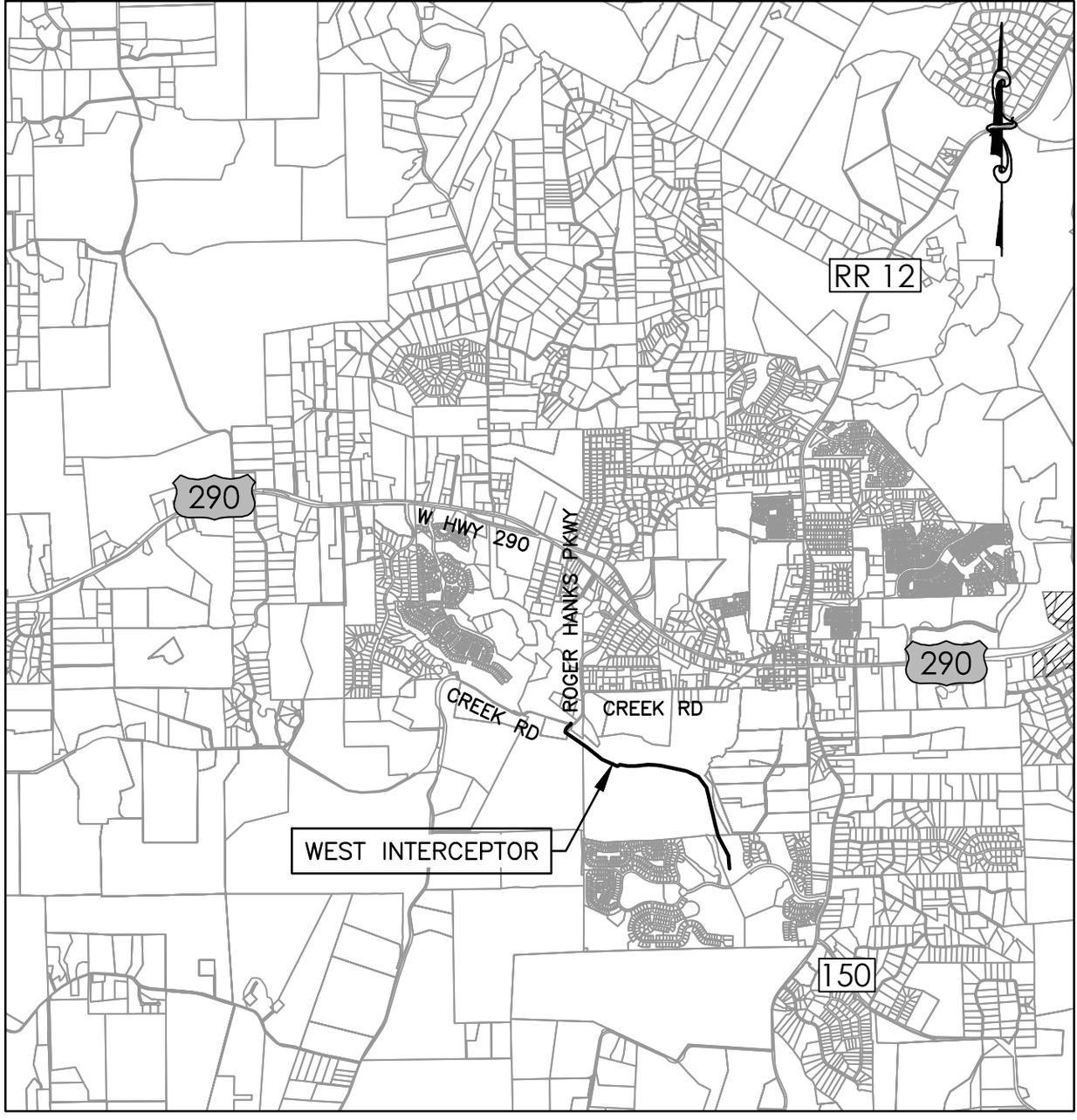
Max Zekos-Sierra, P.E.
Project Engineer

Xc: Susan Jablonski, P.E., TCEQ Region 11 Office



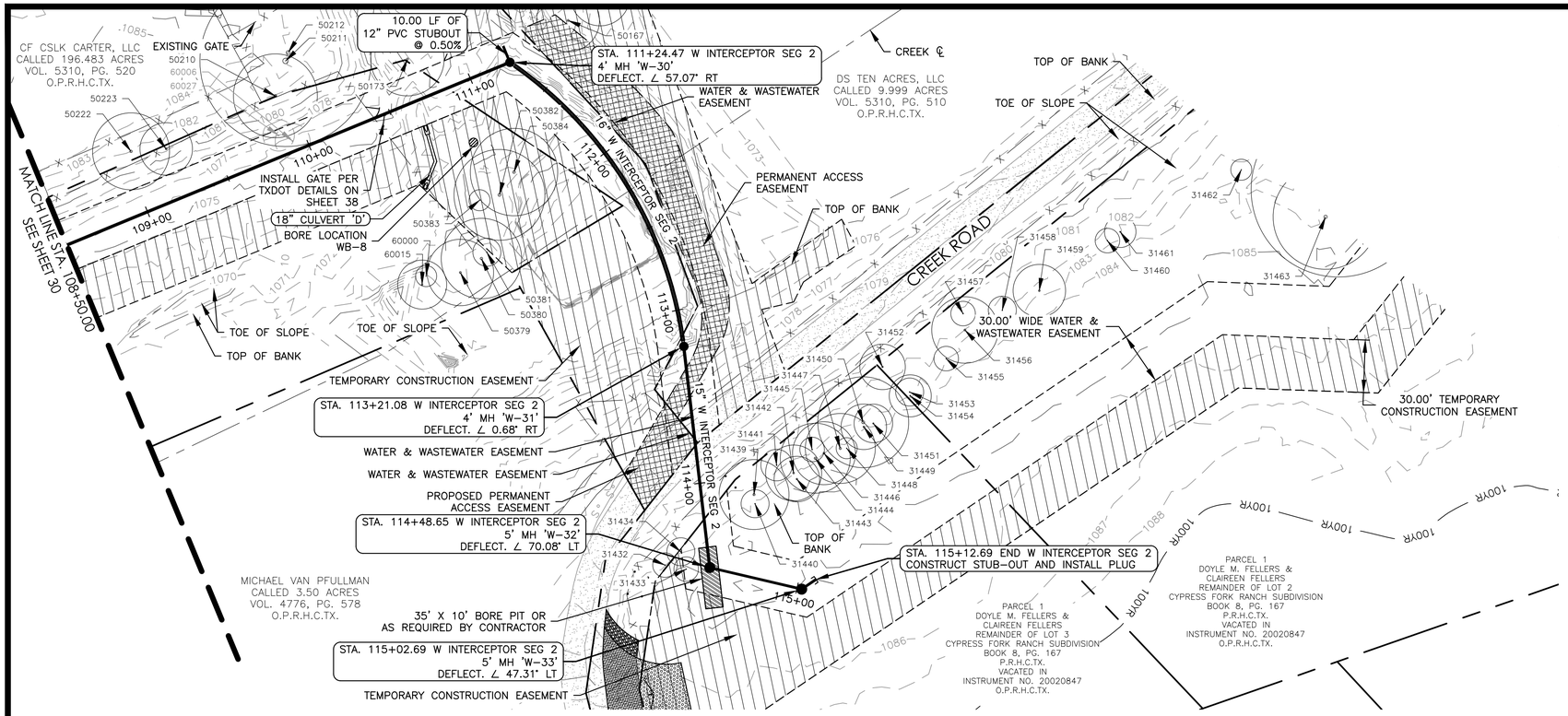
LOCATION MAP

1" = 2000'



VICINITY MAP

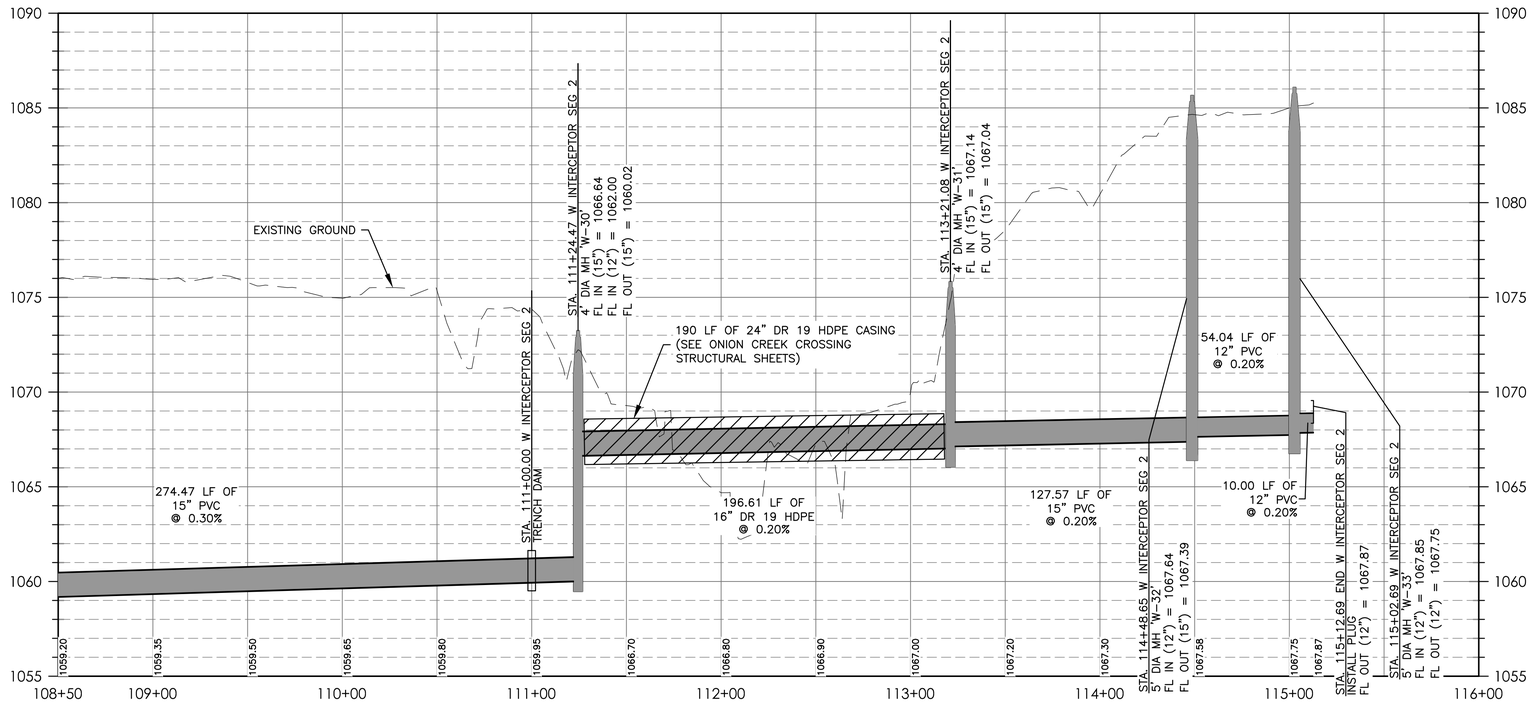
1" = 5000'



NOTE: REPAIR DIRT/GRAVEL ROAD TO EXISTING CONDITION OR BETTER.

W INTERCEPTOR SEG 2

PROFILE SCALE:
HORIZ: 1" = 40'
VERT: 1" = 4'



BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
WEST INTERCEPTOR STA 108+50 TO END P&P
- ALTERNATE 1

NO:	DESCRIPTION REVISIONS	DATE

JOB NO: 1950-001
DATE: JUNE 2025
DESIGNED BY: JB, CC
DRAWN BY: JB, CC
CHECKED BY: WBB
APPROVED BY: WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
6/10/2025

THIS DOCUMENT IS RELEASED FOR INTERIM REVIEW ONLY UNDER AUTHORITY OF WILLIAM B. BALL, P.E., (NO. 85379) ON 6/10/2025 1:14:08 PM AND IS NOT TO BE USED FOR BIDDING OR CONSTRUCTION.

SHEET: 32 OF 38

clark – Jun 10, 2025 – 1:14pm – File: M:\DWG\1950-C of DS West Interceptor\CAD\SHEETS\1950-PLAN AND PROFILE.dwg

Clerk's Note: At the time of recordation this instrument was found to be inadequate for the best reproduction, because of illegibility, carbon of photocopy, discolored paper, etc. All blackouts, additions and changes were present at the time the instrument was filed.

23046867 EASEMENT Total Pages: 17
Filed and Recorded: 12/27/2023 08:46:12 AM

Corridor Title GF 19.2533-CR

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

WATER, WASTEWATER AND ACCESS EASEMENT
(CORPORATE)

Date: December 21, 2023

Grantor: **SIEPIELA DEVELOPMENT CORPORATION,** a Texas corporation

Grantor's Address: 12222 Merit Drive, Suite 1020
Dallas, Texas 75251

Grantee: **CITY OF DRIPPING SPRINGS, TEXAS,** a General Law municipality situated in Hays County, Texas

Grantee's Address: P.O. Box 384
511 Mercer Street
Dripping Springs, Hays County, Texas 78620

Property: An exclusive easement and right-of-way in, upon, over, under, along, through, and across the parcel of real property of Grantor ("Easement"), said Easement consisting of approximately 0.044 acre, more or less, and more particularly described on **Exhibit "A"**, attached hereto and incorporated herein by reference ("Easement Tract 2A, 2B").

Consideration: Ten and No/100 Dollars ($10.00) and other good and valuable consideration paid to Grantor for which no lien either express or implied is retained.

GRANT OF EASEMENT:

SIEPIELA DEVELOPMENT CORPORATION, a Texas corporation ("Grantor"), for the sum of Ten and No/100 Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and confessed, does hereby GRANT, SELL AND CONVEY unto **THE CITY OF DRIPPING SPRINGS, TEXAS**, a General Law municipality located in Hays County, Texas ("Grantee") the Easement subject to the Reservations and Additional Terms set forth below, in, upon, over, under, along, through, and across the Easement Tract TO HAVE AND TO HOLD the same perpetually to Grantee and its successors and assigns, together with the right and privilege at any and all times to enter the Easement Tract with full rights of ingress and egress from the adjoining property of Grantor, or

any part thereof, for the purpose of construction, operation, maintenance, replacement, upgrade, and repair of the improvements which are constructed and installed therein or thereon under the terms of this Easement.

Grantor, on behalf of Grantor and its successors and assigns, does hereby covenant and agree to WARRANT AND FOREVER DEFEND title to the Easement herein granted on the Easement Tract, unto Grantee, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof by, though, or under Grantor, but not otherwise.

CHARACTER OF EASEMENT:

The Easement granted herein is "in gross," in that there is no "benefitted property." Nevertheless, the Easement rights herein granted shall pass to Grantee's successors and assigns, subject to all of the Terms hereof. The Easement rights of use granted herein are irrevocable. The Easement is for the benefit of Grantee.

PURPOSE OF EASEMENT:

The Easement shall be used by Grantee for public wastewater and/or water utility purposes, including placement, construction, installation, replacement, repair, maintenance, upgrade, relocation, removal, and operation of public wastewater or water pipelines and related appurtenances, or making connections thereto, as well as permanent culverts crossing the creek to provide access for maintenance purposes, and temporary and permanent access roads and facilities ("Facilities"). The Easement shall also be used by Grantee for the purpose of providing access for the operation, repair, maintenance, replacement and expansion of the Facilities ("Easement Purpose").

DURATION OF EASEMENT:

The Easement shall be perpetual. Grantor hereby binds Grantor and Grantor's successors and assigns, to warrant and forever defend the Easement on the Easement Tract unto Grantee, its successors and assigns, against any person whomsoever lawfully claiming.

GRANTOR USE:

Grantor hereby retains surface use of the Easement Tract and the right to plant and maintain ground cover and grasses only. Grantor relinquishes the authority for planting or cultivation of bushes, trees or other living matter, and building and maintaining any structures within the Easement Tract, and acknowledges that such uses are specifically prohibited. Grantor grants to Grantee the right to remove any living material or structures located within the Easement Tract, without Grantor recourse, to prevent interference with the operation or repairs to Grantee's facilities or use within the Easement Tract.

All mineral interests in the Easement, whether metallic or nonmetallic, whether similar or dissimilar, whether known or unknown, currently owned by Grantor in, on, and under and that may be produced and saved from the Easement or acreage pooled or unitized therewith, and the full and exclusive executive rights to execute leases in connection therewith, provided, however,

that Grantor shall not be permitted to drill or operate equipment for the production or development of minerals in the Easement but will be permitted to extract the minerals from and under the Easement by directional drilling or other means, so long as such activities do not damage, destroy, injure, and/or interfere with Grantee's use of the Easement for the Easement Purpose; and

All groundwater rights in and to the Easement, whether known or unknown, currently owned by Grantor in, on, and under and that may be produced and saved from the Easement or acreage pooled or unitized therewith, and the full and exclusive executive rights to execute leases in connection therewith, provided, however, that Grantor shall not be permitted to drill or operate equipment for the production or development of groundwater from the Easement but will be permitted to extract the groundwater from and under the Easement by directional drilling or other means, so long as such activities do not damage, destroy, injure, and/or interfere with Grantee's use of the Easement for the Easement Purpose.

ADDITIONAL TERMS:

The Easement and Grantee's use thereof shall be subject to the following additional terms and conditions ("Additional Terms"):

(1) For initial construction of the Facilities, Grantee shall require its construction contractor to make good faith efforts to provide notice to Grantor at least 48 hours prior to the start of construction, and Grantee shall use commercially reasonable efforts to coordinate the performance of such work with Grantor and to schedule such work at times that will not materially and adversely affect Grantor's ability to access and use the remainder of Grantor's property including Grantor's other property.

(2) For maintenance and scheduled repairs to the Facilities, Grantee shall make a good faith effort to contact Grantor prior to entering the Easement. No prior notice is required of Grantee to enter the easement for emergency repairs of the Facilities or when access to the Easement is necessary for compliance with any federal or state regulation, permit, order, or other legal requirement.

(3) Upon completion of initial construction of the Project and future construction within the Easement Tract, Grantee shall remove all construction debris and other material remaining on the site after construction; remove any disturbed rock, roots, and soil; remove any temporary barriers; remove any temporary access roads and drainage facilities; revegetate disturbed vegetated areas; and restore roadway surfaces to the condition existing at the date of execution or better condition, unless requested otherwise by Grantor and Grantee will restore the ground surface of the Easement as nearly as practicable to the vegetation, contour and condition which existed immediately prior to the commencement of such construction and repair in a good and workmanlike manner to a good or better condition as the condition which existed immediately prior to the commencement of such construction any and all fences, parking surfaces, drainage, irrigation, and other utility systems which are cut or damaged by Grantee.

(4) Prior to the start of construction of the Project, Grantee agrees to install all barriers required by the Federal or State agency and the issued permit(s) to prevent loss of disturbed soil, and may install temporary access roads and drainage facilities needed for access.

(5) All notices required or permitted to be given under this Water and Wastewater Easement shall be considered sufficiently given if delivered by (a) hand, courier or overnight delivery service to the physical address listed below, (b) certified or registered mail, return receipt requested to the mailing addresses listed below, or (b) by telephone to the phone numbers listed below:

If to Grantor:

Physical Address:

SIEPIELA DEVELOPMENT CORPORATION

Attn: Gregory L. Rich
12222 Merit Drive, Suite 1020
Dallas, TX 75251
972-960-2777 (O) Ext-103
972-960-2660 (F)
grich@siepiela.com:

If to Grantee:

The City of Dripping Springs
Attn: City Secretary
P.O. Box 384
Dripping Springs, Texas 78620

Notice shall be effective upon the other party's receipt of the notice. Either party may specify a different address for delivery of notices by written notice to the physical addresses specified above or as changed by notice over time,.

(6) This conveyance is made by Grantor and accepted by Grantee subject to any and all existing easements, covenants, rights-of-way, conditions, restrictions, outstanding mineral interests and royalty interests, if any, relating to the Easement, to the extent, and only to the extent, that the same may still be in force and effect, and either shown of record in the office of the County Clerk of Hays County, or that may be visibly apparent on the surface of the Easement Tract ("Prior Encumbrances"). Grantee agrees, to the fullest extent permitted by law, to indemnify, defend, and hold Grantor, its successors, assignees, licensees, occupants, officers, agents, employees, and contractors (each a "Grantor Party" and, collectively, the "Grantor Parties") harmless from and against any and all claims, losses, damages, liabilities and/or costs (including, without limitation, court costs and actual and reasonable attorneys' fees) arising from Grantee's exercise of any of their rights under this Easement that affects any right or property of any grantee or beneficiary under any of the Prior Encumbrances.

(7) BY ITS ACCEPTANCE OF THIS EASEMENT CONVEYANCE, AND AS A MATERIAL PART OF THE CONSIDERATION, GRANTEE EXPRESSLY ACKNOWLEDGES AND AGREES THAT (i) ANY INFORMATION PROVIDED TO GRANTEE PERTAINING TO THE EASEMENT BY GRANTOR HAS NOT BEEN INDEPENDENTLY INVESTIGATED OR VERIFIED BY GRANTOR, (ii) GRANTOR IS NOT MAKING, AND HAS NOT MADE, ANY REPRESENTATIONS OR WARRANTIES WHATSOEVER AS TO THE ACCURACY OR COMPLETENESS OF SUCH INFORMATION; AND (iii) GRANTOR IS NOT, AND WILL NOT BE, LIABLE OR BOUND IN ANY MANNER WHATSOEVER BY ANY WRITTEN OR VERBAL STATEMENT, REPRESENTATION, REPORT, SURVEY, OR INFORMATION FURNISHED TO GRANTEE, OR MADE BY ANY PARTY WITH RESPECT TO THE EASEMENT HEREBY CONVEYED. GRANTEE SPECIFICALLY AGREES THAT HAVING BEEN GIVEN THE OPPORTUNITY TO CONDUCT SUCH TESTS, STUDIES, AND INVESTIGATIONS AS GRANTEE DEEMS NECESSARY AND APPROPRIATE, GRANTEE IS RELYING SOLELY UPON ITS OWN INVESTIGATION OF GRANTOR'S PROPERTY AND NOT ON ANY INFORMATION PROVIDED BY GRANTOR. GRANTEE FURTHER AGREES THAT GRANTEE HAS PURCHASED AND ACCEPTED THE EASEMENT IN ITS CURRENT, "AS IS," WITH ALL FAULTS CONDITION, AND TO HAVE ASSUMED THE RISK OF ANY MATTER OR CONDITION WHICH IS LATENT OR PATENT OR THAT COULD HAVE BEEN REVEALED BY THEIR INVESTIGATIONS. GRANTOR HAS NOT MADE (AND GRANTOR HEREBY EXPRESSLY DISCLAIMS, AND GRANTOR IS SELLING THE EASEMENT WITHOUT) ANY REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, WHATSOEVER, AS TO THE VALUE, CONDITION, NATURE, CHARACTER, SUITABILITY, HABITABILITY, OR FITNESS OF THE EASEMENT, THE PRESENCE OR ABSENCE OF ANY HAZARDOUS MATERIAL OR OTHER ENVIRONMENTAL CONDITION OR COMPLIANCE OF GRANTOR'S LAND WITH, OR VIOLATION OF, ANY LAW, STATUTE, ORDINANCE, RULE, OR REGULATION, AND ANY OF SUCH REPRESENTATIONS AND WARRANTIES, AND ANY CLAIMS OR CAUSES OF ACTION AGAINST GRANTOR BASED ON OR ARISING WITH RESPECT TO ANY SUCH VIOLATION OF ANY FEDERAL, STATE, OR LOCAL STATUTE, ORDINANCE, RULE, OR REGULATION ARISING PRIOR TO GRANTEE'S PURCHASE OF THE EASEMENT TRACT ARE HEREBY EXPRESSLY WAIVED AND RELEASED BY GRANTEE.

(8) GRANTOR WILL NOT BE RESPONSIBLE FOR THE DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE OF REPAIR OF ANY IMPROVEMENTS WITHIN THE EASEMENT. GRANTEE WILL BE RESPONSIBLE THROUGH ITS AGENTS, CONTRACTORS AND EMPLOYEES AND RELATED CONTRACTS FOR THE DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE, AND REPAIR OF ALL IMPROVEMENTS WITHIN THE EASEMENT, AND ANY DAMAGES RESULTING FROM THE ACTIVITIES OF GRANTEE HEREUNDER OR GRANTEE'S USE OF THE EASEMENT, OR ANY OTHER PORTION OF GRANTOR'S PROPERTY BY GRANTEE, OR GRANTEE'S EMPLOYEES, AGENTS, CONTRACTORS, CUSTOMERS, OR INVITEES AND, TO THE FULLEST EXTENT PERMITTED BY LAW, GRANTEE HEREBY AGREES TO INDEMNIFY, DEFEND,

AND HOLD THE GRANTOR PARTIES HARMLESS FROM ANY CLAIMS, COSTS, DAMAGES, EXPENSES, AND LEGAL FEES OR COSTS ASSOCIATED WITH ANY OF THE FOREGOING, SUBJECT TO AND INCORPORATING INDEMINIFICATION AND INSURANCE REQUIREMENTS BETWEEN GRANTEE AND ITS AGENTS AND CONSTRACTORS. NOTHING CONTAINED IN THIS INSTRUMENT WILL EVER BE CONSTRUED TO PLACE UPON GRANTOR ANY MANNER OF LIABILITY FOR INJURY TO OR DEATH OF PERSONS OR FOR DAMAGE TO OR LOSS OF PROPERTY ARISING FROM OR IN ANY MANNER CONNECTED WITH THE ACTS, CONDUCT, OR NEGLIGENCE OF GRANTEE, OR THEIR CONTRACTORS, IN THE DESIGN, CONSTRUCTION, OR MAINTENANCE OF ANY IMPROVEMENT WITHIN THE EASEMENT.

(9) Grantee covenants and agrees that, in conducting its operations on Grantor's Property, Grantee shall comply with all applicable laws, statutes, rules, and regulations. In the event of any leak, spill or release of any hazardous substances caused by or arising from Grantee's operation of the improvements ("Contamination"), Grantee shall take immediate action to stop such Contamination and to clean up and remediate any affected soil, groundwater or other areas in accordance with applicable laws, statutes, rules and regulations. Without limiting any of Grantor's rights or Grantee's obligations set forth elsewhere in this instrument, to the fullest extent permitted by law, Grantee shall indemnify, defend, and hold harmless Grantor from and against any and all claims, actions, judgements, fines, or other proceedings relating to a Contamination action initiated against the Grantor Parties by any third party or government agency, and shall also promptly reimburse any costs and expenses (including, without limitation, reasonable attorney's fees) incurred by the Grantor to defend or resolve such proceedings, except to the extent such Contamination was caused by the negligence or willful misconduct of Grantor or Grantor's employees, agents, contractors, customers, or invitees. The indemnity provision herein shall survive the termination of this instrument, provided the obligation arose prior to such termination.

INSURANCE:

(1) Grantee shall maintain policies of commercial general liability and automobile liability insurance as agreed with Grantor.

(2) Upon request, Grantee shall furnish to Grantor certificates evidencing the insurance described, which insurance shall be issued by companies qualified and authorized to do business within the State of Texas and which shall name Grantor as an additional named insured.

Any use of the Easement or any other portion of Grantor's property by Grantee and any construction shall be done in compliance with applicable law.

In witness whereof, this instrument is executed this 22 day of November, 2023

GRANTOR:

SIEPIELA DEVELOPMENT CORPORATION,
a Texas corporation

By: _____

Title: Vice President

STATE OF TEXAS §
§ **CORPORATE ACKNOWLEDGMENT**
COUNTY OF HAYS §

This instrument was acknowledged before me, the undersigned authority, this 22 day of November, 2023, by Gregory L. Rich, on behalf of said **SIEPIELA DEVELOPMENT CORPORATION,** a Texas corporation.

MEGAN E TERRY
MY COMMISSION EXPIRES
06/17/2026
NOTARY ID: 13382020-3

Notary Public In and For
The State of Texas

My Commission expires: 6/17/26

AFTER RECORDING RETURN TO:

City Secretary
City of Dripping Springs
P.O. Box 384
Dripping Springs, Texas 78620

EXHIBIT A

EASEMENT TRACT

SAM, LLC
4801 Southwest Parkway, Bldg. Two, Suite 100, Austin, TX 78735
Ofc 512.447.0575 Fax 512.326.3029
info@sam.biz www.sam.biz TBPLS # 10064300

Parcel 2
Legal Description
City of Dripping Springs
South Regional Water Reclamation Project
Parcel 2A: 0.04 Acre (1,888 Square Foot)
Variable Width Water, Wastewater & Permanent Access Easement
Parcel 2B: 0.004 Acre (174 Square Foot)
Variable Width Water, Wastewater & Permanent Access Easement
Parcel 2C: 0.114 Acre (4,966 Square Foot)
Variable Width Permanent Access Easement

Parcel 2A:

BEING A 0.04 ACRE, VARIABLE WIDTH WATER, WASTEWATER & PERMANENT ACCESS EASEMENT, SITUATED IN THE BENJAMIN F. HANNA SURVEY NO. 28, ABSTRACT NO. 222, HAYS COUNTY, TEXAS, AND BEING A PORTION OF A CALLED 9.999 ACRE TRACT OF LAND, AS DESCRIBED IN A DEED TO DS TEN ACRE, LLC, AND RECORDED IN VOLUME 5310, PAGE 510, OFFICIAL PUBLIC RECORDS OF HAYS COUNTY, TEXAS (O.P.R.H.C.TX.). SAID 0.04 ACRE WATER, WASTEWATER & ACCESS EASEMENT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at a 1/2-inch iron rod found on the called centerline of the County Road (Creek Road), also being a 30 foot wide right-of-way, dedicated to Hays County, per plat of Cypress Fork Ranch, recorded in Volume 18, Page 167, O.P.R.H.C.TX. . and Document Number 09815804 O.P.R.H.C.TX., for the northwest corner of a called 196.483 acre tract of land, described in a deed to Development Solutions Carter, LLC, recorded in Volume 5310, Page 516, O.P.R.H.C.TX., same being the northeast corner of said 9.999 acre tract and this Water, Wastewater & Access Easement. From said point, a 1/2-inch iron rod found on the existing north right-of-way line of said Creek Road, bears N 11°19'23" E, a distance of 30.17 feet;

THENCE S 17°55'19" W, departing said centerline, with the common line of said 9.999 acre tract and said 196.483 acre tract, a distance of 30.98 feet, to a point. From said point, a magnail in rockbed found at a corner of said 9.999 acre tract, bears S 17°55'19" W, 8.24 feet;

THENCE S 50°13'56" W, departing said common line, over and across said 9.999 acre tract, a distance of 13.51 feet, to a point on said common line;

THENCE with said common line, the following two (2) courses and distances:

1) S 84°09'30" W, a distance of 45.76 feet, to a point, and

2) S 36°43'56" W, a distance of 83.32 feet, for the south corner of this Water, Wastewater & Access Easement, said point being the beginning of a curve to the right;

THENCE departing said common line, over and across said 9.999 acre tract, the following two (2) courses and distances:

1) With said curve to the right, an arc distance of 106.42 feet, through a central angle 24°19'33", having a radius of 250.65 feet, and a chord that bears N 37°08'53" E, a distance of 105.62 feet, to a point, and

2) N 50°13'56" E, a distance of 47.30 feet, to a point on the centerline of said Creek Road, for the northwest corner of this Water, Wastewater & Access Easement;

THENCE S 72°05'53" E, with said centerline, a distance of 15.91 feet, to the **POINT OF BEGINNING** and containing 0.04 acre, more or less.

PARCEL 2B:

BEING A 0.004 ACRE, VARIABLE WIDTH WATER, WASTEWATER & PERMANENT ACCESS EASEMENT, SITUATED IN THE BENJAMIN F. HANNA SURVEY NO. 28, ABSTRACT NO. 222, HAYS COUNTY, TEXAS, AND BEING A PORTION OF A CALLED 9.999 ACRE TRACT OF LAND, AS DESCRIBED IN A DEED TO DS TEN ACRE, LLC, AND RECORDED IN VOLUME 5310, PAGE 510, OFFICIAL PUBLIC RECORDS OF HAYS COUNTY, TEXAS (O.P.R.H.C.TX.). SAID 0.004 ACRE WATER, WASTEWATER & ACCESS EASEMENT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

COMMENCING at a 1/2-inch iron rod with an orange cap stamped "CMA5911" found, for an interior ell corner of a called 196.483 acre tract of land, described in a deed to Development Solutions Carter, LLC, recorded in Volume 5310, Page 520, O.P.R.H.C.TX., for the southeast corner of said 9.999 acre tract;

THENCE N 14°05'33" E, with the common line of said 9.999 acre tract and said 196.483 acre tract, a distance of 256.07 feet to a point, for the **POINT OF BEGINNING** and the south corner of this Water,Wastewater & Access Easement, said point being the beginning of a curve to the right;

THENCE departing said common line, over and across said 9.999 acre tract, with said curve to the right, an arc distance of 80.66 feet, through a central angle 18°26'19", having a radius of 250.65 feet, and a chord that bears N 14°05'33" E, a distance of 80.31 feet, to a point on the said common line, for the north corner of this Water, Wastewater & Access Easement, from said point, a magnail with a washer found bears N 60°23'21" E, 178.00 feet;

THENCE S 14°05'33" W, with said common line, a distance of 80.31 feet to the **POINT OF BEGINNING** and containing 0.004 acre, more or less.

The bearings shown hereon are based on the Texas Coordinate System, South Central Zone, NAD 83/2011. All distances shown are surface in U.S. Survey Feet and may be converted to grid by multiplying the distance by a combined scale factor of 0.999870.

PARCEL 2C:

BEING A 0.114 ACRE, VARIABLE WIDTH PERMANENT ACCESS EASEMENT, SITUATED IN THE BENJAMIN F. HANNA SURVEY NO. 28, ABSTRACT NO. 222, HAYS COUNTY, TEXAS, AND BEING A PORTION OF A CALLED 9.999 ACRE TRACT OF LAND, AS DESCRIBED IN A DEED TO DS TEN ACRE, LLC, AND RECORDED IN VOLUME 5310, PAGE 510, OFFICIAL PUBLIC RECORDS OF HAYS COUNTY, TEXAS (O.P.R.H.C.TX.). SAID 0.114 ACRE PERMANENT ACCESS EASEMENT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

COMMENCING at a 1/2-inch iron rod found on the called centerline of the County Road (Creek Road), also being a 30 foot wide right-of-way, dedicated to Hays County, per plat of Cypress Fork Ranch, recorded in Volume 18, Page 167, O.P.R.H.C.TX. and Document Number 09815804 O.P.R.H.C.TX., for the northwest corner of a called 196.483 acre tract of land, described in a deed to Development Solutions Carter, LLC, recorded in Volume 5310, Page 516, O.P.R.H.C.TX., same being the northeast corner of said 9.999 acre tract and this Permanent Access Easement;

THENCE S 17°55'19" W, departing said centerline, with the common line of said 9.999 acre tract and said 196.483 acre tract, a distance of feet, 18.31 to the **POINT OF BEGINNING**;

THENCE S 17°55'19" W, continuing along said common line, a distance of 10.81 feet the north southeasterly corner of said easement, from said point, a magnail in rockbed found at a corner of said 9.999 acre tract, bears S 17°55'19" W, 8.24 feet;

THENCE leaving said common line, over and across said 9.999 acre tract, the following three (3) courses and distances:

1) S 87°07'37" W, a distance of 27.61 feet, to the beginning of a curve to the left, and
2) With said curve to the left, an arc distance of 46.06 feet, through a central angle 52°47'09", having a radius of 50.00 feet, and a chord that bears S 60°44'02" W, a distance of 44.45 feet, to a point, and
3) South 34°20'28" West, a distance of 74.36 feet to an angle point on said common line;

THENCE along said common line, South 14°05'33" West, a distance of 105.34 feet to a point on said common line;

THENCE leaving said common line, over and across said 9.999 acre tract the following seven (7) courses and distances:

1) North 55°37'33" W, a distance of 21.40 feet, to a point, and

2) North 05°44'12" East, a distance of 27.31 feet to a point, and

3) North 12°44'48" East, a distance of 54.30 feet to the beginning of a curve to the right, and

4) With said curve to the right, an arc distance of 21.55 feet, through a central angle 24°41'48", having a radius of 50.00 feet, and a chord that bears North 25°05'42" East, a distance of 21.39 feet, to a point, and

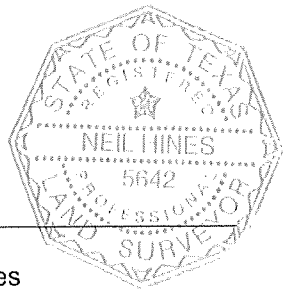
5) North 37°26'36" East, a distance of 80.06 feet to the beginning of a curve to the right, and

6) With said curve to the right, an arc distance of 43.36 feet, through a central angle 49°41'01", having a radius of 50.00 feet, and a chord that bears North 62°17'07" East, a distance of 42.01 feet to a point, and

7) North 87°07'37" East, a distance of 45.34 feet to the **POINT OF BEGINNING** and containing 0.114 acre (4,977 Square Feet), more or less.

This easement description is accompanied by separate plats of even date.

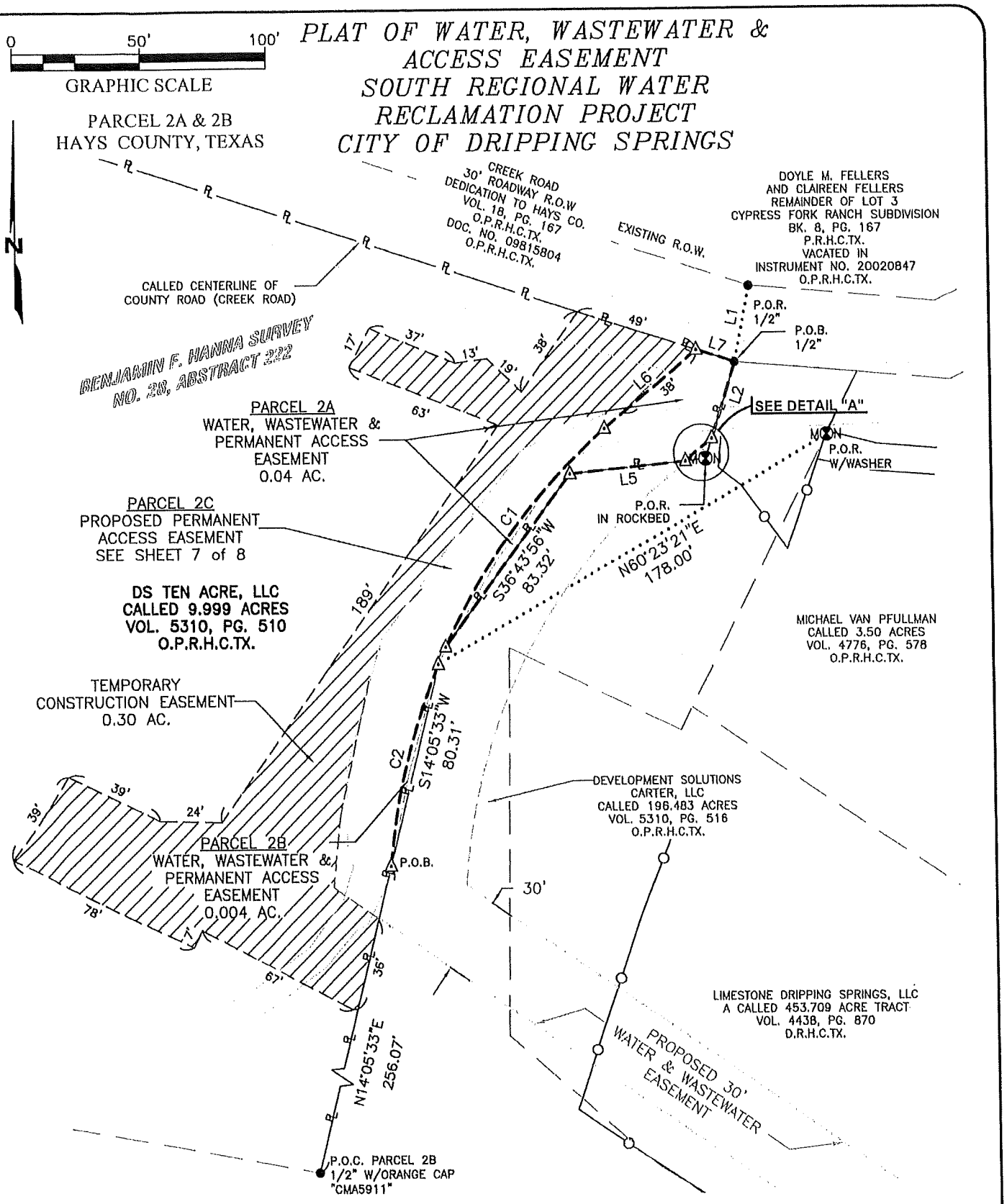
Bearing Basis:
All bearings shown are based on the Texas Coordinate System, South Central Zone, NAD 83/2011. All distances shown are surface and may be converted to grid by multiplying by a combined factor of 0.9999870. Units: U.S. Survey Feet.



Neil Hines
Registered Professional Land Surveyor
Texas Registration Number 5642

Date: 21 November 2022

PLAT OF WATER, WASTEWATER & ACCESS EASEMENT SOUTH REGIONAL WATER RECLAMATION PROJECT CITY OF DRIPPING SPRINGS



JOB NUMBER:47232
DATE:3/03/2020
SCALE:1:50
SURVEYOR:N. HINES
TECHNICIAN:E.HILER
DRAWING:P-2_DS_TEN
TRACT ID:P-2_DS_TEN

SAM®

4801 Southwest Parkway
Building Two, Suite 100
Austin Texas, 78735
Ofc: 512.447.0575
Fax: 512.326.3029
email: info@sam.biz
Texas Firm Registration No. 10064300

PROJECT: WATER, WASTEWATER & ACCESS EASEMENT

SHEET 5 OF 8

PATH:\\SAMINC\AUS\PROJECTS\1018047232\100\SURVEY\06PLATS\PARCEL 2_DS TEN\P-2_DS_TEN_R4.DWG

0 50' 100'

GRAPHIC SCALE

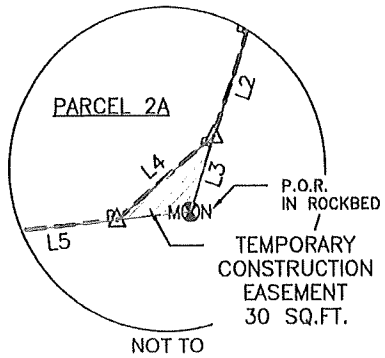
PARCEL 2A & 2B
HAYS COUNTY, TEXAS

PLAT OF WATER, WASTEWATER & ACCESS EASEMENT SOUTH REGIONAL WATER RECLAMATION PROJECT CITY OF DRIPPING SPRINGS

N

LINE TABLE		
NUMBER	DIRECTION	LENGTH
L1	N11°19'23"E	30.17'
L2	S17°55'19"W	30.98'
L3	S17°55'19"W	8.24'
L4	S50°13'56"W	13.51'
L5	S84°09'30"W	45.76'
L6	N50°13'56"E	47.30'
L7	S72°05'53"E	15.91'

DETAIL "A"



NOT TO SCALE

CURVE TABLE					
CURVE NO.	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD LENGTH
C1	024°19'33"	250.65'	106.42'	N37°08'53"E	105.62'
C2	018°26'19"	250.65'	80.66'	N14°05'33"E	80.31'

LEGEND

℄	PARCEL LIMITS
℄	APPROXIMATE SURVEY LINE
	ADJOINER PROPERTY
	FLYTIE
	FENCE
	EDGE OF ROAD
●	IRON ROD FOUND (AS NOTED)
△	CALCULATED POINT
MAG NAIL FOUND	MAG NAIL FOUND
D.R.H.C.TX.	DEED RECORDS HAYS COUNTY, TEXAS
P.R.H.C.TX.	PLAT RECORDS HAYS COUNTY, TEXAS
O.P.R.H.C.TX.	OFFICIAL PUBLIC RECORDS HAYS COUNTY, TEXAS
P.O.B.	POINT OF BEGINNING
P.O.R.	POINT OF REFERENCE
P.O.C.	POINT OF COMMENCEMENT
	PERMANENT EASEMENT
	TEMPORARY CONSTRUCTION EASEMENT
	PERMANENT ACCESS EASEMENT

NOTES:

1. ALL BEARINGS ARE GRID BEARINGS AND ARE BASED ON TEXAS COORDINATE SYSTEM, SOUTH CENTRAL ZONE (4204), NAD83 (2011). ALL DISTANCES ARE REPRESENTED IN SURFACE VALUES, MEASURED IN U.S. SURVEY FEET, AND ARE BASED ON SAID HORIZONTAL DATUM. TO OBTAIN GRID DISTANCE MULTIPLY BY CSF OF 0.999870.
2. RECORD INFORMATION SHOWN HEREON IS BASED UPON TITLE COMMITMENT ISSUED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY GF. NO. 19-2533-CR, EFFECTIVE DATE: SEPTEMBER 23, 2022, ISSUED OCTOBER 19, 2022.
3. FOR ADDITIONAL INFORMATION, SEE ATTACHED LEGAL DESCRIPTION MADE IN CONJUNCTION WITH AND CONSIDERED AN INTEGRAL PART OF THIS PLAT OF EASEMENT.
4. THIS EASEMENT PLAT AND THE ATTACHED DESCRIPTION WERE PREPARED FOR THE PURPOSES OF CREATING AN EASEMENT AND ARE NOT INTENDED FOR USE AS A PROPERTY BOUNDARY SURVEY.

STATE OF TEXAS
REGISTERED
NEIL HINES
5642
PROFESSIONAL
LAND SURVEYOR

Neil Hines 21 November 2022

NEIL HINES DATE
REGISTERED PROFESSIONAL LAND SURVEYOR
NO. 5642 – STATE OF TEXAS

CITY OF DRIPPING SPRINGS

JOB NUMBER:47232
DATE:3/03/2020
SCALE:1:50
SURVEYOR:N. HINES
TECHNICIAN:E.HILER
DRAWING:P-2_DS_TEN
TRACT ID:P-2_DS_TEN

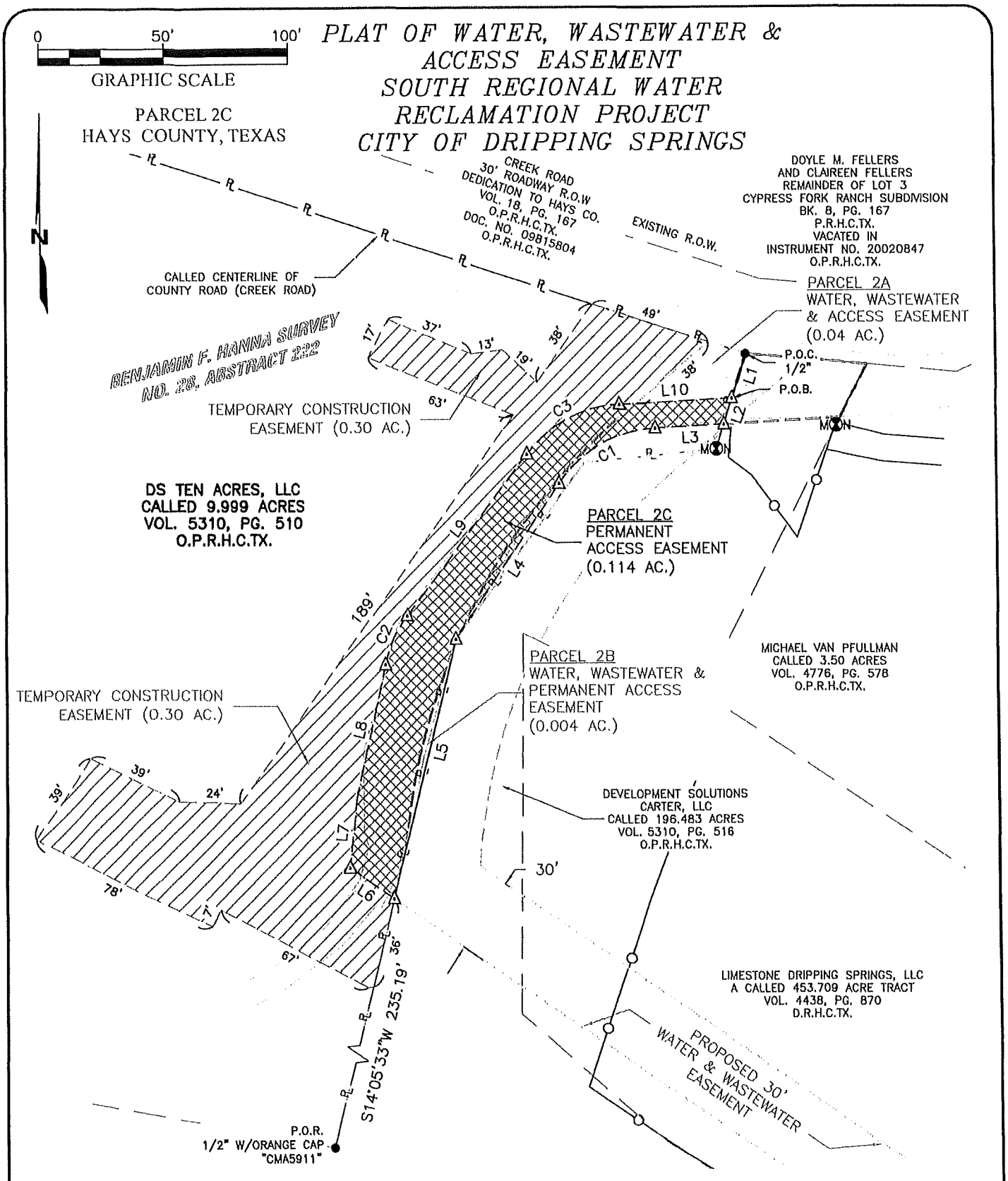
SAM®

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Fax: 512.326.3029
email: info@sam.biz
Texas Firm Registration No. 10064300

PROJECT: WATER, WASTEWATER & ACCESS EASEMENT

SHEET 6
OF 8

PATH:\\SAMINC\AUS\PROJECTS\1018047232\100\SURVEY\06PLATS\PARCEL 2_DS TEN\P-2_DS_TEN_R4.DWG



JOB NUMBER:47232
DATE:5/14/2020
SCALE:1:50
SURVEYOR:N. HINES
TECHNICIAN:P. EVANS
DRAWING:P-2_DS_TEN
TRACT ID:P-2_DS_TEN

SAM®

4801 Southwest Parkway
Building Two, Suite 100
Austin Texas, 78735
Ofc: 512.447.0575
Fax: 512.326.3029
email: info@sam.biz
Texas Firm Registration No. 10064300

PROJECT: WATER, WASTEWATER & ACCESS EASEMENT

SHEET 7
OF 8

PATH:\\SAMINC\AUS\PROJECTS\1018047232\100\SURVEY\06PLATS\PARCEL 2_DS TEN\P-2C_DS_TEN_ACCESS_ROAD_R2.DWG

0 50' 100'

GRAPHIC SCALE

PLAT OF WATER, WASTEWATER & ACCESS EASEMENT SOUTH REGIONAL WATER RECLAMATION PROJECT CITY OF DRIPPING SPRINGS

PARCEL 2C
HAYS COUNTY, TEXAS

N

LINE TABLE		
NUMBER	DIRECTION	LENGTH
L1	S17°55'19"W	18.31'
L2	S17°55'19"W	10.81'
L3	S87°07'37"W	27.61'
L4	S34°20'28"W	74.36'
L5	S14°05'33"W	105.90'
L6	N55°37'33"W	21.40'
L7	N05°44'12"E	27.31'
L8	N12°44'48"E	54.30'
L9	N37°26'36"E	80.06'
L10	N87°07'37"E	45.34'

CURVE TABLE					
CURVE NO.	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD LENGTH
C1	052°47'09"	50.00'	46.06'	S60°44'02"W	44.45'
C2	024°41'48"	50.00'	21.55'	N25°05'42"E	21.39'
C3	049°41'01"	50.00'	43.36'	N62°17'07"E	42.01'

LEGEND

℄	PARCEL LIMITS
ℒ	APPROXIMATE SURVEY LINE
	ADJOINER PROPERTY
	FLYTIE
	FENCE
	EDGE OF ROAD
●	IRON ROD FOUND (AS NOTED)
△	CALCULATED POINT
MAG N	MAG NAIL FOUND
D.R.H.C.TX.	DEED RECORDS HAYS COUNTY, TEXAS
P.R.H.C.TX.	PLAT RECORDS HAYS COUNTY, TEXAS
O.P.R.H.C.TX.	OFFICIAL PUBLIC RECORDS HAYS COUNTY, TEXAS
P.O.B.	POINT OF BEGINNING
P.O.R.	POINT OF REFERENCE
P.O.C.	POINT OF COMMENCEMENT
	PERMANENT EASEMENT
	TEMPORARY CONSTRUCTION EASEMENT
	PERMANENT ACCESS EASEMENT

NOTES:

1. ALL BEARINGS ARE GRID BEARINGS AND ARE BASED ON TEXAS COORDINATE SYSTEM, SOUTH CENTRAL ZONE (4204), NAD83 (2011). ALL DISTANCES ARE REPRESENTED IN SURFACE VALUES, MEASURED IN U.S. SURVEY FEET, AND ARE BASED ON SAID HORIZONTAL DATUM. TO OBTAIN GRID DISTANCE MULTIPLY BY CSF OF 0.999870.
2. RECORD INFORMATION SHOWN HEREON IS BASED UPON TITLE COMMITMENT ISSUED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY GF. NO. 19-2533-CR, EFFECTIVE DATE: SEPTEMBER 23, 2022, ISSUED OCTOBER 19, 2022. FOR ADDITIONAL INFORMATION, SEE ATTACHED LEGAL DESCRIPTION MADE IN CONJUNCTION WITH AND CONSIDERED AN INTEGRAL PART OF THIS PLAT OF EASEMENT.
3. THIS EASEMENT PLAT AND THE ATTACHED DESCRIPTION WERE PREPARED FOR THE PURPOSES OF CREATING AN EASEMENT AND ARE NOT INTENDED FOR USE AS A PROPERTY BOUNDARY SURVEY.

STATE OF TEXAS
REGISTERED
NEIL HINES
5642
PROFESSIONAL
LAND SURVEYOR

Neil Hines 21 November 2022

NEIL HINES DATE
REGISTERED PROFESSIONAL LAND SURVEYOR
NO. 5642 – STATE OF TEXAS

CITY OF DRIPPING SPRINGS

JOB NUMBER:47232
DATE:5/14/2020
SCALE:1:50
SURVEYOR:N. HINES
TECHNICIAN:P. EVANS
DRAWING:P-2_DS_TEN
TRACT ID:P-2_DS_TEN

SAM®

4801 Southwest Parkway
Building Two, Suite 100
Austin Texas, 78735
Ofc: 512.447.0575
Fax: 512.326.3020
email: info@sam.biz
Texas Firm Registration No. 10064300

PROJECT: WATER, WASTEWATER & ACCESS EASEMENT

SHEET 8
OF 8

PATH:\\SAMINC\AUS\PROJECTS\1018047232\100\SURVEY\06PLATS\PARCEL 2_DS TEN\P-2C_DS_TEN_ACCESS_ROAD_R4.DWG

THE STATE OF TEXAS
COUNTY OF HAYS

I hereby certify that this instrument was FILED on the date and the time stamped hereon by me and was duly RECORDED in the Records of Hays County, Texas.

23046867 EASEMENT
12/27/2023 08:46:12 AM Total Fees: $86.00

Elaine H. Cárdenas, MBA, PhD,County Clerk
Hays County, Texas

Elaine H Cárdenas

Clerk's Note: At the time of recordation this instrument was found to be inadequate for the best reproduction, because of illegibility, carbon of photocopy, discolored paper, etc. All blackouts, additions and changes were present at the time the instrument was filed.

23046859 EASEMENT Total Pages: 17
Filed and Recorded: 12/27/2023 08:39:11 AM

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

Corridor Title Co. GF# 19-1673-CR

WATER AND WASTEWATER EASEMENT
(CORPORATE)

Date: Dec 21, 2023

Grantor: **CF CSLK CARTER, LLC,** a Delaware limited liability company

Grantor's Address: 12222 Merit Drive, Suite 1020
Dallas, Texas 75251

Grantee: **CITY OF DRIPPING SPRINGS, TEXAS**, a General Law municipality situated in Hays County, Texas

Grantee's Address: P.O. Box 384
511 Mercer Street
Dripping Springs, Hays County, Texas 78620

Property: An exclusive easement and right-of-way in, upon, over, under, along, through, and across the parcel of real property of Grantor ("Easement"), said Easement consisting of approximately 0.16 acre, more or less, and more particularly described on **Exhibit "A"**, attached hereto and incorporated herein by reference ("Easement Tract 3A & 3B").

Consideration: Ten and No/100 Dollars ($10.00) and other good and valuable consideration paid to Grantor for which no lien either express or implied is retained

GRANT OF EASEMENT:

CF CSLK CARTER, LLC, a Delaware limited liability company ("Grantor"), for the sum of Ten and No/100 Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and confessed, does hereby GRANT, SELL AND CONVEY unto **THE CITY OF DRIPPING SPRINGS, TEXAS**, a General Law municipality located in Hays County, Texas ("Grantee") the Easement in, upon, over, under, along, through, and across the Easement Tract TO HAVE AND TO HOLD the same perpetually to Grantee and its successors and assigns, together with the right and privilege at any and all times to enter the Easement Tract with full rights of ingress and egress from the adjoining property of Grantor, or any part thereof, for the purpose of construction, operation, maintenance,

replacement, upgrade, and repair of the improvements which are constructed and installed therein or thereon under the terms of this Easement.

Grantor, on behalf of Grantor and its successors and assigns, does hereby covenant and agree to WARRANT AND FOREVER DEFEND title to the Easement herein granted on the Easement Tract, unto Grantee, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof by, though, or under Grantor, but not otherwise.

CHARACTER OF EASEMENT:

The Easement granted herein is "in gross," in that there is no "benefitted property." Nevertheless, the Easement rights herein granted shall pass to Grantee's successors and assigns, subject to all of the Terms hereof. The Easement rights of use granted herein are irrevocable. The Easement is for the benefit of Grantee.

PURPOSE OF EASEMENT:

The Easement shall be used by Grantee for public wastewater and/or water utility purposes, including placement, construction, installation, replacement, repair, maintenance, upgrade, relocation, removal, and operation of public wastewater or water pipelines and related appurtenances, or making connections thereto ("Facilities"). The Easement shall also be used by Grantee for the purpose of providing access for the operation, repair, maintenance, replacement and expansion of the Facilities ("Easement Purpose").

DURATION OF EASEMENT:

The Easement shall be perpetual. Grantor hereby binds Grantor and Grantor's successors and assigns, to warrant and forever defend the Easement on the Easement Tract unto Grantee, its successors and assigns, against any person whomsoever lawfully claiming.

GRANTOR USE:

Grantor hereby retains surface use of the Easement Tract and the right to plant and maintain ground cover and grasses only. Grantor relinquishes the authority for planting or cultivation of bushes, trees or other living matter, and building and maintaining any structures within the Easement Tract, and acknowledges that such uses are specifically prohibited. Grantor grants to Grantee the right to remove any living material or structures located within the Easement Tract, without Grantor recourse, necessary to prevent interference with the operation of or repairs to Grantee's facilities or use within the Easement Tract.

All mineral interests in the Easement, whether metallic or nonmetallic, whether similar or dissimilar, whether known or unknown, currently owned by Grantor in, on, and under and that may be produced and saved from the Easement or acreage pooled or unitized therewith, and the full and exclusive executive rights to execute leases in connection therewith, provided, however, that Grantor shall not be permitted to drill or operate equipment for the production or development of minerals in the Easement but will be permitted to extract the minerals from and under the Easement by directional drilling or other means, so long as such activities do not

damage, destroy, injure, and/or interfere with Grantee's use of the Easement for the Easement Purpose; and

All groundwater rights in and to the Easement, whether known or unknown, currently owned by Grantor in, on, and under and that may be produced and saved from the Easement or acreage pooled or unitized therewith, and the full and exclusive executive rights to execute leases in connection therewith, provided, however, that Grantor shall not be permitted to drill or operate equipment for the production or development of groundwater from the Easement but will be permitted to extract the groundwater from and under the Easement by directional drilling or other means, so long as such activities do not damage, destroy, injure, and/or interfere with Grantee's use of the Easement for the Easement Purpose.

ADDITIONAL TERMS:

The Easement and Grantee's use thereof shall be subject to the following additional terms and conditions ("Additional Terms"):

(1) For initial construction of the Facilities, Grantee shall require its construction contractor to make good faith efforts to provide notice to Grantor at least 48 hours prior to the start of construction, and Grantee shall use commercially reasonable efforts to coordinate the performance of such work with Grantor and to schedule such work at times that will not materially and adversely affect Grantor's ability to access and use the remainder of Grantor's property including Grantor's other property.

(2) For maintenance and scheduled repairs to the Facilities, Grantee shall make a good faith effort to contact Grantor prior to entering the Easement. No prior notice is required of Grantee to enter the easement for emergency repairs of the Facilities or when access to the Easement is necessary for compliance with any federal or state regulation, permit, order, or other legal requirement.

(3) Upon completion of initial construction of the Project and future construction within the Easement Tract, Grantee shall remove all construction debris and other material remaining on the site after construction; remove any disturbed rock, roots, and soil; remove any temporary barriers; remove any temporary access roads and drainage facilities; revegetate disturbed vegetated areas; and restore roadway surfaces to the condition existing at the date of execution or better condition, unless requested otherwise by Grantor and Grantee will restore the ground surface of the Easement as nearly as practicable to the vegetation, contour and condition which existed immediately prior to the commencement of such construction and repair in a good and workmanlike manner to a good or better condition as the condition which existed immediately prior to the commencement of such construction any and all fences, parking surfaces, drainage, irrigation, and other utility systems which are cut or damaged by Grantee.

(4) Prior to the start of construction of the Project, Grantee agrees to install all barriers required by the Federal or State agency and the issued permit(s) to prevent loss of disturbed soil, and may install temporary access roads and drainage facilities needed for access.

(5) All notices required or permitted to be given under this Water and Wastewater Easement shall be considered sufficiently given if delivered by (a) hand, courier or overnight delivery service to the physical address listed below, (b) certified or registered mail, return receipt requested to the mailing addresses listed below, or (b) by telephone to the phone numbers listed below:

If to Grantor:

CF CSLK CARTER, LLC
Attn: Gregory L. Rich
12222 Merit Drive, Suite 1020
Dallas, TX 75251
972-960-2777 (O) Ext-103
972-960-2660 (F)
grich@siepiela.com

with copy to:
Stephen Wark
c/o Fortress Investment Group
1345 Ave of Americas, 45th Floor
New York, NY 10105

If to Grantee:

The City of Dripping Springs
Attn: City Secretary
P.O. Box 384
Dripping Springs, Texas 78620

Notice shall be effective upon the other party's receipt of the notice. Either party may specify a different address for delivery of notices by written notice to the physical addresses specified above or as changed by notice over time,.

(6) This conveyance is made by Grantor and accepted by Grantee subject to any and all existing easements, covenants, rights-of-way, conditions, restrictions, outstanding mineral interests and royalty interests, if any, relating to the Easement, to the extent, and only to the extent, that the same may still be in force and effect, and either shown of record in the office of the County Clerk of Hays County, or that may be visibly apparent on the surface of the Easement Tract ("Prior Encumbrances"). Grantee agrees, to the fullest extent permitted by law, to indemnify, defend, and hold Grantor, its successors, assignees, licensees, occupants, officers, agents, employees, and contractors (each a "Grantor Party" and, collectively, the "Grantor Parties") harmless from and against any and all claims, losses, damages, liabilities and/or costs (including, without limitation, court costs and actual and reasonable attorneys' fees) arising from Grantee's exercise of any of their rights under this Easement that affects any right or property of any grantee or beneficiary under any of the Prior Encumbrances.

(7) **BY ITS ACCEPTANCE OF THIS EASEMENT CONVEYANCE, AND AS A MATERIAL PART OF THE CONSIDERATION, GRANTEE EXPRESSLY ACKNOWLEDGES AND AGREES THAT (i) ANY INFORMATION PROVIDED TO GRANTEE PERTAINING TO THE EASEMENT BY GRANTOR HAS NOT BEEN INDEPENDENTLY INVESTIGATED OR VERIFIED BY GRANTOR, (ii) GRANTOR IS NOT MAKING, AND HAS NOT MADE, ANY REPRESENTATIONS OR WARRANTIES WHATSOEVER AS TO THE ACCURACY OR COMPLETENESS OF**

SUCH INFORMATION; AND (iii) GRANTOR IS NOT, AND WILL NOT BE, LIABLE OR BOUND IN ANY MANNER WHATSOEVER BY ANY WRITTEN OR VERBAL STATEMENT, REPRESENTATION, REPORT, SURVEY, OR INFORMATION FURNISHED TO GRANTEE, OR MADE BY ANY PARTY WITH RESPECT TO THE EASEMENT HEREBY CONVEYED. GRANTEE SPECIFICALLY AGREES THAT HAVING BEEN GIVEN THE OPPORTUNITY TO CONDUCT SUCH TESTS, STUDIES, AND INVESTIGATIONS AS GRANTEE DEEMS NECESSARY AND APPROPRIATE, GRANTEE IS RELYING SOLELY UPON ITS OWN INVESTIGATION OF GRANTOR'S PROPERTY AND NOT ON ANY INFORMATION PROVIDED BY GRANTOR. GRANTEE FURTHER AGREES THAT GRANTEE HAS PURCHASED AND ACCEPTED THE EASEMENT IN ITS CURRENT, "AS IS," WITH ALL FAULTS CONDITION, AND TO HAVE ASSUMED THE RISK OF ANY MATTER OR CONDITION WHICH IS LATENT OR PATENT OR THAT COULD HAVE BEEN REVEALED BY THEIR INVESTIGATIONS. GRANTOR HAS NOT MADE (AND GRANTOR HEREBY EXPRESSLY DISCLAIMS, AND GRANTOR IS SELLING THE EASEMENT WITHOUT) ANY REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, WHATSOEVER, AS TO THE VALUE, CONDITION, NATURE, CHARACTER, SUITABILITY, HABITABILITY, OR FITNESS OF THE EASEMENT, THE PRESENCE OR ABSENCE OF ANY HAZARDOUS MATERIAL OR OTHER ENVIRONMENTAL CONDITION OR COMPLIANCE OF GRANTOR'S LAND WITH, OR VIOLATION OF, ANY LAW, STATUTE, ORDINANCE, RULE, OR REGULATION, AND ANY OF SUCH REPRESENTATIONS AND WARRANTIES, AND ANY CLAIMS OR CAUSES OF ACTION AGAINST GRANTOR BASED ON OR ARISING WITH RESPECT TO ANY SUCH VIOLATION OF ANY FEDERAL, STATE, OR LOCAL STATUTE, ORDINANCE, RULE, OR REGULATION ARISING PRIOR TO GRANTEE'S PURCHASE OF THE EASEMENT TRACT ARE HEREBY EXPRESSLY WAIVED AND RELEASED BY GRANTEE.

(8) **GRANTOR WILL NOT BE RESPONSIBLE FOR THE DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE OF REPAIR OF ANY IMPROVEMENTS WITHIN THE EASEMENT. GRANTEE WILL BE RESPONSIBLE THROUGH ITS AGENTS, CONTRACTORS AND EMPLOYEES AND RELATED CONTRACTS FOR THE DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE, AND REPAIR OF ALL IMPROVEMENTS WITHIN THE EASEMENT, AND ANY DAMAGES RESULTING FROM THE ACTIVITIES OF GRANTEE HEREUNDER OR GRANTEE'S USE OF THE EASEMENT, OR ANY OTHER PORTION OF GRANTOR'S PROPERTY BY GRANTEE, OR GRANTEE'S EMPLOYEES, AGENTS, CONTRACTORS, CUSTOMERS, OR INVITEES AND, TO THE FULLEST EXTENT PERMITTED BY LAW, GRANTEE HEREBY AGREES TO INDEMNIFY, DEFEND, AND HOLD THE GRANTOR PARTIES HARMLESS FROM ANY CLAIMS, COSTS, DAMAGES, EXPENSES, AND LEGAL FEES OR COSTS ASSOCIATED WITH ANY OF THE FOREGOING, SUBJECT TO AND INCORPORATING INDEMINIFICATION AND INSURANCE REQUIREMENTS BETWEEN GRANTEE AND ITS AGENTS AND CONSTRACTORS. NOTHING CONTAINED IN THIS INSTRUMENT WILL EVER BE CONSTRUED TO PLACE UPON GRANTOR ANY MANNER OF LIABILITY FOR INJURY TO OR DEATH OF PERSONS OR FOR DAMAGE TO OR LOSS OF**

PROPERTY ARISING FROM OR IN ANY MANNER CONNECTED WITH THE ACTS, CONDUCT, OR NEGLIGENCE OF GRANTEE, OR THEIR CONTRACTORS, IN THE DESIGN, CONSTRUCTION, OR MAINTENANCE OF ANY IMPROVEMENT WITHIN THE EASEMENT.

