

PROJECT MANUAL

TOWN OF ADDISON

Addison Redding Trail Drainage and Amenity Improvements Addison, Texas



January | 2022

Parkhill Project # 03109421 and 03106821

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SPECIFICATIONS AND CONTRACT DOCUMENTS
FOR
REDDING TRAIL DRAINAGE & AMENITY
IMPROVEMENTS

TOWN OF ADDISON, TEXAS
BID NUMBER 22-56

January 12, 2022

PREPARED BY:

Town of Addison
Parkhill

SUBMITTED BY:

North Rock Construction



TOWN OF ADDISON, TEXAS

MAYOR

Joe Chow

MAYOR PRO TEMPORE

Guillermo Quintanilla

DEPUTY MAYOR PRO TEMPORE

Paul Walden

COUNCILMEMBERS

Tom Braun

Lori Ward

Kathryn Wheeler

Marlin Willesen

CITY MANAGER

Wes Pierson

DEPUTY CITY MANAGER

John Crawford

DIRECTOR OF PARKS AND RECREATION

Janna Tidwell

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SECTION RP
REQUEST FOR PROPOSALS

REQUEST FOR PROPOSALS

1. The Town of Addison, Texas is requesting competitive sealed proposals for the **Redding Trail Drainage & Amenity Improvements** in accordance with the specifications, bid documents and contract document prepared by Parkhill. **Sealed Proposals will be accepted until 2:00 pm, Thursday January 27, 2022**, at the Finance Building located 5350 Belt Line Road, Dallas, Texas 75254 and labeled ATTN: Purchasing Manager. Late proposals will not be considered. The plans, specifications and all bid information are available on www.bidsync.com . The Town of Addison reserves the right to waive any formalities, to reject any and all proposals, and to select the proposal deemed most advantageous to the Town of Addison.

This request for proposals (RFP) is a competitive sealed proposal method in accordance with the Texas Government Code Chapter 2269, Subchapter D.

2. The Contractor shall identify the proposal on the outside of the proposal by writing the words **“PARKS & RECREATION DEPARTMENT BID NO. 22-56, REDDING TRAIL DRAINAGE & AMENITY IMPROVEMENTS.**
3. Proposals shall be accompanied by a Bid Bond in an amount not less than five percent (5%) of the total maximum bid price, 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; or a Binder of Insurance executed by a surety company licensed by the State of Texas to act as a surety or its authorized agent as a guarantee that the bidder will enter into a contract and execute a Performance Bond & Payment Bond within ten (10) days after notice of award of contract to him. Bid bonds need to be signed originals to be valid – no photocopied, faxed, or scanned copies will be accepted.
4. Plans, specifications and proposals documents may be secured electronically through www.bidsync.com. The Town of Addison is a “free buyer”, meaning that all prospective offerors need only a free registration to sign up for plan updates. Offerors assume all risk for acquiring specs and / or plans from third party sites and plan rooms, as only BidSync.com will be directly updated by the Town of Addison.
5. The right is reserved by the Mayor and the City Council as the interests of the City may require to reject any or all proposals and to waive any formality in proposals received and to select the proposal deemed most advantageous to the Town.
6. The Offeror (Proposer) must supply all the information required by the Proposal Form.
7. A Bid Bond will be required by the Owner; in the amount of 5% 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.
8. For information regarding proposals submit all questions on Bidsync. **All questions must be received by 5:00 pm on Friday, January 21, 2022.**

9. The project consists of improvements within the Redding Trail Corridor. Improvements include earthwork, fine grading, paving, segmental block retaining walls, site furnishing installation and landscaping.
10. **A non-mandatory Pre-Bid meeting will be held at the Addison Athletic Club, 3900 Beltway Dr., Addison, TX 2:00 P.M. on January 19, 2022.**

SECTION IB
INSTRUCTIONS TO OFFERORS

INSTRUCTIONS TO OFFERORS

- A. PROJECT: REDDING TRAIL DRAINAGE AND AMENITY IMPROVEMENTS,** in the Town of Addison. The bids will be evaluated as stated in Section "O" of these Instructions to Bidders.
- B. PROJECT DESCRIPTION:** The project consists of earthwork, drainage, fine grading, retaining walls, paving, site furnishings, landscaping and irrigation.
- C. PROPOSALS:** Proposals must be in accordance with these instructions in order to receive consideration.
- D. DOCUMENTS:** Bidding Documents include the Project Manual (consisting of the Advertisement for Bids, these Instructions to Bidders, Proposal Forms, Contract Agreement, General Provisions, Bonds and Technical Specifications), a Waiver of Lien, Drawings, Terms & Conditions, Information and Instructions 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.
- E. 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.
- F. 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 to the Town of Addison, not later than ten (10) calendar days prior to the date set for opening bids, a written request for an interpretation or clarification. 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.
- G. 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 ten (10) calendar days prior to the established bid date.

H. ADDENDA: Interpretations, clarifications, additions, deletions and modifications to the Documents during the bidding period will be issued in the form of Addenda will be issued on Bid Sync. 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 sent by telegram, certified or registered mail, facsimile, email or hand delivered to all prospective bidders (at the respective addresses furnished for such purposes) 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.

I. Evaluation of Proposals:

1. Within 45 days after the date of opening the Proposals, the Owner will evaluate and rank each Proposal with respect to the selection criteria described in Section "N" of these Instructions to Offerors. All procurements shall conform to Texas Government Code Chapter 2269. In evaluating Proposals, the Owner will consider whether or not the Proposals comply with the prescribed requirements, and such alternatives, prices and other data, as may be requested in the Proposal Form or may be requested from Offerors prior to a Notice of Award.
2. In evaluating Proposals, the Owner will consider the Contract Price, Offeror Qualification Statement and other requested information to determine which Proposal offers the best value to the Owner. The Proposals will be evaluated using the information submitted in the Proposal Form and information submitted in the Offeror Qualification Statement.
3. Owner may conduct such investigations as the Owner deems necessary to establish the responsibility, qualifications, and financial ability of contractors, individuals, or entities proposed to furnish parts of the Work in accordance with the Contract Documents.
4. The Owner may request Offeror Interviews as a portion of the evaluation and selection process.
5. The evaluation criteria and weighting are as described this RFP.
6. Submission of a Proposal indicates the Offeror's acceptance of the evaluation technique and methodology as well as the Offeror's recognition that some subjective judgments must be made by the Owner during the evaluation.

J. 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, shop drawings, a detailed construction schedule and other items needed to move forward with construction activities, for acceptance by The Town. The Town shall

review and return these submittals in the most expedient manner possible to accommodate immediate material ordering. Review time will vary based on the number of submittals under review at any given time.

The term "Contract Time" as used in this Provision will mean the sum of the calendar days proposed by the contractor on the proposal form to achieve substantial completion the project, a total of _____ calendar days. The term "calendar day" as used in this Article will mean every day shown on the calendar. The term "substantial completion" means that the improvements have been made suitable for use or occupancy or the facility is in condition to serve its intended purpose, but still may require minor miscellaneous work and adjustment, as determined by the Owner. 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.

1. **Substantial Completion** for the project includes the following items:

- i. Completion of **all work** included in the Contract Documents.
- ii. A Punchlist walk-through with the Town will be performed for this segment and provided to the Contractor. If elements of the project are not complete or numerous defects and/or deficiencies are found during the walk-through, the walk-through will be suspended and Contractor will be required to perform their own Quality Control walk-through and make corrections as needed. Once Contractor's Quality Control corrections has been completed, Contractor shall request another walk-through;
- iii. The Contractor will have thirty (30) days to correct the items on the walk-through Punchlist and request a re-inspection from the Town. If Contractor fails to correct all repairs in this timeframe, Contract Time will be restarted.

2. **Final Acceptance** of the for the project includes the following items:

- i. All Punchlist items completed and accepted by the Town;
- ii. Final clean-up after Punchlist corrections;
- iii. Issue Contractor's Affidavit of Bills Paid
- iv. Submittal of Contractor's Record Drawings; and
- v. Execution of Maintenance Bond.

J. PREPARATION OF PROPOSALS: 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. Bids shall be submitted in duplicate per Item J. 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: A COMPUTER-GENERATED PROPOSAL FORM MAY BE USED IN LIEU OF THE ENCLOSED FORMS. THE FORM SHALL BE 8 1/2" BY 11" IN SIZE, AND WILL BE ATTACHED TO THE PROPOSAL IN THE PROPER SECTION, AND WILL BE MADE PART OF THE PROPOSAL AND CONTRACT DOCUMENTS.

NOTE: THE SPREADSHEET OPTION IS FOR THE CONVENIENCE OF THE BIDDER. NO WORDING IN THE SPREADSHEET SHALL MODIFY OR AMEND THE WORDING IN THE BID PROPOSAL OR PLANS. THE UNIT PRICE ON THE FORM SHALL BE THE PRICE OF THE ITEM, AND ERRORS THAT MAY BE PRESENT IN THE PRINTOUT WILL NOT BE RECOGNIZED AS AN OPPORTUNITY TO REVISE THE PROPOSAL. THE SUMMARY SHEET INCLUDED IN THIS BID DOCUMENT SHALL BE UTILIZED FOR SUMMARIZING THE BID. THE SPREADSHEET SHALL PRESENT EACH ITEM IN THE ORDER AND NUMBER AS SHOWN IN THE CITY'S PROPOSAL AND BID SCHEDULE FOR THIS PROJECT. THE SPREADSHEET SHALL BE IN A COLUMN FORMAT WITH THE FOLLOWING COLUMNS:

1. ITEM NUMBER
2. DESCRIPTION & UNIT PRICE IN WORDS
3. UNIT OF MEASURE
4. UNIT PRICE
5. ESTIMATED QUANTITY
6. AMOUNT BID

K. SUBMITTAL OF PROPOSALS: Sealed proposals, containing one (1) original, three (3) copies and one (1) USB, will be received at the time, date and place stated in the Advertisement for Bids. Proposals shall be made on Proposal Forms furnished by the Town of Addison, an electronic spreadsheet will be made available for use. Offerrors shall submit sealed proposals addressed to the Owner and plainly mark on the outside of the envelope the name and address of the bidder. The submittals shall also be marked with the following project description:

PARKS DEPARTMENT
Redding Trail Drainage & Amenity Improvements

The Bid Bond must be completed and signed by each bidder and submitted with the bid. Submit 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 proposals submitted on bidsync.com will not be considered for this project. Paper proposal submittals are required. The Town of Addison uses bidsync to distribute bids and proposals. There will be NO COST to the contractor for standard proposals.

- L. 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.
- M. 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.
- N. EVALUATION CRITERIA AND WEIGHTING:** The Owner will consider the Contract Price, Statement of Qualifications and other criteria requested of the Offerors to determine which Proposal offers the best value to the Owner. The Proposals will be evaluated using the criteria and weighting described below:

Rating Category	Description	Weighting Value %
A	Proposed Contract Price	50
B	Previous Experience on similar projects and information on the Offerors Qualification Statement. Listing of proposed suppliers and sub-contractors and what their role will be in the project. Experience of Key Personnel that will be assigned to the project.	25
C	A brief overview of the proposed construction schedule & sequencing.	10
D	Construction Time	15
Total		100

The Owner reserves the right to take into account in its evaluation of the Price Proposal, the Total Proposal Amount on the Proposal Form as to its reasonableness for the actual cost of the work to complete the scope of work for this Project. The Owner may take into account the increased risk for contract performance problems that a significantly low Total Proposal Amount could represent.

O. SUBMISSION OF POST-BID INFORMATION: Upon notification of acceptance, the selected bidder shall, within five (5) calendar days, 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.

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 Parks 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.

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, most current edition*, (hereinafter called SSPWC) Item 104.2 "Change or Modification of Contract". Alternate item samples will be provided to the town at no cost to the town, upon request.

- 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:** Not applicable for this project.
- 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 Bid Bond will be required by the Owner. The Bid Bond shall name the Town of Addison, and others as directed by the Town, as joint obligees. Sample forms have been included in the Bid Bond sections. (Contractor shall confirm the legal names of obligees prior to execution of Bonds.) Upon award of contract the contractor shall furnish to the Town a Performance Bond and a Payment Bond within ten (10) working days and a maintenance bond upon Substantial Completion.
- 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, 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) working days after notice of award of contract.
- W. CONSTRUCTION STAKING:** Construction staking and re-staking will not be provided by the Owner. Benchmarks and Horizontal Control are shown on the plans. There is no separate bid item for staking, therefore, 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.

X. 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:

1. A Contractor's Affidavit of Bills Paid in accordance with Section BP.
2. A Consent of Surety Company to Final Payment.
3. A complete set of record plans which indicate all construction variations from the original construction documents in accordance with Item 5 of the Special Provisions.
4. A one (1) year Maintenance Bond in accordance with Section MB.

V. PRIORITY OF CONTRACT DOCUMENTS: In case of conflict between contract documents, priority of interpretation shall be in the following order: signed agreement; performance and payment bonds; proposal; special provisions (or conditions); technical specifications; general provisions; advertisement for bids; project drawings; *Standard Specifications for North Central Texas Council of Governments (NCTCOG)*; Town of Addison Standard Drawings. This priority list shall take precedence over Item 105.1.1 of the SSPWC.

SECTION PF
PROPOSAL FORM

Solicitation 22-56

Rebid Redding Trail Drainage & Amenity Improvements

Bid Designation: Public



Town of Addison

PROPOSAL FORM

January 27, 2022

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 1/24/22
- Addendum No. 2 1/28/22
- Addendum No. 3 2/1/22

The following pages contain all bid items for:

BID SCHEDULE 1 – REDDING TRAIL DRAINAGE & AMENITY IMPROVEMENTS

PACKAGE ONE PROPOSAL FORM

Item No.	Package	Estimate Quantity	Unit	Name of Pay Item with Unit Price in Words	Unit Bid Price	Amount Bid
1.	Package 1 and Package 2	1	LS	Mobilization in accordance with plans and specifications, complete and in place for the price of <i>thirty nine thousand eight hundred ninety one dollars and fifty nine cents</i>	\$ <i>39,891.59</i>	\$ <i>39,891.59</i>
2.	Package 1 and Package 2	1	LS	Erosion control SWPP Plan accommodating Package one and Package two improvements, in accordance with plans and specifications but not limited to: 1. Maintenance, inspection and repair as needed for the duration of the job 2. TCEQ requirements 3. SWPP Plan, any other BMP indicated on the plans and specs, not listed as an item number in the proposal, as required by the Town of Addison complete and in place for the price of <i>Two thousand five hundred eighty three dollars and fifty nine cents.</i>	\$ <i>2,583.59</i>	\$ <i>2,583.59</i>
3.	Package 1	1	LS	Temporary sediment control fence and inlet protection (installed and removed), complete and in place for the sum of <i>Three thousand seventy six dollars and twelve cents</i>	\$ <i>3,076.12</i>	\$ <i>3,076.12</i>
4.	Package 1	1	LS	Construction exit (install and remove), complete and in place for the sum of <i>Three thousand four hundred seventy five dollars and eighty nine cents</i>	\$ <i>3,475.89</i>	\$ <i>3,475.89</i>
5.	Package 1	1	LS	Site Preparation including clearing and grubbing, etc. in accordance with plans and specifications, complete and in place for the price of <i>Four thousand one hundred ninety five dollars and ninety five cents.</i>	\$ <i>4,195.95</i>	\$ <i>4,195.95</i>
6.	Package 1	1	LS	Earthmoving in accordance with plans and specifications complete and in place for the price of <i>sixty four thousand four hundred ninety four dollars and thirteen cents</i>	\$ <i>64,494.13</i>	\$ <i>64,494.13</i>

Item No.	Package	Estimate Quantity	Unit	Name of Pay Item with Unit Price in Words	Unit Bid Price	Amount Bid
7.	Package 1	1	LS	Design / Build Irrigation system (including tap, meter, meter vault, Town compliant backflow, shut off valve, master valve, Irrinet controller with enclosure, turf rotors and spray heads, drip irrigation in planting beds) in accordance with plans and specifications, complete and in place for the price of <i>Twenty eight thousand three hundred sixty two dollars</i>	\$ <i>28362</i>	\$ <i>28362</i>
8.	Package 1	322	CY	Turf area soil amendments (4-inches deep compost mixed into existing topsoil), in accordance with plans and specifications, complete and in place for the price of <i>Seventeen thousand four hundred fifty two dollars and forty cents</i>	\$ <i>54.20</i>	\$ <i>17,452.40</i>
9.	Package 1	26,400	SF	Roll Sod- in accordance with plans and specifications complete and in place for the price of <i>Sixteen thousand eight hundred ninety six dollars</i>	\$ <i>.64</i>	\$ <i>16,896</i>
10.	Package 1	300	CY	Plant bed mix, 12 inch depth, including preparation for bed areas, in accordance with plans and specifications, complete and in place for the price of <i>Sixteen thousand eight dollars</i>	\$ <i>53.36</i>	\$ <i>16,008</i>
11.	Package 1	75	CY	Organic Mulch 3-inch depth at plant beds, in accordance with plans and specifications, complete and in place for the price of <i>Six thousand five hundred twenty five dollars.</i>	\$ <i>87.00</i>	\$ <i>6,525</i>
12.	Package 1	148	EA	Three Gallon Shrubs- in accordance with plans and specifications complete and in place for the price of <i>Three thousand six hundred five dollars and twenty eight cents</i>	\$ <i>24.36</i>	\$ <i>3,605.28</i>
13.	Package 1	123	EA	Five Gallon Shrubs- in accordance with plans and specifications complete and in place for the price of <i>Three thousand one hundred thirty eight dollars and ninety six cents</i>	\$ <i>25.57</i>	\$ <i>3,138.96</i>

Item No.	Package	Estimate Quantity	Unit	Name of Pay Item with Unit Price in Words	Unit Bid Price	Amount Bid
14.	Package 1	57	EA	Thirty Gallon Shrubs- in accordance with plans and specifications complete and in place for the price of <i>Fifteen thousand five hundred thirty eight dollars and twenty cents</i>	\$ <i>272.60</i>	\$ <i>15,538.70</i>
15.	Package 1	1015	LF	Landscape edging in accordance with plans and specifications, complete and in place for the price of <i>Eight thousand two hundred forty one dollars and eighty cents</i>	\$ <i>8.12</i>	\$ <i>8,241.80</i>
16.	Package 1	416	SY	Concrete Pilot Channel with six-inch curbs in accordance with plans and specifications, complete and in place for the price of <i>Forty three thousand three hundred thirteen dollars and ninety two cents</i>	\$ <i>104.12</i>	\$ <i>43,313.92</i>
17.	Package 1	23	SY	Concrete Pilot Channel with ten-inch curb on one side and six-inch curb on the other side in accordance with plans and specifications, complete and in place for the price of <i>Five thousand one hundred fifty five dollars and ninety one cents</i>	\$ <i>224.17</i>	\$ <i>5,155.91</i>
18.	Package 1	2	EA	Tie Concrete Channel into existing grate inlets in accordance with plans and specifications, complete and in place for the price of <i>One thousand four hundred forty nine dollars and ninety six cents</i>	\$ <i>719.98</i>	\$ <i>1,439.96</i>

TOTAL PACKAGE ONE (ITEMS 01-18).....(\$ *283,394.70*)

PACKAGE TWO PROPOSAL FORM

Item No.	Package	Estimate Quantity	Unit	Name of Pay Item with Unit Price in Words	Unit Bid Price	Amount Bid
19.	Package 2	1	LS	Temporary sediment control fence (installed and removed), complete and in place for the sum of <i>two thousand six hundred eighty one dollars and three cents</i>	\$ <i>2,681.03</i>	\$ <i>2,681.03</i>
20.	Package 2	1	LS	Site Preparation including demolition and removal of existing concrete paving, existing pavers, existing wood timber retaining walls, existing benches, and clearing and grubbing, etc. in accordance with plans and specifications, complete and in place for the price of <i>Twenty three thousand five hundred forty one dollars and seventy four cents</i>	\$ <i>23,541.74</i>	\$ <i>23,541.74</i>
21.	Package 2	1	LS	Earthmoving in accordance with plans and specifications complete and in place for the price of <i>fourteen thousand one hundred seventy seven dollars and sixty nine cents</i>	\$ <i>14,177.69</i>	\$ <i>14,177.69</i>
22.	Package 2	2,530	SF	Five-inch thick pedestrian concrete paving on compacted subgrade in accordance with plans and specifications complete and in place for the price of <i>Eighteen thousand five hundred seventy dollars and twenty cents</i>	\$ <i>7.34</i>	\$ <i>18,570.20</i>
23.	Package 2	932	SF	Clay brick pavers on five-inch thick concrete base with six-inch thick concrete edge in accordance with plans and specifications complete and in place for the price of <i>Twenty one thousand one hundred fifty five dollars and forty cents</i>	\$ <i>22.70</i>	\$ <i>21,156.40</i>
24.	Package 2	1	LS	Segmental retaining wall system with engineered shop drawings, complete with footing, blocks, drainage fill, drainage piping, geotextile wrap and geogrid soil reinforcement in accordance with plans and specifications complete and in place for the price of <i>Sixty nine thousand seven hundred fifty dollars and eighty cents</i>	\$ <i>69,750.80</i>	\$ <i>69,750.80</i>
25.	Package 2	4	EA	Bench in pavers mounted on concrete sub-base in accordance with plans and specifications complete and in place for the price of <i>one thousand four hundred twenty eight dollars and ninety two</i>	\$ <i>2,369.73</i>	\$ <i>9,478.92</i>

Item No.	Package	Estimate Quantity	Unit	Name of Pay Item with Unit Price in Words	Unit Bid Price	Amount Bid
26.	Package 2	3.65	CY	Turf area soil amendments (4-inches deep compost mixed into existing topsoil), in accordance with plans and specifications, complete and in place for the price of <i>three hundred thirty eight dollars and seventy two cents</i>	\$ <i>92.80</i>	\$ <i>338.72</i>
27.	Package 2	790	SF	Roll Sod with irrigation modifications by owner- in accordance with plans and specifications complete and in place for the price of <i>one thousand one hundred ninety two dollars and ninety cents</i>	\$ <i>1.51</i>	\$ <i>1,192.90</i>
28.	Package 2	48	CY	Plant bed mix, 12 inch depth, including preparation for bed areas, in accordance with plans and specifications, complete and in place for the price of <i>three thousand four hundred eighty dollars</i>	\$ <i>72.50</i>	\$ <i>3,480</i>
29.	Package 2	12	CY	Organic Mulch 3-inch depth at plant beds, in accordance with plans and specifications, complete and in place for the price of <i>one thousand one hundred thirteen dollars and sixty cents</i>	\$ <i>92.80</i>	\$ <i>1,113.60</i>
30.	Package 2	260	EA	One Gallon Groundcover with irrigation modifications by owner- in accordance with plans and specifications complete and in place for the price of <i>two thousand four hundred twelve dollars and eighty cents</i>	\$ <i>9.28</i>	\$ <i>2,412.80</i>
31.	Package 2	88	EA	Three Gallon Shrubs with irrigation modifications by owner- in accordance with plans and specifications complete and in place for the price of <i>two thousand one hundred forty three dollars and sixty eight cents</i>	\$ <i>24.36</i>	\$ <i>2,143.68</i>
32.	Package 2	6	EA	Five Gallon Shrubs with irrigation modifications by owner- in accordance with plans and specifications complete and in place for the price of <i>one hundred forty six dollars and sixteen cents</i>	\$ <i>24.36</i>	\$ <i>146.16</i>
33.	Package 2 Bid Alternate 'A'	1	LS	Temporary sediment control fence (installed and removed) at fitness court, complete and in place for the sum of <i>two thousand six hundred eighty one dollars and three cents</i>	\$ <i>2,081.03</i>	\$ <i>2,081.03</i>

Item No.	Package	Estimate Quantity	Unit	Name of Pay Item with Unit Price in Words	Unit Bid Price	Amount Bid
34.	Package 2 Bid Alternate 'A'	1	EA	Remove existing picnic table at fitness court and return to owner for the sum of <i>One thousand five hundred fifty four dollars and sixty seven cents</i>	\$ 1,554.67	\$ 1,554.67
35.	Package 2 Bid Alternate 'A'	1	LS	Site Preparation at fitness court including demolition and removal of existing concrete paving, ten-inch caliper tree with stump grinding, and clearing and grubbing, etc. in accordance with plans and specifications, complete and in place for the price of <i>Two thousand sixty three dollars and forty seven cents</i>	\$ 2063.47	\$ 2063.47
36.	Package 2 Bid Alternate 'A'	1	LS	Earthmoving at fitness court in accordance with plans and specifications complete and in place for the price of <i>Three thousand six hundred ninety nine dollars and seventy four cents</i>	\$ 3,699.74	\$ 3,699.74
37.	Package 2 Bid Alternate 'A'	1428	SF	Five-inch thick 4,000 PSI concrete fitness court slab with welded wire mesh reinforcing, vapor barrier and six-inch thick crushed gravel base on compacted subgrade in accordance with plans and specifications complete and in place for the price of <i>seventeen thousand four hundred seventy eight dollars and seventy two cents</i>	\$ 12.24	\$ 17,478.72
38.	Package 2 Bid Alternate 'A'	58	SF	Five-inch thick pedestrian concrete paving on compacted subgrade in accordance with plans and specifications complete and in place for the price of <i>one thousand nine hundred seven dollars and four cents</i>	\$ 32.88	\$ 1,907.04
39.	Package 2 Bid Alternate 'A'	21.7	CY	Turf area soil amendments (4-inches deep compost mixed into existing topsoil), in accordance with plans and specifications, complete and in place for the price of <i>one thousand three hundred eighty four dollars and forty six cents</i>	\$ 63.80	\$ 1,384.46
40.	Package 2 Bid Alternate 'A'	1776	SF	Roll Sod in accordance with plans and specifications complete and in place for the price of <i>one thousand seven hundred fifty eight dollars and twenty four cents</i>	\$.99	\$ 1,758.24
41.	Package 2 Bid Alternate 'A'	1	LS	Design-Build irrigation modifications required at concrete fitness court pad in accordance with plans and specifications complete and in place for the price of <i>four thousand sixty dollars</i>	\$ 4060	\$ 4060

Item No.	Package	Estimate Quantity	Unit	Name of Pay Item with Unit Price in Words	Unit Bid Price	Amount Bid
42.	Package 2 Bid Alternate 'B'	1	LS	Installation of owner provided fitness court equipment and owner provided rubber fitness court tiles on concrete slab - in accordance with plans and specifications complete and in place for the price of <i>Seven thousand twenty one dollars and thirty two cents</i>	\$ <i>7021.32</i>	\$ <i>7021.32</i>

TOTAL PACKAGE TWO (ITEMS 19-32).....(\$ *170,184.64*)
 TOTAL PACKAGE TWO BID ALTERNATE BID 'A' (ITEMS 33-41).....(\$ *30,587.37*)
 TOTAL PACKAGE TWO BID ALTERNATE BID 'B' (ITEM 42).....(\$ *7021.32*)

GRAND TOTAL BID: Bidder proposes to construct "Redding Trail Drainage and Amenity Improvements, Bid #22-55 for the stipulated sum of *four hundred ninety seven thousand one hundred eighty eight* and *03* /100 Dollars (\$ *497,188.03*)

LENGTH OF CONSTRUCTION DAYS: Bidder proposes to complete the construction of the project described herein in *90 calendar* Days.

In addition to the proposed contract price and construction schedule, the items listed below are required for scoring the proposals. Please verify these items have been included in the proposal:

- Previous Project Experience List Similar Project Experience
 Include the following:
 Project Name / Location
 Project Budget
 Date of Completion
 Project Reference Contact Information
- List of Proposed Suppliers and Sub-Contractors and Their Role on the Project
- A Brief Overview of the construction schedule & sequencing

UNIT PRICES

This project is being bid lump sum. The undersigned agrees that in case additional work or materials installation or deduction of work or materials are authorized and requested only by the Owner, the following unit prices will be used in adjusting the contract price. These unit prices shall include all overhead, profit, taxes, materials, labor, incidentals, etc., for a complete installation.

Solid Sod-Bermuda 'Tifway 419' - rolled sod..... \$ *.62* per SF
 Segmental Retaining Wall with footing as specified..... \$ *33.55* per Face Foot
 Deduct unit price -Owner provided pavers installed on contractor provided concrete base as specified..... \$ *-3.00* per SF

UNIT PRICES - IRRIGATION

BIDDER agrees that in case additional materials installation are authorized by the Owner that are in addition to the work shown on the plans, the following unit prices will be used in adjusting the contract price. These unit prices shall include all overhead, profit, taxes, material, labor, etc. for a complete installation of any quantities in excess of the work shown on the plans. All additional work must be authorized by the Owner and the cost agreed to in writing by the Contractor and the Owner before the Contractor shall proceed with any work under this contract.

Description	Unit
-------------	------

IRRIGATION ITEMS

2" Master Valve / Flow Meter	EA.
<i>One thousand one hundred fifty</i>	dollars and <i>zero</i> cents \$ <u>1,150</u>
1-1/2" Water Meter	EA.
<i>One thousand five hundred</i>	dollars and <i>zero</i> cents \$ <u>1500</u>
2" Wye Filter	EA.
<i>One hundred fifty</i>	dollars and <i>zero</i> cents \$ <u>150</u>
2" Ball Valve	EA.
<i>Seventy five</i>	dollars and <i>zero</i> cents \$ <u>75</u>
2" DCA	EA.
<i>Seven hundred fifty</i>	dollars and <i>zero</i> cents \$ <u>750</u>
2" Water Tap and Meter Box	EA.
<i>One thousand two hundred</i>	dollars and <i>zero</i> cents \$ <u>1200</u>

Controller EA.
Eight thousand five hundred dollars and zero cents \$ 8500

Remote Control Valve EA.
two hundred fifty dollars and zero cents \$ 250

Drip Zone Valve Kit EA.
Two hundred seventy five dollars and zero cents \$ 275

Gang Wire Splice/Pull Box EA.
Two hundred dollars and zero cents \$ 200

PVC Lateral Line L.F.
Two dollars and zero cents \$ 2

Drip Tubing L.F.
One dollars and twenty five cents \$ 1.25

Quick Coupler Valve EA.
Two hundred fifty dollars and zero cents \$ 250

- NOTES: 1. 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.
2. Prices must be shown in words and figures for each item listed in the Proposal. In the event of discrepancy, the words shall control.
3. 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.

John F Gann II

Name of Person Signing Bid

Signature of Person Signing Bid

525 S Loop 288 Suite 105 Denton, Tx 76205

Address

940-220-5500

Telephone No.

877-305-4657

Fax No.

27-0416466

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

A CORPORATION

By _____ North Rock Construction LLC
(Corporation Name)

_____ Texas
(State of Incorporation)

By _____ John F Gann II
(Name of Person Authorized to Sign)

_____ President
(Title)

(Corporate Seal)

Attest _____
(Secretary)

Business address: _____ 525 S Loop 288 Suite 105 Denton, Tx 76205

Phone No. _____ 940-220-5500



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.)

Information and Instruction Form

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

Section I Company Profile

Name of Business: North Rock Construction LLC

Business Address: 525 S Loop 288 Suite 105
Denton, Tx 76205

Contact Name: John F Gann II

Phone#: 940-220-5500

Fax#: 877-305-4657

Email: jgann@nrockconstruction.com

Name(s) Title of Authorized Company Officers: John F Gann II - President
Kenneth Williamson - VP

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

DUN #: 27-0416466

Remit Address: If different than your physical address:

Section II Instructions to Bidders

Electronic Bids: The Town of Addison uses BidSync to distribute and receive bids and proposals. There will be **NO COST** to the Contractor/Supplier for Standard bids or proposals. For **Cooperative Bids and Reverse Auctions ONLY**, the successful contractor/supplier agrees to pay BidSync a transaction fee of one percent (1%) of the total amount of all contracts for goods and/or services. **Cooperative Bids and Reverse Auctions** will be clearly marked on the bid documents. To assure that all contractors/suppliers are treated fairly, the fee will be payable whether the bid/proposal is submitted electronically, or by paper means. Refer to www.bidsync.com for further information.

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 - No Addendums

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

Town of Addison

5350 Beltline 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 30 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/cmb1/cmb1hub.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: 1/27/2022 

Title: President

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

10/17/17



CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.
 Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY CERTIFICATION OF FILING

Certificate Number:
 2022-858013

Date Filed:
 03/07/2022

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

North Rock Construction
 Denton, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Town of Addison

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

Bid No. 22-16
 Concrete Pavement, Landscaping, Earthwork, Furnishings, Concrete Pilot Channel, Amenity Improvements

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary
	Gann II, Johnyy	Denton, TX United States	X	

5 Check only if there is NO Interested Party.

6 UNSWORN DECLARATION

My name is John Gann II, and my date of birth is 12/3/1975.

My address is 525 South Loop 288 Suite 105, Denton, Tx, 76205, USA.
(street) (city) (state) (zip code) (country)

I declare under penalty of perjury that the foregoing is true and correct.

Executed in Denton County, State of Texas, on the 7th day of March, 20 22.
(month) (year)


 Signature of authorized agent of contracting business entity
(Declarant)

AGENCY CUSTOMER ID: _____

LOC #: _____



ADDITIONAL REMARKS SCHEDULE

Page ____ of ____

AGENCY K&S Insurance Agency		NAMED INSURED North Rock Construction, LLC	
POLICY NUMBER		EFFECTIVE DATE:	
CARRIER	NAIC CODE		

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: 25 **FORM TITLE:** Certificate of Liability Insurance: Notes

GENERAL LIABILITY:

General Liability policy includes automatic additional insured endorsements for ongoing and completed operations that provides additional insured status to the certificate holder only when there is a written contract between the named insured and the certificate holder that requires such status.

General Liability policy includes automatic additional insured endorsements for lessor of leased equipment that provides additional insured status to the certificate holder only when there is a written contract between the named insured and the certificate holder that requires such status.

General Liability policy contain an endorsement with "Primary and Noncontributory" wording.

General Liability policy includes automatic waiver of subrogation endorsement that provides this feature only when there is a written contract between the named insured and the certificate holder that requires it.

AUTOMOBILE LIABILITY:

Automobile policy includes a blanket additional insured endorsement that provides additional insured status to the certificate holder only when there is a written contract between the named insured and the certificate holder that requires such status.

Automobile policy contain an endorsement with "Primary and Noncontributory" wording.

Automobile policy includes automatic waiver of subrogation endorsement that provides this feature only when there is a written contract between the named insured and the certificate holder that requires it.

WORKERS COMPENSATION:

Workers Compensation policy includes a blanket waiver of subrogation endorsement that provides this feature only when there is a written contract between the named insured and the certificate holder that requires it.

*ALWAYS REFER TO THE ATTACHED POLICY FORMS FOR SPECIFIC WORDING OF SUCH COVERAGE, LIMITS, CONDITIONS AND EXCLUSIONS.

References

Project Name and Location:	Moore/Riverchase/Fairway Bike Lane Project	Coppell, TX
Contract Amount:	\$ 633,451.92	
Scope of work:	Construction of new sidewalk paving, concrete curb & gutter, sidewalk w/internal retaining wall, accessible ramps, erosion control, concrete removal, striping, signage, and revegetation.	
Owner Contact Info:	City of Coppell, TX (972) 462-5115 255 Parkway Blvd.	John Elias JElias@coppelltx.gov Coppell, TX. 75019
Project Name and Location:	E. Jefferson Bridge # 2 Rehabilitation	Grand Prairie, TX
Contract Amount:	\$ 516,812.91	
Scope of work:	Erosion control & prep of ROW, remove existing concrete & metal, remove & repair cracked concrete, install new guard fence & rail, concrete, wing wall extensions, bridge rail & transitions.	
Owner Contact Info:	City of Grand Prairie, TX (972) 237-8529 PO Box 534045	Leland Miller Lrmiller@gptx.org Grand Prairie, TX 75051
Project Name and Location:	Roy Orr Bridge	Grand Prairie, TX
Contract Amount:	\$ 437,212.78	
Scope of work:	Demo and haul off, excavation and grading, excavate & fill, block sodding, install concrete, void fill, compacted base, install toe walls, under drain and shoulder drain.	
Owner Contact Info:	City of Grand Prairie, TX (972) 237-8529 PO Box 534045	Leland Miller Lrmiller@gptx.org Grand Prairie, TX 75051

Project Name and Location:	Heritage Park Phase IV	Flower Mound, TX
Contract Amount:	\$ 1,423,060.18	
Scope of work:	Clearing & grubbing, erosion control, nature observation platform, entry sign, pavilion, sundial entry circle, retaining wall, disc golf course, culvert crossings, concrete parking lot, enhanced concrete trail, landscape, irrigation, electrical, handrail, and dry creek bed/boulder outcropping.	
Owner Contact Info:	Town of Flower Mound, TX	David Bauer
	(972) 874-6308	david.bauer@flower-mound.com
	2121 Cross Timbers	Flower Mound, TX 75028
Project Name and Location:	Saint Jo ISD, Tennis Courts	Saint Jo, TX
Contract Amount:	\$ 184,880.40	
Scope of Work:	Two (2) tennis courts with associated parking, access sidewalks, and fencing. realignment of access driveway to new courts.	
Owner Contact Info:	Saint Jo Independent School District	Larry H. Smith, Superintendent
	(940) 995-2668	larry.smith@esc9.net
	206 W. Evans St	Saint Jo, TX 76265
Project Name and Location:	Watters Crossing	Allen, TX
Contract Amount:	\$ 369,894.23	
Scope of Work:	Demo & haul off, excavation & grading, handicap & playground ramps, new concrete pavement, hike & bike trail, drainage, install grills, benches and playground units, construct decomposed granite walk & seating area, install stone veneer, sod, repair irrigation system and add drainage.	
Owner Contact Info:	City of Allen, TX	Matthew D. McComb, Landscape Architect
	(214) 509-4721	mmccomb@cityofallen.org
	900 S Greenville Ave	Allen, TX 75002

Project Name and Location:	Carrollton Downtown Trail	Carrollton, TX
Contract Amount:	\$ 480,000.67	
Scope of Work:	Fiber reinforced concrete trail, trail widening, pavement markings, pedestrian bridge, trail amenities, landscaping, irrigation and pavers.	
Owner Contact Info:	City of Carrollton, TX	Andrew Combs, PE
	(972) 466-3078	andrew.combs@cityofcarrollton.com
	1945 E. Jackson Rd	Carrollton, TX 75006
Project Name and Location:	Trash Interceptor for West Irving Creek Outlet	City of Irving, TX
Contract Amount:	\$ 648,766.83	
Scope of Work:	all concrete, steel, appurtenances, tools, equipment, labor and incidentals necessary to install complete in place the drive aisles, pavement, reinforced concrete footings, gabions, and associated site work for the trash interceptor structures	
Owner Contact Info:	City of Irving, TX	Gene Moulden, Planning Manager
	(972) 721-2719	gmoulen@cityofirving.org
	825 W Irving Blvd	Irving, TX 75060
Project Name and Location:	G. Roland Vela Athletic ComplexDenton, TX.	
Contract Amount:	\$ 5,692,727.00	
Scope of Work:	Construction of a 16ac. Four field athletic complex; earth work & site grading, 400 space concrete parking lot, athletic field lighting, concession/restroom building, utilities, landscape & irrigation, pedestrian paving, playground structure, shade pavilions, and drainage culvert bridge.	
Owner Contact Info:	City of Denton, TX	Jim Mays, Construction Admin
	(940) 349-7200	jim.mays@cityofdenton.com
	869 S. Woodrow	Denton, TX 76205

Project Name and Location:	Pedestrian Trail Connection Project	Highland Village, TX
Contract Amount:	\$ 1,007,937.92	
Scope of Work:	5" and 6" reinforced concrete pavement, reinforced concrete pipe and box culvert drainage structures, inlets, headwalls, stone veneer reinforced concrete retaining walls, landscaping, irrigation, electrical, and other misc. related appurtenances	
Owner Contact Info:	City of Highland Village, TX (972) 317-7430 1000 Highland Village Rd	Fince Espinosa fespinoza@highlandvillage.org Highland Village, TX 75077
Project Name and Location:	The Dog Park at Jack Carter Park	Plano, TX
Contract Amount:	\$ 531,613.46	
Scope of Work:	Entry gates, fence and plaza reconstruction, shade shelters, lighting and controls, irrigation system, misc. concrete paving and site furnishings.	
Owner Contact Info:	City of Plano, TX (972) 941-7271 PO Box 860358	Bill Dakin billd@plano.gov Plano, TX 75086-0358
Project Name and Location:	Hillside Park	Allen, TX
Contract Amount:	\$ 252,142.76	
Scope of Work:	Concrete flatwork, playground improvements, masonry signage, demo, landscape, earthwork and irrigation.	
Owner Contact Info:	City of Allen, TX (214) 509-4720 900 S. Greenville Ave.	Laura Demos, Park Planner ldemos@cityofallen.org Allen, TX 75002

Sub contractors and suppliers for Addison Redding Trail

Meade – Erosion Control

Garrett Perkins 469-578-0525

Perfect Finish Landscaping – Landscaping

Brandon Sohn 940-390-0784

AIM Construction – Paver material and installation

Jared Sterling 817-991-9093

JDK – Walls materials and installation

Morgan Mueller 830-980-4037

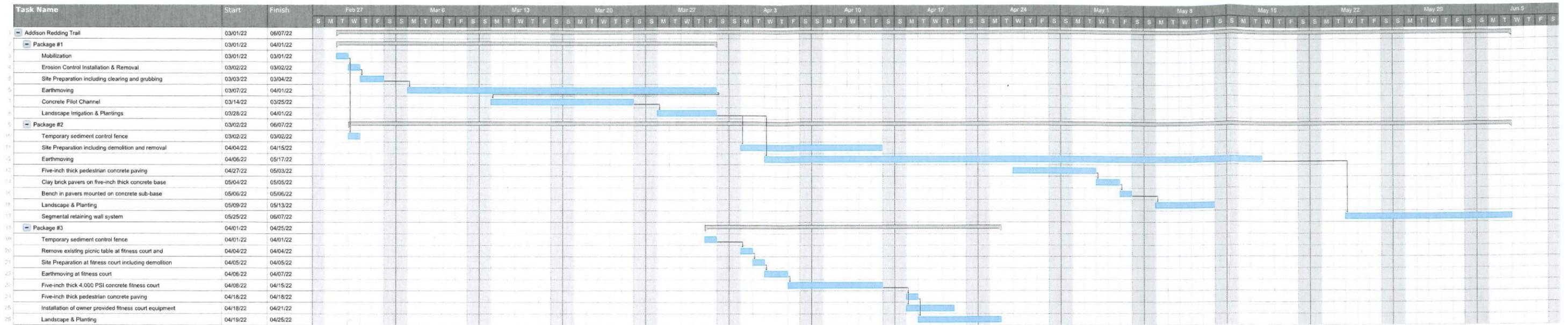
Redi Mix Concrete – Concrete

Sales 817-835-4020

CMC Construction Services – Rebar materials

Sales 214-631-6699

Addison Redding Project



SECTION CA
CONTRACT AGREEMENT

CONSTRUCTION SERVICES AGREEMENT
Redding Trail Drainage & Amenity Improvements Project
(Bid #22-56)

This CONSTRUCTION SERVICES AGREEMENT (“Agreement”) is made as of the Effective Date by and between **North Rock Construction, LLC**, a Texas Limited Liability Company, hereinafter called “CONTRACTOR”, and the **Town of Addison, Texas**, hereinafter called “CITY”.

