SPECIFICATIONS AND CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF

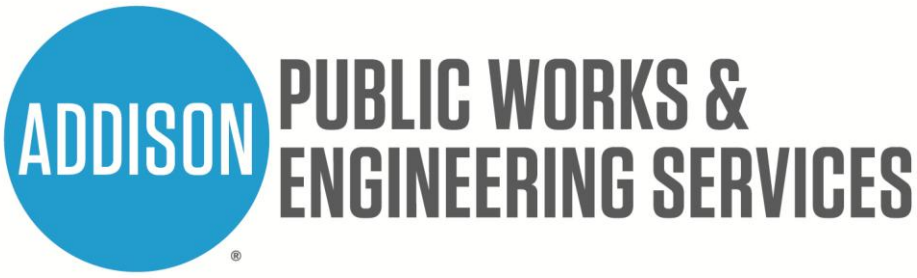
Project Name: ADDISON JUNCTION PUBLIC INFRASTRUCTURE IMPROVEMENTS Project # C00057

TOWN OF ADDISON, TEXAS
PUBLIC WORKS AND ENGINEERING SERVICES
BID NUMBER 27-31

NOVEMBER 13, 2026

225 E. JOHN W. CARPENTER FREEWAY

SUITE 1100, IRVING, TX 75062
(214) 420-5600



TOWN OF ADDISON, TEXAS

MAYOR

Bruce Arfsten

COUNCIL MEMBERS

Chris DeFrancisco

Darren Gardner

Schnell Blanton

Dan Liscio

Randy Smith

Marlin Willesen

CITY MANAGER

David Gaines

DIRECTOR OF PUBLIC WORKS AND ENGINEERING SERVICES

Rebecca Diviney, P.E.

CAPITAL/DEVELOPMENT PROJECTS MANAGER

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SECTION AB

ADVERTISEMENT FOR BIDS

ADVERTISEMENT FOR BIDS

(a) The Town of Addison is requesting bids for ADDISON JUNCTION PUBLIC INFRASTRUCTURE IMPROVEMENTS. **Bids will be accepted until 2:00 PM CST, DECEMBER 15, 2026 electronically through www.civcastusa.com or, for paper bids,** at the Finance Building, 5300 Belt Line Road, Dallas, Texas 75254 – Attention Purchasing Department, at which time responders names and bids will be publicly read aloud. Late bids will not be considered. The plans, specifications, quantities, pre-bid time and date, and other information are available on www.civcastusa.com. The plans, specifications, and quantities for the work to be done are also on file with Public Works & Engineering Services Department , Town of Addison, 16801 Westgrove Drive, Addison, Texas 75001, and such plans, specifications, and quantities may be examined without charge. The Town of Addison reserves the right to waive any formalities, to reject any and all bids, and to select the proposal deemed most advantageous to the Town of Addison.

a) For paper bids, the Contractor shall identify his bid on the outside of the envelope by writing the words **PUBLIC WORKS AND ENGINEERING SERVICES BID NUMBER 27-31, ADDISON JUNCTION PUBLIC INFRASTRUCTURE IMPROVEMENTS.**

BIDS MAY BE SUBMITTED ELECTRONICALLY THROUGH WWW.CIVCASTUSA.COM OR AS SEALED PAPER BIDS. A DUPLICATE PAPER BID OR USB COPY IS NOT REQUIRED FOR AN ELECTRONIC CIVCAST BID.

(b) Bids shall be accompanied by a bid bond in an amount not less than five percent (5%) of the total maximum bid price payable without recourse to the Town of Addison from a reliable surety company licensed by the State of Texas to act as a Surety and be listed on the current U.S. Treasury Listing of Approved Sureties as a guarantee that the bidder will enter into a contract and execute a Performance Bond within ten (10) days after notice of award of contract to him.

(c) Plans, specifications and bidding documents may be downloaded from www.civcastusa.com. The Town of Addison is a "free buyer", meaning that prospective bidders need only a free registration to sign up for plan updates. Bidders assume all risk for acquiring specs and/or plans from third party sites and plan rooms, as only www.civcastusa.com will be directly updated by Addison.

(d) The right is reserved by the Mayor and the City Council as the interests of the City may require to reject any or all bids and to waive any formality in bids received and to select the proposal deemed most advantageous to the City.

(e) The Bidder (Proposer) must supply all the information required by the Proposal Form.

(f) A Performance Bond, Labor and Material Payment Bond, and Maintenance Bond will be required by the Owner; each Bond shall be in the amount of 100% of the total contract amount. Bonds shall be issued by a surety company licensed by the State of Texas to act as a Surety and be listed on the current U.S. Treasury Listing of Approved Sureties.

(g) The Bidder (Proposer) must supply all the information required by the Bidder Qualification Statement.

a) Pre-bid meeting will be held on 2:00 PM CST, NOVEMBER 19, 2026 in Town of Addison Public Works and Engineering Department, 16801 Westgrove Dr, Addison TX 75001. All perspective bidders are strongly encouraged to attend. A site visit will follow this meeting.

b) For information on bidding or work to be performed, please submit all questions on Civcast at www.civcastusa.com . **All questions must be received by 5:00 PM CST on DECEMBER 1, 2026. All questions received by this deadline will be answered by 5:00 PM CST ON DECEMBER 8, 2026.**

c) The project is bounded by Addison Road to the west, Festival Way to the north, Spectrum Drive to the east, and Arapaho Road to the south. The Work consists of roadway and public utility infrastructure improvements, including storm drainage, water distribution, and wastewater systems, along Festival Way, Julian Avenue, and Ace Alley. The Project also includes minor public utility improvements and associated pavement repairs on Spectrum Drive and Arapaho Road, installation of conduits along Festival Way, and reconstruction of pedestrian ramps at intersections along Festival Way. Additional Work includes site preparation and demolition, traffic control, erosion and sedimentation control measures, and all other appurtenant work necessary for completion of the Project in accordance with the plans and specifications.

d) Advertise:

1st advertisement : NOVEMBER 13, 2026

2nd advertisement : NOVEMBER 20, 2026

SECTION IB

INSTRUCTIONS TO BIDDERS

INSTRUCTIONS TO BIDDERS

b) **PROJECT: ADDISON JUNCTION PUBLIC INFRASTRUCTURE IMPROVEMENTS,** in the Town of Addison. The bids will be evaluated as stated in the Evaluation Criteria and Awarding of the Bid section of these Instructions to Bidders.

c) PROJECT DESCRIPTION: The project is bounded by Addison Road to the west, Festival Way to the north, Spectrum Drive to the east, and Arapaho Road to the south. The Work consists of roadway and public utility infrastructure improvements, including storm drainage, water distribution, and wastewater systems, along Festival Way, Julian Avenue, and Ace Alley. The Project also includes minor public utility improvements and associated pavement repairs on Spectrum Drive and Arapaho Road, installation of conduits along Festival Way, and reconstruction of pedestrian ramps at intersections along Festival Way. Additional Work includes site preparation and demolition, traffic control, erosion and sedimentation control measures, and all other appurtenant work necessary for completion of the Project in accordance with the plans and specifications.

d) **PROPOSALS:** Proposals must be in accordance with these instructions in order to receive consideration.

e) **DOCUMENTS:** Bidding Documents include the Project Manual (consisting of the Advertisement for Bids, these Instructions to Bidders, Proposal Forms, Reference Form, Contract Agreement, Performance Bond, Payment Bond, Maintenance Bond, Contractor's Affidavit of Bills Paid, General Provisions, Special Provisions, Project Sign, and Technical Specifications), a Waiver of Lien, Drawings, and Addenda which may be issued by the Town of Addison during the bidding period. Bidding Documents may be viewed and/or obtained under the terms and conditions set forth in the Advertisement for Bids, Section AB of this Project Manual.

f) **EXAMINATION OF DOCUMENTS AND SITE:** Bidders shall carefully examine the Bidding Documents and the construction site to obtain firsthand knowledge of the scope and the conditions of the Work. Each Contractor, Subcontractor and Sub-subcontractor, by submitting a proposal to perform any portion of the Work, represents and warrants that he has examined the Drawings, Specifications (Project Manual) and the site of the Work, and from his own investigation has satisfied himself as to the scope, accessibility, nature and location of the Work; the character of the equipment and other facilities needed for the performance of the Work; the character and extent of other work to be performed; the local conditions; labor availability, practices and jurisdictions; and other circumstances that may affect the performance of the Work. No additional compensation will be allowed by the Owner for the failure of such Contractor, Subcontractor or Sub-subcontractor to inform himself as to conditions affecting the Work.

g) **INTERPRETATION OF DOCUMENTS:** If any person contemplating submitting a bid for the proposed Contract is in doubt as to the meaning of any part of the Drawings, Specifications (Project Manual) or other proposed Contract Documents, he may submit questions through www.civcastusa.com no later than 5:00 PM CST on DECEMBER 1, 2026. All questions received by this deadline will be answered by 5:00 PM CST on DECEMBER 8, 2026. Bidders

should act promptly and allow sufficient time for a reply to reach them before preparing their bids. Any interpretation or clarification will be in the form of an Addendum duly issued. No alleged verbal interpretation or ruling will be held binding upon the Owner.

h) **SUBSTITUTIONS:** Conditions governing the submission of substitutions for specific materials, products, equipment and processes are in the Special Provisions. Requests for substitutions must be received by the Town of Addison seven (7) calendar days prior to the established bid date.

i) **ADDENDA:** Interpretations, clarifications, additions, deletions and modifications to the Documents during the bidding period will be issued in the form of Addenda and a copy of such Addenda will be released through www.civcastusa.com. It will be the responsibility of each person who has been issued a set of bid documents to secure all Addenda from www.civcastusa.com. Addenda will be a part of the Bidding Documents and the Contract Documents, and receipt of them shall be acknowledged in the Bid Form. All such interpretations and supplemental instructions will be in the form of written addenda to the contract documents which, if issued, will be released through www.civcastusa.com not later than three (3) calendar days prior to the date fixed for the opening of bids. If any bidder fails to acknowledge the receipt of such addenda in the space provided in the bid form, his bid will nevertheless be construed as though the receipt of such addenda had been acknowledged.

j) Evaluation Criteria and Awarding of the Bid: For best value, the Final Request for Bid and award will not only look for the lowest bidder, the bids will be scored by an evaluation committee consisting of Town staff, using criteria and associated weights.

(a) **Price**: Evaluation will award up to 50 points based on pricing.

(b) **Previous Performance & Technical Qualification**: Evaluation will award up to 40 points based on past performance contracts with public agencies and private industry in terms of cost control, quality of work, and compliance with performance schedules. List previous contracts and include the name, address, telephone number, and email address of the point of contact representing the public or private entity for each contract.

(c) **Capability and Response**: All contractors responding to the synopsis will be considered, however, evaluations will award up to 10 points based on location in the geographical area of the Town for emergency call response and knowledge of the locality, local laws, regulations, and practices.

Price	50%
Experience and Past Previous Performance	40%
Capability and Response	10%

k) **COMPLETION TIME:** The selected contractor shall use the time period between the awarding of the contract at Town Council and the date of Notice to Proceed to submit materials and shop drawings through VPM for approval by **the Engineer**. The Engineer shall review and return

these submittals through VPM in the most expedient manner possible to accommodate immediate material ordering.

From the commencement date stated in the written Notice to Proceed, the selected contractor shall have **300 calendar days** to construct the project and achieve substantial completion. Substantial completion for this project includes the following items:
Preliminary Punchlist walk-through with the Town performed;
The contractor shall achieve 100% final completion within 360 calendar days from the commencement date stated in the written Notice to Proceed. Final completion for this project shall include:
Punchlist items completed and approved by the Town;
Site clean-up;
Submittal of Record Drawings; and
Execution of Maintenance Bond.

l) **PREPARATION OF BIDS:** Prices quoted shall include all items of cost, expense, taxes, fees and charges incurred by, or arising out of, the performance of the work to be performed under the Contract. Paper bids shall be submitted in duplicate and shall be signed in ink. Electronic bids shall include the completed and signed bid documents uploaded through CivCast. Any bid on other than the required form will be considered informal and may be rejected. Erasures or other changes in a bid must be explained or noted over the initials of the bidder. Bids containing any conditions, omissions, unexplained erasures and alterations, or irregularities of any kind may be rejected as informal. The prices should be expressed in words and figures or they may be deemed informal and may be rejected. In case of discrepancy between the price written in the bid and that given in the figures, the price in writing will be considered as the bid. In the case of a discrepancy between a unit price and its extension, the unit price will govern. Failure to submit all requested information will make a bid irregular and subject to rejection. Bids shall be signed with name typed or printed below signature, and, if a partnership, give full name of all partners. Where bidder is a corporation, bids must be signed with the legal name of the corporation followed by the name of the state of incorporation and the legal signature of an officer authorized to bind the corporation to a contract.

NOTE: AN ELECTRONIC SPREADSHEET IS POSTED ON CIVCAST FOR CONTRACTORS CONVENIENCE TITLED “BID SCHEDULE BID 27-31.XLSX”. THIS SPREADSHEET MAY BE USED IN LIEU OF THE MANUAL HANDWRITTEN PROPOSAL FORM IN THE SPECIFICATIONS AND SHALL BE ATTACHED TO THE PROPOSAL AND MADE PART OF THE CONTRACT DOCUMENTS.USING THE SPREADSHEET OPTION SHALL NOT AMEND OR MODIFY ANY WORDING IN THE PROPOSAL FORM OR THE PLANS AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING THAT THE SPREADSHEET ADEQUATELY CONVEYS THEIR BID.

SUBMITTAL OF BIDS: Proposals submitted electronically through www.civcastusa.com or as sealed paper bids will be received at the time, date and place stated in the Advertisement for Bids. Proposals shall be made on unaltered Proposal Forms furnished by the Town of Addison. Bidders submitting paper bids shall submit proposals in an opaque, sealed envelope addressed

to the Owner and plainly mark on the outside of the envelope the name and address of the bidder. The envelopes shall also be marked with the following project description:

PUBLIC WORKS AND ENGINEERING SERVICES BID NUMBER 27-31

ADDISON JUNCTION PUBLIC INFRASTRUCTURE IMPROVEMENTS

The Bid Bond must be completed and signed by each bidder and submitted with the bid. Submit paper Bids by mail or in person prior to the time for receiving bids set forth in the Advertisement for Bids issued by the Town.

Electronic bidding through www.civcastusa.com is permitted at the Bidder's option. Electronic bidders shall submit the completed and signed Proposal Form, required Bid Bond or other required bid security, and all other required bid documents through CivCast before the stated deadline. A duplicate paper Bid or USB copy is not required for an electronic CivCast Bid. The Town of Addison uses CivCast to distribute bidding documents and receive electronic bids and proposals. There will be NO COST to the contractor for standard bids or proposals. Bid number 27-31 is considered a standard bid. Refer to www.civcastusa.com for further information.

m) **MODIFICATION AND WITHDRAWAL OF BIDS:** Prior to the time set for bid opening, bids may be withdrawn or modified. Bids may be modified only on the official bid form and must be signed by a person legally empowered to bind the bidder. No bidder shall modify, withdraw, or cancel his bid or any part thereof for sixty (60) calendar days after the time agreed upon for the receipt of bids.

n) **DISQUALIFICATION:** The Owner reserves the right to disqualify proposals, before or after the opening, upon evidence of collusion with intent to defraud or other illegal practices relating to this proposal upon the part of the bidder.

o) **SUBMISSION OF POST-BID INFORMATION:** Upon notification of acceptance, the selected bidder shall, within twenty-four (24) hours, submit the following:

1. A designation of the portions of the Work proposed to be performed by the bidder with his own force.
2. A list of names of the Subcontractors or other persons or organizations, including those who are to furnish materials and equipment fabricated to a special design proposed for such portions of the Work as may be designated in the Bidding Documents or as may be requested by the Town of Addison. The bidder will be required to establish to the satisfaction of the Owner the reliability and responsibility of the proposed Subcontractors and suppliers to furnish and perform the Work.

3. Other information as required.

p) **AWARD:** The Owner reserves the right to accept any or to reject any bids without compensation to bidders and to waive irregularities and informalities. The Town of Addison Public Works & Engineering Services Department, in making its recommendation, will consider the following elements:

1. Whether the bidder is a contractor with experience in the type of work involved.

2. Whether the bidder has adequate plant, equipment and personnel to perform the work properly and expeditiously.
3. Whether the bidder has a suitable financial status and reputation for meeting obligations incident to work of the kind specified.
4. Whether the bidder has complied with the terms and conditions.

Alternate items may or may not be awarded. Addition or deletion of other items or schedules will be governed by the *Standard Specifications for Public Works Construction – North Central Texas, November 2017, 5th Edition* (amendments identified in Special Provision in this document) (hereinafter called SSPWC) Item 104.2 "Change or Modification of Contract".

q) **EXECUTION OF THE CONTRACT:** The successful bidder will be required to enter into a contract with the Owner within ten (10) days of notice by the Owner that his bid has been accepted. Failure to enter into a contract within the established time limit shall be considered grounds for forfeiture of the bid bond.

r) **CONSTRUCTION SCHEDULE:** It is the Owner's desire to have the project completed and operational in as short a time as possible. The number of calendar days for completion of the project will begin with the date specified in the Notice to Proceed. The Notice to Proceed will be issued in a manner to facilitate a smooth construction of the project. The Contractor shall begin construction within ten (10) calendar days of the issuance of the Notice to Proceed.

s) **COST PLUS TIME BIDDING:** N/A

t) **FORM OF CONTRACT:** The contract for the construction of the project will be drawn up by the Owner. A sample form of agreement is included in the Contract Agreement Section.

u) **BONDS:** A Performance Bond, a Labor and Material Payment Bond and a Maintenance Bond will be required by the Owner. The Performance Bond and Payment Bond shall name the Town of Addison, and others as directed by the Town, as joint obligees. Sample forms have been included in the Performance Bond, Payment Bond, and Maintenance Bond sections. (Contractor shall confirm the legal names of obligees prior to execution of Bonds.)

v) **BID SECURITY:** Bids shall be accompanied by a bid bond in an amount not less than five percent (5%) of the total maximum bid price payable without recourse to the Town of Addison from a surety company licensed to do business in the State of Texas as a guarantee that the bidder will enter into a contract and execute a Performance Bond and Payment Bond within ten (10) calendar days after notice of award of contract to him.

w) **RESOLUTIONS:** If the bidder is a corporation, a copy of the resolution empowering the person submitting the bid to bind the bidder must be included with the bid.

x) **CONSTRUCTION STAKING:** Construction staking and re-staking will not be provided by the Owner. Benchmarks and Horizontal Control are shown on the plans. When a separate construction staking item is included in the Bid Proposal, payment shall be under that item; otherwise the contractor must include value for staking in the various bid items as subsidiary to

the contract. Any staking or re-staking that is required shall be the responsibility of the Contractor and shall be at no cost to the Owner.

y) **FINAL PAYMENT:** The general provisions for Final Payment shall be as stated in Item 109.5.4 of the SSPWC including all Amendments and Additions. Prior to final payment the Contractor shall provide the Owner with the following items through VPM, with originals provided when required by the Contract Documents:

A Contractor's Affidavit of Bills Paid in accordance with Section BP.

A Consent of Surety Company to Final Payment.

A complete set of record plans which indicate all construction variations from the original construction documents in accordance with the Special Provisions.

A Two (2) years Maintenance Bond in accordance with Section MB.

Acknowledgement that the project has been reviewed and accepted by TDLR.

z) **PREVAILING WAGE RATES:** Wage rates paid on this project shall not be less than specified in the schedule of general prevailing rates of per diem wages as attached in the Special Provisions.

aa) **PRIORITY OF CONTRACT DOCUMENTS:** The order of precedence stated in the signed Agreement shall govern. Where the Agreement does not establish an order of precedence, conflicts shall be resolved in the following order: signed agreement; performance and payment bonds; Information and Instruction Form; proposal; special provisions (or conditions); technical specifications; project drawings; general provisions; advertisement for bids. This priority list shall take precedence over Item 105.1.1 of the SSPWC. Referenced standards apply as provided in Special Provision in this document. Project-specific requirements and specific specification callouts shall take precedence over general references. Town of Addison requirements and details shall govern over NCTCOG standards where they conflict. TxDOT specifications apply only to expressly referenced work and do not have general precedence over Town or NCTCOG requirements.

Top of Form

Information and Instruction Form

RESPONSES THAT DO NOT CONTAIN THIS COMPLETED FORM MAY NOT BE COMPLIANT

Section I Company Profile

Name of Business:

Business Address:

Contact Name:

Phone#:

Fax#:

Email:

Name(s) Title of Authorized Company Officers:

Federal ID #: W-9 Form: A W-9 form will be required from the successful bidder.

DUN #:

Remit Address: If different than your physical address:

Section II Instructions to Bidders

Electronic Bids: Bidders may submit electronically through www.civcastusa.com or submit a sealed paper bid in accordance with Section IB and the Advertisement for Bids. The Town of Addison uses CivCast to distribute bidding documents and receive electronic bids and proposals. There will be **NO COST** to the Contractor/Supplier for standard bids or proposals. An **electronic CivCast bid does not require** a duplicate paper bid or USB copy.

Contractor/Supplier Responsibility: It is the contractor/suppliers responsibility to check for any addenda or questions and answers that might have been issued before bid closing date and time. Contractors/Suppliers will be notified of any addenda and Q&A if they are on the invited list, they view the bid, or add themselves to the watch list.

Acknowledgement of Addenda: #1 #2 #3 #4 #5

Delivery of Bids: For delivery of paper bids our physical address is:

Town of Addison

5300 Belt Line Road

Dallas, TX 75254

Attn: Purchasing Department

Contractor/Supplier Employees: No Contractor/Supplier employee shall have a direct or indirect financial interest in any contract with the town, or be directly or indirectly financially interested in the sale of land, materials, supplies or services to the town.

Deliveries: All deliveries will be F.O.B. Town of Addison. All Transportation Charges paid by the contractor/supplier to Destination.

Payment Terms: A Prompt Payment Discount of % is offered for Payment Made Within Days of Acceptance of Goods or Services. If Prompt Payments are not offered or accepted, payments shall be made 30 days after receipt and acceptance of goods or services or after the date of receipt of the invoice whichever is later.

Delivery Dates: Delivery Dates are to be specified in Calendar Days from the Date of Order.

Bid Prices: Pre-Award bid prices shall remain Firm and Irrevocable for a Period of ____60____ Days.

☐ Exceptions: Contractor/Supplier does not take Exception to Bid Specifications or Other Requirements of this Solicitation. If neither exceptions box is checked, default shall be "No Exceptions"

☐ Contractor/Supplier take the following Exception(s) to the Bid Specifications or Other Requirements of this Solicitation (Explain in Detail). If box checked but no exceptions are listed, default shall be "No Exceptions"

Historically Underutilized Business (HUB): It is the policy of the Town of Addison to involve HUBs in the procurement of goods, equipment, services and construction projects. Prime Contractors/Suppliers are encouraged to provide HUBs the opportunity to compete for sub-contracting and other procurement opportunities. A listing of HUBs in this area may be accessed at the following State of Texas Website. http://www.window.state.tx.us/procurement/cmbl/cmblhub.html.

HUB Owned Business Yes No Include a current copy of your HUB certification with your response or insert Certification number _____ and expire date _____.

Other Government Entities: Would bidder be willing to allow other local governmental entities to participate in this contract, if awarded under the same Terms and Conditions? Yes ☐ No ☐

Bid Bond: Is Bid Bond attached if applicable? ☐Yes ☐No

Termination: The town at any time after issuance of this agreement, by 30 days written notice, has the absolute right to terminate this agreement for cause or convenience. Cause shall be the contractor/supplier's refusal or failure to satisfactorily perform or complete the work within the time specified, or failure to meet the specifications, quantities, quality and/or other requirements specified in the contract/purchase order. In such case the supplier shall be liable for any damages suffered by the town. If the agreement is terminated for convenience, the supplier has no further obligation under the agreement. Payment shall be made to cover the cost of material and work in process or "consigned" to the town as of the effective date of the

termination.

Bidder Compliance: Bidder agrees to comply with all conditions contained in this Information and Instruction Form and the additional terms and conditions and specifications included in this request. The undersigned hereby agrees to furnish and deliver the articles or services as specified at the prices and terms herein stated and in strict accordance with the specifications and conditions, all of which are made a part of your offer. Your offer is not subject to withdrawal after the award is made.

The Town of Addison reserves the right to reject all or part of the offer and to accept the offer considered most advantageous to the town by item or total bid.

The Town of Addison will award to the lowest responsible bidder or to the bidder who provides goods or services at the best value for the Town.

I hereby certify that all of the information provided in sections I and II are true and accurate to the best of my knowledge.

Signature: Date:

Title:

Signature certifies no changes have been made to the content of this solicitation as provided by the Town of Addison.

10/17/17

Bottom of Form

Interested Parties

In 2015, the Texas Legislature adopted House Bill 1295, which added section 2252.908 of the Government Code. The law states that a governmental entity or state agency may not enter into certain contracts with a business entity unless the business entity submits a disclosure of interested parties to the governmental entity or state agency at the time the business entity submits the signed contract to the governmental entity or state agency. The law applies only to a contract of a governmental entity or state agency that either (1) requires an action or vote by the governing body of the entity or agency before the contract may be signed or (2) has a value of at least $1 million. The disclosure requirement applies to a contract entered into on or after January 1, 2016.

The Texas Ethics Commission was required to adopt rules necessary to implement that law, prescribe the disclosure of interested parties form, and post a copy of the form on the commission's website. The commission adopted the Certificate of Interested Parties form (Form 1295) on October 5, 2015. The commission also adopted new rules (Chapter 46) on November 30, 2015, to implement the law.

Filing Process

On January 1, 2016, the commission made available on its website a new filing application that must be used to file Form 1295. A business entity must use the application to enter the required information on Form 1295 and print a copy of the completed form, which will include a certification of filing that will contain a unique certification number. An authorized agent of the business entity must sign the printed copy of the form and have the form notarized. The completed Form 1295 with the certification of filing must be filed with the governmental body or state agency with which the business entity is entering into the contract.

The governmental entity or state agency must notify the commission, using the commission's filing application, of the receipt of the filed Form 1295 with the certification of filing not later than the 30th day after the date the contract binds all parties to the contract. The commission will post the completed Form 1295 to its website within seven business days after receiving notice from the governmental entity or state agency.

Information regarding how to use the filing application will be available on this site by January 1, 2016. https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm, please follow Instructional Video for Business Entities.

SECTION PF-1

PROPOSAL FORM

PROPOSAL FORM

_____ , 20__

TO: The Honorable Mayor and Town Council
Town of Addison, Texas

Gentlemen:

The undersigned bidder, having examined the plans, specifications and contract documents, and the location of the proposed work, and being fully advised as to the extent and character of the work, proposes to furnish all equipment and to perform labor and work necessary for completion of the work described by and in accordance with the Plans, Specifications and Contract for the following prices, to wit:

Signed by: _____

ACKNOWLEDGMENT OF ADDENDA:

The Bidder acknowledges receipt of the following addenda:

Addendum No. 1 _____

Addendum No. 2 _____

Addendum No. 3 _____

The following pages contain all bid items for:

BID SCHEDULE – ADDISON JUNCTION PUBLIC INFRASTRUCTURE IMPROVEMENTS
BID NUMBER 27-31

TOWN OF ADDISON
ADDISON JUNCTION PUBLIC INFRASTRUCTURE IMPROVEMENTS
BID NO. 27-31
UNIT PRICES

ITEM NO.	SPEC. NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	BID AMOUNT
	BASE BID					
P1		MOBILIZATION (5% MAX)	LS	1		
P2		BARRICADES, SIGNS, AND TRAFFIC HANDLING	LS	1		
P3	107.21	PROJECT SIGN	EA	2		
P4	201	GENERAL SITE PROTECTION	LS	1		
P5	203.1	GENERAL SITE PREPARATION	LS	1		
P6	701.2	REMOVE CONCRETE SIDEWALK/RAMPS	SY	868		
P7	701.2	REMOVE CONCRETE SIDEWALK WITH BRICK PAVERS	SY	134		
P8	701.2	REMOVE CONCRETE DRIVEWAY	SY	14		
P9	701.2	REMOVE CONCRETE PAVEMENT	SY	6,787		
P10	701.2	REMOVE MANHOLE (ANY SIZE)	EA	6		
P11	701.2	REMOVE INLET (ANY SIZE)	EA	11		
P12	701.2	REMOVE RCP (ANY SIZE)	LF	1,076		
P13	204.1	REMOVE TREES (ANY SIZE)	EA	12		
P14	701.2	REMOVE EX BOLLARD	EA	8		
P15	701.2	REMOVE EX SIGN POST AND FOUNDATION	EA	5		
P16	701.2	REMOVE EX FOUNDATION AND SALVAGE EX LIGHT POLE	EA	1		
P17	701.2	REMOVE EX STEEL/CHAIN LINK FENCE	LF	722		
P18	701.2	REMOVE EX STEEL PIPE RAILING	LF	10		
P19	701.2	REMOVE EX GUARDRAIL	LF	7		
P20	701.2	REMOVE EX SLOTTED DRAIN	LF	16		
P21	701.2.3	ADJUST EX VAULT TO PROP GRADE	EA	6		
P22	701.2.3	ADJUST EX HANDHOLE TO PROP GRADE	EA	2		
P23	203.2, 203.4, 203.5	UNCLASSIFIED EXCAVATION (INCLUDES ASPHALT REMOVAL)	CY	1,830		
P24	203.2, 203.4, 203.5	BORROW AND SPOIL (ROADWAY)	CY	385		
P25	301.2	HYDRATED LIME (36 LBS/SY)	TON	141		
P26	301.2	6" LIME TREATED SUBGRADE	SY	7,815		
P27	303	6" REINFORCED CONC PAVEMENT (INCLUDING CURB WHERE SHOWN)	SY	1,228		
P28	303	8" REINFORCED CONC PAVEMENT (INCLUDING CURB WHERE SHOWN)	SY	3,467		
P29	303	10" REINFORCED CONC PAVEMENT (INCLUDING CURB WHERE SHOWN)	SY	896		
P30	303	8" REINFORCED CONC PAVEMENT W/ DROP SLAB	SY	1,690		
P31	304	VEHICULAR PAVERS	SY	1,206		

P32	305.2	5" CONCRETE SIDEWALK	SY	814		
P33	305.2	5" CONCRETE SIDEWALK W/ PEDESTRIAN BRICK PAVERS	SY	113		
P34	305.2	PEDESTRIAN CURB RAMP	EA	6		
P35	305.2	8" REINFORCED CONCRETE TRAIL	SY	15		
P36	302	4" TYPE B HMAC (TEMPORARY TRAFFIC CONTROL)	SY	630		
P37	TXDOT 666	REFL PAV MRKG TY 1 (W) 4" SOLID - 90 MIL	LF	371		
P38	TXDOT 666	REFL PAV MRKG TY 1 (W) 8" SOLID - 90 MIL	LF	183		
P39	TXDOT 666	REFL PAV MRKG TY 1 (W) 12" SOLID - 125 MIL	LF	241		
P40	TXDOT 666	REFL PAV MRKG TY 1 (W) 24" STOP BAR - 125 MIL	LF	138		
P41	TXDOT 672	RAISED PAVEMENT MARKER TY II-C-R & SURFACE PREP	EA	3		
P42	TXDOT 672	RAISED PAVEMENT MARKER TY I-C & SURFACE PREP	EA	4		
P43	TXDOT 644	INSTALL NEW SIGN AND SIGN POST ASSEMBLY	EA	15		
P44	801.3	DART STEEL FENCE (MATCH EXISTING)	LF	20		
P45	801.3	STEEL FENCE (FESTIVAL WAY) (MATCH EXISTING)	LF	10		
P46	801.1	REMOVABLE TRAFFIC BOLLARDS	EA	20		
P47	801.3	PEDESTRIAN RAIL TYPE PR11	LF	10		
P48	801.4	CHAIN LINK FENCE (MATCH EXISTING)	LF	5		
P49		RELOCATE DUMPSTER AND DUMPSTER ENCLOSURE	LS	1		
D1	TXDOT 464	18 IN RCP CLASS III	LF	842		
D2	TXDOT 464	24 IN RCP CLASS III	LF	544		
D3	TXDOT 464	30 IN RCP CLASS III	LF	527		
D4	TXDOT 464	36 IN RCP CLASS III	LF	33		
D5	TXDOT 464	42 IN RCP CLASS III	LF	225		
D6	702	6 FOOT CURB INLET	EA	6		
D7	702	8 FOOT CURB INLET	EA	3		
D8	702	2'X2' WYE INLET	EA	1		
D9	702	3'X3' WYE INLET	EA	4		
D10	702	4'X4' WYE INLET	EA	1		
D11	702	TYPE A 3' MANHOLE	EA	4		
D12	702	TYPE A 4' MANHOLE	EA	4		
D13	702	TYPE B 4' MANHOLE	EA	1		
D14	702	TYPE B 5' MANHOLE	EA	6		
D15	702	TYPE B 6' MANHOLE	EA	1		
D16	107.20.3	TRENCH EXCAVATION PROTECTION (STORM SYSTEM)	LF	2,171		
D17	508.3	CONNECT TO EXISTING RCP (ANY SIZE)	EA	5		

D18	508.3	CONNECT TO EXISTING STRUCTURE (ANY SIZE)	EA	2		
D19	508.3	CUT AND PLUG EX RCP	EA	6		
D20	507.5.2	TELEVISION INSPECTION	LF	2,171		
W1	501.14	8-INCH PVC WATER LINE	LF	820		
W2	501.14	12-INCH PVC WATER LINE	LF	1,096		
W3	501.14	8-INCH PVC WATER LINE IN 18-INCH STEEL CASING PIPE	LF	20		
W4	503.2	18-INCH STEEL CASING PIPE	LF	20		
W5	501.14	12-INCH PVC WATER LINE IN 21-INCH STEEL CASING PIPE	LF	80		
W6	503.2	21-INCH STEEL CASING PIPE	LF	80		
W7	502.6.4	8-INCH GATE VALVE	EA	18		
W8	502.6.5	12-INCH GATE VALVE	EA	16		
W9	701.2	REMOVE EXISTING WATER LINE	LF	1,733		
W10		ABANDON EXISTING WATER LINE IN PLACE	LF	332		
W11	506.6	CONNECT TO EXISTING WATER LINE	EA	5		
W12	502.3	FIRE HYDRANT ASSEMBLY	EA	5		
W13	701.2	REMOVE AND SALVAGE EXISTING FIRE HYDRANT ASSEMBLY	EA	5		
W14	502.1	1-INCH TYPE K COPPER WATER SERVICE	LF	100		
W15	502.1	2-INCH TYPE K COPPER IRRIGATION SERVICE	LF	123		
W16	506.5, 506.7	HYDROSTATIC TESTING AND DISINFECTION	LS	1		
W17	507.5	TELEVISION INSPECTION	LF	2,016		
W18	107.20.3	TRENCH SAFETY (WATER SYSTEM)	LF	2,016		
W19	105.9	EXPOSE AND INSPECT EXISTING 24-INCH X 12-INCH TEE	EA	2		
W20	501.7, 506	REPLACE EXISTING 24-INCH X 12-INCH TEE (AS NEEDED, WITH TOWN APPROVAL)	EA	2		
W21	KH 33 13 20	TEMPORARY WATER SERVICE	LS	1		
SS1	502.1	4-FOOT DIAMETER STANDARD MANHOLE	EA	13		
SS2	502.1	6-FOOT DIAMETER DROP MANHOLE	EA	7		

SS3	501.17	8-INCH PVC SSWR LINE	LF	1,667		
SS4	501.17	12-INCH PVC SSWR LINE	LF	349		
SS5	501.14	6-INCH PVC PRESSURE PIPE SSWR LINE	LF	450		
SS6	501.14	8-INCH PVC PRESSURE PIPE SSWR LINE	LF	92		
SS7	501.14	12-INCH PVC PRESSURE PIPE SSWR LINE	LF	42		
SS8		SANITARY SEWER CLEANOUT	EA	21		
SS9	502.1	VACUUM TESTING OF WASTEWATER MANHOLES	EA	20		
SS10	507.6	CONNECTION TO EXISTING WASTEWATER MAIN	EA	3		
SS11		ABANDON EXISTING WASTEWATER LINE IN PLACE (NO GROUT)	LF	416		
SS12	701.2	REMOVE AND DISPOSE OF EXISTING WASTEWATER LINE	LF	1,297		
SS13	701.2	REMOVE AND DISPOSE OF EXISTING WASTEWATER MANHOLE	EA	10		
SS14	507.5	TELEVISION INSPECTION	LF	2,600		
SS15	107.20.3	TRENCH SAFETY (SANITARY SEWER SYSTEM)	LF	954		
SS16		CONTROLLED LOW STRENGTH MATERIAL (CLSM) EMBEDMENT FOR WASTEWATER MAINS	LF	20		
SS17	KH 33 030 10	BYPASS PUMPING	LS	1		
SS18	3 31 23, KH 33	PIPE BURSTING OR CURED IN PLACE PIPE (CIPP)	LF	668		
SS19	3 31 23, KH 33	SANITARY SEWER POINT REPAIR (AS NEEDED, WITH TOWN APPROVAL)	EA	5		
ILL1	702.8	DRILL SHAFT (30 IN)	VF	6		
ILL2	805	2" PVC SCH. 40 STREET LIGHT CONDUIT (TRENCH)	LF	1,065		
ILL3	805	2" PVC SCH. 40 ELECTRICAL CONDUIT (TRENCH)	LF	970		
ILL4	805	2" PVC SCH. 80 STREET LIGHT CONDUIT (TRENCH)	LF	200		
ILL5	805	2" PVC SCH. 80 ELECTRICAL CONDUIT (TRENCH)	LF	250		
ILL6	805	4" HDPE CONDUIT (TRENCH)	LF	1,200		
ILL7	805	STREET LIGHT PULL BOXES	EA	14		
ILL8	805	ELECTRICAL PULL BOXES	EA	13		
ILL9	805	FIBER PULL BOXES	EA	7		
ILL10	805	REINSTALL EXISTING STREET LIGHT ON NEW FOUNDATION	EA	1		
EC1	202.14	INLET PROTECTION (INSTALL/MAINTAIN/REMOVE)	LF	350		
EC2	202.5	SEDIMENT CONTROL FENCE (INSTALL/MAINTAIN/REMOVE)	LF	3,910		
EC3	202	STORM WATER POLLUTION PREVENTION PLAN	LS	1		
EC4	204.2	TOPSOIL	SY	3,920		
EC5	204.5	BLOCK SODDING	SY	3,920		
O1		OWNER'S CONTINGENCY	LS	1		
					SUBTOTAL (BASE BID) =	

	ADDITIVE ALTERNATE 1					
W10		ABANDON EXISTING WATER LINE IN PLACE	LF	(332)		
W22		GROUT EXISTING WATER LINE ABANDONED IN PLACE (AS NEEDED, WITH TOWN APPROVAL)	LF	332		
SS11		ABANDON EXISTING WASTEWATER LINE IN PLACE (NO GROUT)	LF	(416)		
SS20		GROUT EXISTING WASTEWATER LINE ABANDONED IN PLACE (AS NEEDED, WITH TOWN APPROVAL)	LF	416		
					SUBTOTAL (ADDITIVE ALTERNATE 1) =	
	ADDITIVE ALTERNATE 2 (PAVER IMPROVEMENTS)					
P23	203.2, 203.4, 203.5	UNCLASSIFIED EXCAVATION (INCLUDES ASPHALT REMOVAL)	CY	90		
P28	303	8" REINFORCED CONC PAVEMENT (INCLUDING CURB WHERE SHOWN)	SY	(1,785)		
P30	303	8" REINFORCED CONC PAVEMENT W/ DROP SLAB	SY	1,785		
P31	304	VEHICULAR PAVERS	SY	1,785		
					SUBTOTAL (ADDITIVE ALTERNATE 2) =	
					TOTAL (BASE BID) =	
					TOTAL (BASE BID + ADDITIVE ALTERNATE 1) =	
					TOTAL (BASE BID + ADDITIVE ALTERNATE 2) =	
					TOTAL (BASE BID + ADDITIVE ALTERNATE 1 + ADDITIVE ALTERNATE 2) =	

NOTES:

(d) All items, labor, materials, equipment, facilities, incidentals and work required for construction of the project are to be provided and installed by the Contractor as part of the project and payment for the cost of such shall be included in the price bid for the construction of the project.

(e) Prices must be shown in words and figures for each item listed in the Proposal. In the event of discrepancy, the words shall control.

(f) Materials, which are "tax exempt", are those items which are physically incorporated into the facilities constructed for the Town of Addison, as set forth in the Special Provisions. Materials include, but are not limited to purchased items such as water pipe, sanitary sewer pipe, storm drain pipe, etc.

Services, which are "not tax exempt", are those items which are used by the Contractor but are not physically incorporated into the Town of Addison's facility and/or items which are consumed by construction, as set forth in the Special Provisions. Services include, but are not limited to, items such as supplies, tools, skill and labor, the purchase, rental or lease of equipment, etc.

_____

Name of Person Signing Bid

_____

Signature of Person Signing Bid

_____

Address

_____

Telephone No. Fax No.

_____

T.I.N. (Tax Identification or Employer's Number)

If BIDDER is:

AN INDIVIDUAL

By _____ (Seal)
(Individual's Name)

doing business as _____

Business address: _____

_____

_____

Phone No. _____

A PARTNERSHIP

By _____ (Seal)
(Firm Name)

_____
(General Partner)

doing business as _____

Business address: _____

_____

_____

Phone No. _____

A CORPORATION

By _____
(Corporation Name)

_____
(State of Incorporation)

By _____
(Name of Person Authorized to Sign)

_____
(Title)

(Corporate Seal)

Attest _____
(Secretary)

Business address: _____

_____

_____

Phone No. _____

A JOINT VENTURE

By _____
(Name)

_____
(Address)

By _____
(Name)

_____
(Address)

(Each joint venture must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above.)

SECTION BB

BID BOND

BID BOND

Bidder shall submit a bid bond equal to five percent (5%) of the bid price. Failure to submit a bid bond when required may deem the bid non-responsive. Bid Bonds may be submitted electronically with the executed original provided immediately upon request.

SECTION BQS

BIDDER QUALIFICATION STATEMENT

SECTION BQS

ALL BIDDERS ARE NOTIFIED THAT THE FOLLOWING QUALIFICATION STATEMENT MUST BE COMPLETED AND SUBMITTED WITH THE BID PROPOSAL

CONTRACTOR'S QUALIFICATIONS

The Contractor shall show that he has experience with similar projects that require working on water, sanitary sewer, and storm sewer construction and/or relocation projects working in confined areas in close proximity to many physical features (such as: fences, carports, utility poles, guy lines, gas lines and meters, water lines, sewer manholes and cleanouts, etc.) which will require the Contractor to plan his work efforts and equipment needs with these limitations in mind. The Contractor shall submit a complete list of ALL Municipal and Similar Non-Municipal current and completed projects for the past three (3) years for review. This list shall include the names of supervisors and type of equipment used to perform this work.

BIDDERS QUALIFICATION STATEMENT

PUBLIC WORKS AND ENGINEERING SERVICES BID NUMBER 27-31,
ADDISON JUNCTION PUBLIC INFRASTRUCTURE IMPROVEMENTS

Contractor:_____

Indicate One: _____Sole Proprietor _____Partnership _____Other

_____Corporation _____ Joint Venture

Name:_____Partner:_____

Title:_____Title:_____

Address:_____ Address:_____

City:_____ City:_____

State & Zip:_____ State & Zip:_____

Phone:_____ ___Phone:_____

State and Date of Incorporation, Partnership, Ownership, Etc._____

Location of Principal Office:_____

Contact and Phone at Principal Office:_____

Liability Insurance Provider and Limits of Coverage:_____

Workers Compensation Insurance Provider:_____

Surety (Performance and Payment):_____

Address:_____
___

Contact and Phone:_____

Superintendent and Backup Superintendent: (Work Resume - attach additional sheets.) (Safety Record – attached additional sheets; if needed show all verified safety violations.) The superintendent shall be able to communicate in English and not operate any equipment and have not had any verified job safety violations in the past five years. Any variations shall be reviewed by the OWNER for approval or denial. A job site shall be shut down if proper supervision is not provided.

Superintendent Name Backup Superintendent Name

_____ _____

Safety Record – List ALL Verified Violations for Superintendent and Backup Superintendent with explanation, date and action taken to correct future safety violations:

Superintendent

_____

_____

_____

_____

Backup Superintendent

_____

_____

_____

_____

Total Number of Employees to be Associated with this Job:_____

Managerial_____ Administrative_____ Professional_____

Skilled_____ Semi-Skilled_____ Other_____

Percentage of work to be done by Bidder's Employees (Based on Dollars Bid): _____

Type(s) of work to be done by Bidder's Employees (examples: concrete paving, structural concrete, waterlines, sanitary sewer lines, storm pipe, storm inlets, excavation, lime, bridge fencing, etc.)

_____

_____

_____

Access to Tools and Equipment: Percent Owned____ Percent Rented____

Number of Years in Business as a Contractor on Above Types of Works:_____

Type(s) of Work to be done by Sub-Contractors
Include Name, Address, and Phone Number of Sub-Contractor.
Use additional sheets if needed.

Type of Work	Sub-Contractor

List Equipment to be used on this project (Make/Model/Age of Major Equipment) Any Equipment not listed shall be reviewed by the OWNER for approval or rejection prior to use of Equipment on this project. (Use additional sheets if necessary)

Type of Equipment	Make	Model	Age (years)

List of ALL Municipal and Similar Non-Municipal current and completed projects for the past three (3) years. (Use additional sheets if necessary.)

1. Project:_____

   Current Status:_____

   Any Litigation Issues: Yes or No (Circle One) If Yes, explain:_____

   _____

   _____

   _____

   Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain:_____

   _____

   _____

   _____

   Project Description:_____

   Owner/Agency:_____

   Year Built:_____ Contract Price:_____

   Contact Person:_____ Phone:_____

2. Project:_____

   Current Status:_____

   Any Litigation Issues: Yes or No (Circle One) If Yes, explain:_____

   _____

   _____

   _____

   Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain:_____

   _____

   _____

_____

Project Description:_____

Owner/Agency:_____

Year Built:_____ Contract Price:_____

Contact Person:_____ Phone:_____

3. Project:_____

Current Status:_____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain:_____

_____

_____

_____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain:_____

_____

_____

_____

Project Description:_____

Owner/Agency:_____

Year Built:_____ Contract Price:_____

Contact Person:_____ Phone:_____

4. Project:_____

Current Status:_____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain:_____

_____

_____

_____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain:_____

_____

_____

_____

Project Description:_____

Owner/Agency:_____

Year Built:_____ Contract Price:_____

Contact Person:_____ Phone:_____

5. Project:_____

Current Status:_____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain:_____

_____

_____

_____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain:_____

_____

_____

_____

Project Description:_____

Owner/Agency:_____

Year Built:_____ Contract Price:_____

Contact Person:_____ Phone:_____

6. Project:_____

Current Status:_____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain:_____

_____

_____

_____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain:_____

_____

_____

_____

Project Description:_____

Owner/Agency:_____

Year Built:_____ Contract Price:_____

Contact Person:_____ Phone:_____

7. Project:_____

Current Status:_____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain:_____

_____

_____

_____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain:_____

_____

_____

_____

Project Description:_____

Owner/Agency:_____

Year Built:_____ Contract Price:_____

Contact Person:_____ Phone:_____

8. Project:_____

Current Status:_____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain:_____

_____

_____

_____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain:_____

_____

_____

_____

Project Description:_____

Owner/Agency:_____

Year Built:_____ Contract Price:_____

Contact Person:_____ Phone:_____

9. Project:_____

Current Status:_____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain:_____

_____

_____

_____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain:_____

_____

_____

_____

Project Description:_____

Owner/Agency:_____

Year Built:_____ Contract Price:_____

Contact Person:_____ Phone:_____

10. Project:_____

Current Status:_____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain:_____

_____

_____

_____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain:_____

_____

_____

_____

Project Description:_____

Owner/Agency:_____

Year Built:_____ Contract Price:_____

Contact Person:_____ Phone:_____

Trade references (List Company, Address, Contact Person, and Phone):

_____

_____

_____

Bank References (List Institution, Address, Contact Person, and Phone)

_____

_____

_____

Claims and Suits (if the answer to any of the following questions is yes, please attached details):

1. Has your organization ever failed to complete any work awarded to it?_____

2. Are there any judgments, claims, arbitration proceedings, or suits pending or outstanding against your organization or officers?_____

3. Has your organization filed any lawsuits or requested arbitration with regard to construction contracts within the last five years?_____

4. Within the last five (5) years, has any officer or principal of your organization ever been an officer or principal of another organization when it failed to complete a construction contract?_____

I,_____,being duly sworn deposes and says that the information provided herein is true and sufficiently complete so as not to be misleading.

Date this_____day of_____, 20_____.
Name of
Organization:_____

By:_____

Title:_____

STATE OF TEXAS

COUNTY OF DALLAS

BEFORE ME the undersigned authority, on this day personally appeared _____ _____, known to me to be the person whose name subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this ___day of _____ 20____.

_____

Notary Public in and for _____ County, Texas

SECTION CA

CONTRACT AGREEMENT

CONTRACT AGREEMENT

STATE OF TEXAS

COUNTY OF DALLAS

THIS AGREEMENT is made and entered into this _____ day of _____, [YEAR], by and between the Town of Addison, of the County of Dallas and State of Texas, acting through its City Manager, thereunto duly authorized so to do, Party of the First Part, hereinafter termed the OWNER, and _____, of the City of _____, County of _____, State of _____, Party of the Second Part, hereinafter termed CONTRACTOR.

WITNESSETH: That for and in consideration of the payment and agreement hereinafter mentioned, to be made and performed by the OWNER, the said CONTRACTOR hereby agrees with the said OWNER to commence and complete construction of certain improvements as follows:

ADDISON JUNCTION PUBLIC INFRASTRUCTURE IMPROVEMENTS

PUBLIC WORKS AND ENGINEERING SERVICES BID NUMBER 27-31

and all extra work in connection therewith, under the terms as stated in the General and Specific Conditions of the AGREEMENT; and at his own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance and other accessories and services necessary to complete the said construction, in accordance with the conditions and prices stated in the Proposal attached hereto and in accordance with the Advertisement for Bids, Instructions to Bidders, General Provisions, Special Provisions, Plans, and other drawings and printed or written explanatory matter thereof, and the Technical Specifications and Addenda thereto, as prepared by the OWNER, each of which has been identified by the endorsement of the CONTRACTOR and the OWNER thereon, together with the CONTRACTOR's written Proposal and the General Provisions, all of which are made a part hereof and collectively evidence and constitute the entire AGREEMENT.

The CONTRACTOR hereby agrees to commence work within ten (10) calendar days after the date of written notice to do so shall have been given to him, to achieve Substantial Completion within 300 calendar days and Final **Completion within 360** calendar days, each measured from the commencement date stated in the written Notice to Proceed, subject to such extensions of time as are provided by the General Provisions.

The OWNER agrees to pay the CONTRACTOR _____ _____ Dollars **($_____)** in current funds for the performance of the Contract in accordance with the Proposal submitted thereof, subject to additions and deductions, as provided in the General Provisions, and to make payments of account thereof as provided therein.

IN WITNESS WHEREOF, the parties of these presents have executed this AGREEMENT in the year and day first above written.

TOWN OF ADDISON, TEXAS (OWNER) **ATTEST:**

By: _____ By: _____
City Manager

(CONTRACTOR) ATTEST:

By: _____ By: _____

The following to be executed if the CONTRACTOR is a corporation:

I, _____ certify that I am the secretary of the corporation named as CONTRACTOR herein; that _____, who signed this Contract on behalf of the CONTRACTOR is the _____ (official title) of said corporation; that said Contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Signed: _____

Corporate Seal

SECTION PrB

PERFORMANCE BOND

PERFORMANCE BOND

STATE OF TEXAS }
COUNTY OF DALLAS }

WHEREAS, _____as principal ("Contractor") and _____, a corporation organized under the laws of _____ and being duly authorized to do business in the State of Texas, as surety ("Surety")(whether one or more), do hereby expressly acknowledge themselves to he held and bound to pay to the Town of Addison, Texas, a home-rule municipality organized and operating under the Constitution and laws of the State of Texas (the "Town"), its successors and assigns, and to all persons, firms, subcontractors and corporations who may furnish materials or labor under the contract as more fully described below, the sum of _____ Dollars in the lawful currency of the United States of America ($) for the payment of which Contractor and Surety are liable to the Town, jointly and severally; and

WHEREAS, Contractor has this day entered into a written contract with the Town to build and construct _____
_____
_____
which contract and the plans and specifications therein mentioned (collectively referred to hereinafter as the "Contract") are hereby expressly incorporated into and made a part hereof as though set forth at length; and

WHEREAS, this bond is given pursuant to Chapter 2253 of the Texas Government Code;

NOW, THEREFORE, if Contractor shall well, truly and faithfully perform all of the undertakings, duties, terms, conditions and agreements of the Contract; shall satisfy all claims and demands incurred under the Contract; shall fully indemnify and hold the Town harmless; shall reimburse and repay the Town for any outlay or expense which the Town may incur in making good any default, and shall promptly make payment to all persons, firms, subcontractors and corporations who may furnish materials or labor under the Contract, then this obligation shall be void; otherwise to remain in full force and effect. The obligations of Contractor and Surety under this bond apply both to the original Contract and to any extension or modification of the Contract and Surety agrees that no change, extension of time, addition, expansion or other modification of the Contract, the work to be done under the Contract, or the plans and specifications which are a part of the Contract shall in any manner affect the obligations of Surety under this bond, and Surety waives notice of any such change, extension of time, addition, expansion or other modification. The obligations of Contractor and Surety under this bond are performable and payable in Dallas County, Texas such that exclusive venue for any legal action pertaining to this bond shall lie in Dallas County, Texas. By their signatures below, the persons signing this bond warrant and represent that they are, respectively, duly authorized to sign on behalf of Contractor and Surety.

EXECUTED this the _____ day of _____, 2___.

CONTRACTOR: SURETY: 1

By:_____ By:_____

Title:_____ Title:_____

ACKNOWLEDGMENTS
[Contractor]

STATE OF TEXAS }
COUNTY OF DALLAS }

Before me _____ (insert the name of the officer) on this day _____ personally appeared _____ known to me (or proved to me on the oath of _____) or through _____ (description of identity card or other document) to be the person whose name is subscribed to the forgoing instrument and acknowledged to me that he/she executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office this _____ day of _____, 2_____.

_____ _____
Notary Public in and for the State of Texas Typed or Printed Name of Notary
My Commission Expires:_____

[Surety]

STATE OF TEXAS }
COUNTY OF DALLAS }

This instrument was acknowledged before me on the ____day of _____, 2_____ by _____ who is the _____ of the Surety, on behalf of Surety.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, 2_____.

_____ _____
Notary Public in and for the State of Texas Typed or Printed Name of Notary

My Commission Expires:_____

1 Please see attached contact sheet for Surety and the Texas Department of Insurance.

Payment and Performance Bond Contact Sheet

(1) Claims:

All notices of claims shall be sent to the surety at the following address:

_____
(Name of surety)

_____
(Mailing address)

_____
(Physical address)

_____
(Phone number)

(2) Texas Department of Insurance Contact Number:

The address and contact information of the surety may otherwise be obtained by contacting the Texas Department of Insurance at the following toll free telephone number:

1-800-252-3439.

SECTION PyB

PAYMENT BOND

PAYMENT BOND

STATE OF TEXAS }
COUNTY OF DALLAS }

WHEREAS, _____, as principal ("Contractor") and _____, a corporation organized under the laws of _____ and being duly authorized to do business in the State of Texas, as surety ("Surety")(whether one or more), do hereby expressly acknowledge themselves to he held and bound to pay to the Town of Addison, Texas, a home-rule municipality organized and operating under the Constitution and laws of the State of Texas (the "Town"), its successors and assigns, and to all persons, firms, subcontractors and corporations who may furnish materials or labor under the contract as more fully described below, the sum of _____ Dollars in the lawful currency of the United States of America ($) for the payment of which Contractor and Surety are liable to the Town, jointly and severally; and

WHEREAS, Contractor has this day entered into a written contract with the Town to build and construct _____
_____

which contract and the plans and specifications therein mentioned (collectively referred to hereinafter as the "Contract") are hereby expressly incorporated into and made a part hereof as though set forth at length; and

WHEREAS, this bond is given pursuant to Chapter 2253 of the Texas Government Code;

NOW, THEREFORE, if Contractor shall promptly make payment to all persons, firms, subcontractors and corporations who may furnish materials or labor under the Contract, then this obligation shall be void; otherwise to remain in full force and effect. The obligations of Contractor and Surety under this bond apply both to the original Contract and to any extension of time or modification of the Contract and Surety agrees that no change, extension of time, addition, expansion or other modification of the Contract, the work to be done under the Contract, or the plans and specifications which are a part of the Contract shall in any manner affect the obligations of Surety under this bond, and Surety waives notice of any such change, extension of time, addition, expansion or other modification. The obligations of Contractor and Surety under this bond are performable and payable in Dallas County, Texas such that exclusive venue for any legal action pertaining to this bond shall lie in Dallas County, Texas. By their signatures below, the persons signing this bond warrant and represent that they are, respectively, duly authorized to sign on behalf of Contractor and Surety.

