CONTRACTOR AGREEMENT (EMERGENCY UTILITY REPAIRS FOR WATER, WASTEWATER AND STORMWATER) WORK ORDER NO._2____

THIS WORK ORDER for Emergency Utility Repairs for Water, Wastewater and Stormwater ("Work Order" hereafter) is made between the **City of Lake Worth Beach**, a Florida municipal corporation located at 7 North Dixie Highway, Lake Worth, Florida 33460 ("City" hereafter) and **Johnson-Davis Incorporated**, a company authorized to do business in the State of Florida ("Contractor" hereafter).

1.0 <u>Project Description</u>:

The City desires the Contractor to provide all goods, services, materials and equipment as identified herein related to the Emergency Utility Repairs for Water, Wastewater and Stormwater project generally described as: <u>John Rice Way drainage improvements</u>. (the "Project"). The Project is more specifically described in the plans prepared by WGI, Inc., dated April 3, 2023, and which are incorporated herein by reference.

2.0 <u>Scope</u>

Under this Work Order, the Contractor will provide the City of Lake Worth Beach with construction services for the Project as specified in the <u>Contractor's proposal attached</u> <u>hereto and incorporated herein as Exhibit "1".</u>

3.0 Schedule and Liquidated Damages

Substantial completion of all services and work under this Work Order shall be within <u>60</u> <u>calendar days</u> from the Effective Date of this Work Order. Final completion of all services and work (and all punch-list items (if any)) under this Work Order shall be within <u>90</u> <u>calendar days</u> from the Effective Date of this Work Order. The Effective Date of this Work Order is the date following the parties' execution of this Work Order and the City's delivery of a Notice to Proceed to the Contractor via e-mail, facsimile or other form of delivery as documented by the City. Substantial completion occurs when the services and work has progressed to the point where, in the opinion of the City, the work is sufficiently complete in accordance with the Contract Documents and this Work Order, so that the Project can be utilized for the purposes for which it is intended. Final completion occurs when all services and work (including punch-list items) has been completed and the project becomes fully operational and accepted by the City.

Liquidated Damages. The City and Contractor recognize that time is of the essence under this Work Order and the Contract Documents, and that the City will suffer financial loss if the services and work described in this Work Order and the Contract Documents are not completed within the times specified in this Work Order. The City and Contractor recognize, agree and acknowledge that it would be impractical and extremely difficult to ascertain and fix the actual damages that the City would suffer in the event Contractor neglects, refuses, or otherwise fails to complete the services and work within the time specified. Accordingly, instead of requiring any such proof, the City and Contractor agree that as liquidated damages for delay (but not as a penalty) Contractor shall pay the City five hundred dollars (\$500.00) for each day that expires after the time specified in this Work Order.

4.0 <u>Compensation and Direct Purchases</u>

This Work Order is issued for a unit price, not to exceed amount of \$73,730 (seventy three thousand seven hundred and thirty dollars and zero cents). The attached proposal identifies all costs and expenses included in the unit price, not to exceed amount.

The following Direct Purchases are to be made under this Work Order by the City: N/A.

5.0 <u>Project Manager</u>

The Project Manager for the Contractor is Jim Amsler, phone:561-588-1170; email: jamsler@johnsondavis.com; and, the Project Manager for the City is Julie Parham, phone:561-586-1798; email: jparham@lakeworthbeachfl.gov.

6.0 **Progress Meetings**

The Contractor shall schedule periodic progress review meetings with the City Project Manager as necessary but every 30 days as a minimum.

7.0 <u>Contractor's Representations</u>

In order to induce the City to enter into this Work Order, the Contractor makes the following representations:

7.1 Contractor has familiarized itself with the nature and extent of the Contract Documents including this Work Order, 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 obtained at his/her own expense and carefully studied, or assumes responsibility for obtaining and carefully studying, soil investigations, explorations, and test reports which pertain to the subsurface 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 stated work order price within the Work Order stated time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of the IFB; and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are or is deemed necessary by Contractor for such purposes.

7.3 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 is deemed necessary by the Contractor in order to perform and furnish the work under this Work Order price, within the Work Order time and in accordance with the other terms and conditions of the Contract Documents.

7.4 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.

7.5 Contractor has given the City's Contract Administrator written notice of all conflicts, errors or discrepancies that he or she has discovered in the Contract Documents and the written resolution thereof by City or its designee is acceptable to the Contractor.