RECITALS

WHEREAS, CITY desires CONTRACTOR to perform certain work and services set forth in Section 1 (the “Scope of Services”), and

WHEREAS, CONTRACTOR has expressed a willingness to perform said work and services, hereinafter referred to only as “services”, specified in the Contract Documents and Section 1 of this Agreement.

NOW, THEREFORE, for and in consideration of the covenants and promises made one to the other herein, CITY and CONTRACTOR agree as follows:

Section 1. Scope of Services

Upon issuance of a written notice to proceed by CITY, CONTRACTOR agrees to provide to CITY the necessary services, labor, materials, equipment and supplies related to the Redding Trail Drainage & Amenity Improvements Project (the “Project”), such services being more fully described herein and pursuant to the plans and specifications identified in the Contract Documents.

Section 2. Term of Agreement

The term of this Agreement shall begin on the last date of execution hereof (the “Effective Date”) and shall continue until CONTRACTOR completes the services required herein to the satisfaction of CITY and has been paid in full by City, unless sooner terminated as provided in Section 9, below.

Section 3. Contract Documents

A. This Agreement is a part of the “Contract Documents”, which include:

- (1) This Agreement, including all exhibits and addenda hereto;
- (2) CITY’S plans, specifications, and all other contract documents for the Project contained in the City’s Invitation for Bid #22-56 (“Bid Packet”);
- (3) CITY’S written notice(s) to proceed to the CONTRACTOR;
- (4) Properly authorized change orders;
- (5) CONTRACTOR’S Bid Proposal (“Proposal” and/or “Response”); and
- (6) Any other materials distributed by the CITY that relate to the Project.

In the event there exists a conflict between any term, provision and/or interpretation of the Contract Documents, the documents shall take precedent and control in the order listed above in this section (which shall supersede any conflicting provision concerning priority of contract documents contained in the Bid Packet). If discrepancies are found that may impact construction of the Project, it shall be the Contractor’s obligation to seek clarification as to which requirements or provisions control before undertaking any work on that component of the Project. Should the Contractor fail or refuse to seek a clarification of such conflicting or inconsistent requirements or provisions prior to any work on that component of the Project, the Contractor

shall be solely responsible for the costs and expenses - including additional time - necessary to cure, repair and/or correct that component of the Project.

Section 4. Contractor Obligations

A. CONTRACTOR shall devote such time as reasonably necessary for the satisfactory performance of the work under this Agreement. Should CITY require additional services not included under this Agreement, CONTRACTOR shall make reasonable effort to provide such additional services at mutually agreed charges or rates, and within the time schedule prescribed by CITY; and without decreasing the effectiveness of the performance of services required under this Agreement.

B. To the extent reasonably necessary for CONTRACTOR to perform the services under this Agreement, CONTRACTOR shall be authorized to engage the services of any agents, assistants, persons, or corporations that CONTRACTOR may deem proper to aid or assist in the performance of the services under this Agreement with the prior written approval of CITY. The cost of such personnel and assistance shall be a reimbursable expense to CONTRACTOR only if authorized in writing in advance by CITY.

C. Unless otherwise agreed, CONTRACTOR shall provide and pay for all materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and all water, light, power, fuel, transportation and all other facilities necessary for the execution and completion of the work covered by the Scope of Services. Unless otherwise specified, all materials shall be new and both workmanship and materials shall be of a good quality. CONTRACTOR shall, if required, furnish satisfactory evidence as to the kind and quality of materials. Materials or work described in words that so applied have well known, technical or trade meaning shall be held to refer to such recognized standards.

D. CONTRACTOR shall comply with all laws, ordinances, rules and regulations governing CONTRACTOR's performance of this Agreement.

E. All minor details of the work not specifically mentioned in the Scope of Services or Contract Documents but obviously necessary for the proper completion of the work, such as the proper connection of new work to old, shall be considered as incidental to and a part of the work for which the prices are set forth in this Agreement. CONTRACTOR will not be entitled to any additional compensation therefor unless specifically stated otherwise. Otherwise the term "extra work" as used in this Agreement shall be understood to mean and include all work that may be required by CITY to be done by CONTRACTOR to accomplish any alteration or addition to the work as shown on the Project plans and drawings. It is agreed that CONTRACTOR shall perform all extra work under the direction of the City's representative when presented with a written work order signed by the City's representative, subject, however, to the right of CONTRACTOR to require written confirmation of such extra work order by CITY. Payment for extra work shall be as agreed in the work order.

F. No claims for extra services, additional services or changes in the services whatsoever, including any change in pricing or time for performance related to the services will be made by CONTRACTOR without first obtaining the CITY's written agreement and approval of a change order reflecting the same.

Section 5. Payment

A. CITY agrees to pay CONTRACTOR for all services authorized in writing and properly performed by CONTRACTOR in a total amount not to exceed FOUR HUNDRED AND NINETY-SEVEN THOUSAND, ONE HUNDRED AND EIGHTY-EIGHT DOLLARS AND THREE CENTS (\$497,188.03) ("Contract Price"), subject to additions or deletions for changes or extras agreed upon in writing. Unless otherwise provided herein, payment to CONTRACTOR shall be monthly based on the CONTRACTOR'S

monthly progress report and detailed monthly itemized statement for services that shows the names of the CONTRACTOR'S employees, agents, contractors performing the services, the time worked, the actual services performed, and the rates charged for such services, in a form reasonably acceptable to CITY. CITY shall pay such monthly statements within thirty (30) days after receipt and CITY verification of the services.

B. CITY may deduct from any amounts due or to become due to CONTRACTOR any sum or sums owing by CONTRACTOR to CITY. In the event of any breach by CONTRACTOR of any provision or obligation of this Agreement, or in the event of the assertion by other parties of any claim or lien against CITY, or the CITY'S premises, arising out of CONTRACTOR's performance of this Agreement, CITY shall have the right to retain out of any payments due or to become due to CONTRACTOR an amount sufficient to completely protect the CITY from any and all loss, damage or expense therefrom, until the breach, claim or lien has been satisfactorily remedied or adjusted by CONTRACTOR.

C. CITY may, on account of subsequently discovered evidence, withhold the whole or part of any payment to such extent as may be necessary to protect itself from loss on account of:

- (1) defective work not remedied;
- (2) claims filed or reasonable evidence indicating possible filing of claims;
- (3) failure of CONTRACTOR to make payments promptly to subcontractors or for material or labor which CITY may pay as an agent for the CONTRACTOR; or
- (4) damages to another contractor or subcontractor.

When the above grounds are removed, or CONTRACTOR provides a surety bond satisfactory to CITY which will protect CITY in the amount withheld because of said grounds, CITY will release the amounts withheld.

Section 6. Responsibilities

A. CONTRACTOR shall be responsible for the professional quality, technical accuracy, and the coordination of all materials, construction, installation and other services furnished by CONTRACTOR under this Agreement. CONTRACTOR shall, without additional compensation, correct or revise any errors or deficiencies in the installation and construction of the Project components to conform as shown in the Project drawings and specifications.

B. Neither CITY's review, approval or acceptance of, nor payment for any of the services required under this Agreement, shall be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement, and CONTRACTOR shall be and remain liable to CITY in accordance with applicable law for all damages to CITY caused by CONTRACTOR's negligent performance of any of the services furnished under this Agreement.

Section 7. Time for Performance

A. CONTRACTOR shall perform all services as provided for under this Agreement in a proper, efficient, timely, and professional manner in accordance with CITY'S requirements. The time for performance under this Agreement is ninety (90) calendar days. Accordingly, CONTRACTOR shall complete all work related to the Project on or before ninety (90) calendar days following the date of CITY'S written notice to proceed to CONTRACTOR.

B. In the event CONTRACTOR's performance of this Agreement is delayed or interfered with by acts of the CITY or others, CONTRACTOR may request an extension of time for the performance of same

as hereinafter provided, but shall not be entitled to any increase in fee or price, or to damages or additional compensation as a consequence of such delays.

C. No allowance of any extension of time, for any cause whatever (including an event of force majeure), shall be claimed by or granted to CONTRACTOR, unless (i) CONTRACTOR shall have made written request to CITY for such extension within forty-eight (48) hours after the cause for such extension occurred, and (ii) CITY and CONTRACTOR have agreed in writing that such additional time shall be granted. As used in this section, the term '*force majeure*' shall mean that CONTRACTOR's performance of the services under this Agreement is prevented or delayed, in whole or in part, to such an extent that CONTRACTOR would not be able to complete the services (or any partial component thereof) within the time for performance set forth herein by reason of or through work strikes, stoppage of labor, riot, fire, flood, acts of war, insurrection, court judgment, act of God, pandemic, or other specific cause reasonably beyond CONTRACTOR's control and not attributable to its malfeasance, neglect or nonfeasance. Should CONTRACTOR timely request an extension of time due to an event of force majeure under this section, CITY and CONTRACTOR may agree in writing to suspended CONTRACTOR's performance until such disability to perform (other than a payment obligation) is removed; provided, that CONTRACTOR shall use commercially reasonable efforts to remove any such causes and resume performance of the services under this Agreement as soon as reasonably practicable.

D. CONTRACTOR understands and agrees that time is of the essence of this contract, and that for each day of delay beyond the number of calendar days agreed upon for the completion of the work herein specified and contracted for (after due allowance for such extension of time as may otherwise be provided for extension of time herein), the Owner may withhold permanently from the Contract Price an amount equal to \$2,500.00 per day, which the parties agree represents a reasonable estimation of the actual costs that would be incurred by the CITY in the event of such delay.

Section 8. Ownership of Project; Bill of Sale; No Liens

A. CONTRACTOR warrants that title to all services, including all equipment and materials incorporated into the Project, will pass to CITY no later than the time of final payment. CONTRACTOR further warrants that upon payment by CITY, all services for which payments have been received from CITY shall be free and clear of liens, claims, security interests or other encumbrances in favor of CONTRACTOR or any other person or entity whatsoever.

B. CONTRACTOR agrees to assign to CITY at the time of completion of the Scope of Services all manufacturer's warranties relating to equipment, materials and labor used in the Project and further agrees to perform the Project in such manner to preserve all manufacturer's warranties. If necessary as a matter of law, CONTRACTOR may retain the right to enforce directly any such manufacturers' warranties during the one year period following the date of acceptance of the Project by City.

C. CONTRACTOR AGREES TO INDEMNIFY, DEFEND, AND SAVE CITY HARMLESS FROM ALL CLAIMS RELATED TO ANY DEMANDS OF SUBCONTRACTORS, LABORERS, WORKMEN, MECHANICS, MATERIALMEN, AND SUPPLIERS OF MACHINERY AND PARTS THEREOF, EQUIPMENT, POWER TOOLS, ALL SUPPLIES ARISING OUT OF THE PERFORMANCE OF THIS AGREEMENT. When CITY requests, CONTRACTOR shall furnish satisfactory evidence that all obligations described herein have been paid, discharged or waived.

Section 9. Default; Termination; Abandonment

A. Default by Contractor. Should CONTRACTOR fail to comply with any term or condition this Agreement applicable to CONTRACTOR, or become disabled and unable to comply with any provisions of this Agreement related to the quality or character of the services or time of performance, CONTRACTOR

shall be deemed in default of this Agreement. If such default is not corrected within ten (10) days after written notice by CITY to CONTRACTOR, CITY may, at its sole discretion without prejudice to any other right or remedy:

- (1) Terminate this Agreement and be relieved of the payment of any further consideration to CONTRACTOR except for all services determined by CITY to be satisfactorily completed prior to termination. Payment for work satisfactorily completed shall be for actual costs, including reasonable salaries and travel expenses of CONTRACTOR to and from meetings called by CITY at which CONTRACTOR is required to attend, but shall not include any loss of profit of CONTRACTOR. CITY may further proceed to complete the services in any manner deemed proper by CITY, either by the use of its own forces or by resubletting to others; or
- (2) CITY may, without terminating this Agreement or taking over the services, furnish the necessary materials, equipment, supplies and/or help necessary to remedy the situation, at the expense of CONTRACTOR.

B. Suspension or Termination by City. CITY may suspend or terminate this Agreement for cause or without cause at any time by giving written notice to CONTRACTOR. In the event suspension or termination is without cause, payment to CONTRACTOR, in accordance with the terms of this Agreement, will be made based on services reasonably determined by CITY to be satisfactorily performed as of the date of suspension or termination. Such payment will become payable upon delivery of all instruments of service to CITY and CITY's acceptance of the same. If CITY requires a modification of this Agreement with CONTRACTOR, and in the event CITY and CONTRACTOR fail to agree upon a modification to this Agreement, CITY shall have the option of terminating this Agreement and CONTRACTOR's services hereunder at no additional cost other than the payment to CONTRACTOR, in accordance with the terms of this Agreement, for the services reasonably determined by CITY to be properly performed by CONTRACTOR prior to such termination date.

C. Abandonment. If CONTRACTOR should abandon and fail or refuse to resume work within ten (10) days after written notification from the City, or if CONTRACTOR fails to timely comply with the orders of the CITY, when such orders are consistent with the Contract Documents, then, and in that case, where a performance bond(s) exists, the surety on the bond(s) may be notified in writing by CITY and directed to complete the work (at CITY'S sole discretion), and a copy of said notice shall be delivered to CONTRACTOR. After receiving said notice of abandonment, CONTRACTOR shall not remove from the work any machinery, equipment, tools, materials or supplies then on the job, but the same, together with any materials and equipment under contract for the work, may be held for use on the work by the CITY or the surety on the performance bond, or another contractor in completion of the work; and CONTRACTOR shall not receive any rental or credit therefor, having hereby acknowledged that the use of such equipment and materials will ultimately reduce the cost to complete the work and be reflected in the final settlement. The remedies in this section are cumulative and nothing herein shall be deemed a waiver of any other remedy available to the CITY under this Agreement, including its remedies upon default provided herein above.

- (1) In the event a surety fails to comply with CITY's written notice for completion provided for herein, within ten (10) days after service such notice, then the CITY may provide for completion of the work in either of the following elective manners:
 - (a) The CITY may employ such labor and use such machinery, equipment, tools, materials and supplies as said CITY may deem necessary to complete the work and charge the expense of such labor, machinery, equipment, tools, materials and supplies to said CONTRACTOR, and expense so charged shall be deducted and paid by the CITY out of such moneys as may be due, or that may thereafter at any

time become due to the CONTRACTOR under and by virtue of this Agreement. In case such expense is less than the sum which would have been payable under this Agreement, if the same had been completed by the CONTRACTOR, then said CONTRACTOR shall receive the difference. In case such expense is greater than the sum which would have been payable under this Agreement, if the same had been completed by said CONTRACTOR, then the CONTRACTOR and/or its surety shall pay the amount of such excess to the CITY; or

- (b) The CITY may (under sealed bids when and in the manner required by law) let the contract to another contractor for the completion of the work under substantially the same terms and conditions which are provided in this Agreement. In the case of any increase in cost to the CITY under the new contract as compared to what would have been the cost under this Agreement, such increase shall be charged to the CONTRACTOR and its surety shall be and remain bound therefor. However, should the cost to complete any such new contract prove to be less than what would have been the cost to complete under this Agreement, the CONTRACTOR and/or its surety shall be credited therewith.

Section 10. Insurance

A. CONTRACTOR shall during the term hereof maintain in full force and effect such insurance policies as the CITY may reasonably require for the Project, including, at a minimum, the following insurance:

- (1) a comprehensive general liability policy of insurance for bodily injury, death and property damage insuring against all claims, demands or actions relating to the CONTRACTOR's performance of services pursuant to this Agreement with a minimum combined single limit of not less than \$2,000,000.00 per occurrence and \$4,000,000.00 aggregate for injury to persons (including death), and for property damage; and
- (2) a policy of automobile liability insurance covering any vehicles owned and/or operated by CONTRACTOR, its officers, agents, and employees, and used in the performance of this Agreement with policy limits of not less than \$1,000,000.00 combined single limit and aggregate for bodily injury and property damage; and
- (3) statutory Worker's Compensation Insurance at the statutory limits and Employers Liability covering all of CONTRACTOR's employees involved in the provision of services under this Agreement with policy limit of not less than \$500,000.00.

B. All insurance and certificate(s) of insurance shall:

- (1) provide for at least thirty (30) days prior written notice to CITY for cancellation or non-renewal of the insurance; and
- (2) name CITY, its officers, and employees as additional insureds as to all applicable coverage with the exception of Workers Compensation Insurance; and
- (3) provide for a waiver of subrogation against CITY for injuries, including death, property damage, or any other loss to the extent the same is covered by the proceeds of insurance.

C. All insurance companies providing the required insurance shall be authorized to transact business in Texas and rated at least "A" by AM Best or other equivalent rating service.

D. A certificate of insurance evidencing the required insurance and all endorsements shall be submitted prior to commencement of services. Contractor shall provide written notice to CITY of any material change of or to the insurance required herein.

Section 11. Indemnification

CITY SHALL NOT BE LIABLE FOR ANY LOSS, DAMAGE, OR INJURY OF ANY KIND OR CHARACTER TO ANY PERSON OR PROPERTY ARISING FROM THE SERVICES OF CONTRACTOR PURSUANT TO THIS AGREEMENT. CONTRACTOR HEREBY WAIVES ALL CLAIMS AGAINST CITY, ITS OFFICERS, AGENTS AND EMPLOYEES (COLLECTIVELY REFERRED TO IN THIS SECTION AS "CITY") FOR DAMAGE TO ANY PROPERTY OR INJURY TO, OR DEATH OF, ANY PERSON ARISING AT ANY TIME AND FROM ANY CAUSE OTHER THAN THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF CITY OR BREACH OF CITY'S OBLIGATIONS HEREUNDER. CONTRACTOR AGREES TO INDEMNIFY AND SAVE HARMLESS CITY FROM AND AGAINST ANY AND ALL LIABILITIES, DAMAGES, CLAIMS, SUITS, COSTS (INCLUDING COURT COSTS, REASONABLE ATTORNEYS' FEES AND COSTS OF INVESTIGATION) AND ACTIONS OF ANY KIND BY REASON OF INJURY TO OR DEATH OF ANY PERSON OR DAMAGE TO OR LOSS OF PROPERTY TO THE EXTENT CAUSED BY CONTRACTOR'S PERFORMANCE OF SERVICES UNDER THIS AGREEMENT OR BY REASON OF ANY NEGLIGENT ACT OR OMISSION ON THE PART OF CONTRACTOR, ITS OFFICERS, DIRECTORS, SERVANTS, EMPLOYEES, REPRESENTATIVES, CONSULTANTS, LICENSEES, SUCCESSORS OR PERMITTED ASSIGNS (EXCEPT WHEN SUCH LIABILITY, CLAIMS, SUITS, COSTS, INJURIES, DEATHS OR DAMAGES ARISE, IN WHOLE OR IN PART, FROM OR ARE ATTRIBUTED TO THE GROSS NEGLIGENCE OF CITY, IN WHICH CASE CONTRACTOR SHALL INDEMNIFY CITY ONLY TO THE EXTENT OR PROPORTION OF NEGLIGENCE ATTRIBUTED TO CONTRACTOR AND/OR ITS OFFICERS, DIRECTORS, SERVANTS, EMPLOYEES, REPRESENTATIVES, CONSULTANTS, LICENSEES, SUCCESSORS OR PERMITTED ASSIGNS AS DETERMINED BY A COURT OR OTHER FORUM OF COMPETENT JURISDICTION). CONTRACTOR'S OBLIGATIONS UNDER THIS SECTION SHALL NOT BE LIMITED TO THE LIMITS OF COVERAGE OF INSURANCE MAINTAINED OR REQUIRED TO BE MAINTAINED BY CONTRACTOR UNDER THIS AGREEMENT.

CONTRACTOR shall promptly advise CITY in writing of any claim or demand against the CITY, related to or arising o CONTRACTOR shall promptly advise CITY in writing of any claim or demand against the CITY, related to or arising out of CONTRACTOR's acts or omissions under this AGREEMENT and shall see to the investigation and defense of such claims or demand at CONTRACTOR's sole cost and expense; provided, that CITY, at its option and at its own expense, may participate in such defense without relieving CONTRACTOR of any of its obligations hereunder. THE PROVISIONS OF THIS SECTION 11 SHALL SURVIVE TERMINATION OF THIS AGREEMENT.

Section 12. Assignment

CONTRACTOR shall not assign or sublet this Agreement, or any part thereof, without the prior written consent of CITY.

Section 13. Applicable Laws; Venue

CONTRACTOR shall comply with all federal, state, county and municipal laws, ordinances, regulations, safety orders, resolutions and building codes relating or applicable to services to be performed under this Agreement. The laws of the State of Texas shall govern this Agreement; and venue for any action concerning this Agreement shall be in the state district court of Dallas County, Texas. The parties agree to submit to the personal and subject matter jurisdiction of said court.

Section 14. Agreement Amendments

This Agreement contains the entire understanding of the parties with respect to the subject matter hereof and there are no oral understandings, statements or stipulations bearing upon the meaning or effect of this Agreement which have not been incorporated herein. This Agreement may only be modified, amended, supplemented or waived by a written instrument executed by the parties except as may be otherwise provided therein.

Section 15. Severability

In the event any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions, and the Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained in it.

Section 16. Independent Contractor

In satisfying the conditions of and providing the services under this Agreement, CONTRACTOR is acting independently, and CITY assumes no responsibility or liabilities to any third party in connection with CONTRACTOR's actions. All services to be performed by CONTRACTOR pursuant to this Agreement shall be in the capacity of an independent contractor and not as an agent or employee of CITY. CONTRACTOR shall supervise the performance of its services and shall be entitled to control the manner and means by which its services are to be performed, subject to the terms of this Agreement. There is no intended third-party beneficiary to this Agreement.

Section 17. Right-Of-Access

CITY will obtain or furnish right-of-access to the Project site for CONTRACTOR to perform any required studies, surveys, tests or other necessary investigations in relation to the Scope of Services. CONTRACTOR will take all necessary and reasonable precautions to minimize damage to all personal and real property in the performance of such surveys, tests, studies and investigations.

Section 18. Counterparts

This Agreement may be executed by the parties hereto in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument. Each counterpart may consist of any number of copies hereof each signed by less than all, but together signed by all of the parties hereto.

Section 19. Recitals; Exhibits.

All recitals and exhibits attached hereto are incorporated and made a part hereof for all purposes.

Section 20. Survival of Obligations.

Any of the representations and obligations of the parties, as well as any rights and benefits of the parties pertaining to a period of time following the termination of this Agreement shall survive termination.

Section 21. Notice

All notices required by this Agreement shall be in writing and addressed to the following, or such other party or address as either party designates in writing, by: (i) courier with signed receipt of delivery; (ii) overnight mail by reputable overnight delivery service; (iii), certified mail, postage prepaid, return receipt requested; (iv) confirmed electronic mail; or (v) by hand delivery with signed receipt of delivery:

If to CITY:

Town of Addison, Texas
Attn: Wesley S. Pierson, City Manager
5300 Belt Line Road
Addison, Texas 75254
E: wperson@addisontx.gov

With copy to:

Whitt L. Wyatt, City Attorney
Wood Banowsky, PLLC
5810 Long Prairie Road, Suite 700-220
Flower Mound, Texas 75028
E: whitt@woodbanowsky.com

If to CONTRACTOR:

North Rock Construction, LLC
Attn: John F. Gann II, President
525 South Loop 288, Suite 105 Denton
Texas 76205
E: jgann@nrockconstruction.com

Section 22. Sales and Use Taxes

CONTRACTOR understands and acknowledges that CITY is a governmental entity and exempt from the payment of sales and use taxes for certain materials and equipment conveyed to City as part of this Project or otherwise incorporated into the Project. CITY agrees to provide CONTRACTOR such documentation as may otherwise be required by state law to allow CONTRACTOR to avoid payment of sales and uses taxes for materials and equipment with respect to the Project to the extent allowed by law.

Section 23. Texas Government Code Verifications

CONTRACTOR's execution of this Agreement shall serve as its acknowledgement and written verification that:

- (1) the requirements of Subchapter J, Chapter 552, Government Code, apply to this Agreement and CONTRACTOR agrees that the Agreement can be terminated if CONTRACTOR knowingly or intentionally fails to comply with a requirement of that subchapter;
- (2) pursuant to Texas Government Code Chapter 2270, that CONTRACTOR's organization does not presently boycott Israel and will not boycott Israel during the term of this Agreement; and
- (3) pursuant to Texas Government Code Chapter 2251, that CONTRACTOR's organization does not current discriminate against firearm and ammunition industries and will not for the term of the contract. 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.

[REMAINDER OF PAGE LEFT BLANK INTENTIONALLY –
SIGNATURES ON FOLLOWING PAGE(S)]

IN WITNESS WHEREOF, the parties have executed and delivered this Agreement as of the date of last execution hereof (the "Effective Date").

For CITY:

TOWN OF ADDISON, TEXAS

By: _____
Wesley S. Pierson, City Manager

Date: _____

ATTEST:

By: _____
Christine Loven, City Secretary

APPROVED AS TO FORM:

By: _____
Whitt L. Wyatt, City Attorney

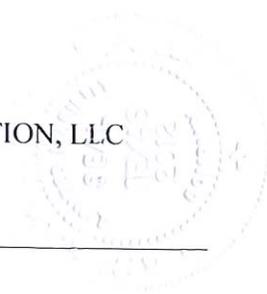
Contract ID:
JT.WW_ March 22, 2022

For CONTRACTOR:

NORTH ROCK CONSTRUCTION, LLC

By: _____
John F Gann II, President

Date: 3/7/2022



SECTION PrB
PERFORMANCE BOND

**STATUTORY PERFORMANCE BOND PURSUANT TO CHAPTER 2253
OF THE TEXAS GOVERNMENT CODE
(PUBLIC WORKS)**

(Penalty of this Bond must be 100% of Contract Amount)

KNOW ALL MEN BY THESE PRESENTS, That North Rock Construction, LLC
(hereinafter called the Principal), as Principal, and Atlantic Specialty Insurance Company
(hereinafter called the Surety), as Surety are held and firmly bound unto the **Town of Addison** (hereinafter
called the Oblige), in the amount of Four Hundred and Ninety Seven Thousand, One Hundred and Eighty-Eight
and 03/100----- Dollars (\$ 497,188.03) for the
payment whereof the said Principal and Surety bind themselves and their heirs, administrators, executors,
successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Oblige, dated the
22nd day of March, ²⁰²²~~2021~~ to

REDDING TRAIL DRAINAGE & AMENITY IMPROVEMENTS BID NO. 22-16

which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at
length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said
Principal shall faithfully perform the work in accordance with the plans, specifications and contract
documents, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of
the Texas Government Code and all liabilities on this bond shall be determined in accordance with the
provisions, conditions and limitations of said Chapter to the same extent as if it were copied at length
herein.

IN WITNESS, WHEREOF, the said Principal and Surety have signed this instrument this 22nd
day of March, ~~2021~~²⁰²².



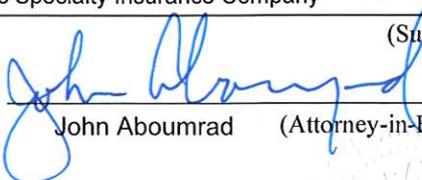
North Rock Construction, LLC
(Principal)

By: 



Neira Hernandez, Witness

Atlantic Specialty Insurance Company
(Surety)

By: 

John Aboumrad (Attorney-in-Fact)



Power of Attorney

KNOW ALL MEN BY THESE PRESENTS, that ATLANTIC SPECIALTY INSURANCE COMPANY, a New York corporation with its principal office in Plymouth, Minnesota, does hereby constitute and appoint: **William Baldwin, Blaine Allen, Brent Baldwin, Brock Baldwin, Brady K. Cox, Russ Frenzel, Michael B. Hill, Chandler Nazzal, John A Aboumrads**, each individually if there be more than one named, its true and lawful Attorney-in-Fact, to make, execute, seal and deliver, for and on its behalf as surety, any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof; provided that no bond or undertaking executed under this authority shall exceed in amount the sum of: **unlimited** and the execution of such bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof in pursuance of these presents, shall be as binding upon said Company as if they had been fully signed by an authorized officer of the Company and sealed with the Company seal. This Power of Attorney is made and executed by authority of the following resolutions adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the President, any Senior Vice President or Vice-President (each an "Authorized Officer") may execute for and in behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and affix the seal of the Company thereto; and that the Authorized Officer may appoint and authorize an Attorney-in-Fact to execute on behalf of the Company any and all such instruments and to affix the Company seal thereto; and that the Authorized Officer may at any time remove any such Attorney-in-Fact and revoke all power and authority given to any such Attorney-in-Fact.

Resolved: That the Attorney-in-Fact may be given full power and authority to execute for and in the name and on behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed and sealed by an Authorized Officer and, further, the Attorney-in-Fact is hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof.

This power of attorney is signed and sealed by facsimile under the authority of the following Resolution adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the signature of an Authorized Officer, the signature of the Secretary or the Assistant Secretary, and the Company seal may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing an Attorney-in-Fact for purposes only of executing and sealing any bond, undertaking, recognizance or other written obligation in the nature thereof, and any such signature and seal where so used, being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

IN WITNESS WHEREOF, ATLANTIC SPECIALTY INSURANCE COMPANY has caused these presents to be signed by an Authorized Officer and the seal of the Company to be affixed this twenty-seventh day of April, 2020.

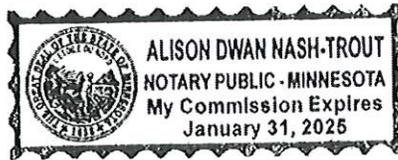


By *Paul J. Brehm*

Paul J. Brehm, Senior Vice President

STATE OF MINNESOTA
HENNEPIN COUNTY

On this twenty-seventh day of April, 2020, before me personally came Paul J. Brehm, Senior Vice President of ATLANTIC SPECIALTY INSURANCE COMPANY, to me personally known to be the individual and officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, that he is the said officer of the Company aforesaid, and that the seal affixed to the preceding instrument is the seal of said Company and that the said seal and the signature as such officer was duly affixed and subscribed to the said instrument by the authority and at the direction of the Company.



Alison Nash-Trout

Notary Public

I, the undersigned, Secretary of ATLANTIC SPECIALTY INSURANCE COMPANY, a New York Corporation, do hereby certify that the foregoing power of attorney is in full force and has not been revoked, and the resolutions set forth above are now in force.

Signed and sealed. Dated 22nd day of March, 2022



Kara Barrow

Kara Barrow, Secretary

This Power of Attorney expires
January 31, 2025

SECTION PyB
PAYMENT BOND

**STATUTORY PAYMENT BOND PURSUANT TO CHAPTER 2253
OF THE TEXAS GOVERNMENT CODE
(PUBLIC WORKS)**

(Penalty of this Bond must be 100% of Contract Amount)

KNOW ALL MEN BY THESE PRESENTS, That North Rock Construction, LLC
(hereinafter called the Principal), as Principal, and Atlantic Specialty Insurance Company
(hereinafter called the Surety), as Surety are held and firmly bound unto the **Town of Addison** (hereinafter
called the Obligee), in the amount of Four Hundred and Ninety Seven Thousand,
One Hundred and Eighty-Eight and 03/100----- Dollars (\$ 497,188.03) for the
payment whereof the said Principal and Surety bind themselves and their heirs, administrators, executors,
successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, dated the
22nd day of March, ~~2021~~²⁰²² to

REDDING TRAIL DRAINAGE & AMENITY IMPROVEMENTS BID NO. 22-16

which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at
length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said
Principal shall pay all claimants supplying labor and material to him or a subcontractor in the prosecution
of the work provided for in said contract, then this obligation shall be void; otherwise to remain in full force
and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of
the Texas Government Code and all liabilities on this bond shall be determined in accordance with the
provisions, conditions, and limitations of said Chapter to the same extent as if it were copied at length
herein.

IN WITNESS, WHEREOF, the said Principal and Surety have signed this instrument this 22nd
day of March, ~~2021~~²⁰²².




(Principal)

By: 

Atlantic Specialty Insurance Company
(Surety)

By: 
John Aboumrad (Attorney-in-Fact)


Neira Hernandez, Witness



Power of Attorney

KNOW ALL MEN BY THESE PRESENTS, that ATLANTIC SPECIALTY INSURANCE COMPANY, a New York corporation with its principal office in Plymouth, Minnesota, does hereby constitute and appoint: **William Baldwin, Blaine Allen, Brent Baldwin, Brock Baldwin, Brady K. Cox, Russ Frenzel, Michael B. Hill, Chandler Nazzal, John A Aboumrada**, each individually if there be more than one named, its true and lawful Attorney-in-Fact, to make, execute, seal and deliver, for and on its behalf as surety, any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof; provided that no bond or undertaking executed under this authority shall exceed in amount the sum of: **unlimited** and the execution of such bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof of these presents, shall be as binding upon said Company as if they had been fully signed by an authorized officer of the Company and sealed with the Company seal. This Power of Attorney is made and executed by authority of the following resolutions adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the President, any Senior Vice President or Vice-President (each an "Authorized Officer") may execute for and in behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and affix the seal of the Company thereto; and that the Authorized Officer may appoint and authorize an Attorney-in-Fact to execute on behalf of the Company any and all such instruments and to affix the Company seal thereto; and that the Authorized Officer may at any time remove any such Attorney-in-Fact and revoke all power and authority given to any such Attorney-in-Fact.

Resolved: That the Attorney-in-Fact may be given full power and authority to execute for and in the name and on behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed and sealed by an Authorized Officer and, further, the Attorney-in-Fact is hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof.

This power of attorney is signed and sealed by facsimile under the authority of the following Resolution adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the signature of an Authorized Officer, the signature of the Secretary or the Assistant Secretary, and the Company seal may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing an Attorney-in-Fact for purposes only of executing and sealing any bond, undertaking, recognizance or other written obligation in the nature thereof, and any such signature and seal where so used, being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

IN WITNESS WHEREOF, ATLANTIC SPECIALTY INSURANCE COMPANY has caused these presents to be signed by an Authorized Officer and the seal of the Company to be affixed this twenty-seventh day of April, 2020.

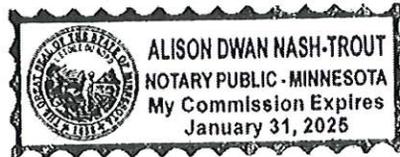


By *Paul J. Brehm*

Paul J. Brehm, Senior Vice President

STATE OF MINNESOTA
HENNEPIN COUNTY

On this twenty-seventh day of April, 2020, before me personally came Paul J. Brehm, Senior Vice President of ATLANTIC SPECIALTY INSURANCE COMPANY, to me personally known to be the individual and officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, that he is the said officer of the Company aforesaid, and that the seal affixed to the preceding instrument is the seal of said Company and that the said seal and the signature as such officer was duly affixed and subscribed to the said instrument by the authority and at the direction of the Company.



Alison Nash-Trout

Notary Public

I, the undersigned, Secretary of ATLANTIC SPECIALTY INSURANCE COMPANY, a New York Corporation, do hereby certify that the foregoing power of attorney is in full force and has not been revoked, and the resolutions set forth above are now in force.

Signed and sealed. Dated 22nd day of March, 2022



Kara Barrow

Kara Barrow, Secretary

This Power of Attorney expires
January 31, 2025

SECTION MB
MAINTENANCE BOND

The Contractor hereby agrees to repair and correct defective work or material, should an issue arise, for a period of one (1) years from the date of the Maintenance Bond.

During the Term of the Bond, the Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the Contractor's warranty obligations set forth in the Construction Contract, which is incorporated herein by reference.

If the Contractor satisfies its warranty obligations under the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond. It is understood and agreed that in no event shall the Surety's obligations under this Bond extend to warranties provided by the Contractor's suppliers and manufacturers.

If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:

1. The owner provides notice to the Contractor and the Surety during the Term of the Bond of the Owner's intent to declare a Contractor Default;
2. The Contractor fails to remedy the Contractor Default within a reasonable amount of time of such notice: and,
3. The Owner declares a Contractor Default and notifies the Surety.

Failure on the part of the Owner to comply with the notice requirement shall not constitute a failure to comply with the condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

If the Surety does not proceed with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety shall be demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner.

The responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. The Surety is obligated, without modification or qualification, for the responsibilities of the Contractor for correction of defective work as set forth in the Construction Contract, and additional legal and design professional costs resulting from the Contractor's Default or resulting from the actions or failure to act of the Surety.

The owner may request an extension of the Term of this Bond. The Surety, at its sole option, may extend the Term of this Bond by continuation certificate or rider setting forth the new expiration dates.

1. If the Surety extends the Term of this Bond, the Bond shall be considered on continuous bond.
2. If the Surety decides not to extend the Term of this Bond, then the Surety shall notify the Owner in writing thirty (30) days prior to the end of the current term of this Bond.
3. Neither the Surety's failure to extend the Term of this Bond nor the Contractor's failure to provide a replacement bond or other acceptable security shall be considered a breach or default by the Surety or Contractor on this Bond, nor serve as a basis for a claim demand on this Bond.

The Surety's total liability under this Bond is limited to the Amount of this Bond indicated on Page 1, regardless of whether the Term of this Bond is extended, the length of time this Bond remains in force, and the number of premiums that shall be payable or paid.

No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors and assigns.

Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work of the Contractor required by the Construction Contract is located and shall be instituted within two years after a declaration of Contractor Default. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

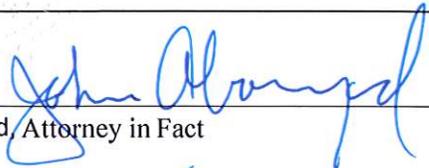
Notice to the Surety, the Owner of the Contractor shall be in writing and mailed or delivered to the address shown on the first page of the Bond.

Provisions in this Bond that conflict with applicable statutory or other legal requirements shall be deemed deleted here from and provisions conforming to such statutory or other legal requirements shall be deemed incorporated herein.

IN WITNESS, WHEREOF, the said North Rock Construction, LLC has caused these presents to be executed by Atlantic Specialty Insurance Company and the said John Aboumrad, Attorney-in-Fact has hereunto set his hand this the 22nd day of March, ~~2021~~ ²⁰²²

SURETY

Atlantic Specialty Insurance Company

By: 
John Aboumrad, Attorney in Fact

By: 
Surety

Neira Hernandez, Witness

5930 Preston View Blvd, Ste 200, Dallas, TX 75240

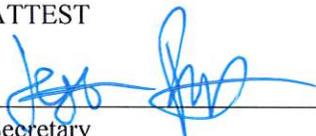
Agency and Address

PRINCIPAL

North Rock Construction, LLC

By: 

ATTEST


Secretary

NOTE: Date of Maintenance Bond must be same as date of Substantial Completion.



Power of Attorney

KNOW ALL MEN BY THESE PRESENTS, that ATLANTIC SPECIALTY INSURANCE COMPANY, a New York corporation with its principal office in Plymouth, Minnesota, does hereby constitute and appoint: **William Baldwin, Blaine Allen, Brent Baldwin, Brock Baldwin, Brady K. Cox, Russ Frenzel, Michael B. Hill, Chandler Nazzal, John A Aboumrada**, each individually if there be more than one named, its true and lawful Attorney-in-Fact, to make, execute, seal and deliver, for and on its behalf as surety, any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof; provided that no bond or undertaking executed under this authority shall exceed in amount the sum of: **unlimited** and the execution of such bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof in pursuance of these presents, shall be as binding upon said Company as if they had been fully signed by an authorized officer of the Company and sealed with the Company seal. This Power of Attorney is made and executed by authority of the following resolutions adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the President, any Senior Vice President or Vice-President (each an "Authorized Officer") may execute for and in behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and affix the seal of the Company thereto; and that the Authorized Officer may appoint and authorize an Attorney-in-Fact to execute on behalf of the Company any and all such instruments and to affix the Company seal thereto; and that the Authorized Officer may at any time remove any such Attorney-in-Fact and revoke all power and authority given to any such Attorney-in-Fact.

Resolved: That the Attorney-in-Fact may be given full power and authority to execute for and in the name and on behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed and sealed by an Authorized Officer and, further, the Attorney-in-Fact is hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof.