EXECUTED this the _____ day of _____, 2_____.

CONTRACTOR: SURETY: [1]

By:_____ By:_____

Title:_____ Title:_____

ACKNOWLEDGMENTS
[Contractor]

STATE OF TEXAS }
COUNTY OF DALLAS }

Before me _____ (insert the name of the officer) on this day _____ personally appeared _____ known to me (or proved to me on the oath of _____) or through _____ (description of identity card or other document) to be the person whose name is subscribed to the forgoing instrument and acknowledged to me that he/she executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office this _____ day of _____, 2_____.

_____ _____
Notary Public in and for the State of Texas Typed or Printed Name of Notary
My Commission Expires:_____

[Surety]

STATE OF TEXAS }
COUNTY OF DALLAS }

This instrument was acknowledged before me on the _____ day of _____, 2_____ by _____ who is the _____ of the Surety, on behalf of Surety.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, 2_____.

_____ _____
Notary Public in and for the State of Texas Typed or Printed Name of Notary

My Commission Expires:_____

[1] Please see attached contact sheet for Surety and the Texas Department of Insurance

Payment and Performance Bond Contact Sheet

(1) Claims:

All notices of claims shall be sent to the surety at the following address:

_____
(Name of surety)

_____
(Mailing address)

_____
(Physical address)

_____
(Phone number)

(2) Texas Department of Insurance Contact Number:

The address and contact information of the surety may otherwise be obtained by contacting the Texas Department of Insurance at the following toll free telephone number:

1-800-252-3439.

SECTION MB

MAINTENANCE BOND

MAINTENANCE BOND – TWO YEAR

STATE OF TEXAS '

COUNTY OF DALLAS '

WHEREAS,_____, as principal ("Contractor") and _____, a corporation organized under the laws of _____ and being duly authorized to do business in the State of Texas, as surety ("Surety")(whether one or more), do hereby expressly acknowledge themselves to he held and bound to pay to the Town of Addison, Texas, a home-rule municipality organized and operating under the Constitution and laws of the State of Texas (the "Town"), its successors and assigns the sum of _____ Dollars in the lawful currency of the United States of America ($) for the payment of which Contractor and Surety are liable to the Town, jointly and severally; and

WHEREAS, Contractor has this day entered into a written contract with the Town to build and construct which contract and the plans and specifications therein mentioned (collectively referred to hereinafter as the "Contract") are hereby expressly incorporated into and made a part hereof as though set forth at length; and

WHEREAS, under the Contract it is provided that the Contractor will maintain and keep in good repair all work to be performed and done under the Contract for a period of **two (2) years** from and after its date of final completion and written acceptance by the Town, and to do and perform all necessary work and repair any defective condition, it being understood that the purpose of this maintenance bond is to insure all warranties, express or implied, made or given by the Contractor to the Town and to cover all defective, inadequate or non-conforming conditions arising by reason of any materials or labor installed, provided, constructed or performed by the Contractor and in case the Contractor shall fail to correct any such conditions it is agreed that the Town may make such corrections and charge the cost of making those corrections against the Contractor and the Surety on this obligation, and the Contractor and Surety shall be subject to the liquidated damages provided in the contract, the plans and the specifications for each day's failure on its part to comply with the terms and provisions of the Contract;

NOW, THEREFORE, if the Contractor shall keep and perform its obligation to maintain the work and keep the work in repair for the full maintenance period of two (2) years as herein provided, then these presents shall be null and void and have no further effect, but if default shall be made by Contractor in the performance of its obligations, then these presents shall have full force and effect, and the Town shall have and recover from the Contractor and its Surety damages in the premises as provided and it is further understood and agreed that this obligation shall be a continuing one against the Contractor and the Surety and that successive recoveries may be had hereon for successive breaches until the full amount of this bond shall have been exhausted; and it is further understood that the obligation under this bond to maintain the work shall continue throughout the maintenance period and shall not be changed, diminished, or in any other manner affected during the term of this bond. The obligations of Contractor and Surety under this bond apply both to the original Contract and to any extension or modification of the Contract and Surety agrees that no change, extension of time, addition, expansion or other modification of the Contract, the work to be done under the Contract, or the plans and specifications which are a part of the Contract shall in any manner affect the obligations of Surety under this bond, and Surety waives notice of any such change, extension of time, addition, expansion or other modification. The obligations of Contractor and Surety under this bond are performable and payable in Dallas County, Texas such that exclusive venue for any legal action pertaining to this bond shall lie in Dallas County, Texas. By their signatures below, the persons signing this bond warrant and represent that they are, respectively, duly authorized to sign on behalf of Contractor and Surety.

EXECUTED this the _____ day of _____, 2_____.

CONTRACTOR:	SURETY:
By:_____	By:_____
Printed Name:_____	Printed Name:_____
Title:_____	Title:_____
Address of Principal:	Address of Surety:
_____	_____
_____	_____
_____	_____

ACKNOWLEDGMENTS

[Contractor]

STATE OF TEXAS '
COUNTY OF DALLAS '

Before me _____(insert the name of the officer) on this day _____ personally appeared _____ known to me (or proved to me on the oath of _____) or through _____ (description of identity card or other document) to be the person whose name is subscribed to the forgoing instrument and acknowledged to me that he/she executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office this _____ day of _____, 2_____.

_____ _____
Notary Public in and for the State of Texas Typed or Printed Name of Notary
My Commission Expires:_____

[Surety]

STATE OF TEXAS '
COUNTY OF DALLAS '

This instrument was acknowledged before me on the ___ day of _____, 2_____ by _____ who is the _____ of the Surety, on behalf of Surety.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, 2_____.

_____ _____
Notary Public in and for the State of Texas Typed or Printed Name of Notary
2-4-13 2 yr

SECTION BP

CONTRACTOR'S AFFIDAVIT OF BILLS PAID

CONTRACTOR'S AFFIDAVIT OF BILLS PAID

STATE OF TEXAS

COUNTY OF DALLAS

Personally, before me the undersigned authority, on this day appeared _____ who, being duly sworn, on oath, says that he is a legal representative of _____
(full name of Contractor as in contract)

and that the contract for the construction of the project, designated as

ADDISON JUNCTION PUBLIC INFRASTRUCTURE IMPROVEMENTS

PUBLIC WORKS AND ENGINEERING SERVICES BID NUMBER 27-31

has been satisfactorily completed and that all bills for materials, apparatus, fixtures, machinery and labor used in connection with the construction of this project have, to the best of my knowledge and belief, been fully paid.

_____
Signature

_____
Title

Sworn to and subscribed before me this _____day of _____, 202_.

_____
Notary Public in and for

_____ County, Texas

Instructions:

If the contractor is an individual, he shall sign the affidavit. If the contractor is a partnership, any partner may sign the affidavit. If the contractor is a corporation, a person authorized by the by-laws or by the Board of Directors shall sign the affidavit. If the Contractor is a joint-venture of individuals, any of the individuals may sign the affidavit. If the Contractor is a joint-venture of partnerships, or of individuals and partnerships, the affidavit may be signed by the individual or any partner of any partnership. If the contractor is a joint-venture in which a corporation is a party, separate affidavits must be executed in the name of the joint-venture: one by each corporation and one by each individual or partnership. Signatures for corporations should be by a duly authorized officer. If signature is by another, a showing of authority to sign must accompany the affidavit.

SECTION GP

GENERAL PROVISIONS

GENERAL PROVISIONS

The General Provisions of the Contract shall be as stated in the *Standard Specifications for Public Works Construction – North Central Texas, 5th Edition (2017)*, under Division 100, "General Provisions," Items 101.1 through 109.6 inclusive, with amendments expressly identified under Special Provision in this document and except as modified by the Contract Documents.

SECTION TS

TECHNICAL SPECIFICATIONS

Technical Specifications – NCTCOG Fifth Edition November 2017

Division 200 **Site Protection and Preparation (not included in this spec book)**

201 **Site Protection**

202 **Temp. Erosion, Sedimentation and Water Pollution Prevention**

203 **Site Preparation**

204 **Landscaping**

Division 300 **Roadway Construction (not included in this spec book)**

301 **Subgrade, Subbase and Base Preparation**

302 **Asphalt Pavement**

303 **Portland Cement Concrete Pavement**

304 **Paving Units**

305 **Miscellaneous Roadway Construction**

Division 400 **Roadway Maintenance and Rehabilitation (not included in this spec book)**

401 **Crack Sealing**

402 **Pavement Cut, Excavation and Repair**

403 **Asphaltic Pavement Repair**

404 Surface Treatments

Division 500 Underground Construction and Appurtenances (not included in this spec book)

501 Underground Conduit Materials

502 Appurtenances

503 Trenchless Installations

504 Open Cut- Backfill

505 Open Cut- General Conduit Installation

506 Open Cut Water Conduit Installation

507 Open Cut- Wastewater Conduit Installation

508 Open Cut – Stormwater Conduit Installation

509 Crossings

Division 600 Conduit and Appurtenance Rehabilitation (not included in this spec book)

601 Pipeline Rehabilitation

602 Rehab Manholes or Underground Vaults

Division 700 Structures (not included in this spec book)

701 General Structures

702 Concrete Structures

703 Steel Structures

704 Piling

Division 800 Miscellaneous Construction and Materials (not included in this spec book)

801 Barriers, Warning and Detour Signs and Fences

802 Steps and Retaining Walls

804 Painting and Other Protective Trtmts and Pavement Markings

Town of Addison
GENERAL TERMS AND CONDITIONS

By submitting an Offer in response to the Solicitation, the Contractor/Seller (hereafter called Seller) agrees the Contract/Purchase Order shall be governed by the following terms and conditions for goods and services.

1. Applicability: These General Terms and Conditions and the Terms and Conditions, Specifications, Drawings and other requirements included in the Town of Addison's Request for Bid (collectively, "Terms and Conditions") are applicable to Contracts/Purchase Orders issued by the Town of Addison (hereinafter referred to as the "Town" or "Buyer") and the Seller (herein after referred to as the "Seller"). Any deviations must be in writing and signed by a representative of the Town's Purchasing Department and the Seller. No terms and conditions contained in the Seller's Proposal, Invoice or Statement shall modify the Terms and Conditions. If there is a conflict between the Terms and Conditions and Seller's response to the Town's request for bids or proposals documents (including the provisions of the Seller's form of contract/purchase order), the Terms and Conditions will take precedence and control.

2. Official Solicitation Notification: The Town utilizes the following for official notifications of solicitation opportunities: www.civcastusa.com and the Dallas Morning News of Dallas County. These are the only forms of notification authorized by the Town for notifications of solicitation opportunities. The Town is not responsible for receipt of notifications or information from any source other than those listed. It shall be the Seller's responsibility to verify the validity of all solicitation information received from any source other than the Town. There will be NO COST to the Seller for using CivCast to respond to Town of Addison solicitations.

3. Seller to Package Goods: Seller shall package goods in accordance with good commercial practice. Each shipping container, shall be clearly and permanently marked as follows: (a) Seller's name and address: (b) consignee's name, address and purchase order or purchase change order number; (c) container number and total number of containers, e.g., "box 1 of 4 boxes"; and (d) number of the container bearing the packing slip. Seller shall bear cost of packaging unless otherwise provided and agreed to in writing by Buyer. Goods shall be suitably packed to secure lowest transportation costs and to conform to requirements of common carriers and any applicable specifications. Town's count or weight shall be final and conclusive on shipments not accompanied by packing list. Unless otherwise stated in the Town's solicitation, all goods will be new, not used, rebuilt, reconditioned or recycled, will be in first class condition, and will be in containers suitable for site.

4. Shipment Under Reservation Prohibited: Seller is not authorized to ship the goods under reservation and no tender of a bill of lading will operate as a tender of goods.

5. Title and Risk of Loss: Title and risk of loss of the goods will not pass to the Town until the Town actually receives, takes possession of, and inspects and accepts the goods at the point or points of delivery.

6. Delivery Terms and Transportation Charges: Goods shall be shipped F.O.B. point of delivery; prices bid and quoted shall be F.O.B. point of delivery, and shall include all freight, delivery and packaging costs. Town shall have the right to designate what method of transportation shall be used to ship the goods. Town assumes and shall have no liability for goods damaged while in transit and or delivered in a damaged condition or that otherwise don't conform to the Terms and Conditions. Seller shall be responsible for and handle all claims with carriers, and in case of damaged or non-conforming goods shall ship replacement goods immediately upon notification by the Town of the same, and the Town may return such damaged or non-conforming goods at Seller's sole cost and expense, including costs and expense for freight, delivery, packaging, and shipping.

7. Right of Inspection and Rejection; Backorders: The Town shall have the right, and expressly reserves all rights under law, including, but not limited to the Uniform Commercial Code, to inspect the goods at delivery before accepting them, and to reject defective or non-conforming goods. Backorders delayed beyond a reasonable period of time, as determined by the Town Purchasing Manager, may be cancelled by the Town without liability of any kind whatsoever, and payment will not be made for such cancellations.

8. Acceptance of Incomplete or Non-Conforming Goods: If, instead of requiring immediate correction or removal and replacement of defective or non-conforming goods, Town prefers to accept such goods, Town may do so. Seller shall pay all claims, costs, losses and damages attributable to Town's evaluation of and determination to accept such defective or non-conforming deliverables. If any such acceptance occurs prior to final payment, Town may deduct such amounts as are necessary to compensate Town for the diminished value of the defective or non-conforming deliverables. If the acceptance occurs after final payment, such amount will be refunded to Town by Seller.

9. Substitution: Every delivery of goods by the Seller must comply with all provisions of this bid including the specifications, delivery schedule, quantity and quality, and the Terms and Conditions. Any delivery which does not conform to the Buyer's requirements shall constitute a breach of contract. Seller does not have authorization to make or tender substitute goods unless it is agreed to in writing by the Buyer and signed by an authorized representative of Buyer.

10. Payment:

(a) All proper invoices received by the Town will be paid within thirty (30) days of the Town's receipt and acceptance of the goods or of the invoice, whichever is later, unless other terms are specified on the face of the purchase order in the original printing. If payment is not timely made, interest shall accrue on the unpaid balance at the lesser of one percent per month or the maximum lawful rate; except, if payment is not timely made for a reason for which the Town may withhold payment hereunder, interest shall not accrue until ten (10) days after the grounds for withholding payment have been resolved.

(b) If partial shipments or deliveries are authorized by the Town, Seller will be paid for the partial shipment or delivery, as stated above, provided that the invoice matches the shipment or delivery.

(c) The Town may withhold or set off the entire payment or part of any payment otherwise due Seller to such extent as may be necessary on account of: (i) delivery of defective or non-conforming goods by Seller, or (ii) failure of the Seller to submit proper invoices with all required attachments and supporting documentation, or (iii) failure of Seller to deliver quantity of goods ordered (payment will be made for actual quantities delivered).

(d) The Town's payment obligations are payable only and solely from funds appropriated, budgeted, and available for the purpose of this purchase. The absence of appropriated and budgeted or other lawfully available funds shall render the Contract/Purchase Order null and void to the extent funds are not appropriated and budgeted or available and any goods delivered but unpaid shall be returned to Seller. The Town shall provide the Seller written notice of the failure of the Town to make an adequate appropriation and budget for any fiscal year to pay the amounts due under the Contract/Purchase Order, or the reduction of any appropriation to an amount insufficient to permit the Town to pay its obligations under the Contract/Purchase Order.

11. Invoicing: Submit construction project invoices and supporting documentation through VPM in accordance with the Special Provisions. If invoice is subject to cash discounts the discount period will begin on the day invoices are received. So that proper cash discount may be computed, invoice should show amount of freight as a separate item, if applicable; otherwise, cash discount will be computed on total amount of invoice.

12. Taxes - Exemption: All quotations are required to be submitted LESS Federal Excise and State Sales Taxes. Tax Exemption Certificate will be provided by the Town for the successful Seller

13. Warranty - Price:

(a) Seller warrants the prices quoted in its bid are no higher than Seller's current prices on orders by others for like goods under similar terms of purchase.

(b) Seller certifies that the prices in Seller's bid have been arrived at independently without consultation, communication, or agreement for the purpose of restricting competition, as to any matter relating to such fees with any other firm or with any competitor.

(c) In the event of any breach of this warranty, the prices of the items will be reduced to Seller's current prices on orders by others, or in the alternative, the Town may cancel this Contract/Purchase Order without liability to Seller of any kind whatsoever. In addition to any other remedy available, the Town may deduct from any amounts owed to Seller, or otherwise recover, any amounts paid for items in excess of Seller's current prices on orders by others for like goods under similar terms of purchase.

14. Warranty – Title: Without limiting any provision of law, Seller warrants that it has good and indefeasible title to all goods furnished hereunder, and that the goods are free and clear of all liens, claims, security interests and encumbrances. **Seller shall indemnify and hold the Town harmless from and against all adverse title claims to the goods.**

15. Warranty (goods): If goods are sold and furnished to Seller in connection with these Terms and Conditions, Seller represents and warrants that the goods sold and furnished to the Town will be (i) free from defects in design, manufacture, materials and workmanship, (ii) be of merchantable quality and fit for ordinary use, (iii) be in full conformance with Buyer's specifications, drawings and data, with Seller's samples or models furnished in connection herewith, with Seller's express warranties, and with the terms and conditions of the Town's solicitation, and (iv) conform to all applicable Federal, State, and local laws, ordinances, rules, regulations, codes, and to all applicable standards and industry codes and standards. These warranties are in addition to all others given to the Buyer by the Seller or by law. Seller shall not limit, disclaim, or exclude these warranties or any implied warranties, and any attempt to do so shall render this Contract/Purchase Order voidable at the option of the Buyer, and any such limitations, disclaim, or exclusions shall be void and without force or effect.

Unless otherwise specified in a Contract/Purchase Order and approved by the Town in writing, the warranty period shall be at least one year from the date of acceptance of the goods or from the date of acceptance of any replacement goods. If during the warranty period, one or more of the above warranties are breached, Seller shall promptly upon receipt of demand either repair the defective or non-conforming goods, or replace the non-conforming or defective goods with fully conforming and non-defective goods, at the Town's option and at no additional cost to the Town. All costs incidental to such repair or replacement, including but not limited to, any packaging and shipping costs, shall be borne exclusively by Seller. The Town shall endeavor to give Seller written notice of the breach of warranty within thirty (30) days of discovery of the breach of warranty, but failure to give timely notice shall not impair the Town's rights hereunder.

If Seller is unable or unwilling to repair or replace defective or non-conforming goods as required by Town, then in addition to any other available remedy, Town may reduce the quantity of goods it may be required to purchase under the Contract/Purchase Order from Seller, and purchase conforming goods from other sources. In such event, Seller shall pay to Town upon demand the increased cost, if any, incurred by the Town to procure such goods from another source.

If Seller is not the manufacturer, and the goods are covered by a separate manufacturer's warranty, Seller shall transfer and assign such manufacturer's warranty to Town. If for any reason the manufacturer's warranty cannot be fully transferred to Town, Seller shall assist and cooperate with Town to the fullest extent to enforce such manufacturer's warranty for the benefit of Town.

16. Warranty (services): If services are provided to Seller in connection with these Terms and Conditions, Seller represents and warrants that all services to be provided to the Town will be fully and timely performed in a good and workmanlike manner in accordance with generally accepted industry standards and practices, the terms, conditions, and covenants of this Contract/Purchase Order, and all applicable Federal, State and local laws, ordinances, rules, regulations and codes. These warranties are in addition to all others given to the Buyer by the Seller or by law. Seller shall not limit, disclaim, or exclude these warranties or any implied warranties, and any attempt to

do so shall render this Contract/Purchase Order voidable at the option of the buyer, and any such limitations, disclaim, or exclusions shall be void and without force or effect.

Unless otherwise specified in the Contract/Purchase Order, the warranty period shall be at least one year from the date of final acceptance of the services by the Town. If during the warranty period, one or more of the above warranties are breached, Seller shall promptly upon receipt of demand perform the services again in accordance with above standard at no additional cost to the Town. All costs incidental to such additional performance shall be borne by the Seller. The Town shall endeavor to give the Seller written notice of the breach of warranty within thirty (30) calendar days of discovery of the breach warranty, but failure to give timely notice shall not impair the Town's rights under this section.

If the Seller is unable or unwilling to perform its services in accordance with the above standard as required by the Town, then in addition to any other available remedy, the Town may reduce the amount of services it may be required to purchase under the Contract/Purchase Order from the Seller, and purchase conforming services from other sources. In such event, the Seller shall pay to the Town upon demand the increased cost, if any, incurred by the City to procure such services from another source.

17. Right to Assurance: Whenever one party to the Contract/Purchase Order in good faith has reason to question the other party's intent to perform, demand may be made to the other party for written assurance of the intent to perform. In the event that no assurance is given within the time specified after demand is made, the demanding party may treat this failure as an anticipatory repudiation of this Contract/Purchase Order.

18. Default: Seller shall be in default under this Contract/Purchase Order if Seller (a) fails to fully, timely and faithfully perform any of its material obligations under this Contract/Purchase Order (whether or not an obligation is "material" shall be determined by the Town), (b) fails to provide adequate assurance of performance as provided for herein, (c) becomes insolvent or seeks relief under the bankruptcy laws of the United States, or (d) makes a material misrepresentation in Seller's offer or response to Buyer's solicitation, or in any report or deliverable required to be submitted by Seller to the Town.

19. Termination for Cause or Convenience: The Town, at any time, by 30 days written notice to the Seller, has the absolute right to terminate this Contract/Purchase Order, in whole or in part, for cause or for convenience (that is, for any reason or for no reason whatsoever). "Cause" means the Seller's refusal or failure to perform or complete its obligations under this Contract/Purchase Order within the time specified and to the Town's satisfaction, or failure to meet the specifications, quantities, quality and/or other requirements specified in the Contract/Purchase Order. If the Town terminates this Contract/Purchase Order for cause, the Seller shall be liable for any damages suffered by the Town. If the agreement is terminated for convenience, the Seller has no further obligation under this Contract/Purchase Order. Upon receipt of a notice of termination, Seller shall promptly cease all further work pursuant to the Contract/Purchase Order, with such exceptions, if any, specified in the notice of termination. Payment shall be made to cover the cost of goods delivered and services performed and obligations incurred prior to the date of termination in accordance with the terms hereof.

20. Delay: Town may delay scheduled delivery or other due dates by written notice to Seller if the Town deems it is in its best interest. If such delay causes an increase in the cost of the work under the Contract/Purchase Order, the Town and the Seller shall negotiate an equitable adjustment for costs incurred by Seller in the Contract/Purchase Order price and execute an amendment to the Contract/Purchase Order. Seller must assert its right to an adjustment within thirty (30) days from the date of receipt of the notice of delay. Failure to agree on any adjusted price shall be handled under the Dispute Resolution process specified herein. However, nothing in this provision shall excuse Seller from delaying the delivery as notified. For purposes of these Terms and Conditions, "days" means calendar days.

21. **SELLER'S INDEMNITY OBLIGATION;** INSURANCE: See attached Town of Addison minimum requirements.

22. Gratuity: Town may, by written notice to Seller, cancel this Contract/Purchase Order without liability to Town if it is determined by Town that any gratuity, in the form of entertainment, gifts, or otherwise, was offered or given by Seller, or any officer, employee, agent or representative of Seller, to any officer, employee, or representative of Town with a view toward securing a contract or securing favorable treatment with regard to the awarding or amending, or the making or any determinations with respect to the performance of, a contract. In the event this Contract/Purchase Order is canceled by the Town pursuant to this provision, the Town shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by the Seller in providing such gratuities.

23. Notices: Unless otherwise specified, all notices, requests, or other communications required or appropriate to be given under this Contract/Purchase Order shall be in writing and shall be deemed delivered upon being hand-delivered or upon three (3) business days after postmarked if sent by U.S. Postal Service certified or registered mail, return receipt requested. Notices to Seller shall be sent to the address as specified by Seller. Notices to the Town shall be addressed to Town at 5300 Belt Line Road, Dallas, Texas 75254 and marked to the attention of the Town Finance Director.

24. No Warranty By Town Against Infringement: Seller represents and warrants to the Town that: (i) Seller shall provide the Town good and indefeasible title to all goods being sold and/or supplied to the Town, and (ii) such goods in accordance with the specifications in this Contract/Purchase Order will not infringe, directly or indirectly, any patent, trademark, copyright, trade secret, or any other intellectual property right of any kind of any third party; that no claims have been made by any person or entity with respect to the ownership or operation of such goods and the Seller does not know of any valid basis for any such claims. The Town's specifications regarding the goods shall in no way diminish Seller's warranties or obligations under this paragraph, and the Town makes no warranty that the production, development, or delivery of goods according to the specifications will not give rise to such a claim or will not will not impact such warranties of Seller, and in no event will Town be liable to Seller, its officers, employees, or agents (together, "Seller Parties") for indemnification or otherwise if Seller Parties or any of them is sued on the grounds of infringement or the like. If Seller is of the opinion that an infringement or the like will or may result, Seller shall promptly notify Town of that opinion. If Seller in good

faith ascertains, prior to production of the goods, that production of the goods according to the specifications will result in infringement or the like, this Contract/Purchase Order will be null and void, and neither Town nor Seller shall have any liability one to the other.

25. Assignment and Successors: The successful Seller shall not assign, transfer, pledge, subcontract, or otherwise convey (collectively, "assign" or "assignment"), in any manner whatsoever, any rights, duties, obligations, or responsibilities of Seller under or in connection with this Contract/Purchase Order, in whole or in part, without the prior written consent of the Town of Addison (and any such assignment without the prior written consent of the Town shall be null and void). Any person or entity to whom Seller assigns any right, duty or obligation shall, as a condition of such assignment, agree to comply with and abide by all provisions of this Contract/Purchase Order, and Seller shall promptly give the Town a true and correct copy of such agreement.

This Contract/Purchase Order shall be binding upon and inure to the benefit of the City and the Seller and their respective successors and authorized assigns, provided however, that no right or interest in the Contract/Purchase Order shall be assigned and no obligation shall be delegated by the Contractor without the prior written consent of the City. This Contract/Purchase Order does not and is not intended to confer rights or benefits on any person, firm or entity not a party hereto; it being the intention of the parties that there be no third party beneficiaries to this Contract/Purchase Order.

26. Waiver; Rights, Remedies: All waivers must be in writing and signed by the waiving party. The rights or remedies under this Agreement are cumulative to any other rights or remedies, which may be granted by law.

27. Modifications: This contract can be modified or amended only by a writing signed by both parties. No pre-printed or similar terms on any Seller invoice, order or other document shall have any force or effect to change the terms, covenants, and conditions of this Contract/Purchase Order.

28. Independent Contractor: Seller shall operate hereunder as an independent contractor and not as an officer, agent, servant or employee of the Town. Seller shall have exclusive control of, and the exclusive right to control, the details of its operations hereunder, and all persons performing same, and shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors, subcontractors and consultants.

29. Interpretation: This Contract/Purchase Order is intended by the parties as a final, complete and exclusive statement of the terms of their agreement. No course of prior dealing between the parties or course of performance or usage of the trade shall be relevant to supplement or explain any term used in this Contract/Purchase Order. Although the Contract/Purchase Order may have been substantially drafted by one party, it is the intent of the parties that all provisions be construed in a manner to be fair to both parties, reading no provisions more strictly against one party or the other. Whenever a term defined by the Uniform Commercial Code, as enacted by the State of Texas, is used in this contract, the UCC definition shall control, unless otherwise defined in this Contract/Purchase Order.

30. Competitive Pricing: It is the intent of the Town to consider Interlocal Cooperative Agreements and State/Federal contracts in determining the best value for the Town.

31. Interlocal Agreement: Successful bidder (Seller) agrees to extend prices for the goods and/or services to be provided by Seller described in this Contract/Purchase Order to all entities that have entered into or will enter into joint purchasing interlocal cooperation agreements with the Town. The Town is a participating member of several interlocal cooperative purchasing agreements. As such, the Town has executed interlocal agreements, as permitted by law, including under Chapter 791 of the Texas Government Code, with certain other political subdivisions, authorizing participation in a cooperative purchasing program. The successful bidder (Seller) may be asked by the Town to provide products/services based upon the bid price to any other participant to a cooperative purchasing agreement, and the Seller agrees to do so (such provision will be pursuant to an agreement between Seller and such other participant, and the Town will have no liability or responsibility in connection therewith).

32. Right to Audit: The city shall have the right to examine and audit after reasonable notice any and all books and records. in any form or format whatsoever (including electronic), of Seller that may relate to this Contract/Purchase Order including, without limitation, the performance of Seller, its employees, agents, and subcontractors. Such books and records will be maintained in accordance with generally accepted accounting principles and shall, upon request and at the Town's request, be made available at a location designated by the Town. Seller shall, except for copying costs, otherwise bear all costs of producing such records for examination and copying by the Town. Unless otherwise agreed by the Town, such books and records must be made available to the Town within five business days after the Seller's receipt of a written notice from the Town requesting the same. The provisions of this paragraph shall survive the termination of this agreement. Seller shall retain all such books and records for a period of three (3) years after final payment on this Contract/Purchase Order or until all audit and litigation matters that the Town has brought to the attention of the Seller are resolved, whichever is longer. The Seller agrees to refund to the Town any overpayments disclosed by any such audit. The Seller shall include a similar audit right on behalf of the Town in all subcontractor agreements entered into in connection with this Contract/Purchase Order.

33. Correspondence: The Bid number must appear on all correspondence and inquiries pertaining to the Request for Bid or to quotes. The Purchase Order number must appear on all invoices or other correspondence relating to the Contract/Purchase Order.

34. Easement Permission: The contractor shall not enter or use private property except as allowed by easements shown on the contract documents or if the contractor obtains specific written permission from the property owner.

35. Alternates - Samples: If bidding on other than the item solicited by the Town, Seller's bid must identify the item's Trade Name, Manufacturer's Name and/or Catalog Number, and certify the item offered is equivalent to the item solicited by the Town. Descriptive literature must be submitted with alternate brands. Samples shall be furnished free of expense to the Town and if requested, may be returned at bidder's expense.

36. Error - Quantity: Bids must be submitted in units of quantity specified, extended, and totaled. In the event of discrepancies in extension, the unit prices shall govern.

37. Acceptance: The right is reserved to the Town to accept or reject all or part of the bid, and to accept the offer considered most advantageous to the Town by line item or total bid.

38. Term Contracts: Except as otherwise provided herein, prices must remain firm for the entire Contract/Purchase Order period, including any periods of extension or renewal. At the time of any renewal or extension of the Contract/Purchase Order, the Town or the Seller may request a price adjustment based upon the economy. All requests for a price adjustment must include detailed documentation and rationale to support the requested adjustment. The party to whom a request for price adjustment is made may, in its sole discretion, accept or reject the request. Any price adjustment must be mutually agreed upon in writing by the parties, and shall be effective for the applicable renewal term.

39. Term Contract Quantities: The quantities (if any) in the request for bid are estimated requirements and the Town reserves the right to increase or decrease the quantities or cancel any item to be furnished. The successful bidder (Seller) shall have no claim against the Town for anticipated profits for quantities diminished or deleted.

40. Term Contract Shipments: The Seller will make shipments under this Contract/Purchase Order only when requested and only in the quantities requested. Seller shall comply with minimum shipments or standard packaging requirements (if any) included in the Contract/Purchase Order.

41. Contract Renewal Options: In the event a clause for option to renew for an additional period is included in the request for bid, all renewals will be based solely upon the option and agreement between the Town and the Seller. Either party dissenting will terminate the Contract/Purchase Order in accordance with its initial specified term.

42. Electronic Signature – Uniform Electronic Transactions Act: The Town adopts Texas Business and Commerce Code Chapter 322, Uniform Electronic Transactions Act, allowing individuals, companies, and governmental entities to lawfully use and rely on electronic signatures.

43. Funding Out Clause: This Contract/Purchase Order may be terminated by the Town without notice and without penalty or liability in the event that (1) the Town lacks sufficient funds for this Contract/Purchase Order; (2) funds for this Contract/Purchase Order are not appropriated and/or budgeted by the City Council of the Town; and (3) funds for this Contract/Purchase Order that are or were to be provided by grant or through a third party are withheld, denied or are otherwise not available to the Town.

44. Dispute Resolution: Pursuant to subchapter I, Chapter 271, Texas Local Government Code, Seller agrees that, prior to instituting any lawsuit or other proceeding arising from any dispute or claim of breach under this Contract/Purchase Order (a "Claim"), the parties will first attempt to resolve the Claim by taking the following steps: (i) A written notice substantially describing the factual and legal basis of the Claim shall be delivered by the Seller to the Town

within one-hundred eighty (180) days after the date of the event giving rise to the Claim, which notice shall request a written response to be delivered to the Seller not less than fourteen (14) business days after receipt of the notice of Claim; (ii) if the response does not resolve the Claim, in the opinion of the Seller, the Seller shall give notice to that effect to the Town whereupon each party shall appoint a person having authority over the activities of the respective parties who shall promptly meet, in person, in a effort to resolve the Claim; (iii) if those persons cannot or do not resolve the Claim, then the parties shall each appoint a person from the highest tier of managerial responsibility within each respective party, who shall then promptly meet, in person, in an effort to resolve the Claim.

45. Disclosure of Certain Relationships: Chapter 176 of the Texas Local Government Code requires that any person, as defined in the statute, considering doing business with a local government entity disclose in the Questionnaire Form CIQ, the person's affiliation or business relationship that might cause a conflict of interest with a local government entity. By law, this questionnaire must be filed with the Records Administrator of the Town not later than the 7th business day after the later of (a) the date the person (i) begins discussions or negotiations to enter into a contract with the local governmental entity, or (b) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity, or (b) the date the person becomes aware (i) of an employment or other business relationship with a local government officer, or a family member of the officer, described by the statute, or (ii) that the person has given one or more gifts described in the statute. See Section 176.006, Local Government Code. A person commits an offense if the person knowingly violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor. The questionnaire may be found at www.ethics.state.tx.us/forms/CIQ.pdf By submitting a response to this request, Seller represents that it is in compliance with the requirements of Chapter 176 of the Texas Local Government Code.

46. Force Majeure: To the extent either the Town or Seller shall be wholly or partially prevented or delayed from the performance of this Contract/Purchase Order or of any obligation or duty under this Contract/Purchase Order placed on such party, by reason of or through work strikes, stoppage of labor, riot, fire, flood, acts of war, insurrection, court judgment, act of God, or other specific cause reasonably beyond the party's control and not attributable to its malfeasance, neglect or nonfeasance, then in such event, such party shall give notice of the same to the other party (specifying the reason for the prevention) and the time for performance of such obligation or duty shall be suspended until such disability to perform is removed.

47. BAFO: During evaluation process Town reserves the right to request a best and final offer upon completion of negotiations.

48. Silence of Specifications: The apparent silence of these specifications as to any detail or to the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail. All interpretations of these specifications shall be made on the basis of this statement.

49. Applicable Law: This agreement shall be governed by the laws of the State of Texas, including, when applicable, the Uniform Commercial Code as adopted by the State of Texas

(excluding any rule or principle that would refer to and apply the substantive law of another state or jurisdiction), as effective and in force on the date of this Contract/Purchase Order, without regard to its conflict of laws rules or the conflict of law rules of any other jurisdiction. The foregoing, however, shall not be construed or interpreted to limit or restrict the right or ability of the City to seek and secure injunctive or any other relief from any competent authority as contemplated herein.

50. Venue: This Contract/Purchase Order is performable in Dallas County, Texas, and venue for any suit, action, or legal proceeding under or in connection with this Contract/Purchase Order shall lie exclusively in Dallas County, Texas. Seller submits to the exclusive jurisdiction of the courts in Dallas County, Texas for purposes of any such suit, action, or proceeding hereunder, and waives any claim that any such suit, action, or legal proceeding has been brought in an inconvenient forum or that the venue of that proceeding is improper.

51. Cost of Response: Any cost incurred by the Seller in responding to the Request for Proposal is the responsibility of the Seller and cannot be charged to the Town.

52. Prohibition Against Personal Interest in Contracts: No Town of Addison officer or employee shall have a direct or indirect financial interest in any contract with the Town, or be directly or indirectly financially interested in the sale of land, materials, supplies or services to the Town.

53. Prior or Pending Litigation or Lawsuits: Each Seller must include in its proposal a complete disclosure of any alleged significant prior or ongoing contract failures, any civil or criminal litigation or investigation pending which involves the Seller or in which the Seller has been judged guilty or liable.

54. Severability: The invalidity, illegality, or unenforceability of any provision of this Contract/Purchase Order shall in no way affect the validity or enforceability of any other portion or provision of this Contract/Purchase Order. Any void or invalid provision shall be deemed severed from this Contract/Purchase Order and the balance of the Contract/Purchase Order shall be construed and enforced as if the Contract/Purchase Order did not contain the particular portion or provision held to be void. The parties further agree to reform the Contract/Purchase Order to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this section shall not prevent this entire Contract/Purchase Order from being void should a provision which is the essence of the Contract/Purchase Order be determined to be void.

55. Headings; "Includes": The headings of this Contract/Purchase Order are for convenience of reference only and shall not affect in any manner any of the terms and conditions hereof. The words "includes" and "including" are terms of enlargement and not of limitation or exclusive enumeration, and use of the terms does not create a presumption that components not expressed are excluded.

56. Conflict: When there is a conflict between the this purchase order (including, without limitation, these Terms and Conditions) and the Seller's invoice, this purchase order shall prevail.

57. Response Contractual Obligation; **Waiver**: This response, submitted documents, and any negotiations, when properly accepted by the Town, shall constitute a contract equally binding between the successful Seller and the Town. No different or additional terms will become part of this Contract/Purchase Order except as properly executed in an addendum or change order. **By submitting a bid, Seller waives any claim it has or may have against the Town, its officials, officers, employees, and agents, arising out of or in connection with the administration, evaluation, or recommendation of any bid, acceptance or rejection of any bid, and the award of a contract.**

58. No Waiver of Immunity. Notwithstanding any other of this Contract/Purchase Order, nothing in this Contract/Purchase Order shall or may be deemed to be, or shall or may be construed to be, a waiver or relinquishment of any immunity, defense, or tort limitation to which the Town, its officials, officers, employees, representatives, and agents are or may be entitled, including, without limitation, any waiver of immunity to suit.

59. No Boycotting Israel. The entity contracting with the Town of Addison does not boycott Israel and will not boycott Israel during the term of the contract. Reference HB 89 as it relates to Chapter 2270 of the Texas Government Code. Boycott Israel means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

60. No Industry Discrimination. The entity contracting with the Town of Addison does not discriminate against firearm and ammunition industries during the term of the contract. Reference SB 19 as it relates to Chapter 2251 of the Texas Government Code. Discriminating means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with the firearm or ammunition industry or with a person or entity doing business in the firearm or ammunition industry, but does not include an action made for ordinary business purposes.

61. Equal Opportunity: The Town of Addison complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex (including pregnancy, sexual orientation, or gender identity).

SECTION SP

SPECIAL PROVISIONS

SPECIAL PROVISIONS

SCOPE OF WORK: The Work to be performed under the provisions of these Contract Documents shall consist of furnishing all materials, labor, equipment, supplies and appurtenances; providing all construction, plant, equipment and tools; performing all necessary labor and supervision; and the construction complete, including all Work appurtenant thereto, the proposed improvements for: **ADDISON JUNCTION PUBLIC INFRASTRUCTURE IMPROVEMENTS**.

GENERAL: This Work shall conform to the requirements of the Contract Documents as listed in the Contract Agreement. These Contract Documents are intended to be complementary. The Contractor shall do all work as provided in the Contract Documents shall do such additional Extra work as may be considered necessary to complete the work in a satisfactory and acceptable manner. The Contractor shall furnish all labor, tools, materials, machinery, equipment, and incidentals necessary to the satisfactory prosecution and completion of the Work.

EXAMINATION OF SITE: The Contractor acknowledges that he has investigated and satisfied itself as to the conditions affecting the Work, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads and uncertainties of weather, or similar physical conditions at the site, conditions of the ground, the character of equipment and facilities needed preliminary to and during prosecution of the Work. The Contractor acknowledges that he has inspected the site of the Work and is familiar with the soil conditions to be encountered. Any failure by the Contractor to acquaint himself with the available information will not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the Work. The Town of Addison assumes no responsibility for any conclusions or interpretations made by the Contractor on the basis of the information made available by the Town and the Engineer of Record (**Kimley-Horn and Associates, Inc.)**

SPECIFICATIONS: Construction improvements shall be governed by the following published specifications and details, subject to the Town requirements and modifications in the Contract Documents:

Town of Addison Standard Specifications and Construction Details, January 2022; NCTCOG Standard Specifications for Public Works Construction, North Central Texas, Fifth Edition (November 2017), and NCTCOG Standard Drawings Fifth Edition; and, only for expressly referenced work, TxDOT Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges (November 2014), unless a different edition is expressly designated for that work in the Contract Documents.

The Contractor shall keep copies of applicable Specifications on the Project site at all times.

Where reference is made to specifications compiled by other agencies, organizations or departments, such referenced specifications are made a part of the Project Specifications only to the extent and for the work expressly identified in the Contract Documents.

NCTCOG shall be the general basis for technical specifications, subject to Town of Addison requirements and project-specific modifications in the Contract Documents. TxDOT specifications shall apply only where expressly referenced in the proposal, bid item descriptions, Plans, or Technical Specifications, and only to the identified work. Specific callouts shall govern over general specification references, subject to project-specific Town modifications. Conflicts shall be resolved under the signed Agreement and the Priority of Contract Documents provision in the Instructions to Bidders. References to the latest NCTCOG or TxDOT edition or version mean the editions and amendments expressly identified for this Project; subsequent publications of those standards are not automatically incorporated.

SUBSURFACE INVESTIGATION: Subsurface exploration to ascertain the nature of soils, including the amount of rock, if any, is the responsibility of any and all prospective Bidders. It shall be the responsibility of the Bidders to make such subsurface investigations as he deems necessary to determine the nature of the material to be encountered. Preliminary subsurface exploration, if provided, is identified in GEOTECHINICAL ENGINEERING REPORT FOR ADDISON JUNCTION PUBLIC INFRASTRUCTURE IMPROVEMENTS, NOVEMBER 9, 2026 BY ECS SOUTHWEST, LLP] in the Contract Documents. This information is provided only as preliminary and all bids shall be based on information obtained by the Contractor. The Town of Addison and the Engineer disclaim any responsibility for the accuracy, true location and extent of the soils information that has been prepared by others. They further disclaim responsibility for interpretation of that data by Bidders, as in projecting soil bearing values, rock profiles, soils stability and the presence, level and extent of underground water.

HISTORICAL, SCIENTIFIC AND ARCHAEOLOGICAL DISCOVERIES: Contractor shall immediately give an oral and written report to the Town of Addison of the discovery of any articles of historical, scientific, or archaeological significance. Contractor shall take all necessary steps to preserve the article and shall cease operations, which would affect the find until otherwise directed by the Town of Addison but continue with all other unaffected operations. The future operations of Contractor with respect to the discovery, including disposition of the articles, shall be decided by the Town of Addison. The Town of Addison shall have sole and exclusive title to any discovered articles.

The Town of Addison shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in Contractor's cost of, or the time required for performing any part of the work under the Contract, whether or not changed as a result of conditions, an equitable adjustment will be made and the Contract modified in writing accordingly.

No request by Contractor for an equitable adjustment to the Contract under this Section shall be allowed unless Contractor has given the written notice required. No request by

Contractor for an equitable adjustment of the Contract for differing site conditions will be allowed or shall be made after final payment under the Contract.

ENVIRONMENTAL REQUIREMENTS: In addition to requirements set forth in other sections of the Contract, including the Plans and Specifications, Contractor shall ensure that the requirements of this Section are fulfilled and incorporated into its procedures and processes as well as those of any Subcontractors. All materials utilized by Contractor on the Project shall comply with all applicable local, state and federal laws and regulations.

A. Contractor is responsible for compliance with any requirements included in the Contract Documents regarding Hazardous Materials. If Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by Contractor, Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Town of Addison in writing.

1. The term "Hazardous Materials" means any substance or compound, whether solid, liquid or gaseous: (i) which is listed, defined or regulated as a "hazardous substance", "hazardous waste", "extremely hazardous waste", "solid waste", "toxic substance", "hazardous substance", "hazardous material" or "regulated substance" or otherwise classified as hazardous or toxic, in or pursuant to any Environmental Law; or (ii) which is or contains asbestos, radon, any polychlorinated biphenyl, urea formaldehyde foam insulation, explosive or radioactive material, lead, or motor fuel or other volatile organic compounds; or (iii) which causes or poses a threat to cause a contamination or nuisance on the Project Site or any adjacent property, or (iv) which causes or poses a threat to cause a hazard to the environment or to the health, safety or welfare of persons on or about the Project Site.

2. The term "Environmental Law" means any federal, state or local law, statute, guidance or policy statement, ordinance, code, rule, regulation, license, authorization, decision, order, injunction or decree, which pertains to health, safety or the environment (including, but not limited to, ground, air, water or noise pollution or contamination, and underground or aboveground tanks) and shall include without limitation, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, the Resource Conservation and Recovery Act of 1976, as amended, the Occupational Health and Safety Act, the Toxic Substances Control Act, the Texas Water Code and the Texas Solid Waste Disposal Act and any other state or federal environmental statutes.

B. If the material or substance was on the site prior to the issuance of the Notice to Proceed, the Town of Addison shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by Contractor and, in the event such material or substance is found to be present, to verify that it has been remediated to levels required by the Texas Commission on Environmental Quality. When the material

or substance has been remediated, Work in the affected area shall resume upon written direction of the Town of Addison.

C. Except as provided in Subparagraph B., Contractor (with the Town of Addison's prior written approval of the laboratory) shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by Contractor and, in the event such material or substance is found to be present, the Town of Addison shall determine whether Contractor or the Town of Addison shall have the substance remediated to levels required by the Texas Commission on Environmental Quality. When the material or substance has been remediated, Work in the affected area shall resume upon written direction of the Town of Addison. The Contract time shall be not be extended and the Contract Price shall not be increased, unless the material or substance to be remediated were not introduced to the Work Site by Contractor, and Contractor shall then pay for (or reimburse the Town of Addison for) the testing and remediation.

D. The Town of Addison shall not be responsible under this Section for materials or substances Contractor brings or introduces to the Project Site. Contractor shall be responsible for the fault or negligence in the use and handling of materials or substances of Contractor, Subcontractor, Sub-subcontractor, or anyone directly or indirectly employed by any of them.

E. Contractor shall indemnify the Town of Addison and its affiliates for any and all damages incurred by the Town of Addison as a result of Contractor's actions with respect to all applicable state and federal environmental laws related to materials or substances Contractor brings to the Project Site, including but not limited to fines, penalties, costs of remediation and reasonable attorney's fees. No time extension shall be granted for breach of this provision.

F. Contractor agrees that it shall not transport to, use, generate, dispose of, or install at the Project Site any Hazardous Materials, except in accordance with applicable environmental laws. Further, in performing the Work, Contractor shall not cause any release of Hazardous Materials into, or contamination of, the environment, including the soil, the atmosphere, any water course or ground water unless required by the Contract Documents. In the event Contractor engages in any of the activities prohibited in this Section or fails to stop Work as provided in this Section, to the fullest extent permitted by law, Contractor hereby indemnifies and holds the Town of Addison, its affiliates and their respective officers, agents, employees and tenants harmless from and against any and all claims, damages, losses, causes of action, suits and liabilities of every kind, including but not limited to, expenses of litigation, court costs, punitive damages and attorneys' fees, arising out of, incidental to or resulting from the activities prohibited in this Section or Contractor's failure to stop Work as required. Contractor shall obtain from manufacturers and furnish to the Town of Addison Materials Safety Data Sheets (OSHA Form 20) for all materials incorporated into the Project by Contractor. The Town of Addison hereby agrees that, as between the Town of Addison and Contractor, the Town of Addison will be responsible for Hazardous Materials on site which existed prior to Contractor performing Work on the Project Site or which are introduced to the Project Site by the Town of Addison, except as provided in this Section. Contractor will not be considered the

generator of Hazardous Materials on site which existed prior to Contractor performing Work on the Work Site or which are introduced to the Project Site by the Town of Addison. If the Hazardous Materials were on the Project Site prior to Contractor's presence on the Project Site or were introduced to the Project Site by the Town of Addison, then, if appropriate, the Town of Addison will make an equitable adjustment to the Contract.

G. Include in all construction subcontracts exceeding $100,000, the following requirement: "Contractor is responsible for compliance with all applicable standards, orders, or requirements issued under Section 306 of the Clean Air Act, Section 505 of the Clean Water Act, Executive Order 11738, and Environmental Protection Agency regulations."

H. No request by Contractor for an equitable adjustment to the Contract under this Section shall be allowed unless Contractor has given the written notice required.

I. No request by Contractor for an equitable adjustment of the Contract for Hazardous Materials will be allowed or shall be made after final payment under the Contract.

COMPLIANCE WITH LAWS: The Contractor shall familiarize himself with the nature and extent of the Specifications, Plans, Project Site conditions, traffic and safety requirements, and shall fully comply with all local, state and federal laws, including all codes, ordinances, rules and regulations applicable to this Contract and the Work to be done hereunder, which exist or which may be enacted later by governmental bodies having jurisdiction or authority for such enactment. The Contractor shall comply with all federal, state and local laws, rules and regulations of every kind and nature applicable to the performance of its Work hereunder, and shall hold the Town of Addison and the Engineer harmless therefrom. No plea of ignorance or misunderstanding thereof will be considered.

PERMITS, LICENSES. AND REGULATIONS: Permits and licenses for the prosecution of the Work shall be secured and paid for by the Contractor. Any required permit fees will still be paid by the Contractor. Wherever the Work under this contract requires the obtaining of permits from the Town of Addison or other public authorities, copies of such permits shall be submitted by the Contractor to the Engineer through VPM before the Work covered thereby is started. **NO WORK WILL BE ALLOWED TO PROCEED BEFORE SUCH PERMITS ARE OBTAINED.**

RIGHTS-OF-WAY AND EASEMENTS: Rights-of-way and permanent easements, dedicated to the Town of Addison, will be secured for this Project and made a part of thereto. The Contractor shall obtain a right-of-way permit from the Town of Addison prior to beginning Work. When working within the public rights-of-way and easements, the Contractor shall at all times observe and comply with all Federal and State Laws, and Town of Addison ordinances and regulations which in any way affect the conduct of the Work or its operations, and shall observe and comply with all orders, laws, ordinances and regulations which exist or which may be enacted later by bodies having jurisdiction or authority for such enactment. No plea of misunderstanding or ignorance thereof will be considered. The Contractor and his Sureties shall indemnify and save harmless the Town of Addison, the Engineer and all of their officers, agents, and employees against any and

all claims or liability arising from or based on the violation of any such law, ordinance, regulation, or order, whether it be by itself or its employees.

It shall be the responsibility of the Contractor, prior to the initiation of construction on easements through private property, to inform the property owner of its intent to begin construction. Before beginning construction in areas of public dedication, the Contractor shall inform the agency having jurisdiction in the area forty-eight (48) hours prior to initiation of the Work. All easements shall be cleaned up after use and restored to their original conditions or better.

RESTRICTED WORK HOURS: Per the Town of Addison Building Regulations, "It shall be unlawful for a person, firm or corporation to excavate, erect, build, construct, alter, repair or demolish any building or structure which has been issued or which is required to be issued a building permit by the Town of Addison between the hours of 7:00 p.m. and 7:00 a.m. Monday through Friday, and between the hours of 7:00 p.m. and 8:00 a.m. on Saturday and Sunday, if such activity is performed within a residential, apartment, or townhouse zoned area, or within three hundred (300) feet of an occupied residence, except in cases of urgent necessity or in the interest of public safety and convenience, and then only by permit of the City Manager."

COMPLIANCE WITH IMMIGRATION LAWS: Contractor shall take all steps necessary to ensure that all of the Contractor's employees are authorized to work in the United States as required by the Immigration Reform and Control Act of 1986.

NON-DISCRIMINATION POLICY: It is the policy of the Town of Addison to afford all people an equal opportunity to bid on any contract being let by the Town. The Town of Addison has a policy that prohibits discrimination against any person because of race, color, sex, or national origin, in the award or performance of any contract. The Town of Addison will require its employees, agents, and Contractors to adhere to this policy.

ANTITRUST LAWS: The Contractor hereby assigns to the Town of Addison any and all claims for overcharges associated with this contract which arise under the antitrust laws of the United States 15 U.S.C.A. Sec. 1, et seq. (1973).

ABANDONMENT: The Town of Addison reserves the right to abandon, without obligation to the Contractor, any part of the Project, or the entire Project, at any time before the Contractor begins any construction Work authorized by the Town of Addison. In case of total abandonment of the Project, the Contract becomes void. The Town of Addison may abandon portions of the Project at any time during the Project duration. In case of such partial abandonment, the Contractor shall not be due any payment for lost or unrealized profits on the abandoned portions of the Project.

DISCREPANCIES: If the Contractor, in the course of the Work, finds any discrepancy between the Contract Documents and the physical conditions of the Project, or any errors or omissions in Plans or in the layout as given by survey points and instructions, or if it appears that any Plan, Specification or other Contract Document is or may not be in compliance with any building code or other requirement of any governmental body, he

shall immediately inform the Town of Addison and the Engineer in writing, and the Town of Addison and the Engineer shall promptly verify the same. Any Work done after such discovery, until authorized, will be done at the Contractor's risk.

PREPARATION OF STORM WATER POLLUTION PREVENTION PLAN: A Storm Water Pollution Prevention Plan (SW3P) will be required for this project because the total disturbed area exceeds five (5) acres.

This specification is not all inclusive of the requirements for an SW3P. The Contractor shall comply with all requirements of the TCEQ TPDES permit and the local authorities' storm water ordinance and/or regulations.

ADDENDA: Bidders desiring further information, or interpretation of the Plans and Specifications, must make written request for such information to the Engineer (not later than four (4) working days prior to the date set for the Bid opening. The ability to ask questions will close at **5:00 PM CST ON DECEMBER 1, 2026**. Answers to all such requests will be issued in the form of Addenda and a copy of such Addenda will be released through www.civcastusa.com. It will be the responsibility of each person who has been issued as set of Bidding Documents to secure all Addenda from www.civcastusa.com . Addenda will be bound with and made a part of the Contract Documents. No other explanation or interpretation will be considered official or binding. Should a Bidder find discrepancies in, or omissions from, the Plans, Specifications or Contract Documents, or should it be in doubt as to their meaning, it shall at once notify the Engineer in writing in order that a written addendum may be sent to all Bidders.

PAY ITEMS: Pay items provided are intended to be all-inclusive of the Work required on this Project. Work required by the Plans or Specifications but not provided with a specific pay item shall be considered incidental to other items of Work. Final payment to the construction Contractor shall not be made until all Work has been finally completed and verified in accordance with the construction contract, Plans and Specifications and have been finally accepted by the Town of Addison.

QUANTITIES: The quantities in the Bid Items are approximate and may represent quantities in excess of those actually installed. Final Payment will be based on the actual quantities installed and paid in accordance with the applicable Specifications. Record quantity verification and supporting measurements directly in VPM under Special Provision in this document.

BID ITEMS /REFERENCE SPECIFICATIONS: The NCTCOG specifications and project-specific Town requirements identified in Special Provision in this document shall apply to the bid items below. TxDOT specifications apply only to the items that expressly reference them, using the edition designated under Special Provision in this document. Use the following standard bid-item descriptions for work included in the Project. Coordinate item numbers, descriptions, units, and payment provisions with the Proposal and Plans; omit items that are not included in the Project.

