

# Project Manual

I-35 Utility Relocations  
RFP-2024-01



Owner: **City of Sanger, Texas**

**Kimley»Horn**

© Kimley-Horn and Associates, Inc. 2024

## 2024 I-35 Utility Relocations

December 2023

**For Civil Sheets:**

Chris Igo, P.E.  
Kimley-Horn and Associates, Inc.  
TBPE Reg # F-298  
801 Cherry Street, Unit 11  
Suite 1300  
Fort Worth, TX 76102

12/19/2023





**CONTRACT DOCUMENTS**

**FOR CONSTRUCTION OF**

**2024 I-35 Utility Relocations**

Prepared for:  
**City of Sanger, Texas**  
**502 Elm Street**  
**Sanger, Texas 76266**

Prepared by:



Texas Engineering Firm Registration Number: 928  
801 Cherry Street, Suite 1300  
Fort Worth, Texas 76102  
Phone: (817) 335-6511

NO SPECIFICATIONS ON THIS PAGE FOR FORMATTING PURPOSES.

## City of Sanger, Texas

### 2024 I-35 Utility Relocations

#### Table of Contents

##### *Section*

#### **Division 00 - Procurement and Contracting Requirements**

00 01 01	Project Title Page
00 01 10	Table of Contents
00 11 13	Advertisement for Bid
00 21 13	Instructions to Bidders
00 41 43	Bid Form
00 43 13	Bid Security Form
00 45 13	Bidder's Qualifications
00 45 19	Non-Collusion Affidavit
00 45 20	Conflict of Interest Questionnaire
00 45 21	Certificate of Interested Parties
00 45 48	IRS Form W9
00 52 13	Standard Form of Agreement
00 61 13	Performance Bond
00 61 14	Payment Bond
00 61 19	Maintenance Bond
00 62 00	Certificate of Insurance
00 72 00	Standard General Conditions
00 73 00	Supplementary Conditions

#### **Division 01 - General Requirements**

01 22 00	Unit Prices
01 31 19.13	Pre-Construction Conference
01 31 19	Project Meetings
01 33 23	Shop Drawing Product Data and Sampling
01 45 23	Testing and Inspection Services
01 52 00	Construction Facilities
01 62 00	Substitutions and Product Options
01 74 00	Cleaning and Waste Management
01 74 16	Site Maintenance
01 77 00	Closeout Procedures
01 78 23	Operation and Maintenance Data
01 78 39	Project Record Documents

#### **APPENDIX**

##### **Geotechnical Report**

##### **Easements**

##### **Construction Plans**

---

**DIVISION 00**  
**PROCUREMENT AND CONTRACTING REQUIREMENTS**

**ADVERTISEMENT FOR BIDS**

1. Sealed Bids will be received by City of Sanger, Texas until noon, 12:00 PM., local time, Tuesday, January 30, 2024, with bid opening set at 2:00 pm, for:

**I-35 Utility Relocations  
RFP-2024-01**

2. The proposed Work is generally described as follows:

This project consists of approximately 12,700 linear feet of C-900 PVC Water Line, 7,000 linear feet of PVC Sewer pipe and 500 linear feet of HDPE Force Main located between Sanger Sports Park and View Road along I-35. There will also be approximately 11,984 linear feet of water line and 7,404 linear feet of sewer line to be removed and abandoned. This project is reimbursable by TxDOT to the City of Sanger, and therefore, all materials containing steel shall comply with the Buy America provisions.

3. A Complete Set of Bid Documents including Plans and Specifications may be examined without charge at the Sanger City Hall, 502 Elm Street, Sanger, Texas 76266 and the office of Kimley-Horn, 801 Cherry Street, Unit #11, Suite 1300, Fort Worth, TX 76102. Copies of such instruments will be available for online purchase, January 11, 2024 through CivCast at <http://www.civcastusa.com/> at cost dependent upon product ordered (full size plans, individual sheets, half size plans, project manuals).
4. City of Sanger reserves the right to accept or reject any or all Bids, to waive any and all informalities, and to disregard all nonconforming or conditional Bids or counter Bids, and to accept the Bid that will be in the best interest of the City of Sanger.

Advertisement Dates:

01/13/2024  
01/20/2024

- END OF DOCUMENT -

## INSTRUCTIONS TO BIDDERS

### TABLE OF CONTENTS

	<b>Page</b>
Article 1 – DEFINED TERMS.....	2
Article 2 – COPIES OF BIDDING DOCUMENTS.....	3
Article 3 – QUALIFICATIONS OF BIDDERS.....	3
Article 4 – EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE.....	4
Article 5 – PRE-BID CONFERENCE.....	6
Article 6 – SITE AND OTHER AREAS.....	7
Article 7 – INTERPRETATIONS AND ADDENDA.....	7
Article 8 – BID SECURITY.....	7
Article 9 – CONTRACT TIMES.....	8
Article 10 – LIQUIDATED DAMAGES.....	8
Article 11 – SUBSTITUTE AND “OR-EQUAL” ITEMS.....	8
Article 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS.....	8
Article 13 – PREPARATION OF BID.....	9
Article 14 – BASIS OF BID; COMPARISON OF BIDS.....	11
Article 15 – SUBMITTAL OF BID.....	11
Article 16 – MODIFICATION AND WITHDRAWAL OF BID.....	11
Article 17 – OPENING OF BIDS.....	12
Article 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE.....	12
Article 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT.....	12
Article 20 – CONTRACT SECURITY AND INSURANCE.....	13
Article 21 – SIGNING OF AGREEMENT.....	13
Article 22 – SALES AND USE TAXES.....	13

---

---

## ARTICLE 1 – DEFINED TERMS

---

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
- A. Addenda--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the bidding Requirements or the proposed Contract Documents.
  - B. Agreement--The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.
  - C. Bid--The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
  - D. Bidder--The individual or entity who submits a Bid directly to Owner.
  - E. Bidding Documents--the Bidding Requirements and the proposed Contract Documents (including all Addenda).
  - F. Bidding Requirements--The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.
  - G. Engineer--The individual or entity named as such in the Agreement.
  - H. 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.
  - I. Notice to Proceed--A written notice given 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 under the Contract Documents.
  - J. Owner--The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.
  - K. 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 at the Site.
  - L. Registered Plan Holder--The individual or entity who registers with and purchases Contract Documents from the Engineer.
  - M. 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 thereof.
-

- N. Successful Bidder--The Bidder submitting a responsive Bid to whom Owner makes an award.
- O. Supplementary Conditions--That part of the Contract Documents which amends or supplements these General Conditions.
- P. Supplier--A manufacturer, fabricator, supplier, distributor, materialman, 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 any Subcontractor.
- Q. Underground Facilities--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- R. 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, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

---

## **ARTICLE 2 – COPIES OF BIDDING DOCUMENTS**

---

- 2.01 A Complete Set of Bid Documents including Plans and Specifications may be examined without charge at the Sanger City Hall, 502 Elm Street, Sanger, Texas 76266 and the office of Kimley-Horn, 801 Cherry Street, Unit #11, Suite 1300, Fort Worth, TX 76102. Copies of such instruments will be available for online purchase, January 11, 2024 through CivCast at <http://www.civcastusa.com/> at cost dependent upon product ordered (full size plans, individual sheets, half size plans, project manuals).
- 2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

---

## **ARTICLE 3 – QUALIFICATIONS OF BIDDERS**

---

- 3.01 Pre-qualification of bidders is not required. Successful bidder will be required to submit written evidence, such as financial data, present commitments and available equipment with the bid. A Bidder's Qualifications form, Non-Collusion Affidavit, conflict of interest questionnaire, and IRS Form W-9 have been included in this Project Manual. The BIDDER should provide this information with the bid.
-

- 3.02 Minimum criteria for bidders includes experience in successful completion of at least five projects of a similar magnitude in the state of Texas which are completed and in service after January 1, 2014. Similar experience shall show working with TxDOT Buy America provisions.
- 3.03 The Successful bidder shall perform work amounting to at least 65% of the Contract, using its own equipment and personnel. No portion of the Contract shall be sublet, assigned, or otherwise disposed of except with the expressed written consent of the Owner. If the Successful bidder fails to demonstrate to the Owner that it has the ability to perform the specified percentage of the Contract work with its own equipment and personnel, its Bid may be considered non-responsive.
- 3.04 The Contractor shall be licensed under State Law as a General Contractor. A copy of the Contractor's License for the Successful Bidder, all Subcontractors of the apparent Successful Bidder, and those Bidders requested by the Owner, shall be filed within five (5) calendar days after notice of selection.
- 3.05 Successful bidder shall comply with the Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL91-596) and under Section 107 of the Contract Work Hours and Safety Standards Act (PL91-54), or latest revision.

---

**ARTICLE 4 – EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE**

---

4.01 *Subsurface and Physical Conditions*

A. The Supplementary Conditions identify:

- 1. Those reports known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Bidding Documents.
- 2. Those drawings known to Owner of physical conditions in or relating to existing surface and subsurface structures at or contiguous to the Site (except Underground Facilities).

- B. Copies of reports and drawings referenced in Paragraph 4.01.A will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in Paragraph 5.03 of the General Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
-

4.03 *Underground Facilities*

- A. Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.

4.04 *Hazardous Environmental Condition*

- A. The Supplementary Conditions identify any reports and drawings known to Owner relating to a Hazardous Environmental Condition identified at the Site.
  - B. Copies of reports and drawings referenced in Paragraph 4.03.A will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the “technical data” contained therein upon which Bidder is entitled to rely as provided in Paragraph 5.06 of the General Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any “technical data” or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
- 4.05 Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 5.02, 5.03, and 5.04 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 5.06 of the General Conditions.
- 4.06 On request, Owner will provide Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. Bidder shall comply with all applicable Laws and Regulations relative to excavation and utility locates.
- 4.07 A. Reference is made to Article 8 of the General Conditions for the identification of the general nature of other work that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) that relates to the Work contemplated by these Bidding Documents. On request, Owner will provide to each Bidder for examination access to or copies of contract documents (other than portions thereof related to price) for such other work.
- B. Paragraph 7.13.C of the General Conditions indicates that if an Owner safety program exists, it will be noted in the Supplementary Conditions.
- 4.08 It is the responsibility of each Bidder before submitting a Bid to:
- A. examine and carefully study the Bidding Documents, and the other related data identified in the Bidding Documents;
-

- B. visit the Site and become familiar with and satisfy Bidder as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
  - C. become familiar with and satisfy Bidder as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work;
  - D. carefully study all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in Paragraph 5.03 of the Supplementary Conditions as containing reliable "technical data," and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in the Paragraph 5.06 of the Supplementary Conditions as containing reliable "technical data";
  - E. consider the information known to Bidder; 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 Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs;
  - F. agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price(s) bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
  - G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
  - H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder; and
  - I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.
- 4.09 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Bidding Documents and applying any specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by the Bidding Documents, that Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Bidding Documents and the written resolutions thereof by Engineer are acceptable to Bidder, and that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

---

## ARTICLE 5 – PRE-BID CONFERENCE

---

- 5.01 A pre-bid conference will not be held.

---

#### **ARTICLE 6 – SITE AND OTHER AREAS**

---

- 6.01 The Site is identified in the Bidding Documents. 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. 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.

---

#### **ARTICLE 7 – INTERPRETATIONS AND ADDENDA**

---

- 7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all Registered Plan Holders. Questions received less than ten days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 7.02 Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by Owner or Engineer.

---

#### **ARTICLE 8 – BID SECURITY**

---

- 8.01 No Bid shall be considered or accepted unless at the time of its filing the same shall be accompanied by (1) a deposit of cash or a certified or cashier's check drawn on a bank or trust company insured by the Federal Deposit Insurance Corporation (FDIC), in an amount equal to five percent (5%) of the amount of the Bid. The check shall be made payable to City of Sanger, Texas. Said deposit shall guarantee that the Contract will be entered into by the successful Bidder if the award is made. Such deposit of cash or certified or cashier's check may be held by the City until the successful Bidder has executed and delivered the Contract Documents, including performance and payment bond, to City of Sanger, Texas and returned or kept in accordance with State Law.
- 8.02 In lieu of the cash deposit or certified or cashier's check mentioned above, the Bidder may file a Bid bond in the same amount executed by a corporate surety authorized to execute such bonds in Texas and conditioned as provided by State Law and in the form attached to the Bidding Documents or on file with the Engineer. Bid bond forms enclosed as part of the Bidding Documents must be properly executed at the time Bids are submitted before Bid will be considered. Properly executed Power of Attorney of the corporate surety's agent shall accompany such bond and be attached to the page provided therefore in the Bidding Documents.
- 8.03 The Bid security of the Successful Bidder will be retained until such Bidder 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 Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults. The Bid 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 seven days after the Effective Date of the Agreement or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be returned.

- 8.04 Bid security of other Bidders whom Owner believes do not have a reasonable chance of receiving the award will be returned within seven days after the Bid opening.

---

#### **ARTICLE 9 – CONTRACT TIMES**

---

- 9.01 The number of days within which, or the dates by which, the Work is to be substantially completed (Contract Time) and ready for final payment are set forth in the Agreement. The Contractor shall commence work on the date specified in the Notice to Proceed, and he shall complete the work within the stipulated Contract Time.

---

#### **ARTICLE 10 – LIQUIDATED DAMAGES**

---

- 10.01 Provisions for liquidated damages, if any, are set forth in the Agreement.

---

#### **ARTICLE 11 – SUBSTITUTE AND “OR-EQUAL” ITEMS**

---

- 11.01 The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration of possible substitute or “or-equal” items. Whenever it is specified or described in the Bidding Documents that a substitute or “or-equal” item of material or equipment may be furnished or used by Contractor if acceptable to Engineer, application for such acceptance will not be considered by Engineer until after the Effective Date of the Agreement.

---

#### **ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS**

---

- 12.01 If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, individuals, or entities to be submitted to Owner in advance of a specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of all such Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, individual, or entity if requested by Owner. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit a substitute.
- 12.02 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, individuals, or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to revocation of such acceptance after the Effective Date of the Agreement as provided in Paragraph 6.06 of the General Conditions.
-

- 12.03 Contractor shall not be required to employ any Subcontractor, Supplier, individual, or entity against whom Contractor has reasonable objection.

---

**ARTICLE 13 – PREPARATION OF BID**

---

- 13.01 The approved Bid Form is included with the Bidding Documents. All Bids must be submitted on the approved Bid form furnished in the Bidding Documents. DO NOT REMOVE ANY PAGES FROM THE BOUND DOCUMENTS.
- 13.02 The unit prices for specific items shall reflect all costs associated with furnishing, installing all items of Work as indicated on the Drawings and Technical Specifications, complete, in place and accepted, per the Engineer's Contract Documents, Texas Department of Transportation (TXDOT) Standards and Specifications, and the requirements of the Texas Commission on Environmental Quality (TCEQ).
- 13.03 All blank spaces on the Bid Form shall be completed by printing in ink or by typewriter in both words and numerals, and the Bid signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. In case of a conflict between the Price in words and its equivalent shown in numerals, the words will take precedence. PROPOSALS SHALL NOT BE CONDITIONAL, LIMITED OR RESTRICTED IN ANY WAY. A Bid price shall be indicated for each unit price item listed therein, or the words "No Bid," "No Change," or "Not Applicable" entered.
- 13.04 The omission of prices for any item on the Bid form, or the tendering of any unbalanced Bid may be the cause for the rejection of the submitted Bid.
- 13.05 The estimated quantities contained on the Bid form are for the purpose of comparing Bids. While the quantities are close approximations, they are not guaranteed. Payment will be made on the basis of the Work as actually executed at the unit prices set forth in the executed Agreement and under the provisions of such Agreement.
- 13.06 There shall be no additional compensation to the Contractor for materials, equipment, or work that is incidental to the successful completion of the Contract. Incidental costs include the costs inherent to the complete installation of those individual items included on the Bid form. For example, those costs associated with temporary electrical services, surveying, staking, deliveries and storage are incidental and defined within the Technical Specifications of the Bidding Documents.
- Item values on the Bid form shall be given as figures (i.e. \$23,000.00).*
- 13.07 A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. Insert the corporate officer's capacity under each signature. The corporate address and state of incorporation shall be shown below the signatures.
- 13.08 A Bid by a limited liability company shall be executed in the name of the firm by a member in the presence of a witness with signature, and accompanied by evidence of authority to sign. The state
-

of formation of the firm and the official address of the firm shall be shown below the signature. Affix the limited liability company seal adjacent to the signatures.

- 13.09 A Bid by an individual or sole proprietorship shall be executed with a signature of the individual/sole proprietor in the presence of a witness with signature. Insert the words "Individual/Sole Proprietor" under the signature and show the Bidder's name and official address. Affix the individual/sole proprietor seal adjacent to the signature.
  - 13.10 A Bid by a partnership shall be executed in the partnership name and signed by all partners (whose title must appear under the signature) in the presence of a witness with signature, accompanied by evidence of authority to sign. The official address of the partnership shall be shown below the signatures. Affix the partnership seal adjacent to the each partner signature.
  - 13.11 A Bid by a joint venture shall be executed by each party of the joint venture under their respective seals in a manner appropriate to each such party as described above for each party type. Provide a single signature sheet for each party to the joint venture.
  - 13.12 All names shall be typed or printed in ink below the signatures.
  - 13.13 The Bid shall contain an acknowledgment of all Addenda, the numbers of which shall be filled in on the Bid Form.
  - 13.14 The address and telephone number for communication regarding the Bid shall be shown.
  - 13.15 The Bid shall contain evidence of the Bidder's authority and qualification to do business in the state of Texas or covenant to obtain such qualification prior to the award of the Contract. Bidders shall be licensed under State Law as a General Contractor. Bidder's contractor license number shall also be shown on the Bid Form.
-

---

## ARTICLE 15 – BASIS OF BID; COMPARISON OF BIDS

---

### 15.01 *Unit Price*

- A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the Bid schedule.
- B. The total of all estimated prices will be the sum of the products of the estimated quantity of each item and the corresponding unit price. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.
- C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.

### 15.02 *Allowances*

- A. For cash allowances the Bid price shall include such amounts as the Bidder deems proper for Contractor's overhead, costs, profit, and other expenses on account of cash allowances, if any, named in the Contract Documents, in accordance with Paragraph 13.02.B of the General Conditions.

---

## ARTICLE 16 – SUBMITTAL OF BID

---

- 16.01 The Bid Form and Bid Bond Form are included in each copy of the Bidding Documents. The bound copy of the Bid Form is to be completed and submitted with the Bid security (in the form of a Bid Bond).
- 16.02 A Bid shall be submitted no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in an opaque sealed envelope with the Project title, the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, sealed Bids shall be sent to the attention of the City Secretary, Sanger City Hall, 502 Elm Street, Sanger, Texas 76266. Envelopes shall be marked ***"I-35 UTILITY RELOCATIONS– DO NOT OPEN UNTIL 2:00 PM, TUESDAY, JANUARY 30, 2024"***.

---

## ARTICLE 17 – MODIFICATION AND WITHDRAWAL OF BID

---

- 17.01 A Bid may be modified or withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids.
  - 17.02 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.
-

---

**ARTICLE 18 – OPENING OF BIDS**

---

- 18.01 Bids will be opened at the time and place indicated in the Advertisement or Invitation to Bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.
- 18.02 Bidders may be present at the opening of bids.

---

**ARTICLE 19 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE**

---

- 19.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

---

**ARTICLE 20 – EVALUATION OF BIDS AND AWARD OF CONTRACT**

---

- 20.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.
- 20.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.
- 20.03 In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- 20.04 In evaluating Bidders, Owner will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted as provided in the Supplementary Conditions.
- 20.05 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 proposed for those portions of the Work in accordance with the Contract Documents.
- 20.06 If the Contract is to be awarded, Owner will award the Contract to the Bidder whose Bid is in the best interests of the Project.
- 20.07 If the contract is to be awarded, Owner will give the Successful Bidder a Notice of Award within forty-five days after the day of the Bid Opening.
-

- 20.08 Successful Bidder will be required to provide completed documents to the Owner including the following: the attached Qualification Statement of Bidder, the attached Conflict of Interest Questionnaire, and IRS form W-9.

---

**ARTICLE 21 – CONTRACT SECURITY AND INSURANCE**

---

- 21.01 Article 5 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the executed Agreement to Owner, it shall be accompanied by such bonds.

---

**ARTICLE 22 – SIGNING OF AGREEMENT**

---

- 22.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement along with the other Contract Documents which are identified in the Agreement as attached thereto. Within 15 days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner. Within ten days thereafter, Owner shall deliver one fully signed counterpart to Successful Bidder with a complete set of the Drawings with appropriate identification.

---

**ARTICLE 23 – SALES AND USE TAXES**

---

- 23.01 Owner is exempt from State of Texas sales and use taxes on materials and equipment to be incorporated in the work. Said taxes shall not be included in the bid.
-

**SECTION 00 42 43 - UNIT PRICE BID FORM**



Sanger City Hall  
502 Elm Street  
Sanger, Texas 76266

From: Company Name  
Address  
City, ST ZIP  
CONTACT NAME  
PHONE  
Contact Email

IH-35 Utility Relocations  
RFP 2024-01

**BIDDERS APPLICATION - UNIT PRICE BID**

Item #	Item Description	Quantity	Unit	Unit Price	Item Cost
<b>CSJ 074^ WATER</b>					
1	Mobilization	1	EA		\$ -
2	Grout Fill 8" Water Line	888	LF		\$ -
3	Remove 6" Water Line	20	LF		\$ -
4	Remove 8" Water Line	4,885	LF		\$ -
5	Remove 12" Water Line	622	LF		\$ -
6	Remove 6" Water Valve	6	EA		\$ -
7	Remove 8" Water Valve	4	EA		\$ -
8	Remove Water Meter	6	EA		\$ -
9	Remove Fire Hydrant	4	EA		\$ -
10	C-900 DR-18 PVC Water Line (6") (Open Cut)	20	LF		\$ -
11	C-900 DR-18 PVC Water Line (8") (Open Cut)	5,346	LF		\$ -
12	C-900 DR-18 PVC Water Line (8") (Carrier Pipe)	1,027	LF		\$ -
13	C-900 DR-18 PVC Water Line (12") (Open Cut)	246	LF		\$ -
14	Steel Casing (18") (Bore)*	1,027	LF		\$ -
15	Resilient Seated Gate Valve (8")*	16	EA		\$ -
16	Resilient Seated Gate Valve (12")*	5	EA		\$ -
17	Ductile Iron Fittings*	1	TON		\$ -
18	Fire Hydrant Assembly*	4	EA		\$ -
19	1" Water Meter	5	EA		\$ -
20	Connect Existing Water Line	15	EA		\$ -
21	Trench Excavation Protection	5,612	LF		\$ -
22	Cut & Restore Asph Paving	67	SY		\$ -
23	Cut & Restore Conc Paving*	136	SY		\$ -
24	Conc Curb & Gutter (TY I)*	10	LF		\$ -
25	Seeding Surface Repair	10,715	SY		\$ -
26	Sodding Surface Repair	31	SY		\$ -
<b>TOTAL CSJ 074 WATER BID AMOUNT</b>					\$ -
<b>CSJ 074^ SEWER</b>					
27	Grout Fill 8" Sewer Line	376	LF		\$ -
28	Grout Fill 15" Sewer Line	315	LF		\$ -
29	Grout Fill 18" Sewer Line	380	LF		\$ -
30	Remove 6" Sewer Line	99	LF		\$ -
31	Remove 8" Sewer Line	294	LF		\$ -
32	Remove 12" Sewer Line	1,424	LF		\$ -
33	Remove 15" Sewer Line	77	LF		\$ -
34	Remove 18" Sewer Line	284	LF		\$ -
35	Remove Sanitary Sewer Manhole	13	EA		\$ -
36	SDR-26 PVC Sewer (8") (Open Cut)	9	LF		\$ -
37	SDR-26 PVC Sewer (12") (Open Cut)	232	LF		\$ -
38	SDR-26 PVC Sewer (12") (Pressure-Rated) (Open Cut)	1,195	LF		\$ -
39	SDR-26 PVC Sewer (15") (Open Cut)	10	LF		\$ -
40	SDR-26 PVC Sewer (15") (Pressure-Rated) (Open Cut)	36	LF		\$ -
41	SDR-26 PVC Sewer (15") (Carrier Pipe)	353	LF		\$ -
42	SDR-26 PVC Sewer (21") (Open Cut)	305	LF		\$ -
43	SDR-26 PVC Sewer (21") (Carrier Pipe)	399	LF		\$ -
44	Steel Casing (24") (Bore)*	353	LF		\$ -

Item #	Item Description	Quantity	Unit	Unit Price	Item Cost
45	Steel Casing (36") (Bore)*	399	LF		\$ -
46	Manhole (4ft Dia.)*	8	EA		\$ -
47	Manhole (5ft Dia.)*	9	EA		\$ -
48	4' Drop Concrete Manhole*	1	EA		\$ -
49	5' Extra Depth Concrete Manhole (<8')*	28	VF		\$ -
50	Cut & Restore Asph Paving	67	SY		\$ -
51	Cut & Restore Conc Paving*	136	SY		\$ -
52	Conc Curb & Gutter (TY I)*	10	LF		\$ -
53	Seeding Surface Repair	10,715	SY		\$ -
54	Sodding Surface Repair	31	SY		\$ -
55	Connect Existing Sewer Line	10	EA		\$ -
56	Trench Excavation Protection	1,787	LF		\$ -
<b>TOTAL CSJ 074 SEWER BID AMOUNT</b>					\$ -
<b>CSJ 081** WATER</b>					
57	Grout Fill 12" Water Line	73	LF		\$ -
58	Remove 6" Water Line	65	LF		\$ -
59	Remove 8" Water Line	570	LF		\$ -
60	Remove 12" Water Line	4,861	LF		\$ -
61	Remove 6" Water Valve	13	EA		\$ -
62	Remove 12" Water Valve	8	EA		\$ -
63	Remove 2" Air Release Valve	1	EA		\$ -
64	Remove Water Meter	1	EA		\$ -
65	Remove Fire Hydrant	13	EA		\$ -
66	C-900 DR-18 PVC Water Line (6") (Open Cut)	70	LF		\$ -
67	C-900 DR-18 PVC Water Line (8") (Open Cut)	528	LF		\$ -
68	C-900 DR-18 PVC Water Line (8") (Carrier Pipe)	59	LF		\$ -
69	C-900 DR-18 PVC Water Line (12") (Open Cut)	4,468	LF		\$ -
70	C-900 DR-18 PVC Water Line (12") (Carrier Pipe)	968	LF		\$ -
71	Steel Casing (18") (Bore)*	59	LF		\$ -
72	Steel Casing (24") (Bore)*	968	LF		\$ -
73	Resilient Seated Gate Valve (8")*	2	EA		\$ -
74	Resilient Seated Gate Valve (12")*	15	EA		\$ -
75	Ductile Iron Fittings*	1	TON		\$ -
76	Fire Hydrant Assembly*	14	EA		\$ -
77	1" Water Meter	1	EA		\$ -
78	Connect Existing Water Line	7	EA		\$ -
79	Trench Excavation Protection	5,066	LF		\$ -
80	Cut & Restore Asph Paving	73	SY		\$ -
81	Cut & Restore Conc Paving*	1	SY		\$ -
82	Conc Curb & Gutter (TY I)*	5	LF		\$ -
83	Seeding Surface Repair	10,791	SY		\$ -
84	Sodding Surface Repair	368	SY		\$ -
<b>TOTAL CSJ 081 WATER BID AMOUNT</b>					\$ -
<b>CSJ 081** SEWER</b>					
85	Grout Fill 12" Sewer Line	133	LF		\$ -
86	Grout Fill 15" Sewer Line	50	LF		\$ -
87	Grout Fill 18" Sewer Line	313	LF		\$ -
88	Remove 1.5" Force Main	360	LF		\$ -
89	Remove 12" Sewer Line	270	LF		\$ -
90	Remove 15" Sewer Line	2,798	LF		\$ -
91	Remove 18" Sewer Line	231	LF		\$ -
92	Remove Sanitary Sewer Manhole	10	EA		\$ -
93	HDPE Force Main (1.5") (Open Cut)	384	LF		\$ -
94	HDPE Force Main (1.5") (Carrier Pipe)	123	LF		\$ -
95	SDR-26 PVC Sewer (12") (Open Cut)	73	LF		\$ -
96	SDR-26 PVC Sewer (12") (Pressure-Rated) (Open Cut)	233	LF		\$ -
97	SDR-26 PVC Sewer (12") (Carrier Pipe)	108	LF		\$ -

Item #	Item Description	Quantity	Unit	Unit Price	Item Cost
98	SDR-26 PVC Sewer (15") (Pressure-Rated) (Open Cut)	2,604	LF		\$ -
99	SDR-26 PVC Sewer (15") (Carrier Pipe)	122	LF		\$ -
100	SDR-26 PVC Sewer (18") (Open Cut)	440	LF		\$ -
101	SDR-26 PVC Sewer (18") (Carrier Pipe)	906	LF		\$ -
102	Steel Casing (8") (Bore)*	123	LF		\$ -
103	Steel Casing (24") (Bore)*	230	LF		\$ -
104	Steel Casing (30") (Bore)*	906	LF		\$ -
105	Manhole (5ft Dia.)*	16	EA		\$ -
106	5' Drop Concrete Manhole	1	EA		\$ -
107	5' Extra Depth Concrete Manhole (<8')	58	VF		\$ -
108	Cut & Restore Asph Paving	74	SY		\$ -
109	Cut & Restore Conc Paving*	1	SY		\$ -
110	Conc Curb & Gutter (TY I)*	5	LF		\$ -
111	Seeding Surface Repair	10,791	SY		\$ -
112	Sodding Surface Repair	368	SY		\$ -
113	Connect Existing Sewer Line	7	EA		\$ -
114	Trench Excavation Protection	3,501	LF		\$ -
TOTAL CSJ 081 SEWER BID AMOUNT					\$ -
TOTAL CSJ 074 PROJECT BID AMOUNT					\$ -
TOTAL CSJ 081 PROJECT BID AMOUNT					\$ -
TOTAL BID AMOUNT					\$ -
*All materials shall use domestically manufactured products that are composed predominately of steel and/or iron to incorporate into the permanent installation of the utility facility – in compliance with the Buy America provisions of 23 CFR 635.410 as amended. ^CSJ 074 Water and Sewer denotes Water Line A-E and Sewer Line A-C **CSJ 081 Water and Sewer denotes Water Line F-I and Sewer Line D-G and Force Main A					
END BID ITEMS					
IH-35 Utility Relocations RFP-2024-01				COMPANY NAME	

**BID SECURITY FORM**

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

BIDDER *(Name and Address):*

SURETY *(Name and Address of Principal Place of Business):*

OWNER *(Name and Address):*

City of Sanger, Texas  
502 Elm Street, Sanger, Texas 76266

BID

Bid Due Date: 12:00 P.M., Tuesday, January 30, 2024  
Description: I-35 Utility Relocations

BOND

Bond

Number:

Date *(Not earlier than Bid due date):*

Penal sum

\_\_\_\_\_  
(Words)

\$ \_\_\_\_\_  
(Figures)

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

**BIDDER**

**SURETY**

\_\_\_\_\_  
Bidder's Name and Corporate Seal (Seal)

\_\_\_\_\_  
Surety's Name and Corporate Seal (Seal)

By: \_\_\_\_\_  
Signature

By: \_\_\_\_\_  
Signature (Attach Power of Attorney)

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

Attest: \_\_\_\_\_  
Signature

Attest: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

*Note: Above addresses are to be used for giving any required notice. Provide execution by any additional parties, such as joint venturers, if necessary.*

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 shall be Owner's sole and exclusive remedy upon default of Bidder.
  2. Default of Bidder shall occur 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 shall 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 shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.
  6. No suit or action shall 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 Bid due date.
  7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
  8. Notices required hereunder shall 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 Registered or Certified Mail, return receipt requested, postage pre-paid, and shall 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 shall 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 shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
  11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.
-

**Project Engineer: Kimley-Horn & Associates, Inc.**  
**801 Cherry Street, Unit #11, Suite 1300**  
**Fort Worth, TX 76102**

Bidder: \_\_\_\_\_

**Circle One:** Sole Proprietor   Partnership   Corporation   Joint Venture

Name: \_\_\_\_\_ Partner: \_\_\_\_\_

Address: \_\_\_\_\_ Address: \_\_\_\_\_

Owner: \_\_\_\_\_ Owner: \_\_\_\_\_

Phone: \_\_\_\_\_ Phone: \_\_\_\_\_

Principal Place of Business:

Principal Place of Business:

\_\_\_\_\_  
County,      State

\_\_\_\_\_  
County,      State

If the Bidder is a corporation, fill out the following:

State and County of Incorporation: \_\_\_\_\_

Location of Principal Office: \_\_\_\_\_

Contact Person(s) at Office: \_\_\_\_\_ Phone: \_\_\_\_\_

List Officers of the Corporation and person(s) authorized to execute Contracts on Behalf of the Corporation:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Greatest number of contracts in excess of \$400,000 under construction at one time in company's history:

\_\_\_\_\_

Total approximate value of incomplete work outstanding: \$ \_\_\_\_\_.

**Project descriptions will include at a minimum location of project, month and year of completion, client name, engineer name, reference name and phone number.**

**List major projects of the type of work qualifying for or similar work completed in the last five years, give the following information for each project:**

**Project / Location Owner and State:** \_\_\_\_\_

Owner/Engineer: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Date of Completion: \_\_\_\_\_ Contract Price: \_\_\_\_\_

**Project / Location Owner and State:** \_\_\_\_\_

Owner/Engineer: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Date of Completion: \_\_\_\_\_ Contract Price: \_\_\_\_\_

**Project / Location Owner and State:** \_\_\_\_\_

Owner/Engineer: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Date of Completion: \_\_\_\_\_ Contract Price: \_\_\_\_\_

**Project / Location Owner and State:** \_\_\_\_\_

Owner/Engineer: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Date of Completion: \_\_\_\_\_ Contract Price: \_\_\_\_\_

---

**Project / Location Owner and State:** \_\_\_\_\_

Owner/Engineer: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Date of Completion: \_\_\_\_\_ Contract Price: \_\_\_\_\_

**Project / Location Owner and State:** \_\_\_\_\_

Owner/Engineer: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Date of Completion: \_\_\_\_\_ Contract Price: \_\_\_\_\_

**Project / Location Owner and State:** \_\_\_\_\_

Owner/Engineer: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Date of Completion: \_\_\_\_\_ Contract Price: \_\_\_\_\_

**Project / Location Owner and State:** \_\_\_\_\_

Owner/Engineer: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Date of Completion: \_\_\_\_\_ Contract Price: \_\_\_\_\_

(Use Attachments if Necessary)

**List incomplete projects, including the following information for each incomplete project listed:**

**Project / Location Owner and State:** \_\_\_\_\_

Owner/Engineer: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Value of Incomplete Work: \_\_\_\_\_

Contract Price: \_\_\_\_\_

**Project / Location Owner and State:** \_\_\_\_\_

Owner/Engineer: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Value of Incomplete Work: \_\_\_\_\_

Contract Price: \_\_\_\_\_

**Project / Location Owner and State:** \_\_\_\_\_

Owner/Engineer: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Value of Incomplete Work: \_\_\_\_\_

Contract Price: \_\_\_\_\_

**Project / Location Owner and State:** \_\_\_\_\_

Owner/Engineer: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Value of Incomplete Work: \_\_\_\_\_

Contract Price: \_\_\_\_\_

(Use Attachments If Necessary)

If company is under new management, please list names of staff and qualification and/or experience of said persons. (Please use attachments).

\_\_\_\_\_

Have you or any present partner(s) or officer(s) failed to complete a contract? \_\_\_\_\_  
If so, name of owner and/or surety: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

List any unsatisfied demands upon you as to your accounts payable, please use attachments.