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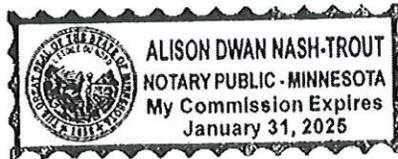
IN WITNESS WHEREOF, ATLANTIC SPECIALTY INSURANCE COMPANY has caused these presents to be signed by an Authorized Officer and the seal of the Company to be affixed this twenty-seventh day of April, 2020.



By *Paul J. Brehm*
Paul J. Brehm, Senior Vice President

STATE OF MINNESOTA
HENNEPIN COUNTY

On this twenty-seventh day of April, 2020, before me personally came Paul J. Brehm, Senior Vice President of ATLANTIC SPECIALTY INSURANCE COMPANY, to me personally known to be the individual and officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, that he is the said officer of the Company aforesaid, and that the seal affixed to the preceding instrument is the seal of said Company and that the said seal and the signature as such officer was duly affixed and subscribed to the said instrument by the authority and at the direction of the Company.



Alison Nash-Trout
Notary Public

I, the undersigned, Secretary of ATLANTIC SPECIALTY INSURANCE COMPANY, a New York Corporation, do hereby certify that the foregoing power of attorney is in full force and has not been revoked, and the resolutions set forth above are now in force.

Signed and sealed. Dated 22nd day of March, 2022



This Power of Attorney expires
January 31, 2025

Kara Barrow
Kara Barrow, Secretary

IMPORTANT NOTICE

To obtain information or make a complaint:

You may contact your agent.

You may call your Insurance Carrier's toll-free telephone number for information or to make a complaint at:

1-800-321-2721

You may also write to your Insurance Carrier at

Atlantic Specialty Insurance Company
Paralegal

605 Highway 169 North, Suite 800
Plymouth, MN 55441

Email: surety@intactinsurance.com
Phone: 1-800-662-0156

You may contact the Texas Department of Insurance to obtain information on companies, coverages, rights or complaints at

1-800-252-3439

You may write the Texas Department of Insurance:

P.O. Box 149104, Austin, TX 78714-9104

Fax: (512) 490-1007
Web: www.tdi.texas.gov
E-mail: ConsumerProtection@tdi.texas.gov

PREMIUM OR CLAIM DISPUTES: Should you have a dispute concerning your premium or about a claim you should contact the agent first. If the dispute is not resolved, you may contact the Texas Department of Insurance.

ATTACH THIS NOTICE TO YOUR POLICY: This notice is for information only and does not become a part or condition of the attached document.

AVISO IMPORTANTE

Para obtener informacion o para someter una queja:

Puede comunicarse con su agente.

Usted puede llamar al numero de telefono gratis de su compañía de seguros para informacion o para someter una queja al:

1-800-321-2721

Usted tambien puede escribir a su compañía de seguros en:

Atlantic Specialty Insurance Company
Paralegal

605 Highway 169 North, Suite 800
Plymouth, MN 55441

Email: surety@intactinsurance.com
Phone: 1-800-662-0156

Puede comunicarse con el Departamento de Seguros de Texas para obtener informacion acerca de companias, coberturas, derechos o quejas al:

1-800-252-3439

Puede escribir al Departamento de Seguros de Texas:

P.O. Box 149104, Austin, TX 78714

Fax: (512) 490-1007
Web: www.tdi.texas.gov
E-mail: ConsumerProtection@tdi.texas.gov

DISPUTAS SOBRE PRIMAS □ RECLAMOS: Si tiene una disputa concerniente a su prima o a un reclamo, debe comunicarse con el agente primero. Si no se resuelve la disputa, puede entonces comunicarse con el departamento (TDI).

UNA ESTE AVISO A SU POLIZA: Este aviso es solo para proposito de informacion y no se convierte en parte condicion del documento adjunto.

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

REDDING TRAIL DRAINAGE & AMENITY IMPROVEMENTS BID NO. 22-56

_____ 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 _____, 2022.

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, 4th Edition (2004)*, under Division 100, "General Provisions," Items 101.1 through 109.6 inclusive, as amended or supplemented and except as modified by the Special Provisions.

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SECTION SP

SPECIAL PROVISIONS

SPECIAL PROVISIONS

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SPECIAL PROVISIONS

1. **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 **REDDING TRAIL DRAINAGE & AMENITY IMPROVEMENTS**

2. **GENERAL:** This work shall conform to the requirements of the specifications and the details as shown on the Drawings. These Contract Documents are intended to be complementary. Requirements of any of the Contact Documents are as binding as if called for by all. In the event of conflict between the Drawings and the Specifications, the Contractor will be deemed to have assumed the more expensive way of doing the work unless, before submitting a bid, the Contractor shall have asked for and obtained (by addendum) a written decision as to which method or material is intended.

In cases of discrepancies, calculated dimensions shall govern over scaled dimensions; special provisions and special specifications shall govern over both general and standard specifications; and quantities shown on the plans shall govern over those shown in the proposal.

3. **EXAMINATION OF THE SITE:** The Contractor acknowledges that he has investigated and satisfied himself 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.

4. **SPECIFICATIONS:** Construction improvements shall be governed by the following published specifications and details (except as modified by these Special Provisions):
 - Standard Specifications for Public Works Construction, North Central Texas – North Central Texas Council of Governments (latest edition);
 - Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges - Texas Department of Transportation, 2004;
 - Town of Addison Standard Details;

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 specifications referred to are hereby made a part of the project specifications.

5. **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. Some preliminary subsurface exploration has been performed by the Town of Addison and the Engineer, and is provided to the Contractor in these 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 or 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.
6. **COMPLIANCE WITH LAWS:** The Contractor shall familiarize himself with the nature and extent of the specifications, 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 there from.
7. **PERMITS, LICENSES, AND REGULATIONS:** Permits and licenses for the prosecution of the Work shall be secured and paid for by the Contractor. Wherever the Work under this Contract requires the obtaining of permits from the Town of Addison or other public authorities, duplicate copies of such permits shall be furnished to the Engineer by the Contractor hereunder before the Work covered thereby is started. **NO WORK WILL BE ALLOWED TO PROCEED BEFORE SUCH PERMITS ARE OBTAINED.**
8. **RIGHTS-OF-WAY AND EASEMENTS:** Rights-of-way and permanent easements, dedicated to the Town of Addison, have been 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 his 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 himself or his 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 his 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.

9. **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 case of urgent necessity or in the interest of public safety and convenience, and then only by permit of the City Manager."
10. **COMPLIANCE WITH IMMIRGRATION 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.
11. **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.
12. **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).
13. **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.
14. **DISCREPANCIES:** If the Contractor, in the course of the Work, finds any discrepancy between the Contract Documents and the physical conditions of the locality, or any errors or omissions in the Drawings 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 be not 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.
15. **PREPARATION OF STORM WATER POLLUTION PREVENTION PLAN:** A Storm Water Pollution Prevention Plan (SW3P) will be prepared in accordance with the Texas Pollution Discharge Elimination System, General Permit Number TXR150000 Relating to Discharges From Construction Activities issued by the Texas Commission on Environmental Quality (TCEQ). The SW3P will include the following information as required by the TCEQ Permit: Project description that includes: description of the construction activity; intended schedule or sequence of major soil disturbing activities; number of total areas of the project

area and number of acres where soil will be disturbed; estimate of the runoff coefficient of the site for pre-construction and post-construction conditions; data describing the soil; a general location map; name of the receiving waters at or near the site and a copy of the TPDES General Permit.

A detailed site map will be prepared showing drainage patterns and approximate slopes after grading; areas where soil disturbance will occur; locations of major structural controls; locations where stabilization practices are expected to be used; surface waters; and locations where storm water discharges from the site directly to a surface water.

The Contractor will be required to locate his operation specific items on the site map, such as locations of waste containment, sanitary facilities, equipment storage, fuel storage, off-site materials and batch plants, etc.

For projects where the disturbed area is 1 or more acres and less than 5 acres only a SW3P is required. The Contractor shall prepare a SW3P and submit a Notice of Intent (NOI) as required by the TPDES Permit if the total disturbed area is 5 or more acres.

A three-ring SW3P binder will be prepared containing all information and reports that are required as part of the SW3P. The Contractor will be required to utilize the SW3P prepared as listed above, and maintain all records on-site during the project including performing inspections and maintaining all required documentation required by the TPDES General Permit.

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

16. **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 three (3) calendar days prior to the date set for the Bid opening). Answers to all such requests will be e-mailed, faxed, or mailed to all Bidders in addendum form and all 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 he be in doubt as to their meaning, he shall at once notify the Engineer in writing in order that a written addendum may be sent to all Bidders.
17. **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.
18. **INCREASE OR DECREASE IN QUANTITIES:** The quantities shown in the proposal are approximate. Final payment will be based on quantities determined by measurement methods described for each work item.

When the quantity of work to be done or materials to be furnished under any major pay item or contract is more than 125% of the quantity stated in the Contract, whether stated by Town

of Addison or by Contractor, then either party to the Contract, upon demand, shall be entitled to negotiate for revised consideration on the portion of work above 125% of the quantity stated in the Contract.

When the quantity of the work to be done or materials to be furnished under any major pay item of the contract is less than 75% of the quantity stated in the contract, whether stated by Town of Addison or by Contractor, then either party to the contract, upon demand, shall be entitled to negotiate for revised consideration on the portion of work below 75% of the quantity stated in the contract. This paragraph shall not apply in the event Town of Addison deletes a pay item in its entirety from this contract.

19. **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 permits, inspection fees, traffic control, construction staking, surface restoration and cleanup are general items of work which fall in the category of subsidiary work.
20. **QUALIFICATIONS 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 resolved in favor of the correct sum.
21. **AWARD AND EXECUTION OF CONTRACT:** For the purpose of award, each bid submitted shall consist of a single contractual agreement with inclusion or exclusion of additional alternate items as approved by the Town of Addison.
22. **EXPLANATION OF CONTRACT TIME:** The term “Original Contract Time” as used in this Provision will mean the number of calendar days established by the Contractor for completion of the Work of the Contract on the date the Contract was executed. The term “calendar day” as used in this Provision will mean every day shown on the calendar. Calendar days will be consecutively counted from commencement of Contract Time regardless of weather, weekends, holidays, suspensions of Contractor’s operations, delays, or other events as described herein. For purposes of the calculation and determination of entitlement to the incentive payment stated above, the Original Contract Time will not be adjusted for any reason, cause or circumstance whatsoever, regardless of fault, save and except in the instance of a catastrophic event (i.e., war, invasion, riot, declared state of emergency, national strike, or other situation as declared by the Town of Addison). 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 suppliers, subcontractors or other contractors, actions by third

parties, weather, weekends, holidays, or other such events, forces or factors sometimes experienced in roadway 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. Further, any and all costs or impacts whatsoever incurred by the Contractor in accelerating the Contractor's work to overcome or absorb such delays or events in an effort to complete the Contract prior to expiration of the Original Contract Time, regardless of whether the Contractor successfully does so or not, shall be the sole responsibility of the Contractor in every instance. In the event the project is altered by work deleted, change order, supplemental agreements, utility conflicts, design changes or defects, extra work, right of way issues, or other situations which are not the fault of or a direct result of Contractor's negligence which may impact the critical path of the project construction schedule, the Town may choose to negotiate the extension or reduction of the Original Contract Time with the Contractor.

(l) 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 Original Contract Time. In the event the Contractor and Town are unable to agree to the number of calendar days to extend the Original Contract Time, the Town shall unilaterally determine the number of calendar days to extend the Original 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 provisions above, the Town shall deduct from the monies due the Contractor the Daily Value in terms of **Liquidated Damages** for each calendar day completion exceeds the Allowable Contract Time. The term "Allowable Contract Time" as used in this Provision 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.**

Should the Contractor fail to complete the Contract on or before the following dates the City of Addison reserves the right to enforce Liquidated Damages:

REDDING TRAIL DRAINAGE & AMENITY IMPROVEMENTS

- 1. The length of Construction is based on an Estimate Notice to Proceed of February 23, 2022.**
- 2. Liquidated Damages of \$250.00 per day shall be applied until the Certificate of Substantial Completion has been approved by the City of Addison.**

23. **COPIES OF PLANS FURNISHED:** One (1) full size set and one half size set of plans shall be furnished to the Contractor, at no charge, for construction purposes. Additional copies are the responsibility of the contractor.
24. **PRE-CONSTRUCTION CONFERENCE:** The successful Contractor, Engineer, and Town of Addison shall meet for a preconstruction 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, 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.
25. **MOBILIZATION:** The work specified in this item consists of the preparatory work and operations in mobilizing for beginning work on the project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site, and for the establishment of temporary offices, utilities, and other facilities, if necessary, for the construction of proposed improvements. The provisions of TxDOT Standard Specification Item (TxDOT Item) 500 "Mobilization" shall apply.
26. **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, to be submitted to the Town of Addison for approval, 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 residences and 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.
27. **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.
28. **COORDINATION WITH OTHERS:** Since several other contractors will be doing work in the same area simultaneously with this project, the Contractor shall coordinate his proposed construction with that of the other contractors. It is imperative that the Contractor carefully coordinate his activities with those completing the George Bush Elementary School in order to minimize delays to any phase of construction. The Town of Addison and/or the Engineer shall mediate any disputes, and the contractors shall comply with their decisions.
29. **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.

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

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

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

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

24 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.

25 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.

26 All certificates shall be mailed to Town of Addison, Purchasing Dept., PO Box 9010, Addison, Texas 75001.

27 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

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

29 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-" 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.

40 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:

41 Set forth all endorsements and insurance coverage's according to requirements and instruction contained herein.

42 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.

30. 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 proper 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 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 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 a least 30-point bold type, and text in a 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."

31. **CLEAN AIR ACT AND CLEAN WATER ACT:** Include in all construction contracts 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".
32. **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 agreement, 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. All forms of Alternative Dispute Resolution may be used except binding arbitration. The proceedings shall be conducted in the laws of the State of Texas.
33. **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 105.3 of the Standard Specifications for Public Works Construction, North Central Texas Council of Governments. The Contractor shall furnish a minimum of four and a maximum of six copies of shop drawings for review by the Town of Addison. Acceptable submittals will be returned as follows:

Two (2) – Town of Addison

One (1) – Contractor

One (1) – Parkhill

Maximum size of submittals shall be 11 x 17 inch. No fax copies are acceptable. Shop drawings shall include all items to be installed in the project, including:

- Concrete Mix Design
- Plant Material & Accessories
- Segmental Retaining Wall
- Irrigation Material
- Furnishings
- Planting Bed Mix
- Unit Pavers

- 34. PROJECT VIDEO:** Prior to the start of construction, Contractor shall video the construction area and property adjacent to construction in the presence of the City Inspector. The format shall be on a thumb drive. The video shall be narrated. The Contractor shall furnish the Town of Addison a copy of the video prior to commencement of project. This shall be subsidiary to project.
- 35. SAMPLES AND TESTS OF MATERIALS:** The Town of Addison shall designate and pay an independent testing laboratory to furnish testing for this project. Samples of all materials for tests shall be taken by the independent lab as necessary. Contractor shall provide access and the materials for testing. 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.
- 36. 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.

37. **ACCESS ROUTES, PARKING, 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 Architect. The Contractor shall be responsible for maintaining and repairing damage to any roads, parking lots 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. Parking and storage should take into consideration of the residential neighborhood surrounding.
38. **PROPERTY ACCESS:** Access to adjacent properties shall be maintained at all times unless otherwise directed by the Engineer and/or Town of Addison. Contractor shall also maintain sufficient sidewalk access throughout the project limits to the adjacent easement trail.
39. **PLANT, PROCEDURE, 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 Construction Agreement.

Where the Work under this contract requires permits from the Town of Addison, the State of Texas, or other public authorities, duplicate copies of such permits shall be furnished to the Engineer by the Contractor before the Work covered thereby is started. **NO WORK WILL BE ALLOWED TO PROCEED BEFORE REQUIRED PERMITS ARE OBTAINED AND DISTRIBUTED.**

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.

40. **PARKING OF CONSTRUCTION EQUIPMENT:** At night and during all other periods of time when equipment is not being actively used on the construction work, the Contractor

shall park the equipment at a designated spot agreed upon by the owner and Contractor. 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.

41. **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.
42. **CONSTRUCTION IN PUBLIC ROADS AND PRIVATE DRIVES:** No public road shall be entirely closed. 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. No interference with traffic flow on city streets shall be permitted during the hours of 6:30 a.m. to 9:30 a.m. and 3:30 p.m. to 7:30 p.m., Mondays through Fridays.

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 one year from the date of such reconstruction. 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.

43. **HAULING ON TOWN OF ADDISON STREETS:** The Contractor shall receive approval of his 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.
44. **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 construction of this project prior to beginning his 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.

45. **SAFETY RESTRICTIONS - WORK NEAR HIGH VOLTAGE LINES:** The following procedures shall be followed for work near high voltage lines on this contract:
- a. A warning sign not less than five (5) inches by seven (7) inches, painted yellow with black letters that are legible at twelve (12) feet shall be placed inside and outside vehicles such as cranes, derricks, power shovels, drilling rigs, pile drivers, hoisting equipment or similar apparatus. The warning sign shall read as follows: "Warning – Unlawful to Operate This Equipment Within Six Feet of High Voltage Lines".
 - b. Equipment that may be operated within ten (10) feet of high voltage lines shall have an insulating cage guard protecting the boom or arm, except backhoes or dippers, and insulator links on lift hook connections.
 - c. When necessary to work within six (6) feet of high voltage electric lines, notify the power company who will erect temporary mechanical barriers, de-energize the line, or raise or lower the line. All such work done by the power company shall be at the expense of the Contractor. The Contractor shall maintain an accurate log of all such calls to the power company.
 - d. The Contractor is required to make arrangements with the power company for the temporary relocation or raising of high voltage lines at the Contractor's sole cost and expense.
 - e. No person shall work within six (6) feet of high voltage lines without protection measures having been taken as outlined in Paragraph c.
46. **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 his 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 his 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.
47. **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 his operations to all existing utility lines, public property, and private property, whether it is below ground or above ground, and he shall settle in total the cost of all damages which may arise as a result of his 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.
- 48. MAINTENANCE AND REPAIRS:** The Contractor shall maintain and keep in good repair all work contemplated under these plans, specifications, and drawings 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 his 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.
- 49. 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.

- 50. PUBLIC CONVENIENCE AND SAFETY:** In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the Work. This requirement shall apply continuously and not be limited to normal working hours.

Temporary fencing should be erected along the full length of the easement abutting Greenhill during the construction period.

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 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, his employees, agents or subcontractors, or at any time due to defective work or materials, or due to his 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 his 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 owner, the 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 his surety shall reimburse the Town of Addison for all such costs.

- 51. 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 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 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 his 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 be 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 expense of the Contractor.

- 52. 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:

1. The Contractor shall be required to furnish barricades, flares, flagmen, etc., for the protection of the public, employees and the Work.
2. The Contractor shall prosecute his work in such a manner as to create a minimum of

interruption to traffic along adjacent roadways.

3. 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.
4. The Contractor shall not remove any regulatory sign, instructional sign, warning sign, or street name sign or any other sign or signal which currently exists.

53. BARRICADES, WARNING SIGNS, DETOURS AND SEQUENCE OF WORK:

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 his work sequence in a manner that will cause minimum interference with traffic 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 his 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 his 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.

54. 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 licensed in the State of Texas. In addition, all trench safety systems utilized in this project must be designed by a Professional Engineer licensed 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 is 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 are found 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. All excavation and backfill in addition to that specified elsewhere in these specifications shall be considered subsidiary to this bid item.

55. TRENCH EXCAVATION, BACKFILL AND COMPACTION: Trench excavation, backfill and compaction of storm drain and utility trenches shall be in accordance with Town of Addison Standards and with details shown on the Construction Drawings.

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 easement 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 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).

56. TRENCH WALLS: The Contractor shall use shoring or a drag box in those areas where it is required to protect existing improvements. This shall be subsidiary to the linear foot cost of the pipe and not a separate pay item.

57. 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.

58. 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 copies of cut sheets and field books for the construction of all paving, water, wastewater, and storm water improvements 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. All trail and sidewalks shall be staked on 20' centers with 10' offsets.
59. **VENDOR'S CERTIFICATION:** All materials used in construction shall have a vendor's certified test report. Test reports shall be delivered to the Engineer before permission will be granted for use of the material. All vendors' test reports shall be subject to review by the Engineer, and shall be subject to verification by testing of samples of materials as received for use on the project. In the event, additional tests are required, they shall be performed by an approved independent testing laboratory and shall be paid for by the Contractor.
60. **WATER PIPE:** All water mains twelve-inch (12") diameter and smaller shall be ANSI / AWWA C-909 molecularly oriented PVC pressure pipe with cast iron o.d. or when pipe penetrates meter vault walls it shall be ductile iron. Pipe joints shall be rubber ring and integral thickened bell, assembled with a factory supplied lubricant. Water mains shall have a minimum class rating of 150-psi for domestic use and a minimum class rating of 200-psi for fire line applications. Joint material for PVC shall conform to ASTM F471.
61. **WASTEWATER PIPE:** All wastewater main piping shall meet the extra strength requirements of ASTM specification D3034 (SDR-35). Pipe shall have the bell and spigot type joints, consisting of integral wall section with factory installed compression rubber ring gasket, securely locked in bell groove to provide positive seal under all installation conditions. Pipe shall be laid with the bell end on the upstream side.
62. **STORM DRAINAGE PIPE:** All pipe for storm drainage improvements shall be reinforced concrete pipe (RCP), Class III, unless otherwise noted on the plans.
63. **POLYETHYLENE WRAPPING:** All valves, ductile iron pipe, cast iron fittings, and specials, shall be polyethylene wrapped. Payment for the polyethylene wrapping for these components shall be subsidiary to the various items bid for the furnishing and installing pipe complete in place. Polyethylene wrap shall precede blocking.
64. **PIPE CLEANING:** Joints shall be wiped and then inspected for proper installation by the inspectors. Each joint shall be swept daily and kept clean during installation. A temporary night plug shall be installed on all exposed pipe ends during any period of work stoppage.
65. **PLUGS:** Pipe plugs for water and wastewater lines shall be considered incidental and shall not be a separate pay item. Plugs for storm drain lines do have separate pay items established for each size provided and shall be paid for accordingly.
66. **PIPE EMBEDMENT:** All storm drain and utility construction shall be installed with embedment per the details shown on the plans for the appropriate pipe size, pipe material, depth and soil condition unless otherwise directed by the Town of Addison or the Engineer.
67. **NON-METALLIC WATER PIPE DETECTION:** Detectable underground utility warning tapes, which can be located from the surface by a pipe detector, shall be installed directly above non-metallic pipe. The detectable tape shall be "Detect Tape" as manufactured by Allen Systems, Inc. or an approved equal, and shall consist of a minimum thickness of 0.35-mil. solid aluminum foil encased in a protective inert plastic jacket that is impervious to all known alkalis, acids, chemical reagents and solvents found in the soil. The

minimum overall thickness of the tape shall be 5.5-mils. And the width shall not be less than two-inch with a medium unit weight of 2 ½ pounds per inch x 1,000 feet. The tape shall be color coded and imprinted with the messages as follow:

<u>Type of Utility</u>	<u>Color Coded</u>	<u>Legend</u>
Water	Safety Precaution Blue	CAUTION BURIED WATER LINE BELOW
Sanitary	Safety Green	CAUTION BURIED SEWER LINE BELOW

Installation of detectable tapes shall be per manufacturer's recommendations and shall be as close to the grade as is practical for optimum protection and detectability. Allow a minimum of 18 inches between the tape and the water line.

Payment for detectable tapes shall be included in the linear foot price bid for applicable pipe(s).

- 68. REMOVALS, ADJUSTMENTS AND REPLACEMENTS:** Existing pavements, driveways, curbs, gutters, sidewalks, etc., to be removed to facilitate the construction of the improvements shall be broken up and disposed of properly. Care shall be exercised to leave a neat, uniform edge or joint at the excavation limits or sections removed where only portions are to be removed. The Engineer will designate the limits to be removed. Where pavements, driveways, curbs, gutters, sidewalks, etc., shall be replaced, then said replacements shall be to the standard of the previously removed portion or better. Re-sawing of damaged edges will be at the Contractor's expense.

Existing structures such as manholes, inlets, cleanouts, valve boxes, etc., which are not the property of a private firm or company, or an individual required to move their own property, shall be adjusted, altered or reset to the required elevation and alignment. New materials and workmanship necessary shall conform to the requirements of these Specifications covering the particular Work. Salvaged materials in good condition may be used in rebuilding such structures, provided the materials are thoroughly cleaned before their use. These items shall be subsidiary to other bid items unless quantified in the proposal as a separate bid item.

All private obstructions which are indicated on the Plans to be moved, will be removed and replaced, or moved to new permanent locations by the Contractor, without additional payment to the Contractor. Any such additional item which the Contractor moves or causes to be moved for his own convenience shall be at his own expense.

- 69. WATER FOR CONSTRUCTION:** The Contractor shall acquire a meter and make the necessary arrangements with the Town of Addison for securing and transporting all water required for construction, including water required for mixing of concrete, temporary offices, sprinkling, testing or flushing. There will be no separate pay item for connection into the existing water system and quantity of water required for construction purposes. The Town of Addison will furnish water for initial cleaning and sterilization of water lines. All additional water used by the Contractor for compaction or any other purpose incidental to this project may be obtained from existing hydrants along adjacent roadways.

- 70. 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 hours written notice, clean the site, and the cost thereof shall be deducted from any monies due or to become due to the Contractor under his contract; or where sufficient contract funds are unavailable for this purpose, the Contractor or his surety shall reimburse the Town of Addison for all such costs.

- 71. 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.
- 72. TOPSOILING, FERTILIZING AND SEEDING:** This item shall cover the topsoiling, seeding, fertilizing, watering and required maintenance for the grassing of all unpaved areas of the right-of-way and the easements, and all other areas of the project site that have been disturbed by this Contractor's operations including batch plant site, haul roads, etc., excluding building pad sites and lots which will not require seeding and fertilizing. The pay item shall only include that area which is within the right-of-way and the easements. All other disturbed areas requiring seeding and fertilizing shall be considered subsidiary to the cost of the project. Topsoiling, fertilizing and seeding shall be provided in accordance with NCTCOG Items 202.2, 202.4, and 202.6, respectively.
- 73. IRRIGATION AND SPRINKLER REPAIR:** The Contractor shall maintain all existing irrigation systems within the limits of the project during the duration of the Contract. 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 his own cost.

74. **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 Drawings 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.
75. **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.
76. **CLEAN-UP FOR FINAL ACCEPTANCE:** The Contractor shall make a final clean-up 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.
77. **TV INSPECTION OF WASTEWATER AND STORM DRAIN SYSTEMS:** NOT USED
78. **STREET LIGHT OPTIONS:** NOT USED
79. **MATERIALS TO BE FURNISHED BY AT&T:** NOT USED
80. **RECYCLING OF ASPHALT AND CONCRETE:** NOT USED
81. **SILICONE JOINT SEALANT:** Silicone joint sealant must be used in all instances where joint sealing applies to Portland cement concrete pavement and curbs. Payment for the use of silicone joint sealant throughout this project will in all cases be subsidiary to this contract at no extra payment.
82. **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:

- (1) Density and associated tests on embedment and backfill.
- (2) Compressive strength tests on concrete.
- (3) Gradation soil tests on backfill as may be required.
- (4) Providing test results from manufacturer as specified in Town of Addison Specifications.

- 83. CLAIMS FOR DAMAGES OR INJURY:** 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 his 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 its irrevocable 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 (30) 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.

- 84. 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.

85. **MECHANICS AND MATERIALMEN'S LIEN:** The Contractor shall be required to execute a release of mechanics and materialmen's liens upon receipt of payment.
86. **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.
87. **PRODUCT RECORD DOCUMENTS:** The Contractor shall maintain record drawings 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 Drawings, 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 Drawings: 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 Drawings.
- 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 the completion of the project, the Contractor shall deliver record drawings to the Town. The transmittal letter shall be accompanied, in duplicate 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 his authorized representative.

88. **TOWN OF ADDISON APPROVAL:** This project is subject to a 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 as-built drawings are given to the Town of Addison.
89. **USE OF EXPLOSIVES:** The use of explosives by the Contractor to complete the Work shall be prohibited.
90. **POWER FOR CONSTRUCTION:** The Contractor shall contract with the local power provider and make the necessary arrangements for securing power required for construction, including power required for temporary offices. There will be no separate pay item for connection into the existing power system or power required for construction purposes.
91. **BID ITEMS/REFERENCE SPECIFICATIONS:** The requirements of NCTCOG standard specifications for Public Works construction Current Edition dated 2004, and supplemental specification sections provided herein shall apply as described.

SECTION 01 10 00 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 1. Work covered by Contract Documents.
 2. Work by Owner.
 3. Owner furnished products.
 4. Contractor use of site and premises.
 5. Work sequence.
 6. Owner occupancy.
- B. Related Requirements:
 1. Other Division 01 Specification Sections apply to Work of this Section.
 2. Section 01 30 00 "Administrative Requirements" for Project information management.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. Identification: Redding Trail Amenity Improvements.
- B. Location: Addison, Texas.
- C. Without force or effect, Work of Project consists of:
 1. Package One Redding Trail Drainage Improvements includes grading, drainage, planting and design/build irrigation improvements as indicated in Drawings and Specifications. Project includes curbed concrete channel, grading between channel sidewalks and neighboring property fence lines, removal and replacement of shrubs at fence line, design and installation of irrigation system and associated turf re-establishment.
 2. Package Two Redding Trail Amenity Improvements includes demolition of existing retaining walls at rest nodes and trail wall sections on existing trail, replacement of existing timber walls with segmental retaining walls, removal and replacement of benches at rest nodes, replacement of concrete sidewalk adjacent to retaining walls. Replacement of pavers at rest nodes, installation of outdoor fitness court and equipment, and associated irrigation modifications and planting improvements. Contractor shall provide and install fitness court slab and install fitness court equipment.

1.3 OWNER FURNISHED PRODUCTS

- A. Products furnished to site and paid for by Owner:
 1. Package Two Fitness Court Equipment and Court Floor Tiles.
- B. Owner's Responsibilities:
 1. Arrange for and deliver Owner reviewed shop drawings, product data, and samples, to Contractor.
 2. Arrange and pay for product delivery to site.
 3. On delivery, inspect products jointly with Contractor.

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4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
 5. Arrange for manufacturers' warranties, inspections and service.
- C. Contractor's Responsibilities:
1. Review Owner reviewed shop drawings, product data, and samples.
 2. Receive and unload products at site; inspect for completeness or damage, jointly with Owner.
 3. Handle, store, install, and products.
 4. Repair or replace items damaged after receipt.

1.4 CONTRACTOR USE OF SITE AND PREMISES

- A. Limit use of site and premises to allow:
 1. Owner occupancy.
 2. Use of site and premises by public.
- B. Construction Operations: Limited to areas noted on Drawings.
- C. Time Restrictions for Performing Exterior Work: As required by Town of Addison Special Provisions.
- D. Utility Outages and Shutdown: As required by Town of Addison Special Provisions.

1.5 OWNER OCCUPANCY

- A. Owner will occupy premises during construction to conduct normal operations.
- B. Cooperate with Owner to minimize conflict, and to facilitate Owner's operations.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 20 00 - PRICE AND PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 1. Material allowances.
 2. Contingency allowance.
 3. Inspection and testing allowances.
 4. Application for Payment.
 5. Change Procedures.
 6. Alternates.
- B. Related Requirements:
 1. Other Division 01 Specification Sections apply to Work of this Section.
 2. Section 01 30 00 "Administrative Requirements" for Project information management.
 3. Section 01 33 00 "Submittal Procedures" for Schedule of Values.
 4. Section 01 60 00 "Product Requirements" for product substitutions.

1.2 TOWN OF ADDISON SPECIAL PROVISIONS

- A. Town of Addison Special Provisions requirements shall supercede all requirements within this Specification section.

1.3 CONTINGENCY ALLOWANCE

- A. The Town of Addison will provide a Project contingency outside of the Project Contract.

1.4 APPLICATIONS FOR PAYMENT

- A. Submit notarized application on AIA Form G702 - Application and Certificate for Payment and AIA G703 - Continuation Sheet.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- C. Deposits on Material, Equipment or Products:
 1. Material/Equipment Deposits: Owner will not pay for deposits for material, equipment or products that may be required of the Contractor in order to start the fabrication process of work that will eventually be incorporated into the Project but are not actually on the Project site. All material, equipment or products must be on the Project site and properly stored before the Owner will make payment to the Contractor.
 2. The Owner will make payment for materials, equipment or products that are properly delivered and stored on the Project site for subsequent incorporation into the Project as authorized in the Owner-Contractor Agreement.

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- 3. Owner may consider payment of materials, equipment or products that are properly stored, secured and insured in a third party warehouse within a fifty (50) mile radius of the Project site that are in accordance with the requirements and authorized in the Owner-Contractor Agreement.
 - D. Payment Period: As defined in Owner-Contractor agreement.
 - E. A complete application for payment includes one copy of waiver of liens from each subcontractor, Construction progress schedule, and submittal schedule, all which are required to process the Application for Payment.

1.5 CHANGE PROCEDURES

- A. Architect will advise of minor changes in Work not involving an adjustment to Contract Sum/Price or Contract Time as authorized by Owner/Contractor Agreement by issuing Architect's Supplemental Instructions on AIA Form G710.
- B. Architect may issue a Construction Change Request which includes a detailed description of a proposed change with supplementary or revised Drawings and Specifications and a change in Contract Time for executing change. Contractor will prepare and submit an estimate within seven days.
- C. Contractor may propose a change by submitting request for change to Architect. Include reason for change and effect on Contract Sum/Price, Contract Time, and subcontractors. Document requested substitutions in accordance with Section 01 60 00 "Product Requirements."
- D. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation or Contractor's request for a Change Order as approved by Architect.
- E. Unit Price Change Order: For pre-determined unit prices and quantities, Change Order will be executed on a fixed unit price basis. For unit costs or quantities of units of work which are not pre-determined, execute Work under a Construction Change Directive. Changes in Contract Sum/Price or Contract Time will be computed as specified for Time and Material Change Order.
- F. Construction Change Directive: Architect may issue a directive, on AIA Form G713 Construction Change Directive signed by Owner, instructing Contractor to proceed with a change in Work, for subsequent inclusion in a Change Order. Document will describe changes in Work, and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute change.
- G. Time and Material Change Order:
 - 1. Submit itemized account and supporting data after completion of change, within time limits indicated in Conditions of the Contract.
 - 2. Architect will determine change allowable in Contract Sum/Price and Contract Time as provided in Contract Documents.
 - 3. Maintain detailed records of work done on Time and Material basis.
 - 4. Provide full information required for evaluation of proposed changes, and to substantiate costs for changes in Work.
- H. Change Order Forms: AIA G701 Change Order.
- I. Execution of Change Orders: Architect will issue Change Orders for signatures of parties as provided in Conditions of the Contract.

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- J. Change Order: Furnish an itemized breakdown, in form acceptable to Architect of costs and supporting information including but not limited to quantities and material prices. Tier subcontracted work performed at labor rates, employer payments, and rental rates. Itemize breakdown detail shall be same for subcontractor work. Provide complete supporting information for profit and overhead or markups used when requested. Consider the following items a part of overhead or Contractor's and subcontractor's mark-up and do not include as separate cost item: Labor for Superintendents, Assistant Superintendents, home office personnel, timekeepers, and maintenance mechanics at any level of contracting; individual pieces of equipment, hand tools or instruments having a new value of \$500.00 or less, whether or not consumed by use; on site and main offices; modification to record Contract Documents; nor guarantee period costs.

1.6 ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected by Owner. Accepted Alternates will be identified in Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work as required.
- C. Schedule of Alternates:
1. Package Two Amenity Improvements Alternate No. A: Fitness Court Concrete Pad, Irrigation Modifications and Sod Renovation. As shown in Sheets L-003, L-102, L-104, L-106, L-502, L-503.
 2. Package Two Amenity Improvements Alternate No. B: Fitness Court Equipment and Floor Tile Installation. Equipment court equipment and tiles provided by owner and installed by contractor. As shown in Sheets L-102, L-503, L-504.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 30 00 - ADMINISTRATIVE REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 1. Project Information Management.
 2. Coordination.
 3. Survey.
 4. Electronic drawing file (digital data) request.
 5. Submittal schedule.
 6. Preconstruction meeting.
 7. Request for information.
 8. Site mobilization meeting.
 9. Progress meetings.
 10. Preinstallation meetings.
 11. Cutting and patching.
 12. Alteration Project procedures.
- B. Related Sections:
 1. Other Division 01 Specification Sections apply to Work of this Section.

1.2 TOWN OF ADDISON SPECIAL PROVISIONS

- A. Town of Addison Special Provisions requirements shall supercede all requirements within this Specification section.

1.3 PROJECT INFORMATION MANAGEMENT

- A. Project Website:
 1. Use Newforma Info Exchange; <https://projects.team-psc.com/UserWeb/Login> to send and receive Project information.
 2. Contact Architect to set a user name and password information.
 3. If this Project is not listed when logged in, contact Architect to add this Project to your account.
- B. Project information includes, but is not limited to, the following:
 1. Product Submittals.
 2. Requests for Information (RFI).
 3. Applications for Payment.
 4. Schedules.
 5. Construction Change Requests (CCRs).
 6. Closeout Documents.
 7. Construction Document Files.
 - a. Weather Days.
 - b. Electronic File Requests.
 - c. Correspondence.

- d. Test Reports.
- e. Meeting Minutes.
- f. Field Reports.

1.4 COORDINATION

- A. Coordinate scheduling, submittals, and Work to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items installed later.
- B. Coordinate completion and clean-up of Work of separate Sections in preparation for Substantial Completion .
- C. After Owner occupancy of premises, coordinate access to site with Owner for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.5 SURVEY

- A. Employ surveyor registered in the State of Texas to locate survey control and reference points.
- B. Protect survey control and reference points.
- C. Control datum for survey is that shown on Drawings.
- D. Verify set-backs and easements, and confirm Drawing dimensions and elevations.
- E. Provide field surveying services. Establish elevations, lines, and levels, utilizing recognized surveying practices.
- F. Submit registered site drawing and certificate signed by registered surveyor that elevations and locations of Work are in conformance with Contract Documents.

1.6 ELECTRONIC DRAWING FILE (DIGITAL DATA) REQUEST

- A. Upon Award of Contract:
 - 1. Conformed Construction Documents: If Conformed Construction Documents are required by the Owner / Architect Agreement, they will be provided in Portable Document Format (.pdf). Conformed Construction Documents are the Drawings and Specifications modified to include any Addenda and negotiated changes issued before execution of the Contract.
 - a. To the extent Conformed Construction Documents are provided to the Contractor, the following provisions shall apply:
 - 1) The Conformed Construction Documents and related information contained therein, are provided for Contractor's convenience only, and does not relieve the Contractor from the requirements of the Contract Documents issued during the procurement phase. Specifically, to the extent that any discrepancy or conflict exists between the Issue for Bid documents, including any Addenda and negotiated changes issued prior to execution of the Contract or Modifications issued after the execution of the Contract on the one hand, and the Conformed Construction Documents on the other; the Issue for Bid documents, Addenda, negotiated changes, and Modifications shall control unless otherwise specified in writing by the Architect.

- 2) Contractor shall not use such drawings, documents, or other data, in whole or in part, for any purpose or project other than this Project in the preparation of Shop Drawings and other submittals.
- 3) Contractor acknowledges that such drawings, documents, and other data are subject to change or modification. Contractor shall be responsible for updating any drawings, documents, or other data obtained prior to use by them for any purpose.
- 4) Any Conformed Construction Documents, including any Drawings, Specifications, documents, or other data related thereto are provided "as is" without representation or warranty by Architect, either expressed or implied.
- 5) Contractor acknowledges that Conformed Construction Documents provided by Architect are a courtesy to Contractor, at their specific request, and accordingly, CONTRACTOR HEREBY AGREES TO RELEASE, HOLD HARMLESS, DEFEND AND INDEMNIFY PRIMARY DESIGNER AND OWNER FROM ANY AND ALL CLAIMS, DEMANDS, OR CAUSES OF ACTION, WHICH CONTRACTOR OR ANY THIRD PARTY MAY HAVE BY REASON OF ANY INJURY OR DAMAGE SUSTAINED BY CONTRACTOR OR THIRD PARTY ARISING OUT OF OR IN ANY WAY RELATED TO THE USE OF SUCH CONFORMED CONSTRUCTION DOCUMENTS.

1.7 SUBMITTAL SCHEDULE

- A. Prepare submittal schedule in accordance with General Conditions of the Contract for Construction.
- B. Include in submittal schedule all submittals and samples required by all section of this Project Manual and any additional submittals required by the Contractor to construct the Project.
- C. Submit submittal schedule for Architect's review within 15 days after date established in Notice to Proceed or with the first Application for Payment, whichever is sooner. Failure to submit submittal schedule with the first Application for Payment will be cause for not processing Application for Payment.

1.8 PRECONSTRUCTION MEETING

- A. Owner will schedule a meeting after Notice to Proceed.
- B. Attendance Required:
 1. Owner.
 2. Architect.
 3. Contractor.
 4. Major subcontractors.
- C. Agenda:
 1. Submission of executed bonds and insurance certificates.
 2. Distribution of Contract Documents.
 3. Submission of list of subcontractors, list of products, Schedule of Values, submittal schedule, and progress schedule.
 4. Designation of personnel representing each party in Contract and Architect.