BASE BID - BID ITEMS DESCRIPTIONS:

Bid Item No. P1 – MOBILIZATION

Mobilization includes the movement of all labor, equipment and supplies, establishment of facilities necessary for work, and other work and operations which must be performed and cost not directly attributable to other pay item costs, which must be incurred in order to enable the Contractor to begin work on other contract items. This item shall be measured as a Lump Sum.

Partial Payments of the Lump Sum for Mobilization shall be limited as follows:

1. When 1% of the *adjusted contract amount is earned, 50% of the Mobilization Lump Sum. Previous payments under this item will be deducted from this amount.

2. When 5% of the *adjusted contract amount is earned, 75% of the Mobilization Lump Sum. Previous payments under this item will be deducted from this amount.

3. When 10% of the *adjusted contract amount is earned, 90% of the Mobilization Lump Sum. Previous payments under this item will be deducted from this amount.

4. When all work under the contract is completed by the Contractor and accepted by the Town, 100% of the Mobilization Lump Sum will be paid.

Bid Item No. P2 - BARRICADES, SIGNS, AND TRAFFIC HANDLING

This item shall include the lump sum cost for installation, maintenance, relocation, and removal of all traffic signs (street name, directional, informational or regulatory), barricades, temporary signs, temporary pavement markings (except those identified in the permanent pavement marking bid items), traffic control plan and all other traffic control measures necessary to provide for the safe travel of vehicles and pedestrians through, along, or around the construction site and for the protection of the workers on the project. All barricades and warning signs will conform to those sections of the Texas Manual on Uniform Traffic Control Devices, latest edition, as amended by the Texas Department of Transportation. **Traffic control construction shall also comply with NCTCOG Item 801.1, "Traffic Control," and the applicable Town of Addison details.**

Partial payment of the Lump Sum bid shall be limited as follows:

1. When 5% of the *adjusted contract amount is earned, 25% of the Lump Sum bid shall be paid.

2. When 25% of the *adjusted contract amount is earned, 50% of the Lump Sum bid shall be paid. Previous payments under this item will be deducted from this amount.

3. When 50% of the *adjusted contract amount is earned, 75% of the Lump Sum bid shall be paid. Previous payments under this item will be deducted from this amount.

4. When all work under the contract is completed by the Contractor and accepted by the City, 100% of the Lump Sum bid shall be paid.

5. An overrun of the contract quantity will not be allowed under any circumstances unless the quantity is added by an approved change order.

Additional Notes - If the Contractor fails to provide properly maintain barricades, signs, and traffic control devices in compliance with the specifications, the Contractor will be considered in non-compliance with this item and payment may be delayed for this item.

Bid Item No. P3 - PROJECT SIGN

This item shall consist of the installation of a project sign in the locations approved by the OWNER. Each sign shall be constructed in accordance with the details found in Section PS of the Specification, details and notes, including NCTCOG Item 107.21.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. P4 – GENERAL SITE PROTECTION

This item shall consist of protecting existing trees, shrubbery, landscaping, irrigation systems, utilities, structures, facilities, and other improvements designated to remain within or adjacent to the limits of construction. The Contractor shall maintain the Project Site in a secure condition at all times throughout construction, including during periods of inactivity, non-working hours, weekends, holidays, and special events. No construction activities shall be permitted during Town-sponsored special events unless otherwise authorized in writing by the Owner. The Contractor shall provide additional site security measures as directed by the Owner and shall secure the Site upon request of the Owner for any purpose, at no additional cost to the Contract. Protection measures shall be provided in accordance with the project specifications, details, and notes, including NCTCOG Item 201.

This item shall include temporary fencing, tree protection, protection of existing utilities and structures, erosion prevention measures associated with protected areas, protection of existing landscaping, and all labor, materials, tools, equipment, and incidentals necessary to preserve existing improvements designated to remain during construction.

Measurement shall be made on the basis of the completed and accepted work measured as a lump sum (LS).

Payment shall be made at the contract unit price bid per lump sum (LS) for General Site Protection and shall be full compensation for furnishing all labor, materials, tools, equipment, protection measures, maintenance, and incidentals necessary to complete the work. No separate measurement or payment shall be made for protection of trees, shrubbery, landscaping, utilities, structures,

facilities, or other improvements designated to remain, unless specifically provided under another bid item.

Bid Item No. P5 - GENERAL SITE PREPARATION

This work includes preparing the jobsite within the project limits requiring such work, unless otherwise noted. This includes work within the right-of-way and any adjacent property that is necessary to complete the work as shown on the construction plans or as determined by the ENGINEER in accordance with the appropriate details and specifications, including NCTCOG Item 203, "Site Preparation," and Item 203.1, subject to Town of Addison requirements and Special Provision in this document. All vegetation within the paving limits shall be removed.

Protect trees, shrubbery, vegetation, existing structures, and existing utilities designated to remain in accordance with NCTCOG Item 201, "Site Protection," and the Plans and Town of Addison requirements.

This work may also include, but not be limited to:

1. The removal of existing pavement markings and traffic buttons;
2. The removal or relocation of any existing barricades or signage;
3. The removal of any existing driveway/roadway;
4. The removal and relocation of any fencing and gates within the proposed right of way as specified within the construction plans;
5. The removal of existing rock rip rap;
6. The removal of a portion of the existing retaining wall at the locations shown in the construction plans;
7. The removal of landscape edging;
8. The removal of mailboxes;
9. Any grading activities (excavation or fill) deemed necessary to prepare the proposed grades of the subgrade prior to pavement, unless separate bid items are provided for excavation or embankment;
10. The removal and salvage of any existing regulatory, school or informational signs;
11. The removal of all trees, stumps, bushes, vegetation, roots and shrubs not specified and are within the limits of work;
12. Adjusting water vaults to finished grade as indicated on the plans;
13. Protection and replacement of existing irrigation equipment.
14. Dewatering of site for access.

Unless expressly identified and quantified under a separate pay item in the Proposal, the work listed above and any removal work indicated in the Plans shall be subsidiary to this item. Work included under a separate pay item shall be measured and paid only under that item.

Measurement and payment for work performed and materials furnished related to general site and/or right of way preparation, as provided herein, shall be made on the basis of the price bid per lump sum (LS) and shall be total compensation for furnishing and/or operating all labor, materials, tools, equipment and other incidentals necessary to complete the work.

Bid Item No. P6 - REMOVE CONCRETE SIDEWALK/RAMPS
Bid Item No. P7 - REMOVE CONCRETE SIDEWALK WITH BRICK PAVERS

This item shall consist of the removal and disposal of existing concrete sidewalk and brick pavers at the locations shown in the drawings. Existing concrete sidewalk and brick pavers shall be removed in accordance with the appropriate specifications, details, and notes, including NCTCOG Item 701.2.

Measurement and payment shall be made on the basis of price bid per square yard (SY) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. P8 - REMOVE CONCRETE DRIVEWAY

This item shall consist of the removal and disposal of existing concrete driveway pavement at the locations shown in the drawings. Existing concrete driveway pavement shall be removed in accordance with the appropriate specifications, details, and notes, including NCTCOG Item 701.2.

Measurement and payment shall be made on the basis of price bid per square yard (SY) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. P9 - REMOVE CONCRETE PAVEMENT

This item shall consist of the removal and disposal of existing concrete pavement at the locations shown in the drawings. Existing concrete pavement shall be removed in accordance with appropriate specifications, details, and notes, including NCTCOG Item 701.2.

Measurement and payment shall be made on the basis of price bid per square yard (SY) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. P10 - REMOVE MANHOLE (ANY SIZE)
Bid Item No. P11 - REMOVE INLET (ANY SIZE)
Bid Item No. P12 - REMOVE RCP (ANY SIZE)

This item shall consist of the removal and disposal of existing storm drain manholes, inlets, reinforced concrete pipe (RCP), and associated appurtenances at the locations shown in the drawings. Existing structures and pipe shall be removed in accordance with the project specifications, details, and notes, including NCTCOG Item 701.2.

The work shall include all excavation; removal of concrete structures, reinforced concrete pipe, and associated appurtenances; backfill; disposal of materials; surface restoration; and all labor, materials, tools, equipment, and incidentals necessary to complete the work.

Measurement shall be made on the basis of the completed and accepted removal measured by each (EA) for manholes and inlets and by linear foot (LF) for reinforced concrete pipe.

Payment shall be made at the contract unit price bid per each (EA) for Remove Manhole (Any Size) and Remove Inlet (Any Size), and per linear foot (LF) for Remove RCP, and shall be full compensation for all excavation and backfill; removal and disposal of concrete, reinforced concrete pipe, steel, and associated materials; hauling, unloading, storage, disposal fees; restoration; labor; materials; tools; equipment; and incidentals necessary to complete the work.

Bid Item No. P13 - REMOVE TREES (ANY SIZE)

This item shall consist of the removal and disposal of existing trees at the locations shown in the drawings. Existing trees shall be removed in accordance with appropriate specifications, details, and notes, including NCTCOG Item 204.1

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. P14 - REMOVE EXISTING BOLLARD
Bid Item No. P15 - REMOVE EXISTING SIGN POST AND FOUNDATION

This item shall consist of the removal and disposal of existing bollards, sign posts, foundations, and associated appurtenances at the locations shown in the drawings. Removal shall be performed in accordance with the project specifications, details, and notes, including NCTCOG Item 701.2.

The work shall include all excavation; removal of concrete foundations, steel components, mounting hardware, and associated appurtenances; backfill; disposal of materials; surface restoration; and all labor, materials, tools, equipment, and incidentals necessary to complete the work.

Measurement shall be made on the basis of the completed and accepted removal measured by each (EA).

Payment shall be made at the contract unit price bid per each (EA) for the specified item removed and shall be full compensation for all excavation and backfill; removal and disposal of concrete, steel, foundations, and associated materials; hauling, unloading, storage, disposal fees; restoration; labor; materials; tools; equipment; and incidentals necessary to complete the work.

Bid Item No. P16 - REMOVE EXISTING FOUNDATION AND SALVAGE EXISTING LIGHT POLE

This item shall consist of removing the existing light pole and foundation while salvaging the existing light pole for reinstallation or delivery to the Owner, as indicated in the plans. Removal shall include disconnecting electrical service, removing the foundation, and protecting the salvaged pole from damage during handling and storage.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all labor, materials, tools, equipment, traffic control, storage, transportation, and incidentals necessary to complete the work.

Bid Item No. P17 - REMOVE EXISTING STEEL/CHAIN LINK FENCE

This item shall consist of the removal and disposal of existing steel & chain link fence, fence posts, gates, foundations, and associated appurtenances at the locations shown in the drawings. Removal shall be performed in accordance with the project specifications, details, and notes, including NCTCOG Item 701.2.

The work shall include all excavation; removal of fence panels, posts, gates, foundations, concrete footings, mounting hardware, and associated appurtenances; backfill; disposal of materials; surface restoration; and all labor, materials, tools, equipment, and incidentals necessary to complete the work.

Measurement shall be made on the basis of the completed and accepted fence removal measured by linear foot (LF).

Payment shall be made at the contract unit price bid per linear foot (LF) for Remove Existing Steel Fence and shall be full compensation for all excavation and backfill; removal and disposal of fence panels, gates, posts, foundations, concrete footings, and associated materials; hauling, unloading, storage, disposal fees; restoration; labor; materials; tools; equipment; and incidentals necessary to complete the work.

Bid Item No. P18 - REMOVE EXISTING STEEL PIPE RAILING

This item shall consist of the removal and disposal of existing steel pipe railing at the locations shown in the drawings. Removal shall be performed in accordance with the project specifications, details, and notes, including NCTCOG Item 701.2.

The work shall include removal of railing, posts, anchors, concrete foundations or footings, mounting hardware, and associated appurtenances; excavation and backfill as required; disposal of materials; restoration; and all labor, materials, tools, equipment, and incidentals necessary to complete the work.

Measurement shall be made on the basis of the completed and accepted steel pipe railing removal measured by linear foot (LF).

Payment shall be made at the contract unit price bid per linear foot (LF) for Remove Existing Steel Pipe Railing and shall be full compensation for removal and disposal of the railing, posts, anchors, foundations, and associated materials; excavation and backfill; hauling; disposal fees; restoration; labor; tools; equipment; and incidentals necessary to complete the work.

Bid Item No. P19 - REMOVE EXISTING GUARDRAIL

This item shall consist of the removal and disposal of existing guardrail at the locations shown in the drawings. Removal shall be performed in accordance with the project specifications, details, and notes, including NCTCOG Item 701.2.

The work shall include removal of guardrail, posts, blocks, anchors, end treatments, concrete foundations or footings, and associated appurtenances; excavation and backfill as required; disposal of materials; surface restoration; and all labor, tools, equipment, and incidentals necessary to complete the work.

Measurement shall be made on the basis of the completed and accepted guardrail removal measured by linear foot (LF).

Payment shall be made at the contract unit price bid per linear foot (LF) for Remove Existing Guardrail and shall be full compensation for removal and disposal of guardrail, posts, blocks, anchors, end treatments, foundations, and associated materials; excavation and backfill; hauling; disposal fees; restoration; labor; tools; equipment; and incidentals necessary to complete the work.

Bid Item No. P20 - REMOVE EXISTING SLOTTED DRAIN

This item shall consist of the removal and disposal of existing slotted drain at the locations shown in the drawings. Removal shall be performed in accordance with the project specifications, details, and notes, including NCTCOG Item 701.2.

The work shall include removal of slotted drain, associated pipe, connections, concrete encasement or supports, and associated appurtenances; excavation and backfill as required; disposal of materials; surface restoration; and all labor, materials, tools, equipment, and incidentals necessary to complete the work.

Measurement shall be made on the basis of the completed and accepted slotted drain removal measured by linear foot (LF).

Payment shall be made at the contract unit price bid per linear foot (LF) for Remove Existing Slotted Drain and shall be full compensation for removal and disposal of the slotted drain and associated components; excavation and backfill; hauling; disposal fees; restoration; labor; tools; equipment; and incidentals necessary to complete the work.

Bid Item No. P21 - ADJUST EXISTING VAULT TO PROPOSED GRADE
Bid Item No. P22 - ADJUST EXISTING HANDHOLE TO PROPOSED GRADE

This item shall consist of adjusting existing vaults and handholes to the proposed elevations and alignments shown in the drawings. Adjustments shall be performed in accordance with the project specifications, details, and notes, including NCTCOG Item 701.2.3.

The work shall include all excavation and backfill; removal, modification, or reconstruction of the existing structure as required; adjustment of frames, covers, and associated components; furnishing

new materials where necessary; and all labor, materials, tools, equipment, and incidentals necessary to complete the adjustment.

Measurement shall be made on the basis of the completed and accepted structure adjustment measured by each (EA).

Payment shall be made at the contract unit price bid per each (EA) for the specified structure adjustment and shall be full compensation for all excavation, backfill, demolition, concrete, steel, adjustment materials, labor, tools, equipment, and incidentals necessary to complete the work in accordance with NCTCOG Item 701.2.3.

Bid Item No. P23 - UNCLASSIFIED EXCAVATION (INCLUDES ASPHALT REMOVAL)

This work consists of all the required excavation within the limits of the right-of-way and adjacent areas to establish the roadway cross-section, grade, drainage ditches and profile as shown on the plans. All excavation is considered unclassified and shall be performed to the lines and grades shown on the construction plans or as directed by the ENGINEER, in accordance with the appropriate specifications, details and notes, including NCTCOG Item 203.2, 203.4 & 203.5. This item includes the removal and disposal of existing asphalt pavement, asphalt base material, and other asphaltic materials encountered within the limits of excavation.

This item also includes temporary stockpiling, placement, and compaction of excavated or borrow material required for this project, in accordance with the appropriate specifications. Fill shall be placed and compacted (minimum 95% of maximum dry density) in accordance with the specifications, details, notes, and geotechnical report.

Unclassified excavation shall be measured in its original position, and the volume in cubic yards shall be determined using the average end area method. Finishing parkways and medians will not be measured separately but shall be considered subsidiary to this item.

Payment shall be made at the contract unit price bid per cubic yard (CY) for unclassified excavation and shall be total compensation for excavation; removal and disposal of existing asphalt pavement and asphalt base materials; placement and compaction of suitable material; loading, hauling, unloading, and satisfactory disposal of unsuitable or excess material; finishing slopes, ditches, parkways, and medians; maintenance blading or scarifying; and furnishing all labor, fuel, materials, tools, equipment, and incidentals necessary to complete the work.

Bid Item No. P24 - BORROW AND SPOIL (ROADWAY)

This work consists of furnishing, hauling, placing, and compacting approved borrow material within the limits of the right-of-way and adjacent areas necessary to establish the roadway cross-section, grades, drainage ditches, and profile shown on the plans. Work shall be performed to the lines and grades shown on the construction plans or as directed by the ENGINEER, in accordance with the appropriate specifications, details, and notes, including NCTCOG Items 203.2, 203.4, and 203.5.

This item includes furnishing borrow material; hauling; placement; moisture conditioning; compaction; construction and maintenance of spoil areas; and all work necessary to construct roadway embankments as shown on the plans. Fill shall be placed and compacted in accordance with the project specifications, details, notes, and geotechnical report.

Borrow shall be measured in its final compacted position, and the volume computed in cubic yards using the average end area method. Spoil sites shall be considered part of the overall project site.

Payment shall be made at the contract unit price bid per cubic yard (CY) for Borrow and Spoil (Roadway) and shall be full compensation for furnishing all labor, materials, tools, equipment, hauling, placement, moisture conditioning, compaction, disposal fees, and incidentals necessary to complete the work. Payment will not be allowed for excavation or borrowed material used for purposes other than those designated in the contract documents.

Bid Item No. P25 - HYDRATED LIME (36 LB/SY)

This item shall consist of furnishing hydrated lime for treatment of the subgrade at the locations shown in the drawings. Hydrated lime shall be furnished at the preliminary application rate of 8% by dry weight of soil, approximately 36 pounds per square yard for a 6-inch treatment depth, in accordance with the project specifications, details, notes, geotechnical report, and NCTCOG Item 301. The final application rate shall be established by lime-series testing during construction.

Hydrated lime incorporated into the accepted work shall be measured by the ton of 2,000 pounds based on the dry weight of hydrated lime. When hydrated lime slurry is used, the water contained in the slurry shall not be included in the measured quantity.

Payment shall be made at the contract unit price bid per ton (TON) for Hydrated Lime and shall be full compensation for furnishing, delivering, handling, and storing the hydrated lime.

Bid Item No. P26 - 6" LIME TREATED SUBGRADE

This item shall consist of constructing a 6-inch lime treated subgrade at the locations shown in the drawings. Lime treatment shall be performed in accordance with the project specifications, details, notes, geotechnical report, and NCTCOG Item 301. The geotechnical report recommends a preliminary lime application rate of 8 percent hydrated lime by dry weight of soil, approximately 36 pounds per square yard for a 6-inch treatment depth.

This item shall include preparation of the subgrade; excavation or scarification as required; pulverization; spreading and mixing of lime; furnishing and applying water; moisture conditioning; shaping; compacting; finishing; curing; maintenance; and all manipulation necessary to complete the lime treated subgrade in accordance with NCTCOG Item 301.

The completed and accepted lime treated subgrade shall be measured by the square yard (SY).

Payment shall be made at the contract unit price bid per square yard (SY) for 6" Lime Treated Subgrade and shall be full compensation for preparing the roadway; loosening; pulverizing;

applying and mixing lime; furnishing and applying water; shaping; sprinkling; compacting; finishing; curing; maintenance; and all labor, equipment, fuel, tools, and incidentals necessary to complete the work.

Bid Item No. P27 – 6" REINFORCED CONCRETE PAVEMENT (INCLUDING CURB WHERE SHOWN)
Bid Item No. P28 – 8" REINFORCED CONCRETE PAVEMENT (INCLUDING CURB WHERE SHOWN)
Bid Item No. P29 – 10" REINFORCED CONCRETE PAVEMENT (INCLUDING CURB WHERE SHOWN)

This item shall consist of installation of reinforced concrete pavement with monolithic curb at the locations shown in the drawings. Concrete pavement shall be installed in accordance with the project specifications, details, notes, and geotechnical report, including NCTCOG Item 303. Monolithic curb, where shown on the plans, shall be included in this item and shall not be measured or paid for separately.

Measurement and payment shall be made on the basis of price bid per square yard (SY) and shall be total compensation for furnishing all materials, reinforcement, concrete, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. P30 - 8" REINFORCED CONC PAVEMENT W/ DROP SLAB

This item shall consist of constructing 8-inch reinforced concrete pavement with a depressed drop slab section at the locations shown in the drawings. Concrete pavement shall be constructed in accordance with the project specifications, details, notes, geotechnical report recommendations, NCTCOG Item 303, and Town of Addison Standard Construction Detail SD-P22. The drop slab shall be constructed to accommodate installation of vehicular pavers and setting bed as shown on the plans and details. Vehicular pavers and setting bed shall be measured and paid for separately. The pavement shall have a minimum compressive strength of 4,000 psi at 28 days for Class P1 and 4,500 psi at 28 days for Class P2. Reinforcement shall consist of No. 3 bars at 18-inch centers each way unless otherwise shown on the plans.

Measurement and payment shall be made on the basis of the price bid per square yard (SY) and shall be total compensation for furnishing all materials, reinforcement, concrete, curb and gutter where shown, joint materials, dowels, curing, finishing, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. P31 - VEHICULAR PAVERS

This item shall consist of furnishing and installing vehicular pavers at the locations shown in the drawings. Vehicular pavers shall be installed in accordance with the project specifications, details, and notes, including the Town of Addison Standard Construction Detail SD-P22. Vehicular pavers shall be heavy paving brick conforming to ASTM C1272, Type R.

The Contractor shall submit the proposed paver manufacturer, color, size, shape, texture, and laying pattern to the OWNER for review and approval prior to procurement and installation. No pavers shall be ordered or installed until approval has been obtained from the Town of Addison.

The completed and accepted vehicular paver installation shall be measured by the square yard (SY) of surface area installed.

Payment shall be made at the contract unit price bid per square yard (SY) for Vehicular Pavers and shall be full compensation for furnishing and installing all pavers, setting bed materials, joint materials, edge restraints, cutting, fitting, labor, tools, equipment, and incidentals necessary to complete the work. The setting bed and joint materials shall not be measured or paid for separately but shall be considered subsidiary to this item.

Bid Item No. P32 - 5" CONCRETE SIDEWALK

This item shall consist of installation of 5-inch concrete sidewalks at the locations shown in the drawings. Concrete sidewalk shall be installed in accordance with project specification, details, and notes, including NCTCOG Item 305.2.

Measurement and payment shall be made on the basis of price bid per square yard (SY) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. P33 - 5" CONCRETE SIDEWALK W/ PEDESTRIAN BRICK PAVERS

This item shall consist of constructing 5-inch concrete sidewalk with pedestrian brick pavers at the locations shown in the drawings. Sidewalk, concrete base, brick pavers, setting bed, joint material, reinforcement, edge restraints, and all associated appurtenances shall be constructed in accordance with the project specifications, details, and notes, including NCTCOG Item 305.2 and the Town of Addison Standard Construction Details. The paver manufacturer, color, pattern, and installation system shall be submitted to the OWNER for review and approval prior to procurement and installation.

Measurement shall be made on the basis of the completed and accepted area of sidewalk with pedestrian brick pavers measured in square yards (SY).

Payment shall be made at the contract unit price bid per square yard (SY) for 5-inch Concrete Sidewalk with Pedestrian Brick Pavers and shall be full compensation for furnishing all materials, labor, tools, equipment, and incidentals necessary to complete the work, including the concrete base, reinforcement, pedestrian pavers, setting bed, joint material, edge restraints, and all associated appurtenances.

Bid Item No. P34 - PEDESTRIAN CURB RAMP

This item shall consist of constructing pedestrian curb ramps at the locations shown in the drawings. Pedestrian curb ramps shall be constructed in accordance with the project specifications,

details, and notes, including NCTCOG Item 305.2 and the applicable Town of Addison Standard Construction Details.

This item shall include all excavation, subgrade preparation, reinforcing steel, concrete, detectable warning surfaces, expansion joints, grading, finishing, and all associated appurtenances required for a complete pedestrian curb ramp installation.

Measurement shall be made on the basis of the completed and accepted curb ramp measured by each (EA).

Payment shall be made at the contract unit price bid per each (EA) for Pedestrian Curb Ramp and shall be full compensation for all excavation and preparation of the subgrade; furnishing and placing all materials, including concrete, reinforcing steel, detectable warning surfaces, granular base where required, expansion joint materials, labor, tools, equipment, and incidentals necessary to complete the work.

Bid Item No. P35 – 8" REINFORCED CONCRETE TRAIL

This item shall consist of the removal and replacement of existing concrete pavement along Cotton Belt Trail where disturbed by proposed utility construction or other project work, as shown in the drawings.

The work shall include removal and disposal of existing pavement; excavation and subgrade preparation; furnishing and placing reinforcing steel and 8-inch reinforced concrete pavement; joints; curing; restoration of adjacent surfaces; and all labor, materials, tools, equipment, and incidentals necessary to complete the work.

Measurement shall be made on the basis of the completed and accepted 8-inch reinforced concrete trail, measured by square yard (SY).

Payment shall be made at the contract unit price bid per square yard (SY) for 8" Reinforced Concrete Trail and shall be full compensation for pavement removal and disposal; excavation and subgrade preparation; reinforcing steel; concrete; joints; curing; restoration; labor; materials; tools; equipment; and incidentals necessary to complete the work.

Bid Item No. P36 – 4" TYPE B HMAC (TEMPORARY TRAFFIC CONTROL)

This item shall consist of furnishing, placing, maintaining, and removing 4 inches of Type B Hot-Mix Asphalt Concrete (HMAC) for temporary traffic control as shown in the Traffic Control Plans. Materials and construction shall conform to NCTCOG Items 302.9 and 302.10.

The work shall include preparation of the underlying surface; furnishing, placing, and compacting 4 inches of Type B HMAC; maintaining the temporary pavement in a safe and serviceable condition; removal and disposal when no longer required; and all labor, materials, tools, equipment, and incidentals necessary to complete the work.

Measurement shall be made on the basis of completed and accepted 4” Type B HMAC (Temporary Traffic Control), measured by square yard (SY).

Payment shall be made at the contract unit price bid per square yard (SY) for 4” Type B HMAC (Temporary Traffic Control) and shall be full compensation for surface preparation; furnishing, placing, compacting, maintaining, removing, and disposing of temporary HMAC; labor; materials; tools; equipment; and incidentals necessary to complete the work.

Bid Item No. P37 - REFL PAV MRKG TY 1 (W) 4" SOLID - 90 MIL
Bid Item No. P38 - REFL PAV MRKG TY 1 (W) 8" SOLID - 90 MIL
Bid Item No. P39 - REFL PAV MRKG TY 1 (W) 12" SOLID - 125 MIL
Bid Item No. P40 - REFL PAV MRKG TY 1 (W) 24" STOP BAR - 125 MIL

This item shall consist of installation of reflective pavement markings of the type shown at the locations shown in the drawings. Reflective pavement markings shall be installed in accordance with project specification, details, and notes, including TxDOT Item 666.

Measurement and payment shall be made on the basis of price bid per linear feet (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. P41 - RAISED PAVEMENT MARKER TY II-C-R & SURFACE PREP
Bid Item No. P42 - RAISED PAVEMENT MARKER TY I-C & SURFACE PREP

This item shall consist of furnishing and installing raised pavement markers of the type shown at the locations shown in the drawings. Raised pavement markers shall be installed in accordance with the project specifications, details, and notes, including TxDOT Item 672. Surface preparation, adhesives, and all appurtenances required for a complete installation shall be considered subsidiary to this item.

Measurement shall be made on the basis of the completed and accepted raised pavement markers measured by each (EA).

Payment shall be made at the contract unit price bid per each (EA) for Raised Pavement Markers of the type specified and shall be full compensation for furnishing all labor, materials, tools, equipment, adhesives, surface preparation, installation, and incidentals necessary to complete the work.

Bid Item No. P43 - INSTALL NEW SIGN AND SIGN POST ASSEMBLY

This item shall consist of installation of new road signs, signposts and assemblies at the locations shown in the drawings. Signs, posts, and assemblies shall be installed in accordance with project specification, details, and notes, including TxDOT Item 644.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. P44 – DART STEEL FENCE (MATCH EXISTING)

This item shall consist of removing, salvaging, relocating, and reinstalling existing steel fence and gates impacted by the proposed improvements and furnishing and installing new steel fence and gates where existing materials cannot be salvaged or reused. New fence and gate materials shall match the existing fence in material, configuration, dimensions, and finish.

The work shall include removal and salvage of existing fence and gates suitable for reuse; furnishing and installing new fence, gates, posts, foundations, hardware, and associated appurtenances as required; disposal of materials not reused; and all labor, materials, tools, equipment, and incidentals necessary to complete the work. Materials damaged by the Contractor shall be repaired or replaced at no additional cost to the Owner.

Measurement shall be made on the basis of completed and accepted Steel Fence, measured by linear foot (LF).

Payment shall be made at the contract unit price bid per linear foot (LF) for Steel Fence and shall be full compensation for removal, salvage, relocation, and reinstallation of existing fence; furnishing and installing replacement fence and associated components where required; foundations, hardware, disposal; labor; materials; tools; equipment; and incidentals necessary to complete the work.

Bid Item No. P45 - STEEL FENCE (FESTIVAL WAY) (MATCH EXISTING)

This item shall consist of furnishing and installing steel fence, including posts, panels, gates, connections, anchors, footings, and associated appurtenances at the locations shown in the drawings. The fence shall be constructed in accordance with the project specifications, details, and notes, including NCTCOG Item 801.3 and the construction plans.

Steel fence shall match the existing steel fence adjacent to the project in style, height, color, finish, and appearance unless otherwise approved by the OWNER. The Contractor shall submit shop drawings, product data, fence manufacturer information, finish samples, and color samples to the OWNER for review and approval prior to fabrication and installation.

Steel fence members shall be handled and installed in a manner that prevents damage to the material or protective coating.

Measurement shall be made on the basis of the completed and accepted steel fence measured by linear foot (LF).

Payment shall be made at the contract unit price bid per linear foot (LF) for Install Steel Fence and shall be full compensation for furnishing all labor, materials, tools, equipment, shop drawings,

fabrication, coatings, posts, panels, gates, anchors, footings, connections, installation, and incidentals necessary to complete the work.

Bid Item No. P46 – REMOVABLE TRAFFIC BOLLARDS

This item shall consist of furnishing and installing removable traffic bollards at the locations shown in the drawings. Bollard type and installation detail will be provided by the Engineer prior to installation.

The work shall include furnishing and installing bollards; excavation; foundations and anchorage; backfill; restoration of adjacent surfaces; and all labor, materials, tools, equipment, and incidentals necessary to complete the work.

Measurement shall be made on the basis of completed and accepted Traffic Bollards, measured by each (EA).

Payment shall be made at the contract unit price bid per each (EA) for Traffic Bollards and shall be full compensation for furnishing and installing the bollards; excavation; foundations and anchorage; backfill; surface restoration; labor; materials; tools; equipment; and incidentals necessary to complete the work.

Bid Item No. P47 - PEDESTRIAN RAIL TYPE PR11

This item shall consist of removing, salvaging, relocating, and reinstalling existing pedestrian railing impacted by the proposed improvements and furnishing and installing new Pedestrian Rail Type PR11 where existing railing cannot be salvaged or reused. New and reinstalled railing shall conform to TxDOT Standard RL-PR11-19, Pedestrian Rail Type PR11.

The work shall include removal and salvage of existing railing suitable for reuse; furnishing new Type PR11 railing as required; posts, rail members, base plates, anchor bolts, hardware, and associated appurtenances; installation; disposal of materials not reused; and all labor, materials, tools, equipment, and incidentals necessary to complete the work. Components damaged by the Contractor shall be repaired or replaced at no additional cost to the Owner.

Measurement shall be made on the basis of completed and accepted Pedestrian Rail Type PR11, measured by linear foot (LF).

Payment shall be made at the contract unit price bid per linear foot (LF) for Pedestrian Rail Type PR11 and shall be full compensation for removal, salvage, relocation, and reinstallation of existing railing; furnishing and installing new railing where required; posts, rail members, base plates, anchors, hardware, disposal, labor, materials, tools, equipment, and incidentals necessary to complete the work.

Bid Item No. P48 - CHAIN LINK FENCE (MATCH EXISTING)

This item shall consist of furnishing and installing chain link fence at the locations shown in the drawings. Chain link fence shall be constructed in accordance with the project specifications, details, and notes, including NCTCOG Item 801.4. New fencing shall match the adjacent existing chain link fence in height, fabric, posts, rails, coating, and general appearance unless otherwise shown on the plans or approved by the OWNER.

The completed and accepted chain link fence shall be measured in place from center to center of end posts or corner posts and paid by the linear foot (LF). Gates will not be included in the fence measurement and shall be paid for separately where applicable.

Payment shall be made at the contract unit price bid per linear foot (LF) for Chain Link Fence (Match Existing) and shall be full compensation for furnishing and installing all fence fabric, posts, rails, braces, fittings, concrete foundations, preparation, erection, labor, materials, tools, equipment, and incidentals necessary to complete the work.

Bid Item No. P49 – RELOCATE DUMPSTER AND DUMPSTER ENCLOSURE

This item shall consist of the relocation of the existing dumpster and wood dumpster enclosure located at the intersection of Addison Circle Road and Ace Alley to the location shown on the plans. The work shall be performed in accordance with the project specifications, details, and notes.

The work shall include removal, salvage, handling, relocation, and reinstallation of the existing dumpster enclosure, including posts, panels, foundations, hardware, and associated appurtenances; relocation of the existing dumpster; excavation and backfill; surface restoration; and all labor, materials, tools, equipment, and incidentals necessary to complete the work. Existing enclosure materials suitable for reuse shall be salvaged and protected from damage. Materials damaged by the Contractor shall be repaired or replaced at no additional cost to the Owner.

Measurement shall be made on a lump sum (LS) basis for the completed and accepted relocation of the dumpster and dumpster enclosure.

Payment shall be made at the contract lump sum price bid for Relocate Dumpster and Dumpster Enclosure and shall be full compensation for removal, salvage, handling, relocation, and reinstallation of the dumpster and enclosure; excavation and backfill; foundations and hardware; surface restoration; labor; materials; tools; equipment; and incidentals necessary to complete the work.

Bid Item No. D1 - 18" RCP CLASS III
Bid Item No. D2 - 24" RCP CLASS III
Bid Item No. D3 - 30" RCP CLASS III
Bid Item No. D4 - 36" RCP CLASS III
Bid Item No. D5 - 42" RCP CLASS III

This item shall consist of installation of reinforced concrete pipe of the type and size shown at the locations shown in the drawings. Reinforced concrete pipe shall be installed in accordance with project specification, details, and notes, including TxDOT Item 464.

TV inspection of reinforced concrete pipe shall be considered subsidiary to this item.

Measurement and payment shall be made on the basis of price bid per linear feet (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. D6 - 6' CURB INLET
Bid Item No. D7 - 8' CURB INLET

This item shall consist of construction of curb inlets of the size shown at the locations shown in the drawings. Curb inlets shall be constructed in accordance with project specification, details, and notes, including NCTCOG 702.1.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. D8 - 2' X 2' WYE INLET
Bid Item No. D9 - 3' X 3' WYE INLET
Bid Item No. D10 - 4' X 4' WYE INLET

This item shall consist of constructing precast or cast-in-place wye inlets of the size and type shown in the drawings. Wye inlets shall be constructed in accordance with the project specifications, details, and notes, including NCTCOG Item 702 and Town of Addison Standard Construction Detail SD-D08.

The work shall include all excavation, bedding, concrete, reinforcing steel, inlet frames and grates, pipe connections, joint materials, backfill, and all other appurtenances required for a complete installation as shown on the plans.

Measurement shall be made on the basis of the completed and accepted wye inlet measured by each (EA).

Payment shall be made at the contract unit price bid per each (EA) for the specified wye inlet size and shall be full compensation for furnishing all labor, materials, tools, equipment, excavation, bedding, concrete, reinforcing steel, frame and grate, pipe connections, backfill, and incidentals necessary to complete the work. No separate measurement or payment shall be made for reinforcing steel, excavation, bedding, backfill, frame and grate, pipe connections, or other appurtenances required for a complete installation.

Bid Item No. D11 - TYPE A 3’ MANHOLE
Bid Item No. D12 - TYPE A 4’ MANHOLE

Bid Item No. D13 - TYPE B 4' MANHOLE
Bid Item No. D14 - TYPE B 5' MANHOLE
Bid Item No. D15 - TYPE B 6' MANHOLE

This item shall consist of constructing Type A & Type B storm drain manholes at the locations shown in the drawings. Manholes shall be constructed in accordance with the project specifications, details, and notes, including NCTCOG Item 702 and the Town of Addison Standard Construction Details. The work shall include excavation, concrete, reinforcing steel, castings, frame and cover, grout, adjustment rings, joint materials, backfill, and all other appurtenances required for a complete installation as shown on the plans.

Measurement and payment shall be made on the basis of the completed and accepted Type A & Type B Manhole measured by each (EA).

Bid Item No. D16 - TRENCH EXCAVATION PROTECTION (STORM SYSTEM)

This work includes preparing a project-specific trench safety plan and installing the appropriate shoring, sheeting, bracing, and other trench safety systems required to provide a safe excavation for all storm sewer improvements in accordance with NCTCOG Item 107.20.3, applicable OSHA regulations, and other governing regulations. The CONTRACTOR shall have a Trench Safety Plan prepared, signed, and sealed by a Professional Engineer licensed in the State of Texas and submitted to the ENGINEER prior to the start of construction. Preparation of the Trench Safety Plan shall be considered subsidiary to this pay item.

Measurement and payment for work performed and materials furnished related to trench excavation protection shall be based on the actual linear footage of the pipe installed on the Project. Payment shall be full compensation for furnishing all labor, materials, tools, equipment, trench safety systems, shoring, sheeting, bracing, engineering, and incidentals necessary to comply with NCTCOG Item 107.20.3 and complete the work.

Bid Item No. D17 – CONNECT TO EXISTING RCP (ANY SIZE)

This item shall consist of connecting proposed storm sewer pipe to existing storm sewer pipe at the locations shown in the drawings. Connections shall be constructed in accordance with the project specifications, details, and notes, including NCTCOG Item 508.3. The work shall include all excavation, fittings, couplings, adapters, concrete, coatings, restoration, and appurtenances necessary to provide a complete and watertight connection. The work shall include all construction necessary to provide a proper connection between the new structure and the existing structure, including coating of the connection when required.

Measurement shall be made on the basis of the completed and accepted connection measured by each (EA).

Payment shall be made at the contract unit price bid per each (EA) for Connection to Existing Pipe and shall be full compensation for furnishing all labor, materials, tools, equipment, excavation, fittings, coatings, restoration, and incidentals necessary to complete the work.

Bid Item No. D18 - CONNECT TO EXISTING STRUCTURE (ANY SIZE)

This item shall consist of connecting proposed storm sewer improvements to existing structures of any size at the locations shown in the drawings. Connections shall be constructed in accordance with the project specifications, details, and notes, including NCTCOG Item 508.3.

The work shall include all cutting, coring, demolition, modification, concrete, reinforcing steel, grout, joint materials, coatings where required, and other work necessary to provide a complete and watertight connection between the proposed improvements and existing structure.

Measurement shall be made on the basis of each completed and accepted connection (EA).

Payment shall be made at the contract unit price bid per each (EA) for Connect to Existing Structure (Any Size) and shall be full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to complete the connection.

Bid Item No. D19 - CUT AND PLUG EXISTING RCP

This item shall consist of cutting, abandoning, and permanently plugging existing reinforced concrete pipe (RCP) at the locations shown in the drawings. Work shall be performed in accordance with the project specifications, details, and notes, including NCTCOG Item 508.3.

The work shall include excavation as required; cutting and removing portions of existing pipe; furnishing and placing reinforced concrete pipe plugs; sealing abandoned pipe ends; backfill; restoration; and all labor, materials, tools, equipment, and incidentals necessary to complete the work. Concrete pipe plugs shall be installed where existing conduit lines are terminated and shall conform to the requirements shown on the plans.

Measurement shall be made on the basis of the completed and accepted cut and plug operation measured by each (EA).

Payment shall be made at the contract unit price bid per each (EA) for Cut and Plug Existing RCP and shall be full compensation for excavation, pipe cutting, reinforced concrete pipe plugs, concrete, sealing materials, backfill, restoration, labor, materials, tools, equipment, and incidentals necessary to complete the work. No separate measurement or payment shall be made for concrete pipe plugs, which shall be considered subsidiary to this item in accordance with NCTCOG Item 508.3.4.3.

Bid Item No. D20 - TELEVISION INSPECTION

This item shall consist of performing closed-circuit television (CCTV) inspection of the completed storm sewer system at the locations shown in the drawings. Television inspection shall be performed in accordance with the project specifications, details, and notes, including NCTCOG Item 507.5.2. The CONTRACTOR shall furnish digital video files, inspection logs, stationing information, and all required documentation to the OWNER. Any portions of the system requiring

reinspection due to inadequate quality, coverage, or corrective work shall be reinspected at no additional cost to the OWNER.

Measurement shall be made on the basis of the completed and accepted television inspection measured by linear foot (LF) of storm sewer inspected.

Payment shall be made at the contract unit price bid per linear foot (LF) for Television Inspection and shall be full compensation for furnishing all labor, materials, tools, equipment, CCTV inspection services, digital recordings, inspection logs, reporting, and incidentals necessary to complete the work.

Bid Item No. W1 - 8-INCH PVC WATER LINE
Bid Item No. W2 - 12-INCH PVC WATER LINE

This work includes the furnishing and installation of 8-inch, and 12-inch diameter PVC meeting the requirements of AWWA C900, at the locations shown in the plans as per NCTCOG items 501.14, 502, 503, 504, and 506 and the Town of Addison Standard Construction Details. Proposed water line shall comply with AWWA C900. Payment shall include furnishing, hauling and laying of pipe shown on the plans, trench excavation, and backfilling, including embedment material as specified, replacement of topsoil, protecting or replacing existing structures or utilities, testing, disposal of surplus materials, and cleaning up and maintenance. Payment shall include any and all extra precautions or construction requirements necessary to adequately protect and support existing utilities. Payment for the pipelines shall include all costs required to have utility companies repair any damage inflicted to their lines by the CONTRACTOR and any cleanup, property damages, fines, etc. resulting from damage inflicted to any utility line by the CONTRACTOR.

Embedment for water lines shall be per Town of Addison standard construction details.

All fittings associated with the proposed water line installation, as indicated in the plans, shall be considered incidental to this pay item.

This work shall also include the construction of temporary pavement repair necessary for traffic control and detours or as determined by the ENGINEER. Temporary pavement repair shall be constructed and maintained in water line installation areas as indicated in the construction plans that will be open to traffic prior to the construction of the final pavement. Temporary pavement repair, as required by these specifications, will not be paid for directly but shall be considered subsidiary to this pay item. Temporary HMAC pavement specifically shown in the Traffic Control Plans shall be measured and paid under Bid Item No. P36, 4" Type B HMAC (Temporary Traffic Control). Other temporary pavement necessary solely for the Contractor's utility operations and not shown for separate payment shall be subsidiary to the applicable utility item.

Measurement and payment shall be made on the basis of price bid per linear foot (LF) measured horizontally and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work, including all excavation, embedment and backfill.

Bid Item No. W3 – 8-INCH PVC WATER LINE IN 18-INCH STEEL CASING PIPE

This item shall consist of furnishing and installing 8-inch PVC water line meeting the requirements of AWWA C900 within a steel casing pipe at the locations shown in the drawings. All work shall be performed in accordance with the Town of Addison Standard Construction Details and Specifications, NCTCOG Items 501.14, 502, 503, 504, and 506, and all applicable project plans, details, and notes.

The work shall include furnishing, hauling, and installation of the carrier pipe; casing spacers; restrained joints where required; tracer wire; connections; testing; disinfection; cleanup; and all labor, materials, tools, equipment, and incidentals necessary to provide a complete installation within the steel casing.

Measurement and payment shall be made on the basis of the price bid per linear foot (LF), measured horizontally along the centerline of the carrier pipe installed within the steel casing from end of casing to end of casing.

Payment shall be full compensation for furnishing all labor, materials, tools, equipment, testing, disinfection, casing spacers, utility protection, and all incidentals necessary to complete the work. Support and protection of existing utilities shall not be measured or paid for separately and shall be considered subsidiary to this item.

Payment for damage to existing utilities, cleanup, restoration, fines, claims, or repairs resulting from the CONTRACTOR's operations shall be the sole responsibility of the CONTRACTOR and shall not result in additional compensation from the OWNER.

Bid Item No. W4 – 18-INCH STEEL CASING PIPE

This item shall consist of furnishing and installing 18-inch steel casing pipe by open cut methods at the locations shown in the drawings. All work shall be performed in accordance with the Town of Addison Standard Construction Details and Specifications, NCTCOG Item 503, and all applicable project plans, details, and notes.

The work shall include furnishing and installing steel casing pipe; pavement removal and replacement; trench excavation; hauling; dewatering; furnishing, placement, and compaction of embedment and backfill; CLSM; casing end seals; disposal of surplus or unsuitable materials; site restoration; cleanup; and all labor, materials, tools, equipment, and incidentals necessary to complete the work.

Measurement and payment shall be made on the basis of the price bid per linear foot (LF), measured horizontally along the centerline of the steel casing pipe installed by open cut methods and accepted by the OWNER.

Payment shall be full compensation for furnishing all labor, materials, tools, equipment, trench excavation, steel casing pipe, embedment, backfill, end seals, dewatering, pavement replacement, restoration, utility protection, and all incidentals necessary to complete the work.

Support and protection of existing utilities shall not be measured or paid for separately and shall be considered subsidiary to this item.

The carrier pipe, casing spacers, tracer wire, fittings, connections, testing, and disinfection shall be measured and paid for under the applicable water line bid item and are not included in this item.

Bid Item No. W5 – 12-INCH PVC WATER LINE IN 21-INCH STEEL CASING PIPE

This item shall consist of furnishing and installing 12-inch PVC water line meeting the requirements of AWWA C900 within a steel casing pipe at the locations shown in the drawings. All work shall be performed in accordance with the Town of Addison Standard Construction Details and Specifications, NCTCOG Items 501.14, 502, 503, 504, and 506, and all applicable project plans, details, and notes.

The work shall include furnishing, hauling, and installation of the carrier pipe; casing spacers; restrained joints where required; tracer wire; connections; testing; disinfection; cleanup; and all labor, materials, tools, equipment, and incidentals necessary to provide a complete installation within the steel casing.

Measurement and payment shall be made on the basis of the price bid per linear foot (LF), measured horizontally along the centerline of the carrier pipe installed within the steel casing from end of casing to end of casing.

Payment shall be full compensation for furnishing all labor, materials, tools, equipment, testing, disinfection, casing spacers, utility protection, and all incidentals necessary to complete the work. Support and protection of existing utilities shall not be measured or paid for separately and shall be considered subsidiary to this item.

Payment for damage to existing utilities, cleanup, restoration, fines, claims, or repairs resulting from the CONTRACTOR's operations shall be the sole responsibility of the CONTRACTOR and shall not result in additional compensation from the OWNER.

Bid Item No. W6 – 21-INCH STEEL CASING PIPE

This item shall consist of furnishing and installing 21-inch steel casing pipe by open cut methods at the locations shown in the drawings. All work shall be performed in accordance with the Town of Addison Standard Construction Details and Specifications, NCTCOG Item 503, and all applicable project plans, details, and notes.

The work shall include furnishing and installing steel casing pipe; pavement removal and replacement; trench excavation; hauling; dewatering; furnishing, placement, and compaction of embedment and backfill; CLSM; casing end seals; disposal of surplus or unsuitable materials; site restoration; cleanup; and all labor, materials, tools, equipment, and incidentals necessary to complete the work.

Measurement and payment shall be made on the basis of the price bid per linear foot (LF), measured horizontally along the centerline of the steel casing pipe installed by open cut methods and accepted by the OWNER.

Payment shall be full compensation for furnishing all labor, materials, tools, equipment, trench excavation, steel casing pipe, embedment, backfill, end seals, dewatering, pavement replacement, restoration, utility protection, and all incidentals necessary to complete the work.

Support and protection of existing utilities shall not be measured or paid for separately and shall be considered subsidiary to this item.

The carrier pipe, casing spacers, tracer wire, fittings, connections, testing, and disinfection shall be measured and paid for under the applicable water line bid item and are not included in this item.

Bid Item No. W7 - 8-INCH GATE VALVE
Bid Item No. W8 - 12-INCH GATE VALVE

This work includes the furnishing and installation of 8-inch, and 12-inch gate valves as shown on the plans or as determined by the ENGINEER, in accordance with NCTCOG Item 502.6 and the Town of Addison Standard Construction Details and Specifications. These pay items shall be inclusive of all items necessary to complete the installation.

Measurement and payment shall be made on the basis of the price per bid each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work, including curb identification markings, valve boxes, all excavation, embedment and backfill necessary to complete the work.

Bid Item No. W9 - REMOVE EXISTING WATER LINE

This work includes the removal and disposal of the existing water line at the locations shown in the drawings. The existing water line shall be removed in accordance with the project specifications, details, and notes.

Removal shall include cutting and disconnecting the existing water line; removal and disposal of pipe, fittings, valves, and other associated appurtenances indicated for removal; excavation; dewatering; traffic control; temporary pavement replacement; backfill and compaction; protection of existing utilities and improvements; disposal of surplus or unsuitable materials; site restoration; cleanup; and all other incidental work necessary to complete the removal.

Measurement and payment shall be made on the basis of the price bid per linear foot (LF), measured horizontally along the centerline of the water line removed, and shall be total compensation for furnishing all materials, tools, equipment, labor, and other incidentals necessary to complete the work.

Bid Item No. W10 - ABANDON EXISTING WATER LINE IN PLACE

This work includes the abandonment of existing water lines of the sizes indicated in the construction plans or as directed by the ENGINEER. Water lines shall be abandoned in accordance with the Town of Addison Standard Construction Details and Specifications, and all applicable project notes and details.

Prior to abandonment, the CONTRACTOR shall verify that all existing services, meters, fire hydrants, blow-offs, air release valves, and other appurtenances connected to the water line to be abandoned have been removed from service, relocated, or reconnected to the proposed water system as shown on the construction plans. The existing water line shall be disconnected from the active water system, drained, and capped or plugged at all locations indicated on the plans or as directed by the ENGINEER. Removal of valve boxes, valve stacks, and appurtenances designated for abandonment shall be considered subsidiary to this item.

Abandoned water lines shall be filled with flowable fill or grout in accordance with the project specifications. All materials, equipment, excavation, dewatering, traffic control, temporary pavement replacement, plugs, caps, flowable fill, grout, restoration, and incidental work necessary to complete the abandonment shall be included in this item.

Measurement and payment shall be made on the basis of the price bid per linear foot (LF), measured horizontally along the centerline of the water line abandoned, and shall be total compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to complete the work.

Bid Item No. W11 - CONNECT TO EXISTING WATER LINE

This item shall consist of furnishing all labor, materials, tools, and equipment necessary to connect the proposed water line to an existing water line, including the existing 24-inch x 12-inch water line tees at the location shown in the drawings. The bid price shall include excavation and disposal of excavated soil; locating and exposing the existing water line or tee prior to connecting; dewatering; furnishing, hauling, and installing all necessary pipe, fittings, restraints, and connection materials; cutting and plugging the existing water line where required; removal and disposal of existing pipe and fittings; traffic control; temporary pavement replacement; protection of existing structures and utilities; coordination and notification; backfill and compaction; property restoration; cleanup; and any incidental work and materials not otherwise provided for in these specifications.

For connections to the existing 24-inch x 12-inch water line tees, the CONTRACTOR shall verify the location, elevation, size, configuration, and condition of the existing tee prior to making the connection and shall notify the ENGINEER of any discrepancies that may affect the proposed connection. Measurement and payment shall be made at the unit price bid per each connection.

Bid Item No. W12 - FIRE HYDRANT ASSEMBLY

This pay item shall consist of the installation of new fire hydrant assemblies, including connections and testing of the fire hydrants, at locations indicated on the plans and in accordance with NCTCOG Item 502.3 and Town of Addison Construction Details and Specifications. The 6-inch PVC water line lead from the water main to the gate valve and the 6-inch gate valve required for fire hydrant installation are considered subsidiary to this item and shall not be paid for separately.

Fire hydrant assemblies shall be inclusive of all work necessary to install and connect the new fire hydrant to the water line. This includes all fittings, megalugs, water pipe from the main line to the fire hydrant, gate valve, water pipe for stack, blocking, and other appurtenances necessary to complete the construction.

Measurement and payment for work performed and materials furnished related to installing the new fire hydrant and valve assembly, as provided herein, shall be made on the basis of the price bid per each (EA) and shall be total compensation for furnishing and/or operating all labor, materials, tools, equipment, and other incidentals necessary to complete the work, including curb identification markings, bollards, and any barrel extensions required.

Bid Item No. W13 - REMOVE AND SALVAGE EXISTING FIRE HYDRANT ASSEMBLY

This pay item shall consist of the removal and salvage of existing fire hydrants and associated gate valves for delivery to the Town of Addison, including removal and disposal of remaining associated appurtenances, at locations indicated on the plans and in accordance with NCTCOG and Town of Addison Construction Details and Specifications. The existing fire hydrant lead, fittings, blocking, and other appurtenances associated with the fire hydrant assembly shall be removed or abandoned as indicated on the plans and shall be considered subsidiary to this item and shall not be paid for separately.

Removal of existing fire hydrant assemblies shall be inclusive of all work necessary to remove and salvage the existing fire hydrant and gate valve without damage, transport and deliver the salvaged fire hydrant and gate valve to a location designated by the Town, dispose of remaining associated appurtenances, and properly disconnect, plug, cap, or otherwise abandon the existing fire hydrant lead at the existing water main as indicated on the plans. This includes all excavation, loading, hauling, fittings, restraints, blocking, backfill, surface restoration, and other incidental work necessary to complete the removal and salvage. Work associated with these appurtenances shall be considered subsidiary to this item and shall not be measured or paid for separately under other water line removal or abandonment items.

Measurement and payment for work performed related to removing, salvaging, transporting, and delivering the existing fire hydrant and gate valve to the Town, removing and disposing of remaining associated appurtenances, and completing the associated abandonment work, as provided herein, shall be made on the basis of the price bid per each (EA) and shall be total compensation for furnishing and/or operating all labor, materials, tools, equipment, transportation, and other incidentals necessary to complete the work.

Bid Item No. W14 - 1-INCH TYPE K COPPER WATER SERVICE

This pay item shall consist of furnishing and installing 1-inch Type K copper water service line at the locations indicated on the plans and in accordance with the Town of Addison Construction Details and Specifications. Work shall include connection to the proposed or existing water line, as indicated on the plans, and extension of the service line to the proposed meter location.

The 1-inch Type K copper water service line shall be inclusive of all work necessary to provide a complete service connection, including tapping saddle and corporation stop, copper service tubing, fittings, couplings, bends, meter, meter box, curb stop, excavation, dewatering, bedding, backfill and compaction, testing, surface restoration, and other appurtenances necessary to complete the installation. The meter, meter box, and associated appurtenances shall be considered subsidiary to this item and shall not be paid for separately.

Measurement and payment shall be made on the basis of the price bid per linear foot (LF), measured horizontally along the centerline of the installed water service line, and shall be total compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to complete the work.

Bid Item No. W15 - 2-INCH TYPE K COPPER IRRIGATION SERVICE

This pay item shall consist of furnishing and installing 2-inch Type K copper irrigation service line at the locations indicated on the plans and in accordance with the Town of Addison Construction Details and Specifications. Work shall include connection to the proposed or existing water line, as indicated on the plans, and extension of the irrigation service line to the termination point shown on the plans.

The 2-inch Type K copper irrigation service line shall be inclusive of all work necessary to provide the service connection, including tapping saddle and corporation stop, copper service tubing, fittings, couplings, bends, excavation, dewatering, bedding, backfill and compaction, testing, surface restoration, and other appurtenances necessary to complete the installation. The service shall be capped or otherwise terminated at the location indicated on the plans for future connection. A water meter is not included in this bid item. The Developer shall furnish and install the meter at the time the irrigation system is connected.

Measurement and payment shall be made on the basis of the price bid per linear foot (LF), measured horizontally along the centerline of the installed irrigation service line, and shall be total compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to complete the work.

