

CONTRACT FOR THE CONSTRUCTION OF

CC Moss and ML Phillips SRTS Improvements

City Project No. 102411

Betsy Price Mayor David Cooke City Manager

William Johnson Director, Transportation and Public Works Department

Prepared for The City of Fort Worth Transportation and Public Works Department

2021

Kimley-Horn and Associates, Inc. 801 Cherry Street, Unit 11, Suite 1300 Fort Worth, Texas 76102 817-335-6511 Scott R. Arnold, P.E. (TPBE #96782)

SCOTT R. ARNOLD

05/28/2021

Lott R Lines, R.E.



City of Fort Worth

Standard Construction Specification Documents

Last Revised

SECTION 00 00 00

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Technical Specifications which have been modified by the Engineer specifically for this Project; hard copies are included in the Project's Contract Documents

NONE

Technical Specifications listed below are included for this Project by reference and can be viewed/downloaded from the City's website at:

NONE

TxDOT Requirements

- 1. Disadvantaged Business Enterprises (DBE) Requirements
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- 17. Federal Requirements for Federal-Aid Construction Contracts (FHWA-1273)
- 18. "Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges Adopted by the Texas Department of Transportation June 1, 2004" Included by Reference.

*Required to be submitted with bid to be deemed a responsive bid. If these items are not submitted with the bid package, the bids will not be read publicly.

Appendix

NONE

END OF SECTION

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2	MAYOR AND COUNCIL COMMUNICATION (M&C)
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INVITATION TO BIDDERS

RECEIPT OF BIDS

Due to the COVID19 Emergency declared by the City of Fort Worth and until the emergency declaration, as amended, is rescinded, sealed bids for the construction of CC Moss and ML Phillips SRTS Improvements, CPN 102411 ("Project") will be received by the City of Fort Worth Purchasing Office until 1:30 P.M. CST, Thursday, August 26, 2021 as further described below:

City of Fort Worth Purchasing Division 200 Texas Street Fort Worth, Texas 76102

Bids will be accepted by:

- 1. US Mail at the address above,
- 2. By courier, FedEx or hand delivery from 8:30-1:30 on Thursdays only at the South End Lobby of City Hall located at 200 Texas Street, Fort Worth, Texas 76102. A Purchasing Department staff person will be available to accept the bid and provide a time stamped receipt; or
- 3. If the bidder desires to submit the bid on a day or time other than the designated Thursday, the bidder must contact the Purchasing Department during normal working hours at 817-392-2462 to make an appointment to meet a Purchasing Department employee at the South End Lobby of City Hall located at 200 Texas Street, Fort Worth, Texas 76102, where the bid(s) will be received and time/date stamped as above.

Bids will be opened publicly and read aloud at 2:00 PM CST in the City Council Chambers and broadcast through live stream and CFW public television which can be accessed at http://fortworthtexas.gov/fwtv/. The general public will not be allowed in the City Council Chambers.

In addition, in lieu of delivering completed MBE forms for the project to the Purchasing Office, bidders shall e-mail the completed MBE forms to the City Project Manager no later than 2:00 p.m. on the second City business day after the bid opening date, exclusive of the bid opening date.

GENERAL DESCRIPTION OF WORK

The major work will consist of the (approximate) following: curb ramps, sidewalk, driveways, pavement markings, and signage.

PREQUALIFICATION

The improvements included in this project must be performed by a contractor who is prequalified by the City at the time of bid opening. The procedures for qualification and prequalification are outlined in the Section 00 21 13 – INSTRUCTIONS TO BIDDERS.

DOCUMENT EXAMINATION AND PROCUREMENTS

The Bidding and Contract Documents may be examined or obtained on-line by visiting the City of Fort Worth's Purchasing Division website at http://www.fortworthtexas.gov/purchasing/ and clicking on the link to the advertised project folders on the City's electronic document management and collaboration system site. The Contract Documents may be downloaded, viewed, and printed by interested contractors and/or suppliers.

Copies of the Bidding and Contract Documents will not be available for purchase.

PREBID CONFERENCE

A prebid conference may be held as discussed in Section 00 21 13 - INSTRUCTIONS TO BIDDERS at the following date, and time via a web conferencing application:

DATE: August 17, 2021 **TIME:** 10:00 AM, CST

If a prebid conference will be held online via a web conferencing application, invitations will be distributed directly to those who have submitted Expressions of Interest in the project to the City Project Manager and/or the Design Engineer. The presentation given at the prebid conference and any questions and answers provided at the prebid conference will be issued as an Addendum to the call for bids.

If a prebid conference is not being held, prospective bidders can e-mail questions or comments in accordance with Section 6 of the Instructions to Bidders referenced above to the project manager(s) at the e-mail addresses listed below. Emailed questions will suffice as "questions in writing" and the requirement to formally mail questions is suspended. If necessary, Addenda will be issued pursuant to the Instructions to Bidders.

CITY'S RIGHT TO ACCEPT OR REJECT BIDS

City reserves the right to waive irregularities and to accept or reject bids.

AWARD

City will award a contract to the Bidder presenting the lowest price, qualifications and competencies considered.

FUNDING

Any Contract awarded under this INVITATION TO BIDDERS are expected to be funded from revenues generated from Safe Routes to School (SRTS) Grant and reserved by the City for the Project.

INOUIRIES

All inquiries relative to this procurement should be addressed to the following:

Attn: Chad Allen, P.E., City of Fort Worth Email: chad.allen@kimley-horn.com

Phone: 817-392-8021

AND/OR

Attn: Scott R. Arnold, P.E., Kimley-Horn and Associates, Inc.

Email: scott.arnold@kimley-horn.com

Phone: 817-335-6511

EXPRESSION OF INTERSEST

To ensure bidders are kept up to date of any new information pertinent to this project or the COVID19 emergency declaration, as amended, as it may relate to this project, bidders are requested to email Expressions of Interest in this procurement to the City Project Manager and the Design Engineer. The email should include the bidder's company name, contact person, that individuals email address and phone number. All Addenda will be distributed directly to those who have expressed an interest in the procurement and will also be posted in the City of Fort Worth's purchasing website at http://fortworthtexas.gov/purchasing/

PLAN HOLDERS

To ensure you are kept up to date of any new information pertinent to this project such as when an addenda is issued, download the Plan Holder Registration form to your computer, complete and email it to the City Project Manager or the Design Engineer.

The City Project Manager and Design Engineer are responsible to upload the Plans Holder Registration form to the Plan Holders folder in BIM360.

Mail your completed Plan Holder Registration form to those listed in INQUIRIES above.

ADVERTISEMENT DATES

Thursday, July 29, 2021 Thursday, August 5, 2021

END OF SECTION

SECTION 00 21 13

INSTRUCTIONS TO BIDDERS

1. Defined Terms

- 1.1. Terms used in these INSTRUCTIONS TO BIDDERS, which are defined in Section 00 72 00 GENERAL CONDITIONS.
- 1.2. Certain additional terms used in these INSTRUCTIONS TO BIDDERS have the meanings indicated below which are applicable to both the singular and plural thereof.
 - 1.2.1. Bidder: Any person, firm, partnership, company, association, or corporation acting directly through a duly authorized representative, submitting a bid for performing the work contemplated under the Contract Documents.
 - 1.2.2. Nonresident Bidder: Any person, firm, partnership, company, association, or corporation acting directly through a duly authorized representative, submitting a bid for performing the work contemplated under the Contract Documents whose principal place of business is not in the State of Texas.
 - 1.2.3. Successful Bidder: The lowest responsible and responsive Bidder to whom City (on the basis of City's evaluation as hereinafter provided) makes an award.

2. Copies of Bidding Documents

- 2.1. Neither City nor Engineer shall assume any responsibility for errors or misinterpretations resulting from the Bidders use of incomplete sets of Bidding Documents.
- 2.2. City and Engineer in making copies of Bidding Documents available do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license or grant for any other use.

3. Prequalification of Bidders (Prime Contractors and Subcontractors)

- 3.1. All Bidders and their subcontractors are required to be prequalified for the work types requiring prequalification at the time of bidding. Bids received from contractors who are not prequalified shall not be opened and, even if inadvertently opened, shall not be considered. Prequalification requirement work types and documentation are available by accessing all required files through the City's website at: https://apps.fortworthtexas.gov/ProjectResources/
 - 3.1.1. Paving Requirements document located at;

https://apps.fortworthtexas.gov/ProjectResources/ResourcesP/02%20-%20Construction%20Documents/Contractor%20Prequalification/TPW%20Paving %20Contractor%20Prequalification%20Program/PREQUALIFICATION%20REQ UIREMENTS%20FOR%20PAVING%20CONTRACTORS.pdf

3.1.2. Roadway and Pedestrian Lighting – Requirements document located at;

https://apps.fortworthtexas.gov/ProjectResources/ResourcesP/02%20-%20Construction%20Documents/Contractor%20Prequalification/TPW%20Roadway%20and%20Pedestrian%20Lighting%20Prequalification%20Program/STREET%20LIGHT%20PREOUAL%20REOMNTS.pdf

3.1.3. Water and Sanitary Sewer – Requirements document located at;

 $\frac{\text{https://apps.fortworthtexas.gov/ProjectResources/ResourcesP/02\%20-}{\%20 Construction\%20 Documents/Contractor\%20 Prequalification/Water\%20 and\%2}{0 Sanitary\%20 Sewer\%20 Contractor\%20 Prequalification\%20 Program/WSS\%20 prequal \%20 Prequirements.pdf}$

- 3.2. Each Bidder, unless currently prequalified, must submit to City at least seven (7) calendar days prior to Bid opening, the documentation identified in Section 00 45 11, BIDDERS PREQUALIFICATIONS.
 - 3.2.1. Submission of and/or questions related to prequalification should be addressed to the City contact as provided in Paragraph 6.1.
 - 3.2.2.TEMPORARY PROCEDURES DUE TO COVID-19: A Bidder whose prequalification has expired during the time period where a valid emergency order is in place (federal, state, local) and for 30 days past the expiration of the emergency order with the furthest expiration date by day and month, will not be automatically disqualified from having the Bidder's bid opened. A Bidder in this situation will have its bid opened and read aloud and will be allowed 5 business days (close of business on the 5th day) to submit a complete prequalification renewal package. Failure to timely submit, or submittal of an incomplete package, will render the Bidder's bid non-responsive. If the prequalification renewal documents show the Bidder as now not-qualified, the bid will be rendered non-responsive. A Bidder may not use this exception to seek a prequalification status greater than that which was in place of the date of expiration. A Bidder who seeks to increase its prequalification status must follow the traditional submittal/review process.
- 3.3. The City reserves the right to require any pre-qualified contractor who is the apparent low bidder(s) for a project to submit such additional information as the City, in its sole discretion may require, including but not limited to manpower and equipment records, information about key personnel to be assigned to the project, and construction schedule, to assist the City in evaluating and assessing the ability of the apparent low bidder(s) to deliver a quality product and successfully complete projects for the amount bid within the stipulated time frame. Based upon the City's assessment of the submitted information, a recommendation regarding the award of a contract will be made to the City Council. Failure to submit the additional information, if requested, may be grounds for rejecting the apparent low bidder as non-responsive. Affected contractors will be notified in writing of a recommendation to the City Council.
- 3.4. In addition to prequalification, additional requirements for qualification may be required within various sections of the Contract Documents.

4. Examination of Bidding and Contract Documents, Other Related Data, and Site

- 4.1. Before submitting a Bid, each Bidder shall:
 - 4.1.1. Examine and carefully study the Contract Documents and other related data identified in the Bidding Documents (including "technical data" referred to in Paragraph 4.2. below). No information given by City or any representative of the City other than that contained in the Contract Documents and officially promulgated addenda thereto, shall be binding upon the City.
 - 4.1.2. Visit the site to become familiar with and satisfy Bidder as to the general, local and site conditions that may affect cost, progress, performance or furnishing of the Work.
 - 4.1.3. Consider federal, state and local Laws and Regulations that may affect cost, progress, performance or furnishing of the Work.
 - 4.1.4. Be advised, City, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration of award.
 - 4.1.5. Study all: (i) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in the Contract Documents as containing reliable "technical data" and (ii) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in the Contract Documents as containing reliable "technical data."
 - 4.1.6. Be advised that the Contract Documents on file with the City shall constitute all of the information which the City will furnish. All additional information and data which the City will supply after promulgation of the formal Contract Documents shall be issued in the form of written addenda and shall become part of the Contract Documents just as though such addenda were actually written into the original Contract Documents. No information given by the City other than that contained in the Contract Documents and officially promulgated addenda thereto, shall be binding upon the City.

- 4.1.7. Perform independent research, investigations, tests, borings, and such other means as may be necessary to gain a complete knowledge of the conditions which will be encountered during the construction of the project. On request, City may provide each Bidder access to the site to conduct such examinations, investigations, explorations, tests and studies as each Bidder deems necessary for submission of a Bid. Bidder must fill all holes and clean up and restore the site to its former conditions upon completion of such explorations, investigations, tests and studies.
- 4.1.8. Determine the difficulties of the Work and all attending circumstances affecting the cost of doing the Work, time required for its completion, and obtain all information required to make a proposal. Bidders shall rely exclusively and solely upon their own estimates, investigation, research, tests, explorations, and other data which are necessary for full and complete information upon which the proposal is to be based. It is understood that the submission of a proposal is prima-facie evidence that the Bidder has made the investigation, examinations and tests herein required. Claims for additional compensation due to variations between conditions actually encountered in construction and as indicated in the Contract Documents will not be allowed.
- 4.1.9. Promptly notify City of all conflicts, errors, ambiguities or discrepancies in or between the Contract Documents and such other related documents. The Contractor shall not take advantage of any gross error or omission in the Contract Documents, and the City shall be permitted to make such corrections or interpretations as may be deemed necessary for fulfillment of the intent of the Contract Documents.
- 4.2. Reference is made to Section 00 73 00 Supplementary Conditions for identification of:
 - 4.2.1. those reports of explorations and tests of subsurface conditions at or contiguous to the site which have been utilized by City in preparation of the Contract Documents. The logs of Soil Borings, if any, on the plans are for general information only. Neither the City nor the Engineer guarantee that the data shown is representative of conditions which actually exist.
 - 4.2.2. those drawings of physical conditions in or relating to existing surface and subsurface structures (except Underground Facilities) which are at or contiguous to the site that have been utilized by City in preparation of the Contract Documents.
 - 4.2.3. copies of such reports and drawings will be made available by City to any Bidder on request. Those reports and drawings may not be part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in Paragraph 4.02. of the General Conditions has been identified and established in Paragraph SC 4.02 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion drawn from any "technical data" or any other data, interpretations, opinions or information.

- 4.3. The submission of a Bid will constitute an incontrovertible representation by Bidder (i) that Bidder has complied with every requirement of this Paragraph 4, (ii) that without exception the Bid is premised upon performing and furnishing the Work required by the Contract Documents and applying the specific means, methods, techniques, sequences or procedures of construction (if any) that may be shown or indicated or expressly required by the Contract Documents, (iii) that Bidder has given City written notice of all conflicts, errors, ambiguities and discrepancies in the Contract Documents and the written resolutions thereof by City are acceptable to Bidder, and when said conflicts, etc., have not been resolved through the interpretations by City as described in Paragraph 6., and (iv) that the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.
- 4.4. The provisions of this Paragraph 4, inclusive, do not apply to Asbestos, Polychlorinated biphenyls (PCBs), Petroleum, Hazardous Waste or Radioactive Material covered by Paragraph 4.06. of the General Conditions, unless specifically identified in the Contract Documents.

5. Availability of Lands for Work, Etc.

- 5.1. The lands upon which the Work is to be performed, rights-of-way and easements for access thereto and other lands designated for use by Contractor in performing the Work are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by City unless otherwise provided in the Contract Documents.
- 5.2. Outstanding right-of-way, easements, and/or permits to be acquired by the City are listed in Paragraph SC 4.01 of the Supplementary Conditions. In the event the necessary right-of-way, easements, and/or permits are not obtained, the City reserves the right to cancel the award of contract at any time before the Bidder begins any construction work on the project.
- 5.3. The Bidder shall be prepared to commence construction without all executed right-of-way, easements, and/or permits, and shall submit a schedule to the City of how construction will proceed in the other areas of the project that do not require permits and/or easements.

6. Interpretations and Addenda

6.1. All questions about the meaning or intent of the Bidding Documents are to be directed to City in writing on or before 2 p.m., the Monday prior to the Bid opening. Questions received after this day may not be responded to. Interpretations or clarifications considered necessary by City in response to such questions will be issued by Addenda delivered to all parties recorded by City as having received the Bidding Documents. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

Address questions to:

City of Fort Worth 200 Texas Street Fort Worth, TX 76102

Attn: Chad Allen, P.E., TPW

Email: chad.allen@fortworthtexas.gov

Phone: 817-392-8021

- 6.2. Addenda may also be issued to modify the Bidding Documents as deemed advisable by City.
- 6.3. Addenda or clarifications may be posted via the City's electronic document management and collaboration system at *<Insert Link to Documents>*.
- 6.4. A prebid conference may be held at the time and place indicated in the Advertisement or INVITATION TO BIDDERS. Representatives of City will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference. City will transmit to all prospective Bidders of record such Addenda as City considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

7. Bid Security

- 7.1. Each Bid must be accompanied by Bid Bond made payable to City in an amount of five (5) percent of Bidder's maximum Bid price on form attached, issued by a surety meeting the requirements of Paragraphs 5.01 of the General Conditions.
- 7.2. The Bid Bond of all Bidders will be retained until the conditions of the Notice of Award have been satisfied. If the Successful Bidder fails to execute and deliver the complete Agreement within 10 days after the Notice of Award, City may consider Bidder to be in default, rescind the Notice of Award, and the Bid Bond of that Bidder will be forfeited. Such forfeiture shall be City's exclusive remedy if Bidder defaults. The Bid Bond of all other Bidders whom City believes to have a reasonable chance of receiving the award will be retained by City until final contract execution.

8. Contract Times

The number of days within which, or the dates by which, Milestones are to be achieved in accordance with the General Requirements and the Work is to be completed and ready for Final Acceptance is set forth in the Agreement or incorporated therein by reference to the attached Bid Form.

9. Liquidated Damages

Provisions for liquidated damages are set forth in the Agreement.

10. Substitute and "Or-Equal" Items

The Contract, if awarded, will be on the basis of materials and equipment described in the Bidding Documents without consideration of possible substitute or "or-equal" items. Whenever it is indicated or specified in the Bidding Documents that a "substitute" or "or-equal" item of material or equipment may be furnished or used by Contractor if acceptable to City, application for such acceptance will not be considered by City until after the Effective Date of the Agreement. The procedure for submission of any such application by Contractor and consideration by City is set forth in Paragraphs 6.05A., 6.05B. and 6.05C. of the General Conditions and is supplemented in Section 01 25 00 of the General Requirements.

11. Subcontractors, Suppliers and Others

11.1. In accordance with the City's Business Equity Ordinance No. 24534-11-2020 the City has goals for the participation of minority business and/or women business enterprises in City contracts. A copy of the Ordinance can be obtained from the Office of the City Secretary. The Bidder shall submit the Business Equity Utilization Form, Business Equity Prime Contractor Waiver Form and/or Good Faith Effort Form with documentation and/or Business Equity Joint Venture Form, as appropriate. The Forms including documentation must be received by the City no later than 2:00 P.M. CST, on the second business day after the bid opening date. The Bidder shall obtain a receipt from the City as evidence the documentation was received. Failure to comply shall render the bid as non-responsive.

Business Equity Ordinance No. 24534-11-2020 https://apps.fortworthtexas.gov/ProjectResources/ResourcesP/60%20-%20MWBE/NEW%20Business%20Equity%20Ordinance/Ordinance%2024534-11-2020.pdf

11.2. No Contractor shall be required to employ any Subcontractor, Supplier, other person or organization against whom Contractor has reasonable objection.

12. Bid Form

- 12.1. The Bid Form is included with the Bidding Documents; additional copies may be obtained from the City.
- 12.2. All blanks on the Bid Form must be completed by printing in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each Bid item, alternative, and unit price item listed therein. In the case of optional alternatives, the words "No Bid," "No Change," or "Not Applicable" may be entered. Bidder shall state the prices, written in ink in both words and numerals, for which the Bidder proposes to do the work contemplated or furnish materials required. All prices shall be written legibly. In case of discrepancy between price in written words and the price in written numerals, the price in written words shall govern.

- 12.3. Bids by corporations shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed. The corporate address and state of incorporation shall be shown below the signature.
- 12.4. Bids by partnerships shall be executed in the partnership name and signed by a partner, whose title must appear under the signature accompanied by evidence of authority to sign. The official address of the partnership shall be shown below the signature.
- 12.5. Bids by limited liability companies shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- 12.6. Bids by individuals shall show the Bidder's name and official address.
- 12.7. Bids by joint ventures shall be executed by each joint venture in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 12.8. All names shall be typed or printed in ink below the signature.
- 12.9. The Bid shall contain an acknowledgement of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 12.10. Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 12.11. Evidence of authority to conduct business as a Nonresident Bidder in the state of Texas shall be provided in accordance with Section 00 43 37 Vendor Compliance to State Law Non Resident Bidder.

13. Submission of Bids

Bids shall be submitted on the prescribed Bid Form, provided with the Bidding Documents, at the time and place indicated in the Advertisement or INVITATION TO BIDDERS, addressed to Purchasing Manager of the City, and shall be enclosed in an opaque sealed envelope, marked with the City Project Number, Project title, the name and address of Bidder, and accompanied by the Bid security and other required documents. If the Bid is sent through the mail or other delivery system, the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED" on the face of it.

14. Modification and Withdrawal of Bids

14.1. Bids addressed to the Purchasing Manager and filed with the Purchasing Office cannot be withdrawn prior to the time set for bid opening. A request for withdrawal must be made in writing by an appropriate document duly executed in the manner that a Bid must be executed and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids. After all Bids not requested for withdrawal are opened and publicly read aloud, the Bids for which a withdrawal request has been properly filed may, at the option of the City, be returned unopened.

14.2. Bidders may modify their Bid by electronic communication at any time prior to the time set for the closing of Bid receipt.

15. Opening of Bids

Bids will be opened and read aloud publicly at the place where Bids are to be submitted. An abstract of the amounts of the base Bids and major alternates (if any) will be made available to Bidders after the opening of Bids.

16. Bids to Remain Subject to Acceptance

All Bids will remain subject to acceptance for the time period specified for Notice of Award and execution and delivery of a complete Agreement by Successful Bidder. City may, at City's sole discretion, release any Bid and nullify the Bid security prior to that date.

17. Evaluation of Bids and Award of Contract

- 17.1. City reserves the right to reject any or all Bids, including without limitation the rights to reject any or all nonconforming, nonresponsive, unbalanced or conditional Bids and to reject the Bid of any Bidder if City believes that it would not be in the best interest of the Project to make an award to that Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by City. City also reserves the right to waive informalities not involving price, contract time or changes in the Work with the Successful Bidder. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.
 - 17.1.1. Any or all bids will be rejected if City has reason to believe that collusion exists among the Bidders, Bidder is an interested party to any litigation against City, City or Bidder may have a claim against the other or be engaged in litigation, Bidder is in arrears on any existing contract or has defaulted on a previous contract, Bidder has performed a prior contract in an unsatisfactory manner, or Bidder has uncompleted work which in the judgment of the City will prevent or hinder the prompt completion of additional work if awarded.
- 17.2. City may consider the qualifications and experience of Subcontractors, Suppliers, and other persons and organizations proposed for those portions of the Work as to which the identity of Subcontractors, Suppliers, and other persons and organizations must be submitted as provided in the Contract Documents or upon the request of the City. City also may consider the operating costs, maintenance requirements, performance data and guarantees of major items of materials and equipment proposed for incorporation in the Work when such data is required to be submitted prior to the Notice of Award.
- 17.3. City may conduct such investigations as City deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to City's satisfaction within the prescribed time.

- 17.4. Contractor shall perform with his own organization, work of a value not less than 35% of the value embraced on the Contract, unless otherwise approved by the City.
- 17.5. If the Contract is to be awarded, it will be awarded to lowest responsible and responsive Bidder whose evaluation by City indicates that the award will be in the best interests of the City.
- 17.6. Pursuant to Texas Government Code Chapter 2252.001, the City will not award contract to a Nonresident Bidder unless the Nonresident Bidder's bid is lower than the lowest bid submitted by a responsible Texas Bidder by the same amount that a Texas resident bidder would be required to underbid a Nonresident Bidder to obtain a comparable contract in the state in which the nonresident's principal place of business is located.
- 17.7. A contract is not awarded until formal City Council authorization. If the Contract is to be awarded, City will award the Contract within 90 days after the day of the Bid opening unless extended in writing. No other act of City or others will constitute acceptance of a Bid. Upon the contractor award a Notice of Award will be issued by the City.
 - 17.7.1. The contractor is required to fill out and sign the Certificate of Interested Parties Form 1295 and the form must be submitted to the Project Manager before the contract will be presented to the City Council. The form can be obtained at https://www.ethics.state.tx.us/data/forms/1295/1295.pdf
- 17.8. Failure or refusal to comply with the requirements may result in rejection of Bid.

18. Signing of Agreement

- 18.1. When City issues a Notice of Award to the Successful Bidder, it will be accompanied by the required number of unsigned counterparts of the Agreement. Within 14 days thereafter Contractor shall sign and deliver the required number of counterparts of the Agreement to City with the required Bonds, Certificates of Insurance, and all other required documentation.
- 18.2. Failure to execute a duly awarded contact may subject the Contractor to penalties.
- 18.3. City shall thereafter deliver one fully signed counterpart to Contractor.

END OF SECTION

SECTION 00 32 15

CONSTRUCTION PROJECT SCHEDULE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. General requirements for the preparation, submittal, updating, status reporting and management of the Construction Project Schedule
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements

D. Purpose

The City of Fort Worth (City) is committed to delivering quality, cost-effective infrastructure to its citizens in a timely manner. A key tool to achieve this purpose is a properly structured schedule with accurate updates. This supports effective monitoring of progress and is input to critical decision making by the project manager throughout the life of the project. Data from the updated project schedule is utilized in status reporting to various levels of the City organization and the citizenry.

This Document complements the City's Standard Agreement to guide the construction contractor (Contractor) in preparing and submitting acceptable schedules for use by the City in project delivery. The expectation is the performance of the work follows the accepted schedule and adhere to the contractual timeline.

The Contractor will designate a qualified representative (Project Scheduler) responsible for developing and updating the schedule and preparing status reporting as required by the City.

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Work associated with this Item is considered subsidiary to the various items bid. No separate payment will be allowed for this Item.
 - 2. Non-compliance with this specification is grounds for City to withhold payment of the Contractor's invoices until Contractor achieves said compliance.

1.3 REFERENCES

A. Project Schedules

Each project is represented by City's master project schedule that encompasses the entire scope of activities envisioned by the City to properly deliver the work. When the City contracts with a Contractor to perform construction of the Work, the Contractor

will develop and maintain a schedule for their scope of work in alignment with the City's standard schedule requirements as defined herein. The data and information of each such schedule will be leveraged and become integral in the master project schedule as deemed appropriate by the City's Project Control Specialist and approved by the City's Project Manager.

1. Master Project Schedule

The master project schedule is a holistic representation of the scheduled activities and milestones for the total project and be Critical Path Method (CPM) based. The City's Project Manager is accountable for oversight of the development and maintaining a master project schedule for each project. When the City contracts for the design and/or construction of the project, the master project schedule will incorporate elements of the Design and Construction schedules as deemed appropriate by the City's Project Control Specialist. The assigned City Project Control Specialist creates and maintains the master project schedule in P6 (City's scheduling software).

2. Construction Schedule

The Contractor is responsible for developing and maintaining a schedule for the scope of the Contractor's contractual requirements. The Contractor will issue an initial schedule for review and acceptance by the City's Project Control Specialist and the City's Project Manager as a baseline schedule for Contractor's scope of work. Contractor will issue current, accurate updates of their schedule (Progress Schedule) to the City at the end of each month throughout the life of their work.

B. Schedule Tiers

The City has a portfolio of projects that vary widely in size, complexity and content requiring different scheduling to effectively deliver each project. The City uses a "tiered" approach to align the proper schedule with the criteria for each project. The City's Project Manager determines the appropriate schedule tier for each project, and includes that designation and the associated requirements in the Contractor's scope of work. The following is a summary of the "tiers".

- 1. Tier 1: Small Size and Short Duration Project (design not required)
 The City develops and maintains a Master Project Schedule for the project. No schedule submittal is required from Contractor. City's Project Control Specialist acquires any necessary schedule status data or information through discussions with the respective party on an as-needed basis.
- 2. Tier 2: Small Size and Short to Medium Duration Project The City develops and maintains a Master Project Schedule for the project. The Contractor identifies "start" and "finish" milestone dates on key elements of their work as agreed with the City's Project Manager at the kickoff of their work effort. The Contractor issues to the City, updates to the "start" and "finish" dates for such milestones at the end of each month throughout the life of their work on the project.
- 3. Tier 3: Medium and Large Size and/or Complex Projects Regardless of Duration The City develops and maintains a Master Project Schedule for the project. The Contractor develops a Baseline Schedule and maintains the schedule of their respective scope of work on the project at a level of detail (generally Level 3) and in

alignment with the WBS structure in Section 1.4.H as agreed by the Project Manager. The Contractor issues to the City, updates of their respective schedule (Progress Schedule) at the end of each month throughout the life of their work on the project.

C. Schedule Types

Project delivery for the City utilizes two types of schedules as noted below. The City develops and maintains a Master Project Schedule as a "baseline" schedule and issue monthly updates to the City Project Manager (end of each month) as a "progress" schedule. The Contractor prepares and submits each schedule type to fulfill their contractual requirements.

1. Baseline Schedule

The Contractor develops and submits to the City, an initial schedule for their scope of work in alignment with this specification. Once reviewed and accepted by the City, it becomes the "Baseline" schedule and is the basis against which all progress is measured. The baseline schedule will be updated when there is a change or addition to the scope of work impacting the duration of the work, and only after receipt of a duly authorized change order issued by the City. In the event progress is significantly behind schedule, the City's Project Manager may authorize an update to the baseline schedule to facilitate a more practical evaluation of progress. An example of a Baseline Schedule is provided in Specification 00 32 15.1 Construction Project Schedule Baseline Example.

2. Progress Schedule

The Contractor updates their schedule at the end of each month to represent the progress achieved in the work which includes any impact from authorized changes in the work. The updated schedule must accurately reflect the current status of the work at that point in time and is referred to as the "Progress Schedule". The City's Project Manager and Project Control Specialist reviews and accepts each progress schedule. In the event a progress schedule is deemed not acceptable, the unacceptable issues are identified by the City within 5 working days and the Contractor must provide an acceptable progress schedule within 5 working days after receipt of non-acceptance notification. An example of a Progress Schedule is provided in Specification 00 32 15.2 Construction Project Schedule Progress Example.

1.4 CITY STANDARD SCHEDULE REQUIREMENTS

The following is an overview of the methodology for developing and maintaining a schedule for delivery of a project.

A. Schedule Framework

The schedule will be based on the defined scope of work and follow the (Critical Path Methodology) CPM method. The Contractor's schedule will align with the requirements of this specification and will be *cost loaded* to reflect their plan for execution. Overall schedule duration will align with the contractual requirements for the respective scope of work and be reflected in City's Master Project Schedule. The Project Number and Name of the Project is required on each schedule and must match the City's project data.

B. Schedule File Name

All schedules submitted to the City for a project will have a file name that begins with the City's *project number* followed by the *name of the project* followed by *baseline* (if a baseline schedule) or the *year and month* (if a progress schedule), as shown below.

• Baseline Schedule File Name

Format: City Project Number_Project Name_Baseline Example: 101376 North Montgomery Street HMAC Baseline

Progress Schedule File Name

Format: City Project Number_Project Name_YYYY-MM Example: 101376 North Montgomery Street HMAC 2018 01

Project Schedule Progress Narrative File Name

Format: City Project Number_Project Name_PN_YYYY-MM Example: 101376 North Montgomery Street HMAC PN 2018 01

C. Schedule Templates

The Contractor will utilize the relevant sections from the City's templates provided in the City's document management system as the basis for creating their respective project schedule. Specifically, the Contractor's schedule will align with the layout of the Construction section. The templates are identified by type of project as noted below.

- Arterials
- Aviation
- Neighborhood Streets
- Sidewalks (later)
- Quiet Zones (later)
- Street Lights (later)
- Intersection Improvements (later)
- Parks
- Storm water
- Street Maintenance
- Traffic
- Water

D. Schedule Calendar

The City's standard calendar for schedule development purposes is based on a 5-day workweek and accounts for the City's eight standard holidays (New Years, Martin Luther King, Memorial, Independence, Labor, Thanksgiving, day after Thanksgiving, Christmas). The Contractor will establish a schedule calendar as part of the schedule development process and provide to the Project Control Specialist as part of the basis for their schedule. Variations between the City's calendar and the Contractor's calendar must be resolved prior to the City's acceptance of their Baseline project schedule.

E. WBS & Milestone Standards for Schedule Development

The scope of work to be accomplished by the Contractor is represented in the schedule in the form of a Work Breakdown Structure (WBS). The WBS is the basis for the development of the schedule activities and shall be imbedded and depicted in the schedule.

The following is a summary of the standards to be followed in preparing and maintaining a schedule for project delivery.

- 1. Contractor is required to utilize the City's WBS structure and respective project type template for "Construction" as shown in Section 1.4.H below. Additional activities may be added to Levels 1 4 to accommodate the needs of the organization executing the work. Specifically the Contractor will add activities under WBS XXXXXXX.80.83 "Construction Execution" that delineates the activities associated with the various components of the work.
- 2. Contractor is required to adhere to the City's Standard Milestones as shown in Section 1.4.I below. Contractor will include additional milestones representing intermediate deliverables as required to accurately reflect their scope of work.

F. Schedule Activities

Activities are the discrete elements of work that make up the schedule. They will be organized under the umbrella of the WBS. Activity descriptions should adequately describe the activity, and in some cases the extent of the activity. All activities are logically tied with a predecessor and a successor. The only exception to this rule is for "project start" and "project finish" milestones.

The activity duration is based on the physical amount of work to be performed for the stated activity, with a maximum duration of 20 working days. If the work for any one activity exceeds 20 days, break that activity down incrementally to achieve this duration constraint. Any exception to this requires review and acceptance by the City's Project Control Specialist.

G. Change Orders

When a Change Order is issued by the City, the impact is incorporated into the previously accepted baseline schedule as an update, to clearly show impact to the project timeline. The Contractor submits this updated baseline schedule to the City for review and acceptance as described in Section 1.5 below. Updated baseline schedules adhere to the following:

- 1. Time extensions associated with approved contract modifications are limited to the actual amount of time the project activities are anticipated to be delayed, unless otherwise approved by the Program Manager.
- 2. The re-baselined schedule is submitted by the Contractor *within ten workdays* after the date of receipt of the approved Change Order.
- 3. The changes in logic or durations approved by the City are used to analyze the impact of the change and is included in the Change Order. The coding for a new activity(s) added to the schedule for the Change Order includes the Change Order number in the Activity ID. Use as many activities as needed to accurately show the work of the Change Order. Revisions to the baseline schedule are not effective until accepted by the City.

H. City's Work Breakdown Structure

WBS Code XXXXXX	WBS Name Project Name	
XXXXXXX.30	•	
XXXXXX	X.30.10	Design Contractor Agreement
XXXXXX	X.30.20	Conceptual Design (30%)
XXXXXX	X.30.30	Preliminary Design (60%)
XXXXXX	X.30.40	Final Design
XXXXXX	X.30.50	Environmental
XXXXXX	X.30.60	Permits
XXXX	XX.30.60.10	Permits - Identification
XXXX	XX.30.60.20	Permits - Review/Approve
XXXXXXX.40	ROW & Easer	nents
XXXXXX	X.40.10	ROW Negotiations
XXXXXX	X.40.20	Condemnation
XXXXXXX.70	Utility Relocat	ion
XXXXXX	X.70.10	Utility Relocation Co-ordination
XXXXXXX.80	Construction	
XXXXXX	7.80.81	Bid and Award
XXXXXX	X.80.83	Construction Execution
XXXXXX	X.80.85	Inspection
XXXXXX	X.80.86	Landscaping
XXXXXXX.90	Closeout	
XXXXXX		Construction Contract Close-out
XXXXXX	X.90.40	Design Contract Closure

I. City's Standard Milestones

The following milestone activities (i.e., important events on a project that mark critical points in time) are of particular interest to the City and must be reflected in the project schedule for all phases of work.

Activity ID	Activity Name
Design	
3020	Award Design Agreement
3040	Issue Notice To Proceed - Design Engineer
3100	Design Kick-off Meeting
3120	Submit Conceptual Plans to Utilities, ROW, Traffic, Parks, Storm Water,
	Water & Sewer
3150	Peer Review Meeting/Design Review meeting (technical)
3160	Conduct Design Public Meeting #1 (required)
3170	Conceptual Design Complete
3220	Submit Preliminary Plans and Specifications to Utilities, ROW, Traffic,
	Parks, Storm Water, Water & Sewer
3250	Conduct Design Public Meeting #2 (required)
3260	Preliminary Design Complete

3310	Submit Final Design to Utilities, ROW, Traffic, Parks, Storm Water,
	Water & Sewer
3330	Conduct Design Public Meeting #3 (if required)
3360	Final Design Complete
ROW & Easo	ements
4000	Right of Way Start
4230	Right of Way Complete
TT. 171. TO 1	.•

Utility Relocation

7000 Utilities Start

7120 Utilities Cleared/Complete

Construction

Bid and Award

8110	Start Advertisement
8150	Conduct Bid Opening
8240	Award Construction Contract

Construction Execution

8330	Conduct Construction Public Meeting #4 Pre-Construction
8350	Construction Start
8370	Substantial Completion
8540	Construction Completion
9130	Notice of Completion/Green Sheet
9150	Construction Contract Closed
9420	Design Contract Closed

1.5 SUBMITTALS

A. Schedule Submittal & Review

The City's Project Manager is responsible for reviews and acceptance of the Contractor's schedule. The City's Project Control Specialist is responsible for ensuring alignment of the Contractor's baseline and progress schedules with the Master Project Schedule as support to the City's Project Manager. The City reviews and accepts or rejects the schedule *within ten workdays* of Contractor's submittal.

1. Schedule Format

The Contractor will submit each schedule in two electronic forms, one in native file format (.xer, .xml, .mpx) and the second in a pdf format, in the City's document management system in the location dedicated for this purpose and identified by the Project Manager. In the event the Contractor does not use Primavera P6 or MS Project for scheduling purposes, the schedule information must be submitted in .xls or .xlsx format in compliance with the sample layout (See Specification 00 32 115.1 Construction Project Schedule Baseline Example), including activity predecessors, successors and total float.

2. Initial & Baseline Schedule

The Contractor will develop their schedule for their scope of work and submit their initial schedule in electronic form (in the file formats noted above), in the City's document management system in the location dedicated for this purpose within ten workdays of the Notice of Award.

The City's Project Manager and Project Control Specialist review this initial schedule to determine alignment with the City's Master Project Schedule, including format & WBS structure. Following the City's review, feedback is provided to the Contractor for their use in finalizing their initial schedule and issuing (*within five workdays*) their Baseline Schedule for final review and acceptance by the City.

3. Progress Schedule

The Contractor will update and issue their project schedule (Progress Schedule) by the last day of each month throughout the life of their work on the project. The Progress Schedule is submitted in electronic form as noted above, in the City's document management system in the location dedicated for this purpose.

The City's Project Control team reviews each Progress Schedule for data and information that support the assessment of the update to the schedule. In the event data or information is missing or incomplete, the Project Controls Specialist communicates directly with the Contractor's scheduler for providing same. The Contractor re-submits the corrected Progress Schedule *within 5 workdays*, following the submittal process noted above. The City's Project Manager and Project Control Specialist review the Contractor's progress schedule for acceptance and to monitor performance and progress.

The following list of items are required to ensure proper status information is contained in the Progress Schedule.

- Baseline Start date
- Baseline Finish Date
- % Complete
- Float
- Activity Logic (dependencies)
- Critical Path
- Activities added or deleted
- Expected Baseline Finish date
- Variance to the Baseline Finish Date

B. Monthly Construction Status Report

The Contractor submits a written status report (referred to as a progress narrative) at the end of each month to accompany the Progress Schedule submittal, using the standard format provided in Specification 00 32 15.3 Construction Project Schedule Progress Narrative. The content of the Construction Project Schedule Progress Narrative should be concise and complete to:

- Reflect the current status of the work for the reporting period (including actual activities started and/or completed during the reporting period)
- Explain variances from the baseline on critical path activities
- Explain any potential schedule conflicts or delays
- Describe recovery plans where appropriate
- Provide a summary forecast of the work to be achieved in the next reporting period.

C. Submittal Process

- Schedules and Monthly Construction Status Reports are submitted in Buzzsaw following the steps outlined in Specification 00 32 15.4 Construction Project Schedule Submittal Process.
- Once the project has been completed and Final Acceptance has been issued by the City, no further progress schedules or construction status reports are required from the Contractor.
- 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 1.9 QUALITY ASSURANCE
 - A. The person preparing and revising the Contractor's Project Schedule shall be experienced in the preparation of schedules of similar complexity.
 - B. Schedule and supporting documents addressed in this Specification shall be prepared, updated and revised to accurately reflect the performance of the Contractor's scope of work.
 - C. The Contractor is responsible for the quality of all submittals in this section meeting the standard of care for the construction industry for similar projects.
- 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 1.12 WARRANTY [NOT USED]
- 1.13 ATTACHMENTS

Spec 00 32 15.1 Construction Project Schedule Baseline Example

Spec 00 32 15.2 Construction Project Schedule Progress Example

Spec 00 32 15.3 Construction Project Schedule Progress Narrative

Spec 00 32 15.4 Construction Project Schedule Submittal Process

PART 2 - PRODUCTS [NOT USED]

PART 3 - EXECUTION [NOT USED]

END OF SECTION

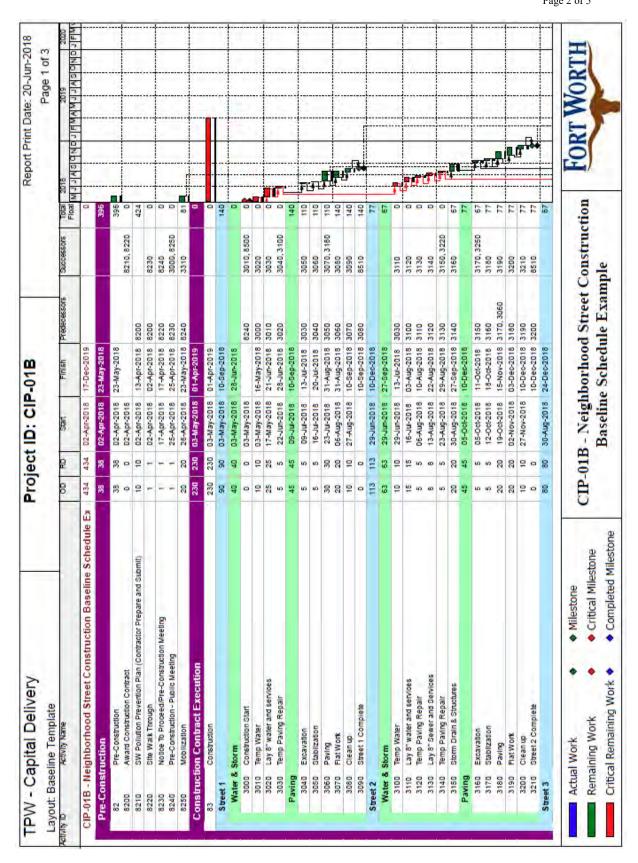
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DATE	NAME	SUMMARY OF CHANGE		
July 20, 2018	M. Jarrell	Initial Issue		

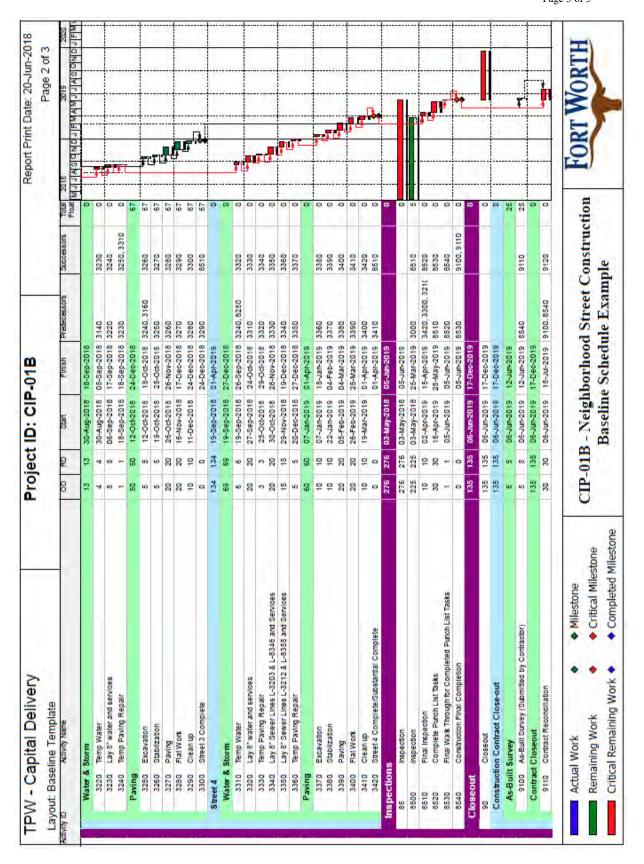
SECTION 00 32 15.1

CONSTRUCTION PROJECT SCHEDULE – BASELINE EXAMPLE

PART 1 - GENERAL

The following is an example of a Contractor's project schedule that illustrates the data and expectation for schedule content depicting the baseline for the project. This version of the schedule is referred to as a "baseline" schedule. This example is intended to provide guidance for the Contractor when developing and submitting a baseline schedule. See CFW Specification 00 32 15 Construction Project Schedule for details and requirements regarding the Contractor's project schedule.