**Bank Reference:**

Bank: \_\_\_\_\_ Owner: \_\_\_\_\_

Address: \_\_\_\_\_ Phone: \_\_\_\_\_

Contact Officer: \_\_\_\_\_

**Other Credit References:**

Name: \_\_\_\_\_ Name: \_\_\_\_\_

Address: \_\_\_\_\_ Address: \_\_\_\_\_

Owner: \_\_\_\_\_ Owner: \_\_\_\_\_

Phone: \_\_\_\_\_ Phone: \_\_\_\_\_

**Municipal Reference:**

Owner: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_

Address: \_\_\_\_\_ Phone: \_\_\_\_\_

---

REFERENCE STATEMENT OF BIDDER'S SURETY

Bidder: \_\_\_\_\_

Address: \_\_\_\_\_

1. For this Bidder, how many contracts **that are now complete** has this surety furnished contract bonds? \_\_\_\_\_
2. For this Bidder, how many **incomplete contracts** has this surety furnished contract bonds?  
\_\_\_\_\_
3. What is the maximum bonding capacity of this Bidder? \$ \_\_\_\_\_
4. Does the current financial information on this Bidder indicate solvency and a financial ability to complete this contract? \_\_\_\_\_
5. Does the information available to this surety indicate that the contractor pays accounts when due?  
\_\_\_\_\_ If not, give details:  
\_\_\_\_\_  
\_\_\_\_\_

**REMARKS:**

\_\_\_\_\_  
\_\_\_\_\_

Surety: \_\_\_\_\_

Signed: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

\_\_\_\_\_

---

**BIDDER'S RELEASE OF QUALIFICATION INFORMATION**

Pursuant to advertisement for bids and in conformance with Instructions to Bidders for types of work outlined in Bidder's Statement of Qualifications, the undersigned is submitting information as required only to assist in determining the qualifications of Bidder's organization to perform the type and magnitude of work designated, and further, Bidder guarantees the truth and accuracy of all statements made, and will accept the Owner's determination of qualifications without prejudice. The surety herein named, any other bonding company(s), bank(s), subcontractor(s), supplier(s), or any other person(s), firm(s) or corporation(s) with whom Bidder has done business, or who have extended any credit to Bidder is (are) hereby authorized to furnish the Owner with any information the Owner may request concerning performance on previous work and Bidder's credit standing with any of them; and Bidder hereby releases any and all such parties from any legal responsibility whatsoever on account of having furnished such information to the Owner:

Signed: \_\_\_\_\_ Title: \_\_\_\_\_

Bidder: \_\_\_\_\_ Date: \_\_\_\_\_

**LOCATION OF LOCAL UNDERWRITING OFFICE OF PROPOSED SURETY**

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_ Owner: \_\_\_\_\_ State: \_\_\_\_\_

---

**Sub-contractor's Name**

**Type of Work to be Performed**

[illegible]

**NON-COLLUSION AFFIDAVIT OF BIDDER**

State of \_\_\_\_\_ County of \_\_\_\_\_  
\_\_\_\_\_, being first duly sworn, deposes and says that:

1. He is \_\_\_\_\_ of \_\_\_\_\_, the Bidder that has submitted the attached Bid;
2. He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
3. Such Bid is genuine and is not a collusive or sham Bid;
4. Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from Bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy connivance or unlawful agreement any advantage against the \_\_\_\_\_ (Local Public Agency) or any person interested in the proposed Contract; and
5. The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed)

\_\_\_\_\_

\_\_\_\_\_

Title

Subscribed and sworn to before me this  
\_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_

Title

My Commission Expires \_\_\_\_\_

**NON-COLLUSION AFFIDAVIT OF SUBCONTRACTOR(S)**

State of \_\_\_\_\_ County of \_\_\_\_\_  
\_\_\_\_\_, being first duly sworn, deposes and says that:

1. He is \_\_\_\_\_ of \_\_\_\_\_, hereinafter referred to as the "Subcontractor";

2. He is fully informed respecting the preparation and contents of the Subcontractor's Proposal submitted by the Subcontractor to \_\_\_\_\_, the Contractor for certain work in connection with the \_\_\_\_\_ Contract pertaining to the Project in City of Sanger, Texas (Owner or County and State);

3. Such Subcontractor's Proposal is genuine and is not a collusive or sham proposal;

4. Neither the Subcontractor nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Proposal in connection with such Contract or to refrain from submitting a Proposal in connection with such Contract, or has in any manner, directly or indirectly, sought by unlawful agreement or connivance with any other Bidder, firm or person to fix the price or prices in said Contractor's Proposal, or to fix any overhead, profit or cost element of the price or prices in said Contractor's Proposal, or to secure through collusion, conspiracy connivance or unlawful agreement any advantage against the \_\_\_\_\_ (Local Public Agency) or any person interested in the proposed Contract; and

5. The price or prices quoted in the Subcontractor's Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) \_\_\_\_\_

\_\_\_\_\_  
Title

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Title

My Commission Expires \_\_\_\_\_

# CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor or other person doing business with local governmental entity

## OFFICE USE ONLY

Date Received

This questionnaire is being filed in accordance with chapter 176 of the Local Government Code by a person doing business with the governmental entity.

By law this questionnaire must be filed with the records administrator of the local government not later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code.

A person commits an offense if the person violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor.

1 Name of person doing business with local governmental entity.

2

☐

Check this box if you are filing an update to a previously filed questionnaire.

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than September 1 of the year for which an activity described in Section 176.006(a), Local Government Code, is pending and not later than the 7th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.)

3

Describe each affiliation or business relationship with an employee or contractor of the local governmental entity who makes recommendations to a local government officer of the local governmental entity with respect to expenditure of money.

4

Describe each affiliation or business relationship with a person who is a local government officer and who appoints or employs a local government officer of the local governmental entity that is the subject of this questionnaire.

# CONFLICT OF INTEREST QUESTIONNAIRE

For vendor or other person doing business with local governmental entity

FORM CIQ

Page 2

**5** Name of local government officer with whom filer has affiliation or business relationship. (Complete this section only if the answer to A, B, or C is YES.)

This section, item 5 including subparts A, B, C & D, must be completed for each officer with whom the filer has affiliation or business relationship. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income from the filer of the questionnaire?

☐

Yes

☐

No

B. Is the filer of the questionnaire receiving or likely to receive taxable income from or at the direction of the local government officer named in this section AND the taxable income is not from the local governmental entity?

☐

Yes

☐

No

C. Is the filer of this questionnaire affiliated with a corporation or other business entity that the local government officer serves as an officer or director, or holds an ownership of 10 percent or more?

☐

Yes

☐

No

D. Describe each affiliation or business relationship.

**6** Describe any other affiliation or business relationship that might cause a conflict of interest.

**7**

\_\_\_\_\_  
Signature of person doing business with the governmental entity

\_\_\_\_\_  
Date

# CERTIFICATE OF INTERESTED PARTIES

## FORM 1295

### OFFICE USE ONLY

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.

**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 goods or services to be provided under the contract.**

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

**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**

# Request for Taxpayer Identification Number and Certification

Give form to the  
requester. Do not  
send to the IRS.

Print or type  
See Specific Instructions on page 2.

Name (as shown on your income tax return)

Business name, if different from above

Check appropriate box: ☐ Individual/Sole proprietor ☐ Corporation ☐ Partnership  
☐ Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ▶ .....  
☐ Other (see instructions) ▶

☐ Exempt  
payee

Address (number, street, and apt. or suite no.)

Requester's name and address (optional)

City, state, and ZIP code

List account number(s) here (optional)

## Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Social security number

or

Employer identification number

**Note.** If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

## Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

Sign  
Here

Signature of  
U.S. person ▶

Date ▶

## General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

### Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

**Note.** If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,

- The U.S. grantor or other owner of a grantor trust and not the trust, and
- The U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

**Foreign person.** If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

**Nonresident alien who becomes a resident alien.** Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

**Example.** Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity not subject to backup withholding, give the requester the appropriate completed Form W-8.

**What is backup withholding?** Persons making certain payments to you must under certain conditions withhold and pay to the IRS 28% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

**Payments you receive will be subject to backup withholding if:**

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),
3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See the instructions below and the separate Instructions for the Requester of Form W-9.

Also see *Special rules for partnerships* on page 1.

## Penalties

**Failure to furnish TIN.** If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

**Civil penalty for false information with respect to withholding.** If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

**Criminal penalty for falsifying information.** Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

**Misuse of TINs.** If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

## Specific Instructions

### Name

If you are an individual, you must generally enter the name shown on your income tax return. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form.

**Sole proprietor.** Enter your individual name as shown on your income tax return on the "Name" line. You may enter your business, trade, or "doing business as (DBA)" name on the "Business name" line.

**Limited liability company (LLC).** Check the "Limited liability company" box only and enter the appropriate code for the tax classification ("D" for disregarded entity, "C" for corporation, "P" for partnership) in the space provided.

For a single-member LLC (including a foreign LLC with a domestic owner) that is disregarded as an entity separate from its owner under Regulations section 301.7701-3, enter the owner's name on the "Name" line. Enter the LLC's name on the "Business name" line.

For an LLC classified as a partnership or a corporation, enter the LLC's name on the "Name" line and any business, trade, or DBA name on the "Business name" line.

**Other entities.** Enter your business name as shown on required federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name" line.

**Note.** You are requested to check the appropriate box for your status (individual/sole proprietor, corporation, etc.).

### Exempt Payee

If you are exempt from backup withholding, enter your name as described above and check the appropriate box for your status, then check the "Exempt payee" box in the line following the business name, sign and date the form.

Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends.

**Note.** If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.

The following payees are exempt from backup withholding:

1. An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2),
  2. The United States or any of its agencies or instrumentalities,
  3. A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities,
  4. A foreign government or any of its political subdivisions, agencies, or instrumentalities, or
  5. An international organization or any of its agencies or instrumentalities.
- Other payees that may be exempt from backup withholding include:
6. A corporation,
  7. A foreign central bank of issue,
  8. A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States,
  9. A futures commission merchant registered with the Commodity Futures Trading Commission,
  10. A real estate investment trust,
  11. An entity registered at all times during the tax year under the Investment Company Act of 1940,
  12. A common trust fund operated by a bank under section 584(a),
  13. A financial institution,
  14. A middleman known in the investment community as a nominee or custodian, or
  15. A trust exempt from tax under section 664 or described in section 4947.

The chart below shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 15.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 9
Broker transactions	Exempt payees 1 through 13. Also, a person registered under the Investment Advisers Act of 1940 who regularly acts as a broker
Barter exchange transactions and patronage dividends	Exempt payees 1 through 5
Payments over \$600 required to be reported and direct sales over \$5,000 <sup>1</sup>	Generally, exempt payees 1 through 7

<sup>1</sup> See Form 1099-MISC, Miscellaneous Income, and its instructions.

<sup>2</sup> However, the following payments made to a corporation (including gross proceeds paid to an attorney under section 6045(f), even if the attorney is a corporation) and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, and payments for services paid by a federal executive agency.

## Part I. Taxpayer Identification Number (TIN)

**Enter your TIN in the appropriate box.** If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited liability company (LLC)* on page 2), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

**Note.** See the chart on page 4 for further clarification of name and TIN combinations.

**How to get a TIN.** If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local Social Security Administration office or get this form online at [www.ssa.gov](http://www.ssa.gov). You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at [www.irs.gov/businesses](http://www.irs.gov/businesses) and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting [www.irs.gov](http://www.irs.gov) or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

**Note.** Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

**Caution:** A disregarded domestic entity that has a foreign owner must use the appropriate Form W-8.

## Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, and 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). Exempt payees, see *Exempt Payee* on page 2.

**Signature requirements.** Complete the certification as indicated in 1 through 5 below.

**1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.** You must give your correct TIN, but you do not have to sign the certification.

**2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.** You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

**3. Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.

**4. Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

**5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions.** You must give your correct TIN, but you do not have to sign the certification.

### What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account <sup>1</sup>
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor <sup>2</sup>
4. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee <sup>1</sup>
b. So-called trust account that is not a legal or valid trust under state law	The actual owner <sup>1</sup>
5. Sole proprietorship or disregarded entity owned by an individual	The owner <sup>3</sup>
For this type of account:	Give name and EIN of:
6. Disregarded entity not owned by an individual	The owner
7. A valid trust, estate, or pension trust	Legal entity <sup>4</sup>
8. Corporate or LLC electing corporate status on Form 8832	The corporation
9. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
10. Partnership or multi-member LLC	The partnership
11. A broker or registered nominee	The broker or nominee
12. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity

<sup>1</sup> List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

<sup>2</sup> Circle the minor's name and furnish the minor's SSN.

<sup>3</sup> You must show your individual name and you may also enter your business or "DBA" name on the second name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

<sup>4</sup> List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 1.

**Note.** If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

## Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, social security number (SSN), or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

Call the IRS at 1-800-829-1040 if you think your identity has been used inappropriately for tax purposes.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

### Protect yourself from suspicious emails or phishing schemes.

Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to [phishing@irs.gov](mailto:phishing@irs.gov). You may also report misuse of the IRS name, logo, or other IRS personal property to the Treasury Inspector General for Tax Administration at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: [spam@uce.gov](mailto:spam@uce.gov) or contact them at [www.consumer.gov/idtheft](http://www.consumer.gov/idtheft) or 1-877-IDTHEFT(438-4338).

Visit the IRS website at [www.irs.gov](http://www.irs.gov) to learn more about identity theft and how to reduce your risk.

## Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons who must file information returns with the IRS to report interest, dividends, and certain other income paid to you, mortgage interest you paid, the acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA, or Archer MSA or HSA. The IRS uses the numbers for identification purposes and to help verify the accuracy of your tax return. The IRS may also provide this information to the Department of Justice for civil and criminal litigation, and to cities, states, the District of Columbia, and U.S. possessions to carry out their tax laws. We may also disclose this information to other countries under a tax treaty, to federal and state agencies to enforce federal nontax criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism.

You must provide your TIN whether or not you are required to file a tax return. Payers must generally withhold 28% of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to a payer. Certain penalties may also apply.

STANDARD FORM OF AGREEMENT

STATE OF TEXAS                   §  
  §  
COUNTY OF DENTON           §

THIS AGREEMENT is dated as of the \_\_\_\_\_ day of \_\_\_\_\_

in the year 20\_\_\_\_24 by and between City of Sanger, Texas

(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.

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

**UTILITY RELOCATIONS**

The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

**I-35 UTILITY RELOCATIONS  
RFP-2024-01**

Article 2.       ENGINEER.

The Project has been designed by:

KIMLEY-HORN  
801 CHERRY STREET, UNIT 11, SUITE 1300  
FORT WORTH, TX 76102

Kimley-Horn and Associates, Inc. is hereinafter called ENGINEER and 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 completion of the Work in accordance with the Contract Documents.

Article 3.       CONTRACT TIME.

3.1.       GRAND TOTAL CONTRACT TIME – All sections of work, as identified in the Bid Form, will be substantially completed within 300 Calendar Days from the date when the Contract Time commences to run as provided in paragraph 4.01 of the General Conditions, and completed and ready for final payment

---

in accordance with paragraphs 15.06.B and 15.06.C of the General Conditions within 30 calendar days from the date when the Contract is substantially complete.

3.2. Liquidated Damages. OWNER and CONTRACTOR 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 3.1. above plus any extensions thereof allowed in accordance with Article 11.05 of the General Conditions. They 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 Five Hundred and 00/100 dollars (\$ 500.00 ) for each day that expires after the time specified in paragraph 3.1. 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 Two Hundred and 00/100 dollars (\$ 200.00 ) for each day that expires after the time specified in paragraph 3.1 for completion and readiness for final payment.

#### Article 4. CONTRACT PRICE.

4.1. OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents in current funds as follows:

TOTAL BID OF \$ \_\_\_\_\_ AS IDENTIFIED IN THE BID FORM CONTAINED  
HEREIN.

#### Article 5. PAYMENT PROCEDURES.

CONTRACTOR shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions.

5.1. Progress Payments. OWNER shall make progress payments on account of the Contract Price on the basis of CONTRACTOR's Applications for Payment as recommended by ENGINEER, on or about the 25th day of each month during construction as provided below. All progress payments will be on the basis of the progress of the Work measured by the schedule of values established in paragraph 2.05 of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Conditions.

5.1.1. Prior to Substantial Completion, 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 shall determine, or OWNER may withhold, in accordance with paragraph 15.01 of the General Conditions.

95 % of Work completed. If Work has been 50% completed as determined by ENGINEER, and if the character and progress of the Work have been satisfactory to OWNER and ENGINEER, OWNER on recommendation of ENGINEER, may determine that as long as the character and progress of the Work remain satisfactory to them, there will be no additional retainage on account of Work completed in which

---

case the remaining progress payments prior to Substantial Completion will be in an amount equal to 100% of the Work completed.

95 % of materials and equipment not incorporated in the Work (but delivered, suitably stored and accompanied by documentation satisfactory to OWNER as provided in paragraph 14.02.A of the General Conditions).

5.1.2. Upon Substantial Completion, in an amount sufficient to increase total payments to CONTRACTOR to 95 % of the Contract Price, less such amounts as ENGINEER shall determine, or OWNER may withhold, in accordance with paragraph 15.01 of the General Conditions.

5.2. Final Payment. Upon final completion and acceptance of the Work in accordance with paragraph 15.06 of the General Conditions, OWNER shall pay the remainder of the Contract Price as recommended by ENGINEER as provided in said paragraph 15.06.

#### Article 6. INTEREST.

All moneys not paid when due as provided in Article 15 of the General Conditions shall bear interest at the maximum rate allowed by law at the place of the Project.

#### Article 7. CONTRACTOR'S REPRESENTATIONS.

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

7.1. CONTRACTOR has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

7.2. CONTRACTOR has studied carefully all reports of explorations and tests of subsurface conditions and drawings of physical conditions which are identified in the Supplementary Conditions as provided in paragraph 5.03 of the General Conditions, and accepts the determination set forth in paragraphs 5.03 of the Supplementary Conditions of the extent of the technical data contained in such reports and drawings upon which CONTRACTOR is entitled to rely.

7.3. CONTRACTOR has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests, reports and studies (in addition to or to supplement those referred to in paragraph 7.2 above) which pertain to the subsurface or physical conditions at or contiguous to the site or otherwise may affect the cost, progress, performance or furnishing of the Work as CONTRACTOR considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraphs 5.03 of the General Conditions; and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are or will be required by CONTRACTOR for such purposes.

7.4. CONTRACTOR has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing Underground Facilities at or contiguous to the site and assumes responsibility for the accurate location of said Underground Facilities. No additional examinations, investigations, explorations, tests, reports, studies or similar information or data in respect of said

---

Underground Facilities are or will be required by CONTRACTOR in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 4.04 of the General Conditions.

7.5. CONTRACTOR has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.

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

#### Article 8. CONTRACT DOCUMENTS.

The Contract Documents which comprise the entire agreement between OWNER and CONTRACTOR concerning the Work consist of the following:

- 8.1. This Agreement.
- 8.2. Performance, Payment and Maintenance Bonds as contained herein.
- 8.3. Certificate of Insurance.
- 8.4. General Conditions.
- 8.5. Supplementary Conditions.
- 8.6. Specifications bearing the title **2024 I-35 UTILITY RELOCATIONS**
- 8.7. Drawings bearing the following general title: **I-35 UTILITY RELOCATIONS**
- 8.8. Addenda numbers \_\_\_\_\_ to \_\_\_\_\_, inclusive.
- 8.9. CONTRACTOR's Bid Form as contained herein.
- 8.10. Documentation submitted by CONTRACTOR prior to Notice of Award (pages \_\_\_\_\_ to \_\_\_\_\_, inclusive).
- 8.11. The following which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto: All Written Amendments and other documents amending, modifying, or supplementing the Contract Documents pursuant to paragraph 11.01 of the General Conditions.

There are no Contract Documents other than those listed above in this Article 8. The Contract Documents may only be amended, modified or supplemented as provided in paragraph 11.01 of the General Conditions.

#### Article 9. MISCELLANEOUS.

- 9.1. Terms used in this Agreement which are defined in Article 1 of the General Conditions will have
-

the meanings indicated in the General Conditions.

9.2. No assignment by a party hereto of any rights under or interests in the Contract Documents 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.

9.3. 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 of all covenants, agreements and obligations contained in the Contract Documents.

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement in triplicate. One counterpart each has been delivered to OWNER, CONTRACTOR and ENGINEER. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR or by ENGINEER on their behalf.

This Agreement will be effective on \_\_\_\_\_, 2023.

OWNER:  
CITY OF SANGER, TEXAS

CONTRACTOR:

By \_\_\_\_\_  
(Print Name)

By \_\_\_\_\_  
(Print Name)

(CORPORATE SEAL)

(CORPORATE SEAL)

Attest \_\_\_\_\_

Attest \_\_\_\_\_

Address for giving notices:

Address for giving notices:

502 Elm Street  
Sanger, Texas 76266

\_\_\_\_\_  
\_\_\_\_\_



## PERFORMANCE BOND

CONTRACTOR (*name and address*):

SURETY (*name and address of principal place of business*):

OWNER (*name and address*):

**City of Sanger, Texas**  
**502 Elm Street**  
**Sanger, Texas 76266**

### CONSTRUCTION CONTRACT

Effective Date of the Agreement:

Amount:

Description (*name and location*): **I-35 UTILITY RELOCATIONS**

### BOND

Bond Number:

Date (*not earlier than the Effective Date of the Agreement of the Construction Contract*):

Amount:

Modifications to this Bond Form: ☐ None ☐ See Paragraph 16

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

### CONTRACTOR AS PRINCIPAL

### SURETY

\_\_\_\_\_  
Contractor's Name and Corporate Seal

\_\_\_\_\_  
Surety's Name and Corporate Seal

By: \_\_\_\_\_  
Signature

By: \_\_\_\_\_  
Signature (*attach power of attorney*)

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

Attest: \_\_\_\_\_  
Signature

Attest: \_\_\_\_\_  
Signature

---

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 shall be considered plural where applicable.***

1. 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.

2. 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.

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

3.1 The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall 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 3.1 shall 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

---

Title

shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

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

3.3 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.

4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall 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.

5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

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

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

5.3 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

5.4 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.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional 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 5.4, 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.

7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall 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:

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

7.2 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

7.3 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.

8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.

9. 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 shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

11. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall 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 first. 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 shall be applicable.

12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

13. 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 shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

#### 14. Definitions

14.1 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 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.

14.2 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.

14.3 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.

14.4 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.

14.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.

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

16. Modifications to this Bond are as follows:



## PAYMENT BOND

CONTRACTOR *(name and address):*

SURETY *(name and address of principal place of business):*

OWNER *(name and address):*

**City of Sanger, Texas  
502 Elm Street  
Sanger, Texas 76266**

### CONSTRUCTION CONTRACT

Effective Date of the Agreement:

Amount:

Description *(name and location):*

### BOND

Bond Number:

Date *(not earlier than the Effective Date of the Agreement of the Construction Contract):*

Amount:

Modifications to this Bond Form: ☐ None ☐ See Paragraph 18

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

### CONTRACTOR AS PRINCIPAL

### SURETY

\_\_\_\_\_  
Contractor's Name and Corporate Seal *(seal)*

\_\_\_\_\_  
Surety's Name and Corporate Seal *(seal)*

By: \_\_\_\_\_

By: \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature *(attach power of attorney)*

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

Attest: \_\_\_\_\_

Attest: \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

---

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 shall be 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.
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 shall 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 shall arise after the following:

---

Title

- 5.1 Claimants who do not have a direct contract with the Contractor,
  - 5.1.1 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
  - 5.1.2 have sent a Claim to the Surety (at the address described in Paragraph 13).
- 5.2 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).
6. If a notice of non-payment required by Paragraph 5.1.1 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 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

- 
- |   |  |
|---|--|
| <p>7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and</p> <p>7.2 Pay or arrange for payment of any undisputed amounts.</p> <p>7.3 The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall 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 7.1 or 7.2, 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.</p> <p>8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.</p> <p>9. Amounts owed by the Owner to the Contractor under the Construction Contract shall 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 satisfy 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.</p> <p>10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the</p> | <p>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.</p> <p>11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.</p> <p>12. No suit or action shall 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 5.1.2 or 5.2, 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) first occurs. 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 shall be applicable.</p> <p>13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.</p> <p>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 shall be deemed deleted herefrom and provisions conforming to such statutory or other legal</p> |
|---|--|
-

requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall 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. Definitions**

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

1. The name of the Claimant;
2. The name of the person for whom the labor was done, or materials or equipment furnished;
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;
4. A brief description of the labor, materials, or equipment furnished;
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;
6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
7. The total amount of previous payments received by the Claimant; and
8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.

16.2 **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 rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be 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 mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

16.3 **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.

16.4 **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.

16.5 **Contract Documents:** All the documents that comprise the agreement between the Owner and Contractor.

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

18. Modifications to this Bond are as follows:

STATE OF TEXAS )  
 )  
COUNTY OF DENTON )

**NOW, THEREFORE**, if Principal will maintain and keep in good repair the Work herein contracted to be done and performed for a period of two (2) years from the date of final acceptance and do and perform all necessary work and repair any defective condition (it being understood that the purpose of this section is to cover all defective conditions arising by reason of defective materials, work or labor performed by Principal) then this obligation shall be void; otherwise it shall remain in full force and effect and Owner shall have and recover from Principal and its Surety damages in the premises as provided in the Plans and Specifications and Contract.

**PROVIDED, however, that Principal hereby holds harmless and indemnifies Owner from and against any claim or liability for personal injury or property damage caused by and occurring during the performance of said maintenance and repair operation.**

**PROVIDED**, further, that if any legal action be filed on this Bond, exclusive venue shall lie in City of Sanger, Texas.

**AND PROVIDED FURTHER**, Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the Work performed thereunder, or the Plans, Specifications, Drawings, etc. accompanying same shall in any way affect its obligation on this Bond; and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Work to be performed thereunder.

The undersigned and designated agent is hereby designated by Surety as the resident agent in Texas for service of process to whom all requisite notice may be delivered and on whom service of process may be had in matters arising out of this suretyship.

IN WITNESS WHEREOF, this instrument is executed in six copies, each one of which shall be deemed an original, on this the \_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.

ATTEST:

**PRINCIPAL:**

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Typed/Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Address

Owner State Zip

Phone Fax

\_\_\_\_\_  
Company Name

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Typed/Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Address

Owner State Zip

Phone Fax

ATTEST:

SURETY:

By: \_\_\_\_\_

Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Address

\_\_\_\_\_  
Owner                      State                      Zip

\_\_\_\_\_  
Phone                                      Fax

By: \_\_\_\_\_

Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Address

\_\_\_\_\_  
Owner                      State                      Zip

\_\_\_\_\_  
Phone                                      Fax

The Resident Agent of the Surety in Texas, for delivery of notice and service of the process is:

NAME: \_\_\_\_\_

STREET ADDRESS: \_\_\_\_\_

OWNER, STATE, ZIP: \_\_\_\_\_

(SAMPLE FORM)  
**CERTIFICATE OF INSURANCE**

TO: \_\_\_\_\_ Date \_\_\_\_\_  
\_\_\_\_\_ Project No. \_\_\_\_\_  
\_\_\_\_\_ Type of \_\_\_\_\_  
Owner \_\_\_\_\_  
\_\_\_\_\_ Project \_\_\_\_\_  
Address \_\_\_\_\_

THIS IS TO CERTIFY THAT \_\_\_\_\_  
(Name and address of insured)

is, at the date of this certificate, insured by this Company with respect to the business operations hereinafter described, for the types of insurance and in accordance with the provisions of the standard policies used by this Company, and further hereinafter described. Exceptions to standard policy noted on reverse side hereof.

TYPE OF INSURANCE

Policy No.	Effective	Expires	Limits of Liability
Workman's Compensation			1 Person \$ _____
Public Liability			1 Accident \$ _____
Contingent Liability			1 Person \$ _____ 1 Accident \$ _____
Property Damage			
Builder's Risk			
Automobile			
Other			

The forgoing policies (do) (do not) cover all sub-contractors.

Locations Covered: \_\_\_\_\_

Descriptions of Operations Covered: \_\_\_\_\_

The above policies either in the body thereof or by appropriate endorsement provide that they may not be changed or cancelled by the insurer in less than fifteen days after the insured has received written notice of such change or cancellation.

Where applicable local laws or regulations require more than fifteen days actual notice of change or cancellation to the assured, the above policies contain such special requirements, either in the body thereof or by appropriate endorsement thereto attached.

\_\_\_\_\_  
(Name of Insurer)

By \_\_\_\_\_

Title \_\_\_\_\_

**STANDARD GENERAL CONDITIONS OF THE  
CONSTRUCTION CONTRACT**

**TABLE OF CONTENTS**

	<b>Page</b>
Article 1 – Definitions and Terminology .....	6
1.01    Defined Terms .....	6
1.02    Terminology .....	10
Article 2 – Preliminary Matters .....	11
2.01    Delivery of Bonds and Evidence of Insurance .....	11
2.02    Copies of Documents .....	11
2.03    Before Starting Construction .....	11
2.04    Preconstruction Conference; Designation of Authorized Representatives .....	12
2.05    Initial Acceptance of Schedules .....	12
2.06    Electronic Transmittals .....	12
Article 3 – Documents: Intent, Requirements, Reuse .....	13
3.01    Intent .....	13
3.02    Reference Standards .....	13
3.03    Reporting and Resolving Discrepancies .....	13
3.04    Requirements of the Contract Documents .....	14
3.05    Reuse of Documents .....	15
Article 4 – Commencement and Progress of the Work .....	15
4.01    Commencement of Contract Times; Notice to Proceed .....	15
4.02    Starting the Work .....	15
4.03    Reference Points .....	15
4.04    Progress Schedule .....	16
4.05    Delays in Contractor’s Progress .....	16
Article 5 – Availability of Lands; Subsurface and Physical Conditions; Hazardous Environmental Conditions .....	17
5.01    Availability of Lands .....	17
5.02    Use of Site and Other Areas .....	17
5.03    Subsurface and Physical Conditions .....	18
5.04    Differing Subsurface or Physical Conditions .....	19
5.05    Underground Facilities .....	20

---

---

5.06	Hazardous Environmental Conditions at Site .....	22
Article 6 – Bonds and Insurance .....		24
6.01	Performance, Payment, and Other Bonds .....	24
6.02	Insurance—General Provisions .....	24
6.03	Contractor’s Insurance .....	25
6.04	Owner’s Liability Insurance .....	28
6.05	Property Insurance .....	28
6.06	Waiver of Rights .....	30
6.07	Receipt and Application of Property Insurance Proceeds.....	31
Article 7 – Contractor’s Responsibilities .....		31
7.01	Supervision and Superintendence .....	31
7.02	Labor; Working Hours .....	31
7.03	Services, Materials, and Equipment.....	32
7.04	“Or Equals” .....	32
7.05	Substitutes .....	33
7.06	Concerning Subcontractors, Suppliers, and Others .....	34
7.07	Patent Fees and Royalties .....	36
7.08	Permits .....	37
7.09	Taxes .....	37
7.10	Laws and Regulations .....	37
7.11	Record Documents.....	37
7.12	Safety and Protection .....	38
7.13	Safety Representative.....	38
7.14	Hazard Communication Programs.....	39
7.15	Emergencies .....	39
7.16	Shop Drawings, Samples, and Other Submittals .....	39
7.17	Contractor’s General Warranty and Guarantee.....	41
7.18	Indemnification .....	42
7.19	Delegation of Professional Design Services .....	42
Article 8 – Other Work at the Site .....		43
8.01	Other Work .....	43
8.02	Coordination .....	44
8.03	Legal Relationships.....	44

---

Article 9 – Owner’s Responsibilities .....	45
9.01 Communications to Contractor .....	45
9.02 Replacement of Engineer .....	45
9.03 Furnish Data .....	45
9.04 Pay When Due .....	45
9.05 Lands and Easements; Reports, Tests, and Drawings.....	45
9.06 Insurance .....	46
9.07 Change Orders .....	46
9.08 Inspections, Tests, and Approvals .....	46
9.09 Limitations on Owner’s Responsibilities .....	46
9.10 Undisclosed Hazardous Environmental Condition .....	46
9.11 Evidence of Financial Arrangements.....	46
9.12 Safety Programs .....	46
Article 10 – Engineer’s Status During Construction .....	46
10.01 Owner’s Representative .....	46
10.02 Visits to Site .....	46
10.03 Project Representative .....	47
10.04 Rejecting Defective Work.....	47
10.05 Shop Drawings, Change Orders and Payments .....	47
10.06 Determinations for Unit Price Work.....	47
10.07 Decisions on Requirements of Contract Documents and Acceptability of Work.....	47
10.08 Limitations on Engineer’s Authority and Responsibilities.....	48
10.09 Compliance with Safety Program .....	48
Article 11 – Amending the Contract Documents; Changes in the Work.....	48
11.01 Amending and Supplementing Contract Documents.....	48
11.02 Owner-Authorized Changes in the Work .....	49
11.03 Unauthorized Changes in the Work.....	49
11.04 Change of Contract Price .....	49
11.05 Change of Contract Times .....	51
11.06 Change Proposals.....	51
11.07 Execution of Change Orders.....	52
11.08 Notification to Surety.....	52
Article 12 – Claims .....	52

---

---

12.01	Claims .....	52
Article 13 – Cost of the Work; Allowances; Unit Price Work .....		53
13.01	Cost of the Work .....	53
13.02	Allowances .....	56
13.03	Unit Price Work .....	56
Article 14 – Tests and Inspections; Correction, Removal or Acceptance of Defective Work .....		57
14.01	Access to Work .....	57
14.02	Tests, Inspections, and Approvals .....	57
14.03	Defective Work .....	58
14.04	Acceptance of Defective Work .....	59
14.05	Uncovering Work .....	59
14.06	Owner May Stop the Work .....	59
14.07	Owner May Correct Defective Work .....	60
Article 15 – Payments to Contractor; Set-Offs; Completion; Correction Period .....		60
15.01	Progress Payments .....	60
15.02	Contractor’s Warranty of Title .....	63
15.03	Substantial Completion .....	63
15.04	Partial Use or Occupancy .....	64
15.05	Final Inspection .....	65
15.06	Final Payment .....	65
15.07	Waiver of Claims .....	66
15.08	Correction Period .....	66
Article 16 – Suspension of Work and Termination .....		67
16.01	Owner May Suspend Work .....	67
16.02	Owner May Terminate for Cause .....	68
16.03	Owner May Terminate For Convenience .....	69
16.04	Contractor May Stop Work or Terminate .....	69
Article 17 – Final Resolution of Disputes .....		69
17.01	Methods and Procedures .....	69
Article 18 – Miscellaneous .....		70
18.01	Giving Notice .....	70
18.02	Computation of Times .....	70
18.03	Cumulative Remedies .....	70

---

18.04	Limitation of Damages .....	70
18.05	No Waiver .....	70
18.06	Survival of Obligations .....	71
18.07	Controlling Law .....	71
18.08	Headings .....	71

## ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

### 1.01 *Defined Terms*

- A. Wherever used in the 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 which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
  2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
  3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting 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, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
  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; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
  10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision

- regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer has declined to address. 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), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree 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 the Owner and Contractor concerning the Work.
  13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
  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 Times*—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.
  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 that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
  19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
  20. *Engineer*—The individual or entity named as such in the Agreement.
  21. *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.
  22. *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. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.
  23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
25. *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.
26. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
27. *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.
28. *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.
29. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
30. *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.
31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or "RPR" includes any assistants or field staff of Resident Project Representative.
33. *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.
34. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals and the performance of related construction activities.
35. *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.
36. *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.

37. *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 furnished by Owner which are designated for the use of Contractor.
38. *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.
39. *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.
40. *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 thereof.
41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
43. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, 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.
44. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
45. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
46. *Unit Price Work*—Work to be paid for on the basis of unit prices.
47. *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.

48. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 *Terminology*

- A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:*
1. 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:*
1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:*
1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
    - a. does not conform to the Contract Documents; or
    - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
    - c. 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 15.04).
- E. *Furnish, Install, Perform, Provide:*
1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean 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, shall mean 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, shall mean 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. 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 2 – PRELIMINARY MATTERS

### 2.01 *Delivery of Bonds and Evidence of Insurance*

- A. *Bonds*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.
- C. *Evidence of Owner’s Insurance*: After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or otherwise), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

### 2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies 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 *Before Starting Construction*

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise specifically 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.