Bid Item No. W16 - HYDROSTATIC TESTING AND DISINFECTION

This item shall consist of furnishing all labor, materials, tools, equipment, and incidentals necessary to perform hydrostatic pressure testing, leakage testing, flushing, disinfection, bacteriological testing, and placement into service of all proposed water mains included in the project in accordance with Town of Addison Standards, NCTCOG Standard Specifications, and applicable AWWA standards.

Measurement and payment shall be made on the basis of the price bid per lump sum (LS) and shall be total compensation for furnishing all labor, materials, tools, equipment, water, testing, sampling, and incidentals necessary to complete the work.

Bid Item No. W17 – TELEVISION INSPECTION

This item shall consist of furnishing all labor, materials, tools, equipment, and incidentals necessary to perform post-construction closed-circuit television (CCTV) inspection of newly installed water mains in accordance with the Town of Addison Standard Construction Details and Specifications, NCTCOG Public Works Construction Standards, applicable TCEQ requirements, and all project plans, details, and specifications.

The work shall include furnishing and operating CCTV inspection equipment; recording and documenting the condition of the installed water main; providing digital video files, inspection logs, and related documentation; and identifying any defects, irregularities, obstructions, or

deficiencies in the installed pipeline. All equipment introduced into the water main shall be suitable for use in potable water systems and shall be cleaned and disinfected prior to use.

CCTV inspection shall be coordinated with flushing, hydrostatic pressure testing, disinfection, and bacteriological testing of the water main. The CONTRACTOR shall perform all required flushing, pressure testing, disinfection, and bacteriological testing in accordance with the applicable project specifications and regulatory requirements. If CCTV inspection or associated activities occur after disinfection or otherwise compromise the sanitary condition of the water main, the affected portion of the water main shall be reflushed, redisinfected, and bacteriologically retested, as required, prior to placing the water main into service and at no additional cost to the OWNER.

Any defects identified during the CCTV inspection shall be repaired by the CONTRACTOR at no additional cost to the OWNER. Following completion of repairs, the CONTRACTOR shall perform reinspection of the affected pipeline segments until acceptable results are obtained. Any flushing, pressure retesting, disinfection, or bacteriological retesting required as a result of corrective work or reinspection shall be performed at no additional cost to the OWNER. All corrective work, reinspection, and associated costs shall be considered subsidiary to this item.

Measurement and payment shall be made on the basis of the price bid per linear foot (LF), measured horizontally along the centerline of the water main inspected and accepted by the OWNER. Payment shall be full compensation for furnishing all labor, materials, tools, equipment, CCTV inspection, video recordings, inspection logs, reports, reinspection, and incidentals necessary to complete the work.

Bid Item No. W18 - TRENCH SAFETY (WATER SYSTEM)

This work includes preparing a job specific trench safety plan and installing the proper shoring and/or bracing to adequately provide a safe trench for all water improvements, in compliance with current regulations and requirements of the United States Department of Labor Occupational Safety and Health Administration (OSHA). The CONTRACTOR shall have a Trench Safety Plan prepared, signed, and sealed by a professional engineer and provided to the ENGINEER prior to the start of construction. The preparation of the trench safety plan, as required by these specifications, will not be paid for directly but shall be considered subsidiary to this pay item.

Measurement and payment for work performed and materials furnished related to the preparation of a trench safety plan and the installation of a trench safety systems, as provided herein, shall be based on the actual linear footage of the pipe installed on the Project, and shall be total compensation for furnishing and/or operating all labor, materials, tools, equipment and other incidentals necessary to complete the work.

Bid Item No. W19 – EXPOSE AND INSPECT EXISTING 24-INCH X 12-INCH TEE

This work includes exposing and field verifying the existing 24-inch x 12-inch tee at the location shown in the drawings prior to construction. CONTRACTOR shall verify the horizontal and vertical location, size, configuration, and condition of the existing tee and associated piping.

CONTRACTOR shall notify the ENGINEER if the field-verified location, configuration, or condition varies from that shown in the drawings or otherwise affects the proposed construction.

CONTRACTOR shall not proceed with work dependent upon the existing tee until the field verification has been completed. This work shall be completed prior to ordering pipe, fittings, valves, or other materials associated with the proposed connection to the existing 24-inch water line. The CONTRACTOR shall not order such materials or proceed with work dependent upon the existing tee until field verification has been completed and the required connection configuration has been confirmed.

This work shall include excavation; dewatering; traffic control; temporary pavement replacement; protection of the existing tee, piping, utilities, and improvements; backfill and compaction; site restoration; cleanup; and all other incidental work necessary to expose, inspect, and field verify the existing tee.

Measurement and payment shall be made on the basis of the price bid per each (EA) and shall be total compensation for furnishing all tools, equipment, labor, and other incidentals necessary to complete the work.

Bid Item No. W20 – REPLACE EXISTING 24-INCH X 12-INCH TEE (AS NEEDED, WITH TOWN APPROVAL)

This work includes the removal and replacement of the existing 24-inch x 12-inch tee identified under Bid Item No. W19, if determined necessary based on field inspection and authorized by the Town prior to performing the work. Work shall include removal of the existing tee; furnishing and installing a new 24-inch x 12-inch cut-in tee; furnishing and installing a new 24-inch isolation valve; and removal and replacement of up to 20 linear feet of existing 24-inch water line, as necessary to complete the connection.

This item shall include all pipe, fittings, valves, valve boxes and appurtenances, restraints, blocking, excavation, dewatering, traffic control, temporary pavement replacement, cutting and removal of existing pipe and fittings, disposal, connection to the existing water line, flushing, pressure testing, disinfection, bacteriological testing, backfill and compaction, surface restoration, protection of existing utilities and improvements, and other materials and incidental work necessary to complete the replacement.

No work under this bid item shall proceed without prior authorization from the Town. Payment shall only be made if replacement is determined necessary following the inspection performed under Bid Item No. W19 and the work is authorized by the Town prior to execution.

Measurement and payment shall be made on the basis of the price bid per each (EA) and shall be total compensation for furnishing all materials, equipment, tools, labor, and incidentals necessary to complete the work, including the new 24-inch isolation valve and replacement of up to 20 linear feet of existing 24-inch water line.

Bid Item No. W21 – TEMPORARY WATER SERVICE

This work includes furnishing, installing, maintaining, and removing temporary water service as necessary to maintain water service to existing customers during construction of the proposed water line, in accordance with Technical Specification 33 13 20, project plans, details, and notes.

Temporary water service shall include temporary piping, connections, fittings, valves, backflow prevention, temporary service connections, disinfection, testing, protection, and all other appurtenances necessary to provide and maintain temporary water service throughout construction.

Temporary water lines shall be the same nominal size as, or larger than, the existing water line being taken out of service, as indicated on the project plans. The CONTRACTOR shall coordinate temporary connections, shutdowns, and restoration of permanent water service as required by technical specification 33 13 20 and the project plans, details, and notes.

This work shall include all labor, materials, tools, equipment, excavation, backfill, surface restoration, removal of temporary facilities, and other incidental work necessary to provide temporary water service.

Measurement and payment shall be made on the basis of the price bid per lump sum (LS) and shall be total compensation for furnishing all materials, tools, equipment, labor, and other incidentals necessary to complete the work.

Bid Item No. SS1 - 4-FOOT DIAMETER STANDARD MANHOLE

This work includes the installation of 4-foot diameter standard sanitary manholes per NCTCOG item number 502.1 and Town of Addison Construction Details. Payment shall include excavation, castings, reinforcing steel, concrete, backfill, and other materials, and all appurtenances for a complete and functional unit. Pre-cast manholes are permitted for this project.

Bypass pumping, where required, shall be measured and paid for separately under Bid Item No.SS17 and shall not be considered subsidiary to this item.

Measurement and payment shall be made on the basis of price bid per each (EA). There is no separate bid item for extra depth of manhole. The contract price shall be the total compensation for the furnishing of all labor, materials, tools, equipment, and incidentals necessary to complete the work, including curb identification markings, earth excavation, disposal of surplus materials and backfill.

Bid Item No. SS2 - 6-FOOT DIAMETER DROP MANHOLE

This work includes the installation of 6-foot diameter drop sanitary manholes per NCTCOG Item No. 502.1 and Town of Addison Construction Details. Payment shall include excavation, castings, reinforcing steel, concrete, backfill, drop piping, fittings, connections, supports, concrete encasement, and other materials and appurtenances necessary for a complete and functional unit. Precast manholes shall be provided for this project.

This item includes submittal of a plan and execution of the approved plan for any necessary bypass pumping. Bypass pumping, where required, shall be measured and paid for separately under Bid Item No. SS17 and shall not be considered subsidiary to this item.

Measurement and payment shall be made on the basis of price bid per each (EA). There is no separate bid item for extra depth of manhole. The contract price shall be the total compensation for the furnishing of all labor, materials, tools, equipment, and incidentals necessary to complete

the work, including curb identification markings, earth excavation, disposal of surplus materials, backfill, drop piping and associated appurtenances.

Bid Item No. SS3 - 8-INCH PVC SSWR LINE
Bid Item No. SS4 - 12-INCH PVC SSWR LINE

This work includes the installation of ASTM D3034 PVC sewer pipe and fittings at the locations and to the grades shown on the plans. Work shall be in accordance with NCTCOG Items 501, 502, 503, 504, 505, 507, 509 and Standard Construction Details. Payment shall include furnishing, hauling and laying of pipe shown on the plans, trench excavation, dry boring under existing utilities if necessary, and backfilling, including embedment material as specified, replacement of top soil, protecting or replacing existing structures or utilities, mandrel pulling, testing, disposal of surplus materials, general clean-up and maintenance. Payment shall include any and all extra precautions or construction requirements necessary to adequately protect and support existing utilities.

Payment for the pipelines shall include all costs required to have utility companies repair any damage inflicted to their lines by the CONTRACTOR and any cleanup, property damages, fines, etc. resulting from damage inflicted to any utility line by the CONTRACTOR.
Embedment for sewer lines shall be per NCTCOG standard details, unless otherwise noted. Cleanouts shall be measured and paid for separately under the applicable cleanout bid item.
Bypass pumping, where required, shall be measured and paid for separately under Bid Item No. SS17 and shall not be considered subsidiary to this item.

This work shall also include the construction of temporary pavement repair necessary for traffic control and detours or as determined by the ENGINEER. Temporary pavement repair shall be constructed and maintained in sanitary sewer installation areas as indicated in the construction plans that will be open to traffic prior to the construction of the final pavement. Temporary pavement repair, as required by these specifications, will not be paid for directly but shall be considered subsidiary to this pay item. Temporary HMAC pavement specifically shown in the Traffic Control Plans shall be measured and paid under Bid Item No. P36, 4" Type B HMAC (Temporary Traffic Control). Other temporary pavement necessary solely for the Contractor's utility operations and not shown for separate payment shall be subsidiary to the applicable utility item

Measurement and payment shall be made on the basis of price bid per linear foot (LF), regardless of depth, measured horizontally along the centerline of the sewer line installed and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work, including all excavation, embedment and backfill.

Bid Item No. SS5 - 6-INCH PVC PRESSURE PIPE SSWR LINE
Bid Item No. SS6 - 8-INCH PVC PRESSURE PIPE SSWR LINE
Bid Item No. SS7 - 12-INCH PVC PRESSURE PIPE SSWR LINE

This work includes the installation of ASTM D2241 PVC sewer pipe and fittings at the locations and to the grades shown on the plans. Work shall be in accordance with NCTCOG Items 501, 502, 503, 504, 505, 507, 509 and Standard Construction Details. Payment shall include furnishing, hauling and laying of pipe shown on the plans, trench excavation, dry boring under existing utilities if necessary, and backfilling, including embedment material as specified, replacement of top soil,

protecting or replacing existing structures or utilities, mandrel pulling, testing, disposal of surplus materials, general clean-up and maintenance. Payment shall include any and all extra precautions or construction requirements necessary to adequately protect and support existing utilities.

Payment for the pipelines shall include all costs required to have utility companies repair any damage inflicted to their lines by the CONTRACTOR and any cleanup, property damages, fines, etc. resulting from damage inflicted to any utility line by the CONTRACTOR.

Embedment for sewer lines shall be per NCTCOG standard details, unless otherwise noted. Cleanouts shall be measured and paid for separately under the applicable cleanout bid item. Bypass pumping, where required, shall be measured and paid for separately under Bid Item No. SS17 and shall not be considered subsidiary to this item.

This work shall also include the construction of temporary pavement repair necessary for traffic control and detours or as determined by the ENGINEER. Temporary pavement repair shall be constructed and maintained in sanitary sewer installation areas as indicated in the construction plans that will be open to traffic prior to the construction of the final pavement. Temporary pavement repair, as required by these specifications, will not be paid for directly but shall be considered subsidiary to this pay item. Temporary HMAC pavement specifically shown in the Traffic Control Plans shall be measured and paid under Bid Item No. P36, 4" Type B HMAC (Temporary Traffic Control). Other temporary pavement necessary solely for the Contractor's utility operations and not shown for separate payment shall be subsidiary to the applicable utility item

Measurement and payment shall be made on the basis of price bid per linear foot (LF), regardless of depth, measured horizontally along the centerline of the sewer line installed and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work, including all excavation, embedment and backfill.

Bid Item No. SS8 – SANITARY SEWER CLEANOUT

This work includes furnishing and installing sanitary sewer cleanouts at the locations shown on the plans and in accordance with the project specifications, details, and notes.

The cleanout installation shall include all pipe, wyes, bends, risers, fittings, plugs or caps, adapters, concrete collars or pads where required, excavation, dewatering, bedding, embedment, backfill and compaction, connection to the sanitary sewer line, surface restoration, and all other appurtenances and incidental work necessary to provide a complete cleanout installation.

Measurement and payment shall be made on the basis of the price bid per each (EA) cleanout installed and shall be total compensation for furnishing all materials, tools, equipment, labor, and other incidentals necessary to complete the work.

Bid Item No. SS9 - VACUUM TESTING OF WASTEWATER MANHOLES

This item shall consist of furnishing all labor, materials, tools, equipment, and incidentals necessary to perform vacuum testing of sanitary sewer manholes in accordance with the Town of Addison Standard Construction Details and Specifications, NCTCOG Public Works Construction Standards, applicable TCEQ requirements, and ASTM C1244.

Vacuum testing shall be performed on all new sanitary sewer manholes, rehabilitated manholes, and existing manholes modified as part of the project unless otherwise approved by the ENGINEER. Testing shall be conducted after installation of the manhole frame, grade rings, cone section, barrel sections, base, pipe connections, boots, coatings, and appurtenances, but prior to final acceptance. The CONTRACTOR shall provide all plugs, testing equipment, gauges, pumps, monitoring devices, and accessories required to perform the testing.

The CONTRACTOR shall be responsible for locating and repairing all leaks identified during testing and for performing any retesting required to achieve compliance with the project requirements. All repairs, retesting, labor, materials, and equipment necessary to obtain acceptable test results shall be considered subsidiary to this item.

Measurement and payment shall be made on the basis of the price bid per each (EA) manhole successfully tested and accepted by the OWNER. Payment shall be full compensation for furnishing all labor, materials, tools, equipment, leak repairs, retesting, and incidentals necessary to complete the work.

Bid Item No. SS10 - CONNECTION TO EXISTING WASTEWATER MAIN

This item shall consist of furnishing all labor, materials, tools, equipment, and incidentals necessary to connect the proposed wastewater line to the existing wastewater system, including connections to existing wastewater mains or manholes, at the locations shown in the drawings or as directed by the ENGINEER. All work shall be performed in accordance with the Town of Addison Standard Construction Details and Specifications, NCTCOG Public Works Construction Standards, and all applicable project plans, details, and notes.

The work shall include excavation; dewatering; locating and exposing the existing wastewater main or manhole; cutting and removing portions of existing pipe; core drilling or modification of existing manholes, as applicable; furnishing and installing fittings, couplings, adapters, closure sections, flexible connectors, boots, seals, grout, restrained joints, concrete encasement, channel and bench modifications, and other appurtenances required for a complete and watertight connection; traffic control; temporary pavement replacement; backfill; compaction; restoration; testing; cleanup; and all other work necessary to complete the connection. Bypass pumping, if required, shall be measured and paid for separately under Bid Item No. SS17.

The CONTRACTOR shall coordinate all connection activities to minimize disruption of existing wastewater service and shall protect existing mains, manholes, utilities, and improvements from damage. Temporary flow control measures, leak mitigation, and other work necessary to maintain continuous wastewater service during construction shall be considered subsidiary to this item. Bypass pumping, where required, shall be measured and paid for separately under Bid Item No. SS17.

Measurement and payment shall be made on the basis of the price bid per each (EA) connection to the existing wastewater system completed and accepted by the OWNER. Payment shall be full compensation for furnishing all labor, materials, tools, equipment, excavation, dewatering, fittings, connectors, manhole modifications, testing, restoration, and incidentals necessary to complete the work.

Bid Item No. SS11 – ABANDON EXISTING WASTEWATER LINE IN PLACE (NO GROUT)

This item shall consist of the abandonment of existing wastewater lines of the sizes and at the locations shown in the drawings or as directed by the ENGINEER. All work shall be performed in accordance with the Town of Addison Standard Construction Details and Specifications, NCTCOG Public Works Construction Standards, applicable TCEQ requirements, and all project plans, details, and notes.

Prior to abandonment, the CONTRACTOR shall verify that all existing service connections, manhole connections, and other appurtenances have been removed from service, rerouted, or reconnected to the proposed wastewater system as shown on the plans. The existing wastewater line shall be disconnected from the active wastewater system and capped, plugged, or bulkheaded at all locations shown on the plans or as directed by the ENGINEER. The abandoned wastewater line shall remain in place and shall not be filled with grout, flowable fill, or CLSM.

This item shall include all labor, materials, equipment, excavation, plugs, caps, bulkheads, and other incidental work necessary to complete the abandonment.

This item shall include all excavation, dewatering, traffic control, temporary pavement replacement, cleaning, plugs, caps, bulkheads, restoration, disposal of surplus materials, cleanup, and all labor, materials, tools, equipment, and incidentals necessary to complete the work. Bypass pumping, where required to facilitate abandonment, shall be measured and paid for separately under Bid Item No. SS17.

Measurement and payment shall be made on the basis of the price bid per linear foot (LF), measured horizontally along the centerline of the wastewater line abandoned. Payment shall be full compensation for furnishing all labor, materials, tools, equipment, plugs, caps, , restoration, and incidentals necessary to complete the work.

Bid Item No. SS12 – REMOVE AND DISPOSE OF EXISTING WASTEWATER LINE

This item shall consist of the removal and disposal of existing wastewater lines of the sizes and at the locations shown in the drawings or as directed by the ENGINEER. All work shall be performed in accordance with the Town of Addison Standard Construction Details and Specifications, NCTCOG Public Works Construction Standards, applicable TCEQ requirements, and all project plans, details, and notes.

The work shall include excavation; dewatering; cutting and disconnecting the existing wastewater line; removal and disposal of pipe, fittings, encasement, and associated appurtenances designated for removal; protection of existing utilities and improvements; traffic control; temporary pavement

replacement; backfill; compaction; restoration; cleanup; and all labor, materials, tools, equipment, and incidentals necessary to complete the work.

Removal and disposal of existing cleanouts and associated appurtenances shall be considered subsidiary to the applicable pipe removal bid item and shall not be measured or paid for separately. The CONTRACTOR shall maintain uninterrupted wastewater service during removal operations and shall provide all temporary facilities and flow control measures required to perform the work safely and without discharge of wastewater. Bypass pumping, where required, shall be measured and paid for separately under Bid Item No. SS17.

Measurement and payment shall be made on the basis of the price bid per linear foot (LF), measured horizontally along the centerline of the wastewater line removed. Payment shall be full compensation for furnishing all labor, materials, tools, equipment, excavation, dewatering, disposal, restoration, and incidentals necessary to complete the work. Bypass pumping shall not be included in payment under this item and shall be paid under Bid Item No. SS17.

Bid Item No. SS13 – REMOVE AND DISPOSE OF EXISTING WASTEWATER MANHOLE

This item shall consist of the complete removal and disposal of existing wastewater manholes at the locations shown in the drawings or as directed by the ENGINEER. All work shall be performed in accordance with the Town of Addison Standard Construction Details and Specifications, NCTCOG Public Works Construction Standards, applicable TCEQ requirements, and all project plans, details, and notes.

Prior to removal, the CONTRACTOR shall verify that all wastewater lines and service connections entering or exiting the manhole have been removed from service, rerouted, reconnected, or properly abandoned. The manhole shall be disconnected from the active wastewater system and all remaining pipe openings shall be capped, plugged, or otherwise sealed as required.

The work shall include complete removal and disposal of the existing manhole structure, including the base, barrel sections, cone or flat top, frame, cover, and associated appurtenances; protection of existing utilities and improvements; backfill of the resulting excavation; compaction; and restoration of the surface to match the surrounding conditions.

The CONTRACTOR shall maintain uninterrupted wastewater service during removal operations and shall provide all temporary facilities and flow control measures required to perform the work safely and without discharge of wastewater. Bypass pumping, where required to complete the manhole removal, shall be measured and paid for separately under Bid Item No. SS17.

This item shall include excavation; dewatering; removal and disposal; plugs, caps, or bulkheads; backfill; compaction; restoration; cleanup; and all labor, materials, tools, equipment, and incidentals necessary to complete the work. Bypass pumping is excluded from this item and shall be measured and paid for under Bid Item No. SS17.

Measurement and payment shall be made on the basis of the price bid per each (EA) wastewater manhole removed and disposed of. Payment shall be full compensation for furnishing all labor,

materials, tools, equipment, excavation, dewatering, removal, disposal, backfill, restoration, and incidentals necessary to complete the work. Bypass pumping shall not be included in payment under this item and shall be paid under Bid Item No. SS17.

Bid Item No. SS14 – TELEVISION INSPECTION

This item shall consist of furnishing all labor, materials, tools, equipment, and incidentals necessary to perform post-construction closed-circuit television (CCTV) inspection of newly installed wastewater mains, excluding wastewater mains installed or rehabilitated under Bid Item No. SS18, in accordance with the Town of Addison Standard Construction Details and Specifications, NCTCOG Public Works Construction Standards, applicable TCEQ requirements, and all project plans, details, and specifications.

The work shall include cleaning of the wastewater main as necessary; furnishing and operating CCTV inspection equipment; recording and documenting the condition of the installed wastewater main; providing digital video files, inspection logs, and related documentation; and identifying any defects, irregularities, or deficiencies in the installed pipeline. CCTV inspection shall be performed after completion of installation, testing, and backfilling activities and prior to final acceptance by the OWNER.

Any defects identified during the CCTV inspection shall be repaired by the CONTRACTOR at no additional cost to the OWNER. Following completion of repairs, the CONTRACTOR shall perform reinspection of the affected pipeline segments until acceptable results are obtained. All corrective work, reinspection, and associated costs shall be considered subsidiary to this item.

Measurement and payment shall be made on the basis of the price bid per linear foot (LF), measured horizontally along the centerline of the wastewater main inspected and accepted by the OWNER. Payment shall be full compensation for furnishing all labor, materials, tools, equipment, cleaning, CCTV inspection, video recordings, reports, reinspection, and incidentals necessary to complete the work.

Bid Item No. SS15 - TRENCH SAFETY (SANITARY SEWER SYSTEM)

This work includes preparing a job specific trench safety plan and installing the proper shoring and/or bracing to adequately provide a safe trench for all sanitary sewer improvements, in compliance with current regulations and requirements of the United States Department of Labor Occupational Safety and Health Administration (OSHA). The CONTRACTOR shall have a Trench Safety Plan prepared, signed, and sealed by a professional engineer and provided to the ENGINEER prior to the start of construction. The preparation of the trench safety plan, as required by these specifications, will not be paid for directly but shall be considered subsidiary to this pay item.

Measurement and payment for work performed and materials furnished related to the preparation of a trench safety plan and the installation of a trench safety systems, as provided herein, shall be based on the actual linear footage of the pipe installed on the Project, and shall be total compensation for furnishing and/or operating all labor, materials, tools, equipment and other incidentals necessary to complete the work.

Bid Item No. SS16 – CONTROLLED LOW STRENGTH MATERIAL (CLSM) EMBEDMENT FOR WASTEWATER MAINS

This item shall consist of furnishing and placing Controlled Low Strength Material (CLSM) for bedding, haunching, embedment, and backfill of wastewater mains at the locations shown in the drawings or as directed by the ENGINEER. All work shall be performed in accordance with the Town of Addison Standard Construction Details and Specifications, NCTCOG Public Works Construction Standards, applicable TCEQ requirements, and all project plans, details, and notes.

The work shall include furnishing all CLSM materials; excavation as necessary; placement and consolidation of CLSM; protection of existing and proposed utilities; coordination with pipe installation operations; curing; disposal of surplus materials; restoration; and all labor, materials, tools, equipment, and incidentals necessary to provide a complete installation. CLSM shall be placed to the limits shown on the construction plans and in accordance with the applicable standard details and specifications.

This item shall include CLSM required around wastewater mains, fittings, service connections, and appurtenances where indicated on the plans or required by the ENGINEER. The CONTRACTOR shall ensure that the installed wastewater main is maintained in proper alignment and grade during placement of CLSM.

Measurement and payment shall be made on the basis of the price bid per LF (LF) of CLSM furnished and placed in accordance with the plans and accepted by the OWNER. Payment shall be full compensation for furnishing all labor, materials, tools, equipment, placement, curing, restoration, and incidentals necessary to complete the work.

Bid Item No. SS17 – BYPASS PUMPING

This item shall consist of furnishing, installing, operating, maintaining, monitoring, relocating, and removing a complete bypass pumping system as required to maintain continuous wastewater service during construction activities. This item shall include all bypass pumping required for the PROJECT, including bypass pumping associated with open-cut wastewater installation, trenchless construction, pipe removal, pipe abandonment, manhole work, connections to existing facilities, and all other construction activities requiring temporary diversion or maintenance of wastewater flows. All work shall be performed in accordance with Technical Specification 33 03 10, the Town of Addison Standard Construction Details and Specifications, NCTCOG Public Works Construction Standards, applicable TCEQ requirements, and all project plans, details, and specifications.

The work shall include preparation and implementation of a bypass pumping plan; furnishing pumps, generators, fuel, piping, hoses, plugs, weirs, temporary connections, traffic control, backup equipment, alarms, monitoring devices, spill containment measures, and all other equipment necessary to maintain uninterrupted wastewater flows. The CONTRACTOR shall be responsible for operation and maintenance of the bypass system twenty-four (24) hours per day for the duration of bypass activities.

The CONTRACTOR shall prevent the discharge of wastewater to streets, waterways, storm drainage systems, private property, or the environment. Any cleanup, repairs, fines, corrective actions, or damages resulting from bypass system failures shall be the responsibility of the CONTRACTOR and shall be performed at no additional cost to the OWNER.

This item shall include all labor, materials, tools, equipment, permits, coordination, installation, operation, maintenance, monitoring, mobilization, relocation between work areas, removal, restoration, and incidentals necessary to provide a complete and operational bypass pumping for all applicable wastewater construction activities throughout the PROJECT.

Measurement and payment shall be made on the basis of the price bid per lump sum (LS). Payment shall be full compensation for all bypass pumping required for the PROJECT, including furnishing all labor, materials, tools, equipment, fuel, operation, monitoring, maintenance, mobilization, relocation, removal, restoration, and incidentals necessary to complete the work. No separate payment for bypass pumping will be made under other bid items.

Bid Item No. SS18 – PIPE BURSTING OR CURED-IN-PLACE PIPE (CIPP)

This work includes rehabilitation of the existing wastewater line. Rehabilitation shall be performed by pipe bursting or CIPP, at the Contractor's option, subject to conformance with the drawings. Final bid shall include cost for the CONTRACTOR's proposed methodology. The work shall be performed in accordance with Technical Specification 33 31 23, Technical Specification 33 01 30, and the project plans, details, and notes.

Pipe bursting work shall include excavation and construction of launching and receiving pits; cleaning and preparation as required; pre-installation CCTV inspection, where required; pipe bursting operations; furnishing and installing proposed pipe through the alignment of the existing wastewater line; connections to existing wastewater mains, manholes, and service laterals; post-installation CCTV inspection; removal and disposal of excavated or excess materials; dewatering; backfill and compaction; surface restoration; cleanup; and all other incidental work necessary to provide a complete and functional installation.

Bypass pumping, where required for either rehabilitation method, shall be measured and paid for under Bid Item No. SS17.

CIPP work shall include cleaning and preparation of the existing wastewater line; pre-installation CCTV inspection; furnishing and installation of the CIPP liner; curing; cutting and reinstatement of existing service connections; post-installation CCTV inspection; disposal of waste materials; cleanup; and all other incidental work necessary to provide a complete and functional rehabilitation.

Measurement and payment shall be made on the basis of the price bid per linear foot (LF), measured horizontally along the centerline of the wastewater line rehabilitated by the construction method performed and accepted by the OWNER. Payment shall be total compensation for furnishing all materials, tools, equipment, labor, cleaning, CCTV inspection, video recordings, inspection documentation, reinspection, and other incidentals necessary to complete the work.

CCTV inspection associated with work performed under this item shall be considered subsidiary to this item and shall not be measured or paid for separately under Bid Item No. SS14.

Bid Item No. SS19 – SANITARY SEWER POINT REPAIR (AS NEEDED, WITH TOWN APPROVAL)

This work includes point repair of the existing sanitary sewer line, if determined necessary based on pre-installation CCTV inspection performed under Bid Item No. SS18 and authorized by the Town prior to performing the work. Point repair shall only be performed where existing pipe conditions require repair prior to pipe bursting or cured-in-place pipe (CIPP) installation. Each point repair shall include removal and replacement of up to 20 linear feet of existing sanitary sewer pipe.

Work shall include excavation and removal of up to 20 linear feet the damaged or defective portion of existing sanitary sewer pipe; furnishing and installing replacement pipe and fittings; connections to the existing sanitary sewer line; dewatering; bypass pumping, if required; bedding and embedment; backfill and compaction; disposal of removed pipe and surplus materials; protection of existing utilities and improvements; surface restoration; cleanup; and all other materials and incidental work necessary to complete the point repair and allow the proposed trenchless rehabilitation to proceed. Bypass pumping, where required, shall be measured and paid for separately under Bid Item No. SS17.

No work under this bid item shall proceed without prior authorization from the Town. Payment shall only be made if the point repair is determined necessary based on the CCTV inspection performed under Bid Item No. SS18 and the work is authorized by the Town prior to execution. Measurement and payment shall be made on the basis of the price bid per each (EA) point repair. Each point repair shall include replacement of up to 20 linear feet of existing sanitary sewer pipe and shall be total compensation for furnishing all materials, equipment, tools, labor, and incidentals necessary to complete the work, except for bypass pumping paid for separately under Bid Item No. SS17.

Bid Item No. ILL1 - DRILL SHAFT (30 IN)

This item shall consist of constructing 30-inch drilled shafts at the locations shown in the drawings. Drilled shafts shall be constructed in accordance with the project specifications, details, and notes, including NCTCOG Item 702.8.

Measurement shall be made by the vertical foot (VF) from the bottom of the completed and accepted drilled shaft to the ground elevation at the time drilling begins.

Payment shall be made at the contract unit price bid per vertical foot (VF) and shall be full compensation for furnishing all labor, materials, tools, equipment, concrete, reinforcing steel, excavation, and incidentals necessary to complete the work.

Bid Item No. ILL2 - 2" PVC SCH 40 STREET LIGHT CONDUIT (TRENCH)
Bid Item No. ILL3 - 2" PVC SCH 40 ELECTRICAL CONDUIT (TRENCH)

Bid Item No. ILL4 - 2" PVC SCH 80 STREET LIGHT CONDUIT (TRENCH)
Bid Item No. ILL5 - 2" PVC SCH 80 ELECTRICAL CONDUIT (TRENCH)
Bid Item No. ILL6 – 4" HDPE CONDUIT (TRENCH)

This item shall consist of furnishing and installing conduit of the type and size shown in the drawings. Conduit shall be constructed in accordance with the project specifications, details, and notes, including NCTCOG Item 805.

Measurement shall be made on the basis of the completed and accepted conduit measured by linear foot (LF).

Payment shall be made at the contract unit price bid per linear foot (LF) for the specified conduit type and shall be full compensation for furnishing and installing the conduit, excavation, bedding, backfill, fittings, pull wire, labor, equipment, and incidentals necessary to complete the work.

Bid Item No. ILL7 - STREET LIGHT PULL BOXES
Bid Item No. ILL8 - ELECTRICAL PULL BOXES
Bid Item No. ILL9 - FIBER PULL BOXES

This item shall consist of furnishing and installing pull boxes of the type shown in the drawings. Pull boxes shall be constructed in accordance with the project specifications, details, and notes, including NCTCOG Item 805.

Measurement shall be made on the basis of the completed and accepted pull boxes measured by each (EA).

Payment shall be made at the contract unit price bid per each (EA) for the specified pull box type and shall be full compensation for furnishing all labor, materials, tools, equipment, excavation, backfill, concrete collars where required, and incidentals necessary to complete the work.

Bid Item No. ILL10 - REINSTALL EXISTING STREET LIGHT ON NEW FOUNDATION

This item shall consist of reinstalling an existing street light assembly on a new foundation at the locations shown in the drawings. The existing pole, luminaire, mast arm, and associated components shall be installed in accordance with the project specifications, details, and notes, including NCTCOG Item 805.

Measurement shall be made on the basis of the completed and accepted reinstalled street light assembly measured by each (EA).

Payment shall be made at the contract unit price bid per each (EA) for Reinstall Existing Street Light on New Foundation and shall be full compensation for furnishing all labor, materials, tools, equipment, hardware, electrical connections, testing, adjustments, and incidentals necessary to reinstall the existing street light and place it into full operation. Removal, salvage, storage, transportation, and foundation construction shall be paid for under the applicable bid items.

Bid Item No. EC1 - INLET PROTECTION (INSTALL/MAINTAIN/REMOVE)

This item shall consist of installation, maintenance, and removal of inlet protection at the locations shown in the drawings. Inlet protection shall be constructed in accordance with project specifications, details, and notes, including NCTCOG Item 202.14.

Measurement and payment shall be made per linear foot (LF) of inlet protection installed and shall be total compensation for furnishing all materials, tools, equipment, labor, maintenance, removal, and any other incidentals necessary to complete the work.

Bid Item No. EC2 - SEDIMENT CONTROL FENCE (INSTALL/MAINTAIN/REMOVE)

This item shall consist of installation, maintenance, and removal of sediment control fence at the locations shown in the drawings. Sediment control fence shall be constructed in accordance with project specifications, details, and notes, including NCTCOG Item 202.5.

Measurement and payment shall be made per linear foot (LF) of sediment control fence installed and shall be total compensation for furnishing all materials, tools, equipment, labor, maintenance, removal, and any other incidentals necessary to complete the work.

Bid Item No. EC3 - STORM WATER POLLUTION PREVENTION PLAN

This pay item shall consist of furnishing, installing, maintaining and removing erosion controls throughout the duration of the project in accordance with the Texas Commission on Environmental Quality's (TCEQ) permitting procedures and requirements for construction projects that disturb five (5) or more acres. Under the Texas Pollution Discharge Elimination System (TPDES) general construction permit TXR 150000, the operator with control of construction plans and specifications (OWNER) and the operator with day-to-day operational control (Contractor) are required to obtain a permit for the discharge of storm water runoff. The Contractor shall be required to prepare and implement a single comprehensive site-specific Storm Water Pollution Prevention Plan (SWP3) for the entire construction site. The Contractor shall: (1) sign the SWP3, (2) submit an NOI for the Town of Addison & Contractor if required, and (3) post a site notice as part of the permit. The SWP3 must describe and ensure the implementation of best management practices that will be used to reduce, to the maximum extent possible, the pollutants and storm water discharges associated with the construction activity and ensure compliance with the terms and conditions of the permit. The SWP3 must clearly indicate which operator is responsible for satisfying each shared requirement of the SWP3. The SWP3 shall be subject to approval by the OWNER and must be retained on-site during the term of the construction. Notice must be posted if the SWP3 is retained off-site.

A Texas Registered Professional Engineer must sign and seal the Erosion Control Plan (ECP) submitted as part of the SWP3. The Contractor shall submit a Notice of Termination for Town of Addison and Contractor upon completion of the project if required.

This work shall also include the installation and maintenance of, unless specified otherwise:

- Silt fence;

- Rock check dam;
- Stabilized construction entrance;
- Staged inlet protection;
- Any additional erosion control measures required by the SWP3.

Measurement and payment shall be made on the basis of the price bid per lump sum (LS) for preparation and implementation of the SWP3. This includes any necessary revisions to the Erosion Control Plan throughout the term of construction and the installation, sequencing, and maintenance of structural control measures throughout the duration of construction and along its entire stretch. Payment shall be total compensation for furnishing all labor, materials, tools, and equipment necessary to complete the work. Payment shall be evenly prorated throughout the term of construction on a monthly basis, based on amount bid and time bid. Structural erosion control measures provided under separate bid items shall be measured and paid under those respective items and shall not be included in payment under EC3

Bid Item No. EC4 - TOPSOIL

This item shall consist of furnishing and placing topsoil free from rock, debris, and other objectionable materials at the locations shown in the drawings. Topsoil shall be placed in accordance with the project specifications, details, and notes, including NCTCOG Item 204.2. Topsoil obtained from excavation and determined suitable for topsoil use may be incorporated into the work. Borrow topsoil shall be provided where sufficient suitable topsoil is not available on the project site.

Topsoil shall be placed to the lines, grades, and thicknesses shown in the drawings and shall be finished to provide a smooth and uniform surface suitable for seeding, sodding, or landscaping operations.

Measurement shall be made on the basis of the completed and accepted topsoil placement measured by square yard (SY) in place.

Payment shall be made at the contract unit price bid per square yard (SY) for Topsoil and shall be full compensation for furnishing, securing, excavating, loading, hauling, placing, shaping, grading, finishing, labor, materials, tools, equipment, and incidentals necessary to complete the work. Excavation required to obtain salvage topsoil from within the project limits shall be considered subsidiary to the applicable excavation bid item and will not be measured or paid for separately.

Bid Item No. EC5 - BLOCK SODDING

This item shall consist of furnishing and installing block sod at the locations shown in the drawings. Sodding shall be performed in accordance with the project specifications, details, and notes, including NCTCOG Item 204.5. Sod shall be healthy, vigorous, free of weeds, disease, insects, stones, and other objectionable materials and shall be suitable for the intended application.

Sod shall be placed on approved topsoil surfaces prepared to the lines and grades shown in the drawings. All sod shall be laid tightly against adjacent sections, rolled, watered, and maintained until accepted by the OWNER.

Measurement shall be made on the basis of the completed and accepted block sod measured in square yards (SY) in place.

Payment shall be made at the contract unit price bid per square yard (SY) for Block Sodding and shall be full compensation for furnishing, transporting, handling, placing, rolling, watering, maintenance, labor, materials, tools, equipment, and incidentals necessary to complete the work.

ADDITIVE ALTERNATIVE 1 – BID ITEM DESCRIPTIONS

Bid Item No. W22 – GROUT EXISTING WATER LINE ABANDONED IN PLACE (AS NEEDED, WITH TOWN APPROVAL)

This additive alternate shall consist of filling the existing water lines designated for abandonment in place with flowable fill, CLSM, or grout, in addition to the abandonment requirements included under Bid Item No. W10.

Work shall include furnishing and placing the fill material; installing temporary bulkheads, plugs, vents, and injection ports; performing pumping and cleaning as necessary prior to filling; and all other work required to completely fill the abandoned water line.
The CONTRACTOR shall perform the work in a manner that prevents migration of fill material into active water facilities.

Measurement and payment shall be made on the basis of the price bid per linear foot (LF), measured horizontally along the centerline of the water grouted. Payment shall be full compensation for furnishing all labor, materials, tools, equipment, plugs, caps, grout, flowable fill, restoration, and incidentals necessary to complete the work.

Bid Item No. SS20 – GROUT EXISTING WASTEWATER LINE ABANDONED IN PLACE (AS NEEDED, WITH TOWN APPROVAL)

This additive alternate shall consist of filling the existing wastewater lines designated for abandonment in place with flowable fill, CLSM, or grout, in addition to the abandonment requirements included under Bid Item No. SS11.

Work shall include furnishing and placing the fill material; installing temporary bulkheads, plugs, vents, and injection ports; performing pumping and cleaning as necessary prior to filling; and all other work required to completely fill the abandoned wastewater line.
The CONTRACTOR shall perform the work in a manner that prevents migration of fill material into active wastewater facilities.

Measurement and payment shall be made on the basis of the price bid per linear foot (LF), measured horizontally along the centerline of the wastewater grouted. Payment shall be full compensation for furnishing all labor, materials, tools, equipment, plugs, caps, grout, flowable fill, restoration, and incidentals necessary to complete the work.

ADDITIVE ALTERNATIVE 2 (PAVER IMPROVEMENTS)

The intent of Additive Alternative 2 is to provide paver improvements from Julian Avenue to Quorum Drive. For purposes of bidding this alternative**, Bid Item P28** shall be removed from the Base Bid within the limits of paver improvements (Julian Avenue to Quorum Drive) and **Additive Alternative 2 Bid Items P30 and P31** shall be added.

If Additive Alternative 2 is selected by the Town, the Contract Documents will be revised by addendum prior to installation to incorporate the paver improvements contemplated by this alternative. The Bidder shall price Additive Alternative 2 based on the stated design intent and shall not rely solely on the Base Bid configuration, quantities, or limits of work in establishing its price.

The price submitted for Additive Alternative 2 shall constitute **full compensation for all changes reasonably necessary to implement the stated design intent**, including, but not limited to, adjustments to quantities; removal and replacement of improvements; excavation; grading; subgrade and base preparation; transitions and tie-ins; pavement, curb, sidewalk, and other surface restoration; adjustments or coordination associated with drainage, utilities, traffic control, pavement markings, and other affected improvements; and all labor, materials, equipment, coordination, and incidental work necessary to provide a complete installation.

No additional compensation or adjustment to the contract price will be made for revisions issued to implement the stated design intent of Additive Alternative 2, provided such revisions do not materially change the limits, character, or overall scope of the alternative described herein.

Bid Item No. O1 – OWNER'S CONTINGENCY

This item will be used at the Owner's discretion to cover any unexpected costs associated with performing the work.

SUBSIDIARY WORK: Any and all Work specifically governed by documentary requirements for the Project, such as conditions imposed by the Plans or these Special Provisions, in which no specific item for bid has been provided for in the Proposal, shall be considered as a subsidiary item of Work, the cost of which shall be included in the various bid items in the Proposal. Costs of CCTV not separately itemized in the Proposal, permits, inspection fees, traffic control, construction staking, surface restoration and cleanup are general items of Work which fall in the category of subsidiary Work. Any repairs or replacement of items damaged during demolition or as a result of new construction will be considered subsidiary. Limits of all Work requiring repair will be determined by the Town of Addison staff or the inspector. Extreme care should be taken during all demolition and construction operations.

QUALIFICATION OF BIDS: The Town of Addison reserves the right to reject any and all Bids, to waive any and all informalities not involving price, time or changes in the Work, and the right to disregard all nonconforming, non-responsive, unbalanced, or conditional Bids. The Town reserves the right to reject the Bid of any Bidder if the Town 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 the Town. Discrepancies in 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 resolve in favor of the correct sum.

AWARD AND EXECUTION OF CONTRACT: For the purpose of award, each bidders shall provide unit prices and extended amounts for all applicable items included in the Bid Proposal. The Town will evaluate bids in accordance with the evaluation criteria established in the Instructions to Bidders for the following parts:

☐ **ADDISON JUNCTION PUBLIC INFRASTRUCTURE IMPROVEMENTS**

Bidders must fill bid proposal for all base bids and all additive alternates. The Award will be made to the responsive and responsible Bidder providing the best value to the Town based on the evaluation criteria stated in the Instructions to Bidders

The Town reserves the right to accept whichever bid is determined to be in the best interest of the public and to reject all bids.

All payments will be based on actual quantities and bid unit prices.

EXPLANATION OF CONTRACT TIME: The term "Contract Time" as used in this Provision will mean the **300** calendar days for substantial completion of the Work of the Contract from the commencement date stated in the written Notice to Proceed. The term "calendar day" as used in this Article will mean every day shown on the calendar. Calendar days will be consecutively counted from commencement of Contract Time (issuance of a Notice to Proceed) regardless of weather, weekends, and holidays, suspensions of Contractor's operations, delays or other events as described herein.

In the event of a catastrophic event (i.e., war, invasion, riot, declared state of emergency, national strike, or other situations as declared by the Town of Addison) directly and substantially affecting the Contractor's operations on the Contract, the Contractor and the Town shall agree as to the number of calendar days to extend the Contract Time. In the event the Contractor and Town are unable to agree to the number of calendar days to extend the Contract Time, the Town shall unilaterally determine the number of calendar days to extend the Contract Time reasonably necessary and due solely to such catastrophic event and the Contractor shall have no right whatsoever to contest such determination, save and except that the Contractor establishes that the number of calendar days determined by the Town were arbitrary or without any reasonable basis.

Should the Contractor fail to complete the Contract on or before expiration of the Allowable Contract Time, as adjusted in accordance with the Special Provisions of liquidated damage, the Town shall deduct from the moneys due the Contractor the Daily Value for each calendar day completion exceeds the Allowable Contract Time. The term "Allowable Contract Time" as used in this Article shall mean the Original Contract Time plus adjustments pursuant to the statements above. This deduction shall be the disincentive for the Contractor's failing to timely complete the Contract. **This shall be strictly enforced.**

COPIES OF PLANS FURNISHED: One (1) copy of 24" x 36" and one (1) electronic copy of the Plans shall be furnished to the successful Contractor, at no charge, for construction purposes.

PRE-CONSTRUCTION CONFERENCE: The successful Contractor, Engineer, and Town of Addison shall meet for a pre-construction conference before any of the Work begins on this Project. At this time, details of sequencing of the Work, contact individuals for each party, testing requirements, submittals, traffic control, time sensitive completion of the project and pay requests will be covered. Prior to the meeting, the Contractor shall prepare schedules showing the sequencing and progress of their Work and its effect on others. A final composite schedule will be prepared during this conference to allow an orderly sequence of Project construction.

Prior to the start of construction, Contractor shall video the construction area and property adjacent to construction in the presence of the Town Inspector. The video shall be narrated. Submit the digital video file through VPM before commencement of the Project. This shall be subsidiary to the Project.

MOBILIZATION: Mobilization and Demobilization includes the movement of all labor, equipment and supplies, establishment of facilities necessary for work, and other work and operations which must be performed and cost no directly attributable to other pay items, excluding bidding costs, which must be incurred in order to enable the Contractor to begin work on other contract items. And this item incudes all work for removing all equipment and supplies and project site cleanup.

Partial Payments of the Lump Sum for Mobilization shall be limited as follows:

1. When 1% of the *adjusted contract amount is earned, 50% of the Mobilization Lump Sum. Previous payments under this item will be deducted from this amount.

2. When 5% of the *adjusted contract amount is earned, 75% of the Mobilization Lump Sum. Previous payments under this item will be deducted from this amount.

3. When 10% of the *adjusted contract amount is earned, 90% of the Mobilization

Lump Sum. Previous payments under this item will be deducted from this amount.

4. When all work under the contract is completed by the Contractor and accepted by the Town, 100% of the Mobilization Lump Sum will be paid.

GENERAL SEQUENCE OF CONSTRUCTION: Prior to the start of Work, the Contractor shall develop a detailed construction and sequence of construction schedule using the critical path method (CPM) and submit through VPM to the Town of Addison and Engineer for approval. The CPM shall reflect all definable features of Work and activities that shall cause minimum interference with traffic along, across and adjacent to the Project during construction. If the schedule or sequence becomes unworkable or unsatisfactory as Work proceeds, adjustments shall be made. During all phases of construction access to all existing businesses must be maintained at all times unless otherwise authorized in writing by the Town of Addison. Erosion control devices must be properly installed and maintained during all stages of construction.

1. The project schedule shall be prepared using Microsoft Project, Primavera P6 or other as approved by the OWNER. Submit the scheduling software native files and PDF copies through VPM with all schedule submittals.
2. The Original Project Schedule submitted prior to construction and approved by the OWNER shall become the basis for measuring progress and evaluating whether the project is on schedule (Baseline schedule for the project). Once approved by the OWNER, the Original Project Schedule shall not be changed.
3. There shall be at a minimum one schedule Activity for each major bid item in the proposal. Many bid items will need to consist of multiple Activities.
4. The length of this project is such that many Activities or Sets of activities will be repeated for various stages of construction and segments of the roadway. Any repeated Activity must clearly identify the location and/or stage of construction.
5. The schedule must be based on clearly defined Activities, phases of construction and any project milestones. Schedule limits must be easily field verified.
6. All Activities must have Predecessor and Successor activities (except start and finish milestones). Independent or open-ended activities shall not be included.
7. The schedule must clearly identify relationship between Predecessor and Successor activities as “start-to-start”, “start-to-finish”, or “finish-to-finish”.
8. Negative lag times shall not be permitted.
9. Activities with a duration of twenty days or greater shall be broken into sub-activities. (For example, if the activity for “Install Water Line A” has a duration of 21 days, is should be divided into sub-activities such as “Install Water Line A, Sta 0+00 to 15+00”, etc.)
10. Monthly schedule updates shall include actual start and completion dates for completed and ongoing Activities. Original Project Schedule dates must be shown for tracking purposes.
11. For activities behind schedule, a Recovery Plan must be submitted detailing how project will be brought back within schedule. This may include such measures as adding work crews, leasing additional equipment, or engaging subcontractors. Fragnets or copies of the revised schedule reflecting proposed changes shall be used to document proposed plan

revisions and their schedule impacts. Any additional costs resulting from Recovery Plan measures shall be at the contractor's sole expense.

12. Activity durations reflected in the original schedule cannot be reduced without a Recovery Plan description reflecting what additional resources or actions will implemented justifying the schedule change.

The Contractor must comply with all work area restrictions as indicated in the Plans unless specifically authorized in writing by the Town of Addison.

PROJECT REPRESENTATIVE: The Town of Addison, the Engineer, the Contractor(s), and any applicable public utilities shall designate a single individual within their organization to act as liaison for the Project. This individual shall be aware of the day to day activities on the Project, have authority to make decisions binding on the party, and serve as single point for coordination of activities with the other team members. The Contractor's representative must be available to meet and discuss construction related issues on site or at the Town's offices within 20 minutes of a request during working hours and throughout the entire construction period. Upon repeated failure of attendance at requested meetings, Contractor will be required to have a Project representative on-site at all times.

COORDINATION WITH OTHERS: In the event that other Contractors are doing Work in the same area simultaneously with this Project, the Contractor shall coordinate his proposed construction with that of the other Contractors. The Town of Addison and/or the Engineer shall mediate any disputes, and the Contractors shall comply with their decisions.

INSURANCE: Each insurance policy that the Contractor must furnish in accordance with these contract documents shall name the Town of Addison and the Engineer as additional insured. Contractor shall include in their bid package, a copy of their certificate of insurance showing compliance to the limits established by the Town of Addison.

1.0 The Contractor shall agree to furnish and maintain continuously during the period of this agreement, any renewals or extension, insurance coverage meeting all of the following requirements:

1.1 Commercial General Liability Insurance at minimum combined single limits of $1,000,000 per occurrence and $2,000,000 general aggregate for Bodily Injury and Property Damage, which coverage shall include Products/Completed Operations, and XCU Hazards. Coverage for product/completed operations must be maintained for at least two (2) years after the construction Work has been completed. Coverage must be amended to provide for an each-project aggregate limit of insurance. Contractual Liability must be included.

1.2 Workers Compensation Insurance at statutory limits, including employer's liability coverage at minimum limits of $1,000,000 each occurrence-each accident, $1,000,000 by disease-each occurrence and $1,000,000 by disease aggregate

1.3 Commercial Automobile Liability Insurance at minimum combined single limits of $1,000,000 per occurrence for bodily injury and property damage, including owned, non-owned, and hired car coverage.

1.4 Umbrella Liability at minimum limits of $1,000,000 each-occurrence $4,000,000 aggregate with respect to primary commercial general liability, automobile liability and employer's liability policies.

1.5 Any Subcontractor(s) hired by the Contractor shall maintain insurance coverage equal to that required by the Contractor. It is the responsibility of the Contractor to assure compliance with this provision. The Town accepts no responsibility arising from the conduct, or lack of conduct, of the Subcontractor.

1.6 A comprehensive general liability insurance form may be used in lieu of a commercial general liability form. In this event, coverage must be written on an occurrence basis, at limits of $1,000,000 each-occurrence, combined single limit and coverage must include a broad form comprehensive general liability endorsement, products/completed operations, XCU hazards and contractual liability.

2.0 With reference to the foregoing insurance requirements, Contractor shall specifically endorse applicable insurance policies as follows:

2.1 The Town shall be named as an additional insured with respect to general liability and automobile liability.

2.2 All liability policies shall contain no cross liability exclusions or insured versus insured restrictions.

2.3 A waiver of subrogation in favor of the Town of Addison shall be contained in the workers compensation and all liability policies.

2.4 All insurance policies shall be endorsed to require the insured to immediately notify the Town of Addison of any material changes in the insurance coverage.

2.5 All insurance policies shall be endorsed to the effect that the Town will receive at least thirty (30) days notice prior to cancellation or non-renewal of the insurance.

2.6Submit post-award certificates and required endorsements through VPM. Documents required with the Bid shall be provided with the Bid in accordance with the procurement requirements.

2.7 All insurance policies, which name the Town as an additional insured, must be endorsed to read as primary coverage regardless of the application of other insurance.

2.8 Required limits may be satisfied by any combination of primary and umbrella liability insurances.

2.9 Contractor may maintain reasonable and customary deductibles, subject to approval by the Town.

3.0 All insurance shall be purchased from an insurance company who meets the following requirements:

3.1 Must be issued by a carrier, which is rated "A-" VII or better by A.M. Best's Key Rating Guide.

3.2 Licensed and admitted to do business in the State of Texas and is a subscriber to the Texas Guaranty Fund.

4.0 All insurance must be written on forms filed with and approved by the Texas State Board of Insurance. Certificates of insurance shall be prepared and executed by the insurance company or its authorized agent and shall contain provisions representing and warranting the following:

4.1 Set forth all endorsements and insurance coverages according to requirements and instruction contained herein.

4.2 Shall specifically set forth the notice-of-cancellation or termination provisions to the Town.

5.0 Upon request, Contractor shall furnish the Town of Addison with certified copies of all insurance policies.

WORKERS' COMPENSATION INSURANCE COVERAGE:

A. Definitions.

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

Duration of the Project - includes the time from the beginning of the Work on the Project until the Contractor's/person's Work on the Project has been completed and accepted by the governmental entity.

Persons Providing Services on the Project ("Subcontractor" in Section 406.096 of the Texas Labor Code) - includes all persons or entities performing all or part of the services the Contractor has undertaken to perform on the Project, regardless of whether that person contracted directly with the Contractor and regardless of whether that person has employees. This includes, without limitation, independent Contractors, Subcontractors, leasing companies, motor carriers, Town-operators, employees of any such entity or employees of any entity which furnishes persons to provide services on the Project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a Project.

"Services" does not include activities unrelated to the Project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

B. The Contractor shall provide coverage, based on property reporting of classification codes and payroll amounts and filing of any coverage agreement, which meets the statutory requirements of Texas Labor Code, 401.011(44) for all employees of the Contractor providing services on the Project, for the duration of the Project.

C. The Contractor must provide a certificate of coverage to the Town of Addison prior to being awarded the contract.

D. If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the Project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage with the Town of Addison, showing that the coverage has been extended.

E. The Contractor shall obtain from each person providing services on the Project, and provide to the Town of Addison:

(1) a certificate of coverage, prior to that person beginning Work on the Project, so that the Town of Addison will have on file certificates of coverage showing coverage for all persons providing services on the Project; and,

(2) no later than seven days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the Project;

F. The Contractor shall retain all required certificates of coverage on file for the duration of the Project and for one year thereafter.

G. The Contractor shall notify the Town of Addison in writing by certified mail or personal delivery, within 10 days after the Contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the Project.

H. The Contractor shall post on each Project site a notice, in the text, form and manner prescribed by the TWCC, informing all persons providing services on the Project that they are required to be covered, and stating how a person may verify current coverage and report failure to provide coverage.