Report Print Date: 20-Jun-2018 Page 3 of 3	Successors Total 2018 2019 2020 FINAM JAN SURVEY TOTAL MAIN JAN SON DUFFINA	9130 0			
m	sh Predecessors	11-Sep-2019 9110 23-Oct-2019 9120	14-Nov-2019 9130	14-Nov-2019 9140	-2019 9150
Project ID: CIP-01B	Start Finish	19-Jul-2019 11-Sep-2019 23-Oct-2019	14-Nov-2019 14-Nov-	14-Nov-	17-Dec-2019 17-Dec-2019 9150
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1		ocumentation) set	loe Paid		
TPW - Capital Delivery Layout: Baseline Template	Activity Name	Submittals (Project Closeout Documentation) Notice of Completion/Green Sheet	Final Construction Contract Involce Paid	Construction Contract Closed	Lessons Learned
- Ca		9120			9160
TPW	Activity ID				

END OF SECTION

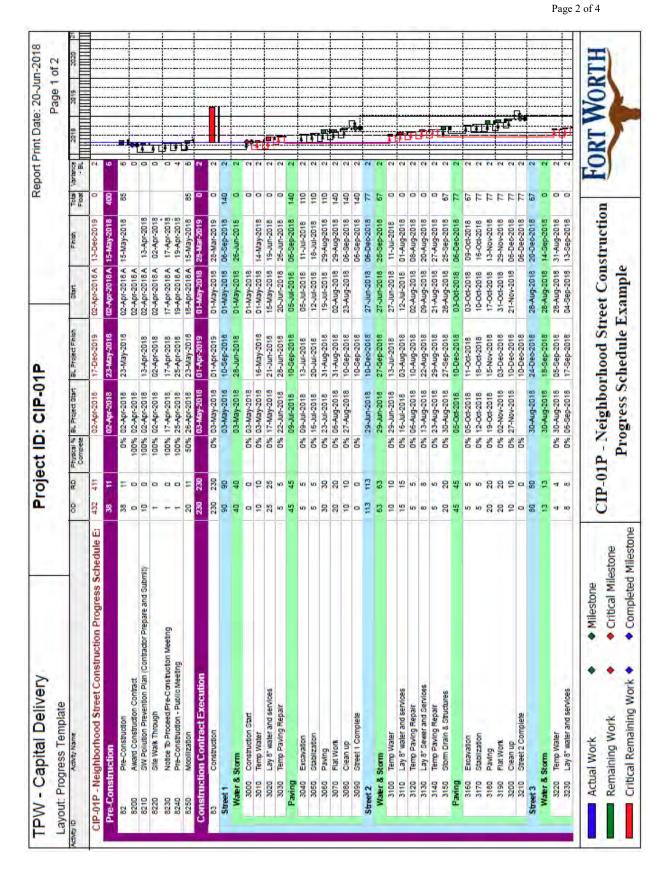
Revision Log				
DATE	NAME	SUMMARY OF CHANGE		
July 20, 2018	M. Jarrell	Initial Issue		

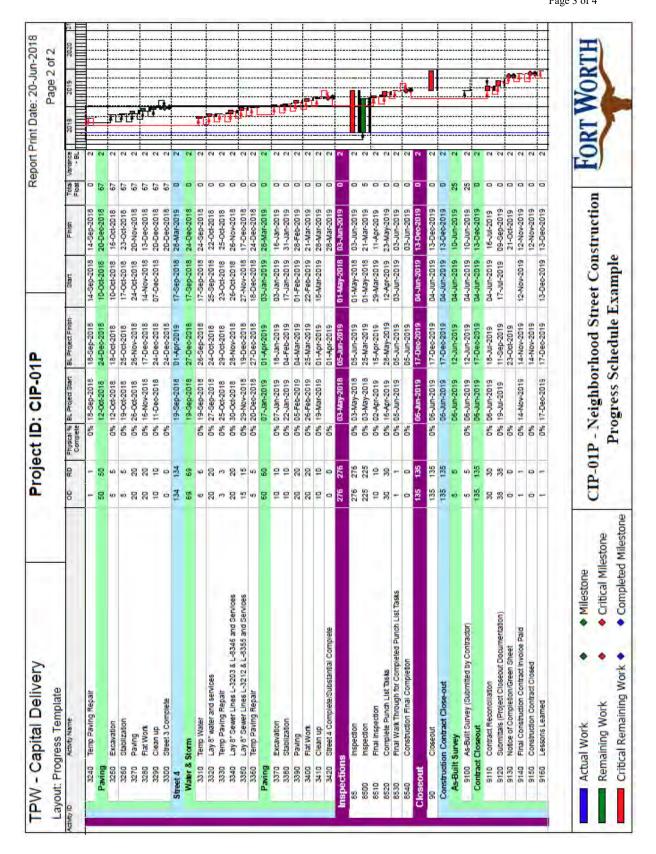
SECTION 00 32 15.2

CONSTRUCTION PROJECT SCHEDULE - PROGRESS EXAMPLE

PART 1 - GENERAL

The following is an example of a Contractor's project schedule that illustrates the data and expectation for schedule content depicting the progress for the project. This version of the schedule is referred to as a "progress" schedule. This example is intended to provide guidance for the Contractor when developing and submitting a progress schedule. See CFW Specification 00 32 15 Construction Project Schedule for details and requirements regarding the Contractor's project schedule.





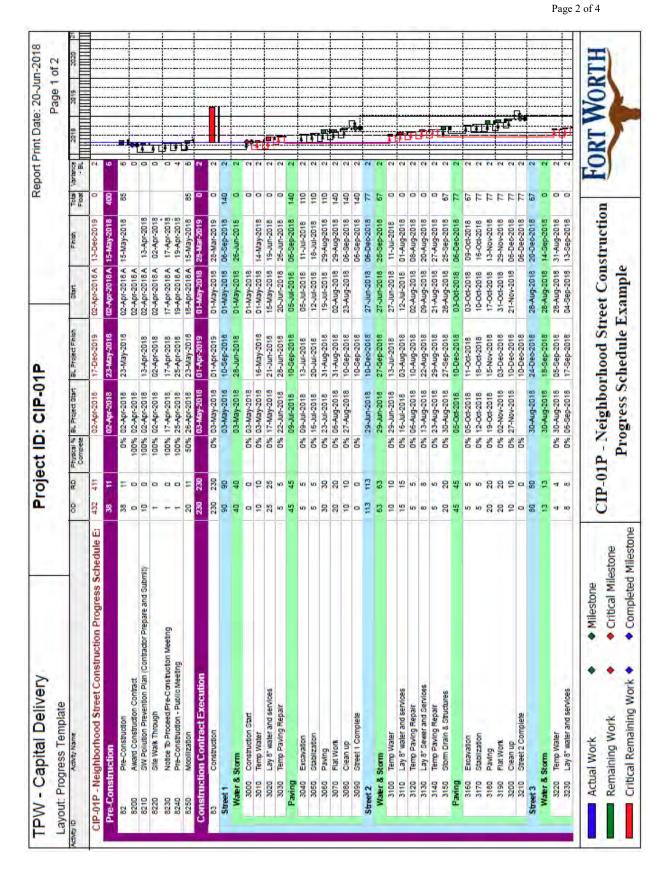
		Revision Log
DATE	NAME	SUMMARY OF CHANGE
July 20, 2018	M. Jarrell	Initial Issue

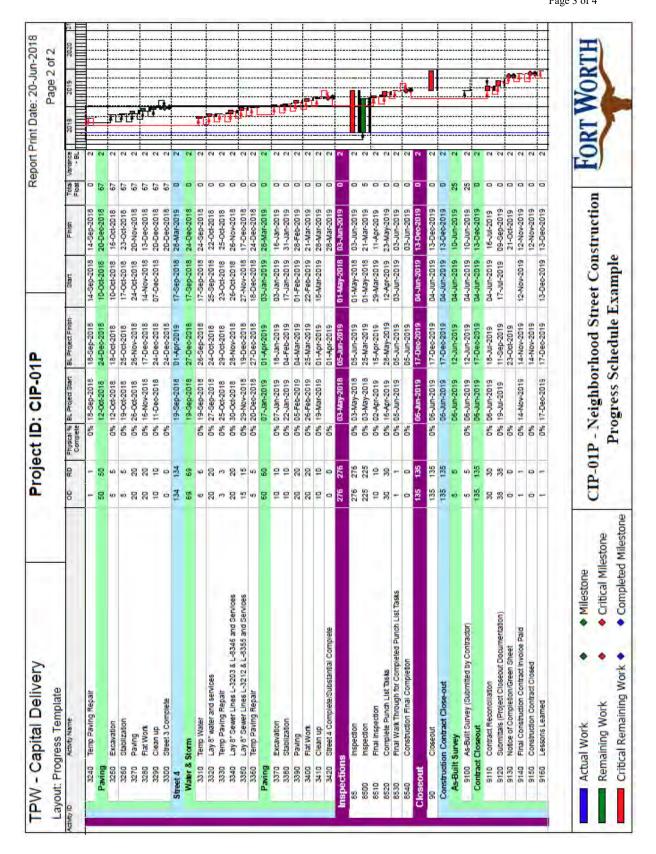
SECTION 00 32 15.2

CONSTRUCTION PROJECT SCHEDULE - PROGRESS EXAMPLE

PART 1 - GENERAL

The following is an example of a Contractor's project schedule that illustrates the data and expectation for schedule content depicting the progress for the project. This version of the schedule is referred to as a "progress" schedule. This example is intended to provide guidance for the Contractor when developing and submitting a progress schedule. See CFW Specification 00 32 15 Construction Project Schedule for details and requirements regarding the Contractor's project schedule.





		Revision Log
DATE	NAME	SUMMARY OF CHANGE
July 20, 2018	M. Jarrell	Initial Issue

SECTION 00 32 15.3 CONSTRUCTION PROJECT SCHEDULE PROGRESS NARRATIVE

Reporting Period:	Date Issued:
Project Name:	Company Name:
City Project No:	Engineer's Project No:
City Project Manager:	Engineer's Project Manager:

Α.	List of	activities	accom	plished i	n the	reporting	period.

- 1. (insert text here)
- 2. (insert text here)
- 3. (insert text here)
- 4. (insert text here)
- 5. (insert text here)
- 6. (insert text here)

B. List of activities to be accomplished in the next reporting period

- 1. (insert text here)
- 2. (insert text here)
- 3. (insert text here)
- 4. (insert text here)
- 5. (insert text here)
- 6. (insert text here)

C. List any potential delays and provide mitigation actions

- 1. (insert text here)
- 2. (insert text here)
- 3. (insert text here)

D. List any actual delays and provide recovery actions

- 1. (insert text here)
- 2. (insert text here)
- 3. (insert text here)

SECTION 00 32 15.4

CONSTRUCTION PROJECT SCHEDULE - SUBMITTAL PROCESS

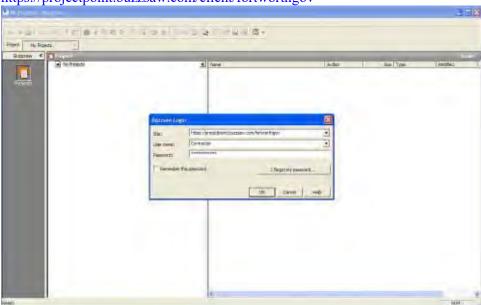
PART 1 - GENERAL

The following information provides the process steps for the Contractor to follow for submitting a project baseline or progress schedule for a capital project to the City of Fort Worth. See CFW Specification 00 32 15 Construction Project Schedule for details and requirements regarding the Contractor's project schedule.

If you are not a registered CFW Buzzsaw user, please email or contact:

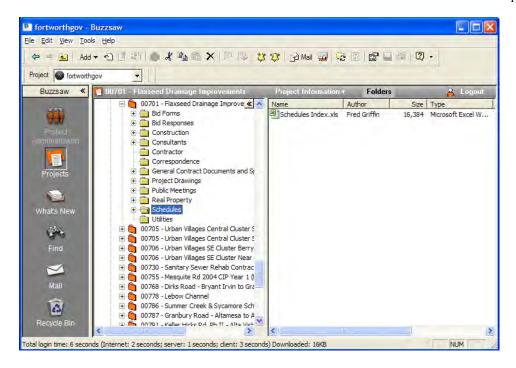
Fred Griffin, Buzzsaw Administrator City of Fort Worth Fred.Griffin@fortworthgov.org 817-392-8868

Using your registered username and password log into the City's Buzzsaw Site https://projectpoint.buzzsaw.com/client/fortworthgov



Navigate to your Project Folder. Verify that your Project ID and Project Name are consistent with Project Folder Name.

Navigate to the Schedule Directory under your Project Folder. The 00701-Flaxseed Drainage Improvements project is used for illustration.



Two files will be uploaded for each submittal. A native schedule file format either Primavera .xer or MS Project .mpp and a PDF version of the schedule will be uploaded

Verify that the file name contains the 5-digit Project ID, Project Name, and Submittal Date and follows the standard naming convention. Initial schedule submittal will be labeled as 'Baseline' for example:

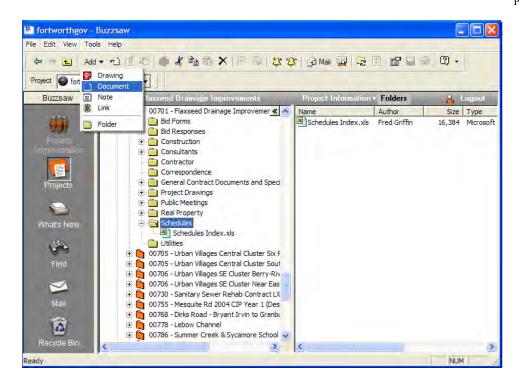
00701-FlaxseedDrainageImprovements-Baseline

Schedule submittal updates will be labeled with Schedule Submittal Date 'YYYY_MM' for example:

00701-FlaxseedDrainageImprovements-2009 01

Expand or select the Schedules folder and add both the native file and PDF file to the directory.

From the Toolbar Select Add Document

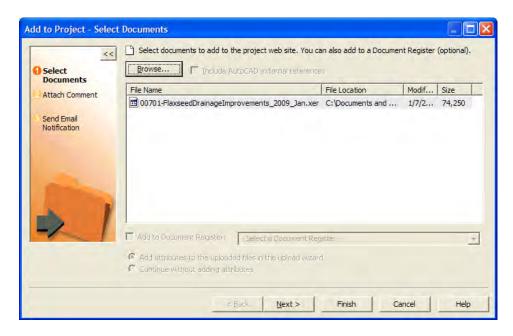


Select *Browse* and go to the location of the files on your desktop. Select *Open*



The file will appear in the Buzzsaw Add to Project – Select Documents window Select *Next*.

Do not select Finish at this time.

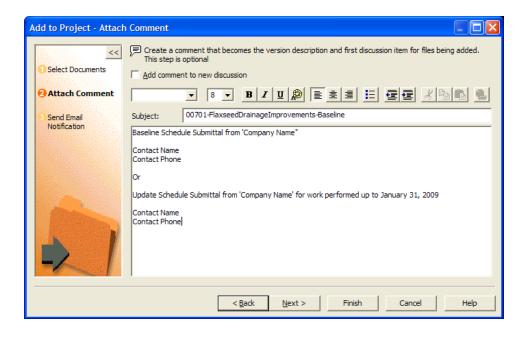


You will be placed into the Attach Comment window to enter a record into the Project Schedule Submittal Log.

Enter the Project ID-Project Name-Submittal in the Subject Line.

Type Submittal and Company Name into the *Comment* window along with Contact Name and Contact Phone Number.

Select Next.



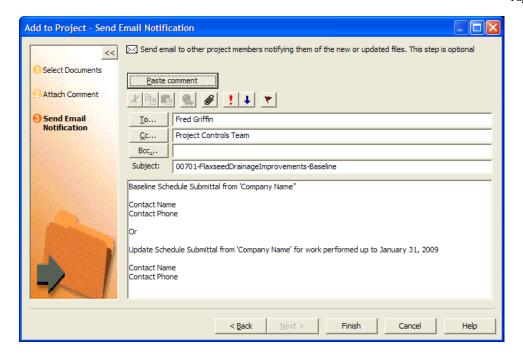
You will be placed into the Send Email Notification window.

Select *To* and the Select Recipients window will appear with a list of Project Contacts.

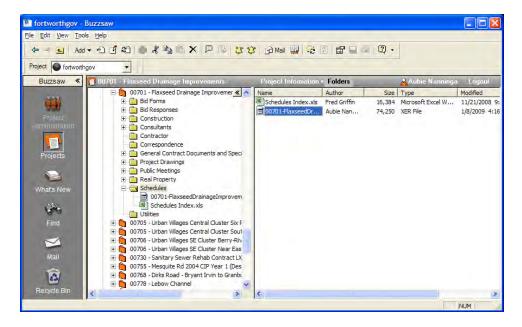
Select the Project Manager as the *To* Recipient and the Project Controls Group as the *Copy* Recipient.



Select the *Paste Comment* button to copy the Comment into the body of the email Select *Finish*.



The schedule file is uploaded to the directory. An email is sent to the City's Project Manager and Project Control Specialist.



Upload the PDF file using the same guideline.

		Revision Log
DATE	NAME	SUMMARY OF CHANGE
July 20, 2018	M. Jarrell	Initial Issue

SECTION 00 35 13 CONFLICT OF INTEREST STATEMENT

Each bidder, offeror or respondent to a City of Fort Worth procurement is required to complete a Conflict of Interest Questionnaire or certify that one is current and on file with the City Secretary's Office pursuant to state law.

If a member of the Fort Worth City Council, any one or more of the City Manager or Assistant City Managers, or an agent of the City who exercises discretion in the planning, recommending, selecting or contracting with a bidder, offeror or respondent is affiliated with your company, then a Local Government Officer Conflicts Disclosure Statement (CIS) may be required.

You are urged to consult with counsel regarding the applicability of these forms and Local Government Code Chapter 176 to your company.

The referenced forms may be downloaded from the links provided below.

https://www.ethics.state.tx.us/data/forms/conflict/CIQ.pdf

https://	/www.ethics.state.tx.us/data/forms/confli	ict/CIS.pdf	
	CIQ Form is on file with City Secretary	y	
	CIQ Form is being provided to the City	y Secretary	
	CIS Form does not apply		
	CIS Form is on File with City Secretar	у	
	CIS Form is being provided to the City	Secretary	
BIDD	ER:		
Compa	any	Ву:	(Please Print)
Addres	ss	Signature:	
		Title:	
City/S1	tate/Zip		(Please Print)

SECTION 00 41 00 BID FORM

TO: The Purchasing Manager

c/o: The Purchasing Division

200 Texas Street

City of Fort Worth, Texas 76102

FOR: CC Moss and ML Phillips SRTS Improvements

City Project No.: 102411

Units/Sections:

1. Enter Into Agreement

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

2. BIDDER Acknowledgements and Certification

- 2.1. In submitting this Bid, Bidder accepts all of the terms and conditions of the INVITATION TO BIDDERS and INSTRUCTIONS TO BIDDERS, including without limitation those dealing with the disposition of Bid Bond.
- 2.2. Bidder is aware of all costs to provide the required insurance, will do so pending contract award, and will provide a valid insurance certificate meeting all requirements within 14 days of notification of award.
- 2.3. Bidder certifies that this Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.
- 2.4. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
- 2.5. Bidder has not solicited or induced any individual or entity to refrain from bidding.
- 2.6. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph:
 - a. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process.
 - b. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of City (b) to establish Bid prices at artificial non-competitive levels, or (c) to deprive City of the benefits of free and open competition.
 - c. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of City, a purpose of which is to establish Bid prices at artificial, noncompetitive levels.

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

3. Prequalification

The Bidder acknowledges that the following work types must be performed only by prequalified contractors and subcontractors:

a. Concrete Paving Construction/Reconstruction

4. Time of Completion

- 4.1. The Work will be complete for Final Acceptance within 130 days after the date when the the Contract Time commences to run as provided in Paragraph 2.03 of the General Conditions.
- 4.2. Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work {and/or achievement of Milestones} within the times specified in the Agreement.

5. Attached to this Bid

The following documents are attached to and made a part of this Bid:

- a. This Bid Form, Section 00 41 00
- b. Required Bid Bond, Section 00 43 13 issued by a surety meeting the requirements of Paragraph 5.01 of the General Conditions.
- c. Proposal Form, Section 00 42 43
- d. Vendor Compliance to State Law Non Resident Bidder, Section 00 43 37
- e. MWBE Forms (optional at time of bid)
- f. Prequalification Statement, Section 00 45 12
- g. Conflict of Interest Statement, Section 00 35 13*If necessary, CIQ or CIS forms are to be provided directly to City Secretary
- h. Any additional documents that may be required by Section 12 of the Instructions to Bidders

6. Total Bid Amount

6.1. Bidder will complete the Work in accordance with the Contract Documents for the following bid amount. In the space provided below, please enter the total bid amount for this project. Only this figure will be read publicly by the City at the bid opening.

6.2. It is understood and agreed by the Bidder in signing this proposal that the total bid amount entered below is subject to verification and/or modification by multiplying the unit bid prices for each pay item by the respective estimated quantities shown in this proposal and then totaling all of the extended amounts.

Total Bid \$0.00

7. Bid Submittal	
This Bid is submitted on Month Day, Year	by the entity named below.
Respectfully submitted,	Receipt is acknowledged of the following Addenda:
By:	Addendum No. 1:
(Signature)	Addendum No. 2:
	Addendum No. 3:
Printed Name Here	Addendum No. 4:
(Printed Name)	
Title: Title Here Company: Company Name Here	Corporate Seal:
Address: Address Here Address Here or Space City, State Zip Code Here	
State of Incorporation: State Here Email: Your Email Address Here	

END OF SECTION

Phone: Your Phone Number Here

SECTION 00 42 43 PROPOSAL FORM

UNIT PRICE BID

Bidder's Application

	Project Item Information				Bidder's	s Proposal
Bidlist Item No.	Description	Specification Section No.	Unit of Measure	Bid Quantity	Unit Price	Bid Value
1	PREPARING ROW	0100 6002	STA	150		
2	PREPARING ROW (TREE) (12" TO 24" DIA)	0100 6004	EA	18		
3	REMOVING CONC (MEDIANS)	0104 6011	SY	6		
4	REMOVING CONC (SIDEWALKS)	0104 6015	SY	880		
5	REMOVING CONC (DRIVEWAYS)	0104 6017	SY	3101		
6	REMOVING CONC (CURB OR CURB & GUTTER)	0104 6029	LF	1605		
7	REMOVING CONC (WHEELCHAIR RAMP)	0104 6032	SY	202		
8	REMOVING STAB BASE & ASPH PAV (4")	0105 6074	SY	1		
9	BLOCK SODDING	0162 6002	SY	7500		
10	VEGETATIVE WATERING	0168 6001	MG	263		
11	CL C CONC (RETAINING WALL)	0420 6062	CY	4.5		
12	RIPRAP (CONC)(4 IN)	0432 6001	CY	3.1		
13	ADJUSTING MANHOLES (WATER VALVE BOX)	0479 6005	EA	80		
14	MOBILIZATION	0500 6001	LS	1		
	BARRICADES, SIGNS AND TRAFFIC HANDLING	0502 6001	MO	8.5		
16	TEMP SEDMT CONT FENCE (INSTALL)	0506 6038	LF	1150		
17	TEMP SEDMT CONT FENCE (REMOVE)	0506 6039	LF	1150		
18	BIODEG EROSN CONT LOGS (INSTL) (8")	0506 6040	LF	1150		
19	CONC CURB & GUTTER (TY II)	0529 6008	LF	352		
20 21	DRIVEWAYS (CONC)	0530 6004	SY SY	3177		
21	CONC SIDEWALKS (4")	0531 6001 0531 6004	EA EA	5562 4		
23	CURB RAMPS (TY 1) CURB RAMPS (TY 2)	0531 6004	EA	18		
23	CURB RAMPS (TY 3)	0531 6005	EA	4		
25	CURB RAMPS (TY 7)	0531 6006	EA	55		
26	CURB RAMPS (TY 10)	0531 6010	EA	5		
27	CONC SIDEWALKS (SPECIAL) (RETAINING WALL)	0531 6057	SF	2822		
28	CHAIN LINK FENCE (INSTALL) (6')	0550 6001	LF	263		
29	CHAIN LINK FENCE (REMOVE)	0550 6003	LF	347		
30	REMOVE AND INSTALL EXISTING GATE	0550 6015	EA	3		
	PIPE UNDERDRAINS (TY 8) (6")	0556 6008	LF	10		
	IN SM RD SN SUP&AM TY10BWG (1) SA (P)	0644 6001	EA	70		
33	RELOCATE SM RD SN SUP&AM TY 10BWG	0644 6068	EA	18		
34	REMOVE SM RD SN SUP&AM	0644 6076	EA	3		
35	REFL PAV MRK TY I (W)24"(SLD)(100MIL)	0666 6048	LF	3636		
36	REFL PAV MRK TY II (W) 24" (SLD)	0666 6182	LF	3636		
37	REFL PAV MRK TY II (Y) 4" (SLD)	0666 6207	LF	5700		
38	RE PM W/RET REQ TY I (Y)4"(SLD)(100MIL)	0666 6315	LF	5700		
39	REFL PAV MRKR TY II-A-A	0672 6009	EA	228		_
40	ELIM EXT PAV MRK & MRKS (12")	0677 6005	LF	756		
41	ELIM EXT PAV MRK & MRKS (24")	0677 6007	LF	516		_
42	PAV SURF PREP FOR MRK (4")	0678 6001	LF	5700		

SECTION 00 42 43 PROPOSAL FORM

UNIT PRICE BID

Bidder's Application

Total Bid

	Project Item Information				Bidder's	s Proposal
Bidlist Item No.	Description	Specification Section No.	Unit of Measure	Bid Quantity	Unit Price	Bid Value
43	PAV SURF PREP FOR MRK (24")	0678 6008	LF	3636		
44	PAV SURF PREP FOR MRK (RPM)	0678 6033	EA	228		
45	RELOCATE OF PEDESTRIAN PUSH BUTTON	0690 6123	EA	1		
46	TREE PROTECTION	1004 6001	EA	62		_

SECTION 00 43 13 BID BOND

KNOW ALL BY THESE PRESENTS:

IID: data all te	That we,				ompany N				, knov	
"Bidder" he		bucinose ir	the State		Surety Nar	ne Here s "Surety" here	oin are hold s	and firmly h	a corpora	•
•						•		•		-
				•		laws of Texas		•	•	
-				-		ul money of th		•		
	•	•	•			truly to be ma		urselves, o	ur heirs, e	xecutors,
administrate	ors, succe	ssors and a	assigns, jo	ointly and	severally,	firmly by these	e presents.			
,	WHEREA		•			or proposal Phillips SRTS	•		ne followir	ng project
the Contract required for terms of su such Contract execution of Surety, not	of the execution the execution of the Corton exceeds	foregoing pution of the then this outling the thing or dance wintract, this	oroject to Contract obligation th the tenderal	the Prince and shall shall be a ms of sar Ill becom	cipal, and to the cipal, and become or fails ethe prop	obligation in the Principal state Contract in the Contract in the null and void to satisfy all reflection compensations are selected	shall satisfy a n writing with id. If, howeve requirements ity, without re	II requirem the City in r, the Princ and conditi course of	ents and accordance to the cordance to the cordance to the cordance to the cordance the cordance the cordance c	conditions be with the to execute red for the pal and/or
			-			iled on this Bo rict of Texas, F			rrant Cour	nty,
l duly author				•	and the Su	rety have SIG day of	NED and SEA		nstrument 2021.	by
						PRINCIP/	AL:			
						BY:				
							Signature			
ATTEST:										

Witness as to Principal

Name and Title

		Address:	
		SURETY:	
		BY:	
			Signature
			Name and Title
		Address:	_
Witness	as to Surety	Telephone	Number:
	·	·	
Attach F	Power of Attorney (Surety) for Attorney-in-Fact		
*Note:	If signed by an officer of the Surety Company, showing that this person has authority to sign sits mailing address, both must be provided. The awarded.	such obligation. If S	Surety's physical address is different from
	END (OF SECTION	•

SECTION 00 45 11

BIDDERS PREQUALIFICATIONS

1. Summary. All contractors are required to be prequalified by the City prior to submitting bids. To be eligible to bid the contractor must submit Section 00 45 12, Prequalification Statement for the work type(s) listed with their Bid. Any contractor or subcontractor who is not prequalified for the work type(s) listed must submit Section 00 45 13, Bidder Prequalification Application in accordance with the requirements below.

The prequalification process will establish a bid limit based on a technical evaluation and financial analysis of the contractor. The information must be submitted seven (7) days prior to the date of the opening of bids. For example, a contractor wishing to submit bids on projects to be opened on the 7th of April must file the information by the 31st day of March in order to bid on these projects. In order to expedite and facilitate the approval of a Bidder's Pregualification Application, the following must accompany the submission.

- a. A complete set of audited or reviewed financial statements.
 - (1) Classified Balance Sheet
 - (2) Income Statement
 - (3) Statement of Cash Flows
 - (4) Statement of Retained Earnings
 - (5) Notes to the Financial Statements, if any
- b. A certified copy of the firm's organizational documents (Corporate Charter, Articles of Incorporation, Articles of Organization, Certificate of Formation, LLC Regulations, Certificate of Limited Partnership Agreement).
- c. A completed Bidder Prequalification Application.
 - (1) The firm's Texas Taxpayer Identification Number as issued by the Texas Comptroller of Public Accounts. To obtain a Texas Taxpayer Identification number visit the Texas Comptroller of Public Accounts online at the following web address www.window.state.tx.us/taxpermit/ and fill out the application to apply for your Texas tax ID.
 - (2) The firm's e-mail address and fax number.
 - (3) The firm's DUNS number as issued by Dun & Bradstreet. This number is used by the City for required reporting on Federal Aid projects. The DUNS number may be obtained at www.dnb.com.
- d. Resumes reflecting the construction experience of the principles of the firm for firms submitting their initial prequalification. These resumes should include the size and scope of the work performed.
- e. Other information as requested by the City.

2. Prequalification Requirements

- a. *Financial Statements*. Financial statement submission must be provided in accordance with the following:
 - (1) The City requires that the original Financial Statement or a certified copy be submitted for consideration.

- (2) To be satisfactory, the financial statements must be audited or reviewed by an independent, certified public accounting firm registered and in good standing in any state. Current Texas statues also require that accounting firms performing audits or reviews on business entities within the State of Texas be properly licensed or registered with the Texas State Board of Public Accountancy.
- (3) The accounting firm should state in the audit report or review whether the contractor is an individual, corporation, or limited liability company.
- (4) Financial Statements must be presented in U.S. dollars at the current rate of exchange of the Balance Sheet date.
- (5) The City will not recognize any certified public accountant as independent who is not, in fact, independent.
- (6) The accountant's opinion on the financial statements of the contracting company should state that the audit or review has been conducted in accordance with auditing standards generally accepted in the United States of America. This must be stated in the accounting firm's opinion. It should: (1) express an unqualified opinion, or (2) express a qualified opinion on the statements taken as a whole.
- (7) The City reserves the right to require a new statement at any time.
- (8) The financial statement must be prepared as of the last day of any month, not more than one year old and must be on file with the City 16 months thereafter, in accordance with Paragraph 1.
- (9) The City will determine a contractor's bidding capacity for the purposes of awarding contracts. Bidding capacity is determined by multiplying the positive net working capital (working capital = current assets current liabilities) by a factor of 10. Only those statements reflecting a positive net working capital position will be considered satisfactory for pregualification purposes.
- (10) In the case that a bidding date falls within the time a new financial statement is being prepared, the previous statement shall be updated with proper verification.
- b. *Bidder Prequalification Application*. A Bidder Prequalification Application must be submitted along with audited or reviewed financial statements by firms wishing to be eligible to bid on all classes of construction and maintenance projects. Incomplete Applications will be rejected.
 - (1) In those schedules where there is nothing to report, the notation of "None" or "N/A" should be inserted.
 - (2) A minimum of five (5) references of related work must be provided.
 - (3) Submission of an equipment schedule which indicates equipment under the control of the Contractor and which is related to the type of work for which the Contactor is seeking prequalification. The schedule must include the manufacturer, model and general common description of each piece of equipment. Abbreviations or means of describing equipment other than provided above will not be accepted.

3. Eligibility to Bid

- a. The City shall be the sole judge as to a contractor's prequalification.
- b. The City may reject, suspend, or modify any prequalification for failure by the contractor to demonstrate acceptable financial ability or performance.
- c. The City will issue a letter as to the status of the prequalification approval.

d. If a contractor has a valid prequalification letter, the contractor will be eligible to bid the prequalified work types until the expiration date stated in the letter.

	SECTION 00 45 12	
I	PREQUALIFICATION STATEMENT	
	y procurement is required to complete to complete to contractors and/or subcontractors whom	
Major Work Type	Contractor/Subcontractor Company Name	Prequalification Expiration Date
Concrete Paving Construction/Reconstruction		
	by certifies that the contractors and/or	succonfidences accentica in
the table above are currently p BIDDER:	orequalified for the work types listed.	
BIDDER:		
BIDDER:		ease Print)
BIDDER: Company	By:(Pl	
BIDDER:	By:(Pl	
BIDDER: Company Address	By:(Ple	
BIDDER: Company	By:(Pl	
BIDDER: Company Address	By: (Please	

25



SECTION 00 45 13

BIDDER PREQUALIFICATION APPLICATION

Date of Balance Sheet			
	Mark	only one:	
		Individ Limited	d Partnership
Name under which you wish to qual	General Partnership Corporation Limited Liability Comp		
Post Office Box	City	State	Zip Code
Street Address (required)	City	State	Zip Code
()	()		
Telephone	Fax	Email	
	Texas Taxpayer Ide	entification No.	
	Federal Employers Id	lentification No.	
	DUNS No. (if a	applicable)	

MAIL THIS QUESTIONAIRE ALONG WITH FINANCIAL STATEMENTS TO: CITY OF FORT WORTH TEXAS 200 TEXAS STREET

FORT WORTH, TEXAS 76102-6311

AND MARK THE ENVELOPE: "BIDDER PREQUALIFICATION APPLICATION"

BUSINESS CLASSIFICATION

The following should be completed in order that we may properly classify your firm:

(Check the block(s) which are applicable – Block 3 is to be left blank if Block 1 and/or Block 2 is checked)
Has fewer than 100 employees
and/or
Has less than \$6,000,000.00 in annual gross receipts
OR
Does not meet the criteria for being designated a small business as provided in Section
2006.001 of the Texas Government Code.
The classification of your firm as a small or large business is not a factor in determining eligibility to become prequalified.
MAJOR WORK CATEGORIES
Water Department
Augur Boring - 24-inch diameter casing and less
Augur Boring - Greater than 24-inch diameter casing and greater
Tunneling – 36-Inches – 60 –inches, and 350 LF or less
Tunneling - 36-Inches – 60 –inches, and greater than 350 LF
Tunneling – 66" and greater, 350 LF and greater
Tunneling – 66" and greater, 350 LF or Less
Cathodic Protection
Water Distribution, Development, 8-inch diameter and smaller
Water Distribution, Urban and Renewal, 8-inch diameter and smaller
Water Distribution, Development, 12-inch diameter and smaller
Water Distribution, Urban and Renewal, 12-inch diameter and smaller
Water Transmission, Development, 24-inches and smaller
Water Transmission, Urban/Renewal, 24-inches and smaller
Water Transmission, Development, 42-inches and smaller
Water Transmission, Urban/Renewal, 42-inches and smaller
Water Transmission, Development, All Sizes
Water Transmission, Urban/Renewal, All Sizes Sewer Bypass Pumping, 18-inches and smaller
Sewer Bypass Pumping, 18-inches – 36-inches
Sewer Bypass Pumping, 16-inches – 50-inches Sewer Bypass Pumping 42-inches and larger
CCTV, 8-inches and smaller
CCTV, 12-inches and smaller
CCTV, 18-inches and smaller
CCTV, 24-inches and smaller
CCTV, 42-inches and smaller
CCTV, 48-inches and smaller

MAJOR WORK CATEGORIES, CONTINUED

Sewer CIPP, 12-inches and smaller				
Sewer CIPP, 24-inches and smaller				
Sewer CIPP, 42-inches and smaller				
Sewer CIPP, All Sizes				
Sewer Collection System, Development, 8-inches and smaller				
Sewer Collection System, Urban/Renewal, 8-inches and smaller				
Sewer Collection System, Development, 12-inches and smaller				
Sewer Collection System, Urban/Renewal, 12-inches and smaller				
Sewer Interceptors, Development, 24-inches and smaller				
Sewer Interceptors, Urban/Renewal, 24-inches and smaller				
Sewer Interceptors, Development, 42-inches and smaller				
Sewer Interceptors, Urban/Renewal, 42-inches and smaller				
Sewer Interceptors, Development, 48-inches and smaller				
Sewer Interceptors, Urban/Renewal, 48-inches and smaller				
Sewer Pipe Enlargement 12-inches and smaller				
Sewer Pipe Enlargement 24-inches and smaller				
Sewer Pipe Enlargement, All Sizes				
Sewer Cleaning, 24-inches and smaller				
Sewer Cleaning, 42-inches and smaller				
Sewer Cleaning, All Sizes				
Sewer Cleaning, 8-inches and smaller				
Sewer Cleaning, 12-inches and smaller				
Sewer Siphons 12-inches or less				
Sewer Siphons 24-inches or less				
Sewer Siphons 42-inches or less				
Sewer Siphons All Sizes				
Transportation Public Works				
Asphalt Paving Construction/Reconstruction (LESS THAN 15,000 square yards)				
Asphalt Paving Construction/Reconstruction (15,000 square yards and GREATER)				
Asphalt Paving Heavy Maintenance (UNDER \$1,000,000)				
Asphalt Paving Heavy Maintenance (\$1,000,000 and OVER)				
Concrete Paving Construction/Reconstruction (LESS THAN 15,000 square yards)				
Concrete Paving Construction/Reconstruction (15,000 square yards and GREATER)				
Roadway and Pedestrian Lighting				

1.	List equipmen	nt you do n	ot own but which	is available by rentin	g
	DESCRIPTION	ON OF EQ	UIPMENT	NAME AND DET	AILED ADDRESS OF OWNER
				en in business as a ge	eneral contractor under your present
	•				
3.	d:	•			onstruction work has your organization
	(a) A	s a Genera	l Contractor:	(b) As a	Sub-Contractor:
4.	*What projec	ts has your	organization com	pleted in Texas and e	elsewhere?
		CLASS		LOCATION	NAME AND DETAILED
	CONTRACT AMOUNT	OF WORK	DATE COMPLETED	CITY-COUNTY- STATE	ADDRESS OF OFFICIAL TO WHOM YOU REFER
	AMOUNT	WORK	COMPLETED	SIAIE	WHOM FOUREFER
3's T	0 1:0:	1 1	1 0 1 :	1	
		•	•	nce last statement.	
				•	
Iİ	so, where and v	vhy?			
	Has any officer omplete a contra				er of another organization that failed to
					1
				_	
				on ever failed to comp	olete a contract executed in his/her
If	so, state the nar	ne of the in	ndividual, name of	f owner and reason.	
	*		,		

3. In what other lines of business are you financially interested?					
9. Have you ever perform					
If so, when and to whom d	o you refer?				
10. State names and detail materials during the last th		producers from w	hom you have purcha	sed principal	
NAME OF FIRM OR CO	OMPANY	DETAILED ADDRESS			
11. Give the names of any to this person or firm.				cate your relationship	
12. What is the construction	on experience of th	e principal individ	luals in your organiza	tion?	
NAME	PRESENT POSITION OR OFFICE	YEARS OF EXPERIENCE	MAGNITUDE AND TYPE OF WORK	IN WHAT CAPACITY	
1 (1 21 12	011102	BILL BILLDI (02	91412		
13. If any owner, officer, of same household with a Cit addition, list any City emp director who does not live a direct result of a docume adoption or marriage.	y employee, please loyee who is the sp in the same housel	e list the name of to bouse, child, or particularly who received	he City employee and rent of an owner, office ves care and assistance	I the relationship. In cer, stockholder, or ce from that person as	

CORPORATION BLOCK	PARTNERSHIP BLOCK
If a corporation:	If a partnership:
Date of Incorporation	State of Organization
Charter/File No.	Date of organization
President	Is partnership general, limited, or registered limited liability partnership?
Vice Presidents	
	File No. (if Limited Partnership)
	General Partners/Officers
Secretary	Limited Partners (if applicable)
Treasurer	
LIMITED LIABILITY COMPANY BLOCK	
If a corporation:	
State of Incorporation	
Date of organization	
File No.	Individuals authorized to sign for Partnership
Officers or Managers (with titles, if any)	

Except for limited partners, the individuals listed in the blocks above are presumed to have full signature authority for your firm unless otherwise advised. Should you wish to grant signature authority for additional individuals, please attach a certified copy of the corporate resolution, corporate minutes, partnership agreement, power of attorney or other legal documentation which grants this authority.

14. Equipment	\$
	TOTAL

ITEM	QUANTITY	ITEM DESCRIPTION	BALANCE SHEET VALUE
1	QUARTITI	TIEW DESCRIPTION	VILUE
2			
3			
4			
5			
6			
7			
8			
9			
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11			
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22			
23			
24			
25			
26			
27			
28			
29			
30			
		Various-	
		TOTAL	

Similar types of equipment may be lumped together. If your firm has more than 30 types of equipment, you may show these 30 types and show the remainder as "various". The City, by allowing you to show only 30 types of equipment, reserves the right to request a complete, detailed list of all your equipment.

The equipment list is a representation of equipment under the control of the firm and which is related to the type of work for which the firm is seeking qualification. In the description include, the manufacturer, model, and general common description of each.

BIDDER PREQUALIFICATION AFFIDAVIT

STATE OF	
COUNTY OF	
he/she is thedescribed in and which executed the foregoing statement	t; that this statement is for the express purpose of submitter a contract; and that the accountant who as well as any depository, vendor or any other a party with any information, while this statement, being duly sworn, deposes and says that of, the entity that he/she is familiar with the books of the said
entity showing its financial condition; that the foregoing said entity as of the date thereof and that the answ Prequalification Application are correct and true as of the	vers to the questions of the foregoing Bidder
Firm Name:	
Signature:	
Sworn to before me this day of,	
Notary Public	•

Notary Public must not be an officer, director, or stockholder or relative thereof.

	SECT	ION 00 45 26
CONTRACTOR COME	LIANCE W	TTH WORKER'S COMPENSATION LAW
provides worker's compensation Project No. 102411. Contractor f	insurance co further certification or control of the control of th	96(a), as amended, Contractor certifies that it overage for all of its employees employed on City les that, pursuant to Texas Labor Code, Section ty its subcontractor's certificates of compliance with
CONTRACTOR:		
		By:
Company		By: (Please Print)
		Signature:
Address		
City/State/Zip		Title: (Please Print)
City/State/Zip		(Please Print)
THE STATE OF TEXAS	§	
COUNTY OF TARRANT	§	
BEFORE ME, the undersigned a	uthority, on	this day personally appeared
subscribed to the foregoing instru	ument, and a	known to me to be the person whose name is cknowledged to me that he/she executed the same as
the act and deed of	and in the east	for the purposes and pacity therein stated.
consideration therein expressed a	ind in the cap	pacity therein stated.
GIVEN UNDER MY HAND AN , 20		F OFFICE thisday of
	<u>'</u>	
		Notary Public in and for the State of Texas

39

1 SECTION 00 45 40

2 <u>TEMPORARY REVISION (COVID-19)</u>

Business Equity Specifications

APPLICATION OF POLICY

If the total dollar value of the contract is greater than \$100,000, then a Business Equity goal is applicable.

A Business Equity Firms refers to certified Minority-, and/or Women-, owned Business Enterprises (M/WBE).

POLICY STATEMENT

It is the policy of the City of Fort Worth to ensure the full and equitable participation of Business Equity Firms when applicable, in the procurement of all goods and services. All requirements and regulations stated in the City's current Business Equity Ordinance No.24534-11-2020 apply to this bid.

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MBE PROJECT GOALS

The City's M/WBE goal on this project is $\underline{0\%}$ of the total bid value of the contract (Base bid applies to Parks and Community Services).

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COMPLIANCE TO BID SPECIFICATIONS

On City contracts \$100,000 or more where a Business Equity Goal is applied, offerors are required to comply with the intent of the City's Business Equity Ordinance by meeting or exceeding the above stated goal through one of the following methods: 1. Business Equity subcontracting participation, or; 2. Commercial useful function services performed by the Business Equity Prime to count towards the goal, or; 3. Combination of Business Equity Prime services and Business Equity subcontracting participation, or; 4. Business Equity Joint Venture participation, or; 5. Good Faith Effort documentation, or; 6. Prime Waiver documentation.

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SUBMITTAL OF REQUIRED DOCUMENTATION

The Utilization Plan shall be due at the time specified in the solicitation. The applicable documents must be received by the Purchasing Division, within the time allocated, in order for the entire bid to be considered responsive to the specifications. The offerer shall **EMAIL** the Business Equity documentation to the assigned City of Fort Worth Project Manager or Department Designee. **Documents are to be received no later than 2:00 p.m., on the second City business day after the bid opening date, exclusive of the bid opening date. A faxed copy will not be accepted.**

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- The Offeror must submit one of the following documentation:
- 1. **Utilization Form**, if the goal is met or exceeded,
- 2. **Good Faith Effort Form and Utilization Form**, including supporting documentation, if participation is less than stated goal, or no Business Equity participation is accomplished,
- 39 3. **Prime Contractor Waiver Form,** including supporting documentation, if the Offeror will perform all subcontracting/supplier opportunities,
- 4. **Joint Venture Form,** if goal is met or exceeded with a Joint Venture.
- 42 These forms can be found on-line at:
- 43 Business Equity Utilization Form
- 44 https://apps.fortworthtexas.gov/ProjectResources/ResourcesP/60%20-
- 45 %20MWBE/NEW%20Business%20Equity%20Ordinance/Business%20Equity%20Utilization%20Form.
- 46 <u>pdf</u>

47

48 Business Equity Prime Contractor Waiver Form

1	https://apps.fortworthtexas.gov/ProjectResources/ResourcesP/60%20-
2	%20MWBE/NEW%20Business%20Equity%20Ordinance/Business%20Equity%20Prime%20Contractor
3	%20Waiver.pdf
4	
5	Business Equity Good Faith Effort Form
6	https://apps.fortworthtexas.gov/ProjectResources/ResourcesP/60%20-
7	%20MWBE/NEW%20Business%20Equity%20Ordinance/Business%20Equity%20Good%20Faith%20Ef
8	fort%20Form.pdf
9	
10	Business Equity Joint Venture Form
11	https://apps.fortworthtexas.gov/ProjectResources/ResourcesP/60%20-
12	%20MWBE/NEW%20Business%20Equity%20Ordinance/Business%20Equity%20Joint%20Venture.pdf
13	
14	
15 16	FAILURE TO COMPLY WITH THE CITY'S BUSINESS EQUITY ORDINANCE WILL RESULT IN
	THE BID BEING CONSIDERED NON-RESONSIVE TO SPECIFICATIONS.
17	
10	FAILURE TO SUBMIT THE REQUIRED BUSINESS EQUTIY DOCUMENTATION WILL RESULT IN
18	THE BID BEING CONSIDERED NON-RESPONSIVE. A SECOND FAILURE WILL RESULT IN THE
19	OFFEROR BEING DISQUALIFIED FOR A PERIOD OF ONE YEAR. THREE FAILURES IN A FIVE YEAR PERIOD WILL RESULT IN A DISQUALIFICATION PERIOD OF THREE YEARS.
	TEAR TERIOD WILL RESULT IN A DISQUALIFICATION TERIOD OF THREE TEARS.
20	Any Questions, Please Contact The Business Equity Division at (817) 392-2674.
21	END OF SECTION
22	
<i>LL</i>	
23	

SECTION 00 52 43

AGREEMENT

THIS AGREEMENT, authorized on is made by and between the City of Forth
Worth, a Texas home rule municipality, acting by and through its duly authorized City Manager,
("City"), and,
authorized to do business in Texas, acting by and through its duly authorized representative, ("Contractor").
City and Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:
Article 1. WORK
Contractor shall complete all Work as specified or indicated in the Contract Documents for the Project identified herein.
Article 2. PROJECT
The project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:
CC Moss and ML Phillips SRTS Improvements
CPN 102411
Article 3. CONTRACT PRICE
City agrees to pay Contractor for performance of the Work in accordance with the Contract Documents an amount, in current funds, ofDollars

Article 4. CONTRACT TIME

4.1 Final Acceptance.

The Work will be complete for Final Acceptance within <u>130 working days</u> after the date when the Contract Time commences to run, as provided in Paragraph 2.03 of the General Conditions, plus any extension thereof allowed in accordance with Article 12 of the General Conditions.

4.2 Liquidated Damages

Contractor recognizes that *time is of the essence* for completion of Milestones, if any, and to achieve Final Acceptance of the Work and City will suffer financial loss if the Work is not completed within the time(s) specified in Paragraph 4.1 above. The Contractor also recognizes the delays, expense and difficulties involved in proving in a legal proceeding, the actual loss suffered by the City if the Work is not completed on time. Accordingly, instead of requiring any such proof, Contractor agrees that as liquidated damages for delay (but not as a penalty), Contractor shall pay City five-hundred dollars (\$500.00) for each day that expires after the time specified in Paragraph 4.1 for Final Acceptance until the City issues the Final Letter of Acceptance.

Article 5. CONTRACT DOCUMENTS

5.1 CONTENTS:

- A. The Contract Documents which comprise the entire agreement between City and Contractor concerning the Work consist of the following:
 - 1. This Agreement.
 - 2. Attachments to this Agreement:
 - a. Bid Form
 - 1) Proposal Form
 - 2) Vendor Compliance to State Law Non-Resident Bidder
 - 3) Prequalification Statement
 - 4) State and Federal documents
 - b. Current Prevailing Wage Rate Table
 - c. Insurance ACORD Form(s)
 - d. Payment Bond
 - e. Performance Bond
 - f. Maintenance Bond
 - g. Power of Attorney for the Bonds
 - h. Worker's Compensation Affidavit
 - i. MBE and/or SBE Utilization Form
 - 3. General Conditions.
 - 4. Supplementary Conditions.
 - 5. Specifications specifically made a part of the Contract Documents by attachment or, if not attached, as incorporated by reference and described in the Table of Contents of the Project's Contract Documents.
 - 6. Drawings.
 - 7. Addenda.
 - 8. Documentation submitted by Contractor prior to Notice of Award.
 - 9. The following which may be delivered or issued after the Effective Date of the Agreement and, if issued, become an incorporated part of the Contract Documents:
 - a. Notice to Proceed.
 - b. Field Orders.
 - c. Change Orders.
 - d. Letter of Final Acceptance.