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5. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, Request for Information (RFI), and Contract closeout procedures.
 6. Review Notice to Proceed (NTP) and Substantial Completion Dates.
 7. Workers' Identification and Background Checks.
 8. Surface drainage requirements (SWPPP).
 9. Scheduling:
 - a. Use of premises by Owner and Contractor.
 - b. Owner's requirements.
 - c. Security and housekeeping procedures.
 - d. Construction progress meetings.
 - e. Procedures for testing.
 - f. Procedures for maintaining record documents.
 10. Scheduling activities of Construction Material Testing (CMT) lab.
- D. Record minutes and distribute copies within three days after meeting to participants with two copies to Architect and those affected by decisions made.

1.9 REQUEST FOR INFORMATION

- A. Request for information (RFI) requests from subcontractors or material suppliers will not be considered. All RFI's must be submitted by Contractor.
- B. RFI's must be submitted on AIA Document G716, or equal approved by Architect in advance of submitting first RFI.
- C. Information indicated on RFI shall be complete before submission. If Architect determines that request can be answered with information provided, Architect will assign an RFI tracking number. Requests determined by Architect not to be an RFI will be returned to Contractor electronically and deleted from Architect's electronic tracking software without being assigned an RFI tracking number. A transmittal document returning the denied RFI request will be provided with a response indicating action to be taken by Contractor.
- D. RFIs may contain more than one item when items are related issues. Otherwise, only one item shall be addressed on each RFI request.
- E. Allow seven (7) days for Architect's response to each RFI.
- F. Response to RFI will be issued to Contractor and Owner per Section 01 33 00 "Submittal Procedures."
- G. Responses from Architect are not changes unless issued with a change per Section 01 20 00 "Price and Payment Procedure."

1.10 SITE MOBILIZATION MEETING

- A. Schedule a meeting at site prior to Contractor occupancy.
- B. Attendance Required: Architect, special consultants, Contractor, Contractor's superintendent, and major subcontractors.
- C. Agenda:
 1. Use of premises by Owner and Contractor.
 2. Owner's requirements and occupancy.
 3. Survey and building layout.
 4. Security and housekeeping procedures.
 5. Schedules.
 6. Procedures for testing.
 7. Procedures for maintaining record documents.

8. Requirements for start-up of equipment.
 9. Inspection and acceptance of equipment put into service during construction period.
- D. Record minutes and distribute copies within three days after meeting to participants with copies to Architect and those affected by decisions made.

1.11 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of Work at minimum Bi-Weekly intervals.
- B. Make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings.
- C. Attendance Required:
 1. Owner.
 2. Job superintendent.
 3. Major subcontractors.
 4. Suppliers.
 5. Architect as appropriate to agenda topics for each meeting.
- D. Agenda:
 1. Review minutes of previous meetings.
 2. Review of Work progress.
 3. Field observations, problems, and decisions.
 4. Identification of problems which impede planned progress.
 5. Review of submittals schedule and status of submittals.
 6. Review of off-site fabrication and delivery schedules.
 7. Maintenance of progress schedule.
 8. Corrective measures to regain projected schedules.
 9. Planned progress during succeeding work period.
 10. Coordination of projected progress.
 11. Maintenance of quality and work standards.
 12. Effect of proposed changes on progress schedule and coordination.
 13. Other business relating to Work.
- E. Record minutes, and distribute copies within three days to Architect, participants, and those affected by decisions made.

1.12 PREINSTALLATION MEETING

- A. When required in individual specification Sections, convene a preinstallation meeting at site prior to installing Work.
- B. Require attendance of parties directly affecting, or affected by, Work.
- C. Notify Architect four days in advance of meeting date.
- D. Prepare agenda and preside at meeting.
 1. Review conditions of installation, preparation and installation procedures.
 2. Review coordination with related work.
- E. Record minutes, and distribute copies within three days after meeting to participants, with three copies to Architect.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual Specification Sections.
- D. Verify that utility services are available, of correct characteristics, and in correct location.

3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply any manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.3 CUTTING AND PATCHING

- A. Employ skilled and experienced installer to perform cutting and patching.
- B. Submit request in advance of cutting or altering elements which affects:
 - 1. Structural integrity of element.
 - 2. Integrity of weather-exposed or moisture-resistant elements.
 - 3. Efficiency, maintenance, or safety of element.
 - 4. Visual qualities of sight-exposed elements.
 - 5. Work of Owner or separate contractor.
- C. Execute cutting, fitting, and patching including excavation and fill, to complete Work, and to:
 - 1. Fit several parts together, to integrate with other Work.
 - 2. Uncover Work to install or correct ill-timed Work.
 - 3. Remove and replace defective and non-conforming Work.
 - 4. Remove samples of installed Work for testing.
 - 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
- D. Execute work by methods which will avoid damage to other Work, and provide proper surfaces to receive patching and finishing.
- E. Cut rigid materials using masonry saw or core drill.
- F. Restore Work with new products in accordance with requirements of Contract Documents.
- G. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- H. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- I. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection. For an assembly, refinish entire unit.
- J. Identify any hazardous substance or condition exposed during Work to Architect for decision or remedy.

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ADMINISTRATIVE REQUIREMENTS

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3.4 ALTERATION PROJECT PROCEDURES

- A. Materials: As specified in product Sections; match existing products and work for patching and extending work.
- B. Employ skilled and experienced installer to perform cutting and patching.
- C. Close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity.
- D. Remove, cut, and patch work in a manner to minimize damage and to provide a means of restoring products and finishes to original condition unless otherwise specified.
- E. Refinish visible existing surfaces to remain in renovated rooms and spaces, to specified condition for each material, with a neat transition to adjacent finishes.
- F. Where new work abuts or aligns with existing, perform a smooth and even transition. Patched work to match existing adjacent work in texture and appearance.
- G. When finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and submit recommendation to Architect for review.
- H. Where a change of plane of 1/4-inch or more occurs, submit recommendation for providing a smooth transition for Architect review.
- I. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.
- J. Finish surfaces as specified in individual product Sections.

END OF SECTION

SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 1. Submittal procedures.
 2. Resubmittal requirements.
 3. Construction progress schedules.
 4. Shop drawings.
 5. Product data.
 6. Samples.
 7. Design data.
 8. Test reports.
 9. Certificates.
 10. Manufacturers' instructions.
 11. Manufacturers' field reports.
 12. Construction photographs.
- B. Related Requirements:
 1. Other Division 01 Specification Sections apply to Work of this Section.
 2. Section 01 20 00 "Price and Payment Procedures" for Schedule of Values; Inspecting and Testing Allowances.
 3. Section 01 30 00 "Administrative Requirements" for Project information management.
 4. Section 01 40 00 "Quality Requirements" for manufacturers' field services and reports; Testing Laboratory Services.
 5. Section 01 70 00 "Execution and Closeout Requirements" for Contract warranty, manufacturer's certificates, and closeout submittals.

1.2 TOWN OF ADDISON SPECIAL PROVISIONS

- A. Town of Addison Special Provisions requirements shall supercede all requirements within this Specification section.

1.3 SUBMITTAL PROCEDURES

- A. Submit to Architect for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
- B. Produce copies and distribute in accordance with this Article.
- C. Use Project website to submit record documents as described in Section 01 70 00 "Execution and Closeout Requirements."
- D. Transmit each submittal separately with Contractor's standard transmittal letter including Contractor's name, address, and phone number. Each submittal shall contain only one Specification Section.
- E. Sequentially number transmittal forms using Section number or Contractors other sequential numbering system.

- F. Identify Project, Contractor, subcontractor, or supplier; pertinent drawing sheet and detail number(s), and Specification Section number appropriate to submittal.
- G. Apply Contractor's stamp, signed or initialed certifying that review, verification of products required, field dimensions, adjacent construction Work, and coordination of information, is in accordance with requirements of Work and Contract Documents.
- H. Schedule submittals to expedite Project, and deliver to Architect. Coordinate submission of related items.
- I. For each submittal for review, allow 15 days excluding delivery time to and from Contractor.
- J. Identify variations from Contract Documents and product or system limitations which may be detrimental to successful performance of completed Work. Information, comments, field verifications, responses, or other notations marked on submittals by Contractor shall be done in blue or green colors only.
- K. Allow space on submittals for Contractor and Architect's review stamps.
- L. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.
- M. Submittals not requested will not be recognized or processed.
- N. Format:
 - 1. Submit all submittals digitally using .PDF file extension. Each submittal shall be a single .PDF file including transmittal letter. Multiple files for same submittal will not be accepted.
 - 2. Submittals in any other format, including .ZIP files, will be rejected.
 - 3. Hard copies will not be accepted.
 - 4. To ensure each page is legible, .PDF pages of drawings shall be same size/scale as a hard copy. Where applicable, scale symbols should be provided to indicate scale. Illegible submittals will be rejected.
 - 5. Uploaded submittals to Project website.
- O. Submittal procedures described in this Article applies to construction progress schedule, products list, shop drawings, product data, samples (actual samples and digital files of same), design data, test reports, certificates, manufacturer's instructions and field reports, erection drawings, and any other type of submittal submitted to Architect.

1.4 RESUBMITTAL REQUIREMENTS

- A. Revise and resubmit submittals, as required, and resubmit to meet requirements as specified and as noted on submittal reviews.
- B. Mark as RESUBMITTAL.
- C. Re-use original transmittal number and supplement with sequential alphabetical or numeric suffix for each re-submittal.

1.5 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial progress schedule for Architect's review within 15 days after date established in Notice to Proceed or with the first Application for Payment, whichever is sooner.
- B. Revise and resubmit as required.
- C. Submit revised schedule with each Application for Payment, identifying changes since previous version.
- D. Submit a horizontal bar chart with separate line for each section of Work, identifying first work day of each week.

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- E. Indicate product/material manufacturer's lead-time for delivery to site. Include as a separate line for each product/material.
 - F. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate early and late start, early and late finish, float dates, and duration.
 - G. Indicate estimated percentage of completion for each item of Work at each submission.
 - H. Dates reviewed submittals will be required from Architect. Indicate decision dates for selection of finishes. Submit separate schedule of submittal dates for following:
 - 1. Shop drawings.
 - 2. Product data.
 - 3. Samples.
 - 4. Owner furnished products.
 - 5. Products identified under Allowances.
 - I. Determine appropriate lead times to allow for manufacturing and delivery of products/material for incorporation into Work. Indicate product/material manufacturer's lead-time for manufacturing and delivery to site. Include as a separate line for each product/material. Failure to timely submit and process submittals, and ordering of products/materials for delivery to site will not be grounds for approval of substitutions for other products/materials.
 - J. Revisions to Schedules:
 - 1. Indicate progress of each activity to date of submittal, and projected completion date of each activity.
 - 2. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
 - 3. Prepare narrative report to define problem areas, anticipated delays, and impact on Schedule. Report corrective action taken, or proposed, and its effect including effect of changes on schedules of separate contractors.

1.6 SHOP DRAWINGS

- A. Submit Shop Drawings in accordance with Town of Addison Special Provisions requirements.

1.7 PRODUCT DATA

- A. Submit Shop Drawings in accordance with Town of Addison Special Provisions requirements.

1.8 SAMPLES

- A. Submit Shop Drawings in accordance with Town of Addison Special Provisions requirements.

1.9 DESIGN DATA

- A. Submit for Architect's knowledge as Contract Administrator or for Owner.
- B. Submit for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

1.10 TEST REPORTS

- A. Submit for Architect's knowledge as Contract Administrator or for Owner.
- B. Submit test reports for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

1.11 CERTIFICATES

- A. When specified in individual Specification Sections, submit certification by manufacturer, installation/application subcontractor, or Contractor to Architect.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or product, but must be acceptable to Architect.

1.12 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual Specification Sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, startup, adjusting, and finishing.
- B. Identify conflicts between manufacturers' instructions and Contract Documents.
- C. Indicate special procedures, conditions requiring special attention and special environmental criteria required for application or installation.

1.13 MANUFACTURER'S FIELD REPORTS

- A. Submit reports for Architect's benefit as Contract Administrator or for Owner.
- B. Submit report within 30 days of observation to Architect for information.
- C. Submit for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

1.14 CONSTRUCTION PHOTOGRAPHS

- A. Each month submit photographs to Architect with Application for Payment.
- B. Photographs:
 - 1. Format: JPEG file extension; color.
 - 2. Subject:
 - a. Take five site photographs from differing directions indicating relative progress of Work, five days maximum prior to submitting pay request.
 - b. Take photographs as evidence as required to document existing Project conditions as follows:
 - 1) Exterior Views: Show complete scope of grading and drainage improvements and planting enhancements.
- C. Identify photographs with date, time, orientation, and Project identification.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

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SUBMITTAL PROCEDURES

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SECTION 01 40 00 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 1. Quality control and control of installation.
 2. Tolerances.
 3. References.
 4. Testing and Inspection services.
 5. Manufacturers' field services.
 6. Examination.
 7. Preparation.
- B. Related Requirements:
 1. Other Division 01 Specification Sections apply to Work of this Section.
 2. Section 01 30 00 "Administrative Requirements" for Project information management.
 3. Section 01 33 00 "Submittal Procedures" for submission of manufacturers' instructions and certificates.
 4. Section 01 60 00 "Product Requirements" for requirements for material and product quality.

1.2 TOWN OF ADDISON SPECIAL PROVISIONS

- A. Town of Addison Special Provisions requirements shall supercede all requirements within this Specification section.

1.3 QUALITY CONTROL AND CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as a minimum quality for Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work by persons qualified to produce workmanship of specified quality.
- F. Verify field measurements are as indicated on shop drawings or as instructed by manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.4 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.

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QUALITY REQUIREMENTS

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- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.
- C. Adjust products to appropriate dimensions; position before securing in place.

1.5 REFERENCES

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date of Contract Documents, except where a specific date is established by Code.
- C. Obtain copy of standards when required by Specification Section.
- D. Neither contractual relationship, duties, nor responsibilities of parties in Contract nor those of Architect shall be altered from Contract Documents by mention or inference otherwise in any reference document.

1.6 TESTING AND INSPECTION SERVICES

- A. Employ and pay for services of an independent testing agency or laboratory meeting requirements specified by Town of Addison.
- B. The independent firm will perform inspections, tests, and other services specified in individual Specification Sections and as required by Architect or Owner.
- C. Testing, inspections and source quality control may occur on or off Project site. Perform off-site testing as required by Architect or Owner.
- D. Submit independent testing laboratory firm's reports to Architect. Reports to include observations and results of tests and will indicate compliance or non-compliance with Contract Documents.
- E. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage, provide safe access to Project site, and provide assistance by incidental labor as requested.
 1. Notify Owner, Architect and independent firm 48 hours prior to expected time for operations requiring services.
 2. Pay for additional samples and tests required for Contractor's use.
- F. Employment of independent testing agency or laboratory does not relieve Contractor from performing Work to Contract requirements.
- G. Re-testing and/or re-inspection required because of non-conformance to specified requirements will be charged to Contractor by deducting re-testing and/or re-inspection charges from Contract Sum/Price.

1.7 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual Specification Sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, and , test, adjust, and balance of equipment as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to Architect 30 days in advance of required observations. Observer subject to approval of Architect.
- C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
- D. Refer to Section 01 33 00 "Submittal Procedures," "Manufacturer's Field Reports" Article.

PART 2 - PRODUCTS (Not Used)**PART 3 - EXECUTION**

3.1 EXAMINATION

- A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual Specification Sections.
- D. Verify utility services are available, of correct characteristics, and in correct locations.

3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

END OF SECTION

SECTION 01 42 00 - REFERENCES

PART 1 - GENERAL

1.1 SUMMARY

- A. Related Requirements:
 1. Other Division 01 Specification Sections apply to Work of this Section.

1.2 TOWN OF ADDISON SPECIAL PROVISIONS

- A. Town of Addison Special Provisions requirements shall supercede all requirements within this Specification section.

1.3 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Unload, temporarily store, unpack, assemble, erect, place, anchor, apply, work to dimension, finish, cure, protect, clean, and similar operations at Project site.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.4 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
 1. For standards referenced by applicable building codes, comply with dates of standards as listed in building codes.

- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.5 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Abbreviations and acronyms not included in this list shall mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States." The information in this list is subject to change and is believed to be accurate as of the date of the Contract Documents.
1. AAMA - American Architectural Manufacturers Association; www.aamanet.org.
 2. AASHTO - American Association of State Highway and Transportation Officials; www.transportation.org.
 3. ACI - American Concrete Institute; (Formerly: ACI International); www.concrete.org.
 4. ACPA - American Concrete Pipe Association; www.concrete-pipe.org.
 5. AGA - American Gas Association; www.aga.org.
 6. AIA - American Institute of Architects (The); www.aia.org.
 7. AISC - American Institute of Steel Construction; www.aisc.org.
 8. AISI - American Iron and Steel Institute; www.steel.org.
 9. ANSI - American National Standards Institute; www.ansi.org.
 10. AOSA - Association of Official Seed Analysts, Inc.; www.aosaseed.com.
 11. APA - Architectural Precast Association; www.archprecast.org.
 12. ASCE - American Society of Civil Engineers; www.asce.org.
 13. ASCE/SEI - American Society of Civil Engineers/Structural Engineering Institute; (See ASCE).
 14. ASSP - American Society of Safety Professionals (The); www.assp.org.
 15. ASTM - ASTM International; www.astm.org.
 16. BIFMA - BIFMA International; (Business and Institutional Furniture Manufacturer's Association); www.bifma.org.
 17. CLFMI - Chain Link Fence Manufacturers Institute; www.chainlinkinfo.org.
 18. CRSI - Concrete Reinforcing Steel Institute; www.crsi.org.
 19. CSI - Construction Specifications Institute (The); www.csiresources.org.
 20. ICBO - International Conference of Building Officials; (See ICC).
 21. ICC - International Code Council; www.iccsafe.org.
 22. ICRI - International Concrete Repair Institute, Inc.; www.icri.org.
 23. NALP - National Association of Landscape Professionals; www.landscapeprofessionals.org.
 24. NRMCA - National Ready Mixed Concrete Association; www.nrmca.org.
 25. NSPE - National Society of Professional Engineers; www.nspe.org.
 26. PCI - Precast/Prestressed Concrete Institute; www.pci.org.
- B. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is believed to be accurate as of the date of the Contract Documents.
1. ICC - International Code Council; www.iccsafe.org.

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2. ICC-ES - ICC Evaluation Service, LLC; www.icc-es.org.
- C. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Information is subject to change and is up to date as of the date of the Contract Documents.
1. CPSC - Consumer Product Safety Commission; www.cpsc.gov.
 2. EPA - Environmental Protection Agency; www.epa.gov.
 3. USPS - United States Postal Service; www.usps.com.
- D. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.
1. TAS; Architectural Barriers Texas Accessibility Standards; www.tdlr.texas.gov/ab/abtas.htm.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Temporary Utilities:
 - a. Electricity.
 - b. Communication services.
 - c. Water.
 - d. Sanitary.
 - 2. Construction Facilities:
 - a. Field offices and sheds.
 - b. Vehicular access.
 - c. Parking.
 - d. Progress cleaning.
 - e. Project identification.
 - f. Traffic regulation.
 - 3. Temporary Controls:
 - a. Barriers.
 - b. Fencing.
 - c. Security.
 - d. Water control.
 - e. Dust control.
 - f. Erosion and sediment control.
 - g. Noise control.
 - h. Pest and rodent control.
 - i. Pollution control.
 - j. Protection of Work.
 - 4. Removal of utilities, facilities, and controls.
- B. Related Requirements:
 - 1. Other Divisions 01 Specification Sections apply to Work of this Section.
 - 2. Section 01 70 00 "Execution and Closeout Requirements" for final cleaning.

1.2 TOWN OF ADDISON SPECIAL PROVISIONS

- A. Town of Addison Special Provisions requirements shall supercede all requirements within this Specification section.

1.3 TEMPORARY ELECTRICITY

- A. Provide and pay for required power service from existing electrical utility source.

1.4 TEMPORARY WATER SERVICE

- A. Provide, maintain and pay for suitable quality water service. Extend branch piping with outlets located so water is available by hoses with threaded connections.

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1.5 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures.
- B. Existing facilities shall not be used.
- C. At end of construction, return facilities to same or better condition than originally found.

1.6 FIELD OFFICES AND SHEDS

- A. Do not use existing facilities for field offices or for storage.
- B. Office
 - 1. If Contractor requires a temporary field office, Contractor can locate office structure on the parking lot behind the Addison Athletic Club, as directed by Owner.
 - 2. Weathertight, with lighting, electrical outlets, heating, cooling, and ventilating equipment.
 - 3. Equip with sturdy furniture including drawing rack, and drawing display table, and conference table and chairs to accommodate six persons.
 - 4. Provide temporary communications services specified in this Section.
 - 5. Locate offices and sheds a minimum distance of 30 feet from existing and new structures.
- C. Maintenance and Cleaning:
 - 1. Weekly janitorial services for offices; periodic cleaning and maintenance for office and storage areas.
 - 2. Maintain approach walks free of mud, water, and snow.
- D. Removal: At completion of Work remove buildings, foundations, utility services, and debris. Restore areas.

1.7 EMPLOYEE RESIDENTIAL OCCUPANCY

- A. Not allowed on Owner's property.

1.8 VEHICULAR ACCESS

- A. Construct temporary all-weather access roads from public thoroughfares to serve construction area, of width and load bearing capacity to accommodate unimpeded traffic for construction purposes.
- B. Extend and relocate vehicular access as Work progress requires, provide detours as necessary for unimpeded traffic flow.
- C. Location as indicated on Drawings
- D. Provide and maintain access to fire hydrants free of obstructions.
- E. Provide means of removing mud from vehicle wheels before entering on site paved areas.
- F. Use existing on-site roads for construction traffic as designated.

1.9 PARKING

- A. Contractor shall coordinate construction parking locations with Owner.
- B. Do not allow heavy or tracked vehicles or construction equipment in parking areas.
- C. Maintenance:
 - 1. Maintain traffic and parking areas in sound condition free of excavated material, construction equipment, products, mud, snow, and ice.

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TEMPORARY FACILITIES AND CONTROLS

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2. Maintain existing and permanent paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.
- D. Removal, Repair:
 1. Remove temporary materials and construction when permanent paving is usable Substantial Completion.
 2. Remove underground work and compacted materials to depth of 2 feet; fill and grade site as specified.
 3. Repair existing facilities damaged by use, to original condition.
- E. Mud from Site Vehicles: Provide means of removing mud from vehicle wheels before entering streets.

1.10 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove waste materials, debris, and rubbish from site and dispose off-site at intervals as required to maintain clean site.

1.11 PROJECT IDENTIFICATION

- A. Project Identification Sign:
 1. Design: As provided by Town of Addison.
 2. Size: Provide one 8 feet wide by 4 feet high.
 3. Materials: 3/4-inch-thick exterior grade plywood and solid wood frame.
 4. Background Paint: Exterior quality, two coats; sign background of color as selected.
 5. Lettering: Exterior paint of quality adequate to withstand weathering, fading, and chipping for duration of construction, contrasting colors as selected with exhibit lettering by professional sign painter.
 6. Design: Design indicated in Drawings.
 7. Content:
 - a. Project title, as indicated on Contract Documents.
 - b. Owners name and logo.
 - c. Council members.
 - d. Commissioner's Court members.
 - e. School Board members.
 - f. Names and titles of Architect and Consultants.
 - g. Name of Prime Contractor.
 8. Lettering: Series C of Standard Alphabet for Highway Signs, Public Roads Administration, Federal Works Agency.
- B. Project Informational Signs:
 1. If required by other Documents or Sections of Project Manual, provide weather-protected signs for site safety procedures, wage rates, and Storm Water Pollution Prevention Plan.
 2. Erect sign on or adjacent to field office, if required.
- C. Design sign and structure to withstand 90 miles/hr wind velocity.
- D. Installation:
 1. Install Project identification sign within 15 days after date fixed by Owner-Contractor Agreement.
 2. Erect at location directed by Owner.

3. Erect supports and framing on secure foundation, rigidly braced and framed to resist wind loadings.
 4. Install sign surface plumb and level, with butt joints. Anchor securely.
 5. Paint exposed surfaces of sign supports and framing.
- E. No other signs are allowed without Owner's permission except those required by law.
- F. Maintenance: Maintain signs and supports clean, repair deterioration and damage.
- G. Removal: Remove signs, framing, supports, and foundations at completion of Project and restore area.

1.12 TRAFFIC REGULATION

- A. Signs, Signals, and Devices:
1. Post Mounted and Wall Mounted Traffic Control and Informational Signs: As approved by authority having jurisdiction.
 2. Traffic Control Signals: As approved by local jurisdictions.
 3. Traffic Cones and Drums: As approved by authority having jurisdiction.
 4. Flares and Lights: As approved by authority having jurisdiction.
 5. Flag Person Equipment: As required by authority having jurisdiction.
- B. Flag Persons: Provide trained and equipped flag persons to regulate traffic when construction operations or traffic encroach on public traffic lanes.
- C. Flares and Lights: Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.
- D. Haul Routes:
1. Consult with authority having jurisdiction, establish public thoroughfares to be used for haul routes and site access.
 2. Confine construction traffic to designated haul routes.
 3. Provide traffic control at critical areas of haul routes to regulate traffic, to minimize interference with public traffic.
- E. Traffic Signs and Signals:
1. Provide signs at approaches to site and on site, at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.
 2. Relocate as Work progresses, to maintain effective traffic control.
- F. Removal:
1. Remove equipment and devices when no longer required.
 2. Repair damage caused by installation.
 3. Remove post settings to depth of 2 feet.

1.13 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
1. Allow for Owner's use of site.
- B. Provide protection for the following items designated to remain. Replace damaged items condition to original condition.
1. Trees.
 2. Shrubbery.
 3. Lawns.

- C. Protect site improvements including but not limited to pavements, walkways, and drainage structures from damage. Replace damaged site improvements to original condition.
- D. Protect non-owned vehicular traffic and stored materials from damage.

1.14 TEMPORARY FENCING

- A. Construction: Commercial grade chain link fence.
- B. Provide 6-foot-high fence around construction site; equip with vehicular and pedestrian gates with locks.

1.15 SECURITY

- A. Security Program:
 1. Protect Work and existing premises from theft, vandalism, and unauthorized entry.
 2. Initiate program at Project mobilization.
 3. Maintain program throughout construction period until Owner acceptance precludes need for Contractor security.
- B. Entry Control:
 1. Restrict entrance of persons and vehicles into Project site.
 2. Allow entrance only to authorized persons with proper identification.
 3. Maintain log of workers and visitors, make available to Owner on request.
 4. Owner will control entrance of persons and vehicles related to Owner's operations.
- C. Restrictions:
 1. Do not allow cameras on site or photographs taken except by written approval of Owner.
 2. Do no work on Sundays.

1.16 WATER CONTROL

- A. Grade site to drain.
- B. Maintain excavations free of water.
- C. Provide, operate, and maintain pumping equipment.
- D. Protect site from puddling and running water. Provide water barriers as required to protect site from soil erosion.
- E. Provide water barriers as required to protect existing buildings from puddling, ponding or other water accumulation that may damage foundations or other sub-surface construction.

1.17 DUST CONTROL

- A. Execute Work by methods to minimize raising dust from construction operations.
- B. Provide positive means to prevent air-borne dust from dispersing into atmosphere.

1.18 EROSION AND SEDIMENT CONTROL

- A. Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
- B. Minimize surface area of bare soil exposed at one time.
- C. Provide temporary measures including berms, dikes, and drains, and other devices to prevent water flow that would result in erosion.
- D. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.

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- E. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.

1.19 NOISE CONTROL

- A. Provide methods, means, and facilities to minimize disruption of Owner's operations and activities due to noise produced by construction operations.
- B. Conduct activities that will produce noise that will or potentially will interfere with Owner's operations and activities at times agreed to by Owner.

1.20 PEST AND RODENT CONTROL

- A. Provide methods, means, and facilities to prevent the following from damaging Work:
 1. Pests.
 2. Insects.
 3. Rodents.

1.21 POLLUTION CONTROL

- A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.
- B. Comply with pollution and environmental control requirements of authorities having jurisdiction.

1.22 PROTECTION OF INSTALLED WORK

- A. Protect installed Work and provide special protection where specified in individual Specification Sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to minimize damage.
- C. Protect finished walkways, drives, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- D. Prohibit traffic from landscaped areas.

1.23 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary above grade utilities, equipment, facilities, and materials as soon as permanent facilities can be utilized.
- B. Remove risers for underground utilities to a minimum depth of 2 feet and cap.
- C. Remove buried equipment, facilities, and materials completely to a minimum depth of 2 feet and cap.
- D. Backfill excavations as specified in other sections and grade site as indicated.
- E. Clean and repair damage caused by installation or use of temporary work.
- F. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.
- G. Remove the following at completion of Work:
 1. Office.
 2. Storage sheds.
 3. Enclosures.

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PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

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SECTION 01 60 00 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 1. Products.
 2. Product delivery, storage, and handling.
 3. Product options.
 4. Substitutions.
- B. Related Requirements:
 1. Other Division 01 Specification Sections apply to Work of this Section.
 2. Section 01 30 00 "Administrative Requirements" for Project information management.
 3. Section 01 40 00 "Quality Requirements" for product quality monitoring. Testing Laboratory Services.
 4. Section 01 42 00 "References."

1.2 TOWN OF ADDISON SPECIAL PROVISIONS

- A. Town of Addison Special Provisions requirements shall supercede all requirements within this Specification section.

1.3 PRODUCTS

- A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming Work and does not include machinery and equipment used for preparation, fabrication, conveying and erection of Work. When allowed by Contract Documents, products may include used and/or existing materials or components.
- B. Hazardous Materials: Products or material containing hazardous materials or substances, including but not limited to asbestos or polychlorinated biphenylshall (PCB), shall not be included in Work.
- C. Do not use materials and equipment removed from existing premises, except as specifically permitted by Contract Documents.
- D. Provide interchangeable components of same manufacturer, for similar components.
- E. Materials required to match existing work and not otherwise specified, shall be equal to existing work in quality, color, and finish. Workmanship and installation shall be comparable to adjacent existing work. Architect shall be authority in determination of acceptable work.

1.4 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Delivery:
 1. Deliver materials, products, and equipment to site in manufacturer's original, unopened containers or packaging, with identifying labels intact and legible.
 2. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

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3. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
 4. Arrange deliveries in accord with construction schedule and in ample time to facilitate inspection prior to installation to avoid unnecessary delays in construction process.
- B. Storage:
1. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible.
 2. Store sensitive products in weathertight, climate-controlled enclosures.
 3. For exterior storage of fabricated products, place on supports, above ground, sloped to drain water.
 4. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation or potential degradation of products.
 5. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
 6. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
 7. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.
 8. Materials, products, and equipment may be stored off site in a bonded and insured warehouse approved by Architect and Owner. Pay all costs incurred for off-site storage facilities. Products properly stored in off-site storage facilities may be included in progress pay requests with written approval of Architect.
- C. Handling: Handle materials, products, and equipment in a manner prescribed by manufacturer or specified to protect from damage during storage and installation.

1.5 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named in accordance with this Section.

1.6 SUBSTITUTIONS

- A. Instructions to Bidders specify time restrictions for submitting requests for Substitutions during bidding period to requirements specified in this Section.
- B. Substitutions (after bidding period) may be considered when a product becomes unavailable through no fault of Contractor.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that Bidder:
 1. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
 2. Will provide same warranty for Substitution as for specified product.
 3. Will coordinate installation and make changes to other Work which may be required for Work to be complete with no additional cost to Owner.

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4. Waives claims for additional costs or time extension which may subsequently become apparent.
 5. Will reimburse Owner and Architect for review or redesign services associated with re-approval by authorities.
- E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to Contract Documents.
- F. Substitution Submittal Procedure:
1. Submit request for Substitution for consideration. Limit each request to one proposed Substitution.
 2. Requests shall include name of material or equipment to be substituted and a description of proposed substitution including drawings, performance and test data, and other information necessary for an evaluation.
 3. Submit item-by-item (line-by-line) comparison of each item listed in Specification compiled and submitted comparing specified material/product with proposed substitution and specifically noting all differences between the compared products and/or systems.
 4. Submit statement setting forth changes in other material, equipment or other portions of Work including changes in work of other contracts that incorporation of proposed substitution would require shall be included.
 5. Submit shop drawings, product data, and certified test results for proposed product equivalence.
 6. Architect will notify Contractor, in writing, of decision to accept or reject request.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 70 00 - EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 1. Closeout procedures.
 2. Final cleaning.
 3. Starting of systems.
 4. Demonstration and instructions.
 5. Protecting installed construction.
 6. Hazardous materials affidavits.
 7. Project record documents.
 8. Operation and maintenance data.
 9. Manual for materials and finishes.
 10. Spare parts and maintenance products.
 11. Product warranties and product bonds.
 12. Maintenance service.
- B. Related Requirements:
 1. Other Division 01 Specification Sections apply to Work of this Section.
 2. Section 01 30 00 "Administrative Requirements" for Project information management.

1.2 TOWN OF ADDISON SPECIAL PROVISIONS

- A. Town of Addison Special Provisions requirements shall supercede all requirements within this Specification section.

1.3 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect's review.
- B. Provide submittals to Architect required by authority having jurisdiction.
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- D. Closeout documents will be submitted electronically in OCR (Optical Character Recognition)/PDF format.
- E. At Owners request, Contractor shall provide a hard copy of Closeout Documents in three-ring binders.

1.4 FINAL CLEANING

- A. Execute final cleaning prior to final Project assessment.
- B. Clean equipment and fixtures to sanitary condition with cleaning materials appropriate to surface and material being cleaned.

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- C. Clean site; sweep paved areas, rake clean landscaped surfaces.
- D. Remove waste and surplus materials, rubbish, and construction facilities from site.

1.5 STARTING OF SYSTEMS

- A. Coordinate schedule for startup of various equipment and systems.
- B. Notify Owner days prior to startup of each item.
- C. Verify each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions which may cause damage.
- D. Verify tests, meter readings, and specified electrical characteristics agree with those required by equipment or system manufacturer.
- E. Verify wiring and support components for equipment are complete and tested.
- F. Execute startup under supervision of applicable Contractors' personnel in accordance with manufacturers' instructions.
- G. Submit a written report in accordance with Section 01 33 00 "Submittal Procedures" that equipment or system has been properly installed and is functioning correctly.

1.6 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of products to Owner's personnel two weeks prior to date of Substantial Completion.
- B. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- C. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owner's personnel in detail to explain aspects of operation and maintenance.
- D. Demonstrate startup, operation, control, adjustment, troubleshooting, servicing, maintenance, and shutdown of each item of equipment at agreed time, at equipment location.
- E. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.
- F. Required instruction time for each item of equipment and system is specified in individual Sections.

1.7 PROTECTING INSTALLED CONSTRUCTION

- A. Protect installed Work and provide special protection where specified in individual Specification Sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit traffic from landscaped areas.

1.8 HAZARDOUS MATERIALS AFFIDAVITS

- A. Provide notarized affidavits declaring that hazardous materials were not incorporated into or delivered to site.
- B. Hazardous materials include asbestos, lead polychlorinated biphenyl (PCB), prohibited termite eradication chemicals or any substance of any proportion determined or suspected by an agency of federal or state government to create a health hazard.
- C. Provide table of contents listing affidavits in alphabetical order.
- D. Prepare cover page with printed title "AFFIDAVITS OF NON-INCORPORATED HAZARDOUS MATERIALS", Title of Project, Project Address, Owner's Name, Address and Phone, and Date of Construction Completion.
- E. Provide one complete set of aforementioned information in OCR (Optical Character Recognition)/PDF format.
- F. Submit prior to Application for Final Payment.

1.9 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of record documents; record actual revisions to Work:
 1. Drawings.
 2. Specifications.
 3. Addenda.
 4. Change Orders and other modifications to Contract.
 5. Reviewed Shop Drawings, Product Data, and Samples.
 6. Complete set of MSDS sheets for materials.
 7. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress, not less than weekly.
- E. Specifications: Legibly mark and record at each product Section description of products installed, including following:
 1. Manufacturer's name and product model and number.
 2. Product substitutions or alternates utilized.
 3. Changes made by Addenda, Change Orders, RFI responses, and other modifications. For Addenda, Change Orders, and RFI responses, cut out and tape to pages in appropriate location, referencing source of change.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 1. Measured depths of foundations in relation to finish first floor datum.
 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of Work.
 4. Field changes of dimension and detail.
 5. Details not on original Contract Drawings.
 6. Changes made by Addenda, Change Order, RFI responses, and other modifications. For Addenda, Change Orders, and RFI responses, cut out and tape to pages in appropriate location, referencing source of change.
 7. Submit in OCR (Optical Character Recognition)/PDF format.

8. Comply with most current requirements of Department of State Health Services, Texas Asbestos Health Protection Rules (TAHPR), Title 25., HEALTH SERVICES, Part I, Chapter 295-Occupational Health, §295.34-Asbestos Management in Facilities and Public Buildings, paragraph (i) as a minimum and as outlined below.
 9. Submit MSDS on products used in construction of Project.
 10. Submit MSDS electronically in 8-1/2- by 11-inch format text pages.
 11. Prepare cover page with printed title "MATERIAL SAFETY DATA SHEETS (MSDS)", Title of Project, Project Address, Owner's Name, Address and Phone, and Date of Construction Completion.
 12. Internally subdivide contents with page dividers, organized into CSI format shown in Project Manual.
 13. Prepare a table of contents, listing each of Division headings and listing each material/product under each heading by manufacturer and material/product name.
 14. Submit complete set of aforementioned information in OCR (Optical Character Recognition)/PDF format.
 15. Submit information with Application for Final Payment and include MSDS for materials/products delivered or installed in Project.
 16. Failure to submit updated electronic MSDS documents will cause Application for Final Payment to be held by Architect (not submitted to Owner for processing) until such time updated electronic MSDS documents are received and reviewed for compliance by Architect.
- G. Submit documents to Architect with claim for final Application for Payment.

1.10 OPERATION AND MAINTENANCE DATA

- A. Submit data electronically in 8-1/2- by 11-inch text pages, OCR (Optical Character Recognition)/PDF format.
- B. Prepare cover page with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of Project.
- C. Internally subdivide contents with page dividers, logically organized as described below:
 1. Drawings: Provide in OCR (Optical Character Recognition)/PDF format.
 2. Contents: Prepare Table of Contents for each file (if multiple files), with each product or system description identified, in three parts as follows:
 - a. Part 1: Directory, listing names, addresses, and telephone numbers of Architect, Contractor, subcontractors, and major equipment suppliers.
 - b. Part 2: Operation and maintenance instructions, arranged by system and subdivided by Specification Section. For each category, identify names, addresses, and telephone numbers of subcontractors and suppliers. Identify:
 - 1) Significant design criteria.
 - 2) List of equipment.
 - 3) Parts list for each component.
 - 4) Operating instructions.
 - 5) Maintenance instructions for equipment and systems.
 - 6) Maintenance instructions for special finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
 - c. Part 3: Project documents and certificates, including:
 - 1) Shop drawings and product data.
 - 2) Air and water balance reports.
 - 3) Certificates.

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- 4) Scanned copies of warranties and bonds in OCR (Optical Character Recognition)/PDF format.
 - D. Submit one complete set of aforementioned information in OCR (Optical Character Recognition)/PDF format.
 - E. Submit documents with Application for Final Payment.

1.11 MANUAL FOR MATERIALS AND FINISHES

- A. Submit in OCR (Optical Character Recognition)/PDF format of preliminary draft or proposed formats and outlines of contents before start of Work. Architect will review draft and return electronic file with comments.
- B. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit documents within 10 days after acceptance.
- C. Submit one electronic copy of completed volumes 15 days prior to final inspection. Draft copy to be reviewed and returned after final inspection, with Architect comments. Revise content of electronic document set as required prior to final submission.
- D. Submit electronic documents of revised final volumes in final form within 10 days after final inspection.
- E. Instructions for Care and Maintenance: Include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
- F. Moisture Protection and Weather Exposed Products: Include product data listing applicable reference standards, chemical composition, and details of installation. Include recommendations for inspections, maintenance, and repair.
- G. Additional Requirements: As specified in individual product Specification Sections.
- H. Include listing in Table of Contents for design data, with fly sheet.

1.12 SPARE PARTS AND MAINTENANCE PRODUCTS

- A. Furnish spare parts, maintenance, and extra products in quantities specified in individual Specification Sections.
- B. Deliver to Project site; obtain receipt prior to final payment.
- C. Submit receipts signed by Owner or letter stating Contractor has delivered extra products to Owner.

1.13 PRODUCT WARRANTIES AND PRODUCT BONDS

- A. Obtain warranties and bonds executed by responsible subcontractors, suppliers, and manufacturers, within 10 days after completion of applicable item of work.
- B. Execute and assemble transferable warranty documents and bonds from subcontractors, suppliers, and manufacturers.
- C. Verify documents are in proper form, contain full information, and are notarized.
- D. Co-execute submittals when required.
- E. Include Table of Contents.
- F. Submit one complete set of aforementioned information in OCR (Optical Character Recognition)/PDF format for review.
- G. Submit prior to Application for Final Payment.
- H. Time of Submittals:
 - 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within 10 days after acceptance.

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2. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing date of acceptance as beginning of warranty or bond period.

1.14 MAINTENANCE SERVICE

- A. Furnish service and maintenance of components indicated in Specification Sections during warranty period.
- B. Examine system components at frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- C. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by manufacturer of original component.
- D. Do not assign or transfer maintenance service to agent or Subcontractor without prior written consent of Owner.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

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SECTION 31 10 00 - SITE CLEARING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 1. Protecting existing vegetation to remain.
 2. Removing existing vegetation.
 3. Clearing and grubbing.
 4. Stripping and stockpiling topsoil.
 5. Removing above- and below-grade site improvements.
 6. Temporary erosion and sedimentation control.
- B. Related Requirements:
 1. Division 01 Specification Sections apply to Work of this Section.
 2. Section 01 50 00 "Temporary Facilities and Controls" for temporary erosion- and sedimentation-control measures.