I. The Contractor shall contractually require each person with whom it contracts to provide Services on a Project to:

(1) provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Codes 401.011 (44) for all its employees providing services on the Project, for the duration of the Project;

(2) provide to the Contractor, prior to that person beginning Work on the Project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the Project, for the duration of the Project;

(3) provide the Contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the Project;

(4) obtain from each person with whom it contracts, and provide to the Contractor;

a. a certificate of coverage, prior to the other person beginning Work on the Project; and,

b. a new certificate of coverage showing extension of the coverage period, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the Project.

(5) retain all required certificates of coverage on file for the duration of the Project and for one year thereafter;

(6) notify the Town of Addison in writing by certified mail or personal delivery, within 10 days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the Project; and

(7) contractually require each other person with whom it contracts to perform as required by paragraphs (1) - (7) with the certificate of coverage to be provided to the person for whom they are providing services.

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

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

The following is the form of notice of workers' compensation coverage prescribed by the TWCC. Pursuant to Section 110.110 (d) (7), this notice must be printed with a title in at least 30-point bold type, and text in at least 19-point nominal type, and shall be in both English and Spanish and any other language common to the worker population.

REQUIRED WORKERS' COMPENSATION COVERAGE

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

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

RESOLUTION OF DISPUTES: The parties hereby covenant and agree that in the event of any controversy, dispute, or claim, of whatever nature arising out of, in connection with or in relation to the interpretation, performance or breach of this Contract, including but not limited to any claims based on contract, tort or statute, before filing a lawsuit, the parties agree to submit the matter to Alternative Dispute Resolution pursuant to the laws of the State of Texas. The parties shall select a third party arbitrator or mediator from the current list of neutrals on file with the Alternative Dispute Resolution Administrator of the Dallas County District Courts or other mutually agreeable mediator or arbitrator. All forms of Alternative Dispute Resolution may be used except binding arbitration. The proceedings shall be conducted in accordance with the laws of the State of Texas.

SHOP DRAWINGS: The Contractor shall provide, review, approve and submit all shop drawings, product data and samples required by the Town of Addison, the Engineer and the Contract Documents in accordance with Item 1.28 of the Standard Specifications for Public Works Construction, North Central Texas Council of Governments. The Contractor shall submit shop drawings and product data through VPM to the Engineer for review, comment, and routing to the Town of Addison for acceptance. Provide required physical samples and retain the associated electronic submittal record in VPM.

Shop drawings shall include all items to be installed in the Project, including but not limited to:

☐ Concrete Mix Designs	☐ Traffic Control Plan	☐ Water Main Pipe/Fitting
☐ Storm Sewer Pipe	☐ Bridge Superstructure	☐ Valves & Boxes
☐ Rock Riprap	☐ Manholes & Vaults	☐ Backfill Materials
☐ Sanitary Sewer Pipe/Fitting	☐ Metal Beam Guard Fence	☐ Handrail Shop Drawings

PROJECT VIDEO: Prior to the start of construction, Contractor shall video the construction area and property adjacent to construction in the presence of the Town Inspector. The video shall be narrated. Submit the digital video file through VPM before commencement of the Project. This effort shall be subsidiary to the various bid items for the Project (See Section 19).

SAMPLES AND TESTS OF MATERIALS: The Town of Addison shall designate and pay an independent testing laboratory to furnish testing for this Project. Random testing will be provided by the independent lab as necessary for compliance with the Specifications. The Contractor shall coordinate construction with the testing lab and the Town of Addison, and shall provide assistance to the testing labs by providing excavation, access, trench safety, materials for testing and any other Work required to insure all testing requirements are met. Work performed to accommodate testing will be a subsidiary item and no extra payment will be authorized. All costs for the field quality control testing shall be paid for by the Town of Addison, except for any and all re-testing, which shall be paid by the Contractor and such cost shall be deducted from monthly pay requests. As a guide, the Contractor shall be responsible for providing any test required by the Specifications.

All samples and tests shall be performed in accordance with the Standard Specifications for Public Works Construction, North Central Texas Council of Governments (Fifth Edition, November 2017), with amendments identified under Special Provision in this document, or the testing standard expressly referenced for the applicable work item.

INSPECTION: The Town of Addison and the Engineer reserve the right to inspect, test, measure or verify the construction Work for this Project as they deem necessary to ascertain that the Work is being accomplished in accordance with the standards and requirements set forth in the Contract Documents. Notwithstanding such reviews, the Contractor will be held responsible for the finished Work and any acceptance of the Work by the Town or governmental agencies will not relieve the Contractor from responsibility for the Work. The Town reserves the right to place full-time construction inspectors at the site of the Work. Costs for inspection services will be paid by the Town of Addison. The Contractor shall provide assistance to the Town of Addison and the Engineer by providing excavation, trench safety, or other Work necessary to facilitate inspection activities, and shall give sufficient notice well in advance of pending construction activities for scheduling of inspection services.

If the Specifications, the Town's instructions, laws, ordinances, or any public authority require any Work to be specially tested, the Contractor shall give the Town timely notice of its readiness for testing, and if the testing is by an authority other than the Town, of the date fixed for such testing. Tests by the Town shall be made promptly, and where practicable at the source of supply.

ACCESS ROUTES, STAGING AREAS AND STORAGE AREAS: All haul roads and access routes and the location of job site trailers, staging areas, and storage areas shall be subject to the approval of the Town and the Engineer. The Contractor shall be responsible for obtaining a staging area for storage of equipment and materials and for employee parking. The Contractor is responsible for maintaining and repairing all roads and other facilities used during construction. Upon completion of the Project all existing roads and other disturbed areas shall be left in a condition equal to that at the time the Contractor commences Work on this Project.

PROPERTY ACCESS: Access to adjacent commercial property shall be maintained at all times unless otherwise directed by the Engineer and/or Town of Addison. Contractor shall

also maintain sufficient access throughout the Project limits to the existing buildings and businesses during construction operations.

PLANT, PROCEDURES, METHODS AND EQUIPMENT: The Contractor shall determine the methods to be employed, the procedures to be followed, and equipment to be used on the Work under this contract, subject to the requirements of these Specifications and approval of the Engineer and Town of Addison. Only adequate and safe procedures, methods and equipment shall be used.

The Contractor shall so arrange his Work and provide such plant and equipment as is necessary in order to meet the progress requirements of the approved time schedule and to complete the Work within the period of time as specified in the Contract. Only such materials and equipment as are necessary for the construction of the Work under this contract shall be placed, stored or allowed to occupy any space at the site of the Work.

It is expressly agreed that the acceptance or approval of any order of procedure, methods or equipment submitted or employed by the Contractor shall not in any manner relieve the Contractor of responsibility for the safety, maintenance and repairs of any Work, or for the construction maintenance and safety of the Work hereunder, or from any liability whatsoever on account of any procedure or method employed by the Contractor.

Where the Work under this contract requires permits from the Town of Addison, the State of Texas, or other public authorities, copies of such permits shall be submitted by the Contractor to the Engineer through VPM before the Work covered thereby is started. **NO WORK WILL BE ALLOWED TO PROCEED BEFORE REQUIRED PERMITS ARE OBTAINED AND DISTRIBUTED.**

PARKING OF CONSTRUCTION EQUIPMENT: During all other periods of time when the Contractor's or their sub-contractors equipment is not being actively used on the construction Work, the Contractor shall park the equipment at locations which are approved by the Town of Addison. The Contractor shall provide adequate barricades, markers and lights to protect the Town of Addison, the Engineer, the public and other Work. All barricades, lights, and markers must meet the requirements of the Town of Addison, State and Federal regulations.

ZONING REQUIREMENTS: During the construction of this Project, the Contractor shall comply with the present zoning requirements of the Town of Addison in the use of vacant property for storage purposes.

IN PUBLIC ROADS AND PRIVATE DRIVES: No public road shall be entirely closed overnight, unless approved by the Town of Addison. It shall be the responsibility of the Contractor to build and maintain all weather bypasses and detours, if necessary, and to properly light, barricade and mark all bypasses and detours that might be required on and across the roads involved in the Work included in this Contract.

The Contractor shall make every effort to complete construction and allow immediate access to adjacent property at driveway entrances located along the roadways. Towns or tenants of improvements where access and/or entrance drives are located shall be notified

at least twenty-four (24) hours prior to the time the construction will be started at their driveways or entrances and informed as to the length of time driveways will be closed. Contractor shall at all times maintain at least one point of access into all properties, unless obtaining written permission from property owner to do otherwise with such written permission being provided to the Town's inspector.

The Contractor shall be responsible for all road and entrance reconstruction and repairs and maintenance of same for a period of two years from the date of Town of Addison's acceptance of the Work. In the event the repairs and maintenance are not made immediately to the satisfaction of the Town, and it becomes necessary for the Town to make such repairs, the Contractor shall reimburse the Town for the cost of such repairs.

The Contractor shall, at all times, keep a sufficient width of the roadway clear of dirt and other material to allow the free flow of traffic. The Contractor shall assume any and all responsibility for damage, personal or otherwise, that may be caused by the construction along roads and private drives.

HAULING ON TOWN OF ADDISON STREETS: The Contractor shall receive approval of its haul routes and type of equipment to be used prior to beginning construction. The Contractor shall be responsible for maintaining the cleanliness of existing paved roadways and shall provide equipment and manpower for that purpose.

EXISTING POWER POLES & GUY WIRES: The Contractor shall have the responsibility of coordinating with the proper authorities for the bracing, replacing or relocating of all utility poles and guy wires which interfere with the Work on this Project prior to beginning its construction operations. The Contractor will also be responsible for all damage to poles, guy wires, etc. that are damaged or destroyed by Contractor's operations.

SAFETY RESTRICTIONS - WORK NEAR HIGH VOLTAGE LINES: The contractor is responsibly for the site safety of the project. Contractor shall follow governing regulatory requirements when working near high voltage lines, including but not limited to, OSHA 1926 and Town of Addison requirements.

PROTECTION OF EXISTING UTILITIES AND STRUCTURES: The location and dimensions shown on the Plans relative to existing utilities and subsurface structures are based on the best records and/or field information available and are not guaranteed by the Town of Addison or the Engineer to be accurate as to location and depth. It shall be the Contractor's responsibility to verify locations of adjacent and conflicting utilities sufficiently in advance of its activities in order that he may negotiate such restrictive locations with the Town of Addison of the conflicting utility and/or make local adjustments to provide adequate clearances. The Contractor shall take all necessary precautions in order to protect all utilities and services encountered, whether or not they are indicated on the Plans. All damage to utilities resulting from Contractor's operations shall be restored at its expense. The Town of Addison and the Engineer assume no responsibility for failure to show any or all of these utilities or structures on the Plans, or to show them in their exact locations. It is mutually agreed that such failure shall not be considered sufficient basis for claims for additional compensation for Extra Work or for increasing the pay quantities in

any manner whatsoever, unless the obstruction encountered is such as to necessitate changes in the lines or grades, or requires the building of special Work, provisions for which are not made in the Plans, in which case, provisions in these Specifications for Extra Work shall apply.

PUBLIC UTILITIES AND OTHER PROPERTY TO BE CHANGED: In case it is necessary to change or move the property of a public utility, such property shall not be moved or interfered with until authorized by the Town of Addison or the Engineer. The right is reserved for the Owner of public utilities to enter upon the limits of the Project for the purpose of making such changes or repairs of their property that may be made necessary by performance of the Contract. The Contractor shall be responsible for coordination with the Town of Addison and the Engineer, and all utility companies whose utility lines or streets may be affected by the proposed improvements. The Contractor shall observe the following:

a. Prior to any excavation, the Contractor shall determine the locations of all existing water, gas, sewer, electric, telephone, telegraph, television, pipelines and other underground utilities and structures.

b. After commencing Work, the Contractor shall use every precaution to avoid interference with existing underground and surface utilities and structures, and protect them from damage.

c. Where the locations of existing underground and surface utilities and structures are indicated, these locations are generally approximate, and all items which may be encountered during the Work are not necessarily indicated. The Contractor shall determine the exact locations of all items indicated, and the existence and locations of all items not indicated.

d. The Contractor shall repair or pay for all damage caused by its operations to all existing utility lines, public property, and private property, whether it is below ground or above ground, and he shall defend and settle in total the cost of all lawsuits which may arise as a result of its operations.

e. To avoid unnecessary interferences or delays, the Contractor shall coordinate all utility removals, replacements and construction with the appropriate utility company, and then request written authorization from the Town of Addison or the Engineer. The Town of Addison and the Engineer will not be liable for damages due to delay as a result of the above.

MAINTENANCE AND REPAIRS: The Contractor shall maintain and keep in good repair all Work contemplated under these Plans, Specifications, and Plans which shall include the maintenance and repair of all existing streets, storm sewer crossings, utility crossings, temporary crossings for access to adjacent property, barricades, lights, and danger signals, and all Work which is necessary for the well-being of the general public. In the event the Contractor fails in its obligations to properly maintain the Work, the Town of Addison shall

make such repairs as are necessary and the cost of such repairs shall be deducted from payment due the Contractor.

PROTECTION OF WORK: During performance and up to date of final acceptance, the Contractor shall be under the absolute obligation to protect the finished Work against damage, loss or injury. In the event of damage, loss or injury, the Contractor shall promptly replace or repair such Work, whichever the Town of Addison shall determine to be preferable. The obligation to deliver finished Work in strict accordance with the contract prior to final acceptance shall be absolute and shall not be affected by the Town of Addison's approval of or failure to prohibit means and methods of construction used by the Contractor. All risk of loss or damage to the Work shall be borne solely by the Contractor until final acceptance of all Work by the Town of Addison, as evidenced by the Town of Addison's issuance of a certificate of acceptance.

PUBLIC CONVENIENCE AND SAFETY: In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions of the Project site, including safety of all persons and property during performance of the Work. This requirement shall apply continuously and not be limited to normal Work hours.

Materials stored about the Work site shall be so placed, and the Work shall at all times be so conducted, as to cause no greater obstruction to the traveling public than is considered necessary by the Town of Addison. The materials excavated shall be placed so as not to endanger the Work or prevent free access to all fire hydrants, water valves, gas valves, manholes (telephone, telegraph or electrical conduits, and sanitary sewers) and fire alarm or police call boxes in the vicinity.

The Town of Addison reserves the right to remedy any neglect on the part of the Contractor as regards to the public convenience and safety which may come to the Town of Addison's attention, after 24 hours notice in writing to the Contractor, save in cases of emergency, when the Town of Addison shall have the right to remedy any neglect without notice; and, in either case, the cost of such Work done by the Town of Addison shall be deducted from the monies due or to become due the Contractor. The Contractor shall notify the Town of Addison and the Engineer when any street is to be closed or obstructed. The Contractor shall provide for emergency vehicle access at all times.

Where the Work passes over or through private property, the Town of Addison shall provide such right-of-way. The Contractor shall notify the proper representatives of any public utility, corporation, company or individual, not less than 48 hours in advance of Work which might damage or interfere with the operation of their property along or adjacent to the Work. The Contractor shall be responsible for all damage or injury to property of any character (except such as may be required by the provisions of the Contract Documents, or caused by agents or employees or the Town of Addison) by reason of any negligent act or omission on the part of the Contractor, its employees, agents or Subcontractors, or at any time due to defective Work or materials, or due to its failure to

reasonably or properly prosecute the Work, and said responsibility shall not be released by the fact that the Work shall have been completed and accepted.

When and where any such damage or injury is done to public or private property on the part of the Contractor, he shall restore or have restored at its own cost and expense such property to a condition similar or equal to that existing before such damage was done, by repairing, rebuilding or otherwise restoring as he may be directed, or he shall make good such damage or injury in a manner acceptable to the property Town of Addison and the Engineer. In case of failure on the part of the Contractor to restore such property or make good such damage or injury, the Town of Addison may, upon 48 hour written notice under ordinary circumstances, and without notice when a nuisance or hazardous condition results, proceed to repair, rebuild or otherwise restore such property as may be determined necessary, and the cost thereof shall be deducted from any monies due or to become due to the Contractor under this contract; or where sufficient contract funds are unavailable for this purpose, the Contractor or its surety shall reimburse the Town of Addison for all such costs.

PROTECTION OF PERSONS AND PROPERTY: The Contractor shall have the responsibility to provide and maintain all warning devices and take all precautionary measures required by law or otherwise necessary to protect the Work and persons and property while said persons or property are approaching, leaving or within the Work site or any area adjacent to said Work site. No separate compensation shall be paid to the Contractor for the installation or maintenance of any protective measures, warning devices, barricades, lights, signs, or any other precautionary measures required by law or otherwise necessary for the protection of persons or property.

The Contractor shall assume all responsibilities to the general public in connection with the general public's immediate approach to and travel through the Work site and the area adjacent to said Work site.

Where the Work is in or adjacent to any street, alley, sidewalk, public right-of-way or public place, the Contractor shall at its own cost and expense provide such flagmen and watchmen and furnish, erect and maintain such warning devices, barricades, lights, signs, and other precautionary measures for the protection of persons or property as may be prudent or necessary, or as required by law. The Contractor's responsibility for providing and maintaining flagmen, watchmen, warning devices, barricades, signs and lights and other precautionary measures shall not cease until the Project shall have been completed and accepted by the Town of Addison, and shall cease when the Town of Addison notifies the Contractor in writing of final Project acceptance.

If the Town of Addison discovers that the Contractor has failed to comply with applicable federal or state laws (by failing to furnish the necessary flagmen, warning devices, barricades, lights, signs or other precautionary measures for the protection of persons or property), the Town of Addison may order the Contractor to take such additional precautionary measures as required by law to protect persons and property. In addition, the Contractor shall be held responsible for all damages to the Work and other public or

private property due to the failure of warning devices, barricades, signs, lights or other precautionary measures in protecting said property; and whenever evidence is found of such damage, the Town of Addison may order the damaged portion immediately removed and replaced by and at the cost and expanse of the Contractor.

TRAFFIC CONTROL: It shall be the responsibility of the Contractor to provide traffic control during the construction as required by the State of Texas, the Town of Addison, and in accordance with the following additional requirements:

a. The Contractor shall be required to furnish barricades, flares, flagmen, etc., for the protection of the public, employees and the Work.

b. The Contractor shall prosecute its Work in such a manner as to create a minimum of interruption to traffic along adjacent roadways.

c. The unit price bid under the appropriate bid item of the proposal shall cover all cost for providing signage, markings, lighting, barricades, flagmen and other devices and personnel required for traffic control during construction of the Project.

d. The Contractor shall not remove any regulatory sign, instructional sign, warning sign, street name sign or any other sign or signal which currently exists.

e. **The Contractor shall provide a comprehensive Traffic Control Plan to the Town of Addison for review, comment, and approval.** In the event the planned sequence of work is different in any way from that sequence of work provided for in the plans or where additional details are required to be reviewed and approved by Addison prior to any further work is performed. The Traffic Control Plan shall be designed in accordance with established standards and regulations and signed and sealed by a professional engineer, registered in the State of Texas. The plan should reflect the Contractor's proposed construction phasing and methodology and include the design layout for all proposed detour and traffic situations. This effort is paid by lump sum in Bid Item No. P2.

BARRICADES, WARNING SIGNS, DETOURS AND SEQUENCE OF CONSTRUCTION: Throughout the construction operations, streets and intersections will remain open to traffic by constructing the Work in stages. All streets, driveways, adjacent business and alleys shall remain open to traffic as far as is practicable.

A. General Construction: The Contractor shall plan its Work sequence in a manner that will cause minimum interference with daily operations and Town Special Events during construction operations. Before beginning Work on this Project, the Contractor shall submit, for approval by the Town of Addison, a plan of construction operations outlining in detail a sequence of Work to be followed; setting out the method of handling traffic on streets, roads and driveways along, across and adjacent to the Work. If at any time during the construction, the Contractor's proposed plan of operation for handling traffic does not provide for safe comfortable movement, the Contractor shall immediately change its operations to correct the unsatisfactory conditions.

Ditches across the traffic lanes will be kept covered with a portable traffic-bearing surface at all times unless Work in the ditch is in progress. Only one lane of traffic may be closed at a time when Work is in progress in a ditch.

B. Safety: The Contractor shall provide, construct and maintain barricades and signs at locations set out in the Plans and in the Special Provisions in accordance with the Texas Manual on "Uniform Traffic Control Devices for Streets and Highways". In addition, he shall provide and maintain such other barricades and signs as deemed necessary by the Town or the Engineer, and provide and maintain, between sunset and sunrise, a sufficient number of lights at barricades and points of danger for the protection of vehicular and pedestrian traffic.

Barricades shall be placed in such a manner as not to interfere with the sight distance of drivers entering the street from side streets.

The Contractor shall keep traveled surfaces used in its hauling operation clear and free of dirt or other material.

The Contractor shall provide and maintain qualified flagmen at such points and for such periods of time as may be required to provide for the safety and convenience of public travel and Contractor's personnel.

EXCAVATION SAFETY SYSTEMS:

The Work performed under this section of the Specifications consists of providing trench safety systems consisting of shoring, sheeting, trench shield, and/or laid back slopes to meet the trench safety requirements of the Occupational Safety and Health Administration (O.S.H.A.), as required for this Project and specified herein.

A. General: Trench safety systems shall be provided by the Contractor as provided in Subpart P - Excavation, Trenching and Shoring, Part 1926 of the Code of Federal Regulations which describes safety and health regulations as administered by the U.S. Department of Labor Occupational Safety and Health Administration (O.S.H.A.). The standards specified by the O.S.H.A. Regulations shall be the minimum allowed on this Project. It shall be the responsibility of the Contractor to design and install adequate trench safety systems for all trenches excavated on this Project.

The Contractor shall furnish to the Town for review, prior to beginning construction activity, a Trench Safety Plan for the entire Project. The trench safety plan must be prepared and sealed by a Professional Engineer registered in the State of Texas. In addition, all trench safety systems utilized in this Project must be designed by a Professional Engineer registered in the State of Texas. The Contractor shall be totally responsible for the safety of all persons involved in the construction of this Project.

B. Core Borings: Any core borings and soil data furnished by the Town are for the convenience of the Contractor. The Contractor shall be responsible for any additional soil or geotechnical information required. The Contractor shall be responsible for properly

designed trench safety systems to be utilized for any type of subsurface condition found on this Project. The furnishing of soil information by the Town of Addison in no way relieves the Contractor of this obligation. If no core borings or soil data are furnished by the Town, it shall be the Contractor's responsibility to obtain whatever geotechnical information required for preparation of trench safety systems.

C. Inspections: In addition to the inspections of the trench and trench safety systems required of the Contractor by the O.S.H.A. Regulations, the Town may further inspect the Work. The Town shall have the right to reject any trench safety systems which he finds to be inadequate, and the Contractor shall immediately improve the system to comply with this specification.

D. Measurement and Payment: Measurement and payment of Trench Safety Systems shall be based on the actual linear footage of the pipe installed on the Project. The payment shall be full compensation for all planning, engineering, materials, equipment, fabrications, installation, recovery and all incidental Work required.

TRENCH EXCAVATION, BACKFILL AND COMPACTION: Trench excavation, backfill and compaction of water and sewer utility trenches shall be in accordance with Town of Addison Standards and with details shown on the Construction Plans.

A. Trench Excavation: If the stated maximum trench widths are exceeded, either through accident or otherwise, and if the Engineer determines that the design loadings of the pipe will be exceeded, the Contractor will be required to support the pipe with an improved trench bottom. The expense of such remedial measures shall be entirely the Contractor's own. All trenching operations shall be confined to the width of permanent rights-of-way, permanent easements and any temporary construction easements. All excavation shall be in strict compliance with the Trench Safety Systems Special Condition of this document.

B. Trench Backfill: Trenches shall be backfilled above the top of the embedment material with approved backfill material per Town of Addison Standards for the appropriate pipe size, pipe material, depth, and soil condition.

C. Compaction: All trenches under proposed or existing pavement shall be compacted to within a range of 95% to 100% Standard Proctor Density. Trenches which lie outside limits of pavement shall be compacted to a minimum of 90% Standard Proctor Density (ASTM D-698).

TRENCH WALLS: The Contractor shall use shoring or a drag box in those areas where it is required to protect existing improvements. Shoring, trench boxes, and other trench safety systems shall be measured and paid under the applicable trench safety bid item.

SUSPENSION OF WORK RELATED TO DANGER: In addition to the other remedies for suspension of the Work as provided for in the General Provisions and Special Provisions, the Town of Addison has the authority to suspend all work immediately if, in the Town of Addison's opinion, there is imminent danger to workers or the general public. If there is no imminent danger to workmen or the general public, but trench conditions are

not in compliance with Federal Regulations 29 C.F.R. 1926.650-1926.652, the Town of Addison shall warn the Contractor who shall then immediately order all workmen in and adjacent to the trench away from the area. The Contractor must then bring the trench into compliance with the regulations. If the Contractor does not make the required corrections, all work on the Contract shall cease and the Town of Addison will issue a letter of Temporary Suspension of Work. The only work authorized after issuance of this letter is work approved by the regulations. Other work shall not be permitted until the Town of Addison issues a letter of Release of Temporary Suspension of Work. The Contractor shall not be entitled to additional compensation, an extension of time or payment of damages as a result of a temporary suspension of work under this provision.

PROPERTY LINES AND MONUMENTS: The Contractor shall protect all property corner markers, and when any such markers or monuments are in danger of being disturbed, they shall be properly referenced and if disturbed shall be reset at expense of the Contractor.

CONSTRUCTION STAKING: Construction staking will not be provided by the Town of Addison or Engineer. This item will be performed by the Contractor and shall be subsidiary to other bid items. The Contractor will also be responsible for maintaining stakes. If re-staking is required for any reason, it will be the Contractor's responsibility, including associated costs.

All construction staking shall be done under the supervision of a Registered Professional Land Surveyor registered in the State of Texas. The Contractor shall submit cut sheets and field books for all paving, water, wastewater, and stormwater improvements through VPM to the Town of Addison for review prior to construction of the improvements. The information on the cut sheets and field books shall include but not be limited to the following:

a. Heading to include date, contract number, Project name, surveying firm, Contractor, and construction plan sheet number.

b. Location, description of street/line and street/line name, number, letter, etc. designation.

c. Benchmark Data: Location, description, and elevation.

d. Slope or percent of grade of each curb line or utility line.

e. Stations at 50 foot intervals and including all PC, PT, PI, PVC, PVI, PVT, PRC, grade changes, etc.

f. Offset description including distance to center line or back of curb and direction of offset; left, right, east, west, etc,

g. Cut to subgrade, pavement, top of curb, or flowline of the street or utility being staked.

h. Clarifying remarks such as top of curb, gutter, pavement, subgrade, manhole, cleanout, valve, tee, cross, fire hydrant, wastewater lateral, water service, etc.

i. Cut sheets shall be signed by a Texas Registered Professional Land Surveyor.

j. Collect and submit GPS/GIS as-built survey data for all permanent improvements in accordance with Special Provision in this document. Construction staking, design coordinates, and record markups alone do not satisfy the requirement to survey actual installed assets before concealment.

DURING CONSTRUCTION: During construction of the Work, the Contractor shall, at all times, keep the site of the Work and adjacent premises as free from material, debris and rubbish as is practicable and shall remove same from any portion of the site if, in the opinion of the Town of Addison or the Engineer, such material, debris or rubbish constitutes a nuisance or is objectionable. In case of failure on the part of the Contractor to maintain a clean site, the Town of Addison may, upon 24 hour written notice, clean the site, and the cost thereof shall be deducted from any monies due or to become due to the Contractor under its contract; or where sufficient contract funds are unavailable for this purpose, the Contractor or its surety shall reimburse the Town of Addison for all such costs.

CONSTRUCTION TRAFFIC OVER PIPE LINES: The design of the new pipes and the design of the existing pipe have been taken into account and provided for highway live loads. It is apparent, however, that certain construction vehicles could exceed this highway load condition under shallow bury conditions. It will be the responsibility of the Contractor to protect both the new line and the existing lines from these possibly excessive loads. The Contractor shall not at any time cross the existing or new pipe with a truck delivering new pipe to the site. Any damage to the existing or new pipe will be repaired or replaced by the Contractor to the satisfaction of the Town of Addison.

In locations where it is not permissible to cross the existing or proposed pipes without additional protection, the Contractor may elect to provide additional protection of the pipes, such as steel plates, so that more frequent crossings of the pipes are allowed. It still is, however, the responsibility of the Contractor to repair any damage to the existing or proposed lines if the damage results from any phase of its construction operation.

CONTRACTOR'S CONTINUING OBLIGATION: Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by the Town of Addison, nor the issuance of a certificate of Substantial Completion, nor any payment by Town of Addison to Contractor under the Contract Documents, nor any use or occupancy of the Work or any part thereof by Town of Addison, nor any act of acceptance by Town of Addison nor any failure to do so, nor any review and approval of a Shop Drawing or sample submission, nor the issuance of a notice of acceptability by the Town of Addison pursuant to final payment nor any correction of defective Work by Town of Addison will constitute an acceptance of Work not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents.

IRRIGATION AND SPRINKLER REPAIR: The Contractor shall maintain all existing irrigation systems within the limits of the Project during the duration of the contract, if necessary. The Contractor shall employ a licensed irrigator who is responsible for the

repair or replacement of any damage to irrigation lines, valves, controllers, sprinklers, wiring and appurtenances which are damaged during construction. **This repair is subsidiary to the various other items bid. The Contractor will be responsible for any vegetation that dies as a result of damage to the irrigation system and replace it with equal vegetation at its own cost.**

REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK: All Work which has been rejected or condemned shall be repaired; or if it cannot be repaired satisfactorily, it shall be removed and replaced at the Contractor's expense. Defective materials shall be immediately removed from the Work site. Work done without line and grade having been provided; Work done beyond the line or not in conformity with the grades shown on the Plans or as provided, Work done without proper inspection; or any Extra or unclassified Work done without written authority and prior agreement in writing as to prices, shall be at the Contractor's risk and will be considered unauthorized, and at the option of the Town of Addison may not be measured and paid for and may be ordered removed at the Contractor's expense. Upon failure of the Contractor to repair satisfactorily or to remove and replace, if so directed, rejected, unauthorized or condemned Work or materials immediately after receiving notice from the Town of Addison, the Town will, after giving written notice to the Contractor, have the authority to cause defective Work to be remedied or removed and replaced, or to cause unauthorized Work to be removed and to deduct the cost thereof from any monies due or to become due the Contractor.

DISPOSITION AND DISPOSAL OF MATERIALS: All materials to be removed from the site including refuse and other debris shall become the property of the Contractor and shall be disposed of outside the limits of the Project. Contractor shall also comply with all applicable laws governing the spillage of debris while transporting to a disposal site.

CLEAN-UP FOR FINAL ACCEPTANCE: The Contractor shall make a final cleanup of all parts of the Work before acceptance by the Town of Addison. This cleanup shall include removal of all objectionable rock and other construction materials, and in general preparing the site of the Work in an orderly manner and appearance.

TV INSPECTION OF SANITARY SEWER/STORM SEWER: Part of the final inspection of the wastewater and storm sewer systems on this Project shall include a closed circuit TV survey of the completed pipe installation, and all imperfections in the installed facility revealed by the TV survey shall be remedied by the Contractor prior to acceptance of the Project as complete. All TV survey Work, including furnishing of necessary personnel, equipment and material shall be performed by the Contractor. Preconstruction service and lateral verification and before-and-after inspection of retained infrastructure shall comply with Special Provision in this document.

TESTING REQUIREMENTS: Testing shall be conducted in accordance with Town of Addison Specifications except as modified in the Special Provisions, Technical Specifications, or as on the plans. The Town of Addison will provide random testing. The Contractor shall coordinate construction with the Town of Addison, and shall provide assistance to the testing labs by providing trench safety, excavation, or other work to insure all testing requirements are met. Work performed to accommodate testing will be a

subsidiary item and no extra payment will be authorized. All retesting shall be at the expense of the Contractor. As a general guide, the Contractor shall be responsible for providing the following tests:

Density and associated tests on embedment and backfill.
Compressive strength tests on concrete.
Gradation soil tests on backfill as may be required.
Pressure test, bacteriological tests for disinfection of water lines,
Mandrel test for gravity sewer pipeline
Vacuum test for SSMH for water tightness.
Providing test results from manufacturer and as specified in Town of Addison Specifications (NTCOG).

SILICONE JOINT SEALANT: Silicone joint sealant must be used in all instances where joint sealant applies to Portland Cement Concrete pavement and curbs. Payment for the use of silicone joint throughout this Project will in all cases be subsidiary to this contract at no extra cost.

CLAIMS FOR DAMAGES OR INJURY: General Provision Item 1.24.3 - SMALL CLAIMS FOR DAMAGE OR INJURY is amended to read as follows: "If any person files a claim against the Town of Addison or Contractor for personal injury or property damage resulting from, arising out of, or caused by, the operations of the Contractor, or any Work within the limits of the Project, the Contractor must either submit to the Town of Addison, a duly executed full release within thirty (30) days from the date of written claim, or immediately report the claim to its liability insurance carrier for their action in adjusting the claim. If the Contractor fails to comply with this provision within the stipulated time limit, it will be automatically deemed that the Contractor has appointed the Town as it's irrevocably Attorney-In-Fact authorizing the Town to report the claim directly with the liability insurance carrier. This provision is in and of itself a Power-of-Attorney from the Contractor to the Town which authorizes the Town to take said action on behalf of the Contractor without the necessity of the execution of any other document. If the Contractor fails to comply with the provisions of this item the Town, at its own discretion, may terminate this contract or take any other actions it deems appropriate. Any payment or portion thereof due the Contractor, whether it is a final payment, progress payment, payment out of retainage or refund payment may be withheld by the Town as is authorized by Item 109.4. Bankruptcy, insolvency or denial of liability by the insurance carrier shall not exonerate the Contractor from liability.

As a result of the additional Work created to Town of Addison due to un-responded claims for damages by Contractor to third parties, Contractor shall incur penalties for failure to abide by this Special Provision.

Contractor shall respond to the claimant in writing regarding the status of the claim, including whether Contractor disputes the claim, wishes to settle, or will notify its liability insurance carrier regarding the claim. Contractor will be assessed a penalty by the Town

of $75.00 per claim, for its failure to respond to the claimant as described above within thirty days of its written notice of claim by the Town.

To ensure Contractor compliance, the Town of Addison shall be notified, by copied correspondence of responses or settlement by Contractor."

WAIVER OF CLAIMS: The making and acceptance of final payment will constitute:

A. A waiver of all claims by Town of Addison against Contractor, except claims arising from unsettled Liens, from defective Work appearing after final inspection or failure to comply with the Contract Documents or the terms of any special guarantees specified therein; however, it will not constitute a waiver by Town of Addison of any rights in respect of Contractor's continuing obligations under the Contract Documents.

B. A waiver of all claims by Contractor against Town of Addison other than those previously made in writing and still unsettled.

MECHANICS AND MATERIALMEN'S LIEN: The Contractor shall be required to execute a release of mechanics and materialmen's liens upon receipt of payment and shall ensure that the Project remains free and clear of all liens related to the Work. The Contractor shall have all liens removed by obtaining releases acceptable to the Town of Addison or shall bond around such liens by obtaining a discharge of all liens.

CONTRACTOR'S AFFIDAVIT OF BILLS PAID: The Contractor shall be required to execute the form provided in Section BP prior to the acceptance of the Project.

PRODUCT RECORD DOCUMENTS: The Contractor shall maintain record Plans and legibly annotate shop drawings to record changes made after review. A red felt-tip marking pen shall be used for all recording.

Maintenance of Documents: The Contractor shall maintain at the job site one record copy of the Contract Plans, Specifications, Shop Drawings, Change Orders, other modification to the Contract, field test records and other documents submitted by Contractor in compliance with specification requirements. These documents shall be maintained at the job site apart from documents used for construction. These documents are not to be used for construction purposes. The documents shall be maintained in clean, legible condition. The documents shall be made available at all times for inspection by the Town.

Recording: Each document shall be labeled Project Record Copy in 2-inch high printed letters. The record documents shall be kept current. No Work shall be covered until required information has been recorded.

Contract Plans: The appropriate drawing shall be legibly marked to record, where applicable:

a. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.

b. Field changes of dimension and detail made during construction process.

c. Changes made by Change Order or Supplemental Agreement.

d. Details not on original Contract Plans.

e. Manufacturer, trade name, catalog number and supplier of each product and item of equipment actually installed.

f. Changes made by Change Order or Supplemental Agreement.

g. Other matters not originally specified.

Shop Drawing: The Contractor shall maintain the Shop Drawings as record drawings and legibly annotate shop drawings to record changes made after review.

Submittal: At completion of the Project, submit record Plans and the GPS/GIS asset dataset to the Town through VPM under Special Provisions in this document. Complete the VPM submission record with:

a. Date, Project title and number.

b. Contractor's name and address.
c. Title and number of each record document.

d. Certification that each document as submitted is complete and accurate.

e. Signature of Contractor or its authorized representative.

OWNERSHIP OF WORK AND MATERIALS: All Work performed by Contractor pursuant to the Contract shall be the property of the Town of Addison. The Town of Addison shall own all construction, and any data, documents, plans, specifications, working papers, computer programs, photographs, or other material produced by Contractor pursuant to the Contract, and Contractor hereby assigns and transfers to the Town of Addison any and all copyrights for such material. To the extent that such programs used are internal, proprietary programs used by Contractor in the performance of the Work, Contractor will provide the Town of Addison such access to the programs as is necessary for the Town of Addison to be able to use the products and documents generated by the program, but Contractor is not required to transfer the copyrights or other intellectual property rights to the program to the Town of Addison. As security for partial, progress, or other payments, title to work for which such payments are made shall pass to the Town of Addison at the time of the payment. To the extent that title has not previously been vested in the Town of Addison by reason of payments, full title shall pass to the Town of Addison at delivery of the Work at the location specified in the Contract.

Unincorporated Work to which the Town of Addison has received title by reason of progress, partial or other payments shall be segregated from other Contractor or Subcontractor materials and clearly identified as the Town of Addison property. The

Contractor shall be responsible for all materials until they have been incorporated into the Work and the Work has been finally accepted by the Town of Addison. The title transferred as above shall in each case be good, and free and clear of any and all security interests, liens, or other encumbrances. The Contractor promises and agrees that it will not pledge, hypothecate, or otherwise encumber the items in any way that would result in any lien, security interest, charge, or claim upon or against said items. The transfer of title as provided above shall not imply acceptance by the Town of Addison, nor relieve Contractor from the responsibility to strictly comply with the Contract, and shall not relieve Contractor of responsibility for any loss of or damage to such items.

The Contractor shall insert provisions in its subcontracts sufficient to ensure compliance with the content of this Section.

DRAWINGS AND OTHER DATA: All documents developed by Contractor in the performance of the Contract shall become the sole property of the Town of Addison and may be used by the Town of Addison on any other project without additional compensation to Contractor. Use by the Town of Addison of these documents on other projects does not confer any liability on Contractor.

The Town of Addison shall be considered the "person for whom the work was prepared" for the purpose of authorship in any copyrightable work under 17 U.S.C. § 201(b). With respect thereto, Contractor agrees not to assert or authorize others to assert any rights or establish any claim under the design related patent and copyright laws. All design drawings, as-built drawings and specifications, in any form, shall contain a copyright mark of the Town of Addison.

TOWN OF ADDISON APPROVAL: This Project is subject to final approval and acceptance by the Town of Addison. Final approval acceptance will not be given until the punch list items are completed to the Town's satisfaction and the Town has accepted the record Plans, complete corrected GPS/GIS asset dataset, and CCTV inspection and condition-comparison records submitted through VPM under Special Provisions in this document.

USE OF EXPLOSIVES: The use of explosives by the Contractor to complete the Work shall be prohibited.

POWER FOR CONSTRUCTION: The Contractor shall contract with the local power provider and make the necessary arrangements for securing power required for the construction, including power required for temporary offices. There will be no separated pay item for connection into the existing power system or for the power required for construction purposes.

LIQUIDATED DAMAGES: If the Contractor fails to complete the Work within the time specified in the contract, the Contractor shall pay liquidated damages to the Town of Addison in the amount of **$ 1,000** for each calendar day of delay until the Work is completed or accepted.

CONTRACT DELAY: The parties anticipate that delays may be caused by or arise from any number of events during the course of the Contract, including, but not limited to, Work performed, disruptions, permitting issues, actions of subcontractors, suppliers, or other contractors, actions by third parties, weather, weekends, holidays, or other such events, forces or factors sometimes experienced in construction work. Such delays or events and their potential impacts on performance by the Contractor are specifically contemplated and acknowledged by the parties in entering into this Contract, and shall not extend the Contract time for completion. Further, any and all costs or impacts whatsoever incurred by the Contractor in accelerating the Work to overcome or absorb such delays or events in an effort to complete the Contract prior to expiration of the Contract time to complete, regardless of whether the Contractor does so or not, shall be the sole responsibility of the Contractor in every instance.

SUBCONTRACTORS: No subcontract shall relieve Contractor of any of Contractor's obligations or liabilities under the Contract. Contractor shall be fully responsible and liable for the acts or omissions of all Subcontractors, including persons directly or indirectly employed by them, their guests and invitees. Contractor shall have sole responsibility for managing and coordinating the operations of its Subcontractors, including the settlement of disputes with or between them. Nothing contained in the Contract shall be deemed to create a contractual relationship between any Subcontractor, and the Town of Addison.

Contractor shall submit through VPM to the Town of Addison all executed subcontracts associated with the Contract, including any changes or modifications to the subcontracts, within three (3) days of their execution. No Subcontractor shall be permitted to perform work associated with the subcontract until the Subcontractor (or Contractor on the Subcontractor's behalf) is in compliance with the insurance requirements specified elsewhere in the Contract, and has furnished satisfactory evidence of insurance to the Town of Addison.

PAYMENTS TO SUBCONTRACTORS: Contractor shall comply with the provisions of applicable laws and regulations relating to Contractor's relations with Subcontractors. Payments by Contractor to Subcontractors associated with the Town of Addison Contracts are subject to the time periods established in the Texas "Prompt Payment Act", contained in Chapter 2251 of the Texas Government Code.

All persons employed in the performance of the Work under the Contract, or any subcontracts hereunder, shall be paid not less than the general rates of per diem, holiday, and overtime wages prevailing in the locality of the Work of a similar character as detailed in the Special Provisions. Failure to comply with this provision shall subject Contractor to the penalties prescribed in Chapter 2258 of the Texas Government Code, as amended.

Contractor will include in each subcontract for property or services entered into by Contractor and a Subcontractor, including a supplier, for purposes of performing the Work under the Contract a payment clause that obligates Contractor to pay the Subcontractor for satisfactory performance under its subcontract within seven (7) days out of such amounts as are paid to Contractor by the Town of Addison under the Contract. A false certification

to the Town of Addison under the provisions of the Payments clause may be a principal offense in violation of Section 37.10 of the Texas Penal Code.

USE OF COMPLETED PORTIONS OF THE WORK: Whenever, as determined by the Town of Addison, any portion of the Work performed by Contractor is in a condition suitable for use, and the best interests of the Town of Addison requires such use the Town of Addison may take possession of or use such portion of the Work. Such use by the Town of Addison shall in no case be construed as final acceptance, and shall neither relieve Contractor of any of its responsibilities under the Contract, nor act as a waiver by the Town of Addison of any of the conditions thereof. Contractor shall not be liable for the cost of repairs, rework, or renewals, which may be required due to ordinary wear and tear resulting from such use. However, if such use increases the cost or delays the completion of remaining portions of the Work, Contractor shall notify the Town of Addison in writing as required by the Contract and shall be entitled to such additional compensation or extension of time, or both, as determined in accordance with the Contract.

If in the course of such use, the Work proves to not be in compliance with the Contract, the Town of Addison shall have the right to continue such use until such portion of the Work can, without injury to the Town of Addison, be taken out of service for correction of defects, errors, omissions, or replacement of unsatisfactory materials, as necessary for such portions of the Work to comply with the Contract. Contractor shall correct the Work as soon as practical, but not later than one (1) month after notification by the Town of Addison.

Contractor shall not use any permanently incorporated materials unless such use is approved in writing by the Town of Addison. Where Contractor's request is granted for the use of certain materials, Contractor shall properly use and maintain and, upon completion of its use and at its own expense, recondition such materials to the satisfaction of the Town of Addison.

COMPLETE AGREEMENT: The Contract (including Attachments, the Special Provisions, other documents and manuals incorporated herein) is the full and complete agreement between the Town of Addison and Contractor with respect to the subject matter herein and supersedes any and all prior agreements between the parties hereto.

WAIVER: The waiver by the Town of Addison of the breach of any provision of the Contract by Contractor shall in no way impair the right of the Town of Addison to enforce the provision for any subsequent breach thereof. All remedies provided hereunder are cumulative and are in addition to all other remedies available at law or in equity.

EXECUTION OF THE CONTRACT: The Contract may be executed in multiple counterparts, each of which shall, for all purposes, be deemed an original but which together shall constitute one and the same instrument, and the signature pages from any counterpart may be appended to any other counterpart to assemble fully executed documents, and counterparts of the Contract may also be exchanged via electronic facsimile machines and any electronic facsimile of any party's signature shall be deemed to be an original signature for all purposes.

DEFINITIONS: The following definitions are added to the General Provisions and Special Provisions:

BIDDER: Any person, persons, partnership, company, firm, association, or corporation acting directly or through a duly authorized representative submitting a bid for the work contemplated.

PROJECT: The Town of Addison's overall objective and endeavor of which the Contract forms a part and ultimately creates, which encompasses all Contact Documents constructed to final completion and final acceptance.

TOWN ENGINEER (ENGINEER): Town Engineer or his/her authorized representative with the Town of Addison located at 16801 Westgrove Drive, Addison, Texas 75001.

CONSULTANT ENGINEER (DESIGN ENGINEER): The consultant engineer of record is L. Nathan Ante, PE (Texas Registered PE #96866 with Kimley-Horn and Associates, Inc., located at 225 E. John W. Carpenter Freeway, Suite 1100, Irving, TX 75062.

WORKING DAY: A working day is defined as a calendar day not including Saturdays, Sundays, or legal holidays authorized in the list prepared by the Town of Addison for contract purposes, in which weather or other conditions not under the control of the Contractor shall permit the performance of the principal units of work underway for a continuous period of not less than 7 hours between 9:30 A.M. and 3:30 PM. A principle unit of work shall be that unit which controls completion time of the contract. Nothing in this definition shall be construed as prohibiting the Contractor from working on Saturdays, if the Contractor so desires and permission of the Town of Addison has been granted. Work on Sundays shall not be permitted except in cases of extreme emergency and then only with the written permission of the Town of Addison. If Saturday or Sunday work is permitted, working time shall be charged on the same basis as weekdays. Where the working time is expressed as calendar days or a specific date, the concept of working days shall no longer be relevant to the contract.

MODIFICATIONS TO THE LANGUAGE OF THE GENERAL PROVISIONS: The General Provisions are modified as follows:

A. Add the following words to the General Provisions before the word "Certificates" found on the fifth line of Section 103.4.1:

"When permitted by law,"

B. Delete the sentence "A model Certificate of Insurance is illustrated in Model Form A.6 in Appendix A." beginning on the eleventh line of Section 103.4.1 of the General Provisions and replace with the following:

"Certificates of Insurance shall be provided on a state approved form."

C. Delete the following sentence beginning on the second line of the fifth subparagraph of Section 104.2.1 of the General Provisions:

> "The foregoing notwithstanding, the total original Contract amount shall not be increased more than 25 percent; the CONTRACTOR, by submission of a bid and execution of the Contract, is deemed to consent to the OWNER'S right to reduce the total original Contract amount by more than 25 percent."

D. Add the following word before the word "decide" found on the second line of Section 105.7.1 of the General Provisions:

> "initially"

E. Add the following word after the word "work" found on the sixth line of Section 105.7.1 of the General Provisions:

> ", subject to the agreement of the Owner"

F. Delete the following sentence beginning on the sixth line of Section 105.7.1 of the General Provisions:

> "Engineer shall determine the amount and quality of work performed and materials furnished, and Engineer's decision and estimates shall be final."

G. Delete Section 105.9.3 of the General Provisions titled "Inspection Overtime" in its entirety.

H. Delete Section 107.3 of the General Provisions titled "Indemnification" in its entirety and replace with the following:

> **"THE CONTRACTOR AGREES TO INDEMNIFY, SAVE, PROTECT, DEFEND, AND HOLD HARMLESS THE OWNER, ITS AFFILIATES AND THEIR OFFICERS, DIRECTORS, AGENTS, INVITEES, AND EMPLOYEES ("INDEMNIFIED PARTIES") FROM AND AGAINST ANY AND ALL LIABILITY, COST, DAMAGE, EXPENSES, FINES AND ALL REASONABLE LEGAL FEES AND COURT COSTS, CLAIMS, LOSSES, CAUSES OF ACTION, SUITS, AND LIABILITY OF ANY KIND, INCLUDING ALL EXPENSES OF LITIGATION AGAINST THE INDEMNIFIED PARTIES, WHETHER OR NOT CAUSED IN PART BY ANY ACT OR OMISSION OF A PERSON OR ENTITY INDEMNIFIED HEREUNDER, OR WHETHER LIABILITY IS IMPOSED UPON SUCH PERSON OR ENTITY, FOR ANY LOSS, INJURY, DAMAGE OR DEATH ARISING FROM OR OUT OF THE CONTRACTOR'S ACTS**

OR OMISSIONS, INCLUDING, BUT NOT LIMITED TO CONTRACTOR'S NEGLIGENT OR GROSSLY NEGLIGENT PERFORMANCE OF THE WORK; NEGLIGENT OR GROSSLY NEGLIGENT USE OR MISUSE OF OWNER'S PROPERTY; NEGLIGENT OR INTENTIONAL ACTIONS, ERRORS OR OMISSIONS AND THOSE OF ITS EMPLOYEES, OFFICERS, DIRECTORS, AGENTS OR SUBCONTRACTORS; VIOLATION OF ANY FEDERAL, STATE OR MUNICIPAL LAWS, REGULATIONS AND/OR ORDINANCES; CONTRACTOR'S OR ITS SUBCONTRACTOR'S USE OF PROPERTY, EQUIPMENT, VEHICLES, OR MATERIALS; DEFECTIVE WORKMANSHIP; NEGLIGENT OR GROSSLY NEGLIGENT USE OR MISUSE OF UTILITIES; OR SUBCONTRACTORS', EMPLOYEES', AGENTS', OFFICERS', OR DIRECTORS' NEGLIGENCE OR INTENTIONAL TORTS. IT IS THE EXPRESS INTENT OF CONTRACTOR TO INDEMNIFY THE INDEMNIFIED PARTIES FROM THE CONSEQUENCES OF THEIR JOINT AND/OR CONCURRENT NEGLIGENCE AND/OR SOLE NEGLIGENCE. IN THE EVENT OF FAILURE BY THE CONTRACTOR TO FULLY PERFORM IN ACCORDANCE WITH THIS INDEMNIFICATION PARAGRAPH, EACH OF THE INDEMNIFIED PARTIES, AT ITS OPTION, AND WITHOUT RELIEVING CONTRACTOR OF ITS OBLIGATIONS HEREUNDER, MAY SO PERFORM, BUT ALL COSTS AND EXPENSES SO INCURRED BY ANY OF THE INDEMNIFIED PARTIES IN THAT EVENT SHALL BE REIMBURSED BY CONTRACTOR TO THE INDEMNIFIED PARTIES, OR ANY OF THEM, AND UNTIL REIMBURSED BY CONTRACTOR SHALL BEAR INTEREST, AT THE RATE OF INTEREST PROVIDED TO BE PAID ON JUDGMENT UNDER THE LAWS OF THE STATE OF TEXAS. THIS INDEMNIFICATION SHALL NOT BE LIMITED TO DAMAGES, COMPENSATION OR BENEFITS PAYABLE UNDER INSURANCE POLICIES, WORKERS' COMPENSATION ACTS, DISABILITY BENEFIT ACTS OR OTHER EMPLOYEE BENEFIT ACTS.

IN THE EVENT THIS CONTRACT RELATES TO A PROJECT OTHER THAN A SINGLE FAMILY HOUSE, TOWNHOUSE, DUPLEX, OR LAND DEVELOPMENT DIRECTLY RELATED THERETO OR A PUBLIC WORKS PROJECT OF A MUNICIPALITY THEN THE INDEMNITY PROVISIONS INCLUDED HEREIN SHALL BE LIMITED SUCH THAT SUBCONTRACTOR SHALL NOT BE REQUIRED TO INDEMNIFY, HOLD HARMLESS OR

DEFEND CONTRACTOR OR ANY THIRD PARTIES AGAINST A CLAIM CAUSED BY THE NEGLIGENCE OR FAULT, THE BREACH OR VIOLATION OF A STATUTE, ORDINANCE, GOVERNMENTAL REGULATION, STANDARD, OR RULE, OR THE BREACH OF CONTRACT OF AN INDEMNIFIED PARTY, ITS AGENT OR EMPLOYEE, OR ANY THIRD PARTY UNDER THE CONTROL OR SUPERVISION OF THE INDEMNIFIED PARTY, OTHER THAN SUBCONTRACTOR OR ITS AGENT, EMPLOYEE, OR SUBCONTRACTOR OF ANY TIER EXCEPT THAT SUBCONTRACTOR SHALL INDEMNIFY, HOLD HARMLESS AND DEFEND THE INDEMNIFIED PARTY AGAINST ANY CLAIMS FOR THE BODILY INJURY OR DEATH OF AN EMPLOYEE OF SUBCONTRACTOR, ITS AGENTS, OR ITS SUBCONTRACTORS OF ANY TIER.

NOTWITHSTANDING ANYTHING HEREIN TO THE CONTRARY, THE INDEMNITY PROVISIONS INCLUDED HEREIN SHALL BE LIMITED SUCH THAT CONTRACTOR SHALL NOT BE REQUIRED TO INDEMNIFY, HOLD HARMLESS OR DEFEND OWNER OR ANY THIRD PARTIES AGAINST A CLAIM CAUSED BY THE NEGLIGENCE OR FAULT, THE BREACH OR VIOLATION OF A STATUTE, ORDINANCE, GOVERNMENTAL REGULATION, STANDARD, OR RULE, OR THE BREACH OF CONTRACT OF THE INDEMNIFIED PARTIES, ITS AGENT OR EMPLOYEE, OR ANY THIRD PARTY UNDER THE CONTROL OR SUPERVISION OF THE INDEMNIFIED PARTIES, OTHER THAN CONTRACTOR OR ITS AGENT, EMPLOYEE, OR SUBCONTRACTOR OF ANY TIER EXCEPT THAT CONTRACTOR SHALL INDEMNIFY, HOLD HARMLESS AND DEFEND THE INDEMNIFIED PARTIES AGAINST ANY CLAIMS FOR THE BODILY INJURY OR DEATH OF AN EMPLOYEE OF CONTRACTOR, ITS AGENTS, OR ITS SUBCONTRACTORS OF ANY TIER."

I. Add the following language after Section 103.3.1.4 of the General Provisions:

"**103.3.1.5. Maintenance Bond**. A good and sufficient bond in an amount not less than **100-percent** of the approximate total of the Contract, as evidenced by the proposed tabulation, or conditioned on the full and proper maintenance and repair of the Work to be done and performed for a period of two (2) years from the date of final acceptance of the Work and the Contractor will do all necessary backfilling that may arise on account of sunken conditions in ditches, or otherwise, and do and perform the necessary Work and repair any defective condition growing out of or

arising from the improper laying or construction of same, or on account of any breaking of same caused by the Contractor in construction of same, or on account of any defect arising in any of the Work laid or constructed by the Contractor or on account of improper excavation or backfilling, it being understood that the purpose of this Section is to cover all defective conditions arising by reason of defective materials, Work, or labor performed by the Contractor."

J. Add the following language after Section 104.2.5. of the General Provisions:

> "**104.2.6. Change Orders**. A Change Order is a written instrument and signed by the Owner, Contractor and Engineer stating their agreement upon all of the following:
>
> (1) the change in the Work;
>
> (2) the amount of the adjustment, if any, in the Contract Sum; and
>
> (3) the extent of the adjustment, if any, in the Contract Time.
>
> In the event the Contractor proposes a Change Order, the Contractor shall provide sufficient detail for such Change Order to allow analysis and review by the Engineer.
>
> Agreement on any Change Order shall constitute final agreement on the Work which is the subject of the Change Order, including, but not limited to, all direct and indirect costs associated with such change and any and all adjustments to the Contract Sum and the Contract Time. In the event a Change Order increases the Contract Sum, the Contractor shall include the Work covered by such Change Orders in Applications for Payment as if such Work were originally part of the Contract Documents.
>
> The Contractor, upon receipt of written notification by the Owner or the Engineer of a proposed item or change in Work, shall prepare as soon as possible a Change Order in the Owner's designated VPM workflow. If the Change Order is returned to the Contractor for additional information or if the scope of the proposed change in the Work is modified by additions, deletions or other revisions, the Contractor shall revise the Change Order accordingly and resubmit the revised Change Order to the Owner and Engineer."