Article 6. INDEMNIFICATION

6.1 Contractor covenants and agrees to indemnify, hold harmless and defend, at its own expense, the city, its officers, servants and employees, from and against any and all claims arising out of, or alleged to arise out of, the work and services to be performed by the contractor, its officers, agents, employees, subcontractors, licenses or invitees under this contract. This indemnification provision is specifically intended to operate and be effective even if it is alleged or proven that all or some of the damages being sought were caused, in whole or in part, by any act, omission or negligence of the city. This indemnity provision is intended to include, without limitation, indemnity for costs, expenses and legal fees incurred by the city in defending against such claims and causes of actions.

6.2 Contractor covenants and agrees to indemnify and hold harmless, at its own expense, the city, its officers, servants and employees, from and against any and all loss, damage or destruction of property of the city, arising out of, or alleged to arise out of, the work and services to be performed by the contractor, its officers, agents, employees, subcontractors, licensees or invitees under this contract. This indemnification provision is specifically intended to operate and be effective even if it is alleged or proven that all or some of the damages being sought were caused, in whole or in part, by any act, omission or negligence of the city.

Article 7. MISCELLANEOUS

7.1 Terms.

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

7.2 Assignment of Contract.

This Agreement, including all of the Contract Documents may not be assigned by the Contractor without the advanced express written consent of the City.

7.3 Successors and Assigns.

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

7.4 Severability.

Any provision or part of the Contract Documents held to be unconstitutional, void or unenforceable by a court of competent jurisdiction shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon CITY and CONTRACTOR.

7.5 Governing Law and Venue.

This Agreement, including all of the Contract Documents is performable in the State of Texas. Venue shall be Tarrant County, Texas, or the United States District Court for the Northern District of Texas, Fort Worth Division.

7.6 Authority to Sign.

Contractor shall attach evidence of authority to sign Agreement if signed by someone other than the duly authorized signatory of the Contractor.

7.7 Prohibition On Contracts With Companies Boycotting Israel.

Contractor acknowledges that in accordance with Chapter 2270 of the Texas Government Code, the City is prohibited from entering into a contract with a company for goods or services unless the contract contains a written verification from the company that it: (1) does not boycott Israel; and (2) will not boycott Israel during the term of the contract.

The terms "boycott Israel" and "company" shall have the meanings ascribed to those terms in Section 808.001 of the Texas Government Code. By signing this contract, Contractor certifies that Contractor's signature provides written verification to the City that Contractor: (1) does not boycott Israel; and (2) will not boycott Israel during the term of the contract.

7.8 Immigration Nationality Act.

Contractor shall verify the identity and employment eligibility of its employees who perform work under this Agreement, including completing the Employment Eligibility Verification Form (I-9). Upon request by City, Contractor shall provide City with copies of all I-9 forms and supporting eligibility documentation for each employee who performs work under this Agreement. Contractor shall adhere to all Federal and State laws as well as establish appropriate procedures and controls so that no services will be performed by any Contractor employee who is not legally eligible to perform such services. CONTRACTOR SHALL INDEMNIFY CITY AND HOLD CITY HARMLESS FROM ANY PENALTIES, LIABILITIES, OR LOSSES DUE TO VIOLATIONS OF THIS PARAGRAPH BY CONTRACTOR, CONTRACTOR'S EMPLOYEES, SUBCONTRACTORS, AGENTS, OR LICENSEES. City, upon written notice to Contractor, shall have the right to immediately terminate this Agreement for violations of this provision by Contractor.

7.9 No Third-Party Beneficiaries.

This Agreement gives no rights or benefits to anyone other than the City and the Contractor and there are no third-party beneficiaries.

7.10 No Cause of Action Against Engineer.

Contractor, its subcontractors and equipment and materials suppliers on the PROJECT or their sureties, shall maintain no direct action against the Engineer, its officers, employees, and subcontractors, for any claim arising out of, in connection with, or resulting from the engineering services performed. Only the City will be the beneficiary of any undertaking by the Engineer. The presence or duties of the Engineer's personnel at a construction site, whether as on-site representatives or otherwise, do not make the Engineer or its personnel in any way responsible for those duties that belong to the City and/or the City's construction contractors or other entities, and do not relieve the construction contractors or any other entity of their obligations, duties, and responsibilities, including, but not limited to, all construction methods, means, techniques, sequences, and procedures necessary for coordinating and completing all portions of the construction work in accordance with the Contract Documents and any health or safety precautions required by such construction work. The Engineer and its personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions.

SIGNATURE PAGE TO FOLLOW

IN WITNESS WHEREOF, City and Contractor have each executed this Agreement to be effective as of the date subscribed by the City's designated Assistant City Manager ("Effective Date").

Contractor:	City of Fort Worth
By:	By:
Signature	Dana Burghdoff Assistant City Manager
(Printed Name)	Date
Title	Attest:
Address	City Secretary
City/State/Zip	(Seal)
	M&C:
Date	Date:
	Form 1295 No.:
	Contract Compliance Manager: By signing, I acknowledge that I am the person responsible for the monitoring and administration of this contract, including ensuring all performance and reporting requirements.
	
	Chad Allen, P.E. Program Manager
	Approved as to Form and Legality:
	Douglas W. Black
	Assistant City Attorney
	APPROVAL RECOMMENDED:
	William Johnson, Director Transportation & Public Works Department

1	SECTION 00 61 13 PERFORMANCE BOND		
2	PERFORMANCE BOND		
4	THE STATE OF TEXAS §		
5 6	THE STATE OF TEXAS \$ \$ KNOW ALL BY THESE PRESENTS: COUNTY OF TARRANT \$		
7	That we,, known as		
8	"Principal" herein and, a corporate		
9	surety(sureties, if more than one) duly authorized to do business in the State of Texas, known a	ıs	
10	"Surety" herein (whether one or more), are held and firmly bound unto the City of Fort Worth,	a	
11	municipal corporation created pursuant to the laws of Texas, known as "City" herein, in the per	nal	
12	sum of, Dollars		
13	(\$), lawful money of the United States, to be paid in Fort Worth,		
14	Tarrant County, Texas for the payment of which sum well and truly to be made, we bind		
15	ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally,		
16	firmly by these presents.		
17	WHEREAS, the Principal has entered into a certain written contract with the City		
18	awarded the day of, 20, which Contract is hereby referred to and	d	
19	made a part hereof for all purposes as if fully set forth herein, to furnish all materials, equipmen		
20	labor and other accessories defined by law, in the prosecution of the Work, including any Chan	ige	
21	Orders, as provided for in said Contract designated as CC Moss and ML Phillips SRTS		
22	Improvements, CPN 102411.		
23	NOW, THEREFORE, the condition of this obligation is such that if the said Principal	1	
24	shall faithfully perform it obligations under the Contract and shall in all respects duly and		
25	faithfully perform the Work, including Change Orders, under the Contract, according to the pla	ıns,	
26	specifications, and contract documents therein referred to, and as well during any period of		
27	extension of the Contract that may be granted on the part of the City, then this obligation shall be	be	
28	and become null and void, otherwise to remain in full force and effect.		
29	PROVIDED FURTHER, that if any legal action be filed on this Bond, venue shall lie	in	
30	Tarrant County, Texas or the United States District Court for the Northern District of Texas, Fo	ort	
31	Worth Division.		

		Principal and the Surety have SIGNED and SEAI
		and officers on this theday of
	, 20	
		PRINCIPAL:
		BY:Signature
ATTEST	:	Signature
(5.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1		
(Principa	l) Secretary	Name and Title
		Address:
Witness a	as to Principal	SURETY:
		DV.
		BY:Signature
		Name and Title
		Address:
Witness a	as to Surety	Telephone Number:

1 2	SECTION 00 61 14 PAYMENT BOND
3	TATMENT BOND
4	THE STATE OF TEXAS \$ KNOW ALL BY THESE PRESENTS:
5 6	THE STATE OF TEXAS \$ KNOW ALL BY THESE PRESENTS: COUNTY OF TARRANT \$
7	That we,, known as
8	"Principal" herein, and, a
9	corporate surety (sureties), duly authorized to do business in the State of Texas, known as
10	"Surety" herein (whether one or more), are held and firmly bound unto the City of Fort Worth, a
11	municipal corporation created pursuant to the laws of the State of Texas, known as "City" herein,
12	in the penal sum of Dollars
13	(\$), lawful money of the United States, to be paid in Fort Worth,
14	Tarrant County, Texas, for the payment of which sum well and truly be made, we bind ourselves,
15	our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these
16	presents:
17	WHEREAS, Principal has entered into a certain written Contract with City, awarded the
18	day of, 20, which Contract is hereby referred to and
19	made a part hereof for all purposes as if fully set forth herein, to furnish all materials, equipment,
20	labor and other accessories as defined by law, in the prosecution of the Work as provided for in
21	said Contract and designated as CC Moss and ML Phillips SRTS Improvements, CPN 102411.
22	NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if
23	Principal shall pay all monies owing to any (and all) payment bond beneficiary (as defined in
24	Chapter 2253 of the Texas Government Code, as amended) in the prosecution of the Work under
25	the Contract, then this obligation shall be and become null and void; otherwise to remain in full
26	force and effect.
27	This bond is made and executed in compliance with the provisions of Chapter 2253 of the
28	Texas Government Code, as amended, and all liabilities on this bond shall be determined in
29	accordance with the provisions of said statute.

, 20	
	PRINCIPAL:
ATTEST:	BY:
(Principal) Secretary	Name and Title Address:
Witness as to Principal	
	SURETY:
ATTEST:	BY:Signature
(Surety) Secretary	Name and Title
	Address:
Witness as to Surety	Telephone Number:
Note: If signed by an officer of the Surety, there must be on file a certified extract bylaws showing that this person has authority to sign such obligation. If Surety's address is different from its mailing address, both must be provided.	
The date of the bond shall not be price	or to the date the Contract is awarded.

1	SECTION 00 61 19	
2	MAINTENANCE BOND	
3 4 5 6 7	THE STATE OF TEXAS \$ \$ KNOW ALL BY THESE PRESENTS: COUNTY OF TARRANT \$	
8	That we, known as	
9	"Principal" herein and, a corporate suret	у
10	(sureties, if more than one) duly authorized to do business in the State of Texas, known as	
11	"Surety" herein (whether one or more), are held and firmly bound unto the City of Fort Worth, a	ı
12	municipal corporation created pursuant to the laws of the State of Texas, known as "City" herein	n,
13	in the sum of Dollars	
14	(\$), lawful money of the United States, to be paid in Fort Worth,	
15	Tarrant County, Texas, for payment of which sum well and truly be made unto the City and its	
16	successors, we bind ourselves, our heirs, executors, administrators, successors and assigns, joint	ily
17	and severally, firmly by these presents.	
18		
19	WHEREAS, the Principal has entered into a certain written contract with the City awarde	d
20	the day of, 20, which Contract is hereby	
21	referred to and a made part hereof for all purposes as if fully set forth herein, to furnish all	
22	materials, equipment labor and other accessories as defined by law, in the prosecution of the	
23	Work, including any Work resulting from a duly authorized Change Order (collectively herein,	
24	the "Work") as provided for in said contract and designated as CC Moss and ML Phillips SRT	<u>'S</u>
25	Improvements, CPN 102411; and	
26		
27	WHEREAS, Principal binds itself to use such materials and to so construct the Work in	1
28	accordance with the plans, specifications and Contract Documents that the Work is and will	
29	remain free from defects in materials or workmanship for and during the period of two (2) years	S
30	after the date of Final Acceptance of the Work by the City ("Maintenance Period"); and	
31		
32	WHEREAS, Principal binds itself to repair or reconstruct the Work in whole or in part	
33	upon receiving notice from the City of the need therefor at any time within the Maintenance	
34	Period.	

1	
2	NOW THEREFORE, the condition of this obligation is such that if Principal shall
3	remedy any defective Work, for which timely notice was provided by City, to a completion
4	satisfactory to the City, then this obligation shall become null and void; otherwise to remain in
5	full force and effect.
6	
7	PROVIDED, HOWEVER, if Principal shall fail so to repair or reconstruct any timely
8	noticed defective Work, it is agreed that the City may cause any and all such defective Work to
9	be repaired and/or reconstructed with all associated costs thereof being borne by the Principal and
10	the Surety under this Maintenance bond; and
11	
12	PROVIDED FURTHER, that if any legal action be filed on this Bond, venue shall lie in
13	Tarrant County, Texas or the United States District Court for the Northern District of Texas, Fort
14	Worth Division; and
15	
16	PROVIDED FURTHER, that this obligation shall be continuous in nature and
17	successive recoveries may be had hereon for successive breaches.
18	
19	
20	

instrument by duly authorized ag	gents and officers on this the day of
	<u>-</u> ·
	PRINCIPAL:
	BY:Signature
ATTEST:	Signature
(Principal) Secretary	Name and Title
	Address:
Witness as to Principal	CUDETY.
	SURETY:
	$\mathrm{RV}\cdot$
	BY:Signature
ATTEST:	Name and Title
(Surety) Secretary	Address:
Witness as to Surety	Telephone Number:
from the by-laws sho	er of the Surety Company, there must be on file a certified owing that this person has authority to sign such obligations is different from its mailing address, both must be pro-

1	SECTION 00 61 25
2 3 4	CERTIFICATE OF INSURANCE
5 6 7	
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13 14	
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17	
18	
19	
20	
21	
22	
23	END OF SECTION

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

- A. Wherever used in these General Conditions or in other Contract Documents, the terms listed below have the meanings indicated which are applicable to both the singular and plural thereof, and words denoting gender shall include the masculine, feminine and neuter. Said terms are generally capitalized or written in italics, but not always. When used in a context consistent with the definition of a listed-defined term, the term shall have a meaning as defined below whether capitalized or italicized or otherwise. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
 - 1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 - 2. *Agreement*—The written instrument which is evidence of the agreement between City and Contractor covering the Work.
 - 3. Application for Payment—The form acceptable to City which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 - 4. *Asbestos*—Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
 - 5. Award Authorization by the City Council for the City to enter into an Agreement.
 - 6. *Bid*—The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 - 7. *Bidder*—The individual or entity who submits a Bid directly to City.
 - 8. *Bidding Documents*—The Bidding Requirements and the proposed Contract Documents (including all Addenda).
 - 9. *Bidding Requirements*—The advertisement or Invitation to Bid, Instructions to Bidders, Bid security of acceptable form, if any, and the Bid Form with any supplements.
 - 10. Business Day A business day is defined as a day that the City conducts normal business, generally Monday through Friday, except for federal or state holidays observed by the City.
 - 11. Calendar Day A day consisting of 24 hours measured from midnight to the next midnight.

- 12. Change Order—A document, which is prepared and approved by the City, which is signed by Contractor and City and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Time, issued on or after the Effective Date of the Agreement.
- 13. City— The City of Fort Worth, Texas, a home-rule municipal corporation, authorized and chartered under the Texas State Statutes, acting by its governing body through its City Manager, his designee, or agents authorized under his behalf, each of which is required by Charter to perform specific duties with responsibility for final enforcement of the contracts involving the City of Fort Worth is by Charter vested in the City Manager and is the entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.
- 14. *City Attorney* The officially appointed City Attorney of the City of Fort Worth, Texas, or his duly authorized representative.
- 15. City Council The duly elected and qualified governing body of the City of Fort Worth, Texas.
- 16. *City Manager* The officially appointed and authorized City Manager of the City of Fort Worth, Texas, or his duly authorized representative.
- 17. Contract Claim—A demand or assertion by City or Contractor seeking an adjustment of Contract Price or Contract Time, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Contract Claim.
- 18. *Contract*—The entire and integrated written document between the City and Contractor concerning the Work. The Contract contains the Agreement and all Contract Documents and supersedes prior negotiations, representations, or agreements, whether written or oral.
- 19. *Contract Documents*—Those items so designated in the Agreement. All items listed in the Agreement are Contract Documents. Approved Submittals, other Contractor submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.
- 20. *Contract Price*—The moneys payable by City to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).
- 21. *Contract Time*—The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any and (ii) complete the Work so that it is ready for Final Acceptance.
- 22. *Contractor*—The individual or entity with whom City has entered into the Agreement.
- 23. Cost of the Work—See Paragraph 11.01 of these General Conditions for definition.

- 24. *Damage Claims* A demand for money or services arising from the Project or Site from a third party, City or Contractor exclusive of a Contract Claim.
- 25. *Day* or day A day, unless otherwise defined, shall mean a Calendar Day.
- 26. *Director of Aviation* The officially appointed Director of the Aviation Department of the City of Fort Worth, Texas, or his duly appointed representative, assistant, or agents.
- 27. *Director of Parks and Community Services* The officially appointed Director of the Parks and Community Services Department of the City of Fort Worth, Texas, or his duly appointed representative, assistant, or agents.
- 28. Director of Planning and Development The officially appointed Director of the Planning and Development Department of the City of Fort Worth, Texas, or his duly appointed representative, assistant, or agents.
- 29. Director of Transportation Public Works The officially appointed Director of the Transportation Public Works Department of the City of Fort Worth, Texas, or his duly appointed representative, assistant, or agents.
- 30. *Director of Water Department* The officially appointed Director of the Water Department of the City of Fort Worth, Texas, or his duly appointed representative, assistant, or agents.
- 31. *Drawings*—That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Submittals are not Drawings as so defined.
- 32. *Effective Date of the Agreement*—The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
- 33. *Engineer*—The licensed professional engineer or engineering firm registered in the State of Texas performing professional services for the City.
- 34. *Extra Work* Additional work made necessary by changes or alterations of the Contract Documents or of quantities or for other reasons for which no prices are provided in the Contract Documents. Extra work shall be part of the Work.
- 35. Field Order A written order issued by City which requires changes in the Work but which does not involve a change in the Contract Price, Contract Time, or the intent of the Engineer. Field Orders are paid from Field Order Allowances incorporated into the Contract by funded work type at the time of award.
- 36. *Final Acceptance* The written notice given by the City to the Contractor that the Work specified in the Contract Documents has been completed to the satisfaction of the City.

- 37. *Final Inspection* Inspection carried out by the City to verify that the Contractor has completed the Work, and each and every part or appurtenance thereof, fully, entirely, and in conformance with the Contract Documents.
- 38. General Requirements—Sections of Division 1 of the Contract Documents.
- 39. *Hazardous Environmental Condition*—The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, Radioactive Material, or other materials in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto.
- 40. *Hazardous Waste*—Hazardous waste is defined as any solid waste listed as hazardous or possesses one or more hazardous characteristics as defined in the federal waste regulations, as amended from time to time.
- 41. Laws and Regulations—Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- 42. *Liens*—Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
- 43. *Major Item* An Item of work included in the Contract Documents that has a total cost equal to or greater than 5% of the original Contract Price or \$25,000 whichever is less.
- 44. *Milestone*—A principal event specified in the Contract Documents relating to an intermediate Contract Time prior to Final Acceptance of the Work.
- 45. *Notice of Award*—The written notice by City to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, City will sign and deliver the Agreement.
- 46. *Notice to Proceed*—A written notice given by City to Contractor fixing the date on which the Contract Time will commence to run and on which Contractor shall start to perform the Work specified in Contract Documents.
- 47. *PCBs*—Polychlorinated biphenyls.
- 48. *Petroleum*—Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.
- 49. *Plans* See definition of Drawings.

- 50. *Project Schedule*—A schedule, prepared and maintained by Contractor, in accordance with the General Requirements, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Time.
- 51. *Project*—The Work to be performed under the Contract Documents.
- 52. *Project Manager*—The authorized representative of the City who will be assigned to the Site.
- 53. *Public Meeting* An announced meeting conducted by the City to facilitate public participation and to assist the public in gaining an informed view of the Project.
- 54. *Radioactive Material*—Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
- 55. Regular Working Hours Hours beginning at 7:00 a.m. and ending at 6:00 p.m., Monday thru Friday (excluding legal holidays).
- 56. Samples—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
- 57. Schedule of Submittals—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.
- 58. Schedule of Values—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
- 59. *Site*—Lands or areas indicated in the Contract Documents as being furnished by City upon which the Work is to be performed, including rights-of-way, permits, and easements for access thereto, and such other lands furnished by City which are designated for the use of Contractor.
- 60. Specifications—That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto. Specifications may be specifically made a part of the Contract Documents by attachment or, if not attached, may be incorporated by reference as indicated in the Table of Contents (Division 00 00 00) of each Project.
- 61. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

- 62. *Submittals*—All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
- 63. *Successful Bidder*—The Bidder submitting the lowest and most responsive Bid to whom City makes an Award.
- 64. *Superintendent* The representative of the Contractor who is available at all times and able to receive instructions from the City and to act for the Contractor.
- 65. Supplementary Conditions—That part of the Contract Documents which amends or supplements these General Conditions.
- 66. Supplier—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or Subcontractor.
- 67. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to, those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 68 Unit Price Work—See Paragraph 11.03 of these General Conditions for definition.
- 69. Weekend Working Hours Hours beginning at 9:00 a.m. and ending at 5:00 p.m., Saturday, Sunday or legal holiday, as approved in advance by the City.
- 70. Work—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction including any Change Order or Field Order, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
- 71. Working Day A working day is defined as a day, not including Saturdays, Sundays, or legal holidays authorized by the City for contract purposes, in which weather or other conditions not under the control of the Contractor will permit the performance of the principal unit of work underway for a continuous period of not less than 7 hours between 7 a.m. and 6 p.m.

1.02 *Terminology*

- A. The words and terms discussed in Paragraph 1.02.B through E are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. Intent of Certain Terms or Adjectives:

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of judgment by City. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of City as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise).

C. Defective:

- 1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. does not conform to the Contract Documents; or
 - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - c. has been damaged prior to City's written acceptance.

D. Furnish, Install, Perform, Provide:

- 1. The word "Furnish" or the word "Install" or the word "Perform" or the word "Provide" or the word "Supply," or any combination or similar directive or usage thereof, shall mean furnishing and incorporating in the Work including all necessary labor, materials, equipment, and everything necessary to perform the Work indicated, unless specifically limited in the context used.
- E. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 *Copies of Documents*

City shall furnish to Contractor one (1) original executed copy and one (1) electronic copy of the Contract Documents, and four (4) additional copies of the Drawings. Additional copies will be furnished upon request at the cost of reproduction.

2.02 Commencement of Contract Time; Notice to Proceed

The Contract Time will commence to run on the day indicated in the Notice to Proceed. A Notice to Proceed may be given no earlier than 14 days after the Effective Date of the Agreement, unless agreed to by both parties in writing.

2.03 *Starting the Work*

Contractor shall start to perform the Work on the date when the Contract Time commences to run. No Work shall be done at the Site prior to the date on which the Contract Time commences to run.

2.04 Before Starting Construction

Baseline Schedules: Submit in accordance with the Contract Documents, and prior to starting the Work.

2.05 Preconstruction Conference

Before any Work at the Site is started, the Contractor shall attend a Preconstruction Conference as specified in the Contract Documents.

2.06 Public Meeting

Contractor may not mobilize any equipment, materials or resources to the Site prior to Contractor attending the Public Meeting as scheduled by the City.

2.07 Initial Acceptance of Schedules

No progress payment shall be made to Contractor until acceptable schedules are submitted to City in accordance with the Schedule Specification as provided in the Contract Documents.

ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that reasonably may be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the indicated result will be provided whether or not specifically called for, at no additional cost to City.
- C. Clarifications and interpretations of the Contract Documents shall be issued by City.
- D. The Specifications may vary in form, format and style. Some Specification sections may be written in varying degrees of streamlined or declarative style and some sections may be relatively narrative by comparison. Omission of such words and phrases as "the Contractor shall," "in conformity with," "as shown," or "as specified" are intentional in streamlined sections. Omitted words and phrases shall be supplied by inference. Similar types of provisions may appear in various parts of a section or articles within a part depending on the format of the

- section. The Contractor shall not take advantage of any variation of form, format or style in making Contract Claims.
- E. The cross referencing of specification sections under the subparagraph heading "Related Sections include but are not necessarily limited to:" and elsewhere within each Specification section is provided as an aid and convenience to the Contractor. The Contractor shall not rely on the cross referencing provided and shall be responsible to coordinate the entire Work under the Contract Documents and provide a complete Project whether or not the cross referencing is provided in each section or whether or not the cross referencing is complete.

3.02 Reference Standards

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

- 1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
- 2. No provision of any such standard, specification, manual, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of City, Contractor, or any of their subcontractors, consultants, agents, or employees, from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to City, or any of its officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 Reporting and Resolving Discrepancies

A. Reporting Discrepancies:

- 1. Contractor's Review of Contract Documents Before Starting Work: Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein against all applicable field measurements and conditions. Contractor shall promptly report in writing to City any conflict, error, ambiguity, or discrepancy which Contractor discovers, or has actual knowledge of, and shall obtain a written interpretation or clarification from City before proceeding with any Work affected thereby.
- 2. Contractor's Review of Contract Documents During Performance of Work: If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) any standard, specification, manual, or code, or (c) any instruction of any Supplier, then Contractor shall promptly report it to City in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph

- 6.17.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.
- 3. Contractor shall not be liable to City for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. Resolving Discrepancies:

- 1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and the provisions of any standard, specification, manual, or the instruction of any Supplier (whether or not specifically incorporated by reference in the Contract Documents).
- 2. In case of discrepancies, figured dimensions shall govern over scaled dimensions, Plans shall govern over Specifications, Supplementary Conditions shall govern over General Conditions and Specifications, and quantities shown on the Plans shall govern over those shown in the proposal.

3.04 Amending and Supplementing Contract Documents

- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by a Change Order.
- B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work not involving a change in Contract Price or Contract Time, may be authorized, by one or more of the following ways:
 - 1. A Field Order;
 - 2. City's review of a Submittal (subject to the provisions of Paragraph 6.18.C); or
 - 3. City's written interpretation or clarification.

3.05 Reuse of Documents

A. Contractor and any Subcontractor or Supplier shall not:

- 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer, including electronic media editions; or
- 2. reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of City and specific written verification or adaptation by Engineer.

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

3.06 Electronic Data

- A. Unless otherwise stated in the Supplementary Conditions, the data furnished by City or Engineer to Contractor, or by Contractor to City or Engineer, that may be relied upon are limited to the printed copies included in the Contract Documents (also known as hard copies) and other Specifications referenced and located on the City's on-line electronic document management and collaboration system site. Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- B. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 Availability of Lands

- A. City shall furnish the Site. City shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. City will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities.
 - 1. The City has obtained or anticipates acquisition of and/or access to right-of-way, and/or easements. Any outstanding right-of-way and/or easements are anticipated to be acquired in accordance with the schedule set forth in the Supplementary Conditions. The Project Schedule submitted by the Contractor in accordance with the Contract Documents must consider any outstanding right-of-way, and/or easements.
 - 2. The City has or anticipates removing and/or relocating utilities, and obstructions to the Site. Any outstanding removal or relocation of utilities or obstructions is anticipated in accordance with the schedule set forth in the Supplementary Conditions. The Project Schedule submitted by the Contractor in accordance with the Contract Documents must consider any outstanding utilities or obstructions to be removed, adjusted, and/or relocated by others.
- B. Upon reasonable written request, City shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed.

C. Contractor shall provide for all additional lands and access thereto that may be required for construction facilities or storage of materials and equipment.

4.02 Subsurface and Physical Conditions

- A. *Reports and Drawings:* The Supplementary Conditions identify:
 - 1. those reports known to City of explorations and tests of subsurface conditions at or contiguous to the Site; and
 - 2. those drawings known to City of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
- B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Contractor may not make any Contract Claim against City, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
 - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
 - 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 - 3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 Differing Subsurface or Physical Conditions

- A. *Notice:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed either:
 - 1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or
 - 2. is of such a nature as to require a change in the Contract Documents; or
 - 3. differs materially from that shown or indicated in the Contract Documents; or
 - 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.17.A), notify City in writing about such condition.

B. Possible Price and Time Adjustments

Contractor shall not be entitled to any adjustment in the Contract Price or Contract Time if:

- 1. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to City with respect to Contract Price and Contract Time by the submission of a Bid or becoming bound under a negotiated contract; or
- 2. the existence of such condition could reasonably have been discovered or revealed as a result of the examination of the Contract Documents or the Site; or
- 3. Contractor failed to give the written notice as required by Paragraph 4.03.A.

4.04 *Underground Facilities*

- A. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to City or Engineer by the owners of such Underground Facilities, including City, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
 - 1. City and Engineer shall not be responsible for the accuracy or completeness of any such information or data provided by others; and
 - 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all such information and data;
 - b. locating all Underground Facilities shown or indicated in the Contract Documents;
 - c. coordination and adjustment of the Work with the owners of such Underground Facilities, including City, during construction; and
 - d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. Not Shown or Indicated:

1. If an Underground Facility which conflicts with the Work is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any

Work in connection therewith (except in an emergency as required by Paragraph 6.17.A), identify the owner of such Underground Facility and give notice to that owner and to City. City will review the discovered Underground Facility and determine the extent, if any, to which a change may be required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. Contractor shall be responsible for the safety and protection of such discovered Underground Facility.

- 2. If City concludes that a change in the Contract Documents is required, a Change Order may be issued to reflect and document such consequences.
- 3. Verification of existing utilities, structures, and service lines shall include notification of all utility companies a minimum of 48 hours in advance of construction including exploratory excavation if necessary.

4.05 Reference Points

- A. City shall provide engineering surveys to establish reference points for construction, which in City's judgment are necessary to enable Contractor to proceed with the Work. City will provide construction stakes or other customary method of marking to establish line and grades for roadway and utility construction, centerlines and benchmarks for bridgework. Contractor shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations. Contractor shall report to City whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations. The City shall be responsible for the replacement or relocation of reference points or property monuments not carelessly or willfully destroyed by the Contractor. The Contractor shall notify City in advance and with sufficient time to avoid delays.
- B. Whenever, in the opinion of the City, any reference point or monument has been carelessly or willfully destroyed, disturbed, or removed by the Contractor or any of his employees, the full cost for replacing such points plus 25% will be charged against the Contractor, and the full amount will be deducted from payment due the Contractor.

4.06 Hazardous Environmental Condition at Site

- A. *Reports and Drawings*: The Supplementary Conditions identify those reports and drawings known to City relating to Hazardous Environmental Conditions that have been identified at the Site.
- B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Contractor may not make any Contract Claim against City, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
 - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of

- construction to be employed by Contractor and safety precautions and programs incident thereto; or
- 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
- 3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.
- D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.17.A); and (iii) notify City (and promptly thereafter confirm such notice in writing). City may consider the necessity to retain a qualified expert to evaluate such condition or take corrective action, if any.
- E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after City has obtained any required permits related thereto and delivered written notice to Contractor: (i) specifying that such condition and any affected area is or has been rendered suitable for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed.
- F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then City may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. City may have such deleted portion of the Work performed by City's own forces or others.
- G. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless City, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.G shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- H. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 – BONDS AND INSURANCE

5.01 Licensed Sureties and Insurers

All bonds and insurance required by the Contract Documents to be purchased and maintained by Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the State of Texas to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.02 Performance, Payment, and Maintenance Bonds

- A. Contractor shall furnish performance and payment bonds, in accordance with Texas Government Code Chapter 2253 or successor statute, each in an amount equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents.
- B. Contractor shall furnish maintenance bonds in an amount equal to the Contract Price as security to protect the City against any defects in any portion of the Work described in the Contract Documents. Maintenance bonds shall remain in effect for two (2) years after the date of Final Acceptance by the City.
- C. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent or attorney-in-fact must be accompanied by a sealed and dated power of attorney which shall show that it is effective on the date the agent or attorney-in-fact signed each bond.
- D. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in the State of Texas or it ceases to meet the requirements of Paragraph 5.02.C, Contractor shall promptly notify City and shall, within 30 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01 and 5.02.C.

5.03 *Certificates of Insurance*

Contractor shall deliver to City, with copies to each additional insured and loss payee identified in the Supplementary Conditions, certificates of insurance (other evidence of insurance requested by City or any other additional insured) in at least the minimum amount as specified in the Supplementary Conditions which Contractor is required to purchase and maintain.

1. The certificate of insurance shall document the City, and all identified entities named in the Supplementary Conditions as "Additional Insured" on all liability policies.

- 2. The Contractor's general liability insurance shall include a, "per project" or "per location", endorsement, which shall be identified in the certificate of insurance provided to the City.
- 3. The certificate shall be signed by an agent authorized to bind coverage on behalf of the insured, be complete in its entirety, and show complete insurance carrier names as listed in the current A.M. Best Property & Casualty Guide
- 4. The insurers for all policies must be licensed and/or approved to do business in the State of Texas. Except for workers' compensation, all insurers must have a minimum rating of A: VII in the current A. M. Best Key Rating Guide or have reasonably equivalent financial strength and solvency to the satisfaction of Risk Management. If the rating is below that required, written approval of City is required.
- 5. All applicable policies shall include a Waiver of Subrogation (Rights of Recovery) in favor of the City. In addition, the Contractor agrees to waive all rights of subrogation against the Engineer (if applicable), and each additional insured identified in the Supplementary Conditions
- 6. Failure of the City to demand such certificates or other evidence of full compliance with the insurance requirements or failure of the City to identify a deficiency from evidence that is provided shall not be construed as a waiver of Contractor's obligation to maintain such lines of insurance coverage.
- 7. If insurance policies are not written for specified coverage limits, an Umbrella or Excess Liability insurance for any differences is required. Excess Liability shall follow form of the primary coverage.
- 8. Unless otherwise stated, all required insurance shall be written on the "occurrence basis". If coverage is underwritten on a claims-made basis, the retroactive date shall be coincident with or prior to the date of the effective date of the agreement and the certificate of insurance shall state that the coverage is claims-made and the retroactive date. The insurance coverage shall be maintained for the duration of the Contract and for three (3) years following Final Acceptance provided under the Contract Documents or for the warranty period, whichever is longer. An annual certificate of insurance submitted to the City shall evidence such insurance coverage.
- 9. Policies shall have no exclusions by endorsements, which, neither nullify or amend, the required lines of coverage, nor decrease the limits of said coverage unless such endorsements are approved in writing by the City. In the event a Contract has been bid or executed and the exclusions are determined to be unacceptable or the City desires additional insurance coverage, and the City desires the contractor/engineer to obtain such coverage, the contract price shall be adjusted by the cost of the premium for such additional coverage plus 10%.
- 10. Any self-insured retention (SIR), in excess of \$25,000.00, affecting required insurance coverage shall be approved by the City in regards to asset value and stockholders' equity. In

lieu of traditional insurance, alternative coverage maintained through insurance pools or risk retention groups, must also be approved by City.

- 11. Any deductible in excess of \$5,000.00, for any policy that does not provide coverage on a first-dollar basis, must be acceptable to and approved by the City.
- 12. City, at its sole discretion, reserves the right to review the insurance requirements and to make reasonable adjustments to insurance coverage's and their limits when deemed necessary and prudent by the City based upon changes in statutory law, court decision or the claims history of the industry as well as of the contracting party to the City. The City shall be required to provide prior notice of 90 days, and the insurance adjustments shall be incorporated into the Work by Change Order.
- 13. City shall be entitled, upon written request and without expense, to receive copies of policies and endorsements thereto and may make any reasonable requests for deletion or revision or modifications of particular policy terms, conditions, limitations, or exclusions necessary to conform the policy and endorsements to the requirements of the Contract. Deletions, revisions, or modifications shall not be required where policy provisions are established by law or regulations binding upon either party or the underwriter on any such policies.
- 14. City shall not be responsible for the direct payment of insurance premium costs for Contractor's insurance.

5.04 Contractor's Insurance

- A. Workers Compensation and Employers' Liability. Contractor shall purchase and maintain such insurance coverage with limits consistent with statutory benefits outlined in the Texas Workers' Compensation Act (Texas Labor Code, Ch. 406, as amended), and minimum limits for Employers' Liability as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:
 - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;
 - 2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees.
- B. Commercial General Liability. Coverage shall include but not be limited to covering liability (bodily injury or property damage) arising from: premises/operations, independent contractors, products/completed operations, personal injury, and liability under an insured contract. Insurance shall be provided on an occurrence basis, and as comprehensive as the current Insurance Services Office (ISO) policy. This insurance shall apply as primary insurance with respect to any other

insurance or self-insurance programs afforded to the City. The Commercial General Liability policy, shall have no exclusions by endorsements that would alter of nullify premises/operations, products/completed operations, contractual, personal injury, or advertising injury, which are normally contained with the policy, unless the City approves such exclusions in writing.

For construction projects that present a substantial completed operation exposure, the City may require the contractor to maintain completed operations coverage for a minimum of no less than three (3) years following the completion of the project (if identified in the Supplementary Conditions).

- C. Automobile Liability. A commercial business auto policy shall provide coverage on "any auto", defined as autos owned, hired and non-owned and provide indemnity for claims for damages because bodily injury or death of any person and or property damage arising out of the work, maintenance or use of any motor vehicle by the Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.
- D. Railroad Protective Liability. If any of the work or any warranty work is within the limits of railroad right-of-way, the Contractor shall comply with the requirements identified in the Supplementary Conditions.
- E. *Notification of Policy Cancellation:* Contractor shall immediately notify City upon cancellation or other loss of insurance coverage. Contractor shall stop work until replacement insurance has been procured. There shall be no time credit for days not worked pursuant to this section.

5.05 Acceptance of Bonds and Insurance; Option to Replace

If City has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the Contractor in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the City shall so notify the Contractor in writing within 10 Business Days after receipt of the certificates (or other evidence requested). Contractor shall provide to the City such additional information in respect of insurance provided as the City may reasonably request. If Contractor does not purchase or maintain all of the bonds and insurance required by the Contract Documents, the City shall notify the Contractor in writing of such failure prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.

ARTICLE 6 – CONTRACTOR'S RESPONSIBILITIES

6.01 Supervision and Superintendence

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.

- B. At all times during the progress of the Work, Contractor shall assign a competent, English-speaking, Superintendent who shall not be replaced without written notice to City. The Superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communication given to or received from the Superintendent shall be binding on Contractor.
- C. Contractor shall notify the City 24 hours prior to moving areas during the sequence of construction.

6.02 Labor; Working Hours

- A. Contractor shall provide competent, suitably qualified personnel to perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during Regular Working Hours. Contractor will not permit the performance of Work beyond Regular Working Hours or for Weekend Working Hours without City's written consent (which will not be unreasonably withheld). Written request (by letter or electronic communication) to perform Work:
 - 1. for beyond Regular Working Hours request must be made by noon at least two (2) Business Days prior
 - 2. for Weekend Working Hours request must be made by noon of the preceding Thursday
 - 3. for legal holidays request must be made by noon two Business Days prior to the legal holiday.

6.03 Services, Materials, and Equipment

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, Contractor required testing, start-up, and completion of the Work.
- B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of City. If required by City, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

- C. All materials and equipment to be incorporated into the Work shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.
- D. All items of standard equipment to be incorporated into the Work shall be the latest model at the time of bid, unless otherwise specified.

6.04 Project Schedule

- A. Contractor shall adhere to the Project Schedule established in accordance with Paragraph 2.07 and the General Requirements as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to City for acceptance (to the extent indicated in Paragraph 2.07 and the General Requirements) proposed adjustments in the Project Schedule that will not result in changing the Contract Time. Such adjustments will comply with any provisions of the General Requirements applicable thereto.
 - 2. Contractor shall submit to City a monthly Project Schedule with a monthly progress payment for the duration of the Contract in accordance with the schedule specification 01 32 16.
 - 3. Proposed adjustments in the Project Schedule that will change the Contract Time shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Time may only be made by a Change Order.

6.05 Substitutes and "Or-Equals"

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment of other Suppliers may be submitted to City for review under the circumstances described below.
 - 1. "Or-Equal" Items: If in City's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by City as an "or-equal" item, in which case review and approval of the proposed item may, in City's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. the City determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

- 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole; and
- 3) it has a proven record of performance and availability of responsive service; and
- b. Contractor certifies that, if approved and incorporated into the Work:
 - 1) there will be no increase in cost to the City or increase in Contract Time; and
 - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items:

- a. If in City's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it may be submitted as a proposed substitute item.
- b. Contractor shall submit sufficient information as provided below to allow City to determine if the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by City from anyone other than Contractor.
- c. Contractor shall make written application to City for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application shall comply with Section 01 25 00 and:
 - 1) shall certify that the proposed substitute item will:
 - a) perform adequately the functions and achieve the results called for by the general design;
 - b) be similar in substance to that specified;
 - c) be suited to the same use as that specified; and

2) will state:

- a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of final completion on time;
- b) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with City for other work on the Project) to adapt the design to the proposed substitute item;

- c) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty; and
- 3) will identify:
 - a) all variations of the proposed substitute item from that specified;
 - b) available engineering, sales, maintenance, repair, and replacement services; and
- 4) shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and Damage Claims of other contractors affected by any resulting change.
- B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by City. Contractor shall submit sufficient information to allow City, in City's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. Contractor shall make written application to City for review in the same manner as those provided in Paragraph 6.05.A.2.
- C. City's Evaluation: City will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. City may require Contractor to furnish additional data about the proposed substitute. City will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized until City's review is complete, which will be evidenced by a Change Order in the case of a substitute and an accepted Submittal for an "or-equal." City will advise Contractor in writing of its determination.
- D. Special Guarantee: City may require Contractor to furnish at Contractor's expense a special performance guarantee, warranty, or other surety with respect to any substitute. Contractor shall indemnify and hold harmless City and anyone directly or indirectly employed by them from and against any and all claims, damages, losses and expenses (including attorneys fees) arising out of the use of substituted materials or equipment.
- E. City's Cost Reimbursement: City will record City's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. Whether or not City approves a substitute so proposed or submitted by Contractor, Contractor may be required to reimburse City for evaluating each such proposed substitute. Contractor may also be required to reimburse City for the charges for making changes in the Contract Documents (or in the provisions of any other direct contract with City) resulting from the acceptance of each proposed substitute.
- F. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

- G. City Substitute Reimbursement: Costs (savings or charges) attributable to acceptance of a substitute shall be incorporated to the Contract by Change Order.
- H. *Time Extensions*: No additional time will be granted for substitutions.
- 6.06 Concerning Subcontractors, Suppliers, and Others
 - A. Contractor shall perform with his own organization, work of a value not less than 35% of the value embraced on the Contract, unless otherwise approved by the City.
 - B. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, against whom City may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection (excluding those acceptable to City as indicated in Paragraph 6.06.C).
 - C. The City may from time to time require the use of certain Subcontractors, Suppliers, or other individuals or entities on the project, and will provide such requirements in the Supplementary Conditions.
 - D. *Minority Business Enterprise Compliance:* It is City policy to ensure the full and equitable participation by Minority Business Enterprises (MBE) in the procurement of goods and services on a contractual basis. If the Contract Documents provide for a MBE goal, Contractor is required to comply with the intent of the City's MBE Ordinance (as amended) by the following:
 - 1. Contractor shall, upon request by City, provide complete and accurate information regarding actual work performed by a MBE on the Contract and payment therefor.
 - 2. Contractor will not make additions, deletions, or substitutions of accepted MBE without written consent of the City. Any unjustified change or deletion shall be a material breach of Contract and may result in debarment in accordance with the procedures outlined in the Ordinance.
 - 3. Contractor shall, upon request by City, allow an audit and/or examination of any books, records, or files in the possession of the Contractor that will substantiate the actual work performed by an MBE. Material misrepresentation of any nature will be grounds for termination of the Contract in accordance with Paragraph 15.02.A. Any such misrepresentation may be grounds for disqualification of Contractor to bid on future contracts with the City for a period of not less than three years.
 - E. Contractor shall be fully responsible to City for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:

- 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between City and any such Subcontractor, Supplier or other individual or entity; nor
- 2. shall create any obligation on the part of City to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.
- F. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.
- G. All Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work shall communicate with City through Contractor.
- H. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of City.

6.07 Wage Rates

- A. *Duty to pay Prevailing Wage Rates*. The Contractor shall comply with all requirements of Chapter 2258, Texas Government Code (as amended), including the payment of not less than the rates determined by the City Council of the City of Fort Worth to be the prevailing wage rates in accordance with Chapter 2258. Such prevailing wage rates are included in these Contract Documents.
- B. *Penalty for Violation*. A Contractor or any Subcontractor who does not pay the prevailing wage shall, upon demand made by the City, pay to the City \$60 for each worker employed for each calendar day or part of the day that the worker is paid less than the prevailing wage rates stipulated in these contract documents. This penalty shall be retained by the City to offset its administrative costs, pursuant to Texas Government Code 2258.023.
- C. Complaints of Violations and City Determination of Good Cause. On receipt of information, including a complaint by a worker, concerning an alleged violation of 2258.023, Texas Government Code, by a Contractor or Subcontractor, the City shall make an initial determination, before the 31st day after the date the City receives the information, as to whether good cause exists to believe that the violation occurred. The City shall notify in writing the Contractor or Subcontractor and any affected worker of its initial determination. Upon the City's determination that there is good cause to believe the Contractor or Subcontractor has violated Chapter 2258, the City shall retain the full amounts claimed by the claimant or claimants as the difference between wages paid and wages due under the prevailing wage rates, such amounts being subtracted from successive progress payments pending a final determination of the violation.

- D. Arbitration Required if Violation Not Resolved. An issue relating to an alleged violation of Section 2258.023, Texas Government Code, including a penalty owed to the City or an affected worker, shall be submitted to binding arbitration in accordance with the Texas General Arbitration Act (Article 224 et seq., Revised Statutes) if the Contractor or Subcontractor and any affected worker does not resolve the issue by agreement before the 15th day after the date the City makes its initial determination pursuant to Paragraph C above. If the persons required to arbitrate under this section do not agree on an arbitrator before the 11th day after the date that arbitration is required, a district court shall appoint an arbitrator on the petition of any of the persons. The City is not a party in the arbitration. The decision and award of the arbitrator is final and binding on all parties and may be enforced in any court of competent jurisdiction.
- E. Records to be Maintained. The Contractor and each Subcontractor shall, for a period of three (3) years following the date of acceptance of the work, maintain records that show (i) the name and occupation of each worker employed by the Contractor in the construction of the Work provided for in this Contract; and (ii) the actual per diem wages paid to each worker. The records shall be open at all reasonable hours for inspection by the City. The provisions of Paragraph 6.23, Right to Audit, shall pertain to this inspection.
- F. *Progress Payments*. With each progress payment or payroll period, whichever is less, the Contractor shall submit an affidavit stating that the Contractor has complied with the requirements of Chapter 2258, Texas Government Code.
- G. *Posting of Wage Rates*. The Contractor shall post prevailing wage rates in a conspicuous place at all times.
- H. Subcontractor Compliance. The Contractor shall include in its subcontracts and/or shall otherwise require all of its Subcontractors to comply with Paragraphs A through G above.

6.08 Patent Fees and Royalties

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of City, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by City in the Contract Documents. Failure of the City to disclose such information does not relieve the Contractor from its obligations to pay for the use of said fees or royalties to others.
- B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless City, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from

the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.09 Permits and Utilities

- A. Contractor obtained permits and licenses. Contractor shall obtain and pay for all construction permits and licenses except those provided for in the Supplementary Conditions or Contract Documents. City shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement, except for permits provided by the City as specified in 6.09.B. City shall pay all charges of utility owners for connections for providing permanent service to the Work.
- B. City obtained permits and licenses. City will obtain and pay for all permits and licenses as provided for in the Supplementary Conditions or Contract Documents. It will be the Contractor's responsibility to carry out the provisions of the permit. If the Contractor initiates changes to the Contract and the City approves the changes, the Contractor is responsible for obtaining clearances and coordinating with the appropriate regulatory agency. The City will not reimburse the Contractor for any cost associated with these requirements of any City acquired permit. The following are permits the City will obtain if required:
 - 1. Texas Department of Transportation Permits
 - 2. U.S. Army Corps of Engineers Permits
 - 3. Texas Commission on Environmental Quality Permits
 - 4. Railroad Company Permits
- C. Outstanding permits and licenses. The City anticipates acquisition of and/or access to permits and licenses. Any outstanding permits and licenses are anticipated to be acquired in accordance with the schedule set forth in the Supplementary Conditions. The Project Schedule submitted by the Contractor in accordance with the Contract Documents must consider any outstanding permits and licenses.

6.10 Laws and Regulations

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, the City shall not be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all

court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.02.

C. Changes in Laws or Regulations not known at the time of opening of Bids having an effect on the cost or time of performance of the Work may be the subject of an adjustment in Contract Price or Contract Time.