2.04 *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 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference 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.

2.05 *Initial 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 for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.03.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall 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.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.
- B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items 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 items, or from those established in applicable transmittal protocols.

## **ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE**

### **3.01    *Intent***

- A. The Contract Documents are complementary; what is required by one 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.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall 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.

### **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, shall mean 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, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, 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, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, 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 not proceed with any Work affected thereby 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 Documents issued pursuant to Paragraph 11.01.

2. *Contractor's Review of Contract Documents:* If, before or 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 Documents 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.

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 shall 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 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 thereunder.
- 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, and on Owner, unless it appeals by filing a Claim.
- 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 give written notice to Owner and Contractor 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.

**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 editions, 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 shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

**ARTICLE 4 – 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 thirtieth 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. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Contract, whichever date is earlier.

**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 shall be done at the Site prior to such date.

**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 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 professionally qualified 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 acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.

- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall 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. If Owner, Engineer, 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 and Contract Price. 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.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in 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. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
  2. abnormal weather conditions;
  3. acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and
  4. acts of war or terrorism.
- D. 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 5.
- E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.
- F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.
- G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

**ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS;  
HAZARDOUS ENVIRONMENTAL CONDITIONS**

**5.01**    *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor 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.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- 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.

**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; 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 7.12, 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 at law; 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 shall 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. *Reports and Drawings*: The Supplementary Conditions identify:
  - 1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;
  - 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and
  - 3. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the 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 Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. 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; or
  - 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.

#### 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 either:
  - 1. 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; or
  - 2. is of such a nature as to require a change in the Drawings or Specifications; or
  - 3. differs materially from that shown or indicated in the Contract Documents; or

4. 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 the necessity of Owner's obtaining 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 above; 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. *Possible Price and Times Adjustments:*
  1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
    - a. such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
    - b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
    - c. 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.
  2. Contractor shall not be entitled to any adjustment in the Contract Price or 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;or

- 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 as 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 Price or Contract Times, or both, then any such adjustment shall 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 Price or Contract Times, or both, 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.

#### 5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
  - 1. Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and
  - 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
    - a. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
    - b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;
    - c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
    - d. 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 Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then Contractor shall, promptly 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), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.
- C. *Engineer's Review:* Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications

to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

D. *Owner's Statement to Contractor Regarding Underground Facility:* 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 Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, 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.

E. *Possible Price and Times Adjustments:*

1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
  - a. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;
  - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
  - c. 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
  - d. Contractor gave the notice required in Paragraph 5.05.B.
2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

#### 5.06 *Hazardous Environmental Conditions at Site*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
2. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the 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 on the

accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. 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; or
  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, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by

Contractor, 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.

- 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, Owner shall indemnify and hold harmless Contractor, Subcontractors, 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 a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.H shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. 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 shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. 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 a performance bond and a payment bond, 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. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.

- B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in “Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies” as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual’s authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.
- D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then 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 bond and surety requirements above.
- E. 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 16.
- F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required

insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

- E. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.
- H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.
- I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.
- J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

#### 6.03 *Contractor's Insurance*

- A. *Workers' Compensation:* Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:
  - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.
  - 2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).
  - 3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees (by stop-gap endorsement in monopolist worker's compensation states).
  - 4. Foreign voluntary worker compensation (if applicable).
- B. *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:
  - 1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
  - 2. claims for damages insured by reasonably available personal injury liability coverage.

3. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- C. *Commercial General Liability—Form and Content:* Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:
1. Products and completed operations coverage:
    - a. Such insurance shall be maintained for three 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 three years thereafter.
  2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
  3. Broad form property damage coverage.
  4. Severability of interest.
  5. Underground, explosion, and collapse coverage.
  6. Personal injury coverage.
  7. 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); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.
  8. 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.
- D. *Automobile liability:* Contractor shall purchase and maintain automobile liability insurance against claims 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 shall be written on an occurrence basis.
- E. *Umbrella or excess liability:* Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.
- F. *Contractor's pollution liability insurance:* Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result of pollution conditions arising from Contractor's operations and completed operations. This insurance shall be maintained for no less than three years after final completion.
- G. *Additional insureds:* The Contractor's commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both

ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.

- H. *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 shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.
- I. *General provisions*: The policies of insurance required by this Paragraph 6.03 shall:
1. include at least the specific coverages provided in this Article.
  2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.
  3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.
  4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.
  5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.
- J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

6.04 *Owner's Liability Insurance*

- A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.
- B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

6.05 *Property Insurance*

- A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in

the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.
3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.
4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).
5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
6. extend to cover damage or loss to insured property while in transit.
7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
8. allow for the waiver of the insurer's subrogation rights, as set forth below.
9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.

10. not include a co-insurance clause.
  11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
  12. include performance/hot testing and start-up.
  13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.
- B. *Notice of Cancellation or Change:* All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- C. *Deductibles:* The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- D. *Partial Occupancy or Use by Owner:* If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
- E. *Additional Insurance:* If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.
- F. *Insurance of Other Property:* If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

6.06 *Waiver of Rights*

- A. All policies purchased in accordance with Paragraph 6.05, expressly including the builder's risk policy, 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 insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and the respective officers, directors, members, 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 Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, 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 or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.

- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for:
  - 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
  - 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.
- D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

**6.07**    *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

## **ARTICLE 7 – CONTRACTOR’S RESPONSIBILITIES**

### **7.01   *Supervision and Superintendence***

- A. 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. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

### **7.02   *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 at all times maintain good discipline and order at the Site.
- B. 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 shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner’s written consent, which will not be unreasonably withheld.

### **7.03   *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 shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall 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 shall 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.

### **7.04   *“Or Equals”***

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, 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 material or equipment, or items from other proposed suppliers under the circumstances described below.

1. If Engineer in its sole discretion determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer shall deem it an “or equal” item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:
  - a. in the exercise of reasonable judgment Engineer determines that:
    - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
    - 2) it 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) it has a proven record of performance and availability of responsive service; and
    - 4) it is not objectionable to Owner.
  - b. Contractor certifies that, if approved and incorporated into the Work:
    - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
    - 2) it 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 shall result in any change in Contract Price. The Engineer’s denial of an “or-equal” request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.
- E. *Treatment as a Substitution Request*: If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an “or-equal” item, Contractor may request that Engineer considered the proposed item as a substitute pursuant to Paragraph 7.05.

#### 7.05 Substitutes

- A. Unless the specification or description of an item of material or equipment 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 material or equipment under the circumstances described below. To the extent possible such requests shall 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 material or equipment from anyone other than Contractor.
2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.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 material or equipment that Contractor seeks to furnish or use. The application:
  - a. shall 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 that specified, and
    - 3) be suited to the same use as that 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 that specified, and
    - 2) available engineering, sales, maintenance, repair, and replacement services.
  - d. shall 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 shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

7.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.
- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. 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, Suppliers, or other individuals or entities 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, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the

- replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
  - H. 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.
  - I. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.
  - J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
  - K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
  - L. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
  - M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.
  - N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.
  - O. Nothing in the Contract Documents:
    - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
    - 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

#### 7.07 *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 a particular 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 shall be disclosed by Owner in the Contract Documents.

- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors 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 specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. 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.

7.08 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. Owner shall 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). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work

7.09 *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.

7.10 *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. Except where otherwise expressly required by applicable Laws and Regulations, 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 all resulting costs and losses, and 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 such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

- C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

#### 7.11 *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, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them 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 Engineer.

#### 7.12 *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. 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.
- B. 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. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when 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.
- C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
- D. 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.

- E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.A.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).
- F. Contractor's duties and responsibilities for safety and protection shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).
- G. Contractor's duties and responsibilities for safety and protection shall 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.

7.13 *Safety Representative*

- A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of 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 threatened 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 thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

7.16 *Shop Drawings, Samples, and Other Submittals*

A. *Shop Drawing and Sample Submittal Requirements:*

- 1. Before submitting a Shop Drawing or Sample, Contractor shall have:
  - a. reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
  - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
  - c. determined and verified 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

- d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
  2. Each submittal shall 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 submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.
- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.
  1. *Shop Drawings:*
    - a. Contractor shall submit the number of copies required in the Specifications.
    - b. Data shown on the Shop Drawings will 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.D.
  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.D.
  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. *Other Submittals:* Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.
- D. *Engineer's Review:*
  1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. 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, conform to the information given in 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 shall 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.
5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 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, shall 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, Sample, or other submittal shall 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.D.4.

E. *Resubmittal Procedures:*

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 submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

7.17 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.

- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
  - 1. abuse, modification, or improper 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 shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
  - 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. any inspection, test, or approval by others; or
  - 8. 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 shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

#### 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 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 performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused 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 any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) 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, the indemnification obligation under Paragraph 7.18.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any

such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

- C. The indemnification obligations of Contractor under Paragraph 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
  2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

**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 Laws and Regulations.
- 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 or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.
- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this paragraph, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 7.16.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

**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 utility work at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. 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.
- D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, 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.

#### 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 at or adjacent to the Site for Owner, the Owner's employees, any other contractor working for Owner, or any utility owner 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 Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior

to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. 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.

- B. 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. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.
- C. 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 to Contractor.
- D. 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 (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) 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. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

### **9.02    *Replacement of Engineer***

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's 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.

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 Documents (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 be 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.

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 10.08. 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 *Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

10.04 *Rejecting Defective Work*

- A. Engineer has the authority to reject Work in accordance with Article 14.

10.05 *Shop Drawings, Change Orders and Payments*

- A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
- B. Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.
- C. Engineer's authority as to Change Orders is set forth in Article 11.
- D. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.06 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

**10.07** *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. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

**10.08** *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- 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, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. 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 15.06.A 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.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.08 shall also apply to the Resident Project Representative, if any.

**10.09** *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 (if any) of which Engineer has been informed.

**ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK**

**11.01** *Amending and Supplementing Contract Documents*

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

1. *Change Orders:*

- a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
  - b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not 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, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.
2. *Work Change Directives:* 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 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.
3. *Field Orders:* 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. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.02 *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. Such changes shall be supported by Engineer's recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes 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 shall be performed under the applicable conditions of the Contract Documents. Nothing in this paragraph shall obligate 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.

11.03 *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.

#### 11.04 *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 shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall 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); or
  - 2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed per each (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.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 per each, 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 11.04.C).
- C. *Contractor's Fee:* When applicable, the Contractor's fee for overhead and profit shall 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 shall be 15 percent;
    - b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five 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 11.01.C.2.a and 11.01.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.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 five 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 shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;
    - d. no fee shall 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 will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
- f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

#### 11.05 *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 shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

#### 11.06 *Change Proposals*

- A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.
  - 1. *Procedures:* Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. 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. The supporting data shall 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. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.
  - 2. *Engineer's Action:* Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
  - 3. *Binding Decision:* Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. *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 that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

#### 11.07 *Execution of Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
  - 1. changes in the 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 11.02, (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 in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

#### 11.08 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

### ARTICLE 12 – CLAIMS

#### 12.01 *Claims*

- A. *Claims Process:* The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
  - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
  - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
  - 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.
- 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 shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

- 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 shall 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 shall 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 shall 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 shall 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 shall 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 shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- 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 shall be incorporated in a Change Order 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. 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 shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall 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. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, 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, shall 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 cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall 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 required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. 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 shall 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 for services specifically related to the Work.
  5. Supplemental costs including 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, and hand tools not owned by the workers, 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.

- c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall 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. Deposits lost for causes other than 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, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes other than 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. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. 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 shall not include any of the following items:

- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
- 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

4. 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.
  5. 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*: When the Work as a whole is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 11.04.C.
- E. *Documentation*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

#### 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 on account of any of the foregoing will be valid.
- C. *Contingency Allowance*: Contractor agrees that a 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 on account of Work covered by allowances, and the Contract Price shall 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.
- 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. 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 following paragraph.
- E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:
  - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
  - 2. there is no corresponding adjustment with respect to any other item of Work; and
  - 3. Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.

#### **ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK**

##### **14.01 *Access to Work***

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction will 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 therewith as applicable.

##### **14.02 *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 shall 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 shall 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 shall 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.

#### 14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt notice of all 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 pay all 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, 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. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims,

costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

#### 14.04 *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, if such acceptance occurs prior to final payment, 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 claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

#### 14.05 *Uncovering Work*

- A. Engineer has the authority to require special 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 shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
  - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, 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.

#### 14.06 *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; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to

exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

**14.07 Owner May Correct Defective Work**

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by 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 seven days written notice to Contractor, correct or remedy any such deficiency.
- 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 incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. 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 on account of 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 20 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. 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 shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens, and 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.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
3. 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. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
  - a. to supervise, direct, or control the Work, or
  - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or

- c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
    - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or
    - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
  - 5. 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.
  - 6. 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 in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
    - 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. Ten 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. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
    - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
    - 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 in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
  - h. the Contract Price has been reduced by Change Orders;
  - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
  - j. liquidated 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;
  - l. there are other items entitling 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, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.1 and subject to interest as provided in the Agreement.

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 seven days after 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 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. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall 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 seven 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, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, 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. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. 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.
- F. 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 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 may occur prior to compliance with the requirements of Paragraph 6.05 regarding builder's risk or other property insurance.

#### 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.

#### 15.06 *Final Payment*

##### A. *Application for Payment:*

1. 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 7.11), and other documents, Contractor may make application for final payment.
2. The final Application for Payment shall 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 disputes that Contractor believes are unsettled; 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.
3. 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 Application and Acceptance:*

1. 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 ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to the provisions of Paragraph 15.07. 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. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.

- D. *Payment Becomes Due:* Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineer's recommendation, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

15.07 *Waiver of Claims*

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by 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 if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then 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 other adjacent areas;

2. correct such defective Work;
  3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, 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 therefrom.
- 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. Contractor shall pay 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).
- 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 shall not 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, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall 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 repeated 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) ten 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) 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, incorporate in the Work 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.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins 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.
- 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, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

**16.03** *Owner May Terminate For Convenience*

- A. Upon seven 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 on account of loss of anticipated overhead, profits, or revenue, 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 seven 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, seven 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; and
  2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising 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. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or
  2. agree with the other party to submit the dispute to another dispute resolution process; or
  3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

## **ARTICLE 18 – MISCELLANEOUS**

### **18.01 *Giving Notice***

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
  - 1. delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or
  - 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

### **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.

### **18.05 *No Waiver***

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall 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 or completion of the Contract or termination of the services of Contractor.

### **18.07 *Controlling Law***

- A. This Contract is to be governed by the law of the state in which the Project is located.

### **18.08 *Headings***

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

### SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the General Conditions and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

#### SC-1.01 DEFINITIONS:

The terms used in these Supplementary Conditions have the meanings assigned to them in the General Conditions or as amended below, which are applicable to both the singular and plural forms thereof.

##### *SC-1.01.A.20 Engineer*

Add the following language to the end of the definition:

"The word "Engineer" in these specifications shall be understood as referring to Kimley-Horn, 801 Cherry Street Unit 11, Suite 1300, Fort Worth, Texas 76102, Engineer or the Owner, or such other representative as may be authorized by said Owner to act in any particular position."

##### *SC-1.01.A.23 Laws and Regulations*

Add the following language to the end of the definition:

"The term "Regulations" is defined to include laws, statutes, ordinances and lawful orders issued by governing authorities, as well as those rules, conventions and agreements within the construction industry which effectively control the performance of the work regardless of whether they are lawfully imposed by governing authority or not."

##### *SC-1.01.A.28 Owner*

Add the following language to the end of the definition:

"The words "Owner" or "City" in these documents shall be understood as referring to the City of Sanger, 502 Elm Street, Sanger, Texas 76266."

##### *SC-1.01.A.30 Project*

Add the following language to the end of the definition:

"The project involves the construction of I-35 Utility Relocations. The project is located in the City of Sanger, Texas."

##### *SC-1.01.A.38 Specifications*

Add the following language to the end of the definition:

"Except as herein amended or supplemented, Division 100 through 800 of the Standard Specifications for Public Works Construction adopted by the North Central Texas Council of Governments (NCTCOG) Fifth Edition in October 2017, with all amendments shall constitute the specifications. They are not physically bound with other contract documents but are incorporated by reference.

Except as herein amended or supplemented, Items 100 through 700 of the Texas Department of Transportation (TxDOT) Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges 2014, with all amendments shall constitute the specifications for those specific pay items as identified in the pay item descriptions (01 22 00). They are not physically bound with other contract

---

documents, but are incorporated by reference.”

SC-1.01.A.42 *Supplementary Conditions*

Add the following language to the end of the definition:

"Where in the Bonds and elsewhere in the contract, the terms "Special Provisions," and "Special Conditions" appear, they shall be read to mean "Supplementary Conditions."

SC-1.02 TERMINOLOGY:

Add the following new paragraphs after paragraph 1.02.F of the General Conditions:

- G. *Indicated:* The term "indicated" is a cross-reference to graphic representations notes or schedules on the drawings, to other paragraphs or schedules in the specifications, and to similar means of recording requirements in contract documents. Where terms such as "shown", "noted", "scheduled", and "specified" are used in lieu of "indicated", it is for the purpose of helping the reader locate the cross-reference, and no limitation of location is intended except as specifically noted.
- H. *Directed, Requested, etc.:* Terms such as "directed", "requested", "authorized", "selected", "approved", "required", "accepted", and "permitted" mean "directed by the Engineer", "requested by the Engineer", and similar phrases. However, no such implied meaning will be interpreted to extend the Engineer's responsibility into the Contractor's area of construction supervision.
- I. *Drawing Symbols:*
1. General: Except as otherwise indicated, graphic symbols used on the drawings are those symbols recognized in the construction industry for purposes indicated. Where not otherwise noted, symbols are defined by "Architectural Graphic Standards", published by John Wiley & Sons, Inc., seventh edition.
  2. Mechanical/Electrical Drawings: Graphic symbols used on mechanical and electrical drawings are generally aligned with symbols recommended by ASHRAE. Where appropriate, these symbols are supplemented by more specific symbols as recommended by other technical associations including ASME, ASPE, IEEE and similar organizations. Refer instances of uncertainty to the Engineer for clarification before proceeding.
- J. *Abbreviations and Names:* Trade association names and titles of general standards are frequently abbreviated. Where acronyms or abbreviations are used in the specifications or other contract documents they are defined to mean the recognized name of the trade association, standards generating organization, governing authority or other entity applicable to the context of the text provision. Refer to the "Encyclopedia of Associations", published by Gale Research Co., available in most libraries.

SC-2.02 COPIES OF DOCUMENTS:

Delete the first sentence of paragraph 2.02.A of the General Conditions and replace with the following sentence:

"Owner shall furnish to Contractor up to three copies of the Contract Documents as are reasonably necessary for the execution of the Work."

---

SC-2.03.A BEFORE STARTING CONSTRUCTION:

Amend the first sentence of paragraph 2.03.A of the General Conditions to read as follows:

"Within five (5) days after the Effective Date of the Agreement (or as specifically required by the contract documents), Contractor shall submit to ENGINEER for timely review:"

SC-3.03.B RESOLVING DISCREPANCIES:

Add the following new paragraph immediately after Paragraph 3.03.B.1.b:

"2. Should a discrepancy arise in the Project Manual, the Construction Drawings shall take precedence over the Specifications."

SC-4.01.A COMMENCEMENT OF CONTRACT TIMES; NOTICE TO PROCEED:

Delete paragraph 4.01.A of the General Conditions in its entirety and replace with the following paragraph:

"The Contract Time will commence to run on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within thirty days after the Effective Date of the Agreement."

SC-4.02.A STARTING THE WORK:

Delete paragraph 4.02.A of the General Conditions in its entirety and replace with the following paragraph:

"Contractor shall start to perform the Work within ten (10) calendar days of the date when the Contract Time commences to run. No work shall be done at the site prior to the Effective Date of the Agreement."

SC-5.01 AVAILABILITY OF LANDS:

Add the following paragraphs to GC-5.02:

- "D. The proposed easements as shown on the Drawings Sheets 20 and 31 (Sanger Ranch LTD, Paage LTD Randall Smith/ All In Properties, LLC, and PNK T1 LLC) have not yet been obtained by the City. Work may proceed with the TxDOT ROW, but any work on these properties must be coordinated with the property owner until easements have been obtained. Easements are projected to be obtained by August 2024."

SC-5.02 USE OF SITE AND OTHER AREAS:

Add the following paragraphs to GC-5.01:

- "E. *Revegetation of Unpaved Areas:* Unless confirmed in writing by TxDOT, the Contractor shall revegetate unpaved areas disturbed by construction prior to acceptance of the project. Revegetation shall consist of seed sowing, straw mulching, fertilizing and watering. Revegetation shall be acceptable when vegetation growth achieves one (1) inch in height, with 85% coverage, and no greater than 10 square feet bare. The cost for revegetation of unpaved areas shall be subsidiary to the various items in the bid form unless otherwise provided as a separate pay item."
-

"F. *Replacement of Fences:* All fences encountered and removed during construction of this project shall be restored to the original or a better than original condition upon completion of this project. Where wire fencing, either wire mesh or barbed wire is to be crossed, the Contractor shall set cross-braced posts on each side of the permanent easement before the fence is cut. Should additional fence cuts be necessary, the Contractor shall provide cross-braced posts at each point of the proposed cuts in addition to the cross-braced posts provided at the permanent easement limits, before the fence is cut. The cost for fence removal, temporary closures and replacement shall be subsidiary to the various items bid in the project proposal. Therefore, no separate payment shall be allowed for any service associated with this work."

"G. *Protection of Trees, Plants, and Soil:* All property along and adjacent to the Contractor's operations, including lawns, yards, shrubs, trees, etc., shall be preserved or restored after completion of the work, to a condition equal to or better than existed prior to start of the work. Trees that are to remain are identified on the plans and boring may be required to preserve the designated trees. Any trees or other landscaped features scarred or damaged by the Contractor's operations shall be restored or replaced at the Contractor's expense. Trimming or pruning to facilitate the work will be permitted only by experienced workmen in an approved manner and only with the property owner's permission. Pruned limbs of 1" (one) diameter or larger, shall be thoroughly treated as soon as possible with a tree wound dressing.

The Contractor shall take all precautions required to prevent soil erosion during construction. If excessive erosion occurs, the Contractor shall take immediate measures to prevent further erosion and restore the disturbed surface with topsoil at completion of the work. No separate payment will be made for this work.

If at any time the Contractor must enter the project site through an existing gate, the Contractor is responsible for closing the gate once they have entered. If at any point a gate remains open, the Contractor will be assessed a \$500 fine by the Owner. "

"H. *Underground Facilities:* All Underground Facilities along and adjacent to the Contractor's operations including septic tanks, drainfields, sprinkler systems, butane tanks, etc., shall be preserved or restored after completion of the work, to a condition equal to or better than existed prior to start of the work. No separate payment will be made for this work."

"I. *Impairment of Access:* Contractor shall make every reasonable effort to assure that adequate access is maintained to adjacent properties during the project. If conditions exist, occur or are encountered by the Contractor that will result in or cause any delay in the Contractor's performance of any part of the work beyond the time specified in the Agreement, Contractor shall take all reasonable steps necessary to assure that such prolonged performance does not materially or substantially impair access to adjoining businesses and properties, whether such impairment is inherently caused by the nature of the work, by the placement of temporary barriers by the Contractor or by any other cause. Contractor covenants and agrees to indemnify, hold harmless and defend Owner, its officers, agents, servants and employees from and against any and all claims, damages, losses and expenses, including but not limited to attorney's fees and court costs and other incidental litigation expenses, occasioned by or arising out of any claim or lawsuit, whether real or asserted, relating to such unnecessary or unreasonable impairment of access, whether based upon inverse condemnation, unnecessary or illegal taking of property or any other cause of action."

---

“J. *Confinement of Work:* The Contractor shall confine his construction activity and storage of material and equipment to the limits of the permanent and temporary construction easements, or the area designated by the owner and/or TxDOT.

SC-5.03 SUBSURFACE AND PHYSICAL CONDITIONS:

Delete 5.03 in its entirety and replace with the following paragraph:

“A copy of the Geotechnical Engineering Studies: CMJ Project NO. 103-22-454, prepared by CMJ Engineering, Inc. for the Owner are available for prospective bidder, and may be viewed at the office of Kimley-Horn. These reports are made available for the convenience of the contractor for informational purposes only. It is expressly understood that neither the Owner nor the Engineer will be responsible for interpretations or conclusion drawn by the Contractor.”

SC-5.04 DIFFERING SUBSURFACE OR PHYSICAL CONDITIONS:

Delete 5.04 in its entirety.

SC-6.01 PERFORMANCE, PAYMENT, AND OTHER BONDS:

SC-6.01.A Delete Paragraph 5.01.A. in its entirety and insert the following in its place:

“A Contractor shall furnish performance and payment Bonds in accordance with Chapter 2253, Texas Government Code, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of the Contractor’s obligations under the Contract Documents. Contractor shall also furnish a maintenance bond in the amount of one hundred (100%) of the Contract Amount guaranteeing the Work and workmanship against defects. The performance, payment, and maintenance bonds will remain in effect at least two years after the date of when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.”

SC-6.01.B Amend the last sentence of Paragraph 6.01.B to read as follows:

“All bonds signed by an agent must be accompanied by a certified copy of the agent’s authority to act and must be issued by sureties licensed by the State of Texas to provide surety bonds.”

SC-6.03 CONTRACTOR'S INSURANCE:

The limits of liability for the insurance required by paragraph 6.03 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations.

6.03.A.1 and 6.03.A.2, 6.03.A.3, and 6.03.A.4. Workers' Compensation, etc. under paragraphs 6.03.A.1 and 6.03.A.2, 6.03.A.3, and 6.03.A.4 of the General Conditions:

(1)	State:	Statutory
(2)	Applicable Federal (e.g. Longshoreman's):	Statutory
(3)	Employer's Liability:	\$500,000

---

6.03.B and 6.03.C Comprehensive General Liability (under paragraphs 6.03.B through 6.03.C of the General Conditions):

- (1) Bodily Injury (including completed operations and products liability):  
\$500,000 Each Occurrence  
\$1,000,000 Annual Aggregate  
  
Property Damage:  
\$200,000 Each Occurrence  
\$500,000 Annual Aggregate
- (2) Property Damage liability insurance will provide Explosion, Collapse and Under-ground coverage where applicable.
- (3) Personal Injury, with employment exclusion deleted  
\$500,000 Annual Aggregate

6.03.D. Comprehensive Automobile Liability:

Bodily Injury:  
\$200,000 Each Person  
\$500,000 Each Occurrence  
  
Property Damage:  
\$200,000 Each Occurrence

The entities listed below are additional insureds as their interest may appear including their respective officers, directors, agents and employees.

OWNER: City of Sanger, TX  
ENGINEER: Kimley-Horn and Associates Inc.

SC-6.03.I.3 CONTRACTUAL LIABILITY INSURANCE:

The Contractual Liability required by paragraph 6.03.I.3 of the General Conditions shall provide coverage for not less than the following amounts:

Bodily Injury:  
\$500,000 Each Occurrence  
  
Property Damage:  
\$200,000 Each Occurrence  
\$500,000 Annual Aggregate

SC-6.04 OWNER'S LIABILITY INSURANCE:

Delete Paragraph 6.04.A of the General Conditions in its entirety and replace with the following:

"The Contractor shall file with Owner a Certificate of Insurance naming the Owner as an additional insured with regard to the contract project and evidencing insurance coverage of limits not less than the limits indicated in SC-6.03 and SC-6.03.I.3."

SC-6.05 PROPERTY INSURANCE:

Delete Paragraph 6.05.A of the General Conditions in its entirety and insert the following in its place:

"6.05.A. Contractor shall purchase and maintain until final payment property insurance upon the Work at the site to the full insurable value thereof (subject to such deductible amounts as may be provided in these Supplementary Conditions or required by Laws and Regulations). This insurance shall include the interests of Owner, Contractor, Subcontractors, Engineer and Engineer's consultants in the Work (all of whom shall be listed as insured or additional insured parties), shall insure against the perils of fire and extended coverage, shall include "all-risk" insurance for physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage, and such other perils as may be provided in these Supplementary Conditions, and shall include damages, losses and expenses arising out of or resulting from any insured loss or incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers, architects, attorneys and other professionals). If not covered under the "all-risk" insurance or otherwise provided in these Supplementary Conditions, Contractor shall purchase and maintain similar property insurance on portions of the Work stored on and off the site or in transit when such portions of the Work are to be included in an Application for Payment. The policies of insurance required to be purchased and maintained by Contractor in accordance with this paragraph 6.05.A shall comply with the requirements of GC-6.05.B"

SC-6.05.F PROPERTY INSURANCE:

Delete Paragraph 6.05.F of the General Conditions in its entirety.

SC-6.08 WORKERS' COMPENSATION INSURANCE COVERAGE:

Add the following paragraphs to Article 6 of the General Conditions:

"6.08 Workers' Compensation Insurance Coverage.

"In addition to other insurance requirements stipulated herein, the Contractor shall comply with all requirements of 28 TAC 110.110 and other requirements outlined in this section. Definitions contained in this section are for this section only."

"6.08.A. Definitions:

Certificate of coverage ("certificate") - A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement (TWCC-81, TWCC-82, TWCC-83, or TWCC-84), showing statutory workers' compensation insurance coverage for the person's or Owner's employees providing services on a project, for the duration of the project."

---

Duration of the project - includes the time from the beginning of the work on the project until the Contractor's/person's work on the project has been completed and accepted by the Owner.

"Persons providing services on the project ("subcontractor") - includes all persons or entities performing all or part of the services the Contractor has undertaken to perform on the project regardless of whether that person contracted directly with the Contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. Services include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets."

"6.08.A.1 The Contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the Contractor providing services on the project, for the duration of the project."

"6.08.A.2 The Contractor must provide a certificate of coverage to the Owner prior to being awarded the contract."

"6.08.A.3 If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage with the Owner showing that coverage has been extended."

"6.08.A.4 The Contractor shall obtain from each person providing services on a project, and provide to the Owner:

- (1) a certificate of coverage, prior to that person beginning work on the project, so the Owner will have on file certificates of coverage showing coverage for all persons providing services on the project; and
- (2) no later than seven days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project."

"6.08.A.5 The Contractor shall retain all required certificates of coverage for the duration of the project and for one year thereafter."

"6.08.A.6 The Contractor shall notify the governmental entity in writing by certified mail or personal delivery, within 10 days after the Contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project."

"6.08.A.7 The Contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Workers' Compensation Commission, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage."

"6.08.A.8 The Contractor shall contractually require each person with whom it contracts to provide services

---

on a project, to:

- (1) provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all of its employees providing services on the project, for the duration of the project;
- (2) provide to the Contractor, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project;
- (3) provide the Contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project;
- (4) obtain from each other person with whom it contracts, and provide to the Contractor:
  - (a) a certificate of coverage, prior to the other person beginning work on the project; and
  - (b) a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;
- (5) retain all required certificates of coverage on file for the duration of the project and for one year thereafter;
- (6) notify the Owner in writing by certified mail or personal delivery, within 10 days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and
- (7) contractually require each person with whom it contracts, to perform as required by paragraphs (1) - (7), with the certificates of coverage to be provided to the person for whom they are providing services."

"6.08.A.9 By signing this contract or providing or causing to be provided a certificate of coverage, the Contractor is representing to the Owner that all employees of the Contractor who will provide services on the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the CONTRACTOR to administrative penalties, criminal penalties, civil penalties, or other civil actions."

"6.08.A.10 The Contractor's failure to comply with any of these provisions is a breach of contract by the Contractor which entitles the Owner to declare the contract void if the Contractor does not remedy the breach within ten days after receipt of the notice of breach from the Owner."

"6.08.A.11 The text for the notice prescribed in 6.08.A.7 shall read as follows:

---

## REQUIRED WORKERS' COMPENSATION COVERAGE

The law requires that each person working on this site or providing services related to this construction project must be covered by workers' compensation insurance. This includes persons providing, hauling, or delivering equipment or materials, or providing labor or transportation or other service related to the project, regardless of the identity of their employer or status as an employee."

"Call the Texas Workers' Compensation Commission at 512-440-3789 to receive information on the legal requirement for coverage, to verify whether your employer has provided the required coverage, or to report an employer's failure to provide coverage."

### SC-7.05.D REIMBURSEMENT OF ENGINEER'S COST:

Add the following language at the end of the last sentence of Paragraph 7.05.D:

"Contractor shall not be required to reimburse Owner for Engineer's charges if the substitution is beyond the control of the Contractor."

### SC-7.06.A SUBCONTRACTS:

Add the following sentence to paragraph 7.06.A of the General Conditions:

"Contractor shall not award Work under the Contract to a Subcontractor(s) that is (are) in excess of 50% of the total contract price without written approval of the Owner."

### SC-7.08 PERMITS:

Add the following paragraphs to GC 7.08.A

"Under the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et.seq.; the Act), except as provided by NPDES General Permits for Storm Water Discharges from Construction Activities Part I, as published in Federal Register/Vol. 63, No. 128/Monday, July 6, 1998 for disturbances 5 acres or greater and Part II, as published in Federal Register/Vol. 64, No. 235/Wednesday, December 8, 1999 for disturbances less than 5 acres but greater than or equal to 1 acre. Federal law prohibits discharges of pollutants in storm water from construction activities without a National Pollutant Discharge Elimination System Permit (NPDES). Operator(s) of construction sites where 1 or more acres are disturbed, smaller sites that are part of a larger common plan of development or sale where there is a cumulative disturbance of at least 1 acre, or any site designated by the Director, must submit an NOI to obtain coverage under an NPDES Storm Water Construction General Permit.

For the purpose of this project the contractor shall be the "Operator". If required to submit a Notice of Intent (NOI) for storm water discharges associated with construction activities under the NPDES General Permit with EPA, the contractor shall submit the NOI at least two (2) days prior to commencement of construction. In addition to submitting the NOI, the Contractor shall prepare and retain on-site a Storm Water Pollution Prevention Plan in accordance the EPA requirements.

---

“B. Notwithstanding the reference herein stated, nothing shall obligate the Owner or Engineer to advise Contractor of the applicable Laws and Regulations, or waives or modifies Contractor’s obligations under this Section 7.08.”

Contractor shall comply with all terms and conditions of the Nationwide 12 permit as well as any other local, state or federal regulations noted or not as referenced by the analysis of Section 404 Permitting Memo from Kimley-Horn to city dated March 29, 2019 included in the appendix. These reports are made available for the convenience of the contractor for informational purposes only. It is expressly understood that neither the Owner nor the Engineer will be responsible for interpretations or conclusion drawn by the Contractor.

SC-7.09 TAXES:

Add the following paragraphs to paragraph 7.09.A of the General Conditions:

"The Contractor's attention is directed to Amendment No. 7 in Section 6a, Article 20.01, Chapter 20, Title 122A, Taxation-General of the Revised Civil Statutes of Texas and the recent amendments contained in H.B. 11 as passed by the Legislature of the State of Texas and enacted August 13, 1991."

"These statutes provide that all items used by a Contractor, and incorporated into the project, can be purchased free of State and City sales tax when the project is being performed by an exempt agency. Excluded are equipment rentals and other items which are consumed by the Contractor but are not incorporated into the project."

"This contract is issued by an organization which qualifies for exemption pursuant to the provisions of Article 20.04 (F) of the Texas Limited Sales, Excise and Use Tax Act."

"The Contractor performing this contract may purchase all materials, supplies, equipment used in the performance of this contract by issuing to his supplier an exemption or resale certificate."

"It shall be the sole responsibility of the Contractor under the terms of this agreement to determine the applicability of the revisions to the tax code and pay all applicable taxes associated with this project without additional or separate pay for the same from the Owner."

SC-7.11 RECORD DOCUMENTS:

Add the following sentence to paragraph 7.11.A of the General Conditions:

"Contractor will submit, upon completion of the project, record drawings of full size."