K. Delete the language in Section 105.2.1 of the General Provisions and replace it with the following language:

> **"105.2.1. WORKMANSHIP**: If the OWNER notifies the CONTRACTOR in writing of defective work, the CONTRACTOR shall correct the deficiencies within five (5) calendar days of the

Notice at no additional cost to the OWNER. If the defective work is not corrected within five (5) calendar days, or the CONTRACTOR is not making satisfactory progress (in the opinion of the OWNER) to correct the deficiencies, the OWNER may withhold future payments for All Work until the defective work has been corrected to the satisfaction of the OWNER."

L. Add the following language after Section 105.10 of the General Provisions:

"**105.10.2. GUARANTEE AFTER COMPLETION**: Unless otherwise specified in the technical section of these specifications, the CONTRACTOR shall, after test and acceptance, and for a period of two (2) years from date of final written acceptance by the OWNER or within such longer or shorter period of time as may be prescribed by law or by the terms of any other applicable special warranty on designated equipment or portions of work as required by the Contract Documents, rebuild, repair, or replace any and all items which have proven defective due to unsatisfactory material and/or workmanship. Upon written notice from the OWNER, the CONTRACTOR shall immediately make any repairs that may be ordered, or such repairs will be made by the Owner at the expense of the CONTRACTOR or the CONTRACTOR'S Surety. In case of an emergency where delay would cause serious loss or damage, the Owner may undertake to have the defects repaired without previous notice. The expense of all repairs, including all emergency repairs, shall be borne by the CONTRACTOR or the CONTRACTOR'S Surety, at no cost to the Owner. This obligation shall survive termination of the Contract.

105.10.3. OFFSET PROGRESS PAYMENTS: OWNER may, at its option, offset any progress payment or final payment under the Contract Documents against any debt (including taxes) lawfully due to OWNER from Contractor, regardless of whether the amount due arises pursuant to the terms of the Contract Documents or otherwise and regardless of whether or not the debt due to OWNER has been reduced to judgment by a court.

105.10.4. FINAL ACCEPTANCE AND PAYMENT: This Project is subject to final inspection and final acceptance by the Owner. Whenever the Work provided for by the Contract shall have been completely performed on the part of the CONTRACTOR, including, but not limited to compliance with North Central Texas Council of Governments Standard Specifications for Public Works Construction, Fifth Edition (November 2017), Section 202.6.4.6, as modified under Special Provision in this document, the CONTRACTOR shall notify the OWNER that the Work is ready for final inspection. The OWNER will then make such final inspection

and if the work is satisfactory and in accordance with the specifications and contract documents, the OWNER shall issue a certificate of acceptance to the CONTRACTOR and submit a request to accept the Work performed by the CONTRACTOR and payment of a final estimate under the terms of which the OWNER will release 100% of the retainage, plus the unpaid portions of the final estimate subject to Section 109.5.2 and applicable law.

Whenever the improvements provided for by the Contract shall have been completely performed on the part of the Contractor, as evidenced in the certificate of acceptance, and all required submissions provided to the OWNER, a final estimate showing the value of the Work shall be prepared by the OWNER as soon as the necessary measurements and computations can be made. All prior estimates upon which payments have been made are subject to necessary corrections or revisions in the final payment. The amount of this final estimate, less any sums that have been previously paid, deducted or retained under the provisions of the contract, shall be paid the CONTRACTOR within 30 days after the final acceptance by the OWNER, provided the CONTRACTOR has furnished to the OWNER a consent of Surety and satisfactory evidence that all indebtedness connected with the Work and all sums of money due for any labor, materials, apparatus, fixtures, or machinery furnished for and used in the performance of the Work have been paid or otherwise satisfied, or that the person or persons to whom the same may respectively be due have consented to such final payment This requirement it not intended and shall not be construed to recognize subcontractors for the purpose of privity of contract, and no third party benefit rights shall be obtained through these provisions for final payment. The acceptance by the CONTRACTOR of the final payment as aforesaid shall operate as and shall be a release to the OWNER from all claims or liabilities under the Contract, including all subcontractor claims, for anything done or furnished or relating to the Work under the Contract or for any act or neglect of said OWNER relating to or connected with the Contract.

All warranties and guarantees shall commence from the date of the certificate of acceptance. No interest shall be due the CONTRACTOR on any partial or final payment, or on the retainage, except as required by applicable law.

105.10.5. RIGHT TO AUDIT CONTRACTOR'S RECORDS: By execution of the Contract, CONTRACTOR grants the OWNER the right to audit, at Owner's election, all of CONTRACTOR'S records and billings relating to the performance of the Work under the Contract. CONTRACTOR agrees to retain such records for a minimum of three (3) years following completion of the Work under

this Contract. OWNER agrees that it will exercise the right to audit only at reasonable hours."

M. Add the following language after Section 107.6 of the General Provisions:

"**107.6.1. COMPENSATION AND ACKNOWLEDGEMENT OF WORK**: The CONTRACTOR shall receive and accept compensation, as herein provided, as full payment for furnishing all labor, tools, material, equipment and incidentals; for performing all Work contemplated and embraced under the Contract; for all loss or damage arising out of the nature of the Work, or from the action of the elements; for any unforeseen defects or obstruction which may arise or be encountered during the prosecution of the Work and before its final acceptance by the OWNER; for all risks of whatever description connected with the prosecution of the Work; for all expense incurred by or in consequence of suspension or discontinuance of such prosecution of the Work as herein specified; for any infringement of patents, trademarks or copyrights; and for completing the Work in an acceptable manner according to the Plans and Specifications."

N. Add the following language after Section 107.12 of the General Provisions:

"**107.12.1. COOPERATION OF THE CONTRACTOR**: The CONTRACTOR shall give to the work the consistent attention necessary to facilitate the progress thereof, and the CONTRACTOR shall cooperate with the OWNER, and with other CONTRACTORS in every way possible.

The OWNER and the OWNER'S representatives shall at all times have free access to the Work whenever it is in preparation or progress and the contractor shall provide safe, convenient and proper facilities for such access and inspection."

O. Delete Section 107.5 of the General Provisions and replace it with the following:

"**107.5. VENUE AND CHOICE OF LAW**

The Owner, the Contractor, and the Contractor's sureties agree that this Contract shall be performed in Dallas, Dallas County, Texas, and if legal action is necessary in connection therewith, exclusive venue shall lie in Dallas County, Texas. The terms and provisions of the Contract Documents shall be construed in accordance with the laws and court decisions of the State of Texas."

P. Delete the following language (which is the first paragraph) from Section 109.5.1. of the General Provisions:

"Between the 25th day and the last day of each month, the Owner shall make an approximate estimate of the value of the work done during the month under the specifications. Whenever the said estimate or estimates of work done since the last previous estimate exceeds $100 in amount, a percentage of such estimate sum shall be paid the Contractor on or before the 15th day of the month next following. The monthly estimate may include acceptable nonperishable materials delivered to the work; such payment shall be allowed on the same percentage basis of the net invoice value as provided hereinafter. The percent retained by the owner shall normally be up to 10 percent at completion, unless otherwise stated. At the midpoint, or at any subsequent time, if the owner determines that the progress of the Contract is satisfactory in all respects, it may at its discretion cease to retain additional funds until the completion of the project, or until progress ceases to be satisfactory. The owner shall make the sole determination in this matter."

Q. Add the following language after Section 109.5.1. of the General Provisions:

"**109.5.1.1. Applications for Payment.** Applications for progress payment ("Application for Payment") will be submitted no more often than monthly and shall be submitted on the dates set forth in the Agreement. Each Application for Payment shall be (1) sworn to and notarized, (2) supported by such data substantiating the Contractor's right to payment as the Owner or Engineer may require, such as copies of requisitions from Subcontractors and material suppliers, and reflecting retainage if provided for in the Contract Documents, and (3) submitted by the Contractor for review to the Engineer in form and substance as mandated by the Owner. The Contractor's Application for Payment shall be segregated and detailed in a manner satisfactory to the Owner. Submit each Application for Payment and its complete supporting package through VPM under Special Provision in this document. Link the application to verified quantities and supporting measurements and include current GPS/GIS records required by Special Provision in this document. Existing certification, notarization, and approval requirements remain applicable.

In each Application for Payment, the Contractor shall certify that such Application for Payment represents a just estimate of portion of the Work that is complete as of the last day covered by the Application for Payment and shall also certify by sworn affidavit as follows:

'There are no known mechanics' or materialmen's liens outstanding at the date of this Application, all due and payable bills with respect to the Work have been paid to date

or shall be paid from the proceeds of this Application for Payment, there is no known basis for filing of any mechanics' or materialmen's liens on the Work, and waivers from all subcontractors and materialmen have been or, at the time of payment, will be obtained in such form as to constitute an effective waiver of lien under the applicable laws of the State of Texas.'

109.5.1.2. Lien Waivers. Concurrent with each Application for Payment, the Contractor shall execute and furnish a waiver and release of its lien rights current through the effective date of such Application for Payment conditioned upon receipt of the payment that is the subject of the application. Beginning with the second Application for Payment, the Contractor shall also deliver with each such Application as a condition precedent to payment thereof, waivers of lien from each of the Subcontractors, Sub-subcontractors, and suppliers current through the effective date of the previous Application of Payment. The Contractor shall also execute and obtain any other reasonable forms as the Owner may require in order to assure an effective waiver and release of mechanics' and materialmen's liens in compliance with the laws of the State of Texas. The Contractor shall, if any Subcontractor, Sub-subcontractor or supplier refuses to furnish a release in full, furnish a bond satisfactory to the Owner to indemnify against any lien."

R. Delete Section 109.5.2 of the General Provisions and replace with the following:

"109.5.2. Retainage. Unless the Agreement specifies a lower rate, retainage shall be ten percent (10%) for a public works contract with a total value less than $5,000,000 and five percent (5%) for a public works contract with a total value of $5,000,000 or more. The applicable rate shall also apply to each bid-schedule or schedule-of-values item, including materials and equipment delivered to the site for installation. All withholding and release shall comply with Texas Government Code Section 2252.032, as applicable. A portion is substantially complete when the Owner determines, on the Engineer's recommendation, that it can be used for its intended purpose and remaining work does not materially impair that use. The Owner may release retainage attributable to such a portion or a fully completed and accepted portion. Upon completion of the required Work, remaining retainage shall be released subject only to withholding permitted by applicable law, including the notice requirements for disputed work or absent surety consent. Retainage withheld and released shall be recorded in VPM."

CONTRACTOR REPRESENTATIONS: By entering into the Contract, the Contractor makes the following representations to the Town of Addison:

A. Contractor has examined and carefully studied the Bidding Documents and the related data identified in the Bidding Documents.

B. The Contractor has visited the Project site where the goods are to be installed or services will be provided and become familiar with and is satisfied as to the observable local conditions that may affect cost, progress, or the furnishing of goods and services, if required to do so by the Bidding Documents, or if, in the Contractor's judgment, any local condition may affect cost, progress, or the furnishing of goods and services.

C. The Contractor is familiar with and is satisfied as to all Laws and Regulations in effect as of the date of the bid that may affect cost, progress, and the furnishing of goods and services.

D. The Contractor has carefully studied, considered, and correlated the information known to the Contractor; information commonly known to sellers of similar goods doing business in the locality of the Project site where the goods will be installed or where services will be provided; information and observations obtained from the Contractor's visits, if any, to the Project site where the goods will be installed or services will be provided; and any reports and drawings identified in the Bidding Documents regarding the Project site where the goods will be installed or where services will be provided, with respect to the effect of such information, observations, and documents on the cost, progress, and performance of the Contractor's obligations under the Bidding Documents.

E. The Contractor has given the Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that the Contractor has discovered in the Bidding Documents, and the written resolution (if any) thereof by the Engineer is acceptable to the Contractor.

F. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for furnishing the goods and services for which the bid is submitted

G. The Contractor acknowledges that estimated quantities are not guaranteed and are solely for the purpose of comparison of bids, and final payment for all unit price bid items will be based on actual quantities, determined as provided in the Contract Documents. The Contractor also acknowledges that each unit price includes an amount considered by the Contractor to be adequate to cover the Contractor's overhead and profit for each separately identified item.

PREVAILING WAGE RATES: Wage rates paid on this Project shall not be less than specified in the schedule of general prevailing rates of per diem wages as set forth below in the Davis Bacon Act General Decision No. TX20260294:

This Project is subject to the applicable provisions of the Davis-Bacon and Related Acts. The Contractor and all subcontractors shall pay laborers and mechanics not less than the applicable prevailing wage rates and fringe benefits established by the U.S. Department of Labor.

Bidders shall obtain the applicable **current Davis-Bacon Wage Determination for Highway Construction** for the county in which the Project is located from SAM.gov at:

https://sam.gov/wage-determinations

The Bidder shall account for the applicable wage determination in preparation of its Bid and shall comply with all applicable Davis-Bacon labor standards requirements throughout performance of the Work.

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END OF GENERAL DECISION

NO BOYCOTT ISREAL: Pursuant to Texas Government Code Chapter 2270, Contractor's execution of this Agreement shall serve as verification that the Contractor does not presently boycott Israel and will not boycott Israel during the term of this Agreement.

END OF GENERAL DECISION

ELECTRONIC PROJECT DOCUMENTATION THROUGH VPM

VPM shall be the official system for project documentation and administration after Contract award. The Contractor shall initiate, submit, track, respond to, and maintain project records using the Town's designated VPM workflows. Complete submittals, transmittals, Contractor submittal certifications, and quantity verification directly in VPM. Separate letter of transmittal, submittal-transmittal, QV sheet, and QV calculations forms are not required.

A. Required VPM records include all submittals and shop drawings; requests for information (RFIs) and responses; change requests, proposals, Change Orders, Field Orders, and Construction Directives; daily reports; quantity verification and supporting measurements; payment applications and supporting invoices; schedules and updates; inspection and test reports; photographs and videos; meeting records and project correspondence; punch lists; and closeout records, warranties, record drawings, and GPS/GIS data. The Contractor shall include records from its subcontractors and suppliers.

B. Complete daily report and quantity verification entries directly in VPM for each day Work is performed no later than the following working day. Include weather, workforce and equipment, Work performed and locations, quantities by bid item, inspections and tests, and issues affecting the Work. Support payment applications with links to the corresponding VPM quantity records and supporting evidence for Town/Engineer verification.

C. VPM submission replaces routine paper-copy, duplicate-transmittal, binder, and separate electronic-media delivery requirements elsewhere in the Contract Documents. Upload required supporting documents as legible PDFs or required native data files and enter workflow information directly in VPM. Provide required physical samples, original signed or sealed documents, on-site regulatory records, and equipment/cabinet operating aids; retain electronic copies in VPM where applicable. Procurement submissions remain subject to the Instructions to Bidders. Send required regulatory filings and external notifications to their designated recipients and retain project copies in VPM. Required signatures, approval authority, formal notice methods, and contractual deadlines remain applicable. Uploading a document does not authorize a change or constitute acceptance of Work or quantities.

D. The Contractor shall maintain the personnel, equipment, and internet access needed to use VPM and keep records current. Email or paper delivery alone does not satisfy routine VPM requirements unless authorized in writing by the Town. During a VPM outage, use the delivery method directed by the Town, meet existing deadlines, and upload records promptly when service is restored. Compliance costs are subsidiary to applicable bid items; no separate payment will be made.

GPS SURVEY AND GIS ASSET DATA

The Contractor shall obtain GPS/GNSS as-built survey data for all permanent improvements installed, relocated, or modified under this Contract, including Work performed by subcontractors. Record point assets, linear alignments, and improvement boundaries as appropriate. Include water, wastewater, and storm drainage facilities and appurtenances; services and connections; electrical, lighting, and signal facilities and conduits; irrigation; signs; trees and landscape features; pavement, curbs, sidewalks, ramps, walls, and site furnishings.

A. Use survey-grade GPS/GNSS equipment tied to Project survey control. Minimum accuracy shall be 0.10 foot horizontally and 0.10 foot vertically relative to Project control, or the more stringent tolerance required elsewhere in the Contract Documents. Where satellite reception is unsuitable, use conventional survey methods tied to the same control. Consumer-grade handheld or phone GPS alone is not acceptable. Coordinate the collection method, coordinate system, horizontal and vertical datums, units, and GIS attribute schema with the Town before collecting data; submit this information through VPM.

B. Measure actual installed positions and elevations while the Work is exposed and before backfilling, paving, or concealment. Record buried pipes, fittings, valves, tees, bends, services, connections, structures, conduits, and other concealed components. Collect utility points at endpoints, connections, changes in direction or grade, and at intervals not exceeding 50 feet along straight runs. Collect sufficient points to define other alignments and boundaries. Include rim, invert, pipe, and finished-surface elevations as applicable, with each elevation clearly identified. Design coordinates or surface box locations alone do not satisfy buried-asset location requirements.

C. For each asset, record a unique identifier, asset type, size, material, installation date, coordinates, applicable elevations, and plan sheet reference. Include manufacturer/model where applicable, survey date, collection method, and achieved accuracy. Link asset identifiers to record drawings and supporting photographs. Deliver point, line, and polygon features in an Esri file geodatabase packaged as a ZIP file and a coordinate/attribute table in CSV format, unless the Town approves another GIS format. Identify the coordinate reference system, datums, units, and field definitions. PDF drawings alone are not an acceptable GIS deliverable. These data supplement the sealed surveys and record drawings required elsewhere in the Contract Documents.

D. Submit current GPS/GIS records through VPM with each monthly payment application and the complete corrected dataset with record documents required by Special Provisions in this document. Resolve missing or deficient data at no additional cost, including re-surveying or exposing Work when necessary. Town acceptance of the complete GPS/GIS dataset is required before final acceptance and final payment. GPS/GIS collection and delivery are subsidiary to applicable bid items; no separate payment will be made.

PRECONSTRUCTION AND POSTCONSTRUCTION CCTV INSPECTION

Before starting demolition, excavation, utility installation, or other construction, the Contractor shall complete preconstruction closed-circuit television (CCTV) inspections of all existing storm drainage and sanitary sewer systems within the Project limits, including mains, service lines, laterals, connections, culverts, and associated manholes and inlets. Include retained facilities and facilities to be connected to, modified, or replaced. Inspect connected reaches beyond the Project limits that may be affected by the Work, to limits established with the Town/Engineer before inspection. These requirements supplement Special Provision and applicable CCTV bid items.

A. Verify and document service and lateral connections, including connections not shown on the Plans. Record the connecting main and structures, connection location and distance from a known structure, pipe size and material where identifiable, observed service activity, and condition. Use a lateral camera and locating equipment as needed to verify accessible lateral routes and connections to cleanouts, property lines, or other endpoints established with the Town/Engineer. Locate verified connections and routes for incorporation into record drawings and GIS records under Special Provisions in this document. Submit discrepancies through VPM and obtain direction before affected excavation, disconnection, or tie-in work.

B. CCTV all existing storm drainage and sanitary sewer infrastructure that will remain in place both before construction and after all construction activities that could affect it, and before final acceptance. The postconstruction inspection shall cover the same retained pipes, service lines, laterals, connections, and structures covered by the baseline inspection, including retained facilities crossed by or adjacent to the Work. Use consistent asset identifiers, inspection limits, and reference distances so the inspections can be compared directly.

C. Compare before-and-after inspections and provide a condition comparison identifying new or worsened cracks, displaced joints, deformation, broken connections, obstructions, debris, leakage, and other damage or deficiencies. Notify the Town/Engineer promptly of damage. Repair damage caused by the Contractor or its subcontractors at no additional cost to the Town and repeat affected inspections until corrective work is accepted. Document pre-existing defects separately and obtain Town/Engineer direction before repairing them; documentation alone does not assign responsibility for pre-existing defects to the Contractor.

D. Provide cleaning and flow control necessary for clear, complete inspections without damaging existing facilities. Record continuous, dated video identifying the facility, access structures, direction, and measured distance; show service and lateral connections clearly. Report inaccessible or uninspected portions through VPM and obtain Town/Engineer approval of an alternative verification method before affected construction; an incomplete inspection does not satisfy this requirement. For retained infrastructure that cannot be inspected by CCTV, submit an appropriate alternative condition assessment for Town/Engineer approval and document its condition before and after construction.

E. Submit the complete preconstruction inspection package through VPM for Town/Engineer review before starting construction. Include videos, inspection logs, annotated plans showing verified services and laterals, asset identifiers, inspection limits, and existing defects. Submit postconstruction videos and logs with the comparison report and repair/reinspection records through VPM. The Town/Engineer shall review the baseline before construction, and acceptance of the final inspection and correction of construction-caused damage are required before final acceptance of the Project.

F. Unless separately itemized in the Bid Proposal, include preconstruction CCTV, postconstruction CCTV of retained facilities, lateral verification, cleaning, access, reporting, and alternative assessments in applicable bid prices. Existing CCTV pay items for new installations remain applicable; the same inspection shall not be paid twice. Correct and reinspect deficient inspections and construction-caused damage at the Contractor's expense.

DISPOSAL OF SURPLUS MATERIAL

The Town will have first rights-of-refusal for existing equipment that will be disposed. Surplus material not required for other parts of the work and not otherwise specifically covered by the drawings or specifications shall become the property of the Contractor for proper disposal by him.

SECTION PS

PROJECT SIGN

PROJECT SIGN

(g) **Quantity**

Two (2) Project Designation signs will be constructed and installed on the project site as directed by the Owner. It will be the responsibility of the Contractor to maintain the sign in a presentable condition at all times during construction. Maintenance will include painting and repairs as directed by the Town Engineer or his appointee. The locations of the signs will be given to the Contractor by the Town of Addison at the Pre-Construction Conference.

(h) **Material**

Sign shall be constructed of ¾-inch thick smooth finish fir plywood (Grade A-C, exterior or better).

Sign will be securely mounted to 6" x 6" square posts. Nuts and bolts will not protrude from face of sign. Posts will be mounted to a support system that will provide adequate stabilization to ensure the sign will not fall over in heavy winds. Sand bags or other techniques may be necessary to protect sign.

(i) **Dimensions**

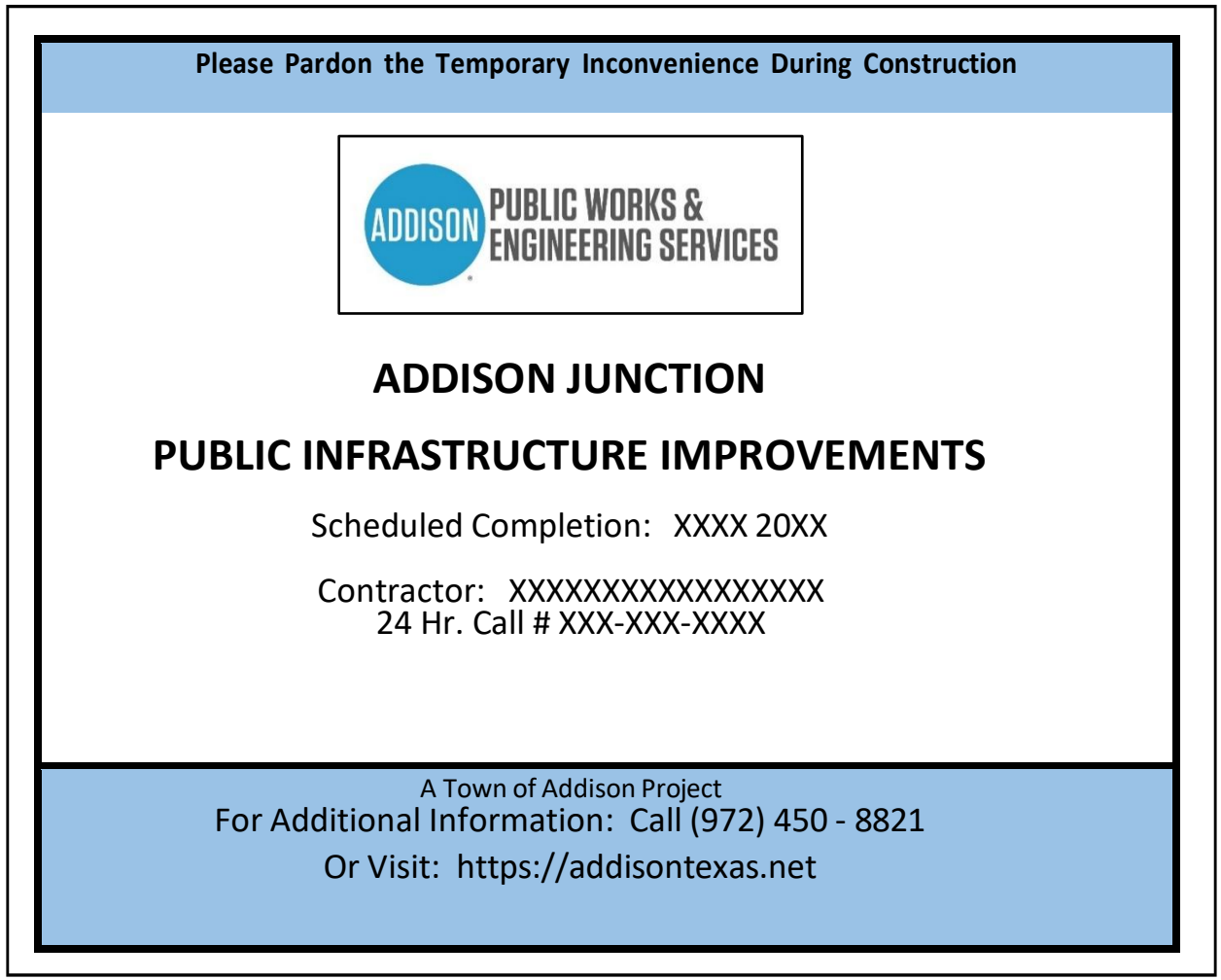
Size of sign will be four feet tall and six feet wide. The height and arrangement of the lettering shall be in accordance with the attached detail.

(j) **Paint**

Sign will be one-sided and will have a white background. Text will be black, except for the word "Addison!" which will be a blue color approved by the Town Engineer. The paint will be an outdoor paint and will be maintained throughout the project in proper order. The quality of the paint, painting, and lettering on the signs shall be approved by the Town Engineer or his appointee.

(k) **Payment**

Project Signs will be a separate pay item. This will include all labor, equipment, tools, and incidentals necessary to complete and install the work.



Color for signs are as follows:

BLUE
CMYK: 80-8-0-0
HEX: 4DA6DE
RGB: 77-166-222
PMS: 2995

SECTION IS

ADDITIONAL INSURANCE REQUIREMENTS

TOWN OF ADDISON, TEXAS
ADDISON JUNCTION PUBLIC INFRASTRUCTURE IMPROVEMENTS

REQUIREMENTS

Contractors performing work on TOWN OF ADDISON property or public right-of-way shall provide the TOWN OF ADDISON a certificate of insurance or a copy of their insurance policy(s) (and including a copy of the endorsements necessary to meet the requirements and instructions contained herein) evidencing the coverages and coverage provisions identified herein within ten (10) days of request from TOWN OF ADDISON. Contractors shall provide TOWN OF ADDISON evidence that all subcontractors performing work on the project have the same types and amounts of coverages as required herein or that the subcontractors are included under the contractor's policy. Work shall not commence until insurance has been approved by TOWN OF ADDISON.

All insurance companies and coverages must be authorized by the Texas Department of Insurance to transact business in the State of Texas and must have a A.M. Best's rating A-:VII or greater.

Listed below are the types and minimum amounts of insurances required and which must be maintained during the term of the contract. TOWN OF ADDISON reserves the right to amend or require additional types and amounts of coverages or provisions depending on the nature of the work.

TYPE OF INSURANCE	AMOUNT OF INSURANCE	PROVISIONS
1. **Workers' Compensation Employers' Liability** to include: (l) each accident (m) Disease Policy Limits (n) Disease each employee	Statutory Limits per occurrence Each accident $1,000,000 Disease Policy Limits $1,000,000 Disease each employee$1,000,000	**TOWN OF ADDISON, and KIMLEY-HORN AND ASSOCIATES, INC. to be provided a *WAIVER OF SUBROGATION AND 30 DAY NOTICE OF CANCELLATION or*** material change in coverage. **Insurance company must be A-:VII rated or above.**
2. **Commercial General (Public) Liability** to include coverage for: e) Bodily Injury f) Property damage g) Independent Contractors h) Personal Injury i) Contractual Liability	Bodily Injury/Property Damage per occurrence $1,000,000, General Aggregate $2,000,000 Products/Completed Aggregate $2,000,000, Personal Advertising Injury per occurrence $1,000,000, Medical Expense 5,000	**TOWN OF ADDISON, and KIMLEY-HORN AND ASSOCIATES, INC. *to be listed as ADDITIONAL INSURED and provided 30 DAY NOTICE OF CANCELLATION* or material change in coverage.** **Insurance company must be A-:VII rated or above.**
3. **Business Auto Liability** to include coverage for: bb) Owned/Leased vehicles cc) Non-owned vehicles dd) Hired vehicles	Combined Single Limit $1,000,000 per occurrence for bodily injury and property damage	**TOWN OF ADDISON, and KIMLEY-HORN AND ASSOCIATES, INC. *to be listed as ADDITIONAL INSURED and provided 30 DAY NOTICE OF CANCELLATION* or material change in coverage.** **Insurance company must be A:VII-rated or above.**
4. **Umbrella or Excess Liability Policy over Commercial General Liability and Automobile Liability limits of $1 million per occurrence**	Minimum $4 million per occurrence excess $1 million underlying per occurrence	**TOWN OF ADDISON, and KIMLEY-HORN AND ASSOCIATES, INC. *to be listed as ADDITIONAL INSURED and provided 30 DAY NOTICE OF CANCELLATION* or material change in coverage.** **Insurance company must be A:VII-rated or above.**

Submit post-award Certificate of Liability Insurance forms and required endorsements through VPM in accordance with Special Provisions in this document. Documents required with the Bid shall be provided with the Bid under the procurement requirements. Questions regarding required insurance shall be directed to the Purchasing Manager.

With respect to the foregoing insurance,

1. All liability policies shall contain no cross-liability exclusions or insured versus insured restrictions applicable to the claims of the Town of Addison.

2. All insurance policies shall be endorsed to require the insurer to immediately notify the Town of Addison, Texas of any material change in the insurance coverage.

3. All insurance policies shall be endorsed to the effect that the Town of Addison, Texas will receive at least thirty (30) days' notice prior to cancellation or non-renewal of the insurance.

4. All insurance policies, which name the Town of Addison and **KIMLEY-HORN AND ASSOCIATES, INC.** as an additional insured, must be endorsed to read as primary coverage regardless of the application of other insurance.

5. Insurance must be purchased from insurers that are financially acceptable to the Town of Addison and licensed to do business in the State of Texas.

All insurance must be written on forms filed with and approved by the Texas Department of Insurance. Upon request, Contractor shall furnish the Town of Addison with complete copies of all insurance policies certified to be true and correct by the insurance carrier.

This form must be signed and returned with your quotation. You are stating that you do have the required insurance and if selected to perform work for TOWN OF ADDISON, will provide the certificates of insurance (and endorsements) with the above requirements to TOWN OF ADDISON within 10 working days.

A CONTRACT/PURCHASE ORDER WILL NOT BE ISSUED WITHOUT EVIDENCE AND APPROVAL OF INSURANCE.

AGREEMENT

I agree to provide the above described insurance coverages within 10 working days if selected to perform work for TOWN OF ADDISON. I also agree to require any subcontractor(s) to maintain insurance coverage equal to that required by the Contractor. It is the responsibility of the Contractor to assure compliance with this provision. The Town accepts no responsibility arising from the conduct, or lack of conduct, of the Subcontractor.

Project/Bid#_____

Company:_____

Printed Name: _____

Signature:_____ **Date:** _____

APPENDICIES

SECTION 33 01 30 REHABILITATION OF EXISTING WASTEWATER MAIN BY CURED IN PLACE PIPE (CIPP)

PART 1 - GENERAL

1.1 SCOPE OF WORK

A. Section Includes:

1. Furnish all materials, labor, equipment, tools, and required incidentals for providing and installing a flexible tube saturated with a thermosetting, sulfuric acid corrosion resistant, polyester, vinyl ester, or epoxy resin, either inverted or pulled into the existing wastewater main such that when properly cured, extends from one manhole to the next in a continuous, tight-fitting, corrosion resistant, watertight pipe.

B. Inversion Method

1. Insertion of a resin impregnated tube into the existing wastewater main using an inversion standpipe under a hydrostatic head or air pressure.

C. Pulling Method

1. This method consists of pulling a resin impregnated tube into the existing wastewater main and expand with a calibration hose through the center and under pressure.

1.2 RELATED WORKS

A. North Texas Central Committee of Government (NCTCOG) – Construction Standards – Item 501, 502, 503, 507.5, 601.

B. NCTCOG – Item 601.7 – Cured-In-Place Pipe Liner (CIPP Liner)

C. Town of Addison Wastewater System and Design Standards (Jan 2022)

D. Texas Commission on Environmental Quality (TCEQ) – Chapter 217 – Subchapter C

PART 2 - QUALITY ASSURANCE

2.1 REFERENCE STANDARDS

A. Unless otherwise stated, the latest editions of the following documents are applicable for this specification:

1. ASTM F1216 - Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin Impregnated Tube
2. ASTM D638 - Standard Test Method for Tensile Properties of Plastics
3. ASTM D790 - Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
4. ASTM F1743 - Standard Practice for Rehabilitation of Existing Pipelines and Conduits by Pulled-in-Place Installation of Cured-in-Place Thermosetting Resin Pipe (CIPP)
5. ASTM D5813 - Standard Specification for Cured-in-Place Thermosetting Resin Sewer Piping Systems
6. ASTM D2990 - Standard Test Methods for Tensile, Compressive, and Flexural Creep and Creep-Rupture of Plastics

2.2 QUALIFICATION REQUIREMENTS

A. Manufacturer/Installer:

1. No work by other than the CIPP manufacturer that involves this rehabilitation process will be accepted, unless such installers or companies are certified and licensed by the CIPP manufacturer for such work and are approved by the Owner. In addition, Manufacturer/Installers must meet the following criteria to be deemed commercially acceptable:
    a. Must satisfy all insurance, financial, and bonding requirements of the Owner, and must have had at least 5 (five) years active experience in the commercial installation.
    b. Must successfully installed at least 100,000 feet of the cured-in-place product intended for use on this project in wastewater collection systems in the U.S. with at least 50,000 feet installed in the State of Texas.
    c. Manufacturer/ Installer's project manager must have a minimum of 3 years of CIPP installation experience, while under the employment of the Manufacturer/ Installer's company.

B. Product:
1. For a product to be considered commercially proven, a minimum of 20 successful wastewater collection system projects of a similar size and scope of work and 200,000 linear feet shall have been completed in the U.S. with the exact product intended for use on this project and documented to the satisfaction of the Owner to assure commercial viability.
2. Both the rehabilitation manufacturing and installation processes shall operate under a quality management system which is third-party certified to ISO 9000 or other recognized third-party certified organization standards. Proof of certification shall be required for approval.
3. Sewer rehabilitation products submitted for approval must provide third party test results supporting the structural performance (short-term and long-term) of the product and such data shall be satisfactory to the Owner. No product will be approved without independent third party testing verification.

2.3 WARRANTY

A. All products and workmanship shall be warranted in accordance with requirements provided in the General Provisions section of this contract.

B. In addition to the standard pipe warranty, the CIPP contractor shall provide in writing a warranty for a period of one year for all the CIPP work including material, installation, and pressure testing at no additional cost to the owner.

C. Unless otherwise specified, the warranty periods shall begin after the Certificate of Acceptance is issued for the Contract.

2.4 SUBMITTAL

A. The Contractor shall furnish all necessary catalogs cut sheets, technical literature, shop drawings and engineering data to address the following documentations:
1. CIPP Questionnaire
    a. The Contractor must fill out and submit with his product submittal the questionnaire at the end of this section. Upon approval by the Engineer all information filled out in the questionnaire becomes part of the Contract, therefore, binding the Contractor/manufacturer/installer to meet or exceed the values set forth in the questionnaire.

2. Material Data:
    a. Type of resin tube material and its physical properties

3. Process Demonstration
   a. Submit detailed installation procedures including curing methods, curing temperatures, inversion methods, inversion or pull-in pressures, etc.
   b. Method of sealing liner at manholes.

4. Engineering Calculations:
   a. Provide diameter, length, wall thickness and all structural design calculations for each wastewater main segment to be rehabilitated. All design calculations must be sealed by a State of Texas Registered Professional Engineer.

5. Testing/TV Inspection Report
   a. Copies of certified independent laboratory tests on the proposed resin impregnated tube showing values for short term Flexural Modulus of Elasticity, Flexural Strength, Tensile Strength as listed in the questionnaire. The testing laboratory must be a certified independent facility and not affiliated with the proposed CIPP manufacturer/installer. In addition, submit field test results from one previous CIPP project over the last three years using the same values shown on the questionnaire.
   b. Television inspection reports along with video made after new pipe installation.

6. References
   a. Provide three references of projects completed within last five years by the manufacturer in which a wastewater main was successfully rehabilitated using the proposed materials. Include contact names, addresses and phone numbers of agencies involved.

PART 3 - PRODUCTS

3.1 RESIN

A. The resin system shall be a corrosion resistant polyester, vinyl ester or epoxy including all required catalysts, initiators that when cured within the tube create a composite that satisfies the requirements of ASTM F1216, Section 5.1 or ASTM F1743, Section 5.2.1 or ASTM D 5813, Sections 5 and 6. The resin shall produce a CIPP that will comply with the structural and chemical resistance requirements of this specification.

3.2 LINING TUBE

A. Inversion Flexible Felt Tube
   1. A sewn tube consisting of one or more layer of a non-woven felt material meeting the provisions of ASTM F1216, Section 5.1, can be used. The tube shall be lined on one side with a translucent waterproof coating such as polyurethane or polyvinylchloride (PVC) and fully impregnated with a sulfuric acid corrosion resistant liquid thermosetting polyester, vinyl ester, or epoxy resin and catalyst system compatible with the inversion process. The resin must meet ASTM F1216, Section 5.2. Any fiberglass stranded mattes are not acceptable.
   2. Size the tube to the existing wastewater pipe circumference and length between manholes as shown on drawings so it will stretch to fit irregular pipe sections; have sufficient strength to bridge missing pipe sections; and invert smoothly around bends. Allow for circumferential stretching during inversion.

B. Pulled-in Felt Fabrication

1. A lining tube impregnated with a sulfuric acid corrosion resistant liquid thermosetting polyester, vinyl ester, or epoxy resin and catalyst system meeting ASTM F1216, Section 5.2 and compatible with the process, can be used.
2. Size the tube to the existing wastewater pipe circumference and length between manholes shown on drawings so it will stretch to fit irregular pipe sections; have sufficient strength to bridge missing pipe sections; and invert smoothly around bends.

C. Thickness:
1. Tubes must have a uniform thickness that when compressed at installation pressures will meet or exceed the design thicknesses noted in the Questionnaire.

D. Material Homogeneity:
1. The tubes must be homogeneous across the entire wall thickness containing no intermediate or encapsulated elastomeric delamination or dry unsaturated layers.

E. Color:
1. CIPP wall coloring after installation must be a white color that can give a clear detail examination with the closed circuit television inspection equipment.

F. Seams:
1. Seams in the tube must be stronger than the unseamed felt. Sewn joints must be spirally formed and sewn with no perpendicular joint to the long axis.

G. Markings:
1. The Tube shall be marked for distance at regular intervals along its entire length, not to exceed 5 feet. Such markings shall include the manufacturers name or identifying symbol. The tubes must be manufactured in the USA.

PART 4 - STRUCTURAL REQUIREMENTS

4.1 DESIGN STANDARDS:

A. The CIPP shall be designed as per ASTM F1216, Appendix X.1. The CIPP design shall assume no bonding to the original pipe wall.

4.2 ROUGHNESS COEFFICIENT:

A. Resin liner must be smooth and have an average “n” factor of 0.013 or lower.

4.3 DESIGN PARAMETERS:

A. The resin liner material and thickness must be designed by the manufacturer to meet the following minimum parameters:
1. The existing pipe condition is classified as a Partially Deteriorated Gravity Flow Pipe Condition (ASTM F1216 X 1.2.1).
2. Resin Impregnated Liner Design Properties:

Minimum Design Flexural Modulus of Elasticity	250,000 psi
Minimum Flexural Strength	4,500 psi
Design Creep Reduction Factor	50%
Design Life	50 years

3. Design Factors:

Enhancement Factor	7.0
Poisson's Ratio	0.3

Ovalness	5%
Minimum Safety Factor	1.5

4.4 SPECIAL CONSIDERATIONS:

A. The manufacturer may propose design figures different from those above but they must be included on the Questionnaire and supported with documentation from independent laboratory tests backing the reason for the deviation. The Owner must approve any changes.

PART 5 - EXECUTION

5.1 PREPARATORY PROCEDURE

A. Adhere to the following conditions, unless approved otherwise by the Owner. After reviewing all television inspection videos and reports, but prior to starting any liner inversion process, make a plan of all work activities. All point repairs must be satisfactorily completed, equipment and material mobilized, and the Owner furnished a copy of the impending work schedules for liner installations.

1. Safety
   a. Carry out operations according to all OSHA and manufacturer's safety requirements, drawing particular attention to those safety requirements involving working with scaffolding and entering confined spaces.
2. Cleaning
   a. It is the responsibility of the Contractor to clean the existing wastewater pipe, specified elsewhere in these Specifications, by removing all internal debris out of the wastewater main immediately before the television inspection.
3. Pre-Construction Television Inspection
   a. A pre-construction television inspection of wastewater mains shall be performed to locate or /confirm the breaks, obstacles and service connections as per Technical Specification for "Television Inspection of Wastewater Mains". Carefully inspect the interior of the wastewater main to determine the location and extent of any structural failures. Note any locations of any conditions which may prevent proper installation so that such conditions can be corrected. The Owner must review and approve the television inspection video prior to proceed with any rehabilitation.
      (a) Pre-construction television inspection shall be subsidiary to the trenchless installation bid item. No separate payment will be made.
4. Flow Control
   a. The Contractor is to provide wastewater flow diversion around the section or sections of pipe designated for effective TV inspection and CIPP rehabilitation, specified elsewhere in these Specifications, at a cost incidental to the CIPP rehabilitation. Submit a flow control implementation plan for the Owner's approval prior to starting work. DO NOT pump wastewater into the streets, alleys, storm drains, rivers, creeks, or drainage channels (man-made or natural). The pump and bypass lines must be of adequate capacity and size to handle the flow. Take all necessary steps to prevent flooding of any residence or business. Contractor is liable for any damages incurred by same.
5. Line Obstructions
   a. Identify any point repairs required, such as dropped joints, intruding service connections, collapsed pipe, sags in main or any other obstructions which prevents completion of the inversion process and remove prior to the lining process. This work must be approved in writing by the Owner and is to be done by the Contractor. The Owner reserves the right to approve or disapprove of any point repairs identified. The Owner also can decide if the point repair identified is needed or not.

6. Water
    a. Water for the rehabilitation work is to be furnished by the Town from the nearest fire hydrant. The Contractor must provide piping and connections for getting water to the site. Hauling, if required, is the Contractor's expense. Use a double-check valve assembly to prevent backflow in the event of a pressure failure. Backflow prevention must be approved by the Owner.

5.2 INSTALLATION

A. The manufacturer's written instructions and procedures for installing CIPP submitted as part of "Section 2.4 Submittal" above will be used as a basis of quality control by the Owner.

5.3 SEALING PIPE IN MANHOLES

A. Cut the liner flush with the existing pipe at the manhole walls. Rework the invert (smoothed and built up) to match the flow line of the new liner pipe. If due to broken or misaligned wastewater pipe at the manhole, the installed pipe fails to make a tight seal, apply a sealant at that point. The sealant must be compatible with materials used in the lining process and approved, in writing, by the Owner.

5.4 SERVICE CONNECTIONS

A. In providing re-connection of existing wastewater services, select (cut) service connection to match existing service diameter of minimum 6". Any existing service smaller than 6" shall be upsize to minimum of 6".

B. It is the intent of these specifications that all service laterals be re-opened without excavation within 24 hours of beginning the inversion process, utilizing a remotely controlled cutting device, monitored by a CCTV.

C. The Contractor shall certify a minimum of two complete functional cutters plus key spare components are on the job site before each installation or are in the immediate area of the jobsite and can be quickly obtained.

D. Unless otherwise directed by the Owner or his authorized representative, all laterals will be reinstated with no less than 90% of their original capacity. No additional payment will be made for excavations for the purpose of reopening connections and the Contractor will be responsible for all costs and liability associated with such excavation and restoration work.

5.5 POST-REHABILITATION TELEVISION INSPECTION

A. Upon completion of CIPP operation and reconnection of the service laterals, the Contractor shall perform television inspection of the rehabilitated wastewater main as outlined in the technical section "Television Inspection of Wastewater Mains".

1) **Post-rehabilitation television inspection shall be subsidiary to the trenchless installation bid item. No separate payment will be made.**

5.6 LIMITATION AND CONSTRAINTS

A. If wet-out is done at the site, confine the operations to one lane of traffic and provide adequate devices and facilities for containing any chemical spills.

5.7 ACCEPTANCE

A. Finish
   1. The finished pipe must be continuous over the entire length of an inversion run between two manholes and free from significant defects.
   2. Any defects which will affect, in the foreseeable future, or warranty period, the integrity or strength of the pipe in the opinion of the Owner must be repaired at the Contractor's expense, in a manner agreed upon by the Owner.

B. Testing of In-Place Material Properties
   1. Prepare flat plate samples according to ASTM F1216, Section 8.1 for each section of line between manholes. Samples should be taken in an area (at manholes) designated by the Owner. Prepare at least two samples per section between manholes.
   2. The Owner will collect the samples and have them tested by a laboratory at his own choosing and expense. Samples will be tested for compliance with the specified liner thickness, flexural strength and flexural modulus of elasticity stated in the approved Questionnaire.

5.8 INSPECTION

A. After the work is completed, the contractor will provide the Owner with a video showing the before and after condition, including the reinstated wastewater line and building lateral connections.

5.9 FAILURE TO MEET REQUIREMENTS

A. The Owner will view the inspection video tape and determine if all required work is complete. Any deficiencies noted by the Owner must be corrected to his satisfaction.

B. Any section failing the water tightness test must be corrected or modified by the Contractor until it passes.

C. The Owner will evaluate in-place material tests for each section between manholes and if the test results show the liner does not meet the stated criteria in the approved Questionnaire, a penalty or deduction from the Contract will be assessed as follows:

C =Bid Item Cost for CIPP per Linear Foot in the Bid Proposal
L = Length of Line between Manholes where the deficiencies occurred.

All adjustments are cumulative for Modulus, strength and thickness. These results will apply to all test values which fall between 95% and 100% of the stated Questionnaire value. If the results are below 95% for flexural Modulus and strength, the Contractor must submit a proposal to remedy the problem. The Owner may accept, at an adjusted price based on the formula above, thicknesses less than 95% of minimum stated in the attached Questionnaire only if the thickness provided exceeds the calculated modified design thickness (i.e. the thickness required with the actual flexural Modulus of elasticity and actual depth). No credit or extra pay will be given for any test results over the values listed in the Questionnaire.

5.10 CLEANUP

A. Clean up the entire project area after the work is completed and all testing accepted. Remove and dispose of all excess material and debris not incorporated into the permanent installation.

PART 6 - METHOD OF MEASUREMENT AND PAYMENT

A. Method of Measurement and Payment for the work included in this section will be in accordance with the payment schedule in the Bid Proposal.

B. CCTV inspection, including pre-construction and post-rehabilitation television inspection, lateral reinstatement monitoring, and associated reports and video, shall be subsidiary to the trenchless installation bid item. No separate payment will be made.

CIPP QUESTIONNAIRE
(To Be Filled by Contractor)

Manufacturer/Installer

_____

Trademark Name for the Process

_____

Type and Brief Description of Installation Process (Inversion, Pull-in, or Other)

_____
__

_____
__

Submit detailed installation procedures including curing methods, curing temperatures, inversion methods, inversion or pull-in pressures, etc.

Type and Description of the Liner:

_____

Type and Brief Description of The Resin (polyester, vinyl ester, or epoxy resin):

_____
__

_____
__

Submit laboratory analysis of the proposed resin(s) showing chemical makeup and concentrations. Samples will be taken in the field and tested to verify this chemical makeup.

Engineering Properties of the Resin:

Short Term Flexural Modulus of Elasticity _____

Short Term Flexural Strength _____

Short Term Tensile Strength _____

****END OF SECTION****

SECTION 33 31 23 REHABILITATION OF EXISTING WASTEWATER MAIN BY PIPE BURSTING

PART 1 GENERAL

1.01 SCOPE OF WORK

This specification provides the minimum requirements for the trenchless installation of wastewater pipe and consists of furnishing all labor, materials and equipment necessary for the replacement of wastewater mains by pipe bursting. Pipe bursting replacement is defined as a trenchless method which splits the existing pipe and immediately installs a new polyethylene pipe behind an apparatus which expands the existing wastewater pipe, tees, wyes and couplings into the adjacent ground forming a clear space to insert the new wastewater piping. Rehabilitation includes reconnecting existing sewer connections, television inspection of the polyethylene pipe and complete installation in accordance with the contract documents.

1.02 RELATED WORK

A. North Central Texas Committee of Government (NCTCOG) – Construction Standards – Item 501. 502, 503, 507.5

B. NCTCOG – Item 601.8 - Pipe Bursting with Polyethylene

C. Town of Addison Wastewater System and Design Standards (Jan 2022)

D. Texas Commission on Environmental Quality (TCEQ) – Chapter 217 - Subchapter C

1.03 QUALIFICATION REQUIREMENTS

A. The Contractor shall be certified by the manufacturer of the particular pipe bursting system that such firm is a licensed installer of their system. The Contractor shall also be certified in the use of all fusing equipment to be utilized for this project. Contractor must provide a letter and/or certification to the Owner documenting these requirements.

B. The Contractor shall have a minimum of five (5) years of verifiable experience using the pipe bursting method while meeting the following criteria:

1) A minimum total of 100,000 LF of completed sewer pipe bursting footage

2) A minimum total of 50,000 LF of upsizing where similar sized diameter increases have been successfully completed in pipe diameters of 8-inch to 15-inch

C. Personnel performing pipe bursting must be certified by the manufacturer of the pipe bursting system as having successfully completed training in:

1) Operating bursting head

2) Installing proposed replacement pipe

3) Operation and maintenance of all equipment to be used

1.04 SUBMITTALS

Contractor and manufacturers of the selected wastewater rehabilitation piping are to furnish engineering data covering design and installation. Submittals shall be made in a timely manner so that project schedule can be met. The data shall include:

A. Shop drawings, catalog data and manufacturer's technical data showing complete information on material composition, physical properties, and dimensions of new pipe and fittings. Include manufacturer's recommendation for handling, storage, and repair of pipe and fittings damaged.

B. Detailed installation procedure including pipe bursting method to be used and method of construction and restoration of existing sewer service connections. This shall include Detail drawings and written description of the entire construction procedure to install pipe, bypass sewage flow and reconnect sewer service connections. Plan shall also document location of insertion and extraction pits needed to perform the work.

C. Certification of workmen training for installing pipe

D. Television inspection reports and video shall be made prior to and after new pipe installation. Reports and footage shall be submitted to Owner for documentation.

E. <u>References</u>

Provide a list of minimum three (3) previous projects completed in the last three years by the Contractor/installer where a wastewater main was successfully rehabilitated using the pipe bursting method to be employed. Contractor shall also submit a project list documenting linear footages of rehabilitated wastewater pipe to demonstrate that they meet or exceed the requirements outlined in item B of the Qualification Requirements stated herein. Include contact names, addresses, and phone numbers of agencies involved.

1.05 METHODS FOR NEW PIPE INSTALLATION

The static method is the only method approved for rehabilitation of existing sanitary sewers by pipe bursting and installation of new polyethylene pipe for this project. Hydraulic methods are not permitted.

1.06 WARRANTY

All products and workmanship shall be warranted in accordance with requirements provided in the General Provisions section of this contract.

PART 2 PRODUCTS

2.01 MATERIALS

Replacement pipe shall be high-density polyethylene pipe and meet the applicable requirements of ASTM F714 Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter, ASTM D1248, and ASTM D3350.

A. Sizes of the insertions to be used shall be as shown on the plans or to renew the sewer to its original or greater than flow capacity.

B. All pipes shall be made of virgin material. No rework except that obtained from the manufacturer's own production of the same formulation shall be used.

C. The pipe shall be homogenous throughout and shall be free of visible cracks, holes, foreign material, blisters or other deleterious faults.

D. Material color shall be white, gray or light colored, suitable for TV inspection.

E. Unless otherwise specified in the plans or specifications, the minimum wall thickness of the polyethylene pipe shall meet the following:

Depth of Cover (ft.)	Separation Distance from Water Main (ft)	SDR (DIPS HDPE)	Min. Pressure (psi)
< 10	≥ 9	17	100
	< 9	11	160
> 10	As Required	11	160

2.02 TESTS

Tests for compliance with this specification shall be made as specified herein and in accordance with the applicable ASTM Specification. A certificate with this specification shall be furnished, upon request, by the manufacturer for all material furnished under this specification. Polyethylene plastic pipe and fittings may be rejected for failure to meet any requirements of this specification. All installed pipe shall be tested in accordance with NCTCOG requirements for sewer lines prior to acceptance by the City.

PART 3 EXECUTION

3.01 DELIVERY, STORAGE AND HANDLING

Transport, handle and store pipe and fittings as recommended by manufacturer. If new pipe and fittings become damaged before or during installation, it shall be repaired as recommended by the manufacturer or replaced as required by the Engineer at the Contractor's expense, before proceeding further. Deliver, store and handle other materials as required to prevent damage.

3.02 PRE-BURSTING TELEVISION INSPECTION

The Contractor shall provide for the television inspection for the section or sections of pipe prior to construction. Pre-bursting television inspection shall be subsidiary to trenchless installation.

3.03 OBSTRUCTION REMOVAL

A. Identify any point repairs required, such as dropped joints, intruding service connections, collapsed pipe, sags in main or any other obstructions prior to the pipe bursting process. The Contractor shall remove all obstructions to perform pipe bursting operation, as necessary.

B. The contractor shall notify the Owner for approval to make an excavation after having exhausted all other options to remove any obstruction or retrieve any pipe bursting tool or camera from the wastewater main.

3.04 DIVERSION PUMPING

A. The Contractor, when and where required, will divert wastewater flows for the cleaning, pipe bursting, television inspection, point repairs, obstruction removals, or other related work in this project as required to complete the work.

B. The Contractor shall be responsible for continuity of sanitary sewer service to each facility connected to the section of sewer during the execution of the work.

C. Sewage will not be permitted to backup into buildings at any time. If sewage backup occurs and enters buildings, the Contractor shall be responsible for cleanup, repair, property damage cost and claims.

3.05 INSERTION PITS OR ACCESS PITS

A. Insertion or access pits shall be efficiently located so that total number of pits are minimized and footage of liner pipe installed in a single pull is maximized. Where possible, use existing manholes and excavations at point repair locations for insertion pits.

B. To facilitate long insertion runs, intermediate insertion pits may be allowed at the most advantageous location to provide for replacement pipe to be installed in both directions. Pits in areas subject to traffic should be avoided as much as possible. If insertion pits in areas subject to traffic cannot be avoided, the operation shall be limited to one (1) lane of traffic or one-half (1/2) of the roadway, whichever is less.

C. Insertion pits shall be only as large as required to accommodate the equipment. All pit dimensions and locations shall be approved by the Owner in writing, prior to beginning work.

D. Manholes may be placed at insertion pit location as directed by the Owner.

E. In the event the pipe bursting process requires the excavation of an insertion pit, the pipe through the pit shall be bedded in the required bedding material as shown on the plans.

3.06 PIPE BURSTING AND LINER INSERTION

A. Equipment used to perform the work shall be located away from buildings so as to minimize noise impact. Provide silencers or other devices to reduce machine noise as required to meet requirements.

B. The Contractor shall install all pulleys, rollers, bumpers, alignment control devices and other equipment required to protect existing manholes, and to protect the pipe form damage during installation. Lubrication may be used as recommended by the manufacturer. Under no circumstances will the pipe be stressed beyond its elastic limit.