1.2 DEFINITIONS

- A. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.
- B. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil," but in disturbed areas such as urban environments, the surface soil can be subsoil.
- C. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil; the zone where plant roots grow. Its appearance is generally friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects larger than 2 inches in diameter; and free of weeds, roots, toxic materials, or other nonsoil materials.
- D. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction and indicated on Drawings.
- E. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction and indicated on Drawings.
- F. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 MATERIAL OWNERSHIP

- A. Except for materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.5 INFORMATIONAL SUBMITTALS

- A. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.
 - 1. Use sufficiently detailed photographs or video recordings.
- B. Record Drawings: Identifying and accurately showing locations of capped utilities and other subsurface structural, electrical, and mechanical conditions.

1.6 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed trafficways if required by Owner or authorities having jurisdiction.
- B. Utility Locator Service: Notify utility locator service for area where Project is located before site clearing.
- C. Do not commence site clearing operations until temporary erosion- and sedimentation-control and plant-protection measures are in place.
- D. Tree- and Plant-Protection Zones: Protect according to requirements in Drawings.
- E. Soil Stripping, Handling, and Stockpiling: Perform only when the soil is dry or slightly moist.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Satisfactory Soil Material: Requirements for satisfactory soil material are specified in Section 31 20 00 "Earth Moving."
 - 1. Obtain approved borrow soil material off-site when satisfactory soil material is not available on-site.
- B. Antirust Coating: Fast-curing, lead- and chromate-free, self-curing, universal modified-alkyd primer complying with MPI #23 (surface-tolerant, anticorrosive metal primer).

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Verify that trees, shrubs, and other vegetation to remain or to be relocated have been flagged and that protection zones have been identified and enclosed according to requirements in Drawings.

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- C. Protect existing site improvements to remain from damage during construction.
 - 1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings and requirements of authorities having jurisdiction.
- B. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- C. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
- D. Remove erosion and sedimentation controls, and restore and stabilize areas disturbed during removal.

3.3 TREE AND PLANT PROTECTION

- A. Protect trees and plants remaining on-site according to requirements in Drawings.
- B. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations according to requirements in Drawings.

3.4 EXISTING UTILITIES

- A. Locate, identify, and disconnect utilities indicated to be abandoned in place.
- B. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others, unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Owner not less than two days in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Owner's written permission.

3.5 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.
 - 1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
 - 2. Grind down stumps and remove roots larger than 2 inches in diameter, obstructions, and debris to a depth of 18 inches below exposed subgrade.
 - 3. Use only hand methods or air spade for grubbing within protection zones.
 - 4. Chip removed tree branches and dispose of off-site.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.
 - 1. Place fill material in horizontal layers not exceeding a loose depth of 8 inches, and compact each layer to a density equal to adjacent original ground.

3.6 TOPSOIL STRIPPING

- A. Remove sod and grass before stripping topsoil.
- B. Strip topsoil to depth of 6 inches in a manner to prevent intermingling with underlying subsoil or other waste materials.
 - 1. Remove subsoil and nonsoil materials from topsoil, including clay lumps, gravel, and other objects larger than 2 inches in diameter; trash, debris, weeds, roots, and other waste materials.
- C. Stockpile topsoil away from edge of excavations without intermixing with subsoil or other materials. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.
 - 1. Limit height of topsoil stockpiles to 72 inches.
 - 2. Do not stockpile topsoil within protection zones.
 - 3. Stockpile surplus topsoil to allow for respreading deeper topsoil.
- D. Stockpiled topsoil shall not be spread into proposed planting beds. Only imported, manufactured planting bed mix is to be installed at planting beds at a 12-inch minimum depth as required in Section 32 91 13 Soil Preparation.

3.7 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.
- B. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.
 - 1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut along line of existing pavement to remain before removing adjacent existing pavement. Saw-cut faces vertically.
 - 2. Paint cut ends of steel reinforcement in concrete to remain with two coats of antirust coating, following coating manufacturer's written instructions. Keep paint off surfaces that will remain exposed.

3.8 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.

END OF SECTION

SECTION 31 20 00 - EARTH MOVING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Excavating and filling for rough grading the Site.
 2. Preparing subgrades for walks, pavements, turf and grasses and plants.
 3. Excavating and backfilling for buildings and structures.
 4. Drainage course for concrete slabs-on-grade.
 5. Subsurface drainage backfill for walls and trenches.
- B. Related Requirements:
1. Division 01 Specification Sections apply to Work of this Section.
 2. Section 31 10 00 "Site Clearing" for site stripping, grubbing, stripping and stockpiling topsoil, and removal of above- and below-grade improvements and utilities.
 3. Section 32 92 00 "Turf and Grasses" for finish grading in turf and grass areas, including preparing and placing planting soil for turf areas.
 4. Section 32 93 00 "Plants" for finish grading in planting areas and tree and shrub pit excavation and planting.

1.2 DEFINITIONS

- A. Backfill: Soil material or controlled low-strength material used to fill an excavation.
1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
 2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- B. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.
- C. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.
- D. Drainage Course: Aggregate layer supporting the slab-on-grade that also minimizes upward capillary flow of pore water.
- E. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.
1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Architect. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
 2. Bulk Excavation: Excavation more than 10 feet in width and more than 30 feet in length.
 3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be without additional compensation.
- F. Fill: Soil materials used to raise existing grades.

- G. Rock: Rock material in beds, ledges, unstratified masses, conglomerate deposits, and boulders of rock material 3/4 cu. yd. or more in volume that exceed a standard penetration resistance of 100 blows/2 inches when tested by a geotechnical testing agency, according to ASTM D1586.
- H. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- I. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- J. Utilities: On-site underground pipes, conduits, ducts, and cables as well as underground services within buildings.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct preexcavation conference at Project site.
 - 1. Review methods and procedures related to earthmoving, including, but not limited to, the following:
 - a. Personnel and equipment needed to make progress and avoid delays.
 - b. Coordination of Work with utility locator service.
 - c. Coordination of Work and equipment movement with the locations of tree- and plant-protection zones.
 - d. Extent of trenching by hand or with air spade.
 - e. Field quality control.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of the following manufactured products required:
 - 1. Geotextiles.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified testing agency.
- B. Material Test Reports: For each on-site and borrow soil material proposed for fill and backfill as follows:
 - 1. Classification according to ASTM D2487.
 - 2. Laboratory compaction curve according to ASTM D698.

1.6 QUALITY ASSURANCE

- A. Geotechnical Testing Agency Qualifications: Qualified according to ASTM E329 and ASTM D3740 for testing indicated.

1.7 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth-moving operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.

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- B. Improvements on Adjoining Property: Authority for performing earth moving indicated on property adjoining Owner's property will be obtained by Owner before award of Contract.
 - 1. Do not proceed with work on adjoining property until directed by Architect.
 - C. Utility Locator Service: Notify utility locator service for area where Project is located before beginning earth-moving operations.
 - D. Do not commence earth-moving operations until temporary site fencing and erosion- and sedimentation-control measures specified in Section 01 50 00 "Temporary Facilities and Controls" and Section 31 10 00 "Site Clearing" are in place.
 - E. Do not commence earth-moving operations until plant-protection measures specified in Drawings are in place.
 - F. The following practices are prohibited within protection zones:
 - 1. Storage of construction materials, debris, or excavated material.
 - 2. Parking vehicles or equipment.
 - 3. Foot traffic.
 - 4. Erection of sheds or structures.
 - 5. Impoundment of water.
 - 6. Excavation or other digging unless otherwise indicated.
 - 7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.
 - G. Do not direct vehicle or equipment exhaust towards protection zones.
 - H. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D2487, or a combination of these groups; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
 - 1. Liquid Limit: less than 35.
 - 2. Plasticity Index: between 5 and 14.
- C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D2487, or a combination of these groups.
 - 1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- D. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.
- E. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- F. Drainage Course: Narrowly graded mixture of washed crushed stone, or crushed or uncrushed gravel; ASTM D448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and zero to 5 percent passing a No. 8 sieve.

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- G. Filter Material: Narrowly graded mixture of natural or crushed gravel, or crushed stone and natural sand; ASTM D448; coarse-aggregate grading Size 67; with 100 percent passing a 1-inch sieve and zero to 5 percent passing a No. 4 sieve.
- H. Sand: ASTM C33/C33M; fine aggregate.

2.2 GEOTEXTILES

- A. Subsurface Drainage Geotextile: Nonwoven needle-punched geotextile, manufactured for subsurface drainage applications, made from polyolefins or polyesters; with elongation greater than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:
 - 1. Survivability: Class 2; AASHTO M 288.
 - 2. Survivability: As follows:
 - a. Grab Tensile Strength: 157 lbf; ASTM D4632.
 - b. Sewn Seam Strength: 142 lbf; ASTM D4632.
 - c. Tear Strength: 56 lbf; ASTM D4533.
 - d. Puncture Strength: 56 lbf; ASTM D4833.
 - 3. Apparent Opening Size: No. 60 sieve, maximum; ASTM D4751.
 - 4. Permittivity: 0.2 per second, minimum; ASTM D4491.
 - 5. UV Stability: 50 percent after 500 hours' exposure; ASTM D4355.
- B. Separation Geotextile: Woven geotextile fabric, manufactured for separation applications, made from polyolefins or polyesters; with elongation less than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:
 - 1. Survivability: Class 2; AASHTO M 288.
 - 2. Survivability: As follows:
 - a. Grab Tensile Strength: 247 lbf; ASTM D4632.
 - b. Sewn Seam Strength: 222 lbf; ASTM D4632.
 - c. Tear Strength: 90 lbf; ASTM D4533.
 - d. Puncture Strength: 90 lbf; ASTM D4833.
 - 3. Apparent Opening Size: No. 60 sieve, maximum; ASTM D4751.
 - 4. Permittivity: 0.02 per second, minimum; ASTM D4491.
 - 5. UV Stability: 50 percent after 500 hours' exposure; ASTM D4355.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth-moving operations.
- B. Protect and maintain erosion and sedimentation controls during earth-moving operations.
- C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

3.2 DEWATERING

- A. Provide dewatering system of sufficient scope, size, and capacity to control hydrostatic pressures and to lower, control, remove, and dispose of ground water and permit excavation and construction to proceed on dry, stable subgrades.

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- B. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- C. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
 - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
- D. Dispose of water removed by dewatering in a manner that avoids endangering public health, property, and portions of work under construction or completed. Dispose of water and sediment in a manner that avoids inconvenience to others.

3.3 EXPLOSIVES

- A. Explosives: Do not use explosives.

3.4 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.
 - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
 - 2. Remove rock to lines and grades indicated to permit installation of permanent construction without exceeding the following dimensions:
 - a. 24 inches outside of concrete forms other than at footings.
 - b. 12 inches outside of concrete forms at footings.
 - c. 6 inches outside of minimum required dimensions of concrete cast against grade.
 - d. Outside dimensions of concrete walls indicated to be cast against rock without forms or exterior waterproofing treatments.
 - e. 6 inches beneath bottom of concrete slabs-on-grade.
 - f. 6 inches beneath pipe in trenches and the greater of 24 inches wider than pipe or 42 inches wide.

3.5 EXCAVATION FOR STRUCTURES

- A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1-inch. If applicable, extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.
 - 1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
- B. Excavations at Edges of Tree- and Plant-Protection Zones:
 - 1. Excavate by hand or with an air spade to indicated lines, cross sections, elevations, and subgrades. If excavating by hand, use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.
 - 2. Cut and protect roots according to requirements in Drawings.

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3.6 EXCAVATION FOR WALKS AND PAVEMENTS

- A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

3.7 SUBGRADE INSPECTION

- A. Notify Architect when excavations have reached required subgrade.
- B. If Architect determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
- C. Proof-roll subgrade below the building slabs and pavements with a pneumatic-tired and loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.
 - 1. Completely proof-roll subgrade in one direction. Limit vehicle speed to 3 mph.
 - 2. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Architect, and replace with compacted backfill or fill as directed.
- D. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
- E. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Architect, without additional compensation.

3.8 UNAUTHORIZED EXCAVATION

- A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi, may be used when approved by Architect.
 - 1. Fill unauthorized excavations under other construction, pipe, or conduit as directed by Architect.

3.9 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.10 BACKFILL

- A. Place and compact backfill in excavations promptly, but not before completing the following:
 - 1. Construction below finish grade including, where applicable, subdrainage, dampproofing, waterproofing, and perimeter insulation.
 - 2. Surveying locations of underground utilities for Record Documents.
 - 3. Testing and inspecting underground utilities.
 - 4. Removing concrete formwork.
 - 5. Removing trash and debris.
 - 6. Removing temporary shoring, bracing, and sheeting.

7. Installing permanent or temporary horizontal bracing on horizontally supported walls.
- B. Place backfill on subgrades free of mud, frost, snow, or ice.

3.11 SOIL FILL

- A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
- B. Place and compact fill material in layers to required elevations as follows:
 1. Under grass and planted areas, use satisfactory soil material.
 2. Under walks and pavements, use satisfactory soil material.
 3. Under footings and foundations, use engineered fill.
- C. Place soil fill on subgrades free of mud, frost, snow, or ice.

3.12 SOIL MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.
 1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
 2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

3.13 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly on all sides of structures to required elevations and uniformly along the full length of each structure.
- C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D698:
 1. Under structures, building slabs, steps, and pavements, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill soil material at 95 percent.
 2. Under walkways, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 92 percent.
 3. Under turf or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 85 percent.

3.14 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
 1. Provide a smooth transition between adjacent existing grades and new grades.
 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.

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- B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to elevations required to achieve indicated finish elevations, within the following subgrade tolerances:
 1. Turf or Unpaved Areas: Plus or minus 1-inch.
 2. Walks: Plus or minus 1-inch.
 3. Planting Beds: Exposed subgrade shall be a minimum of fifteen inches below proposed Finished Grade to account for twelve inches of imported manufactured planting bed mix and three inches of shredded hardwood mulch.

3.15 FIELD QUALITY CONTROL

- A. Special Inspections: Contractor shall engage a qualified special inspector to perform the following special inspections:
 1. Determine prior to placement of fill that site has been prepared in compliance with requirements.
 2. Determine that fill material classification and maximum lift thickness comply with requirements.
 3. Determine, during placement and compaction, that in-place density of compacted fill complies with requirements.
- B. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.
- C. Footing Subgrade: At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by Architect.
- D. Testing agency will test compaction of soils in place according to ASTM D1556, ASTM D2167, ASTM D2937, and ASTM D6938, as applicable. Tests will be performed at the following locations and frequencies:
 1. Paved and Building Slab Areas: At subgrade and at each compacted fill and backfill layer, at least one test for every 2000 sq. ft. or less of paved area or building slab but in no case fewer than three tests.
 2. Foundation Wall Backfill: At each compacted backfill layer, at least one test for every 100 feet or less of wall length but no fewer than two tests.
- E. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

3.16 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
 1. Scarify or remove and replace soil material to depth as directed by Architect; reshape and recompact.

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- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
 - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.17 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.
- B. Transport surplus satisfactory soil to designated storage areas on Owner's property. Stockpile or spread soil as directed by Architect.
 - 1. Remove waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

END OF SECTION

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SECTION 32 13 13 - CONCRETE PAVING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes Concrete Paving. Including the Following:
 - 1. Walks.
 - 2. Curbs and gutters.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 32 13 73 "Concrete Paving Joint Sealants" for joint sealants in expansion and contraction joints within concrete paving and in joints between concrete paving and asphalt paving or adjacent construction.

1.2 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash, slag cement, and other pozzolans.
- B. W/C Ratio: The ratio by weight of water to cementitious materials.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Review methods and procedures related to concrete paving, including but not limited to, the following:
 - a. Concrete mixture design.
 - b. Quality control of concrete materials and concrete paving construction practices.
 - 2. Require representatives of each entity directly concerned with concrete paving to attend, including the following:
 - a. Contractor's superintendent.
 - b. Independent testing agency responsible for concrete design mixtures.
 - c. Ready-mix concrete manufacturer.
 - d. Concrete paving subcontractor.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Design Mixtures: For each concrete paving mixture. Include alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified ready-mix concrete manufacturer and testing agency.
- B. Material Certificates: For the following, from manufacturer:
 - 1. Cementitious materials.

2. Steel reinforcement and reinforcement accessories.
 3. Admixtures.
 4. Curing compounds.
 5. Bonding agent or epoxy adhesive.
 6. Joint fillers.
- C. Material Test Reports: For each of the following:
1. Aggregates: Include service-record data indicating absence of deleterious expansion of concrete due to alkali-aggregate reactivity.
- D. Field quality-control reports.

1.6 QUALITY ASSURANCE

- A. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
- B. Testing Agency Qualifications: Qualified according to ASTM C 1077 and ASTM E 329 for testing indicated.
1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.

1.7 PRECONSTRUCTION TESTING

- A. Preconstruction Testing Service: Engage a qualified independent testing agency to perform preconstruction testing on concrete paving mixtures.

1.8 FIELD CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.
- B. Cold-Weather Concrete Placement: Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing, or low temperatures. Comply with ACI 306.1 and the following:
1. When air temperature has fallen to or is expected to fall below 40 degrees F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 degrees F and not more than 80 degrees F at point of placement.
 2. Do not use frozen materials or materials containing ice or snow.
 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in design mixtures.
- C. Hot-Weather Concrete Placement: Comply with ACI 301 and as follows when hot-weather conditions exist:
1. Cool ingredients before mixing to maintain concrete temperature below 90 degrees F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated in total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 2. Cover steel reinforcement with water-soaked burlap, so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
 3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

PART 2 - PRODUCTS

2.1 CONCRETE, GENERAL

- A. ACI Publications: Comply with ACI 301 unless otherwise indicated.

2.2 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, and smooth exposed surfaces.
1. Use flexible or uniformly curved forms for curves with a radius of 100 feet or less. Do not use notched and bent forms.
- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and that will not impair subsequent treatments of concrete surfaces.

2.3 STEEL REINFORCEMENT

- A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60; deformed.
- B. Joint Dowel Bars: ASTM A 615/A 615M, Grade 60 plain-steel bars. Cut bars true to length with ends square and free of burrs.
- C. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars, welded-wire reinforcement, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete of greater compressive strength than concrete specified, and as follows:
1. Equip wire bar supports with sand plates or horizontal runners where base material will not support chair legs.

2.4 CONCRETE MATERIALS

- A. Cementitious Materials: Use the following cementitious materials, of same type, brand, and source throughout Project:
1. Portland Cement: ASTM C 150/C 150M, gray portland cement Type I.
 2. Fly Ash: ASTM C 618, Class F.
- B. Normal-Weight Aggregates: ASTM C 33/C 33M, Class 1N, uniformly graded. Provide aggregates from a single source with documented service-record data of at least 10 years' satisfactory service in similar paving applications and service conditions using similar aggregates and cementitious materials.
1. Maximum Coarse-Aggregate Size: 1-1/2 inches nominal.
 2. Fine Aggregate Free of materials with deleterious reactivity to alkali in cement.
- C. Air-Entraining Admixture: ASTM C 260/C 260M.
- D. Chemical Admixtures: Admixtures certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material.
1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
 2. Retarding Admixture: ASTM C 494/C 494M, Type B.
 3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
 4. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.

5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.
 6. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.
- E. Water: Potable and complying with ASTM C 94/C 94M.

2.5 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 3, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. dry or cotton mats.
- B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- C. Water: Potable.
- D. Evaporation Retarder: Waterborne, monomolecular, film forming, manufactured for application to fresh concrete.
 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. BASF Corporation-Construction Systems; MasterKure ER 50 (Pre-2014: Confilm.
 - b. Dayton Superior; AquaFilm Concentrate J74.
 - c. Sika Corporation; SikaFilm.
- E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating.
 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. ChemMasters, Inc; Safe-Cure Clear DR.
 - b. Dayton Superior; Clear Resin Cure J11W.
 - c. W.R. Meadows, Inc; 1100-CLEAR SERIES.

2.6 RELATED MATERIALS

- A. Joint Fillers: ASTM D 1751, asphalt-saturated cellulosic fiber in preformed strips.

2.7 CONCRETE MIXTURES

- A. Prepare design mixtures, proportioned according to ACI 301, for each type and strength of normal-weight concrete, and as determined by either laboratory trial mixtures or field experience.
 1. Use a qualified independent testing agency for preparing and reporting proposed concrete design mixtures for the trial batch method.
 2. When automatic machine placement is used, determine design mixtures and obtain laboratory test results that comply with or exceed requirements.
- B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:
 1. Fly Ash or Pozzolan: 25 percent.
- C. Add air-entraining admixture at manufacturer's prescribed rate to result in normal-weight concrete at point of placement having an air content as follows:
 1. Air Content: 4-1/2 percent plus or minus 1-1/2 percent for 1-1/2-inch nominal maximum aggregate size.
 2. Air Content: 4-1/2 percent plus or minus 1-1/2 percent for 1-inch nominal maximum aggregate size.

3. Air Content: 5 percent plus or minus 1-1/2 percent for 3/4-inch nominal maximum aggregate size.
- D. Limit water-soluble, chloride-ion content in hardened concrete to 0.30 percent by weight of cement.
- E. Chemical Admixtures: Use admixtures according to manufacturer's written instructions.
 1. Use water-reducing admixture, high-range, water-reducing admixture, high-range, water-reducing and retarding admixture or plasticizing and retarding admixture in concrete as required for placement and workability.
 2. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
- F. Concrete Mixtures: Normal-weight concrete.
 1. Compressive Strength (28 Days): 3600 psi.
 2. Maximum W/C Ratio at Point of Placement: 0.45.
 3. Slump Limit: 4 inches, plus or minus 1-inch.

2.8 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. Furnish batch certificates for each batch discharged and used in the Work.
 1. When air temperature is between 85 and 90 degrees F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 degrees F, reduce mixing and delivery time to 60 minutes.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine exposed subgrades and subbase surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.
- B. Proof-roll prepared subbase surface below concrete paving to identify soft pockets and areas of excess yielding.
 1. Completely proof-roll subbase in one direction. Limit vehicle speed to 3 mph.
 2. Proof-roll with a pneumatic-tired and loaded, 10-wheel, tandem-axle dump truck weighing not less than 15 tons.
 3. Correct subbase with soft spots and areas of pumping or rutting exceeding depth of 1/2-inch according to requirements in Section 31 20 00 "Earth Moving."
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove loose material from compacted subbase surface immediately before placing concrete.

3.3 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.

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- B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.4 STEEL REINFORCEMENT INSTALLATION

- A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
- C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.

3.5 JOINTS

- A. General: Form construction, isolation, and contraction joints and tool edges true to line, with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline unless otherwise indicated.
 - 1. When joining existing paving, place transverse joints to align with previously placed joints unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than one-half hour unless paving terminates at isolation joints.
 - 1. Continue steel reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of paving strips unless otherwise indicated.
 - 2. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or coat with asphalt one-half of dowel length to prevent concrete bonding to one side of joint.
- C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, other fixed objects, and where indicated.
 - 1. Locate expansion joints at intervals of 50 feet unless otherwise indicated.
 - 2. Extend joint fillers full width and depth of joint.
 - 3. Terminate joint filler not less than 1/2-inch or more than 1-inch below finished surface if joint sealant is indicated.
 - 4. Place top of joint filler flush with finished concrete surface if joint sealant is not indicated.
 - 5. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
 - 6. During concrete placement, protect top edge of joint filler with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.
- D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, as follows, to match jointing of existing adjacent concrete paving:
 - 1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with grooving tool to a 3/8-inch radius. Repeat grooving of contraction joints after applying surface finishes. Eliminate grooving-tool marks on concrete surfaces.
 - a. Tolerance: Ensure that grooved joints are within 3 inches either way from centers of dowels.

2. Doweled Contraction Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or coat with asphalt one-half of dowel length to prevent concrete bonding to one side of joint.
- E. Edging: After initial floating, tool edges of paving, gutters, curbs, and joints in concrete with an edging tool to a 3/8-inch radius. Repeat tooling of edges after applying surface finishes. Eliminate edging-tool marks on concrete surfaces.

3.6 CONCRETE PLACEMENT

- A. Before placing concrete, inspect and complete formwork installation, steel reinforcement, and items to be embedded or cast-in.
- B. Remove snow, ice, or frost from subbase surface and steel reinforcement before placing concrete. Do not place concrete on frozen surfaces.
- C. Moisten subbase to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.
- D. Comply with ACI 301 requirements for measuring, mixing, transporting, and placing concrete.
- E. Do not add water to concrete during delivery or at Project site. Do not add water to fresh concrete after testing.
- F. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
- G. Consolidate concrete according to ACI 301 by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping.
 1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand spreading and consolidation. Consolidate with care to prevent dislocating reinforcement dowels joint devices.
- H. Screed paving surface with a straightedge and strike off.
- I. Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleedwater appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.
- J. Slip-Form Paving: Use design mixture for automatic machine placement. Produce paving to required thickness, lines, grades, finish, and jointing.
 1. Compact subbase and prepare subgrade of sufficient width to prevent displacement of slip-form paving machine during operations.
- K. Curbs and Gutters: Use design mixture for automatic machine placement. Produce curbs and gutters to required cross section, lines, grades, finish, and jointing.

3.7 FLOAT FINISHING

- A. General: Do not add water to concrete surfaces during finishing operations.
- B. Float Finish: Begin the second floating operation when bleedwater sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.
 - 1. Medium-to-Fine-Textured Broom Finish: Draw a soft-bristle broom across float-finished concrete surface, perpendicular to line of traffic, to provide a uniform, fine-line texture.

3.8 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- B. Comply with ACI 306.1 for cold-weather protection.
- C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete but before float finishing.
- D. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
- E. Curing Methods: Cure concrete by curing compound as follows:
 - 1. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating, and repair damage during curing period.
 - 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover, placed in widest practicable width, with sides and ends lapping at least 12 inches, and sealed by waterproof tape or adhesive. Immediately repair ant holes or tears occurring during installation or curing period using cover material and waterproof tape.

3.9 PAVING TOLERANCES

- A. Comply with tolerances in ACI 117 and as follows:
 - 1. Elevation: 3/4-inch.
 - 2. Thickness: Plus 3/8-inch, minus 1/4-inch.
 - 3. Surface: Gap below 10-feet- long; unlevelled straightedge not to exceed 1/2-inch.
 - 4. Lateral Alignment and Spacing of Dowels: 1-inch.
 - 5. Vertical Alignment of Dowels: 1/4-inch.
 - 6. Alignment of Dowel-Bar End Relative to Line Perpendicular to Paving Edge: 1/4-inch per 12 inches of dowel.
 - 7. Joint Spacing: 3 inches.
 - 8. Contraction Joint Depth: Plus 1/4-inch, no minus.
 - 9. Joint Width: Plus 1/8-inch, no minus.

3.10 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Testing Services: Testing and inspecting of composite samples of fresh concrete obtained according to ASTM C 172/C 172M shall be performed according to the following requirements:
 - 1. Testing Frequency: Obtain at least one composite sample for each 100 cu. yd. or fraction thereof of each concrete mixture placed each day.
 - a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
 - 2. Slump: ASTM C 143/C 143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
 - 3. Air Content: ASTM C 231/C 231M, pressure method; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
 - 4. Concrete Temperature: ASTM C 1064/C 1064M; one test hourly when air temperature is 40 degrees F and below and when it is 80 degrees F and above, and one test for each composite sample.
 - 5. Compression Test Specimens: ASTM C 31/C 31M; cast and laboratory cure one set of three standard cylinder specimens for each composite sample.
 - 6. Compressive-Strength Tests: ASTM C 39/C 39M; test one specimen at seven days and two specimens at 28 days.
 - a. A compressive-strength test shall be the average compressive strength from two specimens obtained from same composite sample and tested at 28 days.
- C. Strength of each concrete mixture will be satisfactory if average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
- D. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
- E. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.
- F. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect.
- G. Concrete paving will be considered defective if it does not pass tests and inspections.
- H. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
- I. Prepare test and inspection reports.

3.11 REPAIR AND PROTECTION

- A. Remove and replace concrete paving that is broken, damaged, or defective or that does not comply with requirements in this Section. Remove work in complete sections from joint to joint unless otherwise approved by Architect.
- B. Drill test cores, where directed by Architect, when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory paving areas with portland cement concrete bonded to paving with epoxy adhesive.
- C. Protect concrete paving from damage. Exclude traffic from paving for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION

SECTION 32 13 73 - CONCRETE PAVING JOINT SEALANTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 1. Cold-applied joint sealants.
 2. Joint-sealant backer materials.
 3. Primers.
- B. Related Requirements:
 1. Division 01 Specification Sections apply to Work of this Section.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product data.
- B. Samples: Manufacturer's standard color sheets, showing full range of available colors for each type of joint sealant.

1.4 QUALITY ASSURANCE

- A. Qualifications:
 1. Installers: Entity that employs installers and supervisors who are trained and approved by manufacturer.

PART 2 - PRODUCTS

2.1 JOINT SEALANTS, GENERAL

- A. Compatibility: Provide joint sealants, backer materials, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.

2.2 COLD-APPLIED JOINT SEALANTS

- A. Single-Component, Self-Leveling, Silicone Joint Sealant: ASTM D5893/D5893M, Type SL.
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Pecora Corporation.

- B. Multicomponent, Nonsag, Urethane, Elastomeric Joint Sealant: ASTM C920, Type M, Grade NS, Class 25, for Use T.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. W.R. Meadows, Inc.

2.3 JOINT-SEALANT BACKER MATERIALS

- A. Joint-Sealant Backer Materials: Nonstaining; compatible with joint substrates, sealants, primers, and other joint fillers; and approved for applications indicated by joint-sealant manufacturer, based on field experience and laboratory testing.
- B. Round Backer Rods for Cold-Applied Joint Sealants: ASTM D5249, Type 3, of diameter and density required to control joint-sealant depth and prevent bottom-side adhesion of sealant.
- C. Backer Strips for Cold- and Hot-Applied Joint Sealants: ASTM D5249; Type 2; of thickness and width required to control joint-sealant depth, prevent bottom-side adhesion of sealant, and fill remainder of joint opening under sealant.

2.4 PRIMERS

- A. Primers: Product recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Surface Cleaning of Joints: Before installing joint sealants, clean out joints immediately to comply with joint-sealant manufacturer's written instructions.
- B. Joint Priming: Prime joint substrates where indicated or where recommended in writing by joint-sealant manufacturer.

3.2 INSTALLATION OF JOINT SEALANTS

- A. Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated unless more stringent requirements apply.
- B. Joint-Sealant Installation Standard: Comply with recommendations in ASTM C1193 for use of joint sealants as applicable to materials, applications, and conditions.
- C. Install joint-sealant backers to support joint sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
 - 1. Do not leave gaps between ends of joint-sealant backer materials.
 - 2. Do not stretch, twist, puncture, or tear joint-sealant backer materials.
 - 3. Remove absorbent joint-sealant backer materials that have become wet before sealant application and replace them with dry materials.
- D. Install joint sealants immediately following backer material installation, using proven techniques that comply with the following:
 - 1. Place joint sealants so they fully contact joint substrates.

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2. Completely fill recesses in each joint configuration.
 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- E. Tooling of Nonsag Joint Sealants: Immediately after joint-sealant application and before skinning or curing begins, tool sealants in accordance with the following requirements to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint:
1. Remove excess joint sealant from surfaces adjacent to joints.
 2. Use tooling agents that are approved in writing by joint-sealant manufacturer and that do not discolor sealants or adjacent surfaces.
- F. Provide joint configuration to comply with joint-sealant manufacturer's written instructions unless otherwise indicated.
- G. Clean off excess joint sealant as the Work progresses, by methods and with cleaning materials approved in writing by joint-sealant manufacturers.

END OF SECTION

SECTION 32 14 00 - UNIT PAVING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 1. Brick pavers.
 2. Curbs and edge restraints.
- B. Related Requirements:
 1. Division 01 Specification Sections apply to Work of this Section.
 2. Section 32 13 13 "Concrete Paving" for concrete base under unit pavers and for cast-in-place concrete curbs and gutters serving as edge restraints for unit pavers.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product Data:
 1. For the following:
 - a. Pavers.
- B. Sieve Analyses: For aggregate setting-bed materials, according to ASTM C136.
- C. Samples for Verification: For full-size units of each type of unit paver indicated. Include Samples of the following:
 1. Joint materials.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified unit paving installer. Installer's field supervisor shall have Concrete Paver Installer Certification from the Interlocking Concrete Pavement Institute (ICPI) with one of the following designations:
 1. Commercial Paver Technician Designation.
- B. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
 1. Install a 7 ft by 7 ft paver area.
 2. Use this area to determine surcharge of the bitumen-sand layer, joint sizes, lines, laying pattern(s), color(s) and texture of the job.
 3. This area will be used as the standard by which the work will be judged.
 4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store pavers on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied.
- B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- C. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.
- D. Store liquids in tightly closed containers protected from freezing.
- E. Store asphalt cement and other bituminous materials in tightly closed containers.

1.7 FIELD CONDITIONS

- A. Cold-Weather Protection: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen subgrade or setting beds. Remove and replace unit paver work damaged by frost or freezing.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain each type of unit paver, joint material, and setting material from single source with resources to provide materials and products of consistent quality in appearance and physical properties.

2.2 BRICK PAVERS

- A. Basis of Design Product: Subject to compliance with requirements, provide product indicated below or comparable product approved by Owner.
- B. Brick Pavers, Light-Traffic Paving Brick: ASTM C902, Class SX , Type II, Application PX. Provide brick without frogs or cores in surfaces exposed to view in the completed Work.
 - 1. Manufacturer: Glen-Gery, or Owner Approved Equal.
 - 2. Make: Steel City Clay Pavers.
 - 3. Thickness: 2-1/4 inches.
 - 4. Face Size: 4 by 8 inches.
 - 5. Color: Autumn Haze.

2.3 SETTING-BED MATERIALS

- A. Sand for Leveling Course: Sound, sharp, washed, natural sand or crushed stone complying with gradation requirements in ASTM C33/C33M for fine aggregate.
- B. Polymeric Sand for Paver Joints. Provide Techni-Seal or equal.

2.4 CONCRETE BASE

- A. Provide concrete base as detailed on Drawings. Refer to Section 32 13 13 Concrete Paving for Concrete Material Requirements.

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UNIT PAVING

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PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces indicated to receive unit paving, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
- B. Where unit paving is to be installed over waterproofing, examine waterproofing installation, with waterproofing Installer present, for protection from paving operations, including areas where waterproofing system is turned up or flashed against vertical surfaces.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Install concrete base according to requirements of Section 32 13 73 "Concrete Paving."
- B. Sweep concrete substrates to remove dirt, dust, debris, and loose particles.

3.3 INSTALLATION GENERAL

- A. Do not use unit pavers with chips, cracks, voids, discolorations, or other defects that might be visible or cause staining in finished work.
- B. Mix pavers from several pallets or cubes, as they are placed, to produce uniform blend of colors and textures.
- C. Cut unit pavers with motor-driven masonry saw equipment to provide clean, sharp, unchipped edges. Cut units to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible. Hammer cutting is not acceptable.
- D. Handle protective-coated brick pavers to prevent coated surfaces from contacting backs or edges of other units. If, despite these precautions, coating does contact bonding surfaces of brick, remove coating from bonding surfaces before setting brick.
- E. Joint Pattern: Basket weave.
- F. Tolerances:
 - 1. Do not exceed 1/32-inch unit-to-unit offset from flush (lippage) or 1/8-inch in 10 feet from level, or indicated slope, for finished surface of paving.
 - 2. Do not exceed 1/16-inch unit-to-unit offset from flush (lippage) nor 1/8-inch in 24 inches and 1/4-inch in 10 feet from level, or indicated slope, for finished surface of paving.
- G. Expansion and Control Joints:
 - 1. Provide for sealant-filled joints at locations and of widths indicated. Provide compressible foam filler as backing for sealant-filled joints unless otherwise indicated; where unfilled joints are indicated, provide temporary filler until paver installation is complete. Install joint filler before setting pavers. Sealant materials and installation are specified in Section 32 13 73 Concrete Paving Joint Sealant.
- H. Provide concrete edge restraints as indicated. Install edge restraints and concrete base before placing unit pavers.
- I. Place sand leveling course and screed to a thickness of 1 inches, taking care that moisture content remains constant and density is loose and uniform until pavers are set and compacted.
- J. Treat leveling course with herbicide to inhibit growth of grass and weeds.

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- K. Set pavers with a minimum joint width of 1/16-inch and maximum of 1/8-inch, being careful not to disturb leveling base. Use string lines to keep straight lines. Fill gaps between units that exceed 3/8-inch with pieces cut to fit from full size unit pavers.
 - L. Vibrate pavers into leveling course with a low amplitude plate vibrator capable of a 3500 to 5000 lbf compaction force at 80 to 90 Hz. Use vibrator with neoprene mat on face of plate or other means as needed to prevent cracking and chipping of pavers. Perform at least three passes across paving with vibrator.
 - 1. Compact pavers when there is sufficient surface to accommodate operation of vibrator, leaving at least 36 inches of uncompacted pavers adjacent to temporary edges.
 - 2. Before ending each day's work, compact installed pavers except for 36 inches width of uncompacted pavers adjacent to temporary edges (laying faces).
 - 3. As work progresses to perimeter of installation, compact installed pavers that are adjacent to permanent edges unless they are within 36 inches of laying face.
 - 4. Before ending each day's work and when rain interrupts work, cover pavers that have not been compacted and cover leveling course on which pavers have not been placed with nonstaining plastic sheets to protect them from rain.
 - M. Spread dry polymeric sand and fill joints immediately after vibrating pavers into leveling course. Vibrate pavers and add sand until joints are completely filled, then remove excess sand. Leave a slight surplus of sand on surface for joint filling. Polymeric sand setting shall be performed as specified by manufacturer.
 - N. Do not allow traffic on installed pavers until sand has been vibrated into joints.
 - O. Repeat joint filling process 30 days later.
 - 1. Install job-built concrete edge restraints to comply with requirements in Section 32 13 13 "Concrete Paving."

3.4 REPAIRING, POINTING, AND CLEANING

- A. Remove and replace unit pavers that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Provide new units to match adjoining units and install in same manner as original units, with same joint treatment and with no evidence of replacement.
- B. Pointing: During tooling of joints, enlarge voids or holes and completely fill with grout. Point joints at sealant joints to provide a neat, uniform appearance, properly prepared for sealant application.
- C. Cleaning: Remove excess grout from exposed paver surfaces; wash and scrub clean.
 - 1. Remove temporary protective coating as recommended by coating manufacturer and as acceptable to paver and grout manufacturers.
 - 2. Do not allow protective coating to enter floor drains. Trap, collect, and remove coating material.

END OF SECTION

SECTION 32 32 23 - SEGMENTAL RETAINING WALLS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes single- depth segmental retaining walls with soil reinforcement.
- B. Related Requirements:
 1. Division 01 Specification Sections apply to Work of this Section.
 2. Section 31 20 00 "Earth Moving" for excavation for segmental retaining walls.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each color and texture of concrete unit specified. Submit full-size units.
- C. Delegated-Design Submittal: For segmental retaining walls.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For testing agency.
- B. Product Certificates: For each type of segmental retaining wall unit and soil reinforcement from manufacturer.
 1. Include test data for shear strength between segmental retaining wall units according to ASTM D 6916.
 2. Include test data for connection strength between segmental retaining wall units and soil reinforcement according to ASTM D 6638.
- C. Product Test Reports: For each type of segmental retaining wall unit and soil reinforcement, for tests performed by a qualified testing agency.
 1. Include test data for freeze-thaw durability of segmental retaining wall units.
 2. Include test data for shear strength between segmental retaining wall units according to ASTM D 6916.
 3. Include test data for connection strength between segmental retaining wall units and soil reinforcement according to ASTM D 6638.
- D. Preconstruction test reports.
- E. Source quality-control reports.
- F. Field quality-control reports.

1.5 QUALITY ASSURANCE

- A. Testing Agency Qualifications: Qualified according to ASTM E 329 for testing indicated.
- B. Mockups: Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects.
 1. Build mockup of segmental retaining wall approximately 72 inches long by not less than 36 inches high above finished grade at front of wall.

- a. Include typical soil reinforcement.
 - b. Include typical base and cap or finished top construction.
 - c. Include backfill to typical finished grades at both sides of wall.
 - d. Include typical end construction at one end of mockup.
 - e. Include 36-inch return at one end of mockup, with typical corner construction.
2. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.6 PRECONSTRUCTION TESTING

- A. Preconstruction Testing Service: Engage a qualified testing agency to perform the following preconstruction testing:
 1. Test soil reinforcement and backfill materials for pullout resistance according to ASTM D 6706.
 2. Test soil reinforcement and backfill materials for coefficient of friction according to ASTM D 5321.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store and handle concrete units and accessories to prevent deterioration or damage due to contaminants, breaking, chipping, or other causes.
- B. Store geosynthetics in manufacturer's original packaging with labels intact. Store and handle geosynthetics to prevent deterioration or damage due to sunlight, chemicals, flames, temperatures above 160 degrees F or below 32 degrees F, and other conditions that might damage them. Verify identification of geosynthetics before use, and examine them for defects as material is placed.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 01 40 00 "Quality Requirements," to design segmental retaining walls.
- B. Structural Performance: Engineering design shall be based on the following loads and be according to NCMA's "Design Manual for Segmental Retaining Walls."
 1. Gravity loads due to soil pressures resulting from grades indicated.