SC-7.12 SAFETY AND PROTECTION:

Revise paragraph 7.12.A.3 of the General Conditions to read as follows:

"other property at the site or adjacent thereto, including trees, shrubs, lawns, lawn irrigation systems,..."

Add the following paragraphs to Article 7.12.B of the General Conditions:

"The Contractor shall comply with the provisions of the Occupational Safety and Health Act of 1970, and the standards and regulations issued thereunder and warrant that all work, materials, and products furnished

---

under this contract will conform to and comply with said standards and regulations which are in existence on the date of this contract. The Contractor further agrees to indemnify and hold harmless the Owner and the Engineer for all damages suffered by the Owner and the Engineer as a result of the Contractor's failure to comply with the Act and the Standards issued thereunder and for the failure of any material and/or equipment furnished under this contract to so comply."

"The Contractor shall also comply with all pertinent provisions of the "Manual of Accident Prevention in Construction" issued by the Associated General Contractors of America, Inc., if not in conflict with those of the Occupational Safety and Health Act of 1970 and shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment or work under the contract."

"The Contractor alone shall be responsible for the safety, efficiency, and adequacy of his equipment and employees, and for any damage which may result from their failure or their improper construction, maintenance or operation."

"Per Texas House Bill 1569 effective as of September 1, 1989, it shall be the responsibility of the contractor to provide and maintain a viable trench safety system at all times during construction activities. The contractor is directed to become knowledgeable and familiar with the standards as set forth by the Occupational Safety and Health Administration (OSHA) for trench safety that will be in effect during the period of construction of the project and the contract is responsible for conforming to such regulations as prescribed by OSHA standards. A bid item for trench excavation safety protection and shoring is included in the proposal."

#### SC-7.20 WAGE RATES:

Add a new paragraph to ARTICLE 7 – CONTRACTOR’S RESPONSIBILITIES of the General Conditions as follows:

##### *"7.20 Wage Rates*

A. The prevailing wage rates applicable for this project are attached and made a part of these Contract Documents. Wages not less than these rates must be paid on this project."

#### SC-10.03 Project Representative:

Add the following new paragraph after Paragraph 10.03.A of the General Conditions:

“Owner will furnish an “Owner’s Site Representative” to represent Owner at the Site and assist Owner in observing the progress and quality of the Work. The Owner’s Site Representative is not Engineer’s consultant, agent, or employee. Owner’s Site Representative will be Mr. Sam West.”

#### SC-10.07 DECISIONS ON REQUIREMENTS OF CONTRACT DOCUMENTS AND ACCEPTABILITY OF WORK:

Add the following sentence to Paragraph 10.07.A after the first sentence:

“All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the

---

Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 7 days of the event giving rise to the question.”

SC-14.02 TESTS, INSPECTIONS, AND APPROVALS:

Amend paragraph G.C. 14.02.B of the General Conditions to read as follows:

“Contractor 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.

SC-15.01.A BASIS FOR PROGRESS PAYMENTS:

Amend the first sentence of Paragraph 15.01.A to read as follows:

“A. The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments, subject to acceptance by Engineer, and will be incorporated into a form of Application for Payment acceptable to Engineer.”

SC-15.01.B APPLICATIONS FOR PAYMENTS:

Add a new sentence to the end of paragraph 15.01.B.1 of the General Conditions to read as follows:

"Prior to submitting Application for Payment to Engineer for review, the Contractor shall obtain the Project Inspector's signature verifying that record documents have been updated to reflect variations from the "As Bid" drawings up to the date for which the Contractor seeks payment."

SC-15.01.D.1 REVIEW OF APPLICATIONS:

Revise paragraph 15.01.D.1 of the General Conditions to read as follows:

"Thirty (30) days after presentation of the Application for Payment with Engineer's recommendation, the amount recommended will (subject to the provisions of paragraph 14.02.D) become due and when due will be paid by Owner to Contractor."

SC-15.08 TWO YEAR CORRECTION PERIOD:

Revise the title of paragraph 15.08 of the General Conditions to read "TWO YEAR CORRECTION PERIOD" and revise the content of paragraphs 15.08, 15.08.A, 15.08.B, 15.08.C and 15.08.D to reflect "two (2) years" where "one (1) year" is indicated.

SC-18 MISCELLANEOUS:

Add the following paragraphs to Article 18 of the General Conditions:

"18.09 *Explosives*

A. The use of explosives will not be allowed under this contract for the construction of the proposed facilities without approval of the Engineer and Owner."

---

"18.10 *Use of Domestic Construction Materials*

The Contractor is encouraged to abide by the Buy American Provision of Public Law 95-217 (Section 215) of Public Law 92-500 as amended) generally requiring that preference be given to the use of domestic construction materials in the performance of this contract."

"18.11 *Field Office*

The Contractor will not be required to furnish a field office on this contract."

"18.12 *Buy America*

All materials shall use domestically manufactured products that are composed predominately of steel and/or iron to incorporate into the permanent installation of the utility facility in compliance with the Buy America provisions of 23 CFR 635.410 as amended.

SC-19 PAY ITEMS:

Add a new Article to the General Conditions entitled ARTICLE 19 - PAY ITEMS with the following paragraphs to be included:

Any and all Work specifically called for in the Contract Documents or which is required for the proper construction of items called for in the Contract Documents is to be performed by Contractor unless specifically indicated otherwise.

The cost of all work for which there is no separate pay item in the proposal shall be included in the price for a related pay item such that work called for or required by the Contract Documents will be constructed for the Contract Price.

Specification Section 01 22 00 includes pay item descriptions are intended to clarify the nature of the work required for this project, the provisions of the standard technical specifications shall apply, except as otherwise noted in Specification Section 01 22 00:

Each pay item includes all labor, materials, equipment and incidentals necessary to construct that item. The contract shall be awarded based on the "TOTAL BID" for the funding that the Owner has budgeted.

---

**DIVISION 01**  
**GENERAL REQUIREMENTS**

## **PART 1 - GENERAL**

### **1.1 SUMMARY**

A. Section includes administrative and procedural requirements for unit prices.

### **1.2 DEFINITIONS**

A. Unit price is an amount incorporated in the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

### **1.3 PROCEDURES**

A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.

B. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.

## **PART 2 - PRODUCTS [NOT USED]**

## **PART 3 - EXECUTION**

### **Mobilization:**

The work under this item shall include the establishment of offices and other facilities on the project site and the movement of personnel, construction equipment and supplies to the project site or to the vicinity of the project site in order to enable the Contractor to begin work on the contract. The cost of all bonds and insurance for the project will also be considered part of this specification.

Mobilization will be measured as a per each item as the work progresses. Partial payments for mobilization shall be paid for at the Total Unit Price as shown in the bid proposal with the regular monthly estimates as follows: The adjusted contract amount for construction items as used below is defined as the total contract amount less the per each bid for Mobilization.

**1) For this Item, the adjusted Contract amount will be calculated as the total Contract amount less the per each bid price for mobilization. Mobilization shall be made in partial payments as follows:**

**a) When 1% of the adjusted Contract amount for construction Items is earned, 50% of the mobilization bid price will be paid.**

**b) When 25% of the adjusted Contract amount for construction Items is earned, 75% of the mobilization bid price will be paid. Previous payments under the Item will be deducted from this amount.**

d) **When 75% of the adjusted Contract amount for construction Items is earned, 100% of the mobilization bid price will be paid. Previous payments under the Item will be deducted from this amount.**

e) **A bid containing a total for “Mobilization” in excess of 10% of total contract shall be considered unbalanced and a cause for consideration of rejection.**

**Grout Fill Water Line:**

This item shall consist of the work, labor, and materials required to grout fill and abandon an existing water line in place at the location shown on the plans. Contractor shall excavate and backfill in accordance with the Contract Documents. The grout shall be portland cement based grout mix with the addition of a foaming agent designed for this application and shall completely fill all voids in the host pipe to be abandoned with less than 1% shrinkage.

**Measurement for payment will be on a linear foot basis.**

**Remove Water Line:**

This item shall consist of all the work, labor, equipment, and materials required to remove existing various diameter water lines and dispose of any excess material. Contractor shall excavate and backfill in accordance with the Contract Documents. Any water appurtenance not explicitly called out to be removed but encountered and identified for removal in the field shall be subsidiary to this bid item.

**Measurement for payment will be on a linear foot basis.**

**Remove Existing Water Valve:**

This item shall consist of all the work, labor, equipment, and materials required to remove existing gate valves and dispose of any excess material. Contractor shall excavate and backfill in accordance with the Contract Documents.

**Measurement for payment shall be on a per each basis.**

**Remove 2” Air Release Valve:**

This item shall consist of all the work, labor, equipment, and materials required to remove existing air release valves and dispose of any excess material. Contractor shall excavate and backfill in accordance with the Contract Documents.

**Measurement for payment shall be on a per each basis.**

**Remove Water Meter:**

This item shall consist of all the work, labor, equipment, and materials required to remove existing water meters and dispose of any excess material. Contractor shall excavate and backfill in accordance with the Contract Documents.

**Measurement for payment shall be on a per each basis.**

**Remove Fire Hydrant:**

This item shall consist of all the work, labor, equipment, materials required to install a complete fire hydrant assembly (hydrant, valve, tee, concrete blocking, and hydrant extensions) at the location shown on the plans. Payment shall include the work and materials to install the fire hydrant per the detail identified in the plans and NCTCOG Item 502.3 "Fire Hydrants."

**Measurement for payment shall be on a per each basis.**

**C-900 DR-18 PVC Water Line 6-inch, 8-inch, and 12-inch (Open Cut):**

This item shall consist of all work, labor, tools, materials, and incidentals necessary to complete the work, including but not limited to installing 6-, 8- and 12-inch Dia. C-900 DR-18 PVC Water Line by Open Cut; polywrap on fittings and iron pipe; mechanical restraint; blocking; excavation; embedment; backfill; removal of existing underground pipe and all other obstructions; disposal of surplus material. Pipe shall conform to the plan details, AWWA C-900 Class 150 DR-18 and meet the requirements of NCTCOG Item 501.14, "Polyvinyl Chloride (PVC) Water Pipe." Pipe shall be installed in accordance with NCTCOG Item 506, "Open Cut – Water Conduit Installation", and the details in the construction plan set.

The pipe shall conform to the plan details and meet the requirements of NCTCOG Item 501.14, "Polyvinyl Chloride (PVC) Water Pipe" and pipe shall be installed and tested in accordance with NCTCOG Item 506, "Open Cut – Water Conduit Installation," and the details in the plans and specifications.

**Measurement for payment will be on a linear foot basis.**

**C-900 DR-18 PVC Water Line 8-inch, 12-inch (Carrier Pipe):**

This item shall consist of the work, labor and materials necessary for installing and testing C-900 PVC Water Pipe to be installed in Steel Casing including: Furnishing and installing Waterline Carrier Pipe in Casing as specified by the Drawings, Joint Restraint, Casing spacers, End seals, Excavation, Hauling, and disposal of excess material and cleanup. All joints shall be restrained.

Pipe shall be installed and tested per NCTCOG Item 506, "Open Cut – Water Conduit Installation," and the details in the plans and specifications.

**Measurement for payment will be on a linear foot basis.**

**Resilient Seated Gate Valve 8-inch and 12-inch:**

This item shall consist of all work, labor, tools, materials, and incidentals necessary to furnish and complete the installation of the valve. Valves shall be measured for payment for furnishing and placing each, grouped by size. The bid price for valves shall include mechanical restraint, connection type as noted on the plans, polywrap, roadway box, cover, extension pipe, pad supports, and all other items described in the detail. Installation shall conform to the standard construction details and Specifications herein.

**Measurement for payment shall be on a per each basis.**

**Ductile Iron Fittings:**

This item shall consist of all work, labor, materials, and incidentals necessary to furnish and install required ductile iron fittings, including joint-restraint fittings.

**Measurement for payment shall be on a per ton basis.**

**Fire Hydrant Assembly:**

This item shall consist of all the work, labor, equipment, materials required to install a complete fire hydrant assembly (hydrant, valve, tee, concrete blocking, and hydrant extensions) at the location shown on the plans. Payment shall include the work and materials to install the fire hydrant per the detail identified in the plans and NCTCOG Item 502.3 "Fire Hydrants."

**Measurement for payment shall be on a per each basis.**

**Water Meter:**

This item shall consist of the work, labor, materials required to install a water service, locate, cut, extend, and connect to existing water service lines at the locations shown on the plans according to the detail identified in the plans. Contractor to determine size of meter and service line prior to installation.

**Measurement for payment shall be on a per each basis.**

**Connect Proposed Water Line to Existing Water Line:**

This item shall consist of all the work, labor, equipment, materials required to locate and connect proposed water line to the existing water line at the location shown on the plans, including any valve isolation and temporary water service to disrupted customers. Payment shall include the work and materials to make the connection including all ductile iron fittings, valves, and cut and plug locations.

**Measurement for payment shall be on a per each basis.**

**Trench Excavation Protection:**

This item consists of the required trench safety measures for sanitary sewer lines as required by Item 109.6 of the General Provisions of the Standard Specifications for Public Works Construction, North Central Texas, adopted by the North Central Texas Council of Governments with the following addition:

Per Texas House Bill 1569 effective as of September 1, 1989, it shall be the responsibility of the Contractor to provide and maintain a viable trench safety system at all times during construction activities. The Contractor is directed to become knowledgeable and familiar with the standards as set forth by the Occupational Safety and Health Administration (OSHA) for trench safety that will be in effect during the period of construction of the project and the Contractor is responsible for conforming to such regulations as prescribed by OSHA standards. A bid item for trench excavation safety protection and/or shoring is included in the proposal.

**Measurement for payment will be on a linear foot basis.**

**Cut and Restore Asphalt Paving:**

This item shall consist of the work, labor and materials required to provide asphalt pavement repair including furnishing and installing the asphalt surface and base courses per the plan details. All pavement shall be neatly saw-cut. Maximum measurement width of repair shall not exceed five (5.0) feet. If this quantity is exceeded, the cost of the extra concrete pavement repair shall be borne by the Contractor.

**Measurement for payment shall be on a square yard basis.**

**Cut and Restore Concrete Paving:**

This item shall consist of the work, labor and materials required to provide concrete pavement repair including furnishing and installing the concrete surface and base courses. All pavement shall be neatly saw-cut. Maximum measurement width of repair shall not exceed eight (8.0) feet. If this quantity is exceeded, the cost of the extra concrete pavement repair shall be borne by the Contractor.

**Measurement for payment shall be on a square yard basis.**

**Cut and Restore Pavement (Flex Base):**

This item shall consist of the work, labor and materials required to provide 6-inch gravel (Flexible Base) pavement repair including furnishing and installing the gravel surface. Maximum measurement width of repair shall not exceed eight (8.0) feet. If this quantity is exceeded, the cost of the extra concrete pavement repair shall be borne by the Contractor. Construction methods shall be in accordance with NCTCOG Item 301.5, "Flexible Subbase or Base (Crushed Stone/Concrete)."

**Measurement for payment shall be on a square yard basis.**

**Concrete Curb and Gutter:**

This item shall consist of all work, labor, materials and equipment required to install concrete curb and gutter at the locations shown on the plans and in accordance with NCTCOG Item 305.1 "Concrete Curb and Gutter." Measurement and payment shall be on the basis of the price bid per linear foot of concrete curb and gutter installed.

**Measurement for payment will be on a linear foot basis.**

**Seeding Surface Repair:**

This item shall consist of the work, labor and materials necessary for revegetation in areas disturbed by construction. The Contractor shall revegetate unpaved areas disturbed by construction prior to acceptance of the project. Revegetation shall consist of seed sowing, straw mulching, fertilizing, and watering. Measurement for payment shall be on a square yard basis with a work area within the limits of construction, unless otherwise noted on the plans. If this quantity is exceeded, the cost of the extra Hydromulch seeding shall be borne by the contractor.

**Measurement for payment shall be on a per square yard basis.**

**Sodding Surface Repair:**

This item shall consist of the work, labor and materials necessary for revegetation in areas disturbed by construction. The Contractor shall lay sod in the unpaved areas disturbed by construction prior to acceptance of the project. Revegetation shall consist of soil preparation, laying sod, fertilizing, and watering. Measurement for payment shall be on a square yard basis with a work area within the limits of construction, unless otherwise noted on the plans.

**Measurement for payment shall be on a per square yard basis.**

**Grout Fill Sewer Line:**

This item shall consist of the work, labor, equipment and materials required to grout fill and abandon the existing utility line in place at the location shown on the plans. Contractor shall excavate and backfill in accordance with the Contract Documents. The grout shall be portland cement based grout mix with the addition of a foaming agent designed for this application and shall completely fill all voids in the host pipe to be abandoned with less than 1% shrinkage.

**Measurement for payment will be on a linear foot basis.**

**Remove Force Main and Sewer Line:**

This item shall consist of all the work, labor, equipment, and materials required to remove sewer line, force main and dispose of any excess material. Contractor shall excavate and backfill in accordance with the Contract Documents. Any sewer appurtenance not explicitly called out to be removed but encountered and identified for removal in the field shall be subsidiary to this bid item.

**Measurement for payment will be on a linear foot basis.**

**Remove Sanitary Sewer Manhole:**

This item shall consist of the work, labor and materials required to abandon an existing sanitary sewer manhole at the location shown on the plans. Abandonment shall be in accordance with the Abandon Existing Sanitary Sewer Manhole in-place detail per the plans. Manhole covers are to be salvaged by the Contractor and returned to the City of Gainesville. Measurement for payment shall be on a per each basis.

**Measurement for payment shall be on a per each basis.**

**HDPE Force Main (1.5") (Open Cut):**

This item shall consist of the work, labor and materials necessary for installing and testing DR-9 HDPE (DIPS/DIOD) Sewer Pipe by Open Cut including: Excavation trenching; Embedment; Backfill; barrel restraint blocks; butt fusion of joints and de-beading; hydrostatic testing; removal of existing underground pipe, and all other obstructions; and disposal of excess material. The design, supply, fabrication, installation, maintenance, removal, and dewatering efforts for any temporary cofferdam or water protection system is subsidiary to this unit price.

**Measurement for payment will be on a linear foot basis.**

**HDPE Force Main (1.5") (Carrier Pipe):**

This item shall consist of the work, labor and materials necessary for installing and testing DR-9 HDPE (DIPS/DIOD) Sewer Pipe to be installed in Steel Casing including: Furnishing and installing Sanitary Sewer Carrier Pipe in Casing as specified by the Drawings, Annular grouting, if required, Casing spacers, End seals, Excavation, Hauling, and disposal of excess material and cleanup.

**Measurement for payment will be on a linear foot basis.**

**SDR-26 PVC Sewer 8-inch, 12-inch, 15-inch, 18-inch, and 21-inch (Open Cut):**

This item shall consist of the work, labor and materials necessary for installing and testing SDR-26 PVC Sewer Pipe by Open Cut including: Excavation trenching; Embedment; Backfill; removal of existing underground pipe, and all other obstructions; and disposal of excess material.

Pipe shall be installed and tested at the locations and depths shown on the plan set in accordance with the plan details and NCTCOG Item 507, "Open Cut – Wastewater Conduit Installation." PVC pipe material shall conform to the requirements of NCTCOG Item 501.17, "Polyvinyl Chloride (PVC) Wastewater Pipe & Fittings with Dimension Control."

**Measurement for payment will be on a linear foot basis.**

**ASTM D2241 PVC Sewer 12-inch, and 15-inch (Pressure Rated) (Open Cut):**

This item shall consist of the work, labor and materials necessary for installing and testing ASTM D2241 Pressure Rated PVC Sewer Pipe to be installed in Steel Casing including: Furnishing and installing Sanitary Sewer Carrier Pipe in Casing as specified by the Drawings, Annular grouting, if required, Casing spacers, End seals, Excavation, Hauling, and disposal of excess material and cleanup.

Pipe shall be installed and tested per NCTCOG Item 501.17, "Polyvinyl Chloride (PVC) Wastewater Pipe & Fittings with Dimension Control."

**Measurement for payment will be on a linear foot basis.**

**SDR-26 PVC Sewer 12-inch, 15-inch, 18-inch, and 21-inch (Carrier Pipe):**

This item shall consist of the work, labor and materials necessary for installing and testing SDR-26 PVC Sewer Pipe to be installed in Steel Casing including: Furnishing and installing Sanitary Sewer Carrier Pipe in Casing as specified by the Drawings, Annular grouting, if required, Casing spacers, End seals, Excavation, Hauling, and disposal of excess material and cleanup.

Pipe shall be installed and tested per NCTCOG Item 501.17, "Polyvinyl Chloride (PVC) Wastewater Pipe & Fittings with Dimension Control."

**Measurement for payment will be on a linear foot basis.**

**Steel Casing (x") (Bore):**

This item shall consist of all the work, labor, equipment, and materials necessary for installing various diameters (inches) of I.D. Steel Casing by Auger Bore in accordance with the Contract Documents. This item shall include all equipment, steel casing pipe, launching shaft, receiving shaft, pavement removal, excavation, hauling, dewatering, confirming line/grade, disposal of surplus or unsuitable materials, contact grouting, furnishing, placement and compaction of backfill, and clean-up, in accordance the construction details and specifications. Payment for casing pipe shall include any and all extra precautions or construction requirements necessary to adequately protect and support existing utilities.

Payment for casing pipe shall include all costs required to have utility companies, or other parties, repair any damage inflicted to their lines by the Contractor and any cleanup, property damages, fines, etc. resulting from damage inflicted to any utility line by the Contractor.

**Measurement for payment will be on a linear foot basis.**

**4-foot and 5-foot Dia. Std. Manhole (0-8 ft depth):**

This item shall consist of the work, labor and materials necessary to install a standard sanitary sewer manhole per the detail identified in the plans at depths from 0 ft to 8 ft. This item includes the removal of any existing manhole located in the location of the proposed manhole. This item also includes the manhole vacuum test.

**Measurement for payment shall be on a per each basis.**

**4-foot and 5-foot Drop Concrete Manhole(0-8 ft depth):**

This item shall consist of the work, labor and materials necessary to install drop manhole.

**Measurement for payment shall be on a per each basis.**

**5-foot Extra Depth Concrete Manhole:**

This item shall consist of the work, labor and materials necessary to install std. and drop manhole at depths greater than 8 ft. Manhole depth shall be measured from proposed rim elevation to flow line as shown in the plans.

**Measurement for payment shall be on a vertical foot basis.**

**Connect Proposed Sanitary Sewer to Existing Sanitary Sewer:**

This item shall consist of the work, labor and materials necessary to connect the proposed sanitary sewer line to an existing sanitary sewer line at the locations shown on the plans. Work shall include any required transition to different pipe materials including necessary Fernco couplings, as well as “dog-house” new manhole connections to existing lines where the top of the pipe should be cut-out and manhole base built around the existing pipe.

**Measurement for payment shall be on a per each basis.**

**END OF SECTION**

**PART 1 - GENERAL**

1.01 DESCRIPTION:

- A. Work Included: To help clarify construction contract administration procedures, the Engineer will conduct a Preconstruction Conference prior to start of the Work. Provide attendance by the designated personnel.
- B. Related Work: Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions and Sections in Division 1 of these Specifications.

1.02 QUALITY ASSURANCE:

- A. For those persons designated by the Contractor, his subcontractors, and suppliers to attend the Preconstruction Conference, provide required authority to commit the entities they represent to solutions agreed upon in the Conference.

1.03 SUBMITTALS:

- A. To the maximum extent practicable, advise the Owner and the Engineer at least 24 hours in advance of the Conference as to items to be added to the agenda.
- B. The Engineer will compile minutes of the Conference, and will furnish a copy of the minutes to the Contractor and required copies to the Owner. The Contractor may make and distribute such copies as he wishes.

1.04 PRECONSTRUCTION CONFERENCE:

- A. The Conference will be scheduled to be held prior to the Owner issuing the Notice to Proceed.
  - B. Attendance:
    - 1. Provide attendance by authorized representatives of the Contractor and major subcontractors.
    - 2. The Engineer will advise other interested parties, including the Owner, and request their attendance.
  - C. Minimum agenda: Data will be distributed and discussed on:
    - 1. Organizational arrangement of Contractor's forces and personnel, and those of subcontractors, materials suppliers, and the Engineer;
    - 2. Channels and procedures for communication;
    - 3. Construction schedule, including sequence of critical work;
-

4. Contract Documents, including distribution of required copies of Drawings and revisions;
5. Processing of Shop Drawings and other data submitted to the Engineer for review;
6. Processing of field decisions and Change Orders.
7. Rules and regulations governing performance of the Work; and
8. Procedures for safety and first aid, security, quality control, housekeeping, and related matters.

**END OF SECTION**

## **PART 1 - GENERAL**

### **1.01 DESCRIPTION:**

- A. Work Included: To enable orderly review during progress of the Work, and to provide for systematic discussion of problems, the Engineer/Owner will conduct project meetings throughout the construction period.
- B. Related Work:
  - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
  - 2. The Contractor's relations with his subcontractors and materials suppliers, and discussions relative thereto, are the Contractor's responsibility and normally are not part of project meetings content.

### **1.02 QUALITY ASSURANCE:**

- A. For those persons designated by the Contractor and/or Owner's representative to attend and participate in project meetings, provide required authority that does not require City Council approval to commit the Contractor to solutions agreed upon in the project meetings.

## **PART 2 - PRODUCTS**

(No products are required in this Section)

## **PART 3 - EXECUTION**

### **3.01 MEETING SCHEDULE:**

- A. Except as noted below for the Preconstruction Meeting, project meetings will be held every other week.
- B. Coordinate as necessary to establish mutually acceptable schedule for meetings.

### **3.02 MEETING LOCATION:**

- A. The Owner will establish meeting location. To the maximum extent practicable, meetings will be held at the job site.

### **3.03 PROJECT MEETINGS:**

- A. Attendance:
-

1. To the maximum extent practicable, assign the same person or persons to represent the Contractor at project meetings throughout progress of the Work.
2. Owner.
3. Engineer and principal consultants.
4. Subcontractors, materials suppliers, and others may be invited to attend those project meetings in which their aspect of the Work is involved.
5. Others as appropriate to agenda.

B. Minimum Agenda:

1. Review progress of the Work since last meeting, including status of submittals for approval.
2. Review schedule and identify problems which impede planned progress.
3. Develop corrective measures and procedures to regain planned schedule.
4. Review Pay Requests.

3.04 PRE-INSTALLATION CONFERENCES:

- A. Where required in individual specification Section, convene a pre-installation conference at project site or other designed location. Notify Engineer in writing at least 4 days in advance of meeting.
- B. Require attendance of parties directly affecting or affected by work of the specific Section.
- C. Review conditions of installation, preparation and installation procedures, and coordination with related work.

**END OF SECTION**

---

## **PART 1 - GENERAL**

### **1.01 RELATED DOCUMENTS:**

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification sections, apply to work of this section.

### **1.02 DESCRIPTION OF REQUIREMENTS:**

- A. General: This section specifies procedural requirements for non-administrative submittals including shop drawings, product data, samples and other miscellaneous work-related submittals. Shop drawings, product data, samples and other work-related submittals are required to amplify, expand and coordinate the information contained in the Contract Documents.
  - 1. Refer to other Division 1 sections and other contract documents for specifications on administrative, non-work-related submittals. Such submittals include, but are not limited to the following items:
    - a. Permits.
    - b. Payment applications.
    - c. Performance and payment bonds.
    - d. Insurance certificates.
    - e. Inspection and test reports.
    - f. Schedule of values.
    - g. Trench safety plans.
    - h. Barricade plans
    - i. Progress reports.
    - j. Listing of subcontractors.
- B. Shop Drawings: Shop drawings prepared for this project by the Contractor including but not limited to the following items:
  - 1. Fabrication and installation drawings.
  - 2. Setting diagrams.
  - 3. Shopwork manufacturing instructions.
  - 4. Templates.
  - 5. Patterns.
  - 6. Coordination drawings (for use on-site).
  - 7. Schedules.
  - 8. Design mix formulas.
  - 9. Contractor's engineering calculations.

Standard information prepared without specific reference to a project is not considered to be shop drawings.

---

Deliver submittals to the Owner's Representative at the following address unless otherwise stated at the Pre-Construction Conference:

**Kimley-Horn**  
**Attn: Chris Igo**  
**801 Cherry Street, Unit 11, Suite 1300**  
**Ft. Worth, TX 76102-6811**  
**Reference Project: 061042041**

- C. Product data includes standard printed information on manufactured products that has not been specially-prepared for this project by the Contractor, including but not limited to the following items:
1. Manufacturer's product specifications and installation instructions.
  2. Standard color charts.
  3. Catalog cuts.
  4. Roughing-in diagram and templates.
  5. Standard wiring diagrams.
  6. Printed performance curves.
  7. Operational range diagrams.
  8. Mill reports.
  9. Standard product operating and maintenance manuals.
- D. Samples: Samples to be provided for this project including but not limited to the following items:
1. Partial sections of manufactured or fabricated work.
  2. Small cuts or containers of materials.
  3. Complete units of repetitively-used materials.
  4. Swatches showing color, texture and pattern.
  5. Color range sets.
  6. Units of work to be used for independent inspection and testing.
- E. Miscellaneous submittals are work-related, non-administrative submittals that do not fit in the three previous categories, including, but not limited to the following:
1. Specially prepared and standard printed warranties.
  2. Maintenance agreements.
  3. Workmanship bonds.
  4. Survey data and reports.
  5. Project photographs.
  6. Testing and certification reports.
  7. Record drawings.
  8. Field measurement data.
  9. Operating and maintenance manuals.
  10. Keys and other security protection devices.
  11. Maintenance tools and spare parts.
  12. Overrun stock.

1.03 SUBMITTAL PROCEDURES:

---

- A. Coordination: Coordinate the preparation and processing of submittals with the performance of the work. Coordinate each separate submittal with other submittals and related activities such as testing, purchasing, fabrication, delivery and similar activities that require sequential activity.
    - 1. Coordinate the submittal of different units of interrelated work so that one submittal will not be delayed by the Engineer's need to review a related submittal. The Engineer reserves the right to withhold action on any submittal requiring coordination with other submittals until related submittals are forthcoming.
  - B. Coordination of Submittal Times: Prepare and transmit each submittal to the Engineer sufficiently in advance of the Scheduled performance of related work and other applicable activities. Transmit different kinds of submittals for the same unit of work so that processing will not be delayed by the Engineer's need to review submittals concurrently for coordination.
  - C. Review Time: Allow sufficient time so that the installation will not be delayed as a result of the time required to properly process submittals, including time for resubmittal, if necessary. **Contractor shall allow for a ten calendar day review time from the date that the submittals arrive at the office of the Owner's representative.** Advise the Engineer on each submittal, as to whether processing time is critical to the progress of the work and if the work would be expedited if processing time could be shortened.
  - D. Submittal Preparation: Mark each submittal with a permanent label for identification. Provide a unique identification number (example "S1" for submittal 1) on the label for proper processing and recording of action taken.
  - E. Submittal Requirements: The number of copies of each submittal to be sent by the Contractor and the number of copies of each submittal to be returned are **six copies of each submittal.**
  - F. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from the Contractor to the Engineer, and to other destinations as indicated, by use of a transmittal form. Submittals received from sources other than the Contractor will not be returned to the sender and no action will be taken by the Engineer.
    - 1. Transmittal Form: Transmit all submittals with a properly completed Submittal Transmittal form.
      - a. A separate transmittal form shall be used for each specific product, class of material, and equipment system.
      - b. Items specified in different sections of the specifications are to be submitted separately unless integrally related.
    - 2. Each transmittal form will record the following information for each submittal:
      - a. Project name.
      - b. Date.
      - c. Name and address of Engineer.
      - d. Name and address of Contractor.
-

- e. Name and address of subcontractor.
- f. Name and address of supplier.
- g. Name of manufacturer.
- h. Number and title of appropriate specification section.**
- i. Drawing number and detail references, as appropriate.**
- j. Contractor's review and approval markings,
- k. Statement of compliance with project specifications signed by Contractor or notice of deviations from project specifications signed by Contractor.
- l. Space for the Engineer's "Action" stamp.

#### 1.04 SPECIFIC SUBMITTAL REQUIREMENTS:

- A. General: Specific submittal requirements for individual units of work are specified in the applicable specification section. Except as otherwise indicated in the individual specification sections, comply with the requirements specified herein for each type of submittal.

Where it is necessary to provide intermediate submittals between the initial and final submittals, provide and process intermediate submittals in the same manner as for initial submittals.

- B. Shop Drawings: Information required on shop drawings includes dimensions, identification of specific products and materials which are included in the work compliance with specified standards and notations of coordination requirements with other work. Provide special notation of dimensions that have been established by field measurement. Highlight, encircle or otherwise indicate deviations from the contract documents on the shop drawings.

- 1. Coordination Drawings: Provide coordination drawings where required for the integration of the work, including work first shown in detail on shop drawings or product data. Show sequencing and relationship of separate units of work which must interface in a restricted manner to fit in the space provided, or function as indicated. Coordination drawings are considered shop drawings and must be definitive in nature.
- 2. Do not permit shop drawing copies without an appropriate final "Action" marking by the Engineer to be used in connection with the work.
- 3. Submit six (6) copies, (eight (8) copies for Divisions 2 and 11), of shop drawings, layouts, manufacturer's data and material schedules as may be required by the Engineer for his review. Submittals shall be checked by and stamped with the approval of the Contractor and identified as the Engineer may require. Such review by the Engineer shall include checking for general conformance with the design concept of the project and general compliance with information given in the General Contract Documents. Indicated actions by the Engineer which may result from his review, shall not constitute concurrence with any deviation from the plans and specifications unless such deviations are specifically identified by the method described below, and further shall not relieve the Contractor of responsibility for errors or omissions in the submitted data. Processed shop drawing submittals are not change orders. The purpose of submittals by the Contractor is to demonstrate that the Contractor understands the design concept, and that he demonstrates his understanding by indicating which equipment and materials he intends to furnish and install, and by detailing the fabrication and installation methods he intends to use. If deviations, discrepancies or conflicts between

submittals and the design drawings and/or specifications are discovered, either prior to or after submittals are processed, the design drawings and specifications shall govern.

C. Product Data: General information required specifically as product data includes manufacturer's standard printed recommendations for application and use, compliance with recognized standards of trade associations and testing agencies, and the application of their labels and seals (if any), special notation of dimensions which have been verified by way of field measurement, and special coordination requirements for interfacing the material, product or system with other work.

1. Refer to Divisions 2 and 11 sections for additional general requirements applicable to product data.
2. Preparation: Collect required product data into a single submittal for each unit of work or system. Mark each copy to show which choices and options are applicable to the project. Where product data has been printed to include information on several similar products, some of which are not required for use on the project, or are not included in this submittal, mark the copies to show clearly that such information is not applicable.
  - a. Where product data must be specially prepared for required products, materials or systems, because standard printed data is not suitable for use, submit data as "shop drawings" and not as "product data".
3. Submittals: Product data submittal is required for information and record and to determine that the products, materials and systems comply with the provisions of the contract documents. Therefore, the initial submittal is also the final submittal, except where the Engineer observes that there is non-compliance with the provisions of the contract documents and returns the submittal promptly to the Contractor marked with the appropriate "Action".

Provide a preliminary single-copy submittal where required, for selection of options by the Engineer.

- a. The Engineer will retain one copy, and will return the other marked with "Action" and corrections or modifications as required.
  - b. Do not submit product data or allow its use on the project, until compliance with the requirements of the contract documents has been confirmed by the Contractor.
4. Installation Copy: Do not proceed with installation of materials, products and systems until a copy of product data applicable to the installation is in the possession of the installer. Do not permit the use of unmarked copies of product data in connection with the performance of the work.

D. Samples: Submit samples for the Engineer's visual review of general generic kind, color, pattern, and texture, and for a final check of the coordination of these characteristics with other related elements of the work. Samples are also submitted for quality control comparison of these characteristics between the final sample submittal and the actual work as it is delivered and installed.