C. The installed pipe shall be allowed the manufacturer's recommended amount of time, but not less than four (4) hours, for cooling and relaxation due to tensile stressing prior to any reconnection of service lines, sealing of the annulus or backfilling of the insertion pit. Sufficient excess length of new pipe, but not less than four (4) inches, shall be allowed to protrude into the manhole to provide for occurrence.

D. Following the relaxation period, the annular space may be sealed. Sealing shall be made with materials approved by the Engineer and/or their representative and shall extend a minimum of eight (8) inches into the manhole wall in such a manner as to form a smooth, uniform, watertight joint.

E. The new wastewater pipe shall be placed without damaging the pipe joints or completed pipe sections. Any pipe which has been damaged during installation shall be replaced by the Contractor.

3.07 PIPE JOINING

A. The polyethylene pipe shall be assembled and joined at the site using the thermal butt-fusion method to provide a leak proof joint in accordance with ASTM F2620. Threaded or solvent-cement joints and connections are not permitted. All equipment and procedures used shall be used in strict compliance with the manufacturer's recommendations. Fusing shall be accomplished by personnel certified as fusion technicians by a manufacturer of polyethylene pipe and/or fusing equipment.

B. The butt-fused joint shall be true alignment and shall have uniform roll-back-beads resulting from the use of proper temperature and pressure. The joint shall be allowed adequate cooling time before removal of pressure. The fused joint shall be watertight and shall have tensile strength equal to that of the pipe. All joints shall be subject to acceptance by the Engineer and/or his representative prior to insertion. All defective joints shall be cut out and replaced at no cost to the Owner. Any section of the pipe with a gash, blister, abrasion, nick, scar or other deleterious fault greater in depth than ten percent (10%) of the wall thickness, shall not be used and must be removed from the site. However, a defective area of the pipe may be cut out and the joint fused in accordance with the procedures stated above. In addition, any section of pipe having other defects such as concentrated ridges, discoloration, excessive spot roughness, pitting, variable wall thickness or any other defect of manufacturing or handling as determined by the Engineer and/or his representative shall be discarded and not used.

C. Terminal sections of pipe that are joined within the insertion pit shall be connected with a full circle pipe repair clamp. The butt gap between pipe ends shall not exceed one-half (½) inch.

3.08 LOW PRESSURE AIR TEST

All completed mainline sections will be tested in accordance with NCTCOG requirements prior to acceptance by the Owner. All testing procedures, safety requirement and test times shall be strictly adhered to. Any section not passing the requirements of the test shall be replaced at no cost to the Owner.

3.09 SERVICE CONNECTIONS

A. In providing re-connection of existing wastewater services, selected service connection pipe diameter must match existing service with a minimum diameter of 4 inches. Any existing service smaller than 4 inches shall be upsized to a minimum of 4 inches.

B. All sewer service connections shall be identified, located and excavated prior to the pipe insertion to expedite reconnection. Upon

commencement, pipe insertion shall be continuous and without interruption from one manhole to another, except as approved by the Owner. Upon completion of insertion of the new pipe, the Contractor shall expedite the reconnection of services to minimize any inconvenience to the customers.

C. Mechanical saddles shall be made of polyethylene pipe compound that meets the requirements of ASTM D1248, Class C, have stainless steel straps and fasteners, neoprene gasket and backup plate. Mechanical saddles shall be heat fusion saddles, Strap-On-Saddle Type as manufactured by Driscoplex™ or Tapping Saddle manufactured by Fernco Joint Sealer Company, DFW Plastics, Inc. or approved equal. Once the saddle is secured in place, drill hole full inside diameter of saddle outlet in pipe liner.

D. At all points where the polyethylene pipe has been exposed, as in starter excavations, at service connection fittings, outside of manholes, etc., the contractor shall encase the pipe and fittings in minimum of 6 inches of concrete or flowable backfill. If flowable backfill is used, the contractor shall remove all debris, and create a void along each side of the pipe at the spring line to undisturbed soil, in preparation for the cement stabilized sand backfill. Width of the void shall not exceed (main O.D.+2ft.) or (service line O.D.+2ft.)

3.10 FIELD TESTING

Tests for compliance with this specification shall be made as specified herein and in accordance with the applicable ASTM Specifications. A certificate with this specification shall be furnished, upon request, by the manufacturer for all material furnished under this specification. Polyethylene plastic pipe and fittings may be rejected for failure to meet any requirements of this specification.

3.11 POST-CONSTRUCTION TELEVISION INSPECTION

A. The Contractor shall provide for the television inspection for the section or sections of pipe following rehabilitation. Post-construction television inspection shall be subsidiary to trenchless installation.

B. The Contractor shall provide for the television inspection for the section or sections of pipe following rehabilitation. Post-construction television inspection shall be subsidiary to trenchless installation.

C. Post-construction television inspection shall be performed after the reconnection of the service laterals or as directed by the Engineer. In no case will the television inspection replace the low-pressure air test above.

3.12 FINAL CLEANUP

Upon completion of installation, testing and inspection, clean and restore project area affected by work of this section.

3.13 PAYMENT

Payment for providing and installing the pipe bursting as specified in this section shall be for the unit price bid per linear foot of pipe installed. Pre and post CCTV inspection shall be subsidiary to trenchless installation of pipe burst sewer lines and will not be paid for separately. Any bypass pumping or flow diversion shall be subsidiary to installation of pipe burst sewer lines unless otherwise specified.

END OF SECTION

SECTION 33 03 10 BYPASS PUMPING OF EXISTING SEWER SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Bypass pumping of the existing sewer system, required on sewer lines unless otherwise specified in the Contract Documents

B. Related Specification Sections include but are not necessarily limited to
   1. Drawings and general provisions of the Contract, including Special Conditions, apply to work of this section.
   2. Division 1 – General Requirements

1.2 REFERENCES

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. Occupational Safety and Health Organization (OSHA).

1.3 ADMINISTRATIVE REQUIREMENTS

A. Coordination
   1. Schedule meeting with Town to review sewer shutdown prior to replacing or rehabilitating any facilities.
   2. Town reserves the right to delay schedule due to weather conditions, or other unexpected emergency within the sewer system.
   3. Review bypass pumping arrangement or layout in the field with Town prior to beginning operations. Facilitate preliminary bypass pumping run with Town staff present to affirm the operation is satisfactory to Town.
   4. After replacement or rehabilitation of facilities, coordinate the reestablishment of sewer flow with Town staff.
   5. Provide onsite continuous monitoring during all bypass pumping operations by having personnel on site.

1.4 SUBMITTALS

A. Submittals shall be in accordance with the contract documents.

B. All submittals shall be approved by the Engineer and the Town prior to delivery.

1.5 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS

A. Shop Drawings
   1. Submit a detailed plan and description outlining all provisions and precautions that will be taken with regard to the handling of sewer flows. Submit the plan to the Engineer for approval a minimum of 14 days prior to commencing work. Include the following details:
      a. Schedule for installation and maintenance of the bypass pumping system
      b. Staging areas for pumps
      c. Pump sizes, capacity, number of each size, and power requirements
      d. Calculations for static lift, friction losses, and velocity
      e. Pump curves showing operating range and system head curves
      f. Sewer plugging methods
      g. Size, length, material, joint type, and method for installation of suction and discharge piping

h. Method of noise control for each pump and/or generator, if required
i. Standby power generator size and location
j. Suction and discharge piping plan
k. Emergency action plan identifying the measures taken in the event of a pump failure or sewer spill
l. Staffing plan for responding to alarm conditions identifying multiple contacts by name and phone numbers (office, mobile)
m. A contingency plan to implement in the event the replacement or rehabilitation has unexpected delays or problems

1.6 CLOSEOUT SUBMITTALS [NOT USED]

1.7 MAINTENANCE MATERIAL SUBMITTALS [NOT USED]

1.8 QUALITY ASSURANCE [NOT USED]

1.9 DELIVERY, STORAGE, AND HANDLING [NOT USED]

1.10 FIELD CONDITIONS [NOT USED]

1.11 WARRANTY [NOT USED]

PART 2 - PRODUCTS

2.1 EQUIPMENT

A. Pumping
1. Provide equipment that will convey 125 percent of the wet weather peak flow conditions. Peak flows are as follows:
a. Contractor shall coordinate with Town to confirm existing flow conditions prior to submitting bypass pumping plan. Bypass pumping system proposed shall be adequate for the existing conditions.
2. Provide fully automatic self-priming pumps. Foot-valves or vacuum pumps are not permitted for priming the system.
3. Pumps must be constructed to allow dry running for periods of time to account for the cyclical nature of sewer flow.
4. Provide 1 stand-by pump for each size to be maintained on site. Place backup pumps online, isolated from the primary system by valve.
5. If multiple pumps are required to meet the flow requirements, provide the necessary fittings and connections to incorporate multiple discharges.
6. Noise levels of the pumping system must follow the requirements of the Town's noise standards
7. Pumps shall be sound attenuated, producing at or below 85 dBA.
8. Pump system shall be Quiet Flow as provided by Sunbelt Rentals or approved equals.

B. Piping
1. All piping shall be fused HDPE. No other materials will be allowed.

C. Plugs or Stop Logs
1. Plugs
a. Select a plug that is made for the size and potential pressure head that will be experienced.
b. Provide an additional anchor, support or bracing to secure plug when back pressure is present.
c. Use accurately calibrated air pressure gauges for monitoring the inflation pressure.
d. Place inflation gauge at location outside of confined space area. Keep the inflation gauge and valve a safe distance from the plugs.

e. Never over inflate the plug beyond its pressure rating.

2. Stop Logs
   a. Use stop log devices designed for the manhole or sewer vault structure in use.

PART 3 - EXECUTION

3.1 PREPARATION

A. Locate the bypass pipelines in areas to minimize disturbance to existing utilities and obtain approval of those locations from Town.

B. Make preparations to comply with OSHA requirements when working in the presence of sewer gases, oxygen-deficient atmospheres and confined spaces.

C. Do not begin bypass preparation and operation until Town approval of the submittals requested per this Specification.

3.2 INSTALLATION

A. Install and operate pumping and piping equipment in accordance with the submittals provided per this Specification.

B. Sewer flow stoppage

1. Plugging
   a. Use confined space procedures and equipment during installation when necessary.
   b. Thoroughly clean the pipe before insertion of the plug.
   c. Insert the plug seal surface completely so it is fully supported by the pipe.
   d. Position the plug where there are not sharp edges or protrusions that may damage the plug.
   e. Use pressure gauges for measuring inflation pressures.
   f. Minimize upstream pressure head before deflating and removing.

C. Sewer flow control and monitoring

1. Take sufficient precautions to ensure sewer flow operations do not cause flooding or damage to public or private property. The Contractor is responsible for any damage resulting from bypass pumping operations.
2. Begin continual monitoring of the sewer system as soon as the sewer is plugged or blocked. The bypass pumping system must be manned 24 hours a day when in operation. Be prepared to immediately start bypass pumping if needed due to surcharge conditions.
3. Sewer discharge may be into another sewer manhole, force main quick connect, or appropriate vehicle or container only. Do not discharge sewer into an open environment such as an open channel or earthen holding facility.
4. Do not construct bypass facilities where vehicular traffic may travel over the piping.
5. Provide details in the suction and discharge piping plan that accommodate both the bypass facilities and traffic without disrupting either service.

3.3 FIELD OR SITE QUALITY CONTROL

A. Field [OR] Site Tests and Inspections

1. Perform leakage and pressure tests of the bypass pumping pipe and equipment before actual operation begins. Contractor shall have Town staff on site during tests.

3.4 CLOSEOUT ACTIVITIES

A. Once plugging or blocking is no longer necessary, remove in such a way that permits the sewer flow to slowly return to normal – preventing surge, surcharging and major downstream disturbance.

END OF SECTION

SECTION 33 13 20 TEMPORARY WATER

PART 1GENERAL

1.01 SCOPE OF WORK

This specification covers the requirements for the complete installation and removal of temporary water mains including all necessary labor, materials, and equipment as necessary.

1.02 RELATED WORK

A. Temporary water mains will be required as specified on the plans, specifications or as required by the Owner in order to maintain adequate water supply and fire protection.

B. The temporary water main shall be maintained and repaired at all times by the Contractor until the new permanent main is placed in service.

C. Temporary water mains may be reused in other phases as construction continues and as directed by the Owner.

PART 2 PRODUCT

All temporary water main and appurtenances shall be new or acceptable used as approved by the Owner.

2.01 WATER MAINS

A. All temporary water mains shall be NSF/ANSI 61 approved.

B. Contractor select one of the following pipe materials based on the traffic, weather condition, and construction sequence, as approved by the Owner:

1) PVC (Restrained Joint)

2) HDPE

3) Other approved Equal

2.02 FITTING AND APPURTENANCES

A. All the fittings, valves, fire hydrants and other appurtenances shall be NSF/ANSI 61 approved.

B. Glued fittings shall not be permitted.

C. Fittings are to be suitable and compatible with the specified pipe materials and class with which they are used.

2.03 DESIGN DATA

A. Temporary water mains may be required to be buried a minimum depth of 2 feet in order to protect from traffic and freezing conditions. Contractor to confirm requirements with City depending on season of installation and traffic conditions.

B. Temporary water service shall be connected to the temporary water main for each building or single residential unit. Bull heads shall not be permitted unless otherwise approved by the Owner.

C. Each temporary water service shall be supplied with its own individual corporation cock where it connects to the temporary water main.

2.04 SIZING

A. Minimum size of the temporary main shall be 2” as shown on the plans or as required by the Owner unless otherwise approved.

B. Larger than 2” mains may also be required in order to provide interrupted and adequate water supply and fire protection in specific project sites. The sizing of the temporary mains shall depend on the number of water services, water demand and fire protection requirements of the services being interrupted.

2.05 VALVE

A. Valves shall be furnished and installed by the contractor on the temporary mains at locations designated by the Owner, so that the temporary mains can be isolated.

B. Valves shall be installed at each branch of a temporary water main.

C. Before permanently shutting down an existing water main, the valves shall be tested to ensure that they are in proper working order.

D. 3/4” corporation stop copper shall be installed at the end of the temporary mains.

PART 3 EXECUTION

3.01 PLACEMENT AND OPERATION

A. Water mains shall be placed parallel to each side of the street and as close as possible to the area being serviced.

B. When a street must be crossed with temporary water mains, installation will either be by open-cut or surface mount.

C. Temporary water mains 2” or smaller in diameter may be surface mounded with temporary cold mix asphalt at all driveways and street crossings or where applicable, as long as it does not pose a safety concern. The Contractor may choose to utilize Pipe and Hose Ramps as manufactured by RubberForm

D. Recycled Products, LLC or approved equal, to meet the safety requirements for small mains, per the manufacturer’s specifications.

E. The Contractor shall furnish, place and connect temporary water services from the temporary main to each meter box. The services will consist of a service clamp, corporation cock, sufficient length of pipe to reach each meter box, copper to iron pipe union, street ell and bushing.

F. Temporary water services range from ¾” to 2” in diameter. Temporary water services over 30 feet shall be a minimum of 1” in diameter.

G. In the event the temperatures fall, the Contractor shall take steps to prevent temporary mains and services from freezing. Mains that do freeze shall be thawed by the Contractor utilizing an outside heat source. If flushing is done, the run-off shall be directed such that the street or sidewalk icing does not occur.

H. Temporary water mains larger than 2” in diameter shall require open-cut or by other than open cut (BOTOC) across any driveways and streets/alleys.

I. No more than one fire hydrant shall be taken out of service at any time.

3.02 FLUSHING, DISINFECTION, SAMPLING &SERVICE TRANSFER

A. After installation, the temporary water main shall be flushed and chlorinated by the Contractor and sampled by the Owner. Services shall not be transferred until the temporary main has been checked and approved by the Owner. There will be no additional compensation for delaying in obtaining approval to transfer services. Care shall be given during the installation process of temporary potable water supply services to avoid contamination.

3.03 REMOVAL OF TEMPORARY WATER MAINS

A. After the new permanent main services are in place and in service, the Contractor shall remove and dispose of the temporary mains, services, pipe hose ramps and/or temporary paving as necessary.

B. All associated temporary paving and moundings shall be removed from the existing street surfaces.

3.04 SITE RESTORATION

Following construction operations, the contractor shall restore the work site to the original conditions or better. Backfill and compact all excavations according to these specifications.

PART 4 METHOD OF MEASUREMENT AND PAYMENT

Temporary water mains shall be paid for by linear foot as shown in the bid proposal form.

END OF SECTION





ECS Southwest, LLP

Geotechnical Engineering Report

Addison Junction Public Infrastructure Improvements

SEQ Festival Way and Addison Rd
Addison, Texas

ECS Project Number 19:10552 (Rev.2)

November 9, 2026

November 9, 2026

Ms. Farwa Sultan, P.E.
Kimley-Horn and Associates, Inc.
225 E John W Carpenter Freeway, Suite 1100
Irving, Texas 75062

Reference: Geotechnical Engineering Report
Addison Junction Public Infrastructure Improvements
SEQ Festival and Addison Rd
Addison, Texas

ECS Project No. 19:10552 (Rev.2)

Dear Ms. Sultan:

ECS Southwest, LLP (ECS) has completed the subsurface exploration, laboratory testing, and geotechnical engineering analyses for the above-referenced project. Our services were performed in general accordance with our agreed to scope of work. This report presents our understanding of the geotechnical aspects of the project along with the results of the field exploration and laboratory testing conducted, and our design and construction recommendations.

It has been our pleasure to be of service to Kimley-Horn and Associates, Inc. during the design phase of this project. We would appreciate the opportunity to remain involved during the continuation of the design phase, and we would like to provide our services during construction phase operations as well to verify subsurface conditions assumed for this report. Should you have any questions concerning the information contained in this report, or if we can be of further assistance to you, please contact us.

Respectfully submitted,

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- Pavement Calculations
- General Information for DeepRoot System
- General Recommendations for QA Testing

EXECUTIVE SUMMARY

The following summarizes the main findings of the exploration, particularly those that may have a cost impact on the planned roadway development. Further, our pavement and subgrade improvement recommendations are summarized. Information gleaned from the executive summary should not be utilized in lieu of reading the entire geotechnical report.

- Based on subsurface conditions encountered in the borings, the subsurface material generally consisted of fill materials comprised of lean clay and fat clay, underlain by natural fat clay and weathered limestone, followed by gray limestone extending to the boring termination depth of approximately 15 feet below existing grades. Groundwater seepage was not observed in the borings during drilling and at the completion of drilling.

- Moderate to Highly expansive clays are present at the site. The estimated potential vertical soil rise (PVR) at the existing grades ranges from approximately 2 to 4 inches at a dry moisture state. These potential movements reflect moisture changes in the soil that can occur over the life of the structure and after construction is complete.

- The planned pickleball courts can be supported on a post-tensioned foundation system with improved subgrade.

- It is recommended that ECS conduct a geotechnical review of the project plans (prior to issuance for construction) to check to see that ECS' geotechnical recommendations have been properly interpreted and implemented.

- To prevent misinterpretation of ECS recommendations, ECS should be retained to perform quality control testing and documentation during construction of the earthwork and foundations for the project.

1.0 INTRODUCTION

The purpose of this study was to provide geotechnical information for the design and construction of the Addison Junction Development Public Infrastructure Improvements project in Addison, Texas. The recommendations developed for this report are based on project information provided by the client. This report contains the results of our subsurface explorations and geotechnical laboratory testing programs, site characterization, engineering analyses, and recommendations for the design and construction of the planned roadway improvements.

Our services were performed in general accordance with ECS Proposal No. 19:17267-GP Rev.2, dated July 13, 2026. The project was authorized by the client through IPO (Individual Project Order) KH Project Number 063543066 on July 16, 2026, which includes the Terms and Conditions of service agreed upon the Master Agreement for Continuing Professional Services.

This report contains the procedures and results of our subsurface exploration and laboratory testing programs, review of existing site conditions, engineering analyses, and recommendations for the design and construction of the project.

The report includes the following items.

- A brief review and description of our field and laboratory test procedures and the results of testing conducted.
- A review of surface topographical features and site conditions.
- A review of area and site geologic conditions.
- A review of subsurface soil stratigraphy with pertinent available physical properties.
- A final copy of our soil test borings.
- Recommendations for post-tensioned slab for pickleball courts.
- Recommendations for pavement design and subgrade preparation.
- Recommendations for site preparation and construction of compacted fills, including an evaluation of on-site soils for use as compacted fills.

2.0 PROJECT INFORMATION

2.1 PROJECT LOCATION/CURRENT SITE USE

The project sites are generally located at SEQ of Festival Way and Addison Rd in Addison, Texas. The project site consists of an existing two-lanes undivided Portland Cement Concrete (PCC) roadway (Festival Way), a two-lanes undivided Asphalt Concrete (AC) pavement roadway (Julian Street) and an Alley way. The project location is depicted in the attached Site Location Diagram in Appendix A and below.



Site Location Diagram

2.2 PROPOSED CONSTRUCTION

The following information explains our understanding of the planned development of the street section.

SUMMARY OF DESIGN INFORMATION	
Subject	**Design Information / Assumptions**
Length of Proposed Roadway	1,800 LF. It includes Festival Way (1,100 LF), Julian Street (275 LF), and Alley (425 LF).
Improvements	Reconstruction of Festival Way from Addison to Quorum Drive, Julian Street and the alley adjacent to Julian Street. A pickleball court is also planned.
Proposed Roadway Classification	Spectrum Drive: Collector (Commercial), per client Festival Way and Julian Street: Urban Local, per client
Proposed Pavement	Portland Cement Concrete (PCC) with 20 years of design life.

Based on the information provided by the client, the proposed roadway improvements at Addison Junction are classified as a Collector (Commercial) Street and Urban Local Streets. If ECS' understanding of the project is not correct, please contact ECS so that we may review these changes and revise our recommendations, as appropriate.

3.0 FIELD EXPLORATION AND LABORATORY TESTING

The field exploration was planned with the objective of characterizing the project site in general geotechnical and geological terms and to evaluate subsequent field and laboratory data to assist in the determination of geotechnical recommendations. Borings were located with a handheld GPS unit and their approximate locations are shown on the Boring Location Diagram in Appendix A.

Our scope of work for roadway pavement improvements and a pickleball court included drilling six (6) soil borings (B-01 through B-06) to a depth of 15 feet below the existing grades with a truck mounted drill rig. These borings are listed in the following table.

BORINGS DRILLED FOR THE PROJECT		
Boring No.	**Boring Depth (ft.)**	**Proposed Structure**
B-01, B-02, B-03, B-04, and B-06	15	Pavement
B-05	15	Pickleball Courts

Truck mounted drill rigs with continuous flight augers were utilized to drill the borings. The approximate as-drilled boring locations obtained by a handheld GPS are shown on the Boring Location Diagram in Appendix A. The ground surface elevations noted in this report were obtained from the Conceptual Design Exhibit produced by Kimley-Horn in June 2026, which provided elevation information in 5-foot intervals. The boring coordinates and elevations are approximate and should not be used for design and construction. The boring locations/coordinates and elevations should be surveyed by others/licensed surveyor.

Representative soil samples were obtained by means of the Shelby tube procedure in general accordance with ASTM D1587. In the Shelby tube sampling procedure, a thin-walled, steel seamless tube with sharp cutting edges is pushed hydraulically into the soil, and a relatively undisturbed sample is obtained. Samples were removed from samplers in the field, visually classified, and appropriately sealed in sample containers to preserve their in-situ moisture contents. Samples of cohesive soil were tested with a calibrated hand “pocket” penetrometer. In this test, the unconfined compressive strength of a soil sample is estimated to be a maximum of 4.5 tons per square foot (tsf) by measuring the resistance of the soil sample to the penetration of a small diameter, calibrated, spring-loaded cylinder.

Standard Penetration Tests (SPTs) were also performed to obtain representative samples and penetration resistance measurements in general accordance with ASTM D1586. Soil samples were obtained at various intervals with the 1.625-inch inside diameter, 2-inch outside diameter, Split-Barrel sampler. The Split-Barrel sampler was first seated 6 inches to penetrate loose cuttings, and then was driven an additional 12 inches with blows of a 140-pound hammer falling 30 inches. The number of hammer blows required to drive the sampler each 6-inch increment was recorded. The penetration resistance “N-value” is defined as the number of hammer blows required to drive the sampler the final 12 inches and is indicated on the test boring logs. In very dense materials such as weathered rock material, the SPT test is usually stopped after 50 blows from the hammer and the measurement is recorded as 50 blows per distance penetrated (i.e., 50 over 3 inches).

Texas Cone Penetrometer tests were performed to evaluate the load-carrying capacity of the limestone encountered. These tests were performed in general accordance with test method Tex-132-E in the Texas Department of Transportation (TxDOT) Manual of Testing Procedures. The results of these tests are shown on the attached boring logs at the depths of occurrence.

Soil encountered in the borings was maintained by the drill crew. After recovery, the geotechnical soil sample was removed from the sampler and visually classified. Representative portions of the soil sample were then wrapped in plastic and transported to our laboratory for further visual examination and laboratory testing. After completion of the drilling operations, the boreholes were

backfilled with auger cuttings to the existing ground surface and patched with concrete if the borings were drilled on the pavement.

3.1 SUBSURFACE CHARACTERIZATION

The regional parent geologic mapping indicates that the site is underlain by the Austin Chalk (Kau) geologic formation. The parent rock of the Austin Chalk Formation is a chalky massive limestone. In the Dallas area, this rock varies from 300 to 500 feet thick in full section. It can commonly be seen in the bottoms of creeks, and in some cliff-like outcrops as a bluish-gray rock. Upper portions of this limestone typically weather, becoming tan in color with more frequent fractures, joints, and clay layers.

Through chemical and mechanical weathering, the Austin Chalk forms highly plastic residual clay soils. These clays typically exhibit moderate to high shrink/swell with changes in moisture. The clays directly above the rock are typically tan in color and limy (calcareous). Clays progressively closer to the ground surface take on a darker brown appearance, have higher plasticity, and contain less calcareous deposits and limestone fragments. The regional geology map for the area is provided in Appendix A.

Based on the soil boings, the existing pavements within the proposed street section generally consist of 7 inches of asphalt concrete (AC) and 8 to 9.25 inches of Portland cement concrete (PCC) at the locations of Borings B-01 to B-04. The thicknesses of the AC and PCC pavement sections encountered at each boring location are summarized on the following table.

THICKNESS OF PAVEMENT SECTIONS AT BORING LOCATION			
Boring No.	**PCC Thickness (in.)**	**AC Thickness (in.)**	**FILL. Sand and Gravel (in.)**
B-01	9.25	-	3.75
B-02	8	-	7
B-03	8.5	-	6.5
B-04	-	7	-

The subsurface conditions encountered were generally consistent with published geological mapping. The following sections provide generalized characterizations of the soil strata based on the pavement borings, B-01 through B-05.

SUBSURFACE STRATIGRAPHY				
Approximate Depth to Bottom of Strata Below Grade (feet)	**Approximate Elevation [1] (feet)**	**Stratum**	**Material Description**	**Consistency/ Condition**
2 to 4	632 to 623	I [2]	(FILL) FAT CLAY and (FILL) LEAN CLAY, dark brown, orangish brown, with sand and limestone fragments	Hard
4	630 to 621	II [3]	(CH) FAT CLAY, dark brown, with limestone fragments and weathered limestone seams	Hard
9 to 10	626 to 616	III [4]	LIMESTONE, tan, weathered	Weathered Rock
15 [5]	630 to 610	IV [4]	LIMESTONE, gray	Rock

Notes:

(1) The ground surface elevations are approximate and were obtained from the Conceptual Design Exhibit produced by Kimley-Horn on June 2026, which provided elevation information in 5-foot intervals. The boring coordinates and elevations should be surveyed if being used for design and construction.
(2) Only encountered in B-01 through B-03
(3) Only encountered in B-03 to B-05
(4) Encountered in all borings.
(5) Boring termination depth.

The following table summarizes the depths, and correlating elevations, to the top of tan and gray limestone encountered at boring locations.

Boring No.	Boring Depth (ft.)	Elevation at the Top of Boring (ft.)(1)	Depth to Top of Tan Limestone (ft.)	Top of Tan Limestone Elevation (ft.)(1)	Depth to Top of Gray Limestone (ft.)	Top of Gray Limestone Elevation (ft.)(1)
B-01	15	635	4	631	9	626
B-02	15	634	2	632	9	625
B-03	15	625	4	621	9	614
B-04	15	634	4	630	9	625
B-05	15	633	4	629	10	623
B-06	15	632	4	628	9	623

Notes:
(1) The ground surface elevations are approximate and were obtained from the Conceptual Design Exhibit produced by Kimley-Horn on June 2026, which provided elevation information in 5-foot intervals. The boring coordinated and elevations should be surveyed of being used for design and construction.

Please refer to the attached boring logs and laboratory data summary for a more detailed description of the subsurface conditions encountered as the stratification descriptions above are generalized for presentation purposes. A graphical presentation of the subsurface conditions is shown on the Generalized Subsurface Soil Profile included in Appendix A.

3.2 GROUNDWATER OBSERVATIONS

Groundwater level observations were made in the borings during or at completion of drilling operations. In auger drilling operations, water is not introduced into the borehole and the groundwater position can often be determined by observing water flowing into and out of the excavation. Furthermore, visual observation of soil samples retrieved can often be used in evaluating the groundwater conditions. Groundwater seepage was not observed in the borings during the field exploration work.

Any water observed in boring within this geologic setting is generally referred to as a partially perched condition. Specifically, rainfall that enters the site, either directly from overland flow or from adjacent properties, begins to percolate through surficial soils and within the sand seams and clay fissures and travels along that interface. This ground water remains trapped, or flow continues downhill with the water table occasionally surfacing to form wet springs and intermittent streams. Only in the low-lying areas and adjacent to existing creeks, shallow groundwater table is present in a continuous condition.

The highest groundwater observations are normally observed in the late winter and early spring. Fluctuation in the location of the long-term water table may occur as a result of changes in

precipitation, evaporation, surface water runoff and other factors not immediately apparent at the time of this exploration. Therefore, the groundwater conditions at this site could be different at the time of construction. The possibility of groundwater level fluctuation should be considered when developing the design and construction plans for the project.

3.3 LABORATORY TESTING

The laboratory testing consisted of selected tests performed on samples obtained during our field exploration operations. Classification and index property tests were performed on representative soil samples. The soil samples were tested for moisture content, Atterberg limits, soluble sulfate, swell, and percent passing No. 200 sieve.

Soil samples were visually classified on the basis of texture and plasticity in accordance with ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedures) and including USCS classification symbols. After classification, the samples were grouped in the major zones noted on the boring logs in Appendix B. The group symbols for each soil type are indicated in parentheses along with the soil descriptions. The stratification lines between strata on the logs are approximate; in situ, the transitions may be gradual.

The soil samples will be retained in our laboratory for a period of 60 days, after which, they will be discarded unless other instructions are received as to their disposition.

4.0 DESIGN RECOMMENDATIONS

The following recommendations have been developed on the basis of the previously described project characteristics and subsurface conditions. If there are any changes to the project characteristics or design information, ECS should be consulted so that the recommendations of this report can be reviewed.

4.1 POTENTIAL VERTICAL RISE (PVR) AND POTENTIAL VERTICAL MOVEMENT (PVM)

Based on our observation of the soil samples and test results, the clay soils encountered in the borings are highly expansive. These clay soils are susceptible to shrink swell tendencies, occurring seasonally throughout the life of the pavement with the changes in moisture content.

Based on Texas Department of Transportation (TxDOT) Tex-124-E test procedure for estimating Potential Vertical Rise (PVR), overburden swell tests, and our experience of similar soils, the estimated PVR at the boring locations is about 2 to 4 inches at a dry moisture state.

Based on the laboratory testing results performed on selected samples from borings, the in-situ moisture condition is generally under the dry moisture state.

The estimated Potential Vertical Movement at the boring locations are about 2 to 4 inches based on the swell tests under the in-situ soil moisture conditions. The actual movements could be greater if poor drainage, ponded water, and/or other unusual sources of moisture can saturate the soils beneath the pavement after construction.

To reduce the impact of moisture changes in the subgrade soils and limit potential for movements, the exposed subgrade should be kept moist by adding moisture, covering the subgrade, or through

lime stabilization. Positive drainage should be provided during and following construction. Routine pavement maintenance should be performed, including sealing cracks and joints in the pavement.

Tree roots can remove moisture from below pavements, causing soil contraction and potentially leading to loss of pavement subgrade support and overlying pavement distress (cracking/spalling/faulting). We recommend a tree root barrier made of polypropylene similar to the DeepRoot® system be installed vertically to a depth of at least 4 feet below final grades, and horizontally at least 10 feet outward from pavement edges. The typical DeepRoot installation diagram is provided in Appendix D.

4.2 SOLUBLE SULFATE

Soluble sulfate tests were performed on selected samples to evaluate the potential for sulfate induced heave. The laboratory test results indicated that soluble sulfate concentrations were generally less than 3,000 ppm in the subgrade soils. We recommend that additional soil soluble sulfate tests be performed to confirm the soluble sulfate contents during construction after final grading.

In general, soil with soluble sulfate concentrations of 3,000 ppm or less, are not considered to require special treatment considerations when lime stabilized in accordance with TxDOT "Guidelines for Modification and Stabilization of Soils and Base for Use in Pavement Structures" (2005). If lime stabilization is not feasible, flexible base with geogrid may be used with the PCC pavement.

4.3 PAVEMENT SECTION

Traffic data is not available for the proposed roadways. Based on our past experiences with similar types of projects, we assume that the average daily traffic is about 60,000 for Spectrum Drive. In addition, design life of 20 years with 0% growth rate are used for the pavement design for a commercial collector roadway. The parameters used for design are tabulated below.

DESIGN PARAMETERS FOR CONCRETE PAVEMENT – SPECTRUM DRIVE	
Design Parameters	**Design Values**
Street Classification	Commercial Collector
Design (ADT)	60,000
Percent Trucks (%)	2
Growth Factor (%)	0
Total ESALs	5,215,770
Reliability (percentage)	90
Design Life (year)	20
Pavement Type	Rigid
Subgrade Soil Type	Fill/Fat Clay (CH)/Lean Clay (CL)
Overall Standard Deviation – Rigid	0.35
Concrete Modulus of Rupture (psi) -28 Days	620
Concrete Modulus of Elasticity (psi) -28 days	5,000,000
Drainage Coefficient	1.0
Load Transfer Coefficient	2.9
Initial Pavement Serviceability	4.5
Terminal Pavement Serviceability	2.3

DESIGN PARAMETERS FOR CONCRETE PAVEMENT – SPECTRUM DRIVE	
Design Parameters	**Design Values**
Modulus of Subgrade Reaction (psi/in) – k (PCC Pavement)	200 (Lime Stabilized subgrade) 240 (Flexible Base with Geogrid)

Pavement sections for a commercial collector roadway provided in this report were designed in general accordance with the AASHTO Guide for Design of Pavement Structures (1993). Based on our analysis and the calculations using the indicated design parameters, the pavement reconstruction may be designed as Portland Cement Concrete (PCC) pavement section supported on either lime stabilized subgrade or flexible base with geogrid (Tensar TX140 or approved equal) under the flexible base. A summary of PCC pavement sections is summarized in the following table.

PORTLAND CEMENT CONCRETE (PCC) PAVEMENT SECTION – SPECTRUM DRIVE			
Design Life (Years)	**Concrete Pavement Thickness (inches)**	**[1]Flexible Base with Geogrid (inches)**	**[2]Lime Stabilized Subgrade (inches)**
20	9	6	-
20	9	-	6

Note: [1] – TxDOT Item 247 Type D, Grade 1-2; [2] – TxDOT Item 260.

Festival Way, Julian Street and the Alley will also be reconstructed. Traffic data is not available at the time of preparing this report. Therefore, the minimum pavement thickness for Urban Local and Alley provided in the Town of Addison Public Works & Engineering Services General Construction Notes published in January 2022 may be considered for the project. The pavement sections are summarized in the following table.

PORTLAND CEMENT CONCRETE (PCC) PAVEMENT SECTION – FESTIVAL WAY, JULIAN STREET AND ALLEY			
Street Classification	**Streets**	**Concrete Pavement Thickness (inches)[1]**	**Lime Stabilized Subgrade (inches)[2,3]**
Urban Local	Festival Way and Julian Road	8	6
Alley	Ace Alley	6	6

Note: [1] - TxDOT Item 360, 421, and 440
[2] - TxDOT Item 260
[3] - As an alternative to lime stabilized subgrade, an equivalent thickness of flexible base (TxDOT Item 247 Type D, Grade 1 or 2) with Geogrid (Tensar TX140 or similar) under the flexible base can be utilized.

For the design and construction of pavement, the subgrade should be prepared in accordance with the recommendations in the "Earthwork Operations" section of this report. An important consideration with the design and construction of pavements is surface and subsurface drainage. Where standing water develops, either on the pavement surface or within the base course layer, softening of the subgrade and other problems related to the deterioration of the pavement can be expected. Furthermore, good drainage should reduce the possibility of the subgrade materials becoming saturated during the normal service period of the pavement.

Please note, the recommended pavement sections provided above are considered the minimum necessary to provide satisfactory performance based on the provided traffic loading. In some cases, jurisdictional minimum standards for pavement section construction may exceed those provided above.

Soluble sulfate contents of the pavement subgrade should be confirmed by additional laboratory tests during the construction phase after final grading. A soluble sulfate level of more than 3,000 ppm indicates potential for sulfate induced heave and should be evaluated further. As an alternative, flexible base shall be used instead of lime stabilized or cement treated subgrade in high soluble sulfate areas.

4.3.1 Pavement Material

Pavement materials should be in strict accordance with the most current Town of Addison Requirements, as well as the latest edition of North Central Texas Council of Governments (NCTCOG) Standard Specifications for Public Works Construction (4th Edition). Pavement should be specified, constructed, and tested to meet the following requirements:

1. Portland Cement Concrete: Specify a minimum compressive strength of 4,000 psi at 28 days for Class P1 and 4,500 psi at 28 days for Class P2.
2. Reinforcing Steel: #3 bars (ASTM A615, Grade 60) at 18" centers each way for main-lane pavement.
3. Concrete Pavement Joints:
   a. Longitudinal Joints spacing shall match lane lines unless noted otherwise.
   b. Expansion Joints in pavement shall be redwood boards only with a spacing of three hundred (300) feet. Expansion joints shall be sawcut within 24 hours of placement.
4. Lime Stabilized Subgrade: 8% lime by dry weight of soil (about 36 lbs/sy for 6 inches)
5. Flexible Base Material: Item 247 of the TxDOT Standard Specifications, Type D, Grade 1 -2 with Geogrid (Tensar TX140 or similar) under the flexible base.

4.4 FOUNDATIONS AND SUBGRADE IMPROVEMENTS FOR PICKLEBALL COURTS

The soils encountered in boring B-05 are highly expansive. These soils are susceptible to shrink swell tendencies, occurring seasonally, throughout the life of the structures with the changes in moisture content. Based on test method TEX-124-E in the Texas Department of Transportation (TxDOT) Manual of Testing Procedures and our experience with similar soils, we estimate potential vertical soil movements (PVM) at a dry moisture condition will be about 2 to 4 inches. The actual movements could be greater if poor drainage, ponded water, and/or other unusual sources of moisture are allowed to saturate the soils beneath the structure after construction.

In order to achieve a uniform PVM across the foundation pads and minimize the risk associated with future movements due to settlement of existing fill, we recommend the following subgrade improvement option:

SUBGRADE IMPROVEMENTS				
Locations	**Depth ofSelect Fill or flexible base**	**Depth of Moisture Conditioning/Chemical Injection**	**Total Depth of Improved Zone**	**PVM**
Foundation Pads	1 foot	3 feet or to the top of weathered limestone, whichever is deeper.	4 feet	1-inch

These subgrade improvements should extend at least 5 feet beyond the edge of the foundation pads and include any flatwork sensitive to movements such as sidewalks or pavements. Select fill or flexible base should not be used outside of the pad limits. Additional fill placed to raise the foundation pads should be lean clay (CL) or similar to on-site clays.

4.4.1 Chemical/Water Injection

As an alternative to moisture conditioning, water or chemical pressure injection can be used to reduce the potential movement in the pickleball courts. The recommendations contained in this report should be used as a minimum guideline that should be followed during construction. We recommend the injection process be observed by an authorized representative of ECS.

Prior to injection, the areas to be injected should be graded one foot below final grade. Water or chemicals should be injected to the recommended depth with adequate injection passes to reduce the average vertical swell to 1 percent or less as determined by absorption swell tests under the final overburden pressure. Swelling of clay soils occur during injection. Additional grading may be required after injection. The surface of the injected area should be sealed or otherwise protected against moisture loss until structures or pavements are installed.

The effectiveness of the water or chemical injection should be assessed by soil borings and laboratory tests following a twenty-four-hour curing period. One boring should be continuously sampled to the injected depth for every 2,500 to 5,000 square feet of injected surface area. At least two borings should be drilled and sampled if smaller areas are tested. Laboratory tests should be performed on tube samples (not cuttings) to measure the soil moisture content and hand penetrometer resistance at 1-foot intervals. Absorption swell tests should be performed at about 2-to-3-foot intervals within the injected depth. The average absorption swell should be 1% or less for each boring. Additional injections should be performed if the average absorption swell is more than 1%.

It is not possible to predict the actual required number of the injection passes to meet the requirements noted above and multiple injections should be anticipated. For budgetary purposes, the time and cost for multiple injection passes should be included in the budget and schedule.

Based on the subsurface conditions encountered in the borings, the planned pickleball courts can be supported by a monolithic slab-on-grade foundation/grade beam structural foundation system.

4.4.2 Monolithic Slab-On-Grade

Based on the subsurface conditions encountered in the borings, the planned pickleball courts can be supported by a monolithic slab-on-grade foundation/grade beam structural foundation system. This system may be designed by post-tensioning. The slab should be designed in accordance with PTI “Design and Construction of Post-Tensioned Slabs-On-Ground”. The following design parameters are recommended for the Post-Tensioning Institute's slab-on-grade design method (3rd Edition):

RECOMMENDED PTI PARAMETERS (3RD EDITION)				
Improved Subgrade	Center Lift		Edge Lift	
	Em (feet)	Ym (inches)	Em (feet)	Ym (inches)
PVM of 1 inch or less	8.5	0.8	4.6	1.1

A net allowable soil bearing pressure of 2,500 psf can be used to design grade beams founded on the reworked existing soils or compacted fill, as described in the section titled "Earthwork Operations". Grade beams should have a minimum width of 10 inches to reduce the possibility of foundation bearing failure and excessive settlement due to local shear or "punching" failures. Additionally, the grade beams should extend at least 18 inches below final adjacent grade. Fills should be sloped to drain surface water away from the structure. A soil modulus of subgrade reaction (ks) of 100 pci may be used in the design of the slab.

These design parameters assume that positive drainage will be provided away from the structures and with moderate irrigation of surrounding lawn and planter areas with no excessive wetting or drying of soils adjacent to the foundations. Greater potential movements could occur with extreme wetting/drying of the soils due to ponding of water, plumbing leaks or lack of irrigation.

Vapor Barrier: Before the placement of concrete, a vapor barrier may be placed on top of the granular drainage layer to provide additional protection against moisture penetration through the floor slab. When a vapor barrier is used, special attention should be given to surface curing of the slab to reduce the potential for uneven drying, curling and/or cracking of the slab. Depending on proposed flooring material types, the structural engineer and/or the architect may choose to eliminate the vapor barrier.

Slab Isolation: Where the structural configuration prevents the use of a free-floating slab such as in a drop-down footing/monolithic slab configuration, the slab should be designed with suitable reinforcement and load transfer devices to preclude overstressing of the slab.

5.0 SITE CONSTRUCTION RECOMMENDATIONS

5.1 SUBGRADE PREPARATION

In a dry and undisturbed state, the upper 1-foot of the majority of the soil at the site should provide good subgrade support for fill placement and construction operations. However, when wet, this soil will degrade quickly with disturbance from contractor operations. Therefore, good site drainage should be maintained during earthwork operations, which should help maintain the integrity of the soil.

The surface of the site should be kept properly graded in order to enhance drainage of the surface water away from the proposed structures during the construction phase. We recommend that an attempt be made to enhance the natural drainage without interrupting its pattern, where possible. The soils at the site are moisture and disturbance sensitive and contain fines which are considered moderately erodible.

Therefore, the contractor should carefully plan his operation to limit exposure of the subgrade to weather and construction equipment traffic and provide and maintain good site drainage during

earthwork operations. All erosion and sedimentation shall be controlled in accordance with sound engineering practice and current jurisdictional requirements.

5.1.1 Proofrolling

Prior to fill placement or other construction on subgrades, the subgrades should be evaluated by an ECS field technician. The exposed subgrade should be thoroughly proofrolled with construction equipment having a minimum axle load of 10 tons [e.g. fully loaded tandem-axle dump truck]. Proofrolling should be traversed in two perpendicular directions with overlapping passes of the vehicle under the observation of an ECS technician. This procedure is intended to assist in identifying any localized yielding materials.

Where proofrolling identifies areas that are yielding or "pumping" subgrade those areas should be repaired prior to the placement of any subsequent Structural Fill or other construction materials. Methods of stabilization include undercutting, moisture conditioning, or chemical stabilization. The situation should be discussed with ECS to determine the appropriate procedure. Test pits may be excavated to explore the shallow subsurface materials to help in determining the cause of the observed yielding materials, and to assist in the evaluation of appropriate remedial actions to stabilize the subgrade.

5.2 EARTHWORK OPERATIONS

5.2.1 New Fill

New fill should be benched (stepped) into the existing site slopes where the existing slopes are 6H:1V or steeper. For slopes less steep, the subgrade should be scarified prior to the placement of the first lift of soil to ensure a proper bond between existing and new fill. These subgrades should be compacted as outlined below.

All fill should be uniformly undercut, scarified, and/or reworked to receive an adequate amount of water to ensure uniform moisture contents and compaction. Soil moisture levels should be preserved (by various methods that can include covering with plastic, watering, etc.) until new fill, pavements, or slabs are placed. If the soil becomes desiccated, the material should be removed and replaced, or these materials should be scarified, moisture conditioned and recompacted.
The table below should be used as a summary for the compaction criteria outlined in this report.

Depth Below Finished Grades	Material Type	Compaction Standard (ASTM D-698, Standard)	
		Compaction	Moisture Content
Varies	Select Fill / Flex Base	95%	Above OMC
Varies	Lime Treated Material	95%	+3% above OMC
Foundation Pad Subgrade to 10 feet	Moisture Conditioned	93%	+5% above OMC
Civil Subgrades to 10 feet	Common Fill	95%	Above OMC
10+ feet All Areas	Common Fill	98%	Above OMC

5.2.2 Backfill Settlement

Special care should be exercised to "tie in" the backfill with adjacent undisturbed, firm, natural soils by providing deep benches into the firm natural soil during placement of each fill lift. Loose materials and "slope wash" that may accumulate in the wall excavation during construction should be completely removed prior to placement of the backfill materials.

Some post-construction settlement of the backfill surface should be anticipated. This is typically on the order of one percent (1%) of the backfill height, even if satisfactory compaction of the backfill materials is achieved. This will lead to potential differential settlement. Therefore, it is recommended that special consideration be given to the design of foundation elements, floor slabs, and pavements that may extend over this backfill because of the potential for differential settlements introduced by this condition.

5.2.3 Earthwork Testing

Field density and moisture tests should be performed on each lift to verify that adequate compaction is achieved. Please use the following table as a guide for the minimum compaction testing requirements.

Location	Testing Frequency (1)	Maximum Lift Thickness (2)
Foundation Pad	1 test every 2,500 sf	4 inches to 8 inches
Pavements	1 test every 5,000 sf	
Utility Backfill	1 test every 150 lf	

Notes:

(1) No less than two tests minimum per lift
(2) 4 inches for hand guided jumping jack or plate tampers, 8 inches for large self-propelled compaction equipment.

Certain jurisdictional requirements may require testing in addition to that noted previously. Therefore, these recommendations should be reviewed, and the more stringent specifications should be followed.

Please refer to the general recommendation for quality assurance (QA) testing in Appendix D.

5.3 MATERIAL SPECIFICATIONS

Material Name	Plasticity Requirement	Soil Gradation Requirement	Maximum Particle Size
Moisture Conditioning	PI of 55 or less	Any	6 inches
Common Fill	PI of 55 or less	Any	
Select Fill	PI of 5 to 15	40% to 70% Passing 200	
Flexible Base (Natural or Recycled)	TxDOT Item 247, Type D, Grade 1 or 2		
Natural Free Draining	ASTM C33 No. 57 or No. 67		

Lime Stabilized Clay: Lime stabilized clay may be used as pavement subgrades for stabilization or as a protective cap over moisture conditioned clays or other fill. A preliminary lime application rate of 8% hydrated lime by dry weight of clay (TxDOT Item 260) should be used for budgeting purposes.

The actual amount of lime required should be confirmed by additional laboratory tests (lime series) during the construction phase.

Rock Excavation: Rock will be encountered during construction and rock excavation techniques will be necessary for this project. It has been our experience that single-tooth rippers can usually rip to depths on the order of two (2) to three (3) feet below the top of the tan limestone in large, open, excavations. Below that, or in small excavations, more extensive efforts are required. If excavations are advanced deeper than 1 to 2 feet below the top of the tan limestone, excavation or ripping can be achieved only with great difficulty, and other means are normally required in order to facilitate the removal of the rock.

For purposes of contract terms, we recommend that "rock" be defined as follows:

"Rock shall be defined as those natural materials which cannot be excavated in an open excavation with a Caterpillar Model No. D-8, heavy-duty tract type-tractor, weighted at not less than 285 hp flywheel power and equipped with a single-shank hydraulic ripper, capable of exerting not less than 45,000 lbs. breakout force, or equivalent machinery. For footings, utility trenches and pits, rock shall be defined as those materials that cannot be excavated with a Caterpillar Model No. 215D LC tract-type hydraulic excavator, equipped with a 42-inch wide short-tip radius rock bucket, rated at not less than 120 hp flywheel power with bucket-curling force of not less than 25,000 lbs. and stick-crowd force of not less than 18,000 lbs."

Depending on the excavation methods, the rock at this site will typically excavate in relatively large, blocky, and platy pieces, which are difficult to compact for suitable long-term performance. Also, these materials experience rapid degradation due to weathering over relatively short periods of time, once exposed to air and water conditions. Therefore, these larger pieces, which break up as rock-like fragments in the initial excavation, must be compacted with sufficient compaction energy to substantially break them down into soil size particles during construction.

Excavated tan limestone may be suitable for fill within the building and paving limits. For the purposes of this report, all rock materials excavated at the site will be considered nondurable. Nondurable rock materials removed during excavations may be used as fill if suitably decomposed by mechanical effort. Durability is the term used to describe the ability of a rock or rock-like material to withstand long term chemical and mechanical weathering without size degradation. Any rock excavated from the site and used as earthwork fill should have a well-graded grain size distribution with rock and soil particles ranging from clay or silt size particles to a maximum size of 4 inches in diameter with 2 inches thick plates. Particles larger than this should be decomposed by mechanical compaction equipment to achieve the desired grain size distribution.

5.4 UTILITY INSTALLATIONS

Utility Subgrades: The soils encountered in our exploration are expected to be generally acceptable for support of utility pipes. The pipe subgrades should be observed and probed for stability. Any loose or yielding materials encountered should be removed and replaced with acceptable material.

Utility Backfilling: The granular bedding material (often AASHTO #57 stone) should be at least 4 inches thick, but not less than that specified by the civil engineer's project drawings and specifications. We recommend that the bedding materials be placed up to the spring line of the

pipe. Fill placed for support of the utilities, as well as backfill over the utilities, should satisfy the project requirements.

Excavation Safety: All excavations and slopes should be constructed and maintained in accordance with OSHA excavation safety standards. The contractor is solely responsible for designing, constructing, and maintaining stable temporary excavations and slopes. The contractor's responsible person, as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal safety regulations. ECS is providing this information solely as a service to our client. ECS is not assuming responsibility for construction site safety or the contractor's activities; such responsibility is not being implied and should not be inferred.

6.0 CLOSING

ECS has prepared this report to guide the geotechnical-related design and construction aspects of the project. We performed these services in accordance with the standard of care expected of professionals in the industry performing similar services on projects of like size and complexity at this time in the region. No other representation, expressed or implied, and no warranty or guarantee is included or intended in this report.

The description of the proposed project is based on information provided to ECS by Client. If any of this information is inaccurate or changes, either because of our interpretation of the documents provided or site or design changes that may occur later, ECS should be contacted so we can review our recommendations and provide additional or alternate recommendations that reflect the proposed construction.

We recommend that ECS review the project plans and specifications so we can confirm that those plans/specifications are in accordance with the recommendations of this geotechnical report.
Field observations, and quality assurance testing during earthwork and foundation installation are an extension of, and integral to, the geotechnical design. We recommend that ECS be retained to apply our expertise throughout the geotechnical phases of construction, and to provide consultation and recommendation should issues arise.

ECS is not responsible for the conclusions, opinions, or recommendations of others based on the data in this report.

Appendix A - Drawings and Reports

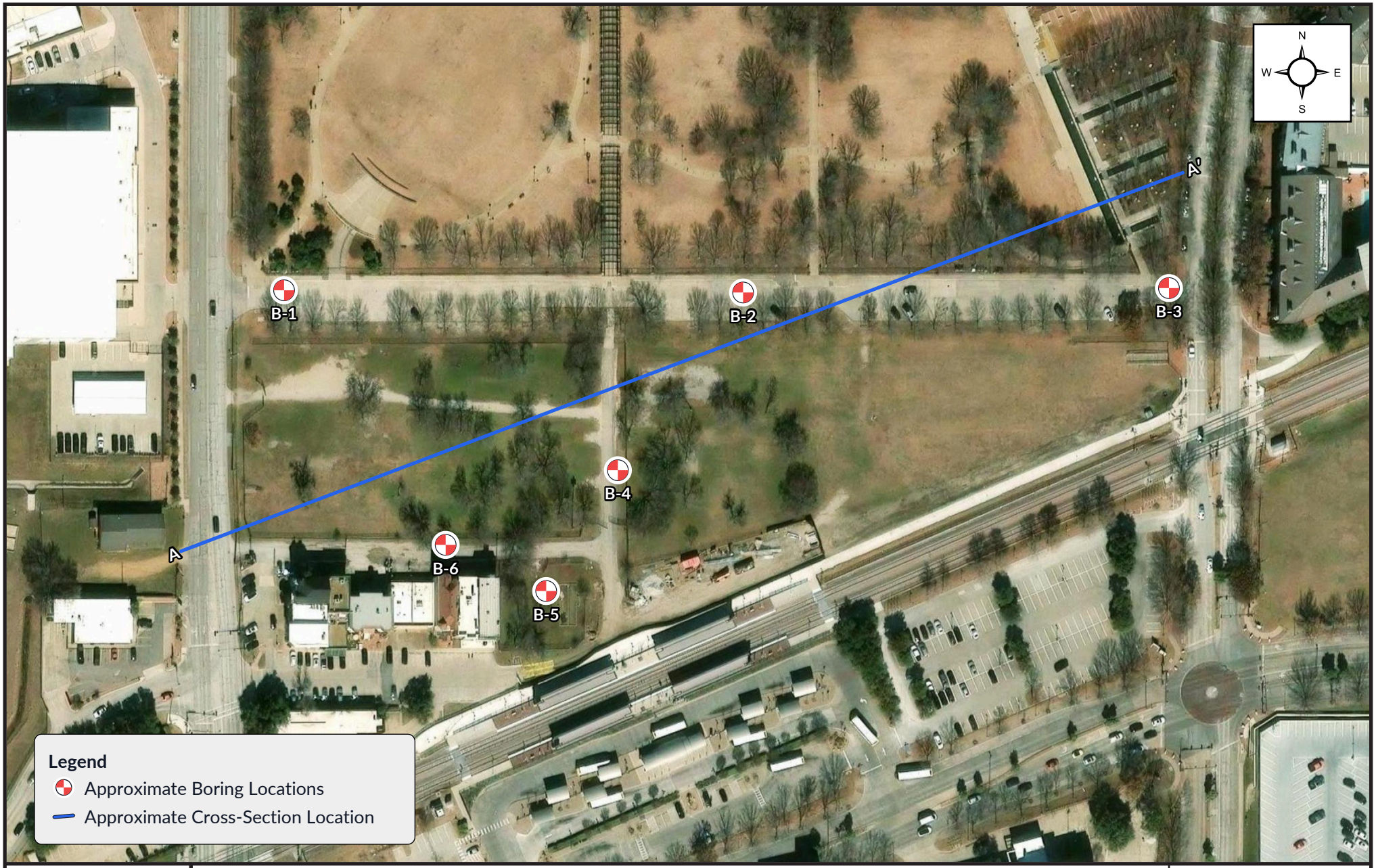
Site Location Diagram
Boring Location Diagram(s)
Subsurface Cross-Section(s)
Geologic Survey Map



SITE LOCATION DIAGRAM
Addison Junction Public Infrastructure Improvements

SEQ Festival Way and Addison Rd, Addison, TX 75001
Kimley-Horn and Associates, Inc.