(9) Grantee covenants and agrees that, in conducting its operations on Grantor's Property, Grantee shall comply with all applicable laws, statutes, rules, and regulations. In the event of any leak, spill or release of any hazardous substances caused by or arising from Grantee's operation of the improvements ("Contamination"), Grantee shall take immediate action to stop such Contamination and to clean up and remediate any affected soil, groundwater or other areas in accordance with applicable laws, statutes, rules and regulations. Without limiting any of Grantor's rights or Grantee's obligations set forth elsewhere in this instrument, to the fullest extent permitted by law, Grantee shall indemnify, defend, and hold harmless Grantor from and against any and all claims, actions, judgements, fines, or other proceedings relating to a Contamination action initiated against the Grantor Parties by any third party or government agency, and shall also promptly reimburse any costs and expenses (including, without limitation, reasonable attorney's fees) incurred by the Grantor to defend or resolve such proceedings, except to the extent such Contamination was caused by the negligence or willful misconduct of Grantor or Grantor's employees, agents, contractors, customers, or invitees. The indemnity provision herein shall survive the termination of this instrument, provided the obligation arose prior to such termination.

INSURANCE:

(1) Grantee shall maintain policies of commercial general liability and automobile liability insurance as agreed with Grantor.

(2) Upon request, Grantee shall furnish to Grantor certificates evidencing the insurance described, which insurance shall be issued by companies qualified and authorized to do business within the State of Texas and which shall name Grantor as an additional named insured.

Any use of the Easement or any other portion of Grantor's property by Grantee and any construction shall be done in compliance with applicable law.

In witness whereof, this instrument is executed this 22 day of November, 2023

GRANTOR:

CF CSLK CARTER, LLC, a Delaware limited liability company

By: _____

Title: Attorney-in-Fact

STATE OF TEXAS §
§ **CORPORATE ACKNOWLEDGMENT**
COUNTY OF HAYS §

This instrument was acknowledged before me, the undersigned authority, this 22 day of November, 2023, by Gregory L. Rich, on behalf of said **CF CSLK CARTER, LLC**, a Delaware limited liability company.

MEGAN E TERRY
NOTARY PUBLIC STATE OF TEXAS
MY COMMISSION EXPIRES
06/17/2026
NOTARY ID: 13382020-3

Notary Public In and For
The State of Texas

My Commission expires: 6/17/26

AFTER RECORDING RETURN TO:

City Secretary
City of Dripping Springs
P.O. Box 384
Dripping Springs, Texas 78620

EXHIBIT "A"

EASEMENT TRACT

SAM, LLC
4801 Southwest Parkway, Bldg. Two, Suite 100, Austin, TX 78735
Ofc 512.447.0575 Fax 512.326.3029
info@sam.biz www.sam.biz TBPLS # 10064300

Parcel 3
Legal Description
City of Dripping Springs
South Regional Water Reclamation Project
Parcel 3A: 0.01 Acre (436 Square Feet)
Variable Width Water and Wastewater Easement
Parcel 3B: 0.15 Acre (6,534 Square Feet)
Variable Width Water and Wastewater & Permanent Access Easement
Parcel 3C: 0.03 Acre (1,307 Square Feet)
Permanent Access Easement

Parcel 3A:

BEING A 0.01 ACRE VARIABLE WIDTH WATER AND WASTEWATER EASEMENT, SITUATED IN THE BENJAMIN F. HANNA SURVEY NO. 28, ABSTRACT NO. 222, HAYS COUNTY, TEXAS, BEING A PORTION OF A CALLED 200.0 ACRE TRACT OF LAND, AS DESCRIBED IN A DEED TO CF CSLK CARTER LLC, AND RECORDED IN DOCUMENT NUMBER 21069740, OFFICIAL PUBLIC RECORDS OF HAYS COUNTY, TEXAS (O.P.R.H.C.TX.). SAID 0.01 ACRE WATER AND WASTEWATER EASEMENT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at a 1/2-inch iron rod found on the called centerline of the County Road (Creek Road), also being a 30 foot wide right-of-way, dedicated to Hays County, per plat of Cypress Fork Ranch, recorded in Volume 18, Page 167, O.P.R.H.C.TX. and Document Number 09815804 O.P.R.H.C.TX., for the northeast corner of a called 9.999 acre tract of land, as described in a deed to DS Ten Acres, LLC, and recorded in Volume 5310, Page 510, O.P.R.H.C.TX., same being the northwest corner of said 200.0 acre tract and this Water and Wastewater easement. From said point, a 1/2-inch iron rod found on the existing north right-of-way line of said Creek Road, bears N 11°19'23" E, a distance of 30.17 feet;

THENCE S 85°06'06" E, with said centerline, a distance of 23.56 feet, to a calculated point, for the northeast corner of this Water and Wastewater easement;

THENCE S 50°13'56" W, departing said centerline, over and across said 200.0 acre tract, a distance of 42.94 feet, to a point on the common line of said 200.0 acre tract and said 9.999 acre tract, for the south corner of this Water and Wastewater easement. From said point, a magnail with a washer found bears N 88°30'47" E, 46.03 feet;

THENCE N 17°55'19" E, with said common line, a distance of 30.98 feet, to the **POINT OF BEGINNING** and containing 0.01 acre, more or less.

PARCEL 3B:

BEING A 0.15 ACRE VARIABLE WIDTH WATER, WASTEWATER AND PERMANENT ACCESS EASEMENT, SITUATED IN THE BENJAMIN F. HANNA SURVEY NO. 28, ABSTRACT NO. 222, HAYS COUNTY, TEXAS, BEING A PORTION OF A CALLED 200.0 ACRE TRACT OF LAND, AS DESCRIBED IN A DEED TO CF CSLK CARTER LLC, AND RECORDED IN DOCUMENT NUMBER 21069740, OFFICIAL PUBLIC RECORDS OF HAYS COUNTY, TEXAS (O.P.R.H.C.TX.). SAID 0.15 ACRE WATER, WASTEWATER AND PERMANENT ACCESS EASEMENT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

COMMENCING at a 1/2-inch iron rod with an orange cap stamped "CMA5911" found, for the southeast corner of a called 9.999 acre tract of land, as described in a deed to DS Ten Acres, LLC, and recorded in Volume 5310, Page 510, O.P.R.H.C.TX., same being an interior ell corner of said 200.0 acre tract;

THENCE N 14°05'33" E, with the common line of said 9.999 acre tract and said 200.0 acre tract, a distance of 235.19 feet to a point, for the **POINT OF BEGINNING** of this Water and Wastewater easement;

THENCE N 14°05'33" E, continuing with said common line, a distance of 101.20 feet, to a point, said point being the beginning of a curve to the right;

THENCE departing said common line, over and across said 200.0 acre tract, with said curve to the right, an arc distance of 7.32 feet, through a central angle 01°40'24", having a radius of 250.65 feet, and a chord that bears N 24°08'54" E, a distance of 7.32 feet, to a point on the said common line;

THENCE with said common line, the following two (2) courses and distances:

1) N 36°43'56" E, a distance of 83.32 feet, to a point, for the northwest corner of this Water and Wastewater easement, and

2) N 84°09'30" E, a distance of 45.76 feet, to a point, for the northeast corner of this Water and Wastewater easement. From said point, a magnail in rockbed found bears N 84°09'30" E, 7.89 feet;

THENCE departing said common line, over and across said 200.0 acre tract, the following two (2) courses and distances:

1) S 50°13'56" W, a distance of 15.86 feet, to a point, said point being the beginning of a curve to the left, and

2) With said curve to the left, an arc distance of 83.46 feet, through a central angle 21°40'19", having a radius of 220.65 feet, and a chord that bears S 38°24'51" W, a distance of 82.96 feet, to a point on the common line of a called 453.709 acre tract of land, as described in a deed to Limestone Dripping Springs, LLC, recorded to Volume 4438, Page 870, Deed Records of Hays County, Texas (D.R.H.C.TX.) and said 200.0 acre tract;

THENCE with said common line, the following two (2) courses and distances:

1) N 64°15'39" W, a distance of 7.16 feet, to a point, and

2) S 00°39'21" W, a distance of 16.99 feet, to a point, said point being the beginning of a curve to the left;

THENCE departing said common line, over and across said 200.0 acre tract, the following two (2) courses and distances:

1) With said curve to the left, an arc distance of 77.09 feet, through a central angle 20°01'05", having a radius of 220.65 feet, and a chord that bears S 13°34'20" W, a distance of 76.70 feet, to a point, and

2) S 55°37'33" E, a distance of 20.61 feet, to a point on said common line;

THENCE S 00°39'21" W, with said common line, a distance of 36.07 feet, to a point, for the southwest corner of this Water and Wastewater easement;

THENCE departing said common line, over and across said 200.0 acre tract, the following two (2) courses and distances:

1) N 55°37'33" W, a distance of 62.04 feet, to the **POINT OF BEGINNING** and containing 0.15 acre, more or less.

Parcel 3C:

BEING A 0.03 ACRE PERMANENT ACCESS EASEMENT, SITUATED IN THE BENJAMIN F. HANNA SURVEY NO. 28, ABSTRACT NO. 222, HAYS COUNTY, TEXAS, BEING A PORTION OF A CALLED 200.0 ACRE TRACT OF LAND, AS DESCRIBED IN A DEED TO CF CSLK CARTER LLC, AND RECORDED IN DOCUMENT NUMBER 21069740, OFFICIAL PUBLIC RECORDS OF HAYS COUNTY, TEXAS (O.P.R.H.C.TX.). SAID 0.03 ACRE(1,307 SQUARE FEET) PERMANENT ACCESS EASEMENT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at a 1/2-inch iron rod found on the called centerline of the County Road (Creek Road), also being a 30 foot wide right-of-way, dedicated to Hays County, per plat of Cypress Fork Ranch, recorded in Volume 18, Page 167, O.P.R.H.C.TX. and Document Number 09815804 O.P.R.H.C.TX., for the northeast corner of a called 9.999 acre tract of land, as described in a deed to DS Ten Acres, LLC, and recorded in Volume 5310, Page 510, O.P.R.H.C.TX., same being the northwest corner of said 200.0 acre tract and this Permanent Access Easement. From said point, a 1/2-inch iron rod found on the existing north right-of-way line of said Creek Road, bears N 11°19'23" E, a distance of 30.17 feet;

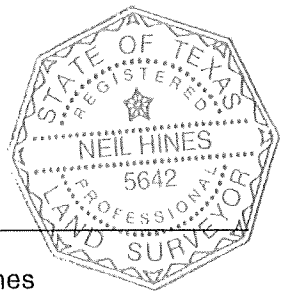
THENCE S 85°06'06" E, with said centerline, a distance of 49.22 feet, to the most northeasterly corner of said 200.0 acre tract, being common with the most northwesterly corner of a called 3.50 acre tract as described in deed to Michael Van Pfullman and recorded in Volume 4776, Page 578, O.P.R.H.C.TX.;

THENCE S 27°38'33" W, leaving said centerline, a distance of 23.87 feet, along the common line between said 200.0 tract and said 3.50 acre tract to a point on the common line of said 200.0 acre tract and said 3.50 acre tract, for the southeast corner of this Permanent Access Easement. From said point, a magnail with a washer found bears S 26°50'57" W, 3.29 feet;

THENCE S 87°07'37" W, a distance of 46.99, over an across said 200.0 tract to a point on the common line of said 200.0 tract and said 9.999 acre tract for the southwest corner of the easement described herein. From said point, a magnail in rockbed found bears S 17°55'19" W, 10.10 feet;

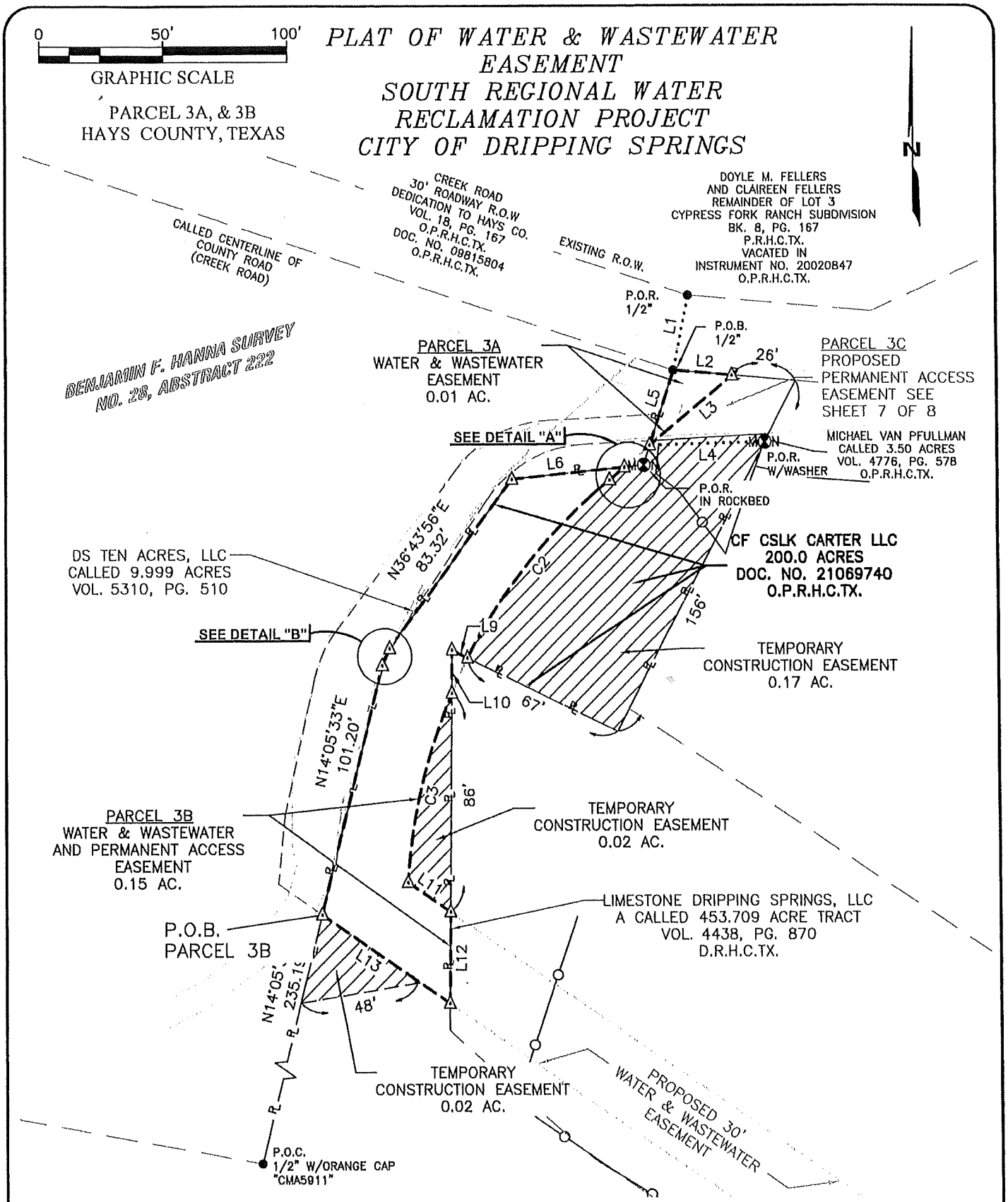
THENCE N 17°55'19" E, with said common line, a distance of 29.12 feet, to the **POINT OF BEGINNING** and containing 0.03 acre, more or less.

The bearings shown hereon are based on the Texas Coordinate System, South Central Zone, NAD 83/2011. All distances shown are surface in U.S. Survey Feet and may be converted to grid by multiplying the distance by a combined scale factor of 0.999870.



Neil Hines
Registered Professional Land Surveyor
Texas Registration Number 5642

Date: 9 November 2022



JOB NUMBER:47232 DATE:5/18/2020 SCALE:1:50 SURVEYOR:N. HINES TECHNICIAN:E.HILER-P.EVANS DRAWING:PARCEL_3_CF_R2 TRACT ID:P-3_CF_CSLK_CARTER	SAM 4801 Southwest Parkway Building Two, Suite 100 Austin Texas, 78735 Ofc: 512.447.0575 Fax: 512.326.3029 email: info@sam.biz Texas Firm Registration No. 10064300	PROJECT: WATER & WASTEWATER EASEMENT CITY OF DRIPPING SPRINGS SHEET 5 OF 8

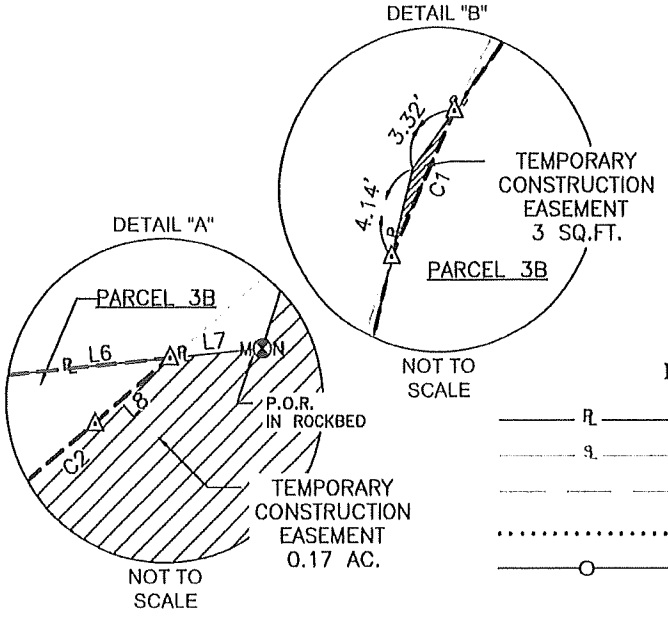
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PARCEL 3A, & 3B
HAYS COUNTY, TEXAS

PLAT OF WATER & WASTEWATER EASEMENT SOUTH REGIONAL WATER RECLAMATION PROJECT CITY OF DRIPPING SPRINGS

PARCEL 3A & 3B
HAYS COUNTY, TEXAS

LINE TABLE		
NUMBER	DIRECTION	LENGTH
L1	N11°19'23"E	30.17'
L2	S85°06'06"E	23.56'
L3	S50°13'56"W	42.94'
L4	N88°30'47"E	46.03'
L5	N17°55'19"E	30.98'
L6	N84°09'30"E	45.76'
L7	N84°09'30"E	7.89'
L8	S50°13'56"W	15.86'
L9	N64°15'39"W	7.16'
L10	S00°39'21"W	16.99'
L11	S55°37'33"E	20.61'
L12	S00°39'21"W	36.07'
L13	N55°37'33"W	62.04'



CURVE TABLE					
CURVE NO.	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD LENGTH
C1	001°40'24"	250.65'	7.32'	N24°08'54"E	7.32'
C2	021°40'19"	220.65'	83.46'	S38°24'51"W	82.96'
C3	020°01'05"	220.65'	77.09'	S13°34'20"W	76.70'

LEGEND

R	PARCEL LIMITS
℄	APPROXIMATE SURVEY LINE
	ADJOINER PROPERTY
	FLYTIE
O	FENCE
	EDGE OF ROAD
●	IRON ROD FOUND (AS NOTED)
△	CALCULATED POINT
MON	MAG NAIL FOUND
D.R.H.C.TX.	DEED RECORDS HAYS COUNTY, TEXAS
P.R.H.C.TX.	PLAT RECORDS HAYS COUNTY, TEXAS
O.P.R.H.C.TX.	OFFICIAL PUBLIC RECORDS HAYS COUNTY, TEXAS
P.O.B.	POINT OF BEGINNING
P.O.R.	POINT OF REFERENCE
P.O.C.	POINT OF COMMENCEMENT
	PERMANENT EASEMENT
	TEMPORARY CONSTRUCTION EASEMENT
	PERMANENT ACCESS EASEMENT

NOTES:

1. ALL BEARINGS ARE GRID BEARINGS AND ARE BASED ON TEXAS COORDINATE SYSTEM, SOUTH CENTRAL ZONE (4204), NAD83 (2011). ALL DISTANCES ARE REPRESENTED IN SURFACE VALUES, MEASURED IN U.S. SURVEY FEET, AND ARE BASED ON SAID HORIZONTAL DATUM. TO OBTAIN GRID DISTANCE MULTIPLY BY CSF OF 0.999870.
2. RECORD INFORMATION SHOWN HEREON IS BASED UPON TITLE COMMITMENT ISSUED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY GF. NO. 19-1673-CR, EFFECTIVE DATE: OCTOBER 5, 2022, ISSUED OCTOBER 25, 2022.
3. FOR ADDITIONAL INFORMATION, SEE ATTACHED LEGAL DESCRIPTION MADE IN CONJUNCTION WITH AND CONSIDERED AN INTEGRAL PART OF THIS PLAT OF EASEMENT.
4. THIS EASEMENT PLAT AND THE ATTACHED DESCRIPTION WERE PREPARED FOR THE PURPOSES OF CREATING AN EASEMENT AND ARE NOT INTENDED FOR USE AS A PROPERTY BOUNDARY SURVEY.

STATE OF TEXAS
REGISTERED
NEIL HINES
5642
PROFESSIONAL
LAND SURVEYOR

NEIL HINES DATE
REGISTERED PROFESSIONAL LAND SURVEYOR
NO. 5642 – STATE OF TEXAS

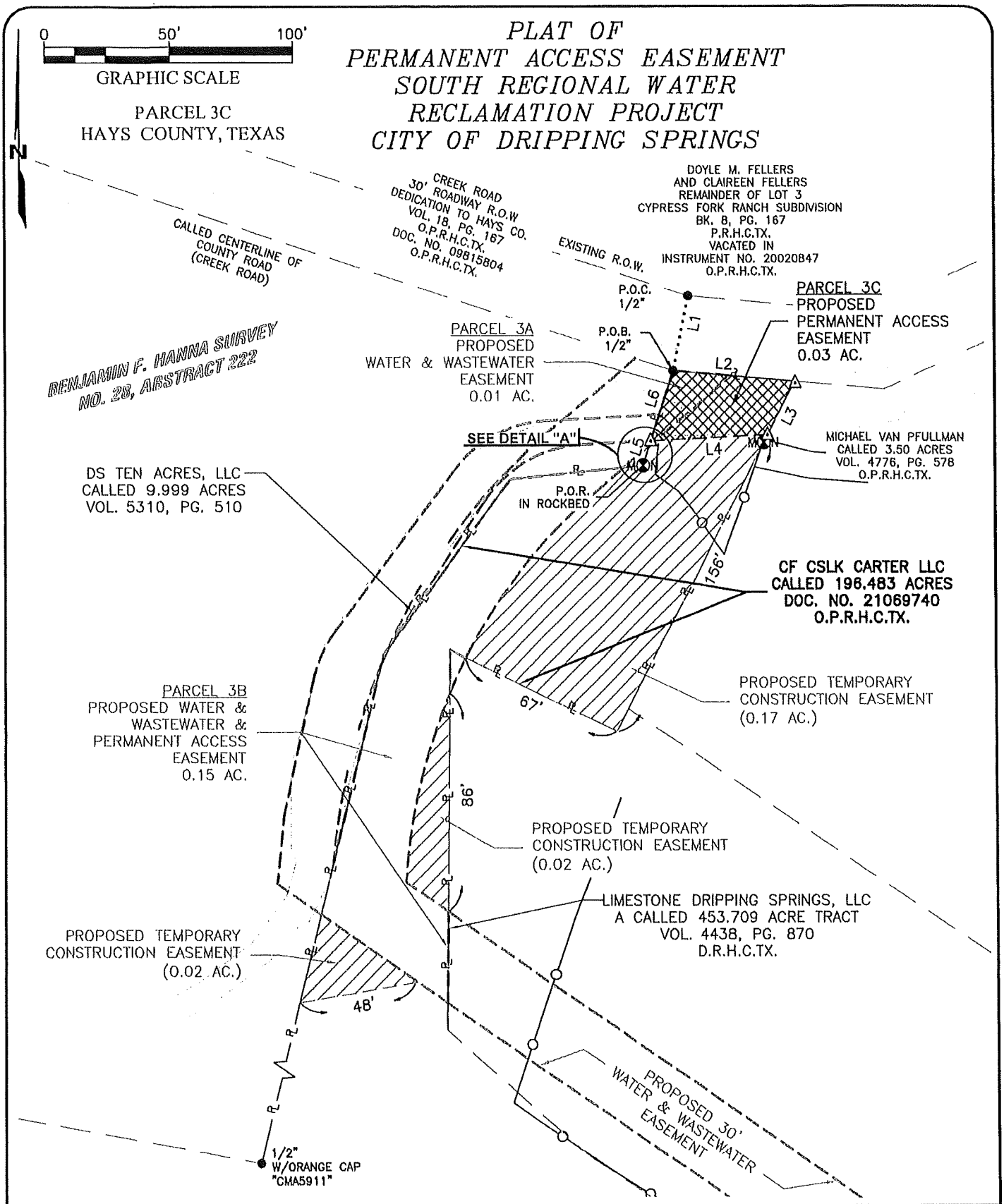
JOB NUMBER:47232
DATE:11/02/2022
SCALE:1:50
SURVEYOR:N. HINES
TECHNICIAN:E.HILER-P.EVANS-J.BRADSHAW
DRAWING:PARCEL_3_CF_R2
TRACT ID:P-3_CF_CSLK_CARTER

SAM®
4801 Southwest Parkway
Building Two, Suite 100
Austin Texas, 78735
Ofc: 512.447.0575
Fax: 512.326.3029
email: info@sam.biz
Texas Firm Registration No. 10064300

PROJECT: WATER & WASTEWATER EASEMENT
CITY OF DRIPPING SPRINGS

SHEET 6
OF 8

PATH:\\SAMINC\AUS\PROJECTS\1018047232\100\SURVEY\06PLATS\PARCEL 3_DEVELOPMENT\PARCEL_3_CF_R2.DWG



JOB NUMBER:47232 DATE:11/02/2022 SCALE:1:50 SURVEYOR:N. HINES TECHNICIAN:P.EVANS-J. BRADSHAW DRAWING:P-3_DEVELOPMENT TRACT ID:P-3_DEVELOPMENT	SAM® 4801 Southwest Parkway Building Two, Suite 100 Austin Texas, 78735 Ofc: 512.447.0575 Fax: 512.326.3029 email: Info@sam.biz Texas Firm Registration No. 10064300	PROJECT: WATER & WASTEWATER EASEMENT CITY OF DRIPPING SPRINGS SHEET 7 OF 8

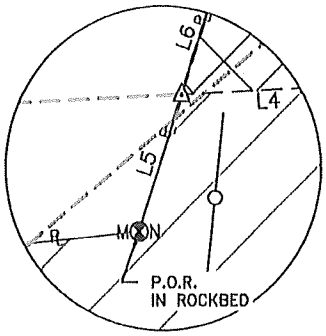
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PARCEL 3C
HAYS COUNTY, TEXAS

PLAT OF PERMANENT ACCESS EASEMENT SOUTH REGIONAL WATER RECLAMATION PROJECT CITY OF DRIPPING SPRINGS

LINE TABLE		
NUMBER	DIRECTION	LENGTH
L1	S11°19'23"W	30.17'
L2	S85°06'06"E	49.22'
L3	S27°38'33"W	23.87'
L4	S87°07'37"W	46.99'
L5	S17°55'19"W	10.10'
L6	N17°55'19"E	29.12'

DETAIL "A"



NOT TO SCALE

LEGEND

℄	PARCEL LIMITS
℄	APPROXIMATE SURVEY LINE
	ADJOINER PROPERTY
	FLYTIE
	FENCE
	EDGE OF ROAD
●	IRON ROD FOUND (AS NOTED)
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STATE OF TEXAS
REGISTERED
NEIL HINES
5642
PROFESSIONAL
LAND SURVEYOR

Neil Hines 9 Nov 22

NEIL HINES — DATE
REGISTERED PROFESSIONAL LAND SURVEYOR
NO. 5642 – STATE OF TEXAS

JOB NUMBER:47232
DATE:5/15/2020
SCALE:1:50
SURVEYOR:N. HINES
TECHNICIAN:P. EVANS
DRAWING:P-3_DEVELOPMENT
TRACT ID:P-3_DEVELOPMENT

SAM®
4801 Southwest Parkway
Building Two, Suite 100
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Texas Firm Registration No. 10064300

PROJECT: WATER & WASTEWATER EASEMENT
CITY OF DRIPPING SPRINGS

SHEET 8
OF 8

PATH:\\SAMINC\AUS\PROJECTS\1018047232\100\SURVEY\06PLATS\PARCEL 3_DEVELOPMENT\P-3C_CF_ACCESS_ROAD_R2.DWG

THE STATE OF TEXAS
COUNTY OF HAYS

I hereby certify that this instrument was FILED on the date and the time stamped hereon by me and was duly RECORDED in the Records of Hays County, Texas.

23046859 EASEMENT
12/27/2023 08:39:11 AM Total Fees: $86.00

Elaine H. Cárdenas, MBA, PhD,County Clerk
Hays County, Texas

Elaine H Cárdenas

GENERAL NOTES

GENERAL

THESE GENERAL NOTES SHALL APPLY UNLESS SPECIFICALLY NOTED ON THE PLANS AND DETAILS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SHALL COORDINATE ALL STRUCTURAL PLANS AND DETAILS WITH THE ARCHITECTURAL DRAWINGS BEFORE STARTING WORK. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. DESIGN, CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL COMPLY WITH THE 2018 INTERNATIONAL BUILDING CODE.

THE STRUCTURAL SYSTEM OF THIS BUILDING IS DESIGNED TO PERFORM AS A COMPLETED UNIT. PRIOR TO COMPLETION OF THE STRUCTURE, STRUCTURAL COMPONENTS MAY BE UNSTABLE AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE TEMPORARY SHORING AND/OR BRACING AS REQUIRED FOR THE STABILITY OF THE INCOMPLETE STRUCTURE AND FOR THE SAFETY OF ALL ON-SITE PERSONNEL.

DESIGN CRITERIA

1. BUILDING CODE: 2018 INTERNATIONAL BUILDING CODE

2. GRAVITY LOADS:

A. DEAD LOADS	
1) WATER	62.4 PCF
B. LIVE LOADS	
1) WALKWAYS	100 PSF

3. LATERAL LOADS:

A. WIND LOADS	
1) WIND SPEED	100 MPH
2) IMPORTANCE FACTOR, I	1.0
3) EXPOSURE	"B"
B. WATER	62.4 PCF
C. UNDRAINED EARTH	102 PCF
D. SEISMIC LOADS	
1) SEISMIC IMPORTANCE FACTOR	1.5
2) MAPPED SPECTRAL RESPONSE ACCELERATIONS	
A) Ss	0.070g
B) S1	0.032g
3) SEISMIC DESIGN CATEGORY	A

FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL INVESTIGATION AND REPORT PREPARED BY TERRACON CONSULTANTS, INC. DATED JUNE 10, 2020.

FOUNDATION NOTES

1. FOR A DISTANCE OF 5'-0" OUTSIDE THE BUILDING LINE, REMOVE AT LEAST 18" OF TOP SOIL, VEGETATION (TREE STUMPS AND MAJOR ROOT SYSTEMS SHOULD BE COMPLETELY REMOVED), DEBRIS, ETC., AND ANY ADDITIONAL AMOUNT REQUIRED TO ENSURE THAT THE FINAL GRADING WILL PROVIDE A MINIMUM OF 6" OF SELECT FILL BELOW THE BOTTOM OF THE SLAB. REMOVAL OF SURFICIAL SOIL CAN BE STOPPED IF LIMESTONE IS ENCOUNTERED.

2. REWORK AND COMPACT THE TOP 6" OF THE EXPOSED SUBGRADE TO 95% OF THE MAXIMUM DENSITY AT 2% TO 3% ABOVE OPTIMUM MOISTURE CONTENT, IN ACCORDANCE WITH ASTM METHOD D 698 USING A COMPACTIVE EFFORT OF 7.16 FT-LB./CU.IN.. DO NOT ALLOW THE EXPOSED SUBGRADE TO DRY OUT PRIOR TO PLACING THE STRUCTURAL FILL.

3. FILL BACK TO REQUIRED GRADE WITH MATERIAL SELECTED AND COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS BELOW. FILL SHOULD EXTEND AT LEAST 3'-0" BEYOND THE FOUNDATION PERIMETER AND SLOPE DOWN AT NOT MORE THAN ONE TO TWO SLOPE TO NATURAL SOIL EXCEPT AT DEEP BEAM CONDITIONS.

4. SELECT FILL SHALL CONSIST OF CRUSHED LIMESTONE BASE MATERIAL MEETING THE REQUIREMENTS OF THE 2004 TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT) STANDARD SPECIFICATIONS ITEM 247, TYPE A, GRADE 3.

   NOTE: SANDY LOAM IS NOT ACCEPTABLE SELECT FILL MATERIAL OR ANY MATERIAL CONTAINING ORGANIC MATTER

5. SAMPLES OF PROPOSED SELECT FILL SHALL BE FURNISHED TO THE TESTING LABORATORY 7 DAYS PRIOR TO INSTALLATION TO PERMIT TIME FOR SPECIFICATION COMPLIANCE INSPECTION AND APPROVAL.

6. SELECT FILL SHALL BE COMPACTED IN THE FIELD IN LOOSE LIFTS NOT TO EXCEED 8" TO A MINIMUM OF 95% OF MAXIMUM LABORATORY DENSITY (FILL SHALL BE WITHIN 3% OF OPTIMUM MOISTURE CONTENT DURING COMPACTION) IN ACCORDANCE WITH TXDOT TEST METHOD TEX-113E. FIELD DENSITIES SHALL BE CHECKED IN ACCORDANCE WITH ASTM D-6938 (NUCLEAR GAUGE).

7. LABORATORY MOISTURE-DENSITY CURVE OR CURVES AS REQUIRED AND RESULTS OF AT LEAST 2 FIELD DENSITY CHECKS PER LIFT ARE TO BE SUBMITTED TO THE ARCHITECT OR ENGINEER.

8. BEAM TRENCHES SHALL BE CUT DIRECTLY INTO COMPACTED FILL TO PLAN DIMENSIONS AND SACKING OF TRENCHES WILL BE PERMITTED FOR INSIDE OF PERIMETER BEAMS. IN CASE SACKING IS USED, DENSITY TESTING WILL NOT BE PERFORMED CLOSER THAN 4'-0" FROM THE INSIDE OF THE PERIMETER BEAM FACE.

9. ALL FOUNDATION EXCAVATIONS SHALL BE EXTENDED TO FINAL GRADE AND THE FOOTINGS CONSTRUCTED AND POURED AS SOON AS POSSIBLE TO MINIMIZE POTENTIAL DAMAGE (DUE TO WETTING AND/OR DRYING) TO BEARING SOILS. FOUNDATION CONCRETE SHOULD NOT BE PLACED ON SOILS THAT HAVE BEEN DISTURBED BY RAINFALL OR SEEPAGE.

CONCRETE NOTES

1. ALL CONCRETE WORK SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTE (ACI) SPECIFICATION, ACI 301 AND THE BUILDING CODE REQUIREMENTS, ACI 318.

2. ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, UNLESS OTHERWISE NOTED, MUST FOLLOW THE "ACI DETAILING MANUAL", PUBLICATION SP-66, LATEST EDITION, ACI 315, LATEST EDITION, AND ACI 315R, LATEST EDITION.

3. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AS FOLLOWS:

ALL CONCRETE	4,000 PSI
MINIMUM CEMENT CONTENT	5.0 SACKS/CY
MAXIMUM WATER/CEMENT RATIO	0.55
SLUMP RANGE	3" MIN. - 5" MAX.

   TYPE F FLY ASH CAN BE SUBSTITUTED FOR CEMENT 20% TO 25% BY WEIGHT. CALCIUM CHLORIDE IS NOT ACCEPTABLE FOR USE IN MIX. FURNISH MIX DESIGNS FOR ALL CLASSES OF CONCRETE. RETAIN A QUALIFIED TESTING LABORATORY TO MAKE CONCRETE CYLINDERS AND PERFORM COMPRESSIVE TESTS. A MINIMUM OF THREE CYLINDERS SHALL BE TAKEN PER 50 CUBIC YARDS OF CONCRETE, WITH ONE TEST AT 7 DAYS AND TWO AT 28 DAYS. COARSE AND FINE AGGREGATES SHALL COME FROM SOURCES LISTED ON THE "CONCRETE RATED SOURCE QUALITY CATALOG" BY THE TEXAS DEPARTMENT OF TRANSPORTATION AS NON REACTIVE SOURCES LATEST EDITION. SOURCES OF RIVER GRAVEL AND SAND SHALL HAVE NO MARCASITE OR IRON PYRITE PRESENT AT THE PRODUCTION FACILITY.

4. REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60.

5. STANDARD PROTECTIVE COVER OF REINFORCING BARS UNLESS OTHERWISE NOTED SHALL BE:

SLABS ON GRADE (TOP)	2 IN.
GRADE BEAMS	
TOPS	2 IN.
SIDES	3 IN.
BOTTOMS	3 IN.
OTHER	2 IN.
WALLS	
TOPS	2 IN.
SIDES	2 IN.
BOTTOMS	2 IN.
OTHER	2 IN.

6. AT CORNERS AND "T" INTERSECTIONS OF ALL BEAMS EXTEND 4 CORNER BARS EQUAL TO THE SCHEDULED STEEL IN THE ADJACENT BEAMS 2'-0" EACH WAY, 2 BARS TOP AND 2 BARS BOTTOM. PROVIDE CORNER BARS AT ALL INTERMEDIATE REINFORCING BARS IN WALLS AND DEEP BEAMS.

7. ALL ACCESSORIES SHALL BE IN ACCORDANCE WITH THE "ACI DETAILING MANUAL", PUBLICATION SP-66, LATEST EDITION, ACI 315, LATEST EDITION, AND ACI 315R, LATEST EDITION. PROVIDE CONCRETE BRICK CHAIRS AT ALL BEAMS AND SLABS TO SUPPORT REINFORCING STEEL AT A SPACING NOT TO EXCEED 4'-0" O.C. IN ANY DIRECTION.

8. VERTICAL JOINTS IN FLOOR SLABS ARE TO BE SHOWN ON PLANS. NO HORIZONTAL JOINTS WILL BE PERMITTED IN SLABS OR BEAMS UNLESS NOTED OTHERWISE.

9. INCLUDE AN ALLOWANCE FOR .5 TONS OF REINFORCING STEEL (ANY SIZE) TO BE USED AS DIRECTED IN THE FIELD FOR SPECIAL CONDITIONS (LABOR PLACING THE SAME TO BE INCLUDED). UPON COMPLETION OF THE PROJECT REBATE ANY AMOUNT REMAINING TO THE OWNER.

10. LAP LENGTHS FOR BARS SCHEDULED AND DETAILED "CONT." SHALL BE:

    FOR 4000 PSI CONCRETE

#4 BARS - 25 INCHES	#7 BARS - 54 INCHES
#5 BARS - 31 INCHES	#8 BARS - 62 INCHES
#6 BARS - 37 INCHES	#9 BARS - 70 INCHES

   LAP LENGTH FOR WELDED WIRE REINFORCEMENT SHALL BE EQUAL TO A DISTANCE OF TWO TIMES THE MESH SIZE OPENING.

11. CONCRETE PLACED BY PUMPING SHALL MEET THE FOLLOWING REQUIREMENTS:

    A) COARSE AGGREGATE SHALL BE GRADED FROM A MAXIMUM OF 1" DOWN.
    B) MAXIMUM ALLOWABLE INCREASE IN CEMENT FACTOR SHALL BE 1/2 SACK PER CUBIC YARD OVER NORMAL MIX DESIGN.
    C) MAXIMUM WATER CEMENT RATIO SHALL CONFORM TO NOTE 3 OF THIS SECTION. IF MORE WORKABILITY IS REQUIRED, AN ADMIXTURE MAY BE USED.
    D) MAXIMUM WEIGHT RATIO OF FINE AGGREGATES TO COARSE AGGREGATES SHALL NOT EXCEED 2/3.
    E) REFER TO ACI 301-05, SECTION 800, FOR OTHER PUMPING REQUIREMENTS.

12. WELDING OR HEAT BENDING OF REINFORCING BARS SHALL NOT BE PERMITTED, UNLESS APPROVED BY THE ENGINEER.

13. PROVIDE 3 - 3'-0" LONG #4 DIAGONAL REINFORCING BARS AT ALL REENTRANT CORNERS.

14. DURING PLACEMENT OF CONCRETE, USE A TREMIE OR OTHER MEANS TO LIMIT FREE FALL OF CONCRETE TO 5'-0".

15. EXTEND ALL GRADE BEAMS A MINIMUM OF 2'-0" BELOW EXISTING GRADE.

16. CONCRETE SHALL BE CONTINUOUSLY CURED FOR A PERIOD OF 7 DAYS FOLLOWING PLACEMENT BY ANY OF THE FOLLOWING METHODS:
    A) FOGGING WITH WATER
    B) APPLYING AN APPROVED SPRAY ON CONCRETE CURING COMPOUND
    C) COVERING WITH A POLY MEMBRANE

17. HOT WEATHER CONCRETE:

    THE TEMPERATURE OF CONCRETE AS PLACED SHALL NOT EXCEED 90°F UNLESS OTHERWISE SPECIFIED OR PERMITTED. LOSS OF SLUMP, FLASH SET, OR COLD JOINTS DUE TO TEMPERATURE OF CONCRETE AS PLACED WILL NOT BE ACCEPTABLE. WHEN TEMPERATURE OF CONCRETE EXCEEDS 90°F, OBTAIN ACCEPTANCE, WHEN REQUIRED, OF PROPOSED PRECAUTIONARY MEASURES. WHEN TEMPERATURE OF STEEL REINFORCEMENT IS GREATER THAN 120°F, FOG STEEL REINFORCEMENT, EMBEDMENTS, SUBGRADE AND FORMS WITH WATER IMMEDIATELY BEFORE PLACING CONCRETE. REMOVE STANDING WATER BEFORE PLACING CONCRETE. REDUCE TIME BETWEEN PLACING AND START OF CURING BY AVOIDING DELAYS DURING CONSTRUCTION. IN THE EVENT OF ANY DELAY DURING CONSTRUCTION PROTECT CONCRETE WITH TEMPORARY COVERINGS, SUCH AS POLYETHYLENE SHEETING OR SPRAY APPLY AN EVAPORATION RETARDER IMMEDIATELY AFTER FINISHING TO MINIMIZE EVAPORATION. APPLY A SUITABLE CURING MATERIAL SUCH AS A CURING COMPOUND, WET BURLAP, OR CURING PAPER.

CONSTRUCTION JOINTS

1. WALL JOINTS ARE NOTED ON PLANS.

2. SLAB JOINTS ARE NOT PERMITTED UNLESS APPROVED BY ENGINEER.

3. HORIZONTAL JOINTS IN WALLS ARE NOT ALLOWED.

POST-INSTALLED ANCHORS BY SIMPSON

1. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS.

   a. ADHESIVE ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC308 FOR CRACKED AND UNCRACKED CONCRETE RECOGNITION. PRE-APPROVED ADHESIVE ANCHORS INCLUDE:

      (1) SIMPSON STRONG-TIE "SET-XP" (ICC-ES ESR-2508)

2. REINFORCING BARS TO BE USED IN AN ADHESIVE ANCHOR ASSEMBLY SHALL CONFORM TO ASTM A615 GRADE 60.

REQUIRED SPECIAL INSPECTIONS

IN ADDITION TO THE REGULAR INSPECTIONS REQUIRED BY SECTION 109 OF THE INTERNATIONAL BUILDING CODE, THE FOLLOWING ITEMS ALSO REQUIRE SPECIAL INSPECTION IN ACCORDANCE WITH SECTION 1704

ITEM	SECTION
SOILS COMPLIANCE PRIOR TO FOUNDATION INSPECTION	1704.7
STRUCTURAL CONCRETE OVER 2500 PSI	1704.4
ANCHOR BOLTS, EXPANSION ANCHORS, AND EPOXY ANCHORS IN CONCRETE	1704.4

DUTY OF CONTRACTOR WITH RESPECT TO SPECIAL INSPECTIONS

1. CONTRACTOR SHALL COMMUNICATE AND COORDINATE WORK SCHEDULE WITH ARCHITECT SO THAT SPECIAL INSPECTIONS CAN BE ARRANGED BY ARCHITECT/OWNER. CONTRACTOR SHALL NOTIFY ARCHITECT OF WORK REQUIRING SPECIAL INSPECTIONS 7 DAYS PRIOR TO THE WORK BEING EXECUTED.

DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR

1. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED TO BE CERTAIN IT CONFORMS WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATION.

2. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE REGISTERED DESIGN PROFESSIONAL IN CHARGE. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. THEN IF UNCORRECTED, TO THE DESIGN AUTHORITY AND THE BUILDING OFFICIAL.

3. UPON COMPLETION OF INSPECTIONS THE REGISTERED DESIGN PROFESSIONAL IN CHARGE SHALL COMPLETE AND SIGN THE APPROPRIATE FORMS CERTIFYING THAT TO THE BEST OF HIS KNOWLEDGE THE WORK IS IN COMPLIANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CODE.

ISSUED FOR REVIEW

SMITH STRUCTURAL ENGINEERS
9701 BRODIE LN., SUITE A-204 AUSTIN, TEXAS 78748
PHONE: 512-478-5281 FAX: 512-381-0127 REG. #F-3907

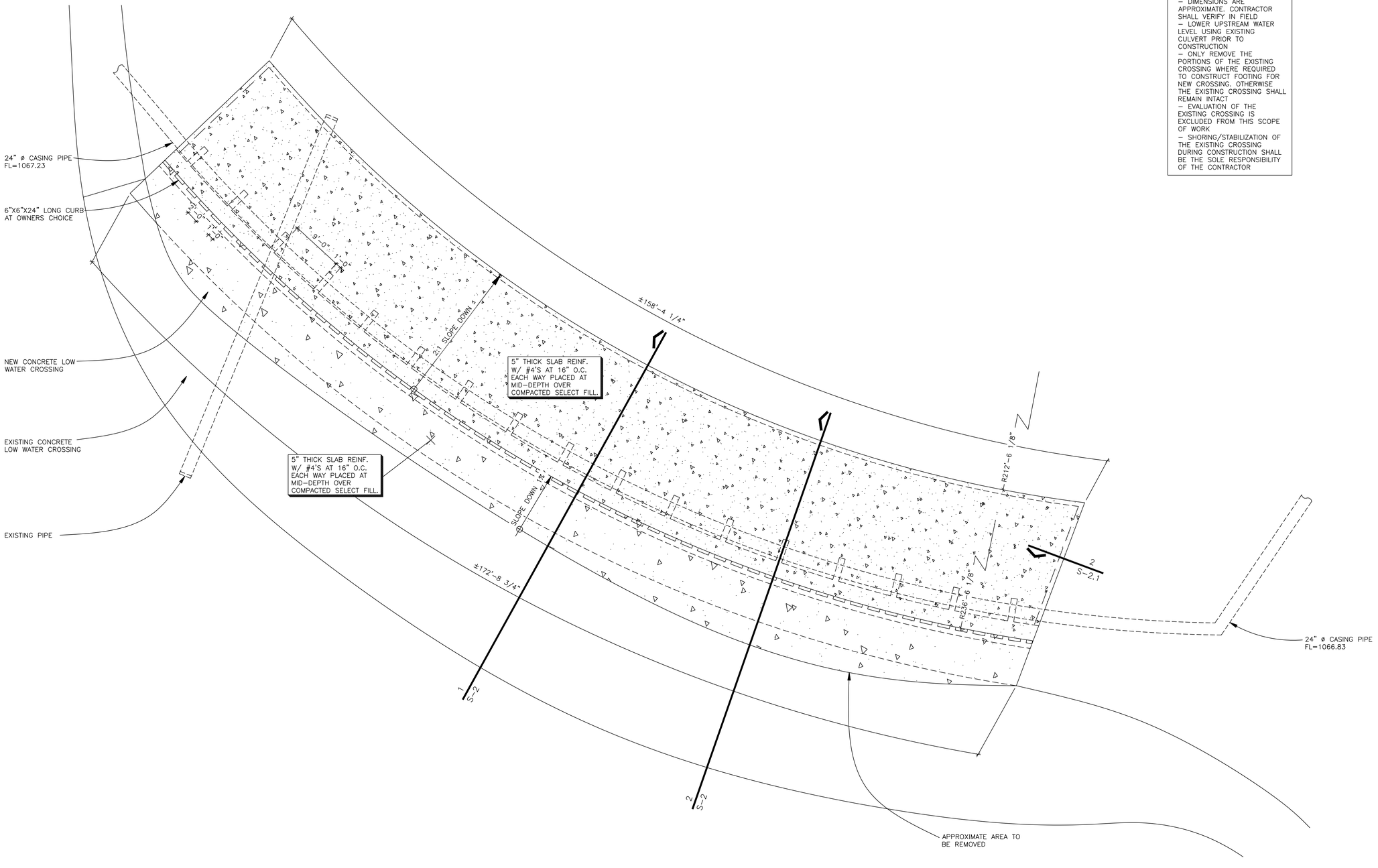
CITY OF DRIPPING SPRINGS
DS 10 LOW WATER CROSSING
DRIPPING SPRINGS, TEXAS

DATE	06-03-25
PROJECT NUMBER	19080
REVISIONS	

GENERAL NOTES

S-0

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF PRELIMINARY REVIEW UNDER THE AUTHORITY OF WILLIAM W. SMITH, P.E. (104797), ON JUN. 03, 2025. IT IS NOT TO BE USED FOR BIDDING OR CONSTRUCTION PURPOSES.



N

CREEK CROSSING PLAN

1/8" = 1'-0"

NOTES

- DIMENSIONS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY IN FIELD
- LOWER UPSTREAM WATER LEVEL USING EXISTING CULVERT PRIOR TO CONSTRUCTION
- ONLY REMOVE THE PORTIONS OF THE EXISTING CROSSING WHERE REQUIRED TO CONSTRUCT FOOTING FOR NEW CROSSING. OTHERWISE THE EXISTING CROSSING SHALL REMAIN INTACT
- EVALUATION OF THE EXISTING CROSSING IS EXCLUDED FROM THIS SCOPE OF WORK
- SHORING/STABILIZATION OF THE EXISTING CROSSING DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR

ISSUED FOR REVIEW

SMITH STRUCTURAL ENGINEERS
9701 BRODIE LN., SUITE A-204 AUSTIN, TEXAS 78748
PHONE: 512-478-5281 FAX: 512-381-0127 REG. #F-3907

CITY OF DRIPPING SPRINGS
DS 10 LOW WATER CROSSING

DRIPPING SPRINGS, TEXAS

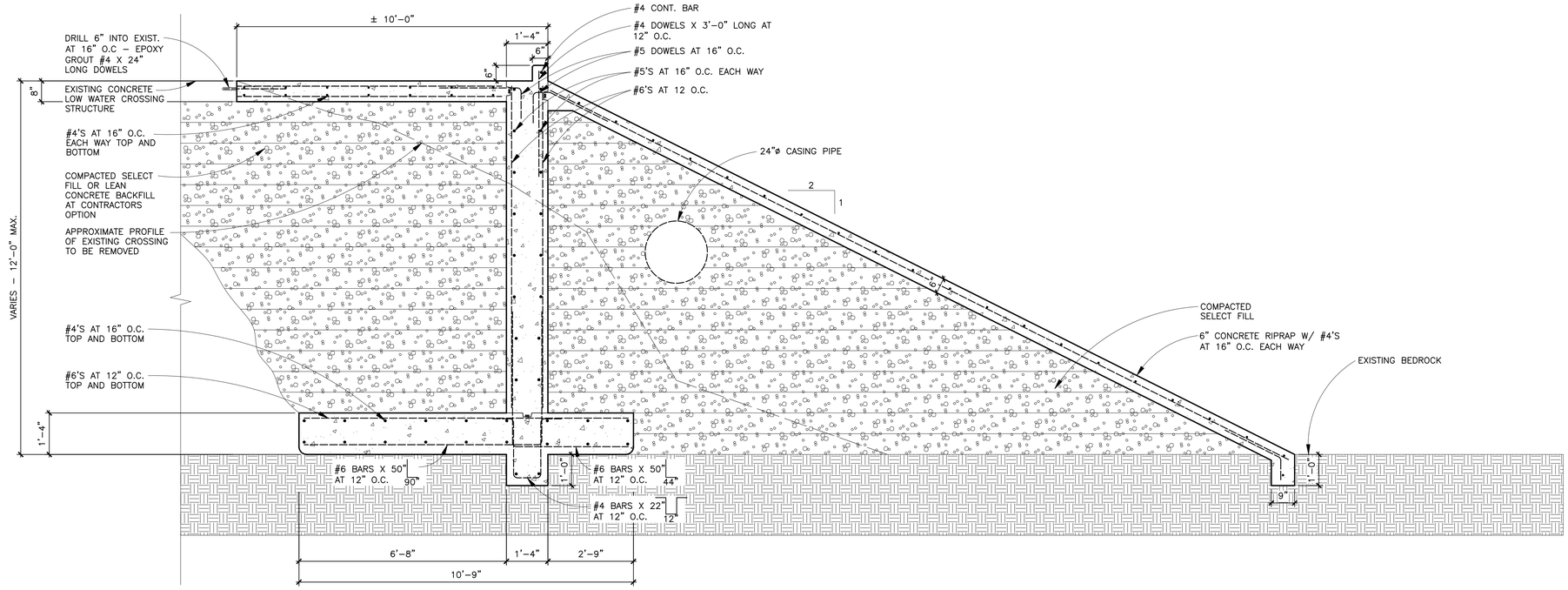
DATE	06-03-25
PROJECT NUMBER	19080
REVISIONS	

CREEK CROSSING PLAN

S-1

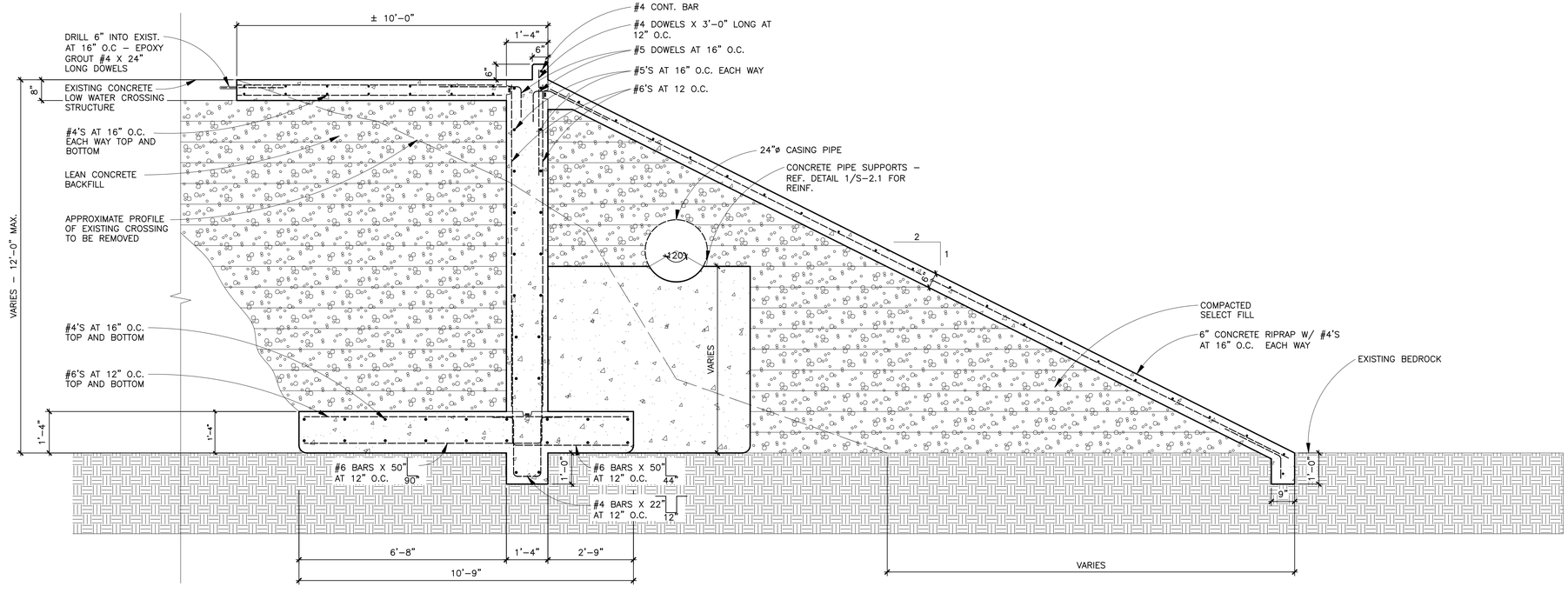
2 OF 4

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1. CROSSING SECTION

1/2" = 1'-0"



2. CROSSING SECTION THRU PIPE SUPPORT

1/2" = 1'-0"

ISSUED FOR REVIEW

SMITH STRUCTURAL ENGINEERS
9701 BRODIE LN., SUITE A-204 AUSTIN, TEXAS 78748
PHONE: 512-478-5281 FAX: 512-381-0127 REG. #F-3907

CITY OF DRIPPING SPRINGS
DS 10 LOW WATER CROSSING

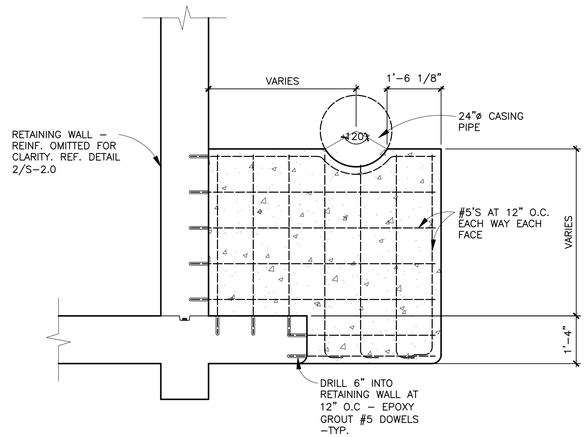
DRIPPING SPRINGS, TEXAS

DATE	06-03-25
PROJECT NUMBER	19080
REVISIONS	

SECTIONS

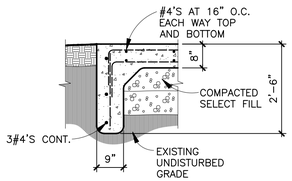
S-2.0

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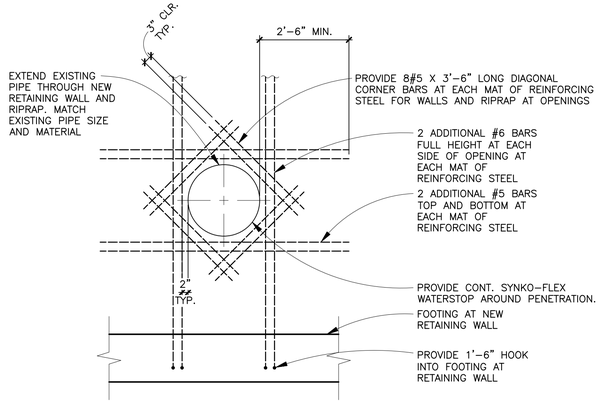
1. PIPE SUPPORT DETAIL

1/2" = 1'-0"



2. EXTERIOR BEAM

1/2" = 1'-0"



3. TYP. REINF. DETAIL AT EXIST. PIPE PENETRATIONS

NO SCALE

ISSUED FOR REVIEW

SMITH STRUCTURAL ENGINEERS
9701 BRODIE LN., SUITE A-204 AUSTIN, TEXAS 78748
PHONE: 512-478-5281 FAX: 512-381-0127 REG. #F-3907

CITY OF DRIPPING SPRINGS
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SECTIONS

S-2.1

4 OF 4

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HDPE Water/Sewer | IPS

PRESSURE-RATED HDPE PIPE

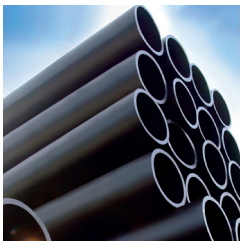
ANSI/AWWA C906, ASTM F714, ASTM D3035
ASTM D3350 Cell Class 445574C/E, PPI (TR-4) PE 4710
ANSI/NSF 61/14

JM Eagle™
DELIVERING GOOD WATER TO YOU

MARKETS

Potable | Reclaim | Sewer | Drainage | Irrigation | Rehabilitation

DESCRIPTION



Standard HDPE



Coiled HDPE

IPS	PIPE SIZES:	ADDITIONAL OPTIONS:
Nominal Laying Length: 40/50 feet *(Laying length tolerances are in accordance with AWWA and ASTM standards)*	4", 5", 6", 7", 8", 10", 12", 14", 16", 18" 20", 22", 24", 26" 28", 30", 32", 34", 36" 42", 48", 54", 63"	**Perforated*:** 4", 5", 6, 7", 8"
		Coil*: 4", 5", 6"
PIPE COLORS:	**BLACK W/COLOR STRIPES:**	**ADDITIONAL COLOR OPTIONS:**
Black	Blue Green Purple	Grey*

AWWA C906	
DR 7	335 psi
DR 9	250 psi
DR 11	200 psi
DR 13.5	160 psi
DR 17	125 psi
DR 19	112 psi
DR 21	100 psi
DR 26	80 psi
DR 32.5	63 psi

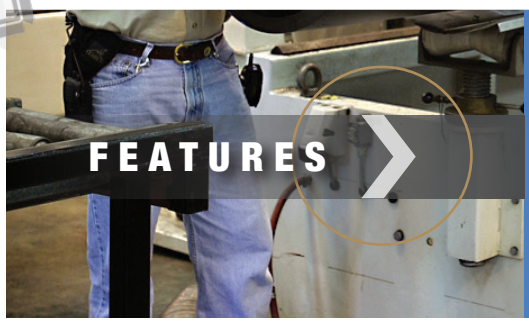


BENEFITS



Lightweight, with long laying length, great for easy transportation and installation.

Pipe applicable for open-trench and slip-lining installation.



Extremely durable, corrosive, gouging and abrasion resistant.

Features 100 years design life per Florida DOT.

Great flexibility, and highly suitable for earth-quake-prone areas.

Highest PE pressure rating, resistance to slow crack growth and rapid crack propagation.

Made in America

JM Eagle 50 YEAR WARRANTY* ON PLASTIC PIPE

*Please call regarding availability.

HDPE Water/Sewer | IPS

PRESSURE-RATED HDPE PIPE

DELIVERING GOOD WATER TO YOU

SUBMITTAL AND DATA SHEET

HDPE IRON PIPE SIZE (IPS) PRESSURE PIPE

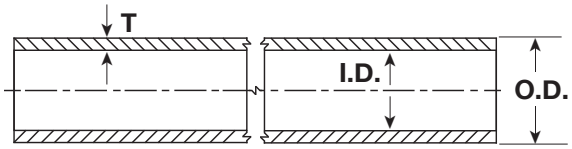
PIPE SIZE (IN)	AVG.O.D. (IN)	MIN. T. (IN)	AVG I.D. (IN)	WGT (LBS/FT)	MIN. T. (IN)	AVG I.D. (IN)	WGT (LBS/FT)	MIN. T. (IN)	AVG I.D. (IN)	WGT (LBS/FT)
		DR 7 (335 psi)			DR 9 (250 psi)			DR 11 (200 psi)		
4	4.500	0.643	3.137	3.40	0.500	3.440	2.75	0.409	3.633	2.30
5	5.375	0.795	3.747	4.85	0.618	4.109	3.92	0.506	4.338	3.29
6	6.625	0.946	4.619	7.36	0.736	5.065	5.96	0.602	5.349	4.99
7	7.125	1.018	5.056	8.52	0.792	5.446	6.89	0.648	5.751	5.78
8	8.625	1.232	6.013	12.48	0.958	6.594	10.09	0.784	6.963	8.46
10	10.750	1.536	7.494	19.40	1.194	8.219	15.68	0.977	8.679	13.14
12	12.750	1.821	8.889	27.28	1.417	9.746	22.07	1.159	10.293	18.49
14	14.000	2.000	9.760	32.90	1.556	10.107	26.61	1.273	11.301	22.30
16	16.000	2.286	11.154	42.97	1.778	12.231	34.75	1.455	12.915	29.12
18	18.000	2.571	12.549	54.37	2.000	13.760	43.97	1.636	14.532	36.84
20	20.000	2.857	13.943	67.13	2.222	15.289	54.28	1.818	16.146	45.49
22	22.000	3.143	15.337	81.23	2.444	16.819	65.68	2.000	17.760	55.05
24	24.000	3.429	16.732	96.67	2.667	18.346	78.18	2.182	19.374	65.52
26	26.000	N/A	N/A	N/A	2.889	19.875	91.75	2.364	20.988	76.90
28	28.000	N/A	N/A	N/A	3.111	21.405	106.40	2.545	22.605	89.15
30	30.000	N/A	N/A	N/A	3.333	22.934	122.13	2.727	24.219	102.35
32	32.000	N/A	N/A	N/A	N/A	N/A	N/A	2.909	25.833	116.46
34	34.000	N/A	N/A	N/A	N/A	N/A	N/A	3.091	27.447	131.48
36	36.000	N/A	N/A	N/A	N/A	N/A	N/A	3.273	29.061	147.41

Product Standard:
ANSI/AWWA C906
ASTM F714
ASTM D3035
Pipe Compound:
PPI TR-4 PE 4710, ASTM D3350
Cell Class 445574 C/E
Certification: ANSI/NSF 61, ANSI/NSF 14*
Additional Option:
Perforated (4" - 8")*

Nominal Laying Length: 40/50 feet (Laying length tolerances are in accordance with AWWA and ASTM standards)
Coil option available upon request for size 6" and below.
Installation: JM Eagle™ HDPE Water/Sewer Installation Guide

Manning Coefficient (n) = 0.009
Hazen-Williams Coefficient (c) = 150

*Supply may vary based on plant location. Please call regarding availability.



T: (Wall Thickness) **I.D.:** (Inside Diameter) **O.D.:** (Outside Diameter)

PIPE SIZE (IN)	AVG.O.D. (IN)	MIN. T. (IN)	AVG I.D. (IN)	WGT (LBS/FT)	MIN. T. (IN)	AVG I.D. (IN)	WGT (LBS/FT)	MIN. T. (IN)	AVG I.D. (IN)	WGT (LBS/FT)
		DR 13.5 (160 psi)			DR 17 (125 psi)			DR 19 (111 psi)		
4	4.500	0.333	3.794	1.91	0.265	3.938	1.55	0.237	3.998	1.39
5	5.375	0.412	4.531	2.73	0.327	4.705	2.21	0.283	4.775	1.99
6	6.625	0.491	5.584	4.15	0.390	5.798	3.35	0.349	5.885	3.02
7	7.125	0.528	6.006	4.80	0.420	6.237	3.88	0.375	6.330	3.49
8	8.625	0.639	7.270	7.03	0.507	7.550	5.68	0.454	7.663	5.12
10	10.750	0.796	9.062	10.92	0.632	9.410	8.82	0.566	9.550	7.95
12	12.750	0.944	10.749	15.36	0.750	11.160	12.41	0.671	11.327	11.19
14	14.000	1.037	11.802	18.52	0.824	12.253	14.98	0.737	12.438	13.49
16	16.000	1.185	13.488	24.19	0.941	14.005	19.55	0.842	14.215	17.61
18	18.000	1.333	15.174	30.61	1.059	15.755	24.75	0.947	15.992	22.29
20	20.000	1.481	16.860	37.79	1.176	17.507	30.53	1.053	17.768	27.52
22	22.000	1.630	18.544	45.75	1.294	19.257	36.86	1.158	19.545	33.30
24	24.000	1.778	20.231	54.44	1.412	21.007	43.99	1.263	21.322	39.63
26	26.000	1.926	21.917	63.89	1.529	22.759	51.61	1.368	23.100	46.51
28	28.000	2.074	23.603	74.09	1.647	24.508	59.87	1.474	24.875	53.94
30	30.000	2.222	25.289	85.04	1.765	26.258	68.74	1.579	26.653	61.92
32	32.000	2.370	26.967	96.76	1.882	28.010	78.18	1.684	28.430	70.45
34	34.000	2.519	28.660	109.26	2.000	29.760	88.28	1.790	30.205	79.54
36	36.000	2.667	30.346	122.49	2.118	31.510	98.98	1.895	31.983	89.17
42	42.000	3.111	35.404	166.70	2.471	36.761	134.72	2.211	37.314	121.37
48	48.000	3.556	40.462	217.76	2.824	42.013	175.97	2.526	42.644	158.52
54	54.000	N/A	N/A	N/A	3.177	47.265	222.67	2.842	47.975	200.63

PIPE SIZE (IN)	AVG.O.D. (IN)	MIN. T. (IN)	AVG I.D. (IN)	WGT (LBS/FT)	MIN. T. (IN)	AVG I.D. (IN)	WGT (LBS/FT)	MIN. T. (IN)	AVG I.D. (IN)	WGT (LBS/FT)
		DR 21 (100 psi)			DR 26 (80 psi)			DR 32.5 (63 psi)		
4	4.500	0.214	4.046	1.27	0.173	4.133	1.03	0.138	4.207	0.83
5	5.375	0.265	4.832	1.81	0.214	4.936	1.48	0.171	5.025	1.19
6	6.625	0.315	5.957	2.74	0.255	6.084	2.24	0.204	6.193	1.81
7	7.125	0.340	6.406	3.18	0.274	6.544	2.59	0.219	6.661	2.09
8	8.625	0.411	7.754	4.66	0.332	7.921	3.80	0.265	8.063	3.06
10	10.750	0.512	9.665	7.24	0.413	9.874	5.90	0.331	10.048	4.77
12	12.750	0.607	11.463	10.17	0.490	11.711	8.30	0.392	11.919	6.69
14	14.000	0.667	12.586	12.28	0.538	12.895	10.00	0.431	13.086	8.08
16	16.000	0.762	14.385	16.03	0.615	14.696	13.07	0.492	14.957	10.54
18	18.000	0.857	16.183	20.28	0.692	16.533	16.54	0.554	16.826	13.36
20	20.000	0.952	17.982	25.03	0.769	18.370	20.43	0.615	18.696	16.48
22	22.000	1.048	19.778	30.31	0.846	20.206	24.72	0.677	20.565	19.95
24	24.000	1.143	21.577	36.06	0.923	22.043	29.42	0.738	22.435	23.72
26	26.000	1.238	23.375	42.32	1.000	23.880	34.53	0.800	24.304	27.86
28	28.000	1.333	25.174	49.07	1.077	25.717	40.05	0.862	26.173	32.33
30	30.000	1.429	26.971	56.36	1.154	27.554	45.98	0.923	28.043	37.09
32	32.000	1.542	28.730	64.11	1.231	29.390	52.31	0.985	29.912	42.22
34	34.000	1.619	30.568	72.36	1.308	31.227	59.06	1.046	31.782	47.63
36	36.000	1.714	32.366	81.12	1.385	33.064	66.22	1.108	33.651	53.42
42	42.000	2.000	37.760	110.43	1.615	38.576	90.08	1.292	39.261	72.68
48	48.000	2.286	43.154	144.25	1.846	44.086	117.68	1.477	44.869	94.95
54	54.000	2.571	48.549	182.51	2.077	49.597	148.95	1.662	50.477	120.20
63	63.000	3.000	56.640	248.46	2.423	57.863	202.73	1.938	58.891	163.53

This information may have been updated. Please visit www.jmeagle.com for all updated information and warranty details.