---

1. Refer to individual work sections of these specifications for additional sample requirements, which may be intended for examination or testing of additional characteristics. Compliance with other required characteristics is the exclusive responsibility of the Contractor; such compliance is not considered in the Engineer's review and "Action" indication on sample submittals.
2. Documentation required specifically for sample submittals includes a generic description of the sample, the sample source or the product name or manufacturer, compliance with governing regulations and recognized standards. In addition, indicate limitations in terms of availability, sizes, delivery time, and similar limiting characteristics.
3. Refer to Division-15 and Division-16 sections for additional general requirements applicable to samples for mechanical and electrical work, respectively.
4. Preparation: Where possible provide samples that are physically identical with the proposed material or product to be incorporated in the work; provide full scale, fully fabricated samples cured and finished in the manner specified. Where variations in color, pattern, or texture are inherent in the material or product represented by the sample, submit multiple units of the sample (not less than 3 units), which show the approximate limits of variations. Where samples are specified for the Engineer's selection of color, texture or pattern, submit a full set of available choices for the material or product. Mount, display, or package samples in the manner specified to facilitate the review of indicated qualities. Prepare samples to match the Engineer's sample where so indicated.
5. Submittal: At the Contractor's option, and depending upon the nature of the anticipated response from the Engineer, the initial submittal of samples may be either a preliminary submittal or a final submittal.
  - a. Preliminary Submittal: Submit 3 set of samples where requirements indicate the Engineer's selection of color, pattern, texture or similar characteristics from a manufacturer's range of standard choices is necessary. Preliminary submittals will be reviewed and returned with the Engineer's "Action" marking.
  - b. Final Submittals: Submit 3 sets of samples in the final submittal, one set will be returned.
  - c. Distribution of Samples: Maintain the final submittal sets of samples, as returned by the Engineer, at the project site, available for quality control comparisons throughout the course of performing the work. In addition, final submittal sets may be used to obtain final acceptance of the work associated with each set.

E. Miscellaneous Submittals:

1. Inspection and Test Reports: Classify each inspection and test report as being either "shop drawing" or "product data" depending on whether the report is specially prepared for the project, or a standard publication of workmanship control testing at the point of production. Process inspection and test reports accordingly.
-

2. Warranties: Refer to section "Products and Substitutions" for specific general requirements on warranties, product bonds, workmanship bonds and maintenance agreements. In addition to copies desired for the Contractor's use, furnish 2 executed copies of such warranties, bonds or agreements. Provide 2 additional copies where required for maintenance manuals.
3. Standards: Where submittal of a copy of standards is indicated, and except where copies of standards are specified as an integral part of a "Product Data" submittal, submit a single copy of standards for the Engineer's use. Where workmanship, whether at the project site or elsewhere is governed by a standard, furnish additional copies of the standard to fabricators, installers and others involved in the performance of the work.
4. Closeout Submittals: Refer to section "Project Closeout" and to individual sections of these specifications for specific submittal requirements of project closeout information, materials, tools, and similar items.
  - a. Record Documents: Furnish 1 set of record documents as maintained on the project site. Refer to Section 01720 for a description of the Record Document requirements.
  - b. Operating and Maintenance Data: Furnish 4 bound copies of operating data and maintenance manuals.
  - c. Materials and Tools: Refer to individual sections of these specifications for required quantities of spare parts, extra and overrun stock, maintenance tools and devices, keys, and similar physical units to be submitted.
5. General Distribution: Provide additional distribution of submittals to governing authorities and others as necessary for the proper performance of the work. Include such additional copies of submittals in the transmittal to the Engineer where the submittals are required to receive "Action" marking before final distribution. Record distributions on transmittal forms.

#### 1.05 ENGINEER'S ACTION:

- A. General: Except for submittals for the record and similar purposes, where action and return on submittals is required or requested, the Engineer will review each submittal, mark with appropriate "Action", and return. Where the submittal must be held for coordination, the Engineer will so advise the Contractor.
  1. Action Stamp: The Engineer will stamp each submittal to be returned with a uniform, self-explanatory action stamp, appropriately marked and executed to indicate whether the submittal returned is for unrestricted use, final-but-restricted use (as marked), must be revised and resubmitted (use not permitted) or without action (as explained on the transmittal form).

#### **PART 2 - PRODUCTS (Not Applicable)**

#### **PART 3 - EXECUTION (Not Applicable)**

---

**END OF SECTION**

## **PART 1 - GENERAL**

### **1.01 DESCRIPTION:**

- A. Work Included: Provide testing and inspecting, complete, as described in this Section and elsewhere in the Contract Documents.
- B. Related Work:
  - 1. Requirements for testing may be described in various Sections of these Specifications.

### **1.02 QUALITY ASSURANCE:**

- A. Provide the services of a soils engineer and a testing laboratory approved by the Engineer.
- B. Upon completion of each test and/or inspection, promptly distribute copies of test or inspection reports to the Engineer, to governmental agencies requiring submission of such reports, and to such other persons as directed by the Engineer.
- C. Employment of Testing Laboratory shall in no way relieve Contractor of his obligations to perform work in accordance with contract documents.
- D. Qualifications of laboratory:
  - 1. Meet ACIL requirements referenced.
  - 2. Meet basic requirements of ASTM E 329.
  - 3. Authorized to operate in State in which project is located.
  - 4. Meet minimum requirements specified in other sections of the Contract Documents.

## **PART 2 - PRODUCTS**

### **2.01 PAYMENT FOR TESTING:**

- A. Include within the Contract Sum an amount sufficient to cover all testing and inspecting required under this Section of these Specifications, and to cover all testing and inspecting required by governmental agencies having jurisdiction.
  - B. The Owner will pay for all testing and inspecting specifically requested by the Engineer over and above those described in Paragraph 2.01-A above.
  - C. When initial tests requested by the Engineer indicate non-compliance with the Contract Documents, costs of initial tests associated with that non-compliance will be deducted by the Owner from the Contract Sum, and subsequent retesting occasioned by the non-compliance shall be performed by the same testing laboratory and the costs thereof shall be paid by the Contractor.
-

2.02 SPECIFIC TESTS AND INSPECTIONS:

- A. Provide all tests and inspections required by governmental agencies having jurisdiction, required by provisions of the Contract Documents, and such other tests and inspections as are directed by the Engineer.
- B. Tests include, but are not necessarily limited to, those described in detail in Part 3 of this Section.

2.03 CONTRACTOR'S RESPONSIBILITIES:

- A. Cooperate with Laboratory personnel; provide access to Work, and to manufacturer's operations.
- B. When materials require testing prior to being incorporated into Work, secure and deliver to Laboratory adequate quantities of representative samples of materials proposed to be used.
- C. Furnish copies of product test reports as required.
- D. Furnish incidental labor and facilities:
  - 1. To provide access to work to be tested.
  - 2. To obtain and handle samples at site or at source of product to be tested.
  - 3. To facilitate inspections and tests.
  - 4. For safe storage and cutting of test samples.
- E. Notify Laboratory sufficiently in advance of operations to allow for Laboratory assignment of personnel and scheduling of tests.
- F. Make arrangements with Laboratory and pay for additional samples and tests required for Contractor's convenience.

**PART 3 - EXECUTION**

3.01 TAKING SPECIMENS:

- A. Except as may be specifically otherwise approved by the Engineer, have the laboratory secure and handle all samples and specimens for testing.

3.02 COOPERATION WITH TESTING LABORATORY:

- A. Provide access to the Work at all times and at all locations where the Work is in progress. Provide facilities for such access to enable the laboratory to perform its functions properly.

3.03 CONCRETE INSPECTING AND TESTING:

- A. Portland Cement:
    - 1. Secure from the cement manufacturer Certificates of Compliance delivered directly to the concrete producer for further delivery directly to the testing laboratory.
-

2. Require the Certificates of Compliance to positively identify the cement as to production lot, bin or silo number, dating and routing of shipment, and compliance with the specified standards.
3. If so required by the Engineer, promptly provide such other specific physical and chemical data as required.

B. Aggregate:

1. Provide one test unless character of material changes, material is substituted, or additional test is requested by the Engineer.
2. Sample from conveyor belts or batching gates at the ready-mix plant:
  - a. Sieve analysis to determine compliance with specified standards and grading;
  - b. Specific gravity test for compliance with specified standards.

C. Laboratory Design Mix:

1. After approval of aggregate, and whenever character or source of materials is changed, provide mix design in accordance with ACI 613.
2. Provide designs for all mixes prepared by a licensed civil engineer.

D. Molded Concrete Cylinders:

1. Provide four test cylinders for each 50 cu. yds or fraction thereof, of each class of concrete of each day's placement.
2. Test one cylinder at seven days, two at 28 days, and one when so directed.
3. Report the mix, slump, location of concrete in the structure, and test results prior to the addition of any plasticizers.
4. Take specimens and make tests in accordance with the applicable ASTM standard specifications.

E. Core Tests:

1. Provide only when specifically so directed by the Engineer because of low cylinder test results.
2. Cut from locations directed by the Engineer, securing in accordance with ASTM C42, and prepare and test in accordance with ASTM C39.

F. Placement Inspections:

---

1. On concrete over 2,000 psi, provide continuous or other inspection as required by governmental agencies having jurisdiction.
2. Throughout progress of concrete placement, make slump tests to verify conformance with specified slump.
3. Using all required personnel and equipment, throughout progress of concrete placement verify that finished concrete surfaces will have the level or slope that is required by the Contract Documents.

3.04 DENSITY:

1. Provide geotechnical observation and materials testing including: compacted moisture / density of all backfill soils at the rate of one test per 250 linear feet of trench, for each lift of fill placed, during compaction.
2. Digging through existing lifts of backfill to access and test underlying lifts is not allowed.

**END OF SECTION**

## **PART 1 - GENERAL**

### **1.01 DESCRIPTION:**

- A. Work Included: Provide temporary facilities and controls needed for the Work including, but not necessarily limited to:
  - 1. Temporary utilities such as water, electricity, and telephone;
  - 2. Sanitary facilities;
  - 3. Enclosures such as tarpaulins, barricades, and canopies;
  - 4. Temporary fencing of the construction site;
  - 5. Security;
  - 6. Water, erosion, sediment, and dust control;
  - 7. Removal.
- B. Related Work:
  - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
  - 2. Except that equipment furnished by subcontractors shall comply with requirements of pertinent safety regulations, such equipment normally furnished by the individual trades in execution of their own portions of the Work are not part of this Section.
  - 3. Permanent installation and hookup of the various utility lines are described in other Sections.

### **1.02 PRODUCT HANDLING:**

- A. Maintain temporary facilities and controls in proper and safe condition throughout progress of the Work.

## **PART 2 - PRODUCTS**

### **2.01 UTILITIES:**

- A. Water:
    - 1. Provide necessary temporary piping and/or water supply and, upon completion of the Work, remove such temporary facilities.
    - 2. Contractor shall be responsible for the transport and/or delivery of water to the project site. Contractor shall include within the Contract Sum an amount sufficient to cover all site water as subsidiary to other pay items, no separate payment will be allowed.
  - B. Electricity:
-

1. Provide necessary temporary wiring and, upon completion of the Work, remove such temporary facility.
2. Provide area distribution boxes so located that the individual trades may furnish and use 100 foot maximum length extension cords to obtain power and lighting at points where needed for work, inspection, and safety.
3. Provide and pay for electricity used in construction.

#### 2.02 FIELD OFFICES AND SHEDS:

A. Contractor's facilities:

1. A field office is not required for this project.

#### 2.03 DEWATERING:

- A. For the entire duration of the Contract, the Contractor, at his expense, shall keep all parts of the project, site, including excavations, free from any accumulation of water, regardless of the source or cause of such water, by adequate trenching and pumping as required.
- B. Pumping shall include adequate pumps, hose strainers, and other appurtenances, fuel, power, trenching, and pumping as required.
- C. Water shall be disposed of in such a manner as will not endanger public health or cause damage or expense to public or private property, and in accordance with the requirements of any public agencies having jurisdiction. If sewers and streets are used for drainage or the disposal of water during construction, they shall be maintained and left satisfactorily clean upon the completion of the work.

#### 2.04 ENCLOSURES:

- A. Provide and maintain for the duration of construction all scaffolds, tarpaulins, canopies, warning signs, steps, platforms, bridges, and other temporary construction necessary for proper completion of the Work in compliance with pertinent safety and other regulations.

#### 2.05 TEMPORARY PROTECTION:

- A. The Contractor or subcontractors shall also be responsible for protecting his work from damage due to the weather.

#### 2.06 TEMPORARY FENCING:

- A. Provide and maintain for the duration of construction a temporary fence of design and type needed to prevent entry onto the Work by the public.

#### 2.07 PROJECT SIGNS:

---

- A. Project signs are required for this project.
- B. Except as otherwise specifically approved by the Engineer, do not permit other signs or advertising on the job site.
- C. Project sign shall conform to attached figure 01500-1.
- D. Provide two (2) project signs at field locations agreed upon by Owner's inspector.

### **PART 3 - EXECUTION**

#### **3.01 MAINTENANCE AND REMOVAL:**

- A. Maintain temporary facilities and controls as long as needed for safe and proper completion of the Work.
- B. Remove such temporary facilities and controls as rapidly as progress of the Work will permit, or as directed by the Engineer.

**END OF SECTION**

---

## **PART 1 - GENERAL**

### **1.01 CONTRACTOR'S OPTIONS:**

- A. For products specified only by reference standards, select any product meeting standards.
- B. For products specified by naming several products or manufacturers, select any names.
- C. For products specified by naming one or more products, followed by "or equal", Contractor must submit request for substitution for any product not specifically named.
- D. For products specified by naming only one product and manufacturer, no option and no substitution will be allowed.

### **1.02 SUBSTITUTIONS:**

- A. Within 30 days after award of Contract (unless noted otherwise), the Engineer will consider formal requests from Contractor for substitution of products in place of those specified.
  - B. Submit **five (5)** copies of each request for substitution, including:
    - 1. Complete data substantiating compliance of proposed substitution with Contract Documents.
    - 2. For products:
      - a. Product identification, including name and address of manufacturer.
      - b. Product description, performance and test data, and reference standards.
    - 3. For construction methods:
      - a. Detailed description of proposed method.
      - b. Illustration drawings.
    - 4. Changes in construction schedule.
    - 5. Accurate cost data in comparison with product or method specified.
  - C. In making request for substitution, Contractor represents that:
    - 1. He has investigated proposed substitution and determined that it is equal or superior to that specified in all aspects.
    - 2. He will provide same warranty as for product or method specified.
    - 3. He will coordinate installation of accepted substitution into Work, making changes as may be required to complete work in all aspects.
-

4. He waives all claims for additional costs related to substitution which subsequently become apparent.
  5. Cost data is complete and includes all related costs under Contract, excluding Engineer's redesign.
- D. Substitutions will not be considered if:
1. They are indicated or implied on shop drawings or data submittals without formal request.
  2. Acceptance will require substantial revision of Contract Documents.
- E. Contractor alone will be responsible for substantiating acceptability of proposed substitutions. Engineer's decision in acceptance or non-acceptance of substitutions shall be final.
-

**REQUEST FOR SUBSTITUTION FORM:**

TO: \_\_\_\_\_

PROJECT: \_\_\_\_\_ DATE: \_\_\_\_\_

We hereby submit for your consideration the following product instead of the specified item for the above project:

SECTION	PARAGRAPH	SPECIFIED ITEM
---------	-----------	----------------

Proposed Substitution: \_\_\_\_\_

Reason for Substitution: \_\_\_\_\_

Include complete information on changes to Drawings and/or Specifications which proposed substitution will require for its proper installation.

Fill in Blanks Below:

A. Will the undersigned contractor pay for changes to the building design, including engineering and detailing costs caused by the requested substitution?

B. What effect does substitution have on other trades?

C. Differences between proposed substitution and specified item?

D. Differences in product cost or product delivery time?

E. Manufacturer's guarantees of the proposed and specified items are:

\_\_\_\_\_ Equal \_\_\_\_\_ Better (explain on attachment)

The undersigned states that the function, appearance and quality are equivalent or superior to the specified item.

Submitted By:

Signature \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

Date \_\_\_\_\_

Telephone \_\_\_\_\_

For Use by Engineer

\_\_\_ Recommended \_\_\_ Recommended as noted

\_\_\_ Not recommended \_\_\_ Received too late

By \_\_\_\_\_

Date \_\_\_\_\_

Remarks \_\_\_\_\_

**END OF SECTION**

## **PART 1 - GENERAL**

### **1.01 DESCRIPTION:**

- A. Work Included: Throughout the construction period, maintain the buildings and site in a standard of cleanliness as described in this Section.
- B. Related Work:
  - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
  - 2. In addition to standards described in this Section, comply with the requirements for cleaning as described in pertinent other Sections of these Specifications.

### **1.02 QUALITY ASSURANCE:**

- A. Conduct daily inspection, and more often if necessary, to verify that requirements for cleanliness are being met.
- B. In addition to the standards described in this Section, comply with pertinent requirements of governmental agencies having jurisdiction.

## **PART 2 - PRODUCTS**

### **2.01 CLEANING MATERIALS AND EQUIPMENT:**

- A. Provide required personnel, equipment, and materials needed to maintain the specified standard of cleanliness.

### **2.02 COMPATIBILITY:**

- A. Use only the cleaning materials and equipment which are compatible with the surface being cleaned, as recommended by the manufacturer of the material.

## **PART 3 - EXECUTION**

### **3.01 PROGRESS CLEANING:**

- A. General:
    - 1. Retain stored items in an orderly arrangement allowing maximum access, not impeding traffic or drainage, and providing required protection of materials.
    - 2. Do not allow accumulation of scrap, debris, waste material, and other items not required for construction of this Work.
-

3. At least twice each month, and more often if necessary, completely remove all scrap, debris, and waste material from the job site.
4. Provide adequate storage for all items awaiting removal from the job site, observing requirements for fire protection and protection of the ecology.

B. Site:

1. Daily, and more often if necessary, inspect the site and pick up all scrap, debris, and waste material. Remove such items to the place designated for their storage.
2. Weekly, and more often if necessary, inspect all arrangements of materials stored on the site. Restack, tidy, or otherwise service arrangements to meet the requirements of subparagraph 3.01-A-1 above.
3. Maintain the site in a neat and orderly condition at all times.

C. Structures:

1. Weekly, and more often if necessary, inspect the structures and pick up all scrap, debris, and waste material. Remove such items to the place designated for their storage.
2. Weekly, and more often if necessary, sweep interior spaces clean.
  - a. "Clean", for the purpose of this subparagraph, shall be interpreted as meaning free from dust and other material capable of being removed by use of reasonable effort and a hand-held broom.
3. As required preparatory to installation of succeeding materials, clean the structures or pertinent portions thereof to the degree of cleanliness recommended by the manufacturer of the succeeding material, using equipment and materials required to achieve the necessary cleanliness.
4. Following the installation of finish floor materials, clean the finish floor daily (and more often if necessary) at all times while work is being performed in the space in which finish materials are installed.
  - a. "Clean", for the purpose of this subparagraph, shall be interpreted as meaning free from foreign material which, in the opinion of the Engineer, may be injurious to the finish floor material.

3.02 FINAL CLEANING:

---

- A. "Clean", for the purpose of this Article, and except as may be specifically provided otherwise, shall be interpreted as meaning the level of cleanliness generally provided by skilled cleaners using commercial quality building maintenance equipment and materials.
- B. Prior to completion of the Work, remove from the job site all tools, surplus materials, equipment, scrap, debris, and waste. Conduct final progress cleaning as described in Article 3.01 above.
- C. Site:
  - 1. Unless otherwise specifically directed by the Engineer, broom clean paved areas on the site and public paved areas adjacent to the site.
  - 2. Completely remove resultant debris.
- D. Structures:
  - 1. Exterior:
    - a. Visually inspect exterior surfaces and remove all traces of soil, waste materials, smudges, and the foreign matter.
    - b. Remove all traces of splashed materials from adjacent surfaces.
    - c. If necessary to achieve a uniform degree of cleanliness, hose down the exterior of the structure.
    - d. In the event of stubborn stains not removable with water, the Engineer may require light sandblasting or other cleaning at no additional cost to the Owner.
  - 2. Interior:
    - a. Visually inspect interior surfaces and remove all traces of soil, waste materials, smudges, and other foreign matter.
    - b. Remove all traces of splashed material from adjacent surfaces.
    - c. Remove paint droppings, spots, stains, and dirt from finished surfaces.
  - 3. Glass: Clean inside and outside.
  - 4. Polished surfaces: To surfaces requiring routine application of buffed polish, apply the polish recommended by the manufacturer of the material being polished.
- E. Schedule final cleaning as approved by the Engineer to enable the Owner to accept a completely clean Work.

### 3.03 CLEANING DURING OWNER'S OCCUPANCY:

---

- A. Should the Owner occupy the Work or any portion thereof prior to its completion by the Contractor and acceptance by the Owner, responsibilities for interim and final cleaning shall be as determined by the Engineer in accordance with the General Conditions of the Contract.

**END OF SECTION**

## **PART 1 - GENERAL**

### **1.01 DESCRIPTION OF WORK INCLUDED IN THIS SECTION:**

- A. Fine Grading
- B. Soil Preparation
- C. Hydro Mulching
- D. Maintenance
- E. Warranty

### **1.02 QUALITY ASSURANCE:**

- A. Contractor to follow standards set forth in the following references:
  - 1. American Standard for Nursery Stock published by American Association of Nurserymen; October 27, 1980, Edition.
  - 2. American Joint Committee on Horticultural Nomenclature; 1942 Edition of Standardized Plant Names.

### **1.03 SUBMITTALS:**

- A. Contractor shall submit for inspection the following items:
  - 1. Receipts for all fertilizer and seed mixture.
  - 2. Method of temporary irrigation for areas not included in permanent irrigation system limits.

### **1.04 WARRANTY:**

- A. Provide a uniform stand of grass by watering, mowing, and maintaining lawn areas for a period of 120 calendar days after project final walk-thru. Re-seed seeded areas which fail to provide a uniform stand of grass, reseed with specified materials until all affected areas are accepted by the Engineer.

## **PART 2 - PRODUCTS**

### **2.01 FERTILIZER:**

- A. Fertilizer shall meet all requirements of Item 202.4

### **2.02 LAWN SEED:**

- A. Lawn Seed: Fresh, clean and new crop seed mixture.
-

1. Provide fresh, clean, new crop hulled seed tested to minimum percentages of purity and germination as established by Official Seed Analysts of North America. Provide seed of grass species, proportions and maximum percentages of purity, germination and be free of: Poa Annua, bent grass, and noxious weed seed.
  - a. Bermuda Grass, 98% purity, 90% germination. Assure that seed has been soaked in salt peter or other medium which will accelerate germination to a minimum time period.

Rate: 2 pounds per 1,000 square feet.

2. Fall Seed will only be allowed by approval of the Owner.

#### 2.03 WATER:

- A. Free of substance harmful to plant growth. Hoses, pumps, sprinklers or other methods of transportation furnished by contractor, to be approved by the Engineer prior to installation (reference 1.03). A temporary irrigation system may be necessary for proper establishment of vegetation which will be the sole responsibility of the Contractor.

### **PART 3 - EXECUTION**

#### 3.01 FINISH GRADING:

- A. Finished Grades: Shall be understood to be final spot grades and contours indicated on the contract drawings. Where final spot grades or new contours are not indicated, finished grades shall be uniformly level or sloping between points for which elevations are given or contours are shown.
- B. Fine Grading Lawn Areas: Bring the grade of areas to receive turf to a uniform, level slope, as determined by the use of surveying instruments, by discing, harrowing and other methods approved by the Engineer. When establishing finish grades, remove and dispose of all clods, hard lumps, rocks, roots, litter and other foreign matter not passing through the teeth of a hand iron rake. Tractor drawn raking equipment that compacts lawn areas will not be allowed.
- C. Settlement: Maintain ground surfaces to the finish grades shown on the contract drawings until the date of final acceptance.

#### 3.02 SEEDING:

- A. Seeding Limits: Disturbed Areas not shown for pavement, gravel, or other surfaces.
  - B. Responsibility: Utilize all measures as may be necessary, including, but not limited to, protective fencing, sod, or erosion control netting to produce a finished continuous blanket of turf over tall areas designated to receive turf.
  - C. Fertilizer: No fertilizer shall be applied prior to seeding.
-

D. Seeding Operations:

1. Seed immediately after preparation of bed. Spring seeding between March 1 and June 1, and Fall seeding between August 15 and October 15, or at such other times acceptable to the Owner.
2. Perform seeding operations when the soil is dry and when winds do not exceed 5 miles per hour velocity.
3. Apply seed evenly by sowing equal quantities in two directions, at right angles to each other.
4. Sow grass at specified rate.
5. After seeding, lightly rake or drag surface of soil to incorporate seed into top 1/8" of soil. Roll with light lawn roller.

3.03 HYDRO MULCHING:

- A. Hydro Mulching Limits: As indicated on the drawings. Seed or seed mixture shall be uniformly distributed over the areas shown.
- B. Responsibility: The contractor shall utilize all such measures as may be necessary, including, but not limited to, protective fencing or erosion control netting to produce a finished continuous blanket of turf over all areas designated to receive turf.
- C. Hydro Mulching Operations:
  1. Seed and fertilizer are to be distributed as a water slurry, and the mixture shall be applied to the area within 30 minutes after all components are placed in the equipment.
  2. After planting, the seed shall be raked or harrowed into the soil to a depth of approximately 1/4 inch.
  3. The planted areas shall then be rolled with a smooth roller, developing 15 to 25 psi contact pressure upon the planted surface area and giving a smooth surface without ruts or tracks.
  4. After compacting is completed, the planted area shall be watered sufficiently to assure uniform moisture from the surface to a minimum of six inches in depth.

3.04 LAWN AND MAINTENANCE:

- A. Maintain seeded areas for a period of at least 120 days after final acceptance of the project.
  - B. Maintain seeded lawn areas, including watering, spot weeding, mowing, applications of herbicides, fungicides, insecticides and reseeding until a full, uniform stand of grass free of weeds, undesirable grass species, disease and insects is achieved. A temporary irrigation system may be necessary for proper establishment of vegetation which will be the sole responsibility of the Contractor.
  - C. Repair, rework, and reseed all areas that are washed out, eroded, or do not catch.
  - D. Fertilize with organic fertilizer after germination, but prior to first mowing.
-

- E. Mow lawn areas as soon as lawn top growth exceeds a 3" height. Cut back to 2 1/2" in height. Repeat mowing as required to maintain specified height.
- F. No lawn areas shall have bare spots or unacceptable cover totaling more than 2% of the area.

END OF SECTION

## **PART 1 - GENERAL**

### **1.01 DESCRIPTION:**

- A. Work Included: Provide an orderly and efficient transfer of the completed Work to the Owner.
- B. Related Work:
  - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

### **1.02 QUALITY ASSURANCE:**

- A. Prior to requesting inspection by the Engineer, use adequate means to assure that the Work is completed in accordance with the specified requirements and is ready for the requested inspection.

### **1.03 PROCEDURES:**

- A. Final Walk Through:
    - 1. The Engineer and the Contractor will prepare a list of items to be completed by the Contractor.
    - 2. Within a reasonable time after receipt of the list, the Engineer will inspect to determine status of completion.
    - 3. Should the Engineer determine that the Work is not substantially complete:
      - a. The Engineer promptly will so notify the Contractor, in writing, giving the reasons therefore.
      - b. Remedy the deficiencies and notify the Engineer when ready for reinspection.
      - c. The Engineer will reinspect the Work.
    - 4. When the Engineer concurs that the Work is substantially complete:
      - a. The Engineer will prepare a Letter accompanied by the Contractor's list of items to be completed or corrected, as verified by the Engineer.
      - b. The Engineer will submit the Letter to the Owner and to the Contractor for their written acceptance of the responsibilities assigned to them in the Letter.
      - c. Contractor shall have a maximum of four weeks to complete the assigned tasks on the final punch list.
  - B. Final Completion:
    - 1. Prepare and submit notice.
-

- 
2. Verify that the Work is complete.
  3. Certify that:
    - a. Contract Documents have been reviewed;
    - b. Work has been inspected for compliance with the Contract Documents;
    - c. Work has been completed in accordance with the Contract Documents;
    - d. Equipment and systems have been tested as required, and are operational;
    - e. Work is completed and ready for final inspection.
  4. The Engineer will make an inspection to verify status of completion.
  5. Should the Engineer determine that the Work is incomplete or defective:
    - a. The Engineer promptly will so notify the Contractor, in writing, listing the incomplete or defective work.
    - b. Remedy the deficiencies promptly, and notify the Engineer when ready for reinspection.
  6. When the Engineer determines that the Work is acceptable under the Contract Documents, he will request the Contractor to make close-out submittals.
- C. Close-out submittals include, but are not necessarily limited to:
1. Project Record Documents described in Section 01720;
  2. Operation and maintenance data for items so listed in pertinent other Sections of these Specifications, and for other items when so directed by the Engineer;
  3. Warranties and bonds;
  4. Keys and keying schedule;
  5. Spare parts and materials extra stock;
  6. Evidence of compliance with requirements of governmental agencies having jurisdiction including, but not necessarily limited to:
    - a. Certificates of Inspection;
    - b. Certificates of Occupancy.
  7. Certificates of Insurance for products and completed operations;
  8. Evidence of payment and release of liens;
  9. List of subcontractors, service organizations, and principal vendors, including names, addresses, and telephone numbers where they can be reached for emergency service at all times including nights, weekends, and holidays.
-

D. Final adjustment of accounts:

1. Submit a final statement of accounting to the Engineer, showing all adjustments to the Contract Sum.
2. If so required, the Engineer will prepare a final Change Order showing adjustments to the Contract Sum which were not made previously by Change Orders.

1.04 INSTRUCTIONS:

- A. Instruct the Owner's personnel in proper operation and maintenance of systems, equipment, and similar items which were provided as part of the Work. Contractor shall be responsible for arranging for the instructions and supervision at a time convenient to the Owner or his representatives.

**END OF SECTION**

## **PART 1 - GENERAL**

### **1.01 DESCRIPTION:**

#### **A. Work Included:**

1. Throughout progress of the Work, assemble data for inclusion in an Operation and Maintenance Manual.
2. Upon completion of the Work, submit Operation and Maintenance Manuals to the Engineer, as described in Article 3.01 below.

#### **B. Related Work:**

1. Documents affecting work of this Section include, but are not necessarily limited to Sections in Division 1 of these Specifications.
2. Other requirements affecting Operation and Maintenance Data may appear in pertinent other Sections of these Specifications.

### **1.02 SUBMITTALS:**

#### **A. Comply with pertinent provisions of Section 01340.**

1. Provide 1 set of Operation and Maintenance Manuals.
2. Provide Operation and Maintenance manuals in electronic format on a compact disc.

## **PART 2 - PRODUCTS (Not Applicable)**

## **PART 3 - EXECUTION**

### **3.01. OPERATION AND MAINTENANCE MANUALS:**

#### **A. Bound Manuals**

1. Organize operating and maintenance data into suitable sets of manageable size.
2. Bind data into individual binders properly identified and indexed.
3. Bind each set of data in a new heavy-duty 2-inch or 3-inch, 3-ring vinyl-covered binder, with typed tabs for each specification section, and with pocket folders for folded sheet information.
4. Mark the appropriate identification on both front and spine of each binder.
5. Provide a cabinet in the pump room for storage of O&M Manuals, see plans for location.

#### **B. Hard-Copy Format:**

1. Size: 8-1/2 in. x 11 in.
2. Text: Manufacturer's printed data, or neatly typewritten.
3. Provide typed description of product, and major component parts of equipment.

#### **C. Drawings:**

1. Provide reinforced punch binder tab, bind in with text.
  2. Fold larger drawings to the size of the text pages.
-

3. Provide fly-leaf for each separate product, or each piece of operating equipment.
- D. Cover: Identify each volume with typed or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS".
1. List:
    - a. Title of Project.
    - b. Identity of separate structure as applicable.
    - c. Identity of general subject matter covered in the manual.
  2. Include the following types of information in operation and maintenance manuals:
    - a. Description of unit and component parts.  
Function, normal operating characteristics, and limiting conditions.  
Performance curves, engineering data and tests.  
Complete nomenclature and commercial number of all replaceable parts.
    - b. Operating procedures:  
Start-up, break-in, routine and normal operating instructions.  
Regulation, control, stopping, shut-down and emergency instructions.  
Summer and winter operating instructions.  
Alignment, adjusting and checking.
    - c. Servicing and lubrication schedule:  
List of lubricants required for each piece of equipment.
    - d. Schedule for manufacturer recommended maintenance.  
Manufacturer's printed operating and maintenance instructions.  
Original manufacturer's parts list, illustrations, assembly drawings and diagrams required for maintenance.  
Other data as required under pertinent sections of specifications.
    - e. Emergency instructions.
    - f. Spare parts listing.
    - g. Copies of warranties.
    - h. Wiring diagrams.
    - i. Recommended "turn-around" cycles.
    - j. Inspection procedures.
    - k. Shop drawings and product data.

END OF SECTION

## **PART 1 - GENERAL**

### **1.01 DESCRIPTION:**

#### **A. Work Included:**

1. Throughout progress of the Work, maintain an accurate record of changes in the Contract Documents, as described in Article 3.01 below.
2. Upon completion of the Work, transfer the recorded changes to a set of Final Project Record Documents, as described in Article 3.02 below.

#### **B. Related Work:**

1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
2. Other requirements affecting Project Record Documents may appear in pertinent other Sections of these Specifications.

### **1.02 QUALITY ASSURANCE:**

- #### **A. Delegate the responsibility for maintenance of Project Record Documents to one person on the Contractor's staff as approved by the Engineer.**

#### **B. Accuracy of records:**

1. Thoroughly coordinate changes within the Record Documents, making adequate and proper entries on each page of Specifications and each sheet of Drawings and other Documents where such entry is required to show the change properly.
2. Accuracy of records shall be such that future search for items shown in the Contract Documents may rely reasonably on information obtained from the approved Project Record Documents.

- #### **C. Make entries within 24 hours after receipt of information that the change has occurred.**

### **1.03 SUBMITTALS:**

- #### **A. Comply with pertinent provisions of Section 01340.**

- #### **B. The Engineer's approval of the current status of Project Record Documents may be a prerequisite to the Engineer's approval of requests for progress payment and request for final payment under the Contract.**

- #### **C. Prior to submitting each request for progress payment, secure the Engineer's approval of the current status of the Project Record Documents.**
-

- D. prior to submitting request for final payment, submit the Final Project Record Documents to the Engineer and secure his approval.

1.04 PRODUCT HANDLING:

- A. Maintain the job set of Record Documents completely protected from deterioration and from loss and damage until completion of the Work and transfer of all recorded data to the Final Project Record Documents.
- B. In the event of loss of recorded data, use means necessary to again secure the data to the Engineer's approval.
  - 1. Such means shall include, if necessary in the opinion of the Engineer, removal and replacement of concealing materials.
  - 2. In such case, provide replacements to the standards originally required by the Contract Documents.

**PART 2 - PRODUCTS**

2.01 RECORD DOCUMENTS:

- A. Job set: Promptly following receipt of the Owner's Notice to Proceed, secure from the Engineer at no charge to the Contractor one complete set of all Documents comprising the Contract.
- B. Final Project Record Documents: At a time nearing the completion of the Work, secure from the Engineer at no charge to the Contractor one complete set of all Drawings in the Contract.

**PART 3 - EXECUTION**

3.01 MAINTENANCE OF JOB SET:

- A. Immediately upon receipt of the job set described in Paragraph 2.01-A above, identify each of the Documents with the title, "RECORD DOCUMENTS - JOB SET".
  - B. Preservation:
    - 1. Considering the Contract completion time, the probable number of occasions upon which the job set must be taken out for new entries and for examination, and the conditions under which these activities will be performed, devise a suitable method for protecting the job set to the approval of the Engineer.
    - 2. Do not use the job set for any purpose except entry of new data and for review by the Engineer, until start of transfer of data to Final Project Record Documents.
    - 3. Maintain the job set at the site of Work as that site is designated by the Engineer.
-

C. Making entries on Drawings:

1. Using an erasable colored pencil (not ink or indelible pencil), clearly describe the change by graphic line and note as required.
2. Date all entries.
3. Call attention to the entry by a "cloud" drawn around the area or areas affected.
4. In the event of overlapping changes, use different colors for the overlapping changes.