2.2 SEGMENTAL RETAINING WALL UNITS

- A. Concrete Units: ASTM C 1372, Normal Weight, except that maximum water absorption shall not exceed 7 percent by weight and units shall not differ in height more than plus or minus 1/16-inch from specified dimension.
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Keystone Retaining Wall Systems, Inc.
 - b. Owner approved equal.
 2. Provide units that comply with requirements in ASTM C 1372 for freeze-thaw durability as determined by testing.

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SEGMENTAL RETAINING WALLS

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3. Provide units that interlock with courses above and below by means of integral lugs, lips, or tongues and grooves and hollow cores filled with drainage fill.
- B. Product: Regal Stone Pro Straight or Owner approved equal.
- C. Color: As selected by Architect from manufacturer's full range.
- D. Shape and Texture: Provide units with machine-split textured.
 1. Face Dimensions: 8 inches high by 18 inches long.
 2. Block Depth: 12 inches.
- E. Batter: Provide units that offset from course below to provide 1:8 batter.
- F. Cap Units: Provide cap units of shape indicated with smooth, as-cast top surfaces without holes or lugs.
- G. Special Units: Provide corner units, end units, and other shapes as needed to produce segmental retaining walls of dimensions and profiles indicated and to provide texture on exposed surfaces as indicated.

2.3 INSTALLATION MATERIALS

- A. Pins: Product supplied by segmental retaining wall unit manufacturer for use with units provided, made from nondegrading polymer reinforced with glass fibers.
- B. Clips: Product supplied by segmental retaining wall unit manufacturer for use with units provided, made from nondegrading polymer reinforced with glass fibers.
- C. Cap Adhesive: Product supplied or recommended by segmental retaining wall unit manufacturer for adhering cap units to units below.
- D. Leveling Base: Comply with requirements in Section 31 20 00 "Earth Moving" for basecourse.
- E. Drainage Fill: Comply with requirements in Section 31 20 00 "Earth Moving" for drainage course.
- F. Reinforced-Soil Fill: Comply with requirements in Section 31 20 00 "Earth Moving" for satisfactory soils.
- G. Nonreinforced-Soil Fill: Comply with requirements in Section 31 20 00 "Earth Moving" for satisfactory soils.
- H. Impervious Fill: Clayey gravel and sand mixture capable of compacting to a dense state.
- I. Drainage Geotextile: Nonwoven needle-punched geotextile, manufactured for subsurface drainage applications, made from polyolefins or polyesters; with elongation greater than 50 percent.
 1. Apparent Opening Size: No. 70 to 100 sieve, maximum; ASTM D 4751.
 2. Minimum Grab Tensile Strength: 110 lb; ASTM D 4632.
 3. Minimum Weight: 4 oz./sq. yd.
- J. Soil Reinforcement: Product specifically manufactured for use as soil reinforcement and as follows:
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Mirafi Construction Products.
 - b. Tenax Corporation - USA.
 - c. Tensar Earth Technologies, Inc.
 2. Product Type: Woven geotextile made from polyamides, polyesters, or polyolefins.

2.4 SOURCE QUALITY CONTROL

- A. Factory test and inspect each roll of soil reinforcement for minimum average roll values for geosynthetic index property tests, including the following:
 - 1. Weight.
 - 2. Grab or single-rib strength.
 - 3. Aperture opening.
 - 4. Rib or yarn size.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for excavation tolerances, condition of subgrades, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 RETAINING WALL INSTALLATION

- A. General: Place units according to NCMA's "Segmental Retaining Wall Installation Guide" and segmental retaining wall unit manufacturer's written instructions.
 - 1. Lay units in running bond.
 - 2. Form corners and ends by using special units.
- B. Do not use units with chips, cracks, or other defects that are visible at a distance of 20 feet where such defects are exposed in the completed Work.
- C. Leveling Base: Place and compact base material to thickness indicated and with not less than 95 percent maximum dry unit weight according to ASTM D 698.
- D. First Course: Place first course of segmental retaining wall units for full length of wall. Place units in firm contact with each other, properly aligned and level.
 - 1. Tamp units into leveling base as necessary to bring tops of units into a level plane.
- E. Subsequent Courses: Remove excess fill and debris from tops of units in course below. Place units in firm contact, properly aligned, and directly on course below.
 - 1. For units with lugs designed to fit into holes in adjacent units, lay units so lugs are accurately aligned with holes, and bedding surfaces are firmly seated on beds of units below.
 - 2. For units with lips at front of units, slide units as far forward as possible for firm contact with lips of units below.
 - 3. For units with lips at bottom rear of units, slide units as far forward as possible for firm contact of lips with units below.
 - 4. For units with pins, install pins and align units.
 - 5. For units with clips, install clips and align units.
- F. Cap Units: Place cap units and secure with cap adhesive.

3.3 FILL PLACEMENT

- A. General: Comply with requirements in Section 31 20 00 "Earth Moving," with NCMA's "Segmental Retaining Wall Installation Guide," and with segmental retaining wall unit manufacturer's written instructions.
- B. Fill voids between and within units with drainage fill. Place fill as each course of units is laid.
- C. Place, spread, and compact drainage fill and soil fill in uniform lifts for full width and length of embankment as wall is laid. Place and compact fills without disturbing alignment of units. Where both sides of wall are indicated to be filled, place fills on both sides at same time. Begin at wall, and place and spread fills toward embankment.
 - 1. Use only hand-operated compaction equipment within 48 inches of wall, or one-half of height above bottom of wall, whichever is greater.
 - 2. Compact reinforced-soil fill to not less than 95 percent maximum dry unit weight according to ASTM D 698.
 - a. In areas where only hand-operated compaction equipment is allowed, compact fills to not less than 90 percent maximum dry unit weight according to ASTM D 698.
 - 3. Compact nonreinforced-soil fill to comply with Section 31 20 00 "Earth Moving."
- D. Place drainage geotextile against back of wall, and place layer of drainage fill at least 12 inches wide behind drainage geotextile to within 12 inches of finished grade. Place another layer of drainage geotextile between drainage fill and soil fill.
- E. Place a layer of drainage fill at least 12 inches wide behind wall to within 12 inches of finished grade. Place a layer of drainage geotextile between drainage fill and soil fill.
- F. Wrap subdrainage pipe with filter fabric and place in drainage fill as indicated, sloped not less than 0.5 percent to drain.
- G. Place impervious fill over top edge of drainage fill layer.
- H. Slope grade at top of wall away from wall unless otherwise indicated. Slope grade at wall base away from wall. Provide uniform slopes that prevent ponding.
- I. Place soil reinforcement in horizontal joints of retaining wall where indicated and according to soil-reinforcement manufacturer's written instructions. Embed reinforcement a minimum of 8 inches into retaining wall and stretch tight over compacted backfill. Anchor soil reinforcement before placing fill.
 - 1. Place additional soil reinforcement at corners and curved walls to provide continuous reinforcement.
 - 2. Place geosynthetics with seams, if any, oriented perpendicular to segmental retaining walls.
 - 3. Do not dump fill material directly from trucks onto geosynthetics.
 - 4. Place at least 6 inches of fill over reinforcement before compacting with tracked vehicles or 4 inches before compacting with rubber-tired vehicles.
 - 5. Do not turn vehicles on fill until first layer of fill is compacted and second layer is placed over each soil-reinforcement layer.

3.4 CONSTRUCTION TOLERANCES

- A. Variation from Level: For bed-joint lines along walls, do not exceed 1-1/4 inches in 10 feet, 3 inches maximum.
- B. Variation from Indicated Batter: For slope of wall face, do not vary from indicated slope by more than 1-1/4 inches in 10 feet.

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SEGMENTAL RETAINING WALLS

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- C. Variation from Indicated Wall Line: For walls indicated as straight, do not vary from straight line by more than 1-1/4 inches in 10 feet.
 - D. Maximum Gap between Units: 1/8-inch.

3.5 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Comply with requirements in Section 31 20 00 "Earth Moving" for field quality control.
 - 1. In each compacted backfill layer, perform at least one field in-place compaction test for each 150 feet or less of segmental retaining wall length.
 - 2. In each compacted backfill layer, perform at least one field in-place compaction test for each 24 inches of fill depth and each 50 feet or less of segmental retaining wall length.

3.6 ADJUSTING

- A. Remove and replace segmental retaining wall construction of the following descriptions:
 - 1. Broken, chipped, stained, or otherwise damaged units. Units may be repaired if Architect approves methods and results.
 - 2. Segmental retaining walls that do not match approved Samples and mockups.
 - 3. Segmental retaining walls that do not comply with other requirements indicated.
- B. Replace units so segmental retaining wall matches approved Samples and mockups, complies with other requirements, and shows no evidence of replacement.

END OF SECTION

SECTION 32 33 00 - SITE FURNISHINGS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Seating.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 31 20 00 "Earth Moving" for excavation for installing concrete footings.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.

1.3 INFORMATIONAL SUBMITTALS

- A. Material Certificates: For site furnishings manufactured with preservative-treated wood.
 - 1. Indicate type of preservative used and net amount of preservative retained. For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to Project site.

1.4 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For site furnishings to include in maintenance manuals.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Bench Replacement Slats: No fewer than two full-size units for each size indicated.

PART 2 - PRODUCTS

2.1 SEATING

- A. Basis-of-Design Product:: Subject to compliance with requirements, provide product indicated on Drawings or comparable product by one of the following:
 - 1. DuMor Inc.
- B. Frame: Steel.
- C. Seat and Back:
 - 1. Material:
 - a. Wood: IPE.
 - b. Planks: Evenly spaced, parallel.
 - 2. Seat Height: As indicated.
 - 3. Seat Surface Shape: Contoured or dished.

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4. Overall Height: As indicated.
 5. Overall Width: As indicated.
 6. Overall Depth: As indicated.
 7. Seating Configuration: Multiple units as indicated.
 - a. Straight shape.
 8. Mounting: Surface mount to concrete substrate below pavers as indicated on Drawings.
- D. Steel Finish: color coated.
1. Color: As selected by Architect from manufacturer's full range.
- E. Wood Finish: Manufacturer's standard finish.
1. Stain: Manufacturer's standard.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with manufacturer's written installation instructions unless more stringent requirements are indicated. Complete field assembly of site furnishings where required.
- B. Unless otherwise indicated, install site furnishings after landscaping and paving have been completed.
- C. Install site furnishings level, plumb, true, and securely anchored at locations indicated on Drawings.
- D. Post Setting: Set cast-in support posts in concrete footing with smooth top, shaped to shed water. Protect portion of posts above footing from concrete splatter. Verify that posts are set plumb or at correct angle and are aligned and at correct height and spacing. Hold posts in position during placement and finishing operations until concrete is sufficiently cured.
- E. Posts Set into Voids in Concrete: Form or core-drill holes for installing posts in concrete to depth recommended in writing by manufacturer of site furnishings and 3/4-inch larger than OD of post. Clean holes of loose material, insert posts, and fill annular space between post and concrete with nonshrink, nonmetallic grout or anchoring cement, mixed and placed to comply with anchoring material manufacturer's written instructions, with top smoothed and shaped to shed water.

END OF SECTION

SECTION 32 84 00 - PLANTING IRRIGATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 1. Piping.
 2. Manual valves.
 3. Automatic control valves.
 4. Transition fittings.
 5. Miscellaneous piping specialties.
 6. Sprinklers.
 7. Quick couplers.
 8. Drip irrigation specialties.
 9. Controllers.
 10. Boxes for automatic control valves.
- B. Related Requirements:
 1. Division 01 Specification Sections apply to Work of this Section.

1.2 SUMMARY OF WORK

- A. Package One Redding Trail Drainage Improvements: Contractor is responsible for the Delegated Design, as outlined in Section 1.4.B, and installation of irrigation system accomodating planting and drainage improvements outlined in Package One. Contractor is responsible for any modifications to existing system and implementation of new system as required for a fully operable system upon completion. All required equipment for installation and full operation and control shall be included.
- B. Package Two Redding Trail Amenity Improvements: Town of Addison will field modify existing irrigation as required for installation of proposed improvements. Contractor is responsible for the repair of any existing irrigation equipment damaged by construction operations.

1.3 DEFINITIONS

- A. Circuit Piping: Downstream from control valves to sprinklers, specialties, and drain valves. Piping is under pressure during flow.
- B. Drain Piping: Downstream from circuit-piping drain valves. Piping is not under pressure.
- C. Main Piping: Downstream from point of connection to water distribution piping to, and including, control valves. Piping is under water-distribution-system pressure.

1.4 PERFORMANCE REQUIREMENTS

- A. Irrigation zone control shall be automatic operation with controller and automatic control valves.
- B. Delegated Design: Design 100 percent coverage irrigation system, including comprehensive engineering analysis by a qualified landscape irrigator licensed in the State of Texas, using performance requirements and design criteria indicated.

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1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.
- B. Delegated-Design Submittal: For irrigation systems indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified licensed irrigator responsible for their preparation.

1.6 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Irrigation systems, drawn to scale, on which components are shown and coordinated with each other, using input from Installers of the items involved. Also include adjustments necessary to avoid plantings and obstructions such as signs and light standards.
- B. Qualification Data: For qualified Installer.
- C. Zoning Chart: Show each irrigation zone and its control valve.

1.7 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For sprinklers and automatic control valves to include in operation and maintenance manuals.

1.8 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 1. Impact Sprinklers: Equal to 5 percent of amount installed for each type and size indicated, but no fewer than 5 units.
 2. Spray Sprinklers: Equal to 5 percent of amount installed for each type and size indicated, but no fewer than 5 units.
 3. Bubblers: Equal to 5 percent of amount installed for each type indicated, but no fewer than 5 units.
 4. Drip-Tube System Tubing: Equal to 5 percent of total length installed for each type and size indicated, but not less than 100 feet.

1.9 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Deliver piping with factory-applied end caps. Maintain end caps through shipping, storage, and handling to prevent pipe-end damage and to prevent entrance of dirt, debris, and moisture.
- B. Store plastic piping protected from direct sunlight. Support to prevent sagging and bending.

1.11 PROJECT CONDITIONS

- A. Interruption of Existing Water Service: Do not interrupt water service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary water service according to requirements indicated:
 1. Notify Owner no fewer than two days in advance of proposed interruption of water service.
 2. Do not proceed with interruption of water service without Owner's written permission.

PART 2 - PRODUCTS

- 2.1 Refer to Town of Addison Irrigation Specifications for all required products.

PART 3 - EXECUTION

- 3.1 Refer to Town of Addison Irrigation Specifications for installation requirements. Town of Addison Irrigation Specifications supercede any requirement within this specification.

3.2 JOINT CONSTRUCTION

- A. Ream ends of pipes and tubes and remove burrs. Bevel plain ends of steel pipe.
- B. Remove scale, slag, dirt, and debris from inside and outside of pipe and fittings before assembly.
- C. Threaded Joints: Thread pipe with tapered pipe threads according to ASME B1.20.1. Cut threads full and clean using sharp dies. Ream threaded pipe ends to remove burrs and restore full ID. Join pipe fittings and valves as follows:
 1. Apply appropriate tape or thread compound to external pipe threads unless dry seal threading is specified.
 2. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged. Do not use pipe sections that have cracked or open welds.
- D. Flanged Joints: Select rubber gasket material, size, type, and thickness for service application. Install gasket concentrically positioned. Use suitable lubricants on bolt threads.
- E. Ductile-Iron Piping Gasketed Joints: Comply with AWWA C600 and AWWA M41.
- F. Copper-Tubing Brazed Joints: Construct joints according to CDA's "Copper Tube Handbook," using copper-phosphorus brazing filler metal.
- G. Copper-Tubing Soldered Joints: Apply ASTM B 813 water-flushable flux to tube end unless otherwise indicated. Construct joints according to ASTM B 828 or CDA's "Copper Tube Handbook," using lead-free solder alloy (0.20 percent maximum lead content) complying with ASTM B 32.
- H. PE Piping Fastener Joints: Join with insert fittings and bands or fasteners according to piping manufacturer's written instructions.
- I. PE Piping Heat-Fusion Joints: Clean and dry joining surfaces by wiping with clean cloth or paper towels. Join according to ASTM D 2657.
 1. Plain-End PE Pipe and Fittings: Use butt fusion.
 2. Plain-End PE Pipe and Socket Fittings: Use socket fusion.

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- J. PVC Piping Solvent-Cemented Joints: Clean and dry joining surfaces. Join pipe and fittings according to the following:
 1. Comply with ASTM F 402 for safe-handling practice of cleaners, primers, and solvent cements.
 2. PVC Pressure Piping: Join schedule number, ASTM D 1785, PVC pipe and PVC socket fittings according to ASTM D 2672. Join other-than-schedule-number PVC pipe and socket fittings according to ASTM D 2855.
 3. PVC Nonpressure Piping: Join according to ASTM D 2855.

3.3 CONNECTIONS

- A. Install piping adjacent to equipment, valves, and devices to allow service and maintenance.
- B. Connect wiring between controllers and automatic control valves.

3.4 FIELD QUALITY CONTROL

- A. Perform tests and inspections.
- B. Tests and Inspections:
 1. Leak Test: After installation, charge system and test for leaks. Repair leaks and retest until no leaks exist.
 2. Operational Test: After electrical circuitry has been energized, operate controllers and automatic control valves to confirm proper system operation.
 3. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- C. Any irrigation product will be considered defective if it does not pass tests and inspections.
- D. Prepare test and inspection reports.

3.5 STARTUP SERVICE

- A. Perform startup service.
 1. Complete installation and startup checks according to manufacturer's written instructions.
 2. Verify that controllers are installed and connected according to the Contract Documents.
 3. Verify that electrical wiring installation complies with manufacturer's submittal.

3.6 ADJUSTING

- A. Adjust settings of controllers.
- B. Adjust automatic control valves to provide flow rate at rated operating pressure required for each sprinkler circuit.
- C. Adjust sprinklers and devices, except those intended to be mounted aboveground, so they will be flush with, or not more than 1/2-inch above, finish grade.

3.7 CLEANING

- A. Flush dirt and debris from piping before installing sprinklers and other devices.

3.8 DEMONSTRATION

- A. Train Owner's maintenance personnel to adjust, operate, and maintain automatic control valves and controllers.

END OF SECTION

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PLANTING IRRIGATION

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SECTION 32 91 13 - SOIL PREPARATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes planting soils specified by composition of the mixes.
- B. Related Requirements:
 1. Division 01 Specification Sections apply to Work of this Section.
 2. Section 31 10 00 "Site Clearing" for topsoil stripping and stockpiling.
 3. Section 32 92 00 "Turf and Grasses" for placing planting soil for turf and grasses.
 4. Section 32 93 00 "Plants" for placing planting soil for plantings.

1.2 DEFINITIONS

- A. AAPFCO: Association of American Plant Food Control Officials.
- B. Backfill: The earth used to replace or the act of replacing earth in an excavation. This can be amended or unamended soil as indicated.
- C. CEC: Cation exchange capacity.
- D. Compost: The product resulting from the controlled biological decomposition of organic material that has been sanitized through the generation of heat and stabilized to the point that it is beneficial to plant growth.
- E. Duff Layer: A surface layer of soil, typical of forested areas, that is composed of mostly decayed leaves, twigs, and detritus.
- F. Imported Soil: Soil that is transported to Project site for use.
- G. Manufactured Soil: Soil produced by blending soils, sand, stabilized organic soil amendments, and other materials to produce planting soil.
- H. NAPIT: North American Proficiency Testing Program. An SSSA program to assist soil-, plant, and water-testing laboratories through interlaboratory sample exchanges and statistical evaluation of analytical data.
- I. Organic Matter: The total of organic materials in soil exclusive of undecayed plant and animal tissues, their partial decomposition products, and the soil biomass; also called "humus" or "soil organic matter."
- J. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified as specified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.
- K. RCRA Metals: Hazardous metals identified by the EPA under the Resource Conservation and Recovery Act.
- L. SSSA: Soil Science Society of America.
- M. Subgrade: Surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.
- N. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.
- O. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil"; but in disturbed areas such as urban environments, the surface soil can be subsoil.
- P. USCC: U.S. Composting Council.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 1. Include recommendations for application and use.
 2. Include test data substantiating that products comply with requirements.
 3. Include sieve analyses for aggregate materials.
 4. Material Certificates: For each type of imported soil and soil amendment and fertilizer before delivery to the site, according to the following:
 - a. Manufacturer's qualified testing agency's certified analysis of standard products.
 - b. Analysis of fertilizers, by a qualified testing agency, made according to AAPFCO methods for testing and labeling and according to AAPFCO's SUIP #25.
 - c. Analysis of nonstandard materials, by a qualified testing agency, made according to SSSA methods, where applicable.
- B. Samples: For each bulk-supplied material, 1-gal. volume of each in sealed containers labeled with content, source, and date obtained. Each sample shall be typical of the lot of material to be furnished; provide an accurate representation of composition, color, and texture.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For each testing agency.
- B. Preconstruction Test Reports: For preconstruction soil analyses specified in "Preconstruction Testing" Article.

1.6 QUALITY ASSURANCE

- A. Testing Agency Qualifications: An independent, state-operated, or university-operated laboratory; experienced in soil science, soil testing, and plant nutrition; with the experience and capability to conduct the testing indicated; and that specializes in types of tests to be performed.

1.7 PRECONSTRUCTION TESTING

- A. Preconstruction Testing Service: Engage a qualified testing agency to perform preconstruction soil analyses on existing, on-site soil and imported soil.
 1. Notify Architect seven days in advance of the dates and times when laboratory samples will be taken.
- B. Preconstruction Soil Analyses: For each unamended soil type, perform testing on soil samples and furnish soil analysis and a written report containing soil-amendment and fertilizer recommendations by a qualified testing agency performing the testing according to "Soil-Sampling Requirements" and "Testing Requirements" articles.
 1. Have testing agency identify and label samples and test reports according to sample collection and labeling requirements.

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SOIL PREPARATION

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1.8 SOIL-SAMPLING REQUIREMENTS

- A. General: Extract soil samples according to requirements in this article.
- B. Sample Collection and Labeling: Have samples taken and labeled by Contractor in presence of Architect under the direction of the testing agency.
 - 1. Number and Location of Samples: Minimum of three representative soil samples from varied locations for each soil to be used or amended for landscaping purposes.
 - 2. Procedures and Depth of Samples: According to USDA-NRCS's "Field Book for Describing and Sampling Soils."
 - 3. Division of Samples: Split each sample into two, equal parts. Send half to the testing agency and half to Owner for its records.
 - 4. Labeling: Label each sample with the date, location keyed to a site plan or other location system, visible soil condition, and sampling depth.

1.9 TESTING REQUIREMENTS

- A. General: Perform tests on soil samples according to requirements in this article.
- B. Physical Testing:
 - 1. Soil Texture: Soil-particle, size-distribution analysis by one of the following methods according to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods":
 - a. Sieving Method: Report sand-gradation percentages for very coarse, coarse, medium, fine, and very fine sand; and fragment-gradation (gravel) percentages for fine, medium, and coarse fragments; according to USDA sand and fragment sizes.
 - b. Hydrometer Method: Report percentages of sand, silt, and clay.
 - 2. Total Porosity: Calculate using particle density and bulk density according to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods."
 - 3. Water Retention: According to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods."
 - 4. Saturated Hydraulic Conductivity: According to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods"; at 85 percent compaction according to ASTM D 698 (Standard Proctor).
- C. Chemical Testing:
 - 1. CEC: Analysis by sodium saturation at pH 7 according to SSSA's "Methods of Soil Analysis - Part 3- Chemical Methods."
 - 2. Clay Mineralogy: Analysis and estimated percentage of expandable clay minerals using CEC by ammonium saturation at pH 7 according to SSSA's "Methods of Soil Analysis - Part 1- Physical and Mineralogical Methods."
 - 3. Metals Hazardous to Human Health: Test for presence and quantities of RCRA metals including aluminum, arsenic, barium, copper, cadmium, chromium, cobalt, lead, lithium, and vanadium. If RCRA metals are present, include recommendations for corrective action.
 - 4. Phytotoxicity: Test for plant-available concentrations of phytotoxic minerals including aluminum, arsenic, barium, cadmium, chlorides, chromium, cobalt, copper, lead, lithium, mercury, nickel, selenium, silver, sodium, strontium, tin, titanium, vanadium, and zinc.

- D. Fertility Testing: Soil-fertility analysis according to standard laboratory protocol of SSSA NAPT SERA-6, including the following:
1. Percentage of organic matter.
 2. CEC, calcium percent of CEC, and magnesium percent of CEC.
 3. Soil reaction (acidity/alkalinity pH value).
 4. Buffered acidity or alkalinity.
 5. Nitrogen ppm.
 6. Phosphorous ppm.
 7. Potassium ppm.
 8. Manganese ppm.
 9. Manganese-availability ppm.
 10. Zinc ppm.
 11. Zinc availability ppm.
 12. Copper ppm.
 13. Sodium ppm.
 14. Soluble-salts ppm.
 15. Presence and quantities of problem materials including salts and metals cited in the Standard protocol. If such problem materials are present, provide additional recommendations for corrective action.
 16. Other deleterious materials, including their characteristics and content of each.
- E. Organic-Matter Content: Analysis using loss-by-ignition method according to SSSA's "Methods of Soil Analysis - Part 3- Chemical Methods."
- F. Recommendations: Based on the test results, state recommendations for soil treatments and soil amendments to be incorporated to produce satisfactory planting soil suitable for healthy, viable plants indicated. Include, at a minimum, recommendations for nitrogen, phosphorous, and potassium fertilization, and for micronutrients.
1. Fertilizers and Soil Amendment Rates: State recommendations in weight per 1,000 sq. ft. for 6-inch depth of soil.
 2. Soil Reaction: State the recommended liming rates for raising pH or sulfur for lowering pH according to the buffered acidity or buffered alkalinity in weight per 1,000 sq. ft. for 6-inch depth of soil.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and compliance with state and Federal laws if applicable.
- B. Bulk Materials:
1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
 2. Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
 3. Do not move or handle materials when they are wet or frozen.
 4. Accompany each delivery of bulk fertilizers and soil amendments with appropriate certificates.

PART 2 - PRODUCTS

2.1 PLANTING SOILS SPECIFIED BY COMPOSITION

- A. General: Soil amendments, fertilizers, and rates of application specified in this article are guidelines that may need revision based on testing laboratory's recommendations after preconstruction soil analyses are performed.
- B. Planting-Soil Type at Turf: Existing, on-site surface soil, with the duff layer, if any, retained; and stockpiled on-site; modified to produce viable planting soil. Blend existing, on-site surface soil with the following soil amendments and fertilizers in the following quantities to produce planting soil:
1. Ratio of Loose Compost to Soil: 1:4 by volume.
 2. Weight of Lime: Supply as recommended in laboratory soil analysis per 1,000 sq. ft. per 6 inches of soil depth.
 3. Weight of Sulfur: Supply as recommended in laboratory soil analysis per 1,000 sq. ft. per 6 inches of soil depth.
 4. Weight of Agricultural Gypsum: Supply as recommended in laboratory soil analysis per 1,000 sq. ft. per 6 inches of soil depth.
 5. Weight of Commercial Fertilizer: Supply as recommended in laboratory soil analysis per 1,000 sq. ft. per 6 inches of soil depth.
 6. Weight of Slow-Release Fertilizer: Supply as recommended in laboratory soil analysis per 1,000 sq. ft. per 6 inches of soil depth.
- C. Planting-Soil Type at Turf: Imported, naturally formed soil from off-site sources and consisting of sandy loam soil according to USDA textures; and modified to produce viable planting soil.
1. Sources: Take imported, unamended soil from sources that are naturally well-drained sites where topsoil occurs at least 4 inches deep, not from agricultural land, bogs, or marshes; and that do not contain undesirable organisms; disease-causing plant pathogens; or obnoxious weeds and invasive plants including, but not limited to, quackgrass, Johnsongrass, poison ivy, nutsedge, nimblewill, Canada thistle, bindweed, bentgrass, wild garlic, ground ivy, perennial sorrel, and brome grass.
 2. Additional Properties of Imported Soil before Amending: Soil reaction of pH 6 to 7 and minimum of 6 percent organic-matter content, friable, and with sufficient structure to give good tilth and aeration.
 3. Unacceptable Properties: Clean soil of the following:
 - a. Unacceptable Materials: Concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials that are harmful to plant growth.
 - b. Unsuitable Materials: Stones, roots, plants, sod, clay lumps, and pockets of coarse sand that exceed a combined maximum of 8 percent by dry weight of the imported soil.
 - c. Large Materials: Stones, clods, roots, clay lumps, and pockets of coarse sand exceeding 2 inches in any dimension.
 4. Amended Soil Composition: Blend imported, unamended soil with the following soil amendments and fertilizers in the following quantities to produce planting soil:
 - a. Ratio of Loose Compost to Soil: 1:4 by volume.

- b. Weight of Lime: Supply as recommended in laboratory soil analysis per 1,000 sq. ft. per 6 inches of soil depth.
 - c. Weight of Sulfur: Supply as recommended in laboratory soil analysis per 1,000 sq. ft. per 6 inches of soil depth.
 - d. Weight of Agricultural Gypsum: Supply as recommended in laboratory soil analysis per 1,000 sq. ft. per 6 inches of soil depth.
 - e. Weight of Commercial Fertilizer: Supply as recommended in laboratory soil analysis per 1,000 sq. ft. per 6 inches of soil depth.
 - f. Weight of Slow-Release Fertilizer: Supply as recommended in laboratory soil analysis per 1,000 sq. ft. per 6 inches of soil depth.
- D. Planting-Soil Type at Planting Beds: Manufactured soil consisting of manufacturer's basic topsoil, blended in a manufacturing facility with sand, stabilized organic soil amendments, and other materials to produce viable planting soil.
- 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Landscaper's Mix: Living Earth, 972-869-4332.
 - 2. Additional Properties of Manufacturer's Basic Soil before Amending: Soil reaction of pH 6 to 7 and minimum of 6 percent organic-matter content, friable, and with sufficient structure to give good tilth and aeration.
 - 3. Unacceptable Properties: Manufactured soil shall not contain the following:
 - a. Unacceptable Materials: Concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials that are harmful to plant growth.
 - b. Unsuitable Materials: Stones, roots, plants, sod, clay lumps, and pockets of coarse sand that exceed a combined maximum of 5 percent by dry weight of the manufactured soil.
 - c. Large Materials: Stones, clods, roots, clay lumps, and pockets of coarse sand exceeding 1-1/2 inches in any dimension.

2.2 INORGANIC SOIL AMENDMENTS

- A. Lime: ASTM C 602, agricultural liming material containing a minimum of 80 percent calcium carbonate equivalent and as follows:
 - 1. Class: T, with a minimum of 99 percent passing through a No. 8 sieve and a minimum of 75 percent passing through a No. 60 sieve.
 - 2. Form: Provide lime in form of ground dolomitic limestone.
- B. Sulfur: Granular, biodegradable, and containing a minimum of 90 percent elemental sulfur, with a minimum of 99 percent passing through a No. 6 sieve and a maximum of 10 percent passing through a No. 40 sieve.
- C. Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.
- D. Perlite: Horticultural perlite, soil amendment grade.
- E. Agricultural Gypsum: Minimum 90 percent calcium sulfate, finely ground with 90 percent passing through a No. 50 sieve.
- F. Sand: Clean, washed, natural or manufactured, free of toxic materials, and according to ASTM C 33/C 33M.

2.3 ORGANIC SOIL AMENDMENTS

- A. Compost: Well-composted, stable, and weed-free organic matter produced by composting feedstock, and bearing USCC's "Seal of Testing Assurance," and as follows:
 - 1. Feedstock: Limited to leaves.
 - 2. Reaction: pH of 5.5 to 8.
 - 3. Soluble-Salt Concentration: Less than 4 dS/m.
 - 4. Moisture Content: 35 to 55 percent by weight.
 - 5. Organic-Matter Content: 50 to 60 percent of dry weight.
 - 6. Particle Size: Minimum of 98 percent passing through a 1-inch sieve.

2.4 FERTILIZERS

- A. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:
 - 1. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified testing agency.
- B. Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:
 - 1. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified testing agency.

PART 3 - EXECUTION

3.1 GENERAL

- A. Place planting soil and fertilizers according to requirements in other Specification Sections.
- B. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in planting soil.
- C. Proceed with placement only after unsatisfactory conditions have been corrected.

3.2 PREPARATION OF UNAMENDED, ON-SITE SOIL BEFORE AMENDING

- A. Excavation: Excavate soil from designated area(s) to a depth of 6 inches and stockpile until amended.
- B. Unacceptable Materials: Clean soil of concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials that are harmful to plant growth.
- C. Unsuitable Materials: Clean soil to contain a maximum of 8 percent by dry weight of stones, roots, plants, sod, clay lumps, and pockets of coarse sand.
- D. Screening: Pass unamended soil through a 3-inch sieve to remove large materials.

3.3 PLACING AND MIXING PLANTING SOIL OVER EXPOSED SUBGRADE

- A. General: Apply and mix unamended soil with amendments on-site to produce required planting soil. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
- B. Subgrade Preparation: Till subgrade to a minimum depth of 6 inches. Remove stones larger than 1-1/2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
 - 1. Apply, add soil amendments, and mix approximately half the thickness of unamended soil over prepared, loosened subgrade according to "Mixing" Paragraph below. Mix thoroughly into top 4 inches of subgrade. Spread remainder of planting soil.
- C. Mixing: Spread unamended soil to total depth of 6 inches, but not less than required to meet finish grades after mixing with amendments and natural settlement. Do not spread if soil or subgrade is frozen, muddy, or excessively wet.
 - 1. Amendments: Apply soil amendments and fertilizer, if required, evenly on surface, and thoroughly blend them with unamended soil to produce planting soil.
 - a. Mix lime sulfur with dry soil before mixing fertilizer.
 - b. Mix fertilizer with planting soil no more than seven days before planting.
 - 2. Lifts: Apply and mix unamended soil and amendments in lifts not exceeding 8 inches in loose depth for material compacted by compaction equipment, and not more than 6 inches in loose depth for material compacted by hand-operated tampers.
- D. Compaction: Compact each blended lift of planting soil to 75 to 82 percent of maximum Standard Proctor density according to ASTM D 698 and tested in-place.
- E. Finish Grading: Grade planting soil to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

3.4 PLACING MANUFACTURED PLANTING SOIL IN PLANTING BEDS OVER EXPOSED SUBGRADE

- A. General: Apply manufactured soil on-site in its final, blended condition. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
- B. Subgrade Preparation: Till subgrade to a minimum depth of 6 inches. Remove stones larger than 1-1/2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
 - 1. Apply approximately half the thickness of planting soil over prepared, loosened subgrade. Mix thoroughly into top 4 inches of subgrade. Spread remainder of planting soil.
- C. Application: Spread planting soil to total depth of 12 inches, but not less than required to meet finish grades after natural settlement. Do not spread if soil or subgrade is frozen, muddy, or excessively wet.
 - 1. Lifts: Apply planting soil in lifts not exceeding 8 inches in loose depth for material compacted by compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- D. Compaction: Compact each lift of planting soil to 75 to 82 percent of maximum Standard Proctor density according to ASTM D 698.

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- E. Finish Grading: Grade planting soil to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

3.5 BLENDING PLANTING SOIL IN PLACE

- A. General: Mix amendments with in-place, unamended soil to produce required planting soil. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
- B. Preparation: Till unamended, existing soil in planting areas to a minimum depth of 6 inches. Remove stones larger than 1-1/2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
- C. Mixing: Apply soil amendments and fertilizer, if required, evenly on surface, and thoroughly blend them into full depth of unamended, in-place soil to produce planting soil.
 1. Mix lime sulfur with dry soil before mixing fertilizer.
 2. Mix fertilizer with planting soil no more than seven days before planting.
- D. Compaction: Compact blended planting soil to 75 to 82 percent of maximum Standard Proctor density according to ASTM D 698.
- E. Finish Grading: Grade planting soil to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

3.6 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Perform the following tests:
 1. Compaction: Test planting-soil compaction after placing each lift and at completion using a densitometer or soil-compaction meter calibrated to a reference test value based on laboratory testing according to ASTM D 698. Space tests at no less than one for each 1,000 sq. ft. of in-place soil or part thereof.
- C. Soil will be considered defective if it does not pass tests.
- D. Prepare test reports.
- E. Label each sample and test report with the date, location keyed to a site plan or other location system, visible conditions when and where sample was taken, and sampling depth.

3.7 PROTECTION

- A. Protection Zone: Identify protection zones according to Drawings.
- B. Protect areas of in-place soil from additional compaction, disturbance, and contamination. Prohibit the following practices within these areas except as required to perform planting operations:
 1. Storage of construction materials, debris, or excavated material.
 2. Parking vehicles or equipment.
 3. Vehicle traffic.
 4. Foot traffic.
 5. Erection of sheds or structures.
 6. Impoundment of water.
 7. Excavation or other digging unless otherwise indicated.

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- C. If planting soil or subgrade is overcompacted, disturbed, or contaminated by foreign or deleterious materials or liquids, remove the planting soil and contamination; restore the subgrade as directed by Architect and replace contaminated planting soil with new planting soil.

3.8 CLEANING

- A. Protect areas adjacent to planting-soil preparation and placement areas from contamination. Keep adjacent paving and construction clean and work area in an orderly condition.
- B. Remove surplus soil and waste material including excess subsoil, unsuitable materials, trash, and debris and legally dispose of them off Owner's property unless otherwise indicated.
 - 1. Dispose of excess subsoil and unsuitable materials on-site where directed by Owner.

END OF SECTION

SECTION 32 92 00 - TURF AND GRASSES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 1. Sodding.
 2. Turf renovation.
 3. Erosion-control material(s).
- B. Related Requirements:
 1. Division 01 Specification Sections apply to Work of this Section.
 2. Section 32 93 00 "Plants" for trees, shrubs, ground covers, and other plants as well as border edgings and mow strips.

1.2 DEFINITIONS

- A. Finish Grade: Elevation of finished surface of planting soil.
- B. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. Pesticides include insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. They also include substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.
- C. Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. Pests include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.
- D. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth. See Section 32 91 13 "Soil Preparation" and drawing designations for planting soils.
- E. Subgrade: The surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For landscape Installer.
- B. Certification of Grass Seed: From seed vendor for each grass-seed monostand or mixture, stating the botanical and common name, percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.
 1. Certification of each seed mixture for turfgrass sod. Include identification of source and name and telephone number of supplier.
- C. Product Certificates: For fertilizers, from manufacturer.
- D. Pesticides and Herbicides: Product label and manufacturer's application instructions specific to Project.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: Recommended procedures to be established by Owner for maintenance of turf during a calendar year. Submit before expiration of required maintenance periods.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified landscape installer whose work has resulted in successful turf establishment.
1. Pesticide Applicator: State licensed, commercial.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Seed and Other Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of compliance with state and Federal laws, as applicable.
- B. Sod: Harvest, deliver, store, and handle sod according to requirements in "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" sections in TPI's "Guideline Specifications to Turfgrass Sodding." Deliver sod within 24 hours of harvesting and in time for planting promptly. Protect sod from breakage and drying.
- C. Bulk Materials:
1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
 2. Provide erosion-control measures to prevent erosion or displacement of bulk materials; discharge of soil-bearing water runoff; and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
 3. Accompany each delivery of bulk materials with appropriate certificates.

1.8 FIELD CONDITIONS

- A. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions.

PART 2 - PRODUCTS

2.1 TURFGRASS SOD

- A. Turfgrass Sod: Number 1 Quality/Premium, including limitations on thatch, weeds, diseases, nematodes, and insects, complying with "Specifications for Turfgrass Sod Materials" in TPI's "Guideline Specifications to Turfgrass Sodding." Furnish viable sod of uniform density, color, and texture that is strongly rooted and capable of vigorous growth and development when planted.
- B. Turfgrass Species: Hybrid Bermudagrass Tifway 419 (Cynodon dactylon Tifway 419).

2.2 FERTILIZERS

- A. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:
 - 1. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.
- B. Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:
 - 1. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.

2.3 PESTICIDES

- A. General: Pesticide, registered and approved by the EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.
- B. Pre-Emergent Herbicide (Selective and Nonselective): Effective for controlling the germination or growth of weeds within planted areas at the soil level directly below the mulch layer.
- C. Post-Emergent Herbicide (Selective and Nonselective): Effective for controlling weed growth that has already germinated.

2.4 EROSION-CONTROL MATERIALS

- A. Erosion-Control Blankets: Biodegradable wood excelsior, straw, or coconut-fiber mat enclosed in a photodegradable plastic mesh. Include manufacturer's recommended steel wire staples, 6 inches long.
- B. Erosion-Control Fiber Mesh: Biodegradable burlap or spun-coir mesh, a minimum of Machine-printed, permanent, with 50 to 65 percent open area. Include manufacturer's recommended steel wire staples, 6 inches long.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to be planted for compliance with requirements and other conditions affecting installation and performance of the Work.
 - 1. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.
 - 2. Suspend planting operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
 - 3. Uniformly moisten excessively dry soil that is not workable or which is dusty.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

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- C. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Architect and replace with new planting soil.

3.2 PREPARATION

- A. Protect structures; utilities; sidewalks; pavements; and other facilities, trees, shrubs, and plantings from damage caused by planting operations.
 - 1. Protect grade stakes set by others until directed to remove them.
- B. Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.3 TURF AREA PREPARATION

- A. General: Prepare planting area for soil placement and mix planting soil according to Section 32 91 13 "Soil Preparation."
- B. Placing Planting Soil: Place and mix planting soil in place over exposed subgrade.
 - 1. Reduce elevation of planting soil to allow for soil thickness of sod.
- C. Moisten prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
- D. Before planting, obtain Architect's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

3.4 PREPARATION FOR EROSION-CONTROL MATERIALS

- A. Prepare area as specified in "Turf Area Preparation" Article.
- B. For erosion-control blanket or mesh, install from top of slope, working downward, and as recommended by material manufacturer for site conditions. Fasten as recommended by material manufacturer.
- C. Moisten prepared area before planting if surface is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.