6.11 *Taxes*

- A. On a contract awarded by the City, an organization which qualifies for exemption pursuant to Texas Tax Code, Subchapter H, Sections 151.301-335 (as amended), the Contractor may purchase, rent or lease all materials, supplies and equipment used or consumed in the performance of this contract by issuing to his supplier an exemption certificate in lieu of the tax, said exemption certificate to comply with State Comptroller's Ruling .007. Any such exemption certificate issued to the Contractor in lieu of the tax shall be subject to and shall comply with the provision of State Comptroller's Ruling .011, and any other applicable rulings pertaining to the Texas Tax Code, Subchapter H.
- B. Texas Tax permits and information may be obtained from:
 - Comptroller of Public Accounts Sales Tax Division Capitol Station Austin, TX 78711; or
 - 2. http://www.window.state.tx.us/taxinfo/taxforms/93-forms.html
- 6.12 Use of Site and Other Areas
 - A. Limitation on Use of Site and Other Areas:
 - 1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.
 - 2. At any time when, in the judgment of the City, the Contractor has obstructed or closed or is carrying on operations in a portion of a street, right-of-way, or easement greater than is necessary for proper execution of the Work, the City may require the Contractor to finish the section on which operations are in progress before work is commenced on any additional area of the Site.

- 3. Should any Damage Claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly attempt to resolve the Damage Claim.
- 4. Pursuant to Paragraph 6.21, Contractor shall indemnify and hold harmless City, from and against all claims, costs, losses, and damages arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against City.
- B. Removal of Debris During Performance of the Work: During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. Site Maintenance Cleaning: 24 hours after written notice is given to the Contractor that the clean-up on the job site is proceeding in a manner unsatisfactory to the City, if the Contractor fails to correct the unsatisfactory procedure, the City may take such direct action as the City deems appropriate to correct the clean-up deficiencies cited to the Contractor in the written notice (by letter or electronic communication), and the costs of such direct action, plus 25 % of such costs, shall be deducted from the monies due or to become due to the Contractor.
- D. *Final Site Cleaning:* Prior to Final Acceptance of the Work Contractor shall clean the Site and the Work and make it ready for utilization by City or adjacent property owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition or better all property disturbed by the Work.
- E. Loading Structures: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.13 Record Documents

A. Contractor shall maintain in a safe place at the Site or in a place designated by the Contractor and approved by the City, one (1) record copy of all Drawings, Specifications, Addenda, Change Orders, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all accepted Submittals will be available to City for reference. Upon completion of the Work, these record documents, any operation and maintenance manuals, and Submittals will be delivered to City prior to Final Inspection. Contractor shall include accurate locations for buried and imbedded items.

6.14 Safety and Protection

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

take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

- 1. all persons on the Site or who may be affected by the Work;
- 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
- 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.
- C. Contractor shall comply with the applicable requirements of City's safety programs, if any.
- D. Contractor shall inform City of the specific requirements of Contractor's safety program, if any, with which City's employees and representatives must comply while at the Site.
- E. All damage, injury, or loss to any property referred to in Paragraph 6.14.A.2 or 6.14.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor.
- F. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and City has accepted the Work.

6.15 Safety Representative

Contractor shall inform City in writing of Contractor's designated safety representative at the Site.

6.16 Hazard Communication Programs

Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers in accordance with Laws or Regulations.

6.17 Emergencies and/or Rectification

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give City prompt written notice if Contractor believes that any significant

changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If City determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Change Order may be issued.

B. Should the Contractor fail to respond to a request from the City to rectify any discrepancies, omissions, or correction necessary to conform with the requirements of the Contract Documents, the City shall give the Contractor written notice that such work or changes are to be performed. The written notice shall direct attention to the discrepant condition and request the Contractor to take remedial action to correct the condition. In the event the Contractor does not take positive steps to fulfill this written request, or does not show just cause for not taking the proper action, within 24 hours, the City may take such remedial action with City forces or by contract. The City shall deduct an amount equal to the entire costs for such remedial action, plus 25%, from any funds due or become due the Contractor on the Project.

6.18 Submittals

- A. Contractor shall submit required Submittals to City for review and acceptance in accordance with the accepted Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as City may require.
 - 1. Submit number of copies specified in the General Requirements.
 - 2. Data shown on the Submittals will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show City the services, materials, and equipment Contractor proposes to provide and to enable City to review the information for the limited purposes required by Paragraph 6.18.C.
 - 3. Submittals submitted as herein provided by Contractor and reviewed by City for conformance with the design concept shall be executed in conformity with the Contract Documents unless otherwise required by City.
 - 4. When Submittals are submitted for the purpose of showing the installation in greater detail, their review shall not excuse Contractor from requirements shown on the Drawings and Specifications.
 - 5. For-Information-Only submittals upon which the City is not expected to conduct review or take responsive action may be so identified in the Contract Documents.
 - 6. Submit required number of Samples specified in the Specifications.
 - 7. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as City may require to enable City to review the submittal for the limited purposes required by Paragraph 6.18.C.

B. Where a Submittal is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to City's review and acceptance of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. City's Review:

- 1. City will provide timely review of required Submittals in accordance with the Schedule of Submittals acceptable to City. City's review and acceptance will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- 2. City's review and acceptance will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and acceptance of a separate item as such will not indicate approval of the assembly in which the item functions.
- 3. City's review and acceptance shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Section 01 33 00 and City has given written acceptance of each such variation by specific written notation thereof incorporated in or accompanying the Submittal. City's review and acceptance shall not relieve Contractor from responsibility for complying with the requirements of the Contract Documents.

6.19 Continuing the Work

Except as otherwise provided, Contractor shall carry on the Work and adhere to the Project Schedule during all disputes or disagreements with City. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as City and Contractor may otherwise agree in writing.

6.20 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to City that all Work will be in accordance with the Contract Documents and will not be defective. City and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on representation of Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 - 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or

- 2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
 - 1. observations by City;
 - 2. recommendation or payment by City of any progress or final payment;
 - 3. the issuance of a certificate of Final Acceptance by City or any payment related thereto by City;
 - 4. use or occupancy of the Work or any part thereof by City;
 - 5. any review and acceptance of a Submittal by City;
 - 6. any inspection, test, or approval by others; or
 - 7. any correction of defective Work by City.
- D. The Contractor shall remedy any defects or damages in the Work and pay for any damage to other work or property resulting therefrom which shall appear within a period of two (2) years from the date of Final Acceptance of the Work unless a longer period is specified and shall furnish a good and sufficient maintenance bond, complying with the requirements of Article 5.02.B. The City will give notice of observed defects with reasonable promptness.

6.21 **Indemnification**

- A. Contractor covenants and agrees to indemnify, hold harmless and defend, at its own expense, the City, its officers, servants and employees, from and against any and all claims arising out of, or alleged to arise out of, the work and services to be performed by the Contractor, its officers, agents, employees, subcontractors, licenses or invitees under this Contract. THIS INDEMNIFICATION PROVISION IS SPECIFICALLY INTENDED TO OPERATE AND BE EFFECTIVE EVEN IF IT IS ALLEGED OR PROVEN THAT ALL OR SOME OF THE DAMAGES BEING SOUGHT WERE CAUSED, IN WHOLE OR IN PART, BY ANY ACT, OMISSION OR NEGLIGENCE OF THE CITY. This indemnity provision is intended to include, without limitation, indemnity for costs, expenses and legal fees incurred by the City in defending against such claims and causes of actions.
- B. Contractor covenants and agrees to indemnify and hold harmless, at its own expense, the City, its officers, servants and employees, from and against any and all loss, damage or destruction of property of the City, arising out of, or alleged to arise out of, the work and services to be performed by the Contractor, its officers, agents, employees, subcontractors, licensees or invitees under this Contract. THIS INDEMNIFICATION PROVISION IS

SPECIFICALLY INTENDED TO OPERATE AND BE EFFECTIVE EVEN IF IT IS ALLEGED OR PROVEN THAT ALL OR SOME OF THE DAMAGES BEING SOUGHT WERE CAUSED, IN WHOLE OR IN PART, BY ANY ACT, OMISSION OR NEGLIGENCE OF THE CITY.

6.22 Delegation of Professional Design Services

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures.
- B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, City will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such professional. Submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to City.
- C. City shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided City has specified to Contractor performance and design criteria that such services must satisfy.
- D. Pursuant to this Paragraph 6.22, City's review and acceptance of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. City's review and acceptance of Submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.18.C.

6.23 Right to Audit

- A. The Contractor agrees that the City shall, until the expiration of three (3) years after final payment under this Contract, have access to and the right to examine and photocopy any directly pertinent books, documents, papers, and records of the Contractor involving transactions relating to this Contract. Contractor agrees that the City shall have access during Regular Working Hours to all necessary Contractor facilities and shall be provided adequate and appropriate work space in order to conduct audits in compliance with the provisions of this Paragraph. The City shall give Contractor reasonable advance notice of intended audits.
- B. Contractor further agrees to include in all its subcontracts hereunder a provision to the effect that the subcontractor agrees that the City shall, until the expiration of three (3) years after final payment under this Contract, have access to and the right to examine and photocopy any directly pertinent books, documents, papers, and records of such Subcontractor, involving transactions to the subcontract, and further, that City shall have access during Regular Working Hours to all

- Subcontractor facilities, and shall be provided adequate and appropriate work space in order to conduct audits in compliance with the provisions of this Paragraph. The City shall give Subcontractor reasonable advance notice of intended audits.
- C. Contractor and Subcontractor agree to photocopy such documents as may be requested by the City. The City agrees to reimburse Contractor for the cost of the copies as follows at the rate published in the Texas Administrative Code in effect as of the time copying is performed.

6.24 Nondiscrimination

- A. The City is responsible for operating Public Transportation Programs and implementing transitrelated projects, which are funded in part with Federal financial assistance awarded by the U.S. Department of Transportation and the Federal Transit Administration (FTA), without discriminating against any person in the United States on the basis of race, color, or national origin.
- B. *Title VI, Civil Rights Act of 1964 as amended:* Contractor shall comply with the requirements of the Act and the Regulations as further defined in the Supplementary Conditions for any project receiving Federal assistance.

ARTICLE 7 – OTHER WORK AT THE SITE

7.01 Related Work at Site

- A. City may perform other work related to the Project at the Site with City's employees, or other City contractors, or through other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then written notice thereof will be given to Contractor prior to starting any such other work; and
- B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner, and City, if City is performing other work with City's employees or other City contractors, proper and safe access to the Site, provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of City and the others whose work will be affected.
- C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to City in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects in the work provided by others.

7.02 Coordination

- A. If City intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:
 - 1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
 - 2. the specific matters to be covered by such authority and responsibility will be itemized; and
 - 3. the extent of such authority and responsibilities will be provided.
- B. Unless otherwise provided in the Supplementary Conditions, City shall have authority for such coordination.

ARTICLE 8 – CITY'S RESPONSIBILITIES

8.01 *Communications to Contractor*

Except as otherwise provided in the Supplementary Conditions, City shall issue all communications to Contractor.

8.02 Furnish Data

City shall timely furnish the data required under the Contract Documents.

8.03 Pay When Due

City shall make payments to Contractor in accordance with Article 14.

8.04 Lands and Easements; Reports and Tests

City's duties with respect to providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to City's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by City in preparing the Contract Documents.

8.05 Change Orders

City shall execute Change Orders in accordance with Paragraph 10.03.

8.06 Inspections, Tests, and Approvals

City's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.

8.07 Limitations on City's Responsibilities

- A. The City shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. City will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- B. City will notify the Contractor of applicable safety plans pursuant to Paragraph 6.14.
- 8.08 Undisclosed Hazardous Environmental Condition

City's responsibility with respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.09 Compliance with Safety Program

While at the Site, City's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which City has been informed pursuant to Paragraph 6.14.

ARTICLE 9 – CITY'S OBSERVATION STATUS DURING CONSTRUCTION

9.01 City's Project Manager

City will provide one or more Project Manager(s) during the construction period. The duties and responsibilities and the limitations of authority of City's Project Manager during construction are set forth in the Contract Documents. The City's Project Manager for this Contract is identified in the Supplementary Conditions.

- 9.02 Visits to Site
 - A. City's Project Manager will make visits to the Site at intervals appropriate to the various stages of construction as City deems necessary in order to observe the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, City's Project Manager will determine, in general, if the Work is proceeding in accordance with the Contract Documents. City's Project Manager will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. City's Project Manager's efforts will be directed toward providing City a greater degree of confidence that the completed Work will conform generally to the Contract Documents.
 - B. City's Project Manager's visits and observations are subject to all the limitations on authority and responsibility in the Contract Documents including those set forth in Paragraph 8.07.

9.03 Authorized Variations in Work

City's Project Manager may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Time and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on City and also on Contractor, who shall perform the Work involved promptly.

9.04 Rejecting Defective Work

City will have authority to reject Work which City's Project Manager believes to be defective, or will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. City will have authority to conduct special inspection or testing of the Work as provided in Article 13, whether or not the Work is fabricated, installed, or completed.

9.05 Determinations for Work Performed

Contractor will determine the actual quantities and classifications of Work performed. City's Project Manager will review with Contractor the preliminary determinations on such matters before rendering a written recommendation. City's written decision will be final (except as modified to reflect changed factual conditions or more accurate data).

- 9.06 Decisions on Requirements of Contract Documents and Acceptability of Work
 - A. City will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder.
 - B. City will render a written decision on any issue referred.
 - C. City's written decision on the issue referred will be final and binding on the Contractor, subject to the provisions of Paragraph 10.06.

ARTICLE 10 – CHANGES IN THE WORK; CLAIMS; EXTRA WORK

10.01 Authorized Changes in the Work

- A. Without invalidating the Contract and without notice to any surety, City may, at any time or from time to time, order Extra Work. Upon notice of such Extra Work, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided). Extra Work shall be memorialized by a Change Order which may or may not precede an order of Extra work.
- B. For minor changes of Work not requiring changes to Contract Time or Contract Price, a Field Order may be issued by the City.

10.02 Unauthorized Changes in the Work

Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Time with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.17.

10.03 Execution of Change Orders

- A. City and Contractor shall execute appropriate Change Orders covering:
 - 1. changes in the Work which are: (i) ordered by City pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08 or City's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;
 - 2. changes in the Contract Price or Contract Time which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed.

10.04 Extra Work

- A. Should a difference arise as to what does or does not constitute Extra Work, or as to the payment thereof, and the City insists upon its performance, the Contractor shall proceed with the work after making written request for written orders and shall keep accurate account of the actual reasonable cost thereof. Contract Claims regarding Extra Work shall be made pursuant to Paragraph 10.06.
- B. The Contractor shall furnish the City such installation records of all deviations from the original Contract Documents as may be necessary to enable the City to prepare for permanent record a corrected set of plans showing the actual installation.
- C. The compensation agreed upon for Extra Work whether or not initiated by a Change Order shall be a full, complete and final payment for all costs Contractor incurs as a result or relating to the change or Extra Work, whether said costs are known, unknown, foreseen or unforeseen at that time, including without limitation, any costs for delay, extended overhead, ripple or impact cost, or any other effect on changed or unchanged work as a result of the change or Extra Work.

10.05 *Notification to Surety*

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

10.06 Contract Claims Process

A. City's Decision Required: All Contract Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the City for decision. A decision by City shall be required as a condition precedent to any exercise by Contractor of any rights or remedies he may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Contract Claims.

B. Notice:

- 1. Written notice stating the general nature of each Contract Claim shall be delivered by the Contractor to City no later than 15 days after the start of the event giving rise thereto. The responsibility to substantiate a Contract Claim shall rest with the party making the Contract Claim.
- 2. Notice of the amount or extent of the Contract Claim, with supporting data shall be delivered to the City on or before 45 days from the start of the event giving rise thereto (unless the City allows additional time for Contractor to submit additional or more accurate data in support of such Contract Claim).
- 3. A Contract Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.
- 4. A Contract Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of Paragraph 12.02.
- 5. Each Contract Claim shall be accompanied by Contractor's written statement that the adjustment claimed is the entire adjustment to which the Contractor believes it is entitled as a result of said event.
- 6. The City shall submit any response to the Contractor within 30 days after receipt of the claimant's last submittal (unless Contract allows additional time).
- C. City's Action: City will review each Contract Claim and, within 30 days after receipt of the last submittal of the Contractor, if any, take one of the following actions in writing:
 - 1. deny the Contract Claim in whole or in part;
 - 2. approve the Contract Claim; or
 - 3. notify the Contractor that the City is unable to resolve the Contract Claim if, in the City's sole discretion, it would be inappropriate for the City to do so. For purposes of further resolution of the Contract Claim, such notice shall be deemed a denial.

- D. City's written action under Paragraph 10.06.C will be final and binding, unless City or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.
- E. No Contract Claim for an adjustment in Contract Price or Contract Time will be valid if not submitted in accordance with this Paragraph 10.06.

ARTICLE 11 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK; PLANS QUANTITY MEASUREMENT

11.01 Cost of the Work

- A. Costs Included: The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work. Such costs shall not include any of the costs itemized in Paragraph 11.01.B, and shall include but not be limited to the following items:
 - 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by City and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include;
 - a. salaries with a 55% markup, or
 - b. salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of Regular Working Hours, Weekend Working Hours, or legal holidays, shall be included in the above to the extent authorized by City.
 - 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith.
 - 3. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by City, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

- 4. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by City, Contractor shall obtain competitive bids from subcontractors acceptable to City and Contractor and shall deliver such bids to City, who will then determine, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.
- 5. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
- 6. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - c. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable not covered under Paragraph 6.11, as imposed by Laws and Regulations.
 - d. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - e. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work, provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of City. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
 - f. The cost of utilities, fuel, and sanitary facilities at the Site.
 - g. Minor expenses such as telegrams, long distance telephone calls, telephone and communication services at the Site, express and courier services, and similar petty cash items in connection with the Work.

- h. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.
- B. Costs Excluded: The term Cost of the Work shall not include any of the following items:
 - 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.
 - 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
 - 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
 - 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 - 5. Other overhead or general expense costs of any kind.
- C. *Contractor's Fee:* When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.
- D. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to City an itemized cost breakdown together with supporting data.

11.02 Allowances

- A. Specified Allowance: It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to City.
- B. Pre-bid Allowances:
 - 1. Contractor agrees that:

- a. the pre-bid allowances include the cost to Contractor of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
- b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the pre-bid allowances have been included in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. *Contingency Allowance:* Contractor agrees that a contingency allowance, if any, is for the sole use of City.
- D. Prior to final payment, an appropriate Change Order will be issued to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by City subject to the provisions of Paragraph 9.05.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item. Work described in the Contract Documents, or reasonably inferred as required for a functionally complete installation, but not identified in the listing of unit price items shall be considered incidental to unit price work listed and the cost of incidental work included as part of the unit price.
- D. City may make an adjustment in the Contract Price in accordance with Paragraph 12.01 if:
 - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
 - 2. there is no corresponding adjustment with respect to any other item of Work.
- E. *Increased or Decreased Quantities:* The City reserves the right to order Extra Work in accordance with Paragraph 10.01.
 - 1. If the changes in quantities or the alterations do not significantly change the character of work under the Contract Documents, the altered work will be paid for at the Contract unit price.

- 2. If the changes in quantities or alterations significantly change the character of work, the Contract will be amended by a Change Order.
- 3. If no unit prices exist, this will be considered Extra Work and the Contract will be amended by a Change Order in accordance with Article 12.
- 4. A significant change in the character of work occurs when:
 - a. the character of work for any Item as altered differs materially in kind or nature from that in the Contract or
 - b. a Major Item of work varies by more than 25% from the original Contract quantity.
- 5. When the quantity of work to be done under any Major Item of the Contract is more than 125% of the original quantity stated in the Contract, then either party to the Contract may request an adjustment to the unit price on the portion of the work that is above 125%.
- 6. When the quantity of work to be done under any Major Item of the Contract is less than 75% of the original quantity stated in the Contract, then either party to the Contract may request an adjustment to the unit price.

11.04 Plans Quantity Measurement

- A. Plans quantities may or may not represent the exact quantity of work performed or material moved, handled, or placed during the execution of the Contract. The estimated bid quantities are designated as final payment quantities, unless revised by the governing Section or this Article.
- B. If the quantity measured as outlined under "Price and Payment Procedures" varies by more than 25% (or as stipulated under "Price and Payment Procedures" for specific Items) from the total estimated quantity for an individual Item originally shown in the Contract Documents, an adjustment may be made to the quantity of authorized work done for payment purposes. The party to the Contract requesting the adjustment will provide field measurements and calculations showing the final quantity for which payment will be made. Payment for revised quantity will be made at the unit price bid for that Item, except as provided for in Article 10.
- C. When quantities are revised by a change in design approved by the City, by Change Order, or to correct an error, or to correct an error on the plans, the plans quantity will be increased or decreased by the amount involved in the change, and the 25% variance will apply to the new plans quantity.
- D. If the total Contract quantity multiplied by the unit price bid for an individual Item is less than \$250 and the Item is not originally a plans quantity Item, then the Item may be paid as a plans quantity Item if the City and Contractor agree in writing to fix the final quantity as a plans quantity.

E. For callout work or non-site specific Contracts, the plans quantity measurement requirements are not applicable.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIME

- 12.01 Change of Contract Price
 - A. The Contract Price may only be changed by a Change Order.
 - B. The value of any Work covered by a Change Order will be determined as follows:
 - 1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or
 - 2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum or unit price (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2), and shall include the cost of any secondary impacts that are foreseeable at the time of pricing the cost of Extra Work; or
 - 3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum or unit price is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).
 - C. *Contractor's Fee:* The Contractor's additional fee for overhead and profit shall be determined as follows:
 - 1. a mutually acceptable fixed fee; or
 - 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 11.01.A.1, 11.01.A.2. and 11.01.A.3, the Contractor's additional fee shall be 15 percent except for:
 - 1) rental fees for Contractor's own equipment using standard rental rates;
 - 2) bonds and insurance;
 - b. for costs incurred under Paragraph 11.01.A.4 and 11.01.A.5, the Contractor's fee shall be five percent (5%);
 - 1) where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 12.01.C.2.a and 12.01.C.2.b is that the Subcontractor who actually performs the Work, at whatever

tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent (5%) of the amount paid to the next lower tier Subcontractor, however in no case shall the cumulative total of fees paid be in excess of 25%;

- c. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.6, and 11.01.B;
- d. the amount of credit to be allowed by Contractor to City for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent (5%) of such net decrease.

12.02 Change of Contract Time

- A. The Contract Time may only be changed by a Change Order.
- B. No extension of the Contract Time will be allowed for Extra Work or for claimed delay unless the Extra Work contemplated or claimed delay is shown to be on the critical path of the Project Schedule or Contractor can show by Critical Path Method analysis how the Extra Work or claimed delay adversely affects the critical path.

12.03 Delays

- A. Where Contractor is reasonably delayed in the performance or completion of any part of the Work within the Contract Time due to delay beyond the control of Contractor, the Contract Time may be extended in an amount equal to the time lost due to such delay if a Contract Claim is made therefor. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by City, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph.
- B. If Contractor is delayed, City shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.
- C. Contractor shall not be entitled to an adjustment in Contract Price or Contract Time for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.
- D. The Contractor shall receive no compensation for delays or hindrances to the Work, except when direct and unavoidable extra cost to the Contractor is caused by the failure of the City to provide information or material, if any, which is to be furnished by the City.

ARTICLE 13 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 Notice of Defects

Notice of all defective Work of which City has actual knowledge will be given to Contractor. Defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 Access to Work

City, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

13.03 Tests and Inspections

- A. Contractor shall give City timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B. If Contract Documents, Laws or Regulations of any public body having jurisdiction require any of the Work (or part thereof) to be inspected, tested, or approved, Contractor shall assume full responsibility for arranging and obtaining such independent inspections, tests, retests or approvals, pay all costs in connection therewith, and furnish City the required certificates of inspection or approval; excepting, however, those fees specifically identified in the Supplementary Conditions or any Texas Department of Licensure and Regulation (TDLR) inspections, which shall be paid as described in the Supplementary Conditions.
- C. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, re-tests, or approvals required for City's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, re-tests, or approvals shall be performed by organizations acceptable to City.
- D. City may arrange for the services of an independent testing laboratory ("Testing Lab") to perform any inspections or tests ("Testing") for any part of the Work, as determined solely by City.
 - 1. City will coordinate such Testing to the extent possible, with Contractor;
 - 2. Should any Testing under this Section 13.03 D result in a "fail", "did not pass" or other similar negative result, the Contractor shall be responsible for paying for any and all retests. Contractor's cancellation without cause of City initiated Testing shall be deemed a negative result and require a retest.

- 3. Any amounts owed for any retest under this Section 13.03 D shall be paid directly to the Testing Lab by Contractor. City will forward all invoices for retests to Contractor.
- 4. If Contractor fails to pay the Testing Lab, City will not issue Final Payment until the Testing Lab is paid.
- E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of City, Contractor shall, if requested by City, uncover such Work for observation.
- F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense.
- G. Contractor shall have the right to make a Contract Claim regarding any retest or invoice issued under Section 13.03 D.

13.04 Uncovering Work

- A. If any Work is covered contrary to the Contract Documents or specific instructions by the City, it must, if requested by City, be uncovered for City's observation and replaced at Contractor's expense.
- B. If City considers it necessary or advisable that covered Work be observed by City or inspected or tested by others, Contractor, at City's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as City may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); or City shall be entitled to accept defective Work in accordance with Paragraph 13.08 in which case Contractor shall still be responsible for all costs associated with exposing, observing, and testing the defective Work.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction.

13.05 *City May Stop the Work*

If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, City may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of City to stop the Work shall not give rise to any duty on the part of City to exercise this right for the benefit of Contractor, any

Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 Correction or Removal of Defective Work

- A. Promptly after receipt of written notice, Contractor shall correct all defective Work pursuant to an acceptable schedule, whether or not fabricated, installed, or completed, or, if the Work has been rejected by City, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, additional testing, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others). Failure to require the removal of any defective Work shall not constitute acceptance of such Work.
- B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair City's special warranty and guarantee, if any, on said Work.

13.07 Correction Period

- A. If within two (2) years after the date of Final Acceptance (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents), any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by City or permitted by Laws and Regulations as contemplated in Paragraph 6.10.A is found to be defective, Contractor shall promptly, without cost to City and in accordance with City's written instructions:
 - 1. repair such defective land or areas; or
 - 2. correct such defective Work; or
 - 3. if the defective Work has been rejected by City, remove it from the Project and replace it with Work that is not defective, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of City's written instructions, or in an emergency where delay would cause serious risk of loss or damage, City may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.

- C. In special circumstances where a particular item of equipment is placed in continuous service before Final Acceptance of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Contract Documents.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work may be required to be extended for an additional period of one year after the end of the initial correction period. City shall provide 30 days written notice to Contractor should such additional warranty coverage be required. Contractor may dispute this requirement by filing a Contract Claim, pursuant to Paragraph 10.06.
- E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

13.08 Acceptance of Defective Work

If, instead of requiring correction or removal and replacement of defective Work, City prefers to accept it, City may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution costs) attributable to City's evaluation of and determination to accept such defective Work and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to Final Acceptance, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and City shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted.

13.09 City May Correct Defective Work

- A. If Contractor fails within a reasonable time after written notice from City to correct defective Work, or to remove and replace rejected Work as required by City in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, City may, after seven (7) days written notice to Contractor, correct, or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 13.09, City shall proceed expeditiously. In connection with such corrective or remedial action, City may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment incorporated in the Work, stored at the Site or for which City has paid Contractor but which are stored elsewhere. Contractor shall allow City, City's representatives, agents, consultants, employees, and City's other contractors, access to the Site to enable City to exercise the rights and remedies under this Paragraph.
- C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution

costs) incurred or sustained by City in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and City shall be entitled to an appropriate decrease in the Contract Price.

D. Contractor shall not be allowed an extension of the Contract Time because of any delay in the performance of the Work attributable to the exercise of City's rights and remedies under this Paragraph 13.09.

ARTICLE 14 – PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 Schedule of Values

The Schedule of Values for lump sum contracts established as provided in Paragraph 2.07 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to City. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 Progress Payments

A. Applications for Payments:

- 1. Contractor is responsible for providing all information as required to become a vendor of the City.
- 2. At least 20 days before the date established in the General Requirements for each progress payment, Contractor shall submit to City for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
- 3. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that City has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate insurance or other arrangements to protect City's interest therein, all of which must be satisfactory to City.
- 4. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
- 5. The amount of retainage with respect to progress payments will be as stipulated in the Contract Documents.

B. Review of Applications:

- 1. City will, after receipt of each Application for Payment, either indicate in writing a recommendation of payment or return the Application to Contractor indicating reasons for refusing payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
- 2. City's processing of any payment requested in an Application for Payment will be based on City's observations of the executed Work, and on City's review of the Application for Payment and the accompanying data and schedules, that to the best of City's knowledge:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Final Acceptance, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Work performed under Paragraph 9.05, and any other qualifications stated in the recommendation).
- 3. Processing any such payment will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to City in the Contract Documents; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by City or entitle City to withhold payment to Contractor, or
 - c. Contractor has complied with Laws and Regulations applicable to Contractor's performance of the Work.
- 4. City may refuse to process the whole or any part of any payment because of subsequently discovered evidence or the results of subsequent inspections or tests, and revise or revoke any such payment previously made, to such extent as may be necessary to protect City from loss because:
 - a. the Work is defective, or the completed Work has been damaged by the Contractor or his subcontractors, requiring correction or replacement;
 - b. discrepancies in quantities contained in previous applications for payment;
 - c. the Contract Price has been reduced by Change Orders;
 - d. City has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or

e. City has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

C. Retainage:

- 1. For contracts less than \$400,000 at the time of execution, retainage shall be ten percent (10%).
- 2. For contracts greater than \$400,000 at the time of execution, retainage shall be five percent (5%).
- D. *Liquidated Damages*. For each calendar day that any work shall remain uncompleted after the time specified in the Contract Documents, the sum per day specified in the Agreement, will be deducted from the monies due the Contractor, not as a penalty, but as liquidated damages suffered by the City.
- E. *Payment:* Contractor will be paid pursuant to the requirements of this Article 14 and payment will become due in accordance with the Contract Documents.

F. Reduction in Payment:

- 1. City may refuse to make payment of the amount requested because:
 - Liens have been filed in connection with the Work, except where Contractor has
 delivered a specific bond satisfactory to City to secure the satisfaction and discharge of
 such Liens;
 - b. there are other items entitling City to a set-off against the amount recommended; or
 - c. City has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.4.a through 14.02.B.4.e or Paragraph 15.02.A.
- 2. If City refuses to make payment of the amount requested, City will give Contractor written notice stating the reasons for such action and pay Contractor any amount remaining after deduction of the amount so withheld. City shall pay Contractor the amount so withheld, or any adjustment thereto agreed to by City and Contractor, when Contractor remedies the reasons for such action.

14.03 Contractor's Warranty of Title

Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to City no later than the time of payment free and clear of all Liens.

14.04 Partial Utilization

- A. Prior to Final Acceptance of all the Work, City may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which City, determines constitutes a separately functioning and usable part of the Work that can be used by City for its intended purpose without significant interference with Contractor's performance of the remainder of the Work. City at any time may notify Contractor in writing to permit City to use or occupy any such part of the Work which City determines to be ready for its intended use, subject to the following conditions:
 - 1. Contractor at any time may notify City in writing that Contractor considers any such part of the Work ready for its intended use.
 - 2. Within a reasonable time after notification as enumerated in Paragraph 14.05.A.1, City and Contractor shall make an inspection of that part of the Work to determine its status of completion. If City does not consider that part of the Work to be substantially complete, City will notify Contractor in writing giving the reasons therefor.
 - 3. Partial Utilization will not constitute Final Acceptance by City.

14.05 Final Inspection

- A. Upon written notice from Contractor that the entire Work is complete in accordance with the Contract Documents:
 - 1. within 10 days, City will schedule a Final Inspection with Contractor.
 - 2. City will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.
- B. No time charge will be made against the Contractor between said date of notification of the City and the date of Final Inspection. Should the City determine that the Work is not ready for Final Inspection, City will notify the Contractor in writing of the reasons and Contract Time will resume.

14.06 Final Acceptance

Upon completion by Contractor to City's satisfaction, of any additional Work identified in the Final Inspection, City will issue to Contractor a letter of Final Acceptance.

14.07 Final Payment

A. Application for Payment:

- 1. Upon Final Acceptance, and in the opinion of City, Contractor may make an application for final payment following the procedure for progress payments in accordance with the Contract Documents.
- 2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.03;
 - b. consent of the surety, if any, to final payment;
 - c. a list of all pending or released Damage Claims against City that Contractor believes are unsettled; and
 - d. affidavits of payments and complete and legally effective releases or waivers (satisfactory to City) of all Lien rights arising out of or Liens filed in connection with the Work.

B. Payment Becomes Due:

- 1. After City's acceptance of the Application for Payment and accompanying documentation, requested by Contractor, less previous payments made and any sum City is entitled, including but not limited to liquidated damages, will become due and payable.
- 2. After all Damage Claims have been resolved:
 - a. directly by the Contractor or;
 - b. Contractor provides evidence that the Damage Claim has been reported to Contractor's insurance provider for resolution.
- 3. The making of the final payment by the City shall not relieve the Contractor of any guarantees or other requirements of the Contract Documents which specifically continue thereafter.

14.08 Final Completion Delayed and Partial Retainage Release

A. If final completion of the Work is significantly delayed, and if City so confirms, City may, upon receipt of Contractor's final Application for Payment, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by City for Work not fully completed or corrected is less than the retainage stipulated in Paragraph 14.02.C, and if bonds have been furnished as required in Paragraph 5.02, the written consent of the surety to the payment of the balance due for that

portion of the Work fully completed and accepted shall be submitted by Contractor to City with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Contract Claims.

B. Partial Retainage Release. For a Contract that provides for a separate vegetative establishment and maintenance, and test and performance periods following the completion of all other construction in the Contract Documents for all Work locations, the City may release a portion of the amount retained provided that all other work is completed as determined by the City. Before the release, all submittals and final quantities must be completed and accepted for all other work. An amount sufficient to ensure Contract compliance will be retained.

14.09 Waiver of Claims

The acceptance of final payment will constitute a release of the City from all claims or liabilities under the Contract for anything done or furnished or relating to the work under the Contract Documents or any act or neglect of City related to or connected with the Contract.

ARTICLE 15 – SUSPENSION OF WORK AND TERMINATION

15.01 City May Suspend Work

- A. At any time and without cause, City may suspend the Work or any portion thereof by written notice to Contractor and which may fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. During temporary suspension of the Work covered by these Contract Documents, for any reason, the City will make no extra payment for stand-by time of construction equipment and/or construction crews.
- B. Should the Contractor not be able to complete a portion of the Project due to causes beyond the control of and without the fault or negligence of the Contractor, and should it be determined by mutual consent of the Contractor and City that a solution to allow construction to proceed is not available within a reasonable period of time, Contractor may request an extension in Contract Time, directly attributable to any such suspension.
- C. If it should become necessary to suspend the Work for an indefinite period, the Contractor shall store all materials in such a manner that they will not obstruct or impede the public unnecessarily nor become damaged in any way, and he shall take every precaution to prevent damage or deterioration of the work performed; he shall provide suitable drainage about the work, and erect temporary structures where necessary.
- D. Contractor may be reimbursed for the cost of moving his equipment off the job and returning the necessary equipment to the job when it is determined by the City that construction may be resumed. Such reimbursement shall be based on actual cost to the Contractor of moving the equipment and no profit will be allowed. Reimbursement may not be allowed if the equipment is moved to another construction project for the City.

15.02 City May Terminate for Cause

- A. The occurrence of any one or more of the following events by way of example, but not of limitation, may justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, failure to adhere to the Project Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04, or failure to adhere to the City's Business Diversity Enterprise Ordinance #20020-12-2011established under Paragraph 6.06.D);
 - 2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;
 - 3. Contractor's repeated disregard of the authority of City; or
 - 4. Contractor's violation in any substantial way of any provisions of the Contract Documents; or
 - 5. Contractor's failure to promptly make good any defect in materials or workmanship, or defects of any nature, the correction of which has been directed in writing by the City; or
 - 6. Substantial indication that the Contractor has made an unauthorized assignment of the Contract or any funds due therefrom for the benefit of any creditor or for any other purpose; or
 - 7. Substantial evidence that the Contractor has become insolvent or bankrupt, or otherwise financially unable to carry on the Work satisfactorily; or
 - 8. Contractor commences legal action in a court of competent jurisdiction against the City.
- B. If one or more of the events identified in Paragraph 15.02A. occur, City will provide written notice to Contractor and Surety to arrange a conference with Contractor and Surety to address Contractor's failure to perform the Work. Conference shall be held not later than 15 days, after receipt of notice.
 - 1. If the City, the Contractor, and the Surety do not agree to allow the Contractor to proceed to perform the construction Contract, the City may, to the extent permitted by Laws and Regulations, declare a Contractor default and formally terminate the Contractor's right to complete the Contract. Contractor default shall not be declared earlier than 20 days after the Contractor and Surety have received notice of conference to address Contractor's failure to perform the Work.
 - 2. If Contractor's services are terminated, Surety shall be obligated to take over and perform the Work. If Surety does not commence performance thereof within 15 consecutive calendar days after date of an additional written notice demanding Surety's performance of its

obligations, then City, without process or action at law, may take over any portion of the Work and complete it as described below.

- a. If City completes the Work, City may exclude Contractor and Surety from the site and take possession of the Work, and all materials and equipment incorporated into the Work stored at the Site or for which City has paid Contractor or Surety but which are stored elsewhere, and finish the Work as City may deem expedient.
- 3. Whether City or Surety completes the Work, Contractor shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds all claims, costs, losses and damages sustained by City arising out of or resulting from completing the Work, such excess will be paid to Contractor. If such claims, costs, losses and damages exceed such unpaid balance, Contractor shall pay the difference to City. Such claims, costs, losses and damages incurred by City will be incorporated in a Change Order, provided that when exercising any rights or remedies under this Paragraph, City shall not be required to obtain the lowest price for the Work performed.
- 4. Neither City, nor any of its respective consultants, agents, officers, directors or employees shall be in any way liable or accountable to Contractor or Surety for the method by which the completion of the said Work, or any portion thereof, may be accomplished or for the price paid therefor.
- 5. City, notwithstanding the method used in completing the Contract, shall not forfeit the right to recover damages from Contractor or Surety for Contractor's failure to timely complete the entire Contract. Contractor shall not be entitled to any claim on account of the method used by City in completing the Contract.
- 6. Maintenance of the Work shall continue to be Contractor's and Surety's responsibilities as provided for in the bond requirements of the Contract Documents or any special guarantees provided for under the Contract Documents or any other obligations otherwise prescribed by law.
- C. Notwithstanding Paragraphs 15.02.B, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.
- D. Where Contractor's services have been so terminated by City, the termination will not affect any rights or remedies of City against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by City will not release Contractor from liability.
- E. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.02, the termination procedures of that bond shall not supersede the provisions of this Article.

15.03 City May Terminate For Convenience

- A. City may, without cause and without prejudice to any other right or remedy of City, terminate the Contract. Any termination shall be effected by mailing a notice of the termination to the Contractor specifying the extent to which performance of Work under the contract is terminated, and the date upon which such termination becomes effective. Receipt of the notice shall be deemed conclusively presumed and established when the letter is placed in the United States Postal Service Mail by the City. Further, it shall be deemed conclusively presumed and established that such termination is made with just cause as therein stated; and no proof in any claim, demand or suit shall be required of the City regarding such discretionary action.
- B. After receipt of a notice of termination, and except as otherwise directed by the City, the Contractor shall:
 - 1. Stop work under the Contract on the date and to the extent specified in the notice of termination;
 - 2. place no further orders or subcontracts for materials, services or facilities except as may be necessary for completion of such portion of the Work under the Contract as is not terminated;
 - 3. terminate all orders and subcontracts to the extent that they relate to the performance of the Work terminated by notice of termination;
 - 4. transfer title to the City and deliver in the manner, at the times, and to the extent, if any, directed by the City:
 - a. the fabricated or unfabricated parts, Work in progress, completed Work, supplies and other material produced as a part of, or acquired in connection with the performance of, the Work terminated by the notice of the termination; and
 - b. the completed, or partially completed plans, drawings, information and other property which, if the Contract had been completed, would have been required to be furnished to the City.
 - 5. complete performance of such Work as shall not have been terminated by the notice of termination; and
 - 6. take such action as may be necessary, or as the City may direct, for the protection and preservation of the property related to its contract which is in the possession of the Contractor and in which the owner has or may acquire the rest.
- C. At a time not later than 30 days after the termination date specified in the notice of termination, the Contractor may submit to the City a list, certified as to quantity and quality, of any or all items of termination inventory not previously disposed of, exclusive of items the disposition of which has been directed or authorized by City.

- D. Not later than 15 days thereafter, the City shall accept title to such items provided, that the list submitted shall be subject to verification by the City upon removal of the items or, if the items are stored, within 45 days from the date of submission of the list, and any necessary adjustments to correct the list as submitted, shall be made prior to final settlement.
- E. Not later than 60 days after the notice of termination, the Contractor shall submit his termination claim to the City in the form and with the certification prescribed by the City. Unless an extension is made in writing within such 60 day period by the Contractor, and granted by the City, any and all such claims shall be conclusively deemed waived.
- F. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. reasonable expenses directly attributable to termination.
- G. In the event of the failure of the Contractor and City to agree upon the whole amount to be paid to the Contractor by reason of the termination of the Work, the City shall determine, on the basis of information available to it, the amount, if any, due to the Contractor by reason of the termination and shall pay to the Contractor the amounts determined. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

ARTICLE 16 – DISPUTE RESOLUTION

16.01 *Methods and Procedures*

- A. Either City or Contractor may request mediation of any Contract Claim submitted for a decision under Paragraph 10.06 before such decision becomes final and binding. The request for mediation shall be submitted to the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.06.E.
- B. City and Contractor shall participate in the mediation process in good faith. The process shall be commenced within 60 days of filing of the request.
- C. If the Contract Claim is not resolved by mediation, City's action under Paragraph 10.06.C or a denial pursuant to Paragraphs 10.06.C.3 or 10.06.D shall become final and binding 30 days after termination of the mediation unless, within that time period, City or Contractor:

- 1. elects in writing to invoke any other dispute resolution process provided for in the Supplementary Conditions; or
- 2. agrees with the other party to submit the Contract Claim to another dispute resolution process; or
- 3. gives written notice to the other party of the intent to submit the Contract Claim to a court of competent jurisdiction.

ARTICLE 17 – MISCELLANEOUS

17.01 Giving Notice

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
 - 1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended; or
 - 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.
- B. Business address changes must be promptly made in writing to the other party.
- C. Whenever the Contract Documents specifies giving notice by electronic means such electronic notice shall be deemed sufficient upon confirmation of receipt by the receiving party.

17.02 *Computation of Times*

When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday the next Working Day shall become the last day of the period.

17.03 Cumulative Remedies

The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 Survival of Obligations

All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

17.05 Headings

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

SECTION 00 73 00 SUPPLEMENTARY CONDITIONS TO GENERAL CONDITIONS

Supplementary Conditions

These Supplementary Conditions modify and supplement Section 00 72 00 - General Conditions, and other provisions of the Contract Documents as indicated below. All provisions of the General Conditions that are modified or supplemented remain in full force and effect as so modified or supplemented. All provisions of the General Conditions which are not so modified or supplemented remain in full force and effect.

Defined Terms

The terms used in these Supplementary Conditions which are defined in the General Conditions have the meaning assigned to them in the General Conditions, unless specifically noted herein.

Modifications and Supplements

The following are instructions that modify or supplement specific paragraphs in the General Conditions and other Contract Documents.

SC-3.03B.2, "Resolving Discrepancies"

Plans govern over Specifications.

SC-4.01A

Easement limits shown on the Drawing are approximate and were provided to establish a basis for bidding. Upon receiving the final easements descriptions, Contractor shall compare them to the lines shown on the Contract Drawings.

SC-4.01A.1., "Availability of Lands"

The following is a list of known outstanding right-of-way, and/or easements to be acquired, if any as of May 28, 2021:

Outstanding Right-Of-Way, and/or Easements to Be Acquired

PARCEL OWNER TARGET DATE
NUMBER OF POSSESSION

The Contractor understands and agrees that the dates listed above are estimates only, are not guaranteed, and do not bind the City.

If Contractor considers the final easements provided to differ materially from the representations on the Contract Drawings, Contractor shall within five (5) Business Days and before proceeding with the Work, notify City in writing associated with the differing easement line locations.

SC-4.01A.2, "Availability of Lands"

Utilities or obstructions to be removed, adjusted, and/or relocated

The following is list of utilities and/or obstructions that have not been removed, adjusted, and/or relocated as of May 28, 2021:

EXPECTED OWNER

UTILITY AND LOCATION

TARGET DATE OF ADJUSTMENT

None

The Contractor understands and agrees that the dates listed above are estimates only, are not guaranteed, and do not bind the City.

SC-4.02A., "Subsurface and Physical Conditions"

The following are reports of explorations and tests of subsurface conditions at the site of the Work:

None

The following are drawings of physical conditions in or relating to existing surface and subsurface structures (except Underground Facilities) which are at or contiguous to the site of the Work:

None

SC-4.06A., "Hazardous Environmental Conditions at Site"

The following are reports and drawings of existing hazardous environmental conditions known to the City:

None

SC-5.03A., "Certificates of Insurance"

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

- (1) City
- (2) Consultant: Kimley-Horn and Associates, Inc.
- (3) Other: None

SC-5.04A., "Contractor's Insurance"

The limits of liability for the insurance required by Paragraph GC-5.04 shall provide the following coverages for not less than the following amounts or greater where required by laws and regulations:

5.04A. Workers' Compensation, under Paragraph GC-5.04A.

Statutory limits
Employer's liability
\$100,000 and pacid

\$100,000 each accident/occurrence \$100,000 Disease - each employee \$500,000 Disease - policy limit

SC-5.04B., "Contractor's Insurance"

5.04B. Commercial General Liability, under Paragraph GC-5.04B. Contractor's Liability Insurance under Paragraph GC-5.04B., which shall be on a per project basis covering the Contractor with

minimum limits of:

\$1,000,000 each occurrence \$2,000,000 aggregate limit

The policy must have an endorsement (Amendment – Aggregate Limits of Insurance) making the General Aggregate Limits apply separately to each job site.

The Commercial General Liability Insurance policies shall provide "X", "C", and "U" coverage's. Verification of such coverage must be shown in the Remarks Article of the Certificate of Insurance.

SC 5.04C., "Contractor's Insurance"

5.04C. Automobile Liability, under Paragraph GC-5.04C. Contractor's Liability Insurance under Paragraph GC-5.04C., which shall be in an amount not less than the following amounts:

(1) **Automobile Liability** - a commercial business policy shall provide coverage on "Any Auto", defined as autos owned, hired and non-owned.

\$1,000,000 each accident on a combined single limit basis. Split limits are acceptable if limits are at least:

\$250,000 Bodily Injury per person / \$500,000 Bodily Injury per accident / \$100,000 Property Damage

SC-5.04D., "Contractor's Insurance"

Not applicable

SC-6.04., "Project Schedule"

Project schedule shall be tier 3 for the project.

SC-6.07., "Wage Rates"

The following is the prevailing wage rate table(s) applicable to this project and is provided in the Appendixes:

CFW Horizontal Wage Rate Table, 2013 Prevailing Wage Rates CFW Vertical Wage Rate Table, 2013 Prevailing Wage Rates

A copy of the table is also available by accessing the City's website at:

https://apps.fortworthtexas.gov/ProjectResources/

You can access the file by following the directory path: 02-Construction Documents/Specifications/Div00 – General Conditions

SC-6.09., "Permits and Utilities"

SC-6.09A., "Contractor obtained permits and licenses"

The following are known permits and/or licenses required by the Contract to be acquired by the Contractor:

None

SC-6.09B. "City obtained permits and licenses"

The following are known permits and/or licenses required by the Contract to be acquired by the City:

None

SC-6.09C. "Outstanding permits and licenses"

The following is a list of known outstanding permits and/or licenses to be acquired, if any as of May 28, 2021:

Outstanding Permits and/or Licenses to Be Acquired

OWNER

PERMIT OR LICENSE AND LOCATION

TARGET DATE OF POSSESSION

None

SC-6.24B., "Title VI, Civil Rights Act of 1964 as amended"

During the performance of this Contract, the Contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

- Compliance with Regulations: The Contractor shall comply with the Regulation relative to
 nondiscrimination in Federally-assisted programs of the Department of Transportation (hereinafter,
 "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time,
 (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part
 of this contract.
- 2. **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin, in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by 49 CFR, section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- 3. Solicitations for Subcontractors, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontactor or supplier shall be notified by the Contractor of the Contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
- 4. Information and Reports: The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by City or the Texas Department of Transportation to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information the contractor shall so certify to the City, or the Texas Department of Transportation, as appropriate, and shall set forth what efforts it has made to obtain the information.

