



**SPECIFICATIONS
AND
FORMS OF CONTRACT AND BONDS
FOR
WATER AND WASTEWATER MAIN REPLACEMENTS
AT
VARIOUS LOCATIONS
CONTRACT NO. 21-233/ 21-234**



PLEASE NOTE

Sealed Bids clearly identified for **“WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS, CONTRACT NO. 21-233/234”**, as detailed on Dallas Water Utilities plans and as described in the Contract Specifications, shall be submitted as pdfs in Bonfire at: <https://dallascityhall.bonfirehub.com/login>, **before 1:00 p.m. on Friday, November 19, 2021.** Bid opening will be read ONLY online by the Purchasing Agent at **2:00 p.m. on Friday, November 19, 2021.** You may view this bid opening live by going to www.dallascityhall.com, click on watch city meetings online, and it will be live on DCN 95 live.

Due to the COVID-19 Pandemic, the office of Procurement Services is unable to accept paper copies of bids or proposals. Please submit all required bid documents (.pdf format), along with the Bid Proposal Spreadsheet (.xlsx format) until 1:00 p.m. on Friday, November 19, 2021 in Bonfire at: <https://dallascityhall.bonfirehub.com/login>. For any questions, please email procurementAds@dallascityhall.com.

Bid opening will be read ONLY online for this Bid due to COVID-19 precautions. You may view this bid opening live by going to www.dallascityhall.com, click on watch city meetings online, and it will be live on DCN 95 live at 2:00 p.m. on Friday, November 19, 2021. Bid opening will not be open for in-person viewing at this time.

**“FAILURE TO SIGN YOUR BID WILL RESULT IN A REJECTION OF
YOUR BID.**

**Bidder’s Acknowledgement of Prohibition on Contracts with Companies
Boycotting Israel**

Effective September 1, 2017, Bidder acknowledges, in accordance with Chapter 2270 of the Texas Government Code, that Bidder does not boycott Israel and will not boycott Israel during the term of any contract with the City of Dallas to provide goods and services to the City. Bidder further acknowledges that this provision is hereby incorporated by reference, as if written word for word, into any subsequent contract entered into between City and Bidder for goods and services.”

**“FAILURE TO SIGN YOUR BID WILL RESULT IN A REJECTION OF
YOUR BID.**

**Bidder’s Acknowledgement of Prohibition on Contracts with Foreign Terrorist
Organizations**

Effective September 1, 2017, Bidder acknowledges, in accordance with Chapter 2252 of the Texas Government Code, that (a) Bidder does not engage in business with Iran, Sudan or any foreign terrorist organization and (b) Bidder is not listed by the Texas Comptroller as a terrorist organization as defined by Chapter 2252 of the Texas Government Code. Bidder further acknowledges that this provision is hereby incorporated by reference, as if written word for word, into any subsequent contract entered into between City and Bidder for (1) professional or consulting services subject to the Professional Services Act - Chapter 2254 of the Texas Government Code, (2) general construction, (3) an improvement, (4) a service, (5) a public works project, or (5) for a purchase of supplies, materials or equipment.”

BUSINESS INCLUSION AND DEVELOPMENT POLICY

It is the policy of the City of Dallas to involve certified Minority and Women-Owned Business Enterprises (M/WBEs) to the greatest extent feasible on the City's construction, general services, and professional services contracts. It is the policy of the City of Dallas to encourage the growth and development of M/WBEs that can successfully compete for contracting opportunities. The City and its contractors shall not discriminate on the basis of race, age, color, ancestry, national origin, place of birth, religion, sex, sexual orientation, gender identity and expression, military or veteran status, genetic characteristics, or disability unrelated to job performance in the award and performance of contracts. In consideration of this policy, the City of Dallas has adopted the Business Inclusion and Development (BID) Policy for all City of Dallas contracts.

Following are the City of Dallas' adopted M/WBE goals without consideration for specific ethnicity or gender adopted on September 23, 2020 (Resolution Number 20-1430):

<u>Construction</u>	<u>Architecture & Engineering</u>	<u>Professional Services</u>	<u>Other Services</u>	<u>Goods</u>
32.00%	34.00%	38.00%	N/A	32.00%

While minority business participation may vary from time to time in accordance with procurement specifications and the availability of minority enterprises in the marketplace, the City of Dallas believes the goals to be realistically obtainable.

In accordance with the City's Business Inclusion and Development Policy adopted on September 23, 2020, by Resolution No. 20-1430, as amended, the M/WBE participation on this contract is as follows:

Procurement Type: Construction 32%

ATTENTION

All bidders must submit With Their Bid the following Forms Completed and signed

City of Dallas Pre-Bid/Proposal Cover Memo (BWI-FRM-622)

City of Dallas Pre-Bid/Proposal Form (BWI-FRM-623)

City of Dallas Ethic Workforce Report (BWI-FRM-627)

Any firm listed as M/WBE must be certified by one of the following Certification Agencies:

- 1) North Central Texas Regional Certification Agency (NCTRCA)
616 Six Flags Drive, Suite 128
Arlington, Texas 76011
817-640-0606
- 2) Dallas Fort Worth Minority Business Council
2710 N. Stemmons Freeway
Dallas, Texas 75207
214-630-0747
- 3) The Women's Business Council – Southwest
2201 N. Collins, Suite 158
Arlington, Texas 76011
214-299-0566

A list of Minority/Women Owned Business Enterprises or other information or assistance can be obtained from the Business and Workforce Inclusion (BWI) Division of the Office of Economic Development, City Hall, 6DN, 1500 Marilla Street, Dallas, Texas, 75201, Phone: (214) 670-5010.

WORK WITH OWN FORCES

Where a Contractor indicates lower M/WBE participation than the City of Dallas typically sees for similar projects and the Contractor is indicating there are limited subcontracting opportunities as a result of the Contractor performing the remaining work with their own forces as their normal business practice, the following information may be deemed adequate documentation.

For each previous project

Name of Project

Location

Contracting Agency

Description of work performed

For each specific item of work (i.e. hauling, concrete pavement, pipe installation, etc.)

Work Forces

Documentation showing name and job classifications.

Which individuals actually performed the work?

If individuals were classified other than what the work called for, why? (i.e. Pipefitter performing concrete finishing work.)

List of extra individuals hired to do this work (temporary, day laborers, etc.) Is the same work force to be used on this project?

Note: If additional personnel are required, an M/WBE subcontracting opportunity exists; this includes, but is not limited to, M/WBE temporary personnel agencies, subcontractors, and suppliers.

Equipment

List equipment required for that specific item of work. Did the Contractor own the equipment? Is it available for use on this job?

Note: If equipment was rented, is not available for this job or if additional equipment will be required, an M/WBE subcontracting opportunity exists. This includes, but is not limited to, equipment rental or purchase from M/WBE firms.

Verification:

The Contractor must provide written verification from a representative of the contracting agency with knowledge of the project verifying that the Contractor did perform the work stated with its own forces.

For each area where specific work was subcontracted on previous jobs, but the intent is to use the Contractor's own forces for the proposed job:

Reason for change in practice

If workload, provide documentation to prove

If new responsibilities for crews; provide documentation on training or reclassification, etc.

Note: Documented previous poor performance on the part of a subcontractor is a legitimate reason not to use that particular subcontractor again but does not eliminate the need to contact other qualified M/WBE firms for that work item

INDEX TO SPECIFICATIONS

ADVERTISEMENT FOR BIDS

PART A - INFORMATION TO BIDDERS

SECTION A

- A 1. Time and Place for Receiving Proposals
- A 2. Location and Description of Project
- A 3. Special Provisions
- A 4. Bid Items
- A 5. Living Wage Rate and Davis Bacon Wage Schedule
- A 6. Proposal Tabulation
- A 7. Time
- A 8. Specifications
- A 9. Addenda
- A 10. Business Inclusion and Development Policy
Minority/Women Business Enterprise Program
- A 11. Drug-Free Jobsite on City Construction Projects
- A 12. Permits
- A 27. Cement Use on Public Projects
- A 28. Environmental Policy and Occupational Safety and Health Program

TEXAS WATER DEVELOPMENT BOARD SUPPLEMENTAL CONTRACT CONDITIONS

AMERICAN IRON AND STEEL

PART T - TECHNICAL SPECIFICATIONS

CONTRACT BONDS AND FORMS

STAY HOME STAY SAFE – RULES FOR THE CONSTRUCTION INDUSTRY

ADVERTISEMENT FOR BIDS

Sealed Bids clearly identified for “**WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS, CONTRACT NO. 21-233/234**”, as detailed on Dallas Water Utilities plans and as described in the Contract Specifications, shall be submitted as pdfs in Bonfire at: <https://dallascityhall.bonfirehub.com/login>, **before 1:00 p.m. on Friday, November 19, 2021.** Bid opening will be read ONLY online by the Purchasing Agent at **2:00 p.m. on Friday, November 19, 2021.** You may view this bid opening live by going to www.dallascityhall.com, click on watch city meetings online, and it will be live on DCN 95 live.

A PDF file version of Plans, Specifications and Bid Proposal Spreadsheet can be obtained using Internet Explorer at the following City of Dallas Bonfire website: <https://dallascityhall.bonfirehub.com/login>, Friday, October 22, 2021. Click on **CIZ-DWU -21 233 234**.

Bid opening will be read ONLY online for this Bid due to COVID-19 precautions. You may view this bid opening live by going to www.dallascityhall.com, click on watch city meetings online, and it will be live on DCN 95 live. Bid opening will not be open for in-person viewing at this time.

There will be an online Pre-Bid Conference held at **10:00 AM on Tuesday, October 26, 2021**. To receive a calendar invite to the meeting, please email DWUCapitalServices@dallascityhall.com. A calendar invite will be sent upon receipt of your request.

Cashier's check or acceptable Bidder's Bond, payable to the City of Dallas in an amount of not less than five percent of total Bid submitted must accompany Bid. City reserves the right to reject any or all Bids.

All Bidders will be required to comply with Chapter 15B, Equal Opportunity Contract Compliance, of the Dallas City Code. It is the goal of the City of Dallas that certain percentage of work under each Contract will be done by one or more M/WBEs. **Following are the City Council M/WBE goals without consideration for specific ethnic or gender adopted on September 23, 2020 (Resolution Number 20-1430):**

<u>Construction</u>	<u>A & E</u>	<u>Other Professional</u>	<u>Other Services</u>	<u>Goods</u>
32.00%	34.00%	38.00%	23.80%	32.00%

The successful Bidder will be required to furnish a Payment Bond and a Performance Bond, each in an amount equal to 100 percent of the Contract Price. Insurance shall be furnished according to Item 103.4 of the City of Dallas Addendum to North Central Texas Standard Specification for Public Works Construction, Latest Edition.

No Proposal may be withdrawn within a period of **150** days after the date fixed for opening Proposals.

PART "A"

INFORMATION TO BIDDERS

**SPECIFICATIONS
AND
FORMS OF CONTRACT AND BONDS
FOR
WATER AND WASTEWATER MAIN REPLACEMENTS
AT VARIOUS LOCATIONS
CONTRACT NO. 21-233/21-234**

PART A - INFORMATION TO BIDDERS

A 1. TIME AND PLACE FOR RECEIVING PROPOSALS

Due to the COVID-19 Pandemic, the office of Procurement Services is unable to accept paper copies of bids or proposals. Please submit all bids or proposal as pdfs in Bonfire at: <https://dallascityhall.bonfirehub.com/login>. For any questions, please email procurementAds@dallascityhall.com.

A 2. LOCATION AND DESCRIPTION OF PROJECT

This project consists of approximately:

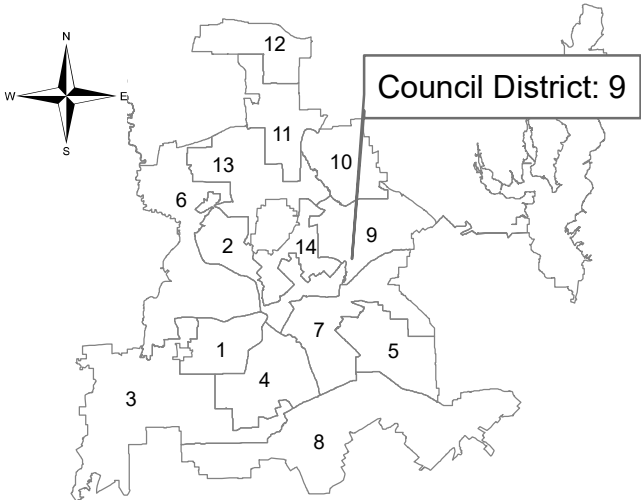
Location	Limits	LF W	LF WW	Pipe Sizes & Types			
				Existing		Proposed	
				Water	WW	Water	WW
Garland Road	Garland Road From Saint Francis to SW Saint Francis Avenue From Garland Road to San Fernando Way San Fernando Way From Saint Francis Avenue to San Rafael Drive San Rafael Drive From San Fernando Way to Garland Road	N/A	4,338	N/A	N/A	N/A	30" PVC
Akard Street	from Ross Avenue to Pacific Avenue	292	892	6" UNK	6" VCT	8" DI 12" DI	8" PVC
		109 1,057		12" DI	12" PVC	16" DI	N/A

Ervay Street	from Pacific Avenue to Woodall Rogers Freeway	2,123 543	1,326 869 351	4" UNK	6" VCT	12" DI	8" PVC 10" PVC
				6" UNK	10" VCT	24" RCCP	16" PVC
				8" UNK	N/A	N/A	N/A
Federal	from Akard to St. Paul	11 801	731	6" UNK	6" VCT	8" DI	8" PVC
				N/A	8" UNK	12" DI	N/A
Live Oak Street	from St. Paul Street to Hawkins Street	75 2,145	1,218	6" UNK	6" UNK	8" DI	12" PVC
				N/A	8" VCT	12" DI	N/A
Patterson Street	from Griffin Street to Ervay Street	107 1,323 1,599	961	4" UNK	6" UNK	8" DI 12" DI	8" PVC
				6" UNK	N/A	24" DI	N/A
St. Paul	from Federal to Live Oak	434	N/A	4" UNK	8" Conc	12" DI	N/A
				6" UNK	12" PVC	N/A	N/A
				N/A	15" PVC	N/A	N/A

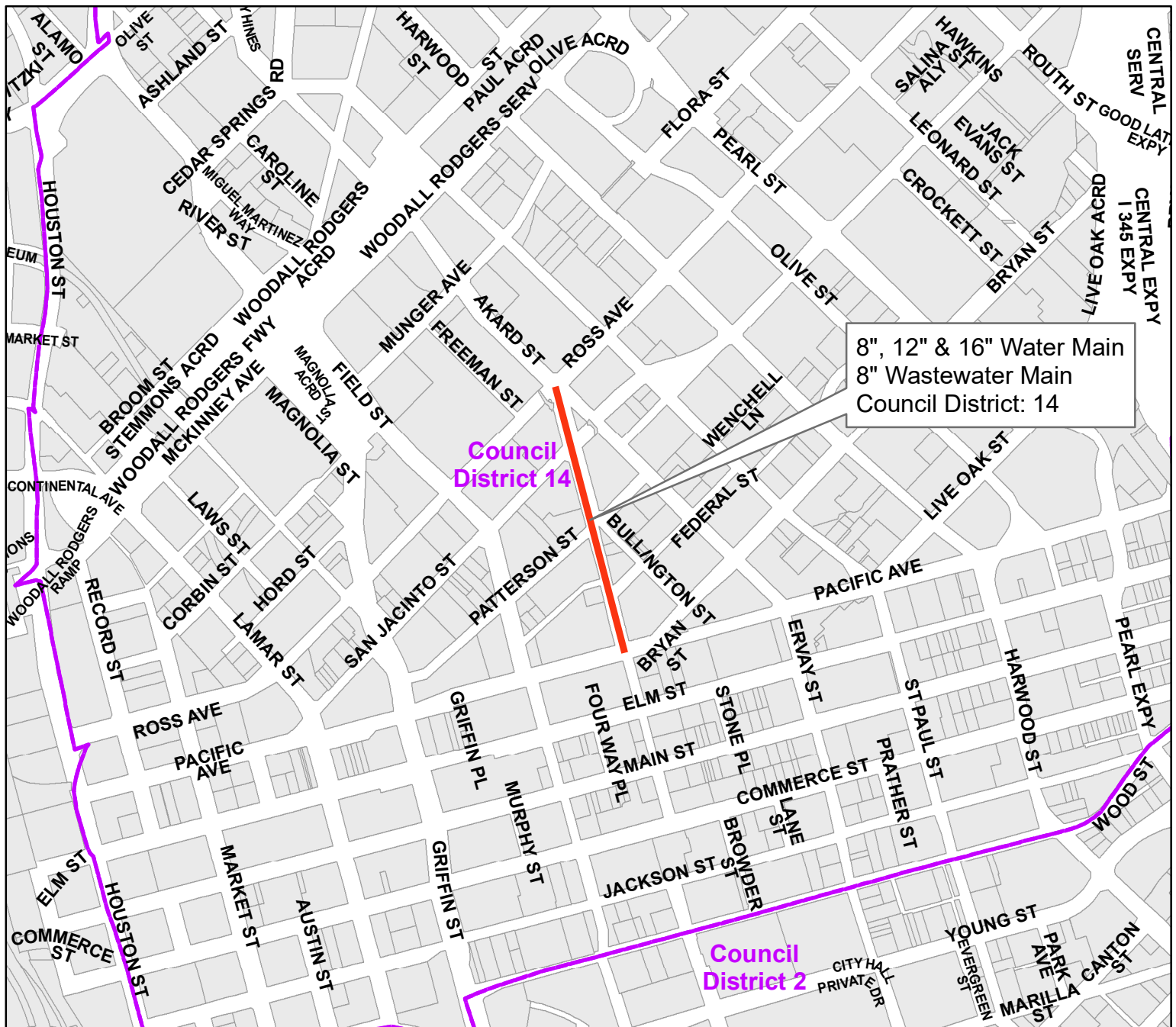
For details of locations and construction see the above referenced maps and the applicable Standard Drawings.



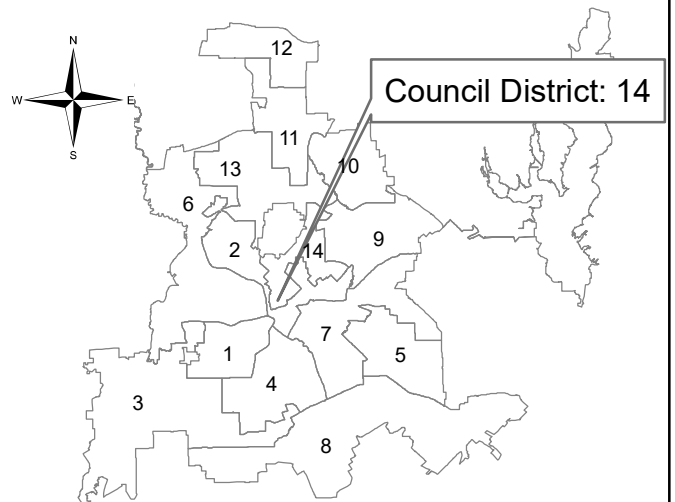
Garland Road
from St. Francis Avenue southwest



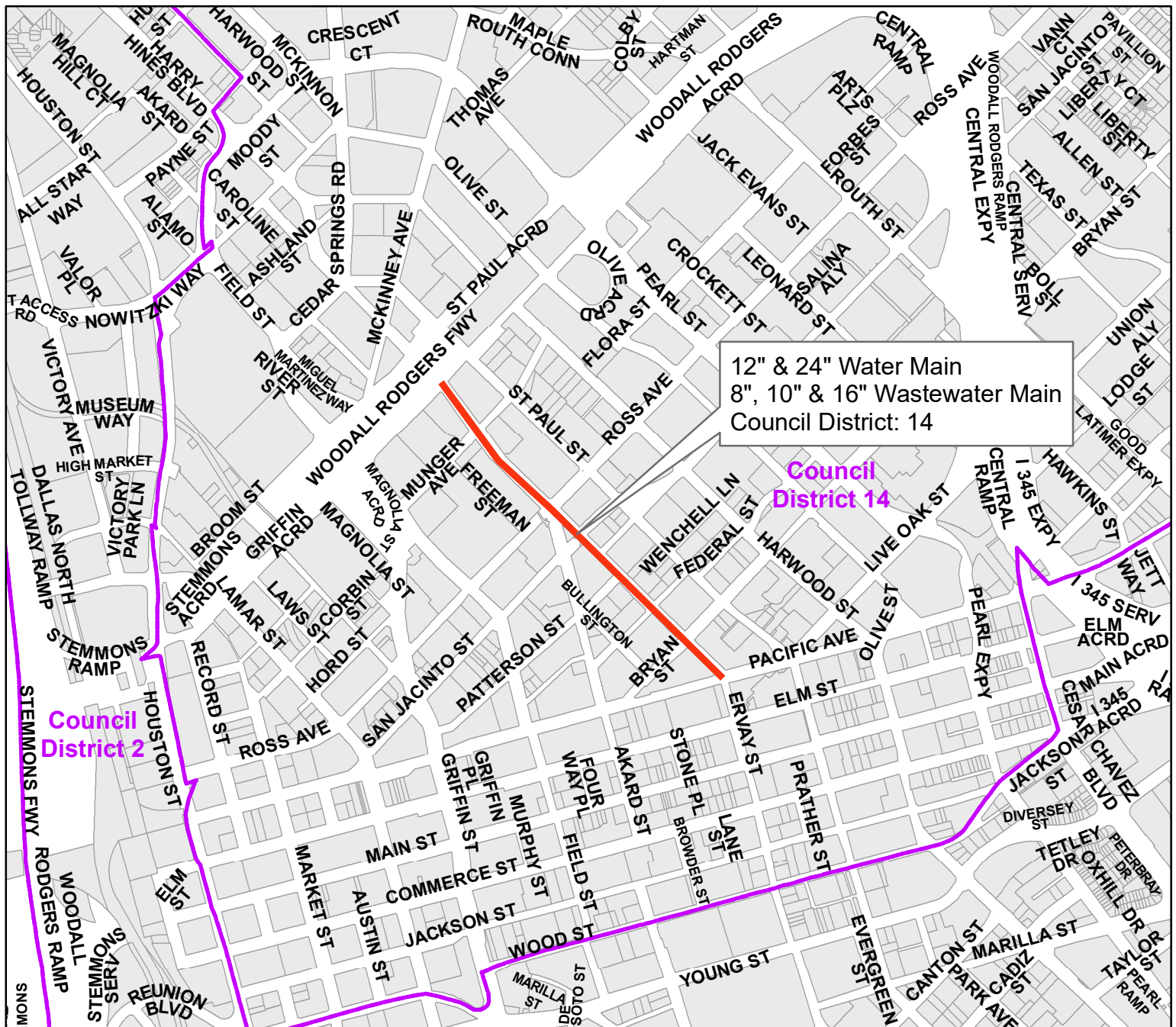
Dallas Water Utilities
Contract No. 21-233/234
Water and Wastewater Main Installations
at 7 Locations



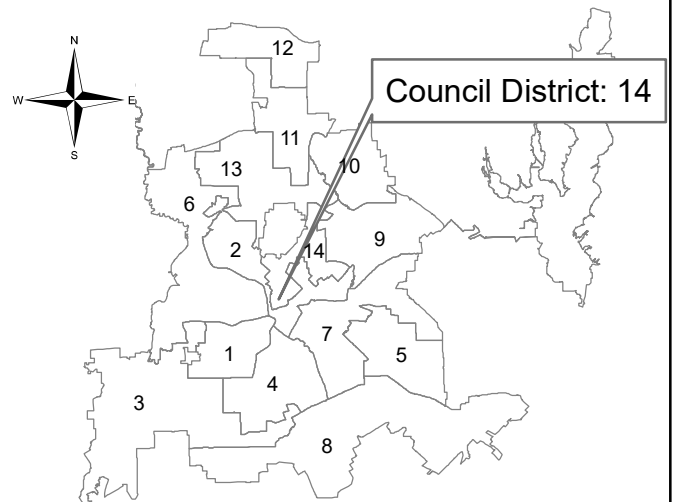
Akard Street
from Ross Avenue to Pacific Avenue



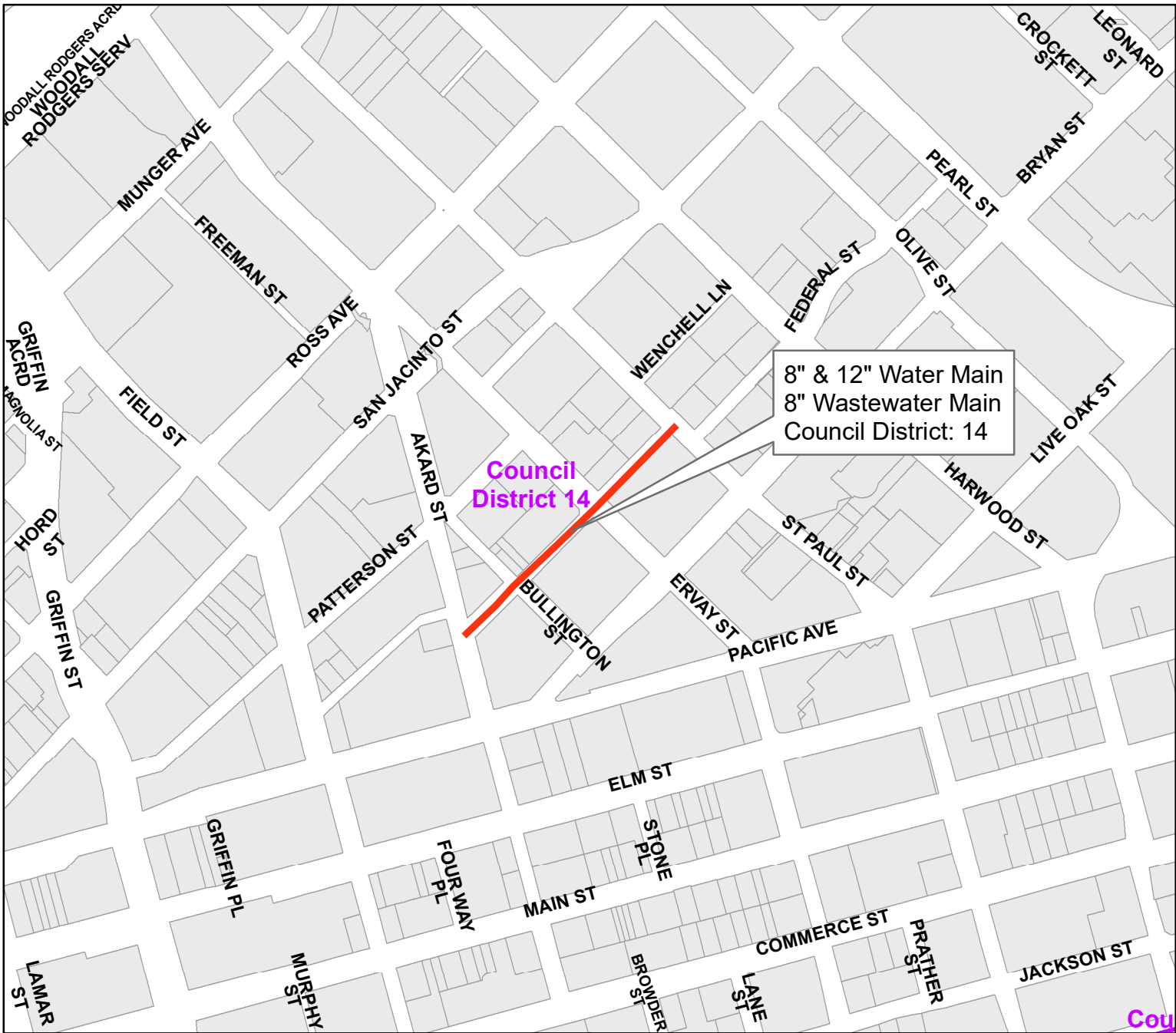
**Dallas Water Utilities
Contract No. 21-233/234
Water and Wastewater Main Installations
at 7 Locations**



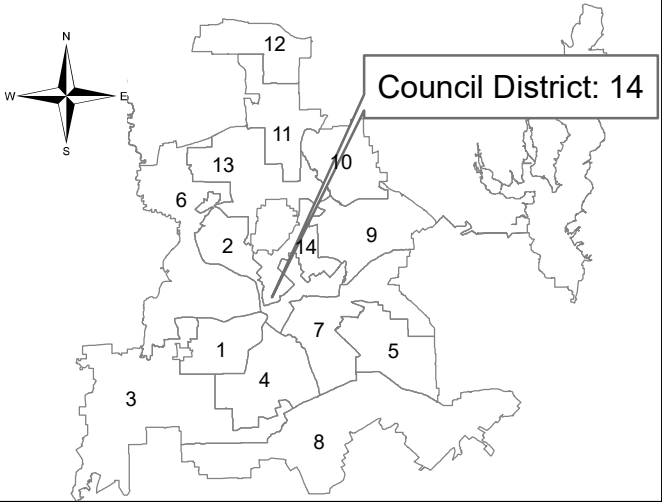
Ervay Street
from Pacific Avenue to Woodall Rodgers Freeway



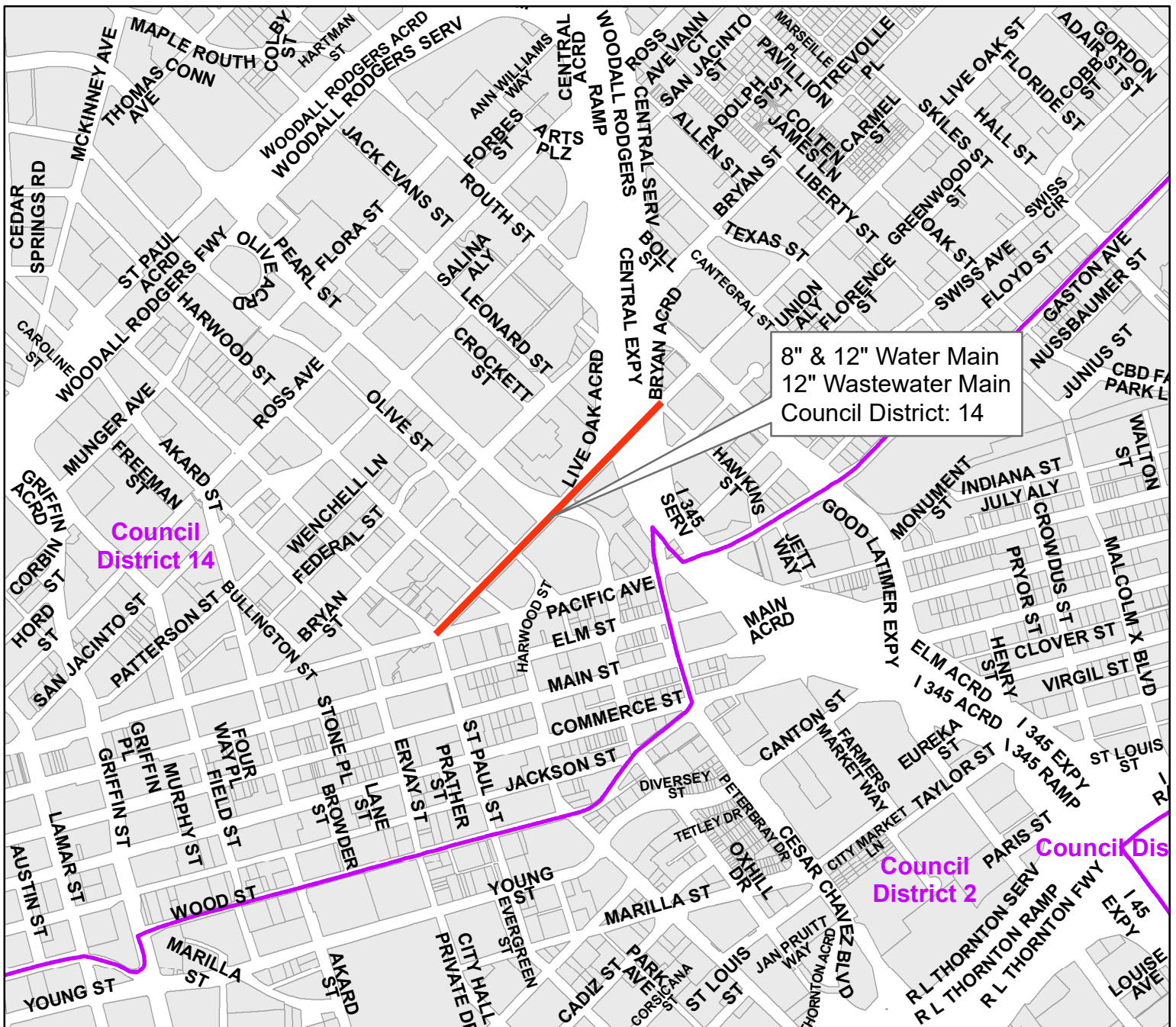
**Dallas Water Utilities
Contract No. 21-233/234
Water and Wastewater Main Installations
at 7 Locations**



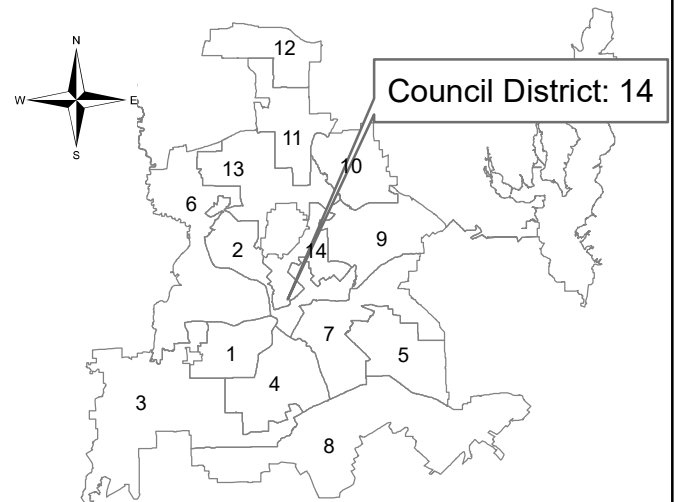
Federal Street
from Akard Street to St. Paul Street



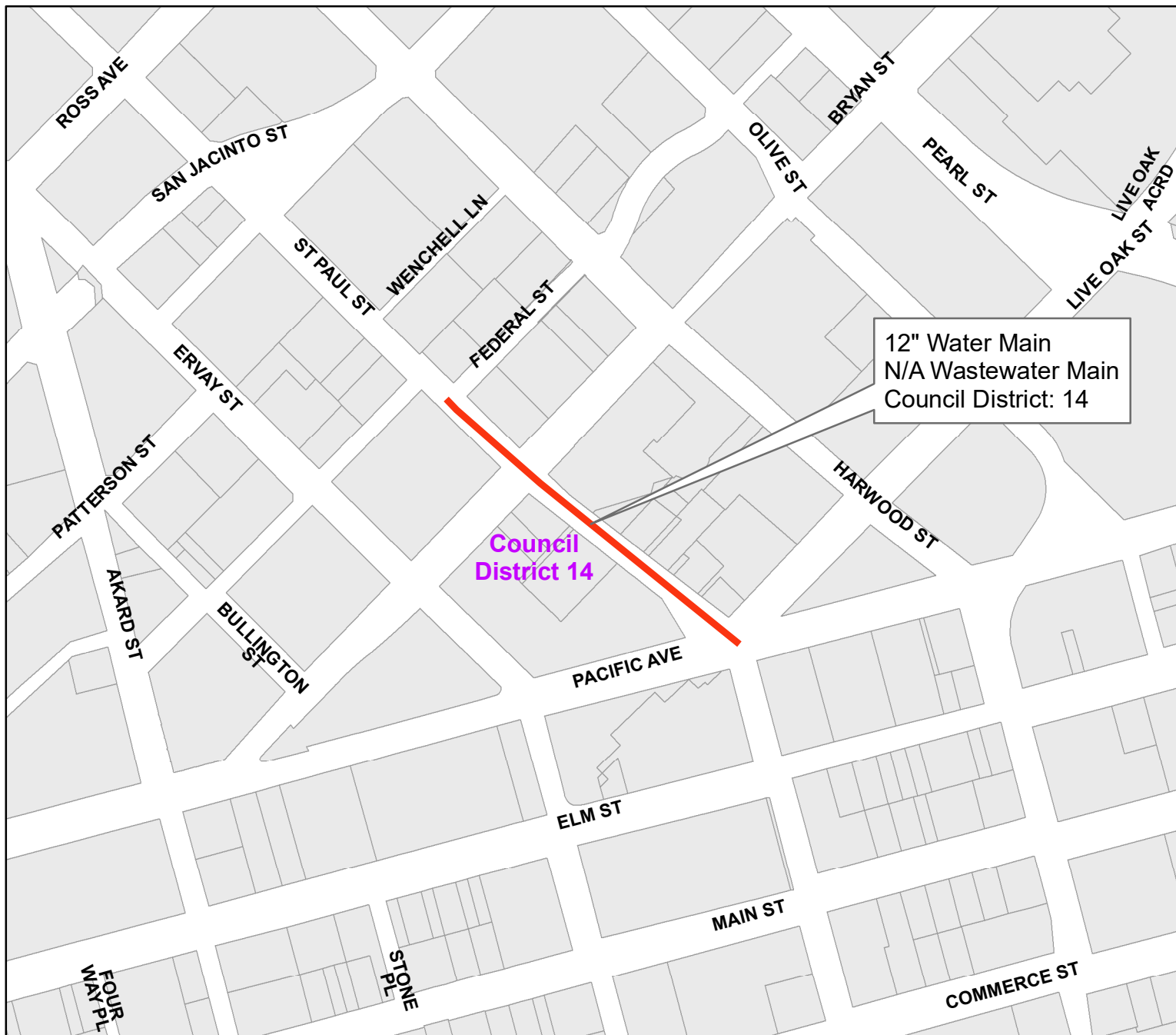
Dallas Water Utilities
Contract No. 21-233/234
Water and Wastewater Main Installations
at 7 Locations



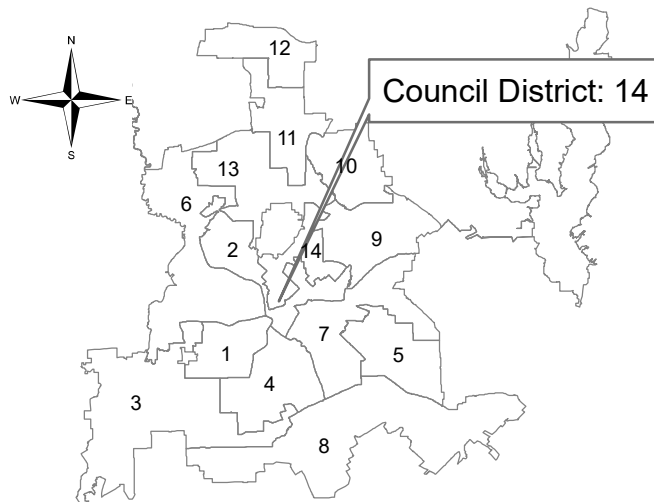
Live Oak Street
from St. Paul Street to Hawkins Street



Dallas Water Utilities
Contract No. 21-233/234
Water and Wastewater Main Installations
at 7 Locations



St. Paul Street
from Federal Street to Live Oak Street



**Dallas Water Utilities
Contract No. 21-233/234
Water and Wastewater Main Installations
at 7 Locations**

A 3. SPECIAL PROVISIONS

S-1 INQUIRIES

All inquiries shall be directed to:

James Wellington

Dallas Water Utilities Department

2121 Main Street, Suite 300

Dallas, Texas 75201

Telephone: (214) 948-4552

E-Mail: james.wellington@dallascityhall.com

Project related questions shall be submitted in writing no later than 4:00PM on Monday, November 01, 2021.

S-2 PRE-BID CONFERENCE

There will be an online Pre-Bid Conference held at **10:00 AM** on **Tuesday, October 26, 2021**. To receive a calendar invite to the meeting, please email DWUCapitalServices@dallascityhall.com. A calendar invite will be sent upon receipt of your request.

S-3 BIDDING RESTRICTIONS

No individual, partnership, corporation, holding company, or other business organization shall submit more than one Bid on this project. The submittal of multiple bids in the names of different Contractors by the same individual, partnership, corporation, holding company, or business is specifically prohibited.

S-4 BID PACKET SUBMITTAL

Contractors must provide an electronic copy of their Bid Proposal Spreadsheet in Excel (.xls, .xlsx) format with their Bid Packet submittal in Bonfire.

S-5 **QUANTITIES**

The quantities in all Unit Price bid items in the Proposal are approximate and may represent quantities in excess of those actually installed. Payment will be based on the actual quantities installed and paid in accordance with the applicable Specifications.

S-6 **MILESTONE/LIQUIDATED DAMAGES**

Bidder agrees that the work covered by the contract award will be completed in accordance with the following Milestones:

Milestone 1: Effective Start Date shall be no longer than 40 Calendar days after City Council award of this project. Liquidated Damages shall be \$ 500 Per Calendar Day.

Milestone 2: 17,500 linear feet of water/wastewater mains installed, backfilled, tested and temporary paving (if applicable) in place within 220 consecutive working days. Liquidated damages shall be \$500 Per Calendar Day.

Milestone 3: 35,000 linear feet of water/wastewater mains installed, backfilled, tested and temporary paving (if applicable) in place within 440 Consecutive Working Days. Liquidated damages shall be \$500 per calendar day.

Milestone 4: All water/wastewater work and site restoration completed within 660 Consecutive Working Days. Liquidated damages shall be \$500 per calendar day.

S-7 **PROJECT SIGN**

This Contract requires work at more than one geographical location. A Project Sign will be required at each location of work from the period when work has started at that location until all work is complete at that location. The signs will be provided to the Contractor **at no charge**, however, delivery to the project site is not included and the Contractor will be required to pick the sign up when notified at Dallas Lite and Barricade, 1607 Fort Worth Avenue, Dallas, Texas, 75208. The Contractor will also be required to erect the sign at the project site and also to deliver the signs upon completion of the project site for re-use. The Contractor will be required to notify the Project Manager two (2) weeks prior to the placement of the signs. **NO PAY ITEM.**

S-8 **NOTIFICATION OF CONSTRUCTION OPERATIONS**

The **Contractor** shall be responsible for all Construction Staking associated with the Water and Wastewater Facilities on this project. Costs for Construction Staking is covered under Bid Items 8011 and 8012. Staking shall be performed by qualified personnel. Typed Cut-Sheets must be submitted to DWU Pipeline Inspection, 2121 Main Street, #300, Dallas, Texas 75201 (Phone - 214-671-9530; Fax - 214-670-3018) no later than 3:00P.M. the day prior to scheduled start of construction. (See example in Part T - Technical Specifications).

The Contractor is responsible for maintaining all staked controls and hubs in the construction area at all times and any costs for re-staking or re-establishing controls required shall be borne by the Contractor.

Inspection of work associated with the water and wastewater facilities will be done by Dallas Water Utilities (DWU) and shall be requested through the appropriate DWU Construction Superintendent a minimum of ten (10) days prior to the scheduled start of construction for each location. Actual start date is dependent upon approval and issuance of the "Public Relations" letter from the Project manager.

S-9 **PROJECT PARTNERING**

The Contractor is to participate in ongoing "Project Partnering" along with the Design Engineer and the Owner as described in the DWU Standard Technical Specifications for Water and Wastewater Construction, Latest Edition. The Contractor shall hire a 3rd party facilitator and all associated costs shall be included in Bid Item No. 6800. The Contractor will be paid 60% of Bid Item No. 6800 in the first estimate following completion of the initial one day partnering workshop.

The remaining balance will be paid after all work is completed and all claims against the Contractor are settled. The initial partnering workshops as well as quarterly partnering sessions should accommodate up to fifteen (15) Dallas Water Utilities and/or design consultant personnel in addition to Contractor's and Subcontractor's personnel. The Project Partnering shall be conducted at the beginning of the Project in accordance with the format detailed in the DWU Standard Technical Specifications for Water and Wastewater Construction, Latest Edition.

This is a **Contingent Item** to be used and paid for only as directed by the Project Manager. Partnering shall be conducted at a location within the City Limits of Dallas.

S-10 **SUBMITTALS**

The Contractor is required to furnish written submittals. The following additional information is required with all pay applications.

MONTHLY ESTIMATE:

PAYMENT REQUEST COVER LETTER
DESCRIPTION OF PAY ITEMS/QUANTITY INFORMATION
UPDATED PROJECT SCHEDULE
SCHEDULE OF WORK AND ACTUAL PAYMENT FORM
CONTRACTOR/SUBCONTRACTOR CERTIFIED PAYROLL REPORT
NEIGHBORHOOD JOB OPPORTUNITIES
CERTIFICATE OF LIABILITY INSURANCE
VERIFICATION OF PAYMENT FOR INSPECTORS OVERTIME
AFFIDAVIT OF SUBCONTRACTOR/SUPPLIER PAYMENT
BREAKDOWN OF STORED MATERIALS (IF APPLICABLE)
M/WBE PROPOSED CHANGES

FINAL ESTIMATE:

CONTRACTOR AFFIDAVIT OF SUBCONTRACTOR/SUPPLIER
PAYMENT
POST CONSTRUCTION CONTRACTOR EVALUATION (with final
application)
RELEASE OF CLAIMS (if applicable with final application)
M/WBE SUBCONTRACTOR/SUPPLIER EVALUATION(S)
INSPECTOR'S OVERTIME FEE PAID
SUBCONTRACTOR EXPLANATION OF VARIANCE FROM PAYMENT
SCHEDULE
WARRANTY(S) ORIGINAL(S)
CONSENT OF SURETY TO FINAL PAYMENT
NEIGHBORHOOD JOB OPPORTUNITIES FORM
WEEKLY CERTIFIED PAYROLLS THROUGH COMPLETION OF WORK
SWORN STATEMENT OF ACCOUNTS
DISPOSITION OF EXISTING ASSETS FORM

S-11 APPROVED MATERIALS BY TRADE NAME

The Owner maintains a list of approved materials by trade name as shown in the DWU Standard Technical Specifications for Water and Wastewater Construction, Latest Edition or as included in these specifications. The latest version provided by either the DWU Standard Technical Specifications or these specifications shall govern. Contractor shall use materials specified on Approved Materials List unless otherwise specified in this contract.

S-12 OFF- SITE CONSTRUCTION AREA

The Contractor is not permitted to use any public right-of-way as a staging area, yard, office, storage, etc. Should the Contractor require the use of private property as a staging area, yard, office, storage, etc. then he will submit that location along with a copy of the agreement from the Property Owner/Owners to the Project Manager.

S-13 STABILIZED MATERIAL

Item(s) **7041 and 7050** may be used interchangeably for various applications during construction at the discretion of the Engineer. There shall be no renegotiation of bid prices for any of these items due to quantity underruns or overruns.

S-14 WATER METER BOXES

Install new plastic type Water Meter Boxes on all new and reconnected existing water services shown on the Drawings and specified herein. Water Meter Boxes shall conform to Dallas Water Utilities Approved Materials List. Install Water Meter Boxes according to DWU Standard Drawings for Water and Wastewater Construction, Latest Edition, pages 201 thru 206A. All locations specified in this Contract are considered "Traffic Bearing Areas".

S-15 TRAFFIC RESTRICTIONS

The following traffic restrictions shall be enforced during construction.

1. Two-way traffic shall be maintained on all streets at all times. Flagmen should be used to maintain two-way traffic.
2. The Contractor will be responsible for barricading all projects. All barricades, warning signs, and traffic control devices shall conform as a minimum to the standards in the City of Dallas Traffic Barricade Manual and TxDOT *Texas Manual on Uniform Traffic Control Devices 2006* (Texas MUTCD).
3. When closing side streets, four working days notification is required for Fire and Police Departments. Contact the Traffic Safety Coordinator Gary Hughes at (214) 670-5662.

S-16 TRANSPORTATION/TRAFFIC CONTROL

The Contractor shall provide a Traffic Control Plan to assure two way traffic and uninterrupted access to properties at all times.

S-17 MANHOLE CORROSION PROTECTION

All proposed Wastewater Manholes require Raven Coating 405 or approved equal as stipulated in the DWU Standard Technical Specifications for Water and Wastewater Construction, Latest Edition. No Separate Pay Item.

S-18 POINT REPAIRS

The Contractor is advised that point repairs may be required on private property. Point repairs on private property shall be hand excavated using small equipment to cause as little damage as may be necessary to accomplish the work. If fences must be removed to accomplish the work, the Contractor shall install temporary fencing of like size and construction until permanent fence replacement is accomplished.

S-19 TEMPORARY PAVING

Temporary Paving will be placed over the compacted, backfilled ditch in paved areas. The Temporary Paving shall consist of 6" minimum thickness flexible base and High Performance mix asphalt at the width and 2" minimum thickness as specified for payment in the bid items.

The Contractor may exceed these limits of measure for payment; however, all cost associated with this increase will be at the Contractor's expense. If the Contractor concludes the Temporary Pavement is not adequate in thickness or width for the conditions, this should be taken into account when preparing the bid.

Temporary surface shall be adequately compacted and sealed to prevent degradation of the repair during the temporary period. Any temporary surface shall be repaired or removed and replaced, as directed by the Engineer, at the Contractor's expense.

If an alternate route is required, the placement and removal of Flex Base and Asphalt Paving as approved by the Construction Engineer will be entirely at the Contractor's expense.

**S-20 POST CONSTRUCTION CONTRACTOR AND SUBCONTRACTOR/
SUPPLIER EVALUATION**

The Contractor will be evaluated by the Owner. The completed form will be submitted for the Contractor's signature prior to final payment.

The Contractor shall evaluate each Subcontractor and Supplier. The evaluation(s) will be furnished to the Owner prior to payment of the final estimate.

Examples of the evaluation forms are available at 2121 Main Street, Suite 400, Dallas, Texas 75201.

S-21 **CONTRACTOR ENVIRONMENTAL PACKET**

Contractor shall read and understand 107.27 of the City of Dallas NCTCOG Addendum, Latest Edition, and provide a signed "*Environmental Record Affidavit*" prior to start of construction.

S-22 **DENSITIES**

Densities shall be taken at the amount of three (3) per one hundred (100) feet of open cut trench excavation, equally spaced.

The density tests are to be conducted by DWU's approved soil density labs. The depths of the samples and the approximate locations are to be coordinated and approved by the DWU Pipeline Field Inspector.

All densities shall meet the requirements set forth in the pavement Cut and Repair Standards Manual issued by the Department of Public Works and Transportation.

Payment for these services related to DWU's Pipeline Program's Capital Improvement Projects shall be borne by DWU's Pipeline program.

S-23 **PERFORMANCE OF WORK BY THE CONTRACTOR**

Contractor Participation. Except as otherwise provided, the Contractor shall perform no less than 25 percent (25%) of the work with his own organization. The on-site production of materials produced by other than the Contractor's forces shall be considered as being subcontracted. If, during the progress of work hereunder, the Contractor requests a reduction in such participation percentage and the **OWNER** determines that it would be to the **OWNER'S** advantage, the percentage of work required to be performed by the Contractor may be reduced; provided, written approval of such reduction is obtained by the Contractor from the **OWNER**.

The organization of the Specifications into divisions, sections, and articles, and the arrangement and titles of project drawings shall not control the Contractor in dividing the work among subcontractors or in establishing the extent of work to be performed by any trade.

S-24 **DAMAGE TO EXISTING STRUCTURES AND OTHER UTILITIES**

Contractor shall take care to protect, and to not cause damage to, existing structures and other utilities as specified in 107.23, 203.1, and all Addenda thereto. If any utility structure, line, service, or any other structure or utility is damaged, contractor shall notify the structure or utility Owner or Operator immediately upon causing the damage incident as per local, state, and federal laws and regulations. Contractor shall notify DWU Inspector or Superintendent within one hour from the time of the damage incident. In case of service disruption to an individual or in case of an emergency, contractor shall also attempt to notify adjacent property owner of the damage incident. Contractor crew which caused the damage incident shall incur a one day mandatory shut-down for each occurrence of a failure to notify DWU Inspector or Superintendent within one hour of a damage incident. Contractor crews shut down as provided will not be prohibited from performing site cleanup or general maintenance on any mandatory shut down day. Contractor shall be responsible for all costs and delays incurred. **NO SEPARATE PAY ITEM.**

S-25 **PRE-CONSTRUCTION VIDEO**

The Contractor is required to furnish a pre-construction video of the segments prior to moving any equipment, material, or personnel to that location as stipulated in the DWU Standard Technical Specifications for Water and Wastewater Construction, Latest Edition. **NO SEPARATE PAY ITEM.**

S-26 **POST-CONSTRUCTION VIDEO**

The Contractor is required to furnish a post-construction video of the segments after all water/wastewater mains work and site restoration is complete as stipulated in the DWU Standard Technical Specifications for Water and Wastewater Construction, Latest edition. **NO SEPARATE PAY ITEM.**

S-27 **ENVIRONMENTALLY CONTAMINATED SOIL**

In the possible event where environmentally contaminated soil is encountered at any project site; the City of Dallas will hire a third party environmental consultant who will determine the extent of environmental contamination through laboratory testing and environmental analysis. The third party consultant will be responsible for:

- Site reconnaissance and environmental study,
- Soil borings and evaluation,
- Determination of site specific chemicals,
- Development of environmental soil and ground water management plan,
- On-site environmental inspection of waterline installation,
- Loading, transport and disposal of environmentally contaminated soil to appropriate landfill.