ENGINEER	Michael Batuna
SCALE	1" = 1000'
PROJECT NO.	19:10552
SHEET	1
DATE	7/16/2026

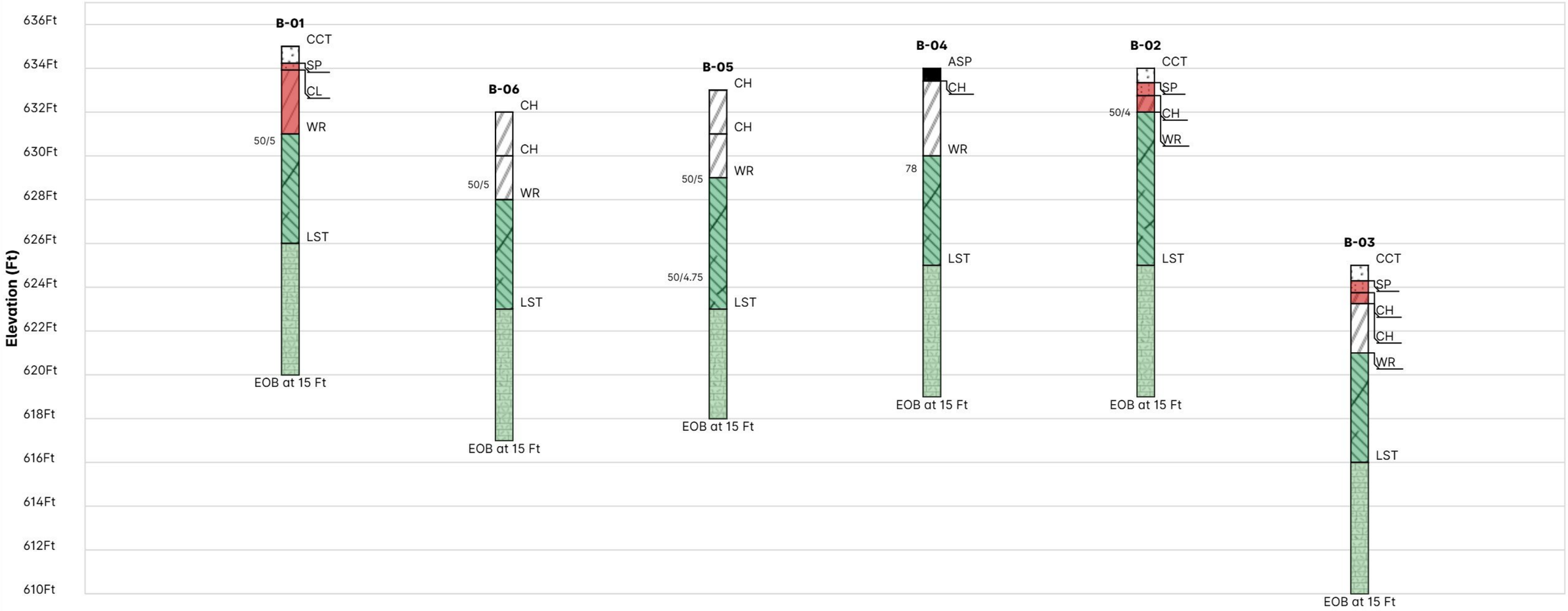


BORING LOCATION DIAGRAM
Addison Junction Public Infrastructure Improvements

SEQ Festival Way and Addison Rd, Addison, TX 75001
Kimley-Horn and Associates, Inc.

ENGINEER	Michael Batuna
SCALE	1" = 150'
PROJECT NO.	19:10552
SHEET	1
DATE	7/16/2026

Subsurface Cross Section A-A'

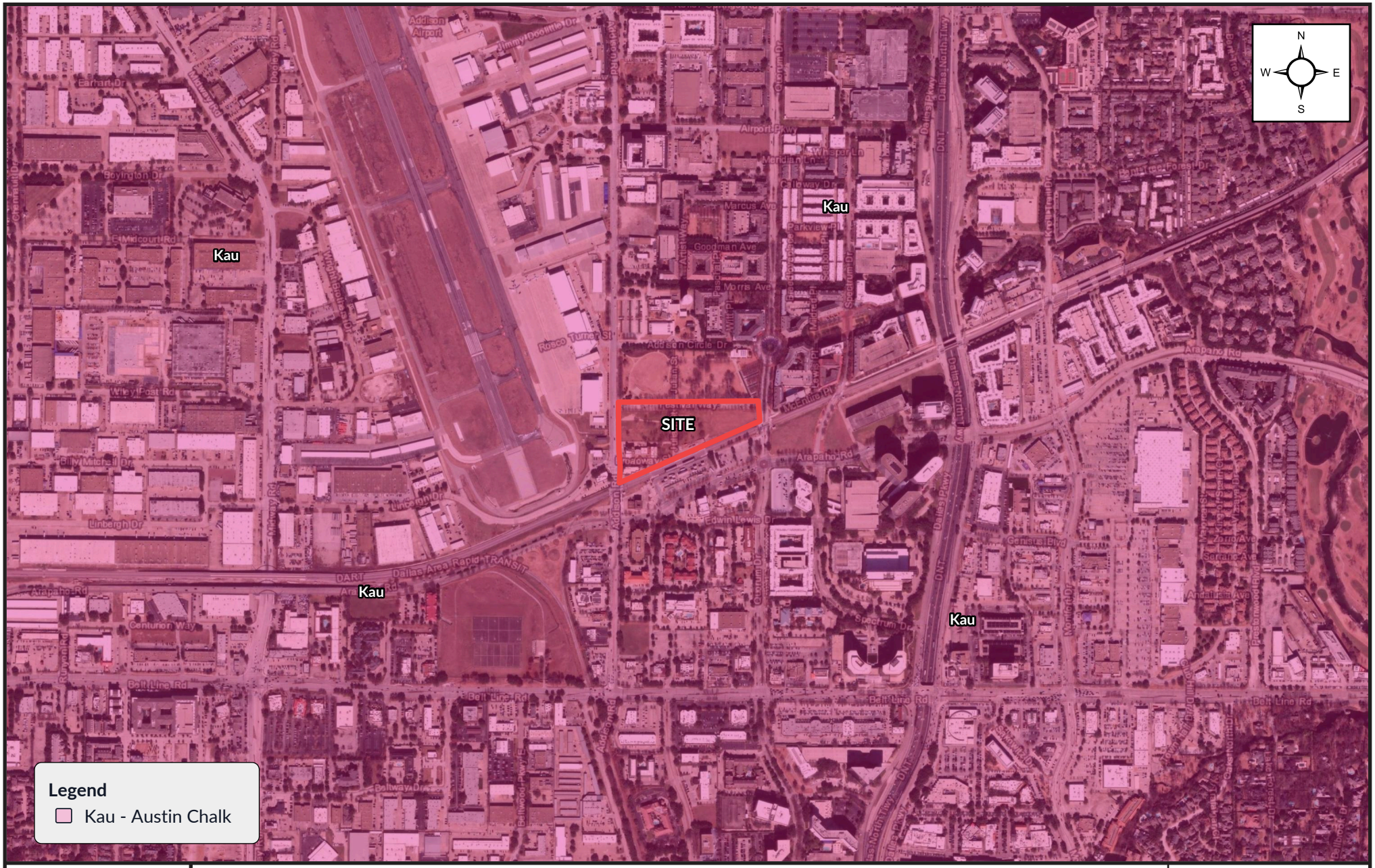


CLIENT:	Kimley-Horn and Associates, Inc.	PROJECT:	Addison Junction Public Infrastructure Improvements
DRAWN DATE:	08/27/2026	PROJECT NO.:	19:10552
CHECKED DATE:	08/27/2026	SCALE:	AS SHOWN

Notes:
1-EOB: END OF BORING AR: AUGER REFUSALSR: SAMPLER REFUSAL
2-SEE INDIVIDUAL BORING LOG AND GEOTECHNICAL INFORMATION.
3-STANDARD PENETRATION TEST RESISTANCE (LEFT OF BORING) IN BLOWS PER FOOT (ASTM D1586).
4- TOPOGRAPHIC INFORMATION IS BASED ON PUBLICLY AVAILABLE DATA (GOOGLE OR CESIUM).THE TOPOGRAPHIC LINE SHOWN BETWEEN BORINGS IS FOR VISUAL REFERENCE ONLY.PLEASE REFER TO THE REFERENCE NOTES FOR BORING LOGS FOR SYMBOLOGY MEANING AND ADDITIONAL

Plastic Limit X—●—△ Water Content Liquid Limit	
[FINES CONTENT %]	
BOTTOM OF CASING	
100% LOSS OF CIRCULATION	
CALIBRATED PENETROMETER	

WL (First Encountered)		Fill	
WL (Completion)		Possible Fill	
WL (Estimated Seasonal High Water)		Probable Fill	
WL (Stabilized)		WR/Rock	



GEOLOGIC SURVEY MAP
Addison Junction Public Infrastructure Improvements

SEQ Festival Way and Addison Rd, Addison, TX 75001
Kimley-Horn and Associates, Inc.

ENGINEER	Michael Batuna
SCALE	1" = 1000'
PROJECT NO.	19:10552
SHEET	1
DATE	7/16/2026

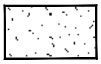
Appendix B - Field Operations

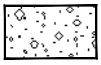
Reference Notes
Boring Logs

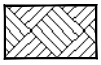
REFERENCE NOTES FOR BORING LOGS

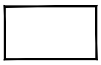
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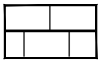

ASPHALT


CONCRETE


GRAVEL

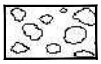

TOPSOIL

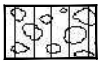

VOID


BRICK

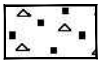

AGGREGATE BASE COURSE

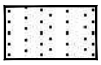

GW **WELL-GRADED GRAVEL**
gravel-sand mixtures, little or no fines

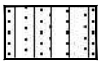

GP **POORLY-GRADED GRAVEL**
gravel-sand mixtures, little or no fines


GM **SILTY GRAVEL**
gravel-sand-silt mixtures

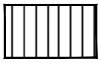

GC **CLAYEY GRAVEL**
gravel-sand-clay mixtures

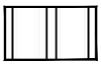

SW **WELL-GRADED SAND**
gravelly sand, little or no fines

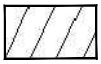

SP **POORLY-GRADED SAND**
gravelly sand, little or no fines


SM **SILTY SAND**
sand-silt mixtures

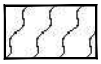

SC **CLAYEY SAND**
sand-clay mixtures

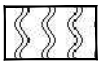

ML **SILT**
non-plastic to medium plasticity

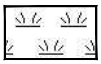

MH **ELASTIC SILT**
high plasticity


CL **LEAN CLAY**
low to medium plasticity


CH **FAT CLAY**
high plasticity


OL **ORGANIC SILT or CLAY**
non-plastic to low plasticity


OH **ORGANIC SILT or CLAY**
high plasticity


PT **PEAT**
highly organic soils

DRILLING SAMPLING SYMBOLS & ABBREVIATIONS

SS	Split Spoon Sampler	PM	Pressuremeter Test
ST	Shelby Tube Sampler	RD	Rock Bit Drilling
WS	Wash Sample	RC	Rock Core, NX, BX, AX
BS	Bulk Sample of Cuttings	REC	Rock Sample Recovery %
PA	Power Auger (no sample)	RQD	Rock Quality Designation %
HSA	Hollow Stem Auger		

PARTICLE SIZE IDENTIFICATION

DESIGNATION		PARTICLE SIZES
Boulders		12 inches (300 mm) or larger
Cobbles		3 inches to 12 inches (75 mm to 300 mm)
Gravel:	Coarse	¾ inch to 3 inches (19 mm to 75 mm)
	Fine	4.75 mm to 19 mm (No. 4 sieve to ¾ inch)
Sand:	Coarse	2.00 mm to 4.75 mm (No. 10 to No. 4 sieve)
	Medium	0.425 mm to 2.00 mm (No. 40 to No. 10 sieve)
	Fine	0.074 mm to 0.425 mm (No. 200 to No. 40 sieve)
Silt & Clay ("Fines")		<0.074 mm (smaller than a No. 200 sieve)

COHESIVE SILTS & CLAYS

UNCONFINED COMPRESSIVE STRENGTH, Q_P[4]	SPT[5] (BPF)	CONSISTENCY[7] (COHESIVE)
<0.25	<2	Very Soft
0.25 - <0.50	2 - 4	Soft
0.50 - <1.00	5 - 8	Firm
1.00 - <2.00	9 - 15	Stiff
2.00 - <4.00	16 - 30	Very Stiff
4.00 - 8.00	31 - 50	Hard
>8.00	>50	Very Hard

GRAVELS, SANDS & NON-COHESIVE SILTS

SPT[5]	DENSITY
<5	Very Loose
5 - 10	Loose
11 - 30	Medium Dense
31 - 50	Dense
>50	Very Dense

RELATIVE AMOUNT[7]	COARSE GRAINED (%)[8]	FINE GRAINED (%)[8]
Trace	≤5	≤5
With	10 - 20	10 - 25
Adjective *(ex: "Silty")*	25 - 45	30 - 45

WATER LEVELS[6]

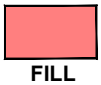

WL (First Encountered)


WL (Completion)


WL (Seasonal High Water)


WL (Stabilized)

FILL AND ROCK


FILL


POSSIBLE FILL


PROBABLE FILL


ROCK

[1]Classifications and symbols per ASTM D 2488-17 (Visual-Manual Procedure) unless noted otherwise.

[2]To be consistent with general practice, "POORLY GRADED" has been removed from GP, GP-GM, GP-GC, SP, SP-SM, SP-SC soil types on the boring logs.

[3]Non-ASTM designations are included in soil descriptions and symbols along with ASTM symbol [Ex: (SM-FILL)].

[4]Typically estimated via pocket penetrometer or Torvane shear test and expressed in tons per square foot (tsf).

[5]Standard Penetration Test (SPT) refers to the number of hammer blows (blow count) of a 140 lb. hammer falling 30 inches on a 2 inch OD split spoon sampler required to drive the sampler 12 inches (ASTM D 1586). "N-value" is another term for "blow count" and is expressed in blows per foot (bpf). SPT correlations per 7.4.2 Method B and need to be corrected if using an auto hammer.

[6]The water levels are those levels actually measured in the borehole at the times indicated by the symbol. The measurements are relatively reliable when augering, without adding fluids, in granular soils. In clay and cohesive silts, the determination of water levels may require several days for the water level to stabilize. In such cases, additional methods of measurement are generally employed.

[7]Minor deviation from ASTM D 2488-17 Note 14.

[8]Percentages are estimated to the nearest 5% per ASTM D 2488-17.

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CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Kimley-Horn and Associates, Inc.	**19:10552**	**B-01**	**1 OF 1**
PROJECT NAME: **Addison Junction Public Infrastructure Improvements**	DRILLER/CONTRACTOR: **Total Depth**		
SITE LOCATION: **SEQ Festival Way and Addison Rd, Addison, Texas, 75001**			LOSS OF CIRCULATION
LATITUDE: **32.9602**	LONGITUDE: **-96.82959**	STRUCTURE:	SURFACE ELEVATION: **635**	BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY (IN)	DESCRIPTION OF MATERIAL	STRATIGRAPHY	ELEVATION (FT)	WATER LEVELS	BLOWS/6" (TCP/MC/SPT N-VALUE)	Rec % / RQD % / SPT / TCP	LIQUID LIMIT	PLASTICITY INDEX	MOISTURE CONTENT (%)	QP (TSF)	FINES CONTENT	DRY UNIT WEIGHT (PCF)	COMPRESSIVE STR. (TSF)
					(Concrete 9.25 inches)									4.5			
	S-1	ST	11	11	(FILL) Sand and Gravel Base (3.75 inches)								20.5				
	S-2	ST	24	24	FILL - (CL) LEAN CLAY - orangish brown, brown, moist, hard, with sand and weathered limestone fragments.						44	22	17.8	4.5	63.1		
	S-3	SS	11	11					16-50/5" (50/5)	50/5							
5					LIMESTONE, tan, weathered		630										
									50/0.75" 50/0.25" 100/1"	100							
10					LIMESTONE, Gray.		625										
									50/0.75" 50/0.25" 100/1"	100							
					END OF BORING AT 15.0 FT												

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered):	**Dry**	**BORING STARTED:**	**08/06/2026**	**CAVE IN DEPTH:**	**Not Observed**
WL (Completion):	**Dry**	**BORING COMPLETED:**	**08/06/2026**	**HAMMER TYPE:**	**Automatic**
WL (Seasonal High Water):		**EQUIPMENT:**	**LOGGED BY:**	**DRILLING METHOD:**	
WL (Stabilized):		**Truck**	**Gopi**	**CFA (0'-15')**	
WL (After 24 Hours):					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Kimley-Horn and Associates, Inc.	**19:10552**	**B-02**	**1 OF 1**
PROJECT NAME: **Addison Junction Public Infrastructure Improvements**	DRILLER/CONTRACTOR: **Total Depth**		
SITE LOCATION: **SEQ Festival Way and Addison Rd, Addison, Texas, 75001**			LOSS OF CIRCULATION
LATITUDE: **32.9602**	LONGITUDE: **-96.82788**	STRUCTURE:	SURFACE ELEVATION: **634**	BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY (IN)	DESCRIPTION OF MATERIAL	STRATIGRAPHY	ELEVATION (FT)	WATER LEVELS	BLOWS/6" (TCP/MC/SPT N-VALUE)	Rec % / RQD % / SPT / TCP	LIQUID LIMIT	PLASTICITY INDEX	MOISTURE CONTENT (%)	QP (TSF)	FINES CONTENT	DRY UNIT WEIGHT (PCF)	COMPRESSIVE STR. (TSF)
					(Concrete 8 inches)									4.5			
	S-1	ST	9	9	(FILL) Sand and Gravel Base (7 inches)						75	47	26.3		84.8		
	S-2	SS	4	4	FILL - (CH) FAT CLAY - dark brown, moist, hard, with limestone fragments.				50/4" (50/4)	50/4							
					LIMESTONE, tan, weathered		630		50/0.75" 50/0.5" 100/1.25"	100							
5																	
					LIMESTONE, Gray.		625		50/0.5" 50/0.25" 100/0.75"	100							
10																	
							620		50/0.5" 50/0.25" 100/0.75"	100							
					END OF BORING AT 15.0 FT												

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered):	**Dry**	**BORING STARTED:**	**08/06/2026**	**CAVE IN DEPTH:**	**Not Observed**
WL (Completion):	**Dry**	**BORING COMPLETED:**	**08/06/2026**	**HAMMER TYPE:**	**Automatic**
WL (Seasonal High Water):		**EQUIPMENT:**	**LOGGED BY:**	**DRILLING METHOD:**	
WL (Stabilized):		**Truck**	**Gopi**	**CFA (0'-15')**	
WL (After 24 Hours):					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Kimley-Horn and Associates, Inc.	**19:10552**	**B-03**	**1 OF 1**
PROJECT NAME: **Addison Junction Public Infrastructure Improvements**	DRILLER/CONTRACTOR: **Total Depth**		
SITE LOCATION: **SEQ Festival Way and Addison Rd, Addison, Texas, 75001**			LOSS OF CIRCULATION
LATITUDE: **32.96021**	LONGITUDE: **-96.82627**	STRUCTURE:	SURFACE ELEVATION: **625**	BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY (IN)	DESCRIPTION OF MATERIAL	STRATIGRAPHY	ELEVATION (FT)	WATER LEVELS	BLOWS/6" (TCP/MC/SPT N-VALUE)	Rec % / RQD % / SPT / TCP	LIQUID LIMIT	PLASTICITY INDEX	MOISTURE CONTENT (%)	QP (TSF)	FINES CONTENT	DRY UNIT WEIGHT (PCF)	COMPRESSIVE STR. (TSF)
					(Concrete 8.5 inches)									4.5			
	S-1	ST	9	9	(FILL) Sand and Gravel Base (6.5 inches)								23.9				
	S-2	ST	24	24	FILL - (CH) FAT CLAY - orangish brown, moist, hard, with sand.						79	52	23.4	4.5	96.7		
	S-3	SS	4	4	(CH) FAT CLAY - dark brown, hard, with limestone fragments.				50/4"								
5					LIMESTONE, tan, weathered		620										
										100							
					LIMESTONE, Gray.				50/1" 50/0.5" 100/1.5"								
10							615										
										100							
									50/0.75" 50/0.5" 100/1.25"								
					END OF BORING AT 15.0 FT												

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered):	Dry	BORING STARTED:	08/06/2026	CAVE IN DEPTH:	Not Observed
WL (Completion):	Dry	BORING COMPLETED:	08/06/2026	HAMMER TYPE:	Automatic
WL (Seasonal High Water):		EQUIPMENT:	LOGGED BY:	DRILLING METHOD:	
WL (Stabilized):		Truck	Gopi	CFA (0'-15')	
WL (After 24 Hours):					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Kimley-Horn and Associates, Inc.	**19:10552**	**B-04**	**1 OF 1**
PROJECT NAME: **Addison Junction Public Infrastructure Improvements**	DRILLER/CONTRACTOR: **Total Depth**		
SITE LOCATION: **SEQ Festival Way and Addison Rd, Addison, Texas, 75001**			LOSS OF CIRCULATION
LATITUDE: **32.95965**	LONGITUDE: **-96.82834**	STRUCTURE:	SURFACE ELEVATION: **634**	BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY (IN)	DESCRIPTION OF MATERIAL	STRATIGRAPHY	ELEVATION (FT)	WATER LEVELS	BLOWS/6" (TCP/MC/SPT N-VALUE)	Rec % / RQD % / SPT / TCP	LIQUID LIMIT	PLASTICITY INDEX	MOISTURE CONTENT (%)	QP (TSF)	FINES CONTENT	DRY UNIT WEIGHT (PCF)	COMPRESSIVE STR. (TSF)
					Asphalt (7 inches)									4.5			
	S-1	ST	17	17	(CH) FAT CLAY - dark brown, moist, hard, with limestone fragments.								26.9				
	S-2	ST	24	24							60	36	20.7	4.5	79.0		
5	S-3	SS	18	18	LIMESTONE, tan, weathered		630		12-35-43 (78)	78							
10					LIMESTONE, Gray.		625		50/0.75" 50/0.25" 100/1"	100							
							620		50/0.5" 50/0.25" 100/0.75"	100							
					END OF BORING AT 15.0 FT												

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered):	**Dry**	**BORING STARTED:**	**08/06/2026**	**CAVE IN DEPTH:**	**Not Observed**
WL (Completion):	**Dry**	**BORING COMPLETED:**	**08/06/2026**	**HAMMER TYPE:**	**Automatic**
WL (Seasonal High Water):		**EQUIPMENT:**	**LOGGED BY:**	**DRILLING METHOD:**	
WL (Stabilized):		**Truck**	**Gopi**	**CFA (0'-15')**	
WL (After 24 Hours):					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Kimley-Horn and Associates, Inc.	**19:10552**	**B-05**	**1 OF 1**
PROJECT NAME: **Addison Junction Public Infrastructure Improvements**	DRILLER/CONTRACTOR: **Total Depth**		
SITE LOCATION: **SEQ Festival Way and Addison Rd, Addison, Texas, 75001**			LOSS OF CIRCULATION
LATITUDE: **32.95928**	LONGITUDE: **-96.82859**	STRUCTURE:	SURFACE ELEVATION: **633**	BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY (IN)	DESCRIPTION OF MATERIAL	STRATIGRAPHY	ELEVATION (FT)	WATER LEVELS	BLOWS/6" (TCP/MC/SPT N-VALUE)	Rec % / RQD % / SPT / TCP	LIQUID LIMIT	PLASTICITY INDEX	MOISTURE CONTENT (%)	QP (TSF)	FINES CONTENT	DRY UNIT WEIGHT (PCF)	COMPRESSIVE STR. (TSF)
	S-1	ST	24	24	(CH) FAT CLAY - dark brown, moist, hard.								20.0	4.5			
	S-2	ST	24	24	(CH) FAT CLAY - dark brown, moist, hard, with weathered limestone seams.		630				69	43	18.7	4.5	86.6		
5	S-3	SS	5	5	LIMESTONE, tan, weathered				50/5" (50/5)	50/5							
	S-4	SS	5	5			625		50/4.75" (50/4.75)	50/4.75							
10					LIMESTONE, Gray.		620		50/1" 50/0.25" 100/1.25"	100							
					END OF BORING AT 15.0 FT												

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered):	Dry	BORING STARTED:	08/06/2026	CAVE IN DEPTH:	Not Observed
WL (Completion):	Dry	BORING COMPLETED:	08/06/2026	HAMMER TYPE:	Automatic
WL (Seasonal High Water):		EQUIPMENT:	LOGGED BY:	DRILLING METHOD:	
WL (Stabilized):		Truck	Gopi	CFA (0'-15')	
WL (After 24 Hours):					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Kimley-Horn and Associates, Inc.	**19:10552**	**B-06**	**1 OF 1**
PROJECT NAME: **Addison Junction Public Infrastructure Improvements**	DRILLER/CONTRACTOR: **Total Depth**		
SITE LOCATION: **SEQ Festival Way and Addison Rd, Addison, Texas, 75001**			LOSS OF CIRCULATION
LATITUDE: **32.9594**	LONGITUDE: **-96.829**	STRUCTURE:	SURFACE ELEVATION: **632**	BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY (IN)	DESCRIPTION OF MATERIAL	STRATIGRAPHY	ELEVATION (FT)	WATER LEVELS	BLOWS/6" (TCP/MC/SPT N-VALUE)	Rec % / RQD % / SPT / TCP	LIQUID LIMIT	PLASTICITY INDEX	MOISTURE CONTENT (%)	QP (TSF)	FINES CONTENT	DRY UNIT WEIGHT (PCF)	COMPRESSIVE STR. (TSF)
	S-1	ST	24	24	(CH) FAT CLAY - dark brown, moist, hard, occasional calcareous fragments.		630				73	48	18.8	4.5	80.3		
	S-3	SS	11	11	(CH) FAT CLAY - dark brown, moist, hard, with weathered limestone seams.				26-50/5" (50/5)	50/5							
5					LIMESTONE, tan, weathered		625		50/1.5" 50/1" 100/2.5"	100							
10					LIMESTONE, Gray.		620		50/1" 50/0.5" 100/1.5"	100							
									50/1" 50/0.75" 100/1.75"	100							
					END OF BORING AT 15.0 FT												

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered):	**Dry**	**BORING STARTED:**	**08/06/2026**	**CAVE IN DEPTH:**	**Not Observed**
WL (Completion):	**Dry**	**BORING COMPLETED:**	**08/06/2026**	**HAMMER TYPE:**	**Automatic**
WL (Seasonal High Water):		**EQUIPMENT:**	**LOGGED BY:**	**DRILLING METHOD:**	
WL (Stabilized):		**Truck**	**Gopi**	**CFA (0'-15')**	
WL (After 24 Hours):					

GEOTECHNICAL BOREHOLE LOG

Appendix C - Laboratory Testing

Laboratory Testing Summary

Laboratory Testing Summary

Sample Source	Sample Number	Start Depth (feet)	End Depth (feet)	MC[1] (%)	Soil Type[2]	Atterberg Limits[3]			Percent Passing No. 200 Sieve[4]	Dry Unit Weight (pcf)	One-Dimentional Swell			Unconfined Compressive Strength (tsf)
						LL	PL	PI			Final Moisture (%)	Surcharge (psf)	Swell (%)	
B-01	S-1	0.0	2.0	20.5										
B-01	S-2	2.0	4.0	17.8	FILL	44	22	22	63.1	97.9	25.1	380	1.2	
B-02	S-1	0.0	2.0	26.3	FILL	75	28	47	84.8	95.5	35.0	140	1.3	
B-03	S-1	0.0	2.0	23.9										
B-03	S-2	2.0	4.0	23.4	CH	79	27	52	96.7	92.2	32.5	380	2.8	
B-04	S-1	0.0	2.0	26.9										
B-04	S-2	2.0	4.0	20.7	CH	60	24	36	79.0	103.6	23.6	380	1.6	
B-05	S-1	0.0	2.0	20.0						91.4	38.6	140	11.9	
B-05	S-2	2.0	4.0	18.7	CH	69	26	43	86.6	94.0	32.3	380	4.0	
B-06	S-1	0.0	2.0	18.8	CH	73	25	48	80.3	79	41.7	140	7.3	

Notes: 1. ASTM D 2216, 2. ASTM D 2487, 3. ASTM D 4318, 4. ASTM D 1140, 5. See test reports for test method, 6. See test reports for test method

Definitions: MC: Moisture Content, Soil Type: USCS (Unified Soil Classification System), LL: Liquid Limit, PL: Plastic Limit, PI: Plasticity Index, CBR: California Bearing Ratio, OC: Organic Content (ASTM D 2974)

Project No.: 19:10552
Project Name: Addison Junction Infrastructure Improvements
PM: Alfredo Rodriguez
PE: Michael Batuna
Printed On: August 28, 2026

ECS Southwest, LLP - Dallas
3033 Kellway Drive, Suite 110
Carrollton, TX 75006
Phone: (972) 392-3222
Fax: (214) 483-9684

Corrosive Suite Report

Boring / Sample #	Depth (Feet)	Sulfate (ppm)	Chloride (ppm)	pH	REMARKS
B-01	0-2	10.91			
B-02	0-2	77.47			
B-03	0-2	110.71			
B-04	0-2	108.44			
B-05	0-2	73.36			
B-06	0-2	61.19			

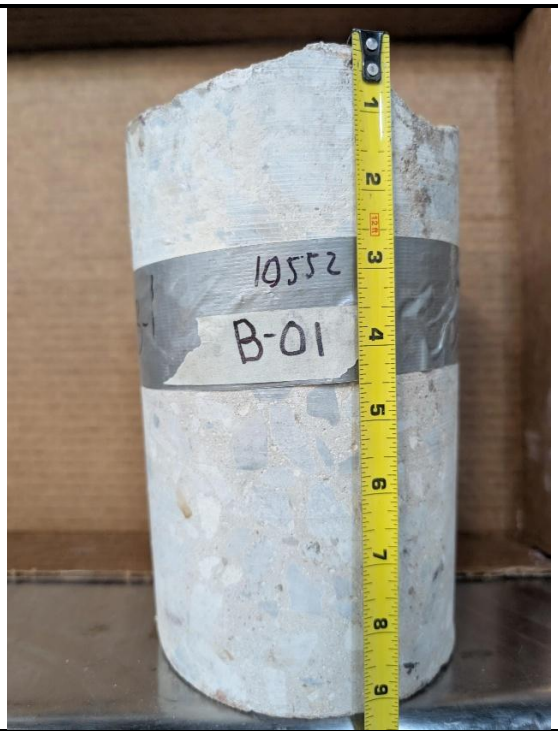
Project Number:	10552	Date Reported:	8/19/2026
Project Name:	Addison Junction	Client:	Kimley-Horn and Associates, Inc.

	Office / Lab	Address	Office Number / Fax
ECS	ECS Southwest LLP - Dallas	3033 Kellway Drive Suite 110	(972)392-3222 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
ABrou	JTubbs	JTubbs		

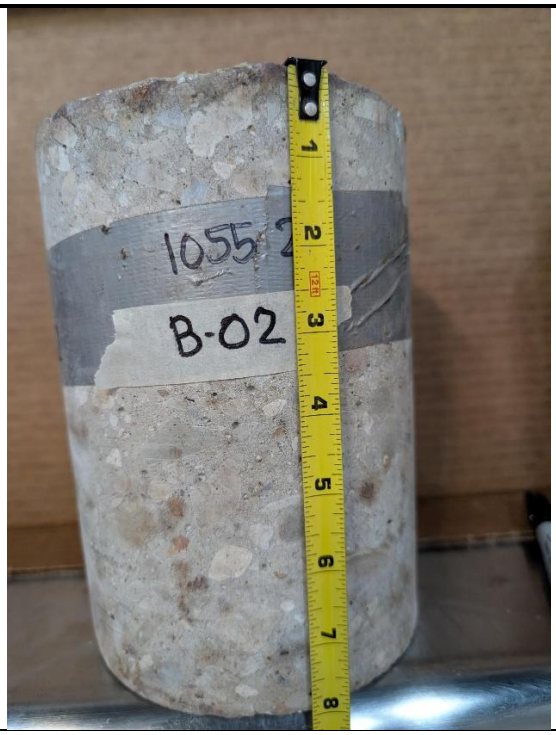
Appendix D - Supplemental Documents

Drawings/Details
Pavement Calculations



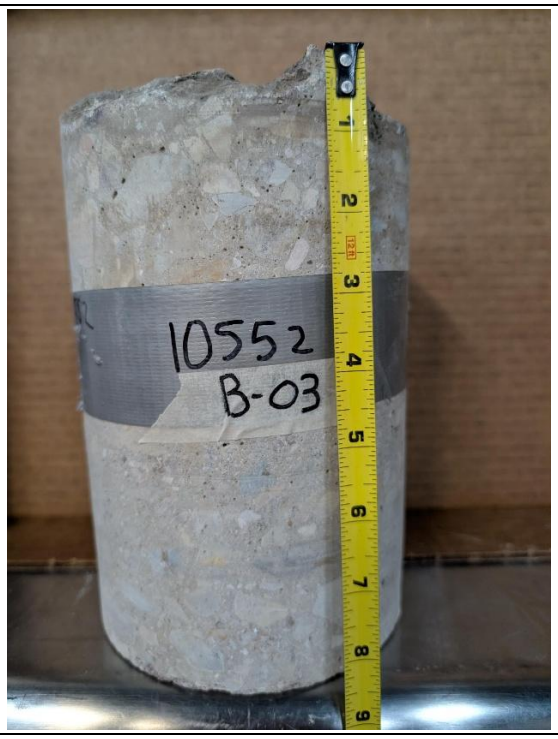
Pavement Core B-01

Bituminous Pavement Surface Course Thickness: 9.25”



Pavement Core B-02

Bituminous Pavement Surface Course Thickness: 8”



Pavement Core B-03

Bituminous Pavement Surface Course Thickness: 8.5”

Pavement Cores Photos August 14, 2026		Addison Junction Infrastructure Improvements SEQ Festival Way and Addison Rd, Addison TX, 75001 ECS Project No. 19:10552

GENERAL SPECIFICATIONS - CHEMICAL or WATER PRESSURE INJECTION

1. The injection process shall be observed on a full time basis by an authorized representative of ECS.

2. The injection process should be performed after the subgrade has been established to the desired elevation and prior to placement of select fill (if any), installation of underground utilities, and construction of pavements.

3. Chemical (ion exchange solution) shall be added to the water for the Chemical Injection Operation and Surfactant shall be added to the water for the Water Injection Operation. The chemical/surfactant should be added in accordance with the manufacturer's recommendations.

4. Hole patterns on the lower portion of the injection rods shall be orientated to uniformly disperse the fluid throughout the injected zone.

5. Injection pressures shall be between 50 and 200 pounds per square inch and shall be adjusted to disperse as large a volume of fluid as possible.

6. The injection pipe shall be forced downward in 12 inch intervals. The pipes shall not be jetted or washed to achieve each penetration. The total depth of injection shall be in accordance with the recommendations contained in the report and is dependent on the depth of Select Fill (if any).

7. Injection shall continue to refusal (i.e. until the soil will not take any more fluid and fluid is running freely on the surface) to the specified injection depth. Refusal should be determined by an on-site representative of ECS.

8. Injection spacing shall not exceed 5 feet on center in each direction. Injections shall extend at least 5 feet beyond the building perimeter. Subsequent injection shall be orthogonally offset 2.5 feet from the previous injection pass.

9. A minimum of 24-hours should elapse between injection passes.

10. Post injection evaluation (after 72 hour mellowing period) of the building pad shall include soil borings conducted at a minimum frequency of one boring per 2,500 to 5,000 square feet, or a minimum of two borings per building pad.

11. Continuous tube samples shall be obtained in the injected zone. Continuous moisture contents and hand penetrometer testing shall be conducted every 12 inches as well as swell testing every 2.5 feet of injection depth, but no less than one swell tests per boring.

12. At completion of the injection process, the surface should be scarified to a depth of 12 inches and recompacted to a minimum of 95% of the maximum standard Proctor dry density as determined by ASTM D-698 at moisture contents at least 3% above optimum.

13. Completion of the building pad shall proceed in a timely manner after injection and recompaction is complete to preserve the moisture content of the injected soils.

14. ECS should be retained to observe the entire injection process, provide post-injection laboratory testing, and evaluate the effectiveness of the injection process.

WinPAS 12

Pavement Thickness Design According to

1993 AASHTO Guide for Design of Pavements Structures

American Concrete Pavement Association

ESAL Determination by Traffic Factor

Project Name: Addison Junction Development Public Infrastructure Improvements
Route:
Location: Addison, TX
Owner/Agency: Town of Addison
Design Engineer:

Traffic Factor

Estimated Rigid Thickness	9.00	**inches**
Estimated Structural Number	3.5	
Terminal Serviceability	2.3	
Design Life	20	**years**
Annual Growth Rate	0.00	**percent**
Traffic Input by	Day	

Traffic Input by

Total Traffic 2-way
Design Lane Distribution 70.00 percent
Directional Distribution 50.00 percent

ESAL Determination by Traffic Input

Traffic Input As

	Average Daily Traffic (ADTT)	0.00
>	**Average Daily Traffic (ADT)**	60,000.00
	% of Heavy trucks	2.00

ESAL Traffic Factors

Rigid ESAL/Truck	1.70
Flexible ESAL/Truck	1.70

Total Rigid ESAL	5,215,770
Total Flexible ESAL	5,215,770

WinPAS

Pavement Thickness Design According to

1993 AASHTO Guide for Design of Pavements Structures

American Concrete Pavement Association

Rigid Design Inputs

Project Name: Addison Junction Development Public Infrastructure Improvements
Route:
Location: Addison, TX
Owner/Agency: Town of Addison
Design Engineer:

Rigid Pavement Design/Evaluation

Concrete Thickness	8.63	**inches**	**Load Transfer Coefficient**	2.90	
Total Rigid ESALs	5,215,770		**Modulus of Subgrade Reaction**	200	**psi/in.**
Reliability	90.00	**percent**	**Drainage Coefficient**	1.00	
Overall Standard Deviation	0.35		**Initial Serviceability**	4.50	
Flexural Strength	620	**psi**	**Terminal Serviceability**	2.30	
Modulus of Elasticity	5,000,000	**psi**			

Modulus of Subgrade Reaction (k-value) Determination

Resilient Modulus of the Subgrade	0.0
Unadjusted Modulus of Subgrade Reaction	1
Depth to Rigid Foundation	0.00
Loss of Support Value (0,1,2,3)	0.0

Modulus of Subgrade Reaction	200	**psi/in.**

WinPAS

Pavement Thickness Design According to

1993 AASHTO Guide for Design of Pavements Structures

American Concrete Pavement Association

Rigid Design Inputs

Project Name: Addison Junction Development Public Infrastructure Improvements
Route:
Location: Addison, TX
Owner/Agency: Town of Addison
Design Engineer:

Rigid Pavement Design/Evaluation

Concrete Thickness	8.53	**inches**	**Load Transfer Coefficient**	2.90	
Total Rigid ESALs	5,215,770		**Modulus of Subgrade Reaction**	240	**psi/in.**
Reliability	90.00	**percent**	**Drainage Coefficient**	1.00	
Overall Standard Deviation	0.35		**Initial Serviceability**	4.50	
Flexural Strength	620	**psi**	**Terminal Serviceability**	2.30	
Modulus of Elasticity	5,000,000	**psi**			

Modulus of Subgrade Reaction (k-value) Determination

Resilient Modulus of the Subgrade	0.0
Unadjusted Modulus of Subgrade Reaction	1
Depth to Rigid Foundation	0.00
Loss of Support Value (0,1,2,3)	0.0

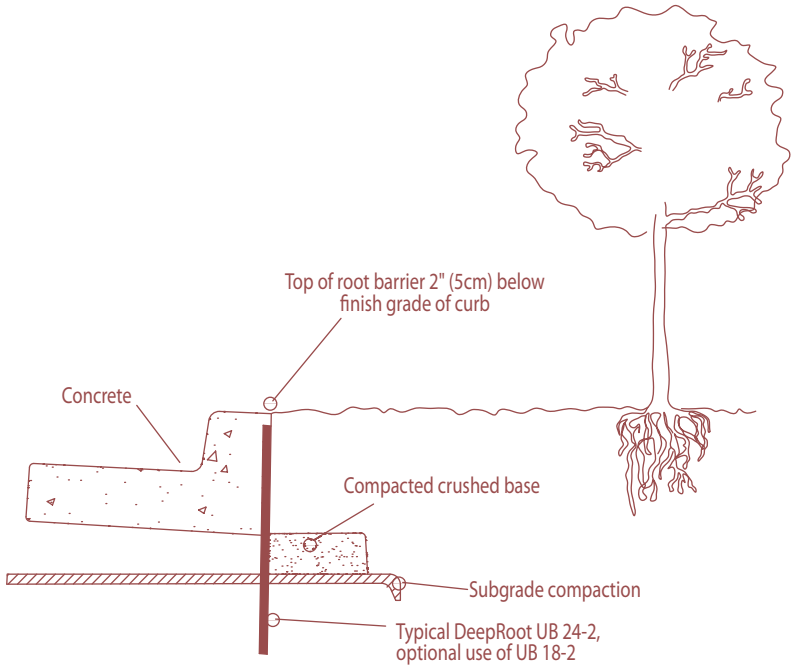
Modulus of Subgrade Reaction	240	**psi/in.**

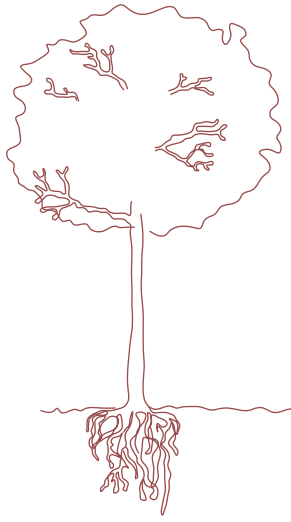
Linear Application of DeepRoot Tree Root Barriers at Time of Installing Concrete Sidewalks and Curbs

TYPICAL SECTION OF CURB AND GUTTER WITH DEEPROOT TREE ROOT BARRIER INSET INTO CONCRETE.
BARRIER INSTALLED IN A TRENCH IN SUBGRADE WHICH IS THEN COMPACTED. BARRIER IS SET SO THAT TOP EDGE WILL BE 2" (5CM) BELOW FINISH GRADE OF CURB, AND SET FLUSH WITH EDGE OF CURB. BARRIER RIBS FACE TOWARD TREE ROOTS.

INSTALLATION SEQUENCE:

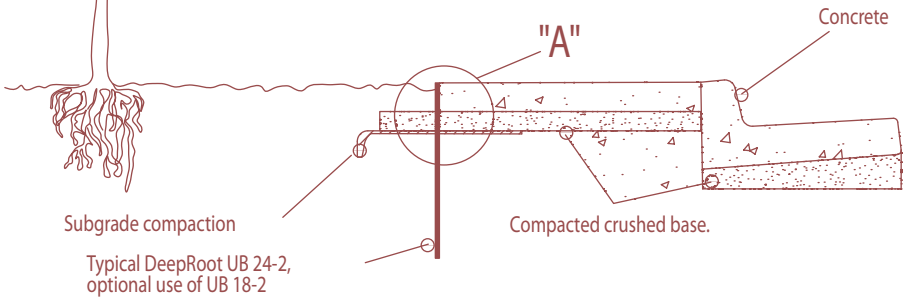
1. Prepare base and subgrade
2. Trench to appropriate depth for installation of root barrier so that top of barrier is 2" (5cm) below finish grade of top of curb.
3. Place root barrier in trench, vertical ribs must face toward tree roots.
4. Backfill and compact to requirements.
5. Place form material against barrier (It may be nailed from the outside of the form)





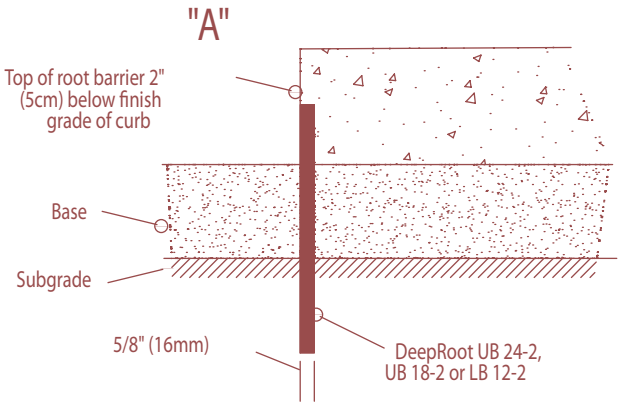
TYPICAL SECTION OF CURB, GUTTER AND SIDEWALK WITH DEEPROOT TREE ROOT BARRIER INSET INTO CONCRETE

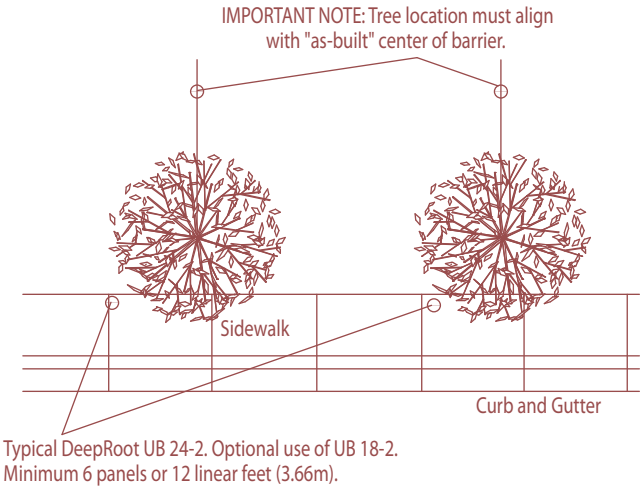
BARRIER INSTALLED IN A TRENCH IN SUBGRADE WHICH IS THEN COMPACTED. BARRIER IS SET SO THAT TOP EDGE WILL BE 2" (5CM) ABOVE COMPACTED BASE (or halfway between base and finish grade of SW). BARRIER RIBS FACE TOWARD TREE ROOTS.



INSTALLATION SEQUENCE:

1. Prepare base and subgrade
2. Trench to appropriate depth for installation of root barrier so that top of barrier is 2" (5cm) below finish grade of top of sidewalk (or halfway between top of compacted base and finish grade of SW)
3. Place root barrier in trench, vertical ribs must face toward tree roots.
4. Backfill and compact to requirements.
5. Place form material against barrier (It may be nailed from the outside of the form)





Surround Style Planting with Deeproot Universal Barriers

When selecting the Surround style planting application you will have the greatest success by following these simple steps as illustrated below:

A. Prepare the initial planting hole as illustrated below. This is based upon the combination of desired barrier diameter and depth. Consider if drainage devices or amendments are needed to correct any adverse soil or planting conditions in the backfill area.

B. Assemble the appropriate number of DeepRoot Universal Barrier panels. The vertical root deflecting ribs on the panel must face inward, toward the root ball. (This is very important, otherwise the roots will become girdled by traveling around the smooth walled surface)

C. Next place the barrier in the center of the planting hole, keeping in mind that the double top edge of the barrier should be positioned approximately 1/2" (13mm) above grade. This helps retard potential root overgrowth. Failing to position the top edge above grade can allow root overgrowth which can lead to uprooted hardscapes.

D. Backfill and compact with soil inside the barrier to the level where the bottom of the root ball will be when positioned correctly with the crown of the root ball approximately 1" (26mm) above grade.

E. Remove the tree from its container, or cut away the top portion of burlap and position in the center of the barrier. Complete the backfill of the soil. Distribute evenly to maintain the shape of the barrier and compact the backfill every 4"-6" (10cm-15cm). Roots will die quickly if left exposed to the elements so keep exposure of the roots to a minimum.

F. If staking or guying is required we recommend using the soft, safe and economical alternative to traditional wire and hose, ArborTie (see www.deeproot.com for details)

G. If the tree(s) will be subject to maintenance work such as lawn mowing or weed trimming we strongly recommend the installation of ArborGard+ Tree Trunk Protectors which are placed around the base of young trees to protect them from damage by weed trimmers, lawn mowers and small rodents. (See www.deeproot.com)

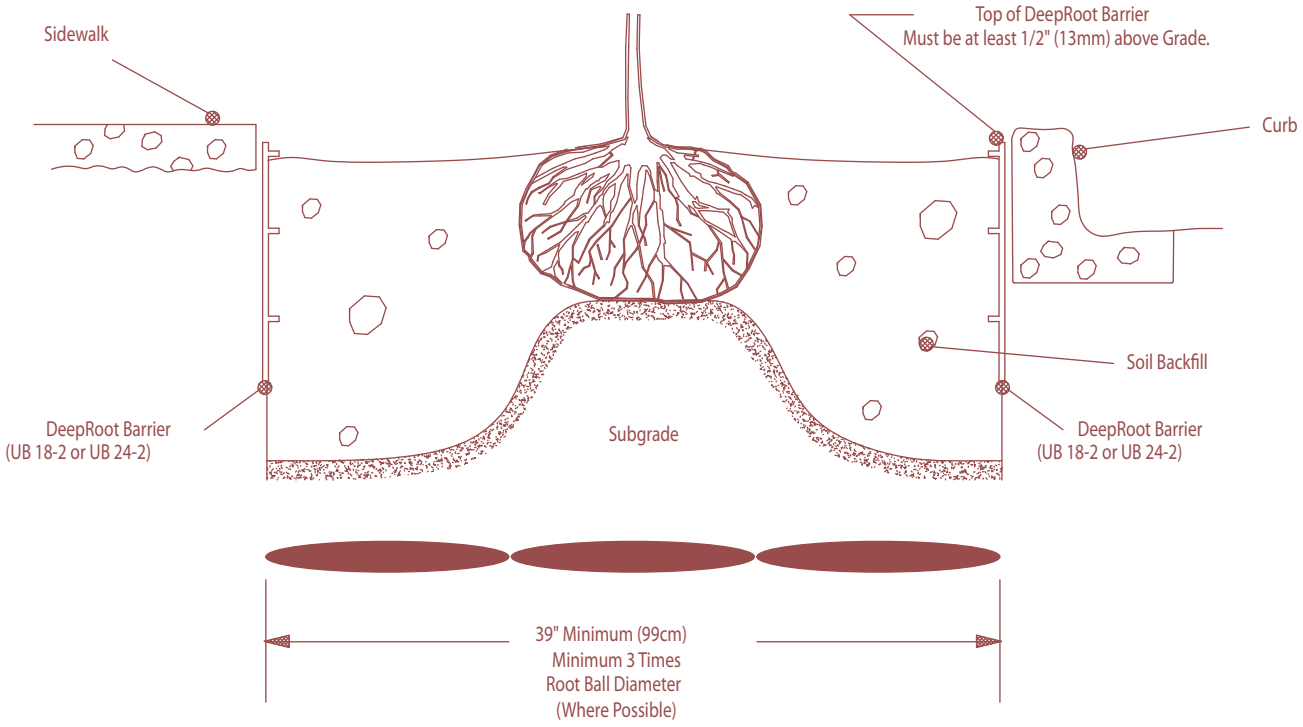
H. Water and follow proper tree maintenance practices.

Trees do require care and nurturing after planting. Consult with your local supplier for proper care procedures for the species you are planting. The planting instructions given here are by no means a comprehensive guide. Rather they are general guidelines to planting with DeepRoot Barriers and a survey of current planting methods. Conditions will vary however and it is recommended that an Arborist be consulted before planting.

For additional information please visit our website at www.deeproot.com

For information regarding distributors please call: 1 800 ILV ROOT (458.7668). For help with drainage or other difficult installation questions please call DeepRoot Technical Support at: 1 800 ROOT TEK (766.8835).

A Typical Surround Planting Installation Using DeepRoot Universal Barrier



General Recommendations for Quality Assurance (QA) Testing*

Item	Parameter	Test Method ASTM unless noted otherwise	Test Frequency or Observations	Requirements
General Earth Fill Below Paving & Structures	Standard Proctor Curve	D698	1 per soil type	--
	Atterberg Limits	D4318	1 per soil type	--
	-200 Mesh Sieve	D1140	1 per soil type	--
	In Situ Density/Moisture Nuclear Gauge	D2922 D3017	1 per each 200 ft. of lane direction per 6 inch lift (2 tests minimum per lift per section)	Density $\geq$ 95% Moisture: PI < 20 (-2 to +5) PI > 20 (0 to +5)
Select Fill	Standard Proctor Curve	D698	1 per soil type	Lean Sandy Clay (CL) or Clayey Sand (SC)
	Atterberg Limits	D4318	1 per soil type	LL $\leq$ 35 6 $\leq$ PI $\leq$ 15
	-200 Mesh Sieve (P 200)	D1140	1 per soil type	P200 $\leq$ 50
	In Situ Density/Moisture Nuclear Gauge	D2922 D3017	1 per each 200 ft. of lane direction per 6 inch lift (2 tests minimum per lift per section)	Density $\geq$ 95% Moisture: (-2 to +5)
Stabilized Subgrade	Standard Proctor Curve	D698	1 per soil type	--
	Atterberg Limits	D4318	1 per soil type	PI $\leq$ 15
	In Situ Density/Moisture Nuclear Gauge	D2922 D3017	1 per each 200 ft. of lane direction (2 tests minimum)	Density $\geq$ 95% Moisture: +3%
	Gradation	D422	1 per 2 Density/Moisture tests	100% Passing 1-3/4" Sieve 60 % passing #4 Sieve
	Depth Check	Survey, drive probe or hand auger	1 per 2 Density/Moisture tests	Min. Specified

*Performed by the Construction Materials Engineering and Testing Company hired by owner.

Item	Parameter	Test Method ASTM unless noted otherwise	Test Frequency or Observations	Requirements
Trench Backfill Below Streets & Structures	Standard Proctor Curve	D698	1 per soil type	--
	Atterberg Limits	D4318	1 per soil type	--
	-200 Mesh Sieve	D1140	1 per soil type	--
	In Situ Density/Moisture Nuclear Gauge	D2922 D3017	1 per each 250 ft. of lane direction per 12 inch lift (2 tests minimum per lift per section)	Density $\geq$ 95% Moisture: -1 to +4
Wall Backfill	Standard Proctor Curve	D698	1 per soil type	--
	Atterberg Limits	D4318	1 per soil type	LL $\leq$ 35 6 $\leq$ PI $\leq$ 15
	-200 Mesh Sieve (P 200)	D1140	1 per soil type	P200 $\leq$ 50
	In Situ Density/Moisture Nuclear Gauge	D2922 D3017	1 per each 200 ft. of lane direction per 8 inch lift 6 inch lifts if hand-operated tampers are used (2 tests minimum per lift per section)	Density $\geq$ 95% Moisture: (-1 to +4)
Crushed Limestone Flexible Base (TxDOT Item 247)	Modified Proctor Curve	D1557	1 per material type	Type A, Grade 1 or better
	Atterberg Limits	D4318	1 per material type	LL $\leq$ 40 PI $\leq$ 12
	Sieve Analysis	D422	1 per material type	0-10 % Passing 1-3/4 inch 45-75 % Passing No. 4 60-85 % Passing No. 40
	Wet Ball Mill	TxDOT	1 per material type	Max. 45
	In Situ Density/Moisture Nuclear Gauge	D2922 D3017	1 per each 200 ft. of lane direction (Streets/Roads)	Density $\geq$ 95% (Modified) Moisture: -2 to +4%

Notes: 1. Table 1 is a guide for sampling and testing. Each of these items may not apply to the specified project.

2. Material changes, suspect areas, or other field conditions may require the engineer to increase testing and sampling frequencies.
3. Minimum of two tests per lift.
4. The moisture content ranges specified are to be considered as maximum allowable ranges. The contractor may have to maintain a more narrow range (within the maximum allowable) in order to consistently achieve the specified density for some soils or under some conditions.