CUSTOMER SERVICE:1.800.621.4404

THIS PRODUCT IS MADE IN AMERICA

PRINTED JUNE 2018 REV12



HIGH-DENSITY POLYETHYLENE WATER/SEWER PIPING SYSTEM

AWWA C901, AWWA C906, ASTM D2239, ASTM D2737, ASTM D3035, F714

TECHNICAL & INSTALLATION GUIDE

JM Eagle™

Building essentials for a better tomorrow™



HIGH-DENSITY POLYETHYLENE WATER/SEWER PIPING SYSTEM

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WARRANTY

J-M Manufacturing Company Inc. (JM Eagle™) warrants that its standard polyvinyl chloride (PVC), polyethylene (PE), conduit/plumbing/solvent weld and Acrylonitrile-Butadiene-Styrene (ABS) pipe products ("Products") are manufactured in accordance with applicable industry specifications referenced on the Product and are free from defects in workmanship and materials. Every claim under this warranty shall be void unless in writing and received by JM Eagle™ within 30 days of the date the defect was discovered, and within one year of the date of shipment from the JM Eagle™ plant. Claims for Product appearance defects, such as sun-bleached pipe etc., however, must be made within days of the date of the shipment from the JM Eagle™ plant. This warranty specifically excludes any Products allowed to become sun-bleached after shipment from the JM Eagle™ plant. Proof of purchase with the date thereof must be presented to the satisfaction of JM Eagle™, with any claim made pursuant to this warranty. JM Eagle™ must first be given an opportunity to inspect the alleged defective Products in order to determine if it meets applicable industry standards, if the handling and installation have been satisfactorily performed in accordance with JM Eagle™ recommended practices and if operating conditions are within standards. Written permission and/or a Return Goods Authorization (RGA) must be obtained along with instructions for return shipment to JM Eagle™ of any Products claimed to be defective.

The limited and exclusive remedy for breach of this Limited Warranty shall be, at JM Eagle's sole discretion, the replacement of the same type, size and like quantity of non-defective Product, or credits, offsets or combination of thereof, for the wholesale purchase price of the defective unit.

This Limited Warranty does not apply for any Product failures caused by user's flawed designs or specifications, unsatisfactory applications, improper installations, use in conjunction with incompatible materials, contact with aggressive chemical agents, freezing or overheating of liquids in the Product and any other misuse causes not listed here. This Limited Warranty also excludes failure or damage caused by fire stopping materials, tread sealants, plasticized vinyl products or damage caused by the fault or negligence of anyone other than JM Eagle™, or any other act or event beyond the control of JM Eagle™.

JM Eagle's liability shall not, at any time, exceed the actual wholesale purchase price of the Product. The warranties in this document are the only warranties applicable to the product and there are no other warranties, expressed or implied. This Limited Warranty specifically excludes any liability for general damages, consequential or incidental damages, including without limitation, costs incurred from removal, reinstallation, or other expenses resulting from any defect. IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE SPECIFICALLY DISCLAIMED AND JM EAGLE™ SHALL NOT BE LIABLE IN THIS RESPECT NOTWITHSTANDING JM EAGLE'S ACTUAL KNOWLEDGE THE PRODUCT'S INTENDED USE.

JM Eagle's Products should be used in accordance with standards set forth by local plumbing and building laws, codes or regulations and the applicable standards. Failure to adhere to these standards shall void this Limited Warranty. Products sold by JM Eagle™ that are manufactured by others are warranted only to the extent and limits of the warranty of the manufacturer. No statement, conduct or description by JM Eagle™ or its representative, in addition to or beyond this Limited Warranty, shall constitute a warranty. This Limited Warranty may only be modified in writing signed by an officer of JM Eagle™.

1.0 INTRODUCTION

The JM Eagle™ Municipal & Industrial Water or Sewer Pipe product line is manufactured from a black High-Density Polyethylene (HDPE) material. High-density PE 3408/3608/4710 is a preferred material for water distribution in municipal and industrial applications. It resists growth of bacteria, algae and fungi. Its strength and resilience provide long-term life against both internal pressure and intermittent surge and water hammer. PE 3408/3608/4710 excels in horizontal directional drilling, plowing, river crossings, sliplining, pipe bursting and other trenchless installation techniques. By following qualified heat fusion procedures, leak-free joints that are as strong as the pipe itself, work to protect our environment and conserve one of our most precious resources.

JM Eagle™ is a member of the Plastics Pipe Institute Inc. There are many helpful PE pipe articles available to the end user on PPI's Web site at www.plasticpipe.org.

The JM Eagle™ Municipal & Industrial Water or Sewer Piping System can be joined by butt fusion, socket fusion, sidewall fusion, mechanical fittings or electrofusion. All methods are reliable means of joining the JM Eagle™ Municipal & Industrial Water or Sewer Piping System. Generally, the choice of which system to use is at the discretion of the individual user. All fitting manufacturers' recommended installation instructions should be carefully followed.

Installer training for the proper use and installation of polyethylene pipe is a critical factor in its long-term performance. The JM Eagle™ Municipal & Industrial Water or Sewer Pipe System has ample safety factors included in its design for providing reliable long-term performance in service, if the system is properly installed and operated at design pressures. The importance of proper training in the installation and operation of polyethylene plastic piping systems cannot be overemphasized. Installation and operating recommendations are included in this bulletin to help the operator develop effective training programs.

Publications by the American Society for Testing and Materials (ASTM), American Water Works Association (AWWA) and the Plastics Pipe Institute (PPI) can also be helpful. Use of this information will minimize the potential for failure resulting from improper design and installation practices.

2.0 PRODUCT AND TECHNICAL INFORMATION

The JM Eagle™ Municipal & Industrial Water or Sewer Piping System is manufactured to meet the requirements of ASTM D3035, ASTM F714, AWWA C901 or AWWA C906. Potable water pipe is listed to ANSI/NSF 14/61. Consult your JM Eagle™ sales representative for advice regarding any questions concerning use of the JM Eagle™ Municipal & Industrial Water or Sewer Piping System.

Potable water pipe is available with highly visible blue stripes OR a blue print line.

2.1 EFFECT OF ENVIRONMENTAL EXPOSURE ON PHYSICAL PROPERTIES

2.1.1 CHEMICAL RESISTANCE

JM Eagle™ Municipal & Industrial Water or Sewer Polyethylene Pipe, for all practical purposes, is chemically inert. There are a few chemicals that will affect it, but it will not rot, rust or corrode by electrolytic action or require cathodic protection. Potable water pipe should be disinfected in accordance with ANSI/AWWA C651. Chemical solutions used for disinfecting new or repaired potable systems should not exceed 12 percent active chlorine. Higher concentrations can degrade polyethylene.

Chemical resistance data for polyethylene pipe can be found in the Plastic Pipe Institute's (PPI) Technical Report TR-19, found at www.plasticpipe.org.

2.1.2 WEATHER RESISTANCE

JM Eagle™ Municipal & Industrial Water or Sewer Pipe is protected against degradation caused by ultraviolet rays from direct sunlight. The polyethylene resin contains 2 percent to 3 percent of finely divided carbon black. This provides the black color for JM Eagle™ Municipal & Industrial Water or Sewer Pipe. Carbon black is the most effective additive for enhancing the weathering characteristics of polyethylene pipe. JM Eagle™ Municipal & Industrial Water or Sewer Pipe can be safely stored outside in most climates for periods of many years without danger of loss of physical properties due to ultraviolet (UV) exposure. In general, JM Eagle™ Co. recommends the use of a first-in first-out inventory management procedure.

2.1.3 INSTALLATION TEMPERATURES

JM Eagle™ Municipal & Industrial Water or Sewer Pipe can be installed at any ambient temperature condition in which normal installation operations would continue. In cold weather, however, special procedural recommendations, as outlined in this bulletin, should be followed.

2.1.4 THERMAL EXPANSION AND CONTRACTION

The coefficient of thermal expansion for JM Eagle™ Municipal & Industrial Water or Sewer Pipe is 9×10^{-5} inch/inch/degrees F. This translates to an easy rule of thumb: the pipe changes in length 1 inch per 10 degrees F change in temperature per 100 feet of pipe length. The effect of expansion and contraction must be considered when using compression and mechanical type fittings. The fitting must possess sufficient pullout resistance to counteract the thermal stress forces generated by the pipe.

2.1.5 EFFECT OF EXTERNAL LOADING STRESSES

Consideration must be given to the installation of all plastic piping systems, including the JM Eagle™ Municipal & Industrial Water or Sewer Piping System, to avoid failures caused by excessive external stress. Field experience has shown that excessive externally induced stresses can act independently

or together with internal pressure to exceed material strength and cause failure. Excessive installed bending in plastic piping systems, particularly at joints, can exceed stress limits and result in failure. Pipe where joined to fittings should be laid true to line and grade and backfilled carefully to prevent differential settlement, and thus excessive bending. See “Permanent Minimum Bending Radius Limits.”

Excessive stresses and failure of plastic pipe can also result from impact, indentations or deflection. Avoid excessive compaction forces and particularly avoid installation of the pipe against a source of point loading. The bed for the pipe and fill materials around the pipe must be free of rocks, blocking materials or other sources of point loading or deflection. Heavy machine compaction as by roller or hydrohammer should be used only for consolidation of final backfill with a minimum of 18 inches of previously layered and compacted backfill.

ASTM D2774, “Standard Recommended Practice for Underground Installation of Thermoplastic Pressure Piping,” provides additional information for direct burial of JM Eagle™ Municipal & Industrial Water or Sewer Pipe.

2.1.6 PLASTIC PIPE DAMAGE & REPAIR

Industry surveys indicate the primary causes for repair of plastic piping are from third-party damage and poor workmanship in the initial installation. Repair can be minimized by using careful mapping and location methods and by proper training and inspection procedures. Repairing PE pipe is similar to repairing ductile iron and PVC water pipe. Mechanical couplings or fusion methods can be used for damage, such as puncture, rupture, or saddle repair. The first step in making a repair is determining the problem.

For smaller sizes, an electrofusion system is useful in making repairs to polyethylene pipe.

3.0 INSTALLATION GUIDELINES

3.1 HANDLING

JM Eagle™ Municipal & Industrial Water or Sewer Pipe is a tough flexible product that is able to withstand normal installation handling. However, unusually rough handling of JM Eagle™ Municipal & Industrial Water or Sewer Pipe can result in damage to the pipe wall. Care should be taken to avoid pushing or pulling JM Eagle™ Municipal & Industrial Water or Sewer Pipe over or around sharp projections. JM Eagle™ Municipal & Industrial Water or Sewer Pipe is subject to impact damage when dropped from excessive heights or when heavy objects are dropped upon it, particularly during cold weather. Kinking or buckling should be avoided and any section of pipe that has been damaged in this manner should be cut out. Based on pipe pressure tests, a good rule of thumb in determining if a scratched piece of pipe should be cut out of the piping system is: if the scratch depth is greater than 10 percent of the pipe wall thickness, then the section should be removed or repaired.

3.2 UNLOADING

The means by which PE Pipe is unloaded in the field is the decision and responsibility of the customer. Preferred unloading is in units using mobile mechanical equipment such as forklifts or front-end loaders with adequate forks. Ensure that the equipment can handle the weight of the pipes (use JM Eagle™ catalog for book weights) and able to lift the pipe bundles clear off the truck. Obtain and follow the handling instructions provided by the delivery personnel. Be extra cautious in handling pipe during inclement weather.

WARNING: Unsafe unloading and handling can result in damage to property or equipment, injury and death. Unloading and handling must be performed safely. Keep unnecessary people away from the area during unloading. Only properly trained personnel should operate unloading equipment.

Refer to the Plastic Pipe Institute's Material Handling Guide for additional guidance, available at www.plasticpipe.org/publications/material_handling_guide.html

3.2.1 UNLOADING SITE REQUIREMENTS

The unloading site must be relatively flat and level. It must be large enough for the carrier's truck, the load handling equipment and its movement, and for temporary load storage. Silo packs and other palletized packages should be unloaded from the side with a forklift. Non-palletized pipe, fittings, fabrications, manholes, tanks or other components should be unloaded with lifting equipment and wide web slings, or with a forklift.

3.2.2 HANDLING EQUIPMENT

Appropriate unloading and handling equipment of adequate capacity must be used to unload the truck. Safe handling and operating procedures must be observed.

Pipe must not be rolled or pushed off the truck. Pipe, fittings, fabrications, tanks, manholes and other components must not be pushed or dumped off the truck, or dropped.

Although polyethylene piping components are lightweight compared to similar components made of metal, concrete, clay or other materials, larger components can be heavy. Lifting and handling equipment must have adequate rated capacity to lift and move components from the truck to temporary storage. Equipment such as a forklift, a crane, a side boom tractor or an extension boom crane is used for unloading. Do not use chains or wire ropes, but use fabric slings.

When using a forklift, or forklift attachments on equipment such as articulated loaders or bucket loaders, lifting capacity must be adequate at the load center on the forks. Forklift equipment is rated for a maximum lifting capacity at a distance from the back of the forks. If the weight-center of the load is farther out on the forks, lifting capacity is reduced.

Before lifting or transporting the load, forks should be spread as wide apart as practical, forks should extend completely under the load, and the load should be as far back on the forks as possible.

WARNING: During transport, a load on forks that are too short or too close together, or a load too far out on the forks, may become unstable and pitch forward or to the side, and result in damage to the load or property, or hazards to people.

Lifting equipment such as cranes, extension boom cranes and side boom tractors should be hooked to wide web choker slings that are secured around the load or to lifting lugs on the component. Only wide web slings should be used. Do not use wire rope slings and chains for they can damage components. Spreader bars should be used when lifting pipe or components longer than 20 feet.

WARNING: Before use, inspect slings and lifting equipment. Equipment with wear or damage that impairs function or load capacity should not be used.

WARNING: When breaking down bulk packs, take care to stand clear of the pipe while strapping is being cut. Coiled HDPE pipe may contain energy as in a spring. Uncontrolled release, i.e., cutting of straps, can result in dangerous uncontrolled forces. All safety precautions and proper equipment is required.

3.3 STRINGING

Reel trailers can be helpful when stringing out coiled pipe for direct burial, plow-in, pull-in or insertion renewal. It is helpful when handling coiled pipe to string the pipe out on the ground upon arrival at the job site. This allows time for the coil set to relax, and will simplify handling and emplacement of the pipe.

When uncoiling pipe by hand, only cut those straps on the coils, which are necessary to uncoil outer rolls; cut internal bands whenever necessary as the coil is unrolled.

Always inspect the pipe as it is being uncoiled and during installation to make sure no damage to the pipe has occurred during shipment and subsequent handling at the job site.

3.4 DRAGGING

Occasionally, when long strings of pipe are joined together, it is necessary to drag the pipe to where it will be installed. When the pipe must be dragged over rocky terrain or hard pavement, take precautions to protect the pipe from abrasion. Sandbags, used tires or short logs may be used to support the pipe and prevent hard contact with sharp rocks or hard pavement.

3.5 CUTTING

For smaller sizes, JM Eagle™ Municipal & Industrial Water or Sewer Pipe should be cut with pipe cutters designed for plastic pipe. These tools easily provide the square cut ends that are necessary to provide satisfactory fusion joints. If carpenter or hacksaws are used to cut the pipe, special care must be taken to ensure square cut ends and to clean the resultant sawdust from inside the pipe.

WARNING: Before cutting coiled pipe, restrain both sides of cut. Pipe is under tension. Unrestrained pipe can spring back forcibly while being cut and could cause personal injury.

3.6 COLD-WEATHER HANDLING

Polyethylene is a tough piping material; yet colder temperatures below 40 degrees F can reduce resistance to damage from mechanical abuse, such as impact. Avoid dropping the pipe, especially in cold weather. The recommended method of unloading is to use a forklift or crane, in all cases the pipe should be inspected for damage.

When handling coiled pipe at temperatures below 40 degrres F, it is helpful to uncoil the pipe that is to be installed and let it straighten out prior to making the installation. This can be done by gradually uncoiling the pipe and covering it with dirt at intervals to keep it from coiling up again. Always be careful when cutting the straps on coils of pipe because the outside end of a coil may spring out when the strapping is removed.

In cold-weather conditions, more effort will be required to uncoil the pipe and piping will spring back more forcibly if the ends are not anchored or restrained. Carefully follow equipment manufacturer's recommendations and guidelines for cold-weather conditions.

3.7 OTHER HANDLING PRECAUTIONS

During the transport of pipe, it should be continuously supported in a manner so as to minimize movement between the pipe and its support. Any practice of carrying supplies or equipment on top of plastic pipe should be avoided because of damage from sharp edges and other projections.

Care should be taken to protect the pipe from excessive heat. Be particularly careful of open flames. Do not lay an open flame or torch across pipe surfaces.

3.8 TRENCHING

For direct burial of JM Eagle™ Municipal & Industrial Water or Sewer Pipe, trench bottoms should be relatively smooth, continuous and free of rocks and other debris. When ledge rock, hardpan or boulders are encountered, the bottom of the trench should be padded with sand or other fine-grained fill materials. The trench should be wide enough to allow (a) fusion in the ditch if required, (b) snaking of the pipe along the bottom of the trench if needed, and (c) filling and compaction of sidewalls. Minimum trench widths can be utilized in most instances by joining the pipe before lowering it into the trench. Refer to ASTM D2321, "Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity Flow Applications" and ASTM D2774 "Standard Practice for Underground Installation of Thermoplastic Pressure Piping" for additional information.

Generally, sufficient cover must be maintained to provide reasonable protection against anticipated external stress loads. Where frost penetration and surface loads need not be considered, a minimum depth to provide 18 inches of cover above the pipe is recommended. When surface loads are expected, a minimum of 3 feet of cover is recommended. Where frost is a factor, pipe should be buried 6 inches below greatest recorded frost penetration.

3.9 PIPE PLACEMENT IN TRENCHES

JM Eagle™ Municipal & Industrial Water or Sewer Pipe can be joined either above ground or in the ditch as the situation dictates. Though most joining can be accomplished above ground, joining that must be done in the ditch should be well planned to ensure that enough space is available and that proper alignment is achieved. Care should be taken to avoid buckling, gouging, and other mechanical damage when lowering JM Eagle™ Municipal & Industrial Water or Sewer Pipe into the ditch.

Align all pipe true to line and grade. As mentioned earlier, extremely cold weather makes JM Eagle™ Municipal & Industrial Water or Sewer Pipe stiffer and increases the likelihood of impact damage. When an unstable trench bottom is encountered and, in the opinion of the engineer, it cannot support the pipe, an additional depth should be excavated and refilled to pipe grade with material approved by the engineer.

Because plastic pipe contracts as it cools, it is desirable in warm weather to snake the pipe in the bottom of the trench. This provides for "slack" in the pipeline to be taken up as the pipe cools and contracts in the ditch prior to backfilling.

3.10 BACKFILLING & COMPACTION

Backfilling and compaction of installed JM Eagle™ Municipal & Industrial Water or Sewer Pipe must be accomplished so as to avoid induced bending stresses both as a result of the backfilling itself and from differential settling of fill materials subsequent to the backfilling operation. Additionally, care should be taken to avoid mechanical damage to the pipe from the fill material itself. Attention to careful emplacement, filling and compaction procedures will prevent such induced stresses and mechanical damage.

JM Eagle™ Municipal & Industrial Water or Sewer Pipe installations should be continuously supported beneath their entire lengths by clean and firm backfill materials (no rocks). Intermittent blocking should not be used to support pipe-excavated sections.

Relatively compactable and clean fill materials should be used to bed newly installed pipe with particular attention to filling voids beneath transition

connections. Side-fill compaction should be utilized to develop lateral passive soil forces when backfilling larger diameter thin wall pipes. The first layer of fill material around and about 12 inches over the pipe should be free from rocks or frozen chunks, which could damage the pipe. This layer should be well compacted by hand. Successive layers should be spread uniformly to fill the trench completely. Large rocks, frozen earth and decomposable debris such as wood should not be included in the backfill. The maximum fill material particle size versus the pipe size is given in the following table.

MAXIMUM PARTICLE SIZE VS. PIPE SIZE	
NOMINAL PIPE SIZE (inches)	**MAXIMUM PARTICLE SIZE**
2 to 4	½
6 to 8	¾
10 to 15	1
16 and larger	1½

Table 1

Heavy rollers and large mechanical tampers such as hydrohammers should only be used to consolidate the final backfill and even then there should be a minimum of 24 inches of layered and previously compacted cover.

Minimum Cold (field) Bending Radius (long-term)
Reference: PE Pipe – Design and Installation M55 AWWA

PIPE DR	MINIMUM COLD BENDING RADIUS
≤ 9	20 times pipe OD
≥ 9-13.5	25 times pipe OD
≥ 13.5-21	27 times pipe OD
≥ 21	30 times pipe OD
Fittings or flange present or to be installed in bend *	100 times pipe OD

Table 2

** Observe the minimum cold bending radius for a distance of about 5 times the pipe diameter on either side of the fitting location.*

Tighter bends down to 10 times the pipe diameter can be made if they are temporary, such as in the plowing or the insertion method of installation.

4.0 TESTING

4.1 LEAK TESTING

The intent of leak testing is to find unacceptable faults in a piping system. If such faults exist, they may manifest themselves by leakage or rupture.

Leakage tests may be performed if required in the contract specifications. Testing may be conducted in various ways. Internal pressure testing involves filling the test section with a nonflammable liquid or gas, then pressurizing the medium. **Hydrostatic pressure testing with water is the preferred and recommended method.** Other test procedures may involve paired internal or end plugs to pressure test individual joints or sections, or an initial service test.

Joints may be exposed to allow inspection for leakage. Liquids such as water are preferred as the test medium because less energy is released if the test section fails catastrophically. During a pressure test, energy (internal pressure) is applied to stress the test section. If the test medium is a compressible gas, then the gas is compressed and absorbs energy while applying stress to the pipeline. If a catastrophic failure occurs, both the pipeline stress energy and the gas compression energy are suddenly released. However, with an incompressible liquid such as water as the test medium, the energy release is only the energy required to stress the pipeline.

WARNING: Pressure Pipe system testing is performed to discover unacceptable faults in a piping system. Pressure testing may cause such faults to fail by leaking or rupturing. This may result in catastrophic failure. Piping system rupture may result in sudden, forcible, uncontrolled movement of system piping or components, or parts of components.

WARNING: Pipe Restraint. The pipe system under test and any closures in the test section should be restrained against sudden uncontrolled movement from catastrophic failure. Test equipment should be examined before pressure is applied to insure that it is tightly connected. All low-pressure filling lines and other items not subject to the test pressure should be disconnected or isolated.

WARNING: Personal Protection. Take suitable precautions to eliminate hazards to personnel near lines being tested. Keep all personnel a safe distance away from the test section during testing.

REFERENCE: ASTM F2164, "Standard Practice for Field Leak Testing of Polyethylene (PE) Pressure Piping System Using Hydrostatic Pressure."

4.2 PRESSURE TESTING PRECAUTIONS

The piping section under test and any closures in the test section should be restrained or otherwise restricted against sudden uncontrolled movement in the event of rupture. Expansion joints and expansion compensators should be temporarily restrained, isolated or removed during the pressure test.

Testing may be conducted on the system, or in sections. The limiting test section size is determined by test equipment capability. If the pressurizing equipment is too small, it may not be possible to complete the test within allowable testing time limits. If so, higher capacity test equipment, or a smaller test section may be necessary.

If possible, test medium and test section temperatures should be less than 100 degrees F (38 degrees C). At temperatures above 100 degrees F (38 degrees C), reduced test pressure is required. Before applying test pressure, time may be required for the test medium and the test section to temperature equalize.

4.3 REFERENCES

The following reference publications provide pressure testing information:

ASME B31.1 Power Piping, Section 137, Pressure Tests.

Plastics Pipe Institute, ***Handbook of Polyethylene Pipes,*** *Dallas, Texas.*

ASTM F1417, Standard Test Method for Installation Acceptance of Plastic Gravity Sewer Lines Using Low-Pressure Air.

Uni-Bell® PVC Pipe Association Publication, Uni-B-6-98, "Recommended Practice for Low-Pressure Air Testing of Installed Sewer Pipe."

ASTM F2164, "Standard Practice for Field Leak Testing of Polyethylene (PE) Pressure Piping System Using Hydrostatic Pressure."

Other pressure testing procedures may or may not be applicable depending upon piping products and/or piping applications.

4.4 TEST PRESSURE

Test pressure may be limited by valves, or other devices, or lower pressure rated components. Such components may not be able to withstand the required test pressure, and should be either removed from, or isolated from the section being tested to avoid possible damage to, or failure of these devices. Isolated equipment should be vented.

- For continuous pressure systems where test pressure limiting components or devices have been isolated or removed, or are not present in the test section, the maximum allowable test pressure is 1.5 times the system design pressure at the lowest elevation in the section under test.

- If the test pressure limiting device or component cannot be removed or isolated, then the limiting section or system test pressure is the maximum allowable test pressure for that device or component.

4.5 TEST DURATION

For any test pressure from 1.0 to 1.5 times the system design pressure, the total test time including initial pressurization, initial expansion, and time at test pressure, must not exceed 8 hours. If the pressure test is not completed due to leakage, equipment failure, etc., the test section should be de-pressurized, and allowed to “relax” for at least 8 hours before bringing the test section up to test pressure again.

4.6 PRE-TEST INSPECTION

Test equipment and the pipeline should be examined before pressure is applied to ensure that connections are tight, necessary restraints are in place and secure, and components that should be isolated or disconnected are isolated or disconnected. All low-pressure filling lines and other items not subject to the test pressure should be disconnected or isolated.

4.7 RELIEVING AIR FROM PIPELINE

AIR SHOULD BE VENTED FROM ALL HIGH SPOTS IN THE PIPELINE BEFORE MAKING EITHER PRESSURE OR LEAKAGE TESTS. AUTOMATIC AIR RELEASE VALVES ARE RECOMMENDED. Compressed entrapped air causes difficulty in pumping to required pressure for strength tests. Furthermore, a pipeline may leak compressed air when it is actually water tight, and if this occurs during a leakage test it will cause erroneous results.

4.8 HYDROSTATIC TESTING

HYDROSTATIC PRESSURE TESTING IS PREFERRED AND IS STRONGLY RECOMMENDED. The preferred testing medium is clean water. The test section should be completely filled with the test medium, taking care to bleed off any trapped air. Venting at high points may be required to purge air pockets while the test section is filling. Venting may be provided by loosening flanges, or by using equipment vents. Re-tighten any loosened flanges before applying test pressure.

4.9 PNEUMATIC TESTING

WARNING: Pressure compressed air or any pressurized gas used as a test medium may present severe hazards to personnel in the vicinity of lines being tested. Extra personnel protection precautions should be observed when a gas under pressure is used as the test medium.

WARNING: Explosive Failure. Piping system rupture during pneumatic pressure testing may result in the explosive, uncontrolled movement of system piping, components, or parts of components. Keep personnel a safe distance away from the test section during testing.

Pneumatic testing should not be used unless the owner and the responsible project engineer specify pneumatic testing or approve its use as an alternative to hydrostatic testing. Pneumatic testing (testing with a gas under pressure) should not be considered unless one of the following conditions exists:

- The piping system is so designed that it cannot be filled with a liquid.
- The piping system service cannot tolerate traces of liquid testing medium.

The testing medium should be non-flammable and non-toxic. The test pressure should not exceed the maximum allowable test pressure for any non-isolated component in the test section.

Leaks may be detected using mild soap solutions (strong detergent solutions should be avoided), or other non-deleterious leak detecting fluids applied to the joint. Bubbles indicate leakage. After leak testing, all soap solutions or leak detecting fluids should be rinsed off the system with clean water.

4.10 HIGH-PRESSURE PROCEDURE

For continuous pressure rated pipe systems, the pressure in the test section should be gradually increased to not more than one-half of the test pressure, then increased in small increments until the required test pressure is reached. Test pressure should be maintained for 10 to 60 minutes, then reduced to the design pressure rating, and maintained for such time as required to examine the system for leaks.

4.11 LOW-PRESSURE PROCEDURE

For components rated for low pressure service the specified rated test pressure should be maintained for 10 minutes to one hour, but not more than one hour. **Test pressure ratings must not be exceeded.** Leakage inspections may be performed during this time. If the test pressure remains steady (within 5 percent of the target value) for the one-hour test time, no leakage is indicated. Pressure testing of gravity-flow sewer lines should be conducted in accordance with ASTM F1417, Standard Test Method for Installation Acceptance of Plastic Gravity Sewer Lines Using Low-Pressure Air.

4.12 INITIAL SERVICE TESTING

An initial service test may be acceptable when other types of tests are not practical, where leak tightness can be demonstrated by normal service, or when initial service tests of other equipment are performed. An initial service test may apply to systems where isolation or temporary closures are impractical, or where checking out pumps and other equipment affords the opportunity to examine the system for leakage prior to full-scale operations.

4.13 TEST PROCEDURE

The piping system should be gradually brought up to normal operating pressure, and held at operating pressure for at least 10 minutes. During this time, joints and connections should be examined for visual evidence of leakage.

4.14 NON-TESTABLE SYSTEMS

Some systems may not be suitable for pressure testing. These systems may contain non-isolatable components, or temporary closures may not be practical. Such systems should be carefully inspected during and after installation. Inspections such as visual examination of joint appearance, mechanical checks of bolt or joint tightness, and other relevant examinations should be performed.

5.0 REPAIRS TO DAMAGED PIPE

Repair situations may arise if a polyethylene pipe has been damaged. Damage may occur during shipping and handling, during installation, or after installation. Damage may include scrapes or abrasions, breaks, punctures, kinks, or emergency squeeze-off. Permanent repair usually involves removing and replacing the damaged pipe or fitting. In some cases, temporary repairs may restore sufficient serviceability and allow time to schedule permanent repairs in the near future. IN ANY EVENT, ALL DAMAGED MATERIAL MAY BE REPLACED OR REPAIRED BY METHODS AUTHORIZED BY THE

ENGINEER.

5.1 DAMAGE ASSESSMENT

Damaged pipe or fittings should be inspected and evaluated. Pipe, fittings, fabrications or structures with excessive damage should not be installed. Damage that occurs after installation may require that the damaged pipe or component be removed and replaced.

WARNING: Scrapes or gouges in pressure pipe cannot be repaired by filling in with extrusion or hot air welding. The damaged section should be removed and replaced.

WARNING: Improperly made fusion joints cannot be repaired.

Improper butt fusions must be cut out and re-done from the beginning. Poorly joined socket or electrofusion fittings must be removed and replaced. Poorly joined saddle fittings must be removed by cutting out the main pipe section, or, if the main is undamaged, made unusable by cutting the branch outlet or chimney off the saddle fitting, and installing a new saddle fitting on a new section of main.

WARNING: Broken or damaged fittings cannot be repaired and, as such, should be removed and replaced.

WARNING: Kinked pipe must not be installed and cannot be repaired. It must be removed and replaced.

WARNING: Pipe damaged during an emergency squeeze-off cannot be repaired. Squeeze-off damaged pipe must be removed and replaced.

Safety and Field Precautions:

1. **WARNING:** Treat electrical tools as potential sources of ignition and follow standard safety procedures for working in explosive atmospheres.

2. **WARNING:** Only properly trained and qualified personnel should make fusions.

3. **WARNING:** Wear suitable gloves and eye protection.
4. **WARNING:** Temperature of fusion tools should be checked to be sure that they conform to the recommended operating temperature range.

5. **WARNING:** When breaking down bulk packs, take care to stand clear of pipe while strapping is being cut. Coiled HDPE pipe may contain energy as in a spring. Both the straps and the pipe may spring outward when the strap is cut and could cause severe injury. All safety precautions and proper equipment is required.

6. **WARNING:** Before cutting coiled pipe, restrain both sides of cut. Pipe is under tension. Unrestrained pipe can spring back forcibly while being cut and could cause personal injury.

7. **WARNING:** Understand and follow all equipment manufacturer's recommendations and guidelines.

8. **WARNING:** Properly made heat fusion joints do not leak. An improperly made joint that leaks when pressurized may precede a catastrophic event that may result in violent or dangerous pipe movement, a sudden release of the system's pressurized contents, and the potential for personal injury. All faulty joints must be cut out and replaced using approved fusion procedures, after the system has been safely depressurized. Stay clear of leaking, faulty joints until the system has been fully depressurized.

5.2 HEATING TOOL MAINTENANCE

Clean heater adaptors carefully before and after each fusion. Remove any residual polyethylene using a clean non-synthetic cloth. Never use metal objects to clean heater adaptors because they can damage the surface.

The heating tool temperature recommendations shown in this bulletin represent the temperature on the surface of the heater adaptors that actually contact the pipe or fitting. This temperature should be monitored daily to ensure compliance with recommendations.

The operator can usually expect the tool thermometer to indicate a higher temperature than specified in order to achieve the correct surface temperature. In addition, the operator will normally encounter variations in heater adaptor temperature due to different adaptor configurations. In these cases, the adaptor having the lower temperature should be set at the recommended temperature.

6.0 FUSION PROCEDURES

6.1 SOCKET FUSION

WARNING: Understand and follow all equipment manufacturers' recommendations and guidelines.

Equipment:

1. Pipe or tubing cutter
2. Cold ring
3. Depth gauge
4. Chamfering tool
5. Heating tool
6. Female and male heater adaptors
7. Fitting puller
8. Clean non-synthetic cloth

Procedures:

1. Cut the pipe squarely with a pipe or tubing cutter.
2. Chamfer pipe using a chamfering tool.
3. Clean the end of the pipe with a clean, non-synthetic cloth.
4. Install the depth gauge and cold ring. Remove depth gauge once cold ring is secured. Ensure pipe is sufficiently round once cold ring is installed.
5. Place a fitting puller on couplings, caps and reducers on 2-inch IPS through 4-inch IPS.
6. Check the heater adaptor faces for proper joining temperature 500 degrees F (± 10 degrees F).
7. Place the fitting on the tool and then the tool on the pipe. Push the tool, pipe and fitting together with even pressure.
8. When the fitting is against the tool and the tool against the cold ring, begin the heating cycle shown in Table 3.
9. When you have heated for the proper cycle time, remove the fitting from the tool with a quick snap action. Then remove the tool from the pipe in the same way.
10. Quickly inspect the melt pattern on the pipe and fitting. If an incomplete pattern is obtained, repeat steps 1-9 using a longer heating cycle and new fitting.
11. Within 3 seconds, carefully line up and push the fitting onto the pipe until it bottoms against the cold ring on the pipe. Do not twist or rotate the fitting.
12. Hold the joint firmly together without movement for the recommended holding time shown in table below. After an additional 3 minutes, release the cold ring and fitting puller.
13. Inspect the entire circumference of the fused joint to be sure there are no open gaps in the pipe to fitting juncture, and that the melt is pressed against the coupling all the way around. If a gap is found or the joint is not aligned properly, cut it out and repeat the procedure. See Figure A for a properly made socket fusion joint. Only accept joints that meet these requirements. Never allow a questionable joint to be installed.
14. Wait an additional 10 minutes prior to pressure testing or burial.

SOCKET FUSION TIME CYCLES		
PIPE SIZE	**HEATING TIME** (sec)	**HOLDING TIME** (sec)
¾" IPS	12	30
1" IPS	15	40
1¼" IPS	18	40
1½" IPS	20	40
2" IPS	24	40
3" IPS	28	50
4" IPS	32	50

Table 3



Figure A

Correctly Made Socket Fusion Joint

Cold Weather Considerations (Below 55°F):

- Carefully remove (by light tapping or scraping) the ice and frost from the fusion areas and the areas to be clamped. Otherwise, ice will melt when exposed to the heating tool and spot chill the polyethylene. This could cause incomplete fusion.
- If possible, store fittings at room temperature (such as in truck cab) prior to use. This will reduce fitting contraction and make placing fitting on heater adaptor easier.

- Cold weather also causes pipe contraction that can result in a loose or slipping cold ring. For best results, clamp one cold ring in its normal position behind the depth gauge. Place shim material (i.e., a piece of paper or rag) around the inside diameter of a second cold ring and clamp this cold ring directly behind the first cold ring to prevent slippage.
- Shield the heating tool and fusion area from the wind, snow and freezing rain.
- Ensure heater adaptor faces maintain a temperature of 500 degrees F (±10 degrees F).
- The length of cycle necessary to obtain a complete melt pattern will depend not only on the outdoor temperature, but also on wind conditions, pipe contraction and operator technique. The maximum heating cycle times shown in Table 4 should be used as a starting point for determining the exact heating cycle time for the particular installation conditions.

Determining the exact heating cycle time can be accomplished by making a test melt pattern on a piece of cold scrap pipe. If the initial melt pattern is incomplete, try a 5-second longer cycle on another cold piece of scrap pipe. Continue this process until a complete melt pattern is obtained. Avoid cycles in excess of that required to achieve a good melt pattern.

Once the optimum heating cycle is established, begin fusion by placing the female adaptor on the pipe. Start counting the heating cycle once the pipe is completely seated. The socket fitting should then be pushed on the male adaptor. There should be no problem with melt development in the fitting since the fit will be snug.

Work quickly once pipe and fitting have been removed from the heating tool so that melt heat loss is minimized. But still take time (2-3 seconds) to inspect both melt patterns.

WARNING: Understand and follow all equipment manufacturer's recommendations and guidelines.

6.2 BUTT FUSION: REFERENCE PPI'S TR-33 GENERIC BUTT FUSION PROCEDURE FOR FIELD JOINING OF PE PIPE

The most widely used method for joining individual lengths of large diameter polyethylene pipe is by heat fusion of the pipe butt ends, as illustrated in Figure B. This technique, which precludes the need for specially modified pipe ends or couplings, produces a permanent, economical and flow-efficient connection. Field-site butt fusions may be made readily by trained operators using specially developed butt fusion machines that secure and precisely align the pipe ends for the fusion process.

Heater Surface temperature	400-450 degrees F (204-232 degrees C)
Interfacial Pressure	60-90 psi (4.14-6.21 bar)

The six steps involved in making a butt fusion joint are:

1. Securely fasten the components to be joined
2. Face the pipe ends
3. Align the pipe profile
4. Melt the pipe interfaces
5. Join the two profiles together
6. Hold under pressure



Figure B

Correctly Made Butt Fusion Joint

6.2.1 SECURE

Each component that is to be fused must be held in position so that it will not move unless it is moved by the clamping device.

6.2.2 FACE

The pipe ends must be faced to establish clean, parallel mating surfaces. Most, if not all, equipment manufacturers have incorporated the rotating planer block design in their facers to accomplish this goal. Facing is continued until a minimal distance exists between the fixed and movable jaws of the machine and the facer is locked firmly and squarely between the jaws. This operation provides for a perfectly square face, perpendicular to the pipe centerline on each pipe end and with no detectable gap.

6.2.3 ALIGN

The pipe profiles must be rounded and aligned with each other to minimize mismatch (high-low) of the pipe walls. This can be accomplished by adjusting the clamping jaws until the outside diameters of the pipe ends match. The jaws must not be loosened or the pipe may slip during fusion. The minimal distance requirement between fixed and moveable jaws mentioned above allows the pipe to be rounded as close as possible to the joint area. The closer to the joint area that the pipe can be clamped, the better control the operator has in properly aligning the pipe.

6.2.4 MELT

Heating tools that simultaneously heat both pipe ends are used to accomplish this operation. These heating tools are normally furnished with thermometers to measure internal heater temperature so the operator can monitor the temperature before each joint is made. However, the thermometer can be used only as a general indicator because there is some heat loss from internal to external surfaces, depending on factors such as ambient temperatures and wind conditions. A pyrometer or other surface-tem-

perature-measuring device should be used periodically to insure proper temperature of the heating tool face. Additionally, heating tools are usually equipped with suspension and alignment guides that center them on the pipe ends. The heater faces that come into contact with the pipe should be clean, oil-free and coated with a nonstick coating as recommended by the manufacturer to prevent molten plastic from sticking to the heater surfaces. Remaining molten plastic can interfere with fusion quality and must be removed according to the tool manufacturer's instructions.

Plug in the heater and bring the surface temperatures up to the temperature range (400-450 degrees F) (204-232 degrees C). Install the heater in the butt fusion machine and bring the pipe ends into full contact with the heater. To ensure that full and proper contact is made between the pipe ends and the heater, the initial contact should be under moderate pressure. After holding the pressure very briefly, it should be released without breaking contact. Continue to hold the components in place, without force, while a bead of molten polyethylene develops between the heater and the pipe ends. When the proper bead size (see Table 4) is formed against the heater surfaces, the heater should be removed.

BEAD SIZE FOR PIPE SIZES	
PIPE SIZE	**SUGGESTED BEAD SIZE**
1¼" and smaller	1/32" – 1/16"
1¼" – 3"	1/16"
3" – 8"	1/8" – 3/16"
8" – 12"	3/16" – ¼"
12" – 24"	¼" – 7/16"
24" – 36"	7/16"
36" – 63"	9/16"

Table 4

6.2.5 JOINING

After the pipe ends have been heated for the proper time, the heater tool is removed and the molten pipe ends are brought together with sufficient force to form a double rollback bead against the pipe wall. The fusion force is determined by multiplying the interfacial pressure, 60-90 psi (4.14-6.21 bar),

by the pipe area.
For manually operated fusion machines, a torque wrench may be used to accurately apply the proper force. For manual machines without force reading capability of a torque wrench, the correct fusion joining force is the force required to roll the melt beads over to the pipe surface during joining. For hydraulically operated fusion machines, the fusion force can be divided by the total effective piston area of the carriage cylinders to give a hydraulic gauge reading in psi. The gauge reading is theoretical; the internal and external drag need to be added to this figure to obtain the actual fusion pressure required by the machine.

6.2.6 HOLD

The molten joint must be held immobile under pressure until cooled adequately to develop strength. The designs of the machines vary from a lever-arm-assist to manual or automatic locking devices that assist the operator to accomplish this step. The proper cooling time is until the joint is cool to the touch. Allowing proper times under pressure for cooling prior to removal from the clamps of the machine is important in achieving joint integrity. Do not apply water, wet cloths or similar items to shorten cool time. The pulling, installation or rough handling of the pipe should be avoided for an additional 30 minutes.

6.2.7 VISUAL INSPECTION

Visually inspect and compare the joint against a properly made joint. Visually, the width of butt fusion beads should be approximately two to two and one-half times the bead height above the pipe and the beads should be rounded and uniformly sized all around the pipe circumference. The v-groove between the beads should not be deeper than half the bead height above the pipe surface. When butt fusing to molded fittings, the fitting-side bead may display shape irregularities such as minor indentations, deflections and non-uniform bead rollover from molded part cooling and knit lines. In such cases, visual evaluation is based mainly on the size and shape of the pipe-side bead. Visually unacceptable joints should be cut out and re-fused using the correct procedure.

Visually mitered (angled, off-set) joints should be cut out and re-fused. Coiled pipe is available in sizes through 6-inch IPS. Coiling may leave a curvature in some pipe sizes that must be addressed in the preparation of the butt fusion process. There are several methods to address this situation:

Straighten and re-round coiled pipe before the butt fusion process. ASTM D2513 requires field re-rounding of coiled pipe larger than 3-inch IPS.

If there is still curvature present, if possible, install the pipe ends in the machine in an "S" configuration with print lines approximately 180 degrees apart in order to help gain proper alignment and help produce a straight joint.

If curvature is still present, another option is to install a straight piece of pipe between the two coiled pipes.

Every effort should be made to make the joint perpendicular to the axis of the pipe.

WARNING: Understand and follow all equipment manufacturer's recommendations and guidelines.

6.2.8 SADDLE FUSION JOINING PROCEDURE OF POLYETHYLENE (PE) PIPE MAINS 1.25-INCH IPS AND LARGER

This procedure is for use only in conjunction with PPI's Technical Report TR-41, which more fully explains the background, scope and purposes of the PPI generic saddle fusion procedure, resuting in Figure C. This procedure has not been qualified for use with any particular piping product or any combination of piping products and must be qualified for use in accordance with DOT 49 CFR Part 192.283 prior to its use in field joining of PE gas pipe.



Figure C

Standard Saddle/Sidewall Fusion Joint

This procedure can be used for HDPE pipe and fittings that have a grade designation (in accordance with ASTM D3350) of PE 3408/3608/4710. The pipe and fitting nominal melt index range would be .07-.20 g/10 min. This procedure is intended only as a guide because heating times can vary under different ambient conditions. Please refer to table below for saddle fusion parameters.

GENERIC SADDLE FUSION PARAMETERS	
Heater Adapter Surface Temperature	500°±10°F
Initial Interfacial Pressure	60±6 psi
Heat Soak Interfacial Pressure	0 psi
Fusion Interfacial Pressure	30±3 psi
Total Heating Time on Main – 1¼-inch IPS Pressure Main	15 seconds max.
Total Heating Time on Main – 2-inch IPS Pressure Main	25-35 seconds max.
Total Heating Time on non-pressure 1¼" IPS, 2-inch IPS mains, and on pressure or non-pressure 3-inch IPS and larger mains.	Look for a 1/16-inch bead around the fitting base.

Table 5

Note: *Look in the lower right hand corner of the fitting label for the forces required for that fitting (Initial Heat Force / Heat Soak Force / Fusion Force) (example 180/0/90)*

6.2.9 DEFINITIONS

Initial Heat (Bead-up)—The heating step used to develop an initial melt bead on the main pipe.

Initial Heat Force (Bead-up force)—The force (pounds) applied to establish an initial melt pattern on the main pipe. The Initial Heat Force is determined by multiplying the fitting base area (square inches) by the initial interfacial pressure (pounds per square inch).

Heat Soak Force—The force (pounds) applied after an initial melt pattern is established on the main pipe. The Heat Soak Force is the minimum force (essentially 0 pounds) that ensures that the fitting, heater and main stay in contact with each other.

Fusion Force—The force (pounds) applied to establish the fusion bond between the fitting and the pipe. The Fusion Force is determined by multiplying the fitting base area (square inches) by the fusion interfacial pressure (pounds per square inch).

Total Heat Time—A time that starts when the heater is placed on the main pipe and initial heat force is applied and ends when the heater is removed.

Cool Time—The time required to cool the joint to approximately 120 degrees F (49 degrees C). The fusion force must be maintained for 5 minutes on 1 ¼-inch IPS or 10 minutes for all other main sizes, after which the saddle fusion equipment can be removed. The joint must be allowed to cool undisturbed for an additional 30 minutes before tapping the main or joining to the branch outlet.

Interfacial Area for rectangular base fittings—The major width times the major length of the saddle base, without taking into account the curvature of the base or sides, minus the area of the hole in the center of the base.

Interfacial Area for round base fittings—The radius of the saddle base squared times π (3.1416), without taking into account the curvature of the base or sides, minus the area of the hole in the center of the base.

Fitting Label—The initial heat force, heat soak force and the fusion force will be listed in the lower right-hand corner of the fitting label for all saddle fusion fittings. This will eliminate the need to calculate the fusion forces in the field. (example: 180/0/90)

6.2.10 PREPARATION

This procedure requires the use of a saddle fusion tool. This tool must be capable of holding and supporting the main, rounding the main for good alignment between the pipe and fitting, holding the fitting, and applying and

indicating the proper force during the fusion process.

1. Install the saddle fusion tool on the main according to the manufacturer's instructions. The tool should be centered over a clean, dry location where the fitting will be fused. Secure the tool to the main. A main bolster or support is recommended under the pipe on 6-inch IPS and smaller main pipe sizes.
2. Abrade the main, where the fitting will be joined, with a 50- to 60-grit utility cloth until a thin layer of the pipe surface is removed. The abraded area must be larger than the area covered by the fitting base. After abrading, brush residue away with a clean, dry cloth.
3. Abrade the fusion surface of the fitting with 50- to 60-grit utility cloth; remove all dust and residue. Insert the fitting in the saddle fusion tool loosely. Using the saddle fusion tool, move the fitting base against the main pipe and apply about 100-pound force to seat the fitting. Secure the fitting in the saddle fusion tool.

6.2.11 HEATING

1. The heater must be fitted with the correct heater adapters. The temperature of the heater adapter fusion surfaces must be 490 to 510 degrees F.
2. Place the heating tool on the main centered beneath the fitting base. Immediately move the fitting against the heater faces, apply the initial heat force (see fitting label), and start the heat time. Apply the initial heat force until melt is first observed on the crown of the pipe main (initial heat is the term used to describe the initial heating (bead-up) step to develop a melt bead on the main pipe and usually is 3 to 5 seconds) and then reduce the force to the heat soak force (Bead-up force) (see fitting label). Maintain the heat soak force until the total heat time is complete.
3. At the end of the Total Heat Time, remove the fitting from the heater and the heater from the main with a quick snapping action. Quickly check for an even melt pattern on the pipe main and fitting heated surfaces (no unheated areas).
4. Total Heat Time ends:

a. When the Total Heating Time expires for a pressurized 1¼-inch IPS or 2-inch IPS main, or

b. When a melt bead of about 1/16-inch is visible all around the fitting base for a 1¼-inch IPS or 2-inch IPS non-pressurized main, or a larger pres-

surized or non-pressurized main.

6.2.12 FUSION AND COOLING

1. Whether or not the melt patterns are satisfactory, press the fitting onto the main pipe very quickly (within 3 seconds) after removing the heater and apply the Fusion Force (see the fitting label). Maintain the Fusion Force on the assembly for 5 minutes on 1¼-inch IPS and for 10 minutes on all larger sizes, after which the saddle fusion equipment may be removed. (Fusion force adjustment may be required during cool time, but never reduce the fusion force during cooling.)
2. Cool the assembly for an additional 30 minutes before rough handling or tapping the main. (If step 7 melt patterns were not satisfactory or if the fusion bead is unacceptable, cut off the saddle fitting above the base to prevent use, relocate to a new section of main, and make a new saddle fusion using a new fitting.)

These procedures are based on tests conducted under controlled ambient temperature conditions. Environmental conditions on a job site could affect heating and cooling times. Regardless of job site conditions or ambient temperature, the prescribed heating tool temperature is required. Do not increase or decrease the heating tool temperature.

6.3 HEAT FUSION QUALIFICATION

Approved joining methods are heat fusion, electrofusion, flanging, transition fittings and approved mechanical fittings. Persons performing heat fusion shall be qualified in accordance with the manufacturer's recommended fusion joining procedures. Electrofusion and mechanical joints shall be made in accordance with the fitting manufacturer's instructions, according to Table 6.

ASTM TEST METHOD		
TEST	**ASTM NO.**	**REQUIREMENT**
Short term rupture strength (hoop stress)	D1599	Ductile Failure
Test for tensile properties of plastics	D638	> 25%
Time to failure under constant internal pressure (1600) psi hoop Stress	D1598	1000 hours
Knock-off resistance of saddle fusions	F905	No joint failure

Table 6

Procedures for Heat Qualification

1. Prepare fusion joint as described previously in the "Fusion Procedures" section of this manual. Allow joint to cool one hour.
2. Compare the outside appearance of joint with photograph illustrating the correct procedure.
3. Section the joint axially into at least three straps (1-inch wide) to expose the bond area. Leave approximately 8-inch of pipe on both sides of the joint.
4. Inspect the fusion to verify:

SOCKET FUSION	BUTT FUSION	SIDEWALL FUSION
• complete melt development • no gaps or voids • external melt pressed against coupling • bond length • alignment	• complete and uniform melt beads • melt bead rolled back to pipe • proper alignment • complete facing • visually mitered (angled, off-set) joints should be cut out and re-fused.	• complete pipe melt pattern • complete melt development around base of fitting • fitting placement in pipe melt pattern • properly prepared pipe surface

5. Using the sectioned joint from step 3, perform the bend test as shown in Figures D, E and F. Hold the ends of the strap in the bent position and inspect the fusion area. If there are any gaps or voids evident, the joint should be rejected. The sectioned joint must be free of gaps or voids. An alternative method is to examine the joint by ultrasonic inspection and find no flaws that would cause failure.
6. If the joint is not representative of the photographs shown in this guide, determine the incorrect procedure step taken and make another joint.

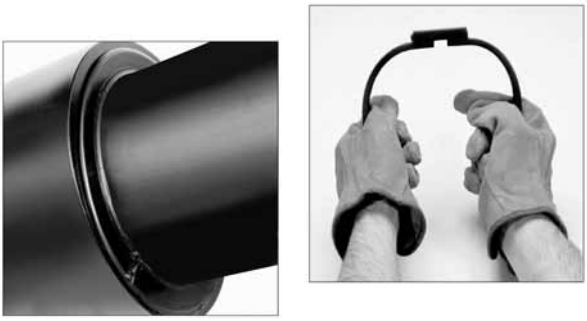


Figure D

Correctly Made Socket Fusion Joint



Figure E

Correctly Made Butt Fusion Joint



Figure F

Correctly Made Saddle Fusion Joint

7.0 SQUEEZE-OFF

WARNING: Understand and follow all equipment manufacturer's recommendations and guidelines.

PE gas pipe manufactured to ASTM D2513 is suitable for squeeze-off; however, squeeze-off practices are not limited to gas applications. Squeeze-off is applicable to PE 3408/3608/4710 pressure pipe. JM Eagle™ Municipal & Industrial Water or Sewer Pipe is suitable to proper squeeze-off procedures.

Effective flow control is a basic requirement in piping systems. This is accomplished with the JM Eagle™ Municipal & Industrial Water or Sewer Pipe in two ways. The primary method of flow control should be those installed system valves that are available. Secondly, squeeze-off using suitable equipment can be used to control flow or isolate a section of pipe. Also, squeeze-off is frequently used to control flow for emergency repairs or during certain pipeline or branch extension operations. Squeeze-off is applicable to sizes up to 16 inches and up to 100-psig internal pressures. Currently, there is no demonstrated experience with larger sizes or higher pressures.

This section describes equipment and explains proper procedures and precautions for effectively and safely squeezing off JM Eagle™ Municipal & Industrial Water or Sewer Pipe for flow control. The pressure rating of the pipe is retained if the recommended procedures and equipment are used.

7.1 TOOLS

Squeeze units suitable for use on JM Eagle™ Municipal & Industrial Water or Sewer Pipe consist of steel bars and a mechanical or hydraulic means of forcing the bars together. These units are designed to squeeze JM Eagle™ Municipal & Industrial Water or Sewer Pipe until the inside surfaces meet. This adequately controls flow although a leak tight seal is not always obtained. A positive locking mechanism should be available.

CAUTION: To assure flow control, yet prevent damage to the pipe, tools have mechanical stops to limit the minimum gap between the squeeze bars. Recommended minimum gaps between the squeeze bars for JM Eagle™ Municipal & Industrial Water or Sewer Pipe are based on the formula:

$$\text{min.gap} = (2)(\text{max wall thickness})(0.7)$$

In addition to observing the minimum gap distances between bars, the bars themselves should be rounded to prevent pipe damage.

The user also may want to consult the "Standard Guide for Squeeze-Off of Polyolefin Gas Pressure Pipe and Tubing," Designation F1041, issued by the ASTM.

7.2 PRECAUTIONS FOR SQUEEZE-OFF

- Certain precautions should be taken to prevent damage to the squeeze tools or to JM Eagle™ Municipal & Industrial Water or Sewer Pipe during squeeze-off in recognition of the large forces required for flow control, particularly in large main sizes. Damage to the pipe from improper squeeze-off procedures may cause eventual failure.
- Make certain the pipe is centered and squared in the squeeze tool. It is important that the pipe be free to spread as it flattens. Failure to do so may prevent flow control or result in damage to the pipe or the tool.
- Locate the squeeze point at least three pipe diameters away from the nearest fitting or butt-fused joint. Failure to do so may result in damage to the fittings or joints.
- Squeeze-off JM Eagle™ Municipal & Industrial Water or Sewer Pipe only once in the same place. It is possible for scale or other metal particles contained within the flow to become trapped at the squeeze point. A second squeeze in the immediate area of the first could force these particles to penetrate into or through the pipe wall.
- Always use a squeeze tool with gap stops to limit the amount of squeeze and use the proper gap stops for the pipe size being squeezed. Using smaller gap stops or otherwise over-squeezing the pipe may result in dam-

age to the pipe or tool.

- A leak tight flow control will not always be obtained through squeeze-off. If more complete flow control is required, a valve should be used or additional squeeze tools used in series to supplement each other.
- Close the squeeze tools until flow is controlled or until the gap stops make contact. Do not use extension levers or "cheater bars," or otherwise abuse the tools in trying to effect a squeeze-off. Such abuse may overstress the tool and result in failure of the tool and release of the flow. Any damaged tool should be repaired or replaced before use for squeeze-off of JM Eagle™ Municipal & Industrial Water or Sewer Pipe.
- Squeeze JM Eagle™ Municipal & Industrial Water or Sewer Pipe slowly or use momentary pauses in the operation to allow for pipe relaxation and reduction in resistance to closure. This is particularly helpful in larger diameters or when the pipe becomes stiffer in cold weather.
- A release rate of 0.5 inches/minute or less is recommended by ASTM F1041 based on a GRI/Battelle Study, "Effect of Squeeze-Off Practices and Parameters on PE Gas Pipe Damage."*

** Twelfth Plastic Fuel Gas Pipe Proceedings, pp. 228-242 (1991).*

NOTES:

NOTES:



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Leaders in Sealing Integrity

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NEW - RANGER II® GKO-XL

Segments can support outside diameters up to 98.43". All Ranger II® casing spacers including Ranger II® GKO-XL are cost effective, completely non-metallic, being made entirely of polypropylene and can isolate the carrier pipe for a variety of applications. This includes being able to design Ranger II® casing spacers into a cathodic protection system.



APPLICATION

Road crossing with casing pipe Carbon Steel and FRP, carrier pipe pre-insulated Carbon Steel and FRP.

TECHNICAL DESCRIPTION

Carrier Pipe: Carbon Steel, FRP

Size of Carrier Pipe: DN 1200mm CS pipe - DN 750mm FRP pipe (pre-insulated)

Casing Pipe: FRP

Size of Casing Pipe: FRP casing pipe I.D. 1520mm, FRP casing pipe size I.D.



FEATURES

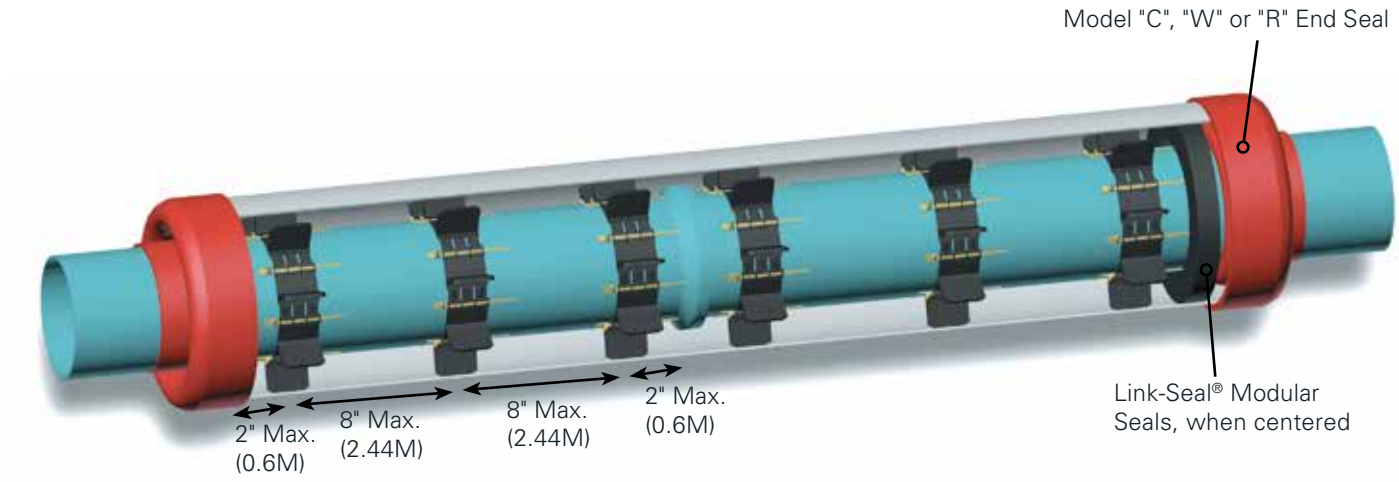
- All non-metallic, made entirely of polypropylene which means, no nuts, bolts, washers or any other metal parts to corrode or degrade over time.
- Designed for carrier pipe diameters from 0.91" (23mm) to 98.43" (2,500mm) in diameter.
- Segmented pieces - small inventory may be used to accommodate a large variety of pipe styles, types and diameters. No extra trips from job site to warehouse for additional parts.
- Easy assembly. Simply slide the segments together and cinch tight with the patented Slide-Lock connecting system.
- Wide variety of runner heights to allow numerous options for pipe positioning within the casing.
- Runner variations may be used to adjust for grade.
- Will accommodate small conduit attachment for communications or electrical cable.
- Medi-L and GKO-XL segments, 2 molded runners per segment.
- Segment band and runners molded as one piece.
- Manufactured from UV resistant polypropylene.
- High impact strength, 1.8 ft. lbs./inch (0.96 joules/cm)
- Excellent compressive strength, 4,000 psi (281 kg/square cm)
- 635 Volts/Mil. Dielectric Strength.
- Wide temperature range, -22˚ to +212˚ F. (-30˚ to +100˚C.)
- Eliminates sand or grout fill.
- No special tools required for installation.
- Low coefficient of friction for ease of installation.



Weight Comparison 9.05" x 17.25" CR Application	
Ranger II® Non-Metallic 2.79 lbs.	Model S8G-2 Stainless Steel 15 lbs.
Ranger II® Advantage Installer and Shipping Costs	

TYPICAL INSTALLATION

Based on 20' (6.1M) carrier pipe segments in a casing of not more than 400' (121.9M). Consult Garlock for longer casings and for concrete pipe. Use 2 spacers/length of pipe for 13' (4.0M) sewer pipe segments.



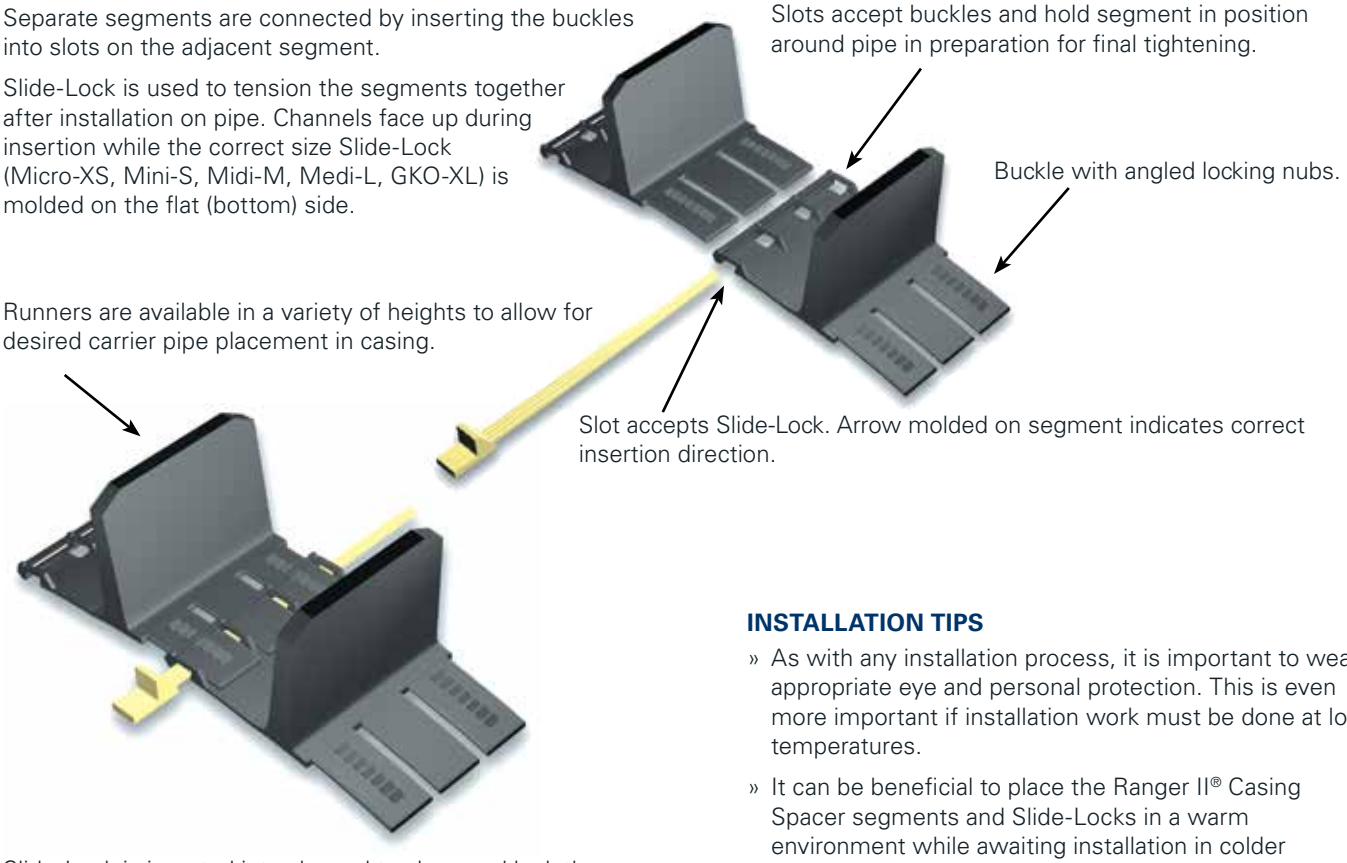
Not drawn to scale

For sizing application to exactly center or for use with LINK-SEAL® Modular Seals please contact Garlock at 1-800-423-2410 or visit www.garlock.com

COMPONENT PARTS - INSTALLATION

Separate segments are connected by inserting the buckles into slots on the adjacent segment.

Slide-Lock is used to tension the segments together after installation on pipe. Channels face up during insertion while the correct size Slide-Lock (Micro-XS, Mini-S, Midi-M, Medi-L, GKO-XL) is molded on the flat (bottom) side.



Slide-Lock is inserted into channel to close and lock the segments together. Slide-Lock removal and re-insertion will cinch the segments together for final tightening against carrier pipe.

INSTALLATION TIPS

- As with any installation process, it is important to wear appropriate eye and personal protection. This is even more important if installation work must be done at low temperatures.
- It can be beneficial to place the Ranger II® Casing Spacer segments and Slide-Locks in a warm environment while awaiting installation in colder climates.
- During the installation process, no matter what the temperature, it is essential that the Slide-Locks be supported by the carrier pipe to eliminate the possibility of bending the Slide-Locks during insertion.
- Under hot installation conditions, it is better to allow the product to age a couple of hours at ambient temperature prior to assembly.