8.0 **Warranty.** The Contractor warrants and guarantees to the City that all services and work provided under this Work Order will be in accordance with this Work Order and the other Contract Documents. The Contractor warrants that (a) all materials and parts supplied under this Work Order shall be free from defects for one (1) year from the final completion of all work (unless a longer manufacturer warranty applies); (b) all services and work performed under this Work Order will be free from defects for one (1) year from the final completion of all work and the project shall be fully operational without unreasonable downtime or failures; and (c) that the services and work will conform to the requirements of the Contract Documents. If, at any time prior to the expiration of the one (1) year warranty period, the City discovers any failure or breach of the Contractor's warranties or the Contractor discovers any failure or breach of the Contractor's warranties, the Contractor will, upon written notice from City or of its own accord, at the Contractor's sole cost and expense, promptly correct such failure or breach (which corrective action must include, without limitation, any necessary removal, disassembly, reinstallation, repair, replacement, reassembly, retesting, and/or re-inspection of any part or portion of the work and any other property damaged or affected by such failure, breach, or corrective action). The Contractor will remedy any such failure or breach so, to the extent possible, to avoid unnecessary disruptions to the operations of City or its systems. In the event the Contractor fails to initiate and diligently pursue corrective action within five (5) days of the Contractor's receipt of the City's notice or the Contractor's discovery of the same, the City may undertake such corrective action at the Contractor's expense.

9.0 Authorization

This Work Order is issued pursuant to the Emergency Utility Repairs for Water, Wastewater and Stormwater Contract between the City of Lake Worth Beach and the Contractor, dated July 10, 2020 ("Contract" hereafter) as amended. If there are any conflicts between the terms and conditions of this Work Order and the Contract, the terms and conditions of the Contract shall prevail.

REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK

IN WITNESS WHEREOF, the parties hereto have made and executed this <u>Work Order</u> as of the day and year set forth above.

By:

CITY OF LAKE WORTH BEACH, FLORIDA

By: _____ Betty Resch, Mayor

ATTEST:

By:

Melissa Ann Coyne, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

APPROVED FOR FINANCIAL SUFFICIENCY

By:

Glen J. Torcivia, City Attorney

Johnson-Davis Incorporated

Print Name: William Cryer Title: Vice President

Yannick Ngendahayo, Financial Services Director

[Corporate Seal]

STATE OF Florida)
COUNTY OF Palm Beach

CONTRACTOR:

The foregoing instrument was acknowledged before me by means of physical presence or \Box online notarization on this <u>10th</u> day of <u>July</u>, 2023, by <u>WILLEAM CRYER</u>, as the <u>VICE PRESIDENT</u> (title), of **Johnson-Davis Incorporated**, a Company which is authorized to do business in the State of Florida, and who is personally known to me or who has produced _______ as identification, and who did take an oath that he or she is duly authorized to execute the foregoing instrument and bind the CONTRACTOR to the same.

Notary Seal:

Notary Public Signature



Exhibit 1:

³Items GC-11 through GC-17 & W-117 have been excluded from the calculation as they are representative of costs that are directly reimbursable by the City.