The cost associated with the items above will be paid by the City.

Contractor is instructed to immediately contact the Owner Representative when environmental issues arise so that arrangements can be made. Contractor will coordinate with the third party environmental consultant as necessary for the compliance of environmental requirements.

Any delay of the project due to environmentally contaminated soil will be adjusted in contract milestones. City will not provide any additional compensation to the contractor due to the delay caused by encountering environmentally contaminated soil.

S-28 **PERMITS**

In addition to other provisions in this contract, the Contractor shall adhere to the requirements of Owner contained within permits in Section A 12. The provisions of these permits shall be considered necessary to complete the work and shall be included by the Contractor at no additional cost to the Owner. **NO SEPARATE PAY ITEM.**

S-29 **DISPOSAL OF EXCAVATED MATERIALS**

The Contractor must submit to the Owner a detailed list of disposal sites and materials to be disposed at each site for entire project prior to commencement of work. The Contractor is responsible for disposal of all spoil materials associated with this project. Once the detailed list of disposal sites is submitted and approved, no deviation is allowed without written approval. Contractor must keep record of delivery manifests, tickets, invoices, and other pertinent documents, and submit copies of documents to Owner upon request.

If any dump site is located on private property the submittal must include the following:

1. A letter from the property owner outlining the agreement for the use of the property.
2. If the private property is located within a designated flood plain, a copy of the City permit to dump in the flood plain must be attached with the letter from the property owner.
3. A signed release letter from the property owner stating final acceptance of the property condition. **NO SEPARATE PAY ITEM.**

S-30 **INSPECTION OVERTIME REIMBURSEMENTS**

The following paragraph in Item 105.9.3.COD: Inspection Overtime of the DWU Addendum to North Central Texas Standard Specifications for Public Works Construction shall be revised as follows:

Inspection overtime will be charged to the Contractor at the rate of **\$50.00** per hour per Inspector with the number of Inspectors to be determined by the Owner under the following overtime conditions:

1. Weekdays between the hours of midnight to 7:30am and 4:30pm to midnight.
2. Saturdays, Sundays and Holidays between the hours of midnight to midnight with a minimum of four (4) hours, at a rate of **\$50.00** per hour per Inspector and a minimum of **\$200** per day per Inspector.

If the Contractor plans to work on a weekend, or holiday, the Contractor must make request by noon on Thursday, prior to that weekend or holiday.

S-31 HOT MIX ASPHALTIC CONCRETE PAVING

Contractor shall provide Hot Mix Asphaltic Concrete mix design submittal for review and approval prior to commencement of work. Mix design must have been previously approved for use by Texas Department of Transportation (TxDOT) and be performing satisfactorily. Submittal shall include a list of TxDOT projects where the mix was installed. Submittal shall include source of asphaltic materials, laboratory test results as specified in 302 of these Specifications and Addenda thereto, and equipment listing for spreaders, finishers and rollers to be used. Contractor shall submit a separate mix design, complete as specified hereto, for each permanent asphalt type required for the project. Owner shall, at owners discretion, perform materials testing to ensure control of materials and installation. Contractor shall notify Inspector no less than 24-hours prior to asphalt placement. These requirements shall be considered inclusive to the permanent paving pay items.

S-32 MACHINE FINISH PERMANENT PAVING

Unless otherwise specified or approved by owner, permanent paving restoration of cuts greater than eight (8) feet width in asphalt requires machine spreading and machine finishing, and greater than eight (8) feet width in concrete requires machine finishing, per 302.9.6.6 and 303.5.6, of these specifications, respectively and addenda thereto. These requirements shall be considered inclusive to the permanent paving pay items.

S-33 PERMANENT PAVEMENT RESTORATION COMMENCEMENT

As a condition of the street cut permit, issued on behalf of Contractor and per Dallas City Code Chapter 43 by Ordinance 24495, amended by Ordinance 25409 and then amended by Ordinance 29993: Contractor is notified that permanent paving restoration shall commence no later than 14 calendar days after paving release is issued. **Liquidated Damages shall be \$500.00 per calendar day.**

S-34 CITY OF DALLAS ORDINANCE 29993

Ordinance 29993, amending the street cut permit conditions and requirements of the City Code, went into effect as a result of Council action on 1/27/2016 by Resolution 16-0193, and is made part of this contract as per 107.16 of these specifications and addenda thereto.

S-35 PERMANENT PAVING REPAIR LIMITS

City of Dallas Pavement Cut and Repair Standards establish the minimum repair standard required and rules for determining actual extent necessary. Some project locations require the extent of paving repairs in excess of the minimum repair extent, up to and including the full width of the street. Quantities for these locations have been calculated and included in the contract. Final determination of paving limits will be made by the City of Dallas at these locations prior to release to contractor for final paving repairs. All paving repairs are considered Contract Work. Compensation will be at the bid unit rates established for the bid items, as applicable. Repairs necessitated as a result of contractor's inadequate construction means and methods, or due to contractor damage to adjacent property are non-compensatory repairs.

S-36 STAY HOME STAY SAFE - RULES FOR THE CONSTRUCTION INDUSTRY

The City of Dallas adopted the Dallas County Amended Emergency Order dated March 29, 2020 (County Order) as part of Dallas' Third Amended Emergency Regulations with certain "exceptions and additions."

One of the Sections of the County's Order the City adopted is the Stay Home Stay Safe Rules for the Construction Industry. These rules provide guidelines that construction businesses must follow.

Dallas has also adopted Section 2(b)(Xi) (Construction) of the County Order. Construction contractors will find pertinent additional information regarding construction activities contractors must follow.

See attached Memo



Stay Home Stay Safe

Rules for the Construction Industry

This document provides guidance for persons and business associated with the building and construction industries and trades on the meaning and application of Order issued by Dallas County Judge Clay Jenkins on March 29, 2020 (the "Order").

Reason for Construction Rules. The purpose of these rules is to outline the steps that every employer and employee must take to reduce the risk of exposure to COVID-19. The rules describe how to prevent worker exposure to coronavirus, protective measures to be taken on the jobsite, and cleaning and disinfecting procedures.

Construction as Critical Infrastructure. The Order classified construction for public works, residential, commercial, and schools as critical infrastructure. Elective additions and maintenance are prohibited.

Requirements for Construction. All employers involved in construction activity must follow the requirements set forth in the COVID-19 Safety Recommendations issued by the Construction Industry Safety Coalition, including the rules below:

1. Mandatory temperature checks of all workers before they leave home. If a worker has a temperature above 99.6 degrees Fahrenheit, then they are prohibited from going to work and must remain at their residence;
2. Temperature checks of all workers with a forehead thermometer at the construction site before they may begin work. If an employee or contractor has a temperature above 99.6 degrees Fahrenheit, then they are to be sent home immediately;
3. Implement shift work;
4. Limit crossover of subcontractors;
5. Prohibit gatherings during meals or breaks;
6. Keep a 6 foot distance between people at all times, unless the work being performed requires multiple individuals for the safety of the workers;
7. Do not use a common water cooler. Provide individual water bottles or instruct workers to bring their own;



8. Allow non-essential personnel to work from home when possible;
9. Provide soap and water and hand sanitizer in the workplace, including all restrooms. Ensure that adequate supplies are maintained;
10. Mandatory handwashing of at least twenty (20) seconds for workers during the following:
 - a. Before workers begin work;
 - b. After workers remove gloves;
 - c. Before and after the use of shared items such as tools or multi-user devices;
 - d. Before and after any meal or restroom breaks; and
 - e. After a worker's shift or work time ends.
11. Mandatory rest breaks of at least fifteen (15) minutes for every four (4) hours worked so workers may follow hygiene guidelines;
12. Provide one (1) working flushing toilet for every fifteen (15) workers on site or one (1) outdoor portable toilet for every 10 workers on site;
13. No adverse action taken against an employee who has been quarantined, or advised to self-quarantine, due to possible exposure to coronavirus; and
14. Designate a COVID-19 safety monitor on each site who has the authority to enforce these rules.

Enforcement. Failure to strictly comply with this Order can result in penalties described below. Additionally, the general contractor and non-compliant subcontractor can be removed from the essential business list.

S-37 GEOTECHNICAL REPORT

In accordance with **Item 107.23** Existing Structures, Facilities and Appurtenances, **Item 107.23.2.1** COD: Soil Borings: Soil Borings are to be used for information only and are not warranted accurate in any way. The OWNER accepts no responsibility for any deviation from or variance in soil types and/or depths shown on the borings.

S-38 TEXAS WATER DEVELOPMENT BOARD LOAN

TWDB requires that bidders be aware of the following:

1. "Any contract or contracts awarded under this Invitation for Bids are expected to be funded in part by a loan from the Texas Water Development Board and shall be referred to as Project Numbers DWSRF 62741 CWSRF 73757. Neither the State of Texas nor any of its departments, agencies, or employees is or will be a party to this Invitation for Bids or any resulting contract."
2. This project is subjected to the American Iron and Steel (AIS) requirements of Section 608 of the Federal Water Pollution Control Act, Including federal appropriation acts. All Iron and steel products for construction, alteration, maintenance, or reports Incorporated in these plans must be produced in the United States.
3. Pipeline crossings of all potential waters of the U.S. will performed using trenchless technology or If open trench in compliance with Nationwide Permit 12-Utility Line Activities. If project activities within potential waters of the U.S. would not quality under a nationwide permit, then the appropriate permit from the U.S. Army Corps of Engineers would be required prior to clearing or construction activities.
4. Prior to construction activities within any 100-year floodplain, a flood plain permit, or exemption must be obtained from the local Floodplain Administrator (National Insurance Program).
5. The project must also comply with the following conditions:
 - Standard emergency condition for the discovery of cultural resources.
 - Standard emergency condition for the discovery of threatened and endangered species.

S-39 MWBE COMPLIANCE MANAGEMENT SYSTEM REPORTING

Effective September 2020, upon receipt of each payment from the City of Dallas, in addition to paper submittals, the awarded vendor is required to report payment data in the City's contract compliance system. Sub-contractors will be prompted to confirm payment data as reported by the prime in the City's contract compliance system. The City of Dallas M/WBE Diversity Compliance website can be found at <https://dallas.diversitycompliance.com>. There is no cost to contractors to use the System. System training is available on the website. If you require technical assistance during the login process or when using the System, please use the online support form.

S-40 NEIGHBORHOOD JOB OPPORTUNITIES

Notice is hereby given to all prospective Bidders for City of Dallas construction projects, pursuant to City Council Resolution 90-1961, that all construction Bid Proposals received by the City of Dallas after October 1, 1990, shall comply with the following City of Dallas Policy:

The goal of the Neighborhood Job Opportunities Program is to encourage "BID" in hiring unemployed Dallas residents. The Contractor agrees to make a "BID" to promote the City's Job opportunity program regardless of the jurisdictional location of the project.

The Bidder certifies by submission of his bid that if awarded the contract the Bidder will:

1. Post signs at the job site, providing information on employment opportunities, the location of the employment office, the telephone number, and the name of the contact person.
2. Make BID Plan to hire unemployed Dallas residents when hiring new employees.
3. Provide monthly reports indicating the number of employees hired during the month on all contracts and the number of Dallas residents hired, and
4. The Contractor shall establish an on-site employment office/center on contracts in excess of \$5,000,000.00. In those cases where the construction site lies outside the City limits of Dallas, the Contractor may establish an employment office/center inside the City limits of Dallas in lieu of the on-site location.

The following form shall be utilized for the monthly report in accordance with Item 3 above:

As requested in a resolution by the Dallas City Council on June 13, 1990, establishing a "BID Plan" to promote the City's job opportunity program, the purpose of which is to encourage and facilitate the hiring of unemployed local residents for City construction contracts, our firm and all subcontractors hired the following unemployed persons during the month of _____, 20_____.

TOTAL UNEMPLOYED HIRED

Employment Classification
Construction Mgrs.
Foreman
Skilled
Helpers
Laborers
Managers
Administrators
Professionals
Technicians
Office & Clerical
Grand Total

[illegible][illegible]

TOTAL UNEMPLOYED CITY OF DALLAS RESIDENTS HIRED

Employment Classification
Construction Mgrs.
Foreman
Skilled
Helpers
Laborers
Managers
Administrators
Professionals
Technicians
Office & Clerical
Grand Total

[illegible][illegible]

DATE _____

CONTRACTOR

CONTRACT NO. 21-233 / 21-234

**PRE-BID INQUIRIES AND PRE-BID INSPECTION INQUIRIES
FOR
CONTRACT NO. 21-233/234**

QUESTIONS

ALL PRE-BID INQUIRIES MUST BE SUBMITTED IN WRITING. ONLY WRITTEN QUESTIONS WILL RECEIVE A RESPONSE. A RESPONSE WILL BE ISSUED BY ADDENDUM TO ALL WRITTEN QUESTIONS SUBMITTED. FAX, EMAIL OR MAIL PRE-BID INQUIRIES AS APPROPRIATE TO PERSON LISTED IN PART A - INFORMATION TO BIDDERS; **SPECIAL PROVISION S-1.**

Example Format:

Company Name: _____
Project Name: **WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS**
Contract No.: **21-233/234**
Question(s) By: _____
Date Submitted: _____

Question No.	Question	Plan Sheet and/or Spec. Reference
1.		
2.		
3.		
4.		
5.		
6.		

A 4. BID ITEMS

ITEM NO. 1500F 4" DUCTILE IRON WATER PIPE

This item consists of furnishing and placing approximately **160 Linear Feet of 4" Ductile Iron Water Pipe** in accordance with **Item 506. Open Cut – Water Conduit Installation**, **Item 506.5.COD: Hydrostatic Test**, **Item 506.6.COD: Connections To Existing Water Conduits**, **Item 506.6.1.COD: Water Main Tie-In During Off Hours**, **Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger**, **Item 506.7.3.2.COD: Flushing Method**, **Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water**, **Item 506.7.1.COD: Preliminary Flushing**, **Item 506.7.2.COD: Chlorination**, **Item 506.7.3.COD: Flushing**, **Item 506.7.4.COD: Disposal of Flushing Water**, **Item 506.7.5.4.COD: Sampling**, **Item 506.7.6.COD: Indemnification**, **Item 506.8.1.COD: Cut and Plugs** and **Item 501.7.COD: Ductile-Iron Pressure Pipe and Fittings** of these specifications and addenda thereto.

This item includes all fittings, polywrap (AWWA C105-99), barricading, and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

ITEM NO. 1500H 6" DUCTILE IRON WATER PIPE

This item consists of furnishing and placing approximately **350 Linear Feet of 6" Ductile Iron Water Pipe** in accordance with **Item 506. Open Cut – Water Conduit Installation**, **Item 506.5.COD: Hydrostatic Test**, **Item 506.6.COD: Connections To Existing Water Conduits**, **Item 506.6.1.COD: Water Main Tie-In During Off Hours**, **Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger**, **Item 506.7.3.2.COD: Flushing Method**, **Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water**, **Item 506.7.1.COD: Preliminary Flushing**, **Item 506.7.2.COD: Chlorination**, **Item 506.7.3.COD: Flushing**, **Item 506.7.4.COD: Disposal of Flushing Water**, **Item 506.7.5.4.COD: Sampling**, **Item 506.7.6.COD: Indemnification**, **Item 506.8.1.COD: Cut and Plugs** and **Item 501.7.COD: Ductile-Iron Pressure Pipe and Fittings** of these specifications and addenda thereto.

This item includes all fittings, polywrap (AWWA C105-99), barricading, and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

ITEM NO. 1500J**8" DUCTILE IRON WATER PIPE**

This item consists of furnishing and placing approximately **510** Linear Feet of **8"** Ductile Iron Water Pipe in accordance with **Item 506. Open Cut – Water Conduit Installation**, **Item 506.5.COD: Hydrostatic Test**, **Item 506.6.COD: Connections To Existing Water Conduits**, **Item 506.6.1.COD: Water Main Tie-In During Off Hours**, **Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger**, **Item 506.7.3.2.COD: Flushing Method**, **Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water**, **Item 506.7.1.COD: Preliminary Flushing**, **Item 506.7.2.COD: Chlorination**, **Item 506.7.3.COD: Flushing**, **Item 506.7.4.COD: Disposal of Flushing Water**, **Item 506.7.5.4.COD: Sampling**, **Item 506.7.6.COD: Indemnification**, **Item 506.8.1.COD: Cut and Plugs** and **Item 501.7.COD: Ductile-Iron Pressure Pipe and Fittings** of these specifications and addenda thereto.

This item includes all fittings, polywrap (AWWA C105-99), barricading, and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

ITEM NO. 1500L**12" DUCTILE IRON WATER PIPE**

This item consists of furnishing and placing approximately **6,970** Linear Feet of **12"** Ductile Iron Water Pipe in accordance with **Item 506. Open Cut – Water Conduit Installation**, **Item 506.5.COD: Hydrostatic Test**, **Item 506.6.COD: Connections To Existing Water Conduits**, **Item 506.6.1.COD: Water Main Tie-In During Off Hours**, **Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger**, **Item 506.7.3.2.COD: Flushing Method**, **Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water**, **Item 506.7.1.COD: Preliminary Flushing**, **Item 506.7.2.COD: Chlorination**, **Item 506.7.3.COD: Flushing**, **Item 506.7.4.COD: Disposal of Flushing Water**, **Item 506.7.5.4.COD: Sampling**, **Item 506.7.6.COD: Indemnification**, **Item 506.8.1.COD: Cut and Plugs** and **Item 501.7.COD: Ductile-Iron Pressure Pipe and Fittings** of these specifications and addenda thereto.

This item includes all fittings, polywrap (AWWA C105-99), barricading, and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

ITEM NO. 1500Q**16" DUCTILE IRON WATER PIPE**

This item consists of furnishing and placing approximately **1,100** Linear Feet of **16"** Ductile Iron Water Pipe in accordance with **Item 506. Open Cut – Water Conduit Installation**, **Item 506.5.COD: Hydrostatic Test**, **Item 506.6.COD: Connections To Existing Water Conduits**, **Item 506.6.1.COD: Water Main Tie-In During Off Hours**, **Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger**, **Item 506.7.3.2.COD: Flushing Method**, **Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water**, **Item 506.7.1.COD: Preliminary Flushing**, **Item 506.7.2.COD: Chlorination**, **Item 506.7.3.COD: Flushing**, **Item 506.7.4.COD: Disposal of Flushing Water**, **Item 506.7.5.4.COD: Sampling**, **Item 506.7.6.COD: Indemnification**, **Item 506.8.1.COD: Cut and Plugs** and **Item 501.7.COD: Ductile-Iron Pressure Pipe and Fittings** of these specifications and addenda thereto.

This item includes all fittings, polywrap (AWWA C105-99), barricading, and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

ITEM NO. 1500V**24" DUCTILE IRON WATER PIPE**

This item consists of furnishing and placing approximately **2,150** Linear Feet of **24"** Ductile Iron Water Pipe in accordance with **Item 506. Open Cut – Water Conduit Installation**, **Item 506.5.COD: Hydrostatic Test**, **Item 506.6.COD: Connections To Existing Water Conduits**, **Item 506.6.1.COD: Water Main Tie-In During Off Hours**, **Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger**, **Item 506.7.3.2.COD: Flushing Method**, **Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water**, **Item 506.7.1.COD: Preliminary Flushing**, **Item 506.7.2.COD: Chlorination**, **Item 506.7.3.COD: Flushing**, **Item 506.7.4.COD: Disposal of Flushing Water**, **Item 506.7.5.4.COD: Sampling**, **Item 506.7.6.COD: Indemnification**, **Item 506.8.1.COD: Cut and Plugs** and **Item 501.7.COD: Ductile-Iron Pressure Pipe and Fittings** of these specifications and addenda thereto.

This item includes all fittings, polywrap (AWWA C105-99), barricading, and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

ITEM NO. 1800H**6" PVC WATER PIPE**

This item consists of furnishing and placing approximately **40** Linear Feet of **6"** Polyvinyl Chloride Water Pipe (C-900) in accordance with **Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance** of these specifications and addenda thereto.

This item includes fittings, polywrap for fittings, mechanical tamping, diagonal utilities, barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

ITEM NO. 3110J**8" PVC PRESSURE RATED WASTEWATER PIPE**

This item consists of furnishing and placing approximately **3,860** Linear Feet of **8"** Polyvinyl Chloride Pressure Rated Wastewater Pipe conforming to ASTM D2241 (DR 26) Minimum Pressure Rating of 160 PSI and ASTM D3139 joints, and in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.15. Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)** of these specifications and addenda thereto.

This item to include barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 507.6. Measurement and Payment For Wastewater Conduit Installation** of these specifications.

ITEM NO. 3110K**10" PVC PRESSURE RATED WASTEWATER PIPE**

This item consists of furnishing and placing approximately **870** Linear Feet of **10"** Polyvinyl Chloride Pressure Rated Wastewater Pipe conforming to ASTM D2241 (DR 26) Minimum Pressure Rating of 160 PSI and ASTM D3139 joints, and in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.15. Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)** of these specifications and addenda thereto.

This item to include barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 507.6. Measurement and Payment For Wastewater Conduit Installation** of these specifications.

ITEM NO. 3110L**12" PVC PRESSURE RATED WASTEWATER PIPE**

This item consists of furnishing and placing approximately **1,220** Linear Feet of **12"** Polyvinyl Chloride Pressure Rated Wastewater Pipe conforming to ASTM D2241 (DR 26) Minimum Pressure Rating of 160 PSI and ASTM D3139 joints, and in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.15. Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)** of these specifications and addenda thereto.

This item to include barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 507.6. Measurement and Payment For Wastewater Conduit Installation** of these specifications.

ITEM NO. 3120Q**16" PVC PRESSURE RATED WASTEWATER PIPE**

This item consists of furnishing and placing approximately **360** Linear Feet of **16"** Polyvinyl Chloride Pressure Rated Wastewater Pipe conforming to ASTM C905 (DR 25) Minimum Pressure Rating of 165 PSI and ASTM D3139 joints, and in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.15. Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)** of these specifications and addenda thereto.

This item to include barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 507.6. Measurement and Payment For Wastewater Conduit Installation** of these specifications.

ITEM NO. 3120Y**30" PVC PRESSURE RATED WASTEWATER PIPE**

This item consists of furnishing and placing approximately **4,340** Linear Feet of **30"** Polyvinyl Chloride Pressure Rated Wastewater Pipe conforming to ASTM C905 (DR 25) Minimum Pressure Rating of 165 PSI and ASTM D3139 joints, and in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.15. Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)** of these specifications and addenda thereto.

This item to include barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 507.6. Measurement and Payment For Wastewater Conduit Installation** of these specifications.

ITEM NO. 3560**CONNECTION TO EXISTING MANHOLE**

This item consists of furnishing and placing approximately 2 Each Connection to an Existing Manhole, in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be per each in place in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

ITEM NO. 5020**EXTRA IRON FITTINGS**

This item consists of furnishing and placing approximately 35 Tons of Iron Fittings in accordance with **Item 501.7.4.COD: Fittings and Item 502.5.2.COD: All Other Fittings** of these specifications and addenda thereto.

This is a **Contingency** item and is intended to provide compensation for extra fittings not called for on the plans, which are required for changes in horizontal or vertical alignment of water mains, as approved by the Construction Engineer, to avoid conflicts with existing utilities. The use of Ductile Iron Compact fittings for this item is prohibited.

Measurement and payment will be per ton of fittings installed at the CONTRACT unit price.

ITEM NO. 5050**WATER SERVICE**

This item consists of furnishing and placing approximately **71** Each Water Service on an existing or new water main. This item includes all sizes of water services, 3/4" through 2", water meter boxes and meters, 5/8" through 2". This item does not include Commercial Water Meter Vaults. This item includes tapping of the existing or new water main, removing the existing meter box and lid and old service line and replacing with a new meter box and approved lid, transferring the water service to the meter, adjusting the meter box and meter vertically and horizontally as required, and installing a new service line from the new meter box to the property line in accordance with **Item 502.10.3.2. Services and Bullheads, Item 502.10.3.2.1.COD: Procedures for Transferring Service, Item 502.10.3.2.1.1.COD: IN ADVANCE OF PAVING or Item 502.10.3.2.2.COD: NOT IN ADVANCE OF PAVING, Item 502.10.3.4.COD: NSF 61 Compliance and Item 504.2.3.6.COD: OPEN CUT WASTEWATER LATERAL AND WATER SERVICES** of these specifications and addenda thereto, and the applicable Standard Drawings.

The new meter box and lid shall be replaced to the proper grade and relocated to the correct location on a sand cushion. The disturbed area around the meter box will be replaced with sod in accordance with **Item 202.5. Sodding**, or concrete in accordance with **Item 305.2. Concrete Sidewalks, Driveway Approaches, and Barrier Free Ramps, and Item 305.2.2.2.COD: Reinforcement** to match the existing surface. If the meter is determined by the Project Manager to be defective, it will be replaced with a new meter, furnished by the City.

This bid item will also be utilized to provide a water service to a vacant lot where no meter transfer is involved. It will be the Contractor's responsibility to relocate the existing backflow prevention devices on the existing water service between the meter and property line to a proper location as directed by the Project Manager. Should any additional services be found necessary, they will be added to the contract at the same Unit Price. Likewise, should any of the listed services not be necessary, they will be removed from the contract without having any effect on the Unit Price. The provisions of **Item 104.2.1. Increased Or Decreased Quantities of Work** of the specifications regarding negotiating for revised consideration for over/underruns **do not** apply to this item.

Measurement and payment will be in accordance with **Item 502.10.3.2.2. Measurement and Payment** of these specifications and will include any costs for pipe, copper, equipment, materials and labor, all boring, tapping, crossing diagonal utilities, costs for barricading, trench safety and support for these services, encasement, embedment, and all temporary paving related items (saw-cut, base, asphalt, concrete, sidewalk, driveways, curb and/or gutter, sod), and all other work associated with this item.

ITEM NO. 5061FxF**4" DOMESTIC SERVICE WITH 4" METER AND
TRANSFER**

This item consists of installing **1** Each new **4"** Domestic Service with **4"** Meter, removing the existing vault and existing meter, and transferring service in accordance with the specifications and addenda thereto, and the Standard Drawings.

The City will furnish the new **4"** meter and the meter access hatch cover to the Contractor for the new **4"** Domestic Service.

The Contractor will remove and salvage the existing **4"** meter and deliver it to the Large Meter Repair Shop, 2821 Municipal Street. If the existing **4"** meter is damaged during removal, the Contractor will be liable for the replacement cost. If the **4"** meter is determined by the Engineer to be defective or damaged prior to any work by the Contractor, the Contractor will not be liable for replacement cost.

Measurement and payment will be per Each and will include all work to install the **4"** Domestic Service; to include **4"** gate valves, meter, installation of the new vault, vault floor, piping, blocking, disposal of excess material, boring, crossing diagonal utilities, and all temporary and permanent paving related items (saw-cut, base, asphalt, concrete, sidewalk, driveways, curb and/or gutter, sod, etc.), and any costs for barricading, trench safety and support for these services.

The water pipe from the new main to the first fitting of the bypass piping will not be included in this item. This pipe will be paid under the bid item for the appropriate water pipe.

ITEM NO. 5062HxH**6" CLOSED FIRELINE SERVICE WITH 6" DETECTOR CHECK DEVICE AND TRANSFER**

This item consists of installing **1** Each new **6"** Closed Fireline Service with **6"** Detector Check Device, removing and disposing of the existing vault piping and fittings, and salvaging the existing detector check device, and transferring service in accordance with the specifications and addenda thereto, and the Standard Drawings.

The City will furnish the new **6"** detector check device and the vault access hatch cover to the Contractor for the new **6"** Closed Fireline Service.

The Contractor will remove and salvage the existing **6"** detector check device and deliver it to the Large Meter Repair Shop, 2821 Municipal Street. If the existing **6"** detector check device is damaged during removal, the Contractor will be liable for the replacement cost. If the **6"** detector check device is determined by the Engineer to be defective or damaged prior to any work by the Contractor, the Contractor will not be liable for replacement cost.

Measurement and payment will be per Each and will include all work to dispose of the existing vault, piping and fittings, and all work to install the **6"** Closed Fireline Service; to include **6"** detector check device, installation of the new vault, vault floor, piping, blocking, disposal of excess material, boring, crossing diagonal utilities, and all temporary and permanent paving and paving related items (saw-cut, base, asphalt, concrete, sidewalk, driveways, curb and/or gutter, sod, etc.), and any costs for barricading, trench safety and support for these services.

The water pipe from the new main to the first fitting of the bypass piping will not be included in this item. This pipe will be paid under the bid item for the appropriate water pipe.

ITEM NO. 5064JxJ**8" COMBINED SERVICE WITH 8" METER**

This item consists of installing **1** Each new **8"** Combined Service with **8"** Meter in accordance with the specifications and addenda thereto, and the Standard Drawings.

The City will furnish the new **8"** meter and the meter access hatch cover to the Contractor for the new **8"** Combined Service. The Contractor will install the new vault, meter and frame, and cover.

Measurement and payment will be per Each and will include all work to install the **8"** Combined Service; to include **8"** gate valve, meter, installation of the new vault, vault floor, piping, blocking, disposal of excess material, boring, crossing diagonal utilities, and all temporary and permanent paving related items (saw-cut, base, asphalt, concrete, sidewalk, driveways, curb and/or gutter, sod, etc.), and any costs for barricading, trench safety and support for these services.

The water pipe from the new main to the first fitting of the bypass piping will not be included in this item. This pipe will be paid under the bid item for the appropriate water pipe.

ITEM NO. 5066JxJ**8" CLOSED FIRELINE SERVICE WITH 8" DETECTOR CHECK DEVICE**

This item consists of installing **6** Each new **8"** Closed Fireline Service with **8"** Detector Check Device in accordance with the specifications and addenda thereto, and the Standard Drawings.

The City will furnish the new **8"** detector check device and the vault access hatch cover to the Contractor for the new **8"** Closed Fireline Service.

Measurement and payment will be per Each and will include all work to install the **8"** Closed Fireline Service; to include **8"** detector check device, installation of the new vault, vault floor, piping, blocking, disposal of excess material, boring, crossing diagonal utilities, and all temporary and permanent paving, and paving related items (saw-cut, base, asphalt, concrete, sidewalk, driveways, curb and/or gutter, sod, etc.), and any costs for barricading, trench safety and support for these services.

The water pipe from the new main to the first fitting of the bypass piping will not be included in this item. This pipe will be paid under the bid item for the appropriate water pipe.

ITEM NO. 5091**INSTALL FIRE HYDRANT**

This item consists of furnishing and placing approximately **11** Each Fire Hydrant in accordance with **Item 502.3. Fire Hydrants**, **Item 502.3.1.COD: Materials**, **Item 502.3.1.2.COD: Breakable Type Hydrants**, **Item 502.3.1.3.COD: Main Valve Seats**, **Item 502.3.1.4.COD: Nozzle Cap Chains**, **Item 502.3.1.5.COD: Flanges**, **Item 502.3.1.6.COD: Operating Stems**, **Item 502.3.1.7.COD: O-Rings**, **Item 502.3.1.8.COD: Provisions For Extension**, **Item 502.3.1.11.COD: Upperstem thread Lubrication**, **Item 502.3.1.12.COD: Tests and Affidavit of Compliance**, **Item 502.3.1.14.COD: Rejection**, **Item 502.3.1.15.COD: Protection of Stem Threads**, **Item 502.2.2.COD: Installation**, **Item 502.3.17.COD: Hydrant Approval** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.3.3.COD: Measurement and Payment** of these specifications and will include all items necessary to furnish and install a fire hydrant; including barricading, all paving removal and replacement, saw-cut, embedment, and concrete blocking required. This item does not include any of the fire hydrant lead. That pipe will be paid for under the appropriate 6" D.I. or 6" PVC Water Pipe bid item.

ITEM NO. 5092**REMOVING EXISTING FIRE HYDRANT**

This item consists of Removing, in the most economical manner, approximately **10** Each Existing Fire Hydrant. If the Project Manager determines the fire hydrant is to be salvaged and paid for under Item No. 5093, the Contractor must take necessary precautions to insure the fire hydrant is not damaged. A cap or plug on the existing fire hydrant lead is included with this item.

ITEM NO. 5093**DELIVER FIRE HYDRANT**

This item consists of delivering approximately **10** Each Existing Fire Hydrant.

This item to include loading and hauling the fire hydrant to the Dallas Water Utilities Yard located at 2863 Municipal St. The Contractor shall contact Distribution 24-48 hours prior to delivery.

This item is a **contingent item** and payment will be made only if directed by the Project Manager. If delivery is not directed, the fire hydrant shall become the property of the Contractor.

ITEM NO. 5094**RELOCATE FIRE HYDRANT**

This item is to consist of moving and relocating approximately **1** Each Existing Fire Hydrant as shown on the plans.

ITEM NO. 5100F**4" GATE VALVE**

This item consists of furnishing and placing approximately **4** Each **4"** Gate Valve in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

ITEM NO. 5100H**6" GATE VALVE**

This item consists of furnishing and placing approximately **14** Each **6"** Gate Valve in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

ITEM NO. 5100J**8" GATE VALVE**

This item consists of furnishing and placing approximately **22** Each **8"** Gate Valve in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

ITEM NO. 5100L**12" GATE VALVE**

This item consists of furnishing and placing approximately **48** Each **12"** Gate Valve in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

ITEM NO. 5100Q**16" GATE VALVE**

This item consists of furnishing and placing approximately **2** Each **16"** Gate Valve in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

ITEM NO. 5100V**24" GATE VALVE**

This item consists of furnishing and placing approximately **17** Each **24"** Gate Valve in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

ITEM NO. 5110QxL 16" x 12" TAPPING SLEEVE

This item consists of furnishing and placing approximately 1 Each 16" x 12" Tapping Sleeve in accordance with **Item 502.6.1.17. Tapping Valves and Item 502.10.2.3. Tapping Sleeves** of these specifications and addenda thereto.

Measurement and payment will be in accordance with **Item 502.5.3.COD: Measurement and Payment** of these specifications.

ITEM NO. 5140H 6" FLAP VALVE

This item consists of furnishing and placing approximately 1 Each 6" Flap Valve in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

ITEM NO. 5155AJ 72" ACCESS MANHOLE WITH BLOWOFF

This item consists of furnishing and placing 1 Each 72" Access Manhole.

This item is complete and includes the manhole, blowoff valves, labor, materials, drain pipe, fittings, barricading, and incidentals as detailed on the plans and standard drawings.

Measurement and payment will be per each and in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

ITEM NO. 5500L 12" WATER MAIN (BOTOC)

This item consists of approximately 20 Linear Feet of 12" Water Main to be installed By Other Than Open Cut in accordance with **Item 503.3. Methods of Jacking, Boring Or Tunneling, Item 503.3.2.COD: Materials, Item 503.3.3.COD: Construction Methods, and Item 503.3.3.1.COD: General** of these specifications and addenda thereto, and as shown the plans.

The 12" carrier pipe is not to be included in this item. The encasement pipe is included in this item and shall have an inside diameter of at least 6" greater than the largest outside bell diameter of the carrier pipe. The size indicator for this item is the size of the carrier pipe, not the encasement pipe.

Measurement and payment will be in accordance with **Item 503.4. Measurement and Payment** of these specifications.

ITEM NO. 5500V**24" WATER MAIN (BOTOC)**

This item consists of approximately **40** Linear Feet of **24"** Water Main to be installed By Other Than Open Cut in accordance with **Item 503.3. Methods of Jacking, Boring Or Tunneling, Item 503.3.2.COD: Materials, Item 503.3.3.COD: Construction Methods, and Item 503.3.3.1.COD: General** of these specifications and addenda thereto, and as shown the plans.

The **24"** carrier pipe is not to be included in this item. The encasement pipe is included in this item and shall have an inside diameter of at least 6" greater than the largest outside bell diameter of the carrier pipe. The size indicator for this item is the size of the carrier pipe, not the encasement pipe.

Measurement and payment will be in accordance with **Item 503.4. Measurement and Payment** of these specifications.

ITEM NO. 5600**CUT AND PLUG EXISTING WATER MAIN**

This item consists of approximately **16** Each Cut and Plug Existing Water Main as indicated on the plans. The cast iron plug and barricading shall be incidental to this bid item.

Measurement and payment will be per each complete in place and shall include all labor, materials, and equipment necessary to Cut and Plug Existing Water Main.

ITEM NO. 5610**CUT AND PLUG WATER MAIN FOR TEST**

This item consists of **15** Each Cut and Plug Water Main for Test.

This is a contingent item to be used if approved by the Project Manager, in the event pressure testing of the newly constructed main proves unsatisfactory because of leaks in the existing system. In such case, the Contractor must isolate the new construction, perform the required test, and then tie the newly constructed main to the existing water main.

Measurement and payment will be per each complete in place and shall include all labor, materials, and equipment necessary to Cut and Plug Existing Water Main for Test.

ITEM NO. 5990J**8" WASTEWATER MAIN (BOTOC)**

This item consists of approximately **130** Linear Feet of **8"** Wastewater Main to be installed By Other Than Open Cut in accordance with **Item 503.3. Methods of Jacking, Boring Or Tunneling, Item 503.3.2.COD: Materials, Item 503.3.3.COD: Construction Methods, and Item 503.3.3.1.COD: General** of these specifications and addenda thereto.

The **8"** carrier pipe is not to be included in this item. The encasement pipe, if required, is included in this item.

Measurement and payment will be in accordance with **Item 503.4. Measurement and Payment** of these specifications.

ITEM NO. 5990AE**48" WASTEWATER MAIN (BOTOC)**

This item consists of approximately **4,210** Linear Feet of **48"** Wastewater Main to be installed By Other Than Open Cut in accordance with **Item 503.3. Methods of Jacking, Boring Or Tunneling, Item 503.3.2.COD: Materials, Item 503.3.3.COD: Construction Methods, and Item 503.3.3.1.COD: General** of these specifications and addenda thereto.

The **48"** carrier pipe is not to be included in this item. The encasement pipe, if required, is included in this item.

Measurement and payment will be in accordance with **Item 503.4. Measurement and Payment** of these specifications.

This item consists of furnishing and placing approximately **66** Each Wastewater Lateral on an existing or new wastewater main. This item will include street, alley, and easement laterals with cleanouts, with or without caps in accordance with **Item 502.10.4. Wastewater Conduit Connections, Item 502.10.4.1.COD: Service Connection, and Item 504.2.3.6.COD: OPEN CUT WASTEWATER LATERAL AND WATER SERVICES** of these specifications and addenda thereto, and the applicable Standard Drawings.

Laterals will be replaced with the same size and type as the existing lateral or as indicated on the plans, with a minimum of 6" diameter pipe required. This item will include, if required, Polyvinyl Chloride Pressure Rated Laterals conforming to ASTM D2241 (DR 26), minimum pressure rating of 160 PSI and ASTM D3139 joints. If a deep cut connection is required, the costs will be included in this item.

The replacement shall include removal of the existing lateral, plugging the existing lateral near the main, installing a new lateral with cleanout by removing a portion of the existing main, installing a wye, connecting to the existing main with adapters for 6" and 8" mains and by tapping mains 10" and larger, installing a new lateral with cleanout and connection to the existing house lateral. Should a private wastewater lateral not exist, a wastewater mainline lateral shall be installed with a cleanout and cap, or a cap only as indicated on the plans. The disturbed area around the cleanout will be replaced with sod in accordance with **Item 202.5. Sodding**, or concrete or asphalt in accordance with **Item 305.2. Concrete Sidewalks, Driveway Approaches, and Barrier Free Ramps, and Item 305.2.2.2.COD: Reinforcement** to match the existing surface. The Contractor shall furnish a cleanout casting if lost, stolen, or damaged due to Contractor's negligence. Should any additional laterals be found necessary, they will be added to the contract at the same Unit Price. Likewise, should any of the listed laterals not be necessary, they will be removed from the contract without having any effect on the unit price. The provisions of **Item 104.2.1. Increased Or Decreased Quantities of Work** of the specifications regarding negotiating for revised consideration for over/underruns do not apply to this item

Measurement and payment will be in accordance with **Item 502.10.4.3. Measurement and Payment** of these specifications, and will include any costs for pipe, equipment, materials and labor, deep cut connections, all boring, encasement, crossing diagonal utilities, costs for barricading, trench safety and support for these laterals, embedment, and all temporary paving related items (saw-cut, base, asphalt, concrete, sidewalk, driveways, curb and/or gutter, sod) and all other work associated with this item.

ITEM NO. 6100**WASTEWATER ACCESS DEVICE**

This item consists of furnishing and placing approximately **8** Each Wastewater Access Device in accordance with the plans and Standard Drawings.

Removal of any existing conflicting manhole or cleanout, if required, will be included in this item. This item shall include barricading.

Measurement and payment will be paid for at contract Unit Price per Each, complete in place, as shall be the total compensation for the furnishing of all labor, materials, tools and equipment and incidentals necessary to complete the work, including each excavation, disposal of surplus materials, and backfill all in accordance with the plans and specifications.

ITEM NO. 6110AE**48" DIAMETER DROP CONNECTION MANHOLE**

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **5** Each **48"** Diameter Drop Connection Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Removal of any existing conflicting manhole, if required, will be included in this item. Nonshrink grout shall be used in place of mortar. This item shall include barricading.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

ITEM NO. 6110AG**60" DIAMETER DROP CONNECTION MANHOLE**

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **1** Each **60"** Diameter Drop Connection Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Removal of any existing conflicting manhole, if required, will be included in this item. Nonshrink grout shall be used in place of mortar. This item shall include barricading.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

**ITEM NO. 6111AN X 96" DIAMETER DROP CONNECTION MANHOLE –
EXTRA DEPTH (+20')**

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **1 Each 96"** Diameter Drop Connection Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Removal of any existing conflicting manhole, if required, will be included in this item. Nonshrink grout shall be used in place of mortar. This item shall include barricading.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

ITEM NO. 6130AE 48" DIAMETER WASTEWATER MANHOLE

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **35 Each 48"** Diameter Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Removal of any existing conflicting manhole, if required, will be included in this item. Nonshrink grout and precast concrete grade rings shall be used for adjustments of the ring and cover. This item is to include Wastewater Manhole Frame Seals for each manhole installed as per the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**. This item shall also include trench safety and barricades.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

ITEM NO. 6130AJ**72" DIAMETER WASTEWATER MANHOLE**

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **4** Each **72"** Diameter Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Removal of any existing conflicting manhole, if required, will be included in this item. Nonshrink grout and precast concrete grade rings shall be used for adjustments of the ring and cover. This item is to include Wastewater Manhole Frame Seals for each manhole installed as per the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**. This item shall also include trench safety and barricades.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

ITEM NO. 6131AJ X**72" DIAMETER WASTEWATER MANHOLE – EXTRA DEPTH (+20')**

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **6** Each **72"** Diameter Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Removal of any existing conflicting manhole, if required, will be included in this item. Nonshrink grout and precast concrete grade rings shall be used for adjustments of the ring and cover. This item is to include Wastewater Manhole Frame Seals for each manhole installed as per the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**. This item shall also include trench safety and barricades.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

ITEM NO. 6141**VACUUM TEST FOR WASTEWATER MANHOLE**

This item consists of performing approximately **54** Each Vacuum Test for Wastewater Manhole in accordance with **Item 502.1.5.2 Vacuum Testing Manholes** and **Item 507.5. Tests and Inspections** of these specifications.

This item shall include all materials, equipment, labor, and incidentals required to complete the test as specified. This item is a **contingent item** and payment will be made only if directed by the DWU Construction Superintendent. Should any of the listed tests not be necessary, they will be removed from the contract without having any effect on the Unit Price.

Measurement and payment shall be in accordance with **Item 502.1.5.2.1.COD: Measurement and Payment of Vacuum Testing Wastewater Manholes** of these specifications and addenda thereto.

ITEM NO. 6800**PROJECT PARTNERING**

This item is intended for compensating the Contractor for all costs to implement Project Partnering as detailed in the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**.

This item to include hiring a third party facilitator, travel and lodging expenses, meeting room rental, program materials, reproduction costs and all costs associated with Contractor's own personnel, Subcontractors and Suppliers participating in partnering.

This is a **Contingent Item** and payment will be made, as directed by the Project Manager.

Payment for this item shall be Lump Sum.

ITEM NO. 6902**PLACEMENT OF BLOCK SODDING**

This item consists of furnishing and placing approximately **742** Square Yards of Block Sodding in accordance with **Item 202.5.1. Description**, **Item 202.5.2. Materials**, and **Item 202.5.3.2. Solid Sodding** of these specifications and addenda thereto.

This is a contingent item and payment will be made, if placement is directed by the Project Manager.

Measurement will be specified ditch width with the length measured in Linear Feet.

Payment will be in accordance with **Item 202.5.4.COD: Measurement and Payment** of these Specifications.

ITEM NO. 6909**PLACE BRICK SIDEWALK**

This item consists of furnishing and placing approximately **56** Square Yards of Brick Sidewalk Replacement in accordance with the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**.

Measurement and payment shall include all labor, materials, and equipment necessary to replace sidewalk based on the maximum permissible ditch width plus two feet for the specified conduit or as directed by the Project Manager.

ITEM NO. 6920**TELEVISION INSPECTION**

This item consists of performing a Television Inspection on approximately **17,030** Linear Feet of Wastewater Main in accordance with **Item 507.5.2. Television Inspection** of these specifications and addenda thereto, and the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**.

Payment will be allowed only for inspections made to a particular section of main in accordance with **Item 507.5.2.4.COD: Measurement And Payment For Television Inspection On City Contracts**.

ITEM NO. 6925**TRENCH EXCAVATION SAFETY AND SUPPORT**

This item consists of Trench Excavation Safety and Support for approximately **18,980** Linear Feet of trench in accordance with the Occupational Safety and Health Administration Standards 1926.652 "Requirements for Protective Systems".

Trench Excavation Safety and Support shall be measured along the centerline of the trench where trench is sloped to maintain angle of repose, a trench box is utilized or trench is shored. Payment shall be allowed for all section of trench regardless of depth.

ITEM NO. 7030**ROCK FOUNDATION**

This item consists of furnishing and placing approximately **686** Cubic Yards of Rock Foundation at locations approved by the Project Manager, in accordance with **Item 504.3.2. Foundation** and **Item 504.2.2.4. Crushed Stone For Foundation** of these specifications and addenda thereto.

This is a **Contingent Item** and payment will be made as directed by the Project Manager.

Measurement and payment will be in accordance with **Item 504.3.2.1. Foundation Measurement** and **Item 504.3.2.2. Foundation Payment** of these specifications.

ITEM NO. 7041**FLOWABLE BACKFILL**

This item consists of furnishing and placing approximately **966** Cubic Yards of Flowable Backfill in accordance with **Item 504.6.6. Flowable Backfill and Item 504.2.3.4. Flowable Backfill** of these specifications and addenda thereto.

This is a **Contingent Item** and payment will be made as directed by the Project Manager. **See 107.27.COD: Environmental Compliance.**

Measurement and payment shall be at the contract Unit Price per Cubic Yard for completed and accepted work.

ITEM NO. 7050**SAND BACKFILL**

This item consists of furnishing and placing approximately **574** Cubic Yards of Sand Backfill at locations approved by the Project Manager, in accordance with **Item 504.6.5. Sand Backfill and Item 504.2.2.6. Sand** of these specifications and addenda thereto.

This is a **Contingent Item** and payment will be made as directed by the Project Manager.

Measurement and payment will be in accordance with **Item 504.7.2.2. Final Trench Backfill** of these specifications. The price per unit of volume will remain the same, regardless of the volume used.

ITEM NO. 7071**CLASS "B" CONCRETE**

This item consists of furnishing and placing approximately **211** Cubic Yards of Class "B" Concrete in accordance with **Item 504.3.2. Foundation, Item 502.4.1. Concrete Blocking, and Item 702.2. Mix Design and Mixing Concrete For Structures** of these specifications and addenda thereto, and the applicable Standard Drawings. **See 107.27.COD: Environmental Compliance.**

Measurement and payment will be in accordance with **Item 504.3.2.1. Foundation Measurement and Item 504.3.2.2. Foundation Payment or Item 502.4.4. Measurement and Payment** of these specifications.

ITEM NO. 7520**TEMPORARY PAVING (HOT MIX OR HIGH PERFORMANCE MIX)**

This item consists of furnishing, placing, and removing approximately **420** Tons of Hot or High Performance Mix Asphalt Pavement for Temporary Paving, as authorized by the Engineer. Hot Mix Asphalt shall conform to **Item 302.9. Hot-Mix Asphalt Pavement and 403.2.3. Hot-Mix, Cold-Laid Asphaltic Concrete (Cold Mix)** of these specifications. Hot or High Performance Mix shall be placed in accordance with **Item 402.4. Replacing Paved Surfaces** of these specifications and addenda thereto.

The method of measurement for payment will be in Tons (2,000 pounds) of material in place and accepted. The basis of payment will be based on the maximum permissible width of ditch as specified for type or kind of conduit to be constructed as shown on the plans or Standard Drawings, and a compacted thickness of 2" over flexible base.

ITEM NO. 7530**CONCRETE CURB AND/OR GUTTER**

This item consists of furnishing and placing approximately **3,220** Linear Feet of Concrete Curb and/or Gutter in accordance with **Item 402.4.3. Replacing Curb, Gutter, Sidewalks, Driveways, Etc. and Item 305.1. Concrete Curb and Gutter** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

Measurement and payment will be in accordance with **Item 402.4.3.1. Measurement For Replacement of Curb, Gutter, Sidewalks, Driveways, Etc. and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

ITEM NO. 7570**REINFORCED CONCRETE PAVING**

This item consists of furnishing and placing approximately **700** Cubic Yards of Reinforced Concrete Paving in accordance with **Item 402.4.4. Replacing Reinforced Concrete Pavement, Item 303. Portland Cement Concrete Pavement and Item 303.2.1.3.2.COD: Gradation** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

This item shall also include removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.4.1. Measurement of Reinforced Concrete Pavement and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

ITEM NO. 7580**REINFORCED CONCRETE SIDEWALK**

This item consists of furnishing and placing approximately **1,582** Square Yards of Reinforced Concrete Sidewalk in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 305.2. Concrete Sidewalks, Driveway Approaches, and Barrier Free Ramps, and Item 305.2.2.2.COD: Reinforcement** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

This item shall also include removal and disposal of existing sidewalk, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.3.1. Measurement For Replacement of Curb, Gutter, Sidewalks, Driveways, Etc. and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

ITEM NO. 7583**REINFORCED CONCRETE DRIVEWAY**

This item consists of furnishing and placing approximately **70** Square Yards of Reinforced Concrete Driveway in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 303. Portland Cement Concrete Pavement and Item 303.2.1.3.2.COD: Gradation** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.** This item also includes removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.3.1. Measurement for Replacement of Curb, Gutter, Sidewalks, Driveways, Etc. and Item 402.4.10. Payment for Pavement Replacement** of these specifications. This item requires the concrete be set at 4500 PSI strength if hand finished or 4000 PSI strength if machine finished.

ITEM NO. 7585**BARRIER FREE RAMP**

This item consists of constructing approximately **1** Each Concrete Barrier Free (wheelchair) Ramps as specified herein and in conformity with the **Public Works Standard Details for Construction (251-D)** and any special details.

This item shall include all necessary saw-cut, removal of existing sidewalk, curb and gutter, excavation and backfill, subgrade preparation, furnishing and placing all materials; including expansion joint materials, asphalt replacement needed to adjacent to new gutter area, and any related work for manipulation, labor, tools, equipment and incidentals. **See 107.27.COD: Environmental Compliance.**

Measurement and payment shall be at unit contract price for complete and accepted work.

ITEM NO. 7600**REINFORCED CONCRETE BASE**

This item consists of furnishing and placing approximately **6,762** Cubic Yards of Reinforced Concrete Base in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 402.4.11.COD: Replacing Asphaltic Concrete Pavement with A Concrete Base, Item 303. Portland Cement Concrete Pavement and Item 303.2.1.3.2.COD: Gradation** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

This item shall also include removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.5.1. Measurement of Concrete Pavement and Asphalt Overlay and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

ITEM NO. 7655**HOT MIX ASPHALT CONCRETE PAVEMENT**

This item consists of furnishing and placing approximately **3,318** Tons of Hot Mix Asphalt Concrete Pavement in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 402.4.11.COD: Replacing Asphaltic Concrete Pavement with A Concrete Base, and Item 302.9. Hot-Mix Asphalt Pavement** of these specifications and addenda thereto. A prime coat shall be applied to a completed granular base course as described in **Item 302.7. Prime Coat and Item 302.9. Hot-Mix Asphalt Pavement**, at a rate of 0.25 gallons per square yard. A tack coat shall be applied to a surface of concrete, brick, or asphalt at a rate of 0.10 gallons per square yard. Prime coat and tack coat shall be not be measured for payment, but will be subsidiary to this bid item.