WEIGHT AND SPACING GUIDELINES

Ranger II® Casing Spacers Skid Height Spacing: (Maximum Distance Between Casing Spacer)		
Skid Height	0.65" (16.5mm) to 1.97" (50mm)	8' (feet)
Skid Height	2.56" (65mm) to 3.54" (90mm)	6' (feet)
Skid Height	3.94" (100mm) and up	5' (feet)

INSTALLED ON VARIOUS TYPES:

- PVC Water
- PVC Sewer
- HDPE
- Steel
- Ductile Iron

RANGER II® CASING SPACERS SKID HEIGHT MAX LOAD PER SPACER

Ranger II® Casing Spacers Skid Height Spacing: (Maximum Distance Between Casing Spacer)		Micro-XS	Mini-S	Midi-M	Medi-L	GKO-XL
Skid Height	0.65" (16.5mm) to 1.97" (50mm)	175 lb.	500 lb.	1,250 lb.	3,300 lb.	5,000 lb.
Skid Height	2.56" (65mm) to 2.95" (75mm)	135 lb.	400 lb.	1,000 lb.	2,600 lb.	4,000 lb.
Skid Height	3.54" (90mm) to 3.94" (100mm)	120 lb.	350 lb.	875 lb.	2,300 lb.	3,500 lb.
Skid Height	4.92" (125mm) to 5.91" (150mm)		250 lb.	625 lb.	1,650 lb.	2,500 lb.
Skid Height	6.89" (175mm)			500 lb.	1,400 lb.	



RANGER II® - MICRO-XS FOR 0.91 - 3.07" (23 - 78MM) DIAMETER CARRIER PIPE BAND WIDTH = 2.13" (54MM)

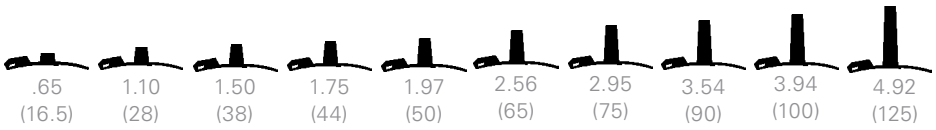
Carrier Pipe O.D. Range Inches (mm)	Number of Segments	Runner Height Options Inches (mm)
0.91 - 1.21 (23 - 31)	3	
1.21 - 1.54 (31 - 39)	4	
1.54 - 1.85 (39 - 47)	5	
1.85 - 2.24 (47 - 57)	6	
2.24 - 2.48 (57 - 63)	7	
2.48 - 3.07 (63 - 78)	8	



Verify that Slide-Locks match segment size by checking to ensure the segment name (Mini) matches the name molded on bottom of the Slide-Lock. **Note: Micro & Mini segments both use the Mini Slide-Lock.**

RANGER II® - MINI-S FOR 2.61 - 5.51" (66 - 140MM) DIAMETER CARRIER PIPE BAND WIDTH = 3.15" (80MM)

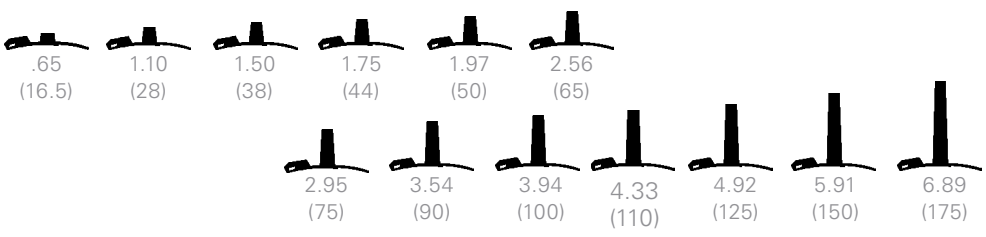
Carrier Pipe O.D. Range Inches (mm)	Number of Segments	Runner Height Options Inches (mm)
2.61 - 3.26 (66 - 83)	4	
3.26 - 3.93 (83 - 100)	5	
3.93 - 4.57 (100 - 116)	6	
4.57 - 5.51 (116 - 140)	7	



Verify that Slide-Locks match segment size by checking to ensure the segment name (Mini) matches the name molded on bottom of the Slide-Lock. **Note: Micro & Mini segments both use the Mini Slide-Lock.**

RANGER II® - MIDI-M FOR 5.51 - 16.65" (140 - 423MM) DIAMETER CARRIER PIPE BAND WIDTH = 5.12" (130MM)

Carrier Pipe O.D. Range Inches (mm)	Number of Segments	Runner Height Options Inches (mm)
5.51 - 6.89 (140 - 175)	4	
6.89 - 8.3 (175 - 211)	5	
8.3 - 9.68 (211 - 246)	6	
9.68 - 11.05 (246 - 281)	7	
11.05 - 12.45 (281 - 316)	8	
12.45 - 13.78 (316 - 350)	9	
13.78 - 16.65 (350 - 423)	10	



Verify that Slide-Locks match segment size by checking to ensure the segment name (Midi) matches the name molded on bottom of the Slide-Lock.

RANGER II® - MEDI-L FOR 16.77 - 25.98" (426 - 660MM) DIAMETER CARRIER PIPE BAND WIDTH = 6.87" (174MM)

Carrier Pipe O.D. Range Inches (mm)	Number of Segments	Runner Height Options Inches (mm)
16.77 - 20.00 (426 - 508)	4	
20.00 - 25.98 (508 - 660)	5	1.10 (28) 1.50 (38) 1.97 (50) 2.56 (65) 2.95 (75) 3.54 (90) 3.94 (100) 4.92 (125) 5.91 (150) 6.89 (175)

Verify that Slide-Locks match segment size by checking to ensure the segment name (Medi) matches the name molded on bottom of the Slide-Lock.

RANGER II® - GKO-XL FOR 25.98 - 98.43" (660 - 2500MM) DIAMETER CARRIER PIPE BAND WIDTH = 8.86" (225MM)

Carrier Pipe O.D. Range Inches (mm)	Number of Segments	Runner Height Options Inches (mm)
25.98 - 29.49 (660 - 749)	6	
29.49-33.62 (749-854)	7	
33.62-37.76 (854-959)	8	
37.76-42.01 (959-1067)	9	
42.01-47.20 (1067-1199)	10	
47.20-52.36 (1199-1330)	11	
52.36-56.69 (1330-1440)	12	
56.69-60.63 (1440-1540)	13	1.42 (36) 1.97 (50) 2.56 (65) 2.95 (75) 3.54 (90) 4.33 (110) 4.92 (125)
60.63-65.35 (1540-1660)	14	
65.35-70.87 (1660-1800)	15	
70.87-75.20 (1800-1910)	16	
75.20-80.39 (1910-2042)	17	
80.39-84.65 (2042-2150)	18	
84.65-89.37 (2150-2270)	19	
89.37-94.49 (2270-2400)	20	
94.49-98.43 (2400-2500)	21	

Verify that Slide-Locks match segment size by checking to ensure the segment name (GKO-XL) matches the name molded on bottom of the Slide-Lock.

SIZE YOUR INSTALLATION APPLICATION

All Ranger II® Casing Spacers require more than one segment to complete a spacer. In addition, all Ranger II® Casing Spacers are available with a number of different runner height options which are used to guarantee clearance of the mechanical joint, provide for options in carrier pipe positioning within the casing or to compensate for grade elevation adjustments. Following are examples on how to size Ranger II® Casing Spacers for various applications. **Detailed Ranger II® casing spacers weight & spacing guidelines on page 5. For exact centering and adjusting for grade elevation changes contact GPT.**

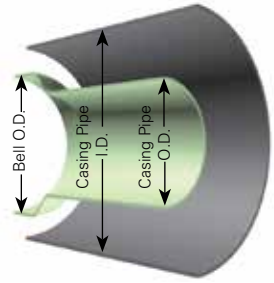
EXAMPLE - CENTERED & RESTRAINED WITH EQUAL LENGTH RUNNERS

20" Ductile Iron pipe (21.60" O.D. barrel & 28.63" O.D. bell) inside a 36" casing with a 0.375" wall thickness.

A. Find carrier pipe O.D. (21.60") from adjacent chart and choose the proper size and number of segments.

One spacer would require 5 - Medi-L segments.

B. Determine maximum runner height with equal length runners.



Casing I.D.	35.25"
Less Carrier Pipe O.D.	-21.60"
	13.65"
Less Space Allowance	-1.00"
	12.65"

Divide this number (12.65") by 2 to obtain the total maximum runner height = 6.325"

C. Choose a runner height of this value or less.

Solution: Use 5 - Medi-L (150) segments with runner heights of 5.91".

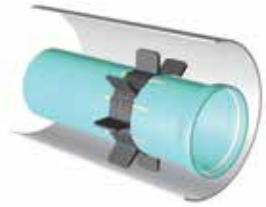
NOTE: This combination will restrain the pipe from flotation within the casing pipe by allowing only about 1.8" of clearance between the top runners and the casing I.D. This will center the carrier pipe within approximately 0.9" of exact center.

EXAMPLE - TO CLEAR THE BELL

(suggested minimum clearance is at least 0.8" (0.4" on both sides)

20" Ductile Iron pipe (21.60" O.D. barrel & 28.63" O.D. bell) inside a 36" casing with a 0.375" wall thickness.

Determine runner height. **(Clear Bell)**



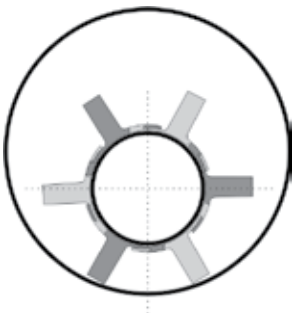
Bell O.D.	28.63"
Add 0.8" Clearance	+0.8"
	29.43"
Less Barrel O.D.	-21.60"
	7.83"

Divide this number (7.83") by 2 to obtain the minimum runner height to clear the bell = 3.92"

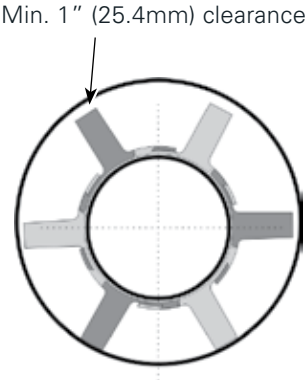
Choose a runner height between 3.92" and the maximum allowable runner height (6.32") determined in the above example.

Solution: Use 5 - Medi-L (100) segments with runner heights of 3.94".

Ordering Codes: See Back Page for Ordering Code Sequence.



Standard To Clear Bell



Centered / Restrained

For sizing application to exactly center or for use with LINK-SEAL® Modular Seals please contact Garlock at 1-800-423-2410 or visit www.garlock.com

NON-METALLIC CASING SPACER & END SEAL SPECIFICATIONS FOR CARRIER PIPE UP TO 98.43" O.D.

Molded non-metallic technology enables Ranger II® casing spacers to replace existing specified stainless steel casing spacers.

A. Casing Spacers

Upon installation of the steel pipe encasement, the contractor shall furnish and install a Ranger II® boltless casing spacer on the carrier pipe as described below. Casing spacers shall be spaced a maximum of eight (8)* feet apart along the length of the carrier pipe. Casing Spacers shall be used within two (2) feet of each end of the casing. For Bell Joints & other compression couplings, two additional spacers may be required per pipe joint. One spacer is required on either side of the pipe joint not to exceed 2ft from the joint itself. Wood skids are not an acceptable method of supporting the carrier pipe.

*Maximum spacing determined by skid height, reference table on page 4 for maximum spacing per skid height

1. Casing spacers shall be all non-metallic virgin polypropylene, molded in segments for field assembly without any special tools. Spacer segments shall be secured around carrier pipe by insertion of a Slide-Lock. The casing spacer polymer shall contain ultraviolet inhibitors and shall have a minimum compressive strength of 4,000 psi, 635 Volts/mil dielectric strength and impact strength of 1.8 ft-lbs./inch. Each casing spacer shall have full length, integrally molded skids extending beyond the bell or mechanical joint of the carrier pipe.

2. Spacers shall be at least as wide as listed below:

CARRIER PIPE DIAMETER INCHES (MM)	RANGER II® MODEL	WIDTH INCHES (MM)
0.91 to 3.07" (23 to 78)	Micro-XS	2.13" (54)
2.61 to 5.51" (66 to 140)	Mini-S	3.15" (80)
5.51 to 16.65" (140 to 423)	Midi-M	5.12" (130)
16.00 to 25.98" (406 to 660)	Medi-L	6.87" (174)
25.98 to 98.43" (660 to 2500)	GKO-XL	8.86" (225)

3. The casing spacers shall be the boltless/all non-metallic GPT Ranger II® Casing Spacers as manufactured by Garlock.

SPECIFIC MATERIAL CHART:

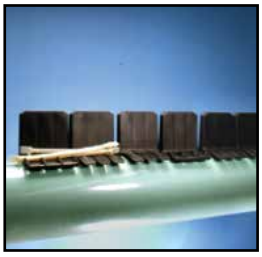
BAND/RUNNER SEGMENT UV RESISTANT POLYPROPYLENE	
SPECIFICATIONS Compressive Strength	**VALUE** 4,000 psi (281 kg/sq. cm)
Temperature	-22˚F to 212˚F (-30˚C to 100˚C)
Impact strength	1.8 ft. lb./in. (0.96 joules/cm)
Dielectric strength	635 volts/mil. min.
Color	Black
Liner	None

B. End Seals

After insertion of the carrier pipe into the casing, the ends of the casing shall be closed by installing 1/8" thick synthetic rubber end seals equal to the Garlock Model C, W or R end seal as manufactured by Garlock.

BASIC INSTALLATION PROCEDURE

Always wear protective safety glasses, especially in low temperatures.



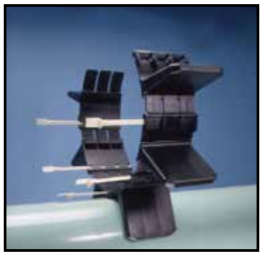
1. Size the Ranger II® casing spacer to make sure you have all the segments and Slide-Locks.



2. Take the segments and align the buckles. Insert the buckles 1/4 of the way into the slots. For GKO-XL position of the buckles (wedges) per element can be located in the table on following page.



3. Locate the directional arrows on the segment and insert Slide-Lock until the tip exits the end of the segment.



4. Continue the process from the previous step until all segments are put together. You're now ready to wrap the Ranger II® around the pipe.



5. Align the buckles and lock into place. Take the final Slide-Lock and slide into place.

NOTE: Make sure buckles are uniformly aligned and inserted into slots.



6. Insert all Slide-Locks as far as possible by hand. Complete tightening by tapping each Slide-Lock with a light rubber headed hammer.

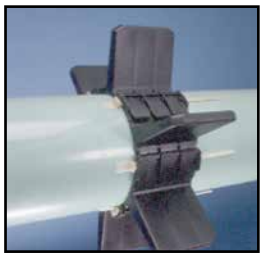


7. To tighten Ranger II® securely to carrier pipe, back Slide-Lock completely out of the slot. If needed, push segments together by hand.



8. Re-insert Slide-Locks completely into segments by lightly tapping Slide-Lock back into position.

NOTE: Make sure buckles are uniformly aligned and inserted into slots.



9. Repeat steps 7 and 8 until Ranger II® is secure against the carrier pipe and unable to move.



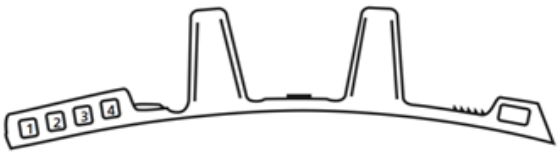
NOTE: Properly installed slide-locks will rarely be driven all the way in. To secure a tight fit drive as far as possible, but if all are driven completely, (bottomed out) it may not be tight enough. Verify Ranger II® casing spacer cannot slide on carrier pipe.

RANGER II® GKO-XL WEDGE POSITIONING

PIPE OD		GKO-XL NUMBER OF SEGMENTS PER SPACER	POSITION OF WEDGES IN CONNECTING SECTION			
FROM	TO		P1	P2	P3	P4
25.98	26.18	6			3	3
27.99	28.19	6		5	1	
29.06	29.45	6	4	2		
30.00	30.20	7			2	5
31.34	31.57	7			7	
32.01	32.24	7		3	4	
33.15	33.54	7	1	6		
34.02	34.25	8			1	7
35.98	36.22	8		1	7	
37.20	37.60	8		6	2	
40.00	40.24	9			7	2
41.26	41.65	9		4	5	
41.61	41.85	9		6	3	
44.02	44.29	10			6	4
47.99	48.27	11			6	5
52.01	52.28	11	1	10		
55.98	56.30	12		9	3	
60.00	60.31	13		7	6	
64.02	64.33	14		5	9	
67.99	68.35	15		3	12	
72.01	72.36	16		1	15	
75.98	76.34	17			16	1
80.00	80.35	17		16	1	
84.02	84.41	18		14	4	
87.99	88.39	19		12	7	
92.01	92.40	20		10	10	
95.98	96.38	21		8	13	

The recommendation position of GKO-XL wedges are suggestions only and can differ according to outside temperature.

GKO-XL WEDGE POSITION EXAMPLE

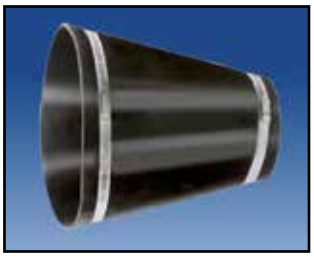


For a pipe O.D. of 30" put 2 wedges in position 3 and 5 wedges in position 2.

END SEALS

Model "C" Custom Pull-on

Individually designed to accommodate custom carrier casing combinations. Made of 1/8" thick, specially compounded synthetic rubber for long life and easy installation.



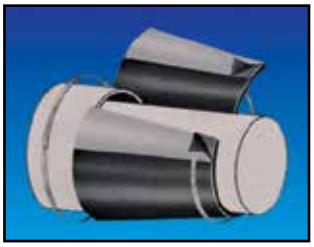
Model "S" Standard Pull-on

Made of special synthetic rubber for long life and easy installation, the highly flexible "S"-shaped seal is available for ANSI steel pipe specifications. Band locating ribs are on the outside, with special sealing ribs on the inside under the band to prevent leakage.



Model "W" Wrap Around

Specifically designed for existing installations. Simply remove plastic backing from self-curing rubber and press exposed surfaces together. Available for all carrier/casing differential.



Model "FW" Fire Resistant

This model has been developed exclusively for situations involving a need for fire retention. They are applicable to casing through dikes in tank farms, fire walls or wherever a casing may be in a fire prone area.



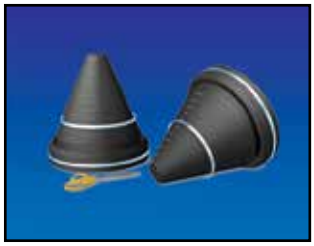
LINK-SEAL® Modular Seals

For a water tight seal (up to 20 psig [40 feet of head]) when the carrier pipe is already centered inside a casing. For added protection a model "C" end seal may be used in conjunction with Link-Seal® Modular Seals.



Model "R" End Seal

Specifically designed for new installations, Model R end seals are available in 5 sizes to accommodate a wide range of carrier/casing diameter combinations. A unique "cone" design, with molded-in dimensions, are easily cut to size for a correct fit on the carrier pipe.



TO ORDER RANGER II® CASING SPACERS PLEASE INDICATE:

1. Total Quantity of Spacers
2. Model No. (Ranger II®)
3. Carrier Pipe O.D.
4. Casing Pipe I.D.
5. Bell O.D.
6. Runner Configuration
   S = Standard Bell Clearance Only
   CR = Centered/Restrained
7. Segment Size (Micro-XS, Mini-S, Midi-M, Medi-L or GKO-XL)
8. Runner Lengths
9. Number of Segments/Spacer
10. Contact your local distributor or Garlock

ISO 9001 Registration

Each casing spacer and end seal shall be manufactured at a facility that has a Registered ISO 9001 Quality Management System. Copy of current ISO 9001. Registration shall be provided with material submittal.

Warranty:

All products are warranted against failure caused by manufacturing defects for a period of one year. Any product found to be so defective and returned within one year from date of shipment will be replaced without charge. The above warranty is made in lieu of, and we disclaim, any and all other warranties, expressed or implied, including the warranties of merchantability and fitness for a particular purpose, and buyer agrees to accept the products without any such warranties. We hereby disclaim any obligation or liability for consequential damages, labor costs or any other claims or liabilities of any kind whatsoever.

PSI 1-21_12.2020

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Fax: 800.543.0598 / 315.597.3216
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Garlock Germany
Garlock India Private Limited

Garlock de Mexico, S.A. De C.V.
Garlock New Zealand
Garlock Great Britain Limited

Minimum Cold (field) Bending Radius (long-term)
Reference: PE Pipe – Design and Installation M55 AWWA

PIPE DR	MINIMUM COLD BENDING RADIUS
≤ 9	20 times pipe OD
≥ 9-13.5	25 times pipe OD
≥ 13.5-21	27 times pipe OD
≥ 21	30 times pipe OD
Fittings or flange present or to be installed in bend *	100 times pipe OD

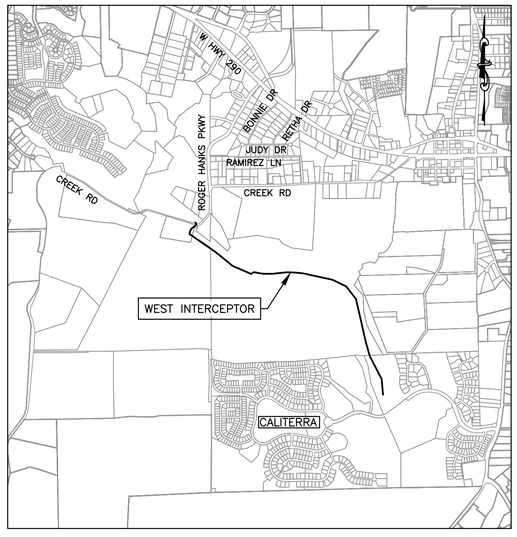
Pipe Material	HDPE			Pipe Material	HDPE		
Pipe DR		17		Pipe DR		17	
Carrier Pipe OD		16	inches	Casing Pipe OD		24	inches
Minimum Bend		27	x OD	Minimum Bend		27	x OD
	=	36	feet		=	54	feet

APPENDIX F

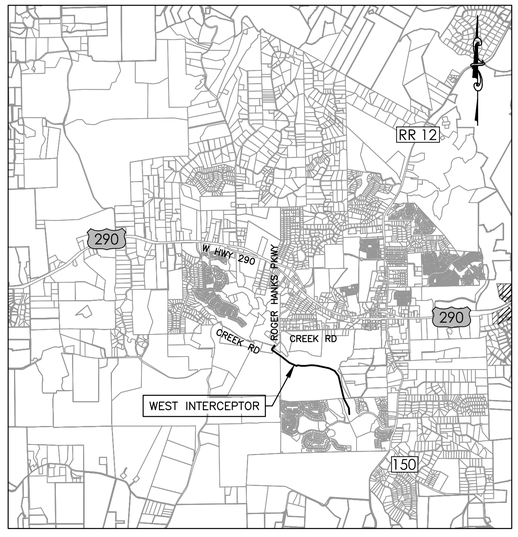
CONSTRUCTION PLANS
FOR
DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2

OWNER: CITY OF DRIPPING SPRINGS
511 MERCER STREET
DRIPPING SPRINGS, TX 78620
512.858.4725

ENGINEER: BURGESS & NIPLE, INC.
235 LEDGE STONE DR.
AUSTIN, TEXAS 78737
william.ball@burgessniple.com
512.432.1000



LOCATION MAP
1" = 2000'



VICINITY MAP
1" = 5000'

SHEET LIST TABLE

Sheet Number	Sheet Title
1	COVER
2	GENERAL NOTES
3	STORM WATER POLLUTION PREVENTION PLAN
4	EROSION-SEDIMENTATION PLAN 1 OF 2
5	EROSION-SEDIMENTATION PLAN 2 OF 2
6	TREE PLAN KEY MAP
7	TREE PLAN 1 OF 8
8	TREE PLAN 2 OF 8
9	TREE PLAN 3 OF 8
10	TREE PLAN 4 OF 8
11	TREE PLAN 5 OF 8
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21	ONION CREEK CROSSING
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23	TEMPORARY ACCESS EASEMENT LOCATIONS
24	WEST INTERCEPTOR STA 35+16.94 TO 45+50 PLAN & PROFILE
25	WEST INTERCEPTOR STA 45+50 TO 56+00 PLAN & PROFILE
26	WEST INTERCEPTOR STA 56+00 TO 66+50 PLAN & PROFILE
27	WEST INTERCEPTOR STA 66+50 TO 77+00 PLAN & PROFILE
28	WEST INTERCEPTOR STA 77+00 TO 87+50 PLAN & PROFILE
29	WEST INTERCEPTOR STA 87+50 TO 98+00 PLAN & PROFILE
30	WEST INTERCEPTOR STA 98+00 TO 108+50 PLAN & PROFILE
31	WEST INTERCEPTOR STA 108+50 TO END P&P
32	WASTEWATER SERVICE AREAS
33	WASTEWATER CALCULATIONS
34	STANDARD DETAILS 1 OF 3
35	STANDARD DETAILS 2 OF 3
36	STANDARD DETAILS 3 OF 3
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S-0	GENERAL NOTES
S-1	CREEK CROSSING PLAN
S-2.0	SECTIONS
S-2.1	SECTIONS

REVIEWED BY:

MICHELLE FISCHER, CITY OF DRIPPING SPRINGS — DATE
CITY ADMINISTRATOR

NOTE:
ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN APPROVING THESE PLANS, THE CITY MUST RELY UPON THE ADEQUACY OF WORK OF THE DESIGN ENGINEER.

PORTION OF THIS PROPERTY LIES IN THE FEMA DESIGNATED FLOODPLAIN PER FEMA PANEL NUMBER 48209C0105G DATED JANUARY 17,2025 AND 48209C0115G DATED JANUARY 17, 2025.

THIS PROPERTY LIES IN THE EDWARDS AQUIFER CONTRIBUTING ZONE.

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED PROFESSIONAL ENGINEER

SUBMITTED BY: — DATE
9/23/2025

WILLIAM B. BALL P.E.
BURGESS & NIPLE, INC.
235 LEDGE STONE DR.
AUSTIN, TEXAS 78737
512.432.1000

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
COVER

NO:	DESCRIPTION	DATE
	REVISIONS	

JOB NO: 1950-001
DATE: SEPT 2025
DESIGNED BY: JB, CC
DRAWN BY: JB, CC
CHECKED BY: WBB
APPROVED BY: WBB

SHEET: 1 OF 36

GENERAL ENGINEERING NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF DRIPPING SPRINGS, DRIPPING SPRINGS WATER SUPPLY CORPORATION AND HAYS COUNTY. CITY OF AUSTIN STANDARD SPECIFICATIONS SHALL GOVERN CONSTRUCTION WHERE NO OTHER REQUIREMENTS EXIST.
2. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR OR HIS/HER AUTHORIZED REPRESENTATIVE SHALL CONVENE A PRE-CONSTRUCTION CONFERENCE BETWEEN THE CITY OF DRIPPING SPRINGS THE CONSULTING ENGINEER, OWNER, COUNTY INSPECTOR, AND ANY OTHER AFFECTED PARTIES, INCLUDING BUT NOT LIMITED TO, THE TCEQ. NOTIFY ALL SUCH PARTIES AT LEAST 48 HOURS PRIOR TO THE TIME OF THE CONFERENCE AND 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.
3. THE CONTRACTOR SHALL GIVE THE CITY, COUNTY AND THE ENGINEER 48 HOURS NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION.
4. ANY EXISTING PAVEMENT, CURBS AND/OR SIDEWALKS DAMAGED OR REMOVED WILL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE BEFORE ACCEPTANCE OF THE SUBDIVISION.
5. THE LOCATION OF ANY WATER AND/OR WASTEWATER LINES OR OTHER UTILITIES TO BE CROSSED OR CONNECTED SHALL BE VERIFIED BY THE CONTRACTOR AT THE TIME OF COMMENCEMENT OF CONSTRUCTION.
6. MANHOLE FRAMES, COVERS, AND WATER VALVES SHALL BE SET TO FINISHED PAVEMENT GRADE BY THE UTILITY CONTRACTOR. ALL UTILITY ADJUSTMENTS SHALL BE COMPLETED PRIOR TO FINAL PAVING CONSTRUCTION. COMPENSATION FOR UTILITY ADJUSTMENTS SHALL BE PAID FOR IN THE UNIT BID PRICE FOR EACH APPURTENANCE. NO ADDITIONAL PAYMENT WILL BE MADE FOR UTILITY ADJUSTMENTS.
7. CONTRACTOR SHALL VERIFY EXACT DEPTH AND LOCATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES, DRIVEWAYS, PAVEMENT, CURB & GUTTER, SIDEWALKS, ETC. SHALL BE REPAIRED BY THE CONTRACTOR, OR THE UTILITY, AT UTILITY'S OPTION, AND SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
8. ALL WATER MAINS SHALL HAVE A MINIMUM 36 INCHES OF COVER FROM FINISHED/NATURAL GRADE OR 36 INCHES BELOW ACTUAL SUBGRADE UNLESS OTHERWISE DENOTED ON THE PLANS.
9. CONTACT SHALL BE MADE TO BURGESS & NIPLE, INC., CITY OF DRIPPING SPRINGS, AND DRIPPING SPRINGS WATER SUPPLY CORPORATION 48 HOURS PRIOR TO CONNECTION TO EXISTING WATER AND/OR WASTEWATER LINES.
10. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION PREPARED BY TERRACON CONSULTANTS, INC.
11. WATER AND WASTEWATER ALIGNMENTS SHOWN ON THE PLANS SHALL BE ACHIEVED BY DEFLECTION WITHIN THE MANUFACTURER'S SPECIFICATIONS, EXCEPT WHERE SPECIFIC FITTINGS ARE CALLED FOR ON THE PLANS. IF FITTINGS ARE REQUIRED WHERE NOT SHOWN ON THE PLANS, THERE WILL BE NO ADDITIONAL PAY.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING UTILITIES, INCLUDING BUT NOT LIMITED TO, GAS LINES, WATERLINES, VALVE BOXES, FIRE HYDRANTS, STRUCTURES, AND OTHER APPURTENANCES THAT LIE WITHIN THE RIGHT-OF-WAY OR EASEMENTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR ALL UTILITIES, DRIVEWAYS, PAVEMENT, CURB & GUTTER, SIDEWALKS, FENCES, AND ANY OTHER ITEMS DAMAGED DURING CONSTRUCTION REGARDLESS OF WHETHER ALL ITEMS ARE SHOWN ON THE PLANS AT HIS SOLE EXPENSE. THE LOCATIONS SHOWN OF EXISTING OVERHEAD AND UNDERGROUND UTILITIES ARE APPROXIMATE. IN ADDITION TO NORMAL PRECAUTIONS WHEN EXCAVATING, TAKE EXTRA CAUTION WHEN EXCAVATING WITHIN 25 FT. OF ANY UTILITIES SHOWN ON THE PLANS.
13. WHENEVER EXISTING UTILITIES, NOT INDICATED ON THE PLANS, PRESENT OBSTRUCTIONS TO GRADE AND ALIGNMENT OF PIPE, IMMEDIATELY NOTIFY BURGESS & NIPLE, INC., WHO WILL DETERMINE WHENEVER EXISTING IMPROVEMENTS ARE TO BE RELOCATED, OR GRADE AND ALIGNMENT OF PIPE CHANGED. WHERE NECESSARY TO MOVE SERVICES, POLES, GUY WIRES, PIPELINES, ETC., AS DETERMINED BY THE ENGINEERS, THE CONTRACTOR WILL MAKE ARRANGEMENTS WITH THE OWNER OF THE UTILITY TO BE MOVED AND HAVE IT MOVED. THE COST OF ANY UTILITY RELOCATION WILL BE AT THE CONTRACTOR'S SOLE EXPENSE. OWNER WILL NOT BE LIABLE FOR RELOCATION COSTS OR DAMAGES ON ACCOUNT OF DELAYS DUE TO CHANGES MADE BY OWNERS OF OTHER PRIVATELY OR PUBLICLY OWNED UTILITIES WHICH HINDER PROGRESS OF THE WORK.
14. INCLUDE ADDITIONAL FLUSHING VALVES AND TEST CONNECTIONS NECESSARY TO PERFORM TEST AND STERILIZATION OPERATION. THERE WILL BE NO ADDITIONAL PAY FOR THESE VALVES AND CONNECTIONS USED FOR TESTING AND STERILIZATION PURPOSES, EXCEPT FOR THOSE SPECIFICALLY SHOWN ON THE PLANS. ALL FLUSHING ACTIVITY SHALL BE METERED.
15. ALL CONSTRUCTION ACTIVITIES, INCLUDING ACCESS, EGRESS, TRAVEL, STOCKPILING, ETC. ARE TO BE CONFINED TO AREAS IDENTIFIED BY THE OWNER.
16. ALL EXCESS SPOIL MATERIAL SHALL BE DISPOSED OF OFFSITE BY THE CONTRACTOR. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK EFFORT, INCLUDE COSTS IN RELATED BID ITEMS.
17. REFER TO THE PLANS FOR DETAILS ON "PIPE BEDDING AND BACKFILL", "CONCRETE ENCASEMENT", "CONCRETE THRUST BLOCKING", AND "HORIZONTAL AND VERTICAL BENDS", "FIRE HYDRANT ASSEMBLY", AND OTHER DETAILS.
18. TREE DAMAGES AND CLEARING OUTSIDE THE RIGHT-OF-WAY OR EASEMENTS ARE EXPRESSLY PROHIBITED.
19. PIPE, FITTINGS AND JOINTS:
    GRAVITY SEWER – PVC PER CITY OF AUSTIN STANDARD PRODUCT LIST.
20. ALL GATE VALVES SHALL HAVE RESILIENT VALVE SEATS.
21. ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED WITH MINIMUM OF 8 MIL POLYETHYLENE WRAP.
22. AT ALL LOCATIONS WHERE A WATERLINE CROSSES A WASTEWATER LINE, THE CONSTRUCTION SHALL STRICTLY COMPLY WITH ALL APPLICABLE RULES AND REGULATIONS OF THE TCEQ.
23. THE CONTRACTOR SHALL FURNISH THE ENGINEER ONE SET OF "AS-BUILT" PLANS REFLECTING ALL CHANGES MADE IN THE FIELD.
24. THE ENGINEER SHALL BE GIVEN 48 HOURS NOTICE PRIOR TO ANY TESTING PHASE (DENSITY, PRESSURE, LEAKAGE, ETC.).
25. THE CONTRACTOR SHALL PROVIDE ALL TRAFFIC CONTROL NECESSARY TO PERFORM THE CONSTRUCTION IN A SAFE MANNER TO PROTECT THE PUBLIC SAFETY. NO SEPARATE PAY.
26. THE COST OF ALL FITTINGS SHALL BE INCLUDED IN THE PER FOOT UNIT COST OF PIPE.
27. THE CONTRACTOR SHALL PROVIDE PLUGS AT ALL PIPE STUB-OUTS. NO SEPARATE PAY.
28. THE CONTRACTOR SHALL GIVE NOTICE TO ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS, OR PERSONS IN CHARGE OF UTILITIES AFFECTED BY HIS OPERATIONS PRIOR TO COMMENCING WORK. THE CONTRACTOR IS RESPONSIBLE FOR ASSURING THAT ALL PERMITS NECESSARY TO LEGALLY PERFORM THE WORK HAVE BEEN OBTAINED PRIOR TO COMMENCING CONSTRUCTION. REQUIRED PERMITS THAT CAN BE ISSUED TO THE CONTRACTOR ONLY WILL BE OBTAINED AT THE CONTRACTOR'S EXPENSE.
29. IF BLASTING IS PLANNED BY THE CONTRACTOR, A BLASTING PERMIT MUST BE SECURED PRIOR TO COMMENCEMENT OF ANY BLASTING.
30. THE CITY OF AUSTIN SPECIFICATION ITEM 509 WILL BE REQUIRED AS A MINIMUM TRENCH SAFETY MEASURE. CONTRACT DOCUMENTS REQUIRE A TRENCH SAFETY PLAN AND INCLUDE A PAY ITEM FOR TRENCH SAFETY MEASURES, IN COMPLIANCE WITH TEXAS HOUSE BILL 1569.
31. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH HAYS COUNTY REQUIREMENTS AND TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
32. PRIOR TO FINAL ACCEPTANCE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATIONS, ITEM #604.ES,
33. LOT PINS REMOVED, COVERED, OR MOVED DURING CONSTRUCTION SHALL BE RELOCATED AT THE CONTRACTOR'S SOLE EXPENSE BY A REGISTERED PROFESSIONAL LAND SURVEYOR.
34. THE CITY OF AUSTIN OR ANY OTHER AGENCY LOGO SHALL NOT APPEAR ON ANY MANHOLE LIDS, VALVE BOX COVERS OR ANY OTHER RELATED APPURTENANCE. ALL ITEMS MENTIONED SHALL BE APPROVED AS A SUBMITTAL.
35. NO SAND BEDDING OR BACKFILL WILL BE ALLOWED FOR WASTEWATER AND STORM SEWER LINES. HAYS COUNTY AND ENGINEER SHALL APPROVE ALL BEDDING MATERIAL.
36. BENCH MARKS: CONTACT ENGINEER

TEXAS WATER DEVELOPMENT NOTES:

1. STANDARD CONDITIONS

1.a. TO ENSURE COMPLIANCE WITH THE MIGRATORY BIRD TREATY ACT, VEGETATION CLEARING WILL BE NOT BE PERFORMED, IF POSSIBLE, DURING THE MIGRATORY BIRD NESTING PERIOD FROM MARCH 15 THROUGH SEPTEMBER 15, TO AVOID ADVERSE IMPACTS TO BREEDING BIRDS. IF CLEARING VEGETATION DURING THE MIGRATORY BIRD NESTING SEASON IS UNAVOIDABLE, THEN A SURVEY OF THE PROPOSED PROJECT AREA WILL BE CONDUCTED TO ENSURE THAT NO NESTS WITH EGGS OR YOUNG WILL BE DISTURBED BY OPERATIONS. A MINIMUM 150-FOOT BUFFER OF VEGETATION REMAIN AROUND ANY NESTS THAT ARE OBSERVED PRIOR TO DISTURBANCE. ANY VEGETATION (SUCH AS TREES, SHRUBS, AND GRASSES) OR OTHER OPEN AREAS WHERE OCCUPIED NESTS ARE LOCATED WILL NOT BE DISTURBED UNTIL THE EGGS HAVE HATCHED AND THE YOUNG HAVE FLEDGED;

1.b. COMPLIANCE WITH THE TERMS AND CONDITIONS OF UNITED STATES ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT 12 FOR UTILITY LINE ACTIVITIES (USACE PROJECT NUMBER SWF-2020-00075);

1.c. IN ORDER TO COMPLY WITH REQUIREMENTS OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY REGARDING IMPLEMENTATION OF THE FLOOD INSURANCE ACT, FLOOD DISASTER PROTECTION ACT, NATIONAL FLOOD INSURANCE REFORM ACT, FEDERAL EXECUTIVE ORDERS 11988 AND 11990, AND TO COMPLY WITH RELATED STATE STATUTES, PROPONENTS OF CONSTRUCTION PROJECTS IN SPECIAL FLOOD HAZARD AREAS MUST' COORDINATE IN ADVANCE WITH THE LOCAL FLOODPLAIN ADMINISTRATOR AND OBTAIN A FLOODPLAIN DEVELOPMENT PERMIT PRIOR TO CONSTRUCTION;

1.d. STANDARD EMERGENCY CONDITION FOR THE DISCOVERY OF THREATENED AND ENDANGERED SPECIES; AND

1.e. STANDARD EMERGENCY CONDITION FOR THE DISCOVERY OF CULTURAL RESOURCES.

HAYS COUNTY CONSTRUCTION NOTES:

1. SEVENTY-TWO (72) HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION, THE DEVELOPER SHALL ARRANGE A PRE-CONSTRUCTION CONFERENCE WITH ALL PERTINENT PARTIES.
2. ALL ROADWAY AND DRAINAGE IMPROVEMENTS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH HAYS COUNTY SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS FROM HAYS COUNTY ROAD AND BRIDGE DEPARTMENT PRIOR TO BEGINNING ANY ON-SITE CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING THE NECESSARY INSPECTIONS FROM THE HAYS COUNTY ROAD AND BRIDGE DEPARTMENT. ALL REPAIRS TO IMPROVEMENTS CAUSED BY CONTRACTOR'S FAILURE TO INSTALL IMPROVEMENTS IN ACCORDANCE WITH HAYS COUNTY SPECIFICATIONS AND THESE CONSTRUCTION PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. HAYS COUNTY TRANSPORTATION DEPARTMENT'S ACCEPTANCE OF THE IMPROVEMENTS ARE CONTINGENT ON REPAIRS BEING MADE TO HAYS COUNTY'S SATISFACTION. DELAYS CAUSED BY REPAIRS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
3. A MINIMUM OF TWO (2) BENCHMARKS SHALL BE SHOWN ON THE CONSTRUCTION PLANS.
4. ALL BEDDING MATERIALS USED WITHIN THE ROW SHALL COMPLY WITH COA ITEM 510.
5. ALL CONCRETE PLACED WITHIN THE ROW SHALL BE A MINIMUM OF CLASS A. THE USE OF REBAR CHAIRS AND TESTS CYLINDERS WILL BE REQUIRED ON PCC VALLEY GUTTER PLACEMENTS.
6. THE PROPOSED FULLY DEVELOPED STORMWATER RUNOFF RATE CANNOT EXCEED EXISTING CONDITIONS RUNOFF RATE.
7. DEWATERING OPERATIONS MUST USE SWPPP-SPECIFIED METHODS ONLY. IF SUCH METHODS ARE ONLY GENERAL OR NOT APPLICABLE, PUMP FROM THE TOP OF THE POOL (RATHER THAN THE BOTTOM) AND DISCHARGE TO A VEGETATED, UPLAND AREA (AWAY FROM WATERBODIES OR DRAINAGES) OR USE ANOTHER TYPE OF FILTRATION PRIOR TO DISCHARGE. REFER TO THE EPA 2017 GENERAL CONSTRUCTION PERMIT, SECTION 2.4, AS APPLICABLE.
8. THE CONTRACTOR SHALL SUPPLY QUALIFIED PERSONNEL TO PERFORM SWPPP INSPECTIONS ON PROJECT ≥1 ACRE. QUALIFIED PERSONNEL SHALL HAVE CISEC, CISSWI, OR EQUIVALENT CERTIFICATION APPROVED BY THE MS4.
9. CONTRACTOR SHALL ENSURE THAT MUD AND DEBRIS TRACKED ONTO PUBLICLY MAINTAINED ROADWAYS FROM VEHICLES LEAVING THE CONSTRUCTION SITE WILL BE CLEANED UP DAILY.
10. NO EXPLOSIVES SHALL BE USED FOR THIS PROJECT WITHOUT TCEQ APPROVAL.
11. ALL HOLES, TRENCHES AND OTHER HAZARDOUS AREAS SHALL BE ADEQUATELY PROTECTED BY BARRICADES, FENCING, LIGHTS AND/OR OTHER PROTECTIVE DEVICES IN COMPLIANCE WITH COA 509S AND OSHA REGULATIONS AT ALL TIMES.
12. THE CONTRACTOR SHALL SUBMIT A TRENCH SAFETY PLAN PREPARED AND SEALED BY AN ENGINEER LICENSED BY THE STATE OF TEXAS PRIOR TO THE START OF THE PROJECT. THE CONTRACTOR SHALL ASSIGN A COMPETENT PERSON THAT HAS BEEN PROPERLY TRAINED AND IS QUALIFIED TO MAKE INSPECTIONS AND SUPERVISE THE INSTALLATION, MAINTENANCE, AND REMOVAL OF THE TRENCH SAFETY OR EXCAVATION SAFETY SYSTEM.
13. HAYS COUNTY IS NOT RESPONSIBLE FOR SIDEWALK MAINTENANCE. A FULLY EXECUTED LICENSE AGREEMENT MUST BE IN-PLACE PRIOR TO CONSTRUCTION OF SIDEWALKS WITHIN HAYS COUNTY ROW.
14. CONTRACTOR SHALL COMPLY WITH CONSTRUCTION SEQUENCING WHICH MAY BE SPECIFIED SOMEWHERE IN THE CONSTRUCTION PLANS.
15. PERMIT IS REQUIRED FOR CONSTRUCTION IN 'RIGHT OF WAY': ORDINANCE 7.10. NO DRIVEWAY, UTILITY CONSTRUCTION, MAILBOXES, LANDSCAPING OR ANY OTHER ENCROACHMENT INTO RIGHT-OF-WAY OR EASEMENT SHALL BE ALLOWED WITHOUT FIRST OBTAINING A PERMIT FROM THE HAYS COUNTY ROAD AND BRIDGE DEPARTMENT.
16. PRIOR TO THE INSTALLATION OF ANY ROAD BUILDING MATERIAL THE SUBGRADE SHALL BE INSPECTED BY HAYS COUNTY. PRIOR TO PAVING, BASE MATERIAL SHALL BE INSPECTED BY HAYS COUNTY. THE OWNER OR HIS AGENT SHALL NOTIFY HAYS COUNTY FORTY-EIGHT (48) HOURS PRIOR TO THE TIME WHEN THE INSPECTION IS NEEDED :ORDINANCE 1.05; 2.06.
17. ALL OUTFALLS CONSTRUCTED WITHIN HAYS COUNTY MUST BE SUBMITTED TO HAYS COUNTY WITH GPS COORDINATES AT THE END OF EACH PROJECT. COORDINATES WILL BE SUBMITTED ON THE NAD 1983 STATE PLANE SOUTH CENTRAL FIPS 4204 FEET COORDINATE SYSTEM. ALL COORDINATES WILL BE SUBMITTED IN GRID UNITS. THE REQUIRED FILE TYPE FOR COORDINATE DATA SUBMISSIONS IS *TXT FORMAT.
18. AT THE TIME A FINAL INSPECTION AND RELEASE OF PERFORMANCE SECURITY IS REQUESTED; THE DESIGN ENGINEER SHALL PROVIDE A COMPLETE SET OF "AS-BUILT" RECORD DRAWINGS IN PDF FORMAT (300DPI) ON A VIRUS FREE DISK AND SHALL CERTIFY THAT ALL ROAD AND DRAINAGE CONSTRUCTION HAS BEEN COMPLETED IN SUBSTANTIAL ACCORDANCE WITH PREVIOUSLY APPROVED PLANS AND SPECIFICATIONS, EXCEPT AS NOTED. NO PERFORMANCE SECURITY WILL BE RELEASED WITHOUT THESE EXHIBITS.

TREE PROTECTION NOTES:

1. CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES 6" IN DIAMETER AND SMALLER ONLY WHEN NECESSARY FOR WATER, WASTEWATER AND DRAINAGE FACILITIES BEING BUILT OUTSIDE THE RIGHT-OF-WAY. NO TREES LARGER THAN 6" IN DIAMETER SHALL BE REMOVED WITHOUT THE EXPRESS PERMISSION OF THE OWNER. OWNER WILL FLAG TREES TO BE SAVED & FOR TREE PROTECTION FENCING PRIOR TO CONSTRUCTION.
2. ALL TREES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED AND SAVED UNLESS INDICATED TO BE REMOVED.
3. SAVED OR PROTECTED TREES DAMAGED OR REMOVED BY CONSTRUCTION ACTIVITIES WILL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.
4. REPLACEMENT TREES WILL BE 3" CALIPER MINIMUM.
5. REPLACEMENT TREES WILL BE REPLACED AT A RATE OF ONE (1) CALIPER INCH OF TREE REPLACEMENT FOR EACH ONE (1) CALIPER INCH OF TREE REMOVED.(EX. -ONE (1) 9" CALIPER INCH TREE REMOVED EQUALS THREE (3) 3" CALIPER REPLACEMENT TREES PLANTED.)
6. REPLACEMENT TREE TYPES WILL BE SAME AS THAT REMOVED OR ONE OF THE FOLLOWING TYPES AS APPROVED BY OWNER'S REPRESENTATIVE: CEDAR ELM (ULMUS CRASSIFOLIA), YAUPON HOLLY (ILEX VOMITORIA), POSSUM-HAW HOLLY (ILEX DECIDUA), MOUNTAIN-LAUREL (SOPHORA SECUNDIFLORA), CHINQUAPIN OAK (QUERCUS MUHLENBERGII), LACEY OAK (QUERCUS LACEYI). LIVE OAK (QUERCUS VIRGINIANA), SHUMARD RED OAK (QUERCUS SHUMARDII), TEXAS RED OAK (QUERCUS TEXANA), OR PECAN (CARYA ILLINOINENSIS).
7. REPLACEMENT TREES SHALL BE PLANTED WITHIN 50 FEET OF WHERE THE EXISTING TREE WAS REMOVED IF POSSIBLE. WHERE SITE CONDITIONS CANNOT ACCOMMODATE REPLACEMENT TREES, CONTRACTOR SHALL CONSULT WITH OWNER'S REPRESENTATIVE FOR ALTERNATIVE PLANTING LOCATION(S).
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING TEMPORARY IRRIGATION FOR A MINIMUM ONE (1) YEAR PERIOD ON AREAS NOT COVERED BY IRRIGATION.
9. REPLACEMENT TREES WILL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM TIME OF PROJECT COMPLETION AND FINAL INSPECTION BY OWNER'S REPRESENTATIVE. TREES THAT HAVE DIED, OR PARTIALLY DIED, DURING THE WARRANTY PERIOD WILL BE REPLACED WITH THE SAME SIZE AND SPECIES. THE REPLACED TREE WILL BE WARRANTED FOR A ONE YEAR (1) PERIOD.
10. HAND EXCAVATE ALL WORK UNDER EXISTING TREE DRIPLINES. USE ROCK SAW TO KEEP CUTS CLEAN. KEEP EXPOSED ROOTS MOIST BY COVERING WITH BURLAP AND WATERING IF TO BE LEFT OVER NIGHT OR ALTERNATIVE APPROVED METHOD.

NOTES:

1. CONTRACTOR SHALL BE AWARE THAT LIVESTOCK MAY BE ROAMING IN WORK AREAS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING BARRIERS/FENCING TO PROTECT ITS EQUIPMENT, MATERIALS, AND WORKERS FROM LIVESTOCK.
2. AT THE END OF EACH WORK DAY CONTRACTOR SHALL PROVIDE SUFFICIENT FREE STANDING LIVESTOCK PANELS WITH ORANGE CONSTRUCTION FENCING ATTACHED TO PANELS TO KEEP LIVESTOCK AND OTHER ANIMALS OUT OF EXCAVATIONS.
3. CONTRACTOR SHALL SCRAPE THE AREAS TO BE EXCAVATED TO THE LESSER OF 3 FEET OR TO BEDROCK, STOCKPILE EXCAVATED TOPSOIL, INSTALL PIPE AND BACKFILL TRENCH, AND BACKFILLED TRENCH WITH STOCKPILED TOPSOIL, AND REVEGETATE PER PROJECT SPECIFICATIONS.
4. CONTRACTOR SHALL NOT WORK OR MOVE OUTSIDE THE PERMANENT, TEMPORARY, OR ACCESS EASEMENTS.
5. CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER IF ANY ENDANGERED OR THREATENED SPECIES ARE DISCOVERED DURING CONSTRUCTION.
6. CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER IF ANY CULTURAL RESOURCES ARE DISCOVERED DURING CONSTRUCTION.
7. CONTRACTOR MUST NOTIFY GRANTOR AT LEAST 48 HOURS PRIOR TO START OF ANY WORK.
8. THIS PROJECT IS SUBJECT TO THE AMERICAN IRON AND STEEL (AIS) REQUIREMENTS OF SECTION 608 OF THE FEDERAL WATER POLLUTION CONTROL ACT (33 U.S.C. §1388). ALL IRON AND STEEL PRODUCTS FOR CONSTRUCTION, ALTERATION, MAINTENANCE, OR REPAIRS INCORPORATED IN THESE PLANS MUST BE PRODUCED IN THE UNITED STATES.

CITY OF DRIPPING SPRINGS STANDARD WASTEWATER UTILITY CONSTRUCTION NOTES (JUNE 2024)

1. ALL WASTEWATER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF AUSTIN AND TCEQ 30 TAC, CHAPTER 217 REQUIREMENTS.
2. CONTRACTOR SHALL GUARANTEE THE WORK AGAINST DEFECTIVE WORKMANSHIP AND MATERIALS FOR A PERIOD OF TWO (2) YEARS FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK BY THE CITY OF DRIPPING SPRINGS.
3. ALL GAS, ELECTRIC, AND TELECOMMUNICATION LINES MUST CROSS BELOW WASTEWATER MAINS AND SERVICE LINES THAT ARE LESS THAN 5 FEET DEEP, ANY LINE THAT CANNOT CROSS UNDER WILL REQUIRE APPROVAL FROM THE CITY OF DRIPPING SPRINGS
4. BEDDING FOR GRAVITY WASTEWATER LINES, FORCE MAINS, LOW PRESSURE SEWER LINES, AND TREATED EFFLUENT LINES SHALL CONTAIN GREATER THAN 70% OF TOTAL ANALYSIS OF 3/4" TO 1 1/2" ROCK WITH A 6 OUNCE NONWOVEN GEOTEXTILE FABRIC, MEETING EITHER TXDOT DMS 6200 OR TYPE 1 COA 620S, PLACED OVER THE BEDDING. CONTRACTOR SHALL PROVIDE A MINIMUM 5 GALLON BUCKET SAMPLE OF THE PROPOSED BEDDING MATERIAL FOR CITY OF DRIPPING SPRINGS APPROVAL.
5. WHEN GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION, RECOMMENDATIONS ON BEDDING AND BACKFILL SHALL BE PROVIDED BY A GEOTECHNICAL ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. ALL RECOMMENDATIONS SHALL BE APPROVED BY THE CITY OF DRIPPING SPRINGS.
6. CONTRACTOR SHALL ADHERE TO CITY OF AUSTIN STANDARD 1100S-1 FOR WASTEWATER MANHOLE RING ADJUSTMENTS IN PAVED AREAS.
7. GRAVITY WASTEWATER LINES SHALL BE PVC SDR 26 ASTM D3034 IF LOCATED GREATER THAN 9 FEET FROM A WATERLINE. IF LESS THAN 9 FEET (OUTSIDE OF PIPE OR MANHOLE TO OUTSIDE OF PIPE) FROM ANY WATER LINE, PIPE SHALL BE PVC SDR 26 ASTM D2241 PRESSURE RATED PIPE.
8. FORCE MAINS SHALL BE MINIMUM PVC SDR 26 ASTM D2241 PRESSURE RATED PIPE IN LABELED BROWN POLY BAG.
9. TREATED EFFLUENT LINES SHALL BE MINIMUM PVC SDR 21 ASTM D2241 USING ONLY FACTORY MOLDED PURPLE PRESSURE RATED PIPE.
10. ALL WASTEWATER MANHOLES OR LARGE DIAMETER CLEANOUTS ARE TO BE COATED WITH CEMENTITIOUS LINING (SEWPERCOAT® OR APPROVED EQUAL) PER CITY OF AUSTIN REQUIREMENTS. EXISTING MANHOLES WHERE CONNECTIONS ARE MADE TO THE CITY SEWER SYSTEM SHALL BE COATED OR RECOATED AFTER CONNECTIONS ARE MADE OR AFTER MANHOLE ADJUSTMENTS ARE MADE.
11. ENGINEER AND CONTRACTOR SHALL COORDINATE WITH THE DRIPPING SPRINGS WSC REGARDING WATER LINE AND WATER SERVICE LINE CROSSINGS.
12. CONTRACTOR SHALL INSTALL BOLTED MANHOLE LIDS (EAST JORDAN V2432 OR APPROVED EQUAL) WITH MINIMUM TOP OF LID 10"-12" ABOVE FINISHED GRADE ON ALL MANHOLES OUTSIDE PAVEMENT USING CITY OF DRIPPING SPRINGS WASTEWATER DETAIL.
13. WASTEWATER MANHOLE LIDS SHALL HAVE "SANITARY SEWER" CAST IN THE LID.
14. CITY OF DRIPPING SPRINGS' INSPECTOR SHALL OBSERVE INSTALLATION OF ALL TAPS ONTO WASTEWATER LINES.
15. CITY OF DRIPPING SPRINGS' INSPECTOR SHALL BE NOTIFIED 48 HOURS PRIOR TO ALL UTILITY LINE TESTING BY CALLING THE CITY 512-858-4725 OR THE DESIGNATED INSPECTOR IDENTIFIED AT THE PRECONSTRUCTION MEETING.
16. CONTRACTOR SHALL PERFORM THE FOLLOWING TESTING ON ALL TYPES OF WASTEWATER IMPROVEMENTS AT HIS EXPENSE:
    a. GRAVITY WASTEWATER LINES AND SERVICES – LOW PRESSURE AIR TEST PER TCEQ CHAPTER 217.57.
    b. GRAVITY WASTEWATER LINES – MANDREL DEFLECTION TESTING AFTER 30 DAYS OF FINAL BACKFILL PER TCEQ CHAPTER 217.57.
    c. GRAVITY WASTEWATER LINES – TELEVISED UPON COMPLETION OF ALL CONSTRUCTION INCLUDING DRY UTILITIES AND PRIOR TO PAVING. CONTRACTOR SHALL PROVIDE THE VIDEOS OF THE PIPES TO THE CITY OF DRIPPING SPRINGS PRIOR TO ACCEPTANCE.
    d. WASTEWATER MANHOLES – VACUUM TEST @ 10 INCHES OF MERCURY FOR 3 MINUTES. THE MANHOLE SHALL HAVE PASSED THE TEST IF THE VACUUM DOES NOT DROP BELOW 9 INCHES OF MERCURY (-4.5 PSIG) WITHIN 3 MINUTES OF THE TIME THE INSPECTOR STARTED THE TEST. NO VACUUM TESTING WILL BE ACCEPTED BY THE CITY OF DRIPPING SPRINGS UNTIL COMPLETION OF MINIMUM FIRST COURSE OF BASE IS INSTALLED.
    e. FORCE MAINS AND TREATED EFFLUENT LINES – HYDROSTATICALLY TEST TO A MINIMUM OF 50 PSI ABOVE NORMAL WORKING PRESSURE AS DETERMINED BY THE CITY OF DRIPPING SPRINGS WASTEWATER ENGINEER AND/OR DESIGN ENGINEER FOR A MINIMUM PERIOD OF 4 HOURS PER TCEQ 217.68.
    f. PRESSURE SEWER MAINS – HYDROSTATICALLY TEST TO A MINIMUM 25 PSI ABOVE NORMAL WORKING PRESSURE OR 1.5 TIMES WORKING PRESSURE, WHICH EVER IS LARGER AS DETERMINED BY THE CITY OF DRIPPING SPRINGS WASTEWATER ENGINEER AND/OR DESIGN ENGINEER FOR A MINIMUM PERIOD OF 4 HOURS PER TCEQ 217.99.
    g. EXISTING WASTEWATER FACILITIES – PRETEST AND POSTTEST EXISTING LINES AND MANHOLES WHEN CONNECTING TO EXISTING FACILITIES AT CONTRACTOR'S SOLE EXPENSE.
17. NO TREES SHALL BE LOCATED CLOSER THAN 10 FEET FROM PUBLIC WASTEWATER MAINS OR SERVICE LINES TO BE MAINTAINED BY THE CITY.
18. WASTEWATER LINES SHALL BE CONSTRUCTED SO THE DRIPPING SPRINGS CITY CAN PERFORM MAINTENANCE ON THEM WHEN NECESSARY THIS INCLUDES:
    a. NO WALLS CONSTRUCTED OVER OR WITHIN SIX FEET OF A WASTEWATER LINE WITHOUT PRIOR APPROVAL FROM THE DRIPPING SPRINGS CITY STAFF OR ITS ENGINEERS.
    b. NO SIGNS CONSTRUCTED OVER OR WITHIN SIX FEET OF A WASTEWATER LINE WITHOUT PRIOR APPROVAL FROM DRIPPING SPRINGS CITY STAFF OR ITS ENGINEERS.
    c. NOTHING CAN BE BUILT OR PLACED WITHIN THE DRIPPING SPRINGS CITY EASEMENTS THAT CANNOT BE EASILY MOVED BY CITY STAFF TO PERFORM MAINTENANCE
    d. ALL WASTEWATER LINES MUST BE CONSTRUCTED OUT OF THE FLOW LINE OF OTHER UTILITY TRENCHES, UNLESS CROSSING AT LEAST A 45 DEGREES ANGLE.
    e. NO WASTEWATER LINE WILL BE CONSTRUCTED IN THE FLOWLINE OF A DRAINAGE DITCH.
19. ALL TESTING EQUIPMENT AND METHODS SHALL BE INSPECTED AND APPROVED BY THE CITY OF DRIPPING SPRINGS PRIOR TO START OF TESTING. ALL OIL FILLED GAUGES SHALL BE PROPERLY SECURED WITH FACES POINTING UPWARDS. NO LOOSE GAUGES WILL BE ACCEPTED.
20. ALL CORING OF MANHOLES AND WET WELLS SHALL HAVE WRITTEN APPROVAL BY THE CITY OF DRIPPING SPRINGS PRIOR TO INSTALLATION. CONTRACTOR SHALL ALSO PROVIDE AN INVERT MODIFICATION SKETCH FOR APPROVAL BY CITY OF DRIPPING SPRINGS WASTEWATER ENGINEER OF THE PROPOSED INVERT CHANGE FOR APPROVAL PRIOR TO INSTALLATION.
21. CITY OF AUSTIN DETAIL 506S-7 SHALL BE USED FOR DROP MANHOLE DETAILS AND PRECAST MANHOLES ON CAST IN PLACE BASES.
22. CITY OF DRIPPING SPRINGS WASTEWATER SERVICE DETAIL SHALL BE USED ON ALL WASTEWATER SERVICE INSTALLATIONS.

PEC CONSTRUCTION NOTES:

1.

GENERAL NOTES:

THE CONTRACTOR SHALL COMPLY WITH ALL OF THE REQUIREMENTS SET FORTH IN THE TEXAS COMMISSION OF ENVIRONMENTAL QUALITY (TCEQ) "TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM" (TPDES). INFORMATION ON THE TPDES CONSTRUCTION GENERAL PERMITS MAY BE OBTAINED BY CONTACTING THE TCEQ AT 512-339-2929. INFORMATION IS ALSO AVAILABLE THROUGH TCEQ WEB SITE AT "www.tnrcc.state.tx.us/waterperm/wwperm/construct.html". DISCLAIMER: INFORMATION CONTAINED IN THIS PARAGRAPH IS BASED UPON THE BEST INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE ALL NECESSARY FORMS AND DOCUMENTATION AND COMPLY WITH THE PROVISIONS OF THE TPDES.

THE CONTRACTOR WILL BE REQUIRED TO FOLLOW BEST MANAGEMENT PRACTICES AND TO USE AND MAINTAIN SEDIMENTATION AND WATER POLLUTION CONTROL DEVICES AS REQUIRED.

THE CONTRACTOR SHALL PROVIDE THE OWNER 48 HOURS NOTICE PRIOR TO DISTURBING ANY VEGETATION OR BEGINNING ANY SITE PREPARATION IN ADVANCE OF THE EARTHWORK OPERATION. THE 48 HOUR NOTICE PROVIDES THE OWNER THE REQUIRED TIME TO FILE AND POST THE "NOTICE OF INTENT" (NOI) WITH THE TCEQ.

THE CONTRACTOR SHALL NOT RECEIVE FINAL PAYMENT FOR THE PROJECT UNTIL THE UNPAVED AREAS HAVE ACHIEVED 70% VEGETATIVE COVER WITH PERMANENT GRASSES, AND THE OWNER HAS FILED THE "NOTICE OF TERMINATION" (NOT) WITH THE TCEQ.

IN AREAS THAT HAVE ACHIEVED 70% VEGETATIVE COVER (WHEN COMPARED TO THE SURROUNDING, UNDISTURBED, VEGETATIVE COVER), THE CONTRACTOR MAY REMOVE AND REUSE ANY TEMPORARY EROSION CONTROL DEVICES (THAT ARE IN REASONABLE CONDITION) ON OTHER LOCATIONS IN THE DEVELOPMENT. ADDITIONAL SEEDING MAY BE REQUIRED TO VEGETATE THE AREAS WHERE THE STRUCTURAL CONTROLS WERE REMOVED.

PRIOR TO ACCEPTANCE AND FINAL PAYMENT, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES.

ALL TEMPORARY EROSION CONTROL DEVICES SHALL BE PLACED PRIOR TO CONSTRUCTION IN ANY AREA, OR AS SOON AS PRACTICAL.

THE CONTRACTOR SHALL PROVIDE FOR ALL INTERIM DRAINAGE ON THE PROJECT. THE INTERIM DRAINAGE SHALL ENSURE THAT ALL RUNOFF IS CHANNELED TO THE TEMPORARY CONTROL DEVICES.

THE CONTRACTOR SHALL TAKE THE STEPS NECESSARY TO ENSURE THAT ALL CONSTRUCTION TRAFFIC LEAVING THE PROJECT SHALL NOT TRACK MUD OR OTHER DEBRIS ONTO ANY ROADWAY, PUBLIC STREET OR ANY ROADWAY WITHIN THE DEVELOPMENT. SHOULD MUD OR OTHER DEBRIS BE TRACKED ONTO ANY ROADWAY, THE CONTRACTOR SHALL TAKE IMMEDIATE STEPS TO REMOVE IT TO THE SATISFACTION OF THE OWNER AND/OR ANY REGULATORY AUTHORITY.

TEMPORARY CONSTRUCTION ENTRANCES SHALL BE UTILIZED WHERE NECESSARY.

SPRINKLING OF ROADWAYS SHALL BE REQUIRED TO CONTROL DUST.

THE CONTRACTOR SHALL MODIFY, AS NECESSARY, ANY TEMPORARY EROSION CONTROL DEVICES SO THAT THEY SERVE THEIR INTENDED PURPOSE.

THE CONTRACTOR SHALL MAINTAIN ALL TEMPORARY EROSION DEVICES TO A CONDITION SIMILAR TO THAT OF WHEN IT WAS ORIGINALLY INSTALLED.

THE CONTRACTOR SHALL KEEP ALL TEMPORARY EROSION CONTROL DEVICES FREE OF SILT AND/OR ANY OTHER MATERIAL THAT MAY ACCUMULATE. REMOVAL SHALL OCCUR AS SOON AS PRACTICAL AFTER A RAINFALL. IN NO INSTANCE SHALL SILT BE PERMITTED TO ACCUMULATE TO A DEPTH ABOVE, OR IN EXCESS OF 50% OF THE DESIGN CAPACITY OF THE DEVICE.

AS REQUIRED BY THE OWNER, THE CONTRACTOR SHALL ACCOMPANY THE OWNER DURING THE INSPECTION OF THE EROSION CONTROL DEVICES TO DISCUSS MODIFICATIONS TO ENSURE THE DEVICES SERVE THEIR INTENDED PURPOSE.

THE CONTRACTOR SHALL PROTECT ALL AREAS (TREES AND MATURE VEGETATION). WHETHER WITHIN OR OUTSIDE OF THE ACTUAL LIMITS OF CONSTRUCTION. THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO A CONDITION AS GOOD AS, OR BETTER THAN, THAT PRESENT PRIOR TO THE CONSTRUCTION.

ALL CONSTRUCTION AND CONSTRUCTION EQUIPMENT SHALL REMAIN WITHIN THE ESTABLISHED STREET RIGHT OF WAY AND EASEMENTS UNLESS THE OWNER HAS GRANTED PRIOR AUTHORIZATION.

IN THE EVENT THE CONTRACTOR ESTABLISHES A YARD ON THE PROJECT. HE SHALL BE RESPONSIBLE FOR ESTABLISHING HIS OWN STORM WATER POLLUTION PREVENTION PLAN AND COMPLYING WITH THE REQUIREMENTS THEREOF.

THE CONTRACTOR SHALL KEEP THE DEVELOPMENT FREE FROM LITTER.

TEMPORARY AND PERMANENT EROSION CONTROL AND SEDIMENTATION CONTROL NOTES
PERMANENT EROSION AND SEDIMENTATION CONTROL

1. ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW (FOR SPECIFICS REFERENCE CITY OF AUSTIN STANDARD SPECIFICATIONS – SERIES 600, ENVIRONMENTAL ENHANCEMENT). A MINIMUM OF FOUR INCHES OF TOPSOIL SHALL BE PLACED IN ALL DISTURBED AREAS (EXCEPT ROCK) BETWEEN THE CURB AND THE R.O.W.

THE CONTRACTOR SHALL HYDROMULCH OR SOD ALL EXPOSED CUTS AND FILLS UPON COMPLETION OF CONSTRUCTION, EXCEPT WHERE CUTS ARE MADE IN SOLID ROCK. THE SEEDING OR EROSION CONTROL SHALL BE APPLIED AT THE SPECIFIC RATE OVER AREAS DISTURBED BY CONSTRUCTION AS FOLLOWS UNLESS AN ALTERNATIVE SEED MIX IS APPROVED BY THE OWNER:

FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH A COMBINATION OF 1 POUND PER 1000 SQUARE FEET OF UNHULLED BERMUDA AND 1 POUND PER 1000 SQUARE FEET OF WINTER RYE WITH A PURITY OF 95% GERMINATION.

FROM MARCH 1 TO SEPTEMBER 15, SEEDING SHALL BE WITH HULLED BERMUDA GRASS (CYNODEN DACTOLYN) AT A RATE OF 1 POUND PER 1000 SQUARE FEET WITH A PURITY OF 95% WITH 85% GERMINATION.

FERTILIZER SHALL HAVE AN ANALYSIS OF 15-15-15 AND SHALL BE APPLIED AT A RATE OF 1 LB. PER 1000 SQUARE FEET. MULCH TYPE TO BE STRAW OR HAY APPLIED AT A RATE OF 500 POUNDS PER ACRE. RESTORATION SHALL BE ACCEPTABLE WHEN THE GRASS HAS REACHED A HEIGHT OF AT LEAST 1-1/2" (95%) COVERAGE AND NO BARE SPOTS LARGER THEN 16 SQUARE FEET EXIST.

2. THE SEEDED OR PLANTED AREA IS TO BE IRRIGATED OR SPRINKLED IN A MANNER WHICH WILL NOT ERODE THE TOPSOIL BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF SIX INCHES. THE IRRIGATION SHALL OCCUR AT TEN DAY INTERVALS FOR THE FIRST TWO MONTHS. RAINFALL OCCURRENCES OF AT LEAST 1/2 INCH SHALL POSTPONE THE WATERING OPERATIONS FOR ONE WEEK.

3. WHEN REQUIRED, NATIVE GRASS SEEDING SHALL COMPLY WITH SECTION 604.6 (NATIVE GRASS SEEDING) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS – SERIES 600, ENVIRONMENTAL ENHANCEMENT.

SITE DESCRIPTION

A) THE PROJECT SHALL CONSIST OF THE CONSTRUCTION OF UTILITY IMPROVEMENTS.

B) SEQUENCE OF MAJOR ACTIVITIES:
-INSTALLATION OF EROSION/ SEDIMENTATION CONTROLS.
-CONSTRUCTION OF TEMPORARY AND PERMANENT ACCESS ROADS.
-INSTALLATION OF UNDERGROUND WASTEWATER UTILITIES.
-REVEGETATION OF DISTURBED AREAS.
-REMOVAL AND PROPER DISPOSAL OF EROSION/SEDIMENTATION CONTROLS ONCE PERMANENT VEGETATION IS ESTABLISHED.

C) ESTIMATE OF SITE AREA:
TOTAL SIZE: **18.65 ACRES**
TOTAL DISTURBED AREA: **18.65 ACRES**

D) ESTIMATED RUNOFF COEFFICIENTS FOR THE 100 YEAR STORM AND DESCRIPTION OF RUNOFF:
SHEETFLOW

THE SOIL IS MOSTLY SEAWILLOW CLAY LOAM, 3 TO 8 PERCENT SLOPES, FOLLOWED BY SUNEV CLAY LOAM, 1 TO 3 PERCENT SLOPES, AND DOSS SILTY CLAY, 1 TO 5 PERCENT SLOPES. THERE ARE ALSO SMALL AMOUNTS OF BRACKETT-ROCK OUTCROP-COMFORT COMPLEX 1 TO 8 PERCENT SLOPES, SEAWILLOW CLAY LOAM, 1 TO 3 PERCENT SLOPES, AND GRUENE CLAY, 1 TO 5 PERCENT SLOPES.

E) LOCATION MAP (COVER SHEET)

F) THERE IS NO INDUSTRIAL ACTIVITY OTHER THAN CONSTRUCTION ACTIVITIES

G) RECEIVING WATERS:
RUNOFF FROM THE SITE DISCHARGES TO ONION CREEK, WHICH DISCHARGES TO THE COLORADO RIVER, FLOWING TO THE GULF OF MEXICO.

NOTE:
DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITY HAS CEASED (TEMPORARILY OR PERMANENTLY) SHALL BE STABILIZED WITHIN FOURTEEN (14) DAYS UNLESS ACTIVITIES ARE SCHEDULED TO RESUME AND DO SO WITHIN TWENTY –ONE (21) DAYS THE PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES.

REQUIREMENTS

THE FOLLOWING RECORDS SHALL BE KEPT BY THE CONTRACTOR, WITH THE SWPPP:
-DATES WHEN MAJOR GRADING ACTIVITIES OCCUR
-DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY CEASE
-DATES WHEN CONSTRUCTION ACTIVITIES PERMANENTLY CEASE
-DATES WHEN STABILIZATION MEASURES ARE INITIATED

THE SWPPP SHALL BE AMENDED WHEN:
-THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE SYSTEM OR SITE
-INSPECTIONS INDICATE THE PLAN IS NOT MEETING THE DESIRED OBJECTIVES

THE OWNER/OPERATOR SHALL POST A NOTICE NEAR THE MAIN ENTRANCES OF THE CONSTRUCTION SITE WITH THE FOLLOWING INFORMATION:
-TPDES PERMIT NUMBER OR A COPY OF THE NOI IF THE PERMIT NUMBER HAS NOT YET BEEN ASSIGNED
-THE NAME AND TELEPHONE NUMBER OF A LOCAL CONTACT PERSON
-A BRIEF DESCRIPTION OF THE PROJECT
-THE LOCATION OF THE SWPPP

STRUCTURAL PRACTICES

____X____ SILT FENCES
_____ HAY BALES
____X____ ROCK BERMS
_____ DIVERSION, INTERCEPTOR, OR PERIMETER DIKES
_____ DIVERSION, INTERCEPTOR, OR PERIMETER SWALES
_____ DIVERSION DIKE AND SWALE COMBINATION
_____ BRUSH BERMS
_____ CONCRETE FLUMES
____X____ STABILIZED (ROCK) CONSTRUCTION ENTRANCES
_____ SEDIMENT TRAPS
_____ SEDIMENT BASINS
_____ STONE OUTLET STRUCTURES CURB AND GUTTERS
_____ STORM SEWERS
_____ VELOCITY CONTROL DEVICES

STABILIZATION PRACTICES

____X____ TEMPORARY VEGETATION
____X____ PERMANENT VEGETATION
_____ CELLULOSE FIBER MULCHING
_____ VEGETATIVE BUFFER STRIPS
____X____ PROTECTION OF TREES
_____ PROTECTION OF MATURE VEGETATION
____X____ GEOTEXTILES
_____ SOD STABILIZATION

NOTES:

-MEASURES WILL BE REVISED AS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE PROJECT SITE
-ANY SEDIMENT THAT ESCAPES THE SITE WILL BE REMOVED IMMEDIATELY AND CORRECTIVE ACTION TAKEN TO PREVENT ITS RECURRENCE
-LITTER AND OTHER DEBRIS WILL BE COLLECTED FROM THE SITE ROUTINELY
-ALL ON-SITE AND OFF-SITE MATERIAL STORAGE AREAS SHALL BE PROTECTED

STANDARD ENVIRONMENTAL CONDITIONS:
- CONSISTENT WITH THE TWDB SUPPLEMENTAL CONSTRUCTION CONTRACT CONDITIONS (TWDB-0551), THE CITY WILL ABIDE BY THE STANDARD EMERGENCY CONDITION FOR THE DISCOVERY OF CULTURAL RESOURCES.
- CONSISTENT WITH THE TWDB SUPPLEMENTAL CONSTRUCTION CONTRACT CONDITIONS (TWDB-0551), THE CITY WILL ABIDE BY THE STANDARD EMERGENCY CONDITION FOR THE DISCOVERY OF THREATENED AND ENDANGERED SPECIES.
-TO ENSURE COMPLIANCE WITH THE MIGRATORY BIRD TREATY ACT, VEGETATION CLEARING WILLBE NOT BE PERFORMED, IF POSSIBLE, DURING THE MIGRATORY BIRD NESTING PERIOD FROM MARCH 15 THROUGH SEPTEMBER 15, TO AVOID ADVERSE IMPACTS TO BREEDING BIRDS. IF CLEARING VEGETATION DURING THE MIGRATORY BIRD NESTING SEASON IS UNAVOIDABLE, THEN A SURVEY OF THE PROPOSED PROJECT AREA WILL BE CONDUCTED TO ENSURE THAT NO NESTS WITH EGGS OR YOUNG WILL BE DISTURBED BY OPERATIONS. A MINIMUM 150-FOOT BUFFER OF VEGETATION REMAIN AROUND ANY NESTS THAT ARE OBSERVED PRIOR TO DISTURBANCE. ANY VEGETATION (SUCH AS TREES, SHRUBS, AND GRASSES) OR OTHER OPEN AREAS WHERE OCCUPIED NESTS ARE LOCATED WILL NOT BE DISTURBED UNTIL THE EGGS HAVE HATCHED AND THE YOUNG HAVE FLEDGED;
-COMPLIANCE WITH THE TERMS AND CONDITIONS OF UNITED STATES ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT 12 FOR UTILITY LINE ACTIVITIES (USACE PROJECT NUMBER SWF-2020-00075);•IN ORDER TO COMPLY WITH REQUIREMENTS OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY REGARDING IMPLEMENTATION OF THE FLOOD INSURANCE ACT, FLOOD DISASTER PROTECTION ACT, NATIONAL FLOOD INSURANCE REFORM ACT, FEDERAL EXECUTIVE ORDERS 11988 AND 11990, AND TO COMPLY WITH RELATED STATE STATUTES, PROPONENTS OF CONSTRUCTION PROJECTS IN SPECIAL FLOOD HAZARD AREAS MUST COORDINATE IN ADVANCE WITH THE LOCAL FLOODPLAIN ADMINISTRATOR AND OBTAIN A FLOODPLAIN DEVELOPMENT PERMIT PRIOR TO CONSTRUCTION;

INSPECTIONS

QUALIFIED PERSONNEL SHALL INSPECT DISTURBED AREAS THAT HAVE NOT BEEN FINALLY STABILIZED, STORAGE AREAS, STRUCTURAL CONTROLS, AND AREAS WHERE CONSTRUCTION AND OTHER VEHICLES LEAVE THE SITE AT LEAST ONCE EVERY FOURTEEN (14) DAYS AND WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A STORM EVENT OF ½ INCHES OR GREATER.

DISTURBED AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR POTENTIAL FOR, SEDIMENT ENTERING THE DRAINAGE SYSTEM.

AFTER THE INSPECTIONS, THE SWPPP SHALL BE MODIFIED AS NECESSARY TO INCLUDE ADDITIONAL BMP'S (BEST MANAGEMENT PRACTICES) DESIGNED TO CORRECT DEFICIENCIES IDENTIFIED.

REVISIONS (MODIFICATIONS) SHALL BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING THE INSPECTION, IF POSSIBLE IMPLEMENT BEFORE NEXT STORM EVENT.

IF EXISTING BMP'S NEED TO BE MODIFIED OR ADDITIONAL BMP'S ARE REQUIRED, IMPLEMENTATIONS SHALL BE COMPLETED PRIOR TO THE NEXT ANTICIPATED STORM EVENT OR AS SOON AS PRACTICAL.

A REPORT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE SWPPP SHALL BE MADE AND RETAINED AS PART OF THE SWPPP FOR AT LEAST THREE (3) YEARS FROM THE DATE THE "NOTICE OF TERMINATION" (NOT) IS SUBMITTED.

THE OBSERVATIONS SHOULD INCLUDE:
-SEDIMENT DISCHARGES FROM THE SITE
-LOCATION OF BMP'S THAT SHOULD BE MAINTAINED
-LOCATION OF BMP'S THAT WERE INADEQUATE
-LOCATION WHERE ADDITIONAL BMP'S SHALL BE INSTALLED

WHERE AN INSPECTION DOES NOT INDICATE THAT MODIFICATIONS TO EXISTING BMP'S ARE NECESSARY OR ADDITIONAL BMP'S ARE REQUIRED, A REPORT SHALL BE PREPARED WITH A CERTIFICATION THAT THE FACILITY IS IN COMPLIANCE WITH THE SWPPP AND THE TPDES PERMIT.

STANDARD PERMIT CONDITIONS

1. THE PERMITTEE HAS A DUTY TO COMPLY WITH ALL PERMIT CONDITIONS. FAILURE TO COMPLY WITH ANY PERMIT CONDITION IS A VIOLATION OF THE PERMIT AND STATUTES UNDER WHICH IT WAS ISSUED, AND IS GROUNDS FOR ENFORCEMENT ACTION, FOR TERMINATING COVERAGE UNDER THIS GENERAL PERMIT, OR FOR REQUIRING A DISCHARGER TO APPLY FOR AND OBTAIN AN INDIVIDUAL TPDES PERMIT.

2. AUTHORIZATION UNDER THIS GENERAL PERMIT MAY BE SUSPENDED OR REVOKED FOR CAUSE. FILING A NOTICE OF PLANNED CHANGES OR ANTICIPATED NON-COMPLIANCE BY THE PERMITTEE DOES NOT STAY ANY PERMIT CONDITION. THE PERMITTEE MUST FURNISH TO THE EXECUTIVE DIRECTOR, UPON REQUEST AND WITHIN A REASONABLE TIME, ANY INFORMATION NECESSARY FOR THE EXECUTIVE DIRECTOR TO DETERMINE WHETHER CAUSE EXISTS FOR REVOKING, SUSPENDING, OR TERMINATING AUTHORIZATION UNDER THIS PERMIT. ADDITIONALLY, THE PERMITTEE MUST PROVIDE TO THE EXECUTIVE DIRECTOR, UPON REQUEST, COPIES OF ALL RECORDS THAT THE PERMITTEE IS REQUIRED TO MAINTAIN AS A CONDITION OF THIS GENERAL PERMIT.

3. IT IS NOT A DEFENSE FOR A DISCHARGER IN AN ENFORCEMENT ACTION THAT IT WOULD HAVE BEEN NECESSARY TO HALT OR REDUCE THE PERMITTED ACTIVITY TO MAINTAIN COMPLIANCE WITH THE PERMIT CONDITIONS.

4. INSPECTION AND ENTRY SHALL BE ALLOWED UNDER TEXAS WATER CODE CHAPTERS 26-28, HEALTH AND SAFETY CODE §§ 361.032-361.033 AND 361.037, AND 40 CODE OF FEDERAL REGULATIONS (CFR) § 122.41(i). THE STATEMENT IN TEXAS WATER CODE § 26.014 THAT COMMISSION ENTRY OF A FACILITY SHALL OCCUR ACCORDING TO AN ESTABLISHMENT'S RULES AND REGULATIONS CONCERNING SAFETY, INTERNAL SECURITY, AND FIRE PROTECTION IS NOT GROUNDS FOR DENIAL OR RESTRICTION OF ENTRY TO ANY PART OF THE FACILITY OR SITE, BUT MERELY DESCRIBES THE COMMISSION'S DUTY TO OBSERVE APPROPRIATE RULES AND REGULATIONS DURING AN INSPECTION.

5. THE DISCHARGER IS SUBJECT TO ADMINISTRATIVE, CIVIL, AND CRIMINAL PENALTIES, AS APPLICABLE, UNDER TEXAS WATER CODE §§ 26.136, 26.212, AND 26.213 FOR VIOLATIONS INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

a. NEGLIGENTLY OR KNOWINGLY VIOLATING CWA, §§ 301, 302, 306, 307, 308, 318, OR 405, OR ANY CONDITION OR LIMITATION IMPLEMENTING ANY SECTIONS IN A PERMIT ISSUED UNDER CWA § 402, OR ANY REQUIREMENT IMPOSED IN A PRETREATMENT PROGRAM APPROVED UNDER CWA, §§ 402(a)(3) OR 402(b)(8);

b. KNOWINGLY MAKING ANY FALSE STATEMENT, REPRESENTATION, OR CERTIFICATION IN ANY RECORD OR OTHER DOCUMENT SUBMITTED OR REQUIRED TO BE MAINTAINED UNDER A PERMIT, INCLUDING MONITORING REPORTS OR REPORTS OF COMPLIANCE OR NONCOMPLIANCE.

6. ALL REPORTS AND OTHER INFORMATION REQUESTED BY THE EXECUTIVE DIRECTOR MUST BE SIGNED BY THE PERSON AND IN THE MANNER REQUIRED BY 30TAC § 305.128 (RELATING TO SIGNATORIES TO REPORTS).

7. AUTHORIZATION UNDER THIS GENERAL PERMIT DOES NOT CONVEY PROPERTY OR WATER RIGHTS OF ANY SORT AND DOES NOT GRANT ANY EXCLUSIVE PRIVILEGE.

SPILL RESPONSE PLAN
1. ALL SPILLS MEETING THE FOLLOWING CRITERIA MUST BE IMMEDIATELY REPORTED TO THE TEXAS SPILL HOTLINE (1-800-832-8224), WHICH IS OPERATED 24 HRS A DAY.

KIND OF SPILL	WHERE DISCHARGED	AMOUNT
PETROLEUM PRODUCTS	LAND	25 GAL
	WATER	LEAVES A SHEEN ON WATER SURFACE
CHEMICALS	WATER	100 LBS

IF POSSIBLE, BE PREPARED TO ANSWER THE FOLLOWING QUESTIONS:
- DATE AND TIME OF SPILL.
- IDENTITY OF MATERIAL SPILLED.
- ESTIMATE OF THE QUANTITY OF MATERIAL SPILLED AND DURATION.
- THE EXACT LOCATION OF THE SPILL, INCLUDING THE NAME OF WATERS INVOLVED OR THREATENED (ONION CREEK/WALNUT SPRINGS)
- EXTENT OF ACTUAL AND POTENTIAL WATER POLLUTION.
- SOURCE OF THE SPILL.
- NAME, ADDRESS, AND PHONE NUMBER OF THE PARTY IN CHARGE OF, OR RESPONSIBLE FOR THE PROJECT OR ACTIVITY ASSOCIATED WITH THE SPILL.
- THE STEPS BEING TAKEN OR PROPOSED TO CONTAIN AND CLEAN UP THE SPILL AND ANY PRECAUTIONS TAKEN TO MINIMIZE IMPACTS, INCLUDING EVACUATION.
- THE EXTENT OF INJURIES, IF ANY.
- ANY KNOWN OR ANTICIPATED HEALTH RISKS.
- POSSIBLE HAZARDS TO THE ENVIRONMENT (AIR, SOIL, WATER, WILDLIFE, ETC.)
- THE IDENTITIES OF ANY RESPONDING AGENCIES.

2. IMMEDIATELY CONTAIN SPILLS OF ALL QUANTITIES AND MATERIALS. IF A LIQUID SPILL OCCURS ON PAVED SURFACES, ENCIRCLE THE SPILL WITH ABSORBENT MATERIALS. IF A LIQUID SPILL OCCURS IN DIRT AREAS, IMMEDIATELY CONTAIN THE SPILL BY CONSTRUCTING AN EARTHEN DIKE. PROMPTLY AND PROPERLY DISPOSE OF CONTAMINATED ABSORBENT MATERIAL AND DIRT. NEVER HOSE DOWN OR BURY DRY MATERIAL SPILLS.

3. WHEN VEHICLE MAINTENANCE AND/OR FUELING OCCURS ONSITE, USE A DESIGNATED AREA LOCATED AWAY FROM DRAINAGE COURSES. REGULARLY INSPECT ONSITE VEHICLES AND EQUIPMENT FOR LEAKS. REPAIR IMMEDIATELY.

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

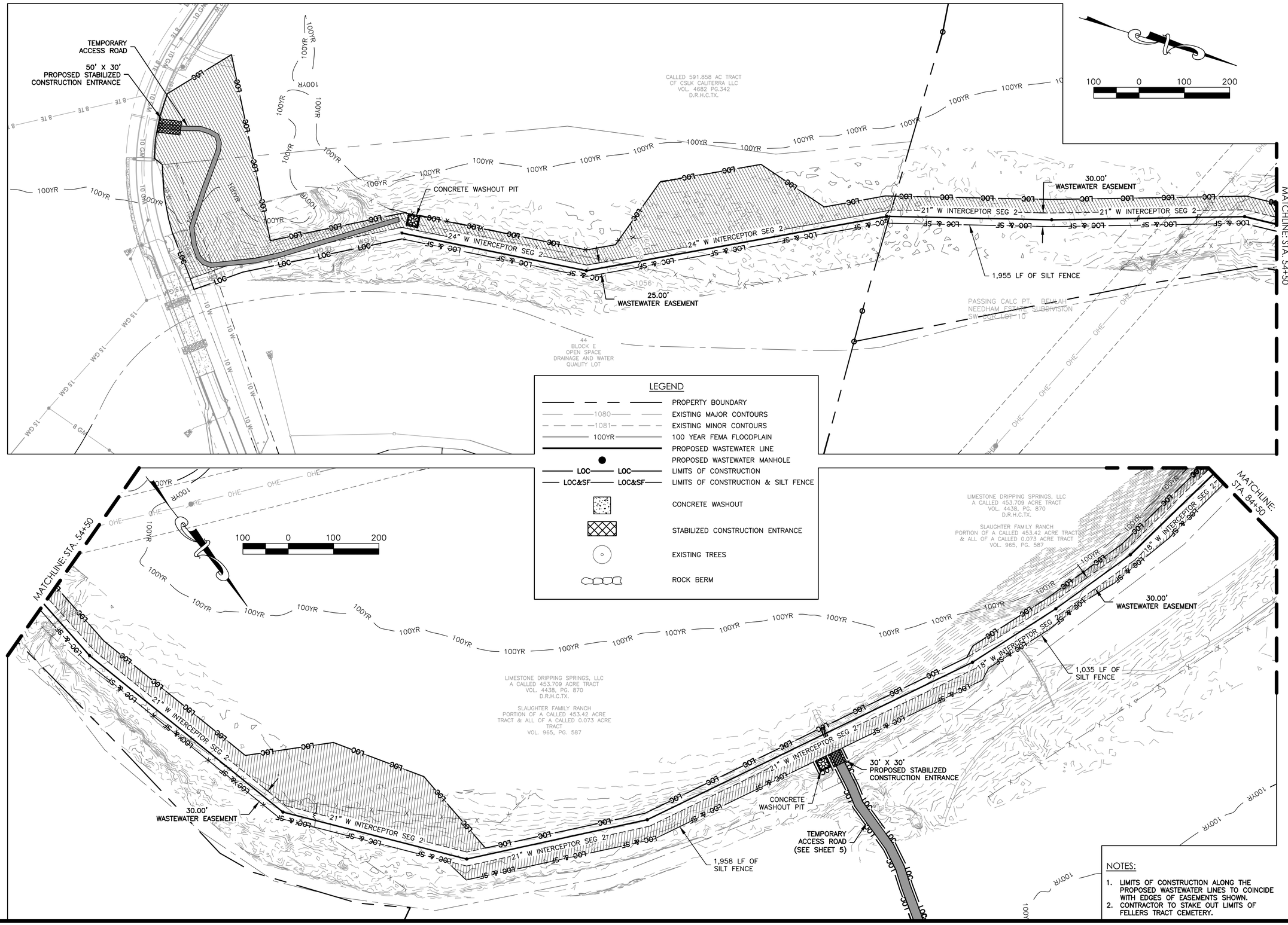
CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
STORM WATER POLLUTION PREVENTION PLAN

NO:	DESCRIPTION REVISIONS	DATE

JOB NO: 1950-001
DATE: SEPT 2025
DESIGNED BY: JB, CC
DRAWN BY: JB, CC
CHECKED BY: WBB
APPROVED BY: WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 3 OF 36



LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOURS (1080)
- EXISTING MINOR CONTOURS (1081)
- 100 YEAR FEMA FLOODPLAIN (100YR)
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- LIMITS OF CONSTRUCTION (LOC)
- LIMITS OF CONSTRUCTION & SILT FENCE (LOC&SF)
- CONCRETE WASHOUT
- STABILIZED CONSTRUCTION ENTRANCE
- EXISTING TREES
- ROCK BERM

NOTES:

1. LIMITS OF CONSTRUCTION ALONG THE PROPOSED WASTEWATER LINES TO COINCIDE WITH EDGES OF EASEMENTS SHOWN.
2. CONTRACTOR TO STAKE OUT LIMITS OF FELLERS TRACT CEMETERY.

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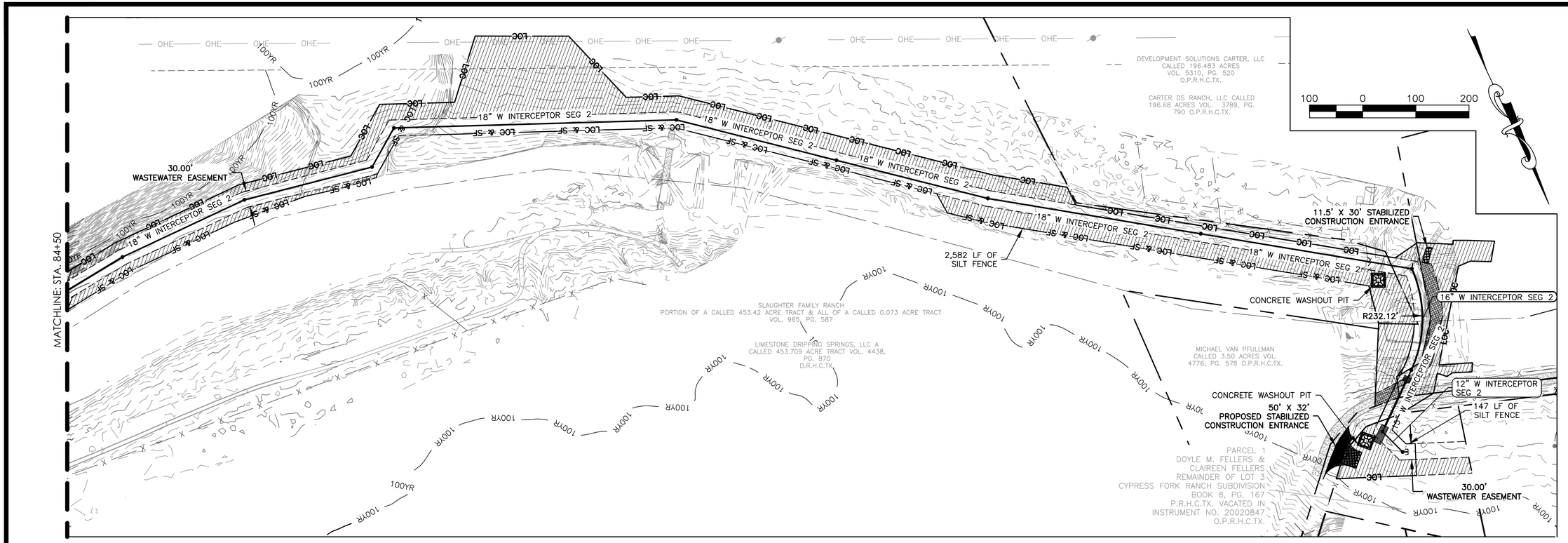
CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
EROSION-SEDIMENTATION
PLAN 1 OF 2

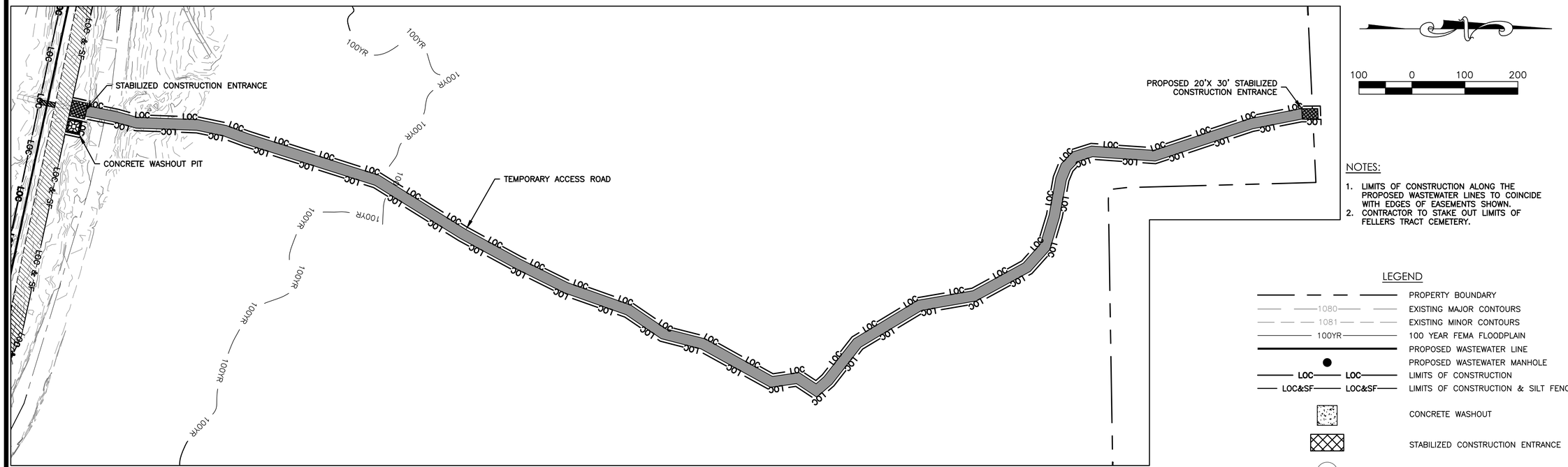
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APPROVED BY:	WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 4 OF 36





TEMPORARY ACCESS ROAD

NOTES:

1. LIMITS OF CONSTRUCTION ALONG THE PROPOSED WASTEWATER LINES TO COINCIDE WITH EDGES OF EASEMENTS SHOWN.
2. CONTRACTOR TO STAKE OUT LIMITS OF FELLERS TRACT CEMETERY.

LEGEND

- PROPERTY BOUNDARY
- 1080 — EXISTING MAJOR CONTOURS
- 1081 — EXISTING MINOR CONTOURS
- 100YR — 100 YEAR FEMA FLOODPLAIN
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- LOC — LOC — LIMITS OF CONSTRUCTION
- LOC&SF — LOC&SF — LIMITS OF CONSTRUCTION & SILT FENCE
- CONCRETE WASHOUT
- STABILIZED CONSTRUCTION ENTRANCE
- EXISTING TREES
- ROCK BERM

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CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
EROSION-SEDIMENTATION
PLAN 2 OF 2

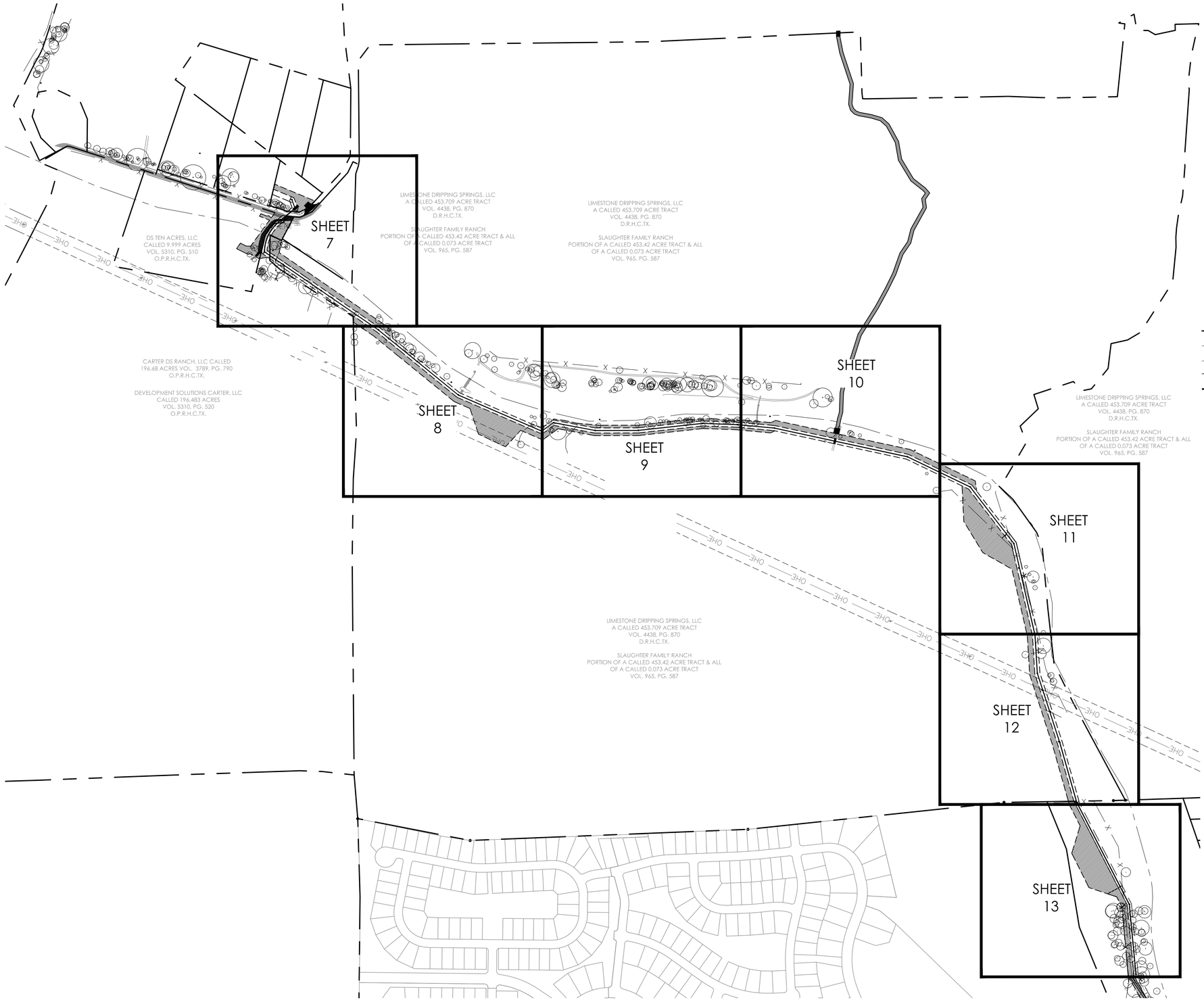
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APPROVED BY:	WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
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PROFESSIONAL ENGINEER
9/23/2025

SHEET: 5 OF 36

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LEGEND

- PROPERTY BOUNDARY
- 1080 EXISTING MAJOR CONTOURS
- 1081 EXISTING MINOR CONTOURS
- 100YR 100 YEAR FEMA FLOODPLAIN
- TREE PROTECTION
- EXISTING TREES
- WATER & WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT

NOTE: TREE REMOVALS SHALL BE VERIFIED BY THE OWNER AND CONTRACTOR PRIOR TO THE START OF CLEARING.

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CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
TREE PLAN KEY MAP

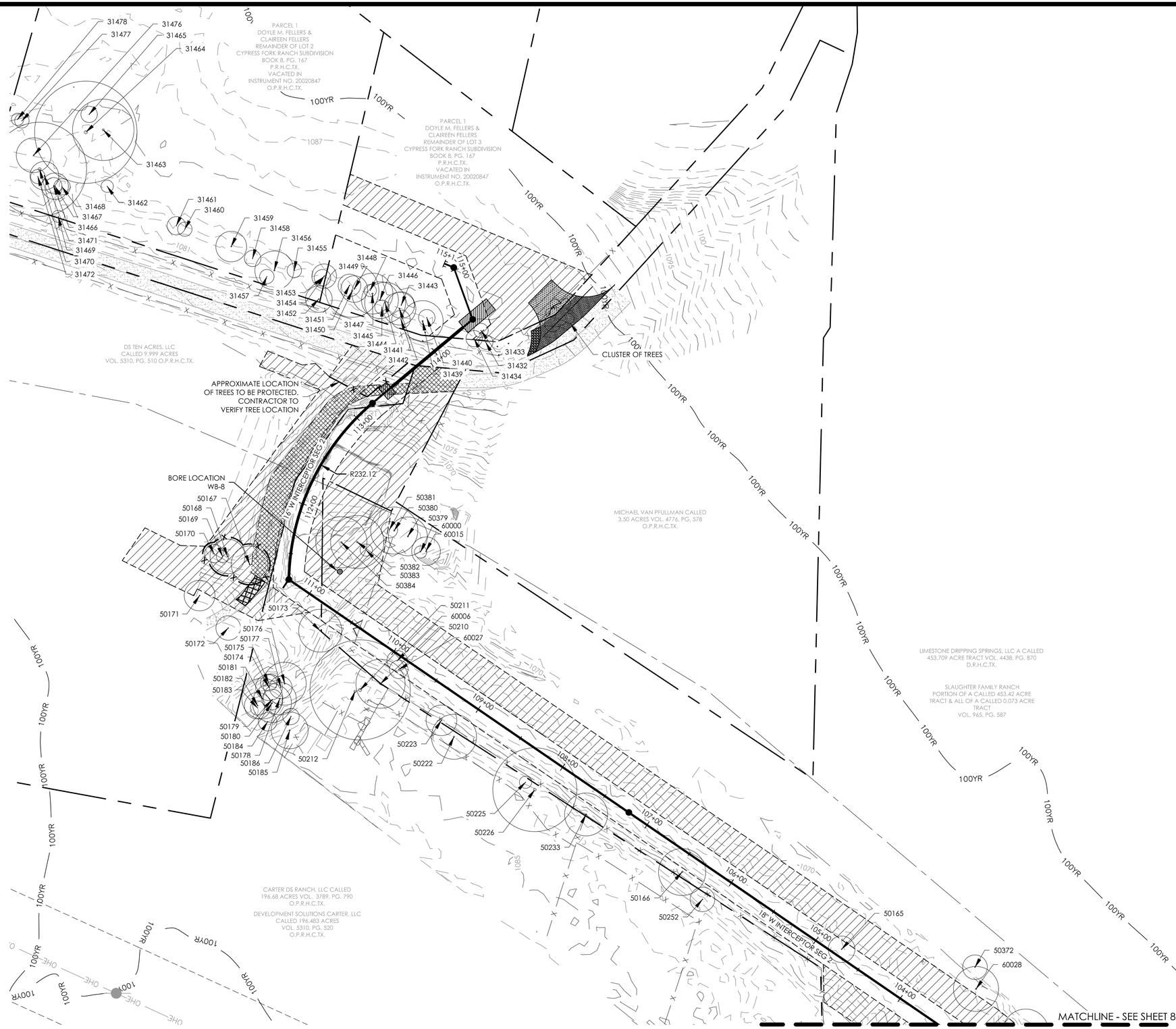
NO:	DESCRIPTION	DATE
	REVISIONS	

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APPROVED BY: WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
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9/23/2025

SHEET: 6 OF 36

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LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- 100 YEAR FEMA FLOODPLAIN
- TREE PROTECTION
- EXISTING TREES
- WATER & WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT

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PELS FIRM REGISTRATION NO. 10834

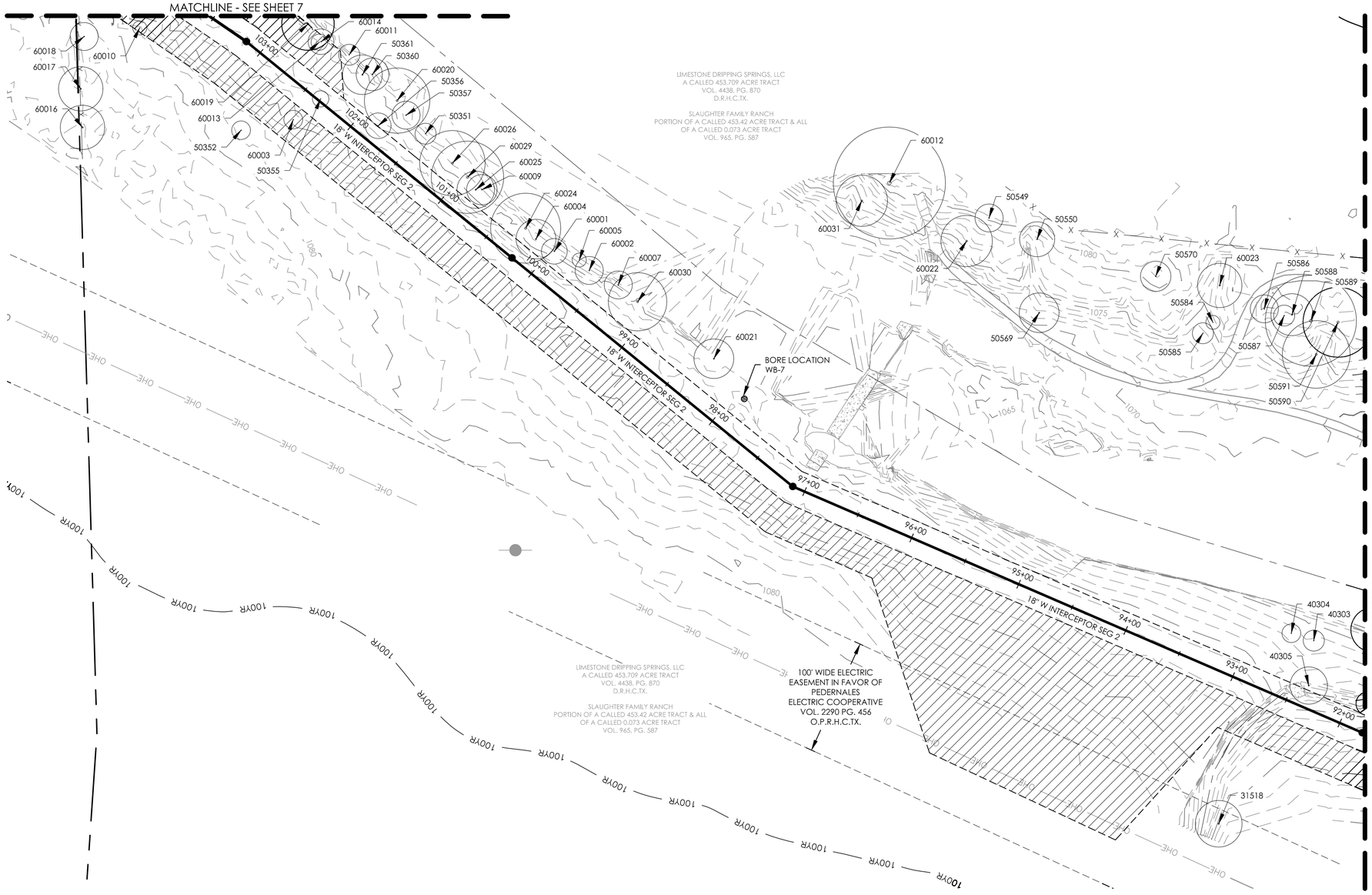
CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
TREE PLAN 1 OF 8

NO:	DESCRIPTION	DATE
	REVISIONS	

JOB NO:	1950-001
DATE:	SEPT 2025
DESIGNED BY:	JB, CC
DRAWN BY:	JB, CC
CHECKED BY:	WBB
APPROVED BY:	WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 7 OF 36



50 0 50 100

NOTE: TREE REMOVALS SHALL BE VERIFIED BY THE OWNER AND CONTRACTOR PRIOR TO THE START OF CLEARING.

LEGEND

- PROPERTY BOUNDARY
- 1080 EXISTING MAJOR CONTOURS
- 1081 EXISTING MINOR CONTOURS
- 100YR 100 YEAR FEMA FLOODPLAIN
- X X X TREE PROTECTION
- EXISTING TREES
- WATER & WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
TREE PLAN 2 OF 8

NO:	DESCRIPTION	DATE
	REVISIONS	

JOB NO: 1950-001
DATE: SEPT 2025
DESIGNED BY: JB, CC
DRAWN BY: JB, CC
CHECKED BY: WBB
APPROVED BY: WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 8 OF 36



50 0 50 100

NOTE: TREE REMOVALS SHALL BE VERIFIED BY THE OWNER AND CONTRACTOR PRIOR TO THE START OF CLEARING.

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- 100 YEAR FEMA FLOODPLAIN
- TREE PROTECTION
- EXISTING TREES
- WATER & WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

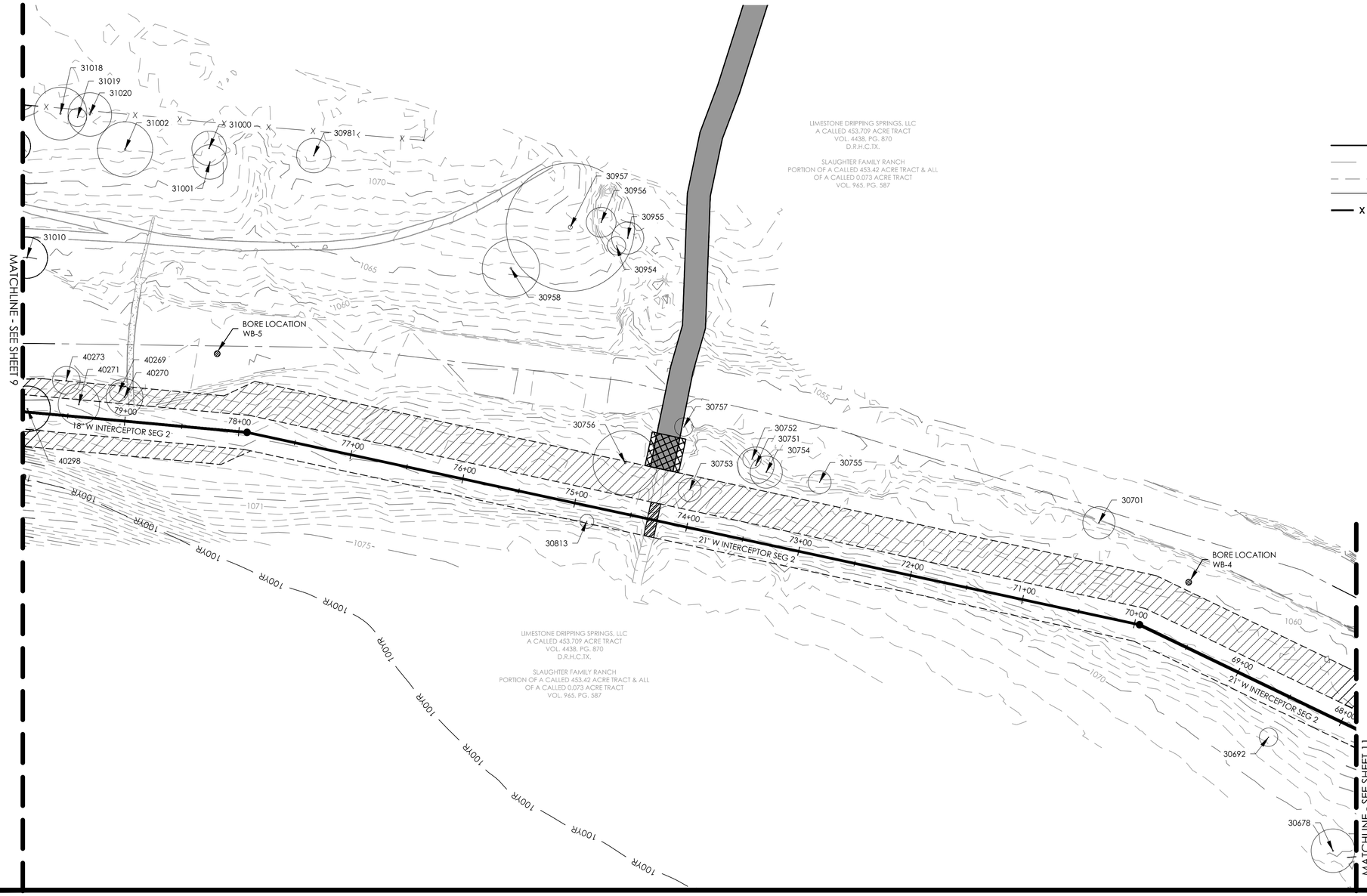
CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
TREE PLAN 3 OF 8

NO:	DESCRIPTION REVISIONS	DATE

JOB NO: 1950-001
DATE: SEPT 2025
DESIGNED BY: JB, CC
DRAWN BY: JB, CC
CHECKED BY: WBB
APPROVED BY: WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED PROFESSIONAL ENGINEER
9/23/2025

SHEET: 9 OF 36



50 0 50 100

LEGEND

- PROPERTY BOUNDARY
- 1080 EXISTING MAJOR CONTOURS
- 1081 EXISTING MINOR CONTOURS
- 100YR 100 YEAR FEMA FLOODPLAIN
- X X X TREE PROTECTION
- EXISTING TREES
- WATER & WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT

NOTE: TREE REMOVALS SHALL BE VERIFIED BY THE OWNER AND CONTRACTOR PRIOR TO THE START OF CLEARING.

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

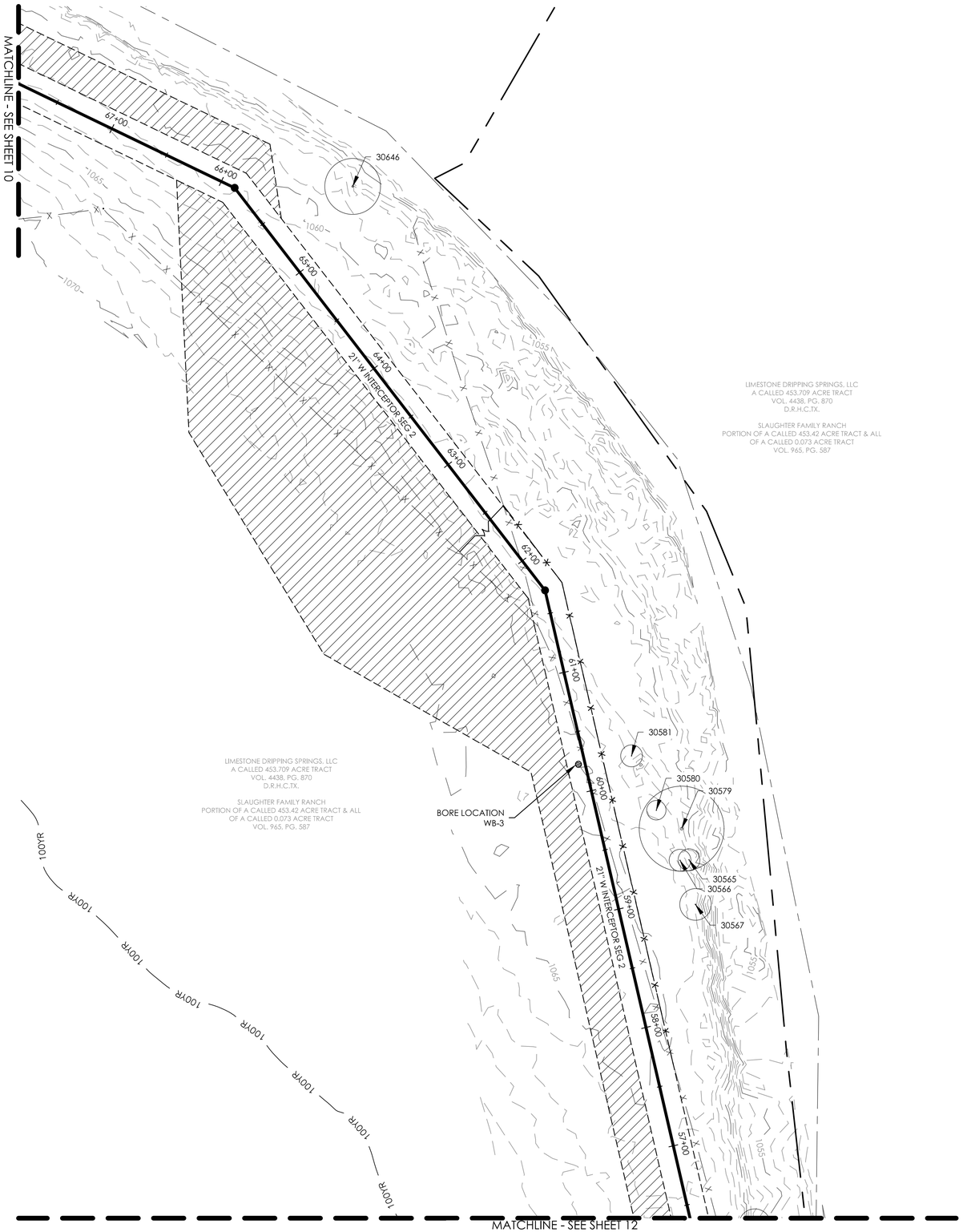
CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
TREE PLAN 4 OF 8

NO:	DESCRIPTION REVISIONS	DATE

JOB NO: 1950-001
DATE: SEPT 2025
DESIGNED BY: JB, CC
DRAWN BY: JB, CC
CHECKED BY: WBB
APPROVED BY: WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 10 OF 36





50 0 50 100

LEGEND

- PROPERTY BOUNDARY
- 1080 EXISTING MAJOR CONTOURS
- 1081 EXISTING MINOR CONTOURS
- 100YR 100 YEAR FEMA FLOODPLAIN
- TREE PROTECTION
- EXISTING TREES
- WATER & WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT

NOTE: TREE REMOVALS SHALL BE VERIFIED BY THE OWNER AND CONTRACTOR PRIOR TO THE START OF CLEARING.

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
TREE PLAN 5 OF 8

NO:	DESCRIPTION REVISIONS	DATE

JOB NO: 1950-001
DATE: SEPT 2025
DESIGNED BY: JB, CC
DRAWN BY: JB, CC
CHECKED BY: WBB
APPROVED BY: WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 11 OF 36

MATCHLINE - SEE SHEET 11

MATCHLINE - SEE SHEET 13

LIMESTONE DRIPPING SPRINGS, LLC
A CALLED 453.709 ACRE TRACT
VOL. 4438, PG. 870
D.R.H.C.TX.

SLAUGHTER FAMILY RANCH
PORTION OF A CALLED 453.42 ACRE TRACT & ALL
OF A CALLED 0.073 ACRE TRACT
VOL. 965, PG. 587

30574
30578
30523
30522
30499
30498
30497
30496

EXISTING ELECTRIC TOWER
SEE PEC CONSTRUCTION NOTES

100' WIDE ELECTRIC
EASEMENT IN FAVOR OF
PEDERNALES
ELECTRIC COOPERATIVE
VOL. 2290 PG. 456
O.P.R.H.C.TX.

PASSING CALC PT. BEULAH
NEEDHAM ESTATE
SUBDIVISION SW COR LOT
19

BORE LOCATION
WB-2

21" W INTERCEPTOR SEG 2

53+00
54+00
55+00
52+00
51+00
50+00
49+00
48+00
47+00

100YR
1055
1065
1080
1081
OHE

50 0 50 100

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- 100 YEAR FEMA FLOODPLAIN
- TREE PROTECTION
- EXISTING TREES
- WATER & WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT

NOTE: TREE REMOVALS SHALL BE VERIFIED BY THE OWNER AND CONTRACTOR PRIOR TO THE START OF CLEARING.

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
TREE PLAN 6 OF 8

NO:	DESCRIPTION	DATE
	REVISIONS	

JOB NO: 1950-001
DATE: SEPT 2025
DESIGNED BY: JB, CC
DRAWN BY: JB, CC
CHECKED BY: WBB
APPROVED BY: WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 12 OF 36

clark – Sep 23, 2025 – 11:41am – File: M:\DWG\1950-C of DS West Interceptor\CAD\SHEETS\1950-TREE PLAN.dwg



50 0 50 100

LEGEND

- PROPERTY BOUNDARY
- 1080 EXISTING MAJOR CONTOURS
- 1081 EXISTING MINOR CONTOURS
- 100YR 100 YEAR FEMA FLOODPLAIN
- TREE PROTECTION
- EXISTING TREES
- WATER & WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT

NOTE: TREE REMOVALS SHALL BE VERIFIED BY THE OWNER AND CONTRACTOR PRIOR TO THE START OF CLEARING.

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
TREE PLAN 7 OF 8

NO:	DESCRIPTION	DATE
	REVISIONS	

JOB NO:	1950-001
DATE:	SEPT 2025
DESIGNED BY:	JB, CC
DRAWN BY:	JB, CC
CHECKED BY:	WBB
APPROVED BY:	WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 13 OF 36

TREE LIST

4041	TR 7" LIVE OAK
4071	TR 18" LIVE OAK
4072	TR 7" LIVE OAK
4073	TR 8" LIVE OAK
4074	TR 7" LIVE OAK
4075	TR 8" LIVE OAK
4076	TR 6" LIVE OAK
4077	TR 6" LIVE OAK
4078	TR 6" LIVE OAK
4079	TR 6" LIVE OAK
4080	TR 6" LIVE OAK
4081	TR 9" LIVE OAK
4082	TR 7" LIVE OAK
4083	TR 14" LIVE OAK
4084	TR 11" LIVE OAK
4127	TR 10" LIVE OAK
4128	TR 6" LIVE OAK
4129	TR 6" LIVE OAK
4130	TR 8" LIVE OAK
4131	TR 11" LIVE OAK
4132	TR 7" LIVE OAK
4133	TR 6" LIVE OAK
4134	TR 10" PIN OAK
4135	TR 6" HACKBERRY
4136	TR 16" PIN OAK
4137	TR 19" LIVE OAK
4138	TR 17" LIVE OAK
4139	TR 6" HACKBERRY
4140	TR 14" LIVE OAK
4142	TR 9" LIVE OAK
4143	TR 8" LIVE OAK
4144	TR 7" LIVE OAK
4145	TR 7" LIVE OAK
4146	TR 7" LIVE OAK
4147	TR 8" LIVE OAK
4148	TR 8" LIVE OAK
4149	TR 7" LIVE OAK
4150	TR 23" JUNIPER
4151	TR 8" LIVE OAK
4152	TR 11" LIVE OAK
4153	TR 13" LIVE OAK
4154	TR 15" LIVE OAK
4155	TR 7" LIVE OAK
4156	TR 7" LIVE OAK
4157	TR 13" LIVE OAK
4196	TR 6" LIVE OAK
4197	TR 6" LIVE OAK
4198	TR 14" LIVE OAK
4199	TR 15" LIVE OAK
4200	TR 7" PIN OAK
4201	TR 7" PIN OAK
4202	TR 7" PIN OAK
4203	TR 6" PIN OAK
4204	TR 14" LIVE OAK
4205	TR 11" LIVE OAK
4206	TR 6" LIVE OAK
4207	TR 12" LIVE OAK
4208	TR 10" LIVE OAK
4209	TR 11" LIVE OAK
4210	TR 13" LIVE OAK
4211	TR 6" JUNIPER
4212	TR 8" LIVE OAK
4246	TR 7" LIVE OAK
4247	TR 29" LIVE OAK
4248	TR 10" JUNIPER
4249	TR 7" LIVE OAK
4250	TR 8" LIVE OAK
4251	TR 6" LIVE OAK
4252	TR 8" LIVE OAK
4253	TR 11" LIVE OAK
4254	TR 10" LIVE OAK
4255	TR 8" LIVE OAK
4256	TR 9" LIVE OAK
4257	TR 6" LIVE OAK
4258	TR 9" LIVE OAK
4259	TR 8" LIVE OAK
4260	TR 7" LIVE OAK
4261	TR 11" HACKBERRY
4262	TR 9" LIVE OAK
4263	TR 9" LIVE OAK
4264	TR 6" LIVE OAK
4265	TR 7" LIVE OAK
4266	TR 9" LIVE OAK
4267	TR 8" LIVE OAK
4268	TR 7" LIVE OAK
4269	TR 7" LIVE OAK
4270	TR 8" LIVE OAK
4271	TR 7" LIVE OAK
4272	TR 10" LIVE OAK
4273	TR 16" LIVE OAK
4274	TR 8" LIVE OAK
4275	TR 7" LIVE OAK
4276	TR 8" LIVE OAK
4277	TR 9" LIVE OAK
4278	TR 11" LIVE OAK
4279	TR 9" LIVE OAK
4280	TR 10" JUNIPER
4281	TR 32" LIVE OAK
4282	TR 10" JUNIPER
4283	TR 7" LIVE OAK
4284	TR 7" LIVE OAK
4285	TR 6" LIVE OAK
4286	TR 7" LIVE OAK
4287	TR 6" LIVE OAK
5031	TR 63" LIVE OAK
5032	TR 28" LIVE OAK
5033	TR 33" LIVE OAK
5034	TR 17" PECAN
5050	TR 18" LIVE OAK
5051	TR 13" LIVE OAK
5059	TR 22" LIVE OAK
5061	TR 19" LIVE OAK
5064	TR 28" LIVE OAK
5065	TR 18" LIVE OAK
5067	TR 16" LIVE OAK
5069	TR 43" (21" 22") LIVE OAK
5072	TR 39" (19" 20") LIVE OAK
5073	TR 21" LIVE OAK
5074	TR 13" LIVE OAK
5077	TR 31" (14" 17") LIVE OAK
5083	TR 19" LIVE OAK
5085	TR 13" LIVE OAK
5086	TR 20" LIVE OAK
5088	TR 14" LIVE OAK
5090	TR 16" LIVE OAK
5092	TR 27" (13" 14") LIVE OAK
5097	TR 22" LIVE OAK
5098	TR 34" LIVE OAK
5102	TR 11" LIVE OAK
5103	TR 16" LIVE OAK
5104	TR 20" LIVE OAK
5112	TR 24" LIVE OAK
5114	TR 13" LIVE OAK
5115	TR 15" LIVE OAK
5116	TR 9" LIVE OAK
5118	TR 26" LIVE OAK
5121	TR 26" LIVE OAK
5122	TR 38" (24" 14") LIVE OAK
5123	TR 12" LIVE OAK
5124	TR 21" LIVE OAK
5125	TR 19" LIVE OAK
5126	TR 22" LIVE OAK
5127	TR 19" LIVE OAK
5134	TR 16" LIVE OAK
5135	TR 24" LIVE OAK
5136	TR 19" LIVE OAK
5140	TR 12" LIVE OAK
5141	TR 13" LIVE OAK
5142	TR 18" LIVE OAK
5159	TR 17" LIVE OAK
5160	TR 15" LIVE OAK
5161	TR 13" LIVE OAK
5162	TR 12" LIVE OAK
5167	TR 19" LIVE OAK DEAD
23861	TR 17" LIVE OAK
23862	TR 19" LIVE OAK
23863	TR 12" LIVE OAK
23866	TR 12" LIVE OAK
23868	TR 12" LIVE OAK
23869	TR 11" LIVE OAK
23870	TR 12" LIVE OAK
23871	TR 12" LIVE OAK
23872	TR 6" LIVE OAK
23873	TR 10" LIVE OAK
23874	TR 23" LIVE OAK
23876	TR 11" LIVE OAK
23881	TR 12" LIVE OAK
23882	TR 18" JUNIPER
23883	TR 16" LIVE OAK
23884	TR 20" LIVE OAK
23885	TR 28" LIVE OAK
23886	TR 13" LIVE OAK
23887	TR 7" LIVE OAK
30210	TR 27" (7" 9" 11") PECAN
30293	TR 36" LIVE OAK
30294	TR 18" LIVE OAK
30295	TR 25" LIVE OAK
30296	TR 23" LIVE OAK
30297	TR 20" (9" 11") LIVE OAK
30298	TR 12 LIVE OAK
30299	TR 32" (15" 17") LIVE OAK
30300	TR 24" (9" 15") LIVE OAK
30302	TR 17" LIVE OAK
30303	TR 19" LIVE OAK
30304	TR 20" CEDAR ELM
30305	TR 35" LIVE OAK
30306	TR 18" CEDAR ELM
30307	TR 14" CEDAR ELM
30320	TR 19" CEDAR ELM
30321	TR 26" PECAN
30322	TR 15" PECAN
30323	TR 17" PECAN
30324	TR 17" PECAN
30325	TR 49" (23" 26") PECAN
30326	TR 19" PECAN
30327	TR 43" (12" 14" 17") LIVE OAK
30328	TR 24" LIVE OAK
30329	TR 17" PECAN
30330	TR 27" PECAN
30331	TR 18" PECAN
30332	TR 23" PECAN
30333	TR 22" PECAN
30334	TR 20" PECAN
30335	TR 20" PECAN
30336	TR 18" PECAN
30337	TR 29" PECAN
30338	TR 20" PECAN
30339	TR 25" PECAN
30340	TR 27" PECAN
30341	TR 33" PECAN
30342	TR 32" AMERICAN ELM
30343	TR 16" PECAN
30344	TR 16" AMERICAN ELM
30345	TR 26" AMERICAN ELM
30346	TR 38" PECAN
30347	TR 44" (18" 26") AMERICAN ELM
30348	TR 28" PECAN
30349	TR 35" PECAN
30350	TR 19" AMERICAN ELM
30351	TR 26" AMERICAN ELM
30352	TR 24" AMERICAN ELM
30388	TR 26" LIVE OAK
30447	TR 17" AMERICAN ELM
30448	TR 22" PECAN
30449	TR 23" PECAN
30450	TR 37" (14" 23") AMERICAN ELM
30451	TR 20" AMERICAN ELM
30452	TR 18" PECAN
30453	TR 19" PECAN
30454	TR 16" PECAN
30455	TR 21" PECAN
30456	TR 46" (18" 28") PECAN
30457	TR 17" PECAN
30458	TR 21" PECAN
30459	TR 12" CEDAR ELM
30460	TR 20" AMERICAN ELM
30461	TR 39" (17" 22") AMERICAN ELM
30462	TR 26" AMERICAN ELM
30463	TR 20" AMERICAN ELM
30464	TR 20" PECAN
30465	TR 21" PECAN
30466	TR 37" (16" 21") PECAN
30467	TR 17" AMERICAN ELM
30496	TR 20" (9" 11") MESQUITE
30497	TR 10" LIVE OAK
30498	TR 18" (7" 11") PECAN
30499	TR 10" MESQUITE
30522	TR 30" SYCAMORE
30523	TR 20" SYCAMORE
30565	TR 9" AMERICAN ELM
30566	TR 9" HACKBERRY
30567	TR 13" LIVE OAK
30574	TR 13" SYCAMORE
30578	TR 45" (18" 27") PECAN DEAD
30579	TR 35" (13" 22") PECAN
30580	TR 8" HACKBERRY
30581	TR 9" HACKBERRY
30646	TR 23" (13" 10") SYCAMORE
30678	TR 19" (8" 11") MESQUITE
30692	TR 8" PECAN
30701	TR 14" SYCAMORE
30751	TR 16" SYCAMORE
30752	TR 8" PECAN
30753	TR 10" PECAN
30754	TR 14" SYCAMORE
30755	TR 10" SYCAMORE
30756	TR 28" CEDAR ELM
30757	TR 8" SYCAMORE
30813	TR 6" LIVE OAK
30954	TR 8" PECAN
30955	TR 14" PECAN
30956	TR 13" (6" 7") SYCAMORE
30957	TR 56" (36" 20") AMERICAN ELM
30958	TR 25" PECAN
30981	TR 15" PECAN
31000	TR 15" PECAN
31001	TR 15" PECAN
31002	TR 24" PECAN
31010	TR 18" SYCAMORE
31017	TR 13" UNK
31018	TR 23" HACKBERRY
31019	TR 8" HACKBERRY
31020	TR 19" HACKBERRY
31049	TR 19" LIVE OAK
31050	TR 46" (26" 20") LIVE OAK
31051	TR 31" (23" 8") LIVE OAK
31067	TR 23" (11" 12") LIVE OAK
31068	TR 16" LIVE OAK
31069	TR 10" LIVE OAK
31070	TR 25" LIVE OAK
31071	TR 18" CEDAR ELM
31075	TR 20" LIVE OAK
31076	TR 13" LIVE OAK
31077	TR 15" LIVE OAK
31078	TR 15" LIVE OAK
31079	TR 16" LIVE OAK
31080	TR 15" LIVE OAK
31081	TR 14" LIVE OAK
31082	TR 25" LIVE OAK
31083	TR 19" LIVE OAK
31084	TR 6" LIVE OAK
31085	TR 7" LIVE OAK
31086	TR 12" LIVE OAK
31087	TR 19" LIVE OAK
31088	TR 9" LIVE OAK
31089	TR 8" LIVE OAK
31432	TR 7" LIVE OAK
31433	TR 7" LIVE OAK
31434	TR 8" LIVE OAK
31439	TR 20" HACKBERRY
31440	TR 8" HACKBERRY
31441	TR 9" HACKBERRY
31442	TR 16" (7" 9") LIVE OAK
31443	TR 13" HACKBERRY
31444	TR 20" (10" 10") LIVE OAK
31445	TR 7" LIVE OAK
31446	TR 18" (9" 9") HACKBERRY
31447	TR 20" HACKBERRY DEAD
31448	TR 6" LIVE OAK
31449	TR 13" HACKBERRY
31450	TR 26" LIVE OAK
31451	TR 11" HACKBERRY
31452	TR 13" LIVE OAK
31453	TR 8" HACKBERRY
31454	TR 12" HACKBERRY
31455	TR 7" HACKBERRY
31456	TR 19" LIVE OAK
31457	TR 7" HACKBERRY
31458	TR 8" HACKBERRY
31459	TR 15" HACKBERRY
31460	TR 7" HACKBERRY
31461	TR 9" HACKBERRY DEAD
31462	TR 6" LIVE OAK
31463	TR 30" HACKBERRY
31464	TR 50" (9" 15" 26") LIVE OAK
31465	TR 8" ASH
31466	TR 8" HACKBERRY
31467	TR 13" HACKBERRY
31468	TR 8" HACKBERRY
31469	TR 6" HACKBERRY
31470	TR 46" (7" 8" 8" 8" 15") LIVE OAK
31471	TR 14" (8" 6") LIVE OAK
31472	TR 7" HACKBERRY
31476	TR 17" (9" 8") HACKBERRY
31477	TR 7" HACKBERRY
31478	TR 6" HACKBERRY
31479	TR 9" HACKBERRY
31480	TR 16" LIVE OAK
31481	TR 7" LIVE OAK
31482	TR 74" (35" 31" 8") LIVE OAK
31483	TR 22" (10" 12") LIVE OAK
31484	TR 10" HACKBERRY
31485	TR 10" LIVE OAK
31486	TR 14" (7" 7") HACKBERRY
31487	TR 13" LIVE OAK
31488	TR 13" HACKBERRY
31489	TR 30" LIVE OAK
31490	TR 46" (26" 20") LIVE OAK
31491	TR 35" (26" 9") LIVE OAK
31492	TR 13" LIVE OAK
31493	TR 10" LIVE OAK
31494	TR 13" LIVE OAK
31495	TR 23" (11" 12") LIVE OAK
31496	TR 7" HACKBERRY
31497	TR 6" HACKBERRY
31498	TR 6" HACKBERRY
31499	TR 6" HACKBERRY
31500	TR 7" HACKBERRY
31501	TR 6" HACKBERRY
31502	TR 23" LIVE OAK
31503	TR 8" HACKBERRY
31504	TR 8" HACKBERRY
31505	TR 66" (20" 13" 33") LIVE OAK
31518	TR 20" CEDAR ELM
40269	TR 8" SYCAMORE
40270	TR 16" SYCAMORE
40271	TR 18" SYCAMORE
40273	TR 12" SYCAMORE
40274	TR 8" SYCAMORE
40275	TR 17" SYCAMORE
40276	TR 10" SYCAMORE
40277	TR 8" CYPRESS
40278	TR 15" SYCAMORE
40279	TR 15" SYCAMORE
40280	TR 14" SYCAMORE
40281	TR 14" SYCAMORE
40282	TR 20" SYCAMORE
40283	TR 17" SYCAMORE
40284	TR 13" SYCAMORE
40285	TR 14" SYCAMORE
40286	TR 11" SYCAMORE
40287	TR 9" SYCAMORE
40288	TR 8" SYCAMORE
40289	TR 10" SYCAMORE
40290	TR 11" SYCAMORE
40291	TR 9" SYCAMORE
40292	TR 8" SYCAMORE
40293	TR 8" SYCAMORE
40294	TR 8" SYCAMORE
40295	TR 10" SYCAMORE
40296	TR 35" CYPRESS
40297	TR 10" SYCAMORE
40298	TR 20" SYCAMORE
40299	TR 13" SYCAMORE
40301	TR 16" CYPRESS
40302	TR 19" CYPRESS
40303	TR 9" SYCAMORE
40304	TR 8" SYCAMORE
40305	TR 16" SYCAMORE
40306	TR 14" SYCAMORE
40319	TR 10" PECAN
40320	TR 14" PECAN
40321	TR 11" PECAN
40322	TR 10" COTTONWOOD
40323	TR 13" PECAN
40324	TR 8" CEDAR ELM
40325	TR 9" CEDAR ELM
40326	TR 11" CEDAR ELM
40327	TR 9" CEDAR ELM
40328	TR 8" CEDAR ELM
40329	TR 10" CEDAR ELM
40330	TR 10" PECAN
40331	TR 11" LIVE OAK
40332	TR 14" LIVE OAK
40333	TR 49" LIVE OAK
40334	TR 12" PECAN
40335	TR 16" CEDAR ELM
40336	TR 10" CEDAR ELM
40363	TR 23" LIVE OAK
40364	TR 27" LIVE OAK
40365	TR 14" LIVE OAK
40366	TR 9" LIVE OAK
40367	TR 10" LIVE OAK
40368	TR 13" LIVE OAK
40369	TR 16" LIVE OAK
40370	TR 45" LIVE OAK
40371	TR 16" LIVE OAK
40372	TR 18" LIVE OAK
40373	TR 21" CEDAR ELM
40374	TR 8" LIVE OAK
40375	TR 24" LIVE OAK
40376	TR 45" LIVE OAK
40377	TR 11" CEDAR ELM
40378	TR 16" CEDAR ELM
40379	TR 11" ASH
40380	TR 9" LIVE OAK
40381	TR 47" LIVE OAK
40382	TR 27" LIVE OAK
40389	TR 9" CEDAR ELM
40390	TR 12" CEDAR ELM
40391	TR 10" CEDAR ELM
40424	TR 14" CEDAR ELM
40425	TR 8" CEDAR ELM
40426	TR 9" CEDAR ELM
40427	TR 14" CEDAR ELM
40428	TR 13" CEDAR ELM
40429	TR 8" ASH
40430	TR 18" CEDAR ELM
40431	TR 8" CEDAR ELM
50165	TR 13" MESQUITE
50166	TR 23" (10" 13") MESQUITE
50167	TR 18" (9" 9") COTTTONWOOD
50168	TR 17" (5" 12") COTTONWOOD
50169	TR 6" COTTONWOOD
50170	TR 9" COTTONWOOD
50171	TR 15" LIVE OAK
50172	TR 12" LIVE OAK
50173	TR 21" ELM
50174	TR 13" ELM
50175	TR 8" LIVE OAK
50176	TR 21" (11" 10") ELM
50177	TR 11" (4" 7") ELM
50178	TR 16" ELM
50179	TR 10" ELM
50180	TR 19" (6" 5" 4" 4") ELM
50181	TR 20" (8" 7" 5") ELM
50182	TR 13" (9" 4") ELM
50183	TR 7" ELM
50184	TR 9" ELM
50185	TR 18" ELM
50186	TR 8" ELM
50210	TR 24" LIVE OAK DEAD
50211	TR 49" (24" 25") LIVE OAK DEAD TRUNK
50212	TR 35" (19" 16") LIVE OAK DEAD TRUNK
50222	TR 22" (8" 14") MESQUITE
50223	TR 15" (4" 5" 6") MESQUITE
50225	TR 6" HACKBERRY
50226	TR 41" (4" 5" 8" 11" 13") MESQUITE
50233	TR 21" (8" 13") HACKBERRY
50252	TR 12" (5" 7") HACKBERRY
50351	TR 9" CYPRESS DEAD TRUNK
50352	TR 8" LIVE OAK
50355	TR 7" PECAN
50356	TR 11" COTTONWOOD
50357	TR 12" COTTONWOOD
50360	TR 14" COTTONWOOD
50361	TR 17" COTTONWOOD DEAD TRUNK
50372	TR 12" COTTONWOOD
50379	TR 19" (7" 12") CYPRESS
50380	TR 23" (6" 8" 9") COTTONWOOD
50381	TR 8" COTTONWOOD
50382	TR 26" (12" 14") WILLOW
50383	TR 6" COTTONWOOD
50384	TR 25" (6" 8" 11") COTTONWOOD
50549	TR 12" (6" 6") LIVE OAK
50550	TR 15" LIVE OAK
50569	TR 17" ELM
50570	TR 13" (6" 7") LIVE OAK
50584	TR 6" HACKBERRY
50585	TR 9" ELM
50586	TR 12" LIVE OAK
50587	TR 9" ELM
50588	TR 18" ELM
50589	TR 39" (11" 13" 15") ELM
50590	TR 30" (5" 8" 8" 9") ELM
50591	TR 29" (12" 17") DEAD TRUNK
50592	TR 16" ELM
50673	TR 7" WALNUT
50674	TR 19" (13" 6") HACKBERRY
50675	TR 16" HACKBERRY DEAD
50676	TR 10" LIVE OAK
50677	TR 6" LIVE OAK
50678	TR 8" HACKBERRY
50679	TR 9" HACKBERRY
50680	TR 7" HACKBERRY
50681	TR 15" HACKBERRY
50682	TR 36" (6" 15" 7" 8") HACKBERRY
50683	TR 8" HACKBERRY
50684	TR 24" HACKBERRY DEAD
50685	TR 13" WHITEOAK
50686	TR 27" (11" 6" 10") WHITEOAK
50687	TR 10" HACKBERRY
50688	TR 21" (3" 4" 7" 7") HACKBERRY
50689	TR 20" (12" 8") WHITEOAK
50690	TR 18" LIVE OAK
60000	TR 6" COTTONWOOD
60001	TR 11" COTTONWOOD
60002	TR 12" COTTONWOOD
60003	TR 8" LIVE OAK
60004	TR 17" (8" 9") COTTONWOOD
60005	TR 6" CYPRESS
60006	TR 10" HACKBERRY
60007	TR 12" COTTONWOOD
60008	TR 8" ELM
60009	TR 13" COTTONWOOD
60010	TR 6" HACKBERRY
60011	TR 9" CYPRESS
60012	TR 48" (24" 14" 10") LIVE OAK
60013	TR 7" PECAN
60014	TR 11" HACKBERRY
60015	TR 14" (5" 9") CYPRESS
60016	TR 19" HACKBERRY
60017	TR 19" HACKBERRY
60018	TR 12" HACKBERRY
60019	TR 22.5" CYPRESS
60020	TR 28" CYPRESS
60021	TR 17" CYPRESS
60022	TR 22" (5" 8" 9") LIVE OAK
60023	TR 19" LIVE OAK
60024	TR 30" CYPRESS
60025	TR 16" COTTONWOOD
60026	TR 28" CYPRESS
60027	TR 9" CHINABERRY
60028	TR 22" CYPRESS
60029	TR 31" COTTONWOOD
60030	TR 25" CYPRESS
60031	TR 22" LIVE OAK
60057	TR 7" LIVE OAK
60058	TR 14" LIVE OAK
60258	TR 25" CEDAR ELM
60259	TR 16" LIVE OAK
60260	TR 16" LIVE OAK
60261	TR 14" LIVE OAK
60262	TR 13" LIVE OAK

TREE REMOVALS SHALL BE VERIFIED BY THE OWNER AND CONTRACTOR PRIOR TO THE START OF CLEARING.

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

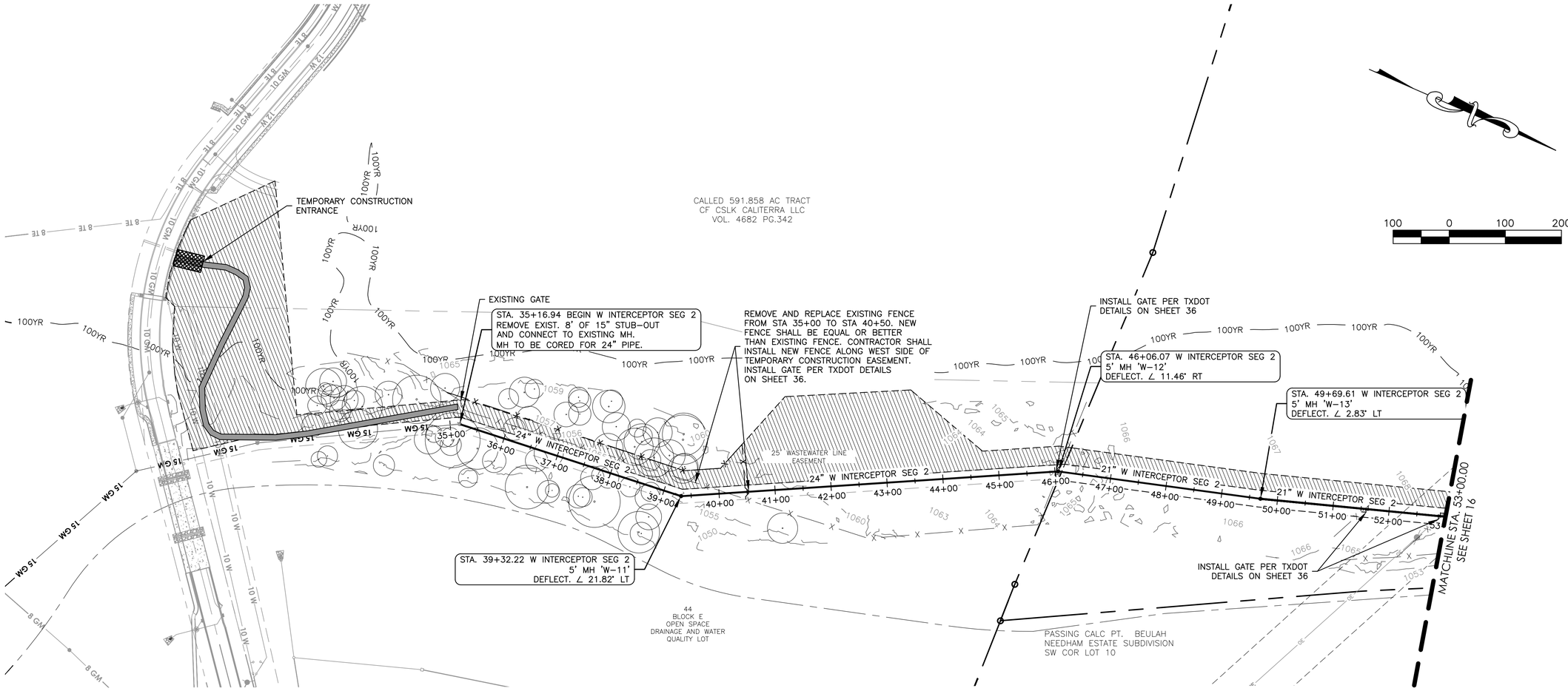
CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
TREE PLAN 8 OF 8

NO:	DESCRIPTION REVISIONS	DATE

JOB NO: 1950-001
DATE: SEPT 2025
DESIGNED BY: JB, CC
DRAWN BY: JB, CC
CHECKED BY: WBB
APPROVED BY: WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 14 OF 36



LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOURS (1080)
- EXISTING MINOR CONTOURS (1081)
- 100 YEAR FEMA FLOODPLAIN (100YR)
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- PROPOSED WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT
- EXISTING TREES

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
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CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
OVERALL SITE PLAN 1 OF 4

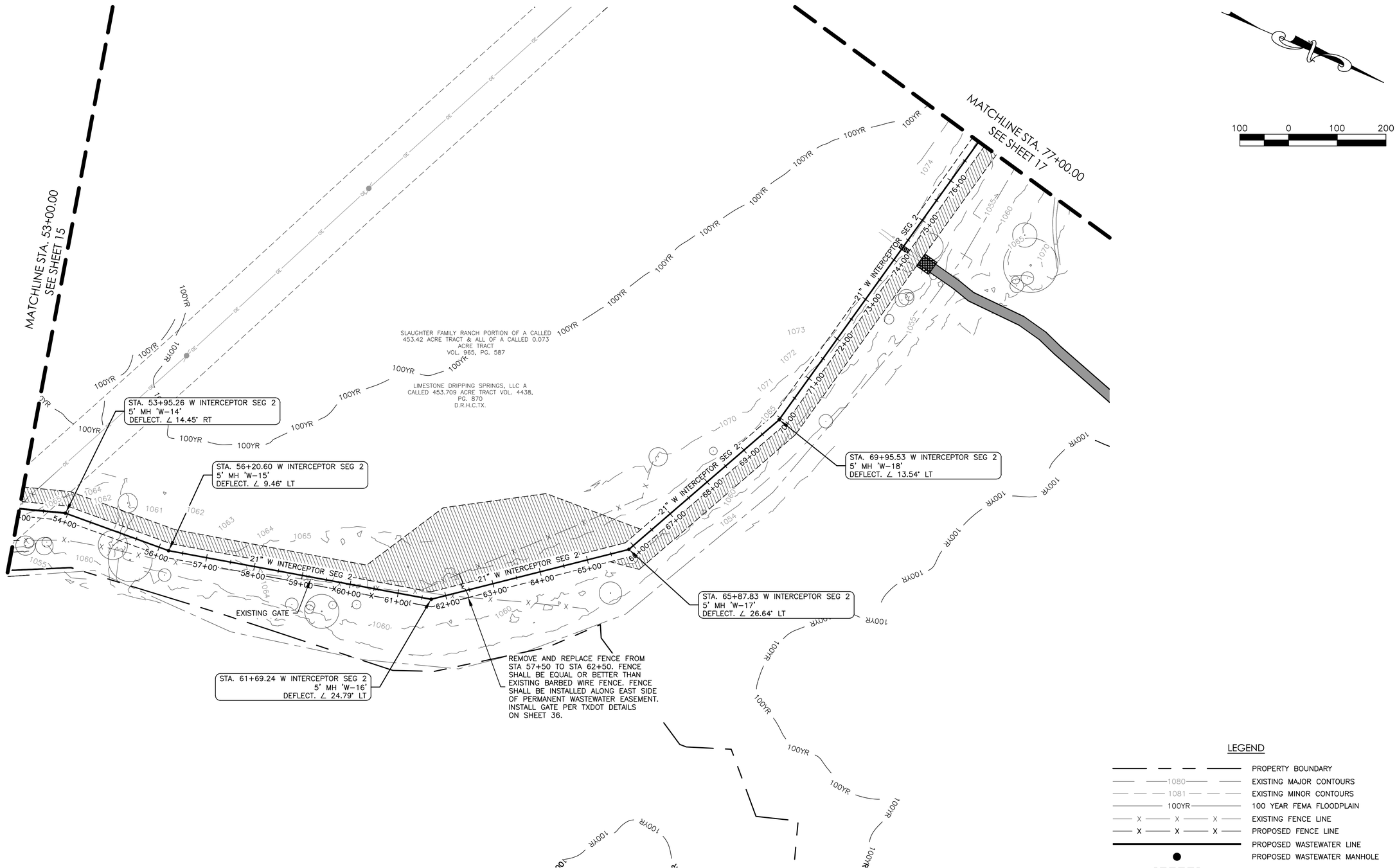
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WILLIAM B. BALL
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9/23/2025

SHEET: 15 OF 36

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LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- 100 YEAR FEMA FLOODPLAIN
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- PROPOSED WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT
- EXISTING TREES

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
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PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
OVERALL SITE PLAN 2 OF 4

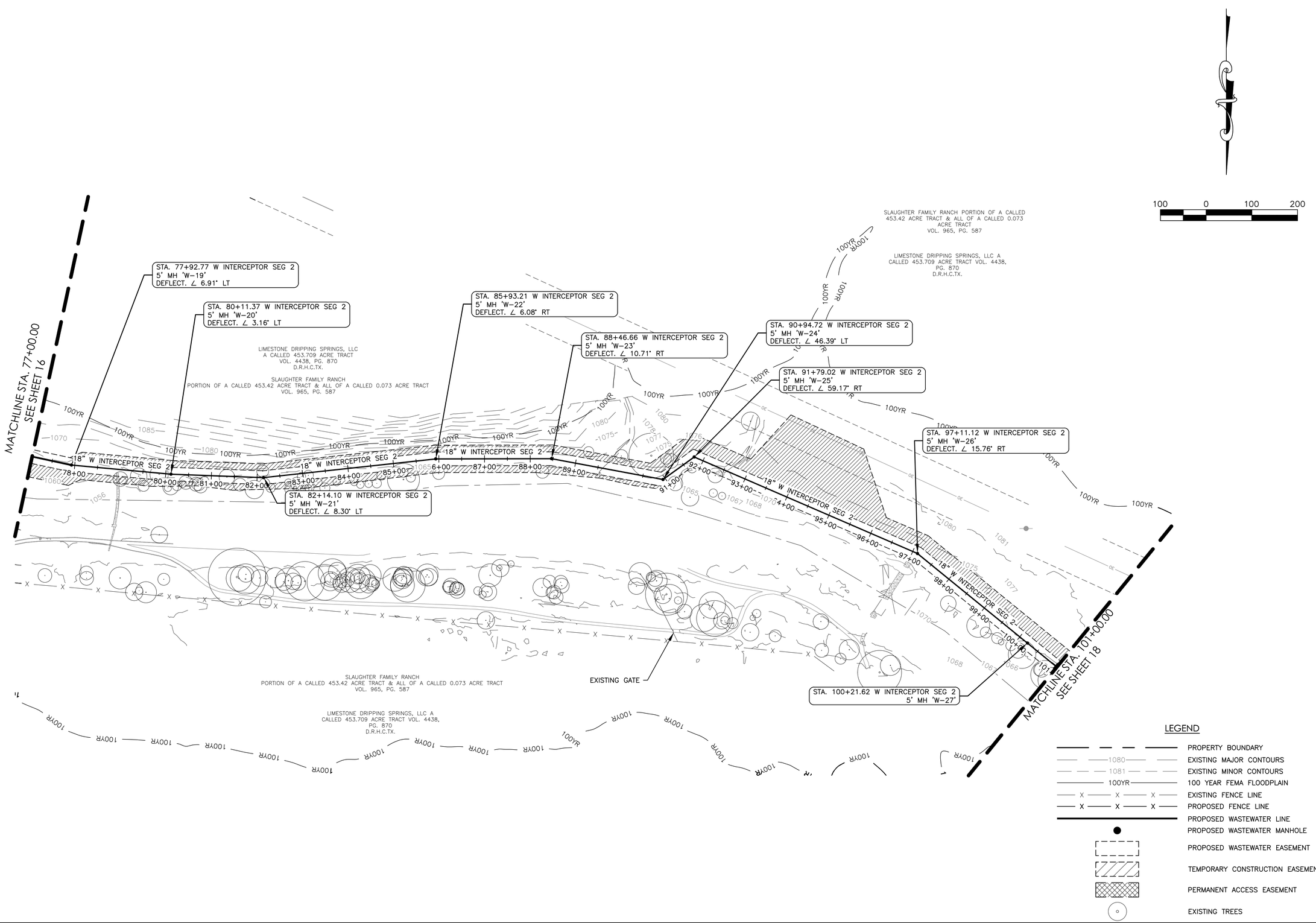
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WILLIAM B. BALL
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LICENSED PROFESSIONAL ENGINEER
9/23/2025

SHEET: 16 OF 36

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LEGEND

- PROPERTY BOUNDARY
- 1080 EXISTING MAJOR CONTOURS
- 1081 EXISTING MINOR CONTOURS
- 100YR 100 YEAR FEMA FLOODPLAIN
- X X X EXISTING FENCE LINE
- X X X PROPOSED FENCE LINE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- PROPOSED WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT
- EXISTING TREES

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
OVERALL SITE PLAN 3 OF 4

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STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 17 OF 36

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MATCHLINE STA. 101+00.00
SEE SHEET 17

STA. 103+15.29 W INTERCEPTOR SEG 2
5' MH 'W-28'
DEFLECT. ∠ 4.78° LT

STA. 107+21.62 W INTERCEPTOR SEG 2
5' MH 'W-29'

INSTALL GATE PER TXDOT
DETAILS ON SHEET 36

STA. 111+24.47 W INTERCEPTOR SEG 2
5' MH 'W-30'
DEFLECT. ∠ 57.07° RT

STA. 113+21.08 W INTERCEPTOR SEG 2
5' MH 'W-31'
DEFLECT. ∠ 0.68° RT

STA. 114+48.65 W INTERCEPTOR SEG 2
5' MH 'W-32'
DEFLECT. ∠ 70.08° LT

INSTALL GATE PER TXDOT
DETAILS ON SHEET 36

TEMPORARY
COMMERCIAL DRIVEWAY

STA. 115+02.69 W INTERCEPTOR SEG 2
5' MH 'W-33'
DEFLECT. ∠ 47.31° LT

18" W INTERCEPTOR SEG 2

16" W INTERCEPTOR SEG 2

MICHAEL VAN PFULLMAN
CALLED 3.50 ACRES VOL.
4776, PG. 578 O.P.R.H.C.TX.

R232.12'

DS TEN ACRES, LLC
CALLED 9.999 ACRES
VOL. 5310, PG. 510
O.P.R.H.C.TX.

PARCEL 1
DOYLE M. FELLERS & CLAIREEN FELLERS
REMAINDER OF LOT 3
CYPRESS FORK RANCH SUBDIVISION
BOOK 8, PG. 167
P.R.H.C.TX.
VACATED IN
INSTRUMENT NO. 20020847
O.P.R.H.C.TX.

LOT 1-A

PARCEL 1
DOYLE M. FELLERS &
CLAIREEN FELLERS
REMAINDER OF LOT 2
CYPRESS FORK RANCH SUBDIVISION
BOOK 8, PG. 167
P.R.H.C.TX.
VACATED IN
INSTRUMENT NO. 20020847
O.P.R.H.C.TX.

LOT 2-A

LOT 3-A

PARCEL 5
CAMELA FELLERS JONES
INSTRUMENT NO. 18012154
O.P.R.H.C.TX.
REMAINDER OF LOT 1
CYPRESS FORK
RANCH SUBDIVISION
BOOK 8, PG. 167
P.R.H.C.TX.
VACATED IN
INSTRUMENT NO. 20020847
O.P.R.H.C.TX.

LOT 4-A

PARCEL 6
CYPRESS FORK RANCH, L.P.,
A TEXAS LIMITED PARTNERSHIP
REMAINDER OF A CALLED 111.181 ACRES
VOL. 4118, PG. 682
INSTRUMENT NO. 11011538
O.P.R.H.C.TX.

EXISTING GATE

EXISTING GATE

NORTH LIMIT OF CEMETERY

NORTH LIMIT OF CEMETERY

NORTH LIMIT OF CEMETERY

NORTH LIMIT OF CEMETERY

NORTH LIMIT OF CEMETERY

DOYLE M. FELLERS,
ET UX
CALLED 111.181
ACRE TRACT
VOLUME 1001,
PAGE 750
O.P.R.H.C.TX.

FORESTAR (USA)
REAL ESTATE GROUP INC.
CALLED 361.83 ACRES
VOL. 3083, PG. 733
O.P.R.H.C.TX.

100YR

100 0 100 200

LEGEND

- PROPERTY BOUNDARY
- 1080 EXISTING MAJOR CONTOURS
- 1081 EXISTING MINOR CONTOURS
- 100YR 100 YEAR FEMA FLOODPLAIN
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- PROPOSED WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT
- EXISTING TREES

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

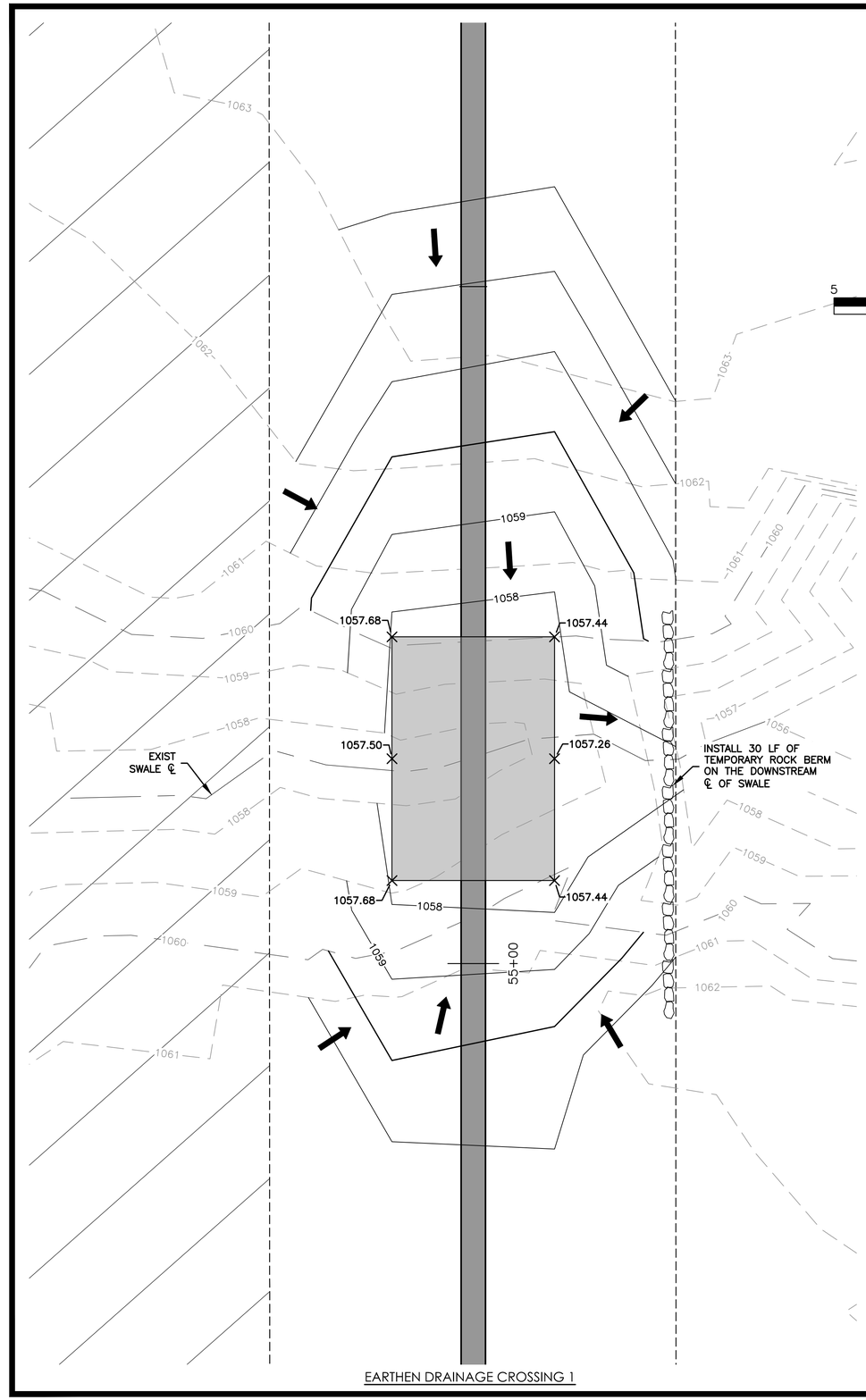
CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
OVERALL SITE PLAN 4 OF 4

NO:	DESCRIPTION REVISIONS	DATE

JOB NO: 1950-001
DATE: SEPT 2025
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STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED PROFESSIONAL ENGINEER
9/23/2025

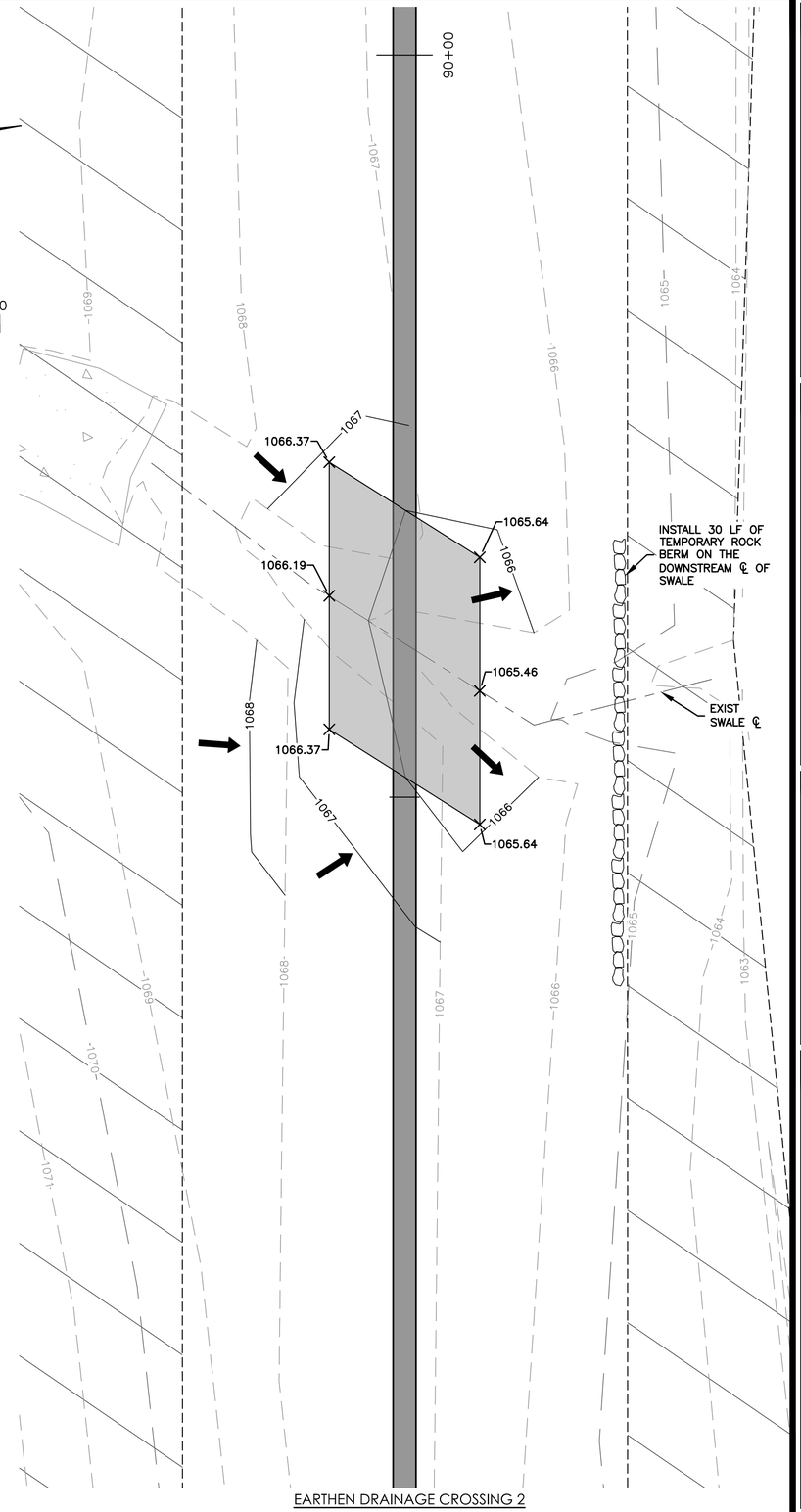
SHEET: 18 OF 36



EARTHEN DRAINAGE CROSSING 1

5 0 5 10

5 0 5 10



EARTHEN DRAINAGE CROSSING 2

LEGEND

- PROPERTY BOUNDARY
- 1075 PROPOSED MAJOR CONTOURS
- 1076 PROPOSED MINOR CONTOURS
- 1080 EXISTING MAJOR CONTOURS
- 1081 EXISTING MINOR CONTOURS
- 100YR 100 YEAR FEMA FLOODPLAIN
- X X X EXISTING FENCE LINE
- PROPOSED WASTEWATER LINE
- XXXX.XX SPOT ELEVATION LABEL
- DRAINAGE ARROW
- PROPOSED WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT
- DRAINAGE CROSSING
- ROCK BERM

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

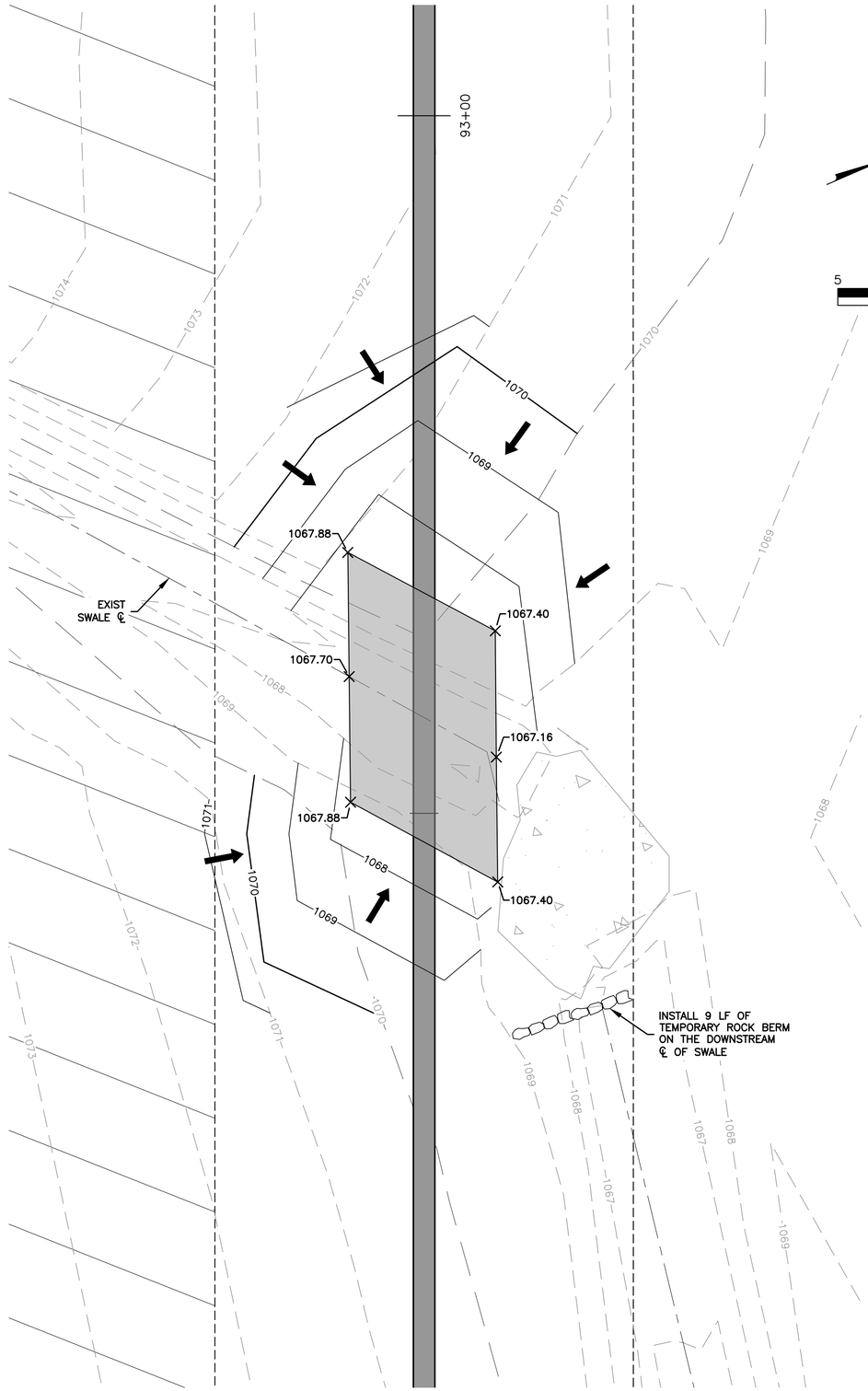
CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
GRADING PLAN 1 OF 2

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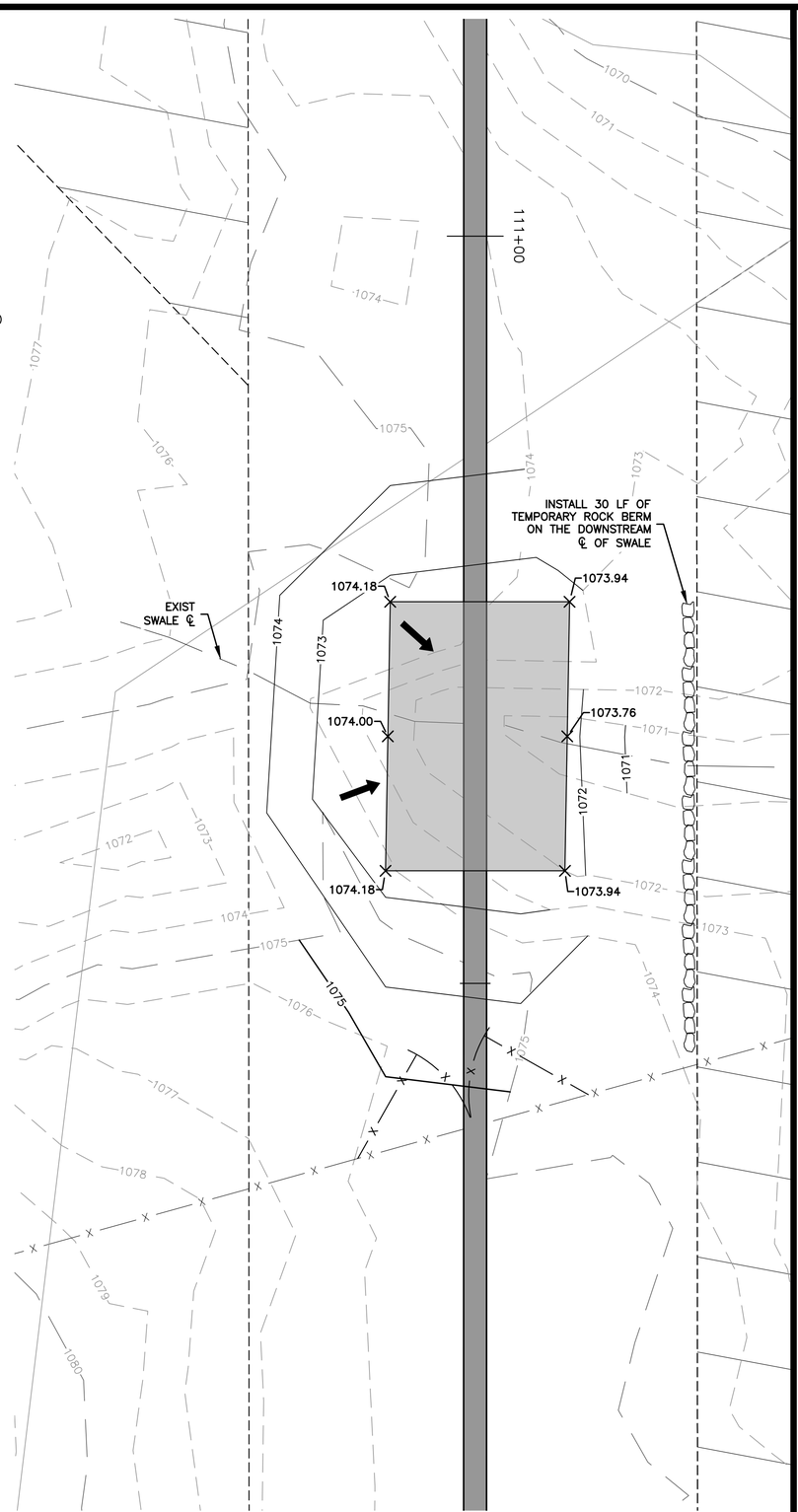
SHEET: 19 OF 36



EARTHEN DRAINAGE CROSSING 3

5 0 5 10

5 0 5 10



EARTHEN DRAINAGE CROSSING 4

LEGEND

- PROPERTY BOUNDARY
- 1075 PROPOSED MAJOR CONTOURS
- 1076 PROPOSED MINOR CONTOURS
- 1080 EXISTING MAJOR CONTOURS
- 1081 EXISTING MINOR CONTOURS
- 100YR 100 YEAR FEMA FLOODPLAIN
- X X X EXISTING FENCE LINE
- PROPOSED WASTEWATER LINE
- XXXX.XX SPOT ELEVATION LABEL
- DRAINAGE ARROW
- PROPOSED WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT
- DRAINAGE CROSSING

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

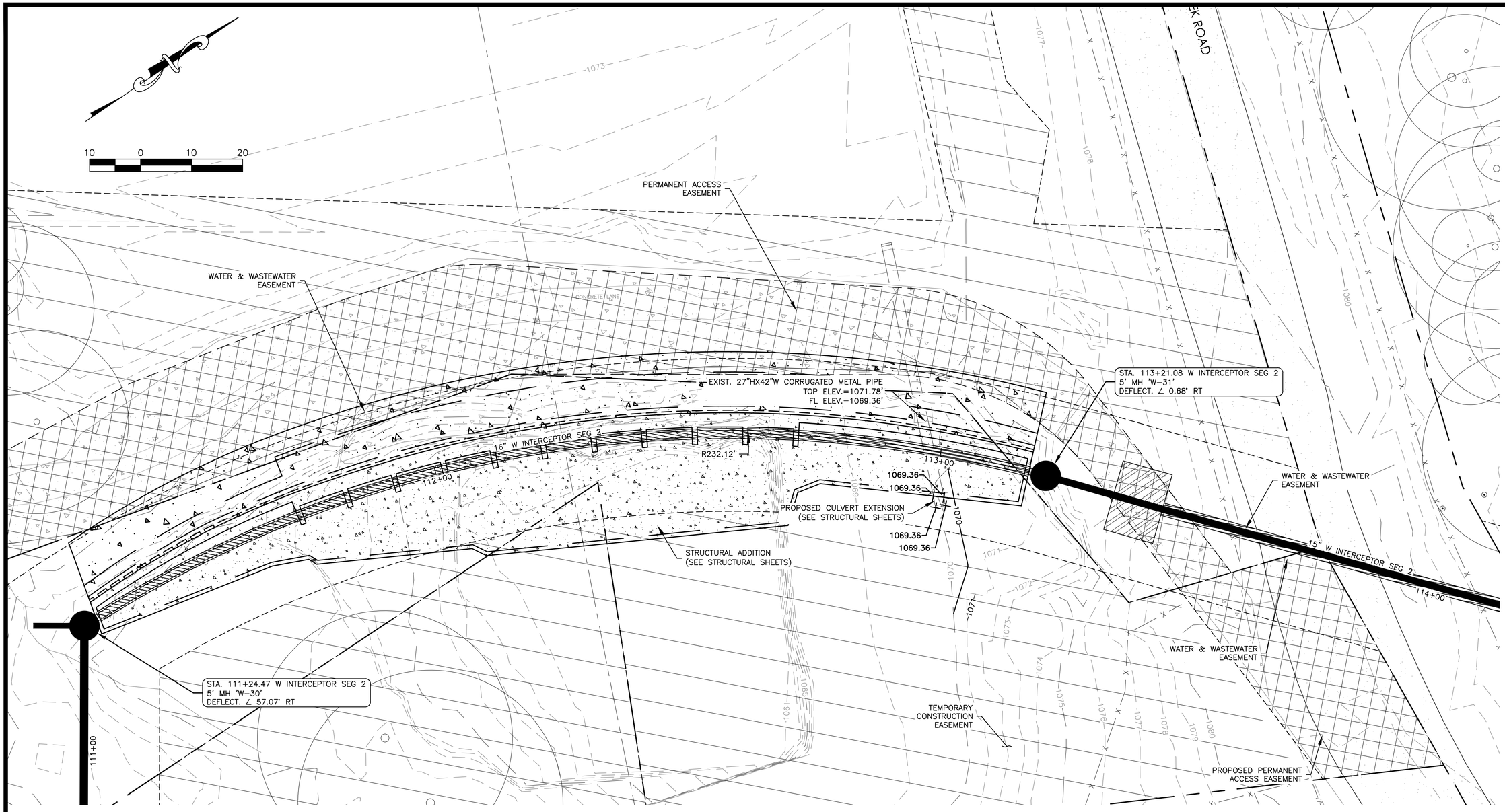
CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
GRADING PLAN 2 OF 2

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STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 20 OF 36



LEGEND

- PROPERTY BOUNDARY
- 1080 EXISTING MAJOR CONTOURS
- 1081 EXISTING MINOR CONTOURS
- 100YR 100 YEAR FEMA FLOODPLAIN
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- PROPOSED WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
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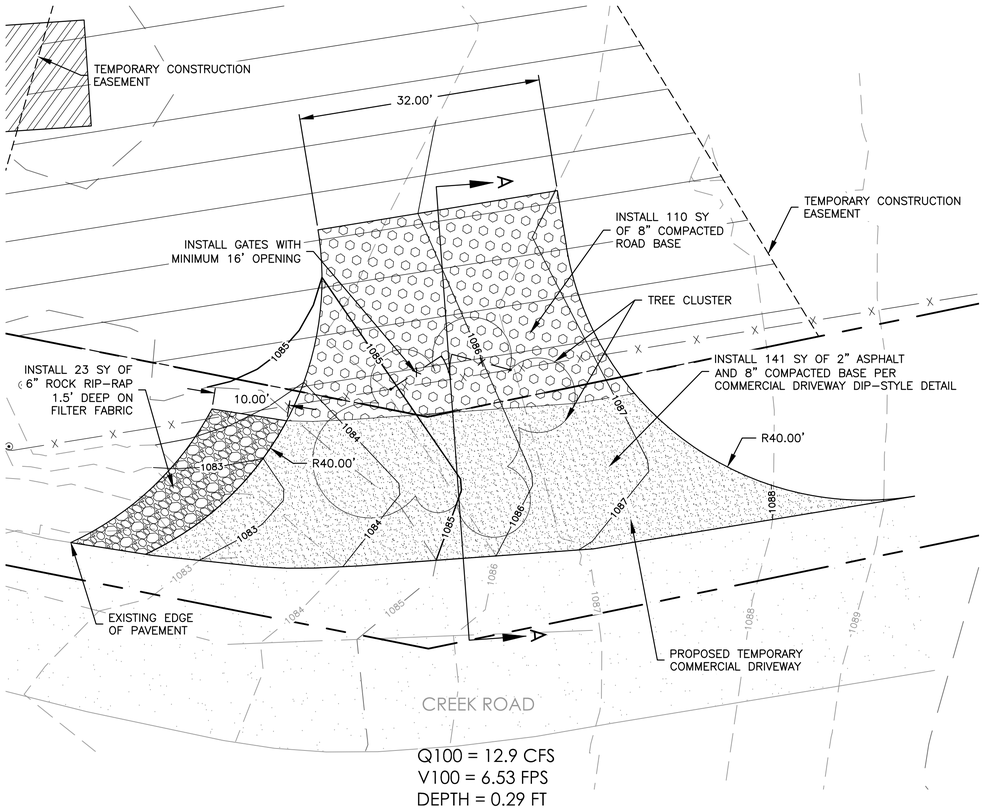
CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
ONION CREEK CROSSING

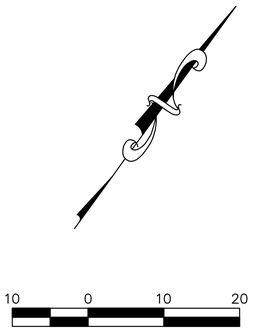
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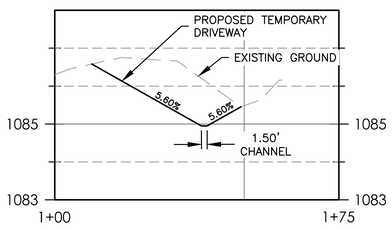
SHEET: 21 OF 36

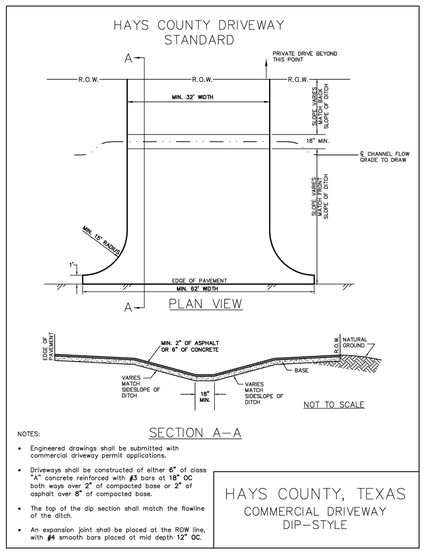




TEMPORARY COMMERCIAL DRIVEWAY

TEMPORARY COMMERCIAL DRIVEWAY SECTION A–A





NOTES:

- Engineered drawings shall be submitted with commercial driveway permit applications.
- Driveways shall be constructed of either **6"** of class "A" concrete reinforced with **#3** bars at **18"** OC both ways over **2"** of compacted base or **2"** of asphalt over **8"** of compacted base.
- The top of the dip section shall match the flowline of the ditch.
- An expansion joint shall be placed at the ROW line, with **#4** smooth bars placed at mid depth **12"** OC.

HAYS COUNTY, TEXAS
COMMERCIAL DRIVEWAY
DIP-STYLE

NOTES:

1. CONTRACTOR TO NOT REMOVE ANY TREES OTHER THAN THOSE SHOWN AS TO BE REMOVED. CONTACT ENGINEER PRIOR TO REMOVING ANY TREES NOT LISTED AS TO BE REMOVED.
2. TEMPORARY COMMERCIAL DRIVEWAY SHOULD BE REMOVED AND DISTURBED AREA SHOULD BE GRADED AND REVEGETATED TO ORIGINAL CONDITIONS OR BETTER. DRIVEWAY SHOULD BE REMOVED AS SOON AS IT IS NO LONGER IN USE.

LEGEND

- PROPERTY BOUNDARY
- 1080 EXISTING MAJOR CONTOURS
- 1081 EXISTING MINOR CONTOURS
- 1080 EXISTING MAJOR CONTOURS
- 1081 EXISTING MINOR CONTOURS
- EXISTING TREES (TO REMAIN)
- EXISTING TREES (TO BE REMOVED)

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

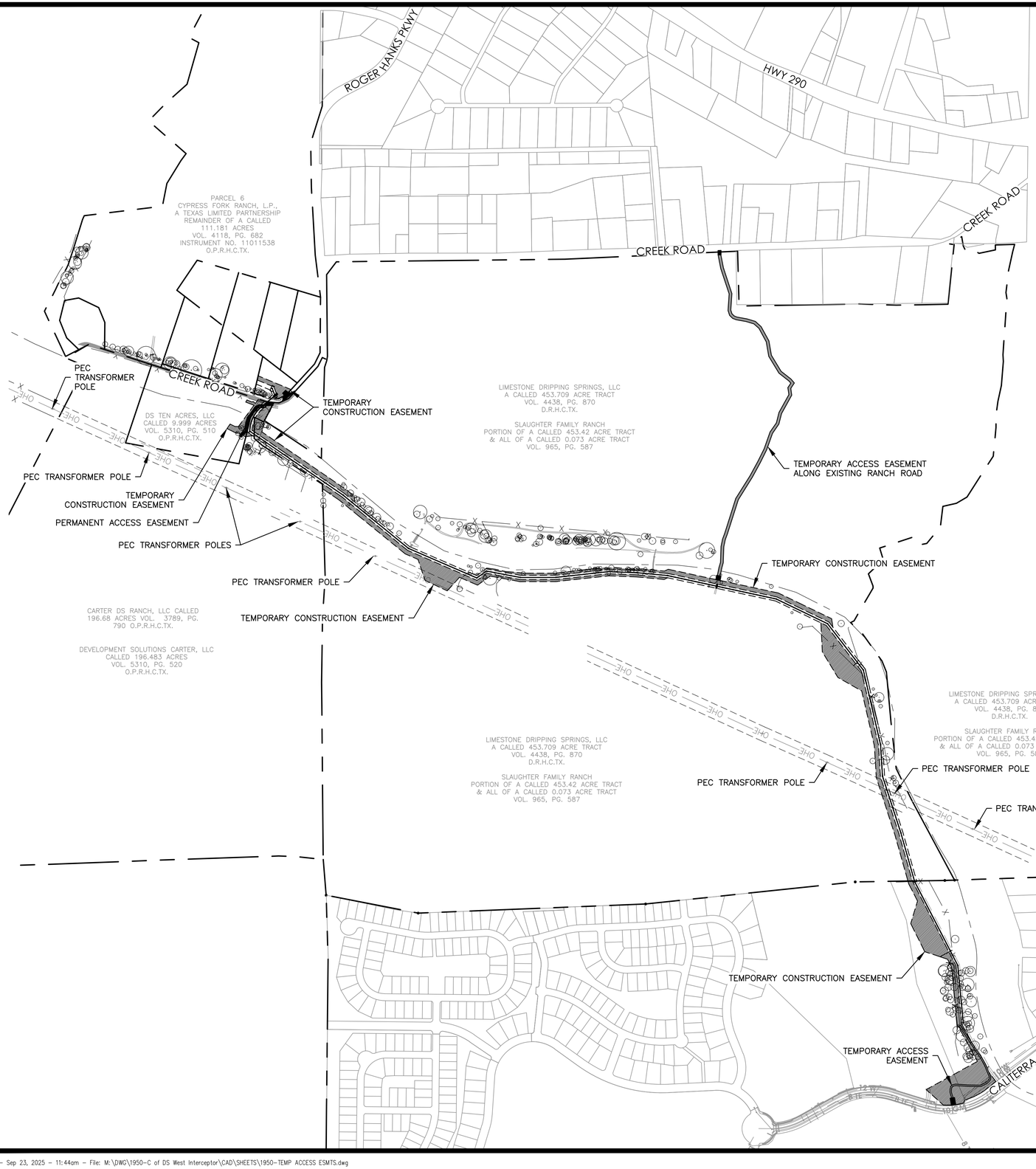
CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
CREEK ROAD DRIVEWAY

NO:	DESCRIPTION	DATE
	REVISIONS	

JOB NO:	1950-001
DATE:	SEPT 2025
DESIGNED BY:	JB, CC
DRAWN BY:	JB, CC
CHECKED BY:	WBB
APPROVED BY:	WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 22 OF 36



400 0 400 800

LEGEND

- PROPERTY BOUNDARY
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- EXISTING WASTEWATER MANHOLE
- PROPOSED WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT
- TEMPORARY ACCESS EASEMENT
- EXISTING TREES (TO REMAIN)

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AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
TEMPORARY ACCESS EASEMENT LOCATIONS

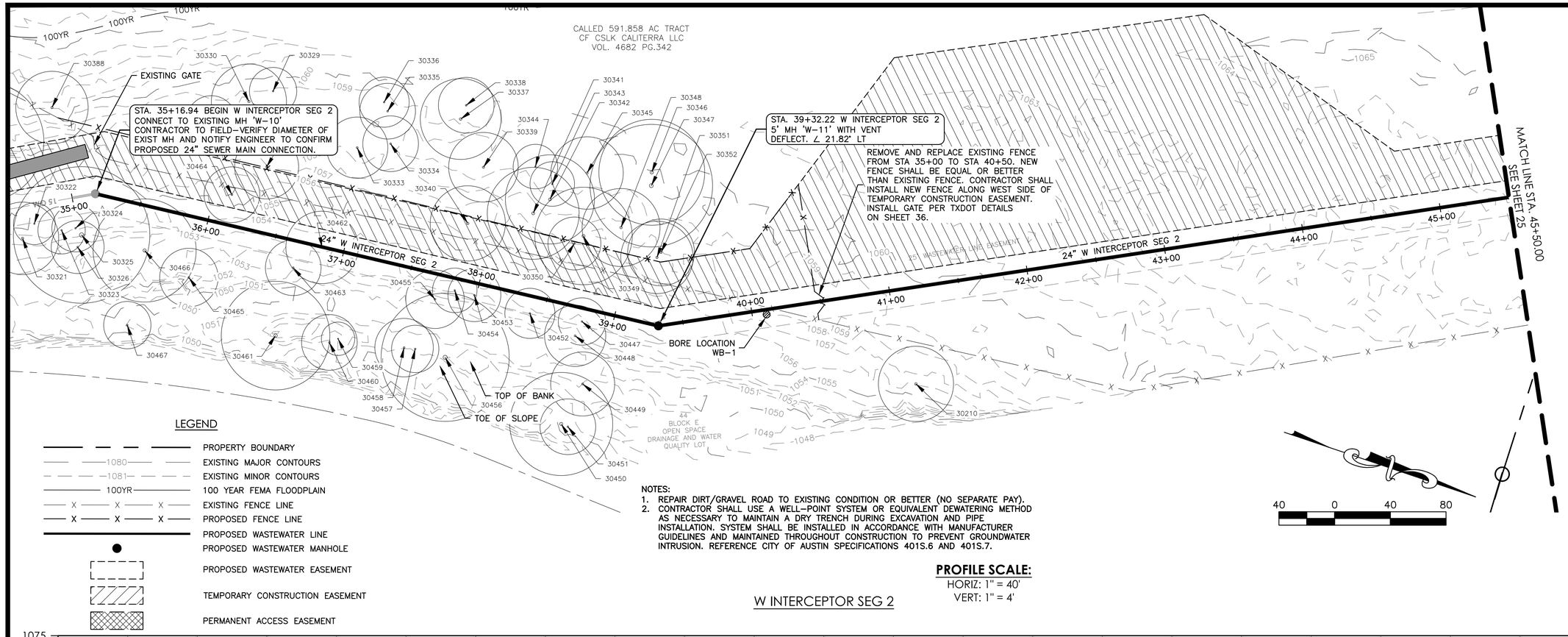
NO:	DESCRIPTION REVISIONS	DATE

JOB NO:	1950-001
DATE:	SEPT 2025
DESIGNED BY:	JB, CC
DRAWN BY:	JB, CC
CHECKED BY:	WBB
APPROVED BY:	WBB

STATE OF TEXAS
WILLIAM B. BALL
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9/23/2025

SHEET: 23 OF 36

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LEGEND

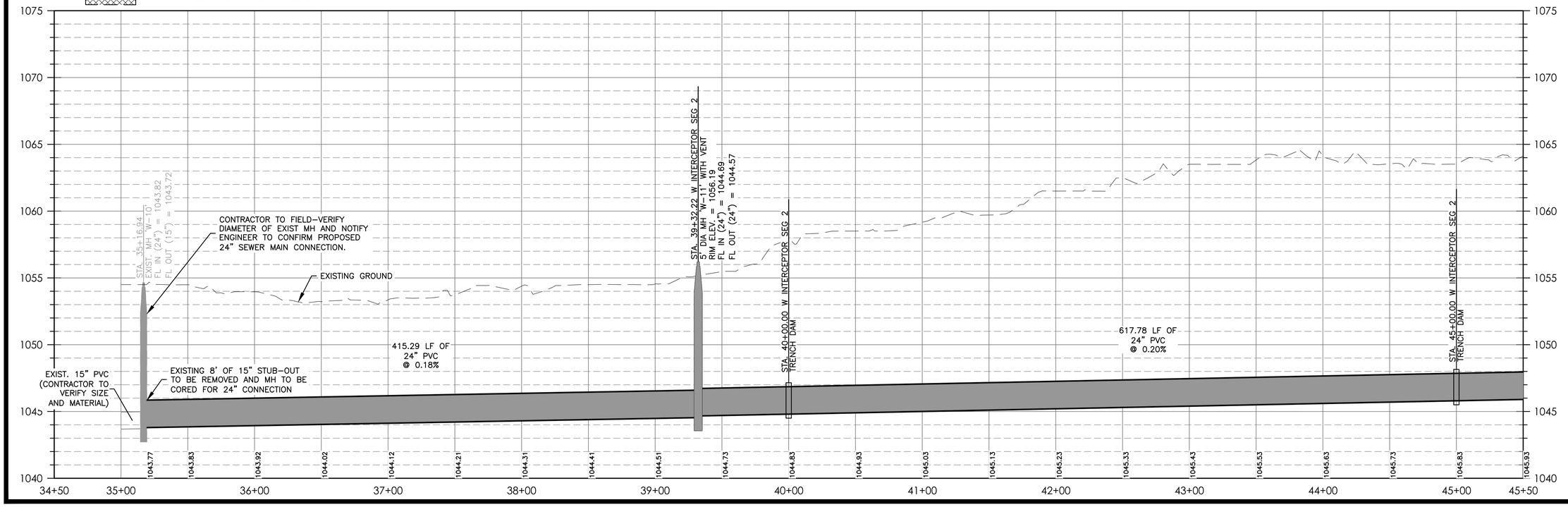
- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- 100 YEAR FEMA FLOODPLAIN
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- PROPOSED WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT

NOTES:
1. REPAIR DIRT/GRAVEL ROAD TO EXISTING CONDITION OR BETTER (NO SEPARATE PAY).
2. CONTRACTOR SHALL USE A WELL-POINT SYSTEM OR EQUIVALENT DEWATERING METHOD AS NECESSARY TO MAINTAIN A DRY TRENCH DURING EXCAVATION AND PIPE INSTALLATION. SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER GUIDELINES AND MAINTAINED THROUGHOUT CONSTRUCTION TO PREVENT GROUNDWATER INTRUSION. REFERENCE CITY OF AUSTIN SPECIFICATIONS 401S.6 AND 401S.7.

40 0 40 80

PROFILE SCALE:
HORIZ: 1" = 40'
VERT: 1" = 4'

W INTERCEPTOR SEG 2



BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
WEST INTERCEPTOR STA 35+16.94 TO 45+50
PLAN & PROFILE

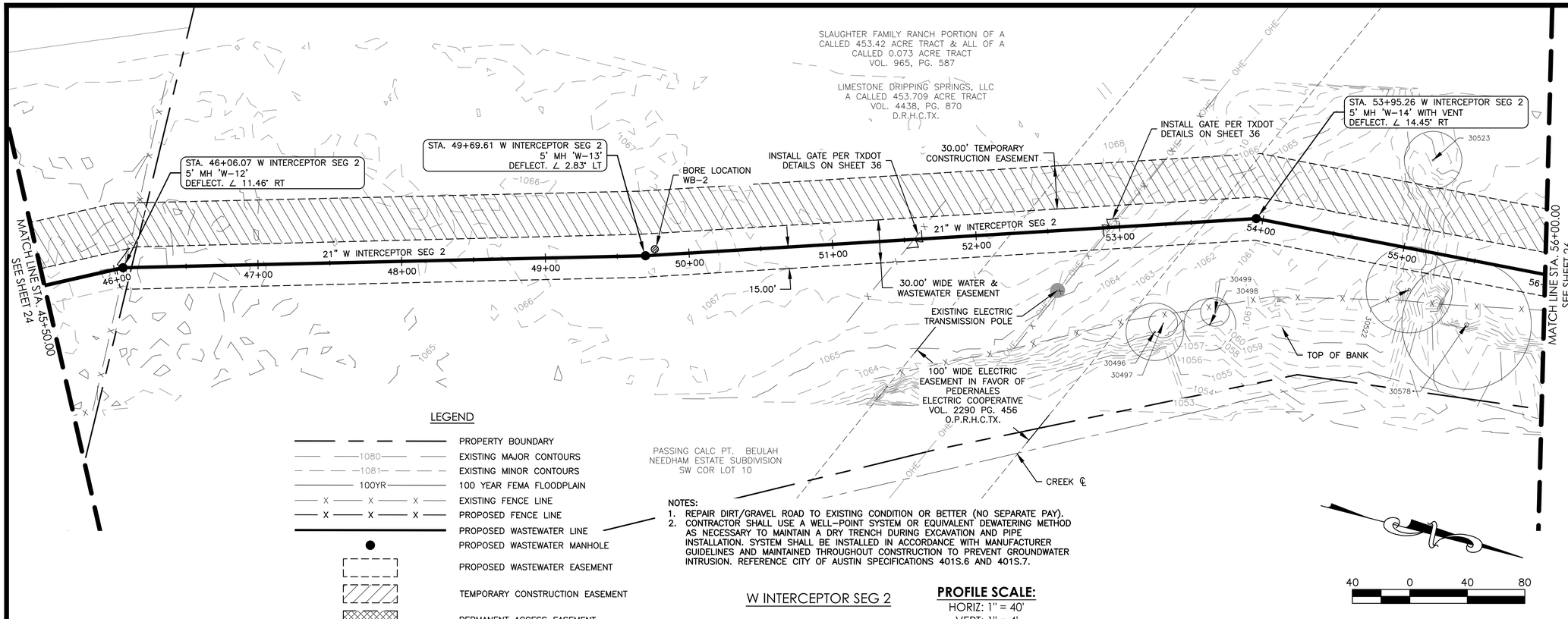
NO:	DESCRIPTION REVISIONS	DATE

JOB NO: 1950-001
DATE: SEPT 2025
DESIGNED BY: JB, CC
DRAWN BY: JB, CC
CHECKED BY: WBB
APPROVED BY: WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 24 OF 36

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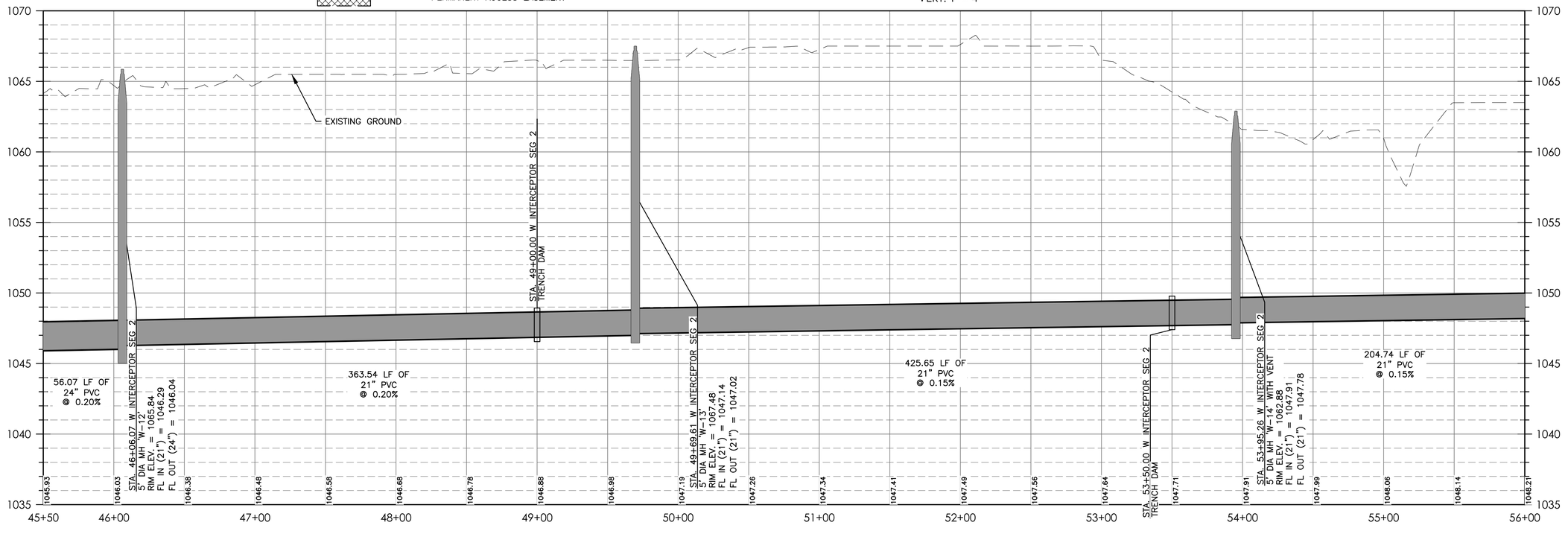
- PROPERTY BOUNDARY
- 1080 EXISTING MAJOR CONTOURS
- 1081 EXISTING MINOR CONTOURS
- 100YR 100 YEAR FEMA FLOODPLAIN
- X EXISTING FENCE LINE
- X PROPOSED FENCE LINE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- PROPOSED WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT

NOTES:
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40 0 40 80

W INTERCEPTOR SEG 2

PROFILE SCALE:
HORIZ: 1" = 40'
VERT: 1" = 4'



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PHONE: (512) 432-1000
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CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
WEST INTERCEPTOR STA 45+50 TO 56+00
PLAN & PROFILE

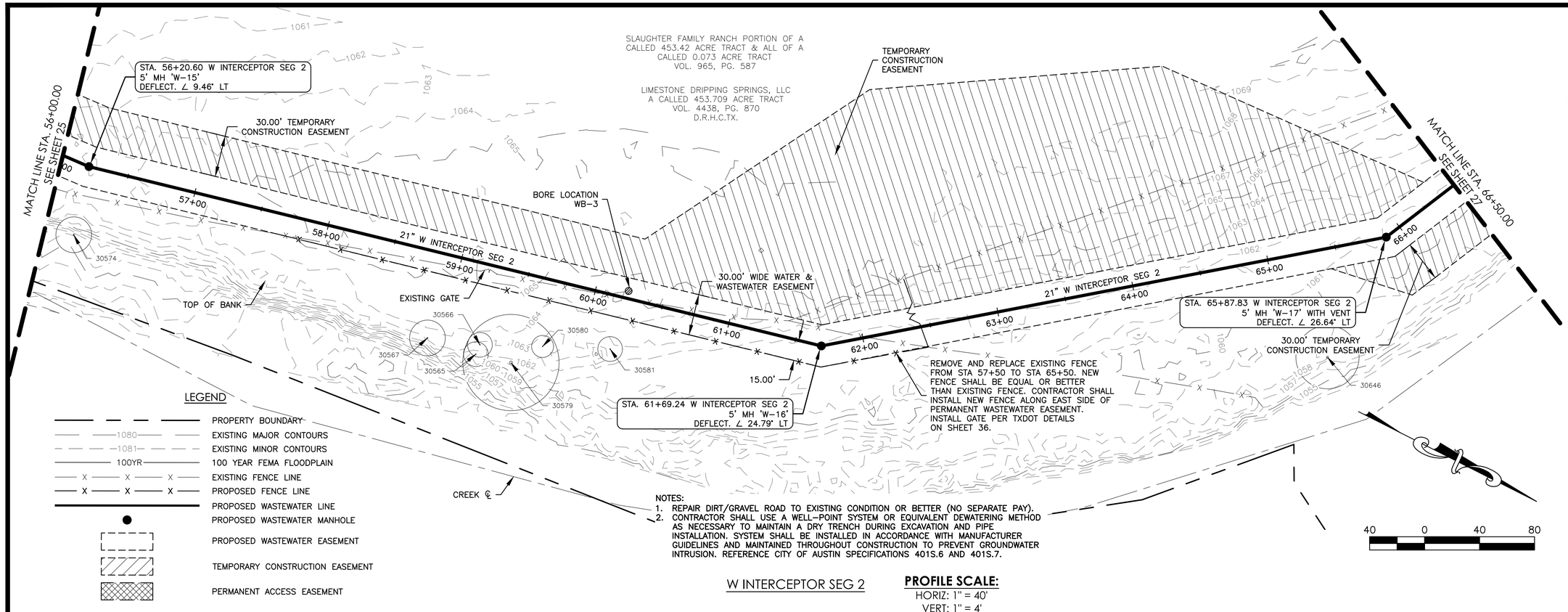
NO:	DESCRIPTION REVISIONS	DATE

JOB NO:	1950-001
DATE:	SEPT 2025
DESIGNED BY:	JB, CC
DRAWN BY:	JB, CC
CHECKED BY:	WBB
APPROVED BY:	WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 25 OF 36

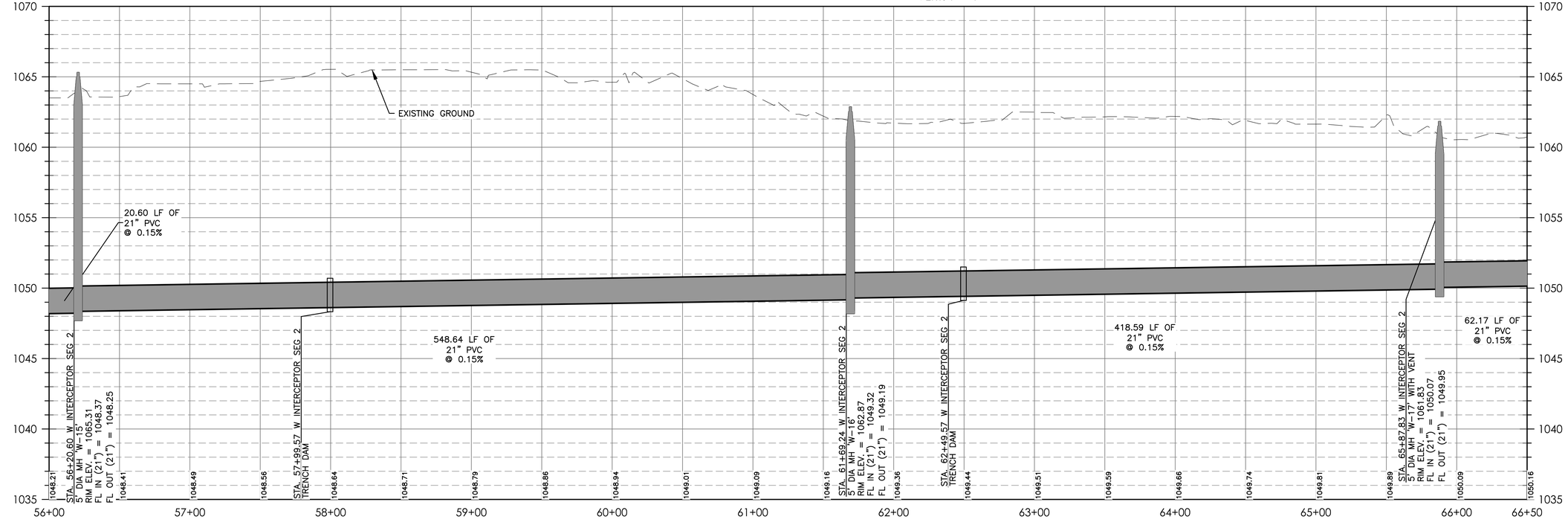
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NOTES:
1. REPAIR DIRT/GRAVEL ROAD TO EXISTING CONDITION OR BETTER (NO SEPARATE PAY).
2. CONTRACTOR SHALL USE A WELL-POINT SYSTEM OR EQUIVALENT DEWATERING METHOD AS NECESSARY TO MAINTAIN A DRY TRENCH DURING EXCAVATION AND PIPE INSTALLATION. SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER GUIDELINES AND MAINTAINED THROUGHOUT CONSTRUCTION TO PREVENT GROUNDWATER INTRUSION. REFERENCE CITY OF AUSTIN SPECIFICATIONS 401S.6 AND 401S.7.

W INTERCEPTOR SEG 2

PROFILE SCALE:
HORIZ: 1" = 40'
VERT: 1" = 4'



BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
WEST INTERCEPTOR STA 56+00 TO 66+50
PLAN & PROFILE

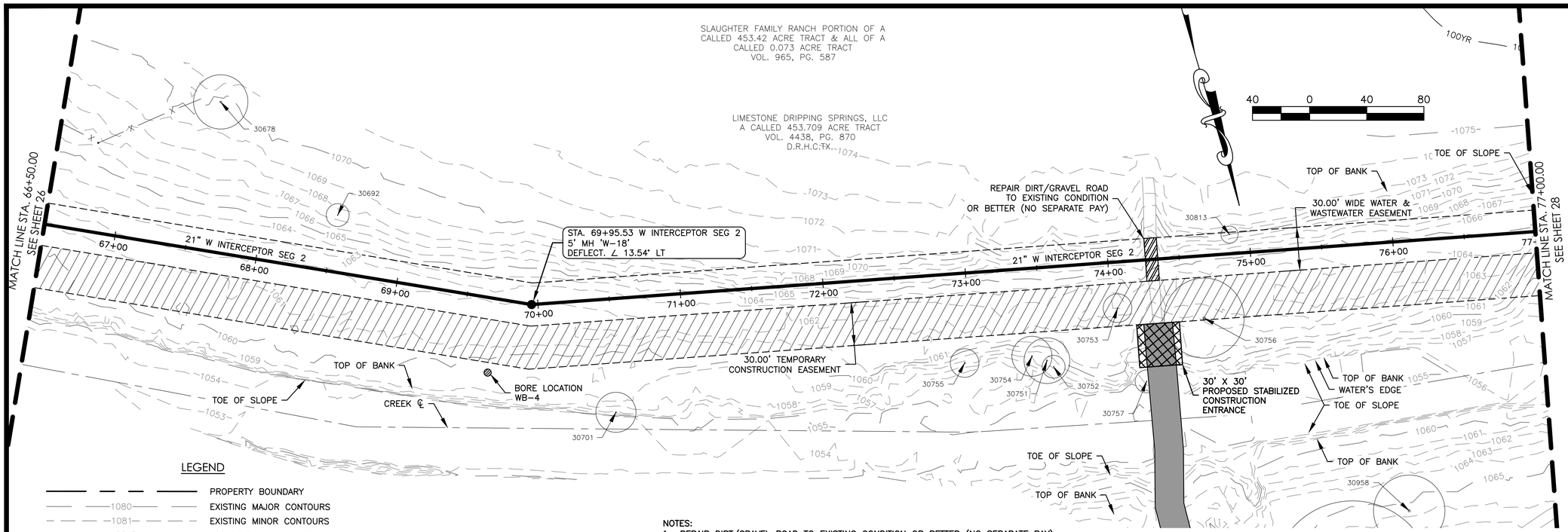
NO:	DESCRIPTION REVISIONS	DATE

JOB NO:	1950-001
DATE:	SEPT 2025
DESIGNED BY:	JB, CC
DRAWN BY:	JB, CC
CHECKED BY:	WBB
APPROVED BY:	WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
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PROFESSIONAL ENGINEER
9/23/2025

SHEET: 26 OF 36

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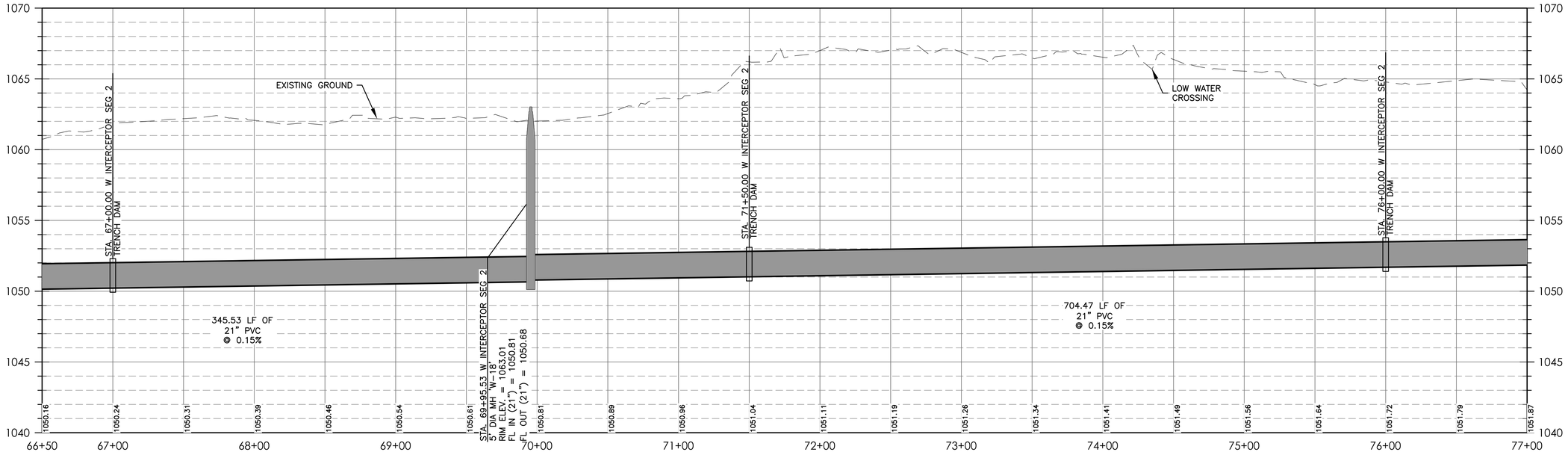
LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- 100 YEAR FEMA FLOODPLAIN
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- PROPOSED WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT

NOTES:
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2. CONTRACTOR SHALL USE A WELL-POINT SYSTEM OR EQUIVALENT DEWATERING METHOD AS NECESSARY TO MAINTAIN A DRY TRENCH DURING EXCAVATION AND PIPE INSTALLATION. SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER GUIDELINES AND MAINTAINED THROUGHOUT CONSTRUCTION TO PREVENT GROUNDWATER INTRUSION. REFERENCE CITY OF AUSTIN SPECIFICATIONS 401S.6 AND 401S.7.

W INTERCEPTOR SEG 2

PROFILE SCALE:
HORIZ: 1" = 40'
VERT: 1" = 4'



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PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

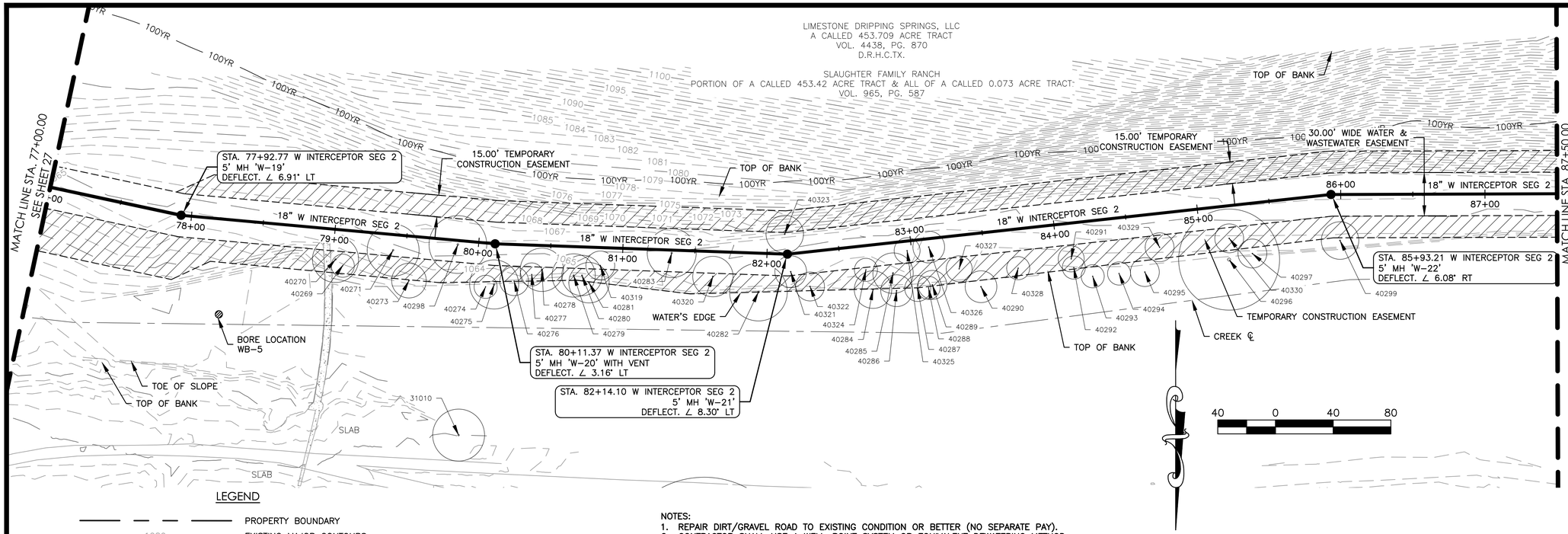
CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
WEST INTERCEPTOR STA 66+50 TO 77+00
PLAN & PROFILE

NO:	DESCRIPTION REVISIONS	DATE

JOB NO:	1950-001
DATE:	SEPT 2025
DESIGNED BY:	JB, CC
DRAWN BY:	JB, CC
CHECKED BY:	WBB
APPROVED BY:	WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED PROFESSIONAL ENGINEER
9/23/2025

SHEET: 27 OF 36



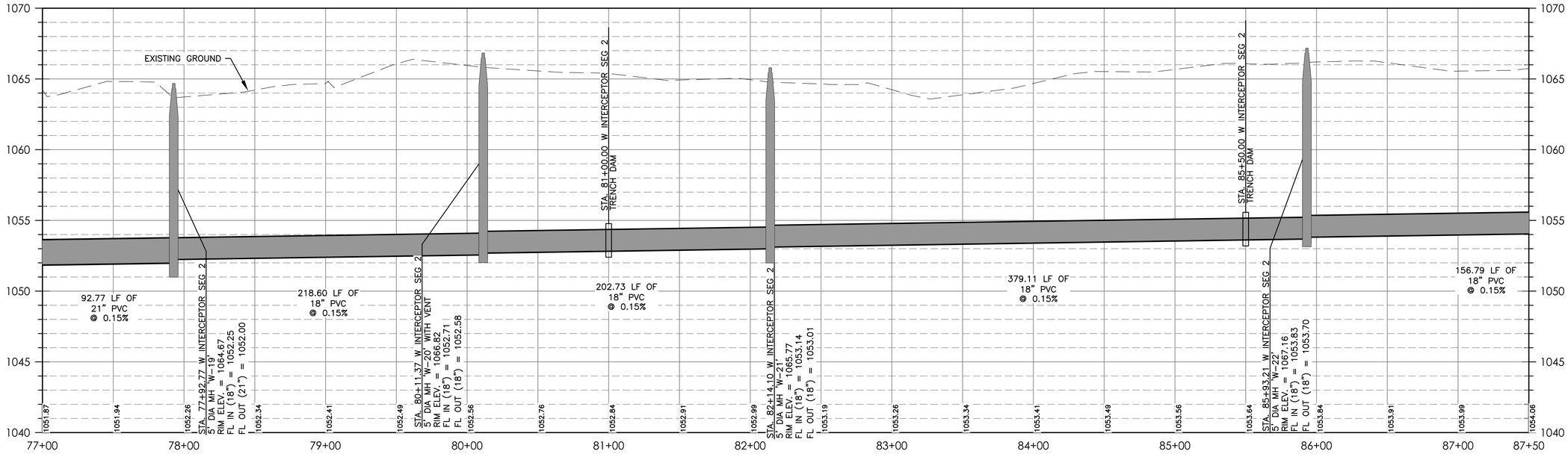
LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- 100 YEAR FEMA FLOODPLAIN
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- PROPOSED WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT

NOTES:
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W INTERCEPTOR SEG 2

PROFILE SCALE:
HORIZ: 1" = 40'
VERT: 1" = 4'



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235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

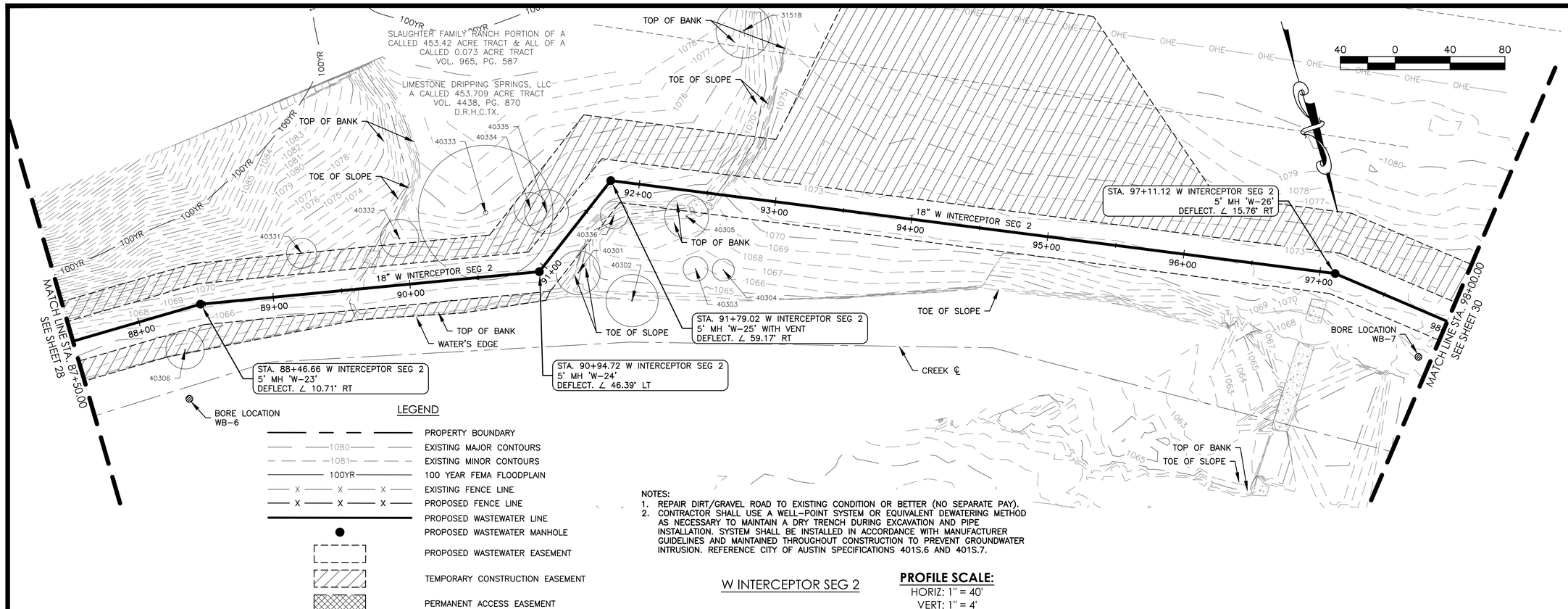
CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
WEST INTERCEPTOR STA 77+00 TO 87+50
PLAN & PROFILE

NO:	DESCRIPTION REVISIONS	DATE

JOB NO:	1950-001
DATE:	SEPT 2025
DESIGNED BY:	JB, CC
DRAWN BY:	JB, CC
CHECKED BY:	WBB
APPROVED BY:	WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
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9/23/2025

SHEET: 28 OF 36



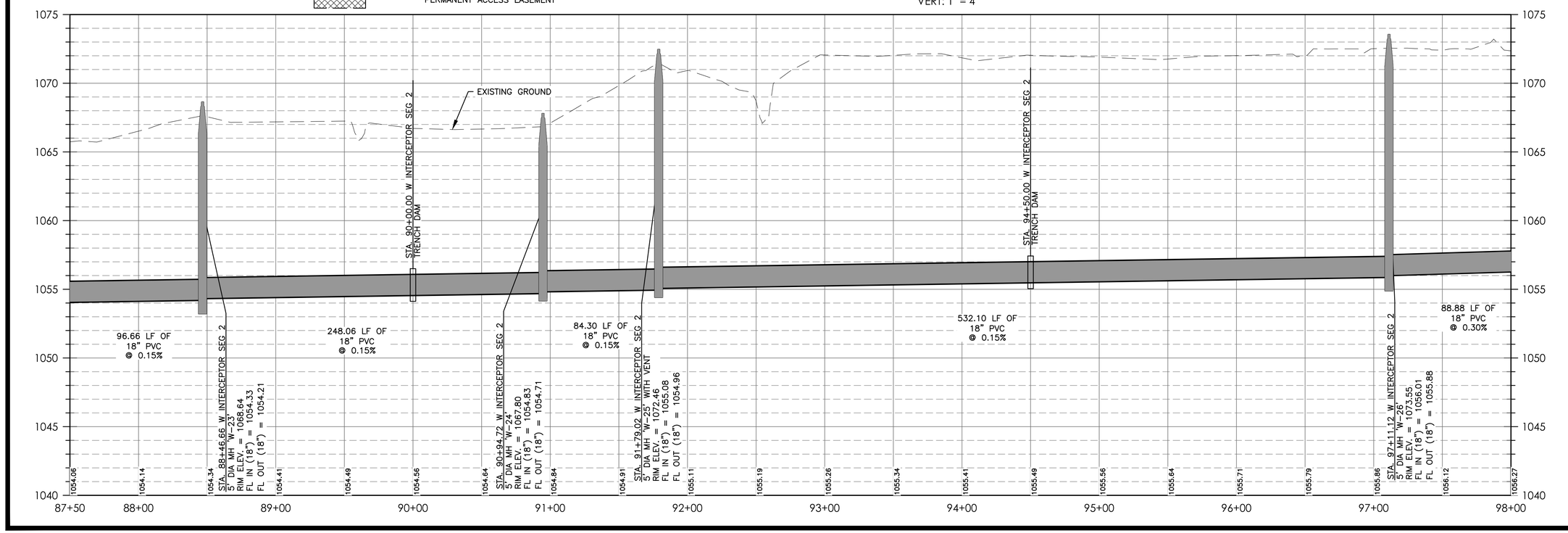
LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- 100 YEAR FEMA FLOODPLAIN
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- PROPOSED WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT

NOTES:
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2. CONTRACTOR SHALL USE A WELL-POINT SYSTEM OR EQUIVALENT DEWATERING METHOD AS NECESSARY TO MAINTAIN A DRY TRENCH DURING EXCAVATION AND PIPE INSTALLATION. SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER GUIDELINES AND MAINTAINED THROUGHOUT CONSTRUCTION TO PREVENT GROUNDWATER INTRUSION. REFERENCE CITY OF AUSTIN SPECIFICATIONS 401S.6 AND 401S.7.

W INTERCEPTOR SEG 2

PROFILE SCALE:
HORIZ: 1" = 40'
VERT: 1" = 4'



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PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
WEST INTERCEPTOR STA 87+50 TO 98+00
PLAN & PROFILE

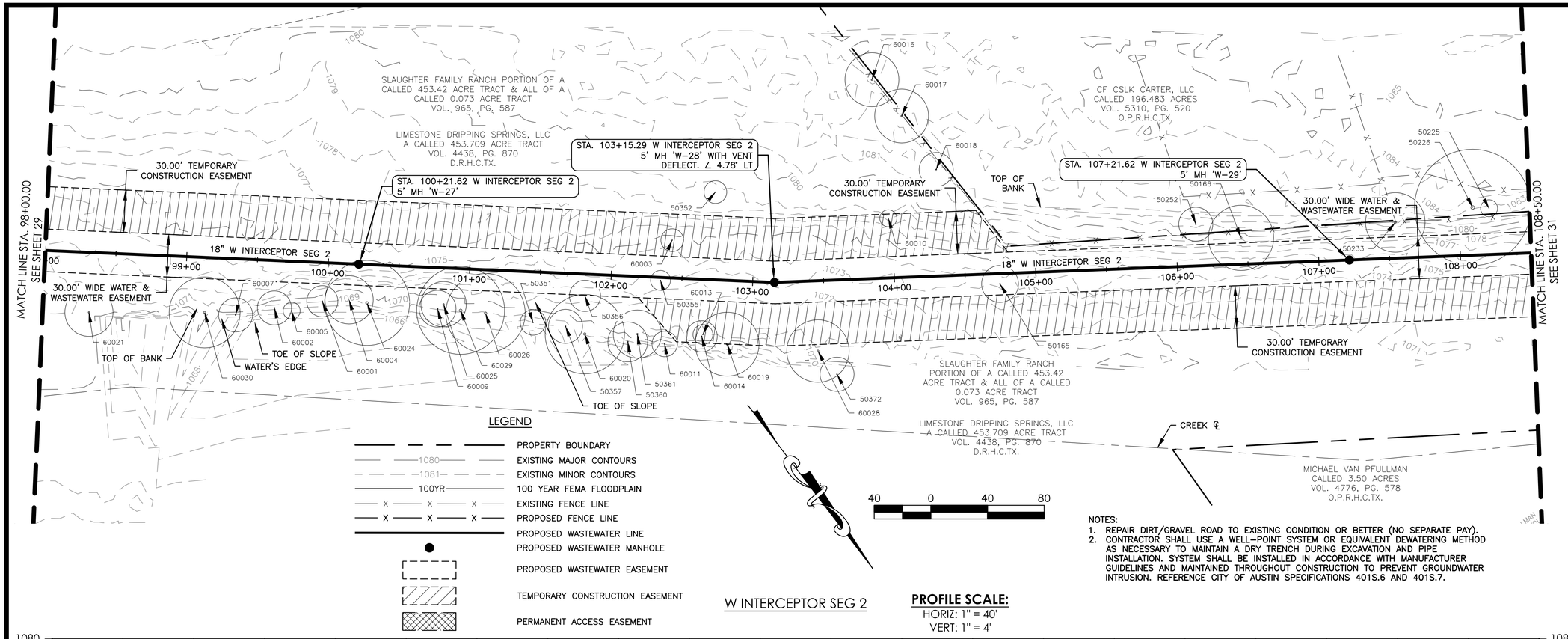
NO:	DESCRIPTION REVISIONS	DATE

JOB NO:	1950-001
DATE:	SEPT 2025
DESIGNED BY:	JB, CC
DRAWN BY:	JB, CC
CHECKED BY:	WBB
APPROVED BY:	WBB

STATE OF TEXAS
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9/23/2025

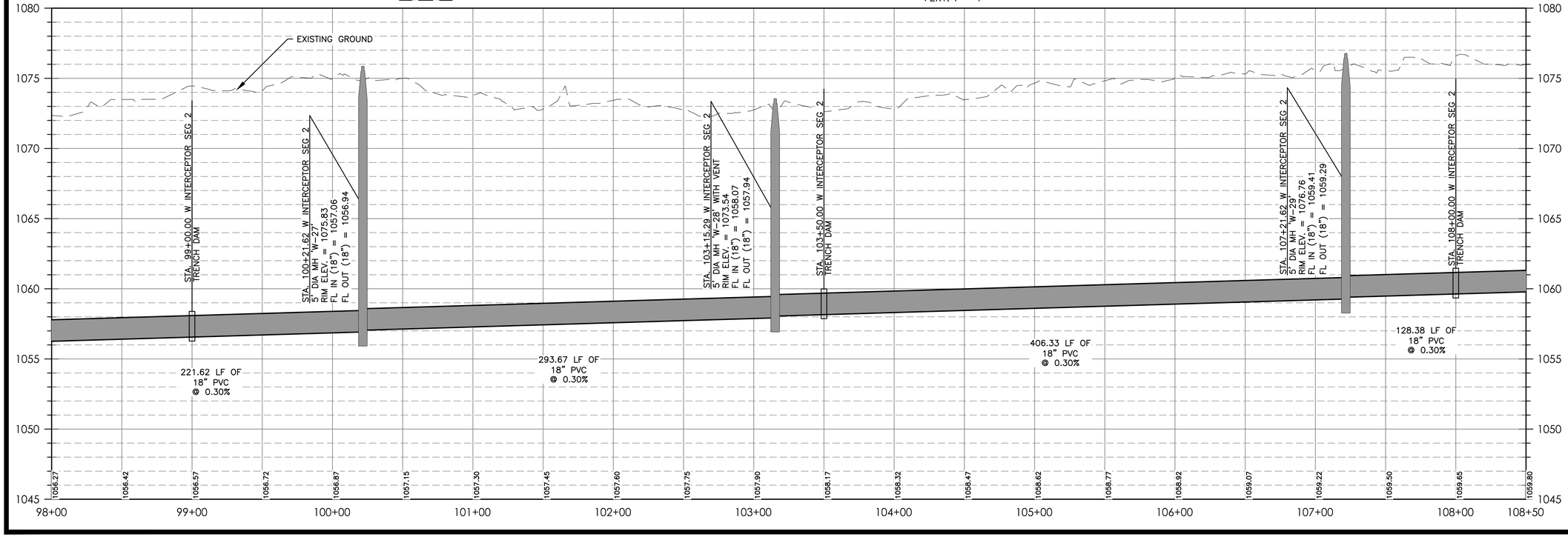
SHEET: 29 OF 36

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W INTERCEPTOR SEG 2

PROFILE SCALE:
HORIZ: 1" = 40'
VERT: 1" = 4'



NOTES:
1. REPAIR DIRT/GRAVEL ROAD TO EXISTING CONDITION OR BETTER (NO SEPARATE PAY).
2. CONTRACTOR SHALL USE A WELL-POINT SYSTEM OR EQUIVALENT DEWATERING METHOD AS NECESSARY TO MAINTAIN A DRY TRENCH DURING EXCAVATION AND PIPE INSTALLATION. SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER GUIDELINES AND MAINTAINED THROUGHOUT CONSTRUCTION TO PREVENT GROUNDWATER INTRUSION. REFERENCE CITY OF AUSTIN SPECIFICATIONS 401S.6 AND 401S.7.

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

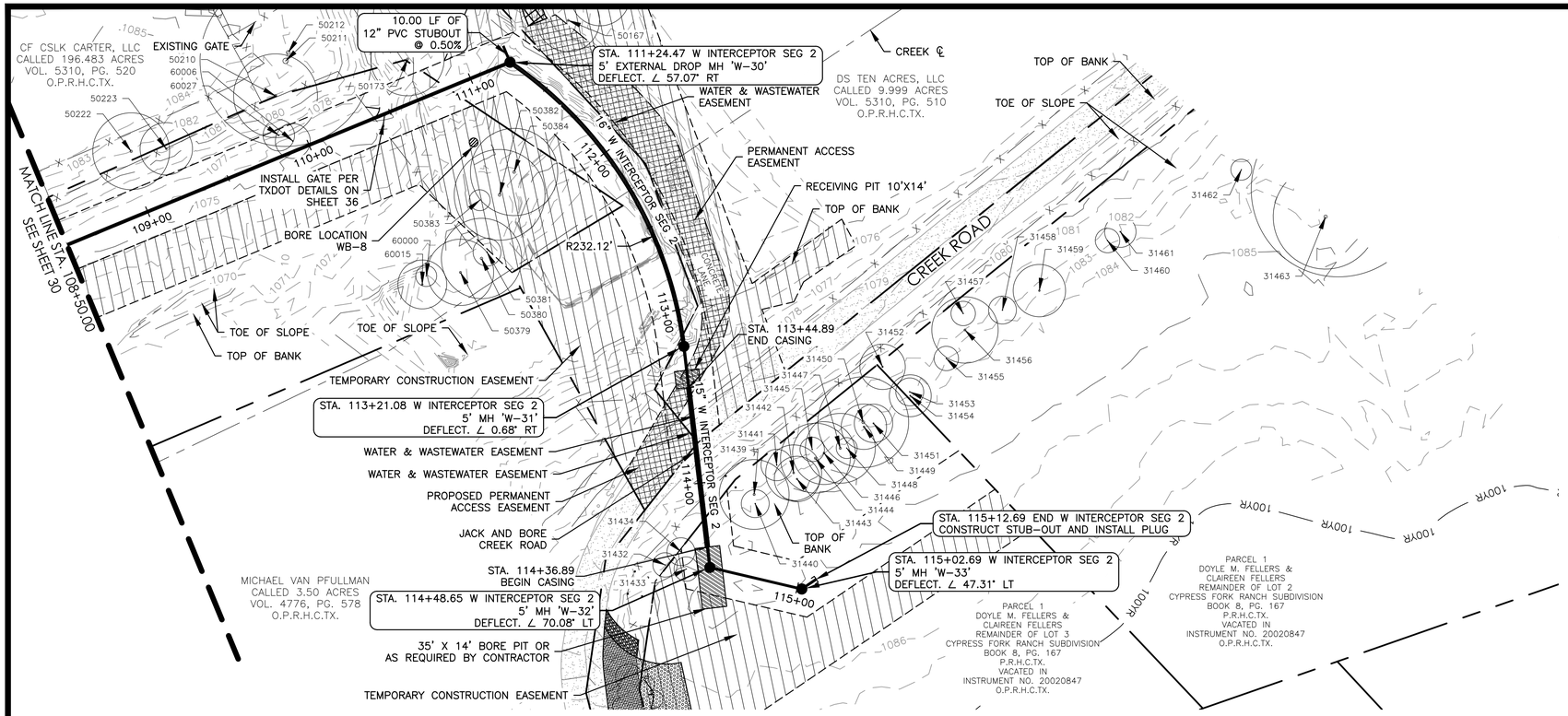
CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
WEST INTERCEPTOR STA 98+00 TO 108+50
PLAN & PROFILE

NO:	DESCRIPTION REVISIONS	DATE

JOB NO:	1950-001
DATE:	SEPT 2025
DESIGNED BY:	JB, CC
DRAWN BY:	JB, CC
CHECKED BY:	WBB
APPROVED BY:	WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

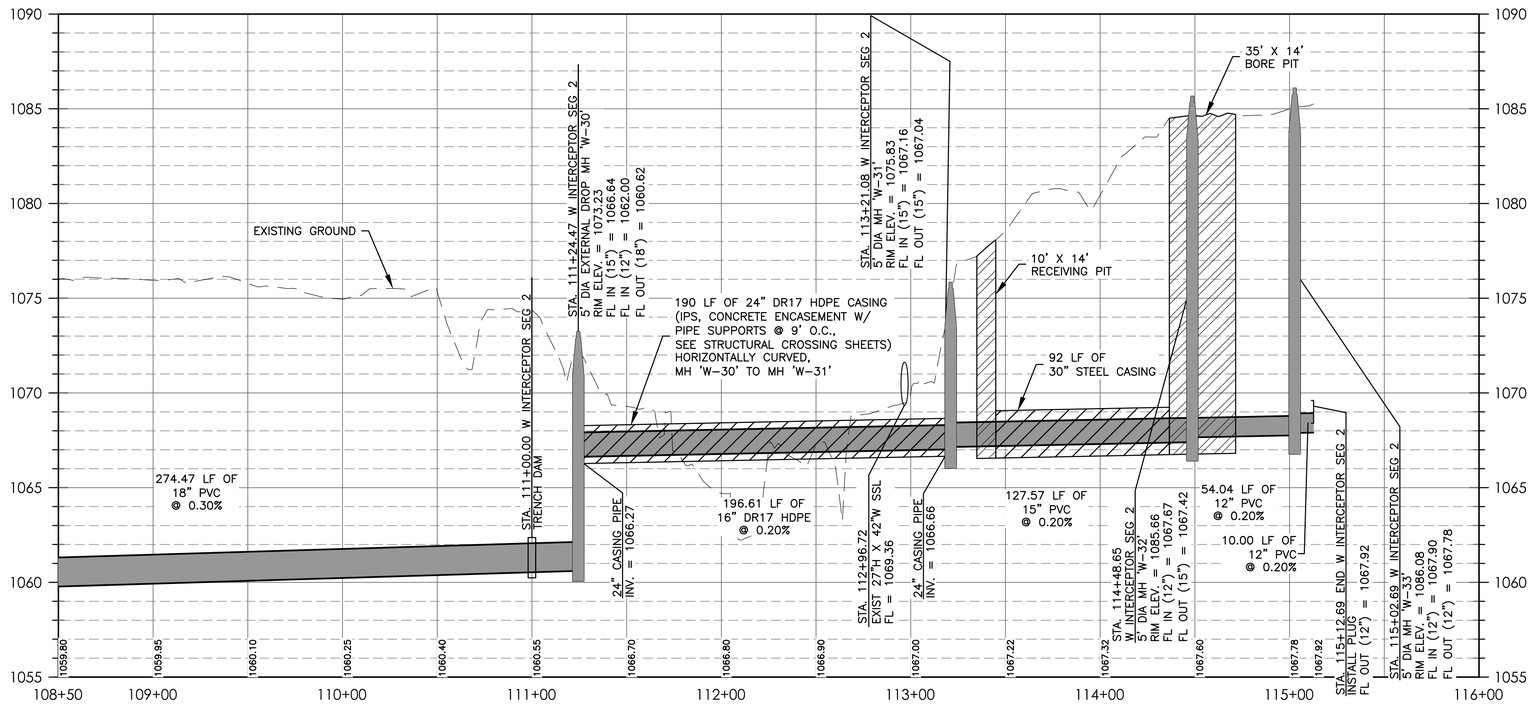
SHEET: 30 OF 36



NOTE: REPAIR DIRT/GRAVEL ROAD TO EXISTING CONDITION OR BETTER (NO SEPARATE PAY).

W INTERCEPTOR SEG 2

PROFILE SCALE:
HORIZ: 1" = 40'
VERT: 1" = 4'



LEGEND

- PROPERTY BOUNDARY
- 1080 EXISTING MAJOR CONTOURS
- 1081 EXISTING MINOR CONTOURS
- 100YR 100 YEAR FEMA FLOODPLAIN
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- PROPOSED WASTEWATER EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ACCESS EASEMENT

DEWATERING NOTES:

1. A COFFER DAM SHALL BE UTILIZED TO DEWATER THE WORK AREA ACROSS ONION CREEK.
2. WELL-POINT SYSTEMS SHALL BE UTILIZED IF NECESSARY.
3. THE ONION CREEK BASE FLOW SHALL BYPASS THE WORK AREA VIA A PUMPING SYSTEM OR TEMPORARY PIPING. IN EITHER CASE, RAMPS OVER PIPING SHALL BE PROVIDED TO ALLOW FOR VEHICULAR ACCESS ACROSS THE DRIVEWAY.
4. THE EXISTING ACCESS DRIVE CURRENTLY IMPOUNDS FLOW IN ONION CREEK, RESULTING IN LITTLE TO NO BASE FLOW WITHIN THE WORK AREA UNDER TYPICAL CONDITIONS. A COFFERDAM SHALL BE INSTALLED DOWNSTREAM OF THE ACCESS DRIVE TO ISOLATE THE WORK AREA. THE AREA BETWEEN THE ACCESS DRIVE AND THE COFFERDAM SHALL BE DEWATERED AND MAINTAINED IN A DRY CONDITION FOR CONSTRUCTION. ALTHOUGH THE CREEK IS NOT CURRENTLY FLOWING, HISTORICAL BASE FLOW HAS BEEN OBSERVED UP TO APPROXIMATELY 1 CFS (~449 GPM). THE CONTRACTOR SHALL MAINTAIN AN EMERGENCY OR BACKUP PUMP ON-SITE CAPABLE OF BYPASSING THIS FLOW OR GREATER TO PREVENT FLOODING OF THE WORK AREA DURING RAIN EVENTS OR SUDDEN INCREASES IN UPSTREAM FLOW.
5. CONTRACTOR SHALL USE A WELL-POINT SYSTEM OR EQUIVALENT DEWATERING METHOD AS NECESSARY TO MAINTAIN A DRY TRENCH DURING EXCAVATION AND PIPE INSTALLATION. SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER GUIDELINES AND MAINTAINED THROUGHOUT CONSTRUCTION TO PREVENT GROUNDWATER INTRUSION. REFERENCE CITY OF AUSTIN SPECIFICATIONS 401S.6 AND 401S.7.

CASED SEWER CROSSING - MH W-30 TO MH W-31 NOTES:

1. INSTALL ±196 LF OF 24" DR 17 HDPE CASING PIPE (IPS) TO HOUSE 16" DR 17 HDPE GRAVITY SEWER MAIN (IPS) FROM MH W-29 TO MH W-30. BOTH CASING AND CARRIER PIPES SHALL BE BUTT-FUSED AND INSTALLED AS A CONTINUOUS CURVED SEGMENT TO MATCH THE 232.12' HORIZONTAL BEND RADIUS SHOWN ON PLANS.
2. CASING PIPE SHALL BE FULLY ENCASED IN CONCRETE WITHIN THE STRUCTURAL CREEK CROSSING ADDITION AND SUPPORTED EVERY 9 FEET BY CAST-IN-PLACE CONCRETE PIPE SUPPORTS DOWELED INTO THE STRUCTURAL WALLS. SEE STRUCTURAL DRAWINGS FOR SUPPORT AND ENCASEMENT DETAILS.
3. CARRIER PIPE SHALL BE CENTRALIZED WITHIN THE CASING USING GARLOCK RANGER II® MIDI-M (OR APPROVED EQUAL) NON-METALLIC CASING SPACERS WITH 1.97" RUNNERS INSTALLED ABOVE AND BELOW THE CARRIER. SPACERS SHALL MAINTAIN A MINIMUM 1" RADIAL CLEARANCE BETWEEN THE CARRIER AND CASING ID BASED ON IPS DIMENSIONS. END SEALS SHALL BE INSTALLED AT BOTH ENDS OF THE CASING.
4. NO ANNULAR GROUT IS REQUIRED INSIDE THE CASING.
5. ALL MATERIALS AND INSTALLATION METHODS SHALL FOLLOW MANUFACTURER RECOMMENDATIONS. MAINTAIN BEND RADIUS ≥ 232.12 FEET AT ALL TIMES.

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
WEST INTERCEPTOR STA 108+50 TO END P&P

NO:	DESCRIPTION REVISIONS	DATE

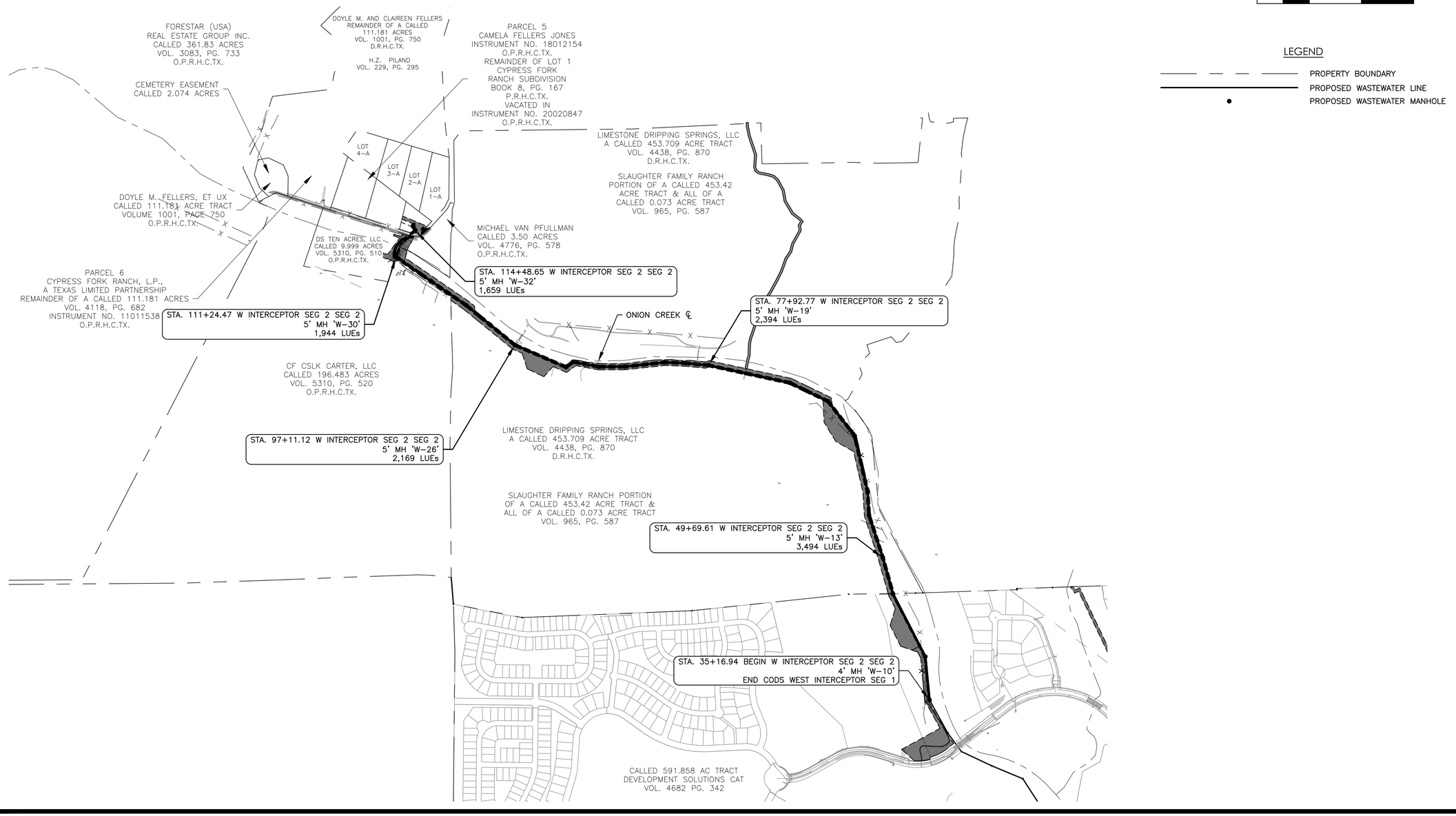
JOB NO:	1950-001
DATE:	SEPT 2025
DESIGNED BY:	JB, CC
DRAWN BY:	JB, CC
CHECKED BY:	WBB
APPROVED BY:	WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 31 OF 36

West Interceptor Segment 2

Participants			MH W-42 to W-38		MH W-38 to W-32		MH W-32 to W-30		MH W-30 to W-26		MH W-26 to W-19		MH W-19 to W-13		W-13 to W-10	
	Total LUEs	Service Area	LUEs	Service Area	LUEs	Service Area	LUEs	Service Area	LUEs	Service Area	LUEs	Service Area	LUEs	Service Area	LUEs	Service Area
Arrowhead Ranch	465 LUEs	192 ac	465 LUEs	192 ac	465 LUEs	192 ac	465 LUEs	192 ac	465 LUEs	192 ac	465 LUEs	192 ac	465 LUEs	192 ac	465 LUEs	192 ac
DSISD	70 LUEs	39 ac	70 LUEs	39 ac	70 LUEs	39 ac	70 LUEs	39 ac	70 LUEs	39 ac	70 LUEs	39 ac	70 LUEs	39 ac	70 LUEs	39 ac
Fellers	100 LUEs	110 ac			100 LUEs	110 ac	100 LUEs	110 ac	100 LUEs	110 ac	100 LUEs	110 ac	100 LUEs	110 ac	100 LUEs	110 ac
City Future	450 LUEs	225 ac					450 LUEs	225 ac	450 LUEs	225 ac	450 LUEs	225 ac	450 LUEs	225 ac	450 LUEs	225 ac
Roger Hanks/New Growth/ Fain	574 LUEs	125 ac					574 LUEs	125 ac	574 LUEs	125 ac	574 LUEs	125 ac	574 LUEs	125 ac	574 LUEs	125 ac
Carter Ranch	285 LUEs	211 ac							285 LUEs	211 ac	285 LUEs	211 ac	285 LUEs	211 ac	285 LUEs	211 ac
Al Rashid/Limestone Dripping	450 LUEs	468 ac									225 LUEs	234 ac	450 LUEs	468 ac	450 LUEs	468 ac
Haydon	500 LUEs	53 ac													500 LUEs	53 ac
Diverted Hays St LS	500 LUEs	250 ac													500 LUEs	250 ac
Needam	100 LUEs	203 ac													100 LUEs	203 ac
		Totals:	**535 LUEs**	**231 ac**	**635 LUEs**	**340 ac**	**1,659 LUEs**	**690 ac**	**1,944 LUEs**	**901 ac**	**2,169 LUEs**	**1,135 ac**	**2,394 LUEs**	**1,369 ac**	**3,494 LUEs**	**1,875 ac**



500 0 500 1000

LEGEND

- PROPERTY BOUNDARY
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
WASTEWATER SERVICE AREAS

NO:	DESCRIPTION REVISIONS	DATE

JOB NO: 1950-001
DATE: SEPT 2025
DESIGNED BY: JB, CC
DRAWN BY: JB, CC
CHECKED BY: WBB
APPROVED BY: WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 32 OF 36

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SEGMENT			Pipe Diameter (in)	Slope	Manning's Material n	PIPE FULL FLOW						PEAK DRY WEATHER FLOW							PEAK WET WEATHER FLOW				
						Normal Depth (ft)	Diameter (ft)	Wetted Perimeter (ft)	Area (sq ft)	Velocity (fps)	Capacity Q_c (gpm)	LUE COUNT		Flow (gpd)[1]	Average Dry Weather Flow (gpm)	COA Criteria Peaking Factor[2]	PDWF[2] (gpm)	Percent Capacity (%)	Service Area (ac)	Calculated I&I (gpd)[3]	Calculated I&I (gpm)[3]	PWWF (gpm)	Percent Capacity (%)
W-42	to W-41		12	0.20%	0.013	1.00	1.00	3.142	0.785	2.0	717	535	LUE	93,625	65.0	3.71	242	34%	231	172,988	120.13	362	50%
W-41	to W-40		12	0.20%	0.013	1.00	1.00	3.142	0.785	2.0	717	535	LUE	93,625	65.0	3.7	242	34%	231	172,988	120.13	362	50%
W-40	to W-39		12	0.20%	0.013	1.00	1.00	3.142	0.785	2.0	717	535	LUE	93,625	65.0	3.7	242	34%	231	172,988	120.13	362	50%
W-39	to W-38		12	0.20%	0.013	1.00	1.00	3.142	0.785	2.0	717	535	LUE	93,625	65.0	3.7	242	34%	231	172,988	120.13	362	50%
W-38	to W-37		12	0.20%	0.013	1.00	1.00	3.142	0.785	2.0	717	635	LUE	111,125	77.2	3.7	283	39%	340	255,263	177.27	460	64%
W-37	to W-36		12	0.20%	0.013	1.00	1.00	3.142	0.785	2.0	717	635	LUE	111,125	77.2	3.7	283	39%	340	255,263	177.27	460	64%
W-36	to W-35		12	0.20%	0.013	1.00	1.00	3.142	0.785	2.0	717	635	LUE	111,125	77.2	3.7	283	39%	340	255,263	177.27	460	64%
W-35	to W-34		12	0.20%	0.013	1.00	1.00	3.142	0.785	2.0	717	635	LUE	111,125	77.2	3.7	283	39%	340	255,263	177.27	460	64%
W-34	to W-33		12	0.20%	0.013	1.00	1.00	3.142	0.785	2.0	717	635	LUE	111,125	77.2	3.7	283	39%	340	255,263	177.27	460	64%
W-33	to W-32		12	0.20%	0.013	1.00	1.00	3.142	0.785	2.0	717	635	LUE	111,125	77.2	3.7	283	39%	340	255,263	177.27	460	64%
W-32	to W-31		15	0.20%	0.013	1.25	1.25	3.927	1.227	2.4	1,300	1,659	LUE	290,325	201.6	3.3	669	51%	690	517,763	359.56	1,029	79%
W-31	to W-30		16	0.20%	0.012	1.33	1.33	4.189	1.396	2.7	1,673	1,659	LUE	290,325	201.6	3.3	669	40%	690	517,763	359.56	1,029	61%
W-30	to W-29		18	0.30%	0.013	1.50	1.50	4.712	1.767	3.3	2,589	1,944	LUE	340,200	236.3	3.3	769	30%	901	676,065	469.49	1,239	48%
W-29	to W-28		18	0.30%	0.013	1.50	1.50	4.712	1.767	3.3	2,589	1,944	LUE	340,200	236.3	3.3	769	30%	901	676,065	469.49	1,239	48%
W-28	to W-27		18	0.30%	0.013	1.50	1.50	4.712	1.767	3.3	2,589	1,944	LUE	340,200	236.3	3.3	769	30%	901	676,065	469.49	1,239	48%
W-27	to W-26		18	0.30%	0.013	1.50	1.50	4.712	1.767	3.3	2,589	1,944	LUE	340,200	236.3	3.3	769	30%	901	676,065	469.49	1,239	48%
W-26	to W-25		18	0.15%	0.013	1.50	1.50	4.712	1.767	2.3	1,831	2,169	LUE	379,575	263.6	3.2	847	46%	1135	851,573	591.37	1,438	79%
W-25	to W-24		18	0.15%	0.013	1.50	1.50	4.712	1.767	2.3	1,831	2,169	LUE	379,575	263.6	3.2	847	46%	1135	851,573	591.37	1,438	79%
W-24	to W-23		18	0.15%	0.013	1.50	1.50	4.712	1.767	2.3	1,831	2,169	LUE	379,575	263.6	3.2	847	46%	1135	851,573	591.37	1,438	79%
W-23	to W-22		18	0.15%	0.013	1.50	1.50	4.712	1.767	2.3	1,831	2,169	LUE	379,575	263.6	3.2	847	46%	1135	851,573	591.37	1,438	79%
W-22	to W-21		18	0.15%	0.013	1.50	1.50	4.712	1.767	2.3	1,831	2,169	LUE	379,575	263.6	3.2	847	46%	1135	851,573	591.37	1,438	79%
W-21	to W-20		18	0.15%	0.013	1.50	1.50	4.712	1.767	2.3	1,831	2,169	LUE	379,575	263.6	3.2	847	46%	1135	851,573	591.37	1,438	79%
W-20	to W-19		18	0.15%	0.013	1.50	1.50	4.712	1.767	2.3	1,831	2,169	LUE	379,575	263.6	3.2	847	46%	1135	851,573	591.37	1,438	79%
W-19	to W-18		21	0.15%	0.013	1.75	1.75	5.498	2.405	2.6	2,762	2,394	LUE	418,950	290.9	3.2	923	33%	1369	1,027,080	713.25	1,636	59%
W-18	to W-17		21	0.15%	0.013	1.75	1.75	5.498	2.405	2.6	2,762	2,394	LUE	418,950	290.9	3.2	923	33%	1369	1,027,080	713.25	1,636	59%
W-17	to W-16		21	0.15%	0.013	1.75	1.75	5.498	2.405	2.6	2,762	2,394	LUE	418,950	290.9	3.2	923	33%	1369	1,027,080	713.25	1,636	59%
W-16	to W-15		21	0.15%	0.013	1.75	1.75	5.498	2.405	2.6	2,762	2,394	LUE	418,950	290.9	3.2	923	33%	1369	1,027,080	713.25	1,636	59%
W-15	to W-14		21	0.15%	0.013	1.75	1.75	5.498	2.405	2.6	2,762	2,394	LUE	418,950	290.9	3.2	923	33%	1369	1,027,080	713.25	1,636	59%
W-14	to W-13		21	0.15%	0.013	1.75	1.75	5.498	2.405	2.6	2,762	2,394	LUE	418,950	290.9	3.2	923	33%	1369	1,027,080	713.25	1,636	59%
W-13	to W-12		21	0.20%	0.013	1.75	1.75	5.498	2.405	3.0	3,189	3,494	LUE	611,450	424.6	3.0	1,279	40%	1875	1,406,580	976.79	2,256	71%
W-12	to W-11		24	0.20%	0.013	2.00	2.00	6.283	3.142	3.2	4,553	3,494	LUE	611,450	424.6	3.0	1,279	28%	1875	1,406,580	976.79	2,256	50%
W-11	to EX MH W-10		24	0.00	0.01	2.00	2.00	6.283	3.142	3.1	4,319	3,494	LUE	611,450	424.6	3.0	1,279	30%	1875	1,406,580	976.79	2,256	52%

1) LUE Average daily flow = 175 gallons per day.
2) City of Austin Peak Dry Weather Flow (PDWF) derived from the formula:
Qpd = [(18+(0.0206 × F)^0.5)/(4+(0.0206 × F)^0.5)] × F
where: F = average dry-weather flow in gpm
3) Inflow and Infiltration calculated per the assumption of 750 gallons per day per acre served
City of Austin Critera Manual2.9.4(A)(3).

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

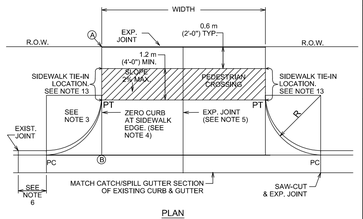
CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
WASTEWATER CALCULATIONS

NO:	DESCRIPTION REVISIONS	DATE

JOB NO: 1950-001
DATE: SEPT 2025
DESIGNED BY: JB, CC
DRAWN BY: JB, CC
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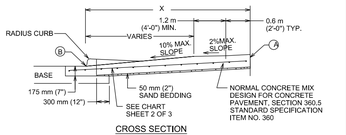
STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 33 OF 36



PLAN

NOTE: ALL DRIVEWAYS SHALL BE SLOPED TOWARDS THE STREET FROM THE R.O.W. LINE. ELEVATION OF POINT (A) ABOVE POINT (B), TYPICALLY A MINIMUM OF 150 mm (6") PLUS 20 mm/m (2" RISE/FOOT) OVER DISTANCE "X" IN METERS (FEET).



CROSS SECTION

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPE II DRIVEWAY	STANDARD NO.
RECORD COPY SIGNED BY CUONG TRAN 02/24/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	433S-2 1 OF 2

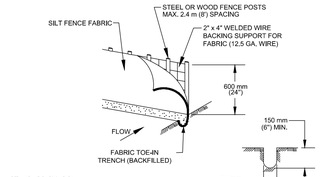
USE	THICKNESS	REINFORCEMENT
DRIVEWAYS FOR PASSENGER VEHICLE PARKING LOTS	150 mm (6") MIN.	125 mm (5") MIN. CONCRETE WITH ONE LAYER OF 13M (#4) BARS PLACED ON CHAIRS AT MIDDEPTH OF SLAB AT NO MORE THAN 450 mm (18") O.C. BOTH DIRECTIONS
ALL OTHERS	175 mm (7") MIN.	125 mm (5") MIN. CONCRETE WITH ONE LAYER OF 13M (#4) BARS PLACED ON CHAIRS AT MIDDEPTH OF SLAB AT NO MORE THAN 450 mm (18") O.C. BOTH DIRECTIONS

ALLOWABLE GRADES

DRIVEWAY VOLUME (ADT)	D=GRADE CHANGE	
	STD.	MAX
>1500	0%	3%
500-1500	3%	6%
< 500	6%	15%

NOTES:
1. ALL TYPE II DRIVEWAYS SHALL HAVE RADIUS ENDS.
2. DRIVEWAY WIDTHS AND RADII DIMENSIONS, ONE/TWO WAY TRAVEL REQUIREMENTS, AND GEOMETRIC LAY-OUT ARE HIGHLY VARIABLE, SUBJECT TO SITE SPECIFIC CONDITIONS AND REQUIREMENTS. SEE TRANSPORTATION CRITERIA MANUAL, SECTION 5 "DRIVEWAYS".
3. THE DRIVEWAY EDGE SHALL BE SMOOTHLY TRANSITIONED INTO THE SIDEWALK TIE-IN LOCATION BEGINNING AT THE RADIUS PC LINE.
4. "ZERO" CURB AT PT OR SIDEWALK EDGE, WHICHEVER IS ENCOUNTERED FIRST.
5. PLACE AN EXPANSION JOINT DOWN THE CENTER OF DRIVEWAY ALL DRIVEWAYS.
6. IF DIMENSION IS LESS THAN 1.5 METERS (5 FEET), REMOVE CURB AND GUTTER TO EXISTING JOINT AND POUR MONOLITHICALLY WITH DRIVEWAY.
7. IF THE BASE IS OVER-EXCAVATED WHERE THE CURB AND GUTTER WERE REMOVED, BACKFILL WITH CONCRETE MONOLITHICALLY WITH THE DRIVEWAY.
8. TYPE II DRIVEWAYS ARE TO BE LOCATED NO CLOSER TO THE CORNER OF INTERSECTING RIGHT OF WAY THAN 60% OF PARCEL FRONTAGE AT 30 METERS (100 FEET) WHICHEVER IS LESS.
9. DRIVEWAY SHALL NOT BE CONSTRUCTED WITHIN THE CURB RETURN OF A STREET INTERSECTION.
10. WHILE THE PROPERTY OWNER REMAINS RESPONSIBLE FOR GRADE BREAKS WITHIN PRIVATE PROPERTY, THE FIRE DEPARTMENT SHALL BE CONSULTED WHERE THE DRIVEWAY IS ESSENTIAL TO EMERGENCY VEHICLE ACCESS AND %2I IS GREATER THAN 15%.
11. USE 12 MM (1/2") ASPHALT BOARD OR OTHER APPROVED MATERIAL FOR CURB AND GUTTER EXPANSION JOINTS. SIDEWALK, AT THE R.O.W. LINE AND AT MIDWIDTH, SEE NOTE 5.
12. SEE TRANSPORTATION CRITERIA MANUAL, SECTION 5 FOR OTHER DRIVEWAY REQUIREMENTS.
13. THE SIDEWALK, REGARDLESS OF ITS LOCATION WITH RESPECT TO THE CURB OR PROPERTY LINE, SHALL BE CONNECTED TO THE DRIVEWAY AT THESE LOCATIONS.
14. WATER METER BOXES AND WASTEWATER CLEAN OUTS ARE PROHIBITED FROM BEING LOCATED IN DRIVEWAY AREAS.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPE II DRIVEWAY	STANDARD NO.
RECORD COPY SIGNED BY CUONG TRAN 02/24/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	433S-2 2 OF 2



STANDARD SYMBOL FOR SILT FENCE (SF)

SF
L=

TRENCH CROSS SECTION

1. STEEL OR WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 300 mm (12 INCHES), IF WOOD POSTS CANNOT ACHIEVE 300 mm (12 inches) DEPTH, USE STEEL POSTS.

2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.

3. THE TRENCH MUST BE A MINIMUM OF 150 mm (6 inches) DEEP AND 150 mm (6 inches) WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.

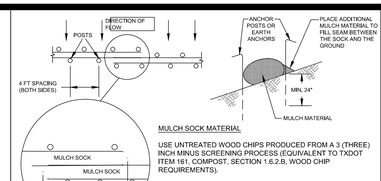
4. SILT FENCE FABRIC SHOULD BE SECURELY FASTENED TO EACH STEEL OR WOOD SUPPORT POST OR TO WOVEN WIRE , WHICH IS IN TURN ATTACHED TO THE STEEL OR WOOD FENCE POST.

5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTY AS NEEDED.

6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6 inches). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	SILT FENCE	STANDARD NO.
RECORD COPY SIGNED BY MORGAN BYARS 09/01/2011 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	642S-1



MULCH SOCK MATERIAL

USE UNTREATED WOOD CHIPS PRODUCED FROM A 3 (THREE) INCH MINUS SCREENING PROCESS (EQUIVALENT TO TXDOT ITEM 161, COMPOST, SECTION 1.6.2.B, WOOD CHIP REQUIREMENTS).

MULCH CONSISTS PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, OR COMPOSTED BARK.

LARGE PORTIONS OF SILT, CLAYS, OR FINE SANDS ARE NOT ACCEPTABLE IN THE MULCH.

NOTES:

1. STEEL OR WOOD POSTS WHICH SUPPORT THE MULCH SOCK SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 600mm (24 inches). IF WOOD POSTS CANNOT ACHIEVE 600mm (24 inches) DEPTH, USE STEEL POSTS. EARTH ANCHORS ARE ALSO ACCEPTABLE.

2. THE TOE OF THE MULCH SOCK SHALL BE PLACED SO THAT THE MULCH SOCK IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. IN ORDER TO PREVENT WATER FROM FLOWING BETWEEN THE JOINTS OF ADJACENT ENDS OFMULCH SOCKS, LAP THE ENDS OF ADJACENT MULCH SOCKS A MINIMUM OF 300mm (12 inches).

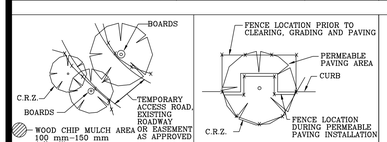
3. MULCH MATERIAL MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH; IT IS NOT ACCEPTABLE FOR THE MULCH MATERIAL TO CONTAIN GROUND CONSTRUCTION DEBRIS, BIOSOLIDS, OR MANURE.

4. SOCK MATERIAL WILL BE 100% BIODEGRADABLE, PHOTODEGRADABLE, OR RECYCLABLE SUCH AS BURLAP, TWINE, UV PHOTOBIODEGRADABLE PLASTIC, POLYESTER, OR ANY OTHER ACCEPTABLE MATERIAL.

5. MULCH SOCKS SHOULD BE USED AT THE BASE OF SLOPES NO STEEPER THAN 2:1 AND SHOULD NOT EXCEED THE MAXIMUM SPACING CRITERIA PROVIDED IN CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL TABLE 1.4.5.F.1 FOR A GIVEN SLOPE CATEGORY.

6. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150mm (6 inches). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	MULCH SOCK	STANDARD NO.
RECORD COPY SIGNED BY MORGAN BYARS 08/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	648S-1



NOTE:
FILTER FABRIC SHALL ENTIRELY COVER DIKE AND SKIRT.

INSTALLATION DETAIL OPTIONS:
1. TOE-IN 150 mm (6") MINIMUM.
2. WEIGHTED WITH 75 mm-125 mm (3"-5") OPEN.
3. TRENCHED IN 100 mm (4").
4. CONTINUOUS BACKING/PLANKS ON IMPERVIOUS SURFACES.

GENERAL NOTES
1. DIKES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT DIKE.
2. THE FABRIC COVER AND SKIRT SHALL BE A CONTINUOUS WRAPPING OF GEOTEXTILE. THE SKIRT SHALL BE A CONTINUOUS EXTENSION OF THE FABRIC ON THE UPSTREAM FACE.
3. THE SKIRT SHALL BE WEIGHTED WITH A CONTINUOUS LAYER OF 75-125 mm (3-5") OPEN GRADED ROCK OR TOED-IN 150 mm (6") WITH MECHANICALLY COMPACTED MATERIAL. OTHERWISE, THE ENTIRE STRUCTURE SHALL BE TRENCHED IN 100 mm (4").
4. DIKES AND SKIRT SHALL BE SECURELY ANCHORED IN PLACE USING 150 mm (6") WIRE STAPLES ON 600 mm (2') CENTERS ON BOTH EDGES AND SKIRT, OR STAKE USING 10M (3/8 ") DIAMETER RE-BAR WITH TEE ENDS.
5. FILTER MATERIA SHALL BE LAPPED OVER ENDS 150 mm (6") TO COVER DIKE TO DIKE JOINTS. JOINTS SHALL BE FASTENED WITH GALVANIZED SHOAT RINGS.
6. THE DIKE STRUCTURE SHALL BE MW40-150 mmX150 mm (6 GA. 6"X6") WIRE MESH, 450 mm (18") ON A SIDE.
7. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
8. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6") AND DISPOSED OF IN A MANNER WHICH WILL NOT CAUSE ADDITIONAL SILTATION.
9. AFTER THE DEVELOPMENT SITE IS COMPLETLY STABILIZED, THE DIKES AND ANY REMAINING SILT SHALL BE REMOVED. SILT SHALL BE DISPOSED OF AS INDICATED IN GENERAL NOTE 8 ABOVE.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	TRIANGULAR SEDIMENT FILTER DIKE	STANDARD NO.
RECORD COPY SIGNED BY J. PATRICK MURPHY 3/27/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	628S



ROCK BERM



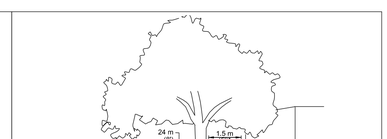
CROSS SECTION

STANDARD SYMBOL FOR ROCK BERM (RB)

RB

NOTES:
1. USE ONLY OPEN GRADED ROCK 75 to 125 mm (3 to 5") DIAMETER FOR ALL CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 25 mm (1") OPENING AND MINIMUM WIRE DIAMETER OF 12.9 mm (20 GAUGE).
3. THE ROCK BERM SHALL BE INSPECTED DAILY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC/ CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SEDIMENT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. IF SEDIMENT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR 150 mm (6"), WHICHEVER IS LESS. THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SITE AND IN A MANNER THAT WILL NOT CREATE A SEDIMENTION PROBLEM.
5. WHEN THE SITE IS COMPLETELY STABILIZED,THE BERM AND ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	ROCK BERM	STANDARD NO.
RECORD COPY SIGNED BY MORGAN BYARS 8/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	639S-1



NOTES:
1. STONE SIZE: 75-125 mm (3-5") OPEN GRADED ROCK.
2. LENGTH: AS EFFECTIVE BUT NOT LESS THAN 15 m (50').
3. THICKNESS: NOT LESS THAN 200 mm (8").
4. WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
5. WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AS WELL AS REPAIR AND CLEAN OUT OF ANY MEASURE DEVICES USED TO TRAP SEDIMENT. ALL SEDIMENTS THAT IS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
7. DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	STABILIZED CONSTRUCTION ENTRANCE	STANDARD NO.
RECORD COPY SIGNED BY J. PATRICK MURPHY 5/23/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	641S-1

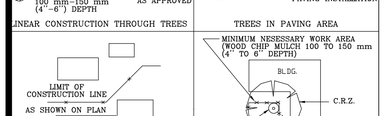
PLAN

SECTION A-A

CONCRETE WASHOUT AREA

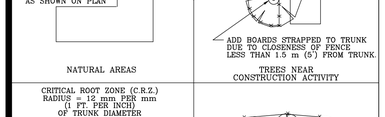
LINEAR CONSTRUCTION THROUGH TREES

TREES IN PAVING AREA



NATURAL AREAS

TREES NEAR CONSTRUCTION ACTIVITY



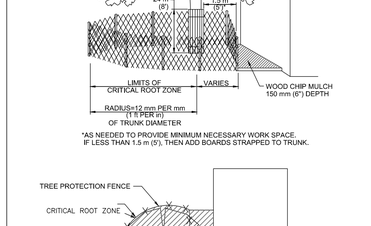
INDIVIDUAL TREE

GROUP OF TREES

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	TREE PROTECTION FENCE LOCATIONS	STANDARD NO.
RECORD COPY SIGNED BY J. PATRICK MURPHY 11/15/99 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	610S-1

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	TREE PROPTECTION FENCE TYPE A - CHAIN LINK	STANDARD NO.
RECORD COPY SIGNED BY J. PATRICK MURPHY 11/15/99 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	610S-2

*AS NEEDED TO PROVIDE MINIMUM NECESSARY WORK SPACE. IF LESS THAN 1.5 m (5'), THEN ADD BOARDS STRAPPED TO TRUNK.



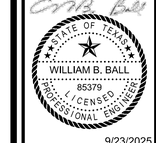
CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	TREE PROTECTION FENCE MODIFIED TYPE A - CHAIN LINK	STANDARD NO.
RECORD COPY SIGNED BY J. PATRICK MURPHY 11/15/99 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	610S-4

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
STANDARD DETAILS 1 OF 3

NO:	DESCRIPTION REVISIONS	DATE

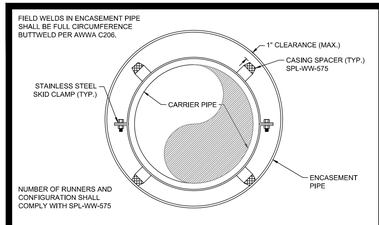
JOB NO: 1950-001
DATE: SEPT 2025
DESIGNED BY: JB, CC
DRAWN BY: JB, CC
CHECKED BY: WBB
APPROVED BY: WBB



9/23/2025

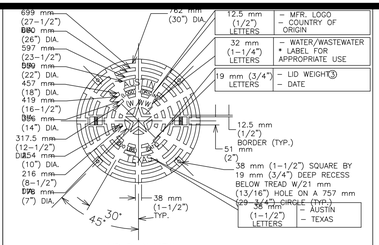
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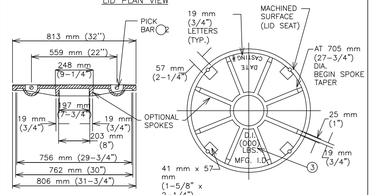


APPLICABLE REFERENCES:
STANDARD SPECIFICATION: ITEM 505.4 & 510.3 (19)

CITY OF AUSTIN AUSTIN WATER	ENCASEMENT PIPE DETAIL WITH CASING SPACERS	
JEFF A. KYLE 02/22/2021 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 501-AW-01 1 OF 1

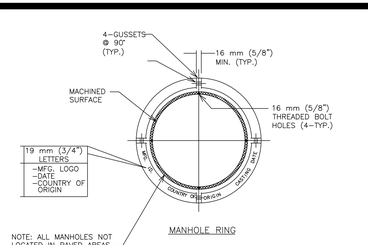


LID PLAN VIEW



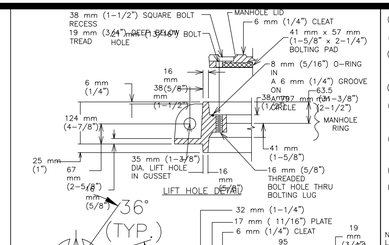
LID SECTION VIEW

CITY OF AUSTIN AUSTIN WATER UTILITY	BOLTED MANHOLE RING AND 813 mm 32" COVER	
RECORD COPY SIGNED BY KATHI L FLOWERS 09/23/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S–5W 1 OF 3



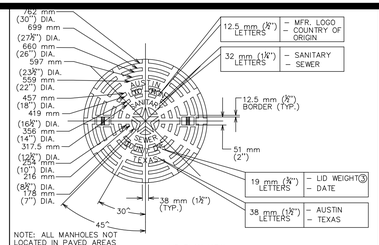
NOTE: ALL MANHOLES NOT LOCATED IN PAVED AREAS SHALL HAVE BOLTED COVERS AS PER SPEC. 506.

CITY OF AUSTIN AUSTIN WATER UTILITY	BOLTED MANHOLE RING AND 813 mm 32" COVER	
RECORD COPY SIGNED BY KATHI L FLOWERS 09/23/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S–5W 2 OF 3



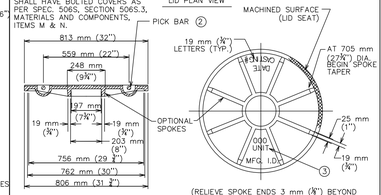
NOTES:
① ALL CORNERS AND EDGES SHALL HAVE A 1.5 mm (1/16") MINIMUM RADIUS.
② LIDS SHALL BE CAST WITH TWO 25 mm (1") DIA. STEEL PICK BARS.
③ LID WEIGHTS SHALL BE 779 N (175 LBS.) FOR DUCTILE IRON WEIGHT SHALL BE CAST ON BOTH TOP AND BOTTOM OF LID.
④ MANUFACTURER SHALL PROVIDE INDEPENDENT TESTING LABORATORY REPORT ON 40,000 POUND PROOF LOAD TEST CONDUCTED ACCORDING TO AASHTO M–306.
⑤ FILLETS SHALL BE 6 mm (1/4") RADIUS UNLESS OTHERWISE SPECIFIED.
⑥ MANUFACTURER SHALL REMOVE EXCESS IRON AND MACHINE FINISH SEATING SURFACES TO NOTED DIMENSIONS.
⑦ BOLTS SHALL BE 16 mm x 44 mm (5/8" x 1–3/4" x 11 N.C.) STAINLESS STEEL HEX HEAD (TYPE 316).

CITY OF AUSTIN AUSTIN WATER UTILITY	BOLTED MANHOLE RING AND 813 mm 32" COVER	
RECORD COPY SIGNED BY KATHI L FLOWERS 09/23/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S–5W 3 OF 3



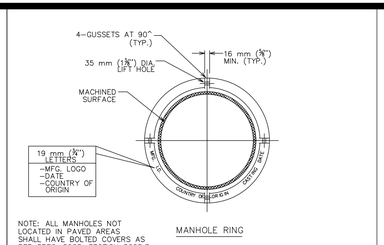
NOTE: ALL MANHOLES NOT LOCATED IN PAVED AREAS SHALL HAVE BOLTED COVERS AS PER SPEC. 506S, SECTION 506S.3, MATERIALS AND COMPONENTS, ITEMS M & N.

LID PLAN VIEW



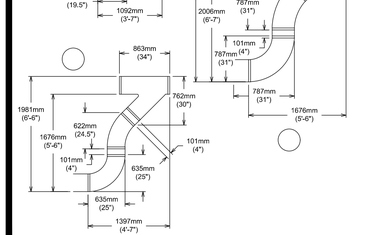
LID SECTION VIEW

CITY OF AUSTIN AUSTIN WATER UTILITY	SANITARY SEWER MANHOLE RING AND 813 mm (32") COVER	
RECORD COPY SIGNED BY KATHI L FLOWERS 3/9/04 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S–4W 1 OF 3



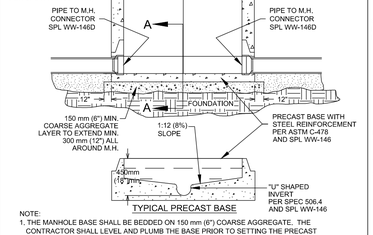
NOTE: ALL MANHOLES NOT LOCATED IN PAVED AREAS SHALL HAVE BOLTED COVERS AS PER SPEC. 506S, SECTION 506S.3, MATERIALS AND COMPONENTS, ITEMS M & N.

CITY OF AUSTIN AUSTIN WATER UTILITY	SANITARY SEWER MANHOLE RING AND 813 mm (32") COVER	
RECORD COPY SIGNED BY KATHI L FLOWERS 3/9/04 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S–4W 2 OF 3

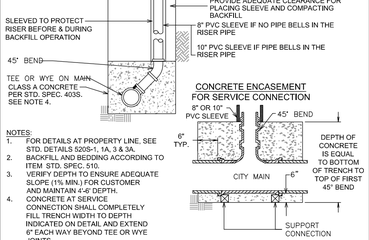


NOTES:
① ALL CORNERS AND EDGES SHALL HAVE A 1.5 mm (1/16") MINIMUM RADIUS.
② LIDS SHALL BE CAST WITH TWO 25 mm (1") DIA. STEEL PICK BARS.
③ LID WEIGHTS SHALL BE 935 N (210 LBS.) FOR CAST IRON OR 779 N (175 LBS.) FOR DUCTILE IRON. WEIGHT SHALL BE CAST ON BOTH TOP AND BOTTOM OF LID.
④ MANUFACTURER SHALL PROVIDE INDEPENDENT TESTING LABORATORY REPORT ON 40,000 POUND PROOF LOAD TEST CONDUCTED ACCORDING TO AASHTO M–306.
⑤ FILLETS SHALL BE 6 mm (1/4") RADIUS UNLESS OTHERWISE SPECIFIED.
⑥ MANUFACTURER SHALL REMOVE EXCESS IRON AND MACHINE FINISH SEATING SURFACES TO NOTED DIMENSIONS.
NOTE: ALL MANHOLES NOT LOCATED IN PAVED AREAS SHALL HAVE BOLTED COVERS AS PER SPEC. 506S, SECTION 506S.3, MATERIALS AND COMPONENTS, ITEMS M & N.

CITY OF AUSTIN AUSTIN WATER UTILITY	SANITARY SEWER MANHOLE RING AND 813 mm (32") COVER	
RECORD COPY SIGNED BY KATHI L FLOWERS 3/9/04 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S–4W 3 OF 3



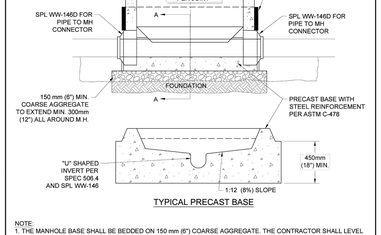
CITY OF AUSTIN AUSTIN WATER UTILITY	CONCRETE ENCASEMENT	
RECORD COPY SIGNED BY LEON BARBA 8/18/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 505S–1 1 OF 1



Ⓐ VERTICAL FACE = ALLOWABLE THROAT OR CHIMNEY HEIGHT
= NEW CONSTRUCTION = 525mm = (21") Max.
= EXISTING CONSTRUCTION = 675mm (27") Max.

NOTES:
1. NON-SHRINK GROUT SHALL NOT EXCEED 25 mm (1") IN ANY DIMENSION.
2. SUB-GRADE AND BASE MATERIALS SHALL BE COMPACTED ACCORDING TO ITEMS 201S AND 210S, RESPECTIVELY, OF THE CITY OF AUSTIN'S STANDARD SPECIFICATIONS.
3. REFER TO STANDARD 1100S-1 FOR REPAIRS AROUND MANHOLES.
4. SEE STANDARD 506S-4A FOR HDPE RING INSTALLATION (FOR USE IN PAVED AREAS ONLY).

CITY OF AUSTIN AUSTIN WATER UTILITY	MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S–4 1 OF 2



NOTES:
1. FOR USE IN UNPAVED AREAS ONLY
2. WHEN USED WITHIN 100-YEAR FLOODPLAIN, SEE DTL. 506S-6 FOR ADDITIONAL M.H. REQUIREMENTS.
3. DIMENSION B=150-300 mm (6"-12") FOR M.H. LOCATED IN 100-YR FLOOD PLAN. =50-300 mm (2"-12") FOR M.H. OUTSIDE 100-YR FLOOD PLAIN.

CITY OF AUSTIN AUSTIN WATER UTILITY	MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S–4 2 OF 2

NOTES:
1. THE MANHOLE BASE SHALL BE BEDDED ON 150mm (6") COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.
2. MANHOLE FOUNDATION SHALL MEET OR EXCEED STD. SPEC 506.5B.

CITY OF AUSTIN AUSTIN WATER UTILITY	PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-8 1 OF 3

CITY OF AUSTIN AUSTIN WATER UTILITY	PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-8 2 OF 3

NOTE:
1. THE MANHOLE BASE SHALL BE BEDDED ON 150 mm (6") COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.
2. MH FOUNDATION SHALL MEET OR EXCEED STD. SPEC. 506.5B.

CITY OF AUSTIN AUSTIN WATER UTILITY	WASTEWATER MANHOLE ON PRECAST BASE	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-10 1 OF 1

NOTES:
1. FOR DETAILS AT PROPERTY LINE, SEE STD. DETAILS 520S-1, 1A, 3 & 3A.
2. BACKFILL AND BEDDING ACCORDING TO ITEM STD. SPEC. 510.
3. VERIFY DEPTH TO ENSURE ADEQUATE SLOPE (1% MIN.) FOR CUSTOMER AND MAINTAIN 4'-6" DEPTH.
4. CONCRETE AT SERVICE CONNECTION SHALL COMPLETELY FILL TRENCH WIDTH TO DEPTH INDICATED ON DETAIL AND EXTEND 6" EACH WAY BEYOND TEE OR WYE JOINTS.

CITY OF AUSTIN AUSTIN WATER UTILITY	WASTEWATER DEEP SERVICE CONNECTION DETAIL	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-6

NOTE:
1. THE MANHOLE BASE SHALL BE BEDDED ON 150 mm (6") COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.2. MANHOLE FOUNDATION SHALL MEET OR EXCEED SPEC. 506.5B.

CITY OF AUSTIN AUSTIN WATER UTILITY	WATER TIGHT WASTEWATER MANHOLE ON PRECAST BASE	
RECORD COPY SIGNED KATHI L FLOWERS 08/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-6 1 OF 1

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
STANDARD DETAILS 2 OF 3

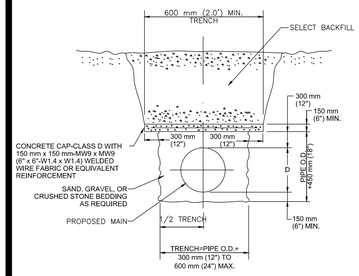
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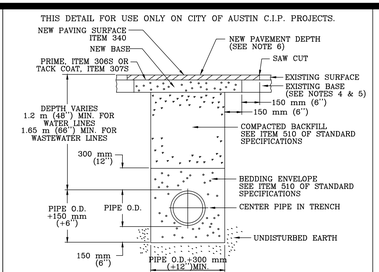
JOB NO: 1950-001
DATE: SEPT 2025
DESIGNED BY: JB, CC
DRAWN BY: JB, CC
CHECKED BY: WBB
APPROVED BY: WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED
PROFESSIONAL ENGINEER
9/23/2025

SHEET: 35 OF 36

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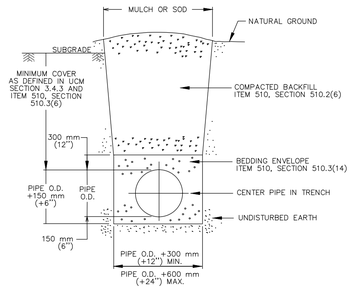


NOTES:

1. THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE A MINIMUM OF 300 mm (12") WIDER THAN THE UNDISTURBED SIDES OF THE TRENCH, SYMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
2. ANY CONCRETE PAVING SHALL BE SAW CUT 150 mm (6") WIDER THAN UNDISTURBED SIDES OF EXCAVATION.
3. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX OR TEMPORARY HOT MIX ASPHALTIC CONCRETE.
4. ROAD BASE AND SURFACE MATERIALS IN THE TRENCH CUT SHALL BE REPLACED IN KIND OF EQUAL THICKNESS, OR MINIMUM BASE THICKNESS OF 250 mm (10"), WHICHEVER IS GREATER.
5. ALL DAMAGED AREAS OF PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH MINIMUM OF 200 mm (8") OF BASE OR MATCH EXISTING THICKNESS, WHICHEVER IS GREATER.
6. SURFACE PAVEMENT SHALL BE OF THE KIND AND THICKNESS AS EXISTING, OR MINIMUM 50 mm (2"), WHICHEVER IS GREATER.

CITY OF AUSTIN	CONCRETE TRENCH CAP		
WATER AND WASTEWATER UTILITY			
RECORD COPY SIGNED BY KATHI F. PAYNE 2/17/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO.	510S-1

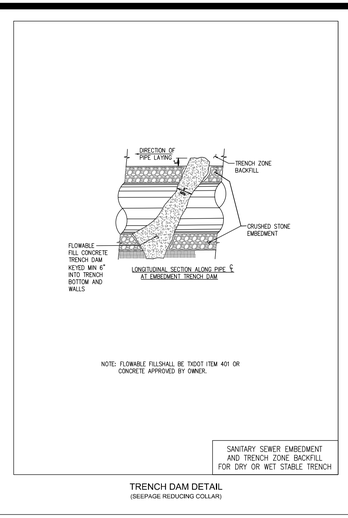
CITY OF AUSTIN	TYPICAL TRENCH WITH PAVED SURFACE		
WATER AND WASTEWATER UTILITY			
RECORD COPY SIGNED BY KATHI L. FLOWERS 8/19/02 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO.	510S-3



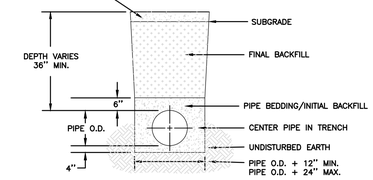
REFERENCES:

1. UTILITY CRITERIA MANUAL SECTION 3.4.3, "FINAL DESIGN"
2. STANDARD SPECIFICATION MANUAL ITEM 510, SECTION 510.2(6), "SELECT BACKFILL OR BORROW"; SECTION 510.3(6), "TRENCH DEPTH AND DEPTH OF COVER"; SECTION 510.3(14), "PIPE BEDDING ENVELOPE"

CITY OF AUSTIN	TYPICAL TRENCH DETAIL WITH UNFINISHED SURFACE		
DEPARTMENT OF PUBLIC WORKS			
RECORD COPY SIGNED BY BILL GARDNER 03/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO.	510S-5



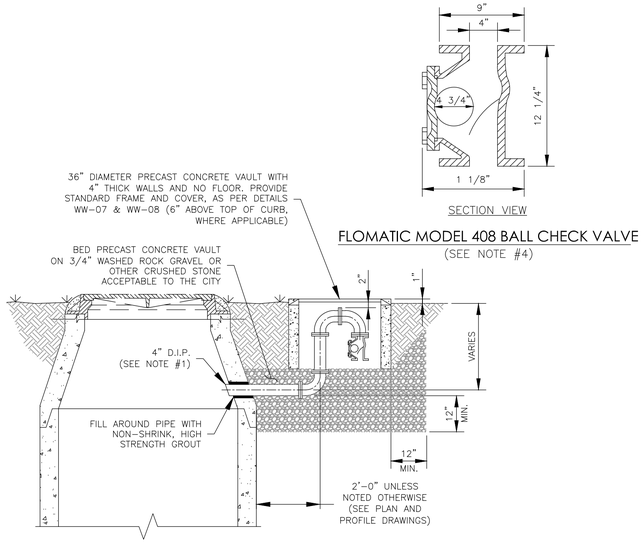
TRENCH DAM DETAIL
(SEEPAGE REDUCING COLLAR)



ELEVATION

TYPICAL TRENCH WITH UNPAVED ROADWAY SURFACE

SCALE: N.T.S.



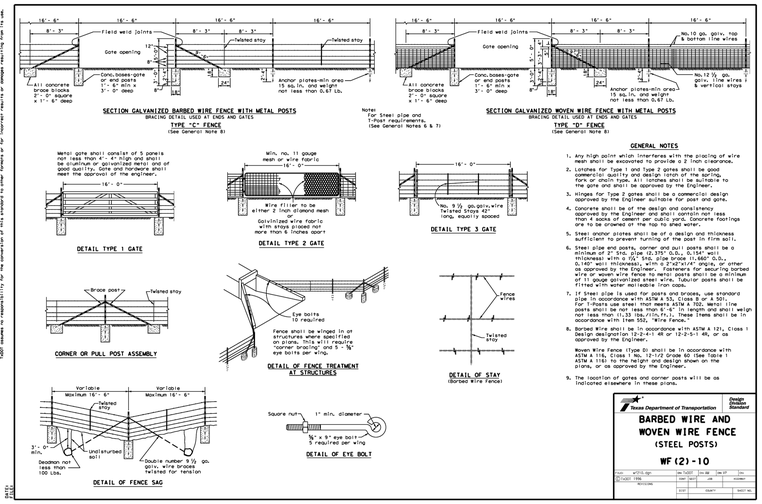
FLOMATIC MODEL 408 BALL CHECK VALVE
(SEE NOTE #4)

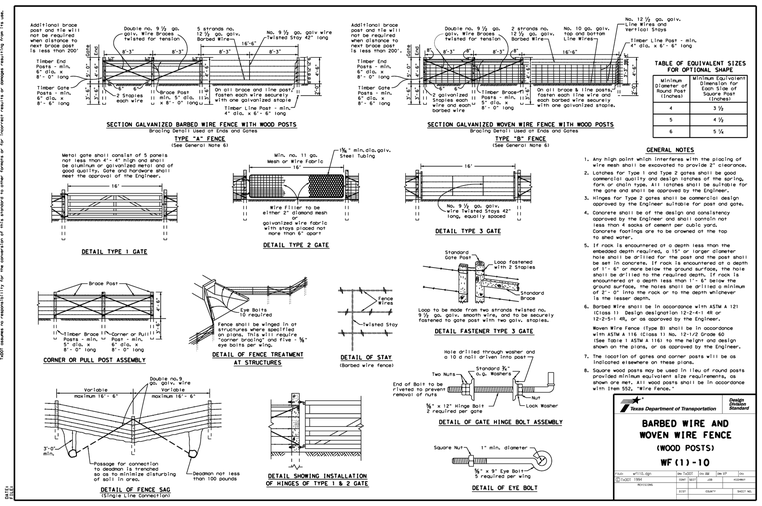
NOTES:

1. AIR VENT PIPE TO BE 4" D.I.P., CLASS 53 WITH FLANGED CONNECTIONS.
2. ALL FITTINGS TO BE 150 PSIG RATED & ANSI/AWWA C110/A21.10.
3. AIR VENT PIPE RISER SHALL BE INSTALLED TO A MINIMUM DEPTH FROM GROUND SURFACE AS POSSIBLE, PREFERABLY LOCATED IN THE CONCENTRIC CONCRETE CONE.
4. MINIMUM ELEVATION AT THE VENT OPENING SHALL BE 1 FOOT (1'-0") ABOVE THE ULTIMATE 100 YEAR FLOOD PLAIN ELEVATION. IF ELEVATION OF VENT OPENING IS LESS THAN 1 FOOT (1'-0") ABOVE THE ULTIMATE 100 YEAR FLOOD PLAIN ELEVATION, A FLOMATIC MODEL 408, PART #2145 BALL CHECK VALVE, OR APPROVED EQUAL, WITH FLOATING TYPE BALL, SHALL BE INSTALLED AT DOWN TURNED OPENING OF VENT. A 16 MESH 304 STAINLESS STEEL INSECT SCREEN SHALL BE PLACED IN THE OPENING.

MANHOLE VENT FOR BELOW GROUND INSTALLATION DETAIL

SCALE: N.T.S.





NOTES:

1. CONTRACTOR SHALL INSTALL TYPE 2 OR TYPE 3 GATES.
2. MINIMUM GATE OPENING DISTANCE SHALL BE 16 FEET. CONTRACTOR MAY INSTALL WIDER OPENING GATES AT CONTRACTOR'S SOLE COST.

BURGESS & NIPLE INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737
PHONE: (512) 432-1000
PELS FIRM REGISTRATION NO. 10834

CITY OF DRIPPING SPRINGS
WEST INTERCEPTOR - SEGMENT 2
STANDARD DETAILS 3 OF 3

NO:	DESCRIPTION	DATE
	REVISIONS	

JOB NO: 1950-001
DATE: SEPT 2025
DESIGNED BY: JB, CC
DRAWN BY: JB, CC
CHECKED BY: WBB
APPROVED BY: WBB

STATE OF TEXAS
WILLIAM B. BALL
85379
LICENSED PROFESSIONAL ENGINEER
9/23/2025

SHEET: 36 OF 36

clark — Sep 23, 2025 — 11:47am — File: M:\DWG\1950-C of DS West Interceptor\CAD\SHEETS\STANDARD DETAIL.dwg

GENERAL NOTES

GENERAL

THESE GENERAL NOTES SHALL APPLY UNLESS SPECIFICALLY NOTED ON THE PLANS AND DETAILS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SHALL COORDINATE ALL STRUCTURAL PLANS AND DETAILS WITH THE ARCHITECTURAL DRAWINGS BEFORE STARTING WORK. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. DESIGN, CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL COMPLY WITH THE 2018 INTERNATIONAL BUILDING CODE.

THE STRUCTURAL SYSTEM OF THIS BUILDING IS DESIGNED TO PERFORM AS A COMPLETED UNIT. PRIOR TO COMPLETION OF THE STRUCTURE, STRUCTURAL COMPONENTS MAY BE UNSTABLE AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE TEMPORARY SHORING AND/OR BRACING AS REQUIRED FOR THE STABILITY OF THE INCOMPLETE STRUCTURE AND FOR THE SAFETY OF ALL ON-SITE PERSONNEL.

DESIGN CRITERIA

1. BUILDING CODE: 2018 INTERNATIONAL BUILDING CODE

2. GRAVITY LOADS:

A. DEAD LOADS	
1) WATER	62.4 PCF
B. LIVE LOADS	
1) WALKWAYS	100 PSF

3. LATERAL LOADS:

A. WIND LOADS	
1) WIND SPEED	100 MPH
2) IMPORTANCE FACTOR, I	1.0
3) EXPOSURE	"B"
B. WATER	62.4 PCF
C. UNDRAINED EARTH	102 PCF
D. SEISMIC LOADS	
1) SEISMIC IMPORTANCE FACTOR	1.5
2) MAPPED SPECTRAL RESPONSE ACCELERATIONS	
A) Ss	0.070g
B) S1	0.032g
3) SEISMIC DESIGN CATEGORY	A

FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL INVESTIGATION AND REPORT PREPARED BY TERRACON CONSULTANTS, INC. DATED JUNE 10, 2020.

FOUNDATION NOTES

1. FOR A DISTANCE OF 5'-0" OUTSIDE THE BUILDING LINE, REMOVE AT LEAST 18" OF TOP SOIL, VEGETATION (TREE STUMPS AND MAJOR ROOT SYSTEMS SHOULD BE COMPLETELY REMOVED), DEBRIS, ETC., AND ANY ADDITIONAL AMOUNT REQUIRED TO ENSURE THAT THE FINAL GRADING WILL PROVIDE A MINIMUM OF 6" OF SELECT FILL BELOW THE BOTTOM OF THE SLAB. REMOVAL OF SURFICIAL SOIL CAN BE STOPPED IF LIMESTONE IS ENCOUNTERED.

2. REWORK AND COMPACT THE TOP 6" OF THE EXPOSED SUBGRADE TO 95% OF THE MAXIMUM DENSITY AT 2% TO 3% ABOVE OPTIMUM MOISTURE CONTENT, IN ACCORDANCE WITH ASTM METHOD D 698 USING A COMPACTIVE EFFORT OF 7.16 FT-LB./CU.IN.. DO NOT ALLOW THE EXPOSED SUBGRADE TO DRY OUT PRIOR TO PLACING THE STRUCTURAL FILL.

3. FILL BACK TO REQUIRED GRADE WITH MATERIAL SELECTED AND COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS BELOW. FILL SHOULD EXTEND AT LEAST 3'-0" BEYOND THE FOUNDATION PERIMETER AND SLOPE DOWN AT NOT MORE THAN ONE TO TWO SLOPE TO NATURAL SOIL EXCEPT AT DEEP BEAM CONDITIONS.

4. SELECT FILL SHALL CONSIST OF CRUSHED LIMESTONE BASE MATERIAL MEETING THE REQUIREMENTS OF THE 2004 TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT) STANDARD SPECIFICATIONS ITEM 247, TYPE A, GRADE 3.

   NOTE: SANDY LOAM IS NOT ACCEPTABLE SELECT FILL MATERIAL OR ANY MATERIAL CONTAINING ORGANIC MATTER

5. SAMPLES OF PROPOSED SELECT FILL SHALL BE FURNISHED TO THE TESTING LABORATORY 7 DAYS PRIOR TO INSTALLATION TO PERMIT TIME FOR SPECIFICATION COMPLIANCE INSPECTION AND APPROVAL.

6. SELECT FILL SHALL BE COMPACTED IN THE FIELD IN LOOSE LIFTS NOT TO EXCEED 8" TO A MINIMUM OF 95% OF MAXIMUM LABORATORY DENSITY (FILL SHALL BE WITHIN 3% OF OPTIMUM MOISTURE CONTENT DURING COMPACTION) IN ACCORDANCE WITH TXDOT TEST METHOD TEX-113E. FIELD DENSITIES SHALL BE CHECKED IN ACCORDANCE WITH ASTM D-6938 (NUCLEAR GAUGE).

7. LABORATORY MOISTURE-DENSITY CURVE OR CURVES AS REQUIRED AND RESULTS OF AT LEAST 2 FIELD DENSITY CHECKS PER LIFT ARE TO BE SUBMITTED TO THE ARCHITECT OR ENGINEER.

8. BEAM TRENCHES SHALL BE CUT DIRECTLY INTO COMPACTED FILL TO PLAN DIMENSIONS AND SACKING OF TRENCHES WILL BE PERMITTED FOR INSIDE OF PERIMETER BEAMS. IN CASE SACKING IS USED, DENSITY TESTING WILL NOT BE PERFORMED CLOSER THAN 4'-0" FROM THE INSIDE OF THE PERIMETER BEAM FACE.

9. ALL FOUNDATION EXCAVATIONS SHALL BE EXTENDED TO FINAL GRADE AND THE FOOTINGS CONSTRUCTED AND POURED AS SOON AS POSSIBLE TO MINIMIZE POTENTIAL DAMAGE (DUE TO WETTING AND/OR DRYING) TO BEARING SOILS. FOUNDATION CONCRETE SHOULD NOT BE PLACED ON SOILS THAT HAVE BEEN DISTURBED BY RAINFALL OR SEEPAGE.

CONCRETE NOTES

1. ALL CONCRETE WORK SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTE (ACI) SPECIFICATION, ACI 301 AND THE BUILDING CODE REQUIREMENTS, ACI 318.

2. ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, UNLESS OTHERWISE NOTED, MUST FOLLOW THE "ACI DETAILING MANUAL", PUBLICATION SP-66, LATEST EDITION, ACI 315, LATEST EDITION, AND ACI 315R, LATEST EDITION.

3. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AS FOLLOWS:

ALL CONCRETE	4,000 PSI
MINIMUM CEMENT CONTENT	5.0 SACKS/CY
MAXIMUM WATER/CEMENT RATIO	0.55
SLUMP RANGE	3" MIN. - 5" MAX.

   TYPE F FLY ASH CAN BE SUBSTITUTED FOR CEMENT 20% TO 25% BY WEIGHT. CALCIUM CHLORIDE IS NOT ACCEPTABLE FOR USE IN MIX. FURNISH MIX DESIGNS FOR ALL CLASSES OF CONCRETE. RETAIN A QUALIFIED TESTING LABORATORY TO MAKE CONCRETE CYLINDERS AND PERFORM COMPRESSIVE TESTS. A MINIMUM OF THREE CYLINDERS SHALL BE TAKEN PER 50 CUBIC YARDS OF CONCRETE, WITH ONE TEST AT 7 DAYS AND TWO AT 28 DAYS. COARSE AND FINE AGGREGATES SHALL COME FROM SOURCES LISTED ON THE "CONCRETE RATED SOURCE QUALITY CATALOG" BY THE TEXAS DEPARTMENT OF TRANSPORTATION AS NON REACTIVE SOURCES LATEST EDITION. SOURCES OF RIVER GRAVEL AND SAND SHALL HAVE NO MARCASITE OR IRON PYRITE PRESENT AT THE PRODUCTION FACILITY.

4. REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60.

5. STANDARD PROTECTIVE COVER OF REINFORCING BARS UNLESS OTHERWISE NOTED SHALL BE:

SLABS ON GRADE (TOP)	2 IN.
GRADE BEAMS	
TOPS	2 IN.
SIDES	3 IN.
BOTTOMS	3 IN.
OTHER	2 IN.
WALLS	
TOPS	2 IN.
SIDES	2 IN.
BOTTOMS	2 IN.
OTHER	2 IN.

6. AT CORNERS AND "T" INTERSECTIONS OF ALL BEAMS EXTEND 4 CORNER BARS EQUAL TO THE SCHEDULED STEEL IN THE ADJACENT BEAMS 2'-0" EACH WAY, 2 BARS TOP AND 2 BARS BOTTOM. PROVIDE CORNER BARS AT ALL INTERMEDIATE REINFORCING BARS IN WALLS AND DEEP BEAMS.

7. ALL ACCESSORIES SHALL BE IN ACCORDANCE WITH THE "ACI DETAILING MANUAL", PUBLICATION SP-66, LATEST EDITION, ACI 315, LATEST EDITION, AND ACI 315R, LATEST EDITION. PROVIDE CONCRETE BRICK CHAIRS AT ALL BEAMS AND SLABS TO SUPPORT REINFORCING STEEL AT A SPACING NOT TO EXCEED 4'-0" O.C. IN ANY DIRECTION.

8. VERTICAL JOINTS IN FLOOR SLABS ARE TO BE SHOWN ON PLANS. NO HORIZONTAL JOINTS WILL BE PERMITTED IN SLABS OR BEAMS UNLESS NOTED OTHERWISE.

9. INCLUDE AN ALLOWANCE FOR .5 TONS OF REINFORCING STEEL (ANY SIZE) TO BE USED AS DIRECTED IN THE FIELD FOR SPECIAL CONDITIONS (LABOR PLACING THE SAME TO BE INCLUDED). UPON COMPLETION OF THE PROJECT REBATE ANY AMOUNT REMAINING TO THE OWNER.

10. LAP LENGTHS FOR BARS SCHEDULED AND DETAILED "CONT." SHALL BE:

    FOR 4000 PSI CONCRETE

#4 BARS - 25 INCHES	#7 BARS - 54 INCHES
#5 BARS - 31 INCHES	#8 BARS - 62 INCHES
#6 BARS - 37 INCHES	#9 BARS - 70 INCHES

   LAP LENGTH FOR WELDED WIRE REINFORCEMENT SHALL BE EQUAL TO A DISTANCE OF TWO TIMES THE MESH SIZE OPENING.

11. CONCRETE PLACED BY PUMPING SHALL MEET THE FOLLOWING REQUIREMENTS:

    A) COARSE AGGREGATE SHALL BE GRADED FROM A MAXIMUM OF 1" DOWN.
    B) MAXIMUM ALLOWABLE INCREASE IN CEMENT FACTOR SHALL BE 1/2 SACK PER CUBIC YARD OVER NORMAL MIX DESIGN.
    C) MAXIMUM WATER CEMENT RATIO SHALL CONFORM TO NOTE 3 OF THIS SECTION. IF MORE WORKABILITY IS REQUIRED, AN ADMIXTURE MAY BE USED.
    D) MAXIMUM WEIGHT RATIO OF FINE AGGREGATES TO COARSE AGGREGATES SHALL NOT EXCEED 2/3.
    E) REFER TO ACI 301-05, SECTION 800, FOR OTHER PUMPING REQUIREMENTS.

12. WELDING OR HEAT BENDING OF REINFORCING BARS SHALL NOT BE PERMITTED, UNLESS APPROVED BY THE ENGINEER.

13. PROVIDE 3 - 3'-0" LONG #4 DIAGONAL REINFORCING BARS AT ALL REENTRANT CORNERS.

14. DURING PLACEMENT OF CONCRETE, USE A TREMIE OR OTHER MEANS TO LIMIT FREE FALL OF CONCRETE TO 5'-0".

15. EXTEND ALL GRADE BEAMS A MINIMUM OF 2'-0" BELOW EXISTING GRADE.

16. CONCRETE SHALL BE CONTINUOUSLY CURED FOR A PERIOD OF 7 DAYS FOLLOWING PLACEMENT BY ANY OF THE FOLLOWING METHODS:
    A) FOGGING WITH WATER
    B) APPLYING AN APPROVED SPRAY ON CONCRETE CURING COMPOUND
    C) COVERING WITH A POLY MEMBRANE

17. HOT WEATHER CONCRETE:

    THE TEMPERATURE OF CONCRETE AS PLACED SHALL NOT EXCEED 90°F UNLESS OTHERWISE SPECIFIED OR PERMITTED. LOSS OF SLUMP, FLASH SET, OR COLD JOINTS DUE TO TEMPERATURE OF CONCRETE AS PLACED WILL NOT BE ACCEPTABLE. WHEN TEMPERATURE OF CONCRETE EXCEEDS 90°F, OBTAIN ACCEPTANCE, WHEN REQUIRED, OF PROPOSED PRECAUTIONARY MEASURES. WHEN TEMPERATURE OF STEEL REINFORCEMENT IS GREATER THAN 120°F, FOG STEEL REINFORCEMENT, EMBEDMENTS, SUBGRADE AND FORMS WITH WATER IMMEDIATELY BEFORE PLACING CONCRETE. REMOVE STANDING WATER BEFORE PLACING CONCRETE. REDUCE TIME BETWEEN PLACING AND START OF CURING BY AVOIDING DELAYS DURING CONSTRUCTION. IN THE EVENT OF ANY DELAY DURING CONSTRUCTION PROTECT CONCRETE WITH TEMPORARY COVERINGS, SUCH AS POLYETHYLENE SHEETING OR SPRAY APPLY AN EVAPORATION RETARDER IMMEDIATELY AFTER FINISHING TO MINIMIZE EVAPORATION. APPLY A SUITABLE CURING MATERIAL SUCH AS A CURING COMPOUND, WET BURLAP, OR CURING PAPER.

CONSTRUCTION JOINTS

1. WALL JOINTS ARE NOTED ON PLANS.

2. SLAB JOINTS ARE NOT PERMITTED UNLESS APPROVED BY ENGINEER.

3. HORIZONTAL JOINTS IN WALLS ARE NOT ALLOWED.

POST-INSTALLED ANCHORS BY SIMPSON

1. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS.

   a. ADHESIVE ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC308 FOR CRACKED AND UNCRACKED CONCRETE RECOGNITION. PRE-APPROVED ADHESIVE ANCHORS INCLUDE:

      (1) SIMPSON STRONG-TIE "SET-XP" (ICC-ES ESR-2508)

2. REINFORCING BARS TO BE USED IN AN ADHESIVE ANCHOR ASSEMBLY SHALL CONFORM TO ASTM A615 GRADE 60.

REQUIRED SPECIAL INSPECTIONS

IN ADDITION TO THE REGULAR INSPECTIONS REQUIRED BY SECTION 109 OF THE INTERNATIONAL BUILDING CODE, THE FOLLOWING ITEMS ALSO REQUIRE SPECIAL INSPECTION IN ACCORDANCE WITH SECTION 1704

ITEM	SECTION
SOILS COMPLIANCE PRIOR TO FOUNDATION INSPECTION	1704.7
STRUCTURAL CONCRETE OVER 2500 PSI	1704.4
ANCHOR BOLTS, EXPANSION ANCHORS, AND EPOXY ANCHORS IN CONCRETE	1704.4

DUTY OF CONTRACTOR WITH RESPECT TO SPECIAL INSPECTIONS

1. CONTRACTOR SHALL COMMUNICATE AND COORDINATE WORK SCHEDULE WITH ARCHITECT SO THAT SPECIAL INSPECTIONS CAN BE ARRANGED BY ARCHITECT/OWNER. CONTRACTOR SHALL NOTIFY ARCHITECT OF WORK REQUIRING SPECIAL INSPECTIONS 7 DAYS PRIOR TO THE WORK BEING EXECUTED.

DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR

1. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED TO BE CERTAIN IT CONFORMS WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATION.

2. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE REGISTERED DESIGN PROFESSIONAL IN CHARGE. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. THEN IF UNCORRECTED, TO THE DESIGN AUTHORITY AND THE BUILDING OFFICIAL.

3. UPON COMPLETION OF INSPECTIONS THE REGISTERED DESIGN PROFESSIONAL IN CHARGE SHALL COMPLETE AND SIGN THE APPROPRIATE FORMS CERTIFYING THAT TO THE BEST OF HIS KNOWLEDGE THE WORK IS IN COMPLIANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CODE.

STATE OF TEXAS
KEVIN O'SANOVA
54926
LICENSED PROFESSIONAL ENGINEER
09-18-25

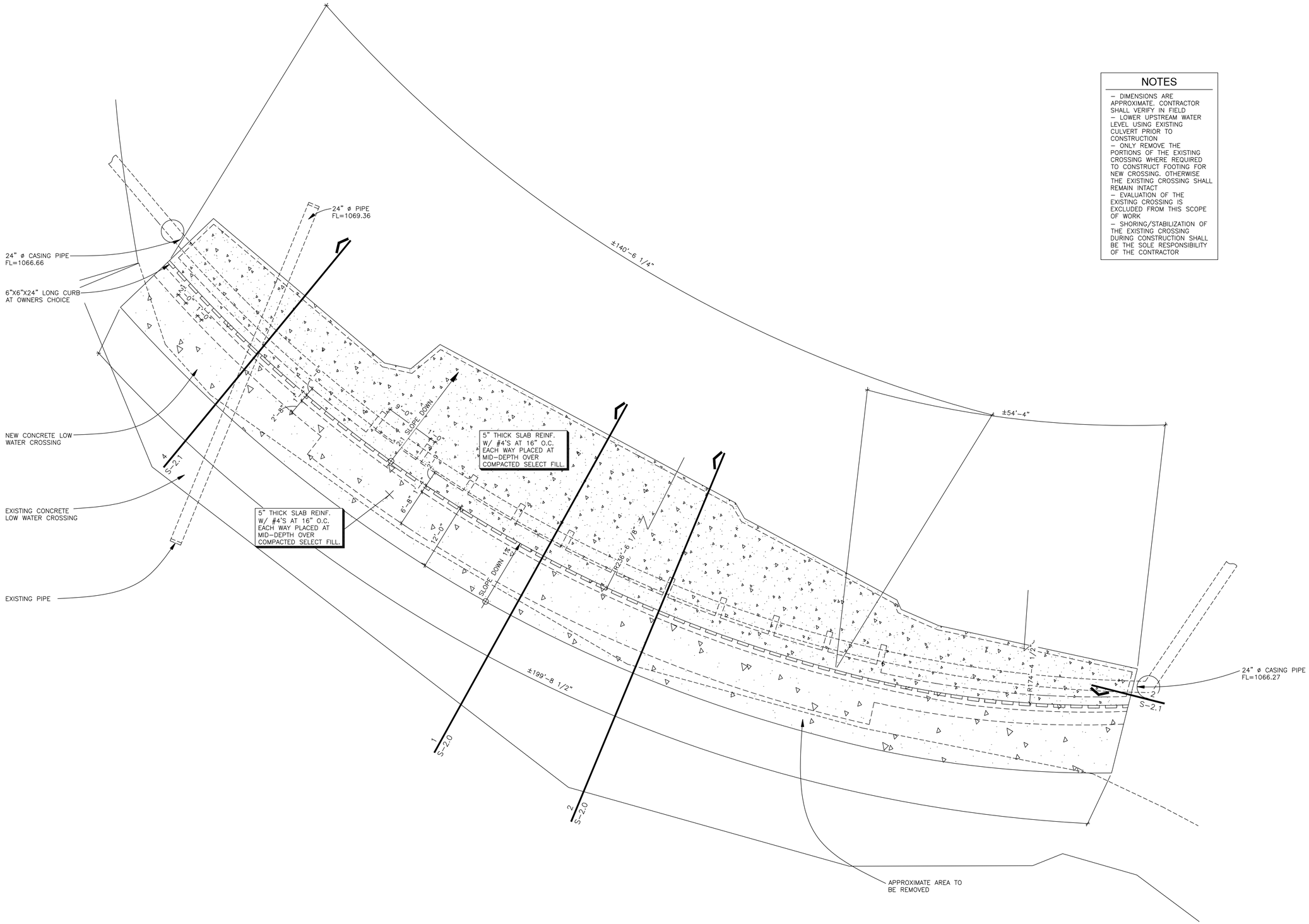
SMITH STRUCTURAL ENGINEERS
9701 BRODIE LN., SUITE A-204 AUSTIN, TEXAS 78748
PHONE: 512-478-5281 FAX: 512-381-0127 REG. #F-3907

CITY OF DRIPPING SPRINGS
DS 10 LOW WATER CROSSING
DRIPPING SPRINGS, TEXAS

DATE	09-18-25
PROJECT NUMBER	19080
REVISIONS	

GENERAL NOTES

S-0



NOTES

- DIMENSIONS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY IN FIELD
- LOWER UPSTREAM WATER LEVEL USING EXISTING CULVERT PRIOR TO CONSTRUCTION
- ONLY REMOVE THE PORTIONS OF THE EXISTING CROSSING WHERE REQUIRED TO CONSTRUCT FOOTING FOR NEW CROSSING. OTHERWISE THE EXISTING CROSSING SHALL REMAIN INTACT
- EVALUATION OF THE EXISTING CROSSING IS EXCLUDED FROM THIS SCOPE OF WORK
- SHORING/STABILIZATION OF THE EXISTING CROSSING DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR

N

CREEK CROSSING PLAN

1/8" = 1'-0"

STATE OF TEXAS
KEVIN O'SANOVA
104926
LICENSED PROFESSIONAL ENGINEER
09-18-25

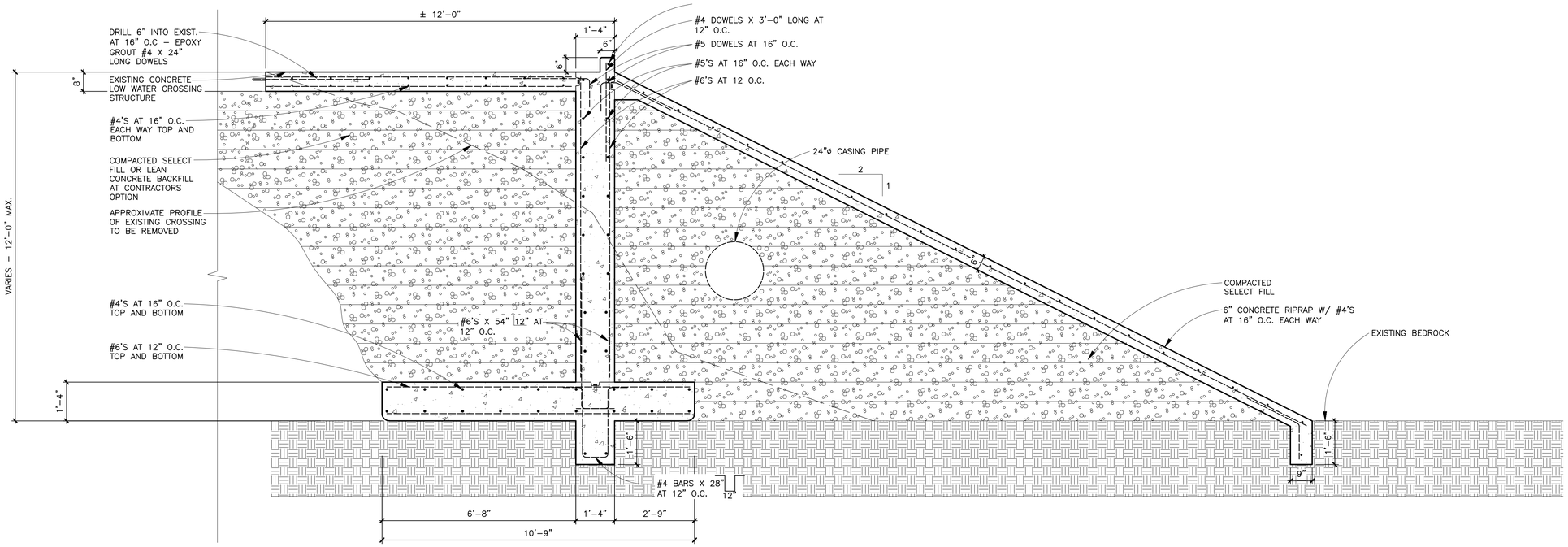
SMITH STRUCTURAL ENGINEERS
9701 BRODIE LN., SUITE A-204 AUSTIN, TEXAS 78748
PHONE: 512-478-5281 FAX: 512-381-0127 REG. #F-3907

CITY OF DRIPPING SPRINGS
DS 10 LOW WATER CROSSING
DRIPPING SPRINGS, TEXAS

DATE	09-18-25
PROJECT NUMBER	19080
REVISIONS	

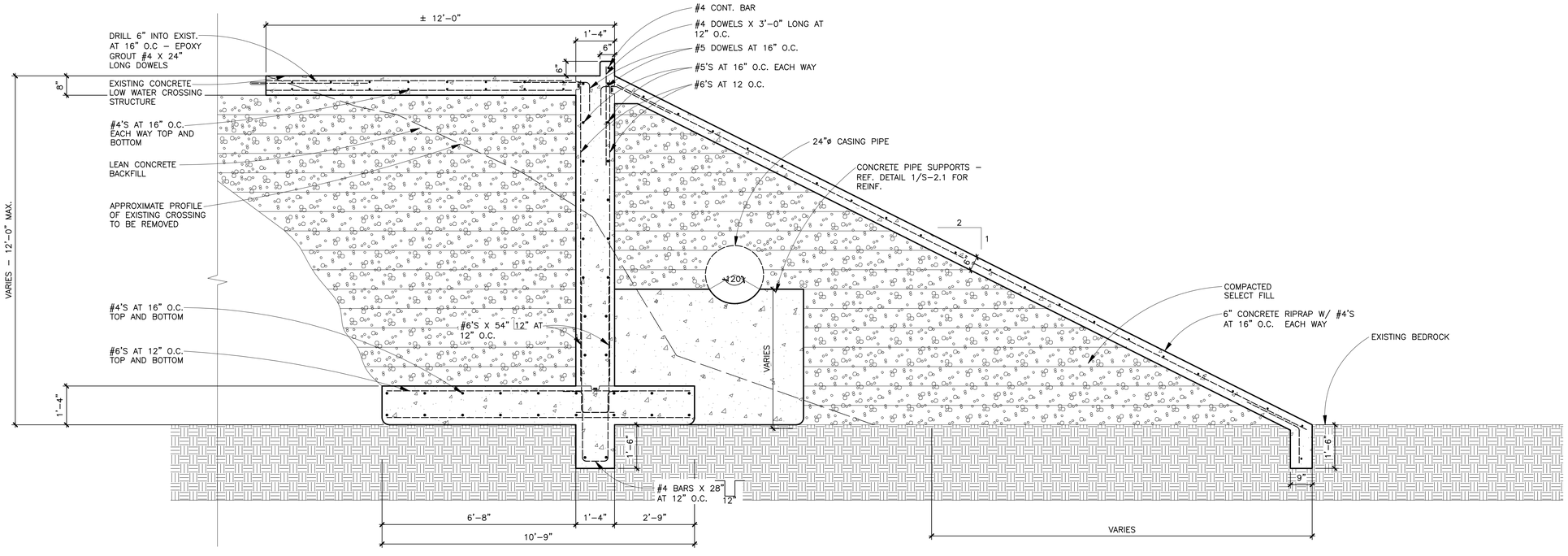
CREEK CROSSING PLAN

S-1



1. CROSSING SECTION

1/2" = 1'-0"



2. CROSSING SECTION THRU PIPE SUPPORT

1/2" = 1'-0"

STATE OF TEXAS
KEVIN D. SANDVIK
124926
LICENSED PROFESSIONAL ENGINEER
09-18-25

SMITH STRUCTURAL ENGINEERS
9701 BRODIE LN., SUITE A-204 AUSTIN, TEXAS 78748
PHONE: 512-478-5281 FAX: 512-381-0127 REG. #F-3907

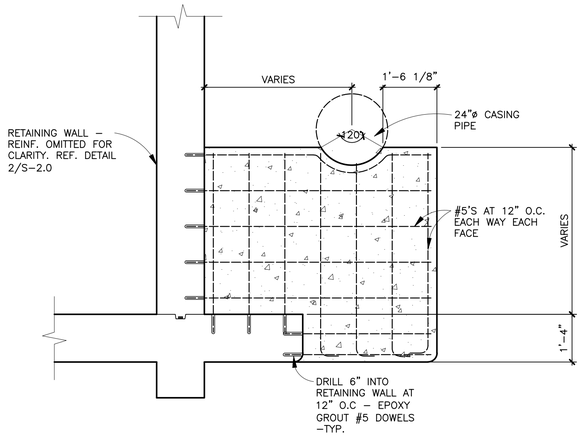
CITY OF DRIPPING SPRINGS
DS 10 LOW WATER CROSSING

DRIPPING SPRINGS, TEXAS

DATE	09-18-25
PROJECT NUMBER	19080
REVISIONS	

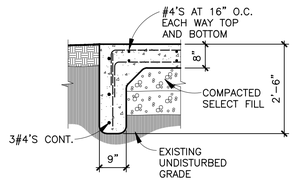
SECTIONS

S-2.0



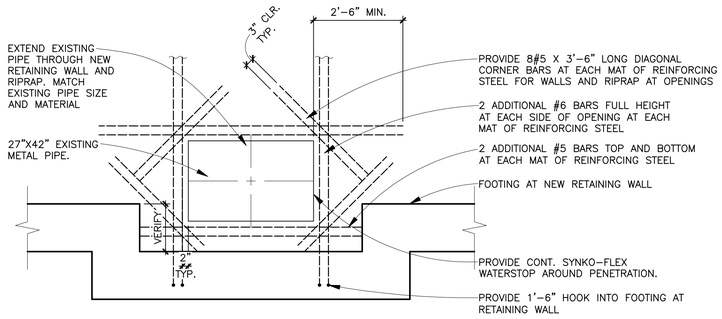
1. PIPE SUPPORT DETAIL

1/2" = 1'-0"



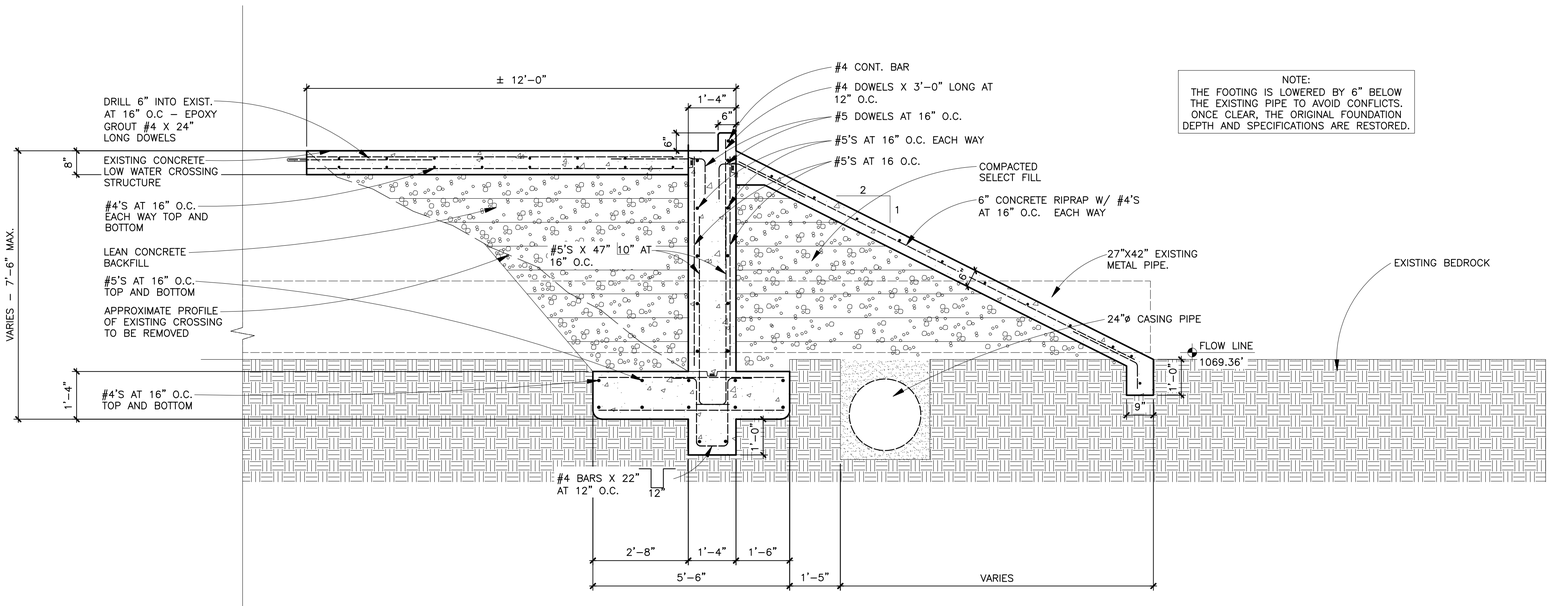
2. EXTERIOR BEAM

1/2" = 1'-0"



3. TYP. REINF. DETAIL AT EXIST. PIPE PENETRATIONS

NO SCALE



NOTE:
THE FOOTING IS LOWERED BY 6" BELOW THE EXISTING PIPE TO AVOID CONFLICTS. ONCE CLEAR, THE ORIGINAL FOUNDATION DEPTH AND SPECIFICATIONS ARE RESTORED.

4. CROSSING SECTION THRU PIPE SUPPORT

1/2" = 1'-0"

STATE OF TEXAS
KEVIN SANOVIA
124926
PROFESSIONAL ENGINEER
09-18-25

SMITH STRUCTURAL ENGINEERS
9701 BRODIE LN., SUITE A-204 AUSTIN, TEXAS 78748
PHONE: 512-478-5281 FAX: 512-381-0127 REG. #F-3907

CITY OF DRIPPING SPRINGS
DS 10 LOW WATER CROSSING

DRIPPING SPRINGS, TEXAS

DATE	09-18-25
PROJECT NUMBER	19080
REVISIONS	

SECTIONS

S-2.1

APPENDIX G

Brooke Paup, *Chairwoman*
Bobby Janecka, *Commissioner*
Catarina R. Gonzales, *Commissioner*
Kelly Keel, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 22, 2025

Max A. Zekos-Sierra, P.E.
BURGESS & NIPLE
235 Ledge Stone Drive
Austin, TX 78737

Re: City of Dripping Springs
West Interceptor Segment 2
Permit No. WQ0014488-003
WWPR Log No. 0725/122
CN602491284, RN104005434
Hays County

Dear Mr. Zekos-Sierra:

We received the project summary transmittal letter dated 7/14/2025.

The Texas Commission on Environmental Quality (TCEQ) rules which regulate the design, installation, and testing of domestic wastewater treatment projects are found in 30 TAC, Chapter 217, titled Design Criteria for Wastewater Systems.

Section 217.6(d), relating to case-by-case reviews, states in part that upon receipt of a summary transmittal letter, the executive director may approve of the project without reviewing a complete set of plans and specifications.

Under the authority of 30 TAC §217.6(e), a technical review of complete plans and specifications for this project is not required, and **the project proposed in the summary transmittal letter is approved for construction. Please note that this conditional approval does not relieve the applicant of any responsibilities to obtain all other necessary permits or authorizations, such as a wastewater treatment permit or any other authorization as required by Chapter 26 of the Texas Water Code.** Below are provisional requirements in 30 TAC Chapter 217, which must be met as a condition of approval. These items are provided as a reminder. If you have already met these requirements, please disregard this additional notice.

- You must keep records of certain materials for the life of the project and be prepared to provide them to TCEQ upon request. These materials include an engineering report, test results, a summary transmittal letter, and the final version of the project plans and specifications. These materials shall be prepared and sealed by a Professional Engineer licensed in the State of Texas and must show substantial compliance with 30 TAC Chapter 217. All plans and specifications must conform to any wastewater discharge requirements authorized in a permit issued by TCEQ. Specific items that must be addressed in the engineering report are discussed in 30 TAC §217.6(d). Additionally, the engineering report must include all constants, graphs, equations, and calculations needed to show substantial compliance with 30 TAC Chapter 217. The items which shall be included in the summary transmittal letter are addressed in 30 TAC §217.6(d)(1)-(9).

- Any deviations from 30 TAC Chapter 217 shall be disclosed in the summary transmittal letter, and the technical justifications for those deviations shall be provided in the engineering report. Any deviations from 30 TAC Chapter 217 shall be based on the best professional judgement of the licensed professional engineer sealing the materials and the engineer's judgement that the design would not result in a threat to public health or the environment.

- Any variance from a 30 TAC Chapter 217 requirement disclosed in your summary transmittal letter is approved. If in the future, additional variances from the requirements in 30 TAC Chapter 217 are desired for the project, each variance must be requested in writing by the design engineer. TCEQ will then consider granting a written approval to the additional variance requests for the specific project and the specific circumstances.

- Within 60 days of construction completion, an appointed engineer shall notify both the Wastewater Permitting Section of the TCEQ Water Quality Division and the appropriate TCEQ Regional Office of the completion date. The engineer shall also provide written certification that all construction, materials, and equipment were substantially in accordance with the approved project, and the rules of TCEQ, as well as provide any change orders filed with TCEQ throughout the duration of project construction. All notifications, certifications, and change orders must include the signed and dated seal of a Professional Engineer licensed in the State of Texas.

This approval does not mean that future projects will be approved without a complete plans and specifications review. TCEQ will provide notification whenever a project is to undergo a complete plans and specifications review. Please note 30 TAC §217.7(a) states, "Approval given by the executive director or other authorized review authority does not relieve an owner of any liability or responsibility with respect to designing, constructing, or operating a collection system or treatment facility in accordance with applicable commission rules and the associated wastewater permit".

If you have any questions or if we can be of any further assistance, please call me at (512) 239-4552.

Sincerely,



Louis C. Herrin, III, P.E.
Water Quality Division (MC 148)
Texas Commission on Environmental Quality

LCHIII/tc

cc: TCEQ, Region 11 Office

APPENDIX H

Hays County Transportation Department

2171 Yarrington Rd, Suite 200, Kyle Texas 78640
(P) 512-393-7385 (Web) www.hayscountytx.com

Permit to Construct Access Driveway Facilities on County Road Right of Way

Permit #: TRN-2021-4499-DW

Date Permit Issued: 09/10/2025

Owner Information
Business Name: CMA Engineering, Inc.
Name: Lauren Barzilla
Address: 432 Ledge Stone Dr., Austin, TX 78737
Home Phone:
Cell Phone:

Contractor Information
Business Name:
Name: TBD
Address: (n/a)
Office Phone:
Cell Phone:

The Hays County Transportation Department, hereinafter called the County, hereby authorizes **TBD**, herein after called the Grantee, to (re)construct an access driveway on the county right of way abutting **1300 Creek Road, Dripping Springs, TX 78620**.

Legal Description - Subdivision:

SubDivision: See attached file for a location map of both driveways

Phase:	Section: See attached file for a location map of both driveways	Block:	Lot:

Legal Description – If not located in a subdivision:

Legal Description: A0222 BENJAMIN F HANNA SURVEY, ACRES 54.2942

Parcel ID: R136311 Precinct:4

Subject to the following:

1. The Grantee is responsible for all costs associated with the construction of this driveway.
2. Design of the facilities shall be as follows:
   i. Build Per Engineer Plans
   ii.
   iii. Maintenance of facilities constructed hereafter shall be the responsibility of the Grantee, and the County reserves the right to require any changes, maintenance or repairs as may be necessary to provide protection of life or property on or adjacent to the roadway.
3. All repairs to improvements caused by the contractor's failure to install improvements in accordance with Hays County specifications shall be the responsibility of the contractor.
4. The owner, or his agent, shall notify the Hays County Transportation Department twenty-four (24) hours prior to the time when the inspection is needed.
5. This permit will become null and void if the above driveway facilities are not constructed within six (6) months from the issuance of this permit.
6. The Grantee will contact the County's representative at (512) 393-7385 at least twenty-four (24) hours prior to beginning the work authorized by this permit.

Tyler Pardee

Inspector: Tyler J Pendergrass
Hays County Transportation Dept.