- Page 5 of 5
- 5. **Sanctions for Noncompliance:** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this Contract, City shall impose such contract sanctions as it or the Texas Department of Transportation may determine to be appropriate, including, but not limited to:
 - a. withholding of payments to the Contractor under the Contract until the Contractor complies, and/or
 - b. cancellation, termination or suspension of the Contract, in whole or in part.
- 6. **Incorporation of Provisions:** The Contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The Contractor shall take such action with respect to any subcontract or procurement as City or the Texas Department of Transportation may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request City to enter into such litigation to protect the interests of City, and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

Additional Title VI requirements can be found in the Appendix.

SC-7.02., "Coordination"

The individuals or entities listed below have contracts with the City for the performance of other work at the Site:

Vendor	Scope of Work	Coordination Authority
None		

SC-9.01., "City's Project Manager"

The City's Project Manager for this Contract is Chad Allen, P.E., or his/her successor pursuant to written notification from the Director of Transportation and Public Works.

SC-13.03C., "Tests and Inspections"

None

SC-16.01C.1, "Methods and Procedures"

None

Revision Log		
DATE	NAME	SUMMARY OF CHANGE
1/22/2016	F (¬rimin	SC-9.01., "City's Project Representative" wording changed to City's Project Manager.
3/9/2020		SC-6.07, Updated the link such that files can be accessed via the City's website.

SECTION 01 11 00 SUMMARY OF WORK

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Summary of Work to be performed in accordance with the Contract Documents
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms, and Conditions of the Contract
 - 2. Division 1 General Requirements

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Work associated with this Item is considered subsidiary to the various items bid. No separate payment will be allowed for this Item.

1.3 REFERENCES [NOT USED]

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Work Covered by Contract Documents
 - 1. Work is to include furnishing all labor, materials, and equipment, and performing all Work necessary for this construction project as detailed in the Drawings and Specifications.
- B. Subsidiary Work
 - 1. Any and all Work specifically governed by documentary requirements for the project, such as conditions imposed by the Drawings or Contract Documents in which no specific item for bid has been provided for in the Proposal and the item is not a typical unit bid item included on the standard bid item list, then the item shall be considered as a subsidiary item of Work, the cost of which shall be included in the price bid in the Proposal for various bid items.

C. Use of Premises

- 1. Coordinate uses of premises under direction of the City.
- 2. Assume full responsibility for protection and safekeeping of materials and equipment stored on the Site.
- 3. Use and occupy only portions of the public streets and alleys, or other public places or other rights-of-way as provided for in the ordinances of the City, as shown in the Contract Documents, or as may be specifically authorized in writing by the City.
 - a. A reasonable amount of tools, materials, and equipment for construction purposes may be stored in such space, but no more than is necessary to avoid delay in the construction operations.

- b. Excavated and waste materials shall be stored in such a way as not to interfere with the use of spaces that may be designated to be left free and unobstructed and so as not to inconvenience occupants of adjacent property.
- c. If the street is occupied by railroad tracks, the Work shall be carried on in such manner as not to interfere with the operation of the railroad.
 - 1) All Work shall be in accordance with railroad requirements set forth in Division 0 as well as the railroad permit.

D. Work within Easements

- 1. Do not enter upon private property for any purpose without having previously obtained permission from the owner of such property.
- 2. Do not store equipment or material on private property unless and until the specified approval of the property owner has been secured in writing by the Contractor and a copy furnished to the City.
- 3. Unless specifically provided otherwise, clear all rights-of-way or easements of obstructions which must be removed to make possible proper prosecution of the Work as a part of the project construction operations.
- 4. Preserve and use every precaution to prevent damage to, all trees, shrubbery, plants, lawns, fences, culverts, curbing, and all other types of structures or improvements, to all water, sewer, and gas lines, to all conduits, overhead pole lines, or appurtenances thereof, including the construction of temporary fences and to all other public or private property adjacent to the Work.
- 5. Notify the proper representatives of the owners or occupants of the public or private lands of interest in lands which might be affected by the Work.
 - a. Such notice shall be made at least 48 hours in advance of the beginning of the Work.
 - b. Notices shall be applicable to both public and private utility companies and any corporation, company, individual, or other, either as owners or occupants, whose land or interest in land might be affected by the Work.
 - c. Be responsible for all damage or injury to property of any character resulting from any act, omission, neglect, or misconduct in the manner or method or execution of the Work, or at any time due to defective work, material, or equipment.

6. Fence

- a. Restore all fences encountered and removed during construction of the Project to the original or a better than original condition.
- b. Erect temporary fencing in place of the fencing removed whenever the Work is not in progress and when the site is vacated overnight, and/or at all times to provide site security.
- c. The cost for all fence work within easements, including removal, temporary closures and replacement, shall be subsidiary to the various items bid in the project proposal, unless a bid item is specifically provided in the proposal.

- 1.5 SUBMITTALS [NOT USED]
- 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 1.9 QUALITY ASSURANCE [NOT USED]
- 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 1.12 WARRANTY [NOT USED]
- PART 2 PRODUCTS [NOT USED]
- PART 3 EXECUTION [NOT USED]

Revision Log		
DATE	NAME	SUMMARY OF CHANGE

SECTION 01 25 00 SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. The procedure for requesting the approval of substitution of a product that is not equivalent to a product which is specified by descriptive or performance criteria or defined by reference to 1 or more of the following:
 - a. Name of manufacturer
 - b. Name of vendor
 - c. Trade name
 - d. Catalog number
 - 2. Substitutions are not "or-equals".
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Work associated with this Item is considered subsidiary to the various items bid. No separate payment will be allowed for this Item.

1.3 REFERENCES [NOT USED]

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Request for Substitution General
 - 1. Within 30 days after award of Contract (unless noted otherwise), the City will consider formal requests from Contractor for substitution of products in place of those specified.
 - Certain types of equipment and kinds of material are described in Specifications by means of references to names of manufacturers and vendors, trade names, or catalog numbers.
 - a. When this method of specifying is used, it is not intended to exclude from consideration other products bearing other manufacturer's or vendor's names, trade names, or catalog numbers, provided said products are "or-equals," as determined by City.
 - 3. Other types of equipment and kinds of material may be acceptable substitutions under the following conditions:
 - Or-equals are unavailable due to strike, discontinued production of products meeting specified requirements, or other factors beyond control of Contractor; or

b. Contractor proposes a cost and/or time reduction incentive to the City.

1.5 SUBMITTALS

- A. See Request for Substitution Form (attached)
- B. Procedure for Requesting Substitution
 - 1. Substitution shall be considered only:
 - a. After award of Contract
 - b. Under the conditions stated herein
 - 2. Submit 3 copies of each written request for substitution, including:
 - a. Documentation
 - 1) Complete data substantiating compliance of proposed substitution with Contract Documents
 - 2) Data relating to changes in construction schedule, when a reduction is proposed
 - 3) Data relating to changes in cost
 - b. For products
 - 1) Product identification
 - a) Manufacturer's name
 - b) Telephone number and representative contact name
 - Specification Section or Drawing reference of originally specified product, including discrete name or tag number assigned to original product in the Contract Documents
 - 2) Manufacturer's literature clearly marked to show compliance of proposed product with Contract Documents
 - 3) Itemized comparison of original and proposed product addressing product characteristics including, but not necessarily limited to:
 - a) Size
 - b) Composition or materials of construction
 - c) Weight
 - d) Electrical or mechanical requirements
 - 4) Product experience
 - a) Location of past projects utilizing product
 - b) Name and telephone number of persons associated with referenced projects knowledgeable concerning proposed product
 - c) Available field data and reports associated with proposed product
 - 5) Samples
 - a) Provide at request of City.
 - b) Samples become the property of the City.
 - c. For construction methods:
 - 1) Detailed description of proposed method
 - 2) Illustration drawings
- C. Approval or Rejection
 - 1. Written approval or rejection of substitution given by the City
 - 2. City reserves the right to require proposed product to comply with color and pattern of specified product if necessary to secure design intent.
 - 3. In the event the substitution is approved, the resulting cost and/or time reduction will be documented by Change Order in accordance with the General Conditions.

- 4. No additional contract time will be given for substitution.
- 5. Substitution will be rejected if:
 - a. Submittal is not through the Contractor with his stamp of approval
 - b. Request is not made in accordance with this Specification Section
 - c. In the City's opinion, acceptance will require substantial revision of the original design
 - d. In the City's opinion, substitution will not perform adequately the function consistent with the design intent

1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]

- 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 1.9 QUALITY ASSURANCE
 - A. In making request for substitution or in using an approved product, the Contractor represents that the Contractor:
 - 1. Has investigated proposed product, and has determined that it is adequate or superior in all respects to that specified, and that it will perform function for which it is intended
 - 2. Will provide same guarantee for substitute item as for product specified
 - 3. Will coordinate installation of accepted substitution into Work, to include building modifications if necessary, making such changes as may be required for Work to be complete in all respects
 - 4. Waives all claims for additional costs related to substitution which subsequently arise
- 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 1.12 WARRANTY [NOT USED]
- PART 2 PRODUCTS [NOT USED]
- PART 3 EXECUTION [NOT USED]

Revision Log		
DATE	NAME	SUMMARY OF CHANGE

EXHIBIT A REQUEST FOR SUBSTITUTION FORM:

ТО:	
PROJECT:	DATE:
We hereby submit for your consideration the follo	wing product instead of the specified item for
the above project:	
SECTION PARAGR.	APH SPECIFIED ITEM
Proposed Substitution:	
Reason for Substitution:	
Include complete information on changes to Drasubstitution will require for its proper installation.	awings and/or Specifications which proposed
Fill in Blanks Below: A. Will the undersigned contractor pay for change and detailing costs caused by the requested sub	es to the building design, including engineering stitution?
B. What effect does substitution have on other trace	des?
C. Differences between proposed substitution and	specified item?
D. Differences in product cost or product delivery	time?
E. Manufacturer's guarantees of the proposed and	specified items are:
Equal Better (ex The undersigned states that the function, appearance specified item.	explain on attachment) ce and quality are equivalent or superior to the
Submitted By:	For Use by City
Signatureas noted	RecommendedRecommended
FirmAddress	Not recommendedReceived late
	Date
Date Telephone	Remarks
For Use by City:	
Approved City	Rejected Date
	Dute

SECTION 01 31 19

PRECONSTRUCTION MEETING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Provisions for the preconstruction meeting to be held prior to the start of Work to clarify construction contract administration procedures
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Work associated with this Item is considered subsidiary to the various items bid. No separate payment will be allowed for this Item.

1.3 REFERENCES [NOT USED]

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Coordination
 - 1. Attend preconstruction meeting.
 - 2. Representatives of Contractor, subcontractors and suppliers attending meetings shall be qualified and authorized to act on behalf of the entity each represents.
 - 3. Meeting administered by City may be tape recorded.
 - a. If recorded, tapes will be used to prepare minutes and retained by City for future reference.

B. Preconstruction Meeting

- 1. A preconstruction meeting will be held within 14 days after the execution of the Agreement and before Work is started.
 - a. The meeting will be scheduled and administered by the City.
- The Project Representative will preside at the meeting, prepare the notes of the meeting and distribute copies of same to all participants who so request by fully completing the attendance form to be circulated at the beginning of the meeting.
- 3. Attendance shall include:
 - a. Project Representative
 - b. Contractor's project manager
 - c. Contractor's superintendent
 - d. Any subcontractor or supplier representatives whom the Contractor may desire to invite or the City may request

- e. Other City representatives
- f. Others as appropriate
- 4. Construction Schedule
 - a. Prepare baseline construction schedule in accordance with Section 01 32 16 and provide at Preconstruction Meeting.
 - b. City will notify Contractor of any schedule changes upon Notice of Preconstruction Meeting.
- 5. Preliminary Agenda may include:
 - a. Introduction of Project Personnel
 - b. General Description of Project
 - c. Status of right-of-way, utility clearances, easements or other pertinent permits
 - d. Contractor's work plan and schedule
 - e. Contract Time
 - f. Notice to Proceed
 - g. Construction Staking
 - h. Progress Payments
 - i. Extra Work and Change Order Procedures
 - i. Field Orders
 - k. Disposal Site Letter for Waste Material
 - 1. Insurance Renewals
 - m. Payroll Certification
 - n. Material Certifications and Quality Control Testing
 - o. Public Safety and Convenience
 - p. Documentation of Pre-Construction Conditions
 - q. Weekend Work Notification
 - r. Legal Holidays
 - s. Trench Safety Plans
 - t. Confined Space Entry Standards
 - Coordination with the City's representative for operations of existing water systems
 - v. Storm Water Pollution Prevention Plan
 - w. Coordination with other Contractors
 - x. Early Warning System
 - y. Contractor Evaluation
 - z. Special Conditions applicable to the project
 - aa. Damages Claims
 - bb. Submittal Procedures
 - cc. Substitution Procedures
 - dd. Correspondence Routing
 - ee. Record Drawings
 - ff. Temporary construction facilities
 - gg. M/WBE or MBE/SBE procedures
 - hh. Final Acceptance
 - ii. Final Payment
 - ij. Questions or Comments

- 1.5 SUBMITTALS [NOT USED]
- 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 1.9 QUALITY ASSURANCE [NOT USED]
- 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 1.12 WARRANTY [NOT USED]
- PART 2 PRODUCTS [NOT USED]
- PART 3 EXECUTION [NOT USED]

Revision Log		
DATE	NAME	SUMMARY OF CHANGE

SECTION 01 31 20

PROJECT MEETINGS

[Specifier: This Specification is intended for use on projects designated as Tier 3 or Tier 4.]

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Provisions for project meetings throughout the construction period to enable orderly review of the progress of the Work and to provide for systematic discussion of potential problems
- B. Deviations this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Work associated with this Item is considered subsidiary to the various items bid. No separate payment will be allowed for this Item.

1.3 REFERENCES [NOT USED]

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Coordination
 - 1. Schedule, attend and administer as specified, periodic progress meetings, and specially called meetings throughout progress of the Work.
 - 2. Representatives of Contractor, subcontractors and suppliers attending meetings shall be qualified and authorized to act on behalf of the entity each represents.
 - 3. Meetings administered by City may be tape recorded.
 - a. If recorded, tapes will be used to prepare minutes and retained by City for future reference.
 - 4. Meetings, in addition to those specified in this Section, may be held when requested by the City, Engineer or Contractor.
- B. Pre-Construction Neighborhood Meeting
 - 1. After the execution of the Agreement, but before construction is allowed to begin, attend 1 Public Meeting with affected residents to:
 - a. Present projected schedule, including construction start date
 - b. Answer any construction related questions
 - 2. Meeting Location
 - a. Location of meeting to be determined by the City.
 - 3. Attendees

- a. Contractor
- b. Project Representative
- c. Other City representatives
- 4. Meeting Schedule
 - a. In general, the neighborhood meeting will occur within the 2 weeks following the pre-construction conference.
 - b. In no case will construction be allowed to begin until this meeting is held.

C. Progress Meetings

- 1. Formal project coordination meetings will be held periodically. Meetings will be scheduled and administered by Project Representative.
- 2. Additional progress meetings to discuss specific topics will be conducted on an asneeded basis. Such additional meetings shall include, but not be limited to:
 - a. Coordinating shutdowns
 - b. Installation of piping and equipment
 - c. Coordination between other construction projects
 - d. Resolution of construction issues
 - e. Equipment approval
- 3. The Project Representative will preside at progress meetings, prepare the notes of the meeting and distribute copies of the same to all participants who so request by fully completing the attendance form to be circulated at the beginning of each meeting.
- 4. Attendance shall include:
 - a. Contractor's project manager
 - b. Contractor's superintendent
 - c. Any subcontractor or supplier representatives whom the Contractor may desire to invite or the City may request
 - d. Engineer's representatives
 - e. City's representatives
 - f. Others, as requested by the Project Representative
- 5. Preliminary Agenda may include:
 - a. Review of Work progress since previous meeting
 - b. Field observations, problems, conflicts
 - c. Items which impede construction schedule
 - d. Review of off-site fabrication, delivery schedules
 - e. Review of construction interfacing and sequencing requirements with other construction contracts
 - f. Corrective measures and procedures to regain projected schedule
 - g. Revisions to construction schedule
 - h. Progress, schedule, during succeeding Work period
 - i. Coordination of schedules
 - i. Review submittal schedules
 - k. Maintenance of quality standards
 - 1. Pending changes and substitutions
 - m. Review proposed changes for:
 - 1) Effect on construction schedule and on completion date
 - 2) Effect on other contracts of the Project
 - n. Review Record Documents
 - o. Review monthly pay request

- p. Review status of Requests for Information
- 6. Meeting Schedule
 - a. Progress meetings will be held periodically as determined by the Project Representative.
 - 1) Additional meetings may be held at the request of the:
 - a) City
 - b) Engineer
 - c) Contractor
- 7. Meeting Location
 - a. The City will establish a meeting location.
 - 1) To the extent practicable, meetings will be held at the Site.
- 1.5 SUBMITTALS [NOT USED]
- 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 1.9 QUALITY ASSURANCE [NOT USED]
- 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 1.12 WARRANTY [NOT USED]
- PART 2 PRODUCTS [NOT USED]
- PART 3 EXECUTION [NOT USED]

Revision Log		
DATE	NAME	SUMMARY OF CHANGE

SECTION 01 32 16

CONSTRUCTION PROGRESS SCHEDULE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. General requirements for the preparation, submittal, updating, status reporting and management of the Construction Progress Schedule
 - 2. Specific requirements are presented in the City of Fort Worth Schedule Guidance Document
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Work associated with this Item is considered subsidiary to the various items bid. No separate payment will be allowed for this Item.

1.3 REFERENCES

- A. Definitions
 - 1. Schedule Tiers
 - a. **Tier 1** No schedule submittal required by contract. Small, brief duration projects
 - b. **Tier 2** No schedule submittal required by contract, but will require some milestone dates. Small, brief duration projects
 - c. **Tier 3** Schedule submittal required by contract as described in the Specification and herein. Majority of City projects, including all bond program projects
 - d. **Tier 4** Schedule submittal required by contract as described in the Specification and herein. Large and/or complex projects with long durations
 - 1) Examples: large water pump station project and associated pipeline with interconnection to another governmental entity
 - e. **Tier 5** Schedule submittal required by contract as described in the Specification and herein. Large and/or very complex projects with long durations, high public visibility
 - 1) Examples might include a water or wastewater treatment plant
 - 2. **Baseline Schedule** Initial schedule submitted before work begins that will serve as the baseline for measuring progress and departures from the schedule.
 - 3. **Progress Schedule** Monthly submittal of a progress schedule documenting progress on the project and any changes anticipated.

4. **Schedule Narrative** - Concise narrative of the schedule including schedule changes, expected delays, key schedule issues, critical path items, etc

B. Reference Standards

1. City of Fort Worth Schedule Guidance Document

1.4 ADMINISTRATIVE REQUIREMENTS

A. Baseline Schedule

- 1. General
 - a. Prepare a cost-loaded baseline Schedule using approved software and the Critical Path Method (CPM) as required in the City of Fort Worth Schedule Guidance Document.
 - b. Review the draft cost-loaded baseline Schedule with the City to demonstrate understanding of the work to be performed and known issues and constraints related to the schedule.
 - c. Designate an authorized representative (Project Scheduler) responsible for developing and updating the schedule and preparing reports.

B. Progress Schedule

- 1. Update the progress Schedule monthly as required in the City of Fort Worth Schedule Guidance Document.
- 2. Prepare the Schedule Narrative to accompany the monthly progress Schedule.
- 3. Change Orders
 - a. Incorporate approved change orders, resulting in a change of contract time, in the baseline Schedule in accordance with City of Fort Worth Schedule Guidance Document.

C. Responsibility for Schedule Compliance

- 1. Whenever it becomes apparent from the current progress Schedule and CPM Status Report that delays to the critical path have resulted and the Contract completion date will not be met, or when so directed by the City, make some or all of the following actions at no additional cost to the City
 - a. Submit a Recovery Plan to the City for approval revised baseline Schedule outlining:
 - 1) A written statement of the steps intended to take to remove or arrest the delay to the critical path in the approved schedule
 - 2) Increase construction manpower in such quantities and crafts as will substantially eliminate the backlog of work and return current Schedule to meet projected baseline completion dates
 - 3) Increase the number of working hours per shift, shifts per day, working days per week, the amount of construction equipment, or any combination of the foregoing, sufficiently to substantially eliminate the backlog of work
 - 4) Reschedule activities to achieve maximum practical concurrency of accomplishment of activities, and comply with the revised schedule
- 2. If no written statement of the steps intended to take is submitted when so requested by the City, the City may direct the Contractor to increase the level of effort in manpower (trades), equipment and work schedule (overtime, weekend and holiday work, etc.) to be employed by the Contractor in order to remove or arrest the delay to the critical path in the approved schedule.
 - a. No additional cost for such work will be considered.

- D. The Contract completion time will be adjusted only for causes specified in this Contract.
 - a. Requests for an extension of any Contract completion date must be supplemented with the following:
 - 1) Furnish justification and supporting evidence as the City may deem necessary to determine whether the requested extension of time is entitled under the provisions of this Contract.
 - a) The City will, after receipt of such justification and supporting evidence, make findings of fact and will advise the Contractor, in writing thereof.
 - 2) If the City finds that the requested extension of time is entitled, the City's determination as to the total number of days allowed for the extensions shall be based upon the approved total baseline schedule and on all data relevant to the extension.
 - a) Such data shall be included in the next updating of the Progress schedule.
 - b) Actual delays in activities which, according to the Baseline schedule, do not affect any Contract completion date shown by the critical path in the network will not be the basis for a change therein.
 - 2. Submit each request for change in Contract completion date to the City within 30 days after the beginning of the delay for which a time extension is requested but before the date of final payment under this Contract.
 - a. No time extension will be granted for requests which are not submitted within the foregoing time limit.
 - b. From time to time, it may be necessary for the Contract schedule or completion time to be adjusted by the City to reflect the effects of job conditions, weather, technical difficulties, strikes, unavoidable delays on the part of the City or its representatives, and other unforeseeable conditions which may indicate schedule adjustments or completion time extensions.
 - Under such conditions, the City will direct the Contractor to reschedule the work or Contract completion time to reflect the changed conditions and the Contractor shall revise his schedule accordingly.
 - a) No additional compensation will be made to the Contractor for such schedule changes except for unavoidable overall contract time extensions beyond the actual completion of unaffected work, in which case the Contractor shall take all possible action to minimize any time extension and any additional cost to the City.
 - b) Available float time in the Baseline schedule may be used by the City as well as by the Contractor.
 - 3. Float or slack time is defined as the amount of time between the earliest start date and the latest start date or between the earliest finish date and the latest finish date of a chain of activities on the Baseline Schedule.
 - a. Float or slack time is not for the exclusive use or benefit of either the Contractor or the City.
 - b. Proceed with work according to early start dates, and the City shall have the right to reserve and apportion float time according to the needs of the project.

c. Acknowledge and agree that actual delays, affecting paths of activities containing float time, will not have any effect upon contract completion times, providing that the actual delay does not exceed the float time associated with those activities.

E. Coordinating Schedule with Other Contract Schedules

- 1. Where work is to be performed under this Contract concurrently with or contingent upon work performed on the same facilities or area under other contracts, the Baseline Schedule shall be coordinated with the schedules of the other contracts.
 - a. Obtain the schedules of the other appropriate contracts from the City for the preparation and updating of Baseline schedule and make the required changes in his schedule when indicated by changes in corresponding schedules.
- 2. In case of interference between the operations of different contractors, the City will determine the work priority of each contractor and the sequence of work necessary to expedite the completion of the entire Project.
 - a. In such cases, the decision of the City shall be accepted as final.
 - b. The temporary delay of any work due to such circumstances shall not be considered as justification for claims for additional compensation.

1.5 SUBMITTALS

A. Baseline Schedule

- 1. Submit Schedule in native file format and pdf format as required in the City of Fort Worth Schedule Guidance Document.
 - a. Native file format includes:
 - 1) Primavera (P6 or Primavera Contractor)
- 2. Submit draft baseline Schedule to City prior to the pre-construction meeting and bring in hard copy to the meeting for review and discussion.

B. Progress Schedule

- 1. Submit progress Schedule in native file format and pdf format as required in the City of Fort Worth Schedule Guidance Document.
- 2. Submit progress Schedule monthly no later than the last day of the month.

C. Schedule Narrative

- 1. Submit the schedule narrative in pdf format as required in the City of Fort Worth Schedule Guidance Document.
- 2. Submit schedule narrative monthly no later than the last day of the month.

D. Submittal Process

- 1. The City administers and manages schedules through Buzzsaw.
- 2. Contractor shall submit documents as required in the City of Fort Worth Schedule Guidance Document.
- 3. Once the project has been completed and Final Acceptance has been issued by the City, no further progress schedules are required.

- 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 1.9 QUALITY ASSURANCE
 - A. The person preparing and revising the construction Progress Schedule shall be experienced in the preparation of schedules of similar complexity.
 - B. Schedule and supporting documents addressed in this Specification shall be prepared, updated and revised to accurately reflect the performance of the construction.
 - C. Contractor is responsible for the quality of all submittals in this section meeting the standard of care for the construction industry for similar projects.
- 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 1.12 WARRANTY [NOT USED]
- PART 2 PRODUCTS [NOT USED]
- PART 3 EXECUTION [NOT USED]

Revision Log		
DATE	NAME	SUMMARY OF CHANGE

SECTION 01 32 33 PRECONSTRUCTION VIDEO

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Administrative and procedural requirements for:
 - a. Preconstruction Videos
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Work associated with this Item is considered subsidiary to the various items bid. No separate payment will be allowed for this Item.
- 1.3 REFERENCES [NOT USED]

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Preconstruction Video
 - 1. Produce a preconstruction video of the site/alignment, including all areas in the vicinity of and to be affected by construction.
 - a. Provide digital copy of video upon request by the City.
 - 2. Retain a copy of the preconstruction video until the end of the maintenance surety period.
- 1.5 SUBMITTALS [NOT USED]
- 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 1.9 QUALITY ASSURANCE [NOT USED]
- 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 1.12 WARRANTY [NOT USED]

PART 2 - PRODUCTS [NOT USED]

PART 3 - EXECUTION [NOT USED]

Revision Log		
DATE	NAME	SUMMARY OF CHANGE

SECTION 01 33 00 SUBMITTALS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. General methods and requirements of submissions applicable to the following Work-related submittals:
 - a. Shop Drawings
 - b. Product Data (including Standard Product List submittals)
 - c. Samples
 - d. Mock Ups
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Work associated with this Item is considered subsidiary to the various items bid. No separate payment will be allowed for this Item.

1.3 REFERENCES [NOT USED]

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Coordination
 - 1. Notify the City in writing, at the time of submittal, of any deviations in the submittals from the requirements of the Contract Documents.
 - 2. Coordination of Submittal Times
 - a. Prepare, prioritize and transmit each submittal sufficiently in advance of performing the related Work or other applicable activities, or within the time specified in the individual Work Sections, of the Specifications.
 - b. Contractor is responsible such that the installation will not be delayed by processing times including, but not limited to:
 - a) Disapproval and resubmittal (if required)
 - b) Coordination with other submittals
 - c) Testing
 - d) Purchasing
 - e) Fabrication
 - f) Delivery
 - g) Similar sequenced activities
 - c. No extension of time will be authorized because of the Contractor's failure to transmit submittals sufficiently in advance of the Work.

d. Make submittals promptly in accordance with approved schedule, and in such sequence as to cause no delay in the Work or in the work of any other contractor.

B. Submittal Numbering

- 1. When submitting shop drawings or samples, utilize a 9-character submittal cross-reference identification numbering system in the following manner:
 - a. Use the first 6 digits of the applicable Specification Section Number.
 - b. For the next 2 digits number use numbers 01-99 to sequentially number each initial separate item or drawing submitted under each specific Section number.
 - c. Last use a letter, A-Z, indicating the resubmission of the same drawing (i.e. A=2nd submission, B=3rd submission, C=4th submission, etc.). A typical submittal number would be as follows:

03 30 00-08-B

- 1) 03 30 00 is the Specification Section for Concrete
- 2) 08 is the eighth initial submittal under this Specification Section
- 3) B is the third submission (second resubmission) of that particular shop drawing

C. Contractor Certification

- 1. Review shop drawings, product data and samples, including those by subcontractors, prior to submission to determine and verify the following:
 - a. Field measurements
 - b. Field construction criteria
 - c. Catalog numbers and similar data
 - d. Conformance with the Contract Documents
- 2. Provide each shop drawing, sample and product data submitted by the Contractor with a Certification Statement affixed including:
 - a. The Contractor's Company name
 - b. Signature of submittal reviewer
 - c. Certification Statement
 - 1) "By this submittal, I hereby represent that I have determined and verified field measurements, field construction criteria, materials, dimensions, catalog numbers and similar data and I have checked and coordinated each item with other applicable approved shop drawings."

D. Submittal Format

- 1. Fold shop drawings larger than 8 ½ inches x 11 inches to 8 ½ inches x 11 inches.
- 2. Bind shop drawings and product data sheets together.
- 3. Order
 - a. Cover Sheet
 - 1) Description of Packet
 - 2) Contractor Certification
 - b. List of items / Table of Contents
 - c. Product Data /Shop Drawings/Samples /Calculations

E. Submittal Content

1. The date of submission and the dates of any previous submissions

- 2. The Project title and number
- 3. Contractor identification
- 4. The names of:
 - a. Contractor
 - b. Supplier
 - c. Manufacturer
- 5. Identification of the product, with the Specification Section number, page and paragraph(s)
- 6. Field dimensions, clearly identified as such
- 7. Relation to adjacent or critical features of the Work or materials
- 8. Applicable standards, such as ASTM or Federal Specification numbers
- 9. Identification by highlighting of deviations from Contract Documents
- 10. Identification by highlighting of revisions on resubmittals
- 11. An 8-inch x 3-inch blank space for Contractor and City stamps

F. Shop Drawings

- 1. As specified in individual Work Sections includes, but is not necessarily limited to:
 - a. Custom-prepared data such as fabrication and erection/installation (working) drawings
 - b. Scheduled information
 - c. Setting diagrams
 - d. Actual shopwork manufacturing instructions
 - e. Custom templates
 - f. Special wiring diagrams
 - g. Coordination drawings
 - h. Individual system or equipment inspection and test reports including:
 - 1) Performance curves and certifications
 - i. As applicable to the Work

2. Details

- a. Relation of the various parts to the main members and lines of the structure
- b. Where correct fabrication of the Work depends upon field measurements
 - 1) Provide such measurements and note on the drawings prior to submitting for approval.

G. Product Data

- 1. For submittals of product data for products included on the City's Standard Product List, clearly identify each item selected for use on the Project.
- 2. For submittals of product data for products <u>not</u> included on the City's Standard Product List, submittal data may include, but is not necessarily limited to:
 - a. Standard prepared data for manufactured products (sometimes referred to as catalog data)
 - 1) Such as the manufacturer's product specification and installation instructions
 - 2) Availability of colors and patterns
 - 3) Manufacturer's printed statements of compliances and applicability
 - 4) Roughing-in diagrams and templates
 - 5) Catalog cuts
 - 6) Product photographs

- 7) Standard wiring diagrams
- 8) Printed performance curves and operational-range diagrams
- 9) Production or quality control inspection and test reports and certifications
- 10) Mill reports
- 11) Product operating and maintenance instructions and recommended spare-parts listing and printed product warranties
- 12) As applicable to the Work

H. Samples

- 1. As specified in individual Sections, include, but are not necessarily limited to:
 - a. Physical examples of the Work such as:
 - 1) Sections of manufactured or fabricated Work
 - 2) Small cuts or containers of materials
 - 3) Complete units of repetitively used products color/texture/pattern swatches and range sets
 - 4) Specimens for coordination of visual effect
 - 5) Graphic symbols and units of Work to be used by the City for independent inspection and testing, as applicable to the Work
- I. Do not start Work requiring a shop drawing, sample or product data nor any material to be fabricated or installed prior to the approval or qualified approval of such item.
 - 1. Fabrication performed, materials purchased or on-site construction accomplished which does not conform to approved shop drawings and data is at the Contractor's risk.
 - 2. The City will not be liable for any expense or delay due to corrections or remedies required to accomplish conformity.
 - 3. Complete project Work, materials, fabrication, and installations in conformance with approved shop drawings, applicable samples, and product data.

J. Submittal Distribution

- 1. Electronic Distribution
 - a. Confirm development of Project directory for electronic submittals to be uploaded to City's Buzzsaw site, or another external FTP site approved by the City.
 - b. Shop Drawings
 - 1) Upload submittal to designated project directory and notify appropriate City representatives via email of submittal posting.
 - 2) Hard Copies
 - a) 3 copies for all submittals
 - b) If Contractor requires more than 1 hard copy of Shop Drawings returned, Contractor shall submit more than the number of copies listed above.
 - c. Product Data
 - 1) Upload submittal to designated project directory and notify appropriate City representatives via email of submittal posting.
 - 2) Hard Copies
 - a) 3 copies for all submittals
 - d. Samples
 - 1) Distributed to the Project Representative
- 2. Hard Copy Distribution (if required in lieu of electronic distribution)

- a. Shop Drawings
 - 1) Distributed to the City
 - 2) Copies
 - a) 8 copies for mechanical submittals
 - b) 7 copies for all other submittals
 - c) If Contractor requires more than 3 copies of Shop Drawings returned, Contractor shall submit more than the number of copies listed above.
- b. Product Data
 - 1) Distributed to the City
 - 2) Copies
 - a) 4 copies
- c. Samples
 - 1) Distributed to the Project Representative
 - 2) Copies
 - a) Submit the number stated in the respective Specification Sections.
- 3. Distribute reproductions of approved shop drawings and copies of approved product data and samples, where required, to the job site file and elsewhere as directed by the City.
 - a. Provide number of copies as directed by the City but not exceeding the number previously specified.

K. Submittal Review

- 1. The review of shop drawings, data and samples will be for general conformance with the design concept and Contract Documents. This is not to be construed as:
 - a. Permitting any departure from the Contract requirements
 - b. Relieving the Contractor of responsibility for any errors, including details, dimensions, and materials
 - c. Approving departures from details furnished by the City, except as otherwise provided herein
- 2. The review and approval of shop drawings, samples or product data by the City does not relieve the Contractor from his/her responsibility with regard to the fulfillment of the terms of the Contract.
 - a. All risks of error and omission are assumed by the Contractor, and the City will have no responsibility therefore.
- 3. The Contractor remains responsible for details and accuracy, for coordinating the Work with all other associated work and trades, for selecting fabrication processes, for techniques of assembly and for performing Work in a safe manner.
- 4. If the shop drawings, data or samples as submitted describe variations and show a departure from the Contract requirements which City finds to be in the interest of the City and to be so minor as not to involve a change in Contract Price or time for performance, the City may return the reviewed drawings without noting an exception.
- 5. Submittals will be returned to the Contractor under 1 of the following codes:
 - a. Code 1
 - 1) "NO EXCEPTIONS TAKEN" is assigned when there are no notations or comments on the submittal.
 - a) When returned under this code the Contractor may release the equipment and/or material for manufacture.
 - b. Code 2

- 1) "EXCEPTIONS NOTED". This code is assigned when a confirmation of the notations and comments IS NOT required by the Contractor.
 - a) The Contractor may release the equipment or material for manufacture; however, all notations and comments must be incorporated into the final product.

c. Code 3

- 1) "EXCEPTIONS NOTED/RESUBMIT". This combination of codes is assigned when notations and comments are extensive enough to require a resubmittal of the package.
 - a) The Contractor may release the equipment or material for manufacture; however, all notations and comments must be incorporated into the final product.
 - b) This resubmittal is to address all comments, omissions and non-conforming items that were noted.
 - c) Resubmittal is to be received by the City within 15 Calendar Days of the date of the City's transmittal requiring the resubmittal.

d. Code 4

- 1) "NOT APPROVED" is assigned when the submittal does not meet the intent of the Contract Documents.
 - a) The Contractor must resubmit the entire package revised to bring the submittal into conformance.
 - b) It may be necessary to resubmit using a different manufacturer/vendor to meet the Contract Documents.

6. Resubmittals

- a. Handled in the same manner as first submittals
 - 1) Corrections other than requested by the City
 - 2) Marked with revision triangle or other similar method
 - a) At Contractor's risk if not marked
- b. Submittals for each item will be reviewed no more than twice at the City's expense.
 - All subsequent reviews will be performed at times convenient to the City and at the Contractor's expense, based on the City's or City Representative's then prevailing rates.
 - 2) Provide Contractor reimbursement to the City within 30 Calendar Days for all such fees invoiced by the City.
- c. The need for more than 1 resubmission or any other delay in obtaining City's review of submittals, will not entitle the Contractor to an extension of Contract Time.

7. Partial Submittals

- a. City reserves the right to <u>not</u> review submittals deemed partial, at the City's discretion.
- b. Submittals deemed by the City to be not complete will be returned to the Contractor, and will be considered "Not Approved" until resubmitted.
- c. The City may at its option provide a list or mark the submittal directing the Contractor to the areas that are incomplete.
- 8. If the Contractor considers any correction indicated on the shop drawings to constitute a change to the Contract Documents, then written notice must be provided thereof to the City at least 7 Calendar Days prior to release for manufacture.

- 9. When the shop drawings have been completed to the satisfaction of the City, the Contractor may carry out the construction in accordance therewith and no further changes therein except upon written instructions from the City.
- 10. Each submittal, appropriately coded, will be returned within 30 Calendar Days following receipt of submittal by the City.

L. Mock ups

1. Mock Up units as specified in individual Sections, include, but are not necessarily limited to, complete units of the standard of acceptance for that type of Work to be used on the Project. Remove at the completion of the Work or when directed.

M. Qualifications

- 1. If specifically required in other Sections of these Specifications, submit a P.E. Certification for each item required.
- N. Request for Information (RFI)
 - 1. Contractor Request for additional information
 - a. Clarification or interpretation of the contract documents
 - b. When the Contractor believes there is a conflict between Contract Documents
 - c. When the Contractor believes there is a conflict between the Drawings and Specifications
 - 1) Identify the conflict and request clarification
 - 2. Use the Request for Information (RFI) form provided by the City.
 - 3. Numbering of RFI
 - a. Prefix with "RFI" followed by series number, "-xxx", beginning with "01" and increasing sequentially with each additional transmittal.
 - 4. Sufficient information shall be attached to permit a written response without further information.
 - 5. The City will log each request and will review the request.
 - a. If review of the project information request indicates that a change to the Contract Documents is required, the City will issue a Field Order or Change Order, as appropriate.
- 1.5 SUBMITTALS [NOT USED]
- 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 1.9 QUALITY ASSURANCE [NOT USED]
- 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 1.12 WARRANTY [NOT USED]

PART 2 - PRODUCTS [NOT USED]

PART 3 - EXECUTION [NOT USED]

		Revision Log
DATE	NAME	SUMMARY OF CHANGE
12/20/2012	D. Johnson	1.4.K.8. Working Days modified to Calendar Days

SECTION 01 35 13 1 2 SPECIAL PROJECT PROCEDURES PART 1 - GENERAL 3 4 1.1 SUMMARY 5 A. Section Includes: 6 1. The procedures for special project circumstances that includes, but is not limited to: a. Coordination with the Texas Department of Transportation 7 b. Work near High Voltage Lines 8 c. Confined Space Entry Program 9 d. Air Pollution Watch Days 10 e. Use of Explosives, Drop Weight, Etc. 11 f. Water Department Notification 12 g. Public Notification Prior to Beginning Construction 13 h. Coordination with United States Army Corps of Engineers 14 Coordination within Railroad permits areas 15 i. **Dust Control** i. 16 17 k. Employee Parking 18 B. Deviations from this City of Fort Worth Standard Specification 19 1. None. C. Related Specification Sections include, but are not necessarily limited to: 20 1. Division 0 – Bidding Requirements, Contract Forms and Conditions of the Contract 21 2. Division 1 – General Requirements 22 23 3. Section 33 12 25 – Connection to Existing Water Mains 1.2 PRICE AND PAYMENT PROCEDURES 24 25 A. Measurement and Payment 1. Coordination within Railroad permit areas 26 27 a. Measurement 1) Measurement for this Item will be by lump sum. 28 29 Payment 30 1) The work performed and materials furnished in accordance with this Item will be paid for at the lump sum price bid for Railroad Coordination. 31 The price bid shall include: 32 33 1) Mobilization 2) Inspection 34 3) Safety training 35 36 4) Additional Insurance 37 5) Insurance Certificates 38 6) Other requirements associated with general coordination with Railroad, including additional employees required to protect the right-of-way and 39 property of the Railroad from damage arising out of and/or from the 40 41 construction of the Project.

2. Railroad Flagmen

1 2				a. Measurement1) Measurement for this Item will be per working day.
3				b. Payment
4 5				1) The work performed and materials furnished in accordance with this Item will be paid for each working day that Railroad Flagmen are present at the
6				Site.
7				c. The price bid shall include:
8				1) Coordination for scheduling flagmen
9 10				2) Flagmen3) Other requirements associated with Railroad
11			3.	All other items
12 13				a. Work associated with these Items is considered subsidiary to the various Items bid. No separate payment will be allowed for this Item.
14	1.3	RE	FER	RENCES
15		A.	Refe	erence Standards
16			1.	Reference standards cited in this Specification refer to the current reference
17 18				standard published at the time of the latest revision date logged at the end of this Specification, unless a date is specifically cited.
19				Health and Safety Code, Title 9. Safety, Subtitle A. Public Safety, Chapter 752.
20				High Voltage Overhead Lines.
21				North Central Texas Council of Governments (NCTCOG) – Clean Construction
22				Specification
23	1.4	AD	MIN	NISTRATIVE REQUIREMENTS
24		A.	Coo	ordination with the Texas Department of Transportation
25			1.	When work in the right-of-way which is under the jurisdiction of the Texas
26				Department of Transportation (TxDOT):
27				a. Notify the Texas Department of Transportation prior to commencing any work
28				therein in accordance with the provisions of the permit
29				b. All work performed in the TxDOT right-of-way shall be performed in
30				compliance with and subject to approval from the Texas Department of
31				Transportation
32		B.		rk near High Voltage Lines
33			1.	Regulatory Requirements
34				a. All Work near High Voltage Lines (more than 600 volts measured between
35				conductors or between a conductor and the ground) shall be in accordance with
36				Health and Safety Code, Title 9, Subtitle A, Chapter 752.
37			2.	Warning sign
38				a. Provide sign of sufficient size meeting all OSHA requirements.
39				Equipment operating within 10 feet of high voltage lines will require the following
40				safety features
41				a. Insulating cage-type of guard about the boom or arm
42				b. Insulator links on the lift hook connections for back hoes or dippers
43				c. Equipment must meet the safety requirements as set forth by OSHA and the
44				safety requirements of the owner of the high voltage lines
45			4.	Work within 6 feet of high voltage electric lines

1		a. Notification shall be given to:
2		1) The power company (example: ONCOR)
3		a) Maintain an accurate log of all such calls to power company and record
4		action taken in each case.
5		b. Coordination with power company
6		1) After notification coordinate with the power company to:
7		a) Erect temporary mechanical barriers, de-energize the lines, or raise or
8		lower the lines
9		c. No personnel may work within 6 feet of a high voltage line before the above
10		requirements have been met.
11	C.	Confined Space Entry Program
12		1. Provide and follow approved Confined Space Entry Program in accordance with
13		OSHA requirements.
14		2. Confined Spaces include:
15		a. Manholes
16		b. All other confined spaces in accordance with OSHA's Permit Required for
17		Confined Spaces
18	D.	Air Pollution Watch Days
19		1. General
20		a. Observe the following guidelines relating to working on City construction sites
21		on days designated as "AIR POLLUTION WATCH DAYS".
22		b. Typical Ozone Season
23		1) May 1 through October 31.
24		c. Critical Emission Time
25		1) 6:00 a.m. to 10:00 a.m.
26		2. Watch Days
27		a. The Texas Commission on Environmental Quality (TCEQ), in coordination
28		with the National Weather Service, will issue the Air Pollution Watch by 3:00
29		p.m. on the afternoon prior to the WATCH day.
30		b. Requirements
31		1) Begin work after 10:00 a.m. whenever construction phasing requires the
32		use of motorized equipment for periods in excess of 1 hour.
33		2) However, the Contractor may begin work prior to 10:00 a.m. if:
34		a) Use of motorized equipment is less than 1 hour, or
35		b) If equipment is new and certified by EPA as "Low Emitting", or
36		equipment burns Ultra Low Sulfur Diesel (ULSD), diesel emulsions, or
37		alternative fuels such as CNG.
38	E.	TCEQ Air Permit
39		1. Obtain TCEQ Air Permit for construction activities per requirements of TCEQ.
40	F.	Use of Explosives, Drop Weight, Etc.
41		1. When Contract Documents permit on the project the following will apply:
42		a. Public Notification
43		1) Submit notice to City and proof of adequate insurance coverage, 24 hours
44		prior to commencing.
45		2) Minimum 24 hour public notification in accordance with Section 01 31 13
46	G.	Water Department Coordination

1 2 3 4		1. During the construction of this project, it will be necessary to deactivate, for a period of time, existing lines. The Contractor shall be required to coordinate with the Water Department to determine the best times for deactivating and activating those lines.
5		2. Coordinate any event that will require connecting to or the operation of an existing
6		City water line system with the City's representative.
7		a. Coordination shall be in accordance with Section 33 12 25.
8		b. If needed, obtain a hydrant water meter from the Water Department for use
9		during the life of named project.
10		c. In the event that a water valve on an existing live system be turned off and on
11		to accommodate the construction of the project is required, coordinate this
12		activity through the appropriate City representative.
13		1) Do not operate water line valves of existing water system.
14		a) Failure to comply will render the Contractor in violation of Texas Penal
15		Code Title 7, Chapter 28.03 (Criminal Mischief) and the Contractor
16		will be prosecuted to the full extent of the law.
17		b) In addition, the Contractor will assume all liabilities and
18		responsibilities as a result of these actions.
19	H.	Public Notification Prior to Beginning Construction
20		1. Prior to beginning construction on any block in the project, on a block by block
21		basis, prepare and deliver a notice or flyer of the pending construction to the front
22		door of each residence or business that will be impacted by construction. The notice
23		shall be prepared as follows:
24		a. Post notice or flyer 7 days prior to beginning any construction activity on each
25		block in the project area.
26		1) Prepare flyer on the Contractor's letterhead and include the following
27		information:
28		a) Name of Project
29		b) City Project No (CPN)
30		c) Scope of Project (i.e. type of construction activity)
31		d) Actual construction duration within the block
32		e) Name of the contractor's foreman and phone number
33		f) Name of the City's inspector and phone number
34		g) City's after-hours phone number
35		2) A sample of the 'pre-construction notification' flyer is attached as Exhibit
36		A.
37		3) Submit schedule showing the construction start and finish time for each
38		block of the project to the inspector.
39		4) Deliver flyer to the City Inspector for review prior to distribution.
40		b. No construction will be allowed to begin on any block until the flyer is
41		delivered to all residents of the block.
42	I.	Public Notification of Temporary Water Service Interruption during Construction
43		1. In the event it becomes necessary to temporarily shut down water service to
44		residents or businesses during construction, prepare and deliver a notice or flyer of
45		the pending interruption to the front door of each affected resident.
46		2. Prepared notice as follows:
47		a. The notification or flyer shall be posted 24 hours prior to the temporary

interruption.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		 b. Prepare flyer on the contractor's letterhead and include the following information: Name of the project City Project Number Date of the interruption of service Period the interruption will take place Name of the contractor's foreman and phone number Name of the City's inspector and phone number A sample of the temporary water service interruption notification is attached as Exhibit B. Deliver a copy of the temporary interruption notification to the City inspector for review prior to being distributed. No interruption of water service can occur until the flyer has been delivered to all affected residents and businesses. Electronic versions of the sample flyers can be obtained from the Project
16	т	Coordination with United States Army Corns of Engineers (USACE)
17 18 19 20	J.	 Coordination with United States Army Corps of Engineers (USACE) At locations in the Project where construction activities occur in areas where USACE permits are required, meet all requirements set forth in each designated permit.
21	K.	Coordination within Railroad Permit Areas
22 23 24 25 26 27 28 29 30 31 32 33 34		 At locations in the project where construction activities occur in areas where railroad permits are required, meet all requirements set forth in each designated railroad permit. This includes, but is not limited to, provisions for: a. Flagmen b. Inspectors c. Safety training d. Additional insurance e. Insurance certificates f. Other employees required to protect the right-of-way and property of the Railroad Company from damage arising out of and/or from the construction of the project. Proper utility clearance procedures shall be used in accordance with the permit guidelines. Obtain any supplemental information needed to comply with the railroad's
35 36 37 38		requirements. 3. Railroad Flagmen a. Submit receipts to City for verification of working days that railroad flagmen were present on Site.
39	L.	Dust Control
40 41 42		 Use acceptable measures to control dust at the Site. a. If water is used to control dust, capture and properly dispose of waste water. b. If wet saw cutting is performed, capture and properly dispose of slurry.
43	M.	Employee Parking
44		1. Provide parking for employees at locations approved by the City.