D. Make entries in the pertinent other Documents as approved by the Engineer.

E. Conversion of schematic layouts:

1. In some cases on the Drawings, arrangements of conduits, circuits, piping, ducts, and similar items, is shown schematically and is not intended to portray precise physical layout.
  - a. Final physical arrangement is determined by the Contractor, subject to the Engineer's approval.
  - b. However, design of future modifications of the facility may require accurate information as to the final physical layout of items which are shown only schematically on the Drawings.
2. Show on the job set of Record Drawings, by dimension accurate to within one inch, the centerline of each run of items such as are described in subparagraph 3.01-E-1 above.
  - a. Final physical arrangement is determined by the Contractor, subject to the Engineer's approval.
  - b. Show, by symbol or note, the vertical location of the Item ("under slab", "in ceiling plenum", "exposed", and the like).
  - c. Make all identification sufficiently descriptive that it may be related reliably to the Specifications.
3. The Engineer may waive the requirements for conversion of schematic layouts where, in the Engineer's judgment, conversion serves no useful purpose. However, do not rely upon waivers being issued except as specifically issued in writing by the Engineer.

3.02 FINAL PROJECT RECORD DOCUMENTS:

- A. The purpose of the Final Project Record Documents is to provide factual information regarding all aspects of the Work, both concealed and visible, to enable future modification of the Work to proceed without lengthy and expensive site measurement, investigation, and examination.
-

B. Approval of recorded data prior to transfer:

1. Following receipt of the Final Project Record Documents described in Paragraph 2.01-B above, and prior to start of transfer of recorded data thereto, secure the Engineer's approval of all recorded data.
2. Make required revisions.

C. Transfer of data to Drawings:

1. Carefully transfer change data shown on the job set of Project Record Drawings to the corresponding Final Project Record Documents, coordinating the changes as required.
2. Clearly indicate at each affected detail and other Drawings a full description of changes made during construction, and the actual location of items described in subparagraph 3.01 above.
3. Call attention to each entry by drawing a "cloud" around the area or areas affected.
4. Make changes neatly, consistently, and with the proper media to assure longevity and clear reproduction.

D. Transfer of data to other Documents:

1. If the Documents other than Drawings have been kept clean during progress of the Work, and if entries thereon have been orderly to the approval of the Engineer, the job set of those Documents other than Drawings will be accepted as Final Project Record Documents.
2. If any such Document is not so approved by the Engineer, secure a new copy of that Document from the Engineer at the Engineer's usual charge for reproduction and handling, and carefully transfer the change data to the new copy to the approval of the Engineer.

E. Review and submittal:

1. Submit the completed set of Project Record Documents to the Engineer as described in Paragraph 1.03-D above.
2. Participate in review meetings as required.
3. Make required changes and promptly deliver the Final Project Record Documents to the Engineer.

3.03 CHANGES SUBSEQUENT TO ACCEPTANCE:

- A. The Contractor has no responsibility for recording changes in the Work subsequent to Final Completion, except for changes resulting from work performed under Warranty.

**END OF SECTION**

---

## APPENDIX

## **GEOTECHNICAL REPORT**

**GEOTECHNICAL ENGINEERING STUDY  
IH-35 UTILITY RELOCATIONS  
LOIS ROAD TO DUCK CREEK  
SANGER, TEXAS**

Presented To:  
**Kimley-Horn and Associates, Inc.**

May 2023

**PROJECT NO. 103-22-454**



May 2, 2023  
Report No. 103-22-454

Kimley-Horn and Associates, Inc.  
801 Cherry Street, Suite 1300, Unit 11  
Fort Worth, Texas 76102

Attn: Mr. Chris Igo, P.E.

**GEOTECHNICAL ENGINEERING STUDY  
IH-35 UTILITY RELOCATIONS  
LOIS ROAD TO DUCK CREEK  
SANGER, TEXAS**

Dear Mr. Igo:

Submitted here are the results of a geotechnical engineering study for the referenced project. This study was performed in general accordance with our Proposal No. 22-8452 (Revised) dated September 23, 2022. The geotechnical services were authorized via Kimley-Horn and Associates, Inc. IPO Number 0612322300 executed by Mr. Chris Igo, P.E., Assistant Secretary of Kimley-Horn and Associates, Inc. on September 28, 2022.

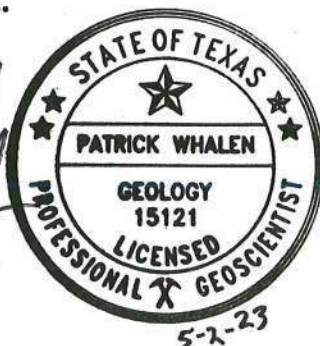
Engineering analyses and recommendations are contained in the text section of the report. The results of our field and laboratory services are included in the appendix of the report. We would appreciate the opportunity to be considered for providing construction material testing services during the construction phase of this project.

We appreciate the opportunity to be of service to Kimley-Horn and Associates, Inc. Please contact us if you have any questions or if we may be of further service at this time.

Respectfully submitted,  
**CMJ ENGINEERING, INC.**

TBPELS REGISTRATION No. F-9177  
TBPG REGISTRATION No. 50644

Patrick J. Whalen, P.G.  
Project Geologist  
Texas No. 15121



Matthew W. Kammerdiener, P.E.  
Project Engineer  
Texas No. 127818



copies submitted: (2) Mr. Chris Igo, P.E.; Kimley-Horn and Associates, Inc. (mail and email)

**CMJ Engineering**  
p: 817.284.9400  
f: 817.589.9993

7636 Pebble Drive  
Fort Worth, TX 76118  
[www.cmjengr.com](http://www.cmjengr.com)

## TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION -----	1
2.0 FIELD EXPLORATION AND LABORATORY TESTING-----	2
3.0 SUBSURFACE CONDITIONS -----	3
4.0 UTILITY EXCAVATIONS -----	5
5.0 EARTHWORK-----	10
6.0 CONSTRUCTION OBSERVATIONS-----	12
7.0 REPORT CLOSURE -----	13

## APPENDIX A

	<u>Plate</u>
Plans of Borings -----	A.1A–A.1C
Unified Soil Classification System -----	A.2
Key to Classification and Symbols -----	A.3
Logs of Borings -----	A.4–A.14
Particle Size Distribution Reports-----	A.15–A.18

## **1.0 INTRODUCTION**

### **1.1 General**

The project, as currently planned, will consist of relocating multiple utility lines along IH-35 from the vicinity of Lois Road E. southward to just north of Duck Creek in Sanger, Texas. Multiple crossings of existing roadways are planned via trenchless (bore/tunnel) techniques. The project vicinity and approximate locations of the exploration borings are illustrated on Plates A.1A through A.1C, Plan of Borings.

### **1.2 Purpose and Scope**

The purpose of this geotechnical engineering study has been to determine the general subsurface conditions, evaluate the engineering characteristics of the subsurface materials encountered, and develop comments on general excavation and directional boring.

To accomplish its intended purposes, the study has been conducted in the following phases: (1) drilling sample borings to determine the general subsurface conditions and to obtain samples for testing; (2) performing laboratory tests on appropriate samples to determine pertinent engineering properties of the subsurface materials; and (3) performing engineering analyses, using the field and laboratory data to develop geotechnical recommendations for the proposed construction.

The design is currently in progress and the locations and/or elevations of the pipelines could change. Once the final design is near completion (80-percent to 90-percent stage), it is recommended that CMJ Engineering, Inc. be retained to review those portions of the construction documents pertaining to the geotechnical recommendations, as a means to determine that our recommendations have been interpreted as intended.

### **1.3 Report Format**

The text of the report is contained in Sections 1 through 7. All plates and large tables are contained in Appendix A. The alpha-numeric plate and table numbers identify the appendix in which they appear. Small tables of less than one page in length may appear in the body of the text and are numbered according to the section in which they occur.

Units used in the report are based on the English system and may include tons per square foot (tsf), kips (1 kip = 1,000 pounds), kips per square foot (ksf), pounds per square foot (psf), pounds per cubic foot (pcf), and pounds per square inch (psi).

## **2.0 FIELD EXPLORATION AND LABORATORY TESTING**

### **2.1 Field Exploration**

Subsurface materials at the project site were explored by eleven (11) vertical soil borings drilled to depths of 20 to 30 feet below existing grade along the proposed alignment. The borings were drilled using continuous flight augers at the approximate locations shown on the Plans of Borings, Plates A.1A through A.1C. The boring logs are included on Plates A.4 through A.14 and keys to classifications and symbols used on the logs are provided on Plates A.2 and A.3.

Undisturbed samples of cohesive soils were obtained with nominal 3-inch diameter thin-walled (Shelby) tube samplers at the locations shown on the logs of borings. The Shelby tube sampler consists of a thin-walled steel tube with a sharp cutting edge connected to a head equipped with a ball valve threaded for rod connection. The tube is pushed into the soil by the hydraulic pulldown of the drilling rig. The soil specimens were extruded from the tube in the field, logged, tested for consistency with a hand penetrometer, sealed, and packaged to limit loss of moisture.

The consistency of cohesive soil samples was evaluated in the field using a calibrated hand penetrometer. In this test, a 0.25-inch diameter piston is pushed into the relatively undisturbed sample at a constant rate to a depth of 0.25 inch. The results of these tests, in tsf, are tabulated at respective sample depths on the logs. When the capacity of the penetrometer is exceeded, the value is tabulated as 4.5+.

To evaluate the relative density and consistency of the harder formations, a modified version of the Texas Cone Penetration test was performed at selected locations. Texas Department of Transportation (TxDOT) Test Method Tex-132-E specifies driving a 3-inch diameter cone with a 170-pound hammer freely falling 24 inches. This results in 340 foot-pounds of energy for each blow. This method was modified by utilizing a 140-pound hammer freely falling 30 inches. This results in 350 foot-pounds of energy for each hammer blow. In relatively soft materials, the penetrometer cone is driven 1 foot and the number of blows required for each 6-inch penetration is tabulated at respective test depths, as blows per 6 inches on the log. In hard materials (rock or rock-like), the

penetrometer cone is driven with the resulting penetrations, in inches, recorded for the first and second 50 blows, a total of 100 blows. The penetration for the total 100 blows is recorded at the respective testing depths on the boring logs.

## **2.2 Laboratory Testing**

Laboratory soil tests were performed on selected representative samples recovered from the borings. In addition to the classification tests (liquid limits, plastic limits, and particle size analyses), moisture content, unit weight, and unconfined compressive strength tests were performed. Results of the laboratory classification tests, moisture content, unit weight, and unconfined compressive strength tests conducted for this project are included on the boring logs. Particle size analysis results are presented on Plates A.15 through A.18.

The above laboratory tests were performed in general accordance with applicable ASTM procedures, or generally accepted practice.

## **3.0 SUBSURFACE CONDITIONS**

### **3.1 Soil Conditions**

Specific types and depths of subsurface strata encountered at the boring locations are shown on the boring logs in Appendix A. The generalized subsurface stratigraphies encountered in the borings are discussed below. Note that depths on the borings refer to the depth from the existing grade or ground surface present at the time of the investigation, and the boundaries between the various soil types are approximate.

Crushed rock base material was present at the surface in Boring B-2 with a thickness of 1 foot. Fill and possible fill materials were observed beneath the paving materials and at the surface in Borings B-1 through B-4, B-9, and B-10 extending to depths of 1 to 6 feet. The fill and possible fill materials consist of brown, dark brown, and gray silty clays and clays containing limestone fragments and occasional ironstone nodules, calcareous nodules, asphalt fragments, pebbles, and iron stains.

Natural soils encountered consist of dark brown, brown, light brown, tan, light reddish brown, and gray clayey sands, sandy clays, silty clays, silty shaly clays, shaly clays, and clays. The various natural soils encountered typically contain iron stains, ironstone nodules, ironstone seams, limestone

fragments, and occasional calcareous nodules, calcareous deposits, limestone seams, gravel, and pebbles. Shale seams are present within the shaly clays below a depth of 6 feet in Boring B-11.

The various clays had tested Liquid Limits (LL) of 27 to 71 with Plasticity Indices (PI) of 12 to 50 and are classified as SC, CL, and CH by the USCS. The various clayey soils were generally firm to hard (soil basis) in consistency with pocket penetrometer readings of 1.25 to over 4.5 tsf. Lower pocket penetrometer readings reflect more granular materials. Tested unit weights were 96 to 124 pcf and unconfined compressive strengths were 650 to 13,740 psf. Borings B-1 and B-2 were terminated in the sandy clays and clayey sands at a depth of 30 feet.

A tan limestone layer with a thickness of 4 feet is present within the various clay soils in Boring B-11 at a depth of 2 feet. Tan limestone is present below the various clays in Borings B-5 through B-10 at depths of 6 to 14 feet. The tan limestone typically contains clay seams and occasionally contains clay layers and is considered moderately hard to very hard (rock basis) with Texas Cone Penetrometer (THD) test values of  $\frac{3}{8}$  to  $3\frac{1}{2}$  inches of penetration for 100 hammer blows.

Gray limestone is next present in Borings B-3 through B-10 at depths of 11 to 23 feet. The gray limestone occasionally contains shale seams and layers and is considered hard to very hard (rock basis) with Texas Cone Penetrometer (THD) test values of  $\frac{7}{8}$  to  $1\frac{3}{4}$  inches of penetration for 100 hammer blows. Gray shale is present in Boring B-11 at a depth of 11 feet. The gray shale is considered moderately hard (rock basis) with Texas Cone Penetrometer (THD) test values of 3 to  $3\frac{1}{2}$  inches of penetration for 100 hammer blows.

The Atterberg Limits tests indicate the various clays encountered at this site range from moderately active to highly active with respect to moisture-induced volume changes. Active clays can experience significant volume changes (expansion or contraction) with fluctuations in their moisture content.

### **3.2 Groundwater Observations**

The borings were drilled using continuous flight augers in order to observe groundwater seepage during drilling. Groundwater seepage was observed at depths ranging from 14 to 27 feet in Borings B-1 through B-3 during drilling. Water levels of 28 and 29 feet were observed in Borings B-1 and B-2 at completion, and Boring B-3 was dry at completion. All other borings were dry during drilling and at the completion of drilling operations. Table 3.2-1 summarizes water level data. While it is not

possible to accurately predict the magnitude of subsurface water fluctuation that might occur based upon these short-term observations, it should be recognized that groundwater conditions will vary.

Fluctuations of the groundwater level can occur due to seasonal variations in the amount of rainfall; site topography and runoff; hydraulic conductivity of soil strata; and other factors not evident at the time the borings were performed. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

Water traveling through the soil (subsurface water) is unpredictable. This could be due to seasonal changes in the groundwater and due to the unpredictable nature of groundwater paths. Therefore, it is necessary during construction for the contractor to be observant for groundwater seepage in excavations in order to assess the situation and take appropriate action. Groundwater seepage can occur through joints in the clays, within or atop the tan limestones, atop the gray limestones and shales, or may be encountered within more granular strata, particularly during periods of heavy or extended rainfall.

<b>TABLE 3.2-1</b>		
<b>Groundwater Observations</b>		
<b>Boring No.</b>	<b>Seepage During Drilling (ft.)</b>	<b>Water at Completion (ft.)</b>
B-1	26	28
B-2	27	29
B-3	14	Dry
B-4	Dry	Dry
B-5	Dry	Dry
B-6	Dry	Dry
B-7	Dry	Dry
B-8	Dry	Dry
B-9	Dry	Dry
B-10	Dry	Dry
B-11	Dry	Dry

## **4.0 UTILITY EXCAVATIONS**

### **4.1 Expected Subsurface Conditions**

The overburden clay soils can be excavated by conventional methods including the use of large backhoes, bulldozers, track, or wheel loaders. Heavy-duty excavation equipment will be necessary

within the various limestone and shale materials encountered at depths ranging from 2 to 23 feet in most borings. In addition, overexcavation should be anticipated within the limestones and shales. Overexcavation may result from large blocks or chunks breaking along either weathered or clay seams beyond the planned excavation. Otherwise, select clay soil zones contain limestone and seams and may also require similar heavy-duty machines. Where softer clays, fills, or clayey sands are encountered in selected locations such as noted in Boring B-1, some caving may occur due to the soft or loose conditions of these materials.

## **4.2 Open Excavation Considerations**

The trench excavations should be performed in accordance with OSHA Safety and Health Standards (29 CFR 1926/1919), Subpart P. For excavations less than 5 feet deep through the various clays and limestones, it is expected that near vertical excavation walls will be possible. However, excavations which occur through soft clays, granular soils, loose fill, or submerged soils, it will be necessary to either slope the excavation sidewalls or provide temporary bracing to control excavation wall instability. In addition, for excavations deeper than 5 feet, the excavation sidewalls must be sloped, or temporary bracing must be provided, regardless of the soil conditions encountered.

If open trench cuts are performed within 1.25 times the trench depth of any surface structure, trench shoring (not trench boxes) should be used within open trench cuts performed within this distance. Hydraulic shoring struts should be used and installed during excavation as needed to provide full lateral support to vertical trench sidewalls, and thereby help reduce lateral ground movements near existing structures. A pre-construction condition survey should be performed prior to beginning excavation near any structure that could be affected by the trench excavation to verify existing conditions (existing distress) prior to construction. Construction monitoring should be performed to verify that existing structures are not impacted or damaged by construction operations.

## **4.3 Bore/Tunnel Considerations**

The results of the exploration borings indicate that the majority of overburden soils similar to those encountered in the borings are not anticipated to exhibit unusual caving or sloughing problems in most locations during directional bore installation.

Increased difficulty of bore drilling through the limestones and shales should be anticipated. Any tunnel bores extending into this limestone or shale strata will be encountering moderately hard to very hard and intact rock, though the tan limestone layers encountered can contain clay seams and

occasional layers, which may result in areas of mixed-face drilling conditions. The limestone strata will likely require special tools to remove/excavate/drill through due to their hardness and abrasiveness.

Groundwater will likely seep into bore/tunnel excavations in select areas and should be anticipated. The more granular strata, joints within the clays, and the tan limestones can serve as conduits to direct water towards the bore excavation. Water seepage can decrease the stability of the bore/tunnel excavation and result in ground subsidence. Proper de-watering, as discussed above, is imperative for excavation stability.

#### **4.4 Trench / Bore Pit Dewatering**

Groundwater seepage was encountered in Borings B-1 through B-3 at depths of 14 to 27 feet during drilling. As discussed in Section 3.2, Groundwater Observations, groundwater conditions can vary with seasonal fluctuations in rainfall. In the case that groundwater is encountered, controlling the groundwater is essential to construction of the utility lines. Failure to control any encountered groundwater could result in trench wall collapse, trench bottom heave, an unstable trench bottom and detrimental pipeline settlement and pipe deflections after backfilling. Groundwater levels should be maintained at two feet below the base of the excavation for the full term of construction. Protection of the open excavations should be provided during periods of moderate to heavy rainfall, as surface water will most likely channel and collect in the excavations. The water level should be lowered prior to excavating and should be maintained at this lowered level until the pipe trench is backfilled. In select areas, seepage may be controlled by means of collection ditches, sumps, and pumping. However, in the event that water infiltration rates are high, it will likely become necessary to install a more elaborate dewatering system. The design of any dewatering system required is the contractor's responsibility.

#### **4.5 Soft Trench Bottom Conditions**

Soft trench bottom conditions are unlikely where the trench bottom is situated in the natural soils, but soft conditions may occur in select reaches. Control of groundwater as discussed above is the key to avoiding an unstable trench bottom in more granular soils, as well as cohesive soils. Unstable trench bottoms are unsuitable for support of the proposed pipeline. Soft clays or saturated sands and gravels could occur where groundwater is present. In any areas where unsuitable bearing materials are encountered at the planned invert elevation, the trench bottom can be prepared using the following method:

- Under-cut to a suitable bearing subgrade and replace it with a structural compacted fill. The over-excavation should extend laterally a distance of at least 1 foot beyond the edges of the pipe, and then at least 1 foot laterally for every 1.5 feet of fill required beneath the pipe. The over-excavation backfill should be surrounded with a geotextile consisting of Mirafi 140N, Amoco ProPex 4545, or equivalent. The backfill should consist of a free-draining aggregate (i.e., sands, gravels, crushed limestone, or crushed concrete) approved by the geotechnical engineer. The backfill should be placed in maximum 9-inch loose lifts and uniformly compacted to a minimum relative density of 65 percent as determined by test methods ASTM D 4253 and D 4254.

#### **4.6 Excavation Considerations**

If open trench cuts are performed within 1.25 times the trench depth of any surface structure, trench shoring (not trench boxes) should be used within open trench cuts performed within this distance. Hydraulic shoring struts should be used and installed during excavation as needed to provide full lateral support to vertical trench sidewalls and thereby help reduce lateral ground movements near existing structures. A pre-construction condition survey should be performed prior to beginning excavation near any structure that could be affected by the trench excavation to verify existing conditions (existing distress) prior to construction. Construction monitoring should be performed to verify that existing structures are not impacted or damaged by construction operations.

#### **4.7 Pipe Installation Bedding**

To assure adequate base support for the pipe, it is recommended that bedding/embedment material be placed around the pipe, 6 inches below the pipe, and 12 inches above the pipe. If concern exists of native backfill above the embedment migrating into the more coarse embedment (and causing backfill settlement), a filter cloth is recommended at the embedment/native soil interface. The filter cloth should cover the entire interface and up through the sidewall a minimum of 1 foot.

Bedding material may consist of gravel/stone from 1" to No. 10 sieve size. Gravel should be consolidated upon placement by rodding or pneumatic vibration methods. Such methods should not cause harm or distress to the pipe. The filter cloth should be TenCate Geosynthetics Marifi 140N or equivalent.

#### **4.8 Trench Backfill**

Site excavated materials are generally considered suitable for use as backfill above the pipe bedding materials. All trench backfill should be free of deleterious materials. Use of rock fragments greater than 4 inches in any dimension should be prohibited, since attaining a uniform moisture and density without voids would be difficult. Backfill should be compacted in maximum 9-inch loose lifts at a

minimum of 95 percent of the Standard Proctor density (ASTM D 698). The uncompacted lift thickness should be reduced to 4 inches for structure backfill zones requiring hand-operated power compactors or small self-propelled compactors.

Clay soils having a PI greater than 20 should be compacted at a moisture content ranging from 0 to +4 percentage points above the optimum moisture content. Granular soils having a PI less than 20 should be compacted at a moisture content ranging from -3 to +3 percentage points of the optimum moisture content. Jetting to compact the pipe backfill should not be allowed. In areas where settlement of the backfill must be closely controlled, the trench excavation should be backfilled with either cement stabilized sand or flowable concrete having a 28-day compressive strength ranging between 50 and 200 psi.

#### **4.9 Trench Backfill Settlement**

Settlement of the backfill soils should be anticipated. It is anticipated that properly compacted on-site clay fill soils will settle between about 1 and 2 percent of the fill thickness. For example, 10 feet of fill would be expected to settle on the order of 1.2 to 2.4 inches.

The trench backfill could be over-built in order to reduce the potential for a surface depression along the trench centerline. We recommend the backfill be crowned. The centerline of the excavation should be over-built by one foot and sloped down to match grade at the edge of the excavation.

#### **4.10 Provisions to Reduce Backfill Settlement**

Field testing will be a critical element in controlling the compaction of the backfill to limit settlement. All trench backfilling in these critical areas shall include full-time observation of soil compaction by an experienced geotechnician under the supervision of the geotechnical engineer. The contractor should provide protection for the testing/inspection personnel while working in the trenches, and shall move the protective shield/shoring such that areas to be tested are readily accessible. The compacted moisture/density of all backfill soils should be tested at a rate of one test per 250 linear feet of trench, for each lift of fill placed, during compaction. Digging through existing lifts of backfill to access and test underlying lifts should not be allowed.

In addition, to limit settlement, where crushed stone materials are used as pipe bedding materials, they should be wrapped with a suitable geotextile to limit the intrusion of fines into the crushed stone material.

## **5.0 EARTHWORK**

### **5.1 Site Preparation & Material Requirements**

The area should be stripped of vegetation, roots, old construction debris, and other organic material. It is estimated that the depth of stripping will be on the order of 6 to 8 inches. The actual stripping depth should be based on field observations with particular attention given to old drainage areas, uneven topography, and excessively wet soils. The stripped areas should be observed to determine if additional excavation is required to remove weak or otherwise objectionable materials that would adversely affect the fill placement or other construction activities.

The subgrade should be firm and able to support the construction equipment without displacement. Soft or yielding subgrade should be corrected and made stable before construction proceeds. The subgrade should be proof rolled to detect soft spots, which if exist, should be excavated to provide a firm and otherwise suitable subgrade. Proof rolling should be performed using a heavy pneumatic tired roller, loaded dump truck, or similar piece of equipment. The proof rolling operations should be observed by the project geotechnical engineer or his/her representative. Prior to fill placement, the subgrade should be scarified to a minimum depth of 6 inches, its moisture content adjusted, and recompacted to the moisture and density recommended for fill.

The on-site soils are suitable for use in site grading. Imported fill material should be clean soil with a Liquid Limit less than 60 and no rock greater than 4 inches in maximum dimension. The fill materials should be free of vegetation and debris.

### **5.2 Placement and Compaction**

Fill material should be placed in loose lifts not exceeding 8 inches in uncompacted thickness. The uncompacted lift thickness should be reduced to 4 inches for structure backfill zones requiring hand-operated power compactors or small self-propelled compactors. The fill material should be uniform with respect to material type and moisture content. Clods and chunks of material should be broken down and the fill material mixed by disking, blading, or plowing, as necessary, so that a material of uniform moisture and density is obtained for each lift. Water required for sprinkling to bring the fill material to the proper moisture content should be applied evenly through each layer.

General fill material should be compacted to a density ranging from 95 to 100 percent of maximum dry density as determined by ASTM D 698, Standard Proctor. Crushed stone should be compacted

via three passes of a vibratory roller over a 6-inch lift. In conjunction with the compacting operation, the fill material should be brought to the proper moisture content. The moisture content for general earth fill should range from 2 percentage points below optimum to 5 percentage points above optimum (-2 to +5). These ranges of moisture contents are given as maximum recommended ranges. For some soils and under some conditions, the contractor may have to maintain a more narrow range of moisture content (within the recommended range) in order to consistently achieve the recommended density.

Field density tests should be taken as each lift of fill material is placed. As a guide, one field density test per lift for each 5,000 square feet of compacted area is recommended. For small areas or critical areas, the frequency of testing may need to be increased to one test per 2,500 square feet. A minimum of 2 tests per lift should be required. The earthwork operations should be observed and tested on a continuing basis by an experienced geotechnician working in conjunction with the project geotechnical engineer.

### **5.3 General Excavation**

The side slopes of excavations through the overburden soils should be made in such a manner to provide for their stability during construction. Existing structures, pipelines, or other facilities, which are constructed prior to or during the currently proposed construction and which require excavation, should be protected from loss of end bearing or lateral support.

Temporary construction slopes and/or permanent embankment slopes should be protected from surface runoff water. Site grading should be designed to allow drainage at planned areas where erosion protection is provided, instead of allowing surface water to flow down unprotected slopes.

Trench safety recommendations are beyond the scope of this report. The contractor must comply with all applicable safety regulations concerning trench safety and excavations including, but not limited to, OSHA regulations.

### **5.4 Acceptance of Imported Fill**

Any soil imported from off-site sources should be tested for compliance with the recommendations for the particular application and approved by the project geotechnical engineer prior to the materials being used. The owner should also require the contractor to obtain a written, notarized certification from the landowner of each proposed off-site soil borrow source stating that to the best of the

landowner's knowledge and belief there has never been contamination of the borrow source site with hazardous or toxic materials. The certification should be furnished to the owner prior to proceeding to furnish soils to the site. Soil materials derived from the excavation of underground petroleum storage tanks should not be used as fill on this project.

### **5.5 Soil Corrosion Potential**

Specific testing for soil corrosion potential was not included in the scope of this study. Recovered soil samples as selected by V&A Consulting Engineers were shipped to their laboratory for related analysis and recommendations.

### **5.6 Erosion and Sediment Control**

All disturbed areas should be protected from erosion and sedimentation during construction, and all permanent slopes and other areas subject to erosion or sedimentation should be provided with permanent erosion and sediment control facilities. All applicable ordinances and codes regarding erosion and sediment control should be followed.

## **6.0 CONSTRUCTION OBSERVATIONS**

In any geotechnical investigation, the design recommendations are based on a limited amount of information about the subsurface conditions. In the analysis, the geotechnical engineer must assume the subsurface conditions are similar to the conditions encountered in the borings. However, quite often during construction anomalies in the subsurface conditions are revealed. Therefore, it is recommended that CMJ Engineering, Inc. be retained to observe earthwork and foundation installation and perform materials evaluation during the construction phase of the project. This enables the geotechnical engineer to stay abreast of the project and to be readily available to evaluate unanticipated conditions, to conduct additional tests if required and, when necessary, to recommend alternative solutions to unanticipated conditions. Until these construction phase services are performed by the project geotechnical engineer, the recommendations contained in this report on such items as final foundation bearing elevations, proper soil moisture condition, and other such subsurface related recommendations should be considered as preliminary.

It is proposed that construction phase observation and materials testing commence by the project geotechnical engineer at the outset of the project. Experience has shown that the most suitable method for procuring these services is for the owner or the owner's design engineers to contract

directly with the project geotechnical engineer. This results in a clear, direct line of communication between the owner and the owner's design engineers and the geotechnical engineer.

## **7.0 REPORT CLOSURE**

The boring logs shown in this report contain information related to the types of soil encountered at specific locations and times and show lines delineating the interface between these materials. The logs also contain our field representative's interpretation of conditions that are believed to exist in those depth intervals between the actual samples taken. Therefore, these boring logs contain both factual and interpretive information. Laboratory soil classification tests were also performed on samples from selected depths in the borings. The results of these tests, along with visual-manual procedures were used to generally classify each stratum. Therefore, it should be understood that the classification data on the logs of borings represent visual estimates of classifications for those portions of each stratum on which the full range of laboratory soil classification tests were not performed. It is not implied that these logs are representative of subsurface conditions at other locations and times.

With regard to groundwater conditions, this report presents data on groundwater levels as they were observed during the course of the field work. In particular, water level readings have been made in the borings at the times and under conditions stated in the text of the report and on the boring logs. It should be noted that fluctuations in the level of the groundwater table can occur with the passage of time due to variations in rainfall, temperature, and other factors. Also, this report does not include quantitative information on rates of flow of groundwater into excavations, on pumping capacities necessary to dewater the excavations, or on methods of dewatering excavations. Unanticipated soil conditions at a construction site are commonly encountered and cannot be fully predicted by mere soil samples, test borings or test pits. Such unexpected conditions frequently require that additional expenditures be made by the owner to attain a properly designed and constructed project. Therefore, provision for some contingency fund is recommended to accommodate such potential extra cost.

The analyses, conclusions, and recommendations contained in this report are based on site conditions as they existed at the time of our field investigation and further on the assumption that the exploratory borings are representative of the subsurface conditions throughout the site; that is, the subsurface conditions everywhere are not significantly different from those disclosed by the borings

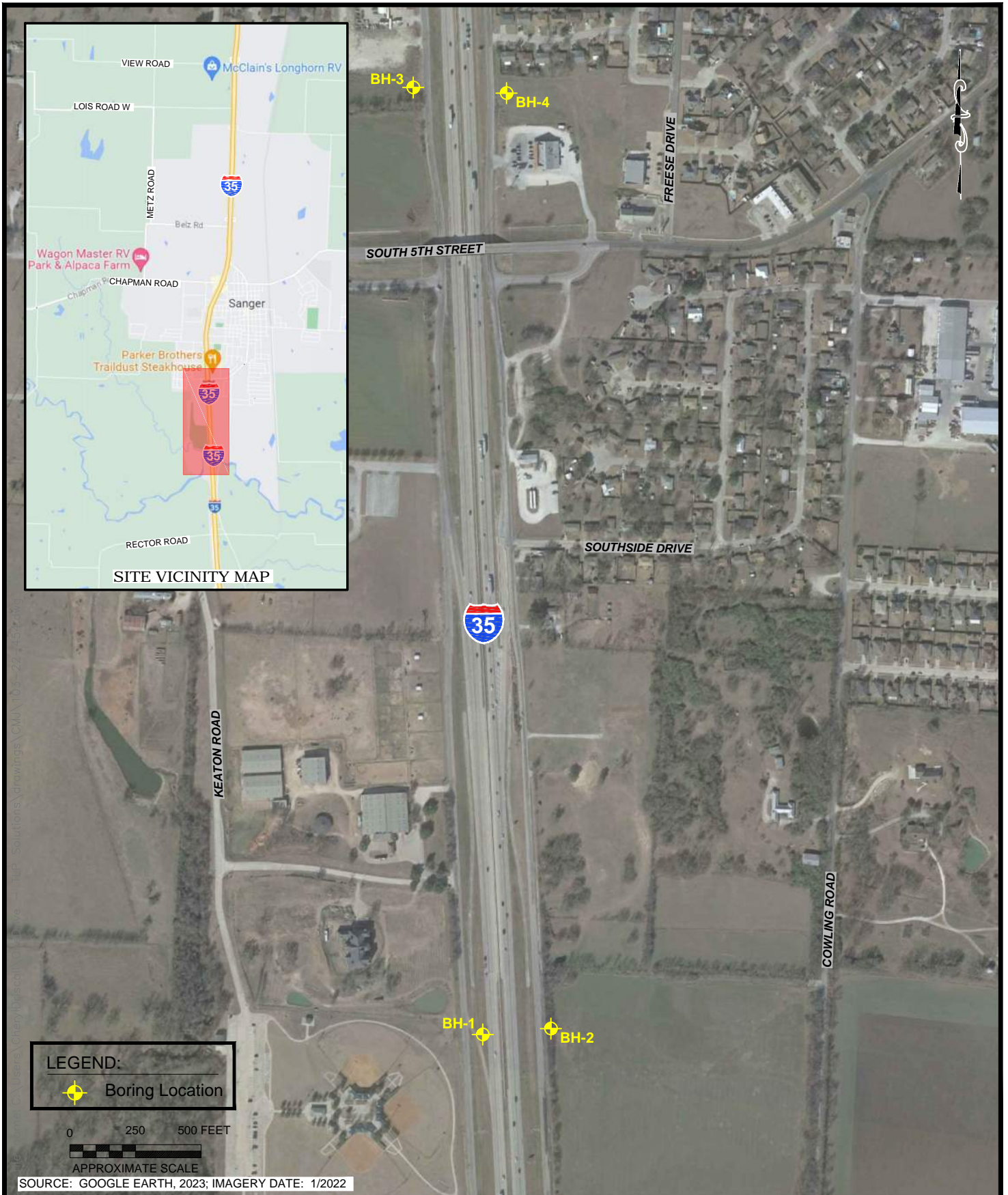
at the time they were completed. If, during construction, different subsurface conditions from those encountered in our borings are observed, or appear to be present in excavations, we must be advised promptly so that we can review these conditions and reconsider our recommendations where necessary. If there is a substantial lapse of time between submission of this report and the start of the work at the site, if conditions have changed due either to natural causes or to construction operations at or adjacent to the site, or if structure locations, structural loads or finish grades are changed, we urge that we be promptly informed and retained to review our report to determine the applicability of the conclusions and recommendations, considering the changed conditions and/or time lapse.