3.5 SODDING

- A. Lay sod within 24 hours of harvesting unless a suitable preservation method is accepted by Architect prior to delivery time. Do not lay sod if dormant or if ground is frozen or muddy.
- B. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to soil or sod during installation. Tamp and roll lightly to ensure contact with soil, eliminate air pockets, and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass.
 - 1. Lay sod across slopes exceeding 1:3.
 - 2. Anchor sod on slopes exceeding 1:6 with wood pegs or steel staples spaced as recommended by sod manufacturer but not less than two anchors per sod strip to prevent slippage.
- C. Saturate sod with fine water spray within two hours of planting. During first week after planting, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1-1/2 inches below sod.

3.6 TURF RENOVATION

- A. Renovate existing turf where indicated.
- B. Renovate turf damaged by Contractor's operations, such as storage of materials or equipment and movement of vehicles.
 - 1. Reestablish turf where settlement or washouts occur or where minor regrading is required.
 - 2. Install new planting soil as required.
- C. Remove sod and vegetation from diseased or unsatisfactory turf areas; do not bury in soil.
- D. Remove topsoil containing foreign materials, such as oil drippings, fuel spills, stones, gravel, and other construction materials resulting from Contractor's operations, and replace with new planting soil.
- E. Mow, dethatch, core aerate, and rake existing turf.
- F. Remove weeds before seeding. Where weeds are extensive, apply selective herbicides as required. Do not use pre-emergence herbicides.
- G. Remove waste and foreign materials, including weeds, soil cores, grass, vegetation, and turf, and legally dispose of them off Owner's property.
- H. Till stripped, bare, and compacted areas thoroughly to a soil depth of 6 inches.
- I. Apply soil amendments and initial fertilizer required for establishing new turf and mix thoroughly into top 4 inches of existing soil. Install new planting soil to fill low spots and meet finish grades.
 - 1. Soil Amendment(s): According to requirements of Section 32 91 13 "Soil Preparation."
 - 2. Initial Fertilizer: Commercial fertilizer applied according to manufacturer's recommendations.
- J. Apply sod as required for new turf.
- K. Water newly planted areas and keep moist until new turf is established.

3.7 TURF MAINTENANCE

- A. General: Maintain and establish turf by watering, fertilizing, weeding, mowing, trimming, replanting, and performing other operations as required to establish healthy, viable turf. Roll, regrade, and replant bare or eroded areas and remulch to produce a uniformly smooth turf. Provide materials and installation the same as those used in the original installation.
 - 1. Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace materials and turf damaged or lost in areas of subsidence.
 - 2. In areas where mulch has been disturbed by wind or maintenance operations, add new mulch and anchor as required to prevent displacement.
 - 3. Apply treatments as required to keep turf and soil free of pests and pathogens or disease. Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards.
- B. Watering: Install and maintain temporary piping, hoses, and turf-watering equipment to convey water from sources and to keep turf uniformly moist to a depth of 4 inches.
 - 1. Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch. Lay out temporary watering system to avoid walking over muddy or newly planted areas.
 - 2. Water turf with fine spray at a minimum rate of 1 inch per week unless rainfall precipitation is adequate.

- C. Mow turf as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than one-third of grass height. Remove no more than one-third of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain the following grass height:
 - 1. Mow bermudagrass to a height of 1/2 to 1 inch.
- D. Turf Postfertilization: Apply slow-release fertilizer after initial mowing and when grass is dry.
 - 1. Use fertilizer that provides actual nitrogen of at least 1 lb/1000 sq. ft. to turf area.

3.8 SATISFACTORY TURF

- A. Turf installations shall meet the following criteria as determined by Architect:
 - 1. Satisfactory Sodded Turf: At end of maintenance period, a healthy, well-rooted, even-colored, viable turf has been established, free of weeds, open joints, bare areas, and surface irregularities.
- B. Use specified materials to reestablish turf that does not comply with requirements, and continue maintenance until turf is satisfactory.

3.9 PESTICIDE APPLICATION

- A. Apply pesticides and other chemical products and biological control agents according to requirements of authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed.
- B. Post-Emergent Herbicides (Selective and Nonselective): Apply only as necessary to treat already-germinated weeds and according to manufacturer's written recommendations.

3.10 CLEANUP AND PROTECTION

- A. Promptly remove soil and debris created by turf work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.
- B. Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of them off Owner's property.
- C. Erect temporary fencing or barricades and warning signs as required to protect newly planted areas from traffic. Maintain fencing and barricades throughout initial maintenance period and remove after plantings are established.
- D. Remove nondegradable erosion-control measures after grass establishment period.

3.11 MAINTENANCE SERVICE

- A. Turf Maintenance Service: Provide full maintenance by skilled employees of landscape Installer. Maintain as required in "Turf Maintenance" Article. Begin maintenance immediately after each area is planted and continue until acceptable turf is established, but for not less than the following periods:
 - 1. Sodded Turf: 30 days from date of Substantial Completion.

END OF SECTION

SECTION 32 93 00 - PLANTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Plants.
 - 2. Landscape edgings.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 32 92 00 "Turf and Grasses" for turf (lawn) and meadow planting, hydroseeding, and erosion-control materials.

1.2 DEFINITIONS

- A. Backfill: The earth used to replace or the act of replacing earth in an excavation.
- B. Balled and Burlapped Stock: Plants dug with firm, natural balls of earth in which they were grown, with a ball size not less than diameter and depth recommended by ANSI Z60.1 for type and size of plant required; wrapped with burlap, tied, rigidly supported, and drum laced with twine with the root flare visible at the surface of the ball as recommended by ANSI Z60.1.
- C. Container-Grown Stock: Healthy, vigorous, well-rooted plants grown in a container, with a well-established root system reaching sides of container and maintaining a firm ball when removed from container. Container shall be rigid enough to hold ball shape and protect root mass during shipping and be sized according to ANSI Z60.1 for type and size of plant required.
- D. Fabric Bag-Grown Stock: Healthy, vigorous, well-rooted plants established and grown in-ground in a porous fabric bag with well-established root system reaching sides of fabric bag. Fabric bag size is not less than diameter, depth, and volume required by ANSI Z60.1 for type and size of plant.
- E. Finish Grade: Elevation of finished surface of planting soil.
- F. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. Pesticides include insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. They also include substances or mixtures intended for use as a plant regulator, defoliant, or desiccant. Some sources classify herbicides separately from pesticides.
- G. Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. Pests include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.
- H. Planting Area: Areas to be planted.
- I. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth. See Section 32 91 13 "Soil Preparation" for drawing designations for planting soils.
- J. Plant; Plants; Plant Material: These terms refer to vegetation in general, including trees, shrubs, vines, ground covers, ornamental grasses, bulbs, corms, tubers, or herbaceous vegetation.

- K. Root Flare: Also called "trunk flare." The area at the base of the plant's stem or trunk where the stem or trunk broadens to form roots; the area of transition between the root system and the stem or trunk.
- L. Stem Girdling Roots: Roots that encircle the stems (trunks) of trees below the soil surface.
- M. Subgrade: The surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.

1.3 COORDINATION

- A. Coordination with Turf Areas (Lawns): Plant trees, shrubs, and other plants after finish grades are established and before planting turf areas unless otherwise indicated.
 - 1. When planting trees, shrubs, and other plants after planting turf areas, protect turf areas, and promptly repair damage caused by planting operations.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Plant Materials: Include quantities, sizes, quality, and sources for plant materials.
 - 2. Plant Photographs: Include color photographs in digital format of each required species and size of plant material as it will be furnished to Project. Take photographs from an angle depicting true size and condition of the typical plant to be furnished. Include a scale rod or other measuring device in each photograph. For species where more than 20 plants are required, include a minimum of three photographs showing the average plant, the best quality plant, and the worst quality plant to be furnished. Identify each photograph with the full scientific name of the plant, plant size, and name of the growing nursery.
- B. Samples for Verification: For each of the following:
 - 1. Organic Mulch: 1-pint volume of each organic mulch required; in sealed plastic bags labeled with composition of materials by percentage of weight and source of mulch. Each Sample shall be typical of the lot of material to be furnished; provide an accurate representation of color, texture, and organic makeup.
 - 2. Weed Control Barrier: 12 by 12 inches.
 - 3. Proprietary Root-Ball-Stabilization Device: One unit.
 - 4. Edging Materials and Accessories: Manufacturer's standard size, to verify color selected.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For landscape Installer. Include list of similar projects completed by Installer demonstrating Installer's capabilities and experience. Include project names, addresses, and year completed, and include names and addresses of owners' contact persons.
- B. Product Certificates: For each type of manufactured product, from manufacturer, and complying with the following:
 - 1. Manufacturer's certified analysis of standard products.

2. Analysis of other materials by a recognized laboratory made according to methods established by the Association of Official Analytical Chemists, where applicable.
- C. Pesticides and Herbicides: Product label and manufacturer's application instructions specific to Project.

1.7 CLOSEOUT SUBMITTALS

- A. Maintenance Data: Recommended procedures to be established by Owner for maintenance of plants during a calendar year. Submit before expiration of required maintenance periods.

1.8 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified landscape installer whose work has resulted in successful establishment of plants.
 1. Experience: Five years' experience in landscape installation in addition to requirements in Section 01 40 00 "Quality Requirements."
 2. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.
 3. Pesticide Applicator: State licensed, commercial.
- B. Provide quality, size, genus, species, and variety of plants indicated, complying with applicable requirements in ANSI Z60.1.
- C. Measurements: Measure according to ANSI Z60.1. Do not prune to obtain required sizes.
 1. Trees and Shrubs: Measure with branches and trunks or canes in their normal position. Take height measurements from or near the top of the root flare for field-grown stock and container-grown stock. Measure main body of tree or shrub for height and spread; do not measure branches or roots tip to tip. Take caliper measurements 6 inches above the root flare for trees up to 4-inch caliper size, and 12 inches above the root flare for larger sizes.
 2. Other Plants: Measure with stems, petioles, and foliage in their normal position.
- D. Plant Material Observation: Architect may observe plant material either at place of growth or at site before planting for compliance with requirements for genus, species, variety, cultivar, size, and quality. Architect may also observe trees and shrubs further for size and condition of balls and root systems, pests, disease symptoms, injuries, and latent defects and may reject unsatisfactory or defective material at any time during progress of work. Remove rejected trees or shrubs immediately from Project site.
 1. Notify Architect of sources of planting materials seven days in advance of delivery to site.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of compliance with state and Federal laws if applicable.
- B. Bulk Materials:
 1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
 2. Provide erosion-control measures to prevent erosion or displacement of bulk materials; discharge of soil-bearing water runoff; and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
 3. Accompany each delivery of bulk materials with appropriate certificates.

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- C. Deliver bare-root stock plants within 36 hours of digging. Immediately after digging up bare-root stock, pack root system in wet straw, hay, or other suitable material to keep root system moist until planting. Transport in covered, temperature-controlled vehicles, and keep plants cool and protected from sun and wind at all times.
- D. Do not prune trees and shrubs before delivery. Protect bark, branches, and root systems from sun scald, drying, wind burn, sweating, whipping, and other handling and tying damage. Do not bend or bind-tie trees or shrubs in such a manner as to destroy their natural shape. Provide protective covering of plants during shipping and delivery. Do not drop plants during delivery and handling.
- E. Handle planting stock by root ball.
- F. Apply antidesiccant to trees and shrubs using power spray to provide an adequate film over trunks (before wrapping), branches, stems, twigs, and foliage to protect during digging, handling, and transportation.
 - 1. If deciduous trees or shrubs are moved in full leaf, spray with antidesiccant at nursery before moving and again two weeks after planting.
- G. Wrap trees and shrubs with burlap fabric over trunks, branches, stems, twigs, and foliage to protect from wind and other damage during digging, handling, and transportation.
- H. Deliver plants after preparations for planting have been completed, and install immediately. If planting is delayed more than six hours after delivery, set plants and trees in their appropriate aspect (sun, filtered sun, or shade), protect from weather and mechanical damage, and keep roots moist.
 - 1. Set balled stock on ground and cover ball with soil, peat moss, sawdust, or other acceptable material.
 - 2. Do not remove container-grown stock from containers before time of planting.
 - 3. Water root systems of plants stored on-site deeply and thoroughly with a fine-mist spray. Water as often as necessary to maintain root systems in a moist, but not overly wet condition.

1.10 FIELD CONDITIONS

- A. Field Measurements: Verify actual grade elevations, service and utility locations, irrigation system components, and dimensions of plantings and construction contiguous with new plantings by field measurements before proceeding with planting work.
- B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions and warranty requirements.

1.11 WARRANTY

- A. Special Warranty: Installer agrees to repair or replace plantings and accessories that fail in materials, workmanship, or growth within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Death and unsatisfactory growth, except for defects resulting from abuse, lack of adequate maintenance, or neglect by Owner.
 - b. Structural failures including plantings falling or blowing over.
 - c. Faulty performance of tree stabilization and edgings .
 - d. Deterioration of metals, metal finishes, and other materials beyond normal weathering.

2. Warranty Periods: From date of Substantial Completion.
 - a. Trees, Shrubs, Vines, and Ornamental Grasses: 12 months.
 - b. Ground Covers, Biennials, Perennials, and Other Plants: 12 months.
3. Include the following remedial actions as a minimum:
 - a. Immediately remove dead plants and replace unless required to plant in the succeeding planting season.
 - b. Replace plants that are more than 25 percent dead or in an unhealthy condition at end of warranty period.
 - c. A limit of one replacement of each plant is required except for losses or replacements due to failure to comply with requirements.
 - d. Provide extended warranty for period equal to original warranty period, for replaced plant material.

PART 2 - PRODUCTS

2.1 PLANT MATERIAL

- A. General: Furnish nursery-grown plants true to genus, species, variety, cultivar, stem form, shearing, and other features indicated in Plant List, Plant Schedule, or Plant Legend indicated on Drawings and complying with ANSI Z60.1; and with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock, densely foliated when in leaf and free of disease, pests, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.
 1. Trees with damaged, crooked, or multiple leaders; tight vertical branches where bark is squeezed between two branches or between branch and trunk ("included bark"); crossing trunks; cut-off limbs more than 3/4 inch in diameter; or with stem girdling roots are unacceptable.
 2. Collected Stock: Do not use plants harvested from the wild, from native stands, from an established landscape planting, or not grown in a nursery unless otherwise indicated.
- B. Provide plants of sizes, grades, and ball or container sizes complying with ANSI Z60.1 for types and form of plants required. Plants of a larger size may be used if acceptable to Architect, with a proportionate increase in size of roots or balls.
- C. Root-Ball Depth: Furnish trees and shrubs with root balls measured from top of root ball, which begins at root flare according to ANSI Z60.1. Root flare shall be visible before planting.
- D. Labeling: Label at least one plant of each variety, size, and caliper with a securely attached, waterproof tag bearing legible designation of common name and full scientific name, including genus and species. Include nomenclature for hybrid, variety, or cultivar, if applicable for the plant.
- E. If formal arrangements or consecutive order of plants is indicated on Drawings, select stock for uniform height and spread, and number the labels to assure symmetry in planting.

2.2 FERTILIZERS

- A. Planting Tablets: Tightly compressed chip-type, long-lasting, slow-release, commercial-grade planting fertilizer in tablet form. Tablets shall break down with soil bacteria, converting nutrients into a form that can be absorbed by plant roots.
 1. Size: 21-gram tablets.

2. Nutrient Composition: 20 percent nitrogen, 10 percent phosphorous, and 5 percent potassium, by weight plus micronutrients.

2.3 MULCHES

- A. Organic Mulch: Free from deleterious materials and suitable as a top dressing of trees and shrubs, consisting of one of the following:
 1. Type: Shredded hardwood.
 2. Size Range: 3 inches maximum, 1/2-inch minimum.
 3. Color: Natural.

2.4 WEED-CONTROL BARRIERS

- A. Composite Fabric: Woven, needle-punched polypropylene substrate bonded to a nonwoven polypropylene fabric, 4.8 oz./sq. yd.

2.5 PESTICIDES

- A. General: Pesticide registered and approved by the EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.
- B. Pre-Emergent Herbicide (Selective and Nonselective): Effective for controlling the germination or growth of weeds within planted areas at the soil level directly below the mulch layer.
- C. Post-Emergent Herbicide (Selective and Nonselective): Effective for controlling weed growth that has already germinated.

2.6 LANDSCAPE EDGINGS

- A. Steel Edging: Standard commercial-steel edging, fabricated in sections of standard lengths, with loops stamped from or welded to face of sections to receive stakes.
 1. Basis-of-Design Product: Subject to compliance with requirements, provide Sure-loc Edging Corporation or comparable product by one of the following:
 - a. Russell, J. D. Company (The).
 2. Edging Size: 3/16-inch thick by 4 inches deep - Minimum.
 3. Stakes: Tapered steel, a minimum of 15 inches long.
 4. Accessories: Standard tapered ends, corners, and splicers.
 5. Finish: Manufacturer's standard paint.
 - a. Paint Color: Black.

2.7 MISCELLANEOUS PRODUCTS

- A. Antidesiccant: Water-insoluble emulsion, permeable moisture retarder, film forming, for trees and shrubs. Deliver in original, sealed, and fully labeled containers and mix according to manufacturer's written instructions.
- B. Burlap: Non-synthetic, biodegradable.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive plants, with Installer present, for compliance with requirements and conditions affecting installation and performance of the Work.
 - 1. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.
 - 2. Verify that plants and vehicles loaded with plants can travel to planting locations with adequate overhead clearance.
 - 3. Suspend planting operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
 - 4. Uniformly moisten excessively dry soil that is not workable or which is dusty.
- B. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Architect and replace with new planting soil.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities and turf areas and existing plants from damage caused by planting operations.
- B. Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- C. Lay out individual tree and shrub locations and areas for multiple plantings. Stake locations, outline areas, adjust locations when requested, and obtain Architect's acceptance of layout before excavating or planting. Make minor adjustments as required.
- D. Lay out plants at locations directed by Architect. Stake locations of individual trees and shrubs and outline areas for multiple plantings.

3.3 PLANTING AREA ESTABLISHMENT

- A. General: Prepare planting area for soil placement and mix planting soil according to Section 32 91 13 "Soil Preparation."
- B. Placing Planting Soil: Place manufactured planting soil over exposed subgrade.
- C. Before planting, obtain Architect's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish rading.

3.4 EXCAVATION FOR TREES AND SHRUBS

- A. Planting Pits and Trenches: Excavate circular planting pits.
1. Excavate planting pits with sides sloping inward at a 45-degree angle. Excavations with vertical sides are unacceptable. Trim perimeter of bottom leaving center area of bottom raised slightly to support root ball and assist in drainage away from center. Do not further disturb base. Ensure that root ball will sit on undisturbed base soil to prevent settling. Scarify sides of planting pit smeared or smoothed during excavation.
 2. Excavate approximately three times as wide as ball diameter for container-grown stock.
 3. Excavate at least 12 inches wider than root spread and deep enough to accommodate vertical roots for bare-root stock.
 4. Do not excavate deeper than depth of the root ball, measured from the root flare to the bottom of the root ball.
 5. If area under the plant was initially dug too deep, add soil to raise it to the correct level and thoroughly tamp the added soil to prevent settling.
 6. Maintain angles of repose of adjacent materials to ensure stability. Do not excavate subgrades of adjacent paving, structures, hardscapes, or other new or existing improvements.
 7. Maintain supervision of excavations during working hours.
 8. Keep excavations covered or otherwise protected overnight.
- B. Backfill Soil: Subsoil and topsoil removed from excavations may not be used as backfill soil unless otherwise indicated.
- C. Obstructions: Notify Architect if unexpected rock or obstructions detrimental to trees or shrubs are encountered in excavations.
1. Hardpan Layer: Drill 6-inch- diameter holes, 24 inches apart, into free-draining strata or to a depth of 10 feet, whichever is less, and backfill with free-draining material.
- D. Drainage: Notify Architect if subsoil conditions evidence unexpected water seepage or retention in tree or shrub planting pits.
- E. Fill excavations with water and allow to percolate away before positioning trees and shrubs.

3.5 TREE, SHRUB, AND VINE PLANTING

- A. Inspection: At time of planting, verify that root flare is visible at top of root ball according to ANSI Z60.1. If root flare is not visible, remove soil in a level manner from the root ball to where the top-most root emerges from the trunk. After soil removal to expose the root flare, verify that root ball still meets size requirements.
- B. Roots: Remove stem girdling roots and kinked roots. Remove injured roots by cutting cleanly; do not break.
- C. Balled and Burlapped Stock: Set each plant plumb and in center of planting pit or trench with root flare 1 inch above adjacent finish grades.
1. Backfill: Planting soil Bed Mix. For trees, use excavated soil for backfill.
 2. After placing some backfill around root ball to stabilize plant, carefully cut and remove burlap, rope, and wire baskets from tops of root balls and from sides, but do not remove from under root balls. Remove pallets, if any, before setting. Do not use planting stock if root ball is cracked or broken before or during planting operation.

3. Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.
 4. Place planting tablets equally distributed around each planting pit when pit is approximately one-half filled. Place tablets beside the root ball about 1 inch from root tips; do not place tablets in bottom of the hole.
 - a. Quantity: Two per plant.
 5. Continue backfilling process. Water again after placing and tamping final layer of soil.
- D. Container-Grown Stock: Set each plant plumb and in center of planting pit or trench with root flare 1-inch above adjacent finish grades.
1. Backfill: Planting soil Bed Mix. For trees, use excavated soil for backfill.
 2. Carefully remove root ball from container without damaging root ball or plant.
 3. Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.
 4. Place planting tablets equally distributed around each planting pit when pit is approximately one-half filled. Place tablets beside the root ball about 1 inch from root tips; do not place tablets in bottom of the hole.
 - a. Quantity: Two per plant.
 5. Continue backfilling process. Water again after placing and tamping final layer of soil.
- E. Fabric Bag-Grown Stock: Set each plant plumb and in center of planting pit or trench with root flare 1 inch above adjacent finish grades.
1. Backfill: Planting soil Bed Mix.
 2. Carefully remove root ball from fabric bag without damaging root ball or plant. Do not use planting stock if root ball is cracked or broken before or during planting operation.
 3. Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.
 4. Place planting tablets equally distributed around each planting pit when pit is approximately one-half filled. Place tablets beside the root ball about 1 inch from root tips; do not place tablets in bottom of the hole.
 - a. Quantity: Two per plant.
 5. Continue backfilling process. Water again after placing and tamping final layer of soil.
- F. Slopes: When planting on slopes, set the plant so the root flare on the uphill side is flush with the surrounding soil on the slope; the edge of the root ball on the downhill side will be above the surrounding soil. Apply enough soil to cover the downhill side of the root ball.

3.6 TREE, SHRUB, AND VINE PRUNING

- A. Remove only dead, dying, or broken branches. Do not prune for shape.
- B. Do not apply pruning paint to wounds.

3.7 GROUND COVER AND PLANT PLANTING

- A. Set out and space ground cover and plants other than trees, shrubs, and vines as indicated on Drawings in even rows with triangular spacing.
- B. Use planting soil Bed Mix for backfill.
- C. Dig holes large enough to allow spreading of roots.
- D. For rooted cutting plants supplied in flats, plant each in a manner that minimally disturbs the root system but to a depth not less than two nodes.
- E. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water.
- F. Water thoroughly after planting, taking care not to cover plant crowns with wet soil.
- G. Protect plants from hot sun and wind; remove protection if plants show evidence of recovery from transplanting shock.

3.8 PLANTING AREA MULCHING

- A. Install weed-control barriers before mulching according to manufacturer's written instructions. Completely cover area to be mulched, overlapping edges a minimum of 12 inches and secure seams with galvanized pins.
- B. Mulch backfilled surfaces of planting areas and other areas indicated.
 - 1. Trees and Treelike Shrubs in Turf Areas: Apply organic mulch ring of 3-inch average thickness, with 36-inch radius around trunks or stems. Do not place mulch within 3 inches of trunks or stems.
 - 2. Organic Mulch in Planting Areas: Apply 3-inch average thickness of organic mulch over whole surface of planting area, and finish level with adjacent finish grades. Do not place mulch within 3 inches of trunks or stems.

3.9 EDGING INSTALLATION

- A. Steel Edging: Install steel edging where indicated according to manufacturer's written instructions. Anchor with steel stakes spaced approximately 30 inches apart, driven below top elevation of edging.

3.10 PLANT MAINTENANCE

- A. Maintain plantings by pruning, cultivating, watering, weeding, fertilizing, mulching, restoring planting saucers, adjusting and repairing tree-stabilization devices, resetting to proper grades or vertical position, and performing other operations as required to establish healthy, viable plantings.
- B. Fill in, as necessary, soil subsidence that may occur because of settling or other processes. Replace mulch materials damaged or lost in areas of subsidence.
- C. Apply treatments as required to keep plant materials, planted areas, and soils free of pests and pathogens or disease. Use integrated pest management practices when possible to minimize use of pesticides and reduce hazards. Treatments include physical controls such as hosing off foliage, mechanical controls such as traps, and biological control agents.

3.11 PESTICIDE APPLICATION

- A. Apply pesticides and other chemical products and biological control agents according to authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed.
- B. Pre-Emergent Herbicides (Selective and Nonselective): Apply to tree, shrub, and ground-cover areas according to manufacturer's written recommendations. Do not apply to seeded areas.
- C. Post-Emergent Herbicides (Selective and Nonselective): Apply only as necessary to treat already-germinated weeds and according to manufacturer's written recommendations.

3.12 REPAIR AND REPLACEMENT

- A. General: Repair or replace existing or new trees and other plants that are damaged by construction operations, in a manner approved by Architect.
 - 1. Submit details of proposed pruning and repairs.
 - 2. Perform repairs of damaged trunks, branches, and roots within 24 hours, if approved.
 - 3. Replace trees and other plants that cannot be repaired and restored to full-growth status, as determined by Architect.
- B. Remove and replace trees that are more than 25 percent dead or in an unhealthy condition before the end of the corrections period or are damaged during construction operations that Architect determines are incapable of restoring to normal growth pattern.
 - 1. Provide new trees of same size as those being replaced for each tree of 4 inches or smaller in caliper size.
 - 2. Species of Replacement Trees: Species selected by Architect.

3.13 CLEANING AND PROTECTION

- A. During planting, keep adjacent paving and construction clean and work area in an orderly condition. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.
- B. Remove surplus soil and waste material including excess subsoil, unsuitable soil, trash, and debris and legally dispose of them off Owner's property.
- C. Protect plants from damage due to landscape operations and operations of other contractors and trades. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged plantings.
- D. After installation and before Substantial Completion, remove nursery tags, nursery stakes, tie tape, labels, wire, burlap, and other debris from plant material, planting areas, and Project site.

3.14 MAINTENANCE SERVICE

- A. Maintenance Service for Trees and Shrubs: Provide maintenance by skilled employees of landscape Installer. Maintain as required in "Plant Maintenance" Article. Begin maintenance immediately after plants are installed and continue until plantings are acceptably healthy and well established, but for not less than maintenance period below:
 - 1. Maintenance Period: Three months from date of Substantial Completion.

END OF SECTION

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01/22

PLANTS

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Redding Trail

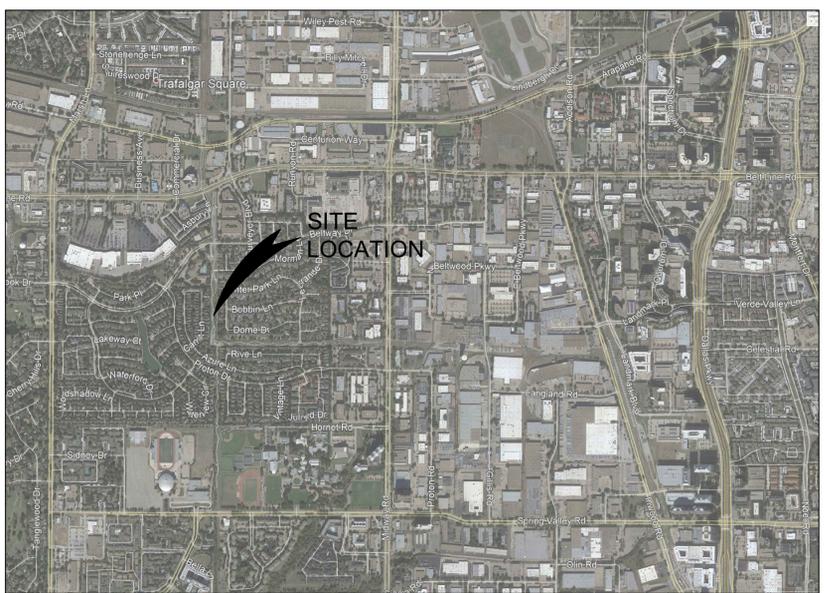
Package One: Drainage Improvements

Package Two: Amenity Improvements

Construction Documents

14661 Midway Road

Addison, Texas



VICINITY MAP
N.T.S.

TOWN OF ADDISON CITY COUNCIL/STAFF

- | | |
|--------------------------------|-----------------------|
| Mayor | Joe Chow |
| Mayor Pro Tempore | Guillermo Quintanilla |
| Deputy Mayor Pro Tempore | Paul Walden |
| Council Member | Tom Braun |
| Council Member | Lori Ward |
| Council Member | Kathryn Wheeler |
| Council Member | Marlin Willesen |
| City Manager | Wes Pierson |
| Deputy City Manager | John Crawford |
| Director of Parks & Recreation | Janna Tidwell |

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General	
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C-101	Package One - Existing Conditions and Removal Plan
C-102	Package One - Grading Layout
C-103	Package One - Grading Layout
C-104	Package One - Drainage Area Map
C-105	Package One - Channel Plan - Profile
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Civil	
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L-001	Package Two - Overall Existing Conditions and Removal Plan
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L-100	Package Two - Overall Annotation, Layout and Grading Plan
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L-102	Package Two - Annotation and Layout Plan
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L-502	Package Two - Landscape Details
L-503	Package Two - Landscape Details
L-504	Package Two - Landscape Details
L-505	Package Two - Landscape Details



Redding Trail
Drainage and Amenity
Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1068.21

KEY PLAN

A PROJECT BY



255 N. Center St.
Suite 200
Arlington, TX 76011
817.649.3216



CONTRACTOR IS RESPONSIBLE TO
CONTACT UTILITIES & ONE CALL
SYSTEM PRIOR TO DIGGING

OWNER:
TOWN OF ADDISON

CONTACT: JANNA TIDWELL, PLA, LEED AP
DIRECTOR OF PARKS AND RECREATION
16801 WESTGROVE DRIVE
TOWN OF ADDISON, TEXAS 75001
O: 972.450.2869
E: JTidwell@Addisontx.gov

LANDSCAPE ARCHITECT:
PARKHILL

CONTACT: LANDON G. BELL, RLA
255 N. CENTER STREET, SUITE 200
ARLINGTON, TEXAS 76011
O: 817.649.3216
E: LGBell@Parkhill.com

CIVIL ENGINEER:
PARKHILL

CASEY HADSALL, P.E.
255 N. CENTER STREET, SUITE 200
ARLINGTON, TEXAS 76011
O: 817.649.3216
E: CHadsall@Parkhill.com

#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

Cover Sheet
G-001

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LEGEND

- 609- EXISTING 1' CONTOUR
- 610- EXISTING 5' CONTOUR
- X- EXISTING FENCE LINE
- OHE- EXISTING OVERHEAD ELECTRIC LINE

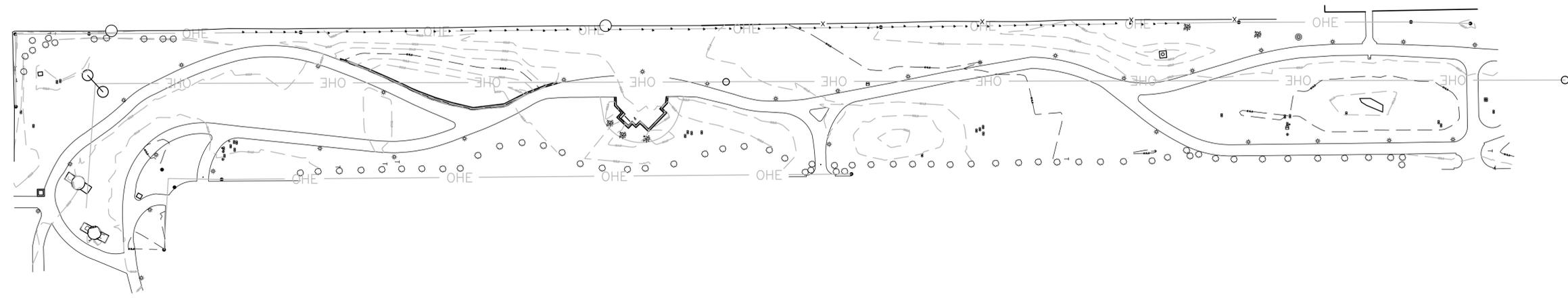
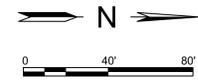
EXISTING UTILITIES
 CONTRACTOR MUST VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH TOWN OFFICIALS AND UTILITY COMPANIES IN LOCATING UTILITIES. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR LOSSES DUE TO DAMAGE TO UTILITIES. LOCATION FOR ALL UTILITIES SHOWN ON PLANS ARE APPROXIMATE. CONTRACTOR SHALL CALL TEXAS 811, 1-800-344-8377.

EXISTING IRRIGATION SYSTEM
 CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF IRRIGATION SYSTEM MODIFICATIONS AS REQUIRED FOR PROPOSED PACKAGE ONE IMPROVEMENTS AND PLANTING PLAN AS OUTLINED ON PACKAGE ONE LANDSCAPE SHEETS. CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING IRRIGATION SYSTEM AS REQUIRED FOR FUTURE MODIFICATION WITHIN THIS CONTRACT. ANY DAMAGED IRRIGATION EQUIPMENT FROM DEMOLITION ACTIVITY IS THE RESPONSIBILITY OF CONTRACTOR AND DOES NOT CONSTITUTE ANY ADDITIONAL PAYMENT.

Parkhill



Parkhill.com



**Redding Trail
 Package One
 Drainage Improvements**



CLIENT
 Town of Addison, Texas
 16801 Westgrove Drive
 Addison, TX 75001

PROJECT NO.
1068.21

KEY PLAN

#	DATE	DESCRIPTION
-	11/02/2021	Bid Set

Package One

Overall Trail Layout C-100

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Redding Trail Package One Drainage Improvements



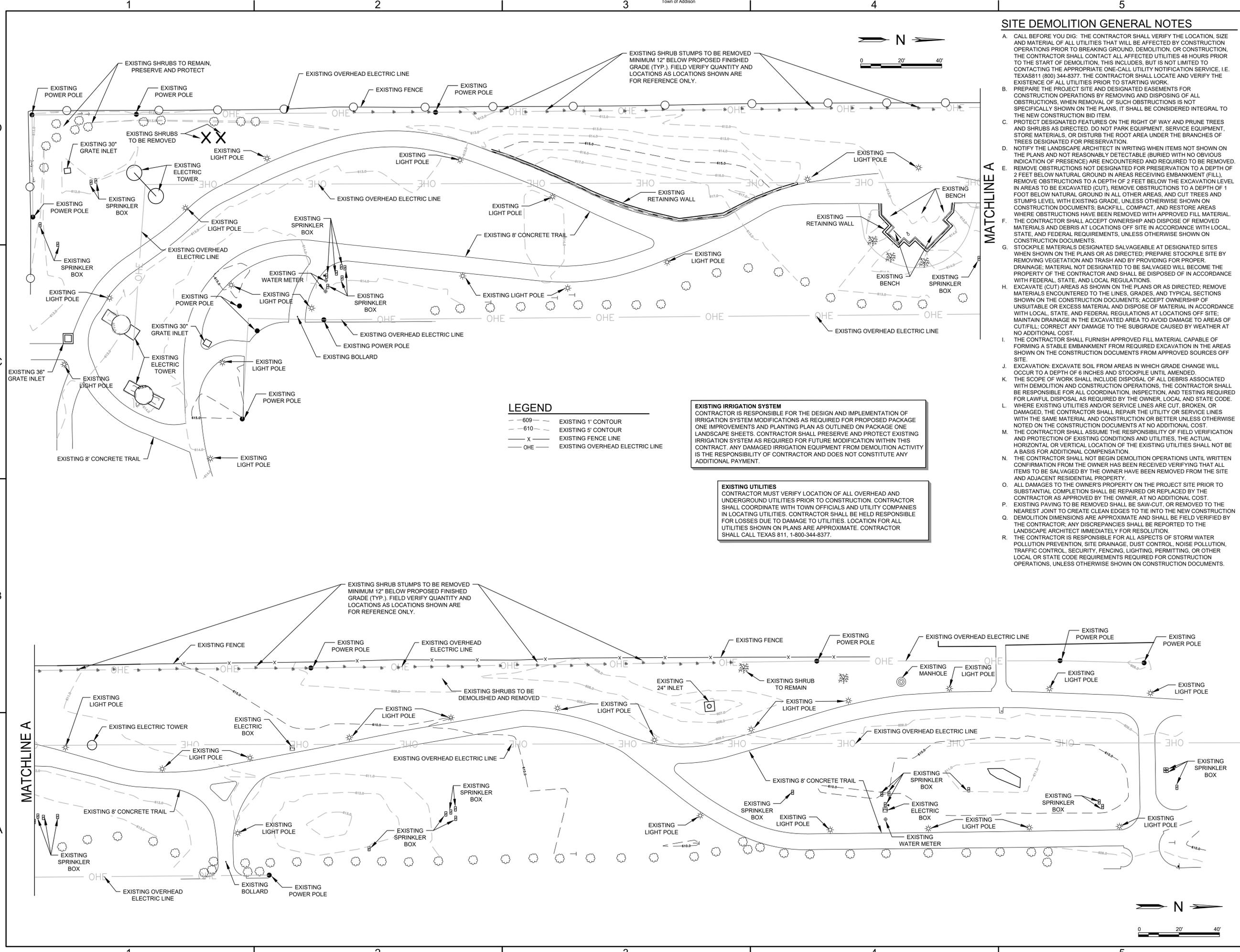
CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1068.21
KEY PLAN

Package One Existing Conditions & Removal Plan C-101

SITE DEMOLITION GENERAL NOTES

- A. CALL BEFORE YOU DIG: THE CONTRACTOR SHALL VERIFY THE LOCATION, SIZE AND MATERIAL OF ALL UTILITIES THAT WILL BE AFFECTED BY CONSTRUCTION OPERATIONS PRIOR TO BREAKING GROUND, DEMOLITION, OR CONSTRUCTION. THE CONTRACTOR SHALL CONTACT ALL AFFECTED UTILITIES 48 HOURS PRIOR TO THE START OF DEMOLITION, THIS INCLUDES, BUT IS NOT LIMITED TO CONTACTING THE APPROPRIATE ONE-CALL UTILITY NOTIFICATION SERVICE, I.E. TEXAS811 (800) 344-8377. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
- B. PREPARE THE PROJECT SITE AND DESIGNATED EASEMENTS FOR CONSTRUCTION OPERATIONS BY REMOVING AND DISPOSING OF ALL OBSTRUCTIONS, WHEN REMOVAL OF SUCH OBSTRUCTIONS IS NOT SPECIFICALLY SHOWN ON THE PLANS, IT SHALL BE CONSIDERED INTEGRAL TO THE NEW CONSTRUCTION BID ITEM.
- C. PROTECT DESIGNATED FEATURES ON THE RIGHT OF WAY AND PRUNE TREES AND SHRUBS AS DIRECTED, DO NOT PARK EQUIPMENT, SERVICE EQUIPMENT, STORE MATERIALS, OR DISTURB THE ROOT AREA UNDER THE BRANCHES OF TREES DESIGNATED FOR PRESERVATION.
- D. NOTIFY THE LANDSCAPE ARCHITECT IN WRITING WHEN ITEMS NOT SHOWN ON THE PLANS AND NOT REASONABLY DETECTABLE (BURIED WITH NO OBVIOUS INDICATION OF PRESENCE) ARE ENCOUNTERED AND REQUIRED TO BE REMOVED.
- E. REMOVE OBSTRUCTIONS NOT DESIGNATED FOR PRESERVATION TO A DEPTH OF 2 FEET BELOW NATURAL GROUND IN AREAS RECEIVING EMBANKMENT (FILL). REMOVE OBSTRUCTIONS TO A DEPTH OF 2 FEET BELOW THE EXCAVATION LEVEL IN AREAS TO BE EXCAVATED (CUT). REMOVE OBSTRUCTIONS TO A DEPTH OF 1 FOOT BELOW NATURAL GROUND IN ALL OTHER AREAS, AND CUT TREES AND STUMPS LEVEL WITH EXISTING GRADE, UNLESS OTHERWISE SHOWN ON CONSTRUCTION DOCUMENTS; BACKFILL, COMPACT, AND RESTORE AREAS WHERE OBSTRUCTIONS HAVE BEEN REMOVED WITH APPROVED FILL MATERIAL.
- F. THE CONTRACTOR SHALL ACCEPT OWNERSHIP AND DISPOSE OF REMOVED MATERIALS AND DEBRIS AT LOCATIONS OFF SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS, UNLESS OTHERWISE SHOWN ON CONSTRUCTION DOCUMENTS.
- G. STOCKPILE MATERIALS DESIGNATED SALVAGEABLE AT DESIGNATED SITES WHEN SHOWN ON THE PLANS OR AS DIRECTED; PREPARE STOCKPILE SITE BY REMOVING VEGETATION AND TRASH AND BY PROVIDING FOR PROPER DRAINAGE; MATERIAL NOT DESIGNATED TO BE SALVAGED WILL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
- H. EXCAVATE (CUT) AREAS AS SHOWN ON THE PLANS OR AS DIRECTED; REMOVE MATERIALS ENCOUNTERED TO THE LINES, GRADES, AND TYPICAL SECTIONS SHOWN ON THE CONSTRUCTION DOCUMENTS; ACCEPT OWNERSHIP OF UNSUITABLE OR EXCESS MATERIAL AND DISPOSE OF MATERIAL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS AT LOCATIONS OFF SITE; MAINTAIN DRAINAGE IN THE EXCAVATED AREA TO AVOID DAMAGE TO AREAS OF CUT/FILL; CORRECT ANY DAMAGE TO THE SUBGRADE CAUSED BY WEATHER AT NO ADDITIONAL COST.
- I. THE CONTRACTOR SHALL FURNISH APPROVED FILL MATERIAL CAPABLE OF FORMING A STABLE EMBANKMENT FROM REQUIRED EXCAVATION IN THE AREAS SHOWN ON THE CONSTRUCTION DOCUMENTS FROM APPROVED SOURCES OFF SITE.
- J. EXCAVATION: EXCAVATE SOIL FROM AREAS IN WHICH GRADE CHANGE WILL OCCUR TO A DEPTH OF 6 INCHES AND STOCKPILE UNTIL AMENDED.
- K. THE SCOPE OF WORK SHALL INCLUDE DISPOSAL OF ALL DEBRIS ASSOCIATED WITH DEMOLITION AND CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION, INSPECTION, AND TESTING REQUIRED FOR LAWFUL DISPOSAL AS REQUIRED BY THE OWNER, LOCAL AND STATE CODE.
- L. WHERE EXISTING UTILITIES AND/OR SERVICE LINES ARE CUT, BROKEN, OR DAMAGED, THE CONTRACTOR SHALL REPAIR THE UTILITY OR SERVICE LINES WITH THE SAME MATERIAL AND CONSTRUCTION OR BETTER UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DOCUMENTS AT NO ADDITIONAL COST.
- M. THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY OF FIELD VERIFICATION AND PROTECTION OF EXISTING CONDITIONS AND UTILITIES, THE ACTUAL HORIZONTAL OR VERTICAL LOCATION OF THE EXISTING UTILITIES SHALL NOT BE A BASIS FOR ADDITIONAL COMPENSATION.
- N. THE CONTRACTOR SHALL NOT BEGIN DEMOLITION OPERATIONS UNTIL WRITTEN CONFIRMATION FROM THE OWNER HAS BEEN RECEIVED VERIFYING THAT ALL ITEMS TO BE SALVAGED BY THE OWNER HAVE BEEN REMOVED FROM THE SITE AND ADJACENT RESIDENTIAL PROPERTY.
- O. ALL DAMAGES TO THE OWNER'S PROPERTY ON THE PROJECT SITE PRIOR TO SUBSTANTIAL COMPLETION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AS APPROVED BY THE OWNER, AT NO ADDITIONAL COST.
- P. EXISTING PAVING TO BE REMOVED SHALL BE SAW-CUT, OR REMOVED TO THE NEAREST JOINT TO CREATE CLEAN EDGES TO TIE INTO THE NEW CONSTRUCTION.
- Q. DEMOLITION DIMENSIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR; ANY DISCREPANCIES SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT IMMEDIATELY FOR RESOLUTION.
- R. THE CONTRACTOR IS RESPONSIBLE FOR ALL ASPECTS OF STORM WATER POLLUTION PREVENTION, SITE DRAINAGE, DUST CONTROL, NOISE POLLUTION, TRAFFIC CONTROL, SECURITY, FENCING, LIGHTING, PERMITTING, OR OTHER LOCAL OR STATE CODE REQUIREMENTS REQUIRED FOR CONSTRUCTION OPERATIONS, UNLESS OTHERWISE SHOWN ON CONSTRUCTION DOCUMENTS.