					-
	JOHN RICE WAY PHASE II		Johnson Davis		
ITEM	DESCRIPTION	-	UNIT	PRICE	1
	GENERAL CONDITIONS				1
GC-4	NON-Emergency Mobilization/Demobilization Costs for Utility Right of Way repairs	1	LS	\$2,000.00	\$2,000.00
GC-6	Record Drawing (more than 40 LF of Utility Work)	1	LS	\$3,500.00	\$3,500.00
GC-7	Construction Survey	1	LS	\$500.00	\$500.00
GC-10	M.O.T. DOT Roadway	1.5	EA	\$3,000.00	\$4,500.00
GC-11	Bacteriological Testing and Clearance of Water Mains (actual cost reimbursement by City)		ALLOWANCE	N/A	,
GC-12	Density Tests (actual cost reimbursement by City)	20	EA	\$25.00	\$500.00
GC-13	Proctor Tests (actual cost reimbursement by City)	2	EA	\$75.00	\$150.00
GC-17	Applicable Permits (actual cost reimbursement by City)	1	LS	\$1,500.00	\$1,500.00
	STORM WATER				
GRAVITY	STORM SEWER - includes all fittings, appurtenances, dewatering and restoration for a complete installation				1
S-8	Furnish & Install 15-Inch RCP Sewer Main	19	LF	\$120.00	\$2,280.00
S-18	Furnish & Install 24-Inch RCP Sewer Main	16	LF	\$140.00	\$2,240.00
	MISCELLANEOUS				
	STORM CREW A - Includes a foreman, 3 experienced workers, layout, excavating, installing and backfilling				
S-74	equipment necessary for concrete. PVC. HDPE or metal pipe laving or repair up to 36" diameter. Material costs	16	HR	\$515.00	\$8,240.00
	shall be included with invoice with maximum 15% markup.				
	RESTORATION				
R-1	Removal and disposal of 6" thick concrete	42	SF	\$10.00	\$420.00
R-9	Furnish & Install FDOT Valley Gutter - by hand	21	LF	\$100.00	\$2,100.00
R-17	Removal and Disposal of Existing Asphalt Pavement	25	SY	\$10.00	\$250.00
R-22	Furnish and Install 1-1/2" SP-12.5 Asphalt First Course in FDOT/PBC Right of Way	25	SY	\$80.00	\$2,000.00
R-28	8" Limerock/ Crushed Concrete Base, primed	25	SY	\$50.00	\$1,250.00
R-29	12" Compacted Subgrade, 98% T-180	25	SY	\$24.00	\$600.00
R-32	Brick paver remove/replace (1 1/2" sand, 6" limerock base, 12" compacted subgrade)	175	SF	\$40.00	\$7,000.00
	WELL POINT SYSTEM AND DE-WATERING				
WP-1	Well Point system up to 50 points complete with pump and jetting equipment, and Monitoring	2	DAY	\$2,800.00	\$5,600.00
•					
SECOND AM	MENDMENT				_
2-1	4' X 6' DIAMETER CONTROL STRUCTURE	1	EA	\$13,500.00	\$13,500.00
2-2	24" CONCRETE COLLAR	2	EA	\$1,750.00	\$3,500.00
2-3	FDOT LANE CLOSURE	5	EA	\$1,500.00	\$7,500.00
2-4	CONNECT TO EXISTING STRUCTURE	1	EA	\$2,500.00	\$2,500.00
2-5	CLEAN EXISTING STORM DRAINAGE	84	LF	\$25.00	\$2,100.00

GRAND TOTAL

\$ 73,730.00



JOHN RICE WAY PHASE II

PERMIT PLANS

PREPARED FOR: CITY OF LAKE WORTH BEACH 1749 3RD AVE SOUTH, LAKE WORTH BEACH, FL 33460



LOCATION MAP



PROJECT LOCATED IN SECTION 27 / TOWNSHIP 44 SOUTH / RANGE 43 EAST

Set	Num
	1
	2
	3
	4
	5
	6
	7
	8
	9
	10
	11
	12

PREPARED BY:



2035 Vista Parkway, West Palm Beach, FL 33411 Phone No. 866.909.2220 www.wginc.com Cert No. 6091 - LB No. 7055

CONSULTANTS:

PROJECT TITLE:

JOHN RICE WA PHASE II LAKE WORTH BEACH PALM BEACH COUNTY, F

Sheet List Table			
ber	Sheet Number	Sheet Title	
	C001	COVER	
	C002	GENERAL NOTES	
	C003	LOCATION MAP	
	C101	EXISTING CONDITIONS	
	CD101	STORMWATER POLLUTION PREVENTION PLAN	
	CG101	PAVING, GRADING, AND DRAINAGE PLAN	
	CG102	DRAINAGE PROFILE	
	C501	CITY OF LAKE WORTH BEACH DETAILS 1	
	C502	CITY OF LAKE WORTH BEACH DETAILS 2	
	C503	FDOT DETAILS 1	
	C504	FDOT DETAILS 2	
	C505	FDOT DETAILS 3	

 ENGINEER OF RECORD

 STEPHEN C. CHERRY, PE

 PE LIC. NO. 83268

 April 3, 2023

 April 3, 2023

 NO:
 DATE:

 DESCRIPTION:

 DATE:
 DESCRIPTION:

 DRAWN DATE:
 2023-02-03

 DRAWN DATE:
 2023-02-03

 DRAWN DATE:
 2023-02-03

 DRAWN BY:
 MAS

 CHECKED BY:
 SCC

 PROJECT #:
 2974.29

SHEET #:

TOTAL SHEETS

-		
GE	NERAL NOTES:	GENERAL NOTE
1.	THESE GENERAL NOTES APPLY TO WORK IN THIS SET OF DRAWINGS.	32. THE CONTRACT INSTALLATION
2.	WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, JULY 2022 EDITION, FDOT STANDARD PLANS FY2022-23 OR LATEST EDITION, AND CITY OF LAKE WORTH BEACH STANDARD DETAILS. ALL FDOT INDEXES ARE INCORPORATED AS PLAN REFERENCED HEREIN. CONTRACTOR IS RESPONSIBLE FOR OBTAINING COMPLETE COPIES OF APPLICABLE FDOT INDEXES AND CITY OF LAKE WORTH BEACH STANDARD DETAILS.	THE PROJECT I
3.	PRIOR TO COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH FLORIDA STATUTE 556- UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT.	UTILITIES:
4.	NO CONSTRUCTION SHALL COMMENCE UNTIL ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN SECURED AND THE CONTRACTOR IS ISSUED A NOTICE TO PROCEED. CONTRACTOR SHALL ABIDE BY ALL PERMIT CONDITIONS.	1. THE LOCATION(S INVESTIGATION
5.	THE CONTRACTOR SHALL MAINTAIN SAFE VEHICULAR ACCESS TO ALL ADJACENT PROPERTY AT ALL TIMES AND SHALL MAINTAIN ACCOMMODATIONS FOR INTERSECTING CROSSING TRAFFIC. NO ROAD OR STREET CROSSING SHALL BE BLOCKED OR UNDULY RESTRICTED.	ONLY AT THE PO ASSURANCES ARE COMPANIES IN TI 2. UPON RECEIPT O
6.	THE CONTRACTOR SHALL PROVIDE SAFE PEDESTRIAN ACCESS AND PROTECTION ADJACENT TO CONSTRUCTION THROUGHOUT THE PROJECT.	3. PRIOR TO EXCAVA
7.	THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE EXISTING LEVEL OF ILLUMINATION THROUGHOUT THE PROJECT LIMITS DURING CONSTRUCTION.	LOCATIONS. A CO
8.	TWO (2) LANES OF ROAD MUST BE OPEN TO TRAFFIC DURING AN EVACUATION NOTICE OF HURRICANE OR OTHER CATASTROPHIC EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EVENT AND UNTIL NOTIFIED OTHERWISE BY THE ENGINEER.	BRIAN SHIELDS CITY OF LAKE V (561) 586-161
9.	EXISTING DRAINAGE STRUCTURES WITHIN CONSTRUCTION LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED. ALL DRAINAGE STRUCTURES SHALL BE PROTECTED FROM THE SEDIMENTATION DURING CONSTRUCTION OPERATIONS ACCORDING TO DEP FLORIDA STORMWATER, EROSION, AND SEDIMENTATION INSPECTOR MANUAL, SECTION 4.08 STORM DRAIN INLET PROTECTION	JEAN ST. SIMON CITY OF LAKE V (561) 722-973
10.	NO EXISTING MATERIAL SHALL BE USED IN NEW CONSTRUCTION UNLESS APPROVED DURING THE SHOP DRAWING REVIEW PROCESS.	PALM BEACH CC (561) 233-392
11.	CONTRACTOR SHALL UTILIZE CONSTRUCTION METHODS AND DEVICES AS INDICATED, AT A MINIMUM, IN FDOT STANDARD INDEXES 100.101, 102, 103, 104, 105 WHERE NECESSARY IN ORDER TO COMPLY WITH ALL STATE AND LOCAL WATER QUALITY STANDARDS.	COMCAST - PAL (772) 321-342 BRAD COLLINS