- 1 1.5 SUBMITTALS [NOT USED]
- 2 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 3 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 4 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 5 1.9 QUALITY ASSURANCE [NOT USED]
- 6 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 7 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 8 1.12 WARRANTY [NOT USED]
- 9 PART 2 PRODUCTS [NOT USED]
- 10 PART 3 EXECUTION [NOT USED]

Revision Log		
DATE	NAME	SUMMARY OF CHANGE
8/31/2012	D. Johnson	1.4.B – Added requirement of compliance with Health and Safety Code, Title 9. Safety, Subtitle A. Public Safety, Chapter 752. High Voltage Overhead Lines. 1.4.E – Added Contractor responsibility for obtaining a TCEQ Air Permit

1	EXHIBIT A
2 3 4	(To be printed on Contractor's Letterhead)
5 6	Date:
7 8 9 10 11	CPN No.: Project Name: Mapsco Location: Limits of Construction:
13 14 15	NOTICE OF CONSTRUCTION
16 17 18 19	THIS IS TO INFORM YOU THAT UNDER A CONTRACT WITH THE CITY OF FORT WORTH, OUR COMPANY WILL WORK ON UTILITY LINES ON OR AROUND YOUR PROPERTY.
20 21 22	CONSTRUCTION WILL BEGIN APPROXIMATELY SEVEN DAYS FROM THE DATE OF THIS NOTICE.
23 24 25 26	IF YOU HAVE QUESTIONS ABOUT ACCESS, SECURITY, SAFETY OR ANY OTHER ISSUE, PLEASE CALL:
27 28 29	Mr. <contractor's superintendent=""> AT <telephone no.=""></telephone></contractor's>
30	OR
31 32	Mr. <city inspector=""> AT < TELEPHONE NO.></city>
33 34	AFTER 4:30 PM OR ON WEEKENDS. PLEASE CALL (817) 392 8306

PLEASE KEEP THIS FLYER HANDY WHEN YOU CALL

35

1

EXHIBIT B

2



DOE NO. XXXX
Project Name:

NOTICE OF TEMPORARY WATER SERVICE INTERRUPTION

EEN THE HOURS OF	AND
U HAVE QUESTIONS ABOUT THIS :	SHUT-OUT, PLEASE CALL:
	ΑT
CONTRACTORS SUPERINTENDENT	(TELEPHONE NUMBER)
	AT
CITY INSPECTOR)	(TELEPHONE NUMBER)
THIS INCONVENIENCE WILL E	BE AS SHORT AS POSSIBLE.
IK YOU,	
	ONTRACTOR

3

SECTION 01 45 23

TESTING AND INSPECTION SERVICES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Testing and inspection services procedures and coordination
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Work associated with this Item is considered subsidiary to the various Items bid. No separate payment will be allowed for this Item.
 - a. Contractor is responsible for performing, coordinating, and payment of all Quality Control testing.
 - b. City is responsible for performing and payment for first set of Quality Assurance testing.
 - 1) If the first Quality Assurance test performed by the City fails, the Contractor is responsible for payment of subsequent Quality Assurance testing until a passing test occurs.
 - a) Final acceptance will not be issued by City until all required payments for testing by Contractor have been paid in full.

1.3 REFERENCES [NOT USED]

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Testing
 - 1. Complete testing in accordance with the Contract Documents.
 - 2. Coordination
 - a. When testing is required to be performed by the City, notify City, sufficiently in advance, when testing is needed.
 - b. When testing is required to be completed by the Contractor, notify City, sufficiently in advance, that testing will be performed.
 - 3. Distribution of Testing Reports
 - a. Electronic Distribution
 - 1) Confirm development of Project directory for electronic submittals to be uploaded to the City's document management system, or another external FTP site approved by the City.

- 2) Upload test reports to designated project directory and notify appropriate City representatives via email of submittal posting.
- 3) Hard Copies
 - a) 1 copy for all submittals submitted to the Project Representative
- b. Hard Copy Distribution (if required in lieu of electronic distribution)
 - 1) Tests performed by City
 - a) Distribute 1 hard copy to the Contractor
 - 2) Tests performed by the Contractor
 - a) Distribute 3 hard copies to City's Project Representative
- 4. Provide City's Project Representative with trip tickets for each delivered load of Concrete or Lime material including the following information:
 - a. Name of pit
 - b. Date of delivery
 - c. Material delivered
- B. Inspection
 - 1. Inspection or lack of inspection does not relieve the Contractor from obligation to perform work in accordance with the Contract Documents.
- 1.5 SUBMITTALS [NOT USED]
- 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 1.9 QUALITY ASSURANCE [NOT USED]
- 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 1.12 WARRANTY [NOT USED]
- PART 2 PRODUCTS [NOT USED]
- PART 3 EXECUTION [NOT USED]

Revision Log		
DATE	NAME	SUMMARY OF CHANGE
3/9/2020		Removed reference to Buzzsaw and noted that electronic submittals be uploaded through the City's document management system.

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Provide temporary facilities and controls needed for the Work including, but not necessarily limited to:
 - a. Temporary utilities
 - b. Sanitary facilities
 - c. Storage Sheds and Buildings
 - d. Dust control
 - e. Temporary fencing of the construction site
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Work associated with this Item is considered subsidiary to the various Items bid. No separate payment will be allowed for this Item.

1.3 REFERENCES [NOT USED]

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Temporary Utilities
 - 1. Obtaining Temporary Service
 - a. Make arrangements with utility service companies for temporary services.
 - b. Abide by rules and regulations of utility service companies or authorities having jurisdiction.
 - c. Be responsible for utility service costs until Work is approved for Final Acceptance.
 - 1) Included are fuel, power, light, heat and other utility services necessary for execution, completion, testing and initial operation of Work.

2. Water

- a. Contractor to provide water required for and in connection with Work to be performed and for specified tests of piping, equipment, devices or other use as required for the completion of the Work.
- b. Provide and maintain adequate supply of potable water for domestic consumption by Contractor personnel and City's Project Representatives.
- c. Coordination
 - 1) Contact City 1 week before water for construction is desired

- d. Contractor Payment for Construction Water
 - 1) Obtain construction water meter from City for payment as billed by City's established rates.
- 3. Electricity and Lighting
 - a. Provide and pay for electric powered service as required for Work, including testing of Work.
 - 1) Provide power for lighting, operation of equipment, or other use.
 - b. Electric power service includes temporary power service or generator to maintain operations during scheduled shutdown.

4. Telephone

- a. Provide emergency telephone service at Site for use by Contractor personnel and others performing work or furnishing services at Site.
- 5. Temporary Heat and Ventilation
 - a. Provide temporary heat as necessary for protection or completion of Work.
 - b. Provide temporary heat and ventilation to assure safe working conditions.

B. Sanitary Facilities

- 1. Provide and maintain sanitary facilities for persons on Site.
 - a. Comply with regulations of State and local departments of health.
- 2. Enforce use of sanitary facilities by construction personnel at job site.
 - a. Enclose and anchor sanitary facilities.
 - b. No discharge will be allowed from these facilities.
 - c. Collect and store sewage and waste so as not to cause nuisance or health problem.
 - d. Haul sewage and waste off-site at no less than weekly intervals and properly dispose in accordance with applicable regulation.
- 3. Locate facilities near Work Site and keep clean and maintained throughout Project.
- 4. Remove facilities at completion of Project

C. Storage Sheds and Buildings

- 1. Provide adequately ventilated, watertight, weatherproof storage facilities with floor above ground level for materials and equipment susceptible to weather damage.
- 2. Storage of materials not susceptible to weather damage may be on blocks off ground.
- 3. Store materials in a neat and orderly manner.
 - a. Place materials and equipment to permit easy access for identification, inspection and inventory.
- 4. Equip building with lockable doors and lighting, and provide electrical service for equipment space heaters and heating or ventilation as necessary to provide storage environments acceptable to specified manufacturers.
- 5. Fill and grade site for temporary structures to provide drainage away from temporary and existing buildings.
- 6. Remove building from site prior to Final Acceptance.

D. Temporary Fencing

1. Provide and maintain for the duration or construction when required in contract documents

E. Dust Control

- 1. Contractor is responsible for maintaining dust control through the duration of the project.
 - a. Contractor remains on-call at all times
 - b. Must respond in a timely manner
- F. Temporary Protection of Construction
 - 1. Contractor or subcontractors are responsible for protecting Work from damage due to weather.
- 1.5 SUBMITTALS [NOT USED]
- 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 1.9 QUALITY ASSURANCE [NOT USED]
- 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 1.12 WARRANTY [NOT USED]
- PART 2 PRODUCTS [NOT USED]
- PART 3 EXECUTION [NOT USED]
- 3.1 INSTALLERS [NOT USED]
- 3.2 EXAMINATION [NOT USED]
- 3.3 PREPARATION [NOT USED]
- 3.4 INSTALLATION
 - A. Temporary Facilities
 - 1. Maintain all temporary facilities for duration of construction activities as needed.
- 3.5 [REPAIR] / [RESTORATION]
- 3.6 RE-INSTALLATION
- 3.7 FIELD [OR] SITE QUALITY CONTROL [NOT USED]
- 3.8 SYSTEM STARTUP [NOT USED]
- 3.9 ADJUSTING [NOT USED]
- 3.10 CLEANING [NOT USED]
- 3.11 CLOSEOUT ACTIVITIES
 - A. Temporary Facilities

- 1. Remove all temporary facilities and restore area after completion of the Work, to a condition equal to or better than prior to start of Work.
- 3.12 PROTECTION [NOT USED]
- 3.13 MAINTENANCE [NOT USED]
- 3.14 ATTACHMENTS [NOT USED]

Revision Log		
DATE	NAME	SUMMARY OF CHANGE

1		SECTION 01 55 26
2		STREET USE PERMIT AND MODIFICATIONS TO TRAFFIC CONTROL
3	DAL	RT 1 - GENERAL
3	IAI	ATT- GENERAL
4	1.1	SUMMARY
5 6 7 8 9		 A. Section Includes: 1. Administrative procedures for: a. Street Use Permit b. Modification of approved traffic control c. Removal of Street Signs
10 11		B. Deviations from this City of Fort Worth Standard Specification 1. None.
12 13 14 15		 C. Related Specification Sections include, but are not necessarily limited to: 1. Division 0 – Bidding Requirements, Contract Forms and Conditions of the Contract 2. Division 1 – General Requirements 3. Section 34 71 13 – Traffic Control
16	1.2	PRICE AND PAYMENT PROCEDURES
17 18 19		 A. Measurement and Payment 1. Work associated with this Item is considered subsidiary to the various Items bid. No separate payment will be allowed for this Item.
20	1.3	REFERENCES
21 22 23 24 25		 A. Reference Standards Reference standards cited in this specification refer to the current reference standard published at the time of the latest revision date logged at the end of this specification, unless a date is specifically cited. Texas Manual on Uniform Traffic Control Devices (TMUTCD).
26	1.4	ADMINISTRATIVE REQUIREMENTS
27 28 29		 A. Traffic Control 1. General a. Contractor shall minimize lane closures and impact to vehicular/pedestrian
30 31 32 33 34		 traffic. b. When traffic control plans are included in the Drawings, provide Traffic Control in accordance with Drawings and Section 34 71 13. c. When traffic control plans are not included in the Drawings, prepare traffic control plans in accordance with Section 34 71 13 and submit to City for
35 36		review. 1) Allow minimum 10 working days for review of proposed Traffic Control.

1 2 3 4 5		2) A traffic control "Typical" published by City of Fort Worth, the Texas Manual Unified Traffic Control Devices (TMUTCD) or Texas Department of Transportation (TxDOT) can be used as an alternative to preparing project/site specific traffic control plan if the typical is applicable to the specific project/site.
6	B.	Street Use Permit
7 8 9 10 11		 Prior to installation of Traffic Control, a City Street Use Permit is required. a. To obtain Street Use Permit, submit Traffic Control Plans to City Transportation and Public Works Department. 1) Allow a minimum of 5 working days for permit review. 2) It is the Contractor's responsibility to coordinate review of Traffic Control plans for Street Use Permit, such that construction is not delayed.
13 14 15 16	C.	 Modification to Approved Traffic Control Prior to installation traffic control: Submit revised traffic control plans to City Department Transportation and Public Works Department. Proving Traffic Control plans in accordance with Section 34 71 13
17 18 19 20		 Revise Traffic Control plans in accordance with Section 34 71 13. Allow minimum 5 working days for review of revised Traffic Control. It is the Contractor's responsibility to coordinate review of Traffic Control plans for Street Use Permit, such that construction is not delayed.
21	D.	Removal of Street Sign
22 23 24		1. If it is determined that a street sign must be removed for construction, then contact City Transportation and Public Works Department, Signs and Markings Division to remove the sign.
25	E.	Temporary Signage
26 27 28		1. In the case of regulatory signs, replace permanent sign with temporary sign meeting requirements of the latest edition of the Texas Manual on Uniform Traffic Control Devices (MUTCD).
29		2. Install temporary sign before the removal of permanent sign.
30 31 32		3. When construction is complete, to the extent that the permanent sign can be reinstalled, contact the City Transportation and Public Works Department, Signs and Markings Division, to reinstall the permanent sign.
33	F.	Traffic Control Standards
34		1. Traffic Control Standards can be found on the City's website.

1.5 SUBMITTALS [NOT USED] 36

35

A. Submit all required documentation to City's Project Representative.

- 1 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 2 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 3 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 4 1.9 QUALITY ASSURANCE [NOT USED]
- 5 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 6 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 7 1.12 WARRANTY [NOT USED]
- 8 PART 2 PRODUCTS [NOT USED]
- 9 PART 3 EXECUTION [NOT USED]

11

Revision Log				
DATE	NAME	SUMMARY OF CHANGE		
		1.4 A. Added language to emphasize minimizing of lane closures and impact to traffic.		
3/22/2021	M Owen	1.4 A. 1. c. Added language to allow for use of published traffic control "Typicals" if applicable to specific project/site.		
		1.4 F. 1) Removed reference to Buzzsaw		
		1.5 Added language re: submittal of permit		

SECTION 01 57 13

STORM WATER POLLUTION PREVENTION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Procedures for Storm Water Pollution Prevention Plans
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements
 - 3. Section 31 25 00 Erosion and Sediment Control

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Construction Activities resulting in less than 1 acre of disturbance
 - a. Work associated with this Item is considered subsidiary to the various Items bid. No separate payment will be allowed for this Item.
 - 2. Construction Activities resulting in greater than 1 acre of disturbance
 - a. Measurement and Payment shall be in accordance with Section 31 25 00.

1.3 REFERENCES

- A. Abbreviations and Acronyms
 - 1. Notice of Intent: NOI
 - 2. Notice of Termination: NOT
 - 3. Storm Water Pollution Prevention Plan: SWPPP
 - 4. Texas Commission on Environmental Quality: TCEQ
 - 5. Notice of Change: NOC

A. Reference Standards

- 1. Reference standards cited in this Specification refer to the current reference standard published at the time of the latest revision date logged at the end of this Specification, unless a date is specifically cited.
- 2. Integrated Storm Management (iSWM) Technical Manual for Construction Controls

1.4 ADMINISTRATIVE REQUIREMENTS

A. General

1. Contractor is responsible for resolution and payment of any fines issued associated with compliance to Stormwater Pollution Prevention Plan.

- B. Construction Activities resulting in:
 - 1. Less than 1 acre of disturbance
 - a. Provide erosion and sediment control in accordance with Section 31 25 00 and Drawings.
 - 1 to less than 5 acres of disturbance
 - a. Texas Pollutant Discharge Elimination System (TPDES) General Construction Permit is required
 - b. Complete SWPPP in accordance with TCEQ requirements
 - 1) TCEQ Small Construction Site Notice Required under general permit TXR150000
 - a) Sign and post at job site
 - b) Prior to Preconstruction Meeting, send 1 copy to City Department of Transportation and Public Works, Environmental Division, (817) 392-6088.
 - 2) Provide erosion and sediment control in accordance with:
 - a) Section 31 25 00
 - b) The Drawings
 - c) TXR150000 General Permit
 - d) SWPPP
 - e) TCEQ requirements
 - 3. 5 acres or more of Disturbance
 - a. Texas Pollutant Discharge Elimination System (TPDES) General Construction Permit is required
 - b. Complete SWPPP in accordance with TCEQ requirements
 - 1) Prepare a TCEQ NOI form and submit to TCEQ along with required fee
 - a) Sign and post at job site
 - b) Send copy to City Department of Transportation and Public Works, Environmental Division, (817) 392-6088.
 - 2) TCEQ Notice of Change required if making changes or updates to NOI
 - 3) Provide erosion and sediment control in accordance with:
 - a) Section 31 25 00
 - b) The Drawings
 - c) TXR150000 General Permit
 - d) SWPPP
 - e) TCEQ requirements
 - 4) Once the project has been completed and all the closeout requirements of TCEQ have been met a TCEQ Notice of Termination can be submitted.
 - a) Send copy to City Department of Transportation and Public Works, Environmental Division, (817) 392-6088.

1.5 SUBMITTALS

A. SWPPP

- 1. Submit in accordance with Section 01 33 00, except as stated herein.
 - a. Prior to the Preconstruction Meeting, submit a draft copy of SWPPP to the City as follows:
 - 1) 1 copy to the City Project Manager
 - a) City Project Manager will forward to the City Department of Transportation and Public Works, Environmental Division for review

- B. Modified SWPPP
 - 1. If the SWPPP is revised during construction, resubmit modified SWPPP to the City in accordance with Section 01 33 00.
- 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 1.9 QUALITY ASSURANCE [NOT USED]
- 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 1.12 WARRANTY [NOT USED]
- PART 2 PRODUCTS [NOT USED]
- PART 3 EXECUTION [NOT USED]

Revision Log				
DATE	NAME	SUMMARY OF CHANGE		

SECTION 01 58 13 TEMPORARY PROJECT SIGNAGE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Temporary Project Signage Requirements
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Work associated with this Item is considered subsidiary to the various Items bid. No separate payment will be allowed for this Item.
- 1.3 REFERENCES [NOT USED]
- 1.4 ADMINISTRATIVE REQUIREMENTS [NOT USED]
- 1.5 SUBMITTALS [NOT USED]
- 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 1.9 QUALITY ASSURANCE [NOT USED]
- 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 1.12 WARRANTY [NOT USED]

PART 2 - PRODUCTS

- 2.1 OWNER-FURNISHED [OR] OWNER-SUPPLIEDPRODUCTS [NOT USED]
- 2.2 EQUIPMENT, PRODUCT TYPES, AND MATERIALS
 - A. Design Criteria
 - 1. Provide free standing Project Designation Sign in accordance with City's Standard Details for project signs.

- B. Materials
 - 1. Sign
 - a. Constructed of ¾-inch fir plywood, grade A-C (exterior) or better
- 2.3 ACCESSORIES [NOT USED]
- 2.4 SOURCE QUALITY CONTROL [NOT USED]

PART 3 - EXECUTION

- 3.1 INSTALLERS [NOT USED]
- 3.2 EXAMINATION [NOT USED]
- 3.3 PREPARATION [NOT USED]
- 3.4 INSTALLATION
 - A. General
 - 1. Provide vertical installation at extents of project.
 - 2. Relocate sign as needed, upon request of the City.
 - B. Mounting options
 - a. Skids
 - b. Posts
 - c. Barricade
- 3.5 REPAIR / RESTORATION [NOT USED]
- 3.6 RE-INSTALLATION [NOT USED]
- 3.7 FIELD [OR] SITE QUALITY CONTROL [NOT USED]
- 3.8 SYSTEM STARTUP [NOT USED]
- 3.9 ADJUSTING [NOT USED]
- 3.10 CLEANING [NOT USED]
- 3.11 CLOSEOUT ACTIVITIES [NOT USED]
- 3.12 PROTECTION [NOT USED]
- 3.13 MAINTENANCE
 - A. General
 - 1. Maintenance will include painting and repairs as needed or directed by the City.
- 3.14 ATTACHMENTS [NOT USED]

Revision Log				
DATE	NAME	SUMMARY OF CHANGE		

SECTION 01 60 00 PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. References for Product Requirements and City Standard Products List
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements

1.2 PRICE AND PAYMENT PROCEDURES [NOT USED]

1.3 REFERENCES [NOT USED]

1.4 ADMINISTRATIVE REQUIREMENTS

- A. A list of City approved products for use is available through the City's website at: https://apps.fortworthtexas.gov/ProjectResources/ and following the directory path; 02 Construction Documents/Standard Products List
- B. Only products specifically included on City's Standard Product List in these Contract Documents shall be allowed for use on the Project.
 - 1. Any subsequently approved products will only be allowed for use upon specific approval by the City.
- C. Any specific product requirements in the Contract Documents supersede similar products included on the City's Standard Product List.
 - 1. The City reserves the right to not allow products to be used for certain projects even though the product is listed on the City's Standard Product List.
- D. Although a specific product is included on City's Standard Product List, not all products from that manufacturer are approved for use, including but not limited to, that manufacturer's standard product.
- E. See Section 01 33 00 for submittal requirements of Product Data included on City's Standard Product List.
- 1.5 SUBMITTALS [NOT USED]
- 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 1.9 QUALITY ASSURANCE [NOT USED]

- 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 1.12 WARRANTY [NOT USED]
- PART 2 PRODUCTS [NOT USED]
- PART 3 EXECUTION [NOT USED]

Revision Log				
DATE	NAME	SUMMARY OF CHANGE		
10/12/12	D. Johnson	Modified Location of City's Standard Product List		
3/9/2020	D.V. Magaña	Removed reference to Buzzsaw and noted that the City approved products list is accessible through the City's website.		

SECTION 01 66 00

PRODUCT STORAGE AND HANDLING REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Scheduling of product delivery
 - 2. Packaging of products for delivery
 - 3. Protection of products against damage from:
 - a. Handling
 - b. Exposure to elements or harsh environments
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Work associated with this Item is considered subsidiary to the various Items bid. No separate payment will be allowed for this Item.
- 1.3 REFERENCES [NOT USED]
- 1.4 ADMINISTRATIVE REQUIREMENTS [NOT USED]
- 1.5 SUBMITTALS [NOT USED]
- 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 1.9 QUALITY ASSURANCE [NOT USED]

1.10 DELIVERY AND HANDLING

- A. Delivery Requirements
 - 1. Schedule delivery of products or equipment as required to allow timely installation and to avoid prolonged storage.
 - 2. Provide appropriate personnel and equipment to receive deliveries.
 - 3. Delivery trucks will not be permitted to wait extended periods of time on the Site for personnel or equipment to receive the delivery.

- Deliver products or equipment in manufacturer's original unbroken cartons or other containers designed and constructed to protect the contents from physical or environmental damage.
- 5. Clearly and fully mark and identify as to manufacturer, item and installation location.
- 6. Provide manufacturer's instructions for storage and handling.

B. Handling Requirements

1. Handle products or equipment in accordance with these Contract Documents and manufacturer's recommendations and instructions.

C. Storage Requirements

- 1. Store materials in accordance with manufacturer's recommendations and requirements of these Specifications.
- 2. Make necessary provisions for safe storage of materials and equipment.
 - a. Place loose soil materials and materials to be incorporated into Work to prevent damage to any part of Work or existing facilities and to maintain free access at all times to all parts of Work and to utility service company installations in vicinity of Work.
- 3. Keep materials and equipment neatly and compactly stored in locations that will cause minimum inconvenience to other contractors, public travel, adjoining owners, tenants and occupants.
 - a. Arrange storage to provide easy access for inspection.
- 4. Restrict storage to areas available on construction site for storage of material and equipment as shown on Drawings, or approved by City's Project Representative.
- 5. Provide off-site storage and protection when on-site storage is not adequate.
 - a. Provide addresses of and access to off-site storage locations for inspection by City's Project Representative.
- 6. Do not use lawns, grass plots or other private property for storage purposes without written permission of owner or other person in possession or control of premises.
- 7. Store in manufacturers' unopened containers.
- 8. Neatly, safely and compactly stack materials delivered and stored along line of Work to avoid inconvenience and damage to property owners and general public and maintain at least 3 feet from fire hydrant.
- 9. Keep public and private driveways and street crossings open.
- 10. Repair or replace damaged lawns, sidewalks, streets or other improvements to satisfaction of City's Project Representative.
 - a. Total length which materials may be distributed along route of construction at one time is 1,000 linear feet, unless otherwise approved in writing by City's Project Representative.

1.11 FIELD [SITE] CONDITIONS [NOT USED]

1.12 WARRANTY [NOT USED]

PART 2 - PRODUCTS [NOT USED]

PART 3 - EXECUTION

- 3.1 INSTALLERS [NOT USED]
- 3.2 EXAMINATION [NOT USED]
- 3.3 PREPARATION [NOT USED]
- 3.4 ERECTION [NOT USED]
- 3.5 REPAIR / RESTORATION [NOT USED]
- 3.6 RE-INSTALLATION [NOT USED]
- 3.7 FIELD [OR] SITE QUALITY CONTROL
 - A. Tests and Inspections
 - 1. Inspect all products or equipment delivered to the site prior to unloading.
 - B. Non-Conforming Work
 - 1. Reject all products or equipment that are damaged, used or in any other way unsatisfactory for use on the project.
- 3.8 SYSTEM STARTUP [NOT USED]
- 3.9 ADJUSTING [NOT USED]
- 3.10 CLEANING [NOT USED]
- 3.11 CLOSEOUT ACTIVITIES [NOT USED]

3.12 PROTECTION

- A. Protect all products or equipment in accordance with manufacturer's written directions.
- B. Store products or equipment in location to avoid physical damage to items while in storage.
- C. Protect equipment from exposure to elements and keep thoroughly dry if required by the manufacturer.
- 3.13 MAINTENANCE [NOT USED]
- 3.14 ATTACHMENTS [NOT USED]

Revision Log				
DATE	NAME	SUMMARY OF CHANGE		

1						SECTION 01 70 00
2						MOBILIZATION AND REMOBILIZATION
3	PAI	RT 1 -	GEN	ER	AL	
4	1.1	SUMN	MAR	Y		
5		A. Se	ection	Inc	lude	s:
6		1.	Mo	biliz	zatio	n and Demobilization
7						zation
8				1)	Trar	asportation of Contractor's personnel, equipment, and operating supplies
9						ne Site
10 11				_		ablishment of necessary general facilities for the Contractor's operation are Site
12				3)	Prer	niums paid for performance and payment bonds
13						asportation of Contractor's personnel, equipment, and operating supplies
14						nother location within the designated Site
15						ocation of necessary general facilities for the Contractor's operation
16			_			n 1 location to another location on the Site.
17			b.			ilization
18						resportation of Contractor's personnel, equipment, and operating supplies
19 20						y from the Site including disassembly Clean-up
						noval of all buildings and/or other facilities assembled at the Site for this
21 22						itract
23			c.			zation and Demobilization do not include activities for specific items of
24				wo	rk tł	nat are for which payment is provided elsewhere in the contract.
25		2.	Ren			
26			a.			ilization for Suspension of Work specifically required in the Contract
27						nents or as required by City includes:
28 29				1)		mobilization Transportation of Contractor's personnel, equipment, and operating
29 30					a)	supplies from the Site including disassembly or temporarily securing
31						equipment, supplies, and other facilities as designated by the Contract
32						Documents necessary to suspend the Work.
33					b)	Site Clean-up as designated in the Contract Documents
34				2)	Rer	mobilization
35					a)	Transportation of Contractor's personnel, equipment, and operating
36						supplies to the Site necessary to resume the Work.
37					b)	Establishment of necessary general facilities for the Contractor's
38						operation at the Site necessary to resume the Work.
39				3)		Payments will be made for:
40					a)	Mobilization and Demobilization from one location to another on the
41 42					b)	Site in the normal progress of performing the Work.
42 43					b) c)	Stand-by or idle time Lost profits
		2	1. F	1. 311		•
44		3.	Mo	D1117	zatio	ns and Demobilization for Miscellaneous Projects

45

a. Mobilization and Demobilization

1			1) Mobilization shall consist of the activities and cost on a Work Order basis
2			necessary for:
3			a) Transportation of Contractor's personnel, equipment, and operating
4			supplies to the Site for the issued Work Order.
5			b) Establishment of necessary general facilities for the Contractor's
6			operation at the Site for the issued Work Order
7			2) Demobilization shall consist of the activities and cost necessary for:
8			a) Transportation of Contractor's personnel, equipment, and operating
9			supplies from the Site including disassembly for each issued Work
10			Order
11			b) Site Clean-up for each issued Work Order
12			c) Removal of all buildings or other facilities assembled at the Site for
13			each Work Oder
14			b. Mobilization and Demobilization do not include activities for specific items of
15			work for which payment is provided elsewhere in the contract.
16			4. Emergency Mobilizations and Demobilization for Miscellaneous Projects
17			a. A Mobilization for Miscellaneous Projects when directed by the City and the
18			mobilization occurs within 24 hours of the issuance of the Work Order.
		_	
19		В.	Deviations from this City of Fort Worth Standard Specification
20			1. None.
21	(C.	Related Specification Sections include, but are not necessarily limited to:
22			1. Division 0 – Bidding Requirements, Contract Forms and Conditions of the Contract
23			•
2.3			2 Division 1 Conoral Positionnests
			2. Division 1 – General Requirements
	.2	PR	2. Division 1 – General Requirements ICE AND PAYMENT PROCEDURES
24 1.			ICE AND PAYMENT PROCEDURES
24 1 . 25			ICE AND PAYMENT PROCEDURES Measurement and Payment [Consult City Department/Division for direction on if
24 1 . 25 26			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the
24 1 25 26 27			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.]
24 1 25 26 27 28			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization
24 1 . 25 26 27 28 29			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure
24 1 . 25 26 27 28 29 30			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure 1) This Item is considered subsidiary to the various Items bid.
24 1 . 25 26 27 28 29 30 31			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure 1) This Item is considered subsidiary to the various Items bid. b. Payment
24 1. 25 26 27 28 29 30 31 32			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure 1) This Item is considered subsidiary to the various Items bid. b. Payment 1) The work performed and materials furnished in accordance with this Item
24 1 . 25 26 27 28 29 30 31 32 33			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure 1) This Item is considered subsidiary to the various Items bid. b. Payment 1) The work performed and materials furnished in accordance with this Item are subsidiary to the various Items bid and no other compensation will be
24 1 . 25 26 27 28 29 30 31 32 33 34			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure 1) This Item is considered subsidiary to the various Items bid. b. Payment 1) The work performed and materials furnished in accordance with this Item are subsidiary to the various Items bid and no other compensation will be allowed.
24 1. 25 26 27 28 29 30 31 32 33 34			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure 1) This Item is considered subsidiary to the various Items bid. b. Payment 1) The work performed and materials furnished in accordance with this Item are subsidiary to the various Items bid and no other compensation will be allowed. 2. Remobilization for suspension of Work as specifically required in the Contract
24 1. 25 26 27 28 29 30 31 32 33 34 35 36			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure 1) This Item is considered subsidiary to the various Items bid. b. Payment 1) The work performed and materials furnished in accordance with this Item are subsidiary to the various Items bid and no other compensation will be allowed. 2. Remobilization for suspension of Work as specifically required in the Contract Documents
24 1. 25 26 27 28 29 30 31 32 33 34 35 36 37			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure 1) This Item is considered subsidiary to the various Items bid. b. Payment 1) The work performed and materials furnished in accordance with this Item are subsidiary to the various Items bid and no other compensation will be allowed. 2. Remobilization for suspension of Work as specifically required in the Contract Documents a. Measurement
24 1. 25 26 27 28 29 30 31 32 33 34 35 36 37 38			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure 1) This Item is considered subsidiary to the various Items bid. b. Payment 1) The work performed and materials furnished in accordance with this Item are subsidiary to the various Items bid and no other compensation will be allowed. 2. Remobilization for suspension of Work as specifically required in the Contract Documents a. Measurement 1) Measurement for this Item shall be per each remobilization performed.
24 1. 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure 1) This Item is considered subsidiary to the various Items bid. b. Payment 1) The work performed and materials furnished in accordance with this Item are subsidiary to the various Items bid and no other compensation will be allowed. 2. Remobilization for suspension of Work as specifically required in the Contract Documents a. Measurement 1) Measurement for this Item shall be per each remobilization performed. b. Payment
24 1. 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure 1) This Item is considered subsidiary to the various Items bid. b. Payment 1) The work performed and materials furnished in accordance with this Item are subsidiary to the various Items bid and no other compensation will be allowed. 2. Remobilization for suspension of Work as specifically required in the Contract Documents a. Measurement 1) Measurement for this Item shall be per each remobilization performed. b. Payment 1) The work performed and materials furnished in accordance with this Item
24 1. 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure 1) This Item is considered subsidiary to the various Items bid. b. Payment 1) The work performed and materials furnished in accordance with this Item are subsidiary to the various Items bid and no other compensation will be allowed. 2. Remobilization for suspension of Work as specifically required in the Contract Documents a. Measurement 1) Measurement 1) Measurement for this Item shall be per each remobilization performed. b. Payment 1) The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit
24 1. 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure 1) This Item is considered subsidiary to the various Items bid. b. Payment 1) The work performed and materials furnished in accordance with this Item are subsidiary to the various Items bid and no other compensation will be allowed. 2. Remobilization for suspension of Work as specifically required in the Contract Documents a. Measurement 1) Measurement for this Item shall be per each remobilization performed. b. Payment 1) The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price per each "Specified Remobilization" in accordance with Contract
24 1. 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure 1) This Item is considered subsidiary to the various Items bid. b. Payment 1) The work performed and materials furnished in accordance with this Item are subsidiary to the various Items bid and no other compensation will be allowed. 2. Remobilization for suspension of Work as specifically required in the Contract Documents a. Measurement 1) Measurement for this Item shall be per each remobilization performed. b. Payment 1) The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price per each "Specified Remobilization" in accordance with Contract Documents.
24 1. 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure 1) This Item is considered subsidiary to the various Items bid. b. Payment 1) The work performed and materials furnished in accordance with this Item are subsidiary to the various Items bid and no other compensation will be allowed. 2. Remobilization for suspension of Work as specifically required in the Contract Documents a. Measurement 1) Measurement for this Item shall be per each remobilization performed. b. Payment 1) The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price per each "Specified Remobilization" in accordance with Contract Documents. c. The price shall include:
24 1. 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43			Measurement and Payment [Consult City Department/Division for direction on if Mobilization pay item to be included or the item should be subsidiary. Include the appropriate Section 1.2 A. 1.] 1. Mobilization and Demobilization a. Measure 1) This Item is considered subsidiary to the various Items bid. b. Payment 1) The work performed and materials furnished in accordance with this Item are subsidiary to the various Items bid and no other compensation will be allowed. 2. Remobilization for suspension of Work as specifically required in the Contract Documents a. Measurement 1) Measurement for this Item shall be per each remobilization performed. b. Payment 1) The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price per each "Specified Remobilization" in accordance with Contract Documents.

2			Item.
3		3.	Remobilization for suspension of Work as required by City
4			a. Measurement and Payment
5			1) This shall be submitted as a Contract Claim in accordance with Article 10
6			of Section 00 72 00.
7			2) No payments will be made for standby, idle time, or lost profits associated
8			with this Item.
9		4.	Mobilizations and Demobilizations for Miscellaneous Projects
10			a. Measurement
11			1) Measurement for this Item shall be for each Mobilization and
12			Demobilization required by the Contract Documents
13			b. Payment
14			1) The Work performed and materials furnished in accordance with this Item
15			and measured as provided under "Measurement" will be paid for at the unit
16			price per each "Work Order Mobilization" in accordance with Contract
17			Documents. Demobilization shall be considered subsidiary to mobilization
18			and shall not be paid for separately.
19			c. The price shall include:
20			1) Mobilization as described in Section 1.1.A.3.a.1)
21			2) Demobilization as described in Section 1.1.A.3.a.2)
22			d. No payments will be made for standby, idle time, or lost profits associated this
23		_	Item.
24		5.	Emergency Mobilizations and Demobilizations for Miscellaneous Projects
25			a. Measurement
26			1) Measurement for this Item shall be for each Mobilization and
27			Demobilization required by the Contract Documents
28 29			b. Payment1) The Work performed and materials furnished in accordance with this Item
30			and measured as provided under "Measurement" will be paid for at the unit
31			price per each "Work Order Emergency Mobilization" in accordance with
32			Contract Documents. Demobilization shall be considered subsidiary to
33			mobilization and shall not be paid for separately.
34			c. The price shall include
35			1) Mobilization as described in Section 1.1.A.4.a)
36			2) Demobilization as described in Section 1.1.A.3.a.2)
37			d. No payments will be made for standby, idle time, or lost profits associated this
38			Item.
39	1.3	REFE	RENCES [NOT USED]
40	1.4	ADMI	NISTRATIVE REQUIREMENTS [NOT USED]
41	1.5	SUBM	ITTALS [NOT USED]
42	1.6	INFOR	RMATIONAL SUBMITTALS [NOT USED]
43	1.7	CLOSI	EOUT SUBMITTALS [NOT USED]
			•

d. No payments will be made for standby, idle time, or lost profits associated this

1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]

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- 1 1.9 QUALITY ASSURANCE [NOT USED]
- 2 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 3 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 4 1.12 WARRANTY [NOT USED]
- 5 PART 2 PRODUCTS [NOT USED]
- 6 PART 3 EXECUTION [NOT USED]

7 END OF SECTION

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	Revision Log					
DATE	NAME	SUMMARY OF CHANGE				
11/22/16		1.2 Price and Payment Procedures - Revised specification, including blue text, to make specification flexible for either subsidiary or paid bid item for Mobilization.				

SECTION 01 71 23

CONSTRUCTION STAKING AND SURVEY

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Requirements for construction staking and construction survey
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Construction Staking
 - a. Measurement
 - 1) Measurement for this Item shall be by lump sum.
 - b. Payment
 - 1) The work performed and the materials furnished in accordance with this Item shall be paid for at the lump sum price bid for "Construction Staking".
 - 2) Payment for "Construction Staking" shall be made in partial payments prorated by work completed compared to total work included in the lump sum item.
 - c. The price bid shall include, but not be limited to the following:
 - 1) Verification of control data provided by City.
 - 2) Placement, maintenance and replacement of required stakes and markings in the field.
 - 3) Preparation and submittal of construction staking documentation in the form of "cut sheets" using the City's standard template.
 - 2. Construction Survey
 - a. Measurement
 - 1) This Item is considered subsidiary to the various Items bid.
 - b. Payment
 - 1) The work performed and the materials furnished in accordance with this Item are subsidiary to the various Items bid and no other compensation will be allowed.
 - 3. As-Built Survey
 - a. Measurement
 - 1) Measurement for this Item shall be by lump sum.
 - b. Payment
 - 1) The work performed and the materials furnished in accordance with this Item shall be paid for at the lump sum price bid for "As-Built Survey".

- 2) Payment for "Construction Staking" shall be made in partial payments prorated by work completed compared to total work included in the lump sum item
- c. The price bid shall include, but not be limited to the following::
 - 1) Field measurements and survey shots to identify location of completed facilities
 - 2) Documentation and submittal of as-built survey data onto contractor redline plans and digital survey files.

1.3 REFERENCES

A. Definitions

- 1. <u>Construction Survey</u> The survey measurements made prior to or while construction is in progress to control elevation, horizontal position, dimensions and configuration of structures/improvements included in the Project Drawings.
- 2. <u>As-built Survey</u> –The measurements made after the construction of the improvement features are complete to provide position coordinates for the features of a project.
- 3. <u>Construction Staking</u> The placement of stakes and markings to provide offsets and elevations to cut and fill in order to locate on the ground the designed structures/improvements included in the Project Drawings. Construction staking shall include staking easements and/or right of way if indicated on the plans.
- 4. <u>Survey "Field Checks"</u> Measurements made after construction staking is completed and before construction work begins to ensure that structures marked on the ground are accurately located per Project Drawings.

B. Technical References

- 1. City of Fort Worth Construction Staking Standards (available on City's Buzzsaw website) 01 71 23.16.01_ Attachment A_Survey Staking Standards
- 2. City of Fort Worth Standard Survey Data Collector Library (fxl) files (available on City's Buzzsaw website).
- 3. Texas Department of Transportation (TxDOT) Survey Manual, latest revision
- 4. Texas Society of Professional Land Surveyors (TSPS), Manual of Practice for Land Surveying in the State of Texas, Category 5

1.4 ADMINISTRATIVE REQUIREMENTS

A. The Contractor's selection of a surveyor must comply with Texas Government Code 2254 (qualifications based selection) for this project.

1.5 SUBMITTALS

- A. Submittals, if required, shall be in accordance with Section 01 33 00.
- B. All submittals shall be received and reviewed by the City prior to delivery of work.

1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS

A. Field Quality Control Submittals

- 1. Documentation verifying accuracy of field engineering work, including coordinate conversions if plans do not indicate grid or ground coordinates.
- 2. Submit "Cut-Sheets" conforming to the standard template provided by the City (refer to 01 71 23.16.01 Attachment A Survey Staking Standards).

1.7 CLOSEOUT SUBMITTALS

- B. As-built Redline Drawing Submittal
 - Submit As-Built Survey Redline Drawings documenting the locations/elevations of constructed improvements signed and sealed by Registered Professional Land Surveyor (RPLS) responsible for the work (refer to 01 71 23.16.01 – Attachment A – Survey Staking Standards).
 - 2. Contractor shall submit the proposed as-built and completed redline drawing submittal one (1) week prior to scheduling the project final inspection for City review and comment. Revisions, if necessary, shall be made to the as-built redline drawings and resubmitted to the City prior to scheduling the construction final inspection.

1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]

1.9 QUALITY ASSURANCE

- A. Construction Staking
 - 1. Construction staking will be performed by the Contractor.
 - 2. Coordination
 - a. Contact City's Project Representative at least one week in advance notifying the City of when Construction Staking is scheduled.
 - b. It is the Contractor's responsibility to coordinate staking such that construction activities are not delayed or negatively impacted.

3. General

a. Contractor is responsible for preserving and maintaining stakes. If City surveyors are required to re-stake for any reason, the Contractor will be responsible for costs to perform staking. If in the opinion of the City, a sufficient number of stakes or markings have been lost, destroyed disturbed or omitted that the contracted Work cannot take place then the Contractor will be required to stake or re-stake the deficient areas.

B. Construction Survey

- 1. Construction Survey will be performed by the Contractor.
- 2. Coordination
 - a. Contractor to verify that horizontal and vertical control data established in the design survey and required for construction survey is available and in place.

3. General

- a. Construction survey will be performed in order to construct the work shown on the Construction Drawings and specified in the Contract Documents.
- b. For construction methods other than open cut, the Contractor shall perform construction survey and verify control data including, but not limited to, the following:
 - 1) Verification that established benchmarks and control are accurate.

- 2) Use of Benchmarks to furnish and maintain all reference lines and grades for tunneling.
- 3) Use of line and grades to establish the location of the pipe.
- 4) Submit to the City copies of field notesused to establish all lines and grades, if requested, and allow the City to check guidance system setup prior to beginning each tunneling drive.
- 5) Provide access for the City, if requested, to verify the guidance system and the line and grade of the carrier pipe.
- 6) The Contractor remains fully responsible for the accuracy of the work and correction of it, as required.
- 7) Monitor line and grade continuously during construction.
- 8) Record deviation with respect to design line and grade once at each pipe joint and submit daily records to the City.
- 9) If the installation does not meet the specified tolerances (as outlined in Sections 33 05 23 and/or 33 05 24), immediately notify the City and correct the installation in accordance with the Contract Documents.

C. As-Built Survey

- 1. Required As-Built Survey will be performed by the Contractor.
- 2. Coordination
 - a. Contractor is to coordinate with City to confirm which features require asbuilt surveying.
 - b. It is the Contractor's responsibility to coordinate the as-built survey and required measurements for items that are to be buried such that construction activities are not delayed or negatively impacted.
 - c. For sewer mains and water mains 12" and under in diameter, it is acceptable to physically measure depth and mark the location during the progress of construction and take as-built survey after the facility has been buried. The Contractor is responsible for the quality control needed to ensure accuracy.

3. General

- a. The Contractor shall provide as-built survey including the elevation and location (and provide written documentation to the City) of construction features **during the progress of the construction** including the following:
 - 1) Water Lines
 - a) Top of pipe elevations and coordinates for waterlines at the following locations:
 - (1) Minimum every 250 linear feet, including
 - (2) Horizontal and vertical points of inflection, curvature, etc.
 - (3) Fire line tee
 - (4) Plugs, stub-outs, dead-end lines
 - (5) Casing pipe (each end) and all buried fittings
 - 2) Sanitary Sewer
 - a) Top of pipe elevations and coordinates for force mains and siphon sanitary sewer lines (non-gravity facilities) at the following locations:
 - (1) Minimum every 250 linear feet and any buried fittings
 - (2) Horizontal and vertical points of inflection, curvature, etc.
 - 3) Stormwater Not Applicable

- b. The Contractor shall provide as-built survey including the elevation and location (and provide written documentation to the City) of construction features **after the construction is completed** including the following:
 - 1) Manholes
 - a) Rim and flowline elevations and coordinates for each manhole
 - 2) Water Lines
 - a) Cathodic protection test stations
 - b) Sampling stations
 - c) Meter boxes/vaults (All sizes)
 - d) Fire hydrants
 - e) Valves (gate, butterfly, etc.)
 - f) Air Release valves (Manhole rim and vent pipe)
 - g) Blow off valves (Manhole rim and valve lid)
 - h) Pressure plane valves
 - i) Underground Vaults
 - (1) Rim and flowline elevations and coordinates for each Underground Vault.
 - 3) Sanitary Sewer
 - a) Cleanouts
- (1) Rim and flowline elevations and coordinates for each
- b) Manholes and Junction Structures
 - (1) Rim and flowline elevations and coordinates for each manhole and junction structure.
- 4) Stormwater Not Applicable

1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]

1.11 FIELD [SITE] CONDITIONS [NOT USED]

1.12 WARRANTY

PART 2 - PRODUCTS

- A. A construction survey will produce, but will not be limited to:
 - 1. Recovery of relevant control points, points of curvature and points of intersection.
 - 2. Establish temporary horizontal and vertical control elevations (benchmarks) sufficiently permanent and located in a manner to be used throughout construction.
 - 3. The location of planned facilities, easements and improvements.
 - a. Establishing final line and grade stakes for piers, floors, grade beams, parking areas, utilities, streets, highways, tunnels, and other construction.
 - b. A record of revisions or corrections noted in an orderly manner for reference.
 - c. A drawing, when required by the client, indicating the horizontal and vertical location of facilities, easements and improvements, as built.
 - 4. Cut sheets shall be provided to the City inspector and Survey Superintendent for all construction staking projects. These cut sheets shall be on the standard city template which can be obtained from the Survey Superintendent (817-392-7925).
 - 5. Digital survey files in the following formats shall be acceptable:
 - a. AutoCAD (.dwg)
 - b. ESRI Shapefile (.shp)

- c. CSV file (.csv), formatted with X and Y coordinates in separate columns (use standard templates, if available)
- 6. Survey files shall include vertical and horizontal data tied to original project control and benchmarks, and shall include feature descriptions

PART 3 - EXECUTION

3.1 INSTALLERS

A. Tolerances:

- 1. The staked location of any improvement or facility should be as accurate as practical and necessary. The degree of precision required is dependent on many factors all of which must remain judgmental. The tolerances listed hereafter are based on generalities and, under certain circumstances, shall yield to specific requirements. The surveyor shall assess any situation by review of the overall plans and through consultation with responsible parties as to the need for specific tolerances.
 - a. Earthwork: Grades for earthwork or rough cut should not exceed 0.1 ft. vertical tolerance. Horizontal alignment for earthwork and rough cut should not exceed 1.0 ft. tolerance.
 - b. Horizontal alignment on a structure shall be within .0.1ft tolerance.
 - c. Paving or concrete for streets, curbs, gutters, parking areas, drives, alleys and walkways shall be located within the confines of the site boundaries and, occasionally, along a boundary or any other restrictive line. Away from any restrictive line, these facilities should be staked with an accuracy producing no more than 0.05ft. tolerance from their specified locations.
 - d. Underground and overhead utilities, such as sewers, gas, water, telephone and electric lines, shall be located horizontally within their prescribed areas or easements. Within assigned areas, these utilities should be staked with an accuracy producing no more than 0.1 ft tolerance from a specified location.
 - e. The accuracy required for the vertical location of utilities varies widely. Many underground utilities require only a minimum cover and a tolerance of 0.1 ft. should be maintained. Underground and overhead utilities on planned profile, but not depending on gravity flow for performance, should not exceed 0.1 ft. tolerance.
- B. Surveying instruments shall be kept in close adjustment according to manufacturer's specifications or in compliance to standards. The City reserves the right to request a calibration report at any time and recommends regular maintenance schedule be performed by a certified technician every 6 months.
 - 1. Field measurements of angles and distances shall be done in such fashion as to satisfy the closures and tolerances expressed in Part 3.1.A.
 - 2. Vertical locations shall be established from a pre-established benchmark and checked by closing to a different bench mark on the same datum.
 - 3. Construction survey field work shall correspond to the client's plans. Irregularities or conflicts found shall be reported promptly to the City.
 - 4. Revisions, corrections and other pertinent data shall be logged for future reference.