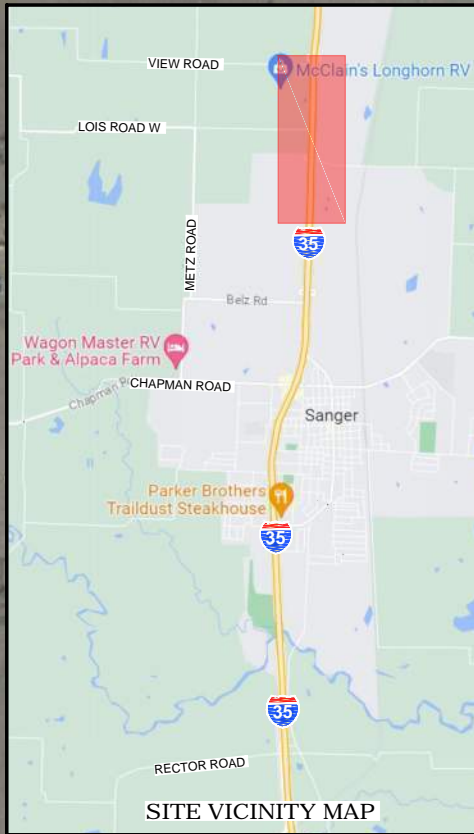
Further, it is urged that CMJ Engineering, Inc. be retained to review those portions of the plans and specifications for this particular project that pertain to earthwork and foundations as a means to determine whether the plans and specifications are consistent with the recommendations contained in this report. In addition, we are available to observe construction, particularly the compaction of structural fill, or backfill and the construction of foundations as recommended in the report, and such other field observations as might be necessary.

The scope of our services did not include any environmental assessment or investigation for the presence or absence of wetlands or hazardous or toxic materials in the soil, surface water, groundwater or air, on or below or around the site.

This report has been prepared for use in developing an overall design concept. Paragraphs, statements, test results, boring logs, diagrams, etc. should not be taken out of context, nor utilized without a knowledge and awareness of their intent within the overall concept of this report. The reproduction of this report, or any part thereof, supplied to persons other than the owner, should indicate that this study was made for design purposes only and that verification of the subsurface conditions for purposes of determining difficulty of excavation, trafficability, etc. are responsibilities of the contractor.

This report has been prepared for the exclusive use of Kimley-Horn and Associates, Inc. for specific application to design of this project. The only warranty made by us in connection with the services provided is that we have used that degree of care and skill ordinarily exercised under similar conditions by reputable members of our profession practicing in the same or similar locality. No other warranty, expressed or implied, is made or intended.



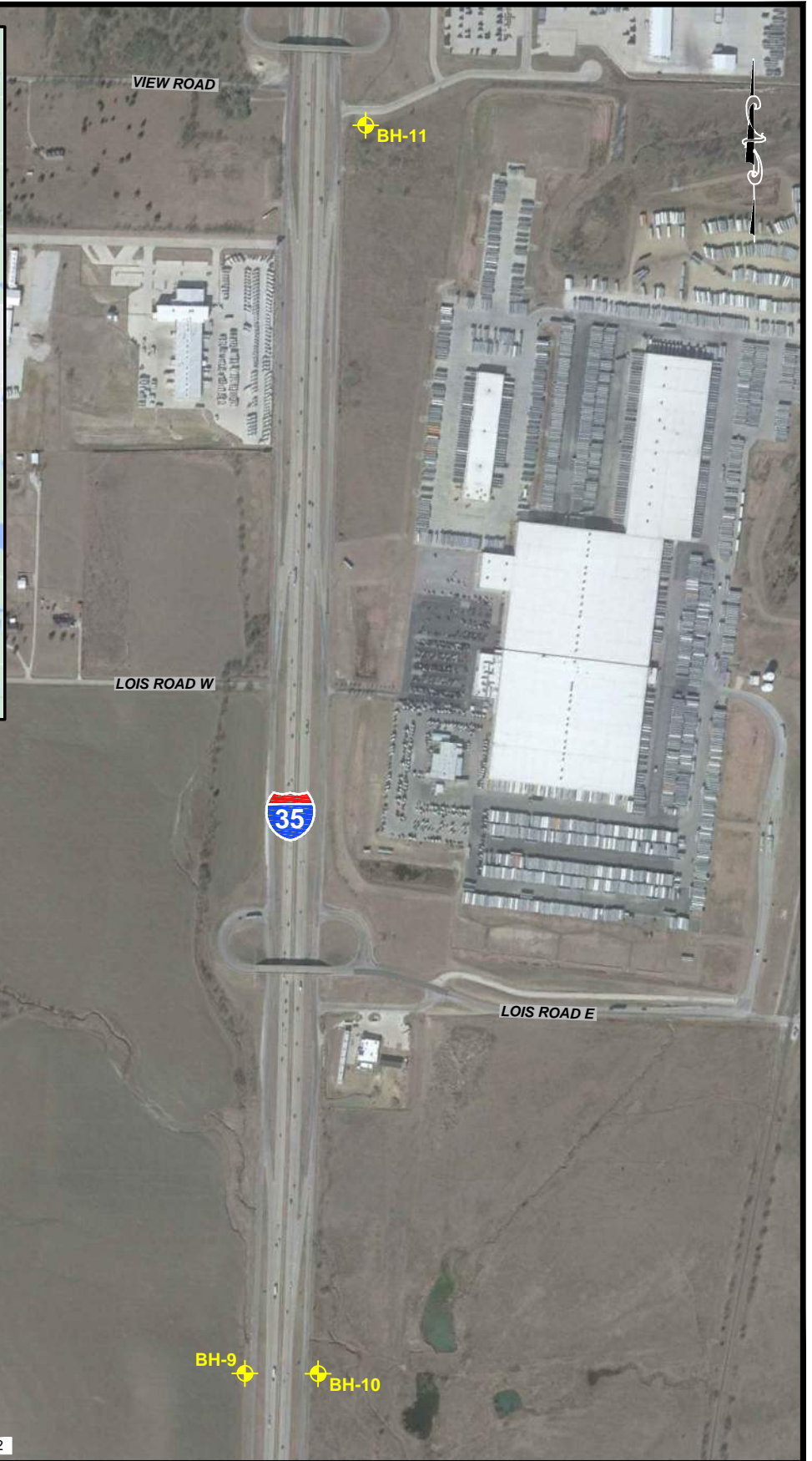
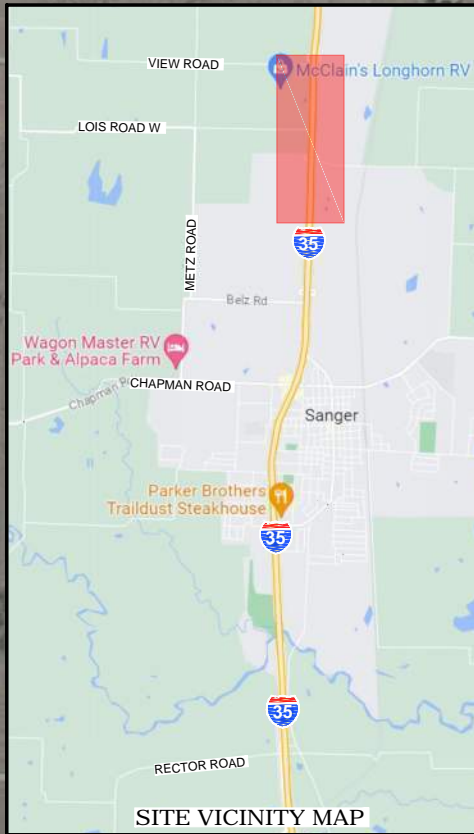


CMJ PROJECT NO. 103-22-454

## PLAN OF BORINGS

I-35 UTILITY RELOCATIONS  
 SANGER, TEXAS

PLATE  
 A.1B



**LEGEND:**



Boring Location

0 375 750 FEET



APPROXIMATE SCALE

SOURCE: GOOGLE EARTH, 2023; IMAGERY DATE: 1/2022



CMJ PROJECT No. 103-22-454

# **PLAN OF BORINGS**

**I-35 UTILITY RELOCATIONS  
SANGER, TEXAS**

**PLATE  
A.1C**

Major Divisions		Grp. Sym.	Typical Names	Laboratory Classification Criteria	
Coarse-grained soils (more than half of the material is larger than No. 200 sieve size)	Gravels (More than half of coarse fraction is larger than No. 4 sieve size)			Determine percentages of sand and gravel from grain size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows: Less than 5 percent.....GW, GP, SW, SP More than 12 percent.....GM, GC, SM, SC 5 to 12 percent.....Borderline cases requiring dual symbols	$C_u = \frac{D_{60}}{D_{10}} \text{ greater than 4: } C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}} \text{ between 1 and 3}$
		GW	Well-graded gravels, gravel-sand mixtures, little or no fines		
		GP	Poorly graded gravels, gravel-sand mixtures, little or no fines		Not meeting all gradation requirements for GW
		GM	Silty gravels, gravel-sand-silt mixtures		Liquid and plastic limits below "A" line or P.I. greater than 4  Liquid and plastic limits plotting in hatched zone between 4 and 7 are borderline cases requiring use of dual symbols
	Sands (More than half of coarse fraction is smaller than No. 4 sieve size)	GC	Clayey gravels, gravel-sand-clay mixtures		
		SW	Well-graded sands, gravelly sands, little or no fines		$C_u = \frac{D_{60}}{D_{10}} \text{ greater than 6: } C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}} \text{ between 1 and 3}$
		SP	Poorly graded sands; gravelly sands, little or no fines		Not meeting all gradation requirements for SW
		SM	Silty sands, sand-silt mixtures		Liquid and plastic limits below "A" line or P.I. less than 4  Liquid and plastic limits plotting between 4 and 7 are borderline cases requiring use of dual symbols
		SC	Clayey sands, sand-clay mixtures		
Fine-grained soils (More than half of material is smaller than No. 200 sieve)	Silts and clays (Liquid limit less than 50)	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity		
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, and lean clays		
		OL	Organic silts and organic silty clays of low plasticity		
	Silts and clays (Liquid limit greater than 50)	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts		
		CH	Inorganic clays of high plasticity, fat clays		
		OH	Organic clays of medium to high plasticity, organic silts		
	Highly Organic soils	Pt	Peat and other highly organic soils		

SOIL OR ROCK TYPES											
	GRAVEL		LEAN CLAY		LIMESTONE						
	SAND		SANDY		SHALE						
	SILT		SILTY		SANDSTONE						
	HIGHLY PLASTIC CLAY		CLAYEY		CONGLOMERATE	Shelby Tube	Auger	Split Spoon	Rock Core	Cone Pen	No Recovery
TERMS DESCRIBING CONSISTENCY, CONDITION, AND STRUCTURE OF SOIL											
Fine Grained Soils (More than 50% Passing No. 200 Sieve)											
Descriptive Item		Penetrometer Reading, (tsf)									
Soft		0.0 to 1.0									
Firm		1.0 to 1.5									
Stiff		1.5 to 3.0									
Very Stiff		3.0 to 4.5									
Hard		4.5+									
Coarse Grained Soils (More than 50% Retained on No. 200 Sieve)											
Penetration Resistance		Descriptive Item		Relative Density							
(blows/foot)											
0 to 4		Very Loose		0 to 20%							
4 to 10		Loose		20 to 40%							
10 to 30		Medium Dense		40 to 70%							
30 to 50		Dense		70 to 90%							
Over 50		Very Dense		90 to 100%							
Soil Structure											
Calcareous		Contains appreciable deposits of calcium carbonate; generally nodular									
Slickensided		Having inclined planes of weakness that are slick and glossy in appearance									
Laminated		Composed of thin layers of varying color or texture									
Fissured		Containing cracks, sometimes filled with fine sand or silt									
Interbedded		Composed of alternate layers of different soil types, usually in approximately equal proportions									
TERMS DESCRIBING PHYSICAL PROPERTIES OF ROCK											
Hardness and Degree of Cementation											
Very Soft or Plastic		Can be remolded in hand; corresponds in consistency up to very stiff in soils									
Soft		Can be scratched with fingernail									
Moderately Hard		Can be scratched easily with knife; cannot be scratched with fingernail									
Hard		Difficult to scratch with knife									
Very Hard		Cannot be scratched with knife									
Poorly Cemented or Friable		Easily crumbled									
Cemented		Bound together by chemically precipitated material; Quartz, calcite, dolomite, siderite, and iron oxide are common cementing materials.									
Degree of Weathering											
Unweathered		Rock in its natural state before being exposed to atmospheric agents									
Slightly Weathered		Noted predominantly by color change with no disintegrated zones									
Weathered		Complete color change with zones of slightly decomposed rock									
Extremely Weathered		Complete color change with consistency, texture, and general appearance approaching soil									
KEY TO CLASSIFICATION AND SYMBOLS										PLATE A.3	

Project No. 103-22-454		Boring No. B-1		Project I-35 Utility Relocations Sanger, TX												
Location See Plate A.1				Water Observations Seepage encountered at 26' during drilling; water at 28' at completion												
Completion Depth 30.0'		Completion Date 2-7-23														
Depth, Ft.	Symbol	Samples	Surface Elevation		Type B-47, w/ CFA		REC %	RQD %	Blows/Ft. or Pen Reading, T.S.F.	Passing No 200 Sieve, %	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Moisture Content, %	Unit Dry Wt. Lbs./Cu. Ft.	Unconfined Compression Pounds/Sq. Ft.
			Stratum Description													
					<u>SILTY CLAY</u> , brown, w/ limestone fragments and occasional ironstone nodules and calcareous nodules, stiff to hard (FILL)				4.5+					13		
					<u>CLAY</u> , dark brown, w/ iron stains and occasional ironstone nodules and pebbles, stiff (possible fill)				2.5					11		
									1.75					26		
									1.5		57	20	37	28		
									1.5					34		
5					<u>SILTY CLAY</u> , dark brown, w/ iron stains and occasional ironstone nodules and pebbles, stiff to very stiff											
									2.5					25		
									2.75					23	106	5300
10																
									2.5					24		
15																
									3.0		49	18	31	21		
20																
									2.0					21	108	3170
25					<u>CLAYEY SAND</u> , light brown, w/ iron stains, gravel, and occasional ironstone nodules and calcareous nodules											
									0.75	35	29	14	15	14		
30																

LOG OF BORING NO. B-1



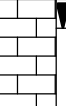
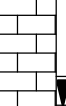


PLATE A.4

Project No. 103-22-454		Boring No. B-2		Project I-35 Utility Relocations Sanger, TX												
Location See Plate A.1				Water Observations Seepage encountered at 27' during drilling; water at 29' at completion												
Completion Depth 30.0'		Completion Date 2-7-23														
Depth, Ft.	Symbol	Samples	Surface Elevation		Type B-47, w/ CFA		REC %	RQD %	Blows/Ft. or Pen Reading, T.S.F.	Passing No 200 Sieve, %	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Moisture Content, %	Unit Dry Wt. Lbs./Cu. Ft.	Unconfined Compression Pounds/Sq. Ft.
			Stratum Description													
			CRUSHED ROCK BASE, 1 foot thick											6		
			SILTY CLAY, brown, w/ limestone fragments and occasional ironstone nodules and calcareous nodules, firm to very stiff (FILL)					3.0						15		
								2.75						17		
								1.25						20		
5			CLAY, dark brown, w/ iron stains and occasional ironstone nodules and calcareous nodules, stiff to very stiff					2.75						28		
								2.5		67	21	46	27			
10								3.25						26	100	5870
15			SILTY CLAY, brown, w/ iron stains and occasional ironstone nodules, calcareous nodules, and pebbles, stiff to very stiff					3.5						19		
20								2.75						18	112	4660
25			SILTY CLAY, tan and light brown, w/ sand layers, calcareous deposits, and occasional calcareous nodules and ironstone nodules, firm to stiff					1.5	76	27	15	12	19			
30								1.25						17	124	650



Project No. <b>103-22-454</b>		Boring No. <b>B-4</b>		Project <b>I-35 Utility Relocations Sanger, TX</b>											
Location <b>See Plate A.1</b>				Water Observations <b>No seepage encountered during drilling; dry at completion</b>											
Completion Depth <b>30.0'</b>		Completion Date <b>1-3-23</b>													
Surface Elevation		Type <b>B-47, w/ CFA</b>													
Depth, Ft.	Symbol	Samples	Stratum Description		REC %	RQD %	Blows/Ft. or Pen Reading, T.S.F.	Passing No 200 Sieve, %	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Moisture Content, %	Unit Dry Wt. Lbs./Cu. Ft.	Unconfined Compression Pounds/Sq. Ft.	
			<b>CLAY / SILTY CLAY</b> , dark brown, w/ limestone fragments and occasional ironstone nodules and calcareous nodules, stiff (FILL)				2.75					21			
							2.5					25	97	3030	
							2.5					21			
							2.75					20			
5			<b>CLAY</b> , dark brown, w/ iron stains and occasional ironstone nodules and pebbles, very stiff				3.0	97	71	23	48	29			
							3.0					19			
10			<b>SILTY SHALY CLAY</b> , light brown, w/ calcareous deposits, limestone fragments, limestone seams, and occasional calcareous nodules, stiff to hard				2.25		36	16	20	16	115	3170	
							100/3.25"								
15															
20			<b>LIMESTONE</b> , gray, w/ shale seams and layers, hard				100/1.75"								
25							100/1.5"								
30							100/1.25"								

Project No. 103-22-454		Boring No. B-5		Project I-35 Utility Relocations Sanger, TX												
Location See Plate A.1				Water Observations No seepage encountered during drilling; dry at completion												
Completion Depth 30.0'		Completion Date 1-3-23														
Depth, Ft.	Symbol	Samples	Surface Elevation		Type B-47, w/ CFA		REC %	RQD %	Blows/Ft. or Pen Reading, T.S.F.	Passing No 200 Sieve, %	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Moisture Content, %	Unit Dry Wt. Lbs./Cu. Ft.	Unconfined Compression Pounds/Sq. Ft.
					Stratum Description											
					CLAY, dark brown, w/ iron stain, pebbles, and occasional calcareous nodules and ironstone nodules, stiff to very stiff - grades brown, w/ ironstone seams below 2'				2.5					22		
									3.25					22		
									2.75		71	21	50	26		
									2.75					26	97	3590
									3.75					19		
5					SILTY CLAY, light reddish brown, w/ ironstone seams, pebbles, and occasional calcareous nodules, stiff to very stiff											
									3.0	70	37	15	22	15		
									3.75					19	110	5380
10					LIMESTONE, tan, w/ clay seams and occasional layers, moderately hard											
									100/2.25"							
15																

Project No. <b>103-22-454</b>		Boring No. <b>B-6</b>		Project <b>I-35 Utility Relocations Sanger, TX</b>											
Location <b>See Plate A.1</b>				Water Observations <b>No seepage encountered during drilling; dry at completion</b>											
Completion Depth <b>30.0'</b>		Completion Date <b>1-3-23</b>													
Surface Elevation		Type <b>B-47, w/ CFA</b>													
Depth, Ft.	Symbol	Samples	Stratum Description		REC %	RQD %	Blows/Ft. or Pen Reading, T.S.F.	Passing No 200 Sieve, %	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Moisture Content, %	Unit Dry Wt. Lbs./Cu. Ft.	Unconfined Compression Pounds/Sq. Ft.	
5			<u>CLAY</u> , dark brown, w/ iron stains, pebbles, and occasional ironstone nodules and calcareous nodules, very stiff to hard - w/ ironstone seams below 2'				3.0					20			
							4.5+					20			
							4.5+	91	70	21	49	20			
							4.5+					21	98	13740	
							4.5+					20			
			<u>LIMESTONE</u> , tan, w/ clay seams, very hard												
10							100/0.375"								
15			<u>LIMESTONE</u> , gray, hard to very hard				100/1"								
20							100/1.5"								
25							100/1.5"								
30							100/1"								

Project No. <b>103-22-454</b>		Boring No. <b>B-7</b>		Project <b>I-35 Utility Relocations Sanger, TX</b>											
Location <b>See Plate A.1</b>				Water Observations <b>No seepage encountered during drilling; dry at completion</b>											
Completion Depth <b>30.0'</b>		Completion Date <b>1-3-23</b>													
Surface Elevation		Type <b>B-47, w/ CFA</b>													
Depth, Ft.	Symbol	Samples	Stratum Description		REC %	RQD %	Blows/Ft. or Pen Reading, T.S.F.	Passing No 200 Sieve, %	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Moisture Content, %	Unit Dry Wt. Lbs./Cu. Ft.	Unconfined Compression Pounds/Sq. Ft.	
			<u>CLAY</u> , brown, w/ iron stains and occasional ironstone nodules, calcareous nodules, limestone fragments, stiff to very stiff				3.0					23			
			<u>SILTY CLAY</u> , light reddish brown and tan, w/ ironstone seams, calcareous deposits, and occasional calcareous nodules, stiff to hard				2.0	92	65	18	47	26			
			<u>LIMESTONE</u> , tan, very hard				2.25					29			
5							2.25					13			
							4.5+					15	113	2800	
10			<u>LIMESTONE</u> , gray, hard				100/0.875"								
15							100/1.5"								
20			- w/ shale seams below 20'				100/1.5"								
25							100/1.25"								
30							100/1.25"								

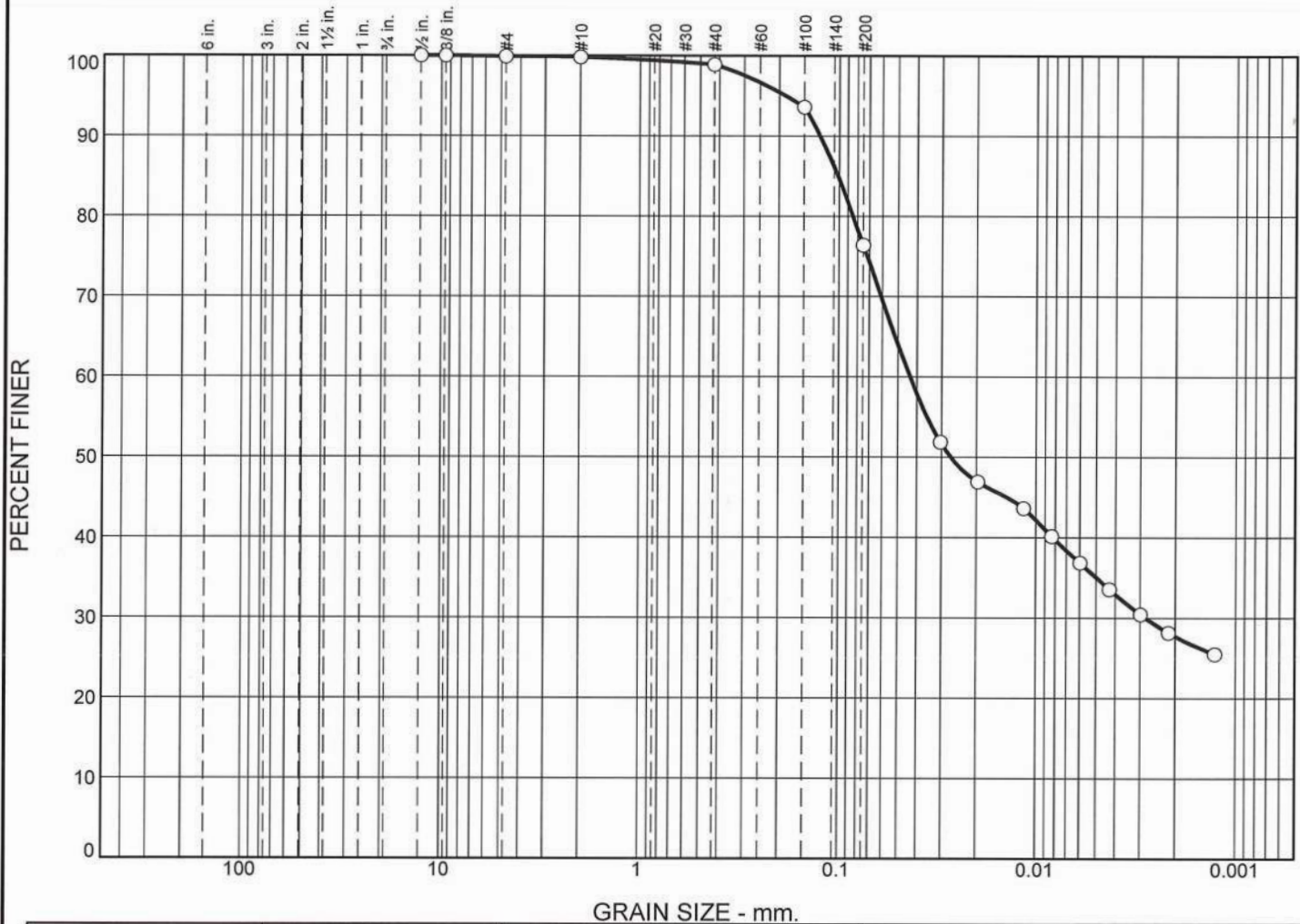








# Particle Size Distribution Report

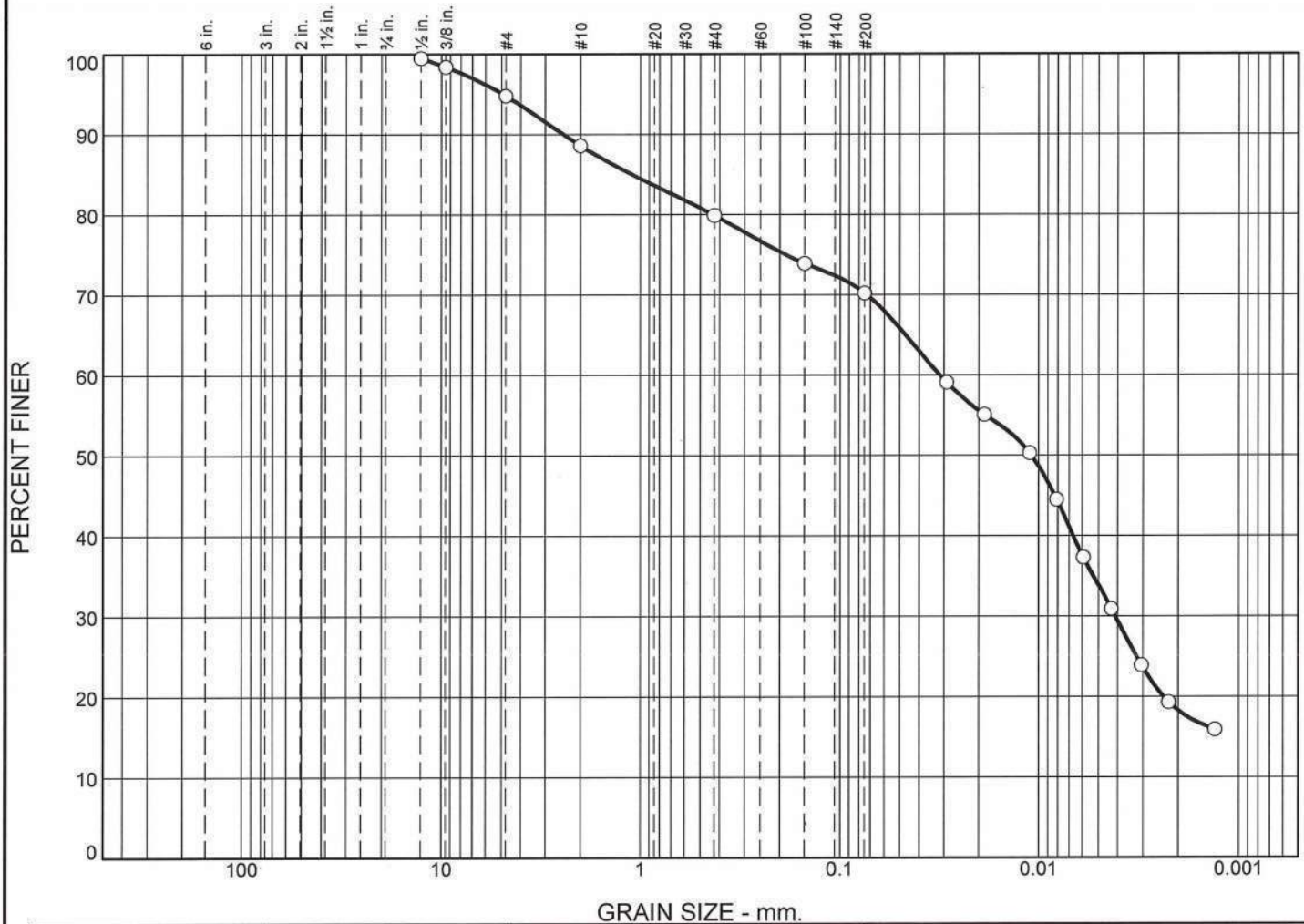


GRAIN SIZE - mm.									
% +3"	% Gravel		% Sand			% Fines			
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay		
0.0	0.0	0.1	0.1	0.9	22.5	41.3	35.1		
LL	PL	D <sub>85</sub>	D <sub>60</sub>	D <sub>50</sub>	D <sub>30</sub>	D <sub>15</sub>	D <sub>10</sub>	C <sub>c</sub>	C <sub>u</sub>
27	15	0.1012	0.0434	0.0270	0.0028				

Material Description	USCS	AASHTO
	CL	A-6(7)

<b>Project No.</b> 103-22-454 <b>Client:</b> Kimley-Horn & Associates <b>Project:</b> IH-35 Utility Reloc-Lois Rd. E. to Duck Creek-Sanger,TX  <b>Depth:</b> 24-25 <b>Sample Number:</b> B-2	<b>Remarks:</b>      
<b>CMJ ENGINEERING, INC.</b>  <b>Fort Worth, Texas</b>	

# Particle Size Distribution Report



GRAIN SIZE - mm.									
% +3"	% Gravel		% Sand			% Fines			
	Coarse	Fine	Coarse	Medium	Fine	Silt		Clay	
<input type="radio"/>			6.2	8.7	9.7	36.4		33.8	
<input type="checkbox"/>									
<input checked="" type="checkbox"/>	LL	PL	D <sub>85</sub>	D <sub>60</sub>	D <sub>50</sub>	D <sub>30</sub>	D <sub>15</sub>	D <sub>10</sub>	C <sub>c</sub> C <sub>u</sub>
<input type="radio"/>	37	15	1.0996	0.0315	0.0109	0.0041			
<input type="checkbox"/>									
<input type="checkbox"/>									
Material Description								USCS	AASHTO
<input type="radio"/>								CL	A-6(13)

**Project No.** 103-22-454    **Client:** Kimley-Horn & Associates  
**Project:** IH-35 Utility Reloc-Lois Rd. E. to Duck Creek-Sanger,TX

☐ **Depth:** 7-8      **Sample Number:** B-5

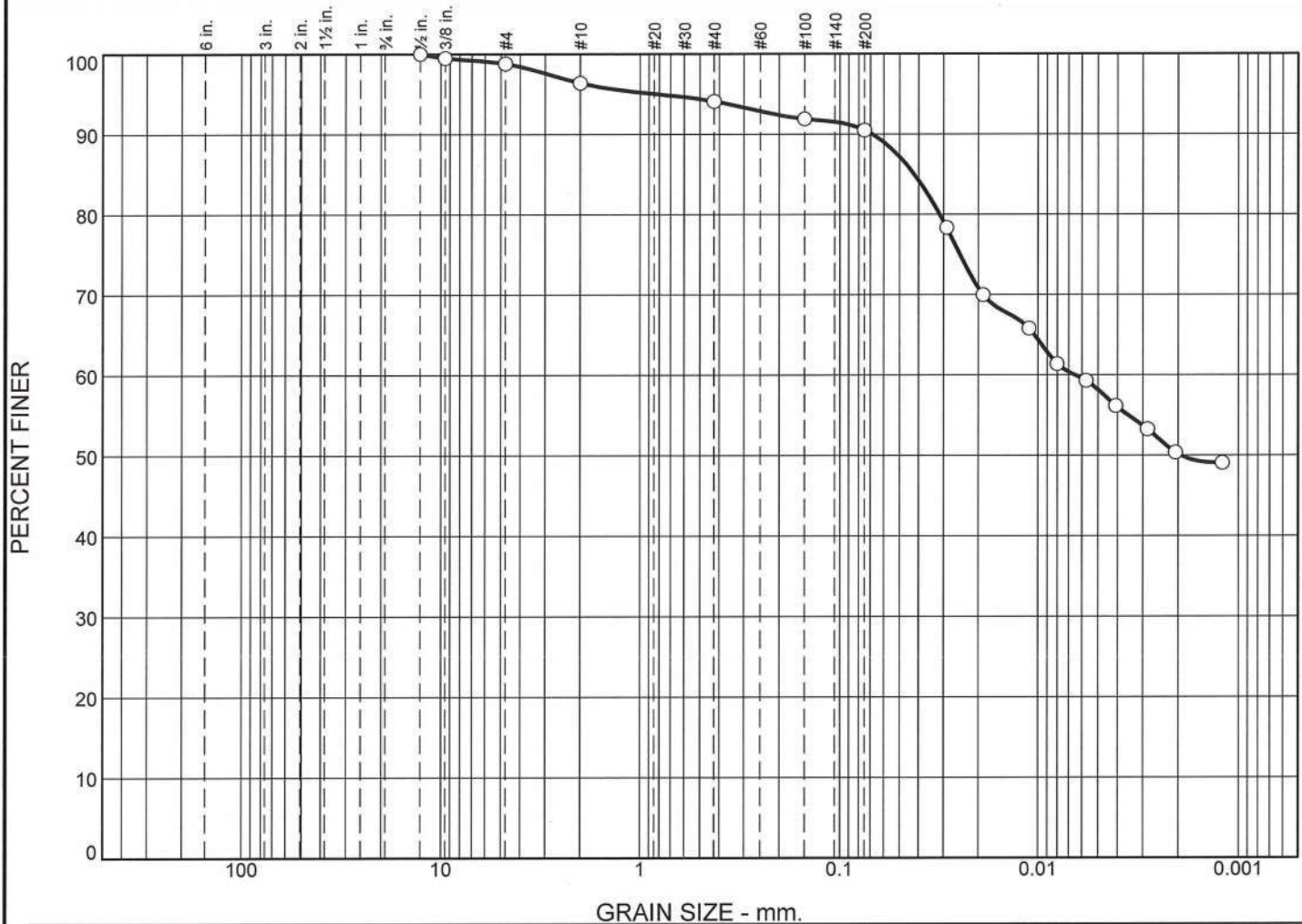
**CMJ ENGINEERING, INC.**

**Fort Worth, Texas**

**Remarks:**

**PLATE A.16**

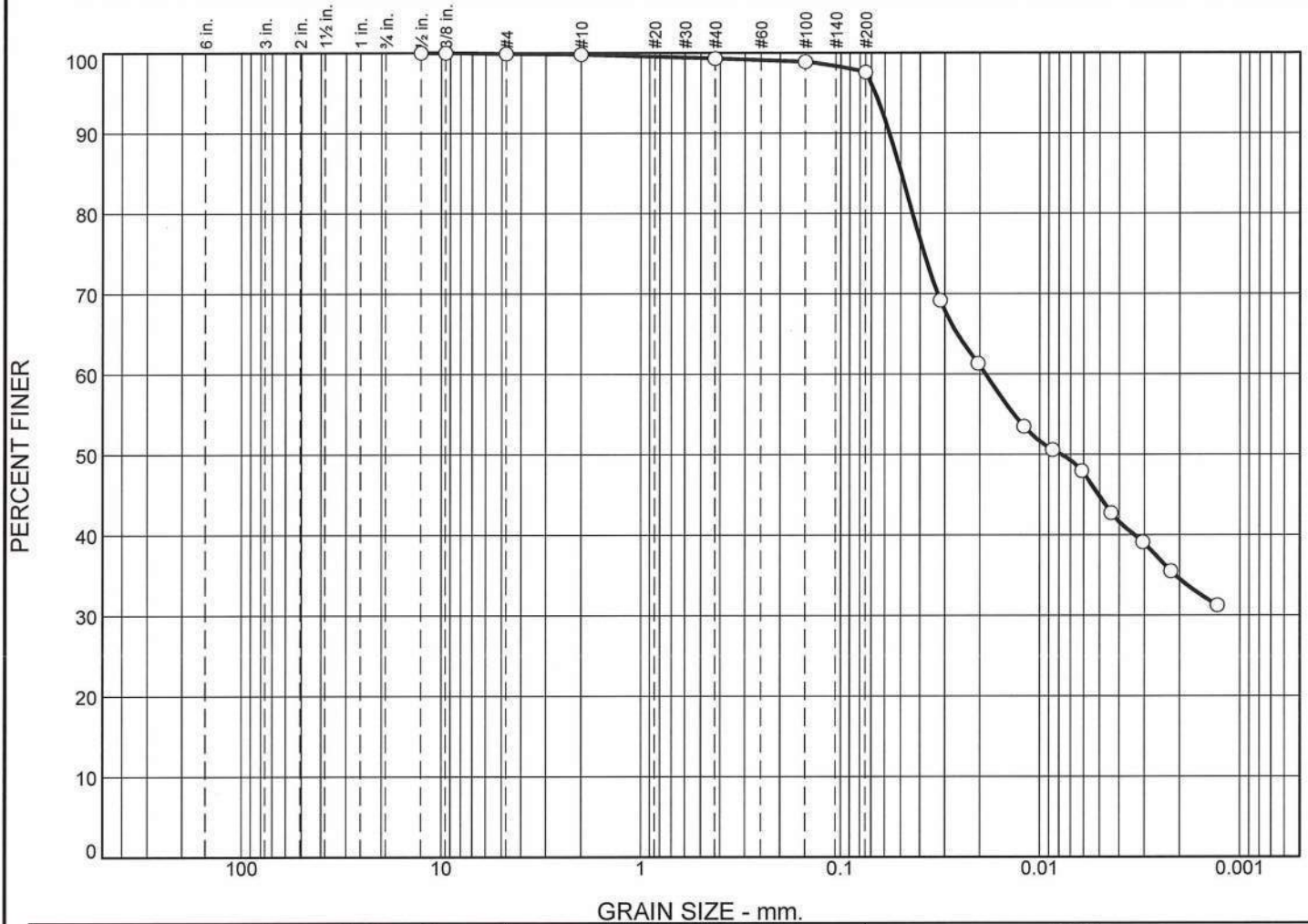
# Particle Size Distribution Report



	% +3"		% Gravel		% Sand			% Fines			
			Coarse	Fine	Coarse	Medium	Fine	Silt		Clay	
○	0.0		0.0	1.2	2.4	2.3	3.6	32.3		58.2	
✗	LL	PL	D85	D60	D50	D30	D15	D10	Cc	Cu	
○	70	21	0.0422	0.0065	0.0019						
Material Description									USCS	AASHTO	
○										CH	A-7-6(48)