12.	THE CONTRACTOR IS RESPONSIBLE FOR KEEPING INLETS CLEAN OF PAVING MATERIAL, SILT, ROCK, AND DEBRIS DURING THE CONSTRUCTION AT NO ADDITIONAL COST.	FLORIDA PUBLI (772) 252-330
13.	ALL AREAS DESIGNATED FOR PAVEMENT REMOVAL SHALL BE SAW-CUT AT THE LIMITS OF REMOVAL WHERE EXISTING PAVEMENT IS TO REMAIN.	GARTH BEDWAI AT&T (561) 540-926
14.	CROSS SLOPES SHALL MATCH EXISTING ADJACENT PAVEMENT UNLESS OTHERWISE SHOWN IN THE DRAWINGS.	KELLY KLINEFEL CROWN CASTLE
15.	CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHILE REMOVING AND/OR RELOCATING EXISTING SIGNS IN ORDER TO PREVENT ANY UNNECESSARY DAMAGE TO THE SIGNS. SIGNS WHICH ARE DAMAGED BEYOND USE, AS DETERMINED BY THE ENGINEER SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY.	(724) 743-608 WINDSTREAM ((800) 289-190
16. 17	PROPOSED SIDEWALK IS TO BE CONNECTED TO EXISTING SIDEWALK WHERE APPLICABLE.	5. IT SHALL BE THE AND WORKMANS BEGINNING CON
10	THE CONTRACTOR SHALL PROTECT ADJACENT WATER RODIES, WET ANDS AND PROPERTIES FROM SEDIMENTATION OR OTHER	6 THE CONTRACTO
18.	POTENTIAL CONSTRUCTION RELATED CAUSES.	AREA OF CONSTR THE RESPECTIVE
19.	ALL RECOMMENDATIONS AND REQUIREMENTS OF THE INSPECTION PERSONNEL OTHER THAN THE OWNER'S SHALL BE REPORTED TO THE ENGINEER PRIOR TO IMPLEMENTATION. COMPENSATION WILL NOT BE ALLOWED FOR WORK WHICH IS NOT AUTHORIZED BY THE ENGINEER OR OWNER.	7. THE CONTRACTO LOCATIONS FROM WHICH ARE PROF
20.	ALL WORK SHALL BE OPEN AND SUBJECT TO INSPECTION BY AUTHORIZED PERSONNEL OF THE CITY, INVOLVED UTILITY COMPANIES, PROJECT ENGINEER, AND EACH APPLICABLE REGULATORY AGENCY.	8. IF UPON EXCAVA SIZE OR MATERIA ENGINEER.
21.	ANY DIFFERING SITE CONDITIONS FROM THAT WHICH IS REPRESENTED HEREON, WHETHER ABOVE, ON OR BELOW THE SURFACE OF THE GROUND, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER AND THE CITY OF LAKE WORTH BEACH IN WRITING. NO CLAIM FOR EXPENSES INCURRED BY THE CONTRACTOR DUE TO DIFFERING SITE CONDITIONS WILL BE ALLOWED IF THE CONTRACTOR FAILS TO PROVIDE THE REQUIRED WRITTEN NOTIFICATION OF SUCH CONDITIONS FOR REVIEW BY THE ENGINEER AND THE CITY OF LAKE WORTH BEACH.	9. THE LOCATIONS BEST INFORMATI RESPONSIBILITY RESPONSIBILITY UTILITIES WITH
22.	ALL EXISTING CITY OF LAKE WORTH SIGNS WITHIN THE LIMITS OF CONSTRUCTION WHICH ARE TO BE RELOCATED OR REMOVED SHALL BE REMOVED BY THE CONTRACTOR AND STOCKPILE AT A LOCATION DESIGNATED BY THE ENGINEER.	CONSTRUCTION TO THE CONTRAC
23.	ALL VEGETATION, DEBRIS, CONCRETE OR OTHER UNSUITABLE MATERIAL SHALL BE DISPOSED OF LEGALLY OFFSITE BY THE CONTRACTOR AT HIS EXPENSE.	CONSTRUCTIO
