

SPECIFICATIONS AND FORMS OF CONTRACT AND BONDS FOR WATER AND WASTEWATER MAIN REPLACEMENTS AND WHITE ROCK NORTH TRANSMISSION MAIN VALVE IMPROVEMENTS AT VARIOUS LOCATIONS CONTRACT NO. 20-001/ 20-002



PLEASE NOTE

Sealed Bids clearly identified on the envelope for "WATER AND WASTEWATER MAIN REPLACEMENTS AND WHITE ROCK NORTH TRANSMISSION MAIN VALVE IMPROVEMENTS AT VARIOUS LOCATIONS, <u>CONTRACT NO. 20-001/20-002</u>", as detailed on Water Utilities plans and as described in the Contract Specifications, will be uploaded as pdf's in Bonfire at: <u>https://dallascityhall.bonfirehub.com/login</u>. <u>until 1:00 p.m. on Friday, July</u> <u>10, 2020</u>. The bids will be publicly opened and read by the Purchasing Agent at <u>2:00 p.m. on Friday, July 10, 2020</u> at the <u>Express Business Center</u>, Room L2ES at City Hall, 1500 Marilla Street, Dallas, Texas 75201.

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 pdf's in Bonfire at: <u>https://dallascityhall.bonfirehub.com/login</u>. For any questions, please e-mail <u>procurementAds@dallascityhall.com</u>.

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 <u>www.dallascityhall.com</u>, 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.

A PDF file version of plans and specifications can be obtained using Internet Explorer at the following City of Dallas ftp website: <u>ftp://ftp.dallascityhall.com</u>. Locate and click on the folder for the appropriate contract number.

<u>"FAILURE TO SIGN YOUR BID WILL RESULT IN A REJECTION OF</u> <u>YOUR BID.</u>

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."

<u>"FAILURE TO SIGN YOUR BID WILL RESULT IN A REJECTION OF</u> YOUR BID.

<u>Bidder's Acknowledgement of Prohibition on Contracts with Foreign Terrorist</u> <u>Organizations</u>

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."

MINORITY/WOMEN OWNED BUSINESS PARTICIPATION

It is the goal of the City of Dallas that a 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 May 14, 1997 (Resolution Number 97-1605):

Construction	<u>A & E</u>	Other <u>Professional</u>	Other <u>Services</u>	<u>Goods</u>
25.00%	25.66%	36.30%	23.80%	18.00%

While minority business participation may vary from time to time and in accordance with the nature or procurement and the availability of minority enterprises in that line of work, the City of Dallas believes the goals to be realistically obtainable.

ATTENTION

All bidders must submit <u>With Their Bid</u> the following Forms Completed and signed

City of Dallas Business Inclusion and Development Affidavit (Form 203) City of Dallas Pre-Bid/Proposal Form (OBD-FRM-623) City of Dallas Ethic Workforce Report (Form 204)

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

- North Central Texas Regional Certification Agency (NCTRCA) 616 Six Flags Drive, Suite 128 Arlington, Texas 76011 817-640-0606
- Dallas Fort Worth Minority Business Council 2710 N. Stemmons Freeway Dallas, Texas 75207 214-630-0747
- 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 Office of Business Diversity, City Hall, 3FN, 1500 Marilla Street, Dallas, Texas, 75201, Phone: (214) 243-2131.

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 Force

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 work load, 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.

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ADVERTISEMENT FOR BIDS

Sealed Bids clearly identified on the envelope for "WATER AND WASTEWATER MAIN REPLACEMENTS AND WHITE ROCK NORTH TRANSMISSION MAIN VALVE IMPROVEMENTS AT VARIOUS LOCATIONS, CONTRACT NO. 20-001/20-002", as detailed on Water Utilities plans and as described in the Contract Specifications, will be uploaded as pdf's in Bonfire at: <u>https://dallascityhall.bonfirehub.com/login</u>. <u>until 1:00</u> <u>p.m. on Friday, July 10, 2020</u>. The bids will be publicly opened and read by the Purchasing Agent at <u>2:00 p.m. on Friday, July 10, 2020</u> at the <u>Express Business</u> <u>Center</u>, Room L2ES at City Hall, 1500 Marilla Street, Dallas, Texas 75201.

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There will be an online Pre-Bid Conference held at 9:00am on Thursday, June 11, 2020. You may attend the pre-bid conference using the information provided below:

Click the link below to join the meeting (or you may contact <u>james.mcquery@dallascityhall.com</u> to have the meeting link emailed to you)

<u>Join Microsoft Teams Meeting</u> +1 469-217-7604 United States, Dallas (Toll) Conference ID: 211 573 598#

The text below may also be copied into your internet browser for this meeting:

https://teams.microsoft.com/l/meetupjoin/19%3ameeting NWE1ZjkwNjctNjY5MC00MjFjLWI4MTMtOTZkYzc2NWM4NzZ m%40thread.v2/0?context=%7b%22Tid%22%3a%222935709e-c10c-4809-a302-852d369f8700%22%2c%22Oid%22%3a%221d2fe6f2-9b2c-42f8-afd7d98e84706ad3%22%7d

Project related questions shall be submitted in writing no later than Monday, June 15, 2020 at 4:00 PM.

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 May 14, 1997 (Resolution Number 97-1605):

Construction	<u>A & E</u>	Other <u>Professional</u>		
25.00%	25.66%	36.30%	23.80%	18.00%

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 <u>150</u> 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 AND WHITE ROCK NORTH TRANSMISSION MAIN VALVE IMPROVEMENTS AT VARIOUS LOCATIONS CONTRACT NO. 20-001/20-002

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: <u>https://dallascityhall.bonfirehub.com/login</u>. For any questions, please email <u>procurementAds@dallascityhall.com</u>.

A 2. LOCATION AND DESCRIPTION OF PROJECT

This project consists of approximately:

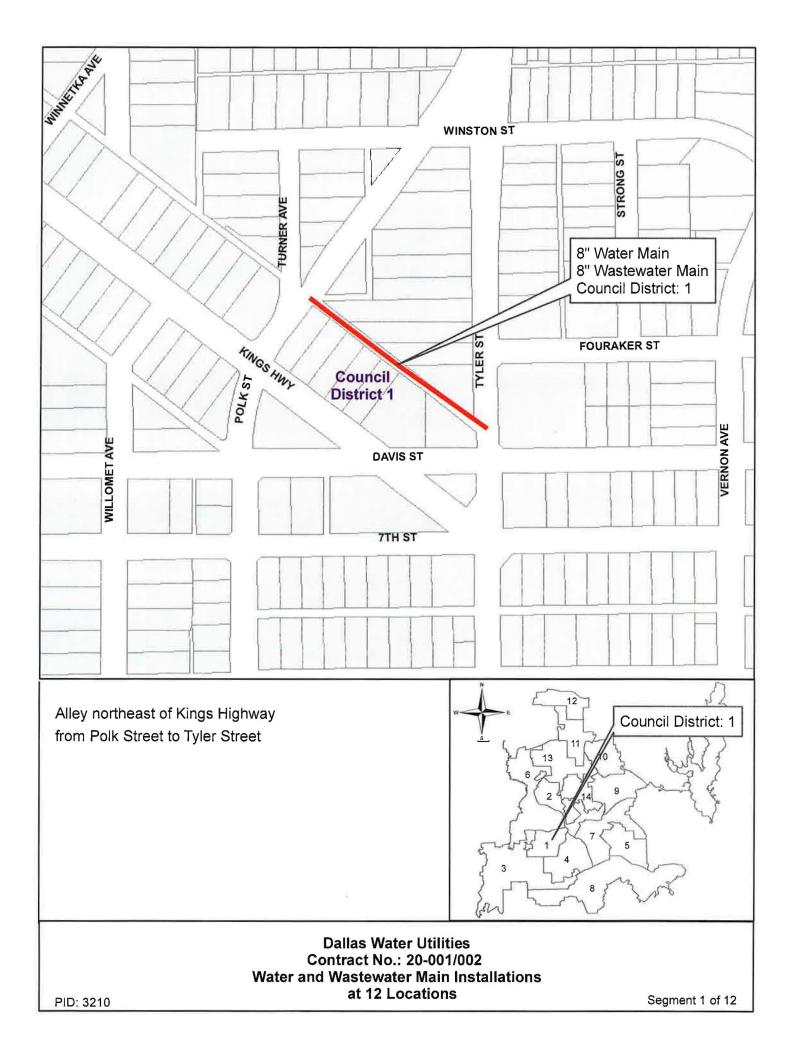
Water and Wastewater Main Replacements and White Rock North Transmission Main Valve Improvements at Various Locations						
Location	Limits	LF W	LF WW	Proposed		O Sheet Number(o)
				Water	ww	Q Sheet Number(s)
Alley northeast of Kings Highway	from Tyler Street to Polk Street	363	366	8" PVC	8" PVC	411Q - 918 Sheet 24
Argonne Drive	from Lausanne Vvenue to Montclair Avenue	1,163	110	8" PVC	8" PVC	411Q - 3040 Sheet(s) 65 thru 66
Easement between Burlington Boulevard and Clarendon Drive	from northeast of Clinton Avenue northeast	N/A	112	N/A	8" PVC	411Q - 239A Sheet 48
Montclair Avenue	from Argonne Drive to Colorado Boulevard	1,163	110	8" PVC	8" PVC	411Q - 3040 Sheet(s) 65 thru 66
Cadiz Street (CBD)	from Browder Street to Harwood Street	1,574	680	12" DI	8" PVC	411Q - 1599 Sheet(s) 220 thru 224