This item shall also include removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.5.1. Measurement of Concrete Pavement and Asphalt Overlay, Item 402.4.6.1. Measurement For Full Depth Hot-Mix Asphalt Pavement, or Item 402.4.7.1. Measurement For Hot-Mix Asphalt Pavement On A Flexible Base, Item 402.4.10. Payment For Pavement Replacement, and Item 402.4.11.1.COD: Measurement of Asphaltic Concrete Pavement with A Concrete Base** of these specifications.

ITEM NO. 7712**STORM WATER POLLUTION PREVENTION PLAN**

This item is to reimburse the Contractor for costs to develop, implement, and maintain the Storm Water Pollution Prevention Plan. Modification to the SWPPP or additional control items required by the Engineer will be at no additional cost.

This item to include all equipment, materials, labor, and maintenance necessary to control storm water pollution.

This is a lump sum item and payment shall be based on the percentage of construction for complete, in place, maintained, removed, and accepted work.

ITEM NO. 7730**DISPOSAL OF HEAVILY CHLORINATED WATER MAIN FLUSHING WATER**

This item consists of Disposal of Heavily Chlorinated Water Main Flushing Water after sterilization or re-sterilization in accordance with the requirements of the EPA [40 C.F.R. 122.26], and **Item 506.7.3.3.COD: Disposal of Flushing Water**.

Measurement and payment will be Lump Sum, complete to include all labor, materials, and equipment necessary to dispose of the heavily chlorinated water main flushing water after sterilization or re-sterilization.

ITEM NO. 8011**CONSTRUCTION SURVEYING AND STAKING OF
PROPOSED WATER & WASTEWATER MAINS**

This item consists of providing Construction Surveying and Staking by the Contractor's qualified personnel for approximately **18,010** Linear Feet of Proposed Water and Wastewater Main installations shown on the plan drawings and in accordance with **Item 105.4.COD: Construction Stakes** of the NCTCOG Specifications and addenda thereto.

This item shall include establishment of all horizontal and vertical controls, horizontal and vertical alignments per plan drawings, and cut depths for all proposed mains shown on the plan drawings with specific grades, elevations and profiles.

Measurement and payment will be per Linear Foot of proposed water and per Linear Foot of proposed wastewater main including instrumentation and equipment, staking materials, notes and cut sheets in final form and any other associated costs, such as barricading and traffic control for these services. Payment will be made when surveying is complete from point of beginning to point of end as shown on the plan drawings and upon submission and approval of survey data (see **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition** for approved data format). The Contractor is responsible for maintaining all staked controls and hubs in the construction area at all times and any costs for re-staking or re-establishing controls required shall be borne by the Contractor.

ITEM NO. 8012**CONSTRUCTION SURVEYING AND STAKING OF
PROPOSED STREET AND ALLEY PAVING**

This item consists of providing Construction Surveying and Staking by the Contractor's qualified personnel for approximately **5,240** Linear Feet of Proposed Alley and/or Street Pavement Replacement shown on the plan drawings and in accordance with **Item 105.4.COD: Construction Stakes** of the NCTCOG Specifications and addenda thereto.

This item shall include establishment of all horizontal and vertical controls, horizontal and vertical alignments, and cut/fill depths for all proposed street and/or alley pavement replacement.

Measurement and payment will be per Linear Foot of proposed pavement including instrumentation and equipment, staking materials, notes and cut sheets in final form, and any other associated costs, such as barricading and traffic control for these services. Payment will be made when surveying is complete for the full street/alley width from point of beginning to point of end as shown on the plan drawings and upon submission and approval of survey data (see **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition** for approved data format). This item does not include pavement repairs and patches, nor does it include pavement replacement associated with bid item 7570. The Contractor is responsible for maintaining all staked controls and hubs in the construction area at all times and any costs for re-staking or re-establishing controls required shall be borne by the Contractor.

ITEM NO. 8300**REMOVAL OF EXISTING RAILROAD TRACKS**

This bid item consists of furnishing all supervision, labor, materials, equipment, incidentals and related items required to remove and dispose of **3,270** each Existing Railroad Tracks in order to facilitate the installation of new piping. The extent of track removal is limited to areas that are in direct conflict with the installation of new piping.

This item shall include all work necessary to remove and dispose of existing steel rail, railroad ties, associated railroad steel hardware such as spikes, plates, ballast, and any associated concrete foundation that may be there. This item will include cutting the steel rail with a torch or saw, cutting the railroad ties and breaking out the concrete foundation. The track, ties and foundation will be removed. This item does not include payment for paving and paving related items (removal, disposal, replacement, saw-cut, base, asphalt, concrete, sidewalk, driveways, curb and/or gutter, sod, seed, etc.), which are subsidiary to the pipe installation. The provisions of **Item 104.2.1. Increased Or Decreased Quantities of Work** of the Specifications regarding negotiating for revised consideration for over/underruns **do not** apply to this item.

This is a contingent item and payment will be made only if directed by the DWU Construction Superintendent.

Measurement and payment shall be at the contract Unit Price per each area of track removal. The area of track removal is measured as a maximum length of six feet as measured along the track and an approximate maximum width of eight feet. The depth of track removal will be a maximum of two feet as measured from the top of rail to the bottom of tie or concrete foundation.

ITEM NO. 20500**INVESTIGATION**

This item consists of excavating at approximately **103** Each locations to a specific infrastructure(s) to determine type, size, location, elevation, and/or condition as determined by the Engineer. The disturbed area will be replaced with compacted backfill in accordance with **Item 504. Open Cut – Backfill and Item 504.6.1. Excavated Material** of these specifications and addenda thereto.

In paved areas, the pavement will be replaced with a compacted 8" thick base of Crushed Rock in accordance with **Item 402.4.COD: Replacing Paved Surfaces, and 301.5. Flexible Subbase Or Base (Crushed Stone/Concrete)**, and a compacted 2" thick surface of Hot or Cold Mix asphalt pavement for temporary paving in accordance with **Item 402.4.COD: Replacing Paved Surfaces, and Item 302.9. Hot-Mix Asphalt Pavement**.

This item is complete and includes all equipment, materials and labor, saw-cut, pavement, base, and sub-base removal, excavation, backfill, compaction, disposal of excess materials, all temporary and permanent paving, and paving related items, sidewalk, curb and/or gutter, driveways, sod, costs for barricading, trench safety and support, support for existing utilities, and all other work associated with this item.

Payment will not be made under this item if the infrastructure is to be adjusted, abandoned, or replaced prior to the placement of backfill. If the investigation is for more than one infrastructure in the same excavation, payment shall be made for only one investigation.

Measurement and payment will be per each complete in place.

A 5.

**LIVING WAGE RATE AND
DAVIS BACON WAGE SCHEDULE**

**CITY OF DALLAS LIVING WAGE RATE
RESOLUTION 21-0907**

The selected bidder shall pay workers performing Work under this Contract the current Davis-Bacon Wage Rates, published online by the U.S. Department of Labor, attached hereto, pursuant to and adopted by the Dallas City Council Resolution No. 21-0907 on May 26, 2021. If the Davis-Bacon Wage Rates are lower than the City's current living wage, the selected bidder shall pay workers the City's current living wage of \$15.21 per hour, pursuant to Dallas City Council Resolution No.15-2141 adopted on November 10, 2015. The higher wage shall be the minimum acceptable rates of per diem wages for public works contracts, including public building construction and highway/heavy construction contracts.

Pursuant to Chapter 2258 of the Government Code, the selected bidder shall pay a penalty of sixty dollars (\$60.00) to the City for each worker performing Work under this Contract, for each calendar day, or portion thereof, such worker is paid less than the said stipulated rates for any Work performed under the Contract, by the Contractor, or by any subcontractor.

"General Decision Number: TX20210017 09/03/2021

Superseded General Decision Number: TX20200017

State: Texas

Construction Type: Heavy

County: Dallas County in Texas.

Heavy Construction, Including Treatment Plants (Does not include water/sewer lines)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/01/2021
1	03/05/2021
2	03/12/2021
3	07/02/2021
4	09/03/2021

ASBE0021-003 08/01/2017

Rates	Fringes
-------	---------

ASBESTOS WORKER/HEAT & FROST INSULATOR (Includes application of all insulating materials, protective coverings, coatings, and finishings to all types of mechanical systems).....	\$ 25.87	4.23
---	----------	------

* ELEEC0020-003 12/01/2020

Rates	Fringes
-------	---------

Electricians: Cable Splicer.....	\$ 30.20	8.91
-------------------------------------	----------	------

Electrician.....	\$ 31.60	9.99
------------------	----------	------

ELEC0220-001 06/29/2020

	Rates	Fringes
--	-------	---------

Line Construction:

CABLE SPLICERS.....	\$ 17.12	14.5%+3.75
EQUIPMENT OPERATORS.....	\$ 22.95	20.5%+6.50
GROUNDMAN.....	\$ 17.13	4.5%+6.75
LINEMAN.....	\$ 34.26	20.5%+6.50
TRUCK DRIVER.....	\$ 20.56	9.5%+6.50

ENGI0178-001 06/01/2020

	Rates	Fringes
--	-------	---------

Cranes:

Hydraulic Crane (35 ton & under).....	\$ 32.35	13.10
Hydraulic over 35 tons,Derricks, Overhead Gentry,Stiffleg,Tower,etc., and Cranes with Piledriving or Caisson attachements.....	\$ 32.60	13.10

IRON0263-010 06/01/2020

	Rates	Fringes
--	-------	---------

Ironworkers:

Reinforcing & Structural....	\$ 25.14	7.43
------------------------------	----------	------

PLUM0100-002 05/01/2021

	Rates	Fringes
--	-------	---------

Plumbers and Pipefitters.....	\$ 33.88	13.07
-------------------------------	----------	-------

SHEE0068-002 11/01/2012

	Rates	Fringes
--	-------	---------

Sheet metal worker.....	\$ 27.64	8.84
-------------------------	----------	------

SUTX1990-040 08/01/1990

	Rates	Fringes
--	-------	---------

CARPENTER.....	\$ 10.536	
----------------	-----------	--

Concrete Finisher.....	\$ 9.603	
------------------------	----------	--

Form Builder.....	\$ 8.036	
-------------------	----------	--

Form Setter.....	\$ 9.578	
------------------	----------	--

Laborers:

Common.....	\$ 7.25	
Utility.....	\$ 7.25	

Pipelayer.....	\$ 7.961	
----------------	----------	--

Power equipment operators:

Backhoe.....\$ 10.971
 Bulldozer.....\$ 9.942
 Front end loader.....\$ 10.771
 Mechanic.....\$ 9.88
 Motor Grader.....\$ 11.633
 Oiler.....\$ 9.183
 Scraper.....\$ 8.00

TRUCK DRIVER.....\$ 7.465

WELDERS - Receive rate prescribed for craft performing
 operation to which welding is incidental.

=====

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the

most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.)

and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION"

"General Decision Number: TX20210025 01/01/2021

Superseded General Decision Number: TX20200025

State: Texas

Construction Type: Highway

Counties: Archer, Callahan, Clay, Collin, Dallas, Delta, Denton, Ellis, Grayson, Hunt, Johnson, Jones, Kaufman, Parker, Rockwall, Tarrant and Wise Counties in Texas.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/01/2021

* SUTX2011-007 08/03/2011

Rates	Fringes
-------	---------

CONCRETE FINISHER (Paving and Structures).....\$ 14.12

ELECTRICIAN.....\$ 19.80

FORM BUILDER/FORM SETTER

Paving & Curb.....\$ 13.16
Structures.....\$ 13.84

LABORER

Asphalt Raker.....\$ 12.69
Flagger.....\$ 10.06
Laborer, Common.....\$ 10.72
Laborer, Utility.....\$ 12.32
Pipelayer.....\$ 13.24
Work Zone Barricade
Servicer.....\$ 11.68

POWER EQUIPMENT OPERATOR:

Asphalt Distributor.....\$ 15.32
Asphalt Paving Machine.....\$ 13.99
Broom or Sweeper.....\$ 11.74
Concrete Pavement
Finishing Machine.....\$ 16.05
Concrete Saw.....\$ 14.48
Crane Operator, Lattice
Boom 80 Tons or Less.....\$ 17.27
Crane Operator, Lattice
Boom over 80 Tons.....\$ 20.52
Crane, Hydraulic 80 Tons
or Less.....\$ 18.12
Crawler Tractor.....\$ 14.07
Excavator, 50,000 pounds
or less.....\$ 17.19
Excavator, over 50,000
pounds.....\$ 16.99
Foundation Drill , Truck
Mounted.....\$ 21.07
Foundation Drill, Crawler
Mounted.....\$ 17.99
Front End Loader 3 CY or
Less.....\$ 13.69
Front End Loader, over 3 CY.\$ 14.72
Loader/Backhoe.....\$ 15.18
Mechanic.....\$ 17.68
Milling Machine.....\$ 14.32
Motor Grader, Fine Grade....\$ 17.19
Motor Grader, Rough.....\$ 16.02
Pavement Marking Machine....\$ 13.63
Reclaimer/Pulverizer.....\$ 11.01
Roller, Asphalt.....\$ 13.08
Roller, Other.....\$ 11.51
Scraper.....\$ 12.96
Small Slipform Machine.....\$ 15.96
Spreader Box.....\$ 14.73

Servicer.....\$ 14.58

Steel Worker (Reinforcing).....\$ 16.18

TRUCK DRIVER

Lowboy-Float.....\$ 16.24
Off Road Hauler.....\$ 12.25
Single Axle.....\$ 12.31
Single or Tandem Axle Dump
Truck.....\$ 12.62
Tandem Axle Tractor with
Semi Trailer.....\$ 12.86
Transit-Mix.....\$ 14.14

WELDER.....\$ 14.84

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division

U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION

"

A 6. PROPOSAL TABULATION:

Proposals for the project will be tabulated only as shown on the Summary at the end of the Bid Proposal Spreadsheet.

A 7. TIME:

Time is the essence of the Contract. The time allotted for the completion of this Contract is **As Specified Per Special Provision S-6**.

A 8. SPECIFICATIONS:

Besides this Part A, the following are a part of this Contract:

1. Part "T", Technical Specifications (where this part is required). A copy of the DWU Standard Technical Specifications for Water & Wastewater Construction, October 2017 (or Latest Edition) which includes a link to the website for the DWU Approved Materials List for Water and Wastewater Construction, May 2019, in the Preface (P-2) can be obtained at:
http://dallascityhall.com/departments/waterutilities/Pages/dwu_design_standards.aspx.
2. Part "T", Technical Specifications (where this part is required). A copy of the DWU Approved Materials List for Water and Wastewater Construction, May 2019, can be obtained at:
http://dallascityhall.com/departments/waterutilities/Pages/dwu_design_standards.aspx.
3. DWU American Iron and Steel Approved Materials List for Texas Water Development Board Water Construction – January 2019
http://dallascityhall.com/departments/waterutilities/Pages/dwu_design_standards.aspx.
4. Contracts and Bond Forms
5. Drawings
6. Proposal
7. Standard Specifications for Public Works Construction - North Central Texas Council of Governments (Fourth Edition - 2004), A copy may be obtained from the North Central Texas Council of Governments, 616 Six Flags Dr., Arlington, Texas 76005, Telephone: (817) 640-3300.
8. City of Dallas 2011 ADDENDUM to the Public Works Construction - North Central Texas Council of Governments - Fourth Edition – October 2004, October 1, 2011, (or Latest Edition). A copy of the City of Dallas ADDENDUM to the NCTCOG General Specifications can be obtained at
http://dallascityhall.com/departments/waterutilities/Pages/dwu_design_standards.aspx.

9. Dallas Water Utilities Standard Drawings for Water & Wastewater Construction, October, 2017 (or Latest Edition). - A copy of the City of Dallas Standard Drawings can be obtained at http://dallascityhall.com/departments/waterutilities/Pages/dwu_design_standards.aspx.
10. Occupational Safety and Health Standards - Excavation, 29 CFR Part 1926, effective January 2, 1990.
11. City of Dallas Business Inclusion and Development BID Policy (BID Policy) – September 23, 2020 (last modification). A copy of the Policy may be obtained at Dallas City Hall, the Business and Workforce Inclusion (BWI) Division of the Office of Economic Development, 1500 Marilla Street, 6DN, Dallas, Texas 75201, 214-670-5010.
12. A revised copy with Ordinance 29993 attached amending the Department of Public Works and Transportation Pavement Cut and Repair Standards Manual (October 2003 or latest edition) may be purchased from the Office of the Director of Public Works and Transportation, Public Works and Transportation Department, 320 E. Jefferson Boulevard, Room 102, Dallas, Texas 75203.
13. City of Dallas Department of Public Works Standard Construction Details 251D-1, September 2002, or latest edition.
A copy can be obtained at <http://dallascityhall.com/departments/public-works/pages/constructionstandards.aspx>.

A 9. ADDENDUMS:

All Bidders are required to acknowledge receipt of all Addendums on the Acknowledgement of Addendum Form.

A 10. Business Inclusion and Development Policy – M/WBE PARTICIPATION

Overview

On September 23, 2020, the City Council adopted the following amendments to the Business Inclusion and Development Plan:

- Changed the name from Business Inclusion and Development (BID) Plan to Business Inclusion and Development (BID) Policy.
- Business and Workforce Inclusion (BWI) will strengthen the program by:
 - Reviewing specifications for large contracts prior to the issuance of a request for proposal or request for a bid to determine and/or identify unbundling opportunities to increase M/WBE participation.
 - Reviewing project specifications for opportunities to remove barriers and restrictive language.
 - Tracking and monitoring payments to prime contractors from the City and payments from prime contractors to subcontractors with emphasis on prompt payment as outlined in Government Code Section 2251.022.
 - Performing regular site visits based on project type, award amount or stakeholder concerns to ensure compliance with BID Policy.
 - Monitoring compliance of prime contractors and subcontractors and recommend measures to deal with prime and sub-contractors deemed to be non-compliant with BID Policy criteria.
 - Developing an owner-controlled insurance policy owned by the City of Dallas.
 - Maintaining a public sector group to provide recommendations on industry best practices focusing on new programs, small business resources, and contracting opportunities that have historically been overlooked.

Policy Statement

It is the policy of the City of Dallas to involve Minority and Women-Owned Business Enterprises (M/WBEs) to the greatest extent feasible on the City's construction, procurement and professional services contracts. It is the policy of the City of Dallas to encourage the growth and development of M/WBEs that can successfully compete for contracting opportunities. The City and its contractors shall not discriminate on the basis of race, color, religion, national origin, or sex in the award and performance of contracts. In consideration of this policy, the City of Dallas has adopted the Business Inclusion and Development (BID) Policy for all City of Dallas contracts.

Scope of BID Policy

The BID Policy shall apply to all contracts for the purchase of goods or services over \$50,000 with special emphasis on those contracts with first tier subcontracting opportunities. The provision of the BID Policy takes precedence over any departmental plans or procedures in conflict herewith, except for specific requirements mandated by the terms or conditions of agreements in force between the City and the Federal Government or the State of Texas that require different procedures than those described in the BID Policy.

The BID Policy Goals

The BID Policy establishes standard requirements for all prospective City of Dallas bidders/proposers to ensure a reasonable degree of participation by M/WBEs in all City contracts. It is the goal of the City that a certain percentage of work under each contract be performed by one or more M/WBEs.

On September 23, 2020, the City Council approved the following M/WBE participation goals (Council Resolution #201430). These goals were adopted without consideration for ethnicity or gender.

- Construction: 32.00%
- Architectural & Engineering: 34.00%
- Professional Services: 38.00%
- Other Services: N/A
- Goods: 32.00%

Prospective bidders/proposers are required to make a "good faith effort" to meet the established participation goals and must document their good faith effort to include M/WBEs in the contract.

Definitions of a M/WBE

- A. Minority/Women Business Enterprise means a business:
 - 1. Which is at least 51% owned and controlled by one or more socially and economically disadvantaged individuals, or in the case of any publicly owned business, of which at least 51% of the stock is owned by one or more socially and economically disadvantaged individuals;
- B. “Socially and economically disadvantaged individuals” means those individuals who are citizens of the United States (or lawfully admitted permanent residents) who are:
 - 1. African American (persons having origins in any of the Black racial tribes of Africa);
 - 2. Hispanic Americans (persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race);
 - 3. Native Americans (persons who are American Indians, Eskimos, Aleuts or Native Hawaiians);
 - 4. Asian Pacific Americans (persons whose origins are from Japan, China, Guam, the U.S. Trust Territories of the Pacific and the Northern Marianas);
 - 5. Asian-Indian Americans (persons whose origins are from India, Pakistan, and Bangladesh);
 - 6. Women (regardless of race, ethnicity or origin); or
 - 7. Any other minorities or individuals found to be disadvantaged by the Small Business Act.
 - 8. Disabled will be evaluated on a case-by-case basis

- C. The phrase “owned and controlled” as used in this definition means a business is:
1. a sole proprietorship legitimately owned by an individual who is a minority or a female;
 2. a partnership or joint venture controlled by minority individuals and/or females, and in which at least 51% of the beneficial ownership interests legitimately are held by minority and/or female individuals; or
 3. a corporation or other entity controlled by a minority or women, or both, and in which at least 51% of the voting interests and 51% of the beneficial ownership interests are legitimately held by minority individuals or women, or both. In addition, these persons must control the management and operation of the business on a day-to-day basis.

Responsibilities of the City and M/WBEs in the Bidding/Proposal Process

A. M/WBE Directory

1. The City of Dallas will maintain a directory to identify M/WBEs relevant to general contracting requirements and to particular bid/proposal solicitations. The directory will consist of certified M/WBEs who are also registered City of Dallas vendors. The Business Workforce Inclusion Office (BWI) of the Department of Economic Development will make the M/WBE Directory available to potential contract awardees to assist in efforts to meet BID goals and requirements.
2. The following information will be maintained on each M/WBE firm listed in the M/WBE Directory: name of business, address, telephone number, email address, services and products of the firm. The directory will include M/WBEs who manufacture, produce, lease, sell, distribute or produce equipment or professional services procured by the City. This information will be used to notify M/WBEs of opportunities for participation in City contracts and to provide other business enterprises with contacts for subcontracting and joint ventures with M/WBEs.

B. Certification of M/WBEs Desiring to Participate in the City’s M/WBE Certification Program

1. The City of Dallas is a member of the North Central Texas Regional Certification Agency (NCTRCA). The agency certifies ownership and control of M/WBEs and provides a centralized M/WBE certification service for public agencies and municipalities. M/WBEs seeking certification can utilize NCTRCA for certification purposes. Copies of application forms for certification are available from BWI and from the NCTRCA website: www.nctrca.org. However, the City of Dallas, upon authorization from the Director of BWI, will accept certification of M/WBEs from agencies of

similar guidelines whether from private certification agencies, municipalities, state or federal government entities. All businesses wishing to be certified as an M/WBE business will be required to provide documentation needed by the City to certify such firms as M/WBEs.

Compliance Procedures

A. Description of BID Documentation Forms

Forms are provided to all apparent low bidders/most advantageous proposers for use in documenting M/WBE subcontractor participation and compliance with the BID Policy. As a prerequisite for City Council award, all primes who have been identified as the apparent low bidder/most advantageous proposer must complete the appropriate forms.

All bid documents and proposal packages must include the signed Pre-Bid / Pre-Proposal Form (BWI-FRM-623) confirming the bidder/proposer's intent to comply with the City's BID Policy.

1. Pre-Bid / Pre- Proposal Form (BWI-FRM-623)

This form is turned in with the bid packet or proposal package and certifies that the bidder/proposer agrees to comply with the City's BID Policy.

2. Schedule of Work and Actual Payment Form

This form provides information on:

- a. Verification of the prime contractor's use of 100% of its own workforce to complete the contract (if applicable);
- b. First tier subcontractors, suppliers or sub consultants participating with the prime contractor on the contract;
- c. Payments made to the subcontractor, supplier or sub consultant through the term of the contract;
- d. Contracts over \$1M report payments on a monthly basis; contracts under \$1M report payments on a quarterly basis.

3. Ethnic Workforce Composition Report

This form provides information on the ethnic and gender composition of the prime's workforce.

4. Subcontractor Intent Form

This form is to be completed by the apparent low bidder/most advantageous proposer and all M/WBE subcontractors, suppliers or sub consultants participating on the anticipated contract. One form for each M/WBE subcontractor, supplier or sub consultant will be required.

5. BID Documentation Form

This form is to be completed by the apparent low bidder/most advantageous proposer who will NOT meet the applicable BID goal. The form documents a bidder's/proposer's BID efforts to obtain M/WBEs for subcontracting or sub consulting opportunities in compliance with the BID Policy.

6. Change of M/WBE Subcontractor/Supplier Form

This form is to be completed by prime contractors to document subcontractor, supplier or sub consultant changes during the term of the contract.

B. Submission of BID Documentation Forms

BID forms are submitted by the apparent low bidder/most advantageous proposer. The apparent low bidder/most advantageous proposer has up to five (5) business days after the City has issued notification of intent to award the contract. The apparent low bidder / most advantageous proposer shall submit BID forms to Business Development and Procurement Services (BDPS).

1. Prime contractors who will meet or exceed the BID goal must submit the following forms:
 - a. Schedule of Work and Actual Payment Form
 - b. Ethnic Composition Workforce Report
 - c. Subcontractor Intent Form(s)
2. Prime contractors who will not meet the BID goal must submit the following forms:
 - a. Schedule of Work and Actual Payment Form
 - b. Subcontractor Intent Form(s)
 - c. Ethnic Composition Workforce Report
 - d. BID Documentation

C. Changes to the Schedule of Work

Once a contract has been approved by City Council, the prime contractor is expected to utilize M/WBE subcontractors or suppliers or listed on the Schedule of Work. In making a M/WBE subcontractor or supplier change, the prime contractor must make a BID to replace the subcontractor or supplier with a M/WBE subcontractor or supplier. Failure to comply with the City's BID Policy in subcontractor, supplier or sub consultant substitutions may result in sanctions. During the course of contract performance, valid reasons to make changes or substitutions to the Schedule of Work are:

1. An increase or decrease in the scope of work;
2. Poor performance by the M/WBE subcontractor or supplier;
3. M/WBE subcontractor, supplier or sub consultant is unable or unwilling to perform the work;
4. M/WBE subcontractor, supplier or sub consultant does not have the equipment or workforce to perform the work; or
5. Other documented reasons

D. All M/WBE subcontractor or supplier changes require submission of a Change of M/WBE Subcontractor/Supplier Form. The prime contractor must submit the following documentation to the City of Dallas project manager prior to any changes in the Schedule of Work:

1. Completed Change of Subcontractor/Supplier Form (signed by the City's project manager) including documentation of BID made to obtain M/WBE subcontractor.
2. Revised Schedule of Work reflecting the revised participation percentages.
3. Subcontractor Intent Form(s) signed by the new M/WBE subcontractor, supplier or sub consultant.
4. Other BID documentation deemed necessary to adequately justify the proposed change and to document the prime contractor's efforts to obtain M/WBE participation.

Acts of Business Inclusion and Development

Determination of BID Policy compliance is based on the apparent low bidder's /most advantageous proposer's documented efforts to obtain M/WBE participation. BID documentation must be submitted and approved by the Office of Economic Development, Business and Workforce Inclusion Division, prior to award of the contract by City Council. To determine whether BID Policy criteria was followed to obtain M/WBE participation, an apparent low bidder/most advantageous proposer that does not meet the established BID goal must demonstrate that a sufficient reasonable effort was made to obtain M/WBE participation in their bid/proposal.

A. Documented efforts include:

1. Contact with the Office of Economic Development, Business and Workforce Inclusion for assistance in locating M/WBE subcontractors
2. Methods used to identify M/WBE subcontractors:
 - a. Industry relationships
 - b. City of Dallas M/WBE Directory
 - c. Written notices sent to certified M/WBEs
 - d. Assistance from other City Staff (provide names and departments)
 - e. Other (provide appropriate documentation)
3. Communication with a minimum of five or 5% (whichever is greater), of M/WBE companies listed on the City's M/WBE Directory:
 - a. Copy of email communication between prime contractor and solicited subcontractor, supplier or sub consultant
 - b. Documented phone conversation including name and number of contacts
 - c. Other documentation supporting contacts
4. Copy of type of information provided to M/WBE firms contacted
 - a. Plans and specifications
 - b. Scope of work and project schedule
 - c. Industry certification requirements or
 - d. Equipment requirements

If the apparent low bidder/most advantageous proposer does not receive a response from the contacted M/WBE, the apparent low bidder/most advantageous proposer must advise BWI that no response has been received.

5. The apparent low bidder/most advantageous proposer must consider all sub-bids, quotes and proposals received from M/WBEs and cannot reject M/WBEs as unqualified without sound reasons based on a thorough understanding of their capabilities. If a subcontract is not awarded to an M/WBE because the quote was not competitive, the apparent low bidder/most advantageous proposer must be able to demonstrate that the sub-bid or price quote was not competitive. The apparent low bidder/most advantageous proposer must also show that the sub-bid, price quote or proposal accepted was for the same work or supply of materials as quoted by the M/WBE. M/WBE subcontractors, suppliers or sub consultants who repeatedly fail to respond to requests for sub-bids, price quotes or proposals will be removed from the M/WBE Directory.

Commercially Useful Function

A prime contractor may count towards its M/WBE participation only expenditures to M/WBEs that perform a commercially useful function in the work of a contract. A M/WBE is considered to perform a commercially useful function when it is responsible for execution of a distinct element of the work of a contract and carrying out its responsibilities by actually performing, managing, and supervising the work involved. To determine whether a M/WBE is performing a commercially useful function, the City will take into account the amount of work subcontracted, industry practices, and other relevant factors.

Consistent with normal industry practice, M/WBE subcontractors may subcontract a portion of their work. If a M/WBE contractor subcontracts a significantly greater portion of the work than would be expected on the basis of normal industry practices, the M/WBE will be presumed to not be performing a commercially useful function. The M/WBE may present evidence to the City to rebut this presumption.

Only payments to M/WBEs that perform a Commercially Useful Function (CUF) under the City's contract will count toward the BID goals. A firm is considered to perform a CUF when:

- A. It is responsible for the execution of a distinct element of work on the contract;
- B. It carries out its responsibilities by actually performing, managing, and supervising the work involved; and
- C. The M/WBE owners control the operation of the business.

BID Policy Credit (Local vs. Non-local)

BID goals for M/WBE subcontracting are set by the City Council based on the availability of M/WBEs within a designated market area. Only first tier, local (within City of Dallas limits) M/WBE participation can be counted toward achieving the goals. Participation of M/WBEs located outside City of Dallas limits will be considered as evidence of compliance with the BID Policy, but are not counted towards the determination of whether the goal was achieved.

Counting M/WBE Participation

An M/WBE's certification must be kept current for the entire term of the contract for the City to continue to count the M/WBE's participation toward the BID goals. If an M/WBE's certification lapses during the performance of the contract, only payments received by the M/WBE prior to its de-certification will be counted toward the BID goals. If the M/WBE is re-certified during the term of the contract, 100% of the M/WBE's participation will be counted for the full term of the contract.

Only first tier subcontractors, suppliers or sub consultants will be counted towards the BID goal.

First tier Definition

Only local certified M/WBE subcontractors, suppliers or subconsultants with a direct contractual relationship with the prime contractor will count toward the BID goal. A prime contractor is a company or firm who is awarded a City contract by either the City Council or by Administrative Action. Contracts awarded by the City Council or by Administrative Action that are assigned to a construction manager are also considered prime contractors, with their subcontractors, suppliers and sub consultants counted as first tier.

In addition, first tier subcontractors, suppliers or subconsultants can utilize subcontractors/suppliers consistent with normal industry practice. If, however, the arrangement erodes the ownership, control or independence of the subcontractor/supplier or does not meet the commercially useful function requirement, the contractor shall receive no credit toward the City's BID goal. Also, prime contractors who have subcontractors, suppliers or sub consultants that do not perform a commercially useful function or first tier subcontractors, suppliers or sub consultants that do not perform the majority (51% of the subcontract amount, or normal industry practice) of the work on a contract will not be given credit toward the BID goal.

On contracts for alternative delivery methods for facility construction, (e.g. construction manager at risk, design build, or construction manager-agent), each construction package awarded will be required to fulfill the BID requirements for subcontractor/ supplier participation. Only the first-tier subcontracts within the awarded construction packages will be counted towards the BID goals.

Prompt Payment to the Subcontractor

State Law, V.T.C.A., Government Code Section 2251.022, requires prime contractors to pay subcontractors within ten (10) days from receipt of payment from the City.

Right to Audit

In accordance with its contracting policy, the City reserves the right to audit/review any or all parts of a project at any time. Such an audit/review may include information from the prime contractor and any subcontractors, suppliers or sub consultants.

Complaints

All complaints regarding the administration of or compliance with the City's BID Policy will be directed to City of Dallas Department of Business Development and Procurement Services. Formal complaints should be filed with the City Auditor's Office for thorough investigation.

Sanctions for Failure to Comply with BID Requirements

The failure of a contractor to adequately comply with the BID Policy shall be considered by the City in the award of future contracts.

- A. A contractor who fails to adequately document that a BID Policy was made to subcontract with M/WBE firms or to purchase significant material supplies from M/WBE firms may be denied award of the contract by the City on the grounds of non-responsibility.

- B. If, during the performance of the contract, the contractor is found not to be fulfilling commitments to utilize M/WBE subcontractors/sub consultants and no acceptable justification has been offered by the prime, this failure to fulfill commitments may be considered in the award of future contracts and may result in the denial of such future contracts to the prime contractor.
- C. A prime contractor may be disqualified for contract awards for a three-year period upon the City Council's determination that the contractor:
 - 1. Is non-responsible based upon poor performance
 - 2. Is engaged in pass-through brokering
 - 3. Is engaged in payrolling

A 11.

**DRUG-FREE JOBSITE
ON CITY CONSTRUCTION PROJECTS**

- I. In the interest of job safety and to protect the general public, other Contractors and the Owner's employees from the consequences of accidents that are caused by Worker abuse of controlled substances on City construction projects, the Bidder certifies by submission of its bid that it will make a good faith effort to maintain a drug-free jobsite, and also certifies that to further this objective it will:
 - (a) Establish a controlled substance abuse program that will test for controlled substance use:
 - (1) Employees utilized by the Bidder on this project in safety-sensitive positions; for purposes of this provision a "safety sensitive" position is a position performed at the jobsite, which if performed by a person impaired by the effects of a controlled substance, would or could:
 - (i) Pose a serious risk of death or personal injury to the employee, fellow employees or other persons in the vicinity; or
 - (ii) Compromise the quality of construction in such manner as would impose a significant public safety risk in the use or operation of the City improvement in question;
 - (2) Employees when there is a reasonable suspicion that an employee is using a controlled substance on the jobsite, or off the jobsite in a manner that affects jobsite performance;
 - (3) Employees as part of a voluntary drug testing program; or
 - (4) Employees as part of or as a follow-up to counseling for or rehabilitation from abuse of a controlled substance;
 - (b) Establish a program that will test an employee utilized by the Bidders on this project in a safety-sensitive position when there is a reasonable suspicion that the employee is impaired by the effects of alcohol on the jobsite; for purposes of this provision, a safety-sensitive position is a position performed at the jobsite which, if performed by a person impaired by the effects of alcohol, would or could:
 - (1) Pose a serious risk of death or personal injury to the employee, fellow employees or other persons in the vicinity; or

- (2) Compromise the quality of construction in such manner as should impose a significant public safety risk in the use or operation of the City improvement in question.
 - (c) Publish a statement notifying employees that the unlawful manufacture, distribution, selling, dispensing, possession or use of controlled substance is prohibited on the jobsite and specifying the actions that will be taken against employees for violations of such prohibitions,
 - (d) Establish a drug-free awareness program to inform employees about the danger of drug abuse on the jobsite, about the Bidder's policy regarding a drug-free jobsite, about available counseling and rehabilitation programs, and about the penalties that may be imposed upon employees for drug abuse violations occurring on the jobsite; and
 - (e) Provide a copy of the statement required by subsection (c) to all employees of the Bidders who will be involved in performance of the Contract.
- II Employees who test positive for controlled substance use in one of the tests conducted pursuant to paragraph I.(a), or who are impaired by the effects of alcohol on the jobsite pursuant to paragraph I.(b), shall be considered unfit for purposes of Item 108.4 of the Standard Specifications for Public Works Construction, Fourth Edition, As Amended
- III For purposes of Section I. above, the term "controlled substance" means a drug substance or immediate precursor listed in Schedules I through V of Subchapter 2 or Penalty Groups 1 through 4 of Subchapter 4 of the Controlled Substances Act, Article 4476-15; Texas Revised Civil Statutes.
- IV The Bidder shall be solely responsible for the maintenance and administration of the program required in Section I above. Nothing in these provisions shall be construed on the Owner's part, as authorizing, permitting or requiring the Bidder to engage in conduct that is otherwise illegal or that otherwise constitutes an unreasonable or unlawful invasion of privacy under Texas or Federal law.

A 12.

PERMITS



Installation Application
Online version 4/2006

Notice of Proposed Installation Utility Line On TxDOT Highway Right of Way

To the Texas Transportation Commission
c/o District Engineer
Texas Department of Transportation
Dallas District, Texas

Date 9/3/2021
Application No. DAL20210901163733

Formal notice is hereby given that City of Dallas Water Utilities
proposes to install a utility facility within the right-of-way of SH0078
in Dallas County, Texas as follows: (details are shown on page 2)

The Proposed 30" WW main is being installed to replace an existing 36" WW which has had a collapse and emergency repair. The new main will not follow the path of the old main. The old main currently runs parallel with TxDOT pavement. The new main will be completely outside the TxDOT ROW except for this proposed 90 degree crossing. The crossing will be bored underneath the TxDOT highway.

The line will be constructed and maintained on the highway right-of-way as shown on the attached drawing and in accordance with the rules, regulations and policies of the Texas Department of Transportation (TxDOT), and all governing laws, including but not limited to the "Federal Clean Water Act," the "National Endangered Species Act," and the "Federal Historic Preservation Act." Upon request by TxDOT, proof of compliance with all governing laws, rules and regulations will be submitted to TxDOT before commencement of construction.

Our firm will use Best Management Practices to minimize erosion and sedimentation resulting from the proposed installation, and we will revegetate the project area as indicated under "Revegetation Special Provisions."

Our firm will ensure that traffic control measures complying with applicable portions of the Texas Manual of Uniform Traffic Control Devices will be installed and maintained for the duration of this installation.

The location and description of the proposed installation and appurtenances is more fully shown by 1 files containing drawings and other pertinent information uploaded to the website.

Construction will begin on or after January 1, 2022 and end on or before April 1, 2022.

I certify that I am authorized to represent the Firm listed below, and that our Firm agrees to the conditions/provisions included in this notice.

Utility Installation Owner City of Dallas Water Utilities
By James Wellington
Title PM
Address 2121 Main Street
Dallas, TX 75201
Phone No. 214-948-4552
E-mail address james.wellington@dallascityhall.com

Application Details

Application No.	DAL20210901163733
Date	9/3/2021
Utility Installation Owner	City of Dallas Water Utilities
By	James Wellington
TxDOT District	Dallas District
County	Dallas
Route	SH0078
Control Section	000902
Description	The Proposed 30" WW main is being installed to replace an existing 36" WW which has had a collapse and emergency repair. The new main will not follow the path of the old main. The old main currently runs parallel with TxDOT pavement. The new main will be completely outside the TxDOT ROW except for this proposed 90 degree crossing. The crossing will be bored underneath the TxDOT highway.
Attachments	sheet 10 garland.pdf

TxDOT - Dallas District
CHECKLIST FOR REVIEW OF NOTICES OF PROPOSED INSTALLATION
Online version 10/2019

Yes No N/A

☐ ☐ ☒ Is the UIR for the relocation of utility facilities to clear a proposed TxDOT project? If so, is the proposed pavement, drainage and right of way lines shown? Do the utility lines differentiate between existing to remain in place, to be abandoned or removed and proposed to be installed?

☐ ☐ ☒ For lines crossing the highway, crossing intersecting streets/county roads, or passing through the protected root area of desirable trees, is it clearly shown that the line will be installed by boring? In addition, casing, labeled with size and material type, should be shown under highways and paved city street/county road intersections.

☐ ☐ ☒ Is the location and identification (highway number) of the TxDOT highway clearly indicated on the plans?

☐ ☐ ☒ Are the utility plans legible, drawn to scale, and accurately dimensioned? Schematic drawings are not acceptable plans. Only include plan sheets for utilities to be placed in State Right of Way.

☐ ☐ ☒ Is the location of the proposed utility line clearly shown on the plans? Is the utility line clearly labeled as to size and type?

☐ ☐ ☒ Are other existing utility lines in the vicinity shown on the plans?

☐ ☐ ☒ For lines to be installed parallel to the highway, is the distance from the right of way line clearly shown?

☐ ☐ ☒ For installations parallel to the highway, does the installation alignment change? Alignment changes need to be justified and reasonable. Aerial lines to be placed

☐ ☐ ☒ For aerial installations, do the plans clearly show and differentiate between existing poles and new poles?

☐ ☐ ☒ For highway crossings, is the location of the crossing clearly shown on the plans? The crossing should be as close to 90 degrees as practical.

☐ ☐ ☒ It is understood that it is the responsibility of the utility owner to contact TxDOT 48 hrs prior to the start of construction using the UIR System. It is also the owners to responsibility to contact TxDOT once the construction is complete.

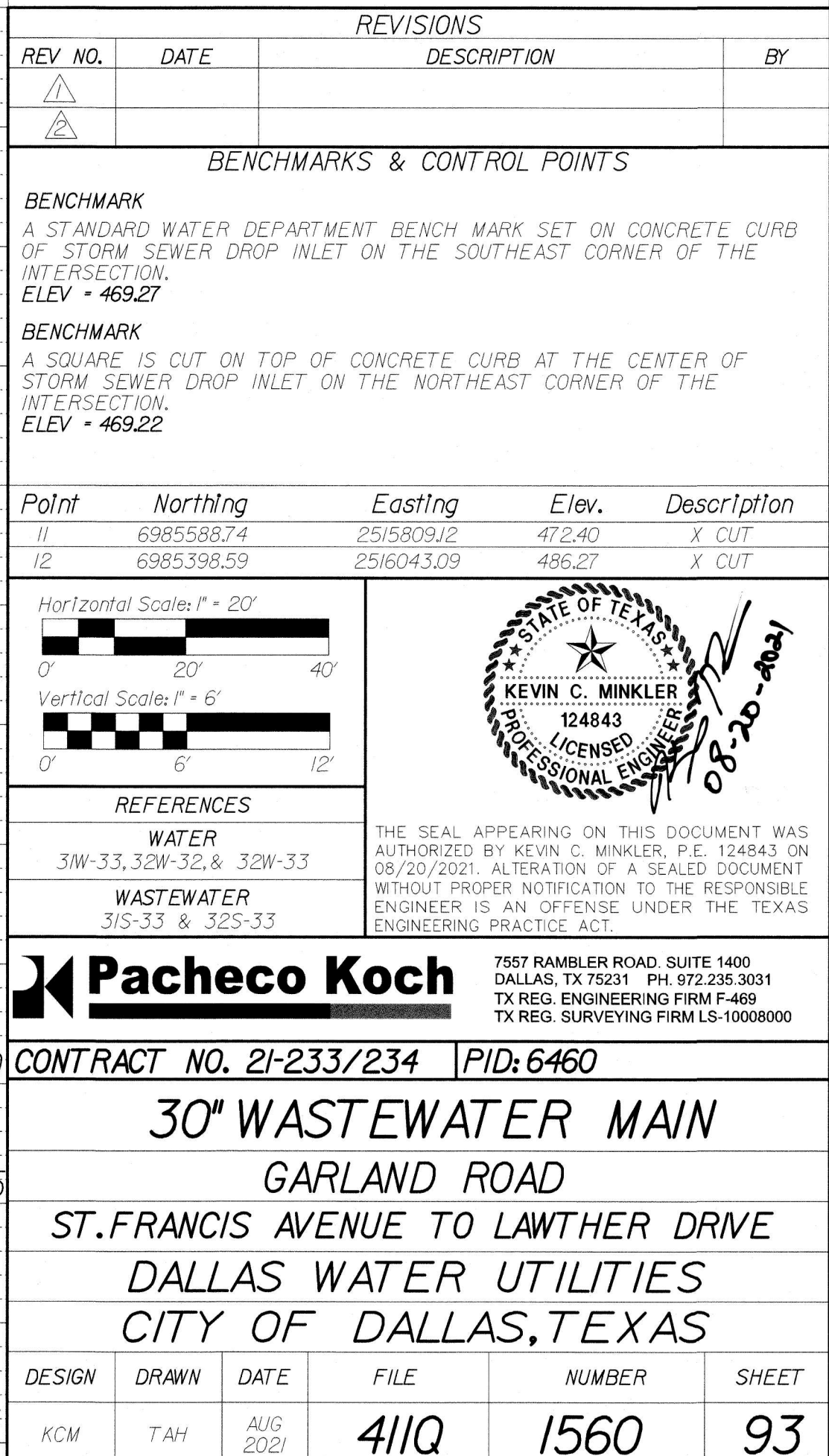
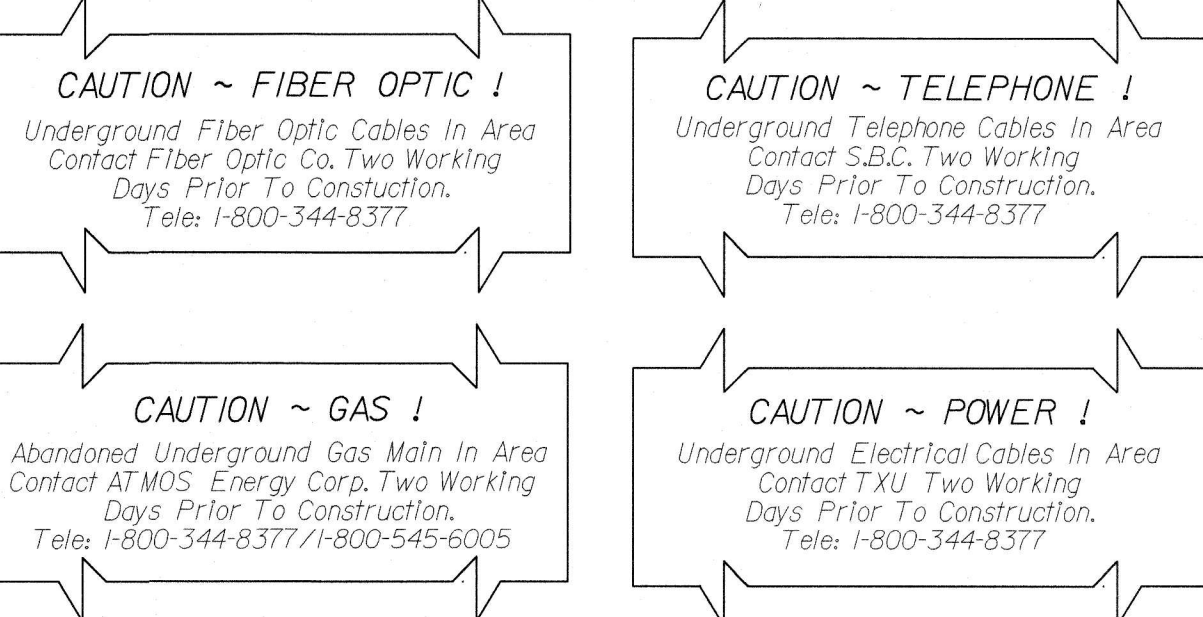
☐ ☐ ☒ For Small Cell: Will this project meet all applicable City design guidelines? If not, please explain.

☐ ☐ ☒ For Small Cell: Has the Applicant read, understood, and to the best of their ability, drafted a design that follows 43 Texas Administrative Code, Chapter 21, Subchapter C, in this submission?

☐ ☐ ☒ For Small Cell: Has the Applicant read, understood, and to the best of their ability, drafted a design that follows the District Special Provision_s?

☐ ☐ ☒ It is understood that a copy of the Utility Permit or Individual Site Agreement (with exhibits) MUST be on the job site during any construction activities.

☐ ☐ ☒ Are the right of way line and edge of highway pavement clearly shown on plans?



A 27.

CEMENT USE ON PUBLIC PROJECTS

A 27. CEMENT USE ON PUBLIC PROJECTS

Item **303.3.6.COD: Cement Used on Public Projects - Sustainable Air Quality**, as shown in the *City of Dallas Addendum to the North Central Texas Council of Governments Public Works Construction Standards (Fourth Edition, October 2004), Latest Edition*, is hereby replaced with the following:

(Page 303-14. Add the following:)

303.3.6.COD: CEMENT USED ON PUBLIC PROJECTS – SUSTAINABLE AIR QUALITY:

(A) Pursuant to Section 271.907 of the Texas Local Government Code, as amended, the OWNER will give a bid preference to the Bid of a CONTRACTOR who certifies in the Bid that, in the purchase of concrete or other products using Portland cement in construction of the Project, the CONTRACTOR will utilize Portland Cement from manufacturers who:

- (1) are in compliance with all applicable state and federal environmental standards relating to the emission of NO_x, including all applicable TCEQ and EPA rules and regulations; and
- (2) operate kilns with emissions that exceed the standards for NO_x emissions set out in 30 Tex. Admin. Code § 117.3110(a)(1)-(4) (as provided presently and as may be amended in the future) by the following percentage amounts:
 - (a) for each long wet kiln, 10 percent lower than the standard for long wet kilns located in Ellis County, Texas as set out in 30 Tex Admin Code § 117.3110(B);
 - (b) for each long dry kiln, 20 percent lower than the standard for long dry kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code § 117.3110(a)(2);
 - (c) for each preheater kiln, 20 percent lower than the standard for preheater kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code § 117.3110(a)(3); and
 - (d) for each preheater-precalciner or precalciner kiln, 35 percent lower than the standard for preheater-precalciner and precalciner kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code § 117.3110(a)(4). *[Reference: City Council Resolution No. 11-0657, passed by the Dallas City Council on March 9, 2011.]*

- (B) The preference shall apply only to the extent that the CONTRACTOR'S Bid, as certified, is not greater than 105 percent of the lowest responsible Bid of a CONTRACTOR who does not or cannot certify that it will utilize Portland cement from a cement kiln meeting the above-mentioned emission standards. The OWNER reserves the right to pursue any remedies it has under the CONTRACT Documents in the event the CONTRACTOR falsely certifies to the requirements stated above, including but not limited to termination of the CONTRACT, adverse evaluation at final completion of the CONTRACT, or debarment from participation in future construction contracts the OWNER may advertise or award. The OWNER also reserves the right to reject any load or item of Portland cement, concrete, or other product containing Portland cement delivered in the event it is discovered that the Portland cement used in the load or item was not manufactured as certified.
- (C) When a bidding preference has been granted as provided herein and any load or item of Portland cement, concrete, or other product which contains Portland cement is delivered to the Project site for use, the CONTRACTOR shall obtain and present to the OWNER a sworn-to certification, using a certification form approved by the OWNER, from the Portland cement or concrete manufacturer that the load or item delivered contains no Portland cement other than Portland cement meeting the requirements as specified in Paragraph (A). The CONTRACTOR shall also obtain a manifest for each Portland cement or concrete load showing the quantity of Portland cement or concrete delivered and the location of the manufacture of the Portland cement, along with the name of a designated representative of the Portland cement manufacturer for purposes of contact by the OWNER if necessary. On a monthly basis or other frequency desired by the OWNER, the CONTRACTOR shall furnish for inspection by the OWNER of a copy of the delivery manifests obtained. The CONTRACTOR shall certify in writing that the manifests are true and correct to the best of the CONTRACTOR'S knowledge. Notwithstanding the manufacturer's certification, the CONTRACTOR will be held responsible in the event the OWNER discovers that the cement used was not manufactured in accordance with the requirements of Paragraph (A).
- (D) The OWNER reserves the right to pursue any remedies it has under the CONTRACT Documents in the event the CONTRACTOR fails to comply with this materials specification, including but not limited to termination of the CONTRACT, adverse evaluation at final completion of the CONTRACT, or debarment from participation in future construction contracts the OWNER may advertise or award. The OWNER also reserves the right to reject any load or item of Portland cement, concrete, or other product containing Portland cement delivered in the event it is discovered that the Portland cement used in the load or item was not manufactured as certified.
- (E) Copies of the required forms are found on the following pages:

CEMENT PREFERENCE CERTIFICATION

I, _____, the _____ [state title of officer of company] of _____ [legal name of bidder company], do hereby certify that my bid for concrete products utilizes Portland cement produced by vendors who:

- (1) are in compliance with all applicable state and federal environmental standards relating to the emission of NOx, including all applicable TCEQ and EPA rules and regulations; and
- (2) operate kilns with emissions that exceed the standards for NOx emissions set out in 30 Tex. Admin. Code § 117.3110(a)(1)-(4) (as provided presently and as may be amended in the future) by the following percentage amounts:
 - (a) for each **long wet kiln**, 10 percent lower than the standard for long wet kilns located in Ellis County, Texas as set out in 30 Tex. Admin. Code § 117.310(a)(1)(B) ***[As of 3-9-11, wet kiln NOx emissions can NOT exceed 3.6 lbs per ton of clinker produced.];***
 - (b) for each **long dry kiln**, 20 percent lower than the standard for long dry kilns located in Ellis County, Texas, as set out in 30 Texas. Admin. Code § 117.3110(a)(2) ***[As of 3-9-11, dry kiln NOx emissions can NOT exceed 4.1 lbs per ton of clinker produced.];***
 - (c) for each **preheater kiln**, 20 percent lower than the standard for preheater kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code § 117.3110(a)(3) ***[As of 3-9-11, preheater kiln NOx emissions can NOT exceed 3.0 lbs per ton of clinker produced.];*** and
 - (d) for each **preheater-precalciner or precalciner kiln**, 35 percent lower than the standard for preheater-precalciner and precalciner kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code § 117.3110(a)(4) ***[As of 3-9-11, preheater-precalciner or precalciner kiln NOx emissions can NOT exceed 1.8 lbs per ton of clinker produced.];***

BIDDER:

Print Name and Title

SUBSCRIBED and SWORN TO before me this ____ day of _____, 20__.

[Seal]

Notary Public, State of Texas

My commission expires: _____

CONCRETE/CEMENT DELIVERY CERTIFICATION

I, _____, the _____ [state title of officer of company] of _____ [legal name of Portland cement or concrete manufacturer], do hereby certify that the concrete/cement products delivered between _____ and _____ to the City of Dallas project known as _____ utilizes Portland cement produced by vendors who:

- (1) are in compliance with all applicable state and federal environmental standards relating to the emission of NOx, including all applicable TCEQ and EPA rules and regulations; and
- (2) operate kilns with emissions that exceed the standards for NOx emissions set out in 30 Tex. Admin. Code § 117.3110(a)(1)-(4) (as provided presently and as may be amended in the future) by the following percentage amounts:
 - (a) for each **long wet kiln**, 10 percent lower than the standard for long wet kilns located in Ellis County, Texas as set out in 30 Tex. Admin. Code §117.310(a)(1)(B) ***[As of 3-9-11, wet kiln NOx emissions can NOT exceed 3.6 lbs per ton of clinker produced.];***
 - (b) for each **long dry kiln**, 20 percent lower than the standard for long dry kilns located in Ellis County, Texas, as set out in 30 Texas. Admin. Code §117.3110(a)(2) ***[As of 3-9-11, dry kiln NOx emissions can NOT exceed 4.1 lbs per ton of clinker produced.];***
 - (c) for each **preheater kiln**, 20 percent lower than the standard for preheater kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Cod §117.3110(a)(3) ***[As of 3-9-11, preheater kiln NOx emissions can NOT exceed 3.0 lbs per ton of clinker produced.];*** and
 - (d) for each **preheater-precalciner or precalciner kiln**, 35 percent lower than the standard for preheater-precalciner and precalciner kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code §117.3110(a)(4) ***[As of 3-9-11, preheater-precalciner or precalciner kiln emissions can NOT exceed 1.8 lbs per ton of clinker produced.];***

CONCRETE/CEMENT MANUFACTURER:

Print Name and Title

SUBSCRIBED and SWORN TO before me this ____ day of _____, 20____.

[Seal]

Notary Public, State of Texas

My commission expires: _____

A 28.

**ENVIRONMENTAL POLICY
&
OCCUPATIONAL SAFETY
&
HEALTH PROGRAM**



Environmental Policy

The City of Dallas is committed to a clean, safe, and healthy environment. As such, we will exercise environmental stewardship in our dealings with employees, other governments, citizens, City contractors, business and others in the community for our world today as well as for future generations. Caring for the environment is one of our core values, and this is demonstrated by ensuring our activities are in harmony with the natural world around us.

This commitment is embodied by the following actions:

- ❖ Implementation of programs and procedures with an intent to meet or exceed all applicable environmental laws and regulations.
- ❖ Continual improvement of our environmental performance through proactive environmental management and self-assessments and/or third-party assessments.
- ❖ Prevention of pollution at its source through implementation of best management practices and resource conservation measures to reuse, reclaim, and recycle materials we generate.
- ❖ Utilization of Environmental Management Systems, as appropriate for our operations, to provide a framework for systematically reviewing and reducing our environmental footprint.
- ❖ Employees will abide by all environmental regulations and demonstrate environmental compliance in their daily work practices.
- ❖ Educate City employees on Dallas' environmental policies and motivate and encourage employees to practice environmental stewardship by raising awareness and sensitivity to environmental issues through City policies, regulations, training, and interactive dialogue.
- ❖ Outreach to the citizens and businesses of our community by communication of this Policy and education on the importance of environmental stewardship for clean air and water and sustainable development for the City of Dallas.

Approved by Dallas City Council January 26, 2005.

Signed


T.C. Broadnax
City Manager



Política Ambiental

La Ciudad de Dallas tiene el compromiso de mantener un medio ambiente limpio, seguro y sano. Y por ende atenderemos al cuidado ambiental en nuestras relaciones con los empleados, otros gobiernos, ciudadanos, contratistas de la Ciudad, negocios y otros individuos de la comunidad, para bien de nuestro mundo de hoy y de las futuras generaciones. El cuidado del medio ambiente es uno de nuestros valores esenciales, y eso se demuestra asegurando que nuestras actividades estén en armonía con el mundo natural que nos rodea.

Este compromiso se manifiesta en las siguientes medidas:

- ❖ Puesta en práctica de programas y procedimientos con la intención de cumplir con, o rebasar en el cumplimiento de, todas las leyes y reglamentaciones ambientales pertinentes.
- ❖ Mejora continua de nuestro desempeño ambiental a través de control ambiental proactivo y de autoevaluaciones y/o evaluaciones de terceros.
- ❖ Prevención de la contaminación en su origen mediante la puesta en práctica de las mejores prácticas de control y de medidas de conservación de recursos para reutilizar, recuperar y reciclar materiales que generamos.
- ❖ Utilización de Sistemas de Control Ambiental (Environmental Management Systems), según sea apropiado para nuestras operaciones, a fin de proveer una estructura para revisar y reducir de forma sistemática las huellas que dejamos en el medio ambiente.
- ❖ Los empleados deberán respetar todas las reglamentaciones ambientales y demostrar cumplimiento con lo establecido respecto al medio ambiente en sus prácticas laborales diarias.
- ❖ Educar a los empleados de la Ciudad con relación a las políticas ambientales de Dallas, y motivar y exhortar a los empleados a practicar el cuidado del medio ambiente a través de la elevación de la conciencia y la sensibilidad respecto a los asuntos ambientales mediante políticas, reglamentaciones, capacitación y diálogo interactivo por parte de la Ciudad.
- ❖ Llegar a los ciudadanos y negocios de nuestra comunidad a través de la comunicación de esta Política y de educación sobre la importancia del cuidado del medio ambiente para tener aire y agua limpios y desarrollo sostenible de la Ciudad de Dallas.

Aprobado por el Concejo de la Ciudad de Dallas el 26 de enero de 2005.

Firmado por _____

T.C. Broadnax
Administradora de la Ciudad

City of Dallas

Occupational Safety and Health Policy

The City of Dallas strives to demonstrate excellence in protecting people and property, and minimizing exposure to financial loss. Every employee, contractor, and visitor or guest to our facilities will be encouraged to take personal responsibility for Safety by adhering to the following principles:

- **Safety:** Maintain a Safe workplace, plan our work, perform it safely and ensure accountability for the Safety of ourselves, co-workers, and guests.
- **Health:** Commitment to prevention of injuries and ill health within our workplace and community.
- **Compliance:** Achieve and comply with applicable legal requirements to which the City subscribes that relate to its Occupational Safety and Health hazards.
- **Community:** Maintain open, proactive and constructive relationships with our employees, neighbors, regulators, and other stakeholders.
- **Continual Improvement:** Make continual improvements in Occupational Safety and Health performance.

The Occupational Safety and Health program will undergo an annual review of the City's progress on meeting its goals and adherence to this policy and be sensitive to financial responsibility when reviewing compliance objectives.


T.C. Broadnax, City Manager

2/1/17
Date



Approved by Dallas City Council 02/11/09
Rev. 3

Ciudad de Dallas

Política de salud y seguridad ocupacional

La ciudad de Dallas se esfuerza en demostrar la excelencia en la protección de personas y bienes y minimizar la exposición a pérdidas financieras. Cada empleado, contratista y visitante o invitado a nuestras instalaciones se verán alentados a asumir la responsabilidad personal de seguridad adhiriéndose a los principios siguientes:

- **Seguridad:** Mantener un lugar de trabajo seguro, planificar nuestro trabajo, realizar de manera segura y asegurar la responsabilidad por la seguridad de nosotros mismos, colaboradores e invitados.
- **Salud:** Compromiso con la prevención de lesiones y problemas de salud en nuestro lugar de trabajo y comunidad.
- **Cumplimiento de normas:** Lograr y cumplir con requisitos legales aplicables que suscribe la ciudad que se relacionan con sus riesgos de seguridad y salud ocupacionales.
- **Comunidad:** Mantener relaciones abiertas, proactivas y constructivas con nuestros empleados, vecinos, reguladores y otras partes interesadas.
- **La mejora continua:** Continúas mejoras en el desempeño de seguridad y salud ocupacional.

El programa de seguridad y salud ocupacional a someterse a un examen anual de progreso de la ciudad en el cumplimiento de sus metas y el cumplimiento de esta política y ser sensible a la responsabilidad financiera al revisar los objetivos de cumplimiento.


T.C. Broadnax, administrador de la ciudad

2/1/17
Fecha



Aprobado por el Concejo Municipal de Dallas 11/02/09

3 Rev



Texas Water Development Board
Supplemental Contract Conditions for
Clean Water State Revolving Fund
(Equivalency) and Drinking Water State
Revolving Fund

For Construction Services for Projects Funded
through the CWSRF Equivalency
and DWSRF Programs

Table of Contents

I.	INSTRUCTIONS FOR APPLICANTS	5
1.	Applicability	5
2.	Use of Conditions	5
3.	Modifications to Provisions.....	5
4.	Good Business Practices	5
5.	Other Requirements.....	6
6.	Advertisements for Bids	6
7.	Bid Proposal	8
8.	Bidding Process	8
9.	Debarment and Suspension Certification.....	8
10.	Release of Funds	9
II.	INSTRUCTIONS TO BIDDERS	11
1.	Contingent Award of Contract.....	11
2.	Disadvantaged Business Enterprise Goals.....	11
3.	Davis-Bacon Wage Rate Requirements.....	11
4.	American Iron and Steel	12
5.	Equal Employment Opportunity and Affirmative Action.....	12
6.	Debarment and Suspension Certification.....	12
7.	Bid Guarantee	12
III.	SUPPLEMENTAL CONTRACT CONDITIONS.....	14
1.	Supersession.....	14
2.	Privity of Contract.....	14
3.	Definitions	14
4.	Laws to be Observed.....	14
5.	Review by Owner and TWDB.....	14
6.	Performance and Payment Bonds	15
7.	Payment Schedule and Cost Breakdown	15
8.	Workman’s Compensation Insurance Coverage (as applicable, consistent with Texas Labor Code § 406.096)	15
9.	American Iron & Steel	16
10.	Davis-Bacon Wage Rate Requirements	17
	(a) Compliance Procedures	17

(b) Subcontracts	18
(c) Davis-Bacon General Wage Determinations.....	18
Option 1 – Applies to Governmental Entities (such as Cities and Districts)	20
Option 2 – Applies to Non-Governmental Entities (such as Water Supply Corporations and Private Companies)	28
11. Payments	35
12. Equal employment opportunity and affirmative action	37
13. Debarment and Suspension.....	39
14. Disadvantaged Business Enterprises.....	40
15. Archeological Discoveries and Cultural Resources.....	42
16. Endangered Species	42
17. Hazardous Materials	42
18. Project Signage	43
19. Changes.....	43
20. Operation and Maintenance Manuals and Training.....	44
21. As-Built Dimensions and Drawings	45
22. Close-Out Procedures	45
23. Additional Forms and Information	45

Forms and Guidance:

The Texas Water Development Board (TWDB) forms and guidance documents noted in this instruction document may be accessed through the TWDB Financial Assistance website at:

<http://www.twdb.texas.gov/financial/instructions/index.asp>

Search by either the document number or name.

I. INSTRUCTIONS FOR APPLICANTS

1. Applicability

These Supplemental Contract Conditions contain provisions that are worded to comply with certain statutes and regulations which specifically relate to all Drinking Water State Revolving Fund (DWSRF) projects and Clean Water State Revolving Fund (CWSRF) Equivalency Program projects. Provisions which are applicable to the project's funding source or dollar value of the contract are so noted within these provisions.

2. Use of Conditions

The conditions and forms listed under **Section II: Instructions to Bidders** are to be included in the instructions to bidders for construction services. The provisions listed under **Section III: Construction Contract Supplemental Conditions** shall be included, in their entirety, with the other general and special conditions that are typically included in the construction contract documents by the design engineer.

3. Modifications to Provisions

These provisions shall be included as a stand-alone section in the contract documents. The Applicant may need to modify parts of these provisions to better fit the other provisions of the construction contract. The Applicant and the consulting engineer should carefully study these provisions before incorporating them into the construction contract documents. In particular, Water Districts and other types of Districts should be aware of statutes relating to their creation and operation which may affect the application of these conditions. The TWDB Project Engineer/Reviewer should be consulted if the Applicant thinks there is a need to modify parts of these provisions.

The Applicant is to determine and incorporate the affirmative action goals for the project into Supplemental Contract Condition No. 12. Supplemental Condition No. 15, Archeological Discoveries and Cultural Resources, and Condition No. 16, Endangered Species, may be superseded or modified by project specific conditions established during the environmental review process.

These documents may confer certain duties and responsibilities on the consulting engineer that are beyond, or short of, what the Applicant intends to delegate. The Applicant should ensure that the contractual agreement with the Engineer provides for the appropriate services. Otherwise the Applicant should revise the wording in these special conditions to agree with actually delegated functions.

4. Good Business Practices

There are other contract provisions that the Applicant and Engineer need to include as a matter of good business practice. It is recommended that provisions addressing the following matters be included in the construction contract.

- (a) Specifying the time frame for accomplishing the construction of the project, and the consequences of not completing on time, including liquidation damages.
- (b) Specifying the type and dollar value of and documentation of insurance the Contractor is to carry. At a minimum, the Contractor should carry worker's compensation, liability and builder's risk insurance.
- (c) Identifying the responsibility of the Contractor - responsibility and warranty of work.
- (d) Price reduction for defective pricing of negotiated costs.
- (e) Differing site conditions - notice and claims regarding site conditions differing from indicated conditions.
- (f) Covenants against contingent fees - prohibit contingent fees for securing business.
- (g) Gratuities - prohibitions against offering and accepting gratuities.
- (h) Audit and access records.
- (i) Suspension of work - conditions under which the Applicant may suspend work.
- (j) Termination - conditions under which the Applicant may terminate.
- (k) Remedies - how disputes will be remedied.

5. Other Requirements

There may be other local government requirements and applicable Federal and State statutes and regulations which are not included by these conditions. It is the Loan/Principal Forgiveness Applicant's responsibility to ensure that the project and all contract provisions are consistent with the relevant statutes and regulations.

6. Advertisements for Bids

State procurement statutes require advertising a contract for bid for at least two (2) consecutive weeks. By not following this requirement, the project may need to be re-advertised. The official advertisement for bids that is published in newspapers should include certain information such as, but not limited to, the following:

- (a) A clear description of what is being procured.
- (b) How to obtain plans and specifications (P&S), necessary forms and information.
- (c) The date and time by which bids are to be submitted (deadline).
- (d) The address where bids are to be provided.
- (e) This contract is contingent upon release of funds from the Texas Water Development Board (TWDB).
- (f) Any contract or contracts awarded under this Invitation for Bid (IFB), Request for Proposals (RFP), or Request for Qualifications (RFQ) are expected to be funded in part by financial assistance from the TWDB. Neither the U.S. Environmental Protection Agency (EPA) or the State of Texas, nor any of its departments, agencies, or employees, are or will be a party to this IFB, RFP, RFQ, or any resulting contract.
- (g) For CWSRF, include – Any contract(s) awarded under this Invitation for Bids is/are subject to the American Iron and Steel (AIS) requirements of Section 608 of the Federal Water Pollution Control Act.

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

- (h) This contract is subject to the Environmental Protection Agency's (EPA) Disadvantaged Business Enterprise (DBE) Program, which includes EPA-approved fair share goals toward procurement of Minority and Women-owned Business Enterprise (M/WBE) businesses. EPA rules require that applicants and prime contractors make a good faith effort to award a fair share of contracts, subcontracts, and procurements to M/WBEs through demonstration of the six affirmative steps. For more details of the DBE Program and the current, applicable fair share goals, please visit <http://www.twdb.texas.gov/dbe>.
- (i) Equal Opportunity in Employment - All qualified Applicants will receive consideration for employment without regard to race, color, religion, sex (including pregnancy), sexual orientation, gender identity, national origin, age (40 or older), disability, or genetic information. Bidders on this work will be required to comply with the Department of Labor regulations at 41 CFR Part 60-4, relating to Construction Contractors--Affirmative Action Requirements, which include the President's Executive Order No. 11246, as amended by Executive Order No. 11375 and Executive Order No. 13672, in the award and administration of contracts awarded under TWDB financial assistance agreements. Failure by the Contractor to carry out these requirements is a material breach, which may result in the termination of the awarded financial assistance.
- (j) Acknowledgement of any special requirements such as mandatory pre-bid conference.
- (k) Right to reject any and all bids.
- (l) Davis-Bacon prevailing wage requirements apply to the construction, alteration or repair of treatment works carried out, in whole or in part, with assistance made available by the Clean Water State Revolving Fund (CWSRF) or a construction project financed, in whole or in part, from the Drinking Water State Revolving Fund (DWSRF).
- (m) The Davis-Bacon prevailing wage requirements apply to Contractors and Subcontractors performing on federally funded or assisted contracts in excess of \$2,000 for the construction, alteration or repair (including painting) of a treatment works project under the CWSRF or a construction project under the DWSRF.
- (n) For prime contracts in excess of \$100,000, Contractors and Subcontractors must also, under the provisions of the Contract Work Hours and Safety Standards Act, as amended, pay laborers and mechanics, including guards and watchmen, at least one and one-half times their regular rate of pay for all hours worked over 40 in a workweek. The Fair Labor Standards Act may also apply to Davis-Bacon covered contracts.
- (o) Any contracts or subcontracts in excess of \$2,000 must include the provisions of the Davis-Bacon Wage Rate Requirements found in TWDB Guidance No. DB-0156.
- (p) Wage Determinations - U.S. Department of Labor (DOL) wage determination must be included in the bidding and contract documents. DOL wage determinations may be obtained online at <http://www.wdol.gov/>.
Once it is determined that Davis-Bacon wage rates will apply to a construction contract, the Applicant must state in the solicitation that Davis-Bacon prevailing wage rates are applicable and bid packages must include the current Davis-Bacon general wage determination for the area where construction will occur. While the solicitation remains open, the Applicant must monitor www.wdol.gov on a weekly basis to ensure that the wage determination contained in the solicitation remains current.

The Applicant must amend the solicitation if the DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the Applicant may request a finding from TWDB that there is not reasonable time to notify interested Contractors of the modification of the wage determination.

- (q) For additional information on Davis-Bacon Wage Rate Requirements and its applicability to this contract, please consult TWDB Guidance No. DB-0156.

7. Bid Proposal

The Bid proposal form should account for the following:

- (a) If a lump sum bid, include a list of the materials used and associated costs.
- (b) Distinguish Eligible and Ineligible items.
- (c) Accommodate Trench Safety requirements with separate per unit pay item for trench excavation safety protection, Health and Safety Code Chapter 756, Subchapter C.
- (d) Include space for the Contractor to acknowledge receipt of each Addendum issued during the bidding process.

8. Bidding Process

The Plans and Specifications, P&S, should include an explanation of how the bids will be processed and should include the following components:

- (a) Whether a Pre-bid Conference will be held, whether it is optional or mandatory, where and when it will be held.
- (b) Specify the criteria and process for determining responsiveness and responsibility of the bidder.
- (c) Specify the method of determining the successful bidder and award (e.g., award to the lowest responsive, responsible bidder, accounting for any multiple parts to bids).
- (d) Allow for withdrawal of a bid due to a material mistake.
- (e) Identify the time frame that the bids may be held by the Applicant before awarding a contract (i.e., typically for 60 or 90 days).
- (f) Acknowledge right of the Applicant to reject any and all bids.

9. Debarment and Suspension Certification

Financial assistant recipients must fully comply with the requirements of Subpart C of 2 CFR Part 180 – “*Responsibilities of Participants Regarding Transactions Doing Business with Other Persons*” - as implemented and supplemented by 2 CFR Part 1532. The recipient is responsible for ensuring that any lower tier covered transaction, as described in Subpart B of 2 CFR Part 180 – “*Covered Transactions*” – includes a term or condition requiring compliance with Subpart C.

The recipient is fully responsible for requiring the inclusion of a similar term or condition in any subsequent lower tier covered transactions.

Recipient acknowledges that failing to disclose the information required under 2 CFR 180.355 may result in the delay or negation of the financial assistance, or pursuance of legal remedies including debarment and suspension.

The recipient must complete and submit certification No. **SRF-404: Debarment / Suspension Certification**, certifying that it has checked the federal System for Award Management website (<http://www.sam.gov>) and determined that the Contractor is not an “excluded party” that is debarred, suspended or otherwise excluded from participation in federal assistance programs under Executive Order 12549, as required by 2 CFR Part 180 and 2 CFR Part 1532.

10. Release of Funds

Prior to the TWDB approval to issue a notice to proceed (NTP), and subsequent release of funds for construction (according to program specific requirements), the Applicant and its consultant shall provide the following bid documents:

(a) Submittal of Bid Documents to TWDB Project Engineer/Reviewer to allow contingent award of contract:

Advertisement and Affidavit of advertisement,
Bid tabulation,
All Addenda submitted and approved for the contract,
Bid proposal of apparent low bidder (or chosen bidder with explanation) with bid bond,
Entity’s Disadvantaged Business Enterprise forms TWDB 0216 and TWDB 373,
Contractor’s Disadvantaged Business Enterprise forms TWDB 0216, 0217, and 0373
Site Certificate (ED-101),
Consulting engineer’s recommendation to award letter,
A description of any bidding irregularities,
Construction inspection proposal,
Bidder’s Certifications Form (WRD-255).

(b) Following contingent award of the contract, TWDB Project Engineer/Reviewer should receive a bound copy of the executed contract documents (including specifications). This document should include:

Executed agreement,
Contractor’s Act of Assurance (TWDB Form ED -103),
Contractor’s Act of Assurance Resolution (TWDB Form ED-104),
Payment and Performance Bonds (must be executed on or after the date of the contract),
Contractor’s Certificate of Insurance,
Sufficiency of Funds letter.

After reviewing and approving the executed bid documents, the TWDB will issue an authorization for the Applicant to issue a notice to proceed. At this time, TWDB staff can begin releasing construction funds in accordance with program requirements.

Once construction begins, the Applicant must submit monthly, with each Outlay Request, the following documents:

- DB-0154 – Monthly Davis Bacon Wage Rate Certificate of Compliance.
- TWDB-1106-A – Monthly American Iron and Steel Certificate.

Failure to provide these certificates will result in denial of release of funds.

For any questions or proposed modifications to these conditions, please contact your TWDB Project Engineer/Reviewer.

II. INSTRUCTIONS TO BIDDERS

The language and conditions listed in this Section shall be included in the “Instructions to Bidders” section of the construction contract documents.

1. Contingent Award of Contract

This contract is contingent upon release of funds from the Texas Water Development Board. Any contract(s) awarded under this Invitation for Bids is/are expected to be funded in part by a loan or loan with principal forgiveness from the Texas Water Development Board and a grant from the United States Environmental Protection Agency, U.S. EPA. Neither the State of Texas, the U.S. EPA, nor any of its departments, agencies, or employees, are or will be a party to this Invitation for Bids or any resulting contract.

2. Disadvantaged Business Enterprise Goals

The Texas Water Development Board’s (TWDB) Clean Water and Drinking Water State Revolving Fund programs receive federal funds from the U. S. Environmental Protection Agency (EPA). As a condition of federal grant awards, EPA regulations require that loan recipients make a **"good faith effort"** to award a fair share of work to Disadvantaged Business Enterprises (DBE) who are Minority Business Enterprises (MBE's), and Women-owned Business Enterprises (WBE's) whenever procuring construction, supplies, services and equipment. More information on DBE requirements is available in the Supplemental Contract Conditions section of this guidance No. **14**.
Disadvantaged Business Enterprises.

The current fair share goals for the State of Texas are as follows:

<u>CATEGORY</u>	<u>MBE</u>	<u>WBE</u>
Construction	19.44%	9.17%
Equipment	16.28%	11.45%
Services	20.41%	13.66%
Supplies	25.34%	8.82%

3. Davis-Bacon Wage Rate Requirements

- (a) Davis-Bacon prevailing wage requirements apply to the construction, alteration or repair of treatment works carried out, in whole or in part, with assistance made available by the Clean Water State Revolving Fund (CWSRF) or a construction project financed, in whole or in part, from the Drinking Water State Revolving Fund (DWSRF).
- (b) The Davis-Bacon prevailing wage requirements apply to Contractors and Subcontractors performing on federally funded or assisted contracts in excess of \$2,000 for the construction, alteration or repair (including painting) of a treatment works project under the CWSRF or a construction project under the DWSRF.
- (c) For prime contracts in excess of \$100,000, Contractors and Subcontractors must also, under the provisions of the Contract Work Hours and Safety Standards Act, as amended, pay laborers and mechanics, including guards and watchmen, at least one and one-half times their regular rate of pay for all hours worked over 40 in a workweek.
The Fair Labor Standards Act may also apply to Davis-Bacon covered contracts.

- (d) Any contracts in excess of \$2,000 must include the provisions of the Davis-Bacon Wage Rate Requirements. If the Owner (sub-recipient) is a governmental entity such as a city or district, it must insert in full the contract clauses found in TWDB Guidance DB-0156, Appendix 1: Section 3, Section 4 if the contract exceeds \$100,000, and Section 5. If the Owner (sub-recipient) is a non-governmental entity such as a water supply corporation or a private company, it must insert in full the contract clauses found in TWDB Guidance DB-0156, Appendix 2: Section 3, Section 4 if the contract exceeds \$100,000, and Section 5. The Owner (sub-recipient) must ensure all prime contracts require the same full text in any subcontracts. See TWDB Guidance DB-0156 for the text of the contract language that must be included.

Additional information on Davis-Bacon Wage Rate Requirements and its applicability to this contract can be found in TWDB Guidance DB-0156.

4. American Iron and Steel

Any contract(s) awarded under this Invitation for Bids is/are subject to the American Iron and Steel (AIS) requirements of 33 U.S.C §1388 for Clean Water State Revolving Fund projects or Public Law 114-113, Consolidated Appropriations Act, 2016, or subsequent appropriations acts, for Drinking Water State Revolving Fund projects. The Contractor must complete the statement of understanding regarding this requirement, found in Supplemental Contract Conditions, Item No. 9.

5. Equal Employment Opportunity and Affirmative Action

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex (including pregnancy), sexual orientation, gender identity, national origin, age (40 or older), disability, or genetic information. Bidders on this work will be required to comply with the Department of Labor regulations at 41 CFR Part 60-4, relating to Construction Contractors--Affirmative Action Requirements, which include the President's Executive Order No. 11246, as amended by Executive Order No. 11375 and Executive Order No. 13672, in the award and administration of contracts awarded under TWDB financial assistance agreements. Failure by the Contractor to carry out these requirements is a material breach, which may result in the termination of the awarded financial assistance.

6. Debarment and Suspension Certification

This contract is subject to the federal requirements of Subpart C of 2 CFR Part 180 and Part 1532 regarding Debarment and Suspension. The Contractor will comply with the assurances provided with the bid that leads to a contract.

7. Bid Guarantee

Each bidder shall furnish a bid guarantee equivalent to five percent of the bid price (Water Code 17.183). If a bid bond is provided, the Contractor shall utilize a surety company which is authorized to do business in Texas in accordance with Surety Bonds and Related Instruments, Chapter 3503 of the Insurance Code.

Forms to be submitted with Bid:

- WRD-255, Bidder's Certifications regarding Equal Employment Opportunity and Non-Segregated Facilities.
- SRF-404, Certification Regarding Debarment, Suspension and Other Responsibility Matters, (to be completed and submitted by the sub-recipient).
- Disadvantaged Business Enterprise (DBE) Construction Contract Phase Forms

Form	Prime Contractor	Submit Form To
TWDB-0216	Required	TWDB
TWDB-0217	Required	TWDB
TWDB-0373	Required	TWDB

III. SUPPLEMENTAL CONTRACT CONDITIONS

1. Supersession

The Owner and the Contractor agree that the TWDB Supplemental Conditions apply to that work eligible for Texas Water Development Board assistance to be performed under this contract and these clauses supersede any conflicting provisions of this contract.

2. Privity of Contract

Funding for this project is expected to be provided in part by the Texas Water Development Board. Neither the State of Texas, nor any of its departments, agencies or employees is, or will be, a party to this contract or any lower tier contract. This contract is subject to applicable provisions 31 TAC Chapter 371 (DWSRF) or 375 (CWSRF) in effect on the date of the assistance award for this project.

3. Definitions

- (a) The term "Owner" means the local entity contracting for the construction services.
- (b) The term "TWDB" means the Executive Administrator of the Texas Water Development Board, or other person who may be at the time acting in the capacity or authorized to perform the functions of such Executive Administrator, or the authorized representative thereof.
- (c) The term "Engineer" means the engineer the Owner has authorized to work on the project.

4. Laws to be Observed

In the execution of the Contract, the Contractor must comply with all applicable Local, State and Federal laws, including but not limited to laws concerned with labor, safety, minimum wages, and the environment. The Contractor shall make himself familiar with and at all times shall observe and comply with all Federal, State, and Local laws, ordinances and regulations which in any manner affect the conduct of the work, and shall indemnify and save harmless the Owner, Texas Water Development Board, and their representatives against any claim arising from violation of any such law, ordinance or regulation by the Contractor, their Subcontractor or their employees.

5. Review by Owner and TWDB

- (a) The Owner, authorized representatives and agents of the Owner, and TWDB shall, at all times have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this Contract, provided, however that all instructions and approval with respect to the work will be given to the Contractor only by the Owner through authorized representatives or agents.
- (b) Any such inspection or review by the TWDB shall not subject the State of Texas, or its representatives, to any action for damages.

6. Performance and Payment Bonds

Each Contractor awarded a construction contract must furnish performance and payment bonds:

- (a) The performance bond shall include without limitation guarantees that work done under the contract will be completed and performed according to approved plans and specifications and in accordance with sound construction principles and practices;
- (b) The performance and payment bonds shall be in a penal sum of not less than 100 percent of the contract price and remain in effect for one year beyond the date of approval by the Engineer of the political subdivision; and
- (c) The Contractor shall utilize a surety company which is authorized to do business in Texas in accordance with Surety Bonds and Related Instruments, Chapter 3503 of the Insurance Code.

7. Payment Schedule and Cost Breakdown

- (a) The Contractor shall submit for approval immediately after execution of the Agreement, a carefully prepared Progress Schedule, showing the proposed dates of starting and completing each of the various sections of the work, the anticipated monthly payments to become due to the Contractor, and the accumulated percent of progress each month.

- (b) The following paragraph applies only to contracts awarded on a lump sum contract price:

COST BREAKDOWN - The Contractor shall submit to the Owner a detailed breakdown of the estimated cost of all work to be accomplished under the contract, arranged and itemized as to meet the approval of the Owner or funding agencies. This breakdown shall be submitted promptly after execution of the agreement and before any payment is made to the Contractor for the work performed under the contract. After approval by the Owner the unit prices established in the breakdown shall be used in estimating the amount of partial payments to be made to the Contractor.

8. Workman's Compensation Insurance Coverage (as applicable, consistent with Texas Labor Code § 406.096)

- (a) The Contractor shall certify in writing that the Contractor provides workers' compensation insurance coverage for each employee of the Contractor employed on the public project.
- (b) Each Subcontractor on the public project shall provide such a certificate relating to coverage of the Subcontractor's employees to the general Contractor, who shall provide the Subcontractor's certificate to the governmental entity.
- (c) A Contractor who has a contract that requires workers' compensation insurance coverage may provide the coverage through a group plan or other method satisfactory to the governing body of the governmental entity.
- (d) The employment of a maintenance employee by an employer who is not engaging in building or construction as the employer's primary business does not constitute engaging in building or construction.
- (e) In this section:

- i. "Building or construction" includes:
 - erecting or preparing to erect a structure, including a building, bridge, roadway, public utility facility, or related appurtenance;
 - remodeling, extending, repairing, or demolishing a structure; or
 - otherwise improving real property or an appurtenance to real property through similar activities.
- ii. "Governmental entity" means this state or a political subdivision of this state. The term includes a municipality.

9. American Iron & Steel

The following statement must be completed by the Contractor and made a part of the agreement between the Owner and the Contractor:

The Contractor acknowledges to and for the benefit of the Owner ("Purchaser") and the Texas Water Development Board (TWDB) that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund that have statutory requirements commonly known as "American Iron and Steel" that requires all of the iron and steel products used in the project to be produced in the United States ("American Iron and Steel Requirement") including iron and steel products provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Owner and the TWDB that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Owner or the TWDB. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Owner to enforce this Agreement and recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Owner resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the TWDB or any damages owed to the TWDB by the Owner). While the Contractor has no direct contractual privity with the TWDB, as a lender to the Owner for the funding of its project, the Owner and the Contractor agree that the TWDB is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the TWDB.

Additional information on the American Iron and Steel (AIS) and its applicability to this contract can be found in the TWDB-1106 guidance.

It is recommended the Owner receive and maintain files documenting the Contractor's use of AIS. Monthly compliance with AIS will be verified by the Owner through the submittal of the TWDB form TWDB-1106-A.

10. Davis-Bacon Wage Rate Requirements

(a) Compliance Procedures

In order to be held in compliance and satisfy this federal requirement, the following must be fulfilled:

- i. **Wage Determinations** - U.S. Department of Labor (DOL) wage determination must be included in the bidding and contract documents. DOL wage determinations may be obtained online at <http://www.wdol.gov/>. Once it is determined that Davis-Bacon wage rates will apply to a construction contract, the Owner must state in the solicitation that Davis-Bacon prevailing wage rates are applicable and bid packages must include the current Davis-Bacon general wage determination for the area where construction will occur. While the solicitation remains open, the Owner must monitor www.wdol.gov on a weekly basis to ensure that the wage determination contained in the solicitation remains current. The Owner must amend the solicitation if the DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the Owner may request a finding from the TWDB that there is not a reasonable time to notify interested Contractors of the modification of the wage determination.
- ii. **Insert wage rate requirements in full for all contracts and subcontracts in excess of \$2,000** - If the Owner is a governmental entity such as a city or district, it must insert in full the contract clauses shown below as Option 1: Section 3, Section 4 if the contract exceeds \$100,000, and Section 5. If the Owner is a non-governmental entity such as a water supply corporation or a private company, it must insert in full the contract clauses shown below as Option 2: Section 3, Section 4 if the contract exceeds \$100,000, and Section 5. The Owner must ensure all prime contracts require the same full text in any subcontracts.
- iii. **Monthly Certification** – The Owner must complete and submit monthly a Davis Bacon Wage Rate Certificate of Compliance once construction has begun. (Use [Monthly Davis Bacon Wage Rate Certificate of Compliance Submittal by Owner \(Subrecipient\) DB-0154](#)).
- iv. **Contractor Payroll Requirements** - The Contractor is required to pay the prevailing wage rates on a weekly basis to laborers and mechanics in accordance with the requirements of 29 CFR 5.5, which are incorporated into the actual construction contract. Contractors/ Subcontractors must furnish weekly a statement with respect to the wages paid to each employee during the preceding week. They may use the Department of Labor (DOL) Payroll Form WH-347 and weekly Statement of Compliance on the reverse, or their own payroll form with all of the same data elements as the DOL Payroll Form WH-347, and the TWDB's form, [Statement of Compliance Certification by Contractor for SRF, DB-0155](#). The DOL Payroll Form WH-347 can be found under the forms section of this document or at the following link: <http://www.dol.gov/whd/programs/dbra/wh347.htm>.

- v. **Interviews** - The Owner must periodically interview a sufficient number of employees entitled to the Davis-Bacon prevailing wages to verify that Contractors or Subcontractors are paying the appropriate wage rates. All interviews must be conducted in confidence. The Owner must use Standard Form 1445 (SF 1445) found in the forms section of TWDB guidance document TWDB-0156 or equivalent documentation to memorialize the interviews. The Owner must establish and follow an interview schedule based on its assessment of the risks of noncompliance with Davis-Bacon posed by Contractors or Subcontractors and the duration of the contract or subcontract. The Owner must conduct more frequent interviews if the initial interviews or other information indicated that there is a risk that the Contractor or Subcontractor is not complying with Davis-Bacon. The Owner must immediately conduct interviews in response to an alleged violation of the prevailing wage requirements.
- vi. **Payroll Records** - Certified payroll records are required to be retained by the Owner and Contractor for three years after completion of the construction project. The Owner must periodically conduct spot checks of a representative sample of weekly payroll data to verify that Contractors or Subcontractors are paying the appropriate wage rates.
- vii. **Wage Rate Poster** – The Contractor must post the required Poster (WH-1321) and applicable wage rates at the construction site. The wage rate poster may be found at under the forms section of TWDB Guidance DB-0156 or at <http://www.dol.gov/whd/programs/dbra/wh1321.htm>.
- viii. **Report Violations** – The Owner must immediately report violations of the Davis-Bacon prevailing wage requirements to the EPA Davis-Bacon Coordinator listed in the assistance agreement and to the appropriate DOL WHD Office listed at <http://www.dol.gov/dol/contact/index.htm>.

(b) Subcontracts

The Contractor will insert in full the required wage rate requirement in any subcontract in excess of \$2,000 as specified in (a)(ii) of this section.

(c) Davis-Bacon General Wage Determinations

A "wage determination" is the listing of wage and fringe benefit for each classification of laborers and mechanics which the Administrator of the Wage and Hour Division of the U.S. DOL has determined to be prevailing in a given area for a construction. The Davis-Bacon Wage Determinations are classified by the nature of the construction projects performed, specifically listed as "schedules": residential, building, highway, and heavy construction. A brief outline of the definitions for each schedule is listed below.

- **Construction Type: Heavy determination**

This determination includes those projects that are not properly classified as either "building," "highway," or "residential." Unlike these classifications, heavy construction is not a homogenous classification. Because of this catch-all nature, projects within the heavy classification may sometimes be distinguished on the basis of their particular project characteristics, and separate schedules may be issued for dredging projects, water and sewer line projects, dams, major bridges, and flood control projects.

- **Construction Type: Highway determination**
This determination includes construction, alteration or repair of roads, streets, highways, runways, taxiways, alleys, trails, paths, parking areas, and other similar projects not incidental to building or heavy construction.
- **Construction Type: Building determination**
This determination includes construction of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment or supplies; all construction of such structures; the installation of utilities and of equipment, both above and below grade levels; as well as incidental grading, utilities and paving. Such structures need not be "habitable" to be building construction. Also, the installation of heavy machinery and/or equipment does not generally change the project's character as a building.
- **Construction Type: Residential**
This determination includes the construction, alteration or repair of single-family houses, apartment buildings of no more than four stories in height. This includes all incidental items such as site work, parking areas, utilities, streets, and sidewalks.

The Owner should review their Contractor's wage decisions and confirm they provide an adequate classification of the labor required for the specific construction contract. Most CWSRF and DWSRF projects will fall under the "Heavy" construction type, but Owners should ask their consulting Engineers if unsure. Some contracts or projects may require more than one general schedule to be included depending on the nature and extent of the work (i.e. a building is constructed in a water treatment facility). This is described in more detail in DOL's All Agency Memorandum 130 with Addendum 131. See the DOL's website <http://www.dol.gov/whd/programs/dbra/memorand.htm>. In such cases, the TWDB would designate the work to which each wage determination or part thereof applies per Federal Acquisition Regulations (FAR) 22.404-2 thru 404-3 <https://www.acquisition.gov/browse/far/22?&searchTerms=Regulations+%28FAR%29+22.404-2+thru+404-3> Should overlaps occur in the wage classification schedules for the contract(s), the Owner may consider adopting the higher rate classification.

In all cases, the Owner is responsible to insure an adequate classification is provided to insure compliance with the law. Where a Contractor alerts the Owner that the classification is inadequate, the Owner should work with the Contractor and the DOL to address any valid concerns.

All questions regarding Davis-Bacon guidance can be directed to: U.S. Department of Labor Wage and Hour Division 1-866-4USWAGE (1-866-487-9243), TTY: 1-877-889-5627, Monday-Friday 8 a.m. to 8 p.m. Eastern Time.

If you require further information about Davis-Bacon and how to apply it to your project, please contact the Texas Water Development Board [Project Team Manager for your region](#) or Clay Schultz, Director, Regional Water Project Development, (512) 463-6277.

The Owner and Contractor may obtain additional information on the Davis-Bacon Wage Rates requirements in the TWDB's Guidance DB-0156 – *"Guidance on Davis-Bacon Wage Rate Requirements"*.

Option 1 – Applies to Governmental Entities (such as Cities and Districts)

1. Applicability of the Davis-Bacon (DB) prevailing wage requirements.

DB prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by the Clean Water State Revolving Fund and to any construction project carried out in whole or in part by assistance made available by the Drinking Water State Revolving Fund. If an Owner encounters a unique situation at a site that presents uncertainties regarding DB applicability, the Owner must discuss the situation with the TWDB before authorizing work on that site.

2. Obtaining Wage Determinations.

(a) Owners shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that Subcontractors follow the wage determination incorporated into the prime contract.

- (i) While the solicitation remains open, the Owner shall monitor www.wdol.gov weekly to ensure that the wage determination contained in the solicitation remains current. The recipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the Owners may request a finding from the TWDB that there is not a reasonable time to notify interested Contractors of the modification of the wage determination. The TWDB will provide a report of its findings to the Owner.
- (ii) If the Owner does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the TWDB, at the request of the Owner, obtains an extension of the 90 day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The Owner shall monitor www.wdol.gov on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.

(b) If the Owner carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing Contractor (ordering instrument) rather than by publishing a solicitation, the Owner shall insert the appropriate DOL wage determination from www.wdol.gov into the ordering instrument.

(c) Owners shall review all subcontracts subject to DB entered into by prime Contractors to verify that the prime Contractor has required its Subcontractors to include the applicable wage determinations.

(d) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to an Owner's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the Owner has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the Owner shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The Owner's Contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

3. Contract and Subcontract provisions.

(a) The Owner(s) shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a treatment work under the CWSRF or a construction project under the DWSRF financed in whole or in part from Federal funds or in accordance

with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in 29 CFR 5.1, the Water Resources Reform and Development Act of 2014 for a CWSRF-funded project or the Consolidated Appropriations Act, 2016 (or subsequent federal law) for a DWSRF-funded project, the following clauses:

(1) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its Subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Owners may obtain wage determinations from the U.S. Department of Labor's web site, www.dol.gov.

(ii)(A) The Owner(s), on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The TWDB shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Owner(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the Owner (s) to the TWDB.

The TWDB will transmit the request, to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210 and to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will approve, modify, or

disapprove every additional classification request within 30 days of receipt and so advise the TWDB or will notify the TWDB within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and the Owner(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the TWDB shall refer the request and the local wage determination, including the views of all interested parties and the recommendation of the TWDB, to the Administrator for determination. The request shall be sent to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding. The Owner(s) shall, upon written request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime Contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any Subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the EPA may, after written notice to the Contractor, sponsor, applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid.

Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible,

and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The Contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the Owner, that is, the entity that receives the funds from the TWDB. Such documentation shall be available on request of the TWDB or EPA. As to each payroll copy received, the Owner shall provide written confirmation in a form satisfactory to the TWDB indicating whether the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/whd/forms/wh347instr.htm> or its successor site. The prime Contractor is responsible for the submission of copies of payrolls by all Subcontractors. Contractors and Subcontractors shall maintain the full social security number and current address of each covered worker and shall provide them upon request to the Owner(s) for transmission to the TWDB or EPA if requested by EPA, the TWDB, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime Contractor to require a Subcontractor to provide addresses and social security numbers to the prime Contractor for its own records, without weekly submission to the Owner(s).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or Subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under § 5.5(a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5(a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the Contractor or Subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The Contractor or Subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the TWDB, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the Contractor or Subcontractor fails to submit the required records or to make them

available, the EPA or TWDB may, after written notice to the Contractor, sponsor, applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a Contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or Subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program.

If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll as a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the

event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The Contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The Contractor or Subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for the compliance by any Subcontractor or lower tier Subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a Contractor and a Subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its Subcontractors) and Owner(s), TWDB, EPA, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

4. Contract Provision for Contracts in Excess of \$100,000.

(a) Contract Work Hours and Safety Standards Act. The Owner shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3, above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No Contractor or Subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of

forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (a)(1) of this section the Contractor and any Subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such Contractor and Subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The Owner, upon written request of the EPA Award Official or an authorized representative of the Department of Labor, shall withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or Subcontractor under any such contract or any other Federal contract with the same prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or Subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (a)(2) of this section.

(4) Subcontracts. The Contractor or Subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a)(1) through (4) of this section and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for compliance by any Subcontractor or lower tier Subcontractor with the clauses set forth in paragraphs (a)(1) through (4) of this section.

(b) In addition to the clauses contained in Item 3, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the Owner shall insert a clause requiring that the Contractor or Subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Owner shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the Contractor or Subcontractor for inspection, copying, or transcription by authorized representatives of the EPA, TWDB, and the Department of Labor, and the Contractor or Subcontractor will permit such representatives to interview employees during working hours on the job.

5. Compliance Verification

(a) The Owner shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that Contractors or Subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(6), all interviews must be conducted in confidence. The Owner must use Standard Form 1445 (SF 1445) found in the forms section of TWDB guidance document TWDB-0156 or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are also available from EPA on request.

(b) The Owner shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by Contractors or Subcontractors and the duration of the contract or subcontract. Owners must conduct more frequent interviews if the initial interviews or other information indicated that there is a risk that the Contractor or Subcontractor is not complying with DB.

Owners shall immediately conduct interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence."

(c) The Owner shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that Contractors or Subcontractors are paying the appropriate wage rates. The Owner shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by Contractors or Subcontractors and the duration of the contract or subcontract. At a minimum, if practicable, the Owner should spot check payroll data within two weeks of each Contractor or Subcontractor's submission of its initial payroll data and two weeks prior to the completion date the contract or subcontract. Owners must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the Contractor or Subcontractor is not complying with DB. In addition, during the examinations the Owner shall verify evidence of fringe benefit plans and payments there under by Contractors and Subcontractors who claim credit for fringe benefit contributions.

(d) The Owner shall periodically review Contractors and Subcontractor's use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that Contractors and Subcontractors are not using disproportionate numbers of, laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.

(e) Owners must immediately report potential violations of the DB prevailing wage requirements to the EPA Region 6 DB Coordinator, TWDB, and to the appropriate DOL Wage and Hour District Office listed at <http://www.dol.gov/whd/america2.htm>.

Option 2 – Applies to Non-Governmental Entities (such as Water Supply Corporations and Private Companies)

1. Applicability of the Davis-Bacon (DB) prevailing wage requirements.

DB prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by the CWSRF and to any construction project carried out in whole or in part by assistance made available by the DWSRF. If an Owner encounters a unique situation at a site that presents uncertainties regarding DB applicability, the Owner must discuss the situation with the TWDB before authorizing work on that site.

2. Obtaining Wage Determinations.

(a) Owners must obtain proposed wage determinations for specific localities at www.wdol.gov. After the Owner obtains its proposed wage determination, it must submit the wage determination to the TWDB for approval prior to inserting the wage determination into a solicitation, contract or issuing task orders, work assignments or similar instruments to existing Contractors (ordering instruments unless subsequently directed otherwise by the TWDB.)

(b) Owners shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that Subcontractors follow the wage determination incorporated into the prime contract.

(i) While the solicitation remains open, the Owner shall monitor www.wdol.gov on a weekly basis to ensure that the wage determination contained in the solicitation remains current. The recipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the Owners may request a finding from the TWDB that there is not a reasonable time to notify interested Contractors of the modification of the wage determination. The TWDB will provide a report of its findings to the Owner.

(ii) If the Owner does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the TWDB, at the request of the Owner, obtains an extension of the 90-day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The Owner shall monitor www.wdol.gov on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.

(c) If the Owner carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing Contractor (ordering instrument) rather than by publishing a solicitation, the Owner shall insert the appropriate DOL wage determination from www.wdol.gov into the ordering instrument.

(d) Owners shall review all subcontracts subject to DB entered into by prime Contractors to verify that the prime Contractor has required its Subcontractors to include the applicable wage determinations.

(e) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to an Owner's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the Owner has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument.

If this occurs, the Owner shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The Owner's Contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

3. Contract and Subcontract provisions.

(a) The Owner(s) shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a treatment work under the CWSRF or a construction project under the DWSRF financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in 29 CFR 5.1, the Water Resources Reform and Development Act of 2014 for a CWSRF-funded project or the Consolidated Appropriations Act, 2016 (or subsequent federal law) for a DWSRF-funded project, the following clauses:

(1) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its Subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Owners may obtain wage determinations from the U.S. Department of Labor's web site, www.dol.gov.

(ii)(A) The Owner(s), on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The TWDB shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Owner(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the Owner(s) to the TWDB. The TWDB will transmit the request, to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210 and to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the TWDB or will notify the TWDB within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and the Owner(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the TWDB shall refer the request and the local wage determination, including the views of all interested parties and the recommendation of the TWDB, to the Administrator for determination. The request shall be sent to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding. The Owner(s) shall, upon written request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime Contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any Subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the EPA may, after written notice to the Contractor, sponsor, applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the

site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The Contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the Owner, that is, the entity that receives the funds from the TWDB. Such documentation shall be available on request of the TWDB or EPA. As to each payroll copy received, the Owner shall provide written confirmation in a form satisfactory to the TWDB indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/whd/forms/wh347instr.htm> or its successor site. The prime Contractor is responsible for the submission of copies of payrolls by all Subcontractors. Contractors and Subcontractors shall maintain the full social security number and current address of each covered worker and shall provide them upon request to the Owner(s) for transmission to the TWDB or EPA if requested by EPA, the TWDB, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime Contractor to require a Subcontractor to provide addresses and social security numbers to the prime Contractor for its own records, without weekly submission to the Owner(s).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or Subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under § 5.5(a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5(a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the Contractor or Subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The Contractor or Subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the TWDB, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the Contractor or Subcontractor fails to submit the required records or to make them available, the EPA or TWDB may, after written notice to the Contractor, sponsor, applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a Contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or Subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the

applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The Contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The Contractor or Subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for the compliance by any Subcontractor or lower tier Subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a Contractor and a Subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its Subcontractors) and Owner(s), TWDB, EPA, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

4. Contract Provision for Contracts in Excess of \$100,000.

(a) Contract Work Hours and Safety Standards Act. The Owner shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3, above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No Contractor or Subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (a)(1) of this section the Contractor and any Subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such Contractor and Subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The Owner shall upon the request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or Subcontractor under any such contract or any other Federal contract with the same prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or Subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (a)(2) of this section.

(4) Subcontracts. The Contractor or Subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a)(1) through (4) of this section and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for compliance by any Subcontractor or lower tier Subcontractor with the clauses set forth in paragraphs (a)(1) through (4) of this section.

(b) In addition to the clauses contained in Item 3, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the Owner shall insert a clause requiring that the Contractor or Subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Owner shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the Contractor or Subcontractor for inspection, copying, or transcription by authorized representatives of the EPA, TWDB, and the Department of Labor, and the Contractor or Subcontractor will permit such representatives to interview employees during working hours on the job.

5. Compliance Verification

- (a) The Owner shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that Contractors or Subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(6), all interviews must be conducted in confidence. The Owner must use Standard Form 1445 (SF 1445) found in the forms section of TWDB guidance document TWDB-0156 or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are also available from EPA on request.
- (b) The Owner shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by Contractors or Subcontractors and the duration of the contract or subcontract. Owners must conduct more frequent interviews if the initial interviews or other information indicated that there is a risk that the Contractor or Subcontractor is not complying with DB. Owners shall immediately conduct interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence."
- (c) The Owner shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that Contractors or Subcontractors are paying the appropriate wage rates. The Owner shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by Contractors or Subcontractors and the duration of the contract or subcontract. At a minimum, if practicable the Owner should spot check payroll data within two weeks of each Contractor or Subcontractor's submission of its initial payroll data and two weeks prior to the completion date the contract or subcontract. Owners must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the Contractor or Subcontractor is not complying with DB. In addition, during the examinations the Owner shall verify evidence of fringe benefit plans and payments there under by Contractors and Subcontractors who claim credit for fringe benefit contributions.
- (d) The Owner shall periodically review Contractors and Subcontractor's use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that Contractors and Subcontractors are not using disproportionate numbers of, laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.
- (e) Owners must immediately report potential violations of the DB prevailing wage requirements to the EPA Region 6 DB Coordinator, TWDB, and to the appropriate DOL Wage and Hour District Office listed at <http://www.dol.gov/whd/america2.htm>.

11. Payments

(a) Progress Payments:

- i. The Contractor shall prepare their requisition for progress payment as of the last day of the payment month and submit it, with the required number of copies, to the Engineer for review. Except as provided in paragraph (iii) of this subsection, the amount of the payment due to the Contractor shall be determined by adding to the total value of work completed to date, the value of materials properly stored on the site and deducting (1) five percent (5%) minimum of the total amount, as a retainage and (2) the amount of all previous payments. The total value of work completed to date shall be based on the actual or estimated quantities of work completed and on the

unit prices contained in the agreement (or cost breakdown approved pursuant to section 7.b relating to lump sum bids) and adjusted by approved change orders. The value of materials properly stored on the site shall be based upon the estimated quantities of such materials and the invoices prices.

Copies of all invoices shall be available for inspection by the Engineer.

- ii. The Contractor shall be responsible for the care and protection of all materials and work upon which payments have been made until final acceptance of such work and materials by the Owner. Such payments shall not constitute a waiver of the right of the Owner to require the fulfillment of all terms of the contract and the delivery of all improvements embraced in the contract complete and satisfactory to the Owner in all details.
- iii. This clause applies to contracts when the Owner is a District or Authority. The retainage shall be ten (10%) percent minimum of the amount otherwise due until at least fifty (50%) of the work has been completed. After the project is fifty (50%) percent completed, and if the District or Authority's Board finds that satisfactory progress is being made, then the District may authorize any of the remaining progress payments to be made in full. The District is not obligated to pay interest earned on the first 50% of work completed (Texas Water Code Sec. 49.276(d)).
- iv. The five (5%) percent retainage of the progress payments due to the Contractor may not be reduced until the building of the project is substantially complete and a reduction in the retainage has been authorized by the TWDB.

- (b) Withholding Payments. The Owner may withhold from any payment otherwise due to the Contractor so much as may be necessary to protect the Owner and if so elects may also withhold any amounts due from the Contractor to any Subcontractors or material dealers for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the Owner and will not require the Owner to determine or adjust any claims or disputes between the Contractor and his Subcontractors or material dealers, or to withhold any monies for their protection unless the Owner elects to do so.

The failure or refusal of the Owner to withhold any monies from the Contractor shall in no way impair the obligations of any surety or sureties under any bond or bonds furnished under this contract.

- (c) Payments Subject to Submission of Certificates. Each payment to the Contractor by the Owner shall be made subject to submission by the Contractor of all written certifications required of him and his Subcontractors by general and special conditions pertaining to this contract.

(d) Final Payment.

- i. Upon satisfactory completion of the work performed under this contract,

as a condition before final payment under this contract or as a termination settlement under this contract the Contractor shall execute and deliver to the Owner a release of all claims against the Owner arising under, or by virtue of, this contract, except claims which are specifically exempted by the Contractor to be set forth therein. Unless otherwise provided in this contract, by State law or otherwise expressly agreed to by the parties to this contract, final payment under this contract or settlement upon termination of this contract shall not constitute a waiver of the Owner's claims against the Contractor or his sureties under this contract or applicable performance and payment bonds.
- ii. After final inspection and acceptance by the Owner of all work under the contract, the Contractor shall prepare their requisition for final payment which shall be based upon the carefully measured or computed quantity of each item of work at the applicable unit prices stipulated in the Agreement or cost breakdown (if lump sum), as adjusted by approved change orders. The total amount of the final payment due the Contractor under this contract shall be the amount computed as described above less all previous payments.
- iii. The retainage and its interest earnings, if any, shall not be paid to the Contractor until the TWDB has authorized a reduction in, or release of, retainage on the contract work.
- iv. Withholding of any amount due to the Owner, under general and/or special conditions regarding "Liquidated Damages," shall be deducted from the final payment due the Contractor.

12. Equal employment opportunity and affirmative action

This provision applies to Clean Water State Revolving Fund Program and Drinking Water State Revolving Fund projects where the contract agreement is for more than \$10,000.

During the performance of this contract, the Contractor agrees as follows:

- (1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex (including pregnancy), sexual orientation, gender identity, national origin, age (40 or older), disability, or genetic information. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for

training, including apprenticeship.

The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

- (2) The Contractor will, in all solicitations or advancements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.
- (4) The Contractor will send to each labor union or representative of workers with which the Contractor has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The Contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The Contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

- (8) The Contractor will include the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each Subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a Subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the notice which contains the applicable goals set for minority and female participation and which is set forth in the solicitations from which this contract resulted.

13. Debarment and Suspension

This provision applies only to Clean Water State Revolving Fund Equivalency Program projects and Drinking Water State Revolving Fund projects. This contract is subject to the Title 40 Code of Federal Regulations Part 32 concerning Debarment and Suspension. The Contractor will comply with the assurances provided with the bid that led to this contract.

Instructions for Certification

- (a) By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
- (b) The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- (c) The prospective lower tier participant shall provide immediate written notice to the person to whom this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or had become erroneous by reason of changed circumstances.
- (d) The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meaning set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- (e) The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48

- CFR part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- (f) The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
 - (g) A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from covered transactions, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Federal Procurement and Non-procurement Programs.
 - (h) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
 - (i) Except for transactions authorized under paragraph (e) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions.

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

14. Disadvantaged Business Enterprises

The Texas Water Development Board's (TWDB) Clean Water and Drinking Water State Revolving Fund programs receive federal funds from the U. S. Environmental Protection Agency (EPA). As a condition of federal grant awards, EPA regulations require that loan recipients make a "good faith effort" to award a fair share of work to DBE's who are Minority Business Enterprises (MBE's), and Women-owned Business Enterprises (WBE's) whenever procuring construction, supplies, services and equipment.

The current fair share goals for the State of Texas are as follows:

Category	MBE	WBE
Construction	19.44%	9.17%
Equipment	16.28%	11.45%
Services	20.41%	13.66%
Supplies	25.34%	8.82%

After loan commitment, but prior to closing, Owners (Applicants) must provide forms TWDB-0216 and TWDB-0373. The project's Prime Engineer, Financial Advisor, and Bond Counsel must complete a TWDB-0217 form and indicate if any subcontracting opportunities will be available or if the Contractor will be self-performing the contract. Regardless of the procurement's outcome, all entities must submit a TWDB-0373 and list the Contractors selected by the Owner for the project. Failure to include a Contractor and contract amount will result in denial of payment until the proper documentation has been reviewed and approved.

For each construction contract, Owners are required to submit a TWDB-0216 and TWDB-0373 for the procurement of the project's Prime Contractor. If the Prime Contractor is utilizing Subcontractors for the project, then additional TWDB-0216 and TWDB-0373 forms will be required for submittal prior to request for payment.

The following forms are required for each contract:

Form	Prime Contractor	Submit Form To
TWDB-0216	Required	TWDB
TWDB-0217	Required	TWDB
TWDB-0373	Required	TWDB

- (a) The Contractor shall, if awarding sub-agreements, to the extent appropriate for the goals listed in the instructions to bidders make a good faith effort to award a fair share of work to DBE's who are Minority Business Enterprises (MBE's) and Women-owned Business Enterprises (WBE's) as sources of supplies, construction, equipment and services by taking the following steps:
 - i. Ensure DBEs are made aware of contracting opportunities by including qualified small, minority, and women's businesses on solicitation lists;
 - ii. Assuring that small, minority, and women's businesses are solicited whenever they are potential sources;
 - iii. Dividing total requirements, when economically feasible, into small tasks or quantities to permit maximum participation of small, minority, and women's businesses;
 - iv. Establishing delivery schedules, where the requirements of the work permit, which will encourage participation by small, minority, and women's businesses; and

- v. Using the services and assistance of the Small Business Administration, Minority Business Development Agency of the U.S. Department of Commerce, and Texas Marketplace, as appropriate.

15. Archeological Discoveries and Cultural Resources

No activity which may affect properties listed or properties eligible for listing in the National Register of Historic Places or eligible for designation as a State Archeological Landmark is authorized until the Owner has complied with the provisions of the National Historic Preservation Act and the Antiquities Code of Texas.

The Owner has previously coordinated with the appropriate agencies and impacts to known cultural or archeological deposits have been avoided or mitigated. However, the Contractor may encounter unanticipated cultural or archeological deposits during construction.

If archeological sites or historic structures which may qualify for designation as a State Archeological Landmark according to the criteria in 13 TAC Chapter 26, or that may be eligible for listing on the National Register of Historic Places in accordance with 36 CFR Part 800, are discovered after construction operations are begun, the Contractor shall immediately cease operations in that particular area and notify the Owner, the TWDB, and the Texas Historical Commission, 1511 N. Colorado St., P.O. Box 12276, Capitol Station, Austin, Texas 78711-2276. The Contractor shall take reasonable steps to protect and preserve the discoveries until they have been inspected by the Owner's representative and the TWDB. The Owner will promptly coordinate with the State Historic Preservation Officer and any other appropriate agencies to obtain any necessary approvals or permits to enable the work to continue. The Contractor shall not resume work in the discovery until authorized to do so by the Owner.

16. Endangered Species

No activity is authorized that is likely to jeopardize the continued existence of a threatened or endangered species as listed or proposed for listing under the Federal Endangered Species Act (ESA), and/or the State of Texas Parks and Wildlife Code on Endangered Species, or to destroy or adversely modify the habitat of such species.

If a threatened or endangered species is encountered during construction, the Contractor shall immediately cease work in the area of the encounter and notify the Owner, who will immediately implement actions in accordance with the ESA and applicable State statutes. These actions shall include reporting the encounter to the TWDB, the U. S. Fish and Wildlife Service, and the Texas Parks and Wildlife Department, obtaining any necessary approvals or permits to enable the work to continue, or implement other mitigation actions. The Contractor shall not resume construction in the area of the encounter until authorized to do so by the Owner.

17. Hazardous Materials

Materials utilized in the project shall be free of any hazardous materials, except as may be specifically provided for in the specifications.

If the Contractor encounters existing material on sites owned or controlled by the Owner or in material sources that are suspected by visual observation or smell to contain hazardous materials, the Contractor shall immediately notify the Engineer and the Owner.

The Owner will be responsible for the testing and removal or disposal of hazardous materials on sites owned or controlled by the Owner. The Owner may suspend the work, wholly or in part during the testing, removal or disposal of hazardous materials on sites owned or controlled by the Owner.

18. Project Signage

The Owner must implement one of the signage options below as described in TWDB Guidance TWDB-1109:

- Online signage placed on community website or social media outlet;
- Press release;
- Posters or wall signage in a public building or location;
- Newspaper or periodical advertisement for project construction, groundbreaking ceremony, or operation of the new or improved facility; or
- Standard on-site signage erected in a prominent location at the construction project site or along a major thoroughfare within the community as directed by the Owner.

If a recipient decides on a public or media event to publicize the accomplishment of significant events related to construction of the project, the U.S Environmental Protection Administration, Region 6, must be provided with at least a ten working day notice of the event and provided the opportunity to attend and participate. Please contact Associate Director Claudia Hosch, who can be reached at (214) 665-6464 or Hosch.Claudia@epa.gov.

19. Changes

*Provisions identified with an asterisk below are consistent with Local Government Code 271.060. Counties and Municipalities may modify the identified provisions, when applicable, to conform to Local Government Code 262.031 (Counties) or 252.048 (Municipalities).

- (a) The Owner may at any time, without notice to any surety, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including but not limited to changes:
 - i. In the specifications (including drawings and designs);
 - ii. In the time, method or manner of performance of the work;
 - iii. To decrease or increase the quantity of work to be performed or materials, equipment or supplies to be furnished;
- (b) *The total price of a contract may not be increased by a change order unless provision has been made for the payment of the added cost by the appropriation of current funds or bond funds for that purpose, by the authorization of the issuance of certificates, or by a combination of those procedures.
- (c) *A contract with an original contract price of \$1 million or more may not be increased by more than 25 percent. If a change order for a contract with an original contract price of less than \$1 million increases the contract amount to \$1 million or more, subsequent change orders may not increase the revised contract amount by more than 25 percent.

- (d) *A governing body may grant authority to an official or employee responsible for purchasing or for administering a contract to approve a change order that involves an increase or decrease of \$50,000 or less.
- (e) Changes that involve an increase in price will be supported by documentation of the cost components. For projects funded through the EDAP program, or with grant proceeds, TWDB staff may request this information to be provided in a format equivalent to the Cost and Pricing Information form (No. WRD-277).
- (f) Any change orders involving a change in the project requiring a relocation of project components, sizing, or process may require additional environmental approval. A map and description of the proposed changes should be sent to the TWDB Environmental Reviewer for coordination and approval as soon as possible to avoid any delay.

20. Operation and Maintenance Manuals and Training

- (a) The Contractor shall obtain installation, operation, and maintenance manuals from manufacturers and suppliers for equipment furnished under the contract. The Contractor shall submit three copies of each complete manual to the Engineer within 90 days after approval of shop drawings, product data, and samples, and not later than the date of shipment of each item of equipment to the project site or storage location.
- (b) The Owner shall require the Engineer to promptly review each manual submitted, noting necessary corrections and revisions. If the Engineer rejects the manual, the Contractor shall correct and resubmit the manual until it is acceptable to the Engineer as being in conformance with the design concept of the project and for compliance with information given in the Contract Documents. Owner may assess the Contractor a charge for reviews of the same items in excess of three (3) times. Such procedure shall not be considered cause for delay.
- (c) Acceptance of manuals by Engineer does not relieve the Contractor of any requirements of terms of Contract.
- (d) The Contractor shall provide the services of trained, qualified technicians to check final equipment installation, to assist as required in placing same in operation, and to instruct operating personnel in the proper manner of performing routine operation and maintenance of the equipment.
- (e) Operations and maintenance manuals specified hereinafter are in addition to any operation, maintenance, or installation instructions required by the Contractor to install, test, and start-up the equipment. Each manual is to be bound in a folder and labeled to identify the contents and project to which it applies. The manual shall contain the following applicable items:
 - i. A listing of the manufacturer's identification, including order number, model, serial number, and location of parts and service centers.
 - ii. A list of recommended stock of parts, including part number and quantity.
 - iii. Complete replacement parts list.
 - iv. Performance data and rating tables.
 - v. Specific instructions for installation, operation, adjustment, and maintenance.
 - vi. Exploded view drawings for major equipment items.

- vii. Lubrication requirements.
- viii. Complete equipment wiring diagrams and control schematics with terminal identification.

21. As-Built Dimensions and Drawings

- (a) Contractor shall make appropriate daily measurements of facilities constructed and keep accurate records of location (horizontal and vertical) of all facilities.
- (b) Upon completion of each facility, the Contractor shall furnish the Owner with one set of direct prints, marked with red pencil, to show as-built dimensions and locations of all work constructed. As a minimum, the final drawings shall include the following:
 - i. Horizontal and vertical locations of work.
 - ii. Changes in equipment and dimensions due to substitutions.
 - iii. "Nameplate" data on all installed equipment.
 - iv. Deletions, additions, and changes to scope of work.
 - v. Any other changes made.

22. Close-Out Procedures

To close-out the contract and release final retainage, the following steps must be completed:

- (a) TWDB Staff must conduct a construction contract final inspection (CCFI);
- (b) The following submittals must be received, reviewed, and accepted by the TWDB:
 - i. The final change order, adjustment of quantities, or a statement that all change orders have previously been submitted and there will be no more change orders;
 - ii. The final pay request from the Contractor;
 - iii. An affidavit by the Contractor that all bills have been paid;
 - iv. Certification by the consulting Engineer that the work has been completed and was constructed in accordance with the approved plans and specifications and sound engineering principals and construction practices;
 - v. Acceptance of the project by the Owner in the form of a written resolution or other formal action;
 - vi. Notification of the beginning date of the warranty period for the contract; and
 - vii. Confirmation that the Owner has received the as-built drawings from the Contractor.
- (c) TWDB will issue a Certificate of Approval allowing the release of retainage.

23. Additional Forms and Information

The following forms and guidance documents, mentioned throughout this Guidance, are available on the TWDB site at: <http://www.twdb.texas.gov/financial/instructions/index.asp>

Forms:

Contractor's Act of Assurance (ED-103)
 Contractor's Resolution on Authorized Representative (ED-104)
 Debarment / Suspension Certification (SRF-404)
 Bidder's Certifications- EEO (WRD – 255)

DBE Affirmative Steps solicitation Report (TWDB 0216)
DBE Prime Contractor Affirmative Steps Certification & Goals (TWDB 0217)
DBE Loan/Grant Participation Summary (TWDB 0373)
Monthly American Iron and Steel Certificate (TWDB-1106-A)
American Iron and Steel (AIS) De Minimis Log (TWDB-1106-B)

Monthly Davis Bacon Wage Rate Certificate of Compliance Submittal by Owner (Sub-Recipient) (DB-0154)

Guidance Documents:

TWDB-0210 Disadvantaged Business Enterprise Guidance
Requirements for American Iron and Steel (AIS) Guidance (TWDB-1106)
Guidance on Davis-Bacon Wage Rate Requirements for State Revolving Fund Projects (DB-0156)



American Iron and Steel (AIS) Guidance for Clean Water & Drinking Water State Revolving Fund Projects

This document is not a comprehensive representation of the federal requirements. For complete details of the federal requirements visit: <https://www.epa.gov/cwsrf/state-revolving-fund-american-iron-and-steel-ais-requirement>

In any instance when there may be a discrepancy between this guidance and the actual federal requirements, program participants must adhere to the federal requirements.

Table of Contents

Overview	4
Effective Dates	4
United States (U.S.) Environmental Protection Agency (EPA) Guidance	5
Covered Iron and Steel Products	5
Waivers	6
Waiver Process	6
Compliance	7
TWDB Compliance Procedures	7
Recommendations and Best Management Practices	9
Attachment 1: American Iron and Steel Requirement Guidance (March 20, 2014)	10
Attachment 2: Questions and Answers Part 1: Valves and Hydrants (May 30, 2014, <u>updated</u> <u>October 27, 2015</u>)	11
Attachment 3: Questions and Answers Part 2: Products, Projects and Process (September 10, 2014)	12
Attachment 4: Questions and Answers Part 3: Plans and specifications dates, Refinancing and Coatings (March 16, 2015)	13
Attachment 5: EPA Approved Waivers	14
a. De Minimis waiver pursuant to Section 436 of P.L. 113-76, Consolidated Appropriations Act (CAA) (April 15, 2014)	14
b. Nationwide Plans and Specs waiver pursuant to Section 436 of P.L. 113-76, Consolidated Appropriations Act (CAA) (April 15, 2014)	15
c. Short-Term National Product Waiver for Stainless Steel Nuts and Bolts used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (February 18, 2015)	16
d. National Product Waiver for Pig Iron and Direct Reduced Iron (February 18, 2015)	17
e. National Product Waiver for Minor Components in Iron and Steel Products (with Cost Ceiling) (October 27, 2015)	18
f. One-Year Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (February 22, 2016) ..	19
g. One-Year Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (January 18, 2017)	20
h. Final Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts	

Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (August 24, 2018)	21
Attachment 6: EPA Waiver Request	22
Information Checklist for Waiver Request	22
EPA Checklist for Waiver Request	23
Attachment 7: Construction Contract Language	24
Attachment 8: Sample Certifications.....	25
Final Manufacturer Certification - Version 1 – AIS Products Delivered to Project Site	26
Final Manufacturer Certification - Version 2 – AIS Products Purchased from Supplier	27
Step Certification	28
Step Certification Letter	28
Step Certification Log	29
De Minimis Log	30
Attachment 9: American Iron and Steel Certificate	31

Overview

It is the intent of the Texas Water Development Board (TWDB) to ensure that applicants, consultants and contractors are provided with procedures and recommendations for implementation of the American Iron and Steel (AIS) provisions for the Clean and Drinking Water State Revolving Funds. These provisions are currently contained in Section 608 of the Federal Water Pollution Control Act (33 U.S.C. §1388) for the Clean Water State Revolving Fund (CWSRF) program and in federal laws, including the federal appropriation acts and Section 1452(a)(4) of the Safe Drinking Water Act (42 U.S.C. §300j-12(a)(4)), as applicable, for the Drinking Water State Revolving Fund (DWSRF) program.

The AIS provisions require CWSRF and DWSRF assistance recipients to use iron and steel products that are produced in the United States for projects for the construction, alteration, maintenance, or repair of a public water system or treatment works. **For the CWSRF program, the AIS requirements apply only to the construction, alteration, maintenance, or repair of treatment works¹ projects. For the DWSRF program, the AIS requirements apply to all public water system projects.** Based on the statutory provisions, the effective date depends on the date the TWDB loan was closed and varies by program.

Effective Dates

CWSRF:

If the loan closes on or after October 1, 2014:	
(a) If the Plans and Specifications for the project were approved by TWDB prior to June 10, 2014	Exempt from AIS
(b) If the Plans and Specifications for the project were approved by TWDB on or after June 10, 2014	AIS applies

DWSRF:

The American Iron and Steel provisions generally apply to any financial assistance closed on or after January 17, 2014. There may be statutory exceptions to the AIS requirements based on the date of approval of plans and specifications by a state agency. The entity should contact the project's Team Manager or Project Manager if there are questions regarding AIS exceptions.

CWSRF and DWSRF

Planning, Acquisition, and Design funded separately from the Construction Phase:

If the original loan for the planning and/or design of a project closed prior to January 17, 2014, then the AIS provision would not apply to the construction phase of the same project.

¹. "Treatments works" is defined in 33 U.S. Code § 1292 (2).

United States (U.S.) Environmental Protection Agency (EPA) Guidance

EPA has provided guidance through the following resources:

1. American Iron and Steel Requirement Guidance (March 20, 2014) (**Attachment 1**)
2. Questions and Answers Part 1: Valves and Hydrants (May 30, 2014) (**Attachment 2**)
3. Questions and Answers Part 2: Products, Projects and Process (September 10, 2014) (**Attachment 3**)
4. Questions and Answers Part 3: Plans and specifications dates, Refinancing and Coatings (March 16, 2015) (**Attachment 4**)
5. EPA's American Iron and Steel webpage - <https://www.epa.gov/cwsrf/state-revolving-fund-american-iron-and-steel-ais-requirement>

Please contact TWDB with any questions regarding applicability of AIS requirements.

Covered Iron and Steel Products

If the project receiving CWSRF or DWSRF funds must comply with the AIS requirements, then all covered iron and steel products must be made in the United States, no matter whether the CWSRF or DWSRF was the source of funds used to purchase a particular covered iron and steel product. The entity may not use funds from non-State Revolving Fund sources, including the entity's own funds, to pay for a non-compliant iron or steel product used in the project.

AIS requirements apply to the following products made primarily of iron or steel, permanently incorporated into the public water system or treatment works:

- Lined or unlined pipes or fittings;
- Manhole Covers;
- Municipal Castings;
- Hydrants;
- Tanks;
- Flanges;
- Pipe clamps and restraints;
- Valves;
- Structural steel;
- Reinforced precast concrete; and
- Construction materials.

Mechanical and electrical components, equipment, and systems are not considered iron and steel products, and are exempt from AIS requirements. Mechanical equipment is typically that which has motorized parts and/or is powered by a motor. Electrical equipment is typically any machine powered by electricity and includes components that are part of the electrical distribution system.

Waivers

AIS provisions permit EPA to issue waivers for a case or category of cases where EPA finds (1) that applying these requirements would be inconsistent with the public interest; (2) iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or (3) inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

EPA has granted nationwide waivers, which are attached hereto as **Attachment 5**:

1. De Minimis waiver pursuant to Section 436 of P.L. 113-76, Consolidated Appropriations Act (CAA) (April 15, 2014). The De Minimis waiver permits the use of products when they occur in de minimis incidental components to the project. Funds used for de minimis incidental components cumulatively may not exceed 5% of the total cost of the materials used in and incorporated into the project; the cost of an individual item may not exceed 1% of the total cost of materials used in and incorporated into the project.
2. Nationwide Plans and Specs waiver pursuant to Section 436 of P.L. 113-76, Consolidated Appropriations Act (CAA) (April 15, 2014)
3. Short-Term National Product Waiver for Stainless Steel Nuts and Bolts used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (February 18, 2015)
4. National Product Waiver for Pig Iron and Direct Reduced Iron (February 18, 2015)
5. National Product Waiver for Minor Components in Iron and Steel Products (with Cost Ceiling) (October 27, 2015)
6. One-Year Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (February 22, 2016)
7. One-year Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (January 18, 2017)
8. Final Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (August 24, 2018)

EPA's American Iron and Steel webpage includes any waivers issued -

<https://www.epa.gov/cwsrf/state-revolving-fund-american-iron-and-steel-ais-requirement>

Waiver Process

EPA has implemented a waiver application process to allow the State, on behalf of the applicant, to apply for waivers of the AIS requirement directly to EPA Headquarters. Only waiver requests received from the State will be considered. A waiver application may be submitted at any time during the project, however until a waiver is granted by EPA, the AIS requirement stands.

In order to apply for a project waiver, the assistance recipient should email the request in the form of a Word document (.doc) to the TWDB project engineer. Proper and sufficient documentation must be provided by the assistance recipient.

After receiving an application for waiver of the AIS requirements, EPA Headquarters will publish the request on its website for 15 days and receive informal comment. EPA Headquarters will then determine whether the application properly and adequately documents and justifies the statutory basis cited for the waiver – that it is quantitatively and qualitatively sufficient – and to determine whether or not to grant the waiver.

EPA will notify TWDB that a waiver request has been approved or denied as soon as such a decision has been made. Approved waivers will be posted on the EPA website. The applicant should keep a copy of the signed waiver in their AIS Certification File.

Compliance

In order to ensure compliance with the AIS requirement, specific AIS contract language must be included in each contract, including the construction material purchase agreements. The applicant should be aware that AIS requirements will apply to the project through the TWDB commitment resolution.

It is the applicant's responsibility to assure that all construction and purchase contracts are executed in compliance with AIS, and a record of all forms and certifications necessary to demonstrating compliance with AIS is maintained. To demonstrate compliance with AIS requirements either the final manufacturer that delivers the iron or steel product to the worksite, vendor, or contractor, may provide a certification asserting that all manufacturing processes occurred in the United States, or the applicant may use step certification process, similar to the Federal Highway Administration. The applicant is also responsible for monitoring De Minimis Logs to ensure all iron and steel products listed on the log meet the requirements of the EPA's De Minimis waiver.

TWDB relies on self-certification by the applicant to document compliance with AIS, and requires the applicant to submit a Monthly American Iron and Steel Certificate of Compliance Submittal with each outlay report covering requests for funds associated within construction contracts. Failure to submit the Monthly American Iron and Steel Certificate of Compliance could delay the release of funds.

TWDB Compliance Procedures

In order to be in compliance and satisfy TWDB's requirements for implementation of AIS requirements, entities will need to do the following:

1. The applicant shall prepare and submit any waiver request to the TWDB project engineer. TWDB will forward all requests to EPA. Any waiver to the AIS requirements must be issued by the EPA. A checklist detailing the types of information required for a waiver to be processed, and EPA's waiver determination checklist is attached as **Attachment 6**.

2. Applicants shall include the following language in the advertisement for bids for all applicable construction contracts funded by the TWDB's DWSRF or CWSRF:

For CWSRF, include - Any contract(s) awarded under this Invitation for Bids is/are subject to the American Iron and Steel (AIS) requirements of Section 608 of the Federal Water Pollution Control Act (33 U.S.C. §1388)."

For DWSRF, include - "Any contract(s) awarded under this Invitation for Bids is/are subject to the American Iron and Steel (AIS) requirements of federal law, including federal appropriation acts and Section 1452(a)(4) of the Safe Drinking Water Act (42 U.S.C. §300j-12(a)(4)), as applicable."

3. Applicants shall include the AIS requirements in all applicable construction contracts, which are attached as **Attachment 7**.
4. Applicants shall include the following language on the General Notes Plan Sheet(s).

For CWSRF, include - "This project is subject to the American Iron and Steel (AIS) requirements of Section 608 of the Federal Water Pollution Control Act (33 U.S.C. §1388). All iron and steel products for construction, alteration, maintenance, or repairs incorporated in these plans must be produced in the United States"

For DWSRF, include - "This project is subject to the American Iron and Steel (AIS) requirements of federal law, including federal appropriation acts and Section 1452(a)(4) of the Safe Drinking Water Act (42 U.S.C. §300j-12(a)(4)), as applicable. All iron and steel products for construction, alteration, maintenance, or repairs incorporated in these plans must be produced in the United States"

5. The applicant and prime construction contractor must obtain certifications from the final manufacturer that delivers the iron and steel product to the worksite, vendor, or contractor asserting that all manufacturing processes occurred in the United States (Version 1 of the sample letter on page 26). For products not delivered to the project site, the applicant and prime contractor must obtain the Final Manufacturer's certification from the supplier (Version 2 of the sample letter on page 27). The supplier must certify that the projects being provided to the contractor for the project are AIS compliant and the contractor and applicant must retain copies of the supplier's certification. Note: EPA has determined that a comparable manufacturer's certification letter that makes reference to the USDA Rural Utilities Service Water and Environmental Programs' American Iron & Steel requirements instead of EPA's AIS requirements would be acceptable.

6. The prime construction contractor and applicant are responsible for inspecting iron and steel products for any readily visible identification labels indicating the country of origin.
7. The prime construction contractor and applicant will be required to maintain a file that contains the certifications from the final manufacturers, any approved waivers, and the De Minimis log. This file must be available for review by TWDB representatives. Sample Certification letters, step certification log, and De Minimis Log are included in **Attachment 8**.
8. The applicant must submit a Monthly American Iron and Steel Certificate of Compliance Submittal with each outlay report requesting funds associated with construction contracts (i.e., covering construction-related invoices), attached as **Attachment 9**.
9. The applicant will provide a final certification, after the completion of the construction contract and prior to issuance of a Certificate of Approval by the TWDB, stating the project was completed in compliance with the AIS requirements, **Attachment 10**.

Recommendations and Best Management Practices

The following recommendations are not required but should be considered by the applicant in implementation of the AIS requirements:

1. AIS requirements should be addressed in the engineering feasibility study to determine availability of AIS products, and determine if any requests for waivers need to be initiated.
2. While a waiver application may be submitted at any time during the project, the applicant should consider EPA's review schedule (15-day comment period plus review time) when scheduling projects. It is not recommended to request a waiver after the advertisement for bids or start of construction unless absolutely necessary.
3. Develop procedures for maintaining a record of AIS documentation.
4. Distinguish separate bid items that must comply with AIS requirements on the Bid Form.
5. Consideration of AIS compliance documentation when developing the contractor submittal procedures for shop drawings, material lists, and manufacturer certifications, etc.
6. Discuss AIS requirements during pre-bid conference and pre-construction meetings, to address contractor's responsibilities, and availability of iron and steel products needed to complete the project.

Attachment 1 - American Iron and Steel Requirement Guidance (March 20, 2014)
(Double click on the embedded Acrobat version below for a clear copy of the entire document)



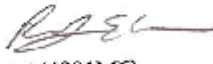
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

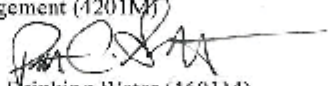
MAR 20 2014

OFFICE OF WATER

MEMORANDUM

SUBJECT: Implementation of American Iron and Steel provisions of P.L. 113-76,
Consolidated Appropriations Act, 2014

FROM: Andrew D. Sawyers, Director 
Office of Wastewater Management (4201M)

Peter C. Grevatt, Director 
Office of Ground Water and Drinking Water (4601M)

TO: Water Management Division Directors
Regions I - X

P.L. 113-76, Consolidated Appropriations Act, 2014 (Act), includes an "American Iron and Steel (AIS)" requirement in section 436 that requires Clean Water State Revolving Loan Fund (CWSRF) and Drinking Water State Revolving Loan Fund (DWSRF) assistance recipients to use iron and steel products that are produced in the United States for projects for the construction, alteration, maintenance, or repair of a public water system or treatment works if the project is funded through an assistance agreement executed beginning January 17, 2014 (enactment of the Act), through the end of Federal Fiscal Year 2014.

Section 436 also sets forth certain circumstances under which EPA may waive the AIS requirement. Furthermore, the Act specifically exempts projects where engineering plans and specifications were approved by a State agency prior to January 17, 2014.

The approach described below explains how EPA will implement the AIS requirement. The first section is in the form of questions and answers that address the types of projects that must comply with the AIS requirement, the types of products covered by the AIS requirement, and compliance. The second section is a step-by-step process for requesting waivers and the circumstances under which waivers may be granted.

Attachment 2 - Questions and Answers Part 1: Valves and Hydrants (May 30, 2014, updated October 27, 2015)

(Double click on the embedded Acrobat version below for a clear copy of the entire document)

May 30, 2014

American Iron & Steel (AIS) Requirement of the Consolidated Appropriations Act of 2014 (Public Law 113-76) Q&A Part 1: Valves and Hydrants

Q1: Does the AIS requirement of the Consolidated Appropriations Act of 2014 require minor, miscellaneous components within a covered valve or hydrant, such as nuts, bolts and washers, to be made in the U.S.?

A1: The definition of "iron and steel products" that must either be domestically produced or subject to a waiver in order to comply with the AIS requirement of the Consolidated Appropriations Act of 2014

Question 1 has been superseded by the National Minor Components Waiver signed on October 27, 2015. This waiver can be found here: https://www.epa.gov/sites/production/files/2015-10/documents/minor_components_waiver_signed_10_27_15_508.pdf

products" that must either be made domestically, or otherwise must comply with the AIS requirement. The minor components represent a very small percentage of the iron and steel in the hydrants and valves that are defined as "iron and steel products." These minor components, which EPA has learned through our research are currently difficult to find domestically in sufficient quantity, such as minor nuts, bolts, and washers, are not required to be of U.S. origin.

Q2: Do the actuators/control systems attached to valves have to comply with the AIS requirement, or just the valve itself?

A2: The AIS requirement of the Consolidated Appropriations Act of 2014 includes valves in its definition of "iron and steel products" that recipients must make certain are either domestically made or subject to a waiver in order to comply with the AIS requirement. Actuators and control systems are not included in the definition. Only the valve itself is required to be either domestically produced or subject to a waiver in order to be compliant with the AIS requirement. Absent a waiver, EPA considers valves and hydrants to be domestically produced if the significant iron and steel components of a covered valve or hydrant – the body, bonnet, shoe, stem, and wedge/disc/gate/ball – if made of iron or steel, is produced in the U.S. See Q1 above for a discussion about minor components. The valves and actuators, while often purchased and shipped together, are two unique products that are manufactured separately and typically attached together during the final step of the process. Valves are included in the definition of "iron and steel products" in the AIS requirement. Actuators, whether manual, electric, hydraulic or pneumatic, are not listed as an "iron and steel product" under the AIS requirement of the Consolidated Appropriations Act of 2014, nor are they considered construction materials. Therefore, they do not need to be domestically produced in the U.S. in order to comply with the requirement.

1 of 2

Attachment 3 - Questions and Answers Part 2: Products, Projects and Process (September 10, 2014)

(Double click on the embedded Acrobat version below for a clear copy of the entire document)

September 10, 2014

**American Iron & Steel (AIS) Requirement of the Consolidated Appropriations Act of 2014
(Public Law 113-76)**

Q&A Part 2

PRODUCT QUESTIONS

1. Q: Do all fasteners qualify for de minimis exemption?

A: No. There is no broad exemption for fasteners from the American Iron and Steel (AIS) requirements. Significant fasteners used in SRF projects are not subject to the de minimis waiver for projects and must comply with the AIS requirements. Significant fasteners include fasteners produced to industry standards (e.g., ASTM standards) and/or project specifications, special ordered or those of high value. When bulk purchase of unknown-origin fasteners that are of incidental use and small value are used on a project, they may fall under the national de minimis waiver for projects. The list of potential items could be varied, such as big-box/hardware-store-variety screws, nails, and staples. The key characteristics of the items that may qualify for the de minimis waiver would be items that are incidental to the project purpose (such as drywall screws) and not significant in value or purpose (such as common nails or brads). See the following: http://water.epa.gov/grants_funding/upload/Deminimis-Waiver-04-15-14.pdf.

EPA also clarifies that minor components of two listed products – valves and hydrants – may not need to meet the AIS requirements if the minor components comprise a very small quantity of minor, low-cost fasteners that are of unknown origin. See EPA's questions and answers on the subject at the following: http://water.epa.gov/grants_funding/upload/AIS-QandA-Part-1-Valves-and-Hydrants-final.pdf.

2. Q: Does PCCP pipe have to be domestically produced?

A: Yes. Pre-stressed concrete cylinder pipe (PCCP) or other similar concrete cylinder pipes would be comparable to pre-cast concrete which is specifically listed in the Consolidated Appropriations Act of 2014 as a product subject to the AIS requirement.

3. Q: If the iron or steel is made from recycled metals will the vendor/supplier have to provide a certification document certifying that the recycled metals are domestically produced?

A: No. Recycled source materials used in the production of iron and steel products do not have to come from the U.S. Iron or steel scrap, for instance, are considered raw materials that may come from anywhere. While certification is not required for the raw material, EPA does recommend that additional final processing of iron and steel be certified to have occurred in the U.S.

4. Q: Do tanks used for filtration systems, if delivered to the construction site separately and then filled with filtration media onsite, have to be domestically produced?

Attachment 4 - Questions and Answers Part 3: Plans and specifications dates,
Refinancing and Coatings
(March 16, 2015)

(Double click on the embedded Acrobat version below for a clear copy of the entire document)

March 2015

American Iron & Steel Requirement for the Clean Water and Drinking Water State Revolving Funds

Q&A Part 3

***For CWSRF and DWSRF:** On January 17, 2014, Public Law 113-76, the "Consolidated Appropriations Act, 2014," was enacted and included an American Iron and Steel requirement for the Clean Water and Drinking Water State Revolving Fund programs through the end of fiscal year 2014. Since then, the AIS requirement has continued for both programs, but through different statutes, with a few changes as described in the questions and answers provided below.*

***For CWSRF:** On June 10, 2014, the Water Resources Reform and Development Act amended the Clean Water Act to include permanent requirements for the use of AIS products in CWSRF assistance agreements. Section 608 of the CWA now contains requirements for AIS that repeat those of the Consolidated Appropriations Act, 2014. All CWSRF assistance agreements must comply with Section 608 of the CWA for implementation of the permanent AIS requirement.*

***For DWSRF:** On December 16, 2014, the President signed Public Law 113- 235, the "Consolidated and Further Continuing Appropriations Act, 2015," which provides fiscal year 2015 full-year appropriations through September 30, 2015. This law continues the requirement for the use of AIS products in DWSRF assistance agreements through September 30, 2015.*

CWSRF PROGRAM

1. **Q:** The Water Resources Reform and Development Act amended the Clean Water Act to include permanent requirements for the use of AIS for CWSRF funded assistance agreements. Does the CWA include an exemption for plans and specifications approved prior to the enactment of the legislation similar to the exemption included in the Consolidated Appropriations Act (CAA) 2014?

A: Yes. The WRRDA amendment to the CWA, which included AIS requirements, included a similar exemption as the CAA 2014. For any CWSRF assistance agreement signed on or after October 1, 2014, if the plans and specifications were approved prior to June 10, 2014 (the enactment of WRRDA), then the project is exempt from AIS requirements. For assistance agreements signed prior to October 1, 2014, the previous dates in the CAA 2014 apply (see March 20, 2014, AIS guidance document).

If a project does not require approved engineering plans and specifications, the bid advertisement date will count in lieu of the plans and specifications approval date for purposes of this exemption in Section 608 (f).

The following table summarizes AIS exemptions based on the plans and specifications approval date for CWSRF funded projects.

3/16/2015

Attachment 5 – EPA Approved Waivers

- a. De Minimis waiver pursuant to Section 436 of P.L. 113-76, Consolidated Appropriations Act (CAA) (April 15, 2014)

(Double click on the embedded Acrobat version below for a clear copy of the entire document).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF WATER

DECISION MEMORANDUM

SUBJECT: De Minimis Waiver of Section 436 of P.L. 113-76, Consolidated Appropriations Act (CAA), 2014

FROM: Nancy K. Stoner
Acting Assistant Administrator

The EPA is hereby granting a nationwide waiver pursuant to the "American Iron and Steel (AIS)" requirements of P.L. 113-76, Consolidated Appropriations Act, 2014 (Act), section 436 under the authority of Section 436(b)(1) (public interest waiver) for de minimis incidental components of eligible water infrastructure projects. This action permits the use of products when they occur in de minimis incidental components of such projects funded by the Act that may otherwise be prohibited under section 436(a). Funds used for such de minimis incidental components cumulatively may comprise no more than a total of 5 percent of the total cost of the materials used in and incorporated into a project; the cost of an individual item may not exceed 1 percent of the total cost of the materials used in and incorporated into a project.

P.L. 113-76, Consolidated Appropriations Act, 2014 (Act), includes an "American Iron and Steel" (AIS) requirement in section 436 that requires Clean Water State Revolving Loan Fund (CWSRF) and Drinking Water State Revolving Loan Fund (DWSRF) assistance recipients to use specific domestic iron and steel products that are produced in the United States if the project is funded through an assistance agreement executed beginning January 17, 2014 (enactment of the Act), through the end of Fiscal Year 2014, unless the agency determines it necessary to waive this requirement based on findings set forth in Section 436(b). The Act states, "[t]he requirements] shall not apply in any case or category of cases in which the Administrator of the Environmental Protection Agency... finds that— (1) applying subsection (a) would be inconsistent with the public interest" 436(b)(1).

In implementing section 436 of the Act, the EPA must ensure that the section's requirements are applied consistent with congressional intent in adopting this section and in the broader context of the purposes, objectives, and other provisions applicable to projects funded under the SRF. Water infrastructure projects typically contain a relatively small number of high-cost components incorporated into the project. In bid solicitations for a project, these high-cost components are generally described in detail via project specific technical specifications. For these major components, utility owners and their contractors are generally familiar with the conditions of availability, the potential alternatives for each detailed specification, the approximate cost, and the country of manufacture of the available components.

- b. Nationwide Plans and Specifications waiver pursuant to Section 436 of P.L. 113-76, Consolidated Appropriations Act (CAA) (April 15, 2014)
(Double click on the embedded Acrobat version below for a clear copy of the entire document)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF WATER

DECISION MEMORANDUM

SUBJECT: Plans and Specifications Waiver of Section 436 of P.L. 113-76, Consolidated Appropriations Act (CAA), 2014

FROM: Nancy K. Stoner
Acting Assistant Administrator

The EPA is hereby granting a nationwide waiver of the American Iron and Steel requirement pursuant to Section 436(b)(1) (public interest waiver), of the Consolidated Appropriations Act (CAA), 2014, for eligible projects that had engineering plans and specifications submitted to an appropriate state agency prior to and including January 17, 2014, the date of enactment of the CAA, and approved between and including January 17, 2014, and the date of this waiver, where the state agency that approved such plans and specifications did so under the normal course of business for that agency. This action permits the use of non-domestic iron and steel products in such projects funded by a Clean or Drinking Water State Revolving Fund that may otherwise be prohibited under section 436.

If a project does not require approved engineering plans and specifications, the bid advertisement date will count in lieu of the plans and specifications approval date for purposes of this national waiver.

The basis for the nationwide waiver is that due to the uncertainty about whether an American Iron and Steel requirement would be included in this year's appropriation, potential assistance recipients did not have the opportunity to plan for a possible American Iron and Steel requirement. Until detailed guidance was issued, potential assistance recipients were unable to solicit bids from construction firms with appropriate definitions of key terms contained in the CAA language. Additionally, projects that submitted engineering plans and specifications prior to and including January 17, 2014, without knowledge of the American Iron and Steel requirement, and with the anticipation that such plans would be quickly approved, but such approval did not occur until on or after January 17, 2014, would be required to redesign elements of the project, investigate potential domestic products, revise engineering drawings and bid specifications, and resubmit such plans and specifications for approval, thereby delaying the initiation of construction substantially. Those projects which do not require approved plans and specifications, but were bid prior to the guidance being issued, also could be required to rebid the project or submit change orders to comply with the new requirements, which would also delay initiation of construction.

- c. Short-Term National Product Waiver for Stainless Steel Nuts and Bolts used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (February 18, 2015)
(Double click on the embedded Acrobat version below for a clear copy of the entire document)



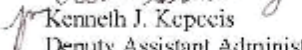
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 18 2015

OFFICE OF WATER

DECISION MEMORANDUM

SUBJECT: Short-Term National Product Waiver for Stainless Steel Nuts and Bolts used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles for State Revolving Fund Projects

FROM: 
Kenneth J. Kepke
Deputy Assistant Administrator

The U.S. Environmental Protection Agency is hereby granting a national product waiver pursuant to the "American Iron and Steel" provisions of the Clean Water Act and Public Law 113-235, the "Consolidated and Further Continuing Appropriations Act, 2015."¹ The waiver permits the use of non-domestically produced stainless steel nuts and bolts in bolting-type pipe couplings, restraints, joints, flanges and repair saddles in iron and steel products for projects funded by a Clean Water or Drinking Water State Revolving Fund that may otherwise be prohibited absent this waiver. This national product waiver is short-term, applying to the covered products if those products are purchased up until one year after the waiver's signature date. The waiver is retroactive and also applies to products purchased before the signature date. Covered products purchased prior to the waiver's signature date or within the one-year period may be used subsequent to the waiver expiration date.

Coverage: The specific product categories covered by this waiver include bolted expansion joints, bolted dismantling joints, bolted pipe couplings, bolted pipe restraints, bolted pipe flanges, bolted flange adapters, bolted pipe repair or service saddles, bolted mechanical joints, and pipe hangers and supports. Non-domestic stainless steel nuts and bolts may be incorporated into these specific products; however, all other iron and steel components in these products, unless subject to a waiver, must still meet the AIS requirements. In other words, this waiver does not exempt the whole product, or any of the main iron or steel components such as the ring, sleeve, body, flange spool or mechanical joint, from the AIS requirements just because stainless steel nuts and bolts are used. Any project that receives funds from the CWSRF or DWSRF since the enactment of P.L. 113-76, the "Consolidated Appropriations Act, 2014," is required to comply with the AIS provisions.

¹ Absent a waiver, all treatment works and drinking water facilities that are constructed, in whole or in part, with funds from the CWSRF or the DWSRF, must use American made iron and steel. EPA is allowed under certain circumstances to provide waivers of this requirement.

- d. National Product Waiver for Pig Iron and Direct Reduced Iron (February 18, 2015)
(Double click on the embedded Acrobat version below for a clear copy of the entire document)



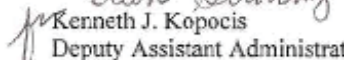
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 18 2015

OFFICE OF WATER

DECISION MEMORANDUM

SUBJECT: National Product Waiver for Pig Iron and Direct Reduced Iron for State
Revolving Fund Projects

FROM: 
Kenneth J. Kopocis
Deputy Assistant Administrator

The U.S. Environmental Protection Agency is hereby granting a national product waiver pursuant to the "American Iron and Steel" provisions of the Clean Water Act and Public Law 113-235, the "Consolidated and Further Continuing Appropriations Act, 2015," for certain intermediate goods used in the manufacture of iron and steel products.¹ This waiver permits the use of pig iron and direct reduced iron manufactured outside of the United States in domestic manufacturing processes for iron and steel products used in projects funded by a Clean Water or Drinking Water State Revolving Fund that may otherwise be prohibited absent this waiver. The waiver is retroactive and thus also applies to the use of non-domestic pig iron and direct reduced iron before the signature date.

Background: Pig iron and direct reduced iron are intermediate products of iron and steel manufacturing used as material feed sources in iron and steel foundries and steel mills. Pig iron is a product of iron ore smelting in a blast furnace. It is made from molten iron, which has been cast in the shape of "pigs" as it comes from the blast furnace. Direct reduced iron ore is produced from iron ore, pellets or fines, which are reduced in a solid state using natural gas. Hot briquetted iron, or HBI, is a compacted form of direct reduced iron with enhanced physical characteristics for shipment and storage.

Coverage: This waiver permits the use of iron and steel products that were manufactured using non-domestic pig iron and direct reduced iron in projects that receive funds from either the CWSRF or DWSRF. Any project that received or will receive funds from the CWSRF or DWSRF beginning with the enactment of P.L. 113-76, the "Consolidated Appropriations Act, 2014," may use this waiver for iron and steel that use these intermediate goods.

Rationale: The AIS provisions require CWSRF and DWSRF assistance recipients to use specific domestic iron and steel products that are produced in the United States if the project is funded

¹ Absent a waiver, all treatment works and drinking water facilities that are constructed, in whole or in part, with funds from the CWSRF or the DWSRF, must use American made iron and steel. EPA is allowed under certain circumstances to provide waivers of this requirement.

- e. National Product Waiver for Minor Components in Iron and Steel Products (with Cost Ceiling)
(October 27, 2015)
(Double click on the embedded Acrobat version below for a clear copy of the entire document)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 27 2015

OFFICE OF WATER

DECISION MEMORANDUM

SUBJECT: National Product Waiver for Minor Components within Iron and Steel Products (with Cost Ceiling) for State Revolving Fund Projects

FROM: Kenneth J. Kopocis *Kenneth J. Kopocis*
Deputy Assistant Administrator

The U.S. Environmental Protection Agency is hereby granting a national product waiver pursuant to the "American Iron and Steel" provisions of the Clean Water Act and Public Law 113-235, the "Consolidated and Further Continuing Appropriations Act, 2015," (hereinafter referred to as "the Acts") for minor components within a product under an established cost ceiling.¹ The waiver will permit projects funded by the Clean Water State Revolving Fund or Drinking Water State Revolving Fund to use non-domestically produced miscellaneous minor components within an otherwise domestically produced iron and steel product for up to 5 percent of the total material cost of the product. These products could be prohibited absent this waiver. This waiver is retroactive, and so also applies to products purchased before the signature date of this waiver.

Coverage: The items covered by this waiver include miscellaneous minor components within iron and steel products as defined in the AIS provisions of the Acts. The specific minor components in covered iron and steel products will vary by product and manufacturer. Pursuant to this waiver, non-domestically produced miscellaneous minor components comprising up to 5 percent of the total material cost of an otherwise domestically produced iron and steel product may be used. This waiver does not exempt the whole product from the AIS requirements, and the primary iron or steel components of the product must be produced domestically. Unless subject to a separate waiver, all other iron and steel components in these products must still meet the AIS requirements. Valves and hydrants are also subject to the cost ceiling requirements described here. This waiver supersedes the EPA's previous guidance issued on May 30, 2014, (Question 1) related to minor components in valves and hydrants.

The coverage of this waiver is different from that of the existing national de minimis waiver. While the national de minimis waiver covers entire products (when those products are generally of low cost and incidental to the construction of the project), this waiver covers minor components within an iron and steel product. In addition, the national de minimis waiver is intended for assistance recipients to use for their projects, while this minor components waiver is intended to allow manufacturers to certify that their products comply with the AIS requirements.

¹ Absent a waiver, all treatment works and drinking water facilities that are constructed, in whole or in part, with funds from the CWSRF or the DWSRF, must use American made iron and steel. The EPA is allowed under certain circumstances to provide waivers of this requirement.

- f. One-Year Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (February 22, 2016)
(Double click on the embedded Acrobat version below for a clear copy of the entire document)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 22 2016

OFFICE OF WATER

DECISION MEMORANDUM

SUBJECT: One-Year Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts used in Pipe Couplings, Restraints, Joints, Flanges and Saddles for State Revolving Fund Projects

FROM: Joel Beauvais
Deputy Assistant Administrator

A handwritten signature in blue ink, appearing to read "Joel Beauvais", is placed to the right of the printed name and title.

The U.S. Environmental Protection Agency hereby grants a one-year extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts used in Pipe Couplings, Restraints, Joints, Flanges and Saddles for State Revolving Fund Projects, pursuant to the "American Iron and Steel" requirements of the Clean Water Act Section 608 and P.L. 114-113, the "Consolidated Appropriations Act, 2016." The original waiver was signed on February 18, 2015. With the one-year extension, the waiver will expire February 18, 2017. This waiver permits the use of non-domestically produced stainless steel nuts and bolts in bolting-type pipe couplings, restraints, joints and repair saddles in iron and steel products for projects funded by a Clean Water or Drinking Water State Revolving Fund that may otherwise be prohibited absent this waiver.

The original, approved waiver (attached) provides details regarding the specific types of products covered by this waiver as well as the rationale for issuance of the original waiver. This national product waiver extension is short-term, applying to the covered products if those products are purchased up until February 18, 2017.

Rationale: The EPA reassessed the market for and supply of stainless steel nuts and bolts for the products of interest and was unable to gather sufficient evidence that there is an adequate domestic supply of stainless steel nuts and bolts for the subject products. Through the research effort, the agency found that the domestic supply of stainless steel nuts and bolts has increased since fall 2014 and there may be manufacturers that have the capability to meet the demand for stainless steel nuts and bolts. However, manufacturers were generally unable, or unwilling, to provide information about their production capacity. The agency did not receive evidence that there is an adequate national availability of stainless steel nuts and bolts.

In addition, the agency received five responses from manufacturers and suppliers after posting a draft version of this Decision Memorandum during a 15-day public comment period. Most comments were in favor of the waiver extension. Comments in support of the waiver extension claimed a remaining significant shortage in the supply of stainless steel nuts and bolts.

- g. One-year Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (January 18, 2017)
(Double click on the embedded Acrobat version below for a clear copy of the entire document)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 18 2017

OFFICE OF WATER

DECISION MEMORANDUM

SUBJECT: One-Year Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts used in Pipe Couplings, Restraints, Joints, Flanges and Saddles for State Revolving Fund Projects

FROM: Michael H. Shapiro *Michael Shapiro*
Deputy Assistant Administrator

The U.S. Environmental Protection Agency hereby grants a one-year extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts used in Pipe Couplings, Restraints, Joints, Flanges and Saddles for State Revolving Fund Projects, pursuant to the "American Iron and Steel" requirements of the Clean Water Act Section 608 and Public Law 114-254, the "Further Continuing and Security Assistance Appropriations Act, 2017." The original waiver was signed on February 18, 2015 and was granted a one-year extension on February 22, 2016. With this additional one-year extension, the waiver will expire February 18, 2018. This waiver permits the use of non-domestically produced stainless steel nuts and bolts in bolting-type pipe couplings, restraints, joints and repair saddles in iron and steel products for projects funded by a Clean Water or Drinking Water State Revolving Fund that may otherwise be prohibited absent this waiver.

The original, approved waiver (attached) provides details regarding the specific types of products covered by this waiver as well as the rationale for issuance of the original waiver. This national product waiver extension is short-term, applying to the covered products if those products are purchased up until February 18, 2018.

Rationale: In 2016, the EPA reassessed the market for and supply of stainless steel nuts and bolts for the products of interest and was unable to gather sufficient evidence that there is an adequate domestic supply of these products. Through the research effort, the agency found that the domestic supply of stainless steel nuts and bolts for the subject products has increased slightly since fall 2015. The EPA received anecdotal evidence from a few manufacturers that they increased their supply of stainless steel nuts and bolts used in the subject products by small amounts, but the slight increase does not represent a significant change in the manufacturing capacity of the domestic products. Furthermore, the domestic supply of the stainless steel nuts and bolts is not readily quantifiable because manufacturers were generally unable, or unwilling, to provide information about their production capacity. In addition, the agency received no responses from manufacturers and suppliers after posting a draft version of this Decision Memorandum during a 15-day public comment period.

Lacking evidence that manufacturers of stainless steel nuts and bolts used in the subject products can meet current demands, the agency is extending the national waiver for another year. Prior to the

- h. Final Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles (August 24, 2018)
(Double click on the embedded Acrobat version below for a clear copy of the entire document)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 24 2018

DECISION MEMORANDUM

OFFICE OF WATER

SUBJECT: Final Extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles for State Revolving Fund Projects

FROM: David P. Ross
Assistant Administrator

A handwritten signature in blue ink, appearing to read "D. Ross", is placed next to the name "David P. Ross" in the "FROM:" field.

The U.S. Environmental Protection Agency (EPA) hereby grants an extension of the Short-Term National Product Waiver for Stainless Steel Nuts and Bolts used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles for State Revolving Fund Projects, pursuant to the "American Iron and Steel" (AIS) requirements of the Clean Water Act. The original waiver was signed on February 18, 2015, and was granted a one-year extension on February 22, 2016. A second extension was granted until February 18, 2018. With this third and final extension, the waiver will retroactively cover nuts and bolts purchased since February 18, 2018, and be extended 18 months from the signing date of this waiver (sunset date). This waiver will not be renewed after the sunset date. This waiver permits the purchase and use of non-domestically produced stainless steel nuts and bolts in bolting-type pipe couplings, restraints, joints, and repair saddles in iron and steel products for projects funded by a Clean Water State Revolving Fund (CWSRF) or Drinking Water State Revolving Fund (DWSRF) that may otherwise be prohibited absent this waiver.

The original, approved waiver provides details regarding the specific types of products covered by and the rationale for issuance of the waiver (see: <https://www.epa.gov/sites/production/files/2015-09/documents/short-term-natl-waiver-for-ss-nuts-bolts-021815.pdf>). This national product waiver extension is short-term, applying to the covered products if those products are purchased by the assistance recipient or their representatives (i.e. construction contractor) up until the sunset date.

The EPA is granting this national product waiver extension on a short-term basis in order to provide the time U.S. manufacturers need to increase the domestic production of the specified stainless steel nuts and bolts. Upon the production of these parts, the EPA stands ready to provide assistance to states and others to help identify AIS compliant products consistent with the April 2017 Buy American and Hire American Executive Order.

Attachments:

1. Rationale and Legal Authority
2. Summary of Comments Received During 15-Day Informal Public Input Period on Short-Term Waiver Extension for Stainless-Steel Nuts and Bolts used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles for State Revolving Fund (SRF) Projects

Attachment 6: EPA Waiver Request

Information Checklist for Waiver Request

The purpose of this checklist is to help ensure that all appropriate and necessary information is submitted to EPA. EPA recommends that States review this checklist carefully and provide all appropriate information to EPA. This checklist is for informational purposes only and does not need to be included as part of a waiver application.

Items	☑	Notes
General <ul style="list-style-type: none"> • Waiver request includes the following information: <ul style="list-style-type: none"> ○ Description of the foreign and domestic construction materials ○ Unit of measure ○ Quantity ○ Price ○ Time of delivery or availability ○ Location of the construction project ○ Name and address of the proposed supplier ○ A detailed justification for the use of foreign construction materials • Waiver request was submitted according to the instructions in the memorandum • Assistance recipient made a good faith effort to solicit bids for domestic iron and steel products, as demonstrated by language in requests for proposals, contracts, and communications with the prime contractor 		
Cost Waiver Requests <ul style="list-style-type: none"> • Waiver request includes the following information: <ul style="list-style-type: none"> ○ Comparison of overall cost of project with domestic iron and steel products to overall cost of project with foreign iron and steel products ○ Relevant excerpts from the bid documents used by the contractors to complete the comparison ○ Supporting documentation indicating that the contractor made a reasonable survey of the market, such as a description of the process for identifying suppliers and a list of contacted suppliers 		
Availability Waiver Requests <ul style="list-style-type: none"> • Waiver request includes the following supporting documentation necessary to demonstrate the availability, quantity, and/or quality of the materials for which the waiver is requested: <ul style="list-style-type: none"> ○ Supplier information or pricing information from a reasonable number of domestic suppliers indicating availability/delivery date for construction materials ○ Documentation of the assistance recipient's efforts to find available domestic sources, such as a description of the process for identifying suppliers and a list of contacted suppliers. ○ Project schedule ○ Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of construction materials • Waiver request includes a statement from the prime contractor and/or supplier confirming the non-availability of the domestic construction materials for which the waiver is sought <p>Has the State received other waiver requests for the materials described in this waiver request, for comparable projects?</p>		

EPA Checklist for Waiver Request

Instructions: To be completed by EPA. Review all waiver requests using the questions in the checklist, and mark the appropriate box as Yes, No or N/A. Marks that fall inside the shaded boxes may be grounds for denying the waiver. If none of your review markings fall into a shaded box, the waiver is eligible for approval if it indicates that one or more of the following conditions applies to the domestic product for which the waiver is sought:

1. The iron and/or steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality.
2. The inclusion of iron and/or steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

Review Items	Yes	No	N/A	Notes
Cost of Waiver Request				
<ul style="list-style-type: none"> • Does the waiver request include the following information? <ul style="list-style-type: none"> ○ Comparison of overall cost of project with domestic iron and steel products to overall cost of project with foreign iron and steel products 				
<ul style="list-style-type: none"> ○ Relevant excerpts from the bid documents used by the contractors to complete the comparison 				
<ul style="list-style-type: none"> ○ A sufficient number of bid documents or pricing information from domestic sources to constitute a reasonable survey of the market 				
<ul style="list-style-type: none"> • Does the Total Domestic Project exceed the Total Foreign Project Cost by more than 25%? 				
Availability Waiver Requests				
<ul style="list-style-type: none"> • Does the waiver request include supporting documentation sufficient to show the availability, quantity, and/or quality of the iron and/or steel product for which the waiver is requested? <ul style="list-style-type: none"> ○ Supplier information or other documentation indicating availability/delivery date for materials ○ Project schedule ○ Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of materials 				
<ul style="list-style-type: none"> • Does supporting documentation provide sufficient evidence that the 				
<ul style="list-style-type: none"> • Contractors made a reasonable effort to locate domestic suppliers of materials, such as a description of the process for identifying suppliers and a list of contacted suppliers? 				
<ul style="list-style-type: none"> • Based on the materials delivery/availability date indicated in the supporting documentation, will the materials be unavailable when they are needed according to the project schedule? (By item, list schedule date and domestic delivery quote date or other relevant information) 				
<ul style="list-style-type: none"> • Is EPA aware of any other evidence indicating the non-availability of the materials for which the waiver is requested? Examples include: <ul style="list-style-type: none"> ○ Multiple waiver requests for the materials described in this waiver request, for comparable projects in the same State ○ Multiple waiver requests for the materials described in this waiver request, for comparable projects in other States ○ Correspondence with construction trade associations indicating the non-availability of the materials • Are the available domestic materials indicated in the bid documents of inadequate quality compared those required by the project plans, specifications, and/or permits? 				

Attachment 7: Construction Contract Language

The following language must be included in all construction and purchase contracts associated with a TWDB CWSRF or DWSRF loan:

The Contractor acknowledges to and for the benefit of the Applicant (“Purchaser”) and the Texas Water Development Board (TWDB) that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund that have statutory requirements commonly known as “American Iron and Steel,” that requires all of the iron and steel products used in the project to be produced in the United States (“American Iron and Steel Requirement”) including iron and steel products provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the TWDB that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Purchaser or the TWDB. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser to enforce this Agreement and recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney’s fees) incurred by the Purchaser resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the TWDB or any damages owed to the TWDB by the Purchaser). While the Contractor has no direct contractual privity with the TWDB, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the TWDB is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the TWDB.

Attachment 8: Sample Certifications

AIS Certification must document the location of the manufacturing process involved with the production of steel and iron materials. Each handler (supplier, fabricator, manufacturer, processor, etc.) of the iron and steel products and their step in the process must be recorded and certified as domestically performed.

The applicant may utilize either

- (1) a Final Manufacturer Certification process, in which the final manufacturer that delivers the iron or steel product to the worksite, vendor, or contractor, may provide a certification identifying all handlers of the iron or steel product, and asserting that all manufacturing processes occurred in the US; or
- (2) a Step Certification process in which each handler of the iron or steel product provides a separate certification letter certifying that their step in the process was domestically performed.

Final Manufacturer Certification – Version 1 – AIS Products Delivered to Project Site

The following information is provided as a sample letter of certification for AIS compliance. Documentation must be provided on company letterhead. The Final Manufacturer's Certification should list everyone who has handled the product, starting with the processor of the raw iron or steel through the contractor who installs the final product.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Certification for Project (XXXXX)

I, (company representative), certify that the following products and/or materials shipped/provided to the project site below are in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Project Site location (City, State): _____

Project's Prime Contractor Name: _____

List for all Items, Products and/or Materials (Include all the predecessor manufacturing processes before the final manufacturer for each item on the list):

Item 1: _____

Predecessor Manufacturing Process: _____

Manufacturer's Name: _____

Manufacturing location (City, State): _____

Predecessor Manufacturing Process: _____

Manufacturer's Name: _____

Manufacturing location (City, State): _____

Item 2: _____

Predecessor Manufacturing Process: _____

Manufacturer's Name: _____

Manufacturing location (City, State): _____

Predecessor Manufacturing Process: _____

Manufacturer's Name: _____

Manufacturing location (City, State): _____

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the project engineer.

Signed by company representative

Final Manufacturer Certification – Version 2 – AIS Products Purchased from Supplier

The Final Manufacturer's Certification should list everyone who has handled the product, starting with the processor of the raw iron or steel through to the Supplier.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Certification for Project (XXXXXX)

I, (company representative), certify that the following products and/or materials shipped/provided to the Supplier listed below are in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Supplier: _____

Address: _____

List for all Items, Products and/or Materials (Include all the predecessor manufacturing processes before the final manufacturer for each item on the list):

Item 1: _____

Predecessor Manufacturing Process: _____

Manufacturer's Name: _____

Manufacturing location (City, State): _____

Predecessor Manufacturing Process: _____

Manufacturer's Name: _____

Manufacturing location (City, State): _____

Item 2: _____

Predecessor Manufacturing Process: _____

Manufacturer's Name: _____

Manufacturing location (City, State): _____

Predecessor Manufacturing Process: _____

Manufacturer's Name: _____

Manufacturing location (City, State): _____

If any of the above compliance statements change while providing material to this project we will immediately notify the Supplier.

Signed by company representative

|

Step Certification

A step certification is a process under which each handler (supplier, fabricator, manufacturer, processor, etc.) of the iron and steel products certifies that their step in the process was domestically performed. The Step Certification process requires you receive a separate letter from everyone who handles the product, starting with the processor of the raw iron or steel through the contractor who installs the final product.

Step Certification Letter

The following information is provided as a sample letter of step certification for AIS compliance. Documentation must be provided on company letterhead of each handler responsible for that process of the iron or steel product.

Date

Company Name

Company Address

City, State ZIP Code

Subject: American Iron and Steel Step Certification for Project (XXXXXXXXXX)

I, (company representative), certify that the (melting, bending, coating, galvanizing, cutting, etc.) process for (manufacturing or fabricating) the following products and/or materials shipped or provided for (project site _____ or to _____ company) is in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item 1: _____

Manufacturing location (City, State): _____

Item 2: _____

Manufacturing location (City, State): _____

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

Step Certification Log

The following information is provided as a sample log to keep track of step certification for AIS compliance. The TWDB makes no claims regarding the legality of the step certification log with respect to AIS compliance.

American Iron and Steel Step Certification Log for

(Iron or Steel Product)

Contractor: _____
(Name) (Item)

Supplier: _____
(Name) (Item)

Final Manufacturer: _____
(Name) (Item) (Process)

Predecessor Manufacturer 1: _____
(Name) (Item) (Process)

Predecessor Manufacturer 2: _____
(Name) (Item) (Process)

Processor (e.g., foundry): _____
(Name) (Item) (Process)

De Minimis Log

The following information is provided as a sample De Minimis log for AIS compliance. The TWDB makes no claims regarding the legality of the De Minimis log with respect to AIS compliance.

Figure 1 - Information contained in the log example: Owner Name, Project Name, TWDB SRF Number, Contractor Name, Total Project Cost, Total Material Cost followed by data entered for each of the following categories: Item Number, Iron or Steel Product, Unit Cost, Quantity, Total Cost, Percent of Total Material Cost Less Than One Percent, Cumulative Cost, Percent of Total Material Cost Less Than Five Percent.

American Iron and Steel de minimis log								
	Owner Name:	City		Total Project Cost:	\$130,000.00			
	Project Name:	CID 01 - Project		Total Material Cost:	\$100,000.00			
	TWDB SRF No.:	####						
	Contractor Name:	Contractor						
Item No.	Iron or Steel Product	Unit Cost	Quantity	Total Cost	% Mat Cost (< 1%)	Cum Cost	% Mat Cost (< 5%)	
1	Steel Door	\$400.00	1	\$ 400.00	0.40%	\$ 400.00	0.40%	
2	Bolts	\$100.00	1	\$ 100.00	0.10%	\$ 500.00	0.50%	
3	Welding rods	\$30.00	1	\$ 30.00	0.03%	\$ 530.00	0.53%	
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								

Attachment 9: Monthly American Iron and Steel Certificate Form 1106-A

Compliance Submittal by Owner (Sub-Recipient)

TWDB Project No. _____

Loan No. _____

This executed certificate must be submitted with each Outlay report requesting funds associated with construction contracts for all iron and steel products and/or materials included within the project's construction contracts.

I, _____, _____ of
(Name) (Title)

_____ hereby certify that all iron and steel products and/or materials incorporated into the construction, alteration, maintenance, or repair of the subject project are in full compliance with the American Iron and Steel requirements of Section 608 of the Federal Water Pollution Control Act (33 U.S.C. §1388) for the Clean Water State Revolving Fund or federal law, including federal appropriation acts and Section 1452(a)(4) of the Safe Drinking Water Act (42 U.S.C. §300j-12(a)(4)), as applicable, for the Drinking Water State Revolving Fund, or comply with waivers granted by the U.S. Environmental Protection Agency.

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

Signature

Date

Attachment 10: Final American Iron and Steel Certification Form 1106-C

Compliance Submittal by Owner (Sub-Recipient)

TWDB Project No. _____

Loan No. _____

This executed certification must be submitted after the completion of the construction contract and prior to issuance of a Certificate of Approval by the TWDB, stating the project was completed in compliance with the AIS requirements.

I, _____, _____ of
(Name) (Title)

_____ hereby certify that all iron and steel products and/or materials incorporated into the construction, alteration, maintenance, or repair of the subject project were in full compliance with the American Iron and Steel requirements of Section 608 of the Federal Water Pollution Control Act (33 U.S.C. §1388) for the Clean Water State Revolving Fund or federal law, including federal appropriation acts and Section 1452(a)(4) of the Safe Drinking Water Act (42 U.S.C. §300j-12(a)(4)), as applicable, for the Drinking Water State Revolving Fund, or comply with waivers granted by the U.S. Environmental Protection Agency.

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

Signature

Date

PART "T"

TECHNICAL SPECIFICATIONS



**GEOTECHNICAL INVESTIGATION REPORT
30-INCH WASTEWATER MAIN
GARLAND ROAD, ST. FRANCIS AVE., SAN FERNANDO WAY AND SAN RAFAEL
DALLAS, TEXAS**

Prepared For:

**CITY OF DALLAS
DALLAS WATER UTILITIES**

Prepared by:

MAS-TEK ENGINEERING & ASSOCIATES, INC.

Geotechnical Consulting & Materials Testing
10625 Newkirk, Suite 800, Dallas, TX 75220

**MTE Report No. 27-046G
March 22, 2021**



10625 Newkirk, Suite 800
Dallas, TX 75220
p | 972.709.7384
f | 972.709.7385

March 22, 2021
MTE Project No. 27-046G

Mr. James Wellington, P.E.
Senior Project Manager

City of Dallas
Dallas Water Utilities, Pipeline Project Management
2121 Main Street #300
Dallas, TX 75201
Ph: 214-948-4552
E: james.wellington@dallascityhall.com

**Subject: GEOTECHNICAL INVESTIGATION REPORT
30-INCH WASTEWATER MAIN
GARLAND ROAD, ST. FRANCIS AVENUE, SAN
FERNANDO WAY AND SAN RAFAEL DR
DALLAS, TEXAS**

Dear Mr. Wellington:

This report presents the results of a geotechnical study performed for the for the proposed 30-inch wastewater transmission main from along Garland Road, ST. Francis Avenue, San Fernando Way and San Rafael Drive near the Dallas Arboretum and Botanical Garden in Dallas, Texas. This study was performed in accordance with our Proposal No:08-02-G, dated August 18, 2020.

Our engineering analysis as well as the results of the field exploration and laboratory testing are included in this report. Our firm is interested in providing the construction material testing (CMT) that will be required during the construction phase of the project.

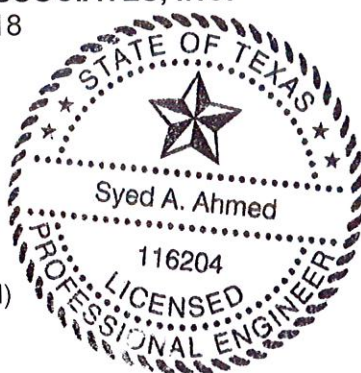
We appreciate the opportunity to be of assistance on this project. Please feel free to contact us if you have any questions or if we can be of further service.

Sincerely,

MAS-TEK ENGINEERING & ASSOCIATES, INC.
TBPE Firm Registration No. 1418

Syed A. Ahmed, P.E.
Senior Project Engineer

Copies Submitted: 1 pdf (via email)



Steve Mason
President

TABLE OF CONTENTS

		PAGE
1	INTRODUCTION	2
1.1	PROJECT AND SITE DESCRIPTION.....	2
1.2	PURPOSE AND SCOPE OF WORK.....	3
2	FIELD EXPLORATION	4
3	LABORATORY TESTING.....	5
4	SUBSURFACE CONDITIONS	6
4.1	GEOLOGY	6
4.2	SUBSURFACE CONDITIONS	6
4.3	GROUNDWATER.....	7
4.4	PIEZOMETER READINGS	7
5	RECOMMENDATIONS FOR DESIGN AND CONSTRUCTION	8
5.1	GROUNDWATER CONTROL.....	8
5.2	EXCAVATION CONSIDERATIONS	9
5.3	UPLIFT PRESSURES	11
5.4	LATERAL EARTH PRESSURES	11
5.5	UTILITY BACKFILL.....	12
5.6	DESIGN CONISDERATIONS FOR TRENCHLESS METHODS.....	13
6	LIMITATIONS	16

APPENDIX A	FIGURE
Vicinity Map	Figure 1
Site and Boring Plan	Figure 2
Logs of Borings (B-1 through B-4).....	Figures 3-11
Soil & Rock Classification Chart.....	Figure 12
Sampler Graphics Legend	Figure 13

APPENDIX B	
Tunnel Liner Loads	Figure B-1
Tunnel Liner Loads, H2O Highway Load.....	Figure B-2



**GEOTECHNICAL INVESTIGATION
30-INCH WASTEWATER MAIN
GARLAND ROAD, ST. FRANCIS AVE., SAN FERNANDO WAY AND SAN RAFAEL
DALLAS, TEXAS**

1 INTRODUCTION

MTE is pleased to submit our Geotechnical Engineering Report for the proposed installation of 30-inch diameter wastewater main along Garland Road, ST. Francis Avenue, San Fernando Way and San Rafael Drive near the Dallas Arboretum and Botanical Garden in Dallas, Texas. Nine test borings, designated B-1 through B-9, were drilled to depths that ranged from approximately 30 to 60 feet below the existing grade along the alignment of the proposed wastewater main.

This project was authorized by Mr. James Wellington, P.E., of City of Dallas. via email on September 14, 2020. The project scope was performed in general accordance with MTE Proposal No. 08-02 G, dated August 18, 2020.

1.1 PROJECT AND SITE DESCRIPTION

Item	Description
Project location	See Appendix A, Figure 1, Vicinity Map.
Site layout	See Appendix A, Figure 2, Boring Location Plan.
Existing conditions	Existing four-lane concrete roadway along Garland Road and two-lane asphaltic concrete roadway along S, Francis Avenue, San Fernando Way and San Rafael Way with concrete curb-and-gutter.

Item	Description
Proposed improvement	Installation of approximately 4,300 linear feet of wastewater main installation along Garland Road, ST. Francis Avenue, San Fernando Way and San Rafael Way near the Dallas Arboretum and Botanical Garden in Dallas, Texas. A plan of the proposed wastewater main alignment is attached with this document. The proposed wastewater main is planned to be 30-inch diameter gravity pipe planned to be installed at depths ranging from about 15 to 50 feet below existing grades. The proposed elevations along the proposed alignment vary from about 465 to 498 feet.
Installation methods and depths	MTE understands the proposed wastewater main is planned to be installed using trenchless techniques in accordance with DWU WATER/WASTEWATER PROCEDURES & DESIGN MANUAL, SECTION 8.4.
Existing topography	The existing road elevations vary from approximately 465 feet to 498 feet (about 460 feet near the intersection San Rafael Drive and Garland Road, and 490 feet along St. Francis Avenue).

1.2 PURPOSE AND SCOPE OF WORK

The purpose of this report is to describe the subsurface conditions observed at the 9 test borings drilled for this project, analyze and evaluate the test data, and provide recommendations with respect to:

- Groundwater control;
- Excavation considerations;
- Uplift pressures;
- Lateral earth pressures;
- Backfill; and
- Design considerations for trenchless methods.

2 FIELD EXPLORATION

Subsurface conditions were evaluated by drilling 9 test borings, designated B-1 through B-9, to depths that ranged from approximately 30 to 60 feet below the existing grade along the alignment of the proposed wastewater main. The borings were drilled using standard truck mounted drilling equipment at the approximate locations shown on the Boring Location Plan, Figure 2 of Appendix A. The borings were located by measuring from existing site features shown on the drawing provided to us without the use of surveying equipment. Boring depths were measured from top of the grade existing at the time of our field activities. Upon completion of our field program, the borings were backfilled with soil cuttings and patched at the surface with asphaltic concrete/concrete, where necessary.

As requested, for extended groundwater level observations, borings B-2, B-5 and B-9 were converted to piezometers. The groundwater levels at the piezometers were observed for about 35 days after completion of drilling. Once monitoring of the groundwater levels in the piezometers was completed, the piezometers were abandoned in place.

Cohesive soil samples were recovered using open-tube samplers. Pocket penetrometer tests were performed on samples of cohesive soils in the field to serve as a general measure of consistency.

Cohesionless soils and soils for which good quality open tubes samples could not be obtained were sampled by means of the Standard Penetration Test (SPT). This test consists of measuring the number of blows (N) required for a 140-pound hammer free falling 30 inches to drive a standard split-spoon sampler 12 inches into the subsurface material after being seated six inches. This blow count or SPT N-value is used to evaluate the stratum.

Texas Department of Transportation Cone Penetration (TCP) tests were performed on the borings to examine the resistance of bedrock or harder materials to penetration and to augment information developed from the core borings. In this test a 3- inch diameter steel cone, driven by a 170-pound hammer freely falling 24 inches forms the basis for Texas Department of Transportation strength correlations. Depending on the resistance of the materials, either the number of blows of the hammer required to provide 12 inches of penetration, or the inches of penetration of the cone due to 100 blows of the hammer are recorded on the field log. The

results of TCP tests are presented at the appropriate depths on the respective Log of Boring illustrations.

Samples were removed from samplers in the field, visually classified, and appropriately sealed in sample containers to preserve their in-situ moisture contents. Samples were then transported to our laboratory in Dallas, Texas.

The Logs of Borings, and the terms and symbols used in the logs are provided in Figures 3 through 12 of Appendix A.

Soil strata boundaries shown on the Log of Boring illustrations are representative of the changes in soil and rock types in the immediate vicinity of each boring. Variation was observed between borings and should be anticipated away from each boring location. The in-situ transition between material types may be gradual and indistinct.

Field boring logs were prepared by the drill crew as part of the drilling operations. The boring logs include visual classifications of the materials encountered during drilling and the driller's interpretation of the subsurface conditions between samples. The final boring logs included in this report represent the engineer's interpretation of the field logs and include modifications based on observations and testing of the samples in the laboratory. The stratification boundaries shown on the logs of borings represent the approximate locations of the changes in the soil and rock types; in situ, the transition between material types may be gradual and indistinct.

The boring locations should be considered accurate only to the degree implied by the method used in its determination. If a greater degree of accuracy is required or desired, then a licensed land surveyor should be retained to record the coordinates of the borings.

3 LABORATORY TESTING

Samples of subsurface materials from the borings were visually examined and classified in the field. Modifications to the field classifications were made based on the results of the laboratory testing related to material classification according to the Unified Soil Classification System (USCS). These tests included moisture content, unit dry weight, Atterberg limits (Liquid Limit,

LL and Plastic Limit, PL), Plasticity Index (PI) and the percent passing No. 200 sieve. Shear strengths of cohesive soils were estimated by field pocket penetrometer tests.

Unconfined Compression (Uc) strength tests were performed by Arias Geo Professional, Inc. on selected soil samples to determine the strength parameters. The results of these tests are reported on the logs of borings at respective depths.

4 SUBSURFACE CONDITIONS

4.1 GEOLOGY

Atlas maps published by the Bureau of Economic Geology at the University of Texas, Austin indicated that the site is located in the located in Austin Chalk (Kau) deposits formation.

Kau: The general characteristic of this formation consists of highly plastic clay soil over tan to gray limestone.

4.2 SUBSURFACE CONDITIONS

Specific types and depths of subsurface strata encountered in the borings are shown on the logs of borings in Appendix A. The subsurface conditions encountered along the proposed wastewater main alignment can be generalized as shown below:

Approximately 7 inches of concrete was observed overlying subgrade soils at Boring B-2, and about 6 inches of asphaltic concrete was observed overlying the subgrade soils at borings B-3 through B-7. The native subsurface soils generally consisted of fat clay, lean clay, silts and sands to depths of approximately 15 to 50 feet, underlain by Shale to the termination depths of the borings (approximately 40 to 60 feet below existing grade). Sands were observed at boring B-5, between depths of about 15 to 30 feet below existing grade.

Conditions observed at each boring location are indicated on the individual Logs of Borings. Stratification boundaries on the Logs represent the approximate location of changes in soil types; in situ, the transition between materials may be gradual. Details for each boring can be found on the Logs of Borings in Appendix A of this report.

Generally, the soils encountered in the borings were stiff to hard fat and lean clays. Based on Atterberg Limits (Liquid Limit and Plastic Limit) test results, the upper brown fat clay and the tan light brown fat/lean clay soils encountered in the borings are considered to be moderate to highly expansive.

Refer to the Logs of Borings in Appendix A for detailed subsurface descriptions. Note that demarcation lines between the strata are interpretive of the field conditions, and that actual strata transitions in the field may be gradual.

4.3 GROUNDWATER

The borings were advanced using dry drilling techniques to termination depths of the borings about 30 to 60 feet below existing grade in an effort to evaluate groundwater conditions at the time of our field program. Groundwater was initially observed at borings B-1, B-2, B-5, B-7, B-8 and B-9 at depths that ranged from about 22 to 36 feet below existing grade. Groundwater was not observed at borings B-3, B-4 and B-6 during or upon completion of drilling.

These groundwater observations are considered approximate and short-term, since the borings were open for a short time period. On a long-term basis, groundwater may be present at shallower depths. Groundwater will fluctuate seasonally with climatic changes and should be evaluated just prior to construction.

4.4 PIEZOMETER READINGS

To allow for extended groundwater level observations, borings B-2, B-5 and B-9 were converted to piezometers. The groundwater levels at the piezometers were observed for about 28 to 30 days after completion of drilling. Once monitoring of the groundwater levels in the piezometers was completed, the piezometers were abandoned in place.

Groundwater observations made using the piezometers at borings B-2, B-5 and B-9 after a period of 1 day, 3 days, 8 day, 14 days, 21 days, and 35 days and are tabulated below.

Piezometer Readings							
Boring No.	Boring Depth (feet)	Approximate Depth of Groundwater ¹ , (feet)					
		1 day Later	3 Days Later	8 Days Later	14 Days Later	21 Days Later	35 Days Later
B-2	40	36.7	37.2	36.8	36.9	36.7	19.3
B-5	50	28.9	28.7	28.8	28.9	28.9	28.9
B-9	60	22.9	21.8	21	21.3	20.8	20.2

5 RECOMMENDATIONS FOR DESIGN AND CONSTRUCTION

The following recommendations are based upon the data obtained in our field and laboratory programs, project information provided to us, and on our experience with similar subsurface and site conditions.

5.1 GROUNDWATER CONTROL

As noted on the Boring Logs and presented in the “**4.3 GROUNDWATER**” section of this report, Groundwater was initially observed at borings B-1, B-2, B-5, B-7, B-8 and B-9 at depths that ranged from about 22 to 36 feet below existing grade. In addition, Piezometer level readings presented in section “**4.4 PIEZOMETER READINGS**” indicate the groundwater level measured at Borings B-2, B-5 and B-9 were observed at depths that varied from about 20.2 to 37.2 feet. Groundwater was not observed at borings B-3, B-4 and B-6 during or upon completion of drilling. Based on the soil and groundwater information obtained during our field activities, we anticipate that groundwater seepage may be observed in excavations that extend into the near-surface clay soils. Seepage from the near-surface clay soils is expected to be minor and can be managed by pumping water collected within sumps positioned in the bottom of the trench.

Excavations that extend in to sandy soils, such as observed at boring B-5 may require advance dewatering. Groundwater extraction from sandy soils is typically facilitated by the installation of vacuum well points. However, vacuum well points are generally less effective below a depth of about 15 feet beneath the top of the well point. Deeper dewatering requires eductors or deep wells with submersible pumps or multiple-stage well pointing.

The suggested methods given above are intended to serve as a guideline for groundwater control; other appropriate means may be required for groundwater control during installation. Control of groundwater should be accomplished in a manner that will preserve the strength of the soils, will not cause instability of the excavation, and will not result in damage to existing structures. Where necessary to this purpose, the water should be lowered in advance of excavation by well points, deep wells, eductors, or similar methods. Open pumping should not be permitted if it results in boils, loss of fines, softening of the subgrade, or excavation instability. Well points, deep wells and eductors should be installed with suitable screen and filter so that pumping of fines does not occur.

The well system should be in operation for at least several days prior to excavating to the design depth. We recommend the groundwater head be lowered at least 3 feet below the bottom of the excavation to provide a working area with increased stability. Dewatering should continue until the construction has been completed and that the dewatering system be turned off in stages to allow groundwater to recover to its original level gradually, over a period of about 3 to 5 days.

Dewatering of medium dense sandy soils may cause subsidence or compression of adjacent soils and adjacent structures. Therefore, the dewatering operations should be performed with care to control the potential of subsidence resulting from the dewatering operations.

As stated previously, groundwater levels will fluctuate with seasonal and climatic changes and should be evaluated just prior to construction. To further evaluate the groundwater at the time of construction, additional piezometers may be installed just prior to construction. As an alternative, test pits may be dug to the planned excavation depths. Based on the results, the contractor should determine effective methods of groundwater management prior to starting excavation operations.

5.2 EXCAVATION CONSIDERATIONS

As stated previously, the proposed installation may need excavations with maximum excavation depths up to 30 feet below existing grades. For the proposed wastewater main, either excavated side slopes or vertical cut excavations are feasible. For vertical cuts, excavations will require the use of a trench box or shoring and bracing to prevent sloughing and caving of the soil into the excavation. Contractor should use a trench box or shoring and bracing as

necessary to maintain a safe and clean excavation which meets Occupational Safety and Health Administration (OSHA) requirements.

Bracing for vertical excavation walls should be designed to resist a uniform lateral earth pressure of at least $36H$ psf, where H is the depth of the excavation in feet. Additional lateral pressure, due to surcharge loads along the trench, should be considered by adding a lateral pressure of 50 percent of the surcharge pressure.

In lieu of shoring, bracing, or trench boxes for excavations greater than 5 feet, OSHA standards provide recommendations for the design of temporary sloped excavations with a depth less than 20 feet. The OSHA standards provide maximum allowable slopes contingent on three designated soil types: Type A, Type B, or Type C. According to OSHA standards, temporary sloped excavations should be no steeper than 0.75-horizontal on 1-vertical (0.75H:1V) for Type A soils, 1H:1V for Type B soils, and 1.5H:1V for Type C soils. The surface slopes should be protected from deterioration and weathering if they are left open for significant periods of time.

Excavations must be performed and evaluated under the supervision of the contractor's designated Competent Person. The Competent Person, (as defined by the OSHA Standard, 29 CFR Part 1926.650 to .652, Subpart P - Excavations), must evaluate the excavations at the time of construction activity to safeguard workers.

We recommend that no equipment should be operated within 5 feet from the edge of the excavation and no materials should be stockpiled within a horizontal distance equal to the excavation depth. Excavations should not approach closer than a horizontal distance equivalent to the excavation depth from existing structures or buried utilities without some form of protection for the facilities. Proper berming or ditching should be done to divert any surface runoff away from the excavations.

Excavations should be performed with equipment capable of providing a relatively clean bearing area. Excavating equipment should not disturb the soil beneath the design excavation bottom and should not leave loose soil in the excavation.

The bearing surface should be protected against disturbance and deterioration by completing the sanitary sewer line installation and backfilling operations as quickly as possible. The excavation bottom should be properly sloped to allow water infiltrating into the excavation to be

collected at a convenient location along the edge of the excavation. Water should not be allowed to stand within the bearing area.

5.3 UPLIFT PRESSURES

Uplift forces on below-grade structures such as manholes will be generated by a difference in water level in the soil adjacent to the structure and inside the structure. If the backfill around any buried structure is a sand or silt material, the backfill will approach saturation during periods of heavy rainfall and the effective static water level will be at the surface. The uplift pressures will be resisted by adhesion or skin friction of the soil to the wall and by the dead weight of the structure. An allowable skin friction for an engineered clay fill compacted to a minimum of 95 percent of the maximum Standard Effort (ASTM D 698) maximum dry density may be considered to be 300 psf. The upper 4 feet of skin friction should be neglected for a clay backfill due to potential for soil shrinkage away from the structure. Sand backfill, compacted to at least 70 percent of the maximum relative density (ASTM D 4253 and 4254), may be considered to have an allowable skin friction of zero at the surface varying linearly to 230 psf at a depth of 30 feet below grade.

An alternate design method would be to place a heel extending out from the utility foundation into the backfill and rely on the weight of the soil above the heel on a 4-vertical to 1-horizontal slope to resist the uplift forces. The unit weight of soil above and below the water table for a properly compacted backfill will be 120 and 60 pcf, respectively. The preparation of the upper 3 feet of soil immediately above the heel is critical to reduce the possibility of an upward bearing failure. The entire thickness of fill should be compacted to the above recommended values.

If the underground structures are installed by excavating from the inside and allowing the structure to sink under its own weight, the soil contact may be very low immediately after construction due to the annulus created during construction. In this case, the uplift pressure must be resisted by structural dead weight or by restoring the contact between the soil and the structure. If the annulus is open, grouting would be one means to restore skin frictional resistance. If grouted, a nominal allowable skin friction of 150 psf may be used to compute uplift resistance.

5.4 LATERAL EARTH PRESSURES

Backfill around embedded structures will impose active to at-rest earth pressures against the embedded walls. Presented below are at-rest, active, and passive earth pressure coefficients for various backfill types, based on the Rankine's Earth Pressure Theory. At-rest earth pressures

are recommended in cases where the structure is fixed and will not rotate. Active earth pressures may be utilized in cases where the structures are free to rotate.

Soil Type	Estimated Unit Weight (pcf)		Lateral Earth Pressure Coefficients		
	Total	Effective	At Rest, K_o	Active, K_a	Passive ¹ , K_p
Clayey Soils	120	60	0.70	0.50	-- ²
Clean Sand	120	60	0.50	0.33	3.0
Clean Gravel	125	65	0.45	0.30	3.5

¹ Passive coefficient represents ultimate value. A safety factor of 2.0 is generally used.

² Passive resistance for properly compacted clayey soils may be taken as 1,000 psf.

The effect of surcharge loads, where applicable, should be incorporated into pressure diagrams by adding a pressure component equal to the active lateral earth pressure coefficient multiplied by the surcharge load to the full height of the structure. Hydrostatic pressure should be included in the lateral pressure used for design of structures below grade, where applicable. A minimum 2-foot thick compacted clay soil should be placed at the top of sand or gravel backfill to reduce the amount of surface water infiltration.

The compaction effort should be controlled during backfill operations near below-grade structures. Over-compaction can produce lateral earth pressures in excess of at-rest magnitudes. Compaction levels adjacent to below-grade structures should be maintained between 93 and 96 percent of the Standard Effort (ASTM D 698) maximum dry density.

5.5 UTILITY BACKFILL

The type of fill placed above the utility bedding will depend on whether the surface above the sanitary sewer is paved or unpaved ground. If the surface is outside of the pavement areas, then the backfill may consist of the excavated, native soils provided they are free of debris and organics. The in-situ soils used as backfill should be placed in thin lifts not exceeding 8-inches loose measure, moisture conditioned to within 2 percent of the optimum moisture content and compacted to at least 95 percent of the Standard Effort (ASTM D 698) maximum dry density.

Backfill details for paved areas are outlined in the City of Dallas "DWU WATER/WASTEWATER PROCEDURES & DESIGN MANUAL", Section 7.2.

Prior to any filling operations, samples of the proposed borrow materials should be obtained for laboratory moisture-density testing. The tests will provide a basis for evaluation of fill compaction by in-place density testing. A qualified soil technician should perform sufficient in-place density tests during the filling operations to verify that proper levels of compaction are being attained.

5.6 DESIGN CONSIDERATIONS FOR TRENCHLESS METHODS

MTE understands that trenchless (tunneling) techniques in accordance with DWU WATER/WASTEWATER PROCEDURES & DESIGN MANUAL, SECTION 8.4 will be used for the installation of the proposed wastewater main. Pipe insertion into the trenchless hole will generate stresses on the pipe. The pipe should be selected by considering the construction equipment to be used. Groundwater will likely be encountered during tunneling operations and should be addressed as discussed in the “5.1 Groundwater Control” section prior to any excavation.

5.6.1 Geotechnical Properties

Stiff to very stiff Clay soils and weathered Shale are anticipated at the depths of trenchless construction.

Recommended engineering design soil parameters for the clay soils observed at this site are as follows:

Design Parameters for Clay Soils	
Soil Property	Recommended Design Parameter
Moist Unit Weight	120 pcf
Submerged Unit Weight	65 pcf
At-Rest Coefficient of Earth Pressure, K_0	0.7
Undrained Shear Strength	450 to 2,890 psf
Poisson's Ratio	0.35 to 0.45
Young's Modulus	300 to 1,500 ksf

Recommended engineering design soil parameters for Shale observed at this site are as follows:

Design Parameters for Shale	
Soil Property	Recommended Design Parameter
Moist Unit Weight	125 pcf
Submerged Unit Weight	65 pcf
At-Rest Coefficient of Earth Pressure, K_o	0.7
Undrained Shear Strength	> 2,000 psf
Poisson's Ratio	0.4
Young's Modulus	> 1,500 ksf

5.6.2 Pipe Design

For pipes to be installed by trenchless techniques, whereby sections of pipe are pushed forward against the surrounding soil, pipes should be designed to resist significant bending moments, along with the jacking forces exerted on the pipe during installation. These loads typically exceed the overburden pressures that are typically determined based on the prism earth load to the ground surface, plus hydrostatic pressure and surcharge loads. Therefore, pipes designed to resist construction loads during jacking operations should have adequate strength for most long-term overburden and traffic loads.

During design, allowance should be made for any external loads other than soil loads that may be exerted on the pipe. These include loads from foundations for structures located near the sanitary sewer line, and any possible future excavation to be performed near the pipe. Much of the stability of the sanitary sewers is due to the presence of relatively uniform stress conditions in the soil around the pipe. Relief of the earth loads on one side of the pipe due to subsequent adjacent excavation could cause an overstress of the pipe.

Access shafts, auger pits, and manhole excavations should be shored or laid back to a stable slope to provide safety for workers and adjacent structures. The bracing and sheeting should be designed using the parameters presented in the “**5.4 Lateral Earth Pressures**” section of this report.

5.6.3 Pressures on Primary Pipe and Permanent Liners

Pipe liner design is largely dependent upon the depth of the liner beneath the ground surface and additional surface loads. Surface loads may include traffic loads, foundations in proximity of the pipe, and other such loading conditions.

We recommend the vertical and horizontal pressures be taken as the following (using pressures on buried rigid pipes from “Structural Mechanics on Buried Pipes” by Reynold K. Watkins and Loren R. Anderson):

Total Liner Pressure = $W + W''$

$$W = \gamma H K_a$$

where,

W'' = Traffic allowance;

γ = design unit weight of soil;

H = depth of pipe from the ground surface to the top of the tunnel liner; and

K_a = active lateral earth pressure coefficient, use values given in the **“4.4 Lateral Earth Pressures”** section.

Tunnel liner loads along street alignments are shown on Figure B-1 in Appendix B. Based on the planned earth cover on the sanitary sewer line, an additional traffic loading should also be considered based upon a design chart adopted from “Principles of Structural Performance of Buried Pipes”, by Reynold K. Watkins. This adopted chart is shown on Figure B-2 in Appendix B.

The pipe liner can be expected to deform under load from its original circular shape. The liner should be designed for the bending stresses associated with the elliptically distorted shape. In general, we recommend a maximum design distortion of:

- about 0.5 percent of the diameter for shortening in the vertical axis; and
- about 0.5 percent of the diameter for lengthening in the horizontal axis.

In addition, the pipe section should be designed to withstand the calculated installation stresses with an appropriate factor of safety.

6 LIMITATIONS

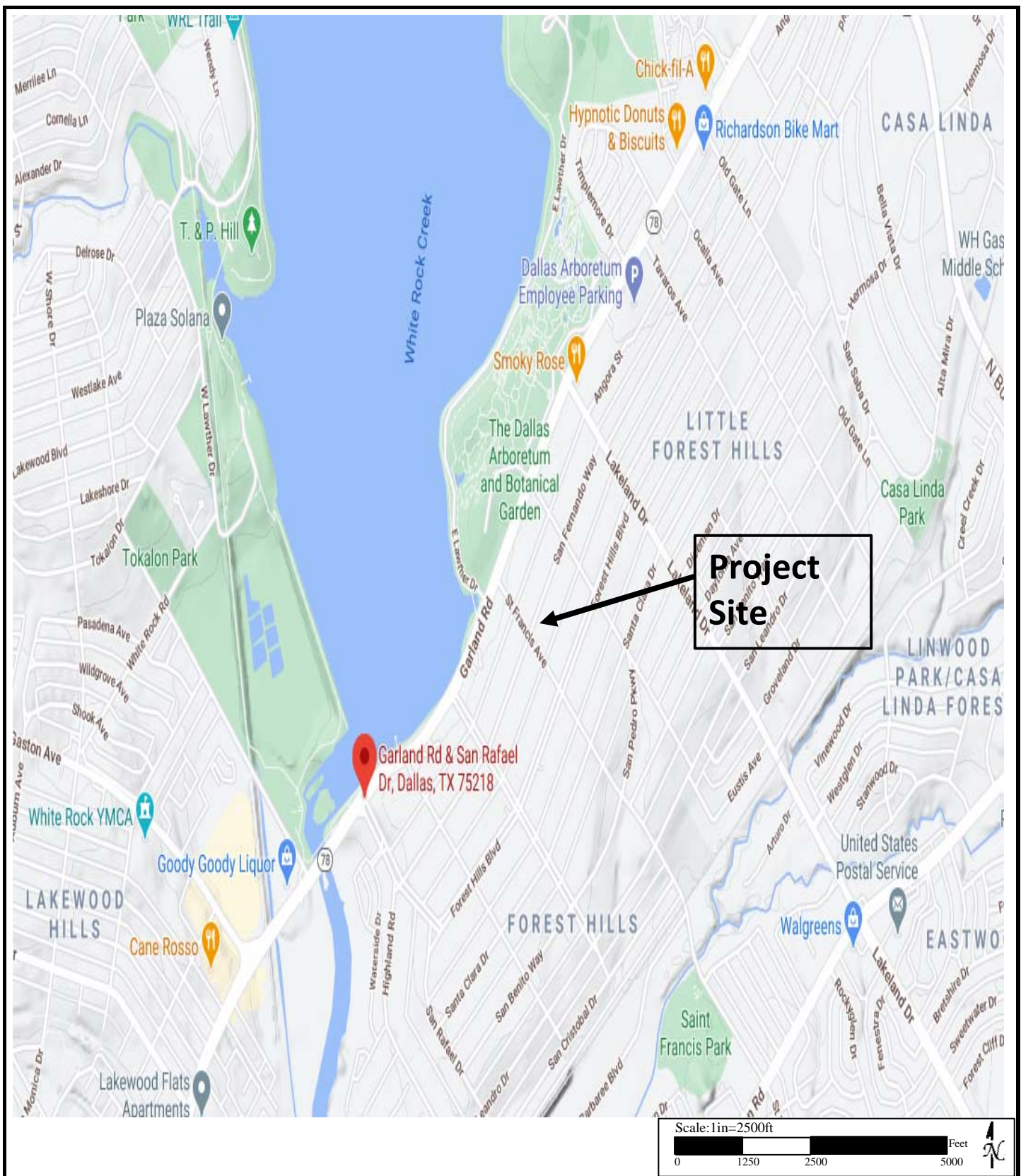
In preparation of this report, we have strived to perform our services in a manner consistent with that level of care and skill ordinarily exercised by other members of our profession currently practicing in the same locality under similar conditions and at the time the services are provided. The results, conclusions, opinions and recommendations provided in this report are directed at, and intended to be utilized within, the scope of work contained in the proposal and agreement executed by Mas-Tek Engineering and the client. These are based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Mas-Tek Engineering makes no other representation, guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.


This report may be used only by the client and the registered design professional in responsible charge and only for the purposes stated for this specific engagement within a reasonable time from its issuance, but in no event later than two (2) years from the date of the report.

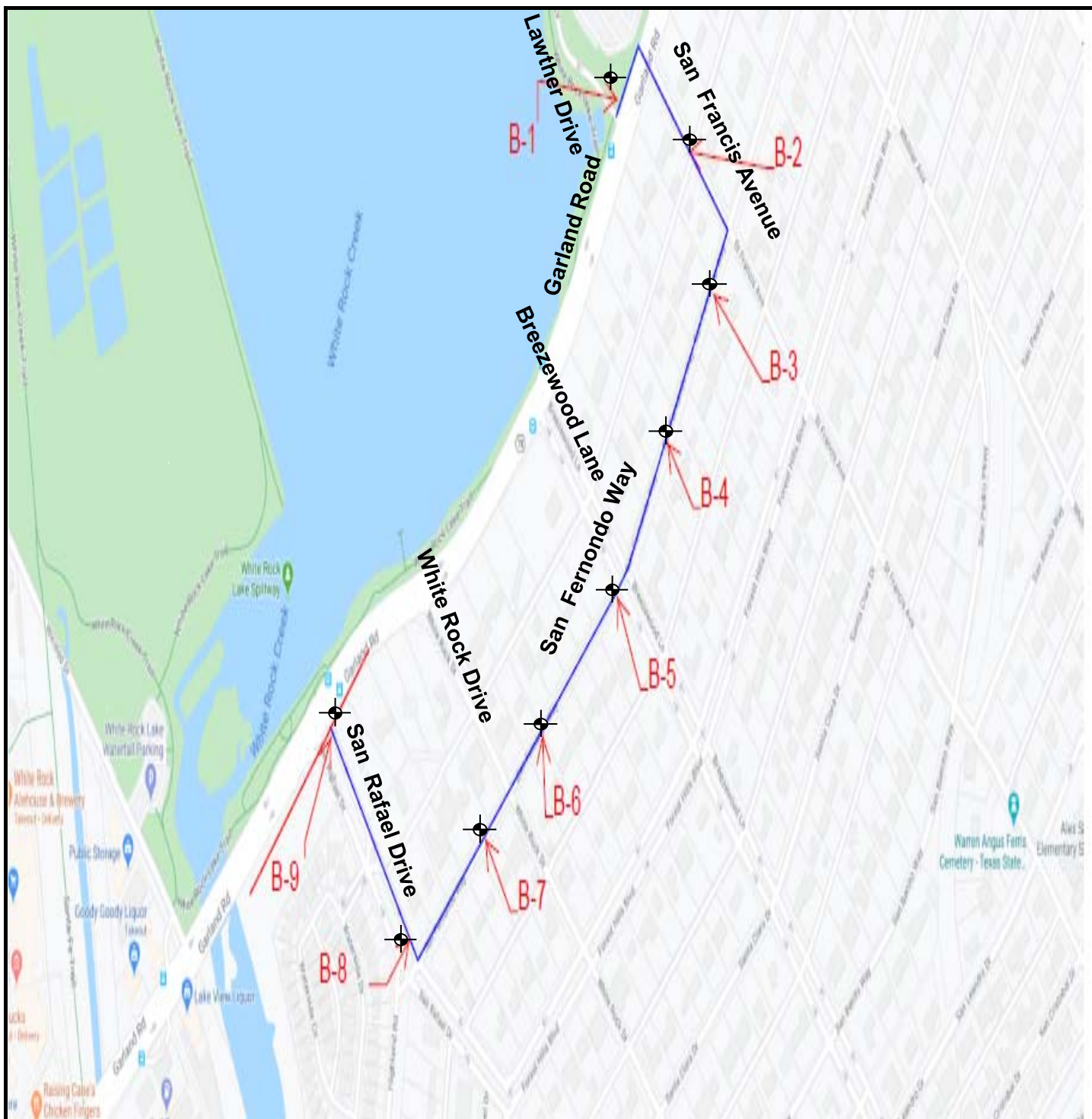
The scope of services was limited to the borings completed at the site. It should be recognized that definition and evaluation of subsurface conditions are difficult. Since some variation was found in subsurface conditions at the specific boring locations for this study, all readers should be aware that a greater variation could occur between the boring locations. Statements in the report as to subsurface variations across the site are intended only as estimations from the data obtained at specific boring locations.

The scope of services did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous substances in the soil, surface water, or groundwater at this site.

APPENDIX A



	Project Name: <u>Geotechnical Investigation For DWU 30 Inch Wastewater Main</u> VICINITY MAP	
	Project Location: <u>Garland Road, ST. Francis Avenue, San Fernando Way and San Rafael Drive</u>	
	Client: <u>City of Dallas (Dallas Water Utilities)</u> Project No.: <u>27-046G</u>	FIGURE: <u>1</u>
	Source: Map Data ©2021 Google	
Date: 01-18-2021		



- ✦ B-1: 30 Feet Boring
- ✦ B-2: 40 Feet Boring
- ✦ B-3 Thru B-7: 50 Feet Boring

- ✦ B-8: 40 Feet Boring
- ✦ B-9: 60 Feet Boring

Scale: 1 in = 100 ft



Project Name: Geotechnical Investigation For DWU 30 Inch Wastewater Main

**SITE &
BORING PLAN**

Project Location: Garland Road, ST. Francis Avenue, San Fernando Way and San Rafael Drive

Client: City of Dallas (Dallas Water Utilities) Project No.: 27-046G

Source: Map Data ©2021 Google

Date: 01-18-2021

FIGURE: 2



LOG OF BORING NO. B-1

10625 Newkirk, Suite 800
Dallas, TX 75220
P: 972.709.7384
Fax: 972.709.7385

FIGURE: 3

Project Name: Geotechnical Investigation For DWU 30- Inch Wastewater Main
Project Location: Boring on Garland Road And Lawther Drive
Project No.: 27-046G
Client: City of Dallas (Dallas Water Utilities)

Depth (feet)	Sample Type	Sample Type	Pocket Pen (tsf) REC/RQD (%) TCP/STP	Stratum Description	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing No. 200 Sieve (%)	Unit Dry Weight (pcf)	UU, (tsf) Undrained Shear Strength	Uc, (tsf) Unconfined Strength
5'			4.5+	SANDY LEAN CLAY (CL), brown with calcareous nodules, stiff to very stiff	17	38	24	14	52			
			4.5+									
			2.5									
			2.5	SANDY LEAN CLAY (CL), brown with calcareous nodules, stiff	20	39	18	21	71	108.9		0.5
			3.5									
10'			3.0	LEAN CLAY (CL) with SAND, brown with calcareous nodules, stiff		44	14	30	82			
			2.0									
15'			2.5									
20'			2.5	LEAN CLAY (CL), tan, light brown with calcareous nodules, stiff	29.4	46	22	25	91.0	90.5		0.45
			2.5									
25'			1.0									
30'												
35'												
40'												

Completion Depth: 30 Feet
Date Drilled: 01-19-2021

Water Level During Drilling: 22 Feet
Water Level Upon Completion: 22 Feet

LOG OF BORING NO. B-2

10625 Newkirk, Suite 800
Dallas, TX 75220
P: 972.709.7384
Fax: 972.709.7385

FIGURE: 4

Project Name: Geotechnical Investigation For DWU 30- Inch Wastewater Main
Project Location: Boring on St Francis Avenue Between The Alley of Garland Road And San Fernando Way
Project No.: 27-046G
Client: City of Dallas (Dallas Water Utilities)

Depth (feet)	Sample Type	Sample Type	Pocket Pen (tsf) REC/RQD (%) TCP/STP	Stratum Description	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing No. 200 Sieve (%)	Unit Dry Weight (pcf)	UU ₁ (tsf) Undrained Shear Strength	U _c (tsf) Unconfined Strength
				7 Inches Concrete Pavement								
3.0				CLAYEY SAND (SC), brown with calcareous nodules, stiff	18	25	13	12	46	108.3		0.5
2.5												
3.5												
4.5+				SANDY LEAN CLAY (CL), brown with calcareous nodules, stiff to very stiff								
4.5+												
10'												
4.5+												
12'												
12'					12	24	14	10	58	123.5		4.28
15'												
4.5+												
20'												
4.5												
20'				LEAN CLAY (CL) with SAND, brown with calcareous nodules, hard								
20'					20	39	19	20	82			
25'												
21-50-4				WEATHERED SHALE with Lime Stone fragments, dark grey, stiff to hard								
25'												
12-14-16												
30'				SHALE with Lime Stone fragments, grey, hard								
30'												
30'					19	50	14	36	61			
35'												
50/5.0" Water												
50/4.0"												
40'												

Completion Depth: 40 Feet

Water Level During Drilling: 36 Feet, Boring was converted as piezometer

Date Drilled: 01-20-2021

Water Level Upon Completion: 36 Feet



LOG OF BORING NO. B-3

10625 Newkirk, Suite 800
Dallas, TX 75220
P: 972.709.7384
Fax: 972.709.7385

FIGURE: 5

Project Name: Geotechnical Investigation For DWU 30- Inch Wastewater Main
Project Location: Boring on San Fernando Way And South of St Francis Avenue
Project No.: 27-046G
Client: City of Dallas (Dallas Water Utilities)

Depth (feet)	Sample Type	Sample Type	Pocket Pen (tsf) REC/RQD (%) TCP/STP	Stratum Description	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing No.200 Sieve (%)	Unit Dry Weight (pcf)	UU, (tsf) Undrained Shear Strength	Uc, (tsf) Unconfined Strength
4.5				6 Inches Asphaltic Concrete Pavement								
4.0				FAT CLAY (CH) with SAND , dark brown with calcareous nodules, stiff	29	52	13	38	77	83.26		0.56
4.0				LEAN CLAY (CL) , brown with calcareous nodules, stiff								
2.5												
3.0												
26					26	40	10	30	87.0	98.5		0.55
1.5												
1.0												
50/1.0"				SHALE with Lime Stone fragments, grey, hard								
100/ 1.25"				SHALE with Lime Stone fragments, grey, hard								
100/0.25"												
100/1.0"												

Completion Depth: 50 Feet

Water Level During Drilling: DRY

Date Drilled: 01-22-2021

Water Level Upon Completion: DRY



LOG OF BORING NO. B-3

10625 Newkirk, Suite 800
Dallas, TX 75220
P: 972.709.7384
Fax: 972.709.7385

FIGURE: 5

Project Name: Geotechnical Investigation For DWU 30- Inch Wastewater Main
Project Location: Boring on San Fernando Way And South of St Francis Avenue
Project No.: 27-046G
Client: City of Dallas (Dallas Water Utilities)

Depth (feet)	Sample Type	Sample Type	Pocket Pen (tsf) REC/RQD (%) TCP/STP	Stratum Description	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing No.200 Sieve (%)	Unit Dry Weight (pcf)	UU, (tsf) Undrained Shear Strength	Uc, (tsf) Unconfined Strength
45'			50/0.25"	SHALE with Lime Stone fragments, grey, hard								
50'			100/0.0"									
55'												
60'												
65'												
70'												
75'												
80'												

Completion Depth: 50 Feet

Water Level During Drilling: DRY

Date Drilled: 01-22-2021

Water Level Upon Completion: DRY



LOG OF BORING NO. B-4

10625 Newkirk, Suite 800
Dallas, TX 75220
P: 972.709.7384
Fax: 972.709.7385

FIGURE: 6

Project Name: Geotechnical Investigation For DWU 30- Inch Wastewater Main
Project Location: Boring on San Fernando Way And North of Breezewood Lane
Project No.: 27-046G
Client: City of Dallas (Dallas Water Utilities)

Depth (feet)	Sample Type	Sample Type	Pocket Pen (tsf) REC/RQD (%) TCP/STP	Stratum Description	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing No. 200 Sieve (%)	Unit Dry Weight (pcf)	UU, (tsf) Undrained Shear Strength	Uc, (tsf) Unconfined Strength
			3.0	6 Inches Asphaltic Concrete Pavement								
			4.5	FAT CLAY (CH) , dark brown with calcareous nodules, stiff to very stiff	20	63	22	41	85			
5'			4.5	SANDY LEAN CLAY (CL) , brown with calcareous nodules, stiff								
			4.5		18	49	19	30				
10'			3.0									
			4.5	Light brown 10 to 15 feet								
15'			4.0									
			4.0	LEAN CLAY (CL) with SAND , brown with calcareous nodules, stiff very stiff								
20'			4.5		24.2	40	15	25	84	94.9		0.66
			3.5	Tan 30 to 40 feet								
25'			4.0									
30'			2.0									
35'			2.0									
40'			2.0		20	44	16	28	74			

Completion Depth: 50 Feet

Water Level During Drilling: DRY

Date Drilled: 01-22-2021

Water Level Upon Completion: DRY

Water Level Upon Completion: DRY



LOG OF BORING NO. B-5

10625 Newkirk, Suite 800
Dallas, TX 75220
P: 972.709.7384
Fax: 972.709.7385

FIGURE: 7

Project Name: Geotechnical Investigation For DWU 30- Inch Wastewater Main
Project Location: Boring on San Fernando Way And South of Breezewood Lane
Project No.: 27-046G
Client: City of Dallas (Dallas Water Utilities)

Depth (feet)	Sample Type	Sample Type	Pocket Pen (tsf) REC/RQD (%) TCP/STP	Stratum Description	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing No.200 Sieve (%)	Unit Dry Weight (pcf)	UU, (tsf) Undrained Shear Strength	Uc, (tsf) Unconfined Strength
2.0				6 Inches Asphaltic Concrete Pavement								
4.5				FAT CLAY (CH) , dark brown with calcareous nodules, stiff to very stiff	26	56	23	33	91			
4.5+				LEAN CLAY (CL) , Tan with calcareous nodules, stiff to very stiff								
4.0												
4.5					14.6	42	13	29	87	112.3		4.52
15'			4.5+		15							
20'			7-13-18	CLAYEY SAND (SC) , tan, medium dense								
25'			6-13-12	SILTY SAND (SM) , tan, medium dense								
30'			5-7-8	SAND WITH CLAY , tan, medium	9				63			
35'			3.5	LEAN CLAY (CL) , brown with calcareous nodules, stiff	32	48	16	32	85			
40'			1.0									

Completion Depth: 50' Feet
Date Drilled: 01-18-2021

Water Level During Drilling: 32 Feet, Boring was converted as Piezometer
Water Level Upon Completion: 32 Feet



LOG OF BORING NO. B-5

10625 Newkirk,Suite 800
Dallas, TX 75220
P: 972.709.7384
Fax:972.709.7385

FIGURE: 7

Project Name: Geotechnical Investigation For DWU 30- Inch Wastewater Main
Project Location: Boring on San Fernando Way And South of Breezewood Lane
Project No.: 27-046G
Client: City of Dallas (Dallas Water Utilities)

Depth (feet)	Sample Type	Sample Type	Pocket Pen (tsf) REC/RQD (%) TCP/STP	Stratum Description	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing No.200 Sieve (%)	Unit Dry Weight (pcf)	UU, (tsf) Undrained Shear Strength	Uc, (tsf) Unconfined Strength
45'			1.0	LEAN CLAY (CL), brown with calcareous nodules, stiff								
50'			2.0		15	49	15	34	85	116.1		0.53
55'												
60'												
65'												
70'												
75'												
80'												

Completion Depth: 50 Feet Water Level During Drilling: 32 Feet, Boring was converted as piezometer
Date Drilled: 01-18-2021 Water Level Upon Completion: 32 Feet



LOG OF BORING NO. B-6

10625 Newkirk, Suite 800
Dallas, TX 75220
P: 972.709.7384
Fax: 972.709.7385

FIGURE: 8

Project Name: Geotechnical Investigation For DWU 30 Inch Wastewater Main
Project Location: Boring on San Fernando Way And North of White Rock Drive
Project No.: 27-046G
Client: City of Dallas (Dallas Water Utilities)

Depth (feet)	Sample Type	Sample Type	Pocket Pen (tsf) REC/RQD (%) TCP/STP	Stratum Description	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing No.200 Sieve (%)	Unit Dry Weight (pcf)	UU ₁ (tsf) Undrained Shear Strength	Uc (tsf) Unconfined Strength
			3.0	6 Inches Asphaltic Concrete Pavement								
				FAT CLAY (CH) , dark brown with calcareous nodules, stiff to very stiff	21	59	21	38	88.0			
5'			3.5									
			2.0	LEAN CLAY (CL) with SAND , Tan with calcareous nodules, stiff to very stiff								
			3.5									
10'			2.5		20	44	26	18	72.0			
15'			2.5									
20'			2.5									
25'			1.5									
				SANDY LEAN CLAY (CL) , tan with calcareous nodules, stiff to very stiff								
					22	38	23	15	68.0	102.85		1.57
30'			1.5									
35'			2.5	LEAN CLAY (CL) , tan with calcareous nodules, stiff to very stiff	23	48	17	31	91			
40'			4.5									

Completion Depth: 50 Feet

Water Level During Drilling: DRY

Date Drilled: 01-21-2021

Water Level Upon Completion: DRY




LOG OF BORING NO. B-6

10625 Newkirk,Suite 800
Dallas, TX 75220
P: 972.709.7384
Fax:972.709.7385

FIGURE: 8

Project Name: Geotechnical Investigation For DWU 30 Inch Wastewater Main
Project Location: Boring on San Fernando Way And North of White Rock Drive
Project No.: 27-046G
Client: City of Dallas (Dallas Water Utilities)

Depth (feet)	Sample Type	Sample Type	Pocket Pen (tsf) REC/RQD (%) TCP/STP	Stratum Description	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing No.200 Sieve (%)	Unit Dry Weight (pcf)	UU, (tsf) Undrained Shear Strength	Uc, (tsf) Unconfined Strength
45'			2.0	LEAN CLAY (CL), Tan with calcareous nodules, stiff	25.2	41	21	20		99.85		0.94
50'			2.5									
55'												
60'												
65'												
70'												
75'												
80'												

Completion Depth: 50 Feet Water Level During Drilling: DRY
Date Drilled: 01-21-2021 Water Level Upon Completion: DRY

Water Level Upon Completion: 33 Feet Water



LOG OF BORING NO. B-7

10625 Newkirk,Suite 800
Dallas, TX 75220
P: 972.709.7384
Fax:972.709.7385

FIGURE: 9

Project Name: Geotechnical Investigation For DWU 30 Inch Wastewater Main
Project Location: Boring On San Fernando Way And South of White Rock Drive
Project No.: 27-046G
Client: City of Dallas (Dallas Water Utilities)

Depth (feet)	Sample Type	Sample Type	Pocket Pen (tsf) REC/RQD (%) TCP/STP	Stratum Description	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing No.200 Sieve (%)	Unit Dry Weight (pcf)	UU, (tsf) Undrained Shear Strength	Uc, (tsf) Unconfined Strength
45			1.0	LEAN CLAY (CL), Tan with calcareous nodules, stiff								
50			3.5									
55												
60												
65												
70												
75												
80												

Completion Depth: 50 Feet Water Level During Drilling: 33 Feet
Date Drilled: 01-21-2021 Water Level Upon Completion: 33 Feet



LOG OF BORING NO. B-8

10625 Newkirk, Suite 800
Dallas, TX 75220
P: 972.709.7384
Fax: 972.709.7385

FIGURE: 10

Project Name: Geotechnical Investigation For DWU 30 Inch Wastewater Main
Project Location: Boring on San Rafael Dr And South of San Fernando Way
Project No.: 27-046G
Client: City of Dallas (Dallas Water Utilities)

Depth (feet)	Sample Type	Sample Type	Pocket Pen (tsf) REC/RQD (%) TCP/STP	Stratum Description	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing No. 200 Sieve (%)	Unit Dry Weight (pcf)	UU ₁ (tsf) Undrained Shear Strength	U _c (tsf) Unconfined Strength
4.5				FAT CLAY (CH) , dark brown with calcareous nodules, stiff to very stiff								
4.5+					17	56	21	35	94			
4.5+				SANDY LEAN CLAY (CL) , light brown with calcareous nodules, stiff								
4.5+												
10'												
					18	36	21	15	68	104.8		0.5
15'			2.0									
					17	28	7	22	66			
20'			2.5									
			Water									
25'			50/05"	SHALE with Lime Stone fragments, grey, hard								
30'			100/1.0"									
35'			100/1.0"									
40'			100/0.25"		20.6					102.9		1.83

Completion Depth: 40 Feet

Water Level During Drilling: 23 Feet

Date Drilled: 01-20-2021

Water Level Upon Completion: 23 Feet



LOG OF BORING NO. B-9

10625 Newkirk,Suite 800
Dallas, TX 75220
P: 972.709.7384
Fax:972.709.7385

FIGURE: 11

Project Name: Geotechnical Investigation For DWU 30 Inch Wastewater Main
Project Location: Boring on San Rafael Drive And East of Garland Road
Project No.: 27-046G
Client: City of Dallas (Dallas Water Utilities)

Depth (feet)	Sample Type	Sample Type	Pocket Pen (tsf) REC/RQD (%) TCP/STP	Stratum Description	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing No.200 Sieve (%)	Unit Dry Weight (pcf)	UU, (tsf) Undrained Shear Strength	Uc, (tsf) Unconfined Strength
2.5				FAT CLAY (CH), dark brown with calcareous nodules, stiff to very stiff	30	70	33	37	96.6			
4.5+												
4.5				SANDY LEAN CLAY (CL), light brown with calcareous nodules, stiff	15	41	21	20	56.0			
5.0												
6.0												
7-8-9				SHALE with Lime Stone fragments, grey, hard	25				56.0			
50/3"												
Water												
50/5.5"												
50/5"												
50/5"												
50/5"												
50/4.5"												

Completion Depth: 60 Feet Water Level During Drilling: 23 Feet, Boring was converted as Piezometer
Date Drilled: 01-20-2021 Water Level Upon Completion: 23 Feet



LOG OF BORING NO. B-9

10625 Newkirk, Suite 800
Dallas, TX 75220
P: 972.709.7384
Fax: 972.709.7385

FIGURE: 11

Project Name: Geotechnical Investigation For DWU 30 Inch Wastewater Main
Project Location: Boring on San Rafael Drive And East of Garland Road
Project No.: 27-046G
Client: City of Dallas (Dallas Water Utilities)

Depth (feet)	Sample Type	Sample Type	Pocket Pen (tsf) REC/RQD (%) TCP/STP	Stratum Description	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing No.200 Sieve (%)	Unit Dry Weight (pcf)	UU, (tsf)	Undrained Shear Strength Uc, (tsf)	Unconfined Strength
45'			50/3"	SHALE with Lime Stone fragments, grey, hard									
50'			50/3.5"										
55'			100/2"										
60'			50/1"										
65'													
70'													
75'													
80'													

Completion Depth: 60 Feet Water Level During Drilling: 23 Feet, Below Ground Surface
Date Drilled: 01-20-2021 Water Level Upon Completion: 23 Feet

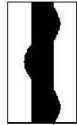
SOIL & ROCK CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	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, 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 SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
ROCK AND OTHERS				-	UNWEATHERED SHALE
				-	WEATHERED SHALE
				-	Asphalt
				-	Concrete

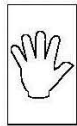
NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

FIGURE: 12

Sampler Graphics Legend



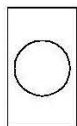
Auger Cuttings



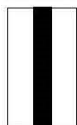
Grab Sample



Modified California Sampler



No Recoverey



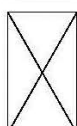
Rock Core



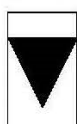
Shelby Tube



Standard Penetration Test



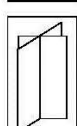
Split Spoon



Texas Cone Penetration

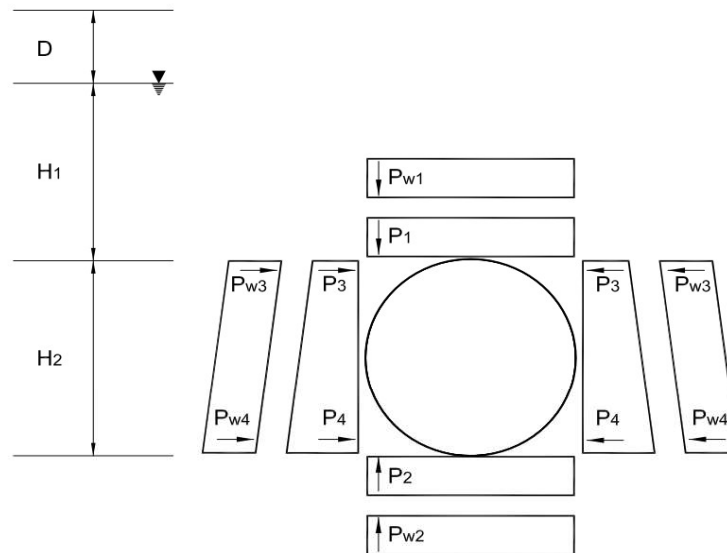


Undisturbed



Vane Shear

APPENDIX B



γ_b = Soil Buoyant Density
 γ_d = Soil Dry Density (pcf)
 γ_w = Soil Wet Density (pcf)
 γ_{water} = Water Density
 K_a = Coefficient of Active Earth Pressure
 D = Depth to Water Table
 q = Applied Traffic Loads

Vertical Pressure

Water Pressure (top)

Over Burden Pressure

Soil Pressure (bottom)

Water Pressure (bottom)

$$P_{w1} = P_{w3}$$

Lateral Soil Pressure (top)

Lateral Soil Pressure (bottom)

Total Lateral Pressure (top)

Total Lateral Pressure (bottom)

$$P_1 = \gamma_w D + (\gamma_w - \gamma_{water})H_1 + q$$

$$P_{w1} = H_1 \gamma_{water}$$

$$= P_1 + P_{w1}$$

$$P_2 = P_1 + (\gamma_w - \gamma_{water})H_2$$

$$P_{w2} = P_{w1} + \gamma_{water}H_2$$

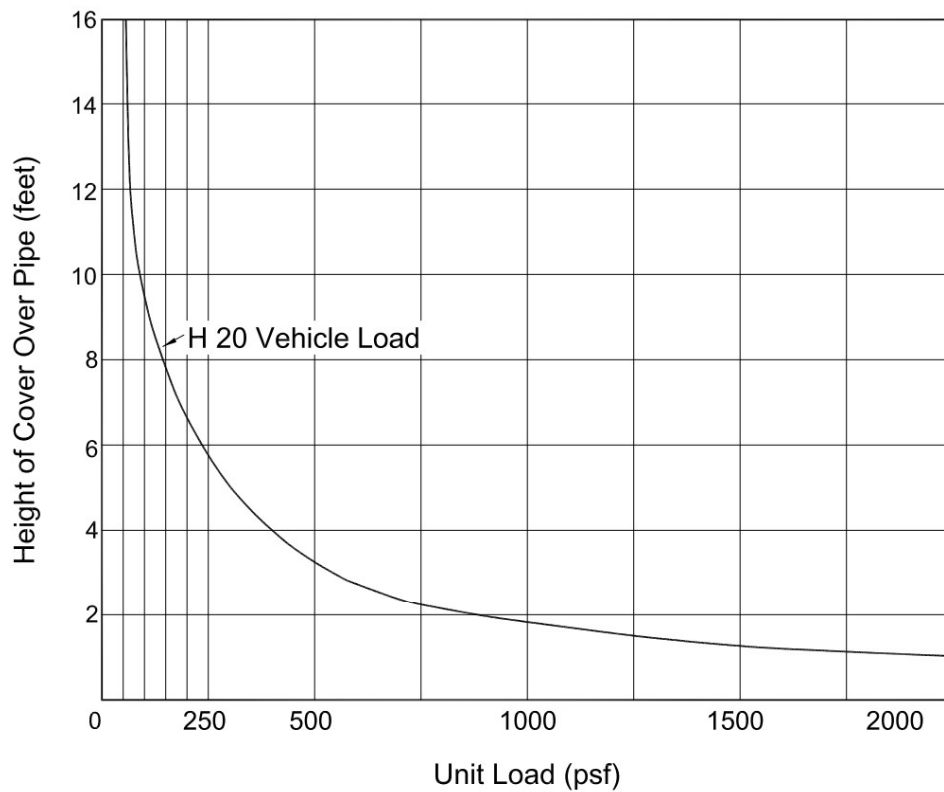
$$P_{w2} = P_{w4}$$

$$P_3 = K_a P_1$$

$$P_4 = K_a P_2$$

$$= P_{w3} + P_3$$

$$= P_{w4} + P_4$$



REFERENCE: PRINCIPLES OF STRUCTURAL PERFORMANCE OF BURIED PIPES
REYNOLD K. WATKINS (1977)

CONSTRUCTION STAKING CUT SHEET

PROJECT: 12" Water in Highland Rd., from
Dorrington Dr. W to Jim
Miller Rd.

PARTY: Sanders & Party

DATE: June 18, 2006

FILE NO.: 411Q 1245, Sheet 126

CONTRACT NO.: 86-211

CONTRACTOR: Lightning Const. Co.

STATION	CUT	OFFSET	LEFT	RIGHT	REMARKS
9+50	6.43	Hub		10'	1-12"x8" Tee, 1-12" Valve & 1-8" Valve
10+00	8.12	"		"	
10+50	8.22	"		"	
11+00	8.82	"		"	
11+50	9.38	"		"	
12+00	9.45	"		"	
12+50	9.29	"		"	
13+00	9.47	"		"	
13+50	9.76	"		"	
13+57.30	9.69	"		"	P.T.
14+00	9.60	"		"	
14+50	9.33	"		"	
15+00	9.16	"		"	1-12"x8" F.H. Tee, 1-6" Valve & 1-F.H.
15+50	8.95	"		"	
16+00	8.65	"		"	
16+30	7.52	"x" Conc.		"	1-12"x8" Reducer
16+33.83	7.37	"		"	1-8"x8" Tapping Sleeve/Conn. To ex. W

Typed and Delivered To: _____

Date: June 19, 1999

CONSTRUCTION STAKING CUT SHEET

PROJECT: _____

PARTY: _____
DATE: _____
FILE NO.: _____
CONTRACT NO.: _____
CONTRACTOR: _____

STATION	CUT	OFFSET	LEFT	RIGHT	REMARKS
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Typed and Delivered To: _____
Date: _____

DALLAS WATER UTILITIES
WATER AND WASTEWATER MAIN REPLACEMENTs AT VARIOUS LOCATIONS
CONTRACT NO. 21-233/ 21-234
TIME OF COMPLETION AS PER SPECIAL PROVISION S-6

BIDDER'S PROPOSAL FORM SUBMITTALS:

- 1 Bidder to complete yellow cells.
- 2 Upload completed Proposal to Bonfire in Project Folder.

CONTRACTOR'S NAME (Below)

BID ITEM	ITEM DESCRIPTION	UNIT	QUANTITY	Unit Price	Total Amount	Dollars and Cents (In Words)
1500F	4" Ductile Iron Water Pipe	LF	160	\$0.00	\$0.00	
1500H	6" Ductile Iron Water Pipe	LF	350	\$0.00	\$0.00	
1500J	8" Ductile Iron Water Pipe	LF	510	\$0.00	\$0.00	
1500L	12" Ductile Iron Water Pipe	LF	6,970	\$0.00	\$0.00	
1500Q	16" Ductile Iron Water Pipe	LF	1,100	\$0.00	\$0.00	
1500V	24" Ductile Iron Water Pipe	LF	2,150	\$0.00	\$0.00	
1800H	6" PVC Water Pipe	LF	40	\$0.00	\$0.00	
3110J	8" PVC Pressure Rated Wastewater Pipe	LF	3,860	\$0.00	\$0.00	
3110K	10" PVC Pressure Rated Wastewater Pipe	LF	870	\$0.00	\$0.00	
3110L	12" PVC Pressure Rated Wastewater Pipe	LF	1,220	\$0.00	\$0.00	
3120Q	16" PVC Pressure Rated Wastewater Pipe	LF	360	\$0.00	\$0.00	
3120Y	30" PVC Pressure Rated Wastewater Pipe	LF	4,340	\$0.00	\$0.00	
3560	Connection to Existing Manhole	EA	2	\$0.00	\$0.00	
5020	Cast Iron Fittings	TN	35	\$0.00	\$0.00	
5050	Water Service	EA	71	\$0.00	\$0.00	
5061FxH	4" Domestic Service with 4" Meter and Transfer	EA	1	\$0.00	\$0.00	
5062HxH	6" Closed Fireline with 6" Detector Check	EA	1	\$0.00	\$0.00	
5064JxJ	8" Combined Service with 8" Meter	EA	1	\$0.00	\$0.00	
5066JxJ	8" Closed Fireline Service with 8" D.C. Service	EA	6	\$0.00	\$0.00	
5091	Install Fire Hydrant	EA	11	\$0.00	\$0.00	
5092	Remove Existing Fire Hydrant	EA	10	\$0.00	\$0.00	
5093	Deliver Fire Hydrant	EA	10	\$0.00	\$0.00	
5094	Relocate Fire Hydrant	EA	1	\$0.00	\$0.00	
5100F	4" Gate Valve	EA	4	\$0.00	\$0.00	
5100H	6" Gate Valve	EA	14	\$0.00	\$0.00	
5100J	8" Gate Valve	EA	22	\$0.00	\$0.00	
5100L	12" Gate Valve	EA	48	\$0.00	\$0.00	
5100Q	16" Gate Valve	EA	2	\$0.00	\$0.00	
5100V	24" Gate Valve	EA	17	\$0.00	\$0.00	
5110QxL	16 X 12" Tapping Sleeve	EA	1	\$0.00	\$0.00	
5140	6" Flap Valve	EA	1	\$0.00	\$0.00	
5155AJ	72" Access Manhole with Blowoff	EA	1	\$0.00	\$0.00	
5500L	12" Water Main (BOTOC)	LF	20	\$0.00	\$0.00	
5500V	24" Water Main (BOTOC)	LF	40	\$0.00	\$0.00	
5600	Cut & Plug Existing Water Main	EA	16	\$0.00	\$0.00	
5610	Cut & Plug Existing Water Main For Test	EA	15	\$0.00	\$0.00	
5990J	8" Wastewater Main (BOTOC)	LF	130	\$0.00	\$0.00	
5990AE	48" Wastewater Main (BOTOC)	LF	4,210	\$0.00	\$0.00	
6060	Wastewater Lateral	EA	66	\$0.00	\$0.00	
6100	Wastewater Access Device	EA	8	\$0.00	\$0.00	
6110AE	48" Drop Manhole	EA	5	\$0.00	\$0.00	
6110AG	60" Drop Manhole	EA	1	\$0.00	\$0.00	
6111AN X	96" Diameter Drop Connection Manhole-Extra Depth (+20')	EA	1	\$0.00	\$0.00	
6130AE	48" Diameter Wastewater Manhole	EA	35	\$0.00	\$0.00	
6130AJ	72" Diameter Wastewater Manhole	EA	4	\$0.00	\$0.00	
6131AJ X	72" Diameter Wastewater Manhole-Extra Depth (+20')	EA	6	\$0.00	\$0.00	
6141	Vacuum Test Wastewater Manhole	EA	54	\$0.00	\$0.00	
6800	Project Partnering	LS	1	\$0.00	\$0.00	
6902	Place Block Sod	SY	742	\$0.00	\$0.00	
6909	Place Brick Sidewalk	SY	56	\$0.00	\$0.00	
6920	Television Inspection	LF	17,030	\$0.00	\$0.00	
6925	Trench Safety & Support	LF	18,980	\$0.00	\$0.00	
7030	Rock Foundation	CY	686	\$0.00	\$0.00	
7041	Flowable Backfill	CY	966	\$0.00	\$0.00	
7050	Sand Backfill	CY	574	\$0.00	\$0.00	
7071	Class B Concrete	CY	211	\$0.00	\$0.00	
7520	Temporary Paving (Hot Mix or High Performance)	TN	420	\$0.00	\$0.00	
7530	Concrete Curb & Gutter	LF	3,220	\$0.00	\$0.00	
7570	Reinforced Concrete Paving	CY	700	\$0.00	\$0.00	
7580	Reinforced Concrete Sidewalk	SY	1,582	\$0.00	\$0.00	
7583	Reinforced Concrete Driveway	SY	70	\$0.00	\$0.00	
7585	Barrier Free Ramp	EA	1	\$0.00	\$0.00	
7600	Reinforced Concrete Base	CY	6,762	\$0.00	\$0.00	
7655	Hot Mix Asphalt Concrete Paving	TN	3,318	\$0.00	\$0.00	
7712	Stormwater Pollution Control Plan	LS	1	\$0.00	\$0.00	
7730	Disposal Of Heavily Chlorinated Water	LS	1	\$0.00	\$0.00	
8011	Construction/Survey Staking W/Tr. & W.W. Mains	LF	18,010	\$0.00	\$0.00	
8012	Construction Surveying and Staking of Proposed Street and Alley Paving	LF	5,240	\$0.00	\$0.00	
8300	Removal of Existing Railroad Tracks	EA	3,270	\$0.00	\$0.00	
20500	Investigation	EA	103	\$0.00	\$0.00	
TOTAL AMOUNT OF BID					\$0.00	
TOTAL AMOUNT OF BID IN WORDS						

CONTRACTOR ENVIRONMENTAL PACKET

(See 107.27 of City of Dallas NCTCOG Addendum)

ENVIRONMENTAL RECORD AFFIDAVIT

For purposes of this Affidavit:

- (A) the term "Bidder/Proposer" includes any and all authorized officers, employees, agents, or other representatives of Bidder/Proposer working in that capacity on behalf of Bidder/Proposer within the past three (3) years prior to the date of this Affidavit;
- (B) the term "Environmental Laws" includes the (i) Clean Air Act, (ii) Clean Water Act, (iii) any rules, regulations, or ordinances promulgated pursuant to either of the above mentioned acts by State, Federal, or local regulatory authorities, or (iv) any other State, Federal, or local environmental law, rule, regulation, or ordinance related to the protection of the environment, including but not limited to solid waste disposal, hazardous waste disposal, illegal discharges of pollutants, and other similar environmental laws, rules, regulations, and ordinances.

I, _____, the duly authorized representative of _____ (Hereinafter called the "Bidder/Proposer"), hereby swears (or affirms) on behalf of Bidder/Proposer the following:

- (1) That Bidder/Proposer has received and read the Contractor Environmental Packet. Bidder/Proposer also understands that the Contractor Environmental Packet is not intended to be all-inclusive, but rather a guideline for environmental responsibility.

[Strike the item indicated below that does NOT apply in this Affidavit.]

- (2) That Bidder/Proposer *has not* been served with any notices of violation, or notices of enforcement, nor had any civil or criminal fines or penalties imposed by any regulatory authority for a violation of any Environmental Laws within the past three (3) years prior to the date of this Affidavit.
- (3) That Bidder/Proposer *has* been served with any notices of violation or notices of enforcement or had any civil or criminal fines or penalties imposed by any regulatory authority for a violation of any Environmental within the past three (3) years prior to the date of this Affidavit as follows:

[If item (3) applies, use a separate sheet to list the notices of violation or enforcement, and any adjudication of actual violations, along with copies of any compliance documents issued by the regulatory authority in connection with the notices or actual violation, and attach the separate sheet to this affidavit.]

Subscribed to and sworn before me on this the _____ day of _____, 20____.

[Seal]

Notary Public
State of Texas

My Commission expires _____

NOTICE

**THE FOLLOWING BLANK SPACES IN THE CONTRACT
AND BONDS ARE NOT TO BE FILLED IN BY THE
BIDDER AT TIME OF SUBMITTING HIS PROPOSAL
THE CONTRACT AND BONDS FORMS ARE SUBMITTED AT THIS
TIME TO FAMILIARIZE THE BIDDER WITH THE FORM
OF CONTRACT AND BONDS WHICH THE SUCCESSFUL BIDDER
WILL BE REQUIRED TO EXECUTE.**

Resolution No. ____ - ____
Contract No. ____
Approved _____, 20__

STATE OF TEXAS §
 § CIVIL CONSTRUCTION SERVICES CONTRACT
COUNTY OF DALLAS §

THIS CONTRACT is made and entered into by and between the CITY OF DALLAS, a Texas municipal corporation (hereinafter called "Owner"), and _____, a _____, with offices at _____ (hereinafter called "Contractor").

1. CONTRACT DOCUMENTS

That for the consideration stated in this Section, Contractor undertakes, covenants and agrees to perform the work described below, in every detail conforming to the advertisement, bid proposal, Owner's Standard Specifications for Public Works Construction (Fourth Edition, 2004), as amended, and all other specifications, including special provisions, addendums, plans, working drawings, and performance and payment bonds, all of which instruments are wholly incorporated by reference into this Contract as though written word for word, on a certain public work described as _____ for a sum not to exceed _____ DOLLARS (\$ _____).

2. TERMS

Defined Terms used in this Contract that are defined in the City's Standard Specifications for Public Works Construction and City's Addendum to the Standard Specifications, October 2011 Edition shall have the meanings designated in these publications.

3. CONTRACT TIME; LIQUIDATED DAMAGES

A. Contractor hereby agrees to commence the work under this Contract on a date to be specified in a work order of City's Project Engineer, and to complete fully all work hereunder as specified in Special Provision _____ of the Specifications.

B. Contractor further agrees to pay liquidated damages as specified in Special Provision _____ of the Specifications in the event the work is not substantially completed within the time or times provided in that Special Provision.

4. PAYMENTS

A. Owner agrees that between the 25th day and last day of each month for odd-numbered contracts, and between the 10th day and the 15th day of the month for even-numbered contracts, the Project Engineer will make an estimate of the value of the work done during the previous month under the Contract, based upon the prices furnished in Contractor's bid proposal, and the actual quantities of work performed as measured by the Project Engineer in accordance with the Contract. Lump sum units shall be estimated and paid on a percentage-of-completion basis. Contractor shall furnish the Project Engineer information as may be requested to aid the Project Engineer as a guide in the preparation of estimates. Contractor shall also comply, where applicable, with Item 109.5.1 of the Standard Specifications for Public Works Construction, as may be modified by the City's Addendum to the Standard Specifications. If the confirmed value of the work done since the last previous estimate exceeds \$100.00 in amount, a percentage of such confirmed sum will be paid to the Contractor about thirty (30) days after completion of the estimate. Owner shall not be liable for interest on any late or delayed payment caused by any claim or dispute, any discrepancy in quantities, any failure to provide supporting documentation or other information required with the estimate or as a precondition to payment, or due to any payment Owner has a right to withhold under the Contract. Payment may include amounts for acceptable, non-perishable materials delivered to the work site, based on the net invoice value as presented in the Contractor's supporting information and confirmed by the Project Engineer's estimate. The percentage retained by Owner shall be as provided below. In no event shall payment for any bid item of work exceed the unit price for the item stated in Contractor's bid proposal, nor shall payment be made in excess of actual quantities of work constructed or supplied.

B. For purposes of subparagraph (a), "odd-numbered contracts" are those contracts numbered under the Dallas Water Utilities Enumeration System such that the second last digit is an odd-number (one, three, five, seven or nine); "even-numbered contracts" are those contracts numbered under the Dallas Water Utilities Enumeration System such that the second last digit is an even-number (two, four, six, eight or zero).

C. If the due date for a progress payment described above falls on a Saturday, Sunday or official City of Dallas holiday, payment will be made to Contractor on or about the first business day following the Saturday, Sunday or official City of Dallas holiday.

D. Progress payments may include payment for acceptable, non-perishable materials delivered to the worksite; payment for materials will be allowed on the same percentage basis of net invoice value as provided hereinafter. The percentage retained by Owner will be fifteen percent (15%) of the total dollar amount of work done on all contracts \$50,000 and less for which performance and payment bonds have been furnished; and ten percent (10%) of the total dollar amount of work done on all contracts in excess of \$50,000.00 and less than \$400,000.00; and five percent (5%) of the total dollar amount of work done on all contracts of \$400,000.00 or more. On all contracts described in this paragraph, the following retainage rules shall also apply:

(1) When work progress is eighty percent complete, retainage may be reduced to two percent (2%) of the dollar value of all work satisfactorily completed to date (not to include material on hand), provided that Contractor is making satisfactory progress and there is no cause for greater retainage as determined by the Project Engineer.

(2) When work progress is substantially complete (operational or beneficial occupancy) the retainage may be further reduced to only that amount necessary to assure completion as determined by the Project Engineer.

(3) If Owner determines that Contractor is not making satisfactory progress or if there is other specific cause, Owner may, at its discretion, reinstate in full the applicable retainage.

5. SURETY

A. It is further mutually agreed that should it appear to Owner or to the Project Engineer that, at any time during the existence of this Contract, the surety on the said Contractor's bond has become insolvent, bankrupt or otherwise financially unable to protect Owner under the terms of the Contract, Owner may demand that the Contractor furnish additional or substitute surety through some approved surety company satisfactory to Owner; the act of Owner or the Project Engineer with reference to demanding additional or substitute surety shall never be construed to relieve the original surety of its obligation under the Contract.

B. Owner may stop the work under the Contract until the additional or substitute surety has been furnished by the Contractor, and Owner shall in no case be liable to the Contractor on account thereof. Further, substitution of the surety or stoppage of work under the circumstances of this Section shall not serve as an extension of the performance time requirements set forth in Section 2, nor as a waiver of the liquidated damages due thereunder. Owner may exercise its right, as provided under this Contract, to take charge of the work in the event of the refusal or failure of the Contractor to comply with the demands of Owner with reference to furnishing additional or substitute surety.

6. OFFSET

Owner may, at its option, offset any amounts due and payable under this Contract against any debt (including taxes) lawfully due to Owner from Contractor, regardless of whether the amount due arises pursuant to the terms of this Contract or otherwise and regardless of whether or not the debt due to Owner has been reduced to judgment by a court.

7. PRICES

In consideration of Contractor fully and faithfully complying with all terms, provisions and stipulations of this Contract, Owner undertakes, covenants and agrees to pay to Contractor for the furnishing of all material and labor, and the performance of the work herein contracted

for, the following prices as shown on the bid proposal of Contractor, which prices represent the total compensation to be received by Contractor under this Contract, consistent with the not-to-exceed sum stated in Section 1, which prices are as stated in **Exhibit A**.

8. CONFLICT OF INTEREST

A. Contractor and its employees, agents or associates are required to make regular, timely, continual and full disclosures to the Director of all significant outside interests and responsibilities that may give rise to a direct or indirect conflict of interest, including, but not limited to, any and all significant outside interests and responsibilities that could reasonably be expected to impair independence of judgment in Contractor's performance of all of the services under this Contract. Such disclosures must be made no later than ten (10) days following the event giving rise to the potential or actual conflict of interest for the duration of the Contract term. A potential or actual conflict of interest exists when commitments and obligations to the City or widely recognized professional norms are likely to be compromised in Contractor's performance of its duties under this Contract by the existence of Contractor's other professional relationships, contracts, obligations, or commitments. Failure to disclose such a conflict of interest may result in the City's immediate termination of this Contract by the City Manager.

B. The following section of the Charter of the City of Dallas shall be one of the conditions, and a part of, the consideration of this Contract, to wit:

"CHAPTER XXII. Sec. 11. FINANCIAL INTEREST OF EMPLOYEE OR OFFICER PROHIBITED.

(a) No city official or employee shall have any financial interest, direct or indirect, in any contract with the city, or be financially interested, directly or indirectly, in the sale to the city of any land, materials, supplies or services, except on behalf of the city as a city official or employee. Any violation of this section shall constitute malfeasance in office, and any city official or employee guilty thereof shall thereby forfeit the city official's or employee's office or position with the city. Any violation of this section, with knowledge, express or implied, of the person or corporation contracting with the city shall render the contract involved voidable by the city manager or the city council.

(b) The alleged violations of this section shall be matters to be determined either by the trial board in the case of employees who have the right to appeal to the trial board, and by the city council in the case of other employees.

(c) The prohibitions of this section shall not apply to the participation by city employees in federally-funded housing programs, to the extent permitted by applicable federal or state law.

(d) This section does not apply to an ownership interest in a mutual or common investment fund that holds securities or other assets unless the person owns more than 10 percent of the value of the fund.

(e) This section does not apply to non-negotiated, form contracts for general city services or benefits if the city services or benefits are made available to the city official or employee on the same terms that they are made available to the general public.

(f) This section does not apply to a nominee or member of a city board or commission, including a city appointee to the Dallas Area Rapid Transit Board. A nominee or member of a city board or commission, including a city appointee to the Dallas Area Rapid Transit Board, must comply with any applicable conflict of interest or ethics provisions in the state law and the Dallas City Code. (Amend. of 8-12-89, Prop. No. 1; Amend. of 8-12-89, Prop. No. 15; Amend. of 11-4-14, Prop. Nos. 2 and 9)"

9. GIFT TO PUBLIC SERVANT

City may terminate this Contract immediately if Contractor has offered, or agreed to confer any benefit upon a City employee or official that the City employee or official is prohibited by law from accepting.

For purposes of this section, "benefit" means anything reasonably regarded as pecuniary gain or pecuniary advantage, including benefit to any other person in whose welfare the beneficiary has a direct or substantial interest, but does not include a contribution or expenditure made and reported in accordance with law.

Notwithstanding any other legal remedies, City may require Contractor to remove any employee of Contractor from the Services who has violated the restrictions of this section or any similar state or federal law, and obtain reimbursement for any expenditures made as a result of the improper offer, Contract to confer, or conferring of a benefit to a City employee or official.

10. NOTICE OF CONTRACT CLAIM

This Contract is subject to the provisions of Section 2-86 of the Dallas City Code, as amended, relating to requirements for filing a notice of a breach of contract claim against City. Section 2-86 of the Dallas City Code, as amended, is expressly incorporated by reference and made a part of this Contract as if written word for word in this Contract. Contractor shall comply with the requirements of this ordinance as a precondition of any claim relating to this Contract, in addition to all other requirements in this Contract related to claims and notice of claims.

11. NOTICES

Except as otherwise provided in Section 10, any notice, payment, statement, or demand required or permitted to be given under this Contract by either party to the other may be effected by

COMPANY NAME

CONSTRUCTION SERVICES CONTRACT NO. _____

DWU CONSTRUCTION FORM 4 – 4TH EDITION, REV. 2-1-17

Page 5 of 9

personal delivery in writing or by mail, postage prepaid. Mailed notices shall be addressed to the parties at the addresses appearing below, but each party may change its address by written notice in accordance with this section. Mailed notices shall be deemed communicated as of three (3) days after mailing.

If intended for City, to:

_____, Director
City of Dallas
Water Utilities Department
1500 Marilla Street, Room 4AN
Dallas, Texas 75201

If intended for Contractor, to:

12. EQUAL EMPLOYMENT OPPORTUNITY/NONDISCRIMINATION

A. Contractor shall not discriminate against any employee or applicant for employment because of race, age, color, ancestry, national origin, place of birth, religion, sex, sexual orientation, gender identity and expression, military or veteran status, genetic characteristics, or disability unrelated to job performance. Contractor shall take affirmative action to insure that applicants are employed and that employees are treated during their employment without regard to their race, age, color, ancestry, national origin, place of birth, religion, sex, sexual orientation, gender identity and expression, military or veteran status, genetic characteristics, or disability unrelated to job performance. This action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection of training, including apprenticeship. Contractor shall also comply with all applicable requirements of the Americans with Disabilities Act, 42 U.S.C.A. §§12101-12213, as amended. Contractor agrees to post in conspicuous places a notice, available to employees and applicants, setting forth the provisions of this non-discrimination clause.

B. Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, age, color, ancestry, national origin, place of birth, religion, sex, sexual orientation, gender identity and expression, military or veteran status, genetic characteristics, or disability unrelated to job performance.

C. Contractor shall furnish all information and reports required by the City Manager or his designee and shall permit the City Manager or his designee to investigate its payrolls and personnel records which pertain to current professional services contracts with City for purposes of ascertaining compliance with this equal employment opportunity clause.

D. Contractor shall file compliance reports with City as may be required by the City Manager or his designee. Compliance reports must be filed within the time, must contain information as to the employment practices, policies, programs, and statistics of Contractor, and must be in the form that the City Manager or his designee prescribes.

E. If Contractor fails to comply with the equal employment opportunity provisions of this Contract, it is agreed that City at its option may do either or both of the following:

- (1) Cancel, terminate or suspend this Contract in whole or in part;
- (2) Declare Contractor ineligible for further City contracts until it is determined to be in compliance.

13. TITLE VI CONTRACT COMPLIANCE (REQUIRED BY THE TEXAS DEPARTMENT OF TRANSPORTATION)

During the performance of this contract, the Contractor, for itself, its assignees and successors in interest agrees as follows (where applicable):

(1) Compliance with Regulations: The Contractor shall comply with the Regulations relative to nondiscrimination in Federally-Assisted programs of the United States Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

(2) Nondiscrimination: The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

(3) Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

COMPANY NAME

CONSTRUCTION SERVICES CONTRACT NO. _____

DWU CONSTRUCTION FORM 4 – 4TH EDITION, REV. 2-1-17

Page 7 of 9

(4) Information and Reports: The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Texas Department of Transportation to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information the Contractor shall so certify to the Recipient, or the Texas Department of Transportation as appropriate, and shall set forth what efforts it has made to obtain the information.

(5) Sanctions for Noncompliance: In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, the Recipient (as defined in the Regulations) shall impose such contract sanctions as it or the Texas Department of Transportation may determine to be appropriate, including, but not limited to: (a) withholding of payments to the Contractor under the contract until the Contractor complies, and/or (b) cancellation, termination or suspension of the contract, in whole or in part.

(6) Incorporation of Provisions: The Contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The Contractor shall take such action with respect to any subcontract or procurement as the Recipient or the Texas Department of Transportation may direct as a means of enforcing such provisions including sanctions for non-compliance. Provided, however, that, in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request the Recipient to enter into such litigation to protect the interests of the Recipient, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

14. TERMINATION

Contractor and City acknowledge and agree that the termination provisions set forth in this Contract and the General Conditions shall survive the termination or expiration of the term of this Contract.

15. CERTIFICATION OF EXECUTION

The person or persons signing and executing this Contract on behalf of Contractor, or representing themselves as signing and executing this Contract on behalf of Contractor, do hereby warrant and certify that he, she or they have been duly authorized by Contractor to execute this Contract on behalf of Contractor and to validly and legally bind Contractor to all terms, performances and provisions herein set forth.

16. COUNTERPARTS

This Contract may be executed, including electronically, in one or more counterparts, each of which when so executed shall be deemed to be an original and constitute one and the same instrument. If this Contract is executed in counterparts, then it shall become fully executed only as of the execution of the last such counterpart called for by the terms of this Contract to be executed.

17. ENTIRE AGREEMENT

This Contract (with all referenced Contract Documents, exhibits, attachments, and other provisions incorporated by reference) embodies the entire Contract of both parties, superseding all oral or written previous and contemporary agreements between the parties relating to matters set forth in this Contract. This Contract can only be amended by an Amendment as provided in the General Conditions.

EXECUTED this the ___ day of _____, 20___, by Owner, signing by and through its City Manager, duly authorized to execute same by Resolution No. ___-_____, adopted by the City Council on _____, 20___, and by Contractor, acting through its duly authorized officials.

APPROVED AS TO FORM:
LARRY E. CASTO
City Attorney

CITY OF DALLAS
T. C. BROADNAX
City Manager

BY _____
Assistant City Attorney

BY _____
Assistant City Manager

CONTRACTOR:
XXX
a _____

BY _____

PRINTED
NAME _____

TITLE _____

THIS IS A SAMPLE CONTRACT FORM ONLY. THE ACTUAL CONTRACT MAY OR MAY NOT CONTAIN THE PROVISIONS HEREIN, DEPENDING ON THE SCOPE OF WORK.

PAYMENT BOND

STATE OF TEXAS §
 §
COUNTY OF DALLAS §

KNOW ALL MEN BY THESE PRESENTS: That _____,
whose address is _____, hereinafter called
Principal, and _____, a corporation organized
and existing under the laws of the State of _____, and fully authorized to transact business in
the State of Texas, as Surety, are held and firmly bound unto the City of Dallas, a municipal
corporation organized and existing under the laws of the State of Texas, hereinafter called
Owner, and unto all persons, firms, and corporations who may furnish materials for, or perform
labor upon the building or improvements hereinafter referred to, in the penal sum of
_____ DOLLARS (\$_____) in lawful money
of the United States, to be paid in Dallas County, Texas, for the payment of which sum well and
truly to be made, we bind ourselves, our heirs, executors, administrators and successors
jointly and severally, firmly by these presents. This Bond shall automatically be increased by
the amount of any Change Order or Supplemental Agreement which increases the Contract
price, but in no event shall a Change Order or Supplemental Agreement which reduces the
Contract price decrease the penal sum of this Bond.

THE OBLIGATION TO PAY SAME is conditioned as follows: Whereas, the Principal entered
into a certain Contract, identified by Resolution No. _____, with the City of Dallas, the
Owner, dated the ____ day of _____, A.D. 20____, a copy of which is hereto attached and
made a part hereof, for _____.

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties and make
prompt payment to all persons, firms, subcontractors, corporations and claimants supplying
labor and/or material in the prosecution of the Work provided for in said Contract and any and
all duly authorized modifications of said Contract that may hereafter be made, notice of which
modification to the Surety is hereby expressly waived, then this obligation shall be void;
otherwise it shall remain in full force and effect.

PROVIDED FURTHER, that if any legal action be filed on this Bond, exclusive venue shall lie
in Dallas County, Texas.

AND PROVIDED FURTHER, that the said Surety, for value received, hereby stipulates and
agrees that no change, extension of time, alteration or addition to the Contract, or to the Work
performed thereunder, or the Plans, Specifications, Drawings, etc., accompanying the same,
shall in anywise 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.

THIS IS A SAMPLE CONTRACT FORM ONLY. THE ACTUAL CONTRACT MAY OR MAY NOT CONTAIN THE PROVISIONS HEREIN, DEPENDING ON THE SCOPE OF WORK.

This Bond is given pursuant to the provisions of Chapter 2253 of the Texas Government Code, as amended, and any other applicable statutes of the State of Texas.

The undersigned and designated agent is hereby designated by the Surety herein as the Resident Agent in Dallas County to whom any requisite notices may be delivered and on whom service of process may be had in matters arising out of such suretyship, as provided by Section 3503.003 of the Insurance Code, Vernon's Texas Codes Annotated.

THE ADDRESS OF THE SURETY TO WHICH ANY NOTICE OF CLAIM SHOULD BE SENT MAY BE OBTAINED FROM THE TEXAS DEPARTMENT OF INSURANCE IN AUSTIN, TEXAS BY CALLING THE FOLLOWING TOLL-FREE TELEPHONE NUMBER: 1-800-252-3439.

IN WITNESS WHEREOF, this instrument is executed in _____ copies, each one of which shall be deemed an original, this day of , 20_____.

ATTEST:

PRINCIPAL:

BY _____
Secretary

BY _____
President

ATTEST:

SURETY:

BY _____

BY _____
Attorney-in-Fact

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

NAME: _____

STREET ADDRESS: _____

(NOTE: Date of Payment Bond must be date of Contract. If Resident Agent is not a corporation, give a **person's** name.)

THIS IS A SAMPLE CONTRACT FORM ONLY. THE ACTUAL CONTRACT MAY OR MAY NOT CONTAIN THE PROVISIONS HEREIN, DEPENDING ON THE SCOPE OF WORK.

PERFORMANCE BOND

STATE OF TEXAS §
 §
COUNTY OF DALLAS §

KNOW ALL MEN BY THESE PRESENTS: That

_____, whose address is _____, hereinafter called Principal, and _____, a corporation organized and existing under the laws of the State of _____, and fully authorized to transact business in the State of Texas, as Surety, are held and firmly bound unto the City of Dallas, a municipal corporation organized and existing under the laws of the State of Texas, hereinafter called Owner, in the penal sum of _____ DOLLARS (\$_____) plus 10 percent of the stated penal sum as an additional sum of money representing additional court expenses, attorneys' fees, and liquidated damages arising out of or connected with the below identified Contract in lawful money of the United States, to be paid in Dallas County, Texas, for the payment of which sum well and truly to be made, we hereby bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents. This Bond shall automatically be increased by the amount of any Change Order or Supplemental Agreement which increases the Contract price, but in no event shall a Change Order or Supplemental Agreement which reduces the Contract price decrease the penal sum of this Bond.

THE OBLIGATION TO PAY SAME is conditioned as follows:

Whereas, the Principal entered into a certain Contract, identified by Resolution No. _____, with the City of Dallas, the Owner, dated the day of _____, A.D. 20____, a copy of which is hereto attached and made a part hereof, for

_____.
NOW, THEREFORE, if the Principal shall well, truly and faithfully perform and fulfill all of the undertakings, covenants, terms, conditions and agreements of said Contract in accordance with the plans, specifications and Contract Documents during the original term thereof and any extension thereof which may be granted by the Owner, with or without notice to the Surety, and during the life of any guaranty or warranty required under this Contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said Contract that may hereafter be made, notice of which modifications to the Surety being hereby waived; and, if the Principal shall repair and/or replace all defects due to faulty materials and workmanship that appear within a period of one (1) year from the date of final completion and final acceptance of the Work by Owner; and, if the Principal shall fully indemnify and save harmless the Owner from all costs and damages which Owner may suffer by reason of failure to so perform herein and shall fully reimburse and repay Owner all outlay and expense which the Owner may incur in making good any default or deficiency, then this obligation shall be void; otherwise, it shall remain in full force and effect.

PROVIDED FURTHER, that if any legal action be filed upon this Bond, exclusive venue shall lie in Dallas County, State of Texas.

THIS IS A SAMPLE CONTRACT FORM ONLY. THE ACTUAL CONTRACT MAY OR MAY NOT CONTAIN THE PROVISIONS HEREIN, DEPENDING ON THE SCOPE OF WORK.

AND PROVIDED FURTHER, that the said 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 to be performed thereunder or the Specifications accompanying the same shall in anywise 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 or to the Specifications.

This Bond is given pursuant to the provisions of Chapter 2253 of the Texas Government Code, as amended, and any other applicable statutes of the State of Texas.

The undersigned and designated agent is hereby designated by the Surety herein as the Resident Agent in Dallas County to whom any requisite notices may be delivered and on whom service of process may be had in matters arising out of such suretyship, as provided by Section 3503.003 of the Insurance Code, Vernon's Texas Codes Annotated.

THE ADDRESS OF THE SURETY TO WHICH ANY NOTICE OF CLAIM SHOULD BE SENT MAY BE OBTAINED FROM THE TEXAS DEPARTMENT OF INSURANCE IN AUSTIN, TEXAS BY CALLING THE FOLLOWING TOLL-FREE TELEPHONE NUMBER: 1-800-252-3439.

IN WITNESS WHEREOF, this instrument is executed in copies, each one of which shall be deemed an original, this day of, **20**_____.

ATTEST:

BY _____
Secretary

PRINCIPAL:

BY _____
President

ATTEST:

BY _____

SURETY:

BY _____
Attorney-in-Fact

THIS IS A SAMPLE CONTRACT FORM ONLY. THE ACTUAL CONTRACT MAY OR MAY NOT CONTAIN THE PROVISIONS HEREIN, DEPENDING ON THE SCOPE OF WORK.

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

NAME: _____

STREET ADDRESS: _____

(**NOTE:** Date of Performance Bond must be date of Contract. If Resident Agent is not a corporation, give a **person's** name.)

TO THE HONORABLE MAYOR AND CITY COUNCIL,
CITY OF DALLAS, TEXAS

Gentlemen:

The undersigned hereby certify that the location of the proposed work, the Special Provisions, the General Provisions and Requirements, the Specifications, the forms of Contract and Bonds, have been carefully examined, and that they have had sufficient time to make all tests and investigations necessary to arrive at an intelligent estimate of the cost of doing the work, and agree that if this proposal is accepted by the City of Dallas, all labor, tools, materials, machinery, appliances, equipment, supplies, insurance and other incidentals necessary for doing the said work, will be provided; and the work completed in a first class workmanlike manner in strict accordance with the Special Provisions and requirements, and the Specifications on file in the Office of the Director of Water Utilities Department of the City of Dallas.

The undersigned further agree that if this Proposal is accepted by the City of Dallas, the undersigned will appear before the City Attorney of the City of Dallas, with the sureties offered by

_____ and

execute the Contract in duplicate.

This Proposal, Special Provisions, the General Provisions and Requirements, and the Specifications and such further terms and provisions as may be provided by the City Council, shall become a part of the Contract.

Place: Dallas, Texas

Date: _____

Proposal of _____

A corporation organized and existing under the laws of the State of _____;

Or partnership consisting of _____; or an individual trading as _____

TO THE CITY OF DALLAS, TEXAS
DALLAS, TEXAS

Gentlemen:

The undersigned hereby propose to furnish all labor and material, tools and necessary equipment for the construction of the project, and to perform the work required for the construction of the said project, at the locations set out by the plans and specifications, in strict accordance with the Contract documents.

The undersigned further agree to appear before the City Attorney to execute said contract within ten days from the date of notification of the acceptance of this proposal, or within such time as the Council of the City of Dallas may determine, and in case the undersigned fail or neglect to appear to execute the Contract within the specified time, of which this proposal, the plans, specifications, special provisions and advertisements are a part, the undersigned will be considered as having abandoned it, and the cashier's check or bidder's bond in the sum of

_____ (\$_____) Dollars
accompanying this proposal will be forfeited to the City of Dallas, Texas by reason of such failure on the part of the undersigned.

The undersigned further agree that the proposal guaranty may be retained by the City of Dallas, Texas, provided the undersigned is one of the three lowest and most advantageous Bidders, and that said proposal guaranty shall remain with the City of Dallas until the Contract has been signed and the bond required for the faithful performance of the Contract has been made by one of the three lowest responsible Bidders; otherwise, proposal guaranty may be obtained from the City Secretary after forty-eight hours from the time of opening the bids.

The undersigned certify that this proposal is made in good faith, without collusion or connection with any other person, persons, partnership, company, firm association or corporation offering bids on this work, for the following sum or prices, to wit:

PROPOSAL (continued)

The undersigned hereby declare that they have visited sites and have carefully examined the plans, specifications and contract documents relating to the work covered by their bid or bids, that they agree to do the work, and that no representations made by the City are in any sense a warranty, but are mere estimates for the guidance of the Contractor.

Upon receipt of notice of the acceptance of the bid, they will execute the formal Contract attached within ten (10) days, and will deliver a Surety Bond for the faithful performance of this Contract. The bid security attached without endorsement, in the sum of

_____ (\$ _____) Dollars is to become the property of the City of Dallas in the event the Contract and Bonds are not executed within the time above set forth, as liquidated damages for the delay and additional work caused thereby.

Number of Signed Sets of Documents: The Contract and all Bonds will be prepared in not less than two (2) counterpart (Original Signed Sets).

Time of Completion: The undersigned agree to complete the work **As Specified Per Special Provision S-6.**

The undersigned further declare that they will provide all necessary tools and apparatus, do all work, and furnish all materials, and do everything required to carry out the above mentioned work covered by this proposal, in strict accordance with the contract documents, and the requirements pertaining thereto, for the sum above set forth.

Respectively submitted,

NOTE: Do not detach bid from other papers. Fill in with ink and submit complete with attached papers

By _____

(Address)

(Must be a street address and not a Post Office Box)

Telephone Number

Cashier's check or the attached Bid Bond, payable to the City of Dallas in an amount of not less than five percent of total Bid submitted must accompany Bid. City reserves the right to reject any or all Bids.

NOTE!

**USING ANOTHER FORM OF BID BOND OTHER THAN
THE ONE SHOWN IN THIS PROPOSAL MAY RESULT
IN THE REJECTION OF BID.**

The name of the resident agent in Dallas County of the Surety Company is also required. (This name must be the name of a natural person residing in **Dallas County, Texas**)

BID BOND

THE STATE OF TEXAS ☐

☐ **KNOWN ALL MEN BY THESE PRESENTS**

COUNTY OF DALLAS ☐

THAT we, _____, as Principal, and _____, a Corporation duly organized under the laws of the State of _____ and authorized to do business in the State of Texas, as Surety, are held and firmly bound unto the

CITY OF DALLAS, TEXAS, a Municipal Corporation,

as Obligee, in the penal sum of **FIVE PERCENT (5%) OF THE GREATEST AMOUNT BID**, lawful money of the United States of America; for the payment of which, will and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

SIGNED, SEALED, AND DATED this _____ day of _____ 20____.
WHEREAS, the Principal is herewith submitting this proposal for:

THE CONDITION OF THE ABOVE OBLIGATIONS ARE SUCH, that if the aforesaid Principal shall be awarded the Contract, the said Principal will, within the time required, enter into a Contract and give Bonds for the faithful performance of the Contract and the prompt payment for labor and materials in the prosecution thereof, then this obligation shall be null and void, otherwise the Principal and Surety will pay unto the Obligee the full penal sum thereof, as liquidated damages, it being difficult and impractical to determine accurately the actual amount of damages occurring to the Obligee by reasons of Principal's failure to execute said Contract and Bonds.

PROVIDED FURTHER, that if any legal action be filed upon this Bond, venue shall lie exclusively in Dallas County, Texas.

ATTEST

Secretary

PRINCIPAL

By _____
(Title)

ATTEST

Secretary

SURETY

By _____
(Title)

BID BOND (Continued)

(NOTE: Certified copy of Power of Attorney must be attached hereto unless previously on file with the City Secretary.)

The Resident Agent of the Surety in Dallas County, Texas, for delivery of Notice and Service of Process is:

NAME _____ **ADDRESS** _____

TELEPHONE _____

The Bidder must complete this form regardless of whether or not the same information is given in the Bidder's Bond:

1. Complete name and address of Surety Company for Performance and Payment Bonds:

2. Name of the Attorney-In-Fact of the Surety Company:

3. The name of the resident agent of the Surety Company in Dallas, County, Texas, (this name must be the name of a **natural person** residing in Dallas County, Texas):

4. Address of the resident agent of the Surety Agent in Dallas, County, Texas, (this must be a street address and not a Post Office box number):

Name of Bidder

Address

EXPERIENCE RECORD

Name: _____

Address: _____

Submitted By: _____

Name: _____

Telephone: (_____) _____

- I. How many years has your organization been in business as a General Contractor?

- II. State the work normally performed by your forces.

- III. Have you ever failed to complete any work awarded to you? If so, note when, where, why, and owner contact.

- IV. On a separate sheet, list the major construction contracts your organization has completed in the past three years, giving the type of contract, owner, owner contact, contract amount, date of completion and percentage of the work performed with your own forces. Resumes of key personnel to be assigned to the project must be provided with current assignments listed. Please provide a separate listing of City of Dallas contracts.

- V. Are you or your surety currently involved in any litigation with the City of Dallas? If yes, explain.

Signature

Date

Title



Date of Bid Opening

BIDDER'S AFFIDAVIT

The following information is required by City Council Resolution #891132.
Failure or refusal to complete this form may result in bid rejection.

The undersigned certifies that safety records from the Dallas OSHA office or the local OSHA office in which this firm does business does not reflect penalties for six (6) or more serious violations, none of which may be repeat violation, nor may it reflect three (3) or more willful violations, none of which may be repeat violations, within the preceding three (3) years.

Name of Signatory

Title

Address

Corporate Authorized
Signatory (Only)

Title

Address

The above signature must be by a Corporate Officer.

Legal Name of Bidder

Address

SWORN TO AND SUBSCRIBED BEFORE ME on this ____ day of _____,
20_____, to certify which witness my hand and seal of this office.

NOTARY PUBLIC, STATE OF _____

Printed Name of Notary

ATTENTION!

Read and follow the directions on the following page.

BE SURE TO **STRIKE THROUGH** the item indicated in (2) **OR** (3) that **DOES NOT APPLY** in the Environmental Record Affidavit.

ENVIRONMENTAL RECORD AFFIDAVIT

For purposes of this Affidavit:

- (A) the term "Bidder/Proposer" includes any and all authorized officers, employees, agents, or other representatives of Bidder/Proposer working in that capacity on behalf of Bidder/Proposer within the past three (3) years prior to the date of this Affidavit;
- (B) the term "Environmental Laws" includes the (i) Clean Air Act, (ii) Clean Water Act, (iii) any rules, regulations, or ordinances promulgated pursuant to either of the above mentioned acts by State, Federal, or local regulatory authorities, or (iv) any other State, Federal, or local environmental law, rule, regulation, or ordinance related to the protection of the environment, including but not limited to solid waste disposal, hazardous waste disposal, illegal discharges of pollutants, and other similar environmental laws, rules, regulations, and ordinances.

I, _____, the duly authorized representative of _____ (Hereinafter called the "Bidder/Proposer"), hereby swears (or affirms) on behalf of Bidder/Proposer the following:

- (1) That Bidder/Proposer has received and read the Contractor Environmental Packet. Bidder/Proposer also understands that the Contractor Environmental Packet is not intended to be all-inclusive, but rather a guideline for environmental responsibility.

[Strike the item indicated below that does NOT apply in this Affidavit.]

- (2) That Bidder/Proposer *has not* been served with any notices of violation, or notices of enforcement, nor had any civil or criminal fines or penalties imposed by any regulatory authority for a violation of any Environmental Laws within the past three (3) years prior to the date of this Affidavit.
- (3) That Bidder/Proposer *has* been served with any notices of violation or notices of enforcement or had any civil or criminal fines or penalties imposed by any regulatory authority for a violation of any Environmental within the past three (3) years prior to the date of this Affidavit as follows:

[If item (3) applies, use a separate sheet to list the notices of violation or enforcement, and any adjudication of actual violations, along with copies of any compliance documents issued by the regulatory authority in connection with the notices or actual violation, and attach the separate sheet to this affidavit.]

Subscribed to and sworn before me on this the _____ day of _____, 20____.

[Seal]

Notary Public
State of Texas

My Commission expires _____

A 27. CEMENT USE ON PUBLIC PROJECTS

Item **303.3.6.COD: Cement Used on Public Projects - Sustainable Air Quality**, as shown in the *City of Dallas Addendum to the North Central Texas Council of Governments Public Works Construction Standards (Fourth Edition, October 2004), Latest Edition*, is hereby replaced with the following:

(Page 303-14. Add the following:)

303.3.6.COD: CEMENT USED ON PUBLIC PROJECTS – SUSTAINABLE AIR QUALITY:

(A) Pursuant to Section 271.907 of the Texas Local Government Code, as amended, the OWNER will give a bid preference to the Bid of a CONTRACTOR who certifies in the Bid that, in the purchase of concrete or other products using Portland cement in construction of the Project, the CONTRACTOR will utilize Portland Cement from manufacturers who:

- (1) are in compliance with all applicable state and federal environmental standards relating to the emission of NO_x, including all applicable TCEQ and EPA rules and regulations; and
- (2) operate kilns with emissions that exceed the standards for NO_x emissions set out in 30 Tex. Admin. Code § 117.3110(a)(1)-(4) (as provided presently and as may be amended in the future) by the following percentage amounts:
 - (a) for each long wet kiln, 10 percent lower than the standard for long wet kilns located in Ellis County, Texas as set out in 30 Tex Admin Code § 117.3110(B);
 - (b) for each long dry kiln, 20 percent lower than the standard for long dry kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code § 117.3110(a)(2);
 - (c) for each preheater kiln, 20 percent lower than the standard for preheater kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code § 117.3110(a)(3); and
 - (d) for each preheater-precalciner or precalciner kiln, 35 percent lower than the standard for preheater-precalciner and precalciner kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code § 117.3110(a)(4).
[Reference: City Council Resolution No. 11-0657, passed by the Dallas City Council on March 9, 2011.]

- (B) The preference shall apply only to the extent that the CONTRACTOR'S Bid, as certified, is not greater than 105 percent of the lowest responsible Bid of a CONTRACTOR who does not or cannot certify that it will utilize Portland cement from a cement kiln meeting the above-mentioned emission standards. The OWNER reserves the right to pursue any remedies it has under the CONTRACT Documents in the event the CONTRACTOR falsely certifies to the requirements stated above, including but not limited to termination of the CONTRACT, adverse evaluation at final completion of the CONTRACT, or debarment from participation in future construction contracts the OWNER may advertise or award. The OWNER also reserves the right to reject any load or item of Portland cement, concrete, or other product containing Portland cement delivered in the event it is discovered that the Portland cement used in the load or item was not manufactured as certified.
- (C) When a bidding preference has been granted as provided herein and any load or item of Portland cement, concrete, or other product which contains Portland cement is delivered to the Project site for use, the CONTRACTOR shall obtain and present to the OWNER a sworn-to certification, using a certification form approved by the OWNER, from the Portland cement or concrete manufacturer that the load or item delivered contains no Portland cement other than Portland cement meeting the requirements as specified in Paragraph (A). The CONTRACTOR shall also obtain a manifest for each Portland cement or concrete load showing the quantity of Portland cement or concrete delivered and the location of the manufacture of the Portland cement, along with the name of a designated representative of the Portland cement manufacturer for purposes of contact by the OWNER if necessary. On a monthly basis or other frequency desired by the OWNER, the CONTRACTOR shall furnish for inspection by the OWNER of a copy of the delivery manifests obtained. The CONTRACTOR shall certify in writing that the manifests are true and correct to the best of the CONTRACTOR'S knowledge. Notwithstanding the manufacturer's certification, the CONTRACTOR will be held responsible in the event the OWNER discovers that the cement used was not manufactured in accordance with the requirements of Paragraph (A).
- (D) The OWNER reserves the right to pursue any remedies it has under the CONTRACT Documents in the event the CONTRACTOR fails to comply with this materials specification, including but not limited to termination of the CONTRACT, adverse evaluation at final completion of the CONTRACT, or debarment from participation in future construction contracts the OWNER may advertise or award. The OWNER also reserves the right to reject any load or item of Portland cement, concrete, or other product containing Portland cement delivered in the event it is discovered that the Portland cement used in the load or item was not manufactured as certified.
- (E) Copies of the required forms are found on the following pages:

CEMENT PREFERENCE CERTIFICATION

I, _____, the _____ [state title of officer of company] of _____ [legal name of bidder company], do hereby certify that my bid for concrete products utilizes Portland cement produced by vendors who:

- (1) are in compliance with all applicable state and federal environmental standards relating to the emission of NOx, including all applicable TCEQ and EPA rules and regulations; and
- (2) operate kilns with emissions that exceed the standards for NOx emissions set out in 30 Tex. Admin. Code § 117.3110(a)(1)-(4) (as provided presently and as may be amended in the future) by the following percentage amounts:
 - (a) for each **long wet kiln**, 10 percent lower than the standard for long wet kilns located in Ellis County, Texas as set out in 30 Tex. Admin. Code § 117.310(a)(1)(B) ***[As of 3-9-11, wet kiln NOx emissions can NOT exceed 3.6 lbs per ton of clinker produced.];***
 - (b) for each **long dry kiln**, 20 percent lower than the standard for long dry kilns located in Ellis County, Texas, as set out in 30 Texas. Admin. Code § 117.3110(a)(2) ***[As of 3-9-11, dry kiln NOx emissions can NOT exceed 4.1 lbs per ton of clinker produced.];***
 - (c) for each **preheater kiln**, 20 percent lower than the standard for preheater kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code § 117.3110(a)(3) ***[As of 3-9-11, preheater kiln NOx emissions can NOT exceed 3.0 lbs per ton of clinker produced.];*** and
 - (d) for each **preheater-precalciner or precalciner kiln**, 35 percent lower than the standard for preheater-precalciner and precalciner kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code § 117.3110(a)(4) ***[As of 3-9-11, preheater-precalciner or precalciner kiln NOx emissions can NOT exceed 1.8 lbs per ton of clinker produced.];***

BIDDER:

Print Name and Title

SUBSCRIBED and SWORN TO before me this ____ day of _____, 20____.

[Seal]

Notary Public, State of Texas

My commission expires: _____

[SEAL]

CONTRACTOR'S ACT OF ASSURANCE RESOLUTION

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

Authorized Representative(s):

--

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

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

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

_____(Secretary)

[SEAL]

BIDDER'S CERTIFICATIONS

Project Name _____

Project Number _____

Contract For _____

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

A. EQUAL EMPLOYMENT OPPROTUNITY:

() I have developed and have on file at my each establishment affirmative action programs pursuant to 41 CFR Part 60-2.

() I have participated in previous contract(s) or subcontract(s) subject to the equal opportunity clause under **Executive Orders 11246 and 11375**. I have filed all reports due under the requirements contained in 41 CFR 60-1.7.

() I have not participated in previous contracts(s) subject to the equal opportunity clause under **Executive Orders 11246 and 11375**.

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

B. NONSEGREGATED FACILITIES

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

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

Typed Name & Title of Bidder's Authorized Representative

Signature of Bidder's Authorized Representative Date

Name & Address of Bidder

**THE FOLLOWING PAGES
ARE TO BE COMPLETED
BY THE APPARENT
LOW BIDDER / MOST ADVANTAGEOUS BIDDER**

TWDB-0216
TEXAS WATER DEVELOPMENT BOARD
AFFIRMATIVE STEPS SOLICITATION REPORT

I. PROJECT INFORMATION

TWDB Project Number	Applicant/Entity Name	Total TWDB Funding Request	Program Type (insert "X" for all that apply)	
			<input type="checkbox"/>	Drinking Water SRF (DWSRF)
			<input type="checkbox"/>	Clean Water SRF (CWSRF)

Project Name: _____

Solicitation By: ☐ Applicant/Entity OR ☐ Prime Contracted Business: _____

Project Phase: ☐ Prior to Closing ☐ Release of funding for PADs ☐ Construction Contract # _____

II. SOLICITATION METHOD(S) UTILIZED

At least two methods of solicitation are required. Select the method(s) utilized for the solicitation. Copies of the actual postings, direct contact email/phone log, etc. must be attached to this form as support documentation for each method used. Failure to adequately follow these steps will result in the requirement to complete additional steps in order to become compliant.

- ☐ Newspaper Advertisements
 ☐ Meetings or Conferences
 ☐ Trade Association Publications
☐ Minority Media
 ☐ Internet & Web Postings
 ☐ Other Government Publications
☐ Direct Contact by Phone, Fax, USPS Mail, or Email*

If using direct contact, entities must solicit to a **minimum of 3 businesses/firms (at least one being a DBE) for each category of contract sought (i.e., construction, supplies, equipment, or services) to demonstrate a Good Faith Effort.*

III. PROJECT BIDDERS LIST:

List on the following table, or provide on a separate list, each business entity directly solicited for procurement or that submitted a bid for consideration.

Instructions for Columns 1 - 4	1 - Full business name (line one) & point of contact (line two) 2 - Business address 3 - Telephone number 4 - Email address for the business
Instructions for Column 5	Enter one of the following procurement or contract categories: CONSTRUCTION – SUPPLIES – EQUIPMENT – SERVICES <i>For detailed definitions, review guidance document, TWDB-0210.</i>
Instructions for Column 6	Enter the type of business: MBE - Minority Business Enterprise, WBE - Women-owned Business Enterprise, or OTHER - Company or firm is Non-MBE or WBE

Notice: Entities receiving State Revolving Fund financial assistance must create and maintain a Bidders List if the entity is subject to, or chooses to follow, competitive bidding. The Bidders List must include all firms that bid or quoted on contracts under EPA assisted projects, including both MBE/WBEs and non-MBE/WBEs. Entities must keep all Bidders Lists until project completion or the recipient is no longer receiving EPA funding under the loan, whichever is later. Entities with loans totaling less than \$250,000 during a state fiscal year are exempt from the Bidders List requirement, but must still meet DBE program requirements. The Bidders List requirement also applies to all Prime Contracted Businesses/Firms that make subcontracting.

	Column 1 Business Name & Point of Contact	Column 2 Business Address	Column 3 Telephone Number	Column 4 E-Mail Address	Column 5 Procurement Category	Column 6 MBE/WBE Status
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						

Use additional sheets if necessary

Signature – Authorized Representative	Title (print legibly)	Date

IV. TWDB APPROVAL SIGNATURE

Signature indicates the form meets DBE requirements.

DBE Coordinator	Approval Date

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

I. PROJECT INFORMATION

TWDB Project Number	Applicant/Entity Name	Total of TWDB Funding	Program Type (insert "X" for all that apply)	
			<input type="checkbox"/>	Drinking Water SRF (DWSRF)
			<input type="checkbox"/>	Clean Water SRF (CWSRF)

Prime Consultant/Contractor: _____

Contract Number: _____ Contract Amount: _____

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

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

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

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

III. PROJECT PARTICIPATION ESTIMATES

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

	Potential MBE Participation	Potential WBE Participation
Cost Category	Goal	Goal
Construction	19.44%	9.17%
Supplies	25.34%	8.82%
Equipment	16.28%	11.45%
Services	20.41%	13.66%

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

IV. TWDB APPROVAL SIGNATURE

Signature indicates the form meets DBE Requirements.

DBE Coordinator	Approval Date

TWDB-0373
TEXAS WATER DEVELOPMENT BOARD
PARTICIPATION SUMMARY

I. PROJECT INFORMATION

TWDB Project Number	Applicant/Entity Name	Total TWDB Funding Request	Program Type (insert "X" for all that apply)
			<input type="checkbox"/> Drinking Water SRF (DWSRF)
			<input type="checkbox"/> Clean Water SRF (CWSRF)

Project Name: _____

Solicitation By: ☐ Applicant/Entity OR ☐ Prime Contracted Business: _____

Project Phase: ☐ Prior to Closing ☐ Release of funding for PADs ☐ Construction Contract # _____

Instructions

Column 1	Enter the full name, street address, city/state/zip for each firm awarded a contract for the project.
Column 2	Enter one of the following procurement or contract categories: CONSTRUCTION – SUPPLIES – EQUIPMENT – SERVICES
Column 3	Enter the type of business: MBE (Minority Business Enterprise), WBE (Women-owned Business Enterprise), or OTHER (NOTE: OTHER = Company or firm is Non-MBE or WBE)
Column 4	Enter the exact amount of the awarded contract.
Column 5	Enter the exact date the contract was executed or the proposed date of contract execution.

If valid MBE/WBE firms are awarded contracts, a copy of their certification is required to be attached with this form for each MBE/WBE business listed.

Notice: Brokers may not be listed below as an MBE or WBE. A broker is a firm that does not perform, manage, or supervise the work of its sub/contract in a manner consistent with the normal business practices for sub/contractors in its line of business. For more specifics, review guidance document, TWDB-0210.

II. LIST OF ACTUAL CONTRACTS/PROCUREMENTS

	Column 1 Name & Address of Contracted Firm/Vendor	Column 2 Procurement Category	Column 3 MBE/WBE Status	Column 4 Contract Amount (\$)	Column 5 Contract Execution Date
1.					
2.					
3.					
4.					
5.					
6.					

(Table continues on the next page)

	Column 1	Column 2	Column 3	Column 4	Column 5
	Name & Address of Contracted Firm/Vendor	Procurement Category	MBE/WBE Status	Contract Amount (\$)	Contract Execution Date
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					

Use additional sheets if necessary

Signature – Authorized Representative	Title (print legibly)	Date

III. TWDB APPROVAL SIGNATURE

Signature indicates the form meets DBE requirements.

DBE Coordinator	Approval Date

CONCRETE/CEMENT DELIVERY CERTIFICATION

I, _____, the _____ [state title of officer of company] of _____ [legal name of Portland cement or concrete manufacturer], do hereby certify that the concrete/cement products delivered between _____ and _____ to the City of Dallas project known as _____ utilizes Portland cement produced by vendors who:

- (1) are in compliance with all applicable state and federal environmental standards relating to the emission of NOx, including all applicable TCEQ and EPA rules and regulations; and
- (2) operate kilns with emissions that exceed the standards for NOx emissions set out in 30 Tex. Admin. Code § 117.3110(a)(1)-(4) (as provided presently and as may be amended in the future) by the following percentage amounts:
 - (a) for each **long wet kiln**, 10 percent lower than the standard for long wet kilns located in Ellis County, Texas as set out in 30 Tex. Admin. Code §117.310(a)(1)(B) ***[As of 3-9-11, wet kiln NOx emissions can NOT exceed 3.6 lbs per ton of clinker produced.];***
 - (b) for each **long dry kiln**, 20 percent lower than the standard for long dry kilns located in Ellis County, Texas, as set out in 30 Texas. Admin. Code §117.3110(a)(2) ***[As of 3-9-11, dry kiln NOx emissions can NOT exceed 4.1 lbs per ton of clinker produced.];***
 - (c) for each **preheater kiln**, 20 percent lower than the standard for preheater kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Cod §117.3110(a)(3) ***[As of 3-9-11, preheater kiln NOx emissions can NOT exceed 3.0 lbs per ton of clinker produced.];*** and
 - (d) for each **preheater-precalciner or precalciner kiln**, 35 percent lower than the standard for preheater-precalciner and precalciner kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code §117.3110(a)(4) ***[As of 3-9-11, preheater-precalciner or precalciner kiln emissions can NOT exceed 1.8 lbs per ton of clinker produced.];***

CONCRETE/CEMENT MANUFACTURER:

Print Name and Title

SUBSCRIBED and SWORN TO before me this ____ day of _____, 20__.

[Seal]

Notary Public, State of Texas

My commission expires: _____

BUSINESS INCLUSION AND DEVELOPMENT POLICY

It is the policy of the City of Dallas to involve certified Minority and Women-Owned Business Enterprises (M/WBEs) to the greatest extent feasible on the City's construction, general services, and professional services contracts. It is the policy of the City of Dallas to encourage the growth and development of M/WBEs that can successfully compete for contracting opportunities. The City and its contractors shall not discriminate on the basis of race, age, color, ancestry, national origin, place of birth, religion, sex, sexual orientation, gender identity and expression, military or veteran status, genetic characteristics, or disability unrelated to job performance in the award and performance of contracts. In consideration of this policy, the City of Dallas has adopted the Business Inclusion and Development (BID) Policy for all City of Dallas contracts.

Following are the City of Dallas' adopted M/WBE goals without consideration for specific ethnicity or gender adopted on September 23, 2020 (Resolution Number 20-1430):

<u>Construction</u>	<u>Architecture & Engineering</u>	<u>Professional Services</u>	<u>Other Services</u>	<u>Goods</u>
32.00%	34.00%	38.00%	N/A	32.00%

While minority business participation may vary from time to time in accordance with procurement specifications and the availability of minority enterprises in the marketplace, the City of Dallas believes the goals to be realistically obtainable.

In accordance with the City's Business Inclusion and Development Policy adopted on September 23, 2020, by Resolution No. 20-1430, as amended, the M/WBE participation on this contract is as follows:

Procurement Type: Goal

ATTENTION

All bidders must submit With Their Bid the following Forms Completed and signed

Pre-Bid/Proposal Cover Memo (BWI-FRM-622)
City of Dallas Pre-Bid/Proposal Form (BWI-FRM-623)
City of Dallas Ethic Workforce Report (BWI-FRM 627)

Any firm listed as M/WBE must be certified by one of the following Certification Agencies:

- 1) North Central Texas Regional Certification Agency (NCTRCA)
616 Six Flags Drive, Suite 128
Arlington, Texas 76011
817-640-0606
- 2) Dallas Fort Worth Minority Business Council
2710 N. Stemmons Freeway
Dallas, Texas 75207
214-630-0747
- 3) The Women's Business Council – Southwest
2201 N. Collins, Suite 158
Arlington, Texas 76011
214-299-0566

A list of Minority/Women Owned Business Enterprises or other information or assistance can be obtained from the Business and Workforce Inclusion Division of the Office of Economic Development, City Hall, 6DN, 1500 Marilla Street, Dallas, Texas, 75201, Phone: (214) 670-5010.

WORK WITH OWN FORCES

Where a Contractor indicates lower M/WBE participation than the City of Dallas typically sees for similar projects and the Contractor is indicating there are limited subcontracting opportunities as a result of the Contractor performing the remaining work with their own forces as their normal business practice, the following information may be deemed adequate documentation.

For each previous project

Name of Project

Location

Contracting Agency

Description of work performed

For each specific item of work (i.e. hauling, concrete pavement, pipe installation, etc.)

Work Forces

Documentation showing name and job classifications.

Which individuals actually performed the work?

If individuals were classified other than what the work called for, why? (i.e. Pipefitter performing concrete finishing work.)

List of extra individuals hired to do this work (temporary, day laborers, etc.) Is the same work force to be used on this project?

Note: If additional personnel are required, an M/WBE subcontracting opportunity exists; this includes, but is not limited to, M/WBE temporary personnel agencies, subcontractors, and suppliers.

Equipment

List equipment required for that specific item of work. Did the Contractor own the equipment? Is it available for use on this job?

Note: If equipment was rented, is not available for this job or if additional equipment will be required, an M/WBE subcontracting opportunity exists. This includes, but is not limited to, equipment rental or purchase from M/WBE firms.

Verification:

The Contractor must provide written verification from a representative of the contracting agency with knowledge of the project verifying that the Contractor did perform the work stated with its own forces.

For each area where specific work was subcontracted on previous jobs, but the intent is to use the Contractor's own forces for the proposed job:

Reason for change in practice

If workload, provide documentation to prove

If new responsibilities for crews; provide documentation on training or reclassification, etc.

Note: Documented previous poor performance on the part of a subcontractor is a legitimate reason not to use that particular subcontractor again but does not eliminate the need to contact other qualified M/WBE firms for that work item.



CITY OF DALLAS
Office of Economic Development - Business and Workforce Inclusion
Contractor's Affidavit - Schedule of Work and Actual Payment (BWI-FRM-213)

Project Name: _____ Bid/Contract #: _____

Instructions:

Column 1: List type of work to be performed by Prime and 1st tier subcontractors.

Column 2: City of Dallas Vendor Number for Prime and Subcontractors/Suppliers (If none, register online: www.bids.dallascityhall.org). ALL Prime and Subcontractors/Suppliers must be registered with the City of Dallas.

Column 3: List name of firm; M/WBE Certification Number (if applicable).

Column 4: List firm(s); contact name; address; telephone number.

Column 5: List ethnicity of firm(s) owner as B=African American; H=Hispanic; I=Asian Indian; N=Native American; P=Asian Pacific; W=Woman; NON=other than M/WBE.

Column 6: Indicate firm's location as L=local (within Dallas county limits); N=Non-local (Outside Dallas county limits).

Column 7: Indicate dollar amount of value of work for the Prime contractor, subcontractors, and suppliers.

Column 8: Indicate percentage of total contract amount.

Column 9: Indicate total payments to date.

Column 10: Indicate payments during current pay period.

Type of Work [1]	City of Dallas Vendor Number [2]	Name of Firm & M/WBE Certification (If Applicable) [3]	Contact Name Address, City, State, Zip & Tel. Number [4]	Type of Firm [5]	L or N [6]	Value of Work (\$) [7]	Percent (%) [8]	Payments to Date (\$) [9]	Payment this Period (\$) [10]
							#VALUE!		
Notes:									
							#DIV/0!		
Notes:									
							#DIV/0!		
Notes:									
							#DIV/0!		
Notes:									
							#DIV/0!		
Notes:									
							#DIV/0!		
Notes:									
							#DIV/0!		
Notes:									



CITY OF DALLAS
Office of Economic Development – Business and Workforce Inclusion
Subcontractor Intent Form (BWI-FRM-214)

(Note: Please use the Tab button, mouse or arrows to move from one section to the next. Please DO NOT use the "Enter" key.)

TO: City of Dallas DATE: _____
Office of Economic Development - Business and Workforce Inclusion

Project Name: _____ Bid # _____

_____ will provide the following

_____ M/WBE Subcontractor on the project

good(s)/service(s): _____

to _____

_____ Prime Contractor on the project

MWBE subcontractor is currently certified by the following agency: _____

M/WBE Certification Number: # _____

Certification must be kept current / valid for the entire duration of this contract. Failure to comply with this provision could be subject to removal from contract.

For the purpose of M/WBE subcontracting participation, the City of Dallas does not include amounts paid to the prime by the sub-contractor.

Total Contract Amount for prime	\$ _____	_____ NCTRCA
		_____ DFWMSDC
MWBE/DBE Sub Participation Amount	\$ _____	% _____ WBCSW

The undersigned intends to enter into a formal agreement with the subcontractor listed, conditioned upon being awarded the City of Dallas contract. The undersigned understands that, for the purpose of M/WBE subcontracting participation, any amounts paid to the prime from the sub contractor should not be included in the above listed participation amount. Finally, the prime contractor must submit a Change of M/WBE subcontractor/supplier form to the Business and Workforce Inclusion division for approval prior to any changes in the team make-up. Failure to comply with these provisions could result in termination of the contract, sanctions against the prime contractor, and/or ineligibility for future City contracts.

Officer's Signature (Prime Contractor)

Officer's Signature (M/WBE/DBE Subcontractor)

Printed Name (Prime Contractor)

Printed Name (M/WBE/DBE Subcontractor)

Title (Prime Contractor)

Title (M/WBE/DBE Subcontractor)

Date

Date

Please select or list all Chambers or Advocacy groups you are a member of:

	Prime	Sub		Prime	Sub
Greater Dallas Asian American Chamber of Commerce	<input type="checkbox"/>	<input type="checkbox"/>	Asian Contractors Association	<input type="checkbox"/>	<input type="checkbox"/>
Greater Dallas Black Chamber of Commerce	<input type="checkbox"/>	<input type="checkbox"/>	Regional Black Contractors Association	<input type="checkbox"/>	<input type="checkbox"/>
Greater Dallas Hispanic Chamber of Commerce	<input type="checkbox"/>	<input type="checkbox"/>	Regional Hispanic Contractors Association	<input type="checkbox"/>	<input type="checkbox"/>
U.S. Pan Asian American Chamber of Commerce	<input type="checkbox"/>	<input type="checkbox"/>			

Other _____



CITY OF DALLAS
Office of Economic Development – Business and Workforce Inclusion
Business Inclusion and Development Documentation Form (BWI-FRM-215)

(Note: Please use the Tab button, mouse or arrows to move from one section to the next. Please DO NOT use the “Enter” key.)

Project Name

Bid #:

Firm Name and Address:

1. Did you meet with a staff member of the Office of Economic Development Business and Workforce Inclusion (BWI)?

Please make a
selection:

Name of staff member:

2. Did you utilize a current M/WBE directory provided by BWI staff for this project?

Please make a
selection:

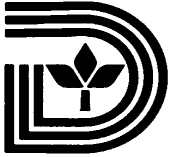
Date of Listing:

3. Did you provide plans and specifications, bids or proposals to potential M/WBEs or information regarding the location of plans and specifications, bids, or proposals for this project?

Please make a
selection:

4. If M/WBE bids and proposals were received and rejected, you must attach documentation of the received bid and the reason for rejection. (i.e. letters, memos, telephone calls, meetings, etc.)

5. Complete the attached Documentation Form(s) to further explain good faith efforts to obtain M/WBE participation on this project. If there is written documentation of efforts with the M/WBEs who responded affirmatively to the bidder’s written notice please attach documentation (i.e. quotes, or e-mails).



CITY OF DALLAS
Office of Economic Development – Business and Workforce Inclusion
Business Inclusion and Development Documentation Form (BWI-FRM-215)

(Note: Please use the Tab button, arrows or mouse to move from one section to the next. Please *DO NOT* use the “Enter” key.)

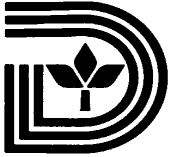
Project Name #: _____ **Bid #:** _____

Firm Name and M/WBE Certification Number	Person Contacted and Date	Telephone Number and Email Address	Type of Work	Method of Communication (Telephone/Email)	Response
		- -			
		- -			
		- -			
		- -			
		- -			
		- -			
		- -			

Please use the form(s) below if additional space is needed. Intentional misrepresentation could result in criminal prosecution.

Officer's Signature: _____ **Title:** _____ **Date:** _____

Printed Name: _____ **Date:** _____



CITY OF DALLAS
Office of Economic Development – Business and Workforce Inclusion
Business Inclusion and Development Documentation Form (BWI-FRM-215)

(Note: Please use the Tab button, arrows or mouse to move from one section to the next. *Please DO NOT use the “Enter” key.*)

Project Name & Bid/Contract #: _____ **#:** _____

Firm Name and M/WBE Certification Number	Person Contacted and Date	Telephone Number and Email Address	Type of Work	Method of Communication (Telephone/Email)	Response
		- -			
		- -			
		- -			
		- -			
		- -			
		- -			
		- -			

Please use the form below if additional space is needed. Intentional misrepresentation could result in criminal prosecution.

Officer's Signature: _____ **Title:** _____ **Date:** _____

Printed Name: _____ **Date:** _____



CITY OF DALLAS
Office of Economic Development – Business and Workforce Inclusion
Change of M/WBE Subcontractor Form (BWI-FRM-216)

(Note: Please use the Tab button, mouse or arrows to move from one section to the next. *Please DO NOT use the “Enter” key.*)

Prime Contractor: _____ Officer's Signature: _____				
Address: _____ Telephone: _____ - _____ Ext. _____				
Project Name: _____ Bid # : _____ Date: _____				
Project Manager Approval: _____				
Current Subcontractor: _____ Certification #: _____				
Scope of Work: _____				
Please indicate reason for change by checking one or more of the following boxes:				
<input type="checkbox"/> Increase or Decrease in the Scope of Work				
<input type="checkbox"/> Poor performance by the subcontractor, sub-consultant, vendor, or supplier				
<input type="checkbox"/> Subcontractor is unable or unwilling to perform the work				
<input type="checkbox"/> Subcontractor does not have the equipment or workforce to perform the work				
<input type="checkbox"/> Other (please explain): _____				
Date Subcontractor Notified of Change: _____				
Representative that notified Subcontractor: _____				
Original Amount (\$)	% of Total	Revised Amount (\$)	% of Change	Net Effect on Total (\$)

Next steps:

1. **E-mail this completed form prior to execution of any changes to City of Dallas Office of Economic Development Business and Workforce Inclusion Staff and Project manager for their signature and final approval.**

Failure to comply with this provision could result in termination of the contract, sanctions against the prime contractor, and/or ineligibility for future City contracts.



CITY OF DALLAS
Office of Economic Development – Business and Workforce Inclusion
Pre-Bid/Pre-Proposal Form – Cover Memo (BWI-FRM-622)

Solicitation Number: _____ Project Name: _____ Company Name: _____

The Office of Economic Development Business and Workforce Inclusion Pre-Bid/Pre-Proposal Form is turned in with all bid documents and proposal packages and certifies that the bidder/proposer agrees to comply with the City of Dallas Business Inclusion and Development Policy (BID Policy).

Section I: Business Inclusion Affidavit

It is the policy of the City of Dallas to involve qualified Minority and Women-Owned Business Enterprises (M/WBEs) to the greatest extent feasible on the City's construction, procurement, and professional services contracts. The BID Policy establishes subcontracting goals and requirements for all prospective bidder/proposer to ensure a reasonable degree of M/WBE business inclusion and participation in City contracts. By signing this section, the bidder/proposer agrees to comply with the City of Dallas BID Policy.

Section II: Historical Utilization

The purpose of this section is to show the bidder/proposer's recent history of utilizing M/WBE companies to complete contracts with municipalities. Historical Utilization is not limited to City of Dallas contracts, but should only include the last three projects performed with municipalities. If you have not done business with the City of Dallas or any other municipalities as a prime contractor, leave this section blank.

Section III: Team Make-up/Schedule of Work

The purpose of this section is to confirm the M/WBE participation percentage for the sub-contracting team that will be utilized for the anticipated project. In this section, the prime contractor will show their proposal to meet the established M/WBE subcontracting goal. This section should include all subcontractors, both M/WBEs and non-M/WBEs, and should also include the prime contractor's percentage. Contact the project manager if you require additional lists of M/WBE certified companies to perform scopes of work.

Once the contract has been awarded to the low bidder/most advantageous proposer, the prime contractor is expected to utilize the M/WBEs listed in this section.



Solicitation Number: _____ Project Name: _____ Company Name: _____

It is the policy of the City of Dallas to involve qualified Minority and Women-Owned Business Enterprises (M/WBEs) to the greatest extent feasible on the City's construction, procurement and professional services contracts. The City and its contractors shall not discriminate on the basis of race, age, color, religion, national origin, or sex in the award and performance of contracts. On September 23, 2020 the City Council adopted the following M/WBE participation goals without consideration for specific ethnicity or gender (Resolution Number 20-1430):

By signing below, I certify that the information included in sections II and III are true and complete to the best of my knowledge and belief. I further understand and agree that all information will be reviewed and verified by the Office of Economic Development, Business and Workforce Inclusion (BWI). I agree to provide the City of Dallas with a completed copy of all required forms provided within the BWI Inclusion document package. I understand that, for the purpose of M/WBE subcontracting participation, any amounts paid to the prime from the sub contractor should not be included in the above listed participation amount. Finally, I understand that if I fail to provide all of the required documents, my bid may be deemed "non-responsive" and I may be denied award of the contract.

Date _____

Entity Name Address, City, State, Zip	Contact Person, Title Phone Number	Month/Year of Project	Total Contract Amount	M/WBE Goal (%)	Project Name/ Contract Type	M/WBE Actual Participation (\$)	M/WBE Actual Participation (%)
			\$ -			\$ -	#DIV/0!
			\$ -			\$ -	#DIV/0!
			\$ -			\$ -	#DIV/0!

Section II = 5 Total Points: 3 Projects = 5 Points; 2 Projects = 3 Points; 1 Project = 1 Point

Section III - Team Make Up/Consolidate Work	Company Name Address, City, State, Zip	Contact Person, Title Phone Number	M/WBE Certification # (if applicable)	Ethnicity/ Gender	Local or Non-Local	Scope of Work	Value of Work (\$)	Participation (%)
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
							\$ -	#DIV/0!
						Total Contract Amount	\$ -	#DIV/0!

Section III = 10 Total Points: Meets Goal = 5 Points; Exceeds Goal, Additional 3 Points; Diverse Team Make-Up, Additional 2 Points



CITY OF DALLAS
Office of Economic Development – Business and Workforce Inclusion
Ethnic Workforce Composition Report (BWI-FRM-627)

(Note: Please use the Tab button, mouse or arrows to move from one section to the next. *Please DO NOT use the “Enter” key.*)

Company name: _____

Address: _____

Bid #: _____

Telephone Number: _____ - _____ - _____ Ext. _____

Email Address: _____

Please complete the following sections based on the ethnic composition of the (location) entity in the address line above.

Employee Classification	Total No. Employees		White		Black		Hispanic		Other	
	Male	Female	M	F	M	F	M	F	M	F
Administrative/ Managerial										
Professional										
Technical										
Office/Clerical										
Skilled										
Semiskilled										
Unskilled										
Seasonal										
Totals:										
# of employees living in Dallas:										
Total % of employees living in Dallas										

Officer's Signature

Title

Typed or Printed Name

Date



Payment to Subcontractors/Suppliers

Page ____ of ____

Instructions: **Block 1** - List the project name. **Block 2** - Describe the bid item or give a brief description of the subcontract and the supplies provided in. **Block 3** - List the subcontractor or supplier name. M/WBE certification number (if applicable) and address. List the subcontract or supply amount. **Block 5** - List the amount due and payable with this pay estimate. **Block 6** - List the total amount paid to the subcontractor/ supplier to date. **Block 7** – Make comments, if any, on the subcontractor/supplier performance in Block 7.

BOTH the GENERAL CONTRACTOR and the SUBCONTRACTOR/SUPPLIER MUST SIGN AND DATE THIS FORM

1. Project Name: _____

2. Bid Item/Description included in the subcontractor's/supplier's work: _____

3. Subcontractor/Supplier: _____

M/WBE Certification Number: _____

Address: _____

4. Subcontract/supply amount: \$ _____

5. Amount due with pay request:
(This amount is due and payable with this pay estimate.)

\$ _____

6. Total amount paid to subcontractor to date:
(This amount has been PAID to the subcontractor.)

\$ _____

7. Comments on subcontractor's/supplier's performance: _____

ALL SIGNATURES MUST BE IN BLUE INK

Officer's Signature

Title

Contractor

Date

Officer's Signature

Title

Subcontractor

Date

Subcontractor: DO NOT SIGN THIS FORM UNLESS No. 5 - TOTAL DUE, AND No. 6 - TOTAL AMOUNT PAID ARE COMPLETED CORRECTLY.