24.	CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING DETAILED TRAFFIC MAINTENANCE AND CONTROL DRAWINGS ACCORDANCE WITH REGULATORY STANDARDS AND CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS (FDOT INDEX 600 SERIES) AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, REVISIONS 1 AND 2. THESE DRAWINGS SHALL INCLUDE A CLEAR SEQUENCE OF CONSTRUCTION. THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER AT THE PRE-CONSTRUCTION CONFERENCE THE MAINTENANCE OF TRAFFIC PLAN FOR APPROVAL BY ALL APPLICABLE REGULATORY AGENCIES.	 ALL CONSTRUC OCCUPATIONA CONTRACTOR 3 WHERE EXCAVA FOLLOWING IN
25.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY TESTING TO ASSURE THAT THE PROPER COMPACTION HAS BEEN ACHIEVED IN THE SUBGRADE, BASE MATERIAL, CONCRETE, ASPHALT, PIPE BASE MATERIAL AND ALL OTHER PERTINENT AREAS THAT HAVE BEEN COMPLETED. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING THE TESTS AND COORDINATING WITH THE CITY OF LAKE WORTH REPRESENTATIVE. THE CITY OF LAKE WORTH WILL PAY FOR INITIAL TESTS. THE CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH RETESTING OF FAILED TESTS. THE CONTRACTOR SHALL PROVIDE THE CITY AND THE ENGINEER COPIES OF ALL TEST RESULTS. ALL REPORTS ARE TO BE SIGNED AND SEALED BY A REGISTERED GEOTECHNICAL ENGINEER IN THE STATE OF FLORIDA.	3.1. REFERE THE PRI 3.2. WRITTE COMPLY 3.3. A SEPAR
26.	CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR VERIFYING ALL QUANTITIES, TAKE-OFF MEASUREMENTS, MATERIALS, ETC. DURING THE BID PROCESS. WHEN DISCREPANCIES OCCUR, THE PHYSICAL PLAN TAKES PRECEDENCE. THE ENGINEER, LANDSCAPE ARCHITECT, CITY OR PROJECT MANAGERS ARE NOT TO BE HELD RESPONSIBLE FOR DISCREPANCIES TO THE SPECIFICATIONS OR DRAWINGS. QUANTITIES PROVIDED ARE PROVIDED FOR REFERENCE ONLY; IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL QUANTITIES PRIOR TO BID SUBMITTAL.	RIGHT-OF-WAY
27.	SPECIAL ATTENTION IS DIRECTED TO THE FACT THAT PORTIONS OF SOME DRAINAGE STRUCTURES AND CULVERTS MAY EXTEND INTO THE STABILIZED PORTION OF THE ROAD BED AND EXTREME CAUTION WILL BE NECESSARY DURING STABILIZATION OPERATIONS AT THESE LOCATIONS.	
28.	THE CONTRACTOR IS TO USE EXTREME CAUTION WHEN WORKING IN OR AROUND AREAS OF EXISTING LOOP AND LEAD-IN WIRES; TRANSMISSION LINES, UNDERGROUND UTILITIES AND OVERHEAD UTILITIES.	
29.	ALL TRENCHING OR EXCAVATION WITHIN THE PAVEMENT AREA SHALL BE PERFORMED PRIOR TO PLACEMENT OF BASE AND ASPHALT.	
30.	THE CONTRACTOR SHALL NOTIFY THE PALM BEACH COUNTY TRAFFIC DIVISION, PHONE (561) 684-4030, TWO WORKING DAYS PRIOR TO ANY MODIFICATION OF AN EXISTING TRAFFIC SIGNAL SYSTEM. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR THE MAINTENANCE OF THE EXISTING TRAFFIC SIGNAL(S) WITHIN THE PROJECT LIMITS.	

G

E		D		С
TES (CONTINUED):				
CTOR SHALL COORDINATE WITH CIT N OF LOOP ASSEMBLIES AND THEIR LIMITS. INSTALLATION OF LOOP AS	Y OF LAKE WORTH AND PAL CONNECTION TO CONTROLL SEMBLIES SHALL BE PERFOR	M BEACH COUNTY TRAFFIC DIV ERS AT SIGNALIZED INTERSEC MED AFTER MILLING AND RES	/ISION PRIOR TO TIONS WITHIN URFACING.	
(S) OF THE UTILITIES SHOWN IN THE I TECHNIQUES AND SHOULD BE CON DINTS SHOWN. INTERPOLATIONS BE RE MADE BY THE ENGINEER OR CITY THE AREA OF WORK BEFORE BEGINN	E DRAWINGS (INCLUDING TH SIDERED APPROXIMATE ONL TWEEN THESE POINTS HAVE AS TO THEIR ACCURACY. TH NING CONSTRUCTION.	IOSE DESIGNATED Vvh) ARE B/ Y. THE VERIFIED LOCATIONS/E NOT BEEN VERIFIED. HOWEV IE CONTRACTOR SHALL NOTIF	ASED ON LIMITED ELEVATIONS APPLY ER, NO Y THE UTILITY	
OF NOTICE OF AWARD, THE CONTRA ERNMENTAL AGENCIES, ALL AFFECTE	CTOR SHALL ATTEND A PRE D UTILITY OWNERS, THE CI	CONSTRUCTION CONFERENCE TY, AND THE ENGINEER.	TO INCLUDE ALL	
VATION, THE CONTRACTOR SHALL C CONTRACTOR'S REPRESENTATIVE MU	ONTACT SUNSHINE 811 AND JST BE PRESENT WHEN UTIL	THE UTILITY OWNER AND REC TY COMPANIES LOCATE THEIR	QUEST UTILITY FACILITIES.	
WIES. S WORTH BEACH WATER AND SEWER 510	UTILITY			
ON WORTH BEACH ELECTRIC UTILITY 734				
COUNTY TRAFFIC OPERATIONS 923				
STEEL ALM BEACH COUNTY 425				
5 JC UTILITIES COMPANY 308				
4RD 263				
085				
COMMUNICATIONS 901				
E CONTRACTOR'S SOLE RESPONSIBI SHIP WHEN WORKING IN THE VICIN NSTRUCTION, THE CONTRACTOR SH/ HIN THE AREA OF CONSTRUCTION.	LITY TO TAKE THE NECESSAF ITY OF EXISTING UNDERGRO ALL VERIFY THE SIZE, LOCAT	RY PRECAUTIONS TO ENSURE F OUND AND OVERHEAD UTILITY ION, ELEVATION, AND MATERI	ROPER SAFETY LINES. PRIOR TO AL OF ALL EXISTING	
OR SHALL BE RESPONSIBLE TO VERI TRUCTION. SHOULD THERE BE UTILI E UTILITY OWNER(S) TO RESOLVE U	FY IF "OTHER" UTILITIES (NOT CONFLICTS, THE CONTRANT ITILITY CONFLICTS AND PER	OT SHOWN IN THE DRAWINGS CTOR SHALL INFORM THE ENG FORM UTILITY ADJUSTMENTS,) EXIST WITHIN THE INEER AND NOTIFY AS REQUIRED.	
OR SHALL BE RESPONSIBLE FOR DAN OM THE UTILITY OWNER. THE CONTR OPERLY LOCATED.	MAGE TO ANY EXISTING UTIL RACTOR IS ALSO RESPONSIB	ITIES FOR WHICH IT FAILS TO LE FOR DAMAGE TO ANY EXIST	REQUEST ING UTILITIES	
ATION, AN EXISTING UTILITY IS FOU IALLY DIFFERENT FROM THAT SHOW	IND TO BE IN CONFLICT WIT	H THE PROPOSED CONSTRUCT CONTRACTOR SHALL IMMEDIA	ION OR TO BE OF A TELY NOTIFY THE	
5 OF EXISTING UTILITIES AND STOR TION AVAILABLE AND ARE GIVEN FOI Y FOR INACCURACY. PRIOR TO THE S Y TO MAKE ARRANGEMENTS FOR THI I THE UTILITY OWNERS, WHICH SHA I SCHEDULE. ANY DELAY CAUSED BY ACT AND NO EXTRA COMPENSATION	M DRAINAGE SHOWN ON THE R THE CONVENIENCE OF THE START OF ANY CONSTRUCTIONE FIELD LOCATIONS AND FOR ALL BE DONE IN A TIMELY MAY THE CONTRACTOR BY THE WILL BE ALLOWED.	E DRAWINGS HAVE BEEN DETE CONTRACTOR. ENGINEER ASS ON ACTIVITY, IT SHALL BE THE ANY RELOCATIONS OF THE V NNER TO MINIMIZE IMPACT O RELOCATION OF UTILITIES SH	RMINED FROM THE UMES NO CONTRACTOR'S ARIOUS EXISTING N THE ALL BE INCIDENTAL	
ON SAFETY:				
JCTION SHALL BE PERFORMED IN A S AL SAFETY AND HEALTH ADMINISTR	SAFE MANNER, SPECIFICALLY ATION (OSHA).	, THE RULES AND REGULATION	IS OF THE	
R SHALL BE SOLELY RESPONSIBLE FC	or compliance with the s	TATE OF FLORIDA TRENCH SAF	ETY ACT.	
VATIONS TO A DEPTH IN EXCESS OF IN THE BID:	FIVE FEET (5') ARE REQUIRE	D, THE CONTRACTOR SHALL I		
ENCE TO THE TRENCH SAFETY STAN ROJECT. FEN ASSURANCES BY THE CONTRACT	IDARDS THAT WILL BE IN EFI	ECT DURING THE PERIOD OF	CONSTRUCTION OF	
LY WITH THE FLORIDA TRENCH SAFE ARATE ITEM IDENTIFYING THE COST	TY ACT. OF COMPLIANCE WITH THE	APPLICABLE TRENCH SAFETY S	STANDARDS.	
Y:				
SHALL BE COMPLETED FROM AND W	ITHIN EXISTING RIGHT OF V	VAY.		

D

E



В



/ED: 3/20/2023 10:58 AM 3T DATE: 4/3/2023 4:54 PM 3TTED BY: MASON SHUTT







EQUIVALENT 70 KSI DE WELDED WIRE REINFOR	FORMED CEMENT
Style Designation	Steel Area (in²/ft)
3"x3"-D4.3xD4.3	
4"x4"-D5.7xD5.7	0.1714
6"x6"-D8.6xD8.6	
3"x3"-D5.1xD5.1	
4"x4"-D6.9xD6.9	0.2057
6"x6"-D10.3xD10.3	
3"x3"-D5.7xD5.7	
4"x4"-D7.6xD7.6	0.2289
6"x6"-D11.4xD11.4	
3"x3"-D7.9xD7.9	
4"x4"-D10.6xD10.6	0.3171
6"x6"-D15.9xD15.9	
3"x3"-D11.4xD11.4	
4"x4"-D15.1xD15.1	0.4543
6"x6"-D22.7xD22.7	
3"x3"-D15.6xD15.6	
4"x4"-D20.9xD20.9	0.6257
6"x6"-D31.3xD31.3	
3"x3"-D22.7xD22.7	
4"x4"-D30.3xD30.3	0.9086
6"x6"-D45.4xD45.4	
3"x3"-D26.6xD26.6	
4"x4"-D35.4xD35.4	1.0629
6"x6"-D53.1xD53.1	
2"v2"_D21 2vD21 2	
$5 \times 5 - 0 \times 1.5 \times 0 \times 1.5$	1.2514

NOTES: 1. See inlet indexes for optional precast inlet construction details up to depths of 15'. 2. Interior dimensions of an Alt. "B" Bottom may be adjusted to reflect these inlet interior dimensions when precast units are used in conjunction with Alt. "B" Structure Bottoms, Index 425-010.

3. Use concrete meeting the requirements of ASTM C478 or Class IV for precast structures with 6" wall or slab thickness.

4. Reinforcement may be deformed bar reinforcement or welded wire reinforcement. Bar reinforcement other than 60 ksi may be used, however only two grades are recognized: Grade 40 and Grade 60. Smooth welded wire reinforcement will be recognized as having a design strength of 65 ksi and deformed welded wire reinforcement will be recognized as having a design strength of 70 ksi. The area of reinforcement required may be adjusted in accordance with the Equivalent Steel Area Table provided. Use the following equations to determine the steel area and spacing for bars not otherwise specified:

Grade 40 Steel Area = As40= 60/40 x As60 Smooth Welded Wire Reinforcement Steel Area = As65= 60/65 x As60 Deformed Welded Wire Reinforcement Steel Area = As70= 60/70 x As60

When a reduced area of reinforcement is provided, any maximum bar spacing shown must also be reduced as determined by the following equations, unless otherwise shown:

Max. Grade 40 Bar Spacing = Grade 60 Bar Spacing Max. Smooth Welded Wire Spacing = Grade 60 Bar Spacing x 0.86

Max. Deformed Welded Wire Spacing = Grade 60 Bar Spacing x 0.74

When an increased area of reinforcing is provided, the maximum bar spacing may be increased by the squared ration of increased steel area, but not to exceed 12": / Steel Area Provided

 $\begin{array}{l} \text{Max. Bar Spacing Provided} \leq=\!\!\text{Max. Bar Spacing Required } x \left(\begin{array}{c} \underline{\text{Steel Area Provided}} \\ \overline{\text{Min. Steel Area Required}} \end{array} \right)^2 \\ \text{Use wire no smaller than than W3.1 or D4.0, or larger and with spacing 8" or less. Use bar reinforcement displaying the minimum yield designation grade mark, or either the number 60 or one (1) grade mark line to be acceptable at the higher value. Use maximum bar spacing no greater than two (2) times the slab thickness with a maximum spacing of 12" or three (3) times the wall thickness, with a maximum spacing of 18" for vertical bars and 12" for horizontal bars. Wires smaller than W3.1 or D4.0 may be used in the walls of ASTM C 478 round structure bottoms and round risers. \\ \end{array}$

5. Fiber-reinforced concrete may be substituted for conventional steel reinforcement in accordance with the Structures Design Guidelines. Submit shop drawings corresponding to an approved fiber-reinforced concrete mix design for approval to the State Drainage Office.

PRECAST OPTION AND EQUIVALENT REINFORCEMEN	IT SUBST	TITUTION
SUPPLEMENTARY DETAILS	INDEX	SHEET
FOR DRAINAGE STRUCTURES	425-001	5 of 8

11 OF 12

2974.29

Know what's **below.** Call before you dig.

SKEWED PIPE IN RECTANGULAR STRUCTURES				
NTARY DETAILS	INDEX	SHEET		
GE STRUCTURES	425-001	7 of 8		

В

Top Slab —

Bottom Slab –