LEGEND

- 609- EXISTING 1' CONTOUR
- 610- EXISTING 5' CONTOUR
- X- EXISTING FENCE LINE
- OHE- EXISTING OVERHEAD ELECTRIC LINE

EXISTING IRRIGATION SYSTEM
CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF IRRIGATION SYSTEM MODIFICATIONS AS REQUIRED FOR PROPOSED PACKAGE ONE IMPROVEMENTS AND PLANTING PLAN AS OUTLINED ON PACKAGE ONE LANDSCAPE SHEETS. CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING IRRIGATION SYSTEM AS REQUIRED FOR FUTURE MODIFICATION WITHIN THIS CONTRACT. ANY DAMAGED IRRIGATION EQUIPMENT FROM DEMOLITION ACTIVITY IS THE RESPONSIBILITY OF CONTRACTOR AND DOES NOT CONSTITUTE ANY ADDITIONAL PAYMENT.

EXISTING UTILITIES
CONTRACTOR MUST VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH TOWN OFFICIALS AND UTILITY COMPANIES IN LOCATING UTILITIES. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR LOSSES DUE TO DAMAGE TO UTILITIES. LOCATION FOR ALL UTILITIES SHOWN ON PLANS ARE APPROXIMATE. CONTRACTOR SHALL CALL TEXAS 811, 1-800-344-8377.

FILE NAME: \data\projects\3\2021\1068.21\03_DSGN01_DWG0050_civil\C-101-1068.dwg LAYOUT NAME: C-101 PRINTED: Tuesday, January 11, 2022 - 8:01am USER: Chadball



Parkhill.com

Redding Trail Package One Drainage Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1068.21

KEY PLAN

#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

Package One Grading Layout C-102

GRADING NOTES

THE EARTHWORK FOR THIS PROJECT IS A NECESSARY AND INCIDENTAL PART OF THE WORK. IN THE CASE THAT THE EARTHWORK DOES NOT BALANCE, THE CONTRACTOR IS RESPONSIBLE FOR ANY ADDITIONAL COSTS ASSOCIATED WITH HAUL OFF OR IMPORT. THE TOTAL COST SHALL BE INCLUDED IN THE BID PROPOSAL AS A LUMP SUM. PAYMENT WILL NOT BE MADE ON A UNIT PRICE BASIS OR BY ANY OTHER SEPARATE MEASURED PAYMENT METHOD.

- BASE BID SHALL INCLUDE ALL EARTHWORK NECESSARY TO ESTABLISH THE FINISHED GRADES AS SHOWN ON THIS PLAN. NO SEPARATE PAYMENT WILL BE MADE.
- REFER TO SPECIFICATIONS FOR DISPOSAL OF EXCESS MATERIAL.
- CONTRACTOR SHALL STRIP, STOCKPILE AND RE-SPREAD A MINIMUM OF 6" OF TOPSOIL IN ALL DISTURBED AREAS. IN AREAS OF CUT, THE GRADE SHALL BE EXCAVATED TO 6" BELOW FINISH GRADE. THEN TOPSOIL SHALL BE RE-SPREAD ABOVE THE SUB GRADE ELEVATION.
- CONTRACTOR SHALL PROVIDE SOLID SOD PER SPECIFICATIONS FOR ALL AREAS INDICATED TO RECEIVE GRADING.
- CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND GRADES, NEW OR EXISTING PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH EXISTING OR NEW CONDITIONS. THE CONTRACTOR SHALL EMPLOY A LICENSED PUBLIC SURVEYOR TO SET ALL GRADES, SPOT ELEVATIONS, FLOW LINES, ETC.

KEY NOTES

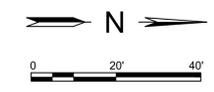
- AS INDICATED BY: (01)
- PROPOSED DRAINAGE CHANNEL (REF DETAIL C1, SHEET C-500).
 - CONTRACTOR TO INSTALL No. 4 SMOOTH DOWELS @ 18" OCEW TO TIE PROPOSED FLUME INTO EXISTING CONCRETE COLLAR. PRIOR TO BEGINNING CONSTRUCTION CONTRACTOR TO VERIFY THICKNESS OF EXISTING CONCRETE COLLAR AROUND INLETS. IF EXISTING CONCRETE COLLARS ARE LESS THAN FIVE INCHES (5") THICK, CONTRACTOR SHALL CONTACT THE ENGINEER TO PROVIDE DETAIL FOR REMOVAL OF EXISTING COLLAR AND INSTALLATION OF NEW CONCRETE COLLAR.

EXISTING UTILITIES

CONTRACTOR MUST VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH TOWN OFFICIALS AND UTILITY COMPANIES IN LOCATING UTILITIES. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR LOSSES DUE TO DAMAGE TO UTILITIES. LOCATION FOR ALL UTILITIES SHOWN ON PLANS ARE APPROXIMATE. CONTRACTOR SHALL CALL TEXAS 811, 1-800-344-8377.

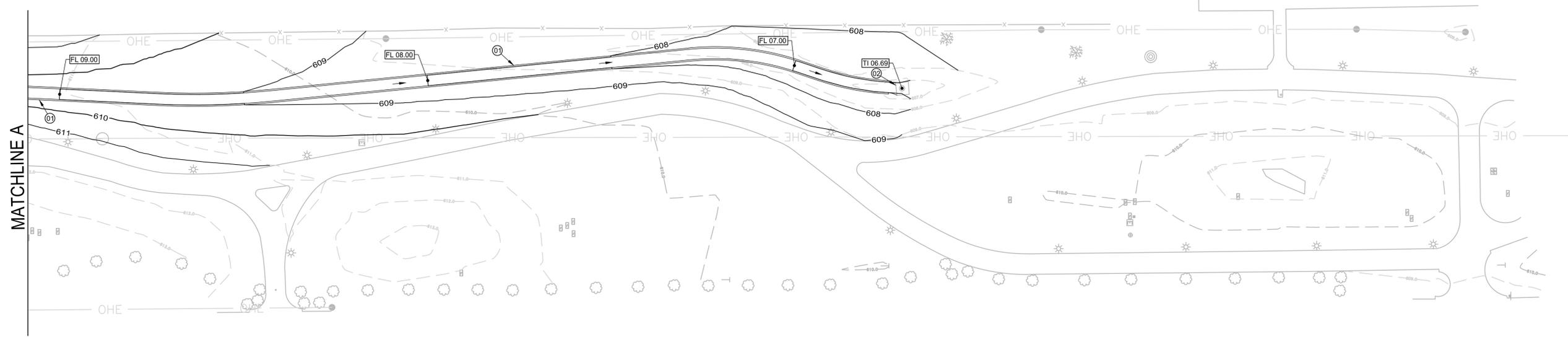
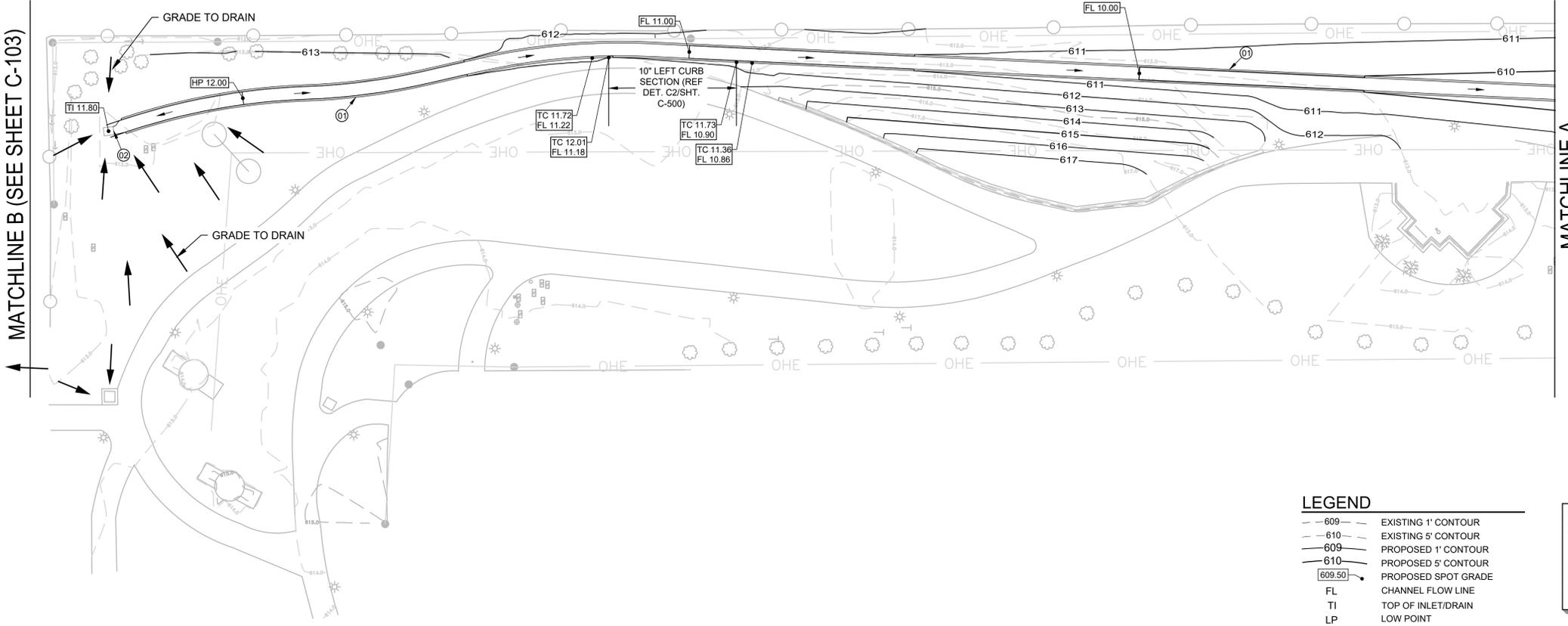
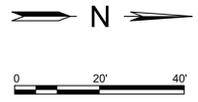
EXISTING IRRIGATION SYSTEM

CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF IRRIGATION SYSTEM MODIFICATIONS AS REQUIRED FOR PROPOSED PACKAGE ONE IMPROVEMENTS AND PLANTING PLAN AS OUTLINED ON PACKAGE ONE LANDSCAPE SHEETS. CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING IRRIGATION SYSTEM AS REQUIRED FOR FUTURE MODIFICATION WITHIN THIS CONTRACT. ANY DAMAGED IRRIGATION EQUIPMENT FROM DEMOLITION ACTIVITY IS THE RESPONSIBILITY OF CONTRACTOR AND DOES NOT CONSTITUTE ANY ADDITIONAL PAYMENT.



LEGEND

- - - 609 EXISTING 1' CONTOUR
- - - 610 EXISTING 5' CONTOUR
- - - 609 PROPOSED 1' CONTOUR
- - - 610 PROPOSED 5' CONTOUR
- 609.50 PROPOSED SPOT GRADE
- FL CHANNEL FLOW LINE
- TI TOP OF INLET/DRAIN
- LP LOW POINT
- HP HIGH POINT
- TC TOP OF CURB
- DIRECTION OF FLOW



FILE NAME: \\data1\projects\3\2022\11068.2103_DSGN01_DWG0050_civil\C-102-1068.dwg LAYOUT NAME: C-102 PRINTED: Tuesday, January 11, 2022 - 8:02am USER: CHaddall

D
C
B
A



GRADING NOTES

THE EARTHWORK FOR THIS PROJECT IS A NECESSARY AND INCIDENTAL PART OF THE WORK. IN THE CASE THAT THE EARTHWORK DOES NOT BALANCE, THE CONTRACTOR IS RESPONSIBLE FOR ANY ADDITIONAL COSTS ASSOCIATED WITH HAUL OFF OR IMPORT. THE TOTAL COST SHALL BE INCLUDED IN THE BID PROPOSAL AS A LUMP SUM. PAYMENT WILL NOT BE MADE ON A UNIT PRICE BASIS OR BY ANY OTHER SEPARATE MEASURED PAYMENT METHOD.

1. BASE BID SHALL INCLUDE ALL EARTHWORK NECESSARY TO ESTABLISH THE FINISHED GRADES AS SHOWN ON THIS PLAN. NO SEPARATE PAYMENT WILL BE MADE.
2. REFER TO SPECIFICATIONS FOR DISPOSAL OF EXCESS MATERIAL.
3. CONTRACTOR SHALL STRIP, STOCKPILE AND RE-SPREAD A MINIMUM OF 6" OF TOPSOIL IN ALL DISTURBED AREAS. IN AREAS OF CUT, THE GRADE SHALL BE EXCAVATED TO 6" BELOW FINISH GRADE, THEN TOPSOIL SHALL BE RE-SPREAD ABOVE THE SUB GRADE ELEVATION.
4. CONTRACTOR SHALL PROVIDE SOLID SOD PER SPECIFICATIONS FOR ALL AREAS INDICATED TO RECEIVE GRADING.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND GRADES, NEW OR EXISTING PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH EXISTING OR NEW CONDITIONS. THE CONTRACTOR SHALL EMPLOY A LICENSED PUBLIC SURVEYOR TO SET ALL GRADES, SPOT ELEVATIONS, FLOW LINES, ETC.

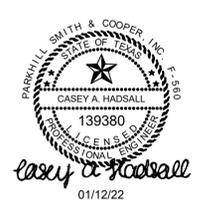
EXISTING UTILITIES
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LEGEND

- 609.50 PROPOSED SPOT GRADE
- TI TOP OF INLET/DRAIN
- LP LOW POINT
- HP HIGH POINT
- DIRECTION OF FLOW

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**Redding Trail
Package One
Drainage Improvements**



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1068.21
KEY PLAN

#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

Package One
**Grading
Layout
C-103**

1

2

3

4

5



Redding Trail Package One Drainage Improvements



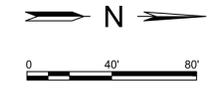
CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1068.21
KEY PLAN

01/12/2022 Bid Set

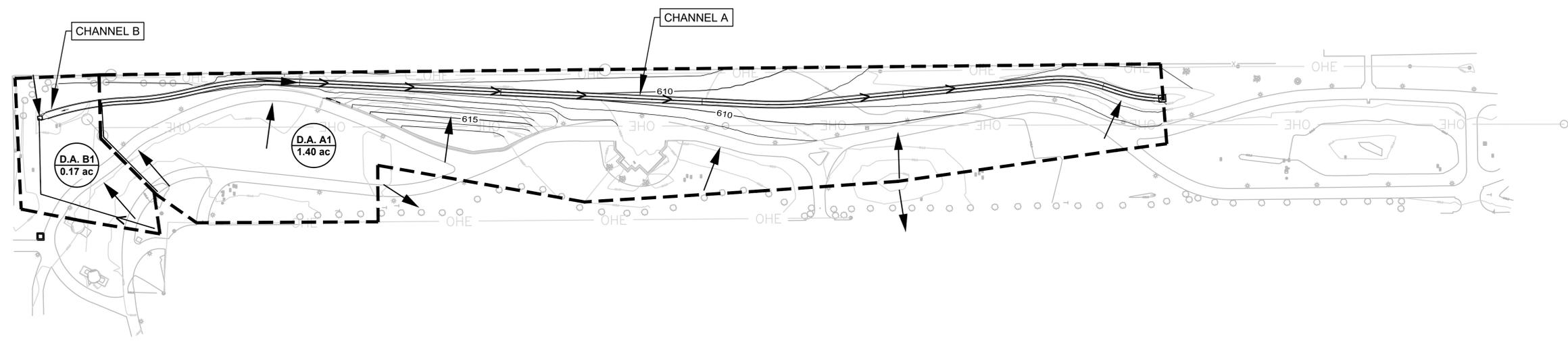
Package One

Drainage Area Map C-104



LEGEND

- - - 609 - - - EXISTING 1' CONTOUR
- - - 610 - - - EXISTING 5' CONTOUR
- - - 609 - - - PROPOSED 1' CONTOUR
- - - 610 - - - PROPOSED 5' CONTOUR
- DRAINAGE AREA BOUNDARY
- FLOW DIRECTION ARROW
- (D.A. A1
1.40 ac) DRAINAGE AREA NUMBER
DRAINAGE AREA (acres)
- LONGEST FLOW PATH



Hydrology Calculations - Addison Redding Trail

D.A. No.	Area ac.	c	tc		
			min	in/hr	Q100 cfs
A1	1.40	0.40	11	9.01	5.0
B1	0.17	0.40	10	9.27	0.6

Notes:
Intensities from Addison County Rainfall Data (Addison Drainage Criteria Manual)

CHANNEL A CAPACITY CALCULATIONS:
 $n = 0.0175$
 $s = 0.0071 \text{ ft/ft}$
 $w = 4 \text{ ft}$
 $d = 0.38 \text{ ft}$
 $A = 1.52 \text{ ft}^2$
 $P = 4.76 \text{ ft}$
 $R = 0.32 \text{ ft}$
 $V_{cap} = 3.34 \text{ fps}$
 $Q_{cap} = 5.08 \text{ cfs}$

CHANNEL B CAPACITY CALCULATIONS:
 $n = 0.0175$
 $s = 0.0050 \text{ ft/ft}$
 $w = 4 \text{ ft}$
 $d = 0.12 \text{ ft}$
 $A = 0.48 \text{ ft}^2$
 $P = 4.24 \text{ ft}$
 $R = 0.11 \text{ ft}$
 $V_{cap} = 1.41 \text{ fps}$
 $Q_{cap} = 0.67 \text{ cfs}$

FILE NAME: \\data1\projects\2021\1068.2103_DSGN01_DWG\050_civil\C-104-068.dwg LAYOUT NAME: C-104 PRINTED: Tuesday, January 11, 2022 - 8:03am USER: Chadall



Redding Trail Package One Drainage Improvements



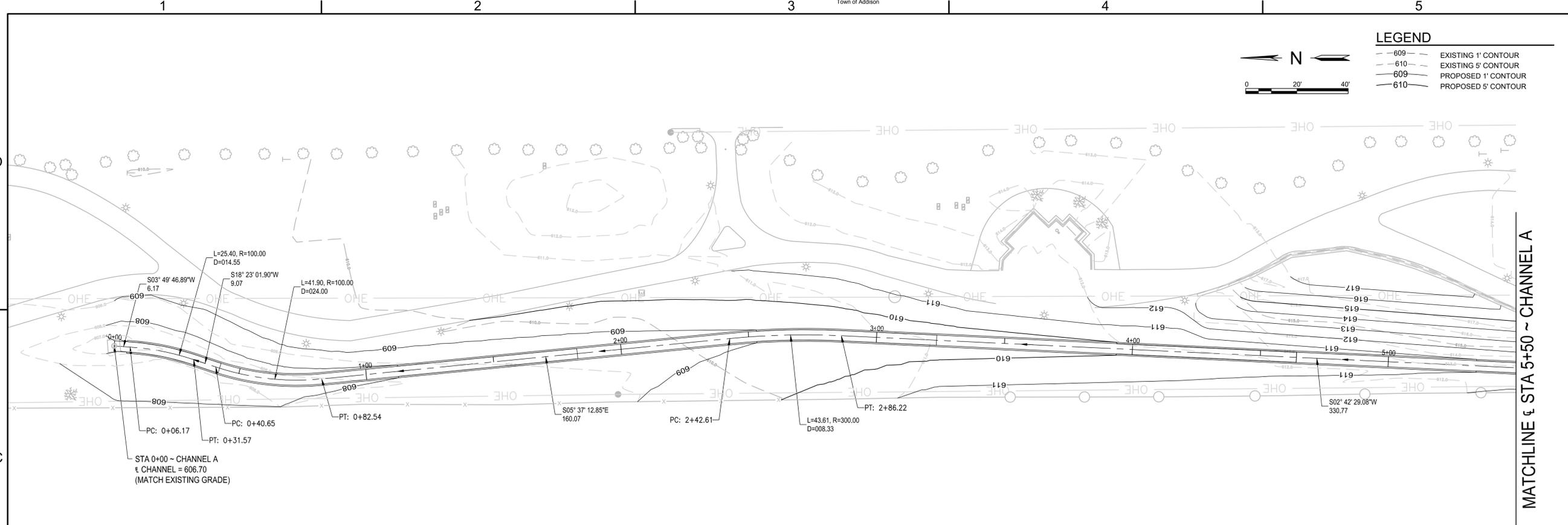
CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1068.21
KEY PLAN

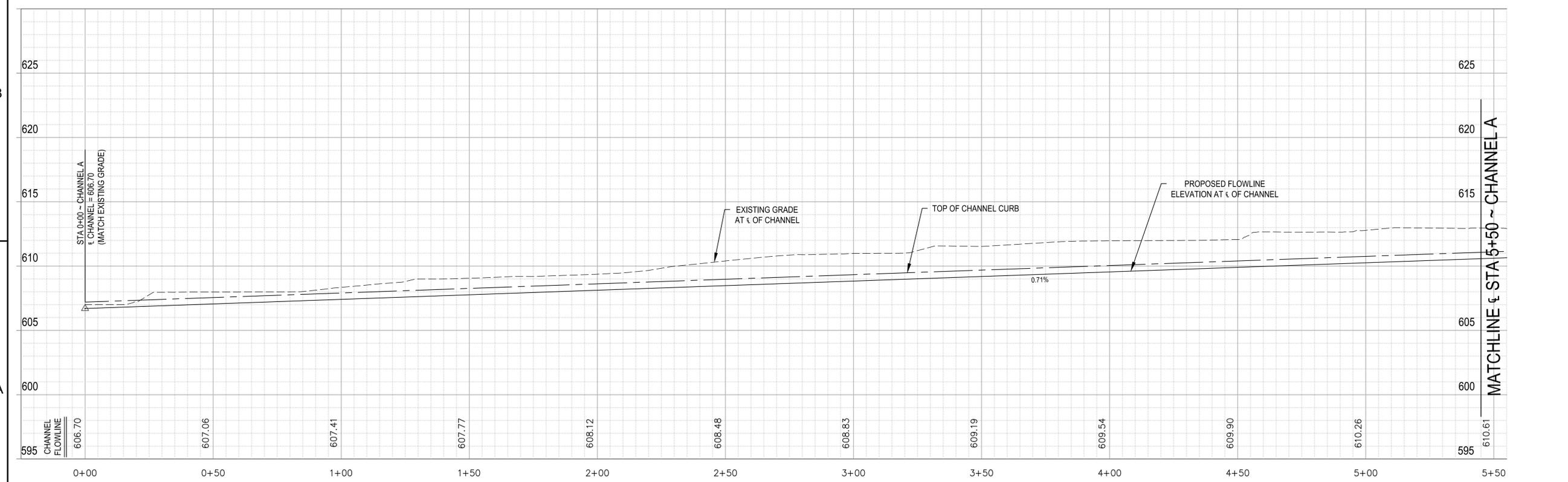
01/12/2022 Bid Set

Package One

Channel Plan-Profile C-105



CHANNEL A PLAN



CHANNEL A PROFILE

FILE NAME: \\data\projects\3\2022\11068.2103_DSGN01_DWG\050_civil\C-105-068.dwg LAYOUT NAME: C-105 PRINTED: Tuesday, January 11, 2022 - 8:04am USER: Chadsall



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Redding Trail Package One Drainage Improvements



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Town of Addison, Texas

16801 Westgrove Drive
Addison, TX 75001

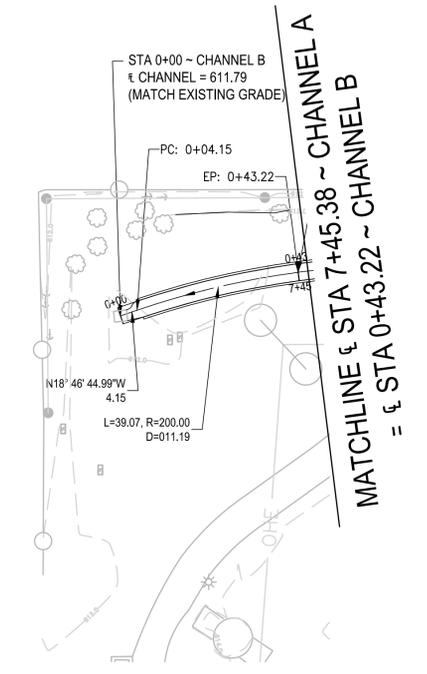
PROJECT NO.
1068.21

KEY PLAN

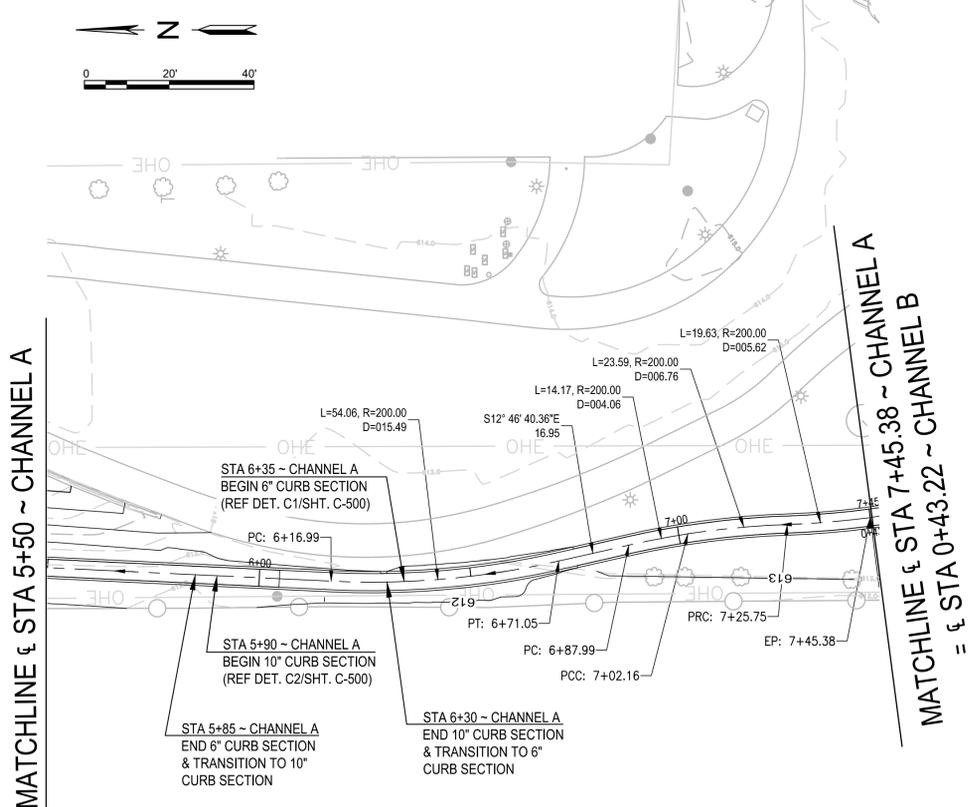
01/12/2022 Bid Set

Package One

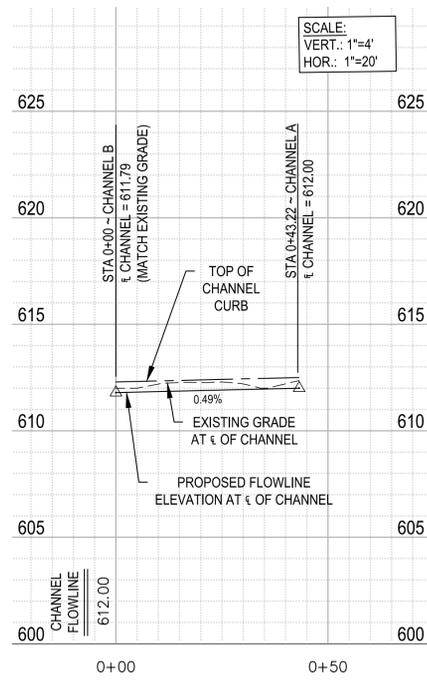
Channel Plan-Profile C-106



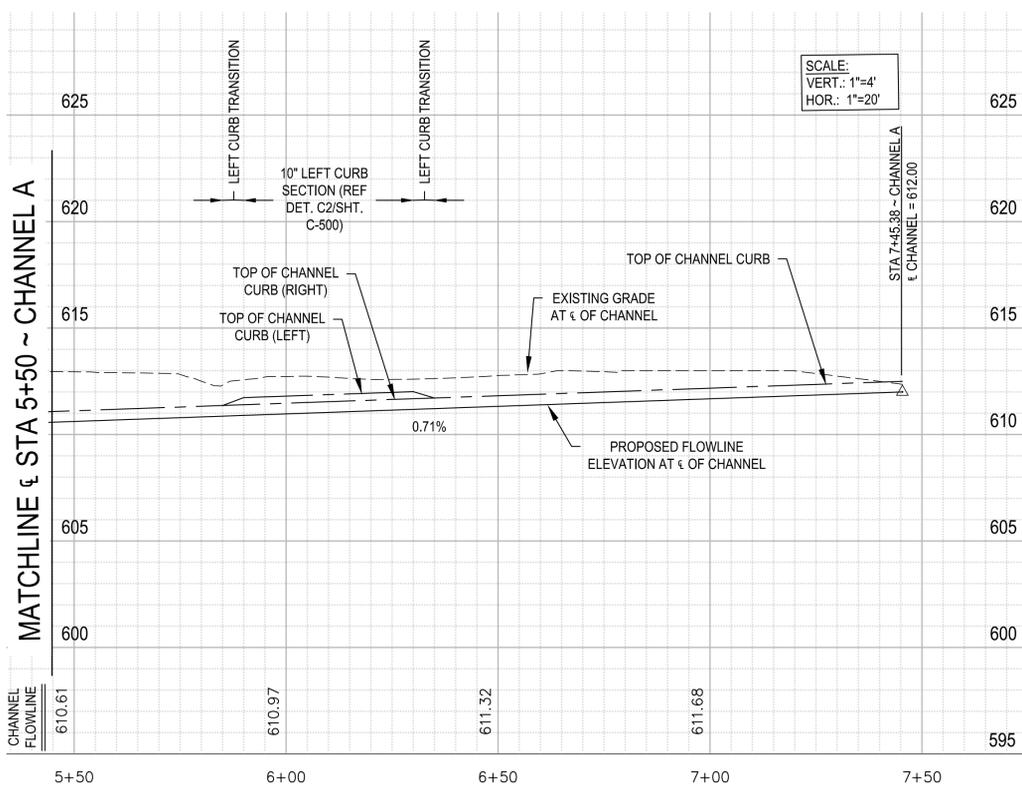
CHANNEL B PLAN



CHANNEL A PLAN



CHANNEL B PROFILE



CHANNEL A PROFILE



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Redding Trail Package One Drainage Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

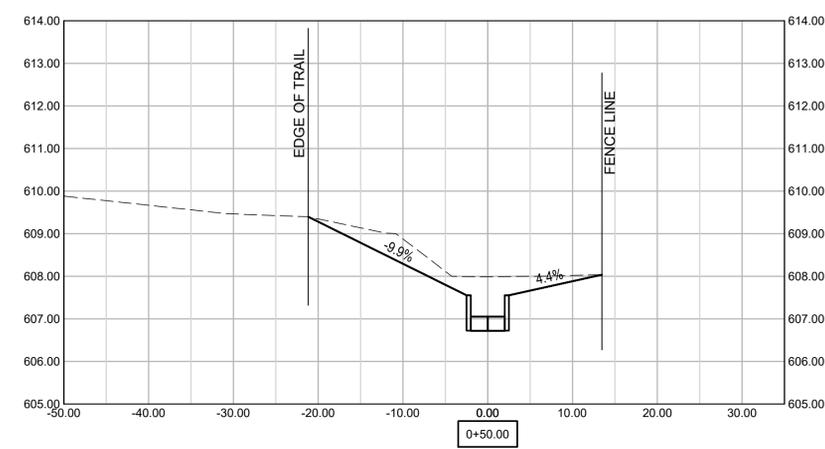
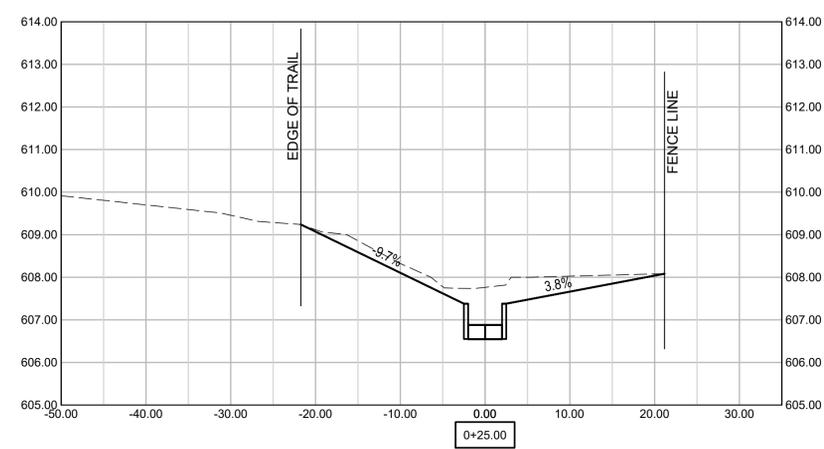
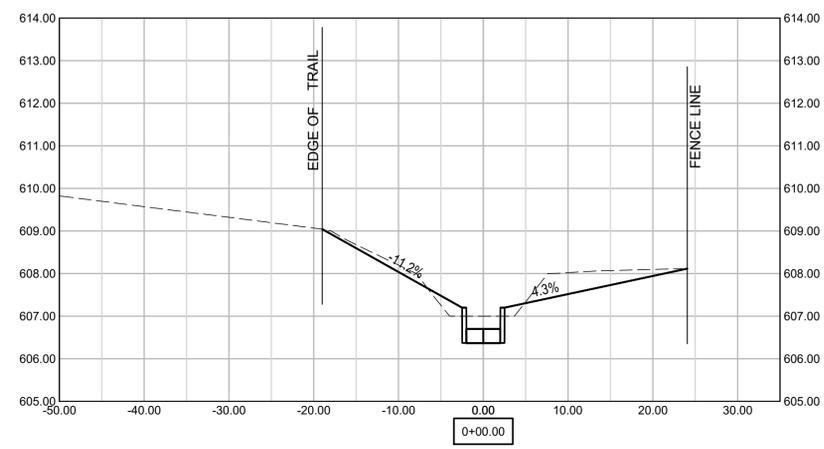
PROJECT NO.
1068.21
KEY PLAN

#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

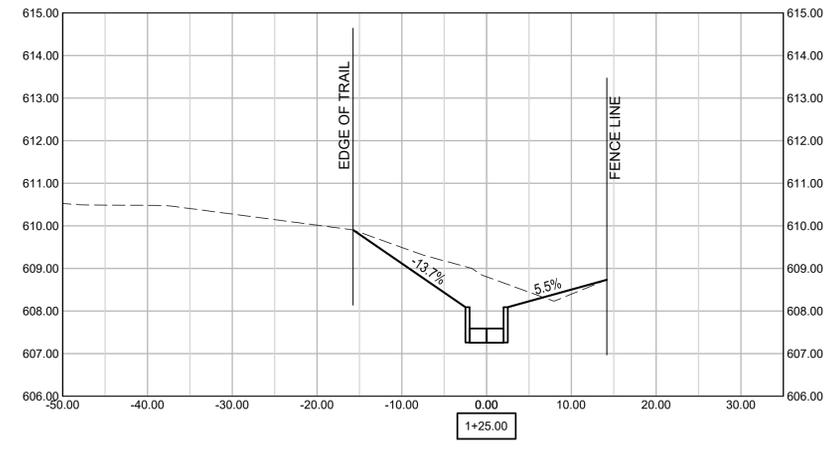
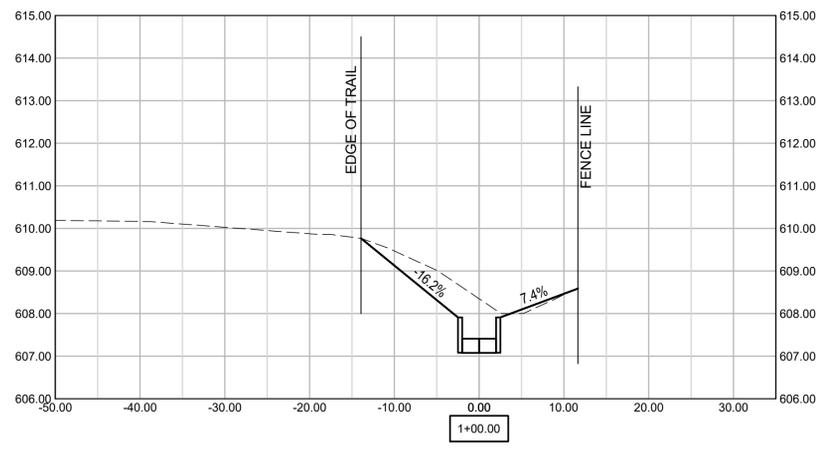
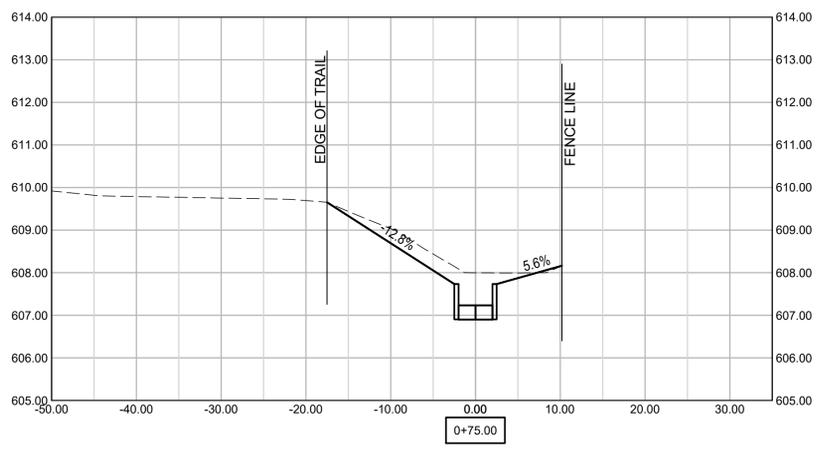
Package One Channel Sections C-107

CHANNEL A SECTIONS