- 3.2 EXAMINATION [NOT USED]
- 3.3 PREPARATION [NOT USED]
- 3.4 APPLICATION
- 3.5 REPAIR / RESTORATION
 - A. If the Contractor's work damages or destroys one or more of the control monuments/points set by the City, the monuments shall be adequately referenced for expedient restoration.
 - 1. Notify City if any control data needs to be restored or replaced due to damage caused during construction operations.
 - a. Contractor shall perform replacements and/or restorations.
 - b. The City may require at any time a survey "Field Check" of any monument or benchmarks that are set be verified by the City surveyors before further associated work can move forward.
- 3.6 RE-INSTALLATION [NOT USED]
- 3.7 FIELD [OR] SITE QUALITY CONTROL
 - A. It is the Contractor's responsibility to maintain all stakes and control data placed by the City in accordance with this Specification. This includes easements and right of way, if noted on the plans.
 - B. Do not change or relocate stakes or control data without approval from the City.
- 3.8 SYSTEM STARTUP
 - A. Survey Checks
 - 1. The City reserves the right to perform a Survey Check at any time deemed necessary.
 - 2. Checks by City personnel or 3rd party contracted surveyor are not intended to relieve the contractor of his/her responsibility for accuracy.
- 3.9 ADJUSTING [NOT USED]
- 3.10 CLEANING [NOT USED]
- 3.11 CLOSEOUT ACTIVITIES [NOT USED]
- 3.12 PROTECTION [NOT USED]
- 3.13 MAINTENANCE [NOT USED]
- 3.14 ATTACHMENTS [NOT USED]

END OF SECTION

Revision Log

DATE	NAME	SUMMARY OF CHANGE
8/31/2012	D. Johnson	
8/31/2017		Added instruction and modified measurement & payment under 1.2; added definitions and references under 1.3; modified 1.6; added 1.7 closeout submittal requirements; modified 1.9 Quality Assurance; added PART 2 – PRODUCTS; Added 3.1 Installers; added 3.5 Repair/Restoration; and added 3.8 System Startup.
2/14/2018	M Owen	Removed "blue text"; revised measurement and payment sections for Construction Staking and As-Built Survey; added reference to selection compliance with TGC 2254; revised action and Closeout submittal requirements; added acceptable depth measurement criteria; revised list of items requiring as-built survey "during" and "after" construction; and revised acceptable digital survey file format



Section 01 71 23.01 - Attachment A Survey Staking Standards

February 2017

These procedures are intended to provide a standard method for construction staking services associated with the City of Fort Worth projects. These are not to be considered all inclusive, but only as a general guideline. For projects on TXDOT right-of-way or through joint TXDOT participation, adherence to the TXDOT Survey Manual shall be followed and if a discrepancy arises, the TXDOT manual shall prevail. (http://onlinemanuals.txdot.gov/txdotmanuals/ess/ess.pdf)

If you have a unique circumstance, please consult with the project manager, inspector, or survey department at 817-392-7925.

Table of Contents

- I. City of Fort Worth Contact Information
- II. Construction Colors
- III. Standard Staking Supplies
- IV. Survey Equipment, Control, and Datum Standards
- V. Water Staking
- VI. Sanitary Sewer Staking
- VII. Storm Staking
- VIII. Curb and Gutter Staking
- IX. Cut Sheets
- X. As-built Survey

I. <u>Survey Department Contact Information</u>

Physical and mailing address: 8851 Camp Bowie West Boulevard Suite 300 Fort Worth, Texas 76116

Office: (817) 392-7925

Survey Superintendent, direct line: (817) 392-8971

II. Construction Colors

The following colors shall be used for staking or identifying features in the field. This includes flagging, paint of laths/stakes, paint of hubs, and any identification such as pin flags if necessary.

Utility	Color
PROPOSED EXCAVATION	WHITE
ALL ELECTRIC AND CONDUITS	RED
POTABLE WATER	BLUE
GAS OR OIL	YELLOW
TELEPHONE/FIBER OPTIC	ORANGE
SURVEY CONTROL POINTS, BENCHMARKS,	
PROPERTY CORNERS, RIGHT-OF-WAYS, AND	PINK
ALL PAVING INCLUDING CURB, SIDEWALK, BUILDING CORNERS	
SANITARY SEWER	GREEN
IRRIGATION AND RECLAIMED WATER	PURPLE

III. Standard Staking Supplies

Item	Minimum size
Lath/Stake	36" tall
Wooden Hub (2"x2" min. square preferred)	6" tall
Pin Flags (2.5" x 3.5" preferred)	21" long
Guard Stakes	Not required
PK or Mag nails	1" long
Iron Rods (1/2" or greater diameter)	18" long
Survey Marking Paint	Water-based
Flagging	1" wide
Marking Whiskers (feathers)	6" long
Tacks (for marking hubs)	3/4" long

IV. Survey Equipment, Control, and Datum Standards

A. City Benchmarks

All city benchmarks can be found here: http://fortworthtexas.gov/itsolutions/GIS/ Look for 'Zoning Maps'. Under 'Layers', expand 'Basemap Layers', and check on 'Benchmarks'.

B. Conventional or Robotic Total Station Equipment

- I. A minimum of a 10 arc-second instrument is required.
- II. A copy of the latest calibration report may be requested by the City at any time.
 It is recommended that an instrument be calibrated by certified technician at least 1 occurrence every 6 months.

C. Network/V.R.S. and static GPS Equipment

- It is critical that the surveyor verify the correct horizontal and vertical datum prior commencing work. A site calibration may be required and shall consist of at least 4 control points spaced evenly apart and in varying quadrants.
 Additional field checks of the horizontal and vertical accuracies shall be completed and the City may ask for a copy of the calibration report at any time.
- II. Network GPS such as the Western Data Systems or SmartNet systems may be used for staking of property/R.O.W, forced-main water lines, and rough-grade only. No GPS staking for concrete, sanitary sewer, storm drain, final grade, or anything that needs vertical grading with a tolerance of 0.25' or less is allowed.

D. Control Points Set

- I. All control points set shall be accompanied by a lath with the appropriate Northing, Easting, and Elevation (if applicable) of the point set. Control points can be set rebar, 'X' in concrete, or any other appropriate item with a stable base and of a semi-permanent nature. A rebar cap is optional, but preferred if the cap is marked 'control point' or similar wording.
- II. Datasheets are required for all control points set.
 - Datasheet should include:
 - A. Horizontal and Vertical Datum used, Example: N.A.D.83, North Central Zone 4202, NAVD 88 Elevations
 - B. Grid or ground distance. If ground, provide scale factor used and base point coordinate, Example: C.S.F.=0.999125, Base point=North: 0, East=0
 - C. Geoid model used, Example: GEOID12A

E. Preferred Grid Datum

Although many plan sets can be in surface coordinates, the City's preferred grid datum is listed below. Careful consideration must be taken to verify what datum each project is in prior to beginning work. It is essential the surveyor be familiar with coordinate transformations and how a grid/surface/assumed coordinate system affect a project.

Projected Coordinate

System: NAD_1983_StatePlane_Texas_North_Central_FIPS_4202_Feet

Projection: Lambert_Conformal_Conic

Linear Unit: Foot_US

Geographic Coordinate System: GCS North American 1983

Datum: D_North_American_1983

Prime Meridian: Greenwich Angular Unit: Degree

<u>Note:</u> Regardless of what datum each particular project is in, deliverables to the City must be converted/translated into this preferred grid datum. 1 copy of the deliverable should be in the project datum (whatever it may be) and 1 copy should be in the NAD83, TX North Central 4202 zone. <u>See Preferred File Naming Convention below</u>

F. Preferred Deliverable Format

.txt .csv .dwg .job

G. Preferred Data Format

P,N,E,Z,D,N

Point Number, Northing, Easting, Elevation, Description, Notes (if applicable)

H. Preferred File Naming Convention

This is the preferred format: City Project Number Description Datum.csv

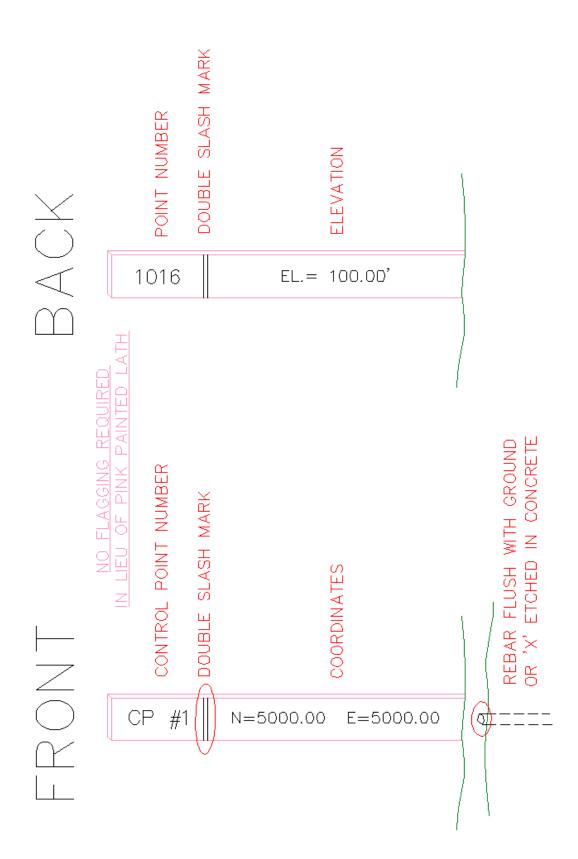
Example for a project that has surface coordinates which must be translated:

File 1: C1234 As-built of Water on Main Street Grid NAD83 TXSP 4202.csv

O:\Specs-Stds Governance Process\Temporary Spec Files\Capital Delivery\Cap Delivery Div 01\01 71 23.16.01_Attachment A_Survey Staking Standards.docx

File 2: C1234_As-built of Water on Main Street_Project Specific Datum.csv

Example Control Stakes



V. Water Staking Standards

A. Centerline Staking - Straight Line Tangents

- I. Offset lath/stakes every 200' on even stations
- II. Painted blue lath/stake only, no hub is required
- III. Grade is to top of pipe (T/P) for 12" diameter pipes or smaller
- IV. Grade to flow line (F/L) for 16" and larger diameter pipes
- V. Grade should be 3.50' below the proposed top of curb line for 10" and smaller diameter pipes
- VI. Grade should be 4.00' below the proposed top of curb line for 12" and larger diameter pipes
- VII. Cut Sheets are required on all staking and a copy can be received from the survey superintendent
 - Optional: Actual stakes shall consist of a 60D nail or hub set with a whisker

B. Centerline Staking - Curves

- I. If arc length is greater than 100', POC (Point of Curvature) offset stakes should be set at a 25' interval
- II. Same grading guidelines as above
- III. Staking of radius points of greater than 100' may be omitted

C. Water Meter Boxes

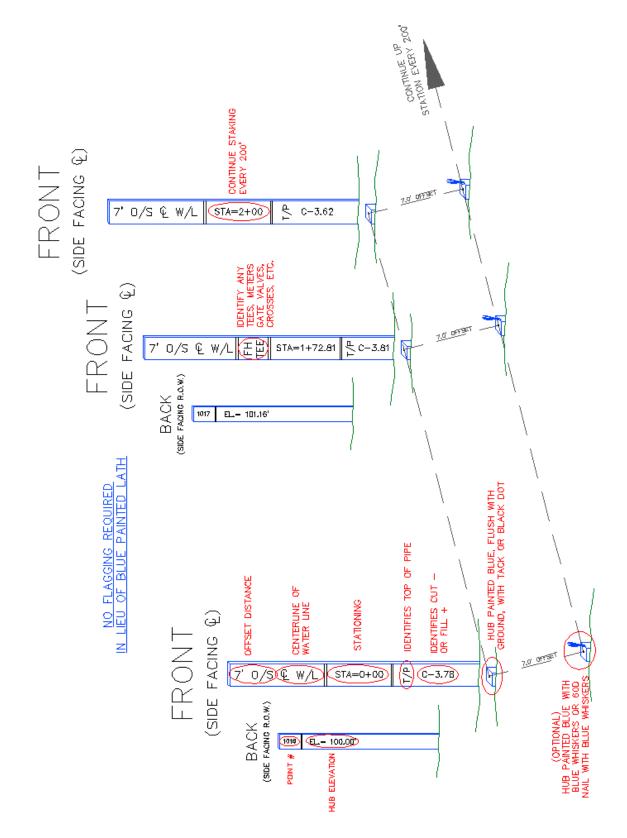
- I. 7.0' perpendicular offset is preferred to the center of the box
- II. Center of the meter should be 3.0' behind the proposed face of curb
- III. Meter should be staked a minimum of 4.5' away from the edge of a driveway
- IV. Grade is to top of box and should be +0.06' higher than the proposed top of curb unless shown otherwise on the plans

D. Fire Hydrants

- I. Center of Hydrant should be 3.0' behind proposed face of curb
- II. Survey offset stake should be 7.0' from the center and perpendicular to the curb line or water main
- III. Grade of hydrants should be +0.30 higher than the adjacent top of curb

E. Water Valves & Vaults

- I. Offsets should be perpendicular to the proposed water main
- II. RIM grades should only be provided if on plans



VI. Sanitary Sewer Staking

A. Centerline Staking – Straight Line Tangents

- I. Inverts shall be field verified and compared against the plans before staking
- II. Painted green lath/stake WITH hub and tack or marker dot, no flagging required
- III. 1 offset stake between manholes if manholes are 400' or less apart
- IV. Offset stakes should be located at even distances and perpendicular to the centerline
- V. Grades will be per plan and the date of the plans used should be noted
- VI. If multiple lines are at one manhole, each line shall have a cut/fill and direction noted
- VII. Stakes at every grade break
- VIII. Cut sheets are required on all staking

 Optional: Actual stakes shall consist of a 60D nail or hub set with a whisker

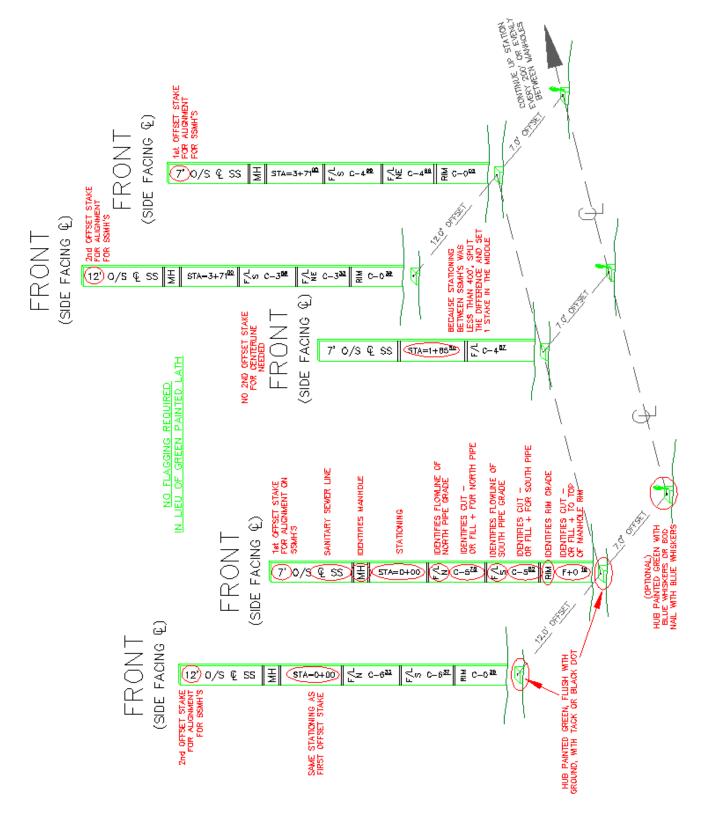
B. Centerline Staking – Curves

- I. If arc length is greater than 100', POC (Point of Curvature) offset stakes should be set at a 25' interval
- II. Staking of radius points of greater than 100' may be omitted

C. Sanitary Sewer Manholes

- I. 2 offset stakes per manhole for the purpose of providing alignment to the contractor
- II. Flowline grade should be on the lath/stake for each flowline and direction noted
- III. RIM grade should only be on the stake when provided in the plans

Example Sanitary Sewer Stakes



VII. Storm Sewer & Inlet Staking

A. Centerline Staking – Straight Line Tangents

- I. 1 offset stake every 200' on even stations
- II. Grades are to flowline of pipe unless otherwise shown on plans
- III. Stakes at every grade break
- IV. Cut sheets are required on all staking

 Optional: Actual stakes shall consist of a 60D nail or hub set with a whisker

B. Centerline Staking - Curves

- I. If arc length is greater than 100', POC (Point of Curvature) offset stakes should be set at a 25' interval
- II. Staking of radius points of greater than 100' may be omitted

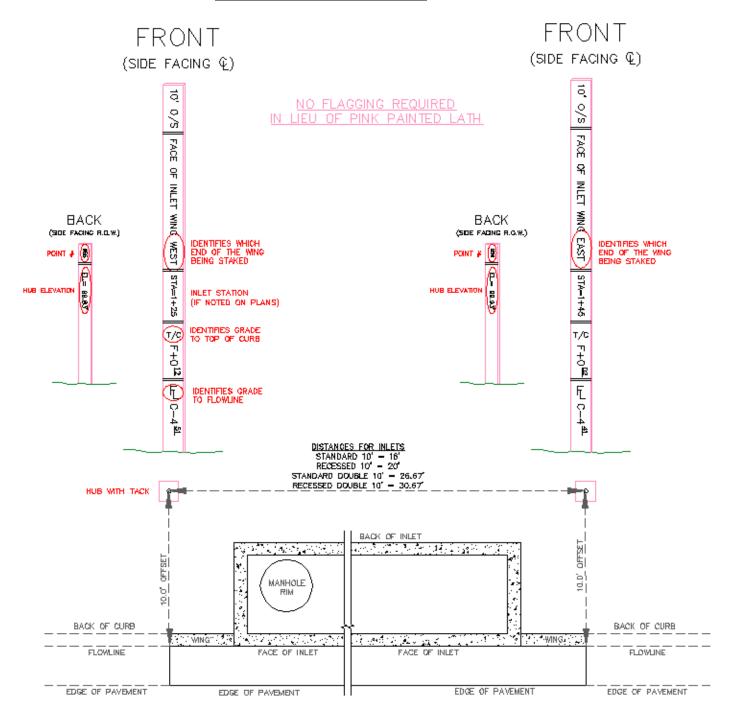
C. Storm Drain Inlets

- I. Staking distances should be measured from end of wing
- II. Standard 10' Inlet = 16.00' total length
- III. Recessed 10' Inlet = 20.00' total length
- IV. Standard double 10' inlet = 26.67' total length
- V. Recessed double 10' inlet = 30.67' total length

D. Storm Drain Manholes

- I. 2 offset stakes per manhole for the purpose of providing alignment to the contractor
- II. Flowline grade should be on the lath/stake for each flowline and direction noted
- III. RIM grade should only be on the stake when provided in the plans

Example Storm Inlet Stakes



VIII. Curb and Gutter Staking

A. Centerline Staking – Straight Line Tangents

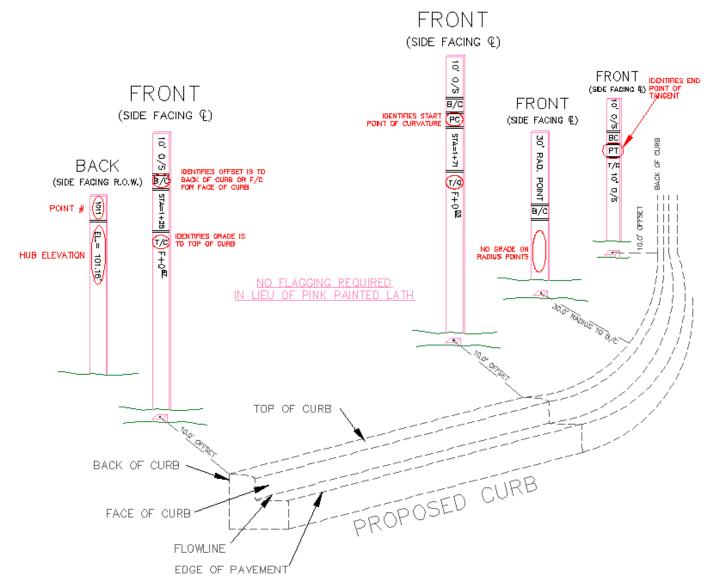
- V. 1 offset stake every 50' on even stations
- VI. Grades are to top of curb unless otherwise shown on plans
- VII. Stakes at every grade break
- VIII. Cut sheets are required on all staking

 Optional: Actual stakes shall consist of a 60D nail or hub set with a whisker

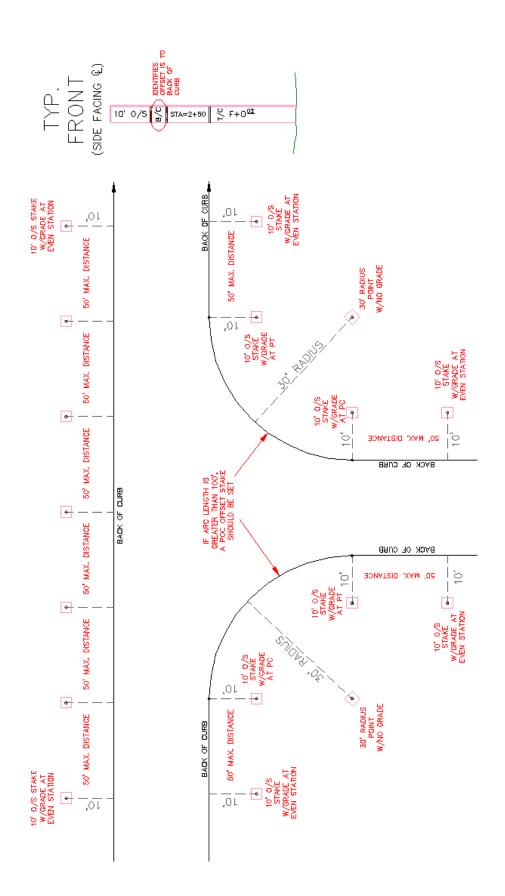
B. Centerline Staking - Curves

- III. If arc length is greater than 100', POC (Point of Curvature) offset stakes should be set at a 25' interval
- IV. Staking of radius points of greater than 100' may be omitted

Example Curb & Gutter Stakes



Example Curb & Gutter Stakes at Intersection



IX. <u>Cut Sheets</u>

- A. Date of field work
- B. Staking Method (GPS, total station)
- C. Project Name
- D. City Project Number (Example: C01234)
- E. Location (Address, cross streets, GPS coordinate)
- F. Survey company name
- G. Crew chief name
- H. A blank template can be obtained from the survey superintendent (see item I above)

Standard City Cut Sheet

Date:			City Project Number:	
			Project Name:	
		☐ TOTAL		
Staking Method: LOCATION:	□ GPS	STATION	□ OTHER	_
CONSULTANT/CONT	RACTOR			- -
SURVEY CREW INITI	ALS			

ALL GRADES ARE TO FLOWLINE OR TOP OF CURB UNLESS OTHERWISE NOTED.

PT#	STATION	OFFSET -LT/+RT	DESCRIPTION	PROP. GRADE	STAKED ELEV.	- CUT	+ FILL
		LI/IIXI		OTORBE	LLL V.		

X. <u>As-built Survey</u>

A. Definition and Purpose

The purpose of an as-built survey is to verify the asset was installed in the proper location and grade. Furthermore, the information gathered will be used to supplement the City's GIS data and must be in the proper format when submitted. *See section IV*.

As-built survey should include the following (additional items may be requested):

Manholes

Top of pipe elevations every 250 feet

Horizontal and vertical points of inflection, curvature, etc. (All Fittings)

Cathodic protection test stations

Sampling stations

Meter boxes/vaults (All sizes)

Fire lines

Fire hydrants

Gate valves (rim and top of nut)

Plugs, stub-outs, dead-end lines

Air Release valves (Manhole rim and vent pipe)

Blow off valves (Manhole rim and valve lid)

Pressure plane valves

Cleaning wyes

Clean outs

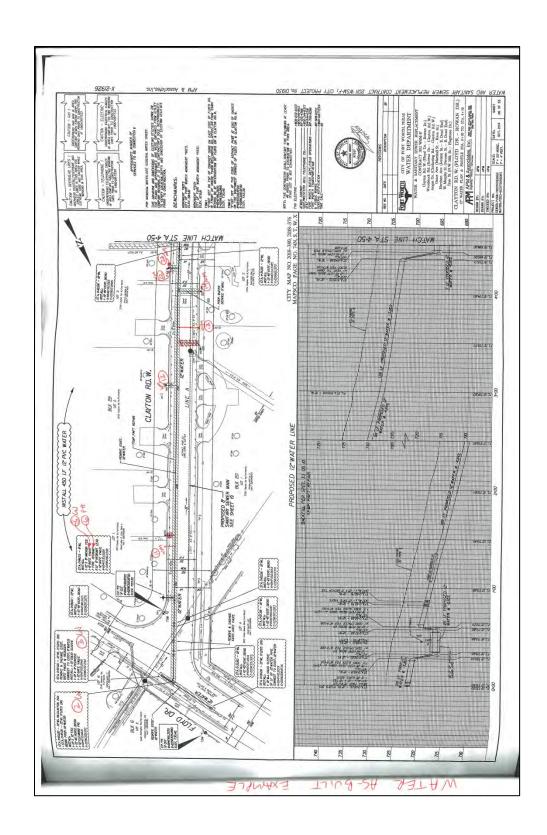
Casing pipe (each end)

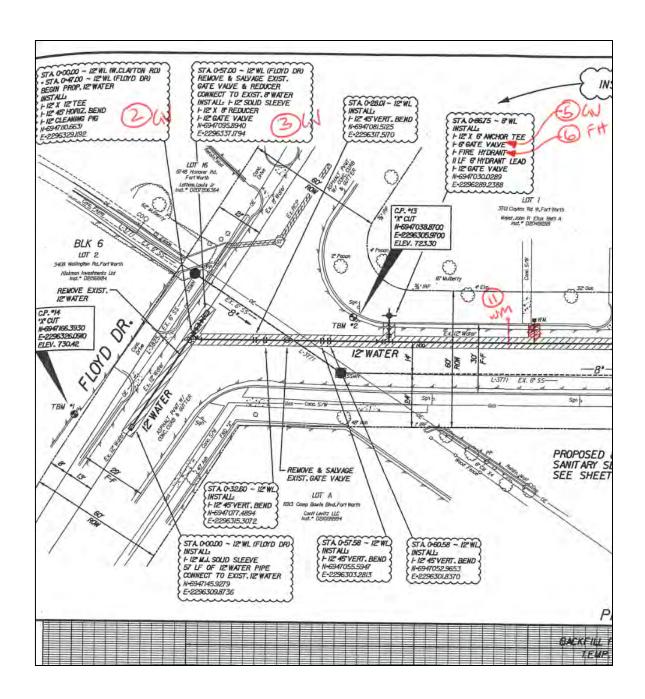
Inverts of pipes

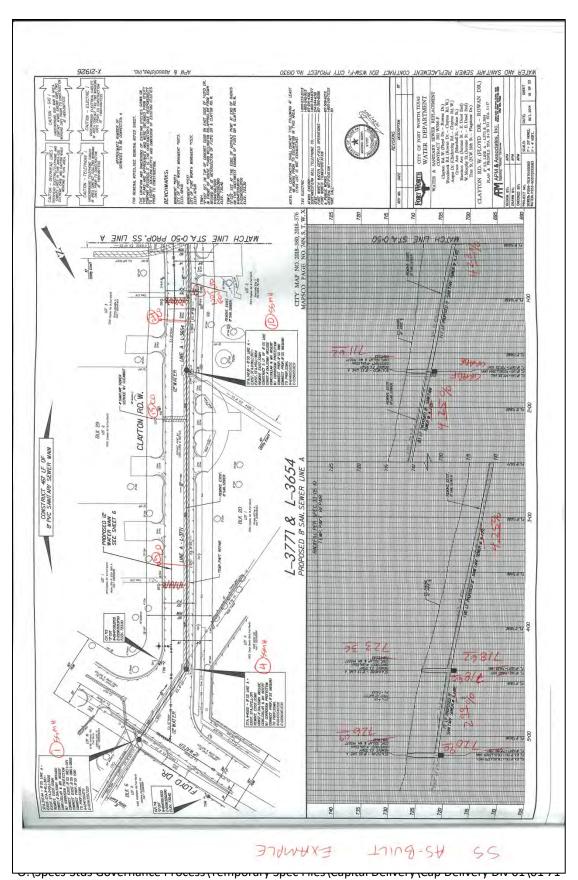
Turbo Meters

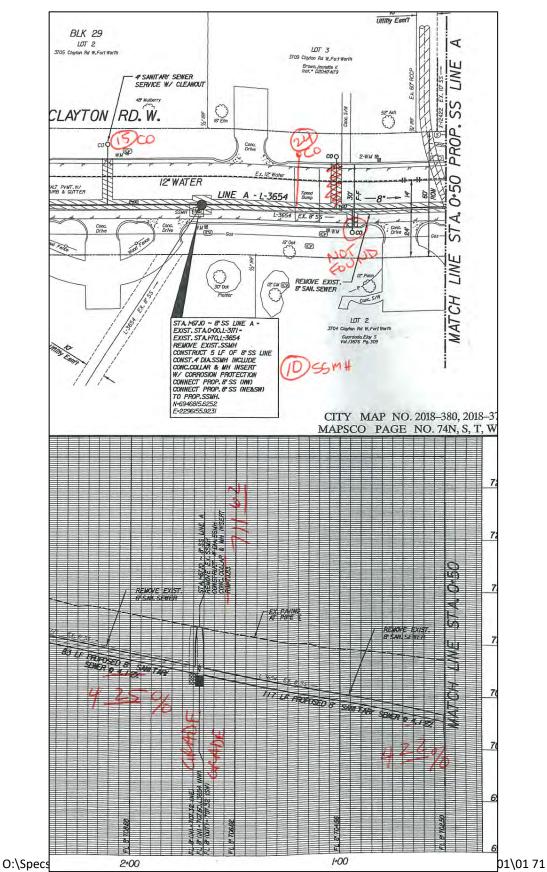
B. Example Deliverable

A hand written red line by the field surveyor is acceptable in most cases. This should be a copy of the plans with the point number noted by each asset. If the asset is missing, then the surveyor should write "NOT FOUND" to notify the City.









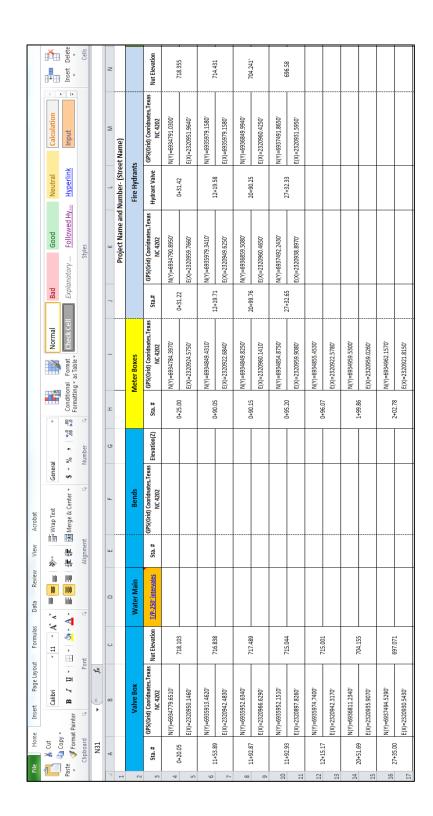
23.16.01_Attachment A_Survey Staking Standards.docx Page 23 of 23

Obviously the .csv or .txt file cannot be signed/sealed by a surveyor in the format requested. This is just an example and all this information should be noted when delivered to the City so it is clear to what coordinate system the data is in.

POINT NO.	1	NORTHING	EASTING ELEV.	DESCRIPTION	
	1	6946257.189	2296079.165	726.09 SSMH RIM	HORIZONTAL
	2	6946260.893	2296062.141	725.668 GV RIM	
	3	6946307.399	2296038.306	726.85 GV RIM	COOLDINATES
	4	6946220.582	2296011.025	723.358 SSMH RIM	
	5	6946195.23	2296015.116	722.123 GV RIM	IN
	6	6946190.528	2296022.721	722.325 FH	N.A.D. 1983
	7	6946136.012	2295992.115	719.448 WM RIM	in the tree
	8	6946002.267	2295919.133	713.331 WM RIM	TX. N. CENTRA
	9	6946003.056	2295933.418	713.652 CO RIM	ZONE 420Z
	10	6945984.677	2295880.52	711.662 SSMH RIM	
	11	6945986.473	2295869.892	710.046 WM RIM	
	12	6945895.077	2295860.962	707.72 WM RIM	11507511
	13	6945896.591	2295862.188	708.205 WM RIM	VERTICAL
	14	6945934.286	2295841.925	709.467 WM RIM	was a second
	15	6945936.727	2295830.441	710.084 CO RIM	COOPDINATES
	16	6945835.678	2295799.707	707.774 SSMH RIM	1N
	17	6945817.488	2295827.011	708.392 SSMH RIM	
	18	6945759.776	2295758.643	711.218 SSMH RIM	N.A.V.D. 88
	19	6945768.563	2295778.424	710.086 GV RIM	
	20	6945743.318	2295788.392	710.631 GV RIM	
	21	6945723.219	2295754.394	712.849 GV RIM	O.P.
	22	6945682.21	2295744.22	716.686 WM RIM	0
	23	6945621.902	2295669.471	723.76 WM RIM	
	24	6945643.407	2295736.03	719.737 CO RIM	CALIBRATED
	25	6945571.059	2295655.195	727.514 SSMH RIM	
	26	6945539.498	2295667.803	729.123 WM RIM	TO
	27	6945519.834	2295619.49	732.689 WM RIM	CONTROL POINTS
	28	6945417.879	2295580.27	740.521 WM RIM	LISTED IN
	29	6945456.557	2295643.145	736.451 CO RIM	
	30	6945387.356	2295597.101	740.756 GV RIM	THE PLANS
	31	6945370.688	2295606.793	740.976 GV RIM	FOR SURFACE
	32	6945383.53	2295610.559	740.408 FH	_
	33	6945321.228	2295551.105	746.34 WM RIM	
	34	6945319.365	2295539.728	746.777 CO RIM	
	35	6945242.289	2295570.715	748.454 WM RIM	
	36	6945233.624	2295544.626	749.59 SSMH RIM	RP.L.S.
	37	6945206.483	2295529.305	751.058 WM RIM	
	38	6945142.015	2295557.666	750.853 WM RIM	STAMPED
	39	6945113.445	2295520.335	751.871 WM RIM	
	40	6945049.02	2295527.345	752.257 SSMH RIM	ATE OF TE
	41	6945041.024	2295552.675	751.79 WM RIM	19
	42	6945038.878	2295552.147	751.88 WM RIM	(ANY SURVEYOR)
	43	6945006.397	2295518.135	752.615 WM RIM	一种###
	44	6944944.782	2295520.635	752.801 WM RIM	The supple
	45	6944943.432	2295556.479	752.156 WM RIM	
	46	6944860.416	2295534.397	752.986 SSMH RIM	ANY CHAEYOR 121

C. Other preferred as-built deliverable

Some vendors have indicated that it is easier to deliver this information in a different format. Below is an example spreadsheet that is also acceptable and can be obtained by request from the survey superintendent.



SECTION 01 74 23

CLEANING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Intermediate and final cleaning for Work not including special cleaning of closed systems specified elsewhere
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements
 - 3. Section 32 92 13 Hydro-Mulching, Seeding and Sodding

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Work associated with this Item is considered subsidiary to the various Items bid. No separate payment will be allowed for this Item.

1.3 REFERENCES [NOT USED]

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Scheduling
 - 1. Schedule cleaning operations so that dust and other contaminants disturbed by cleaning process will not fall on newly painted surfaces.
 - 2. Schedule final cleaning upon completion of Work and immediately prior to final inspection.
- 1.5 SUBMITTALS [NOT USED]
- 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 1.9 QUALITY ASSURANCE [NOT USED]
- 1.10 STORAGE, AND HANDLING
 - A. Storage and Handling Requirements
 - Store cleaning products and cleaning wastes in containers specifically designed for those materials.

1.11 FIELD [SITE] CONDITIONS [NOT USED]

1.12 WARRANTY [NOT USED]

PART 2 - PRODUCTS

2.1 OWNER-FURNISHED [OR] OWNER-SUPPLIEDPRODUCTS [NOT USED]

2.2 MATERIALS

- A. Cleaning Agents
 - 1. Compatible with surface being cleaned
 - 2. New and uncontaminated
 - 3. For manufactured surfaces
 - a. Material recommended by manufacturer
- 2.3 ACCESSORIES [NOT USED]
- 2.4 SOURCE QUALITY CONTROL [NOT USED]

PART 3 - EXECUTION

- 3.1 INSTALLERS [NOT USED]
- 3.2 EXAMINATION [NOT USED]
- 3.3 PREPARATION [NOT USED]
- 3.4 APPLICATION [NOT USED]
- 3.5 REPAIR / RESTORATION [NOT USED]
- 3.6 RE-INSTALLATION [NOT USED]
- 3.7 FIELD [OR] SITE QUALITY CONTROL [NOT USED]
- 3.8 SYSTEM STARTUP [NOT USED]
- 3.9 ADJUSTING [NOT USED]

3.10 CLEANING

A. General

- 1. Prevent accumulation of wastes that create hazardous conditions.
- 2. Conduct cleaning and disposal operations to comply with laws and safety orders of governing authorities.
- 3. Do not dispose of volatile wastes such as mineral spirits, oil or paint thinner in storm or sanitary drains or sewers.
- 4. Dispose of degradable debris at an approved solid waste disposal site.
- 5. Dispose of nondegradable debris at an approved solid waste disposal site or in an alternate manner approved by City and regulatory agencies.

- 6. Handle materials in a controlled manner with as few handlings as possible.
- 7. Thoroughly clean, sweep, wash and polish all Work and equipment associated with this project.
- 8. Remove all signs of temporary construction and activities incidental to construction of required permanent Work.
- 9. If project is not cleaned to the satisfaction of the City, the City reserves the right to have the cleaning completed at the expense of the Contractor.
- 10. Do not burn on-site.

B. Intermediate Cleaning during Construction

- 1. Keep Work areas clean so as not to hinder health, safety or convenience of personnel in existing facility operations.
- 2. At maximum weekly intervals, dispose of waste materials, debris and rubbish.
- 3. Confine construction debris daily in strategically located container(s):
 - a. Cover to prevent blowing by wind
 - b. Store debris away from construction or operational activities
 - c. Haul from site at a minimum of once per week
- 4. Vacuum clean interior areas when ready to receive finish painting.
 - a. Continue vacuum cleaning on an as-needed basis, until Final Acceptance.
- 5. Prior to storm events, thoroughly clean site of all loose or unsecured items, which may become airborne or transported by flowing water during the storm.

C. Interior Final Cleaning

- 1. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels and other foreign materials from sight-exposed surfaces.
- 2. Wipe all lighting fixture reflectors, lenses, lamps and trims clean.
- 3. Wash and shine glazing and mirrors.
- 4. Polish glossy surfaces to a clear shine.
- 5. Ventilating systems
 - a. Clean permanent filters and replace disposable filters if units were operated during construction.
 - b. Clean ducts, blowers and coils if units were operated without filters during construction.
- 6. Replace all burned out lamps.
- 7. Broom clean process area floors.
- 8. Mop office and control room floors.

D. Exterior (Site or Right of Way) Final Cleaning

- 1. Remove trash and debris containers from site.
 - a. Re-seed areas disturbed by location of trash and debris containers in accordance with Section 32 92 13.
- 2. Sweep roadway to remove all rocks, pieces of asphalt, concrete or any other object that may hinder or disrupt the flow of traffic along the roadway.
- 3. Clean any interior areas including, but not limited to, vaults, manholes, structures, junction boxes and inlets.

- 4. If no longer required for maintenance of erosion facilities, and upon approval by City, remove erosion control from site.
- 5. Clean signs, lights, signals, etc.
- 3.11 CLOSEOUT ACTIVITIES [NOT USED]
- 3.12 PROTECTION [NOT USED]
- 3.13 MAINTENANCE [NOT USED]
- 3.14 ATTACHMENTS [NOT USED]

END OF SECTION

Revision Log				
DATE	NAME	SUMMARY OF CHANGE		

1 2		SECTION 01 77 19 CLOSEOUT REQUIREMENTS
_		ezeszesi izgena.
3	PAF	RT 1 - GENERAL
4	1.1	SUMMARY
5		A. Section Includes:
6		1. The procedure for closing out a contract
7 8		B. Deviations from this City of Fort Worth Standard Specification1. None.
9		C. Related Specification Sections include, but are not necessarily limited to:
10 11		 Division 0 – Bidding Requirements, Contract Forms and Conditions of the Contract Division 1 – General Requirements
12	1.2	PRICE AND PAYMENT PROCEDURES
13 14 15		 A. Measurement and Payment 1. Work associated with this Item is considered subsidiary to the various Items bid. No separate payment will be allowed for this Item.
16	1.3	REFERENCES [NOT USED]
17	1.4	ADMINISTRATIVE REQUIREMENTS
18 19 20 21		 A. Guarantees, Bonds and Affidavits 1. No application for final payment will be accepted until all guarantees, bonds, certificates, licenses and affidavits required for Work or equipment as specified are satisfactorily filed with the City.
22		B. Release of Liens or Claims
23 24		 No application for final payment will be accepted until satisfactory evidence of release of liens has been submitted to the City.
25	1.5	SUBMITTALS
26		A. Submit all required documentation to City's Project Representative.
27		
28	1.6	INFORMATIONAL SUBMITTALS [NOT USED]
29		
30	1.7	CLOSEOUT SUBMITTALS [NOT USED]
31	PAF	RT 2 - PRODUCTS [NOT USED]

1 PART 3 - EXECUTION

- 2 3.1 INSTALLERS [NOT USED]
- 3 3.2 EXAMINATION [NOT USED]
- 4 3.3 PREPARATION [NOT USED]
- 5 3.4 CLOSEOUT PROCEDURE

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- 6 A. Prior to requesting Final Inspection, submit:
 - 1. Project Record Documents in accordance with Section 01 78 39
 - 2. Operation and Maintenance Data, if required, in accordance with Section 01 78 23
 - B. Prior to requesting Final Inspection, perform final cleaning in accordance with Section 01 74 23.
 - C. Final Inspection
 - 1. After final cleaning, provide notice to the City Project Representative that the Work is completed.
 - a. The City will make an initial Final Inspection with the Contractor present.
 - b. Upon completion of this inspection, the City will notify the Contractor, in writing within 10 business days, of any particulars in which this inspection reveals that the Work is defective or incomplete.
 - 2. Upon receiving written notice from the City, immediately undertake the Work required to remedy deficiencies and complete the Work to the satisfaction of the City.
 - 3. The Right-of-way shall be cleared of all construction materials, barricades, and temporary signage.
 - 4. Upon completion of Work associated with the items listed in the City's written notice, inform the City that the required Work has been completed. Upon receipt of this notice, the City, in the presence of the Contractor, will make a subsequent Final Inspection of the project.
 - 5. Provide all special accessories required to place each item of equipment in full operation. These special accessory items include, but are not limited to:
 - a. Specified spare parts
 - b. Adequate oil and grease as required for the first lubrication of the equipment
 - c. Initial fill up of all chemical tanks and fuel tanks
 - d. Light bulbs
 - e. Fuses
 - f. Vault keys
 - g. Handwheels
 - h. Other expendable items as required for initial start-up and operation of all equipment
 - D. Notice of Project Completion
 - 1. Once the City Project Representative finds the Work subsequent to Final Inspection to be satisfactory, the City will issue a Notice of Project Completion (Green Sheet).
 - E. Supporting Documentation

1 2 3 4 5 6 7 8 9		 Coordinate with the City Project Representative to complete the following additional forms: a. Final Payment Request b. Statement of Contract Time c. Affidavit of Payment and Release of Liens d. Consent of Surety to Final Payment e. Pipe Report (if required) f. Contractor's Evaluation of City g. Performance Evaluation of Contractor
10		F. Letter of Final Acceptance
11		1. Upon review and acceptance of Notice of Project Completion and Supporting
12 13		Documentation, in accordance with General Conditions, City will issue Letter of Final Acceptance and release the Final Payment Request for payment.
14	3.5	REPAIR / RESTORATION [NOT USED]
17	J. .5	REPAIR / RESTORATION [NOT USED]
15	3.6	RE-INSTALLATION [NOT USED]
16	3.7	FIELD [OR] SITE QUALITY CONTROL [NOT USED]
17	3.8	SYSTEM STARTUP [NOT USED]

18 **3.9 ADJUSTING [NOT USED]**

19 **3.10 CLEANING [NOT USED]**

20 3.11 CLOSEOUT ACTIVITIES [NOT USED]

21 **3.12 PROTECTION [NOT USED]**

22 3.13 MAINTENANCE [NOT USED]

23 3.14 ATTACHMENTS [NOT USED]

24 END OF SECTION

Revision Log				
DATE NAME SUMMARY OF CHANGE				
3/22/2021	M Owen	3.4 C. Added language to clarify and emphasize requirement to "Clearing ROW"		

SECTION 01 78 23

OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Product data and related information appropriate for City's maintenance and operation of products furnished under Contract
 - 2. Such products may include, but are not limited to:
 - a. Traffic Controllers
 - b. Irrigation Controllers (to be operated by the City)
 - c. Butterfly Valves
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Work associated with this Item is considered subsidiary to the various Items bid. No separate payment will be allowed for this Item.

1.3 REFERENCES [NOT USED]

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Schedule
 - 1. Submit manuals in final form to the City within 30 calendar days of product shipment to the project site.

1.5 SUBMITTALS

A. Submittals shall be in accordance with Section 01 33 00 . All submittals shall be approved by the City prior to delivery.

1.6 INFORMATIONAL SUBMITTALS

- A. Submittal Form
 - 1. Prepare data in form of an instructional manual for use by City personnel.
 - 2. Format
 - a. Size: 8 ½ inches x 11 inches
 - b. Paper
 - 1) 40 pound minimum, white, for typed pages
 - 2) Holes reinforced with plastic, cloth or metal
 - c. Text: Manufacturer's printed data, or neatly typewritten

- d. Drawings
 - 1) Provide reinforced punched binder tab, bind in with text
 - 2) Reduce larger drawings and fold to size of text pages.
- e. Provide fly-leaf for each separate product, or each piece of operating equipment.
 - 1) Provide typed description of product, and major component parts of equipment.
 - 2) Provide indexed tabs.
- f. Cover
 - 1) Identify each volume with typed or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS".
 - 2) List:
 - a) Title of Project
 - b) Identity of separate structure as applicable
 - c) Identity of general subject matter covered in the manual

3. Binders

- a. Commercial quality 3-ring binders with durable and cleanable plastic covers
- b. When multiple binders are used, correlate the data into related consistent groupings.
- 4. If available, provide an electronic form of the O&M Manual.