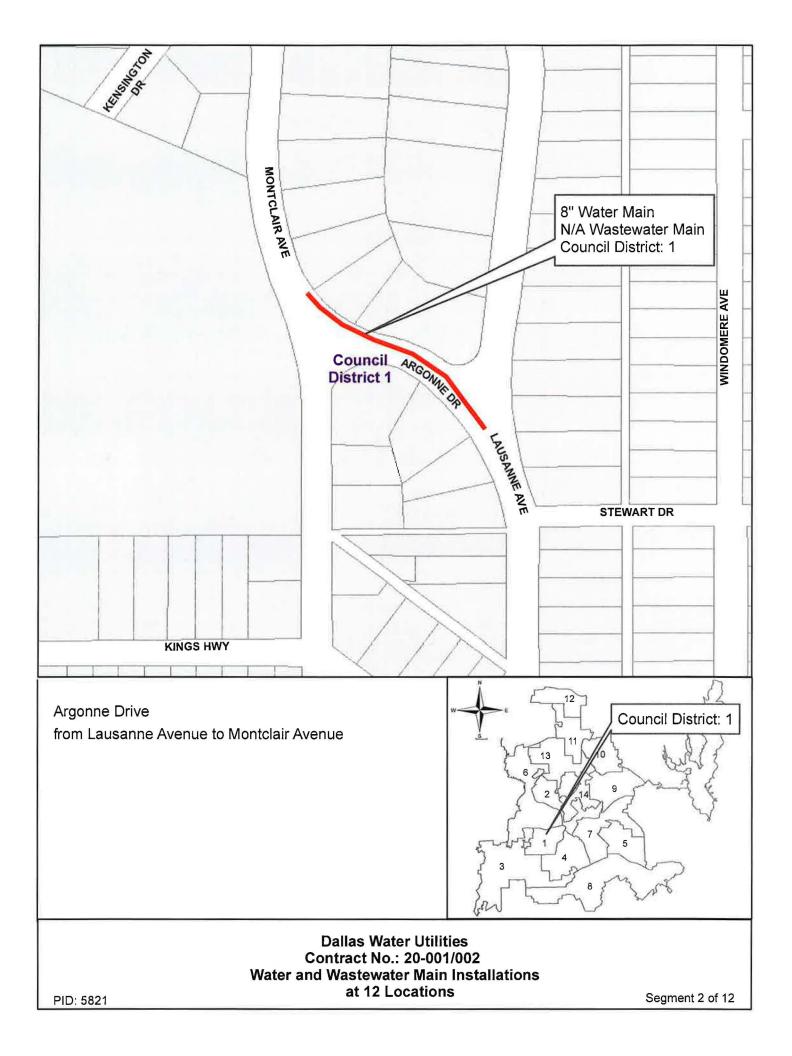
CONTRACT NO. 20-001/20-002

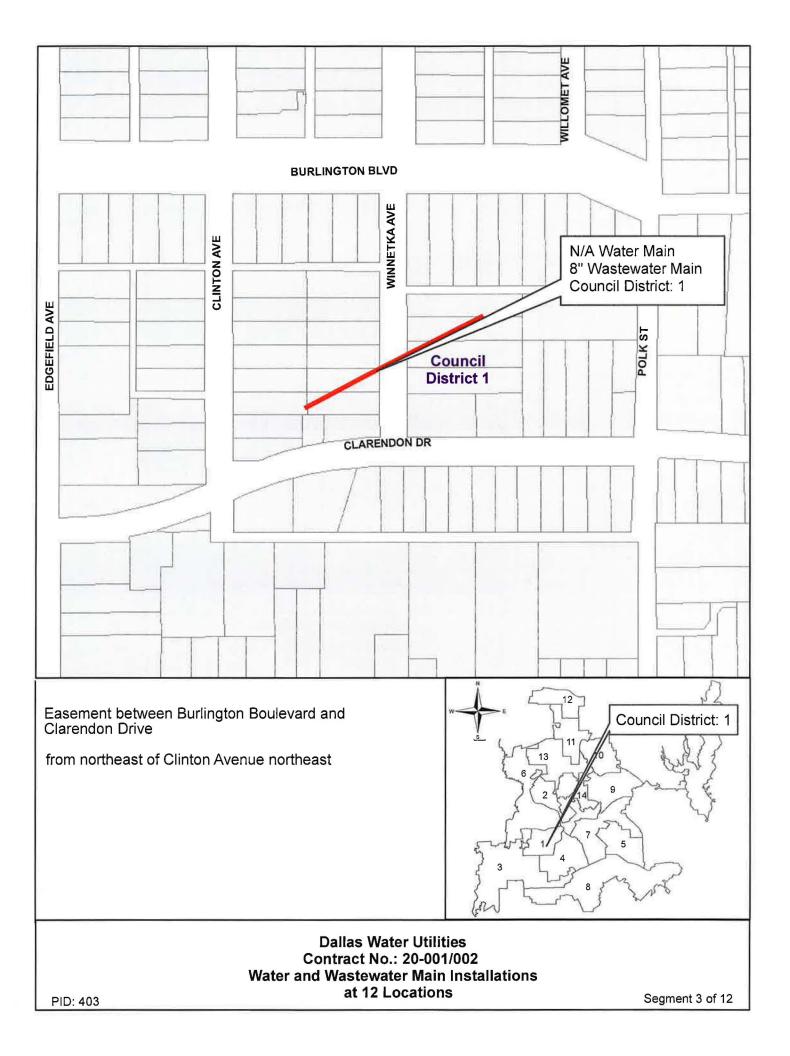
PART A - INFORMATION TO BIDDERS

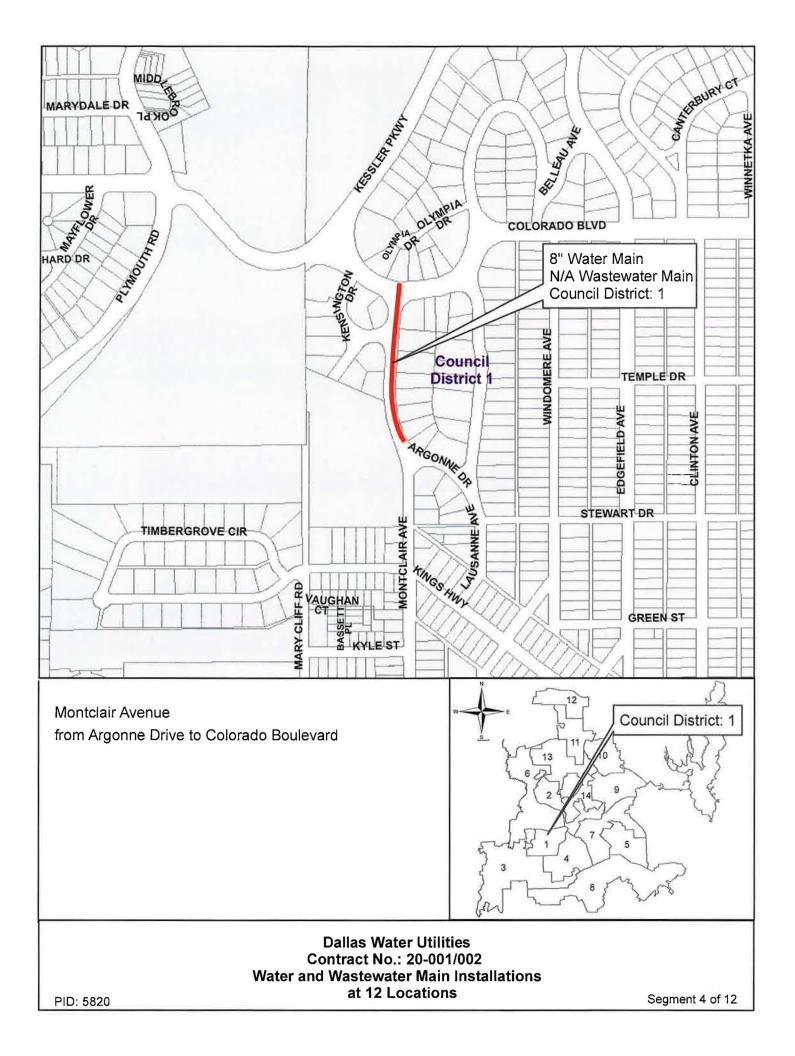
Eagle Ford Drive	from south of Camp Wisdom Road south	2,319	N/A	24" RCCP	N/A	685W - 0694A Sheet(s) 71 thru 77
Jefferson Boulevard	from west of Via Bishop Grahmann northwest	1,279	N/A	8" PVC	N/A	411Q - 1902A Sheet(s) 48 thru 50
Alley between Kellogg Avenue and Sunnyvale Street	from Sunnyvale Street to Overton Road	864	510	8" PVC	8" PVC	411 - 1170 Sheet(s) 101 thru 102
Inwood Road	from Northwest Highway to Southbrook Drive	450	N/A	8" PVC	N/A	411Q - 1320 Sheet(s) 130 thru 130A
Easement between Griffin Street and Field Street	from Jackson Street to Wood Street	1,010	1,072	12" DI	12" PVC	411Q - 1599 Sheet 182
Hoskins Street	from Matilda Street to Hubert Street	1,423	1,594	8" PVC	8" PVC	411Q - 1887 Sheet 30
Jackson Street	from Austin Street northeast	1,010	1,072	12" DI	12" PVC	411Q - 1599 Sheet 182

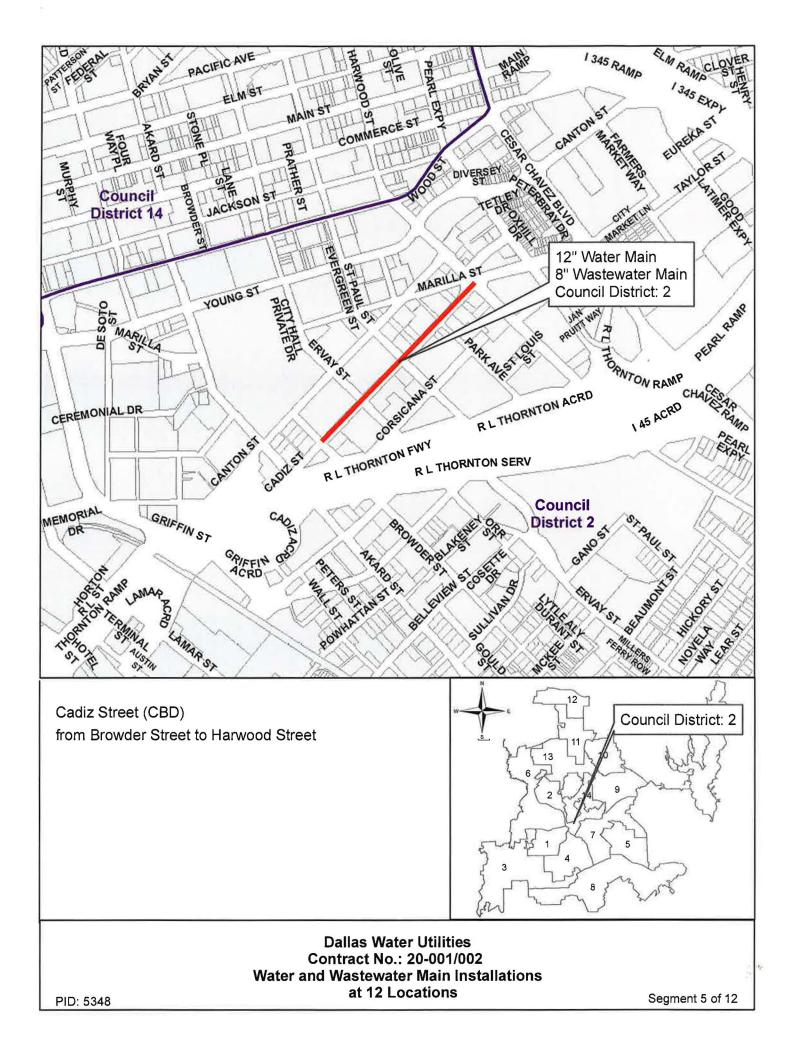
For details of locations and construction see the above referenced maps and the applicable Standard Drawings.

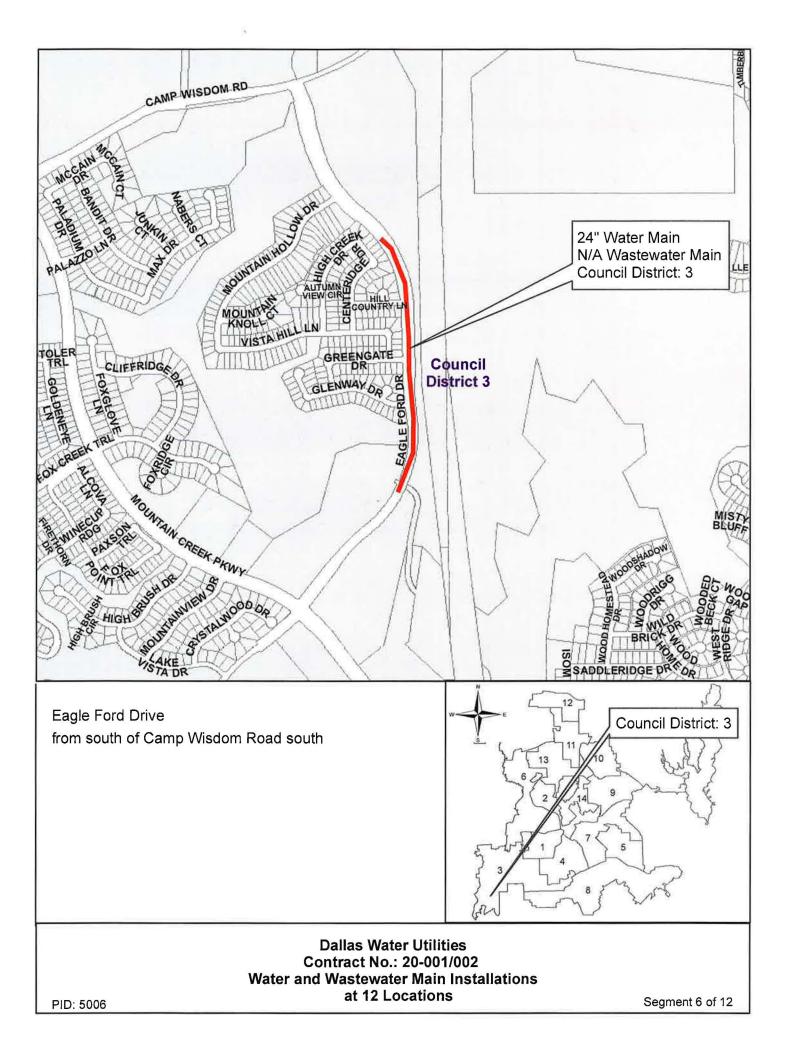


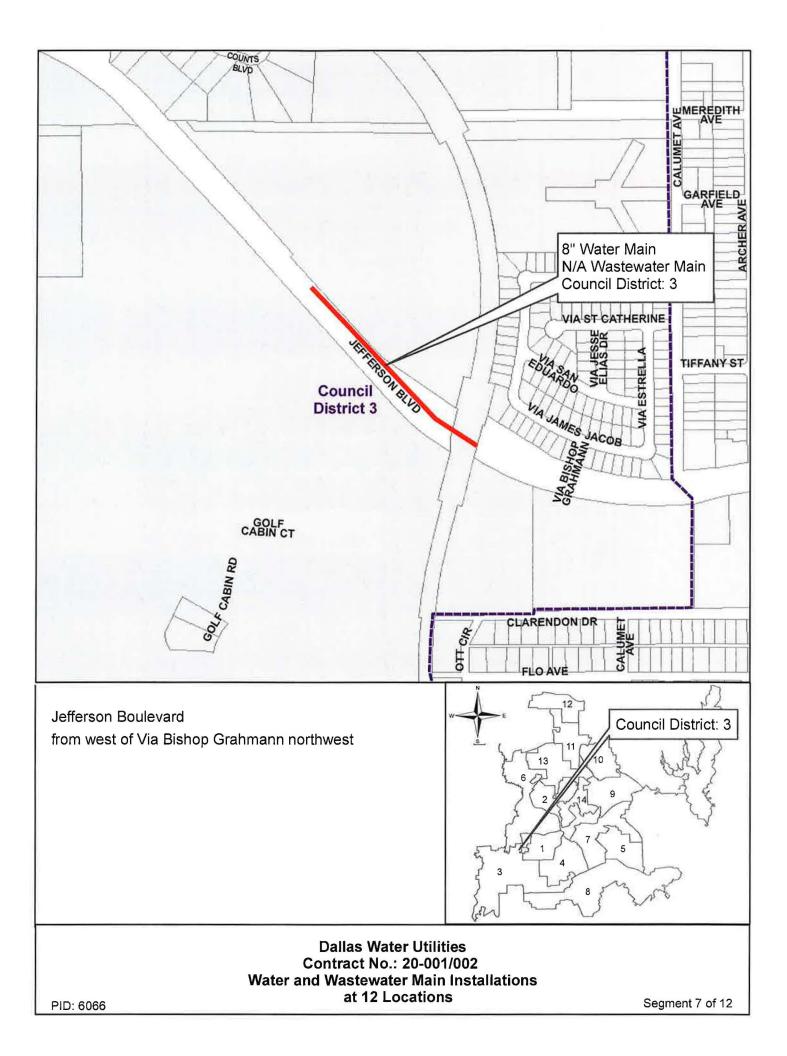


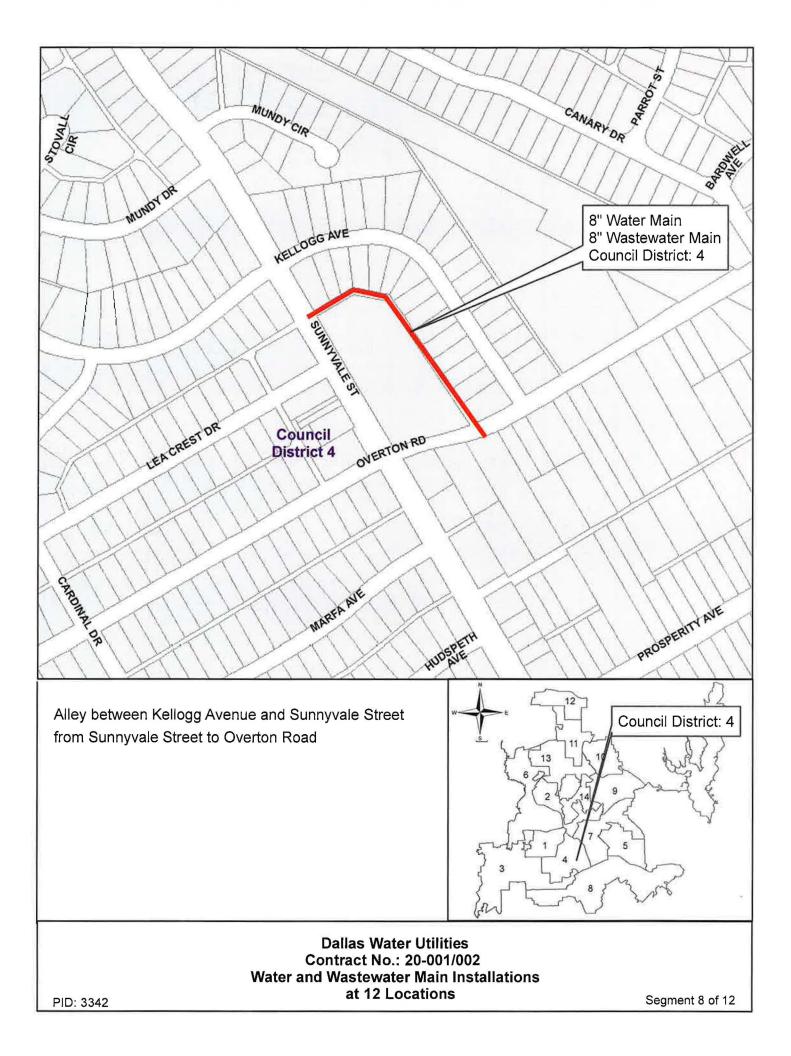


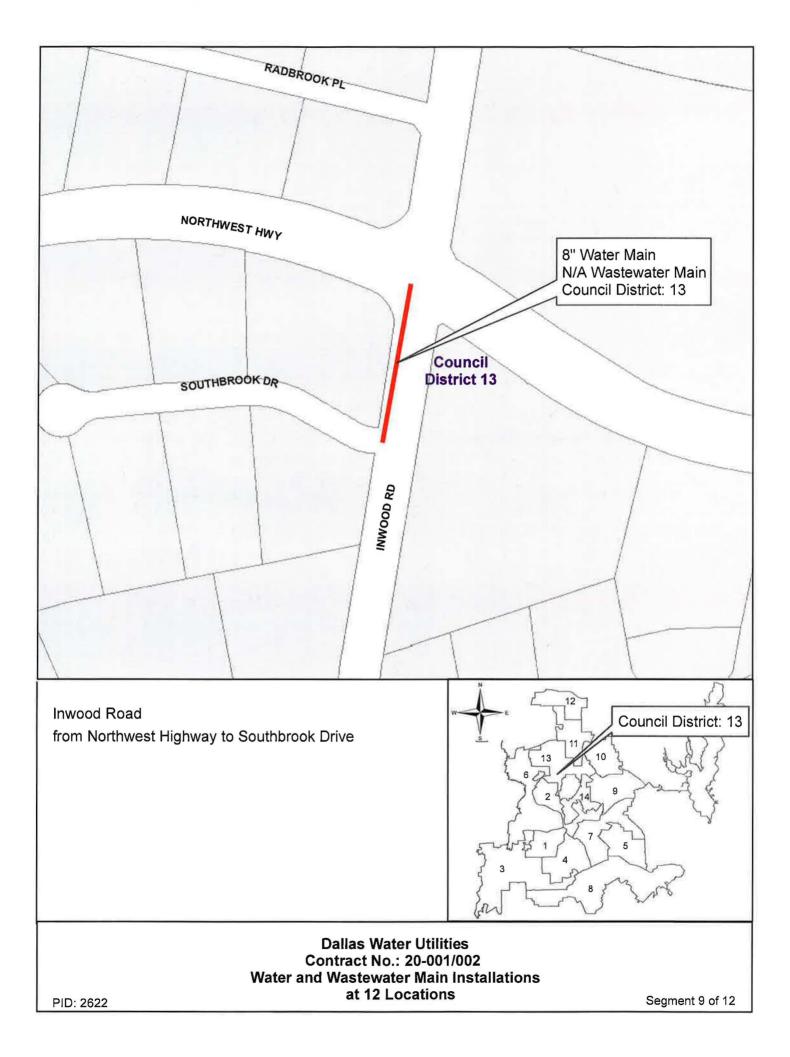


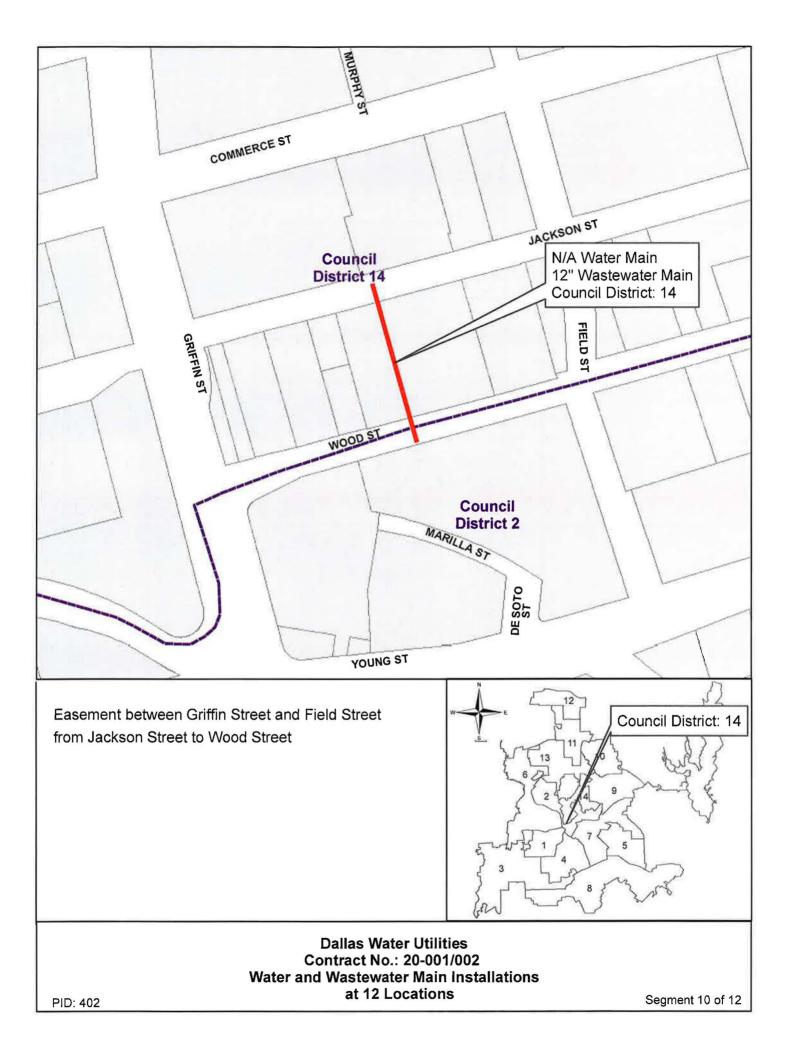


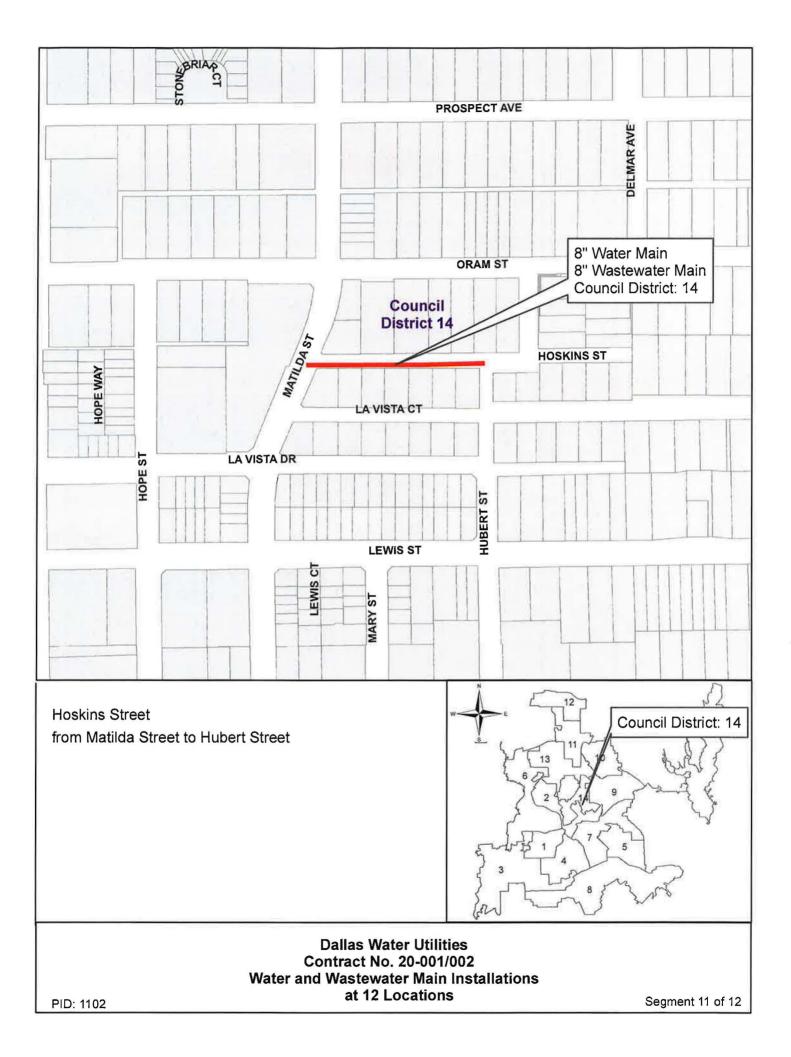


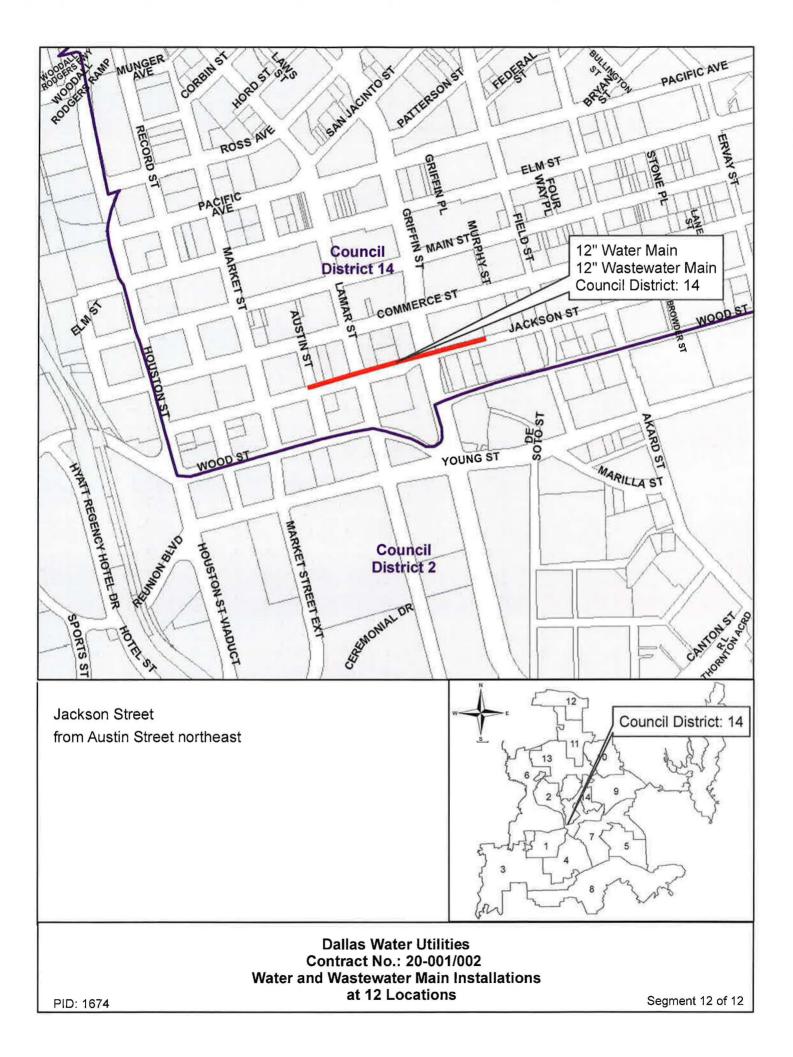












A 3. SPECIAL PROVISIONS

S-1 PLAN HOLDERS LIST / BID RESULT TABULATIONS

lf download Specs. Plans. and Proposals vou from ftp://ftp.dallascityhall.com. please e-mail jose.becerra@dallascityhall.com, khon.eng@dallascityhall.com, or mark.williams@dallascityhall.com so you can be placed on the Plan Holders List and be notified of any Addenda. Plan Holders / Bidders Lists may be obtained by e-mailing jose.becerra@dallascityhall.com, khon.eng@dallascityhall.com, or mark.williams@dallascityhall.com. Bid result tabulations as they become available are located at ftp://ftp.dallascityhall.com in folder titled Bid Tabulations.

S-2 INQUIRIES

All inquiries shall be directed to:

Matt Stevens (Water & Wastewater Main Improvements) Dallas Water Utilities Department 2121 Main Street, Suite 300 Dallas, Texas 75201 Telephone: (214) 671-9852

James McQuery (Water Facilities) Dallas Water Utilities Department 2121 Main Street, Suite 300 Dallas, Texas 75201 Telephone: (214) 671-8030

Project related questions shall be submitted in writing no later than 4:00 PM on Monday, June 15, 2020.

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 the **Original** copy of their Bid Proposal in their Bid Packet submittal.

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 <u>40</u> Calendar days after City Council award of this project. <u>Liquidated Damages shall be</u> <u>\$ 500 Per Calendar Day</u>.

Milestone 2: <u>5,000</u> linear feet of water/wastewater mains installed, backfilled, tested and temporary paving (if applicable) in place within <u>100</u> consecutive working days. <u>Liquidated damages shall be \$500 Per</u> <u>Calendar Day.</u>

Milestone 3: <u>10,000</u> linear feet of water/wastewater mains installed, backfilled, tested and temporary paving (if applicable) in place within <u>200</u> Consecutive Working Days. <u>Liquidated damages shall be \$500 per calendar day.</u>

Milestone 4: All water/wastewater work and site restoration completed within <u>300</u> Consecutive Working Days. <u>Liquidated damages shall be \$500</u> per calendar day.

• Easement between Willomet Avenue and Clinton Avenu	e PID 403
 Jackson Street 	PID 1674
 Alley between Kellogg Avenue and Sunnyvale Street 	PID 3342
 Montclair Avenue and Argonne Drive 	PID 5820 &5821
 West Jefferson Boulevard 	PID 6066

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 <u>Contractor</u> shall be responsible for all Construction <u>Staking</u> associated with the Water and Wastewater Facilities on this project. <u>Costs for Construction Staking is covered under Bid Items 8011 and 8012</u>. 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 reestablishing 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. <u>6800</u>. The Contractor will be paid 60% of Bid Item No. <u>6800</u> 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

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) <u>7040</u>, <u>7041</u>, <u>7044</u>, <u>7050 and 7053</u> 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 TEMPORARY WATER MAINS (NO SEPARATE PAY ITEM)

Temporary water mains of new or acceptable used 2" galvanized iron water pipe or other pipe material acceptable to the Engineer shall be installed as specified by the plans or as required by the Construction Engineer.

Valves shall be furnished and installed by the Contractor on the temporary mains at locations designated by the Construction Engineer, so that the temporary main can be shut off independently. 3/4" blow-off copper will be installed at the end of the temporary mains. In the event that temperatures fall, the Contractor shall take steps to prevent temporary mains and services from freezing. If flushing is done, the run-off shall be directed such that street icing does not occur.

Cold mix asphalt shall be used to mound over the 2" temporary water main at all driveways and at locations where the temporary mains cross vehicular traffic areas. The cold mix asphalt shall be removed after the removal of the temporary water mains.

The temporary 2" water mains will be chlorinated after installation. Services shall not be transferred to the temporary mains until the water in the temporary mains has been checked and approved by the Engineer. There will be no additional compensation for delays in obtaining approval to transfer services.

The temporary water system shall be maintained and repaired at all times by the Contractor.

The Contractor shall furnish, place, and connect temporary water services from the temporary mains to a point beyond each meter box. The services will consist of a service clamp, corporation cock, sufficient length of copper pipe to reach beyond each meter box, copper to iron pipe union, street ell and bushing. The temporary water services shall be a minimum of 3/4."

S-16 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 200*6 (Texas MUTCD).
- 3. When closing side streets, four working days notification is required for Fire and Police Departments. Contact Traffic Safety Coordinators Beth Adams at (214) 670-5896 or Gary Hughes at (214) 670-5662.

S-17 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-18 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-19 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-20 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-21 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-22 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-23 **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-24 PERFORMANCE OF WORK BY THE CONTRACTOR

<u>Contractor Participation</u>. 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-25 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-26 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-27 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-28 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-29 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-30 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-31 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 <u>\$50.00</u> 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.
- Saturdays, Sundays and Holidays between the hours of midnight to midnight with a minimum of four (4) hours, at a rate of <u>\$50.00</u> per hour per Inspector and a minimum of <u>\$200</u> per day per Inspector.

S-32 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-33 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-34 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-35 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-36 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-37 TEXAS WATER DEVELOPMENT BOARD LOAN

TWDB requires that bidders be aware of the following:

- "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-38 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:

- 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;
- 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;
- Keep a 6 foot distance between people at all times, unless the work being performed requires multiple individuals for the safety of the workers;
- 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;
- 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-39 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		FEMALE			
Classification	His	spanic	Black	Other	White
Construction Mgrs.					
Foreman					
Skilled		_			
Helpers					
Laborers					
Managers					
Administrators					
Professionals					
Technicians					
Office & Clerical					
Grand Total					

MALE				
Hispanic	Black	Other	White	
			s	
	_			
			1	

TOTAL UNEMPLOYED CITY OF DALLAS RESIDENTS HIRED

Employment		FEMALE			
Classification	Hispanic	Black	Other	White	
Construction Mgrs.		_			
Foreman					
Skilled			1		
Helpers					
Laborers					
Managers	-	_			
Administrators					
Professionals					
Technicians					
Office & Clerical					
Grand Total					

MALE				
Hispanic	Black	Other	White	

DATE

CONTRACTOR

CONTRACT NO. 20-001 / 20-002

PART A - INFORMATION TO BIDDERS

PRE-BID INQUIRIES AND PRE-BID INSPECTION INQUIRIES FOR CONTRACT NO. 20-001/002

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-2.

Example Format:

Company Name:	
Project Name:	
Contract No.:	
Question(s) By:	

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

ITEM NO. 1500H 6" DUCTILE IRON WATER PIPE

This item consists of furnishing and placing approximately 445 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 100 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.

ITEM NO. 1500L 12" DUCTILE IRON WATER PIPE

This item consists of furnishing and placing approximately 2,865 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 140 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.

ITEM NO. 1500V 24" DUCTILE IRON WATER PIPE WITH PAVING

This item consists of furnishing and placing approximately 20 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. 1800F 4" PVC WATER PIPE

This item consists of furnishing and placing approximately 30 Linear Feet of 4" 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.

ITEM NO. 1800H 6" PVC WATER PIPE

This item consists of furnishing and placing approximately 140 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. 1800J

8" PVC WATER PIPE

This item consists of furnishing and placing approximately 4,500 Linear Feet of 8" 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.

ITEM NO. 1800L 12" PVC WATER PIPE

This item consists of furnishing and placing approximately 90 Linear Feet of 12" 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. 1800Q 16" PVC WATER PIPE

This item consists of furnishing and placing approximately 40 Linear Feet of 16" 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.

ITEM NO. 2000V 24" BAR-WRAPPED CONCRETE CYLINDER WATER PIPE

This item consists of furnishing and placing approximately 2,350 Linear Feet of 24" Bar-Wrapped Concrete Cylinder Water Pipe; including bends, bevels, outlets, other concrete fittings as shown on the plans, barricading and all embedment materials 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 506.7.3.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 501.4. Concrete Pressure Pipe and Fittings, and Item 501.4.1.1.COD: NSF 61 Compliance of these specifications and addenda thereto.

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 1,910 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. 3110L 12" PVC PRESSURE RATED WASTEWATER PIPE

This item consists of furnishing and placing approximately 1,000 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 Item 507.6. Measurement and Payment For Wastewater Conduit Installation of these specifications.

ITEM NO. 3520L REHABILITATION OF EXISTING 12" WASTEWATER MAIN

This item consists of the Rehabilitation of approximately 90 Linear Feet of 12" Wastewater Main in accordance with the DWU Standard Technical Specifications Manual, Latest Edition. This item to include all labor, materials, equipment, barricading, and incidentals required to complete the rehabilitation of the wastewater main in accordance with these specifications and addenda thereto.

Measurement shall be the actual Linear Footage of main rehabilitated. Payment shall be at the contract Unit Price per Linear Foot complete in place.

ITEM NO. 3520Q REHABILITATION OF EXISTING 16" WASTEWATER MAIN

This item consists of the Rehabilitation of approximately 250 Linear Feet of 16" Wastewater Main in accordance with the DWU Standard Technical Specifications Manual, Latest Edition. This item to include all labor, materials, equipment, barricading, and incidentals required to complete the rehabilitation of the wastewater main in accordance with these specifications and addenda thereto.

Measurement shall be the actual Linear Footage of main rehabilitated. Payment shall be at the contract Unit Price per Linear Foot complete in place.

ITEM NO. 3540L POINT REPAIR OF 12" WASTEWATER MAIN

This item consists of approximately 1-point repair(s) of **12**" Wastewater Main as necessary to facilitate rehabilitation.

This item to include all labor, materials, equipment, and incidentals required to complete the repairs; including, but not limited to: excavation, trench safety and support, barricading, furnishing and installing pipe material, connection to existing main, by-pass pumping, and all backfill and embedment materials. This shall be a **contingent item** and shall only be used if directed by the Construction Engineer. Each point repair shall consist of up to twenty (20) linear feet of pipe.

Measurement shall be per each point repair complete and accepted at the contract Unit Price.

ITEM NO. 3540Q POINT REPAIR OF 16" WASTEWATER MAIN

This item consists of approximately **2**-point repair(s) of **16**" Wastewater Main as necessary to facilitate rehabilitation.

This item to include all labor, materials, equipment, and incidentals required to complete the repairs; including, but not limited to: excavation, trench safety and support, barricading, furnishing and installing pipe material, connection to existing main, by-pass pumping, and all backfill and embedment materials. This shall be a **contingent item** and shall only be used if directed by the Construction Engineer. Each point repair shall consist of up to twenty (20) linear feet of pipe.

Measurement shall be per each point repair complete and accepted at the contract Unit Price.

ITEM NO. 5020 EXTI

EXTRA IRON FITTINGS

This item consists of furnishing and placing approximately 23 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 **76** 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. 5060JxH 8" COMBINED SERVICE WITH 6" METER AND TRANSFER

This item consists of installing **1** Each new **8**" Combined Service with **6**" 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 **6**" meter and the meter access hatch cover to the Contractor for the new **8**" Combined Service.

The Contractor will remove and salvage the existing 8" meter and deliver it to the Large Meter Repair Shop, 2821 Municipal Street. If the existing 6" meter is damaged during removal, the Contractor will be liable for the replacement cost. If the 8" 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 8" Combined Service; to include 6" 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 **Item No.1500H**, **6**" Ductile Iron Water Pipe and **Item No.1500J**, **8**" Ductile Iron Water Pipe.

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

This item consists of installing **3** 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. 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 **8** 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 8 Each

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. 5100H 6" GATE VALVE

Existing Fire Hydrant.

This item consists of furnishing and placing approximately 19 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 27 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.

ITEM NO. 5100L 12" GATE VALVE

This item consists of furnishing and placing approximately 19 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 10 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 4 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.

ITEM NO. 5110JxJ 8" x 8" TAPPING SLEEVE

This item consists of furnishing and placing approximately 1 Each 8" x 8" 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. 5110LxL 12" x 12" TAPPING SLEEVE

This item consists of furnishing and placing approximately 2 Each 12" 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. 5140J 8" FLAP VALVE

This item consists of furnishing and placing approximately 1 Each 8" 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. 5170Q 16" PRESSURE REDUCING VALVE AND VAULT

This item consists of furnishing and placing 2 each 16" pressure reducing valve and vault as per the DWU Standard Drawings for Water and Wastewater Construction, Latest Edition. This item includes all special couplings, appurtenances, pilot piping, valves, excavation, foundation material, backfill, and incidentals required for a complete in place pressure reducing valve and vault.

Payment will be per each as set forth in the contract.

ITEM NO. 5310 CORROSION CONTROL TEST STATION

This item consists of furnishing and placing 2 Each Corrosion Control Test Station as per DWU Standard Drawings and DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Editions. This item includes all materials, equipment, labor and any incidentals required to furnish and install a Corrosion Control Test Station.

Payment will be per each as set forth in the contract.

ITEM NO. 5500J 8" WATER MAIN (BOTOC)

This item consists of approximately 100 Linear Feet of 8" 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 **8**" 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. 5500AH 6" WATER MAIN (TUNNELING)

This item consists of approximately 20 Linear Feet of 6" Water Main to be installed By Tunneling 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.

Directional Drilling and any type of mechanical boring is are prohibited in the Central Business District (CBD) by City Ordinance 24495. Any By Other Than Open Cut construction must be done by Hand Dug Tunneling.

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

The **6**" 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. e size indicator for this item is the size of the carrier pipe, not the encasement pipe.

ITEM NO. 5500AL 12" WATER MAIN (TUNNELING)

This item consists of approximately **300** Linear Feet of **12**" Water Main to be installed By Tunneling 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.

Directional Drilling and any type of mechanical boring is are prohibited in the Central Business District (CBD) by City Ordinance 24495. Any By Other Than Open Cut construction must be done by Hand Dug Tunneling.

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

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. 5505J 8" WATER MAIN BY HORIZONTAL DIRECTIONAL DRILLING

This item consists of approximately **350** Linear Feet of **8**" Water Main to be installed by Horizontal Directional Drilling in accordance with the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**, and as shown on the Plans.

The pipe and any associated special appurtenances are included in this item.

Measurement and payment will be per linear foot of pipe

installed.

ITEM NO. 5560J 8" WATER MAIN CROSSING (BY OPEN CUT)

This item consists of approximately **80** Linear Feet of **8"** Water Main Crossing to be installed by Open Cut in accordance with **Item 509.3**. Street and Alley Crossings of these specifications and addenda thereto.

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

ITEM NO. 5560L 12" WATER MAIN CROSSING (BY OPEN CUT)

This item consists of approximately **40** Linear Feet of **12**" Water Main Crossing to be installed by Open Cut in accordance with **Item 509.3. Street and Alley Crossings** of these specifications and addenda thereto.

The **12**" carrier pipe is not to be included in this item. The encasement pipe is included in this item.

Measurement and payment will be in accordance with Item **509.6. Measurement and Payment of Crossings** of these specifications.

ITEM NO. 5575 8" FLANGED OUTLET, 8" BLIND FLANGE WITH 2" CORP. AND MANHOLE

This item consists of furnishing and placing approximately 2 Each, for the 8" Flanged Outlet, 8" Blind Flange with 2" Corp and Manhole complete. This is identical to Pitot Outlet DWU standard (sheet 220) except the pipe will have an 8" flanged outlet, 8" blind flanged tapped for a 2" Mueller H-15014N Ori-Corp Corporation Valve with AWWA taper (Mueller "CC" thread) inlet and F.I.P. Threaded Outlet, in accordance with Item 502.11.1. Pitot Outlets of these specifications and addenda thereto, and the applicable Standard Drawings. The corporation valve inlet will screw into the tapped blind flange and the FIP threaded outlet will be exposed.

This item to include the manhole and barricading.

Measurement and payment will be in accordance with **Item 502.11.1.** of these specifications.

ITEM NO. 5580V 24" DISHED HEAD PLUG

This item consists of furnishing and placing approximately **1** Each Dished Head Plug in accordance with **Item 506.8**. **Plugs** of these specifications and addenda thereto.

Measurement and payment will be in accordance with **Item 506.9.2. Payment** of these specifications.

ITEM NO. 5585V 24" TEST FITTINGS

This item consists of furnishing and placing approximately **1** Each **24''** Test Fittings.

This item to include all plugs and other fittings, and all concrete and steel for blocking.

Measurement and payment shall include all labor, materials, and equipment necessary to construct the test fittings.

ITEM NO. 5600 CUT AND PLUG EXISTING WATER MAIN

This item consists of approximately **7** 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 **9** 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. 5650 REMOVAL OF LEAD PIPE JOINTS

This item consists of cutting and removal of **14** Each of lead pipe joint(s) on iron pipes in order to facilitate the tie-in of new piping onto the preexisting iron pipe. The limit for each joint removal is 20 linear feet.

This item shall include only the labor and equipment required to cut, remove and dispose of the lead joints and connecting the existing iron pipe to the new pipe. This item does not include payment for any materials or incidentals necessary to complete the work. 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 item is a contingent item and payment will be made only if directed by the DWU Construction Superintendent.

Measure and Payment shall be at the Contract Unit Price per

each.

ITEM NO. 5750D 2" FLUSH POINT

This item consists of furnishing and placing approximately 1 Each 2" Flush Point, complete, in accordance with Item 502.10.3. Water Conduit Connections, Item 502.10.3.1.1.COD: Taps, Item 502.10.3.1.2.COD: Tap Assemblies, and Item 502.10.3.1.4.COD: Tapping Ductile Iron Pipe, Item 502.10.3.1.5.COD: Tapping Concrete Pipe, or Item 502.10.3.1.7.COD: Tapping of PVC Pipe of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.10.3.1.8. Measurement and Payment** of these specifications.

ITEM NO. 5761 TYPE 1 AIR VALVE INSTALLATION

This item consists of furnishing and placing approximately 3 Each Type 1 Air Valve Installation, complete, in accordance with **Item 502.6.3.COD: Air Valves and Item 502.6.6.2.COD: Air Release Valves** of these specifications and addenda thereto, and the applicable Standard Drawings.

ITEM NO. 5990AJ 8" WASTEWATER MAIN (TUNNELING)

This item consists of approximately **80** Linear Feet of **8"** Wastewater Main to be installed By Tunneling 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.

Directional Drilling and any type of mechanical boring is are prohibited in the Central Business District (CBD) by City Ordinance 24495. Any By Other Than Open Cut construction must be done by Hand Dug Tunneling.

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

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. 5990AL 12" WASTEWATER MAIN (TUNNELING)

This item consists of approximately **100** Linear Feet of **12**" Wastewater Main to be installed By Tunneling 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.

Directional Drilling and any type of mechanical boring is are prohibited in the Central Business District (CBD) by City Ordinance 24495. Any By Other Than Open Cut construction must be done by Hand Dug Tunneling.

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

The **12**" carrier pipe is not to be included in this item. The encasement pipe, if required, is included in this item.

ITEM NO. 6060 WASTEWATER LATERAL

This item consists of furnishing and placing approximately **36** 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. 6070 EXTERNAL LATERAL CONNECTION

This item consists of the reinstatement of approximately 2 Each External Lateral Connection in accordance with the DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition.

All wastewater lateral services shall be reinstated within 24 hours of beginning the lining process. The external live laterals shall be reinstated by excavating the existing connection and installing a new 6" minimum diameter lateral with cleanout to the property line where and when possible.

This item is completed as each and is to include all labor, materials, equipment, barricading, embedment, clean out, backfilling and incidentals required to complete the reinstatement of the laterals in accordance with these specifications and addenda thereto.

Measurement and payment will be per each complete in place.

ITEM NO. 6100 WASTEWATER ACCESS DEVICE

This item consists of furnishing and placing approximately **5** 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 1 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.

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 16 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. 6140 ABANDON EXISTING MANHOLE

This item consists of abandoning approximately 1 Each Existing Manhole, backfilling the manhole with granular material at 95% standard proctor dry density, and removing and salvaging the frame and cover as per the applicable Standard Drawing.

This item to also include the cleaning, loading, hauling, and unloading the frame and cover at the Stores Division, Yard #2, 2901 Municipal Street. The Contractor will be charged new item replacement cost for any amount lost, stolen, or broken due to the Contractor's negligence prior to delivery into Water Utilities Department Salvage Yard. This item shall also include barricading.

Measurement and payment shall be at the contract Unit Price per Each completed and accepted abandonment.

ITEM NO. 6141 VACUUM TEST FOR WASTEWATER MANHOLE

This item consists of performing approximately **17** 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. 6245D 2" DIAMETER TREE

This item consists of furnishing and placing approximately **17** Each **2**" Diameter Trees at locations approved by the Project Manager, in accordance with the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**.

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 will be in accordance with the **DWU Standard Technical Specifications for Water & Wastewater Construction**, **Latest Edition**.

ITEM NO. 6245F 4" DIAMETER TREE

This item consists of furnishing and placing approximately **17** Each **4**" Diameter Trees at locations approved by the Project Manager, in accordance with the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**.

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 will be in accordance with the DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition.

ITEM NO. 6245M 14" DIAMETER TREE

This item consists of furnishing and placing approximately 3 Each 14" Diameter Trees at locations approved by the Project Manager, in accordance with the DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition.

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 will be in accordance with the DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition.

ITEM NO. 6245R 18" DIAMETER TREE

This item consists of furnishing and placing approximately 1 Each 18" Diameter Trees at locations approved by the Project Manager, in accordance with the DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition.

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 will be in accordance with the **DWU Standard Technical Specifications for Water & Wastewater Construction**, Latest Edition.

ITEM NO. 6260 CLEARING AND GRUBBING

This item consists of required Clearing and Grubbing within the limits shown on the plans and in accordance with Item 202.1. Removal, Protection, and Replacement of Trees, Shrubbery, Plants, Sod, and Other Vegetation and Item 202.1.1.COD: Trees of these specifications and addenda thereto.

Payment will be Lump Sum at contract bid price.

ITEM NO. 6270 FENCE REPLACEMENT

This item consists of installing **100** Linear Feet of various types of Fence to replace existing fences within the limits described on the plans.

Fences shall be installed plumb. They shall be constructed of new materials of like kind and same construction as the existing fences to be replaced. Replacement fences shall abut adjacent fences to maintain the completeness of previously enclosed areas. This item shall include any posts and footings, gates, and all accessory objects necessary to install and match the individual types of existing fences to be replaced.

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

Basis for payment shall be per Linear Foot of fence replaced.