<b>Project No.</b> 103-22-454 <b>Client:</b> Kimley-Horn & Associates <b>Project:</b> IH-35 Utility Reloc-Lois Rd. E. to Duck Creek-Sanger,TX  <b>Depth:</b> 2-3 <b>Sample Number:</b> B-6		<b>Remarks:</b>          <div>PLATE A.17</div>
<div>CMJ ENGINEERING, INC.</div> <div>Fort Worth, Texas</div>		

# Particle Size Distribution Report



GRAIN SIZE - mm.										
% +3"		% Gravel		% Sand			% Fines			
		Coarse	Fine	Coarse	Medium	Fine	Silt		Clay	
0.0		0.0	0.1	0.1	0.5	1.7	52.8		44.8	
LL	PL	D <sub>85</sub>	D <sub>60</sub>	D <sub>50</sub>	D <sub>30</sub>	D <sub>15</sub>	D <sub>10</sub>	C <sub>c</sub>	C <sub>u</sub>	
39	17	0.0497	0.0187	0.0078						
Material Description							USCS		AASHTO	
							CL		A-6(22)	

**Project No.** 103-22-454    **Client:** Kimley-Horn & Associates  
**Project:** IH-35 Utility Reloc-Lois Rd. E. to Duck Creek-Sanger,TX

**Depth:** 7-8    **Sample Number:** B-11

**CMJ ENGINEERING, INC.**

**Fort Worth, Texas**

**Remarks:**

**PLATE A.18**

## **EASEMENTS**

**EXHIBIT A**  
**PARCEL 074-152 WWE**

**METES & BOUNDS DESCRIPTION**  
**WATER AND WASTEWATER EASEMENT**

**BEING** a 625 square foot (0.0144 acre) tract of land situated in the Henry Tierwester Survey, Abstract No. 1241, Denton County, Texas, and being part of a called 103.99 acre tract of land described in Warranty Deed to Sanger Ranch, LTD recorded in Volume 4330, Page 1874, Deed Records, Denton County, Texas, and being more particularly described as follows:

**BEGINNING** at the northwest corner of a called 5.6841 acre tract of land described in the Deed to the State of Texas recorded in Instrument No. 2020-150289, Official Public Records, Denton County, Texas, and being in the west right-of-way line of Interstate Highway No. 35, a variable width right-of-way;

**THENCE** South 01°17'43" West, along the west line of the said called 5.6841 acre tract, and along the said west right-of-way line, a distance of 25.00 feet to a point for corner, from which a 5/8-inch iron rod found bears South 1°17'43" West, a distance of 1066.49 feet;

**THENCE** South 89°39'30" West, departing the said west line, and the said west right-of-way line, a distance of 25.00 feet to a point for corner;

**THENCE** North 01°17'43" East, a distance of 25.00 feet to a point for corner in the north line of the said called 103.99 acre tract;

**THENCE** South 89°39'30" East, along the said north line, a distance of 25.00 feet to the **POINT OF BEGINNING** and containing 625 square feet or 0.0144 acres of land, more or less.

**NOTES:**

Bearing system based on the Texas Coordinate System of 1983 (2011 adjustment), North Central Zone (4202). A survey plat of even survey date herewith accompanies this metes and bounds description.

The undersigned, Registered Professional Land Surveyor, hereby certifies that the foregoing description accurately sets out the metes and bounds of the easement tract.

WATER AND WASTEWATER  
EASEMENT  
HENRY TIERWESTER SURVEY  
ABSTRACT NO. 1241  
CITY OF SANGER  
DENTON COUNTY, TEXAS

  
JOSHUA D. WARGO  
REGISTERED PROFESSIONAL  
LAND SURVEYOR NO. 6391  
801 CHERRY STREET,  
UNIT 11 SUITE 1300  
FORT WORTH, TEXAS 76102  
PH. 817-335-6511  
josh.wargo@kimley-horn.com



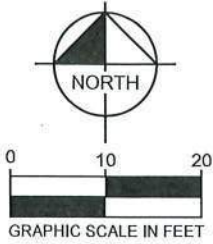
**Kimley»Horn**

801 Cherry Street, Unit 11, # 1300  
Fort Worth, Texas 76102 FIRM # 10194040

Tel. No. (817) 335-6511  
www.kimley-horn.com

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
N/A	DMD	JDW	6/21/2023	061322300	1 OF 2

**EXHIBIT B**  
**PARCEL 074-152 WWE**



**LEGEND**

P.O.B. = POINT OF BEGINNING  
IRF = IRON ROD FOUND

SANGER RANCH, LTD  
INST. NO. 2000-83207

**0.0144 ACRES**  
**625 SQ. FT.**

N: 7192754.00  
E: 2372366.77

CALLLED 103.99 ACRES  
SANGER RANCH, LTD  
VOL. 4330, PG. 1874

CALLLED 1.5321 ACRES  
STATE OF TEXAS  
INST. NO. 2020-150292

**P.O.B.**

CALLLED 5.6841 ACRES  
STATE OF TEXAS  
INST. NO. 2020-150289

LINE TABLE		
NO.	BEARING	LENGTH
L1	S01°17'43"W	25.00'
L2	N89°39'30"W	25.00'
L3	N01°17'43"E	25.00'
L4	S89°39'30"E	25.00'

N: 7192728.85  
E: 2372391.21

1066.49'  
S1°17'43"W

5/8" IRF

S27°30'56"E 114.13'

**INTERSTATE**  
**HIGHWAY NO. 35**  
(A VARIABLE WIDTH RIGHT-OF-WAY)

5/8" IRF

**NOTES**

Bearing system based on the Texas Coordinate System of 1983 (2011 adjustment), North Central Zone (4202). Coordinates have been scaled to surface values using a surface adjustment factor of 1.000150630. A metes and bounds description of even survey date herewith accompanies this survey plat.

The undersigned, Registered Professional Land Surveyor, hereby certifies that this survey plat accurately sets out the metes and bounds of the easement tract.

**WATER AND WASTEWATER  
EASEMENT**  
**HENRY TIERWESTER SURVEY**  
**ABSTRACT NO. 1241**  
**CITY OF SANGER**  
**DENTON COUNTY, TEXAS**

  
JOSHUA D. WARGO  
REGISTERED PROFESSIONAL  
LAND SURVEYOR NO. 6391  
801 CHERRY STREET,  
UNIT 11 SUITE 1300  
FORT WORTH, TEXAS 76102  
PH. 817-335-6511  
josh.wargo@kimley-horn.com



**Kimley»Horn**

801 Cherry Street, Unit 11, # 1300  
Fort Worth, Texas 76102 FIRM # 10194040

Tel. No. (817) 335-6511  
www.kimley-horn.com

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
1" = 20'	DMD	JDW	6/21/2023	061322300	2 OF 2

**EXHIBIT A**  
**PARCEL 074-152 TCE**

**METES & BOUNDS DESCRIPTION**  
**TEMPORARY CONSTRUCTION EASEMENT**

**BEING** a 600 square foot (0.0138 acre) tract of land situated in the Henry Tierwester Survey, Abstract No. 1241, Denton County, Texas, and being part of a called 103.99 acre tract of land described in Warranty Deed to Sanger Ranch, LTD recorded in Volume 4330, Page 1874, Deed Records, Denton County, Texas, and being more particularly described as follows:

**COMMENCING** at the northwest corner of a called 5.6841 acre tract of land described in the Deed to the State of Texas recorded in Instrument No. 2020-150289, Official Public Records, Denton County, Texas, and being in the west right-of-way line of Interstate Highway No. 35, a variable width right-of-way;

**THENCE** South 01°17'43" West, along the west line of the said called 5.6841 acre tract, and along the said west right-of-way line, a distance of 25.00 feet to the **POINT OF BEGINNING**;

**THENCE** South 01°17'43" West, continuing along the said west line, and the said west right-of-way line, a distance of 10.00 feet to a point for corner, from which a 5/8-inch iron rod found bears South 1°17'43" West, a distance of 1056.49 feet;

**THENCE** North 89°39'30" West, departing the said west line, and the said west right-of-way line, a distance of 35.00 feet to a point for corner;

**THENCE** North 01°17'43" East, a distance of 35.00 feet to a point for corner in the north line of the said called 103.99 feet;

**THENCE** South 89°39'30" East, along the said north line, a distance of 10.00 feet to a point for corner;

**THENCE** South 01°17'43" West, departing the said north line, a distance of 25.00 feet to a point for corner;

**THENCE** South 89°39'30" East, a distance of 25.00 feet to the **POINT OF BEGINNING** and containing 600 square feet or 0.0138 acres of land, more or less.

**NOTES:**

Bearing system based on the Texas Coordinate System of 1983 (2011 adjustment), North Central Zone (4202). A survey plat of even survey date herewith accompanies this metes and bounds description.

The undersigned, Registered Professional Land Surveyor, hereby certifies that the foregoing description accurately sets out the metes and bounds of the easement tract.

**TEMPORARY CONSTRUCTION  
EASEMENT  
HENRY TIERWESTER SURVEY  
ABSTRACT NO. 1241  
CITY OF SANGER  
DENTON COUNTY, TEXAS**

  
JOSHUA D. WARGO  
REGISTERED PROFESSIONAL  
LAND SURVEYOR NO. 6391  
801 CHERRY STREET,  
UNIT 11 SUITE 1300  
FORT WORTH, TEXAS 76102  
PH. 817-335-6511  
josh.wargo@kimley-horn.com



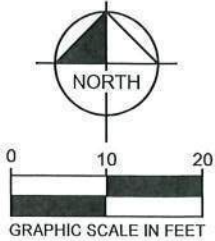
**Kimley»Horn**

801 Cherry Street, Unit 11, # 1300  
Fort Worth, Texas 76102 FIRM # 10194040

Tel. No. (817) 335-6511  
www.kimley-horn.com

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
N/A	DMD	JDW	6/21/2023	061322300	1 OF 2

**EXHIBIT B**  
**PARCEL 074-152 TCE**



SANGER RANCH, LTD  
INST. NO. 2000-83207

CALLED 1.5321 ACRES  
STATE OF TEXAS  
INST. NO. 2020-150292

**0.0138 ACRES**  
**600 SQ. FT.**

CALLLED 103.99 ACRES  
SANGER RANCH, LTD  
VOL. 4330, PG. 1874

N: 7192719.06  
E: 2372355.98

N: 7192754.00  
E: 2372366.77

CALLLED 5.6841 ACRES  
STATE OF TEXAS  
INST. NO. 2020-150289

**P.O.C.**

**P.O.B.**

**INTERSTATE**  
**HIGHWAY NO. 35**  
(A VARIABLE WIDTH RIGHT-OF-WAY)

**LEGEND**

P.O.C. = POINT OF COMMENCING  
P.O.B. = POINT OF BEGINNING  
IRF = IRON ROD FOUND

LINE TABLE		
NO.	BEARING	LENGTH
L1	S01°17'43"W	10.00'
L2	S89°39'30"E	10.00'
L3	S01°17'43"W	25.00'
L4	S89°39'30"E	25.00'

**NOTES**

Bearing system based on the Texas Coordinate System of 1983 (2011 adjustment), North Central Zone (4202). Coordinates have been scaled to surface values using a surface adjustment factor of 1.000150630. A metes and bounds description of even survey date herewith accompanies this survey plat.

The undersigned, Registered Professional Land Surveyor, hereby certifies that this survey plat accurately sets out the metes and bounds of the easement tract.

TEMPORARY CONSTRUCTION  
EASEMENT  
HENRY TIERWESTER SURVEY  
ABSTRACT NO. 1241  
CITY OF SANGER  
DENTON COUNTY, TEXAS

*Joshua D. Wargo* 6/21/23  
JOSHUA D. WARGO  
REGISTERED PROFESSIONAL  
LAND SURVEYOR NO. 6391  
801 CHERRY STREET,  
UNIT 11 SUITE 1300  
FORT WORTH, TEXAS 76102  
PH. 817-335-6511  
josh.wargo@kimley-horn.com



**Kimley»Horn**

801 Cherry Street, Unit 11, # 1300  
Fort Worth, Texas 76102 FIRM # 10194040

Tel. No. (817) 335-6511  
www.kimley-horn.com

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
1" = 20'	DMD	JDW	6/21/2023	061322300	2 OF 2

**EXHIBIT A**  
**PARCEL 074-152-2 WWE**

**METES & BOUNDS DESCRIPTION**  
**WATER AND WASTEWATER EASEMENT**

**BEING** a 300 square foot (0.0069 acre) tract of land situated in the Henry Tierwester Survey, Abstract No. 1241, Denton County, Texas, and being part of a called 103.99 acre tract of land described in Warranty Deed to Sanger Ranch, LTD recorded in Volume 4330, Page 1874, Deed Records, Denton County, Texas, and being more particularly described as follows:

**COMMENCING** at the southwest corner of a called 5.6841 acre tract of land described in the Deed to the State of Texas recorded in Instrument No. 2020-150289, Official Public Records, Denton County, Texas, and being in the west right-of-way line of Interstate Highway No. 35, a variable width right-of-way;

**THENCE** North 01°17'43" East, along the west line of the said called 5.6841 acre tract, and along the said west right-of-way line, a distance of 725.15 feet to the **POINT OF BEGINNING**;

**THENCE** South 89°47'11" West, departing the said west line, and the said west right-of-way line, a distance of 15.00 feet to a point for corner;

**THENCE** North 01°17'43" East, a distance of 20.01 feet to a point for corner;

**THENCE** North 89°47'11" East, a distance of 15.00 feet to a point for corner in the aforementioned west line of the called 5.6841 acre tract, and the aforementioned west right-of-way line of Interstate Highway No. 35, from which a 5/8-inch iron rod found bears North 01°17'43" East, a distance of 8.62 feet;

**THENCE** South 01°17'43" West, along the said west line, and the said west right-of-way line, a distance of 20.01 feet to the **POINT OF BEGINNING** and containing 300 square feet or 0.0069 acres of land, more or less.

**NOTES:**

Bearing system based on the Texas Coordinate System of 1983 (2011 adjustment), North Central Zone (4202). A survey plat of even survey date herewith accompanies this metes and bounds description.

The undersigned, Registered Professional Land Surveyor, hereby certifies that the foregoing description accurately sets out the metes and bounds of the easement tract.

WATER AND WASTEWATER  
EASEMENT  
HENRY TIERWESTER SURVEY  
ABSTRACT NO. 1241  
CITY OF SANGER  
DENTON COUNTY, TEXAS

  
JOSHUA D. WARGO  
REGISTERED PROFESSIONAL  
LAND SURVEYOR NO. 6391  
801 CHERRY STREET,  
UNIT 11 SUITE 1300  
FORT WORTH, TEXAS 76102  
PH. 817-335-6511  
josh.wargo@kimley-horn.com



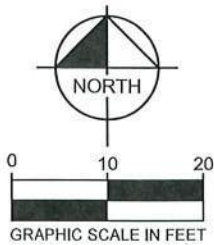
**Kimley»Horn**

801 Cherry Street, Unit 11, # 1300  
Fort Worth, Texas 76102 FIRM # 10194040

Tel. No. (817) 335-6511  
www.kimley-horn.com

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
N/A	DMD	JDW	6/7/2023	061322300	1 OF 2

**EXHIBIT B**  
**PARCEL 074-152-2 WWE**



**LEGEND**

P.O.C. = POINT OF COMMENCING  
P.O.B. = POINT OF BEGINNING  
IRF = IRON ROD FOUND

**0.0069 ACRES**  
**300 SQ. FT.**

CALLLED 103.99 ACRES  
SANGER RANCH, LTD  
VOL. 4330, PG. 1874

LINE TABLE		
NO.	BEARING	LENGTH
L1	S89°47'11"W	15.00'
L2	N01°17'43"E	20.01'
L3	N89°47'11"E	15.00'
L4	S01°17'43"W	20.01'

CALLLED 5.6841 ACRES  
STATE OF TEXAS  
INST. NO. 2020-150289

**P.O.B.**

N: 7191532.80  
E: 2372419.18

**INTERSTATE**  
**HIGHWAY NO. 35**  
(A VARIABLE WIDTH RIGHT-OF-WAY)

**P.O.C.**

CALLLED 83.720 ACRES  
SANGER RANCH, LTD  
VOL. 4269, PG. 1244

**NOTES**

Bearing system based on the Texas Coordinate System of 1983 (2011 adjustment), North Central Zone (4202). Coordinates have been scaled to surface values using a surface adjustment factor of 1.000150630. A metes and bounds description of even survey date herewith accompanies this survey plat.

The undersigned, Registered Professional Land Surveyor, hereby certifies that this survey plat accurately sets out the metes and bounds of the easement tract.

**WATER AND WASTEWATER  
EASEMENT**  
**HENRY TIERWESTER SURVEY**  
**ABSTRACT NO. 1241**  
**CITY OF SANGER**  
**DENTON COUNTY, TEXAS**

*Joshua D. Wargo* 4/21/23  
**JOSHUA D. WARGO**  
REGISTERED PROFESSIONAL  
LAND SURVEYOR NO. 6391  
801 CHERRY STREET,  
UNIT 11 SUITE 1300  
FORT WORTH, TEXAS 76102  
PH. 817-335-6511  
josh.wargo@kimley-horn.com



**Kimley»Horn**

801 Cherry Street, Unit 11, # 1300  
Fort Worth, Texas 76102 . FIRM # 10194040

Tel. No. (817) 335-6511  
www.kimley-horn.com

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
1" = 20'	DMD	JDW	6/7/2023	061322300	2 OF 2

**EXHIBIT A**  
**PARCEL 074-164 WWE**

**METES & BOUNDS DESCRIPTION**  
**WATER AND WASTEWATER EASEMENT**

**BEING** a 6,571 square foot (0.1508 acre) tract of land situated in the Reuben Bebee Survey, Abstract No. 29, Denton County, Texas, and being part of a called 91.02 acre tract of land described in Special Warranty Deed to Paage, LTD recorded in Instrument No. 2015-143392, Official Public Records, Denton County, Texas, and being more particularly described as follows:

**COMMENCING** at a 5/8-inch iron rod with cap stamped "TXDOT ROW SURVEY MARKER" found at the northeast corner of a called 0.969 acre tract of land described in Judgement to the State of Texas recorded in Instrument No. 2022-170924, said Official Public Records, and being in the east right-of-way line of Interstate Highway No. 35, a variable width right-of-way;

**THENCE** South 1°17'43" West, along the east line of the said called 0.969 acre tract, and along the said east right-of-way line, a distance of 766.93 feet to the **POINT OF BEGINNING**;

**THENCE** North 89°47'11" East, departing the said east line, and the said east right-of-way line, a distance of 8.54 feet to a point for corner;

**THENCE** South 73°50'07" East, a distance of 319.45 feet to a point for corner in the west line of a Sewer Easement recorded in Volume 869, Page 859, Deed Records, Denton County, Texas;

**THENCE** South 00°18'49" East, along the said west line, a distance of 15.91 feet to a point for corner;

**THENCE** South 16°35'13" East, continuing along the said west line, a distance of 5.64 feet to a point for corner;

**THENCE** North 73°50'07" West, departing the said west line, a distance of 324.13 feet to a point for corner;


**THENCE** South 89°47'11" West, a distance of 6.19 feet to a point for corner in the aforementioned east line of the called 0.969 acre tract, and the aforementioned east right-of-way line of Interstate Highway No. 35, from which a 5/8-inch iron rod with cap stamped "TXDOT ROW SURVEY MARKER" found bears South 1°17'43" West, a distance of 151.67 feet;

**THENCE** North 01°17'43" East, along the said east line, and along the said east right-of-way line, a distance of 20.01 feet to the **POINT OF BEGINNING** and containing 6,571 square feet or 0.1508 acres of land, more or less.

**NOTES:**

Bearing system based on the Texas Coordinate System of 1983 (2011 adjustment), North Central Zone (4202). A survey plat of even survey date herewith accompanies this metes and bounds description.

The undersigned, Registered Professional Land Surveyor, hereby certifies that the foregoing description accurately sets out the metes and bounds of the easement tract.

  
JOSHUA D. WARGO  
REGISTERED PROFESSIONAL  
LAND SURVEYOR NO. 6391  
801 CHERRY STREET,  
UNIT 11 SUITE 1300  
FORT WORTH, TEXAS 76102  
PH. 817-335-6511  
josh.wargo@kimley-horn.com



**WATER AND WASTEWATER  
EASEMENT**  
**REUBEN BEBEE SURVEY**  
**ABSTRACT NO. 29**  
**CITY OF SANGER**  
**DENTON COUNTY, TEXAS**

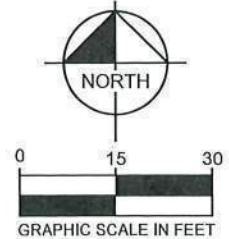
**Kimley»Horn**

801 Cherry Street, Unit 11, # 1300  
Fort Worth, Texas 76102 FIRM # 10194040

Tel. No. (817) 335-6511  
www.kimley-horn.com

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
N/A	DMD	JDW	6/21/2023	061322300	1 OF 3

**EXHIBIT B**  
**PARCEL 074-164 WWE**



**INTERSTATE  
HIGHWAY NO. 35**  
(A VARIABLE WIDTH RIGHT-OF-WAY)

CALLED 0.969 ACRES  
STATE OF TEXAS  
INST. NO. 2022-170924

CALLED 39.63 ACRES  
ALL IN PROPERTIES, LLC  
INST. NO. 2021-211206

5/8" IRFC  
"TXDOT ROW SURVEY MARKER"

**P.O.C.**

CALLED 91.02 ACRES  
PAAGE, LTD  
INST. NO. 2015-143392

**P.O.B.**

S1°17'43"W  
766.93'

L5  
L4

S1°17'43"W  
151.67'

5/8" IRFC  
"TXDOT ROW SURVEY MARKER"

S73°50'07"E 319.45'

**0.1508 ACRES  
6,571 SQ. FT.**

**MATCH LINE (SEE SHEET 3)**

**LEGEND**

P.O.B. = POINT OF BEGINNING  
IRFC = IRON ROD W/CAP FOUND

**NOTES**

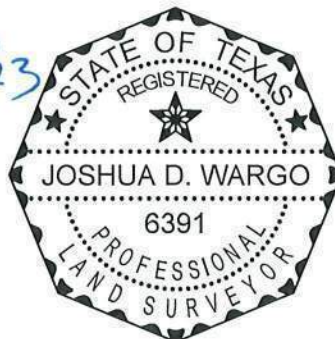
Bearing system based on the Texas Coordinate System of 1983 (2011 adjustment), North Central Zone (4202). Coordinates have been scaled to surface values using a surface adjustment factor of 1.000150630. A metes and bounds description of even survey date herewith accompanies this survey plat.

The undersigned, Registered Professional Land Surveyor, hereby certifies that this survey plat accurately sets out the metes and bounds of the easement tract.

**WATER AND WASTEWATER  
EASEMENT**

**REUBEN BEBEE SURVEY  
ABSTRACT NO. 29  
CITY OF SANGER  
DENTON COUNTY, TEXAS**

*Joshua D. Wargo* 6/21/23  
**JOSHUA D. WARGO**  
REGISTERED PROFESSIONAL  
LAND SURVEYOR NO. 6391  
801 CHERRY STREET,  
UNIT 11 SUITE 1300  
FORT WORTH, TEXAS 76102  
PH. 817-335-6511  
josh.wargo@kimley-horn.com



**Kimley»Horn**

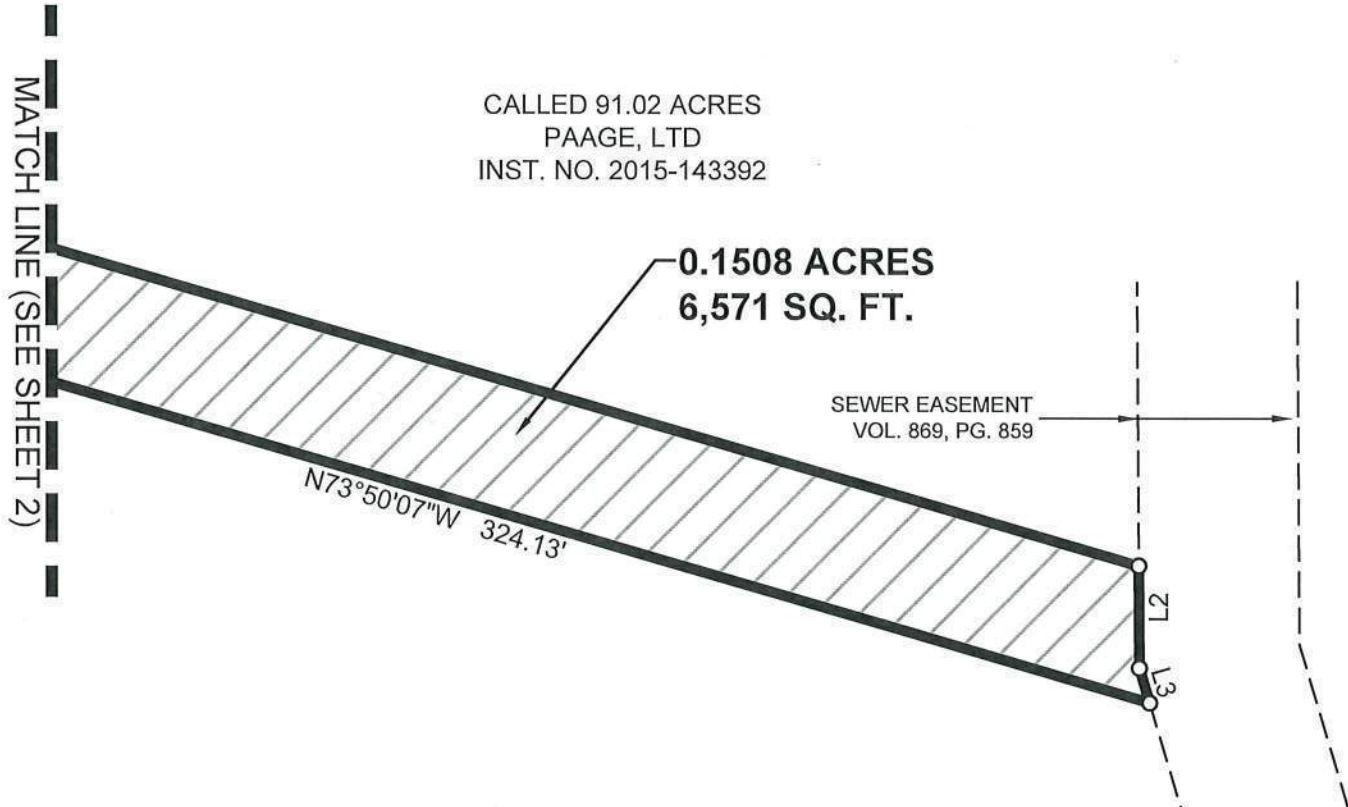
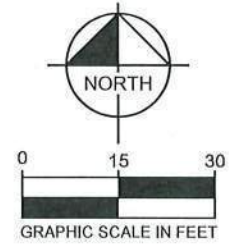
801 Cherry Street, Unit 11, # 1300  
Fort Worth, Texas 76102 FIRM # 10194040

Tel. No. (817) 335-6511  
www.kimley-horn.com

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
1" = 30'	DMD	JDW	6/21/2023	061322300	2 OF 3

**EXHIBIT B**  
**PARCEL 074-164 WWE**

LINE TABLE		
NO.	BEARING	LENGTH
L1	N89°47'11"E	8.54'
L2	S00°18'49"E	15.91'
L3	S16°35'13"E	5.64'
L4	S89°47'11"W	6.19'
L5	N01°17'43"E	20.01'



**LEGEND**

P.O.B. = POINT OF BEGINNING  
IRFC = IRON ROD W/CAP FOUND

**WATER AND WASTEWATER  
EASEMENT**  
**REUBEN BEBEE SURVEY**  
**ABSTRACT NO. 29**  
**CITY OF SANGER**  
**DENTON COUNTY, TEXAS**

**Kimley»Horn**

801 Cherry Street, Unit 11, # 1300  
Fort Worth, Texas 76102 FIRM # 10194040

Tel. No. (817) 335-6511  
www.kimley-horn.com

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
1" = 30'	DMD	JDW	6/21/2023	061322300	3 OF 3

**EXHIBIT A**  
**PARCEL 074-165 WWE**

**METES & BOUNDS DESCRIPTION**  
**WATER AND WASTEWATER EASEMENT**

**BEING** a 1,369 square foot (0.0314 acre) tract of land situated in the Reuben Bebee Survey, Abstract No. 29, Denton County, Texas, and being part of a called 39.63 acre tract of land described in Special Warranty Deed to All In Properties, LLC recorded in Instrument No. 2021-211206, Official Public Records, Denton County, Texas, being more particularly described as follows:

**BEGINNING** at the northeast corner of a called 0.1890 acre tract of land described in Deed to the State of Texas recorded in Instrument No. 2021-98234, said Official Public Records, and being the northwest corner of the said called 39.63 acre tract, and being in the east right-of-way line of Interstate Highway No. 35, a variable width right-of-way;

**THENCE** South 89°35'11" East, along the north line of the said called 39.63 acre tract, a distance of 20.00 feet to a point for corner;

**THENCE** South 01°17'43" West, departing the said north line, a distance of 68.36 feet to a point for corner;

**THENCE** South 89°49'00" West, a distance of 20.01 feet to a point for corner in the east line of the said called 0.1890 acre tract, and being in the aforementioned east right-of-way line of Interstate Highway No. 35;


**THENCE** North 01°17'43" East, along the said east line, and along the said east right-of-way line, a distance of 68.57 feet to the **POINT OF BEGINNING** and containing 1,369 square feet or 0.0314 acres of land, more or less.

**NOTES:**

Bearing system based on the Texas Coordinate System of 1983 (2011 adjustment), North Central Zone (4202). A survey plat of even survey date herewith accompanies this metes and bounds description.

The undersigned, Registered Professional Land Surveyor, hereby certifies that the foregoing description accurately sets out the metes and bounds of the easement tract.

**WATER AND WASTEWATER  
EASEMENT  
REUBEN BEBEE SURVEY  
ABSTRACT NO. 29  
CITY OF SANGER  
DENTON COUNTY, TEXAS**

 6/21/23  
**JOSHUA D. WARGO**  
REGISTERED PROFESSIONAL  
LAND SURVEYOR NO. 6391  
801 CHERRY STREET,  
UNIT 11 SUITE 1300  
FORT WORTH, TEXAS 76102  
PH. 817-335-6511  
josh.wargo@kimley-horn.com



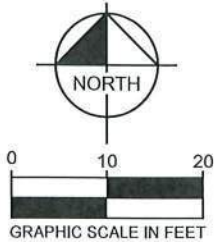
**Kimley»Horn**

801 Cherry Street, Unit 11, # 1300  
Fort Worth, Texas 76102 FIRM # 10194040

Tel. No. (817) 335-6511  
www.kimley-horn.com

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
N/A	DMD	JDW	6/21/2023	061322300	1 OF 2

**EXHIBIT B**  
**PARCEL 074-165 WWE**



CALLED 0.0555 ACRES  
(LIS PENDENS)  
STATE OF TEXAS  
ISNT. NO. 2022-2754

**P.O.B.**

CALLED 0.1890 ACRES  
STATE OF TEXAS  
ISNT. NO. 2021-98234

**INTERSTATE  
HIGHWAY NO. 35**  
(A VARIABLE WIDTH RIGHT-OF-WAY)

LOT 1, BLOCK A  
THE SPORTSMAN 2 GAS  
STATION & CONVENIENCE  
STORE ADDITION  
INST. NO. 2021-184

**0.0314 ACRES  
1,369 SQ. FT.**

CALLLED 39.63 ACRES  
ALL IN PROPERTIES, LLC  
INST. NO. 2021-211206

**LEGEND**

P.O.B. = POINT OF BEGINNING  
IRFC = IRON ROD W/CAP FOUND

**NOTES**

Bearing system based on the Texas Coordinate System of 1983 (2011 adjustment), North Central Zone (4202). Coordinates have been scaled to surface values using a surface adjustment factor of 1.000150630. A metes and bounds description of even survey date herewith accompanies this survey plat.

The undersigned, Registered Professional Land Surveyor, hereby certifies that this survey plat accurately sets out the metes and bounds of the easement tract.

N: 7192790.60  
E: 2372854.72  
L1

N1°17'43"E 68.57'

S1°17'43"W 68.36'

L2

N: 7192722.11  
E: 2372873.18


**LINE TABLE**

NO.	BEARING	LENGTH
L1	S89°35'11"E	20.00'
L2	S89°49'00"W	20.01'

S1°17'43"W 220.13'  
S7°32'08"E 182.39'

5/8" IRFC  
"TXDOT R.O.W. SURVEY MARKER"

**WATER AND WASTEWATER  
EASEMENT**  
**REUBEN BEBEE SURVEY**  
**ABSTRACT NO. 29**  
**CITY OF SANGER**  
**DENTON COUNTY, TEXAS**

  
JOSHUA D. WARGO  
REGISTERED PROFESSIONAL  
LAND SURVEYOR NO. 6391  
801 CHERRY STREET,  
UNIT 11 SUITE 1300  
FORT WORTH, TEXAS 76102  
PH. 817-335-6511  
josh.wargo@kimley-horn.com



**Kimley»Horn**

801 Cherry Street, Unit 11, # 1300  
Fort Worth, Texas 76102 FIRM # 10194040

Tel. No. (817) 335-6511  
www.kimley-horn.com

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
1" = 20'	DMD	JDW	6/21/2023	061322300	2 OF 2