B. Manual Content

- 1. Neatly typewritten table of contents for each volume, arranged in systematic order
 - a. Contractor, name of responsible principal, address and telephone number
 - b. A list of each product required to be included, indexed to content of the volume
 - c. List, with each product:
 - 1) The name, address and telephone number of the subcontractor or installer
 - 2) A list of each product required to be included, indexed to content of the volume
 - 3) Identify area of responsibility of each
 - 4) Local source of supply for parts and replacement
 - d. Identify each product by product name and other identifying symbols as set forth in Contract Documents.

2. Product Data

- a. Include only those sheets which are pertinent to the specific product.
- b. Annotate each sheet to:
 - 1) Clearly identify specific product or part installed
 - 2) Clearly identify data applicable to installation
 - 3) Delete references to inapplicable information

3 Drawings

- a. Supplement product data with drawings as necessary to clearly illustrate:
 - 1) Relations of component parts of equipment and systems
 - 2) Control and flow diagrams
- b. Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation.
- c. Do not use Project Record Drawings as maintenance drawings.
- 4. Written text, as required to supplement product data for the particular installation:
 - a. Organize in consistent format under separate headings for different procedures.
 - b. Provide logical sequence of instructions of each procedure.

- 5. Copy of each warranty, bond and service contract issued
 - a. Provide information sheet for City personnel giving:
 - 1) Proper procedures in event of failure
 - 2) Instances which might affect validity of warranties or bonds
- C. Manual for Materials and Finishes
 - 1. Submit 5 copies of complete manual in final form.
 - 2. Content, for architectural products, applied materials and finishes:
 - a. Manufacturer's data, giving full information on products
 - 1) Catalog number, size, composition
 - 2) Color and texture designations
 - 3) Information required for reordering special manufactured products
 - b. Instructions for care and maintenance
 - 1) Manufacturer's recommendation for types of cleaning agents and methods
 - 2) Cautions against cleaning agents and methods which are detrimental to product
 - 3) Recommended schedule for cleaning and maintenance
 - 3. Content, for moisture protection and weather exposure products:
 - a. Manufacturer's data, giving full information on products
 - 1) Applicable standards
 - 2) Chemical composition
 - 3) Details of installation
 - b. Instructions for inspection, maintenance and repair
- D. Manual for Equipment and Systems
 - 1. Submit 5 copies of complete manual in final form.
 - 2. Content, for each unit of equipment and system, as appropriate:
 - a. Description of unit and component parts
 - 1) Function, normal operating characteristics and limiting conditions
 - 2) Performance curves, engineering data and tests
 - 3) Complete nomenclature and commercial number of replaceable parts
 - b. Operating procedures
 - 1) Start-up, break-in, routine and normal operating instructions
 - 2) Regulation, control, stopping, shut-down and emergency instructions
 - 3) Summer and winter operating instructions
 - 4) Special operating instructions
 - c. Maintenance procedures
 - 1) Routine operations
 - 2) Guide to "trouble shooting"
 - 3) Disassembly, repair and reassembly
 - 4) Alignment, adjusting and checking
 - d. Servicing and lubrication schedule
 - 1) List of lubricants required
 - e. Manufacturer's printed operating and maintenance instructions
 - f. Description of sequence of operation by control manufacturer
 - 1) Predicted life of parts subject to wear
 - 2) Items recommended to be stocked as spare parts
 - g. As installed control diagrams by controls manufacturer
 - h. Each contractor's coordination drawings
 - 1) As installed color coded piping diagrams

- i. Charts of valve tag numbers, with location and function of each valve
- j. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage
- k. Other data as required under pertinent Sections of Specifications
- 3. Content, for each electric and electronic system, as appropriate:
 - a. Description of system and component parts
 - 1) Function, normal operating characteristics, and limiting conditions
 - 2) Performance curves, engineering data and tests
 - 3) Complete nomenclature and commercial number of replaceable parts
 - b. Circuit directories of panelboards
 - 1) Electrical service
 - 2) Controls
 - 3) Communications
 - c. As installed color coded wiring diagrams
 - d. Operating procedures
 - 1) Routine and normal operating instructions
 - 2) Sequences required
 - 3) Special operating instructions
 - e. Maintenance procedures
 - 1) Routine operations
 - 2) Guide to "trouble shooting"
 - 3) Disassembly, repair and reassembly
 - 4) Adjustment and checking
 - f. Manufacturer's printed operating and maintenance instructions
 - g. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage
 - h. Other data as required under pertinent Sections of Specifications
- 4. Prepare and include additional data when the need for such data becomes apparent during instruction of City's personnel.

1.7 CLOSEOUT SUBMITTALS [NOT USED]

1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]

1.9 QUALITY ASSURANCE

- A. Provide operation and maintenance data by personnel with the following criteria:
 - 1. Trained and experienced in maintenance and operation of described products
 - 2. Skilled as technical writer to the extent required to communicate essential data
 - 3. Skilled as draftsman competent to prepare required drawings

- 1.10 DELIVERY, STORAGE, AND HANDLING [NOT USED]
- 1.11 FIELD [SITE] CONDITIONS [NOT USED]
- 1.12 WARRANTY [NOT USED]
- PART 2 PRODUCTS [NOT USED]
- PART 3 EXECUTION [NOT USED]

END OF SECTION

Revision Log			
DATE	NAME	SUMMARY OF CHANGE	
8/31/2012	D. Johnson	1.5.A.1 – title of section removed	

SECTION 01 78 39 PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Work associated with the documenting the project and recording changes to project documents, including:
 - a. Record Drawings
 - b. Water Meter Service Reports
 - c. Sanitary Sewer Service Reports
 - d. Large Water Meter Reports
- B. Deviations from this City of Fort Worth Standard Specification
 - 1. None.
- C. Related Specification Sections include, but are not necessarily limited to:
 - 1. Division 0 Bidding Requirements, Contract Forms and Conditions of the Contract
 - 2. Division 1 General Requirements

1.2 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
 - 1. Work associated with this Item is considered subsidiary to the various Items bid. No separate payment will be allowed for this Item.
- 1.3 REFERENCES [NOT USED]
- 1.4 ADMINISTRATIVE REQUIREMENTS [NOT USED]
- 1.5 SUBMITTALS
 - A. Prior to submitting a request for Final Inspection, deliver Project Record Documents to City's Project Representative.
- 1.6 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS [NOT USED]
- 1.7 CLOSEOUT SUBMITTALS [NOT USED]
- 1.8 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]
- 1.9 QUALITY ASSURANCE
 - A. Accuracy of Records
 - 1. Thoroughly coordinate changes within the Record Documents, making adequate and proper entries on each page of Specifications and each sheet of Drawings and other Documents where such entry is required to show the change properly.
 - 2. Accuracy of records shall be such that future search for items shown in the Contract Documents may rely reasonably on information obtained from the approved Project Record Documents.

- 3. To facilitate accuracy of records, make entries within 24 hours after receipt of information that the change has occurred.
- 4. Provide factual information regarding all aspects of the Work, both concealed and visible, to enable future modification of the Work to proceed without lengthy and expensive site measurement, investigation and examination.

1.10 STORAGE AND HANDLING

- A. Storage and Handling Requirements
 - 1. Maintain the job set of Record Documents completely protected from deterioration and from loss and damage until completion of the Work and transfer of all recorded data to the final Project Record Documents.
 - 2. In the event of loss of recorded data, use means necessary to again secure the data to the City's approval.
 - a. In such case, provide replacements to the standards originally required by the Contract Documents.

1.11 FIELD [SITE] CONDITIONS [NOT USED]

1.12 WARRANTY [NOT USED]

PART 2 - PRODUCTS

2.1 OWNER-FURNISHED [OR] OWNER-SUPPLIED PRODUCTS [NOT USED]

2.2 RECORD DOCUMENTS

- A. Job set
 - 1. Promptly following receipt of the Notice to Proceed, secure from the City, at no charge to the Contractor, 1 complete set of all Documents comprising the Contract.
- B. Final Record Documents
 - 1. At a time nearing the completion of the Work and prior to Final Inspection, provide the City 1 complete set of all Final Record Drawings in the Contract.
- 2.3 ACCESSORIES [NOT USED]
- 2.4 SOURCE QUALITY CONTROL [NOT USED]

PART 3 - EXECUTION

- 3.1 INSTALLERS [NOT USED]
- 3.2 EXAMINATION [NOT USED]
- 3.3 PREPARATION [NOT USED]
- 3.4 MAINTENANCE DOCUMENTS
 - A. Maintenance of Job Set
 - 1. Immediately upon receipt of the job set, identify each of the Documents with the title, "RECORD DOCUMENTS JOB SET".

2. Preservation

- a. Considering the Contract completion time, the probable number of occasions upon which the job set must be taken out for new entries and for examination, and the conditions under which these activities will be performed, devise a suitable method for protecting the job set.
- b. Do not use the job set for any purpose except entry of new data and for review by the City, until start of transfer of data to final Project Record Documents.
- c. Maintain the job set at the site of work.

3. Coordination with Construction Survey

a. At a minimum, in accordance with the intervals set forth in Section 01 71 23, clearly mark any deviations from Contract Documents associated with installation of the infrastructure.

4. Making entries on Drawings

- a. Record any deviations from Contract Documents.
- b. Use an erasable colored pencil (not ink or indelible pencil), clearly describe the change by graphic line and note as required.
- c. Date all entries.
- d. Call attention to the entry by a "cloud" drawn around the area or areas affected.
- e. In the event of overlapping changes, use different colors for the overlapping changes.

5. Conversion of schematic layouts

- a. In some cases on the Drawings, arrangements of conduits, circuits, piping, ducts, and similar items, are shown schematically and are not intended to portray precise physical layout.
 - 1) Final physical arrangement is determined by the Contractor, subject to the City's approval.
 - 2) However, design of future modifications of the facility may require accurate information as to the final physical layout of items which are shown only schematically on the Drawings.
- b. Show on the job set of Record Drawings, by dimension accurate to within 1 inch, the centerline of each run of items.
 - 1) Final physical arrangement is determined by the Contractor, subject to the City's approval.
 - 2) Show, by symbol or note, the vertical location of the Item ("under slab", "in ceiling plenum", "exposed", and the like).
 - 3) Make all identification sufficiently descriptive that it may be related reliably to the Specifications.
- c. The City may waive the requirements for conversion of schematic layouts where, in the City's judgment, conversion serves no useful purpose. However, do not rely upon waivers being issued except as specifically issued in writing by the City.

B. Final Project Record Documents

- 1. Transfer of data to Drawings
 - a. Carefully transfer change data shown on the job set of Record Drawings to the corresponding final documents, coordinating the changes as required.
 - b. Clearly indicate at each affected detail and other Drawing a full description of changes made during construction, and the actual location of items.

- c. Call attention to each entry by drawing a "cloud" around the area or areas affected.
- d. Make changes neatly, consistently and with the proper media to assure longevity and clear reproduction.
- 2. Transfer of data to other Documents
 - a. If the Documents, other than Drawings, have been kept clean during progress of the Work, and if entries thereon have been orderly to the approval of the City, the job set of those Documents, other than Drawings, will be accepted as final Record Documents.
 - b. If any such Document is not so approved by the City, secure a new copy of that Document from the City at the City's usual charge for reproduction and handling, and carefully transfer the change data to the new copy to the approval of the City.
- 3.5 REPAIR / RESTORATION [NOT USED]
- 3.6 RE-INSTALLATION [NOT USED]
- 3.7 FIELD [OR] SITE QUALITY CONTROL [NOT USED]
- 3.8 SYSTEM STARTUP [NOT USED]
- 3.9 ADJUSTING [NOT USED]
- 3.10 CLEANING [NOT USED]
- 3.11 CLOSEOUT ACTIVITIES [NOT USED]
- 3.12 PROTECTION [NOT USED]
- 3.13 MAINTENANCE [NOT USED]
- 3.14 ATTACHMENTS [NOT USED]

END OF SECTION

Revision Log				
DATE	NAME	SUMMARY OF CHANGE		

County Tarrant

Highway VA

Limits From: Daggett Elementary

School to D. McRae

Elementary School in Fort

Worth, Texas

DISADVANTAGED BUSINESS ENTERPRISES REQUIREMENTS

The following goal for disadvantaged business enterprises is established:

DBE 0.0%

DISADVANTAGED BUSINESS ENTERPRISES REQUIREMENTS

PROJECT: DAGGETT AND D. McRAE SRTS IMPROVEMENTS

HIGHWAY: VA

COUNTY: TARRANT

TXDOT CSJ: 0902-90-083

The following goal for disadvantaged business enterprises is established:

DBE

0.00%

Certification of DBE Goal Attainment

By signing the proposal, the Bidder certifies that the above DBE goal will be met by obtaining commitments equal to or exceeding the DBE percentage or that the Bidder will provide a good faith effort to substitute the attempt to meet the goal.

Failure to provide commitments to meet the stated goal or provide a satisfactory good faith effort will be considered a breach of the requirements of the proposal. As a result, the bid proposal guarantee of the Bidder will be property of the City of Fort Worth and the Bidder will be excluded for rebidding on the project when it is re-advertised.

Buy America

§ 635.410 Buy America requirements.

- (a) The provisions of this section shall prevail and be given precedence over any requirements of this subpart which are contrary to this section. However, nothing in this section shall be construed to be contrary to the requirements of § 635.409(a) of this subpart.
- (b) No Federal-aid highway construction project is to be authorized for advertisement or otherwise authorized to proceed unless at least one of the following requirements is met:
- (1) The project either: (i) Includes no permanently incorporated steel or iron materials, or (ii) if steel or iron materials are to be used, all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes which protect or enhance the value of the material to which the coating is applied.
- (2) The State has standard contract provisions that require the use of domestic materials and products, including steel and iron materials, to the same or greater extent as the provisions set forth in this section.
- (3) The State elects to include alternate bid provisions for foreign and domestic steel and iron materials which comply with the following requirements. Any procedure for obtaining alternate bids based on furnishing foreign steel and iron materials which is acceptable to the Division Administrator may be used. The contract provisions must (i) require all bidders to submit a bid based on furnishing domestic steel and iron materials, and (ii) clearly state that the contract will be awarded to the bidder who submits the lowest total bid based on furnishing domestic steel and iron materials unless such total bid exceeds the lowest total bid based on furnishing foreign steel and iron materials by more than 25 percent.
- (4) When steel and iron materials are used in a project, the requirements of this section do not prevent a minimal use of foreign steel and iron materials, if the cost of such materials used does not exceed one-tenth of one percent (0.1 percent) of the total contract cost or \$2,500, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the steel and iron products as they are delivered to the project.
- (c)(1) A State may request a waiver of the provisions of this section if;
- (i) The application of those provisions would be inconsistent with the public interest; or
- (ii) Steel and iron materials/products are not produced in the United States in sufficient and reasonably available quantities which are of a satisfactory quality.
- (2) A request for waiver, accompanied by supporting information, must be submitted in writing to the Regional Federal Highway Administrator (RFHWA) through the FHWA Division Administrator. A request must be submitted sufficiently in advance of the need for the waiver in order to allow time for proper review and action on the request. The RFHWA will have approval authority on the request.
- (3) Requests for waivers may be made for specific projects, or for certain materials or products in specific geographic areas, or for combinations of both, depending on the circumstances.
- (4) The denial of the request by the RFHWA may be appealed by the State to the Federal Highway Administrator (Administrator), whose action on the request shall be considered administratively final.
- (5) A request for a waiver which involves nationwide public interest or availability issues or more than one FHWA region may be submitted by the RFHWA to the Administrator for action.
- (6) A request for waiver and an appeal from a denial of a request must include facts and justification to support the granting of the waiver. The FHWA response to a request or appeal will be in writing and made available to the public upon request. Any request for a nationwide waiver and FHWA's action on such a request may be published in the **Federal Register** for public comment.
- (7) In determining whether the waivers described in paragraph (c)(1) of this section will be granted, the FHWA will consider all appropriate factors including, but not limited to, cost, administrative burden, and delay that would be imposed if the provision were not waived.
- (d) Standard State and Federal-aid contract procedures may be used to assure compliance with the requirements of this section.

[48 FR 53104, Nov. 25, 1983, as amended at 49 FR 18821, May 3, 1984; 58 FR 38975, July 21, 1993]

CHILD SUPPORT STATEMENT

Under Section 231.006, Family Code, the vendor or applicant certifies that the individual or business entity named in this contract, bid, or application is not ineligible to receive the specified grant, loan, or payment and acknowledges that this contract may be terminated and payment may be withheld if this certification is inaccurate.

State of Texas Child Support Business Ownership Form

County:	Project Name:
TxDOT CSJ:	LG Project Number:
Business Entity Submitting Bid:	
Section 231.006, Family Code, requires a bid number of individuals owning 25% or more of	for a contract paid from state funds to include the names and social security the business entity submitting the bid.
 In the spaces below please provide the the business. 	e names and social security number of individuals owning 25% or more of
Name	Social Security Number
 Please check the box below if no indi No individual own 25% of 	vidual owns 25% or more of the business.
Except as provided by Section 231.302(d), Fa	mily Code, a social security number is confidential and may be disclosed st for information from an agency operating under the provisions of Part A
contract, bid, or application is not ineligible to	dor or applicant certifies that the individual or business entity named in this receive the specified grant, loan, or payment and acknowledges that this be withheld if this certification is inaccurate.
are entitled on request to be informed about the Texas Government Code, you also are en	maintained by With few exceptions, you in einformation collected about you. Under Sections 552.021 and 552.023 or ititled to receive and review the information. Under Section 559.004 of the ve information about you corrected that you believe is incorrect.
Signature	 Date
Printed Name	

IF THIS PROJECT IS A JOINT VENTURE,

OSHA Implementation Procedures

The following requirements are to be followed for this project.

§ 635.108 Health and safety.

Contracts for projects shall include provisions designed:

- (a) To insure full compliance with all applicable Federal, State, and local laws governing safety, health and sanitation; and
- (b) To require that the contractor shall provide all safeguards, safety devices, and protective equipment and shall take any other actions reasonably necessary to protect the life and health of persons working at the site of the project and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

DISCLOSURE OF LOBBYING ACTIVITIES

Approved by OMB 0348-0046

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

(See reverse for public burden disclosure.)

1. Type of Federal Action: 2. Status of Federa		l Action:	3. Report Type:		
		ffer/application	a. initial filing		
b. grant b. initial		award b. material change		l change	
c. cooperative agreement	c. post-	award	For Material	Change Only:	
d. loan			year	quarter	
e. loan guarantee			date of las	st report	
f. loan insurance					
4. Name and Address of Reporting	Entity:	5. If Reporting En	tity in No. 4 is a S	ubawardee, Enter Name	
☐ Prime ☐ Subawardee		and Address of	Prime:		
Tier,	if known:				
Congressional District, if known	:		District, if known:		
6. Federal Department/Agency:		7. Federal Progra	m Name/Description	on:	
		CFDA Number, if applicable:			
8. Federal Action Number, if known):	9. Award Amount	, if known:		
		\$			
10. a. Name and Address of Lobby	ring Registrant	b. Individuals Per	forming Services	(including address if	
(if individual, last name, first n	•	different from N	•	(
	, ,	(last name, first	•		
		(333 3 3, 3	,		
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.		Signature:			
	Telephone No.:		Date:		
Fodorel Hoo Only				Authorized for Local Reproduction	
Federal Use Only:			Standard Form LLL (Rev. 7-97)		

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

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

- 1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
- 2. Identify the status of the covered Federal action.
- 3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
- 4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
- 5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
- 6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizationallevel below agency name, if known. For example, Department of Transportation, United States Coast Guard.
- 7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
- 8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
- 9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
- 10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.
 - (b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
- 11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

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

Non-Collusion Affidavit and Debarment Certification

PROJECT: DAGGETT AND D. MCRAE SRTS IMPROVEMENTS

HIGHWAY: VA COUNTY: TARRANT TXDOT CSJ: 0902 90 083

Signature of Notary Public

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME OR FOR A CORPERATION

The bidder being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the bidder intends to do the work with his own bonafide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion affidavit, the Contractor is certifying his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

SIGNATURE OF BIDDER

Texas Department of Transportation INSTRUCTIONS

Form 1560-CS
Professional Provider Insurance
(Rev. 03/13)
Page 1 of 2
(Previously Known As Form 1560-CSS)

BEFORE YOU SUBMIT THIS FORM, MAKE SURE:

- You have the most current 1560-CS TxDOT form. Go to the following TxDOT Internet site: http://www.txdot.gov/business/consultants/insurance.html then look for the Form 1560-CS.
- You have entered the 11-digit Vendor Identification Number, which includes your nine-digit FEIN (Federal Employer Identification Number).
- You have entered each authorized agent's complete address, telephone number, policy expiration dates, sign and date.
- If more than one agent covers different types of insurance (one writes Workers' Compensation, but another writes Auto), both have issued the certificate in its entirety.
- You have provided <u>all</u> requested information on the forms, which may be faxed but must be followed up with the originally signed forms to the address listed below.
- The form is being submitted in connection with a professional services contract.
- For construction and maintenance contracts, go to the following TxDOT Internet site: http://www.txdot.gov/business/contractors/contractor-insurance.html then look for the Form 1560.

DO NOT COMPLETE THIS FORM UNLESS WORKERS' COMPENSATION IS ENDORSED WITH A WAIVER OF SUBROGATION IN FAVOR OF TXDOT.

To avoid work suspension, an updated insurance form must reach the address listed below one business day prior to the expiration date. List the contractor's legal company name, including the DBA (doing business as) name as the insured. If a staff leasing service company is providing insurance, the staff leasing company name is shown first as the named insured and then in parenthesis identify the contractor/client company (i.e. XYZ Staff 4 U, Inc.-staff leasing service company (ABC Engineering, Inc.)). Show contact information (i.e. address, phone number, and etc.) for the insured/staff leasing service company in the appropriate spaces. Show the contact information (i.e. address, phone number, and etc.) for the contractor/client company in the appropriate spaces. The certificate of insurance, once on file with the department, is adequate for subsequent department contracts provided adequate coverage is still in effect. Do not refer to specific projects or contracts on this form. Over-stamping or over-typing entries on the certificate of insurance are not acceptable if they change the provisions of the certificate in any manner. Stamped, typed, or printed signatures are not acceptable. Pre-printed limits are the minimum required; if higher limits are provided by the policy, enter the higher limit amount and strike through or cross out the pre-printed limit. Binder numbers are not acceptable for policy numbers.

WORKERS' COMPENSATION INSURANCE:

The contractor is required to have Workers' Compensation Insurance if the contractor has any employees, including relatives. The word STATUTORY, under limits of liability, means that the insurer would pay benefits allowed under the Texas Workers' Compensation Law. GROUP HEALTH or ACCIDENT INSURANCE is not an acceptable substitute for Workers' Compensation.

COMMERCIAL GENERAL LIABILITY INSURANCE:

If coverages are specified separately, they must be at least these amounts:

Bodily Injury \$500,000 each occurrence Property Damage \$100,000 each occurrence \$100,000 for aggregate

MANUFACTURERS' or CONTRACTOR LIABILITY INSURANCE is not an acceptable substitute for Comprehensive General Liability Insurance or Commercial General Liability Insurance.

BUSINESS AUTOMOBILE POLICY:

The coverage amount for a Business Automobile Policy may be shown as a minimum of \$600,000 Combined Single Limit by a typed or printed entry and deletion of the specific amounts listed for Bodily Injury and Property Damage. Personal Automobile Liability Insurance is not an acceptable substitute for a Business Automobile Policy.

MAIL CERTIFICATES TO:
Texas Department of Transportation
Contract Services Office
125 E. 11th St.
Austin, TX 78701-2483
512-416-4620 (V) 512-416-4621 (F)



Authorized Agent's Phone Number

Texas Department of Transportation (TxDOT) CERTIFICATE OF INSURANCE

Form 1560-CS
Professional Provider Insurance
(Rev. 03/13)
Page 2 of 2
(Previously Known As Form 1560-CSS)

Date

This certificate of insurance is provided for informational purposes only. This certificate does not confer any rights or obligations other than the rights and obligations conveyed by the policies referenced on this certificate. The terms of the referenced policies control over the terms of this certificate.

Prior to the beginning of work, the Contractor shall obtain the minimum insurance and endorsements specified. Only the TxDOT certificate of insurance form is acceptable as proof of insurance for department contracts. Agents should complete the form providing all requested information then either fax or mail this form directly to the address listed on **page one** of this form. Copies of endorsements listed below are not required as attachments to this certificate.

Insured:						
Street/Mailing Address:						
City:			State: Zip Co			
Phone Number: Ver			umber (11 digits):			
Contractor/Client (if applicable):			•			
Street/Mailing Address:						
City:		St	ate:	Zip Code:		
Phone Number:		Vendor ID N	umber (11 digits):			
Workers' Compensation Ins Endorsed with a Waiver of Subro						
Carrier Name:		Carrier	Phone Number:			
Address:		City:		State:	Zip:	
Type of Insurance	Policy Number	Effective Date	Expiration Date	Lii	mits of Liability	
Workers' Compensation				Not Less Tha	n: Statutory - Texas	
Commercial General Liabilit	y Insurance:	·				
Carrier Name:		Carrier	Carrier Phone Number:			
Address:		City:		State:	Zip:	
Type of Insurance	Policy Number	Effective Date	Expiration Date	Li	mits of Liability	
Commercial General Liability Insurance Bodily Injury Property Damage OR Commercial General Liability Insurance				Not Less Than: \$500,000 each occurrence \$100,000 each occurrence \$100,000 for aggregate OR \$600,000 combined single limit		
Automobile Liability Insurar	nce:	•	•			
Carrier Name:		Carrier	Phone Number:			
Address:		City:		State:	Zip:	
Type of Insurance	Policy Number	Effective Date	Expiration Date	Li	mits of Liability	
Business Automobile Policy Bodily Injury Property Damage		Not Less Than: \$250,000 each person \$500,000 each occurrence \$100,000 each occurrence			ch person ch occurrence	
Authorized Agent name	e, address and zip co	ode:				
THIS IS TO CERTIFY to the Texas Dep this form is sent by facsimile machine receiving fax machine as the sender's of	(fax), the sender adopts the do					
The Texas Department of Transportation the information that we collect about yinformation. Under section 559.004 of the section 559.004 o	ou. Under sections 555.021 a	nd 553.023 of the Tex	as Government Code	, you also are en	titled to receive and review the	

Original Signature of Authorized Agent

Bidder Certification

By signing the proposal the bidder certifies:

- 1. the only persons or parties interested in this proposal are those named and the bidder has not directly or indirectly participated in collusion, entered into an agreement or otherwise taken any action in restraint of free competitive bidding in connection with the above captioned project.
- 2. in the event of the award of a contract, the organization represented will secure bonds for the full amount of the contract.
- 3. the signatory represents and warrants that they are an authorized signatory for the organization for which the bid is submitted and they have full and complete authority to submit this bid on behalf of their firm.
- that the certifications and representations contained in the proposal are true and accurate and the bidder intends the proposal to be taken as a genuine government record.

CONTRACTOR'S ASSURANCE

(Subcontracts-Federal Aid Projects)

By signing this proposal the contractor is giving assurances that all subcontract agreements of \$10,000 or more on this project will incorporate the following:

Special Provision "Certification of Nondiscrimination in Employment"

Special Provision "Notice of Requirement for Affirmative Action to Ensure Equal

Employment Opportunity" (Executive Order 11246)

Special Provision "Standard Federal Equal Employment Opportunity Construction

Contract Specifications" (Executive Order 11246)

Form FHWA 1273 "Required Contract Provisions Federal-aid Construction Contracts"

(Form FHWA 1273 must also be physically attached to subcontracts

and purchase orders of \$10,000 or more)

Applicable "Wage Determination Decision"

Also, by signing this proposal the contractor is giving assurances that all subcontract agreements will incorporate the Standard Specification and Special Provisions.

CSJ: 0902-90-084

Project: STP()TP

County: TARRANT

ENGINEER SEAL

The enclosed Texas Department of Transportation Specifications, Special Specifications, Special Provisions, General Notes and Specification Data in this document have been selected by me, or under my responsible supervision as being applicable to this project. Alteration of a sealed document without proper Notification to the responsible engineer is an Offence under the Texas Engineering Practice.

4.00 Anold, R.E.

"General Decision Number: TX20200026 03/13/2020

Superseded General Decision Number: TX20190026

State: Texas

Construction Type: Heavy

Counties: Johnson, Parker and Tarrant Counties in Texas.

Heavy Construction Projects (Including Water and Sewer Lines)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Publication Date Modification Number 01/03/2020 0 03/13/2020

* PLUM0146-002 11/01/2019

PLUMBER/PIPEFITTER\$	32.53	9.50
SUTX1990-041 06/01/1990		
I	Rates	Fringes
CARPENTER\$	10.40	\$3.64
Concrete Finisher\$	9.81	
ELECTRICIAN\$	13.26	
Form Setter\$	7.86	
Laborers: Common\$ Utility\$		
PAINTER\$	10.89	
Pipelayer\$	8.43	
Power equipment operators: Backhoe\$ Bulldozer.\$ Crane.\$ Front End Loader.\$ Mechanic.\$ Scraper.\$	10.76 13.16 10.54 10.93	3.30 3.30
Reinforcing Steel Setter\$	10.64	
TRUCK DRIVER\$		

Rates

Fringes

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

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is

like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

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

The body of each wage determination lists the classification $% \left(1\right) =\left(1\right) \left(1\right)$ and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

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

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

Survey Rate Identifiers

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

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

Union Average Rate Identifiers

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

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

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can
- an existing published wage determination
- a survey underlying a wage determination
- a Wage and Hour Division letter setting forth a position on a wage determination matter
- a conformance (additional classification and rate) ruling

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

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

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

2.) If the answer to the question in 1.) is yes, then an $\ensuremath{\text{\textbf{q}}}$ review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

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

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

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

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

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

END OF GENERAL DECISION"

Prison Produced Materials

635.417 Convict produced materials.

- (a) Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal-aid highway construction project if such materials have been:
 - (1) Produced by convicts who are on parole, supervised release, or probation from a prison or
 - (2) Produced in a qualified prison facility and the cumulative annual production amount of such materials for use in Federal-aid highway construction does not exceed the amount of such materials produced in such facility for use in Federal-aid highway construction during the 12-month period ending July 1, 1987.
- (b) Qualified prison facility means any prison facility in which convicts, during the 12-month period ending July 1, 1987, produced materials for use in Federal-aid highway construction projects.

Differing Site Conditions

- (a) Except as provided in paragraph (b) of this section, the following changed conditions contract clauses shall be made part of, and incorporated in, each highway construction project approved under 23 U.S.C. 106:
 - (1) Differing site conditions.
 - (i) During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the site is disturbed and before the affected work is performed.
 - (ii) Upon written notification, the engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding anticipated profits, will be made and the contract modified in writing accordingly. The engineer will notify the contractor of the determination whether or not an adjustment of the contract is warranted.
 - (iii) No contract adjustment which results in a benefit to the contractor will be allowed unless the contractor has provided the required written notice.
 - (iv) No contract adjustment will be allowed under this clause for any effects caused on unchanged work. (This provision may be omitted by the STD's at their option.)
 - (2) Suspensions of work ordered by the engineer.
 - (i) If the performance of all or any portion of the work is suspended or delayed by the engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the contractor shall submit to the engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.
 - (ii) Upon receipt, the engineer will evaluate the contractor's request. If the engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the engineer will make an adjustment

- (excluding profit) and modify the contract in writing accordingly. The contractor will be notified of the engineer's determination whether or not an adjustment of the contract is warranted.
- (iii) No contract adjustment will be allowed unless the contractor has submitted the request for adjustment within the time prescribed.
- (iv) No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.
- (3) Significant changes in the character of work.
 - (i) The engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and the contractor agrees to perform the work as altered.
 - (ii) If the alterations or changes in quantities significantly change the character of the work under the contract, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character, an adjustment, excluding anticipated profit, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the contractor in such amount as the engineer may determine to be fair and equitable.
 - (iii) If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for as provided elsewhere in the contract.
 - (iv) The term "significant change" shall be construed to apply only to the following circumstances:
 - (A) When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or
 - (B) When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

- (b) The provisions of this section shall be governed by the following:
 - (1) Where State statute does not permit one or more of the contract clauses included in paragraph (a) of this section, the State statute shall prevail and such clause or clauses need not be made applicable to Federal-aid highway contracts.
 - (2) Where the State transportation department has developed and implemented one or more of the contract clauses included in paragraph (a) of this section, such clause or clauses, as developed by the State transportation department may be included in Federal-aid highway contracts in lieu of the corresponding clause or clauses in paragraph (a) of this section. The State's action must be pursuant to a specific State statute requiring differing contract conditions clauses. Such State developed clause or clauses, however, must be in conformance with 23 U.S.C., 23 CFR and other applicable Federal statutes and regulations as appropriate and shall be subject to the Division Administrator's approval as part of the PS&E.
- (c) In the case of a design-build project, STDs are strongly encouraged to use "suspensions of work ordered by the engineer" clauses, and may consider "differing site condition" clauses and "significant changes in the character of work" clauses which are appropriate for the risk and responsibilities that are shared with the design-builder.

Project Number: STP ()TP Sheet A

County: TARRANT Control: 0902-90-084

Highway: V

Specification Data

Basis of Estimate

Item	Description	Rate	Unit
166	Fertilizer (16-8-8)	600 lb./acre**	ton
168	Vegetative Watering	169,400 gal./acre	1,000 gal.

^{**} Non-Pay, for Contractor's Information Only.

Single lane closures, except as otherwise shown in the plans, will be restricted to off-peak hours as defined in the following table:

Peak Hours		Off-Peak Hours	
7 to 9 AM Monday through Friday	4 to 6 PM Monday through Friday		All day Saturday and Sunday

Existing storm sewers and utilities are shown from the best available information. Verify the location of all underground facilities prior to starting work.

Project Number: STP ()TP Sheet B

County: TARRANT Control: 0902-90-084

Highway: VA

The following Holiday/Event lane closure restriction requirements apply to this project: No work that restricts or interferes with traffic shall be allowed between 3 PM on the day preceding a Holiday or Event and 9 AM on the day after the Holiday or Event.

Holiday Lane Closure Restrictions			
New Year's Eve and New Year's Day	3 PM December 30 through 9 AM January 2		
(December 31 through January 1)			
Easter Holiday Weekend (Friday through	3PM Thursday through 9 AM Monday		
Sunday)			
Memorial Day Weekend (Friday through	3 PM Thursday through 9 AM Tuesday		
Monday)			
Independence Day (July 3 through July 5)	3 PM July 2 through 9 AM July 6		
Labor Day Weekend (Friday through	3 PM Thursday through 9 AM Tuesday		
Monday)			
Thanksgiving Holiday (Wednesday through	3 PM Tuesday through 9 AM Monday		
Sunday)			
Christmas Holiday (December 23 through	3 PM December 22 through 9 AM December		
December 26)	27		

Plan work schedules around the appropriate dates above to ensure productive work is performed without lane closures.

Modifications to Lane Closure / Work Restrictions:

Submit a request in writing for approval by the Engineer a minimum of 10 days in advance of implementing a change to lane closure restrictions.

When deemed necessary, the Engineer will lengthen, shorten, or otherwise modify lane closure restrictions as traffic conditions warrant.

When deemed necessary, the Engineer will modify the list of major events when new events develop, existing events are rescheduled, or when warranted.

Special Events/ Special Situations will be handled on a case-by-case basis. No work restricting lane closures is allowed from 3 PM a day before to 9 AM the day after the Special Event or Special Situation.

Project Number: STP ()TP Sheet C

County: TARRANT Control: 0902-90-084

Highway: VA

Prevention of Migratory Bird Nesting

It is anticipated that migratory birds, a protected group of species, may try to nest on bridges, culverts, vegetation, or gravel substrate, at any time of the year. The preferred nesting season for migratory birds is from February 15 through October 1. When practicable, schedule construction operations outside of the preferred nesting season. Otherwise, avoid nests containing migratory birds and perform no work in the nesting areas until the young birds have fledged.

Structures

Do not begin bridge and culvert construction operations until swallow nesting prevention is implemented, until after October 1 if it's determined that swallow nesting is actively occurring, or until it's determined swallow nests have been abandoned. If the State installed nesting deterrent on the bridges and culverts, maintain the existing nesting deterrent to prevent swallow nesting until October 1 or completion of the bridge and culvert work, whichever occurs earlier. If new nests are built and occupied after the beginning of the work, do not perform work that can interfere with or discourage swallows from returning to their nests. Prevention of swallow nesting can be performed by one of the following methods:

- 1. By February 15 begin the removal of any existing mud nests and all other mud placed by swallows for the construction of nests on any portion of the bridge and culverts. The Engineer will inspect the bridges and culverts for nest building activity. If swallows begin nest building, scrape or wash down all nest sites. Perform these activities daily unless the Engineer determines the need to do this work more frequently. Remove nests and mud through October 1 or until bridge and culvert construction operations are completed.
- 2. By February 15 place a nesting deterrent (which prevents access to the bridge and culvert by swallows) on the entire bridge (except deck and railing) and culverts.

No extension of time or compensation payment will be granted for a delay or suspension of work caused by nesting swallows. This work is subsidiary to the various bid items.

The Contractor's attention is directed to the following list of temporary easements and their expiration dates:

Parcel Number Expiration Date

Complete all work in these easement areas prior to the expiration dates shown. In the event that work is done after these expiration dates, all costs for extending these dates will be paid by the Contractor.

^{*} Note: The final list of temporary easements are yet to be finalized.

Project Number: STP ()TP Sheet D

County: TARRANT Control: 0902-90-084

Highway: VA

Remove all existing fences within the right of way and remove and replace all existing fences within easements where such fences conflict with the work. Protect the remaining fence from damage due to slacking. Erect temporary fencing in the easement areas as necessary to secure the property. Provide at least one week notice to the property owner prior to removing or relocating the fence. Restore permanent fencing to an equal or better condition.

Mail box manipulation made necessary because of construction will be in accordance with Item 560 "Mailbox Assemblies," except that this work will not be paid for directly but will subsidiary to the pertinent bid items.

Provide all-weather surface for temporary ingress and egress to adjacent property, as directed. Materials, labor, equipment and incidentals necessary to provide temporary ingress and egress will not be paid for directly but will be subsidiary to the various bid items.

Where necessary, the governing slopes indicated herein may be varied from the limits shown, to the extent approved.

On superelevated curves the shoulders will have the same cross-slope as the pavement, unless otherwise indicated.

On superelevated curves where the grade line is in a sag or on a flat grade, overlay the shoulders to the extent necessary to prevent trapping of water on the high side.

All driveway openings will be determined by the Engineer and will conform with Texas Department of Transportation "Regulations for Access Driveways to State Highways" adopted September 1953, and revised June 2004.

Locations and lengths of all private entrances are approximate only. The actual locations, lengths, lines, and grades are to be established in the field.

Locations and lengths of all private entrances are approximate only. The actual locations, lengths, lines and grades are to be determined by the Engineer and shall conform to the regulations of The City of Fort Worth.

Do not discolor or damage existing curb and curb and gutter during construction operations. In the event of discoloration or damage, clean or repair as directed.

Remove the grass from the crown of shoulders or pavement edges by blading or other approved methods. Payment for this work will not be made directly but will be subsidiary to the various items of the contract.

Project Number: STP ()TP Sheet E

County: TARRANT Control: 0902-90-084

Highway: VA

The City will perform certain preliminary work and will complete the work in such sequence and manner that the Contractor will be able to begin his work at the specified time.

The State will perform certain preliminary work and will complete the work in such sequence and manner that the Contractor will be able to begin his work at the specified time.

Item 100. Preparing Right of Way

Measurement for this item will be along the centerline of the project with the limits of measurements as shown on the plans.

Item 105. Removing Treated and Untreated Base and Asphalt Pavement

Cement, lime, and/or lime fly-ash treated base material removed on this project will become the property of the Contractor.

Item 110. Excavation

Review proposed waste sites to determine if any site is located in a "Base Floodplain" or "Floodway" as defined by the Federal Emergency Management Agency (FEMA).

If waste material from this project is placed in a base floodplain as defined by FEMA, obtain a permit from the local community responsible for enforcing National Flood Insurance Program (NFIP) regulations. Ensure that the owner of the property receiving the waste has obtained the necessary permit.

Item 161. Compost

Place approximately 4" of compost manufactured topsoil (CMT) on all cut and fill slopes (except drainage channels where flexible channel liners are indicated), at other locations shown on the plans, or as directed.

Item 162. Sodding for Erosion Control

Furnish and place Bermudagrass sod. To obtain an estimate on quantities, it was assumed to replace 3' of sod on either side of the proposed sidewalk.

Item 168. Vegetative Watering

Furnish and install an approved rain gauge at the project site, as directed. Furnishing and installation of the rain gauge will not be paid for directly but will be subsidiary to Item 168.

Project Number: STP ()TP Sheet F

County: TARRANT Control: 0902-90-084

Highway: VA

Apply vegetative watering for an establishment period of thirteen weeks following application of seed or installation of sod, at a rate of 1/2 inch of water depth per week (approximately 13,030 gallons per acre). During the first four weeks after seeding, apply water twice per week, on non-consecutive days, each at half the weekly application rate. For the remainder of the establishment period, apply vegetative watering once per week during the months of January through June or September through December, at the weekly application rate; apply watering twice per week, on non-consecutive days during the months of July and August, each at one-half the weekly application rate.

Average weekly rainfall rates for the District are:

January—0.39"	April—0.86"	July—0.48"	October—0.68"
February—0.46"	May—1.00"	August—0.47"	November—0.46"
March—0.48"	June—0.63"	September—0.74"	December—0.37"

Item 360. Concrete Pavement

Furnish a CSS-1P with greater than 50% asphalt residue for the tack coat on this project.

When using the Hardy Chair-Lok to support reinforcing steel, chair spacing may be increased to 1.67 sq. yd. per chair, placed in a diamond or square pattern. Do not exceed 60" longitudinal spacing.

The provisions of Article 360.6.2, "Deficient Thickness Adjustment," will not be a requirement and the pavement will not be cored.

Include the approved mix design number on each delivery ticket.

Item 502. Barricades, Signs, and Traffic Handling

Permanent signs may be installed when construction in an area is complete and they will not conflict with the traffic control plan for the remainder of the job.

Existing signs are to remain as long as they do not interfere with construction and they do not conflict with the traffic control plan.

Any sign not detailed in the plans but called for in the layout will be as shown in the current "Standard Highway Sign Designs for Texas".

When traffic is obstructed, arrange warning devices in accordance with the latest edition of the "Texas Manual on Uniform Traffic Control Devices".

Cover or remove any work zone signs when work or condition referenced is not occurring.

Project Number: STP ()TP Sheet G

County: TARRANT Control: 0902-90-084

Highway: VA

Do not place barricades, signs, or any other traffic control devices where they interfere with sight distance at driveways or side streets. Provide access to all driveways during all phases of construction unless otherwise noted in the plans or as directed.

Item 506. Temporary Erosion, Sedimentation, and Environmental Controls

The SW3P for this project will consist of using the following items as directed:

- Temporary sediment control fence
- Erosion control logs

Remove accumulated sediment or replace SW3P controls when the capacity has been reduced by 50% or when the depth of sediment at the control structure exceeds one foot.

Items 530 And 531. Intersections, Driveways and Turnouts, and Sidewalks

The furnishing and installation of the sand cushion in proposed sidewalks, sidewalk ramps, and driveways will not be paid for directly but will be subsidiary to this bid item.

Item 666. Reflectorized Pavement Markings with Retroreflective Requirements

Collection of retroreflectivity readings using a mobile retroreflectometer is the preferred method. If retroreflectivity readings are collected using a portable or handheld unit, then measurement is defined as a collective average of at least 20 readings taken along a 200-foot test section. A minimum of three measurements will be required per mile of roadway. Measurements collected on a centerline stripe will be averaged separately for stripe in each direction of travel.

Technical Specifications

The following are governing specifications for the Plans for <u>CSJ 0902-90-084</u> for construction of pedestrian improvements consisting of sidewalk, curb ramp, signing and striping improvements.

All specifications applicable to construction for this project are identified as follows:

<u>TxDOT Standard Specifications</u>: Adopted by the Texas Department of Transportation November 1, 2014. Standard specifications are incorporated into the contract by reference.

Item 1	Abbreviations and Definitions
Item 2	Instructions to Bidders
Item 3	Award and Execution of Contract
Item 4	Scope of Work
Item 5	Control of the Work
Item 6	Control of Materials
Item 7	Legal Relations and Responsibilities
Item 8	Prosecution and Progress
Item 9	Measurement and Payment
Item 100	Preparing Right of Way
Item 104	Removing Concrete
Item 105	Removing Treated and Untreated Base and Asphalt Pavement
Item 162	Sodding for Erosion Control
Item 168	Vegetative Watering
Item 420	Concrete Substructures
Item 432	Riprap (420)(421)(431)(440)(DMS-6200)
Item 479	Adjusting Manholes and Inlets
Item 500	Mobilization
Item 502	Barricades, Signs, and Traffic Handling
Item 506	Temporary Erosion, Sedimentation, and Environmental Controls (161)(432)(556)
Item 529	Concrete Curb, Gutter, and Combined Curb and Gutter (360)(420)(421)(440)
Item 530	Intersections, Driveways, and Turnouts
(247)(260)	(263)(275)(276)(292)(316)(330)(334)(340)(360)(421)(440)
Item 531	Sidewalks (360)(420)(421)(440)
Item 550	Chain Link Fence (421)(445)
Item 556	Pipe Underdrains
Item 644	Small Roadside Sign Assemblies (421)(440)(441)(442)(445)(636)(643)(656)
Item 666	Reflectorized Pavement Markings
Item 672	Raised Pavement Markers
Item 677	Eliminating Existing Pavement Markings and Markers (300)(302)(316)
Item 678	Pavement Surface Preparation for Markings
Item 690	Maintenance of Traffic Signals
(416)(421)	(476)(610)(618)(620)(622)(624)(625)(627)(628)(636)(656)(680)(682)(684)(685)(686)(687)(688)

TxDOT Special Provisions

SP002-009	
SP002-011	
SP003-011	
SP005-002	
SP006-001	
SP006-012	

SP007-001

SP007-004

SP007-008

SP008-030

SP008-033

SP502-007

SP666-007

TxDOT Special Specifications Item 1004 Tree Protection

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

- 2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

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

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

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

- b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination: and
 - (ii) The classification is utilized in the area by the construction industry; and
 - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
 - (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
 - (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

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

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

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

- b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

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

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

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

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- 8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- 9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, $18\,U.S.C.\,1001.$

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
- 4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "participant," "person," "principal,"
 and "voluntarily excluded," as used in this clause, are defined
 in 2 CFR Parts 180 and 1200. "First Tier Covered
 Transactions" refers to any covered transaction between a
 grantee or subgrantee of Federal funds and a participant (such
 as the prime or general contract). "Lower Tier Covered
 Transactions" refers to any covered transaction under a First
 Tier Covered Transaction (such as subcontracts). "First Tier
 Participant" refers to the participant who has entered into a
 covered transaction with a grantee or subgrantee of Federal
 funds (such as the prime or general contractor). "Lower Tier
 Participant" refers any participant who has entered into a
 covered transaction with a First Tier Participant or other Lower
 Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "participant," "person," "principal,"
 and "voluntarily excluded," as used in this clause, are defined
 in 2 CFR Parts 180 and 1200. You may contact the person to
 which this proposal is submitted for assistance in obtaining a
 copy of those regulations. "First Tier Covered Transactions"
 refers to any covered transaction between a grantee or
 subgrantee of Federal funds and a participant (such as the
 prime or general contract). "Lower Tier Covered Transactions"
 refers to any covered transaction under a First Tier Covered
 Transaction (such as subcontracts). "First Tier Participant"
 refers to the participant who has entered into a covered
 transaction with a grantee or subgrantee of Federal funds
 (such as the prime or general contractor). "Lower Tier
 Participant" refers any participant who has entered into a
 covered transaction with a First Tier Participant or other Lower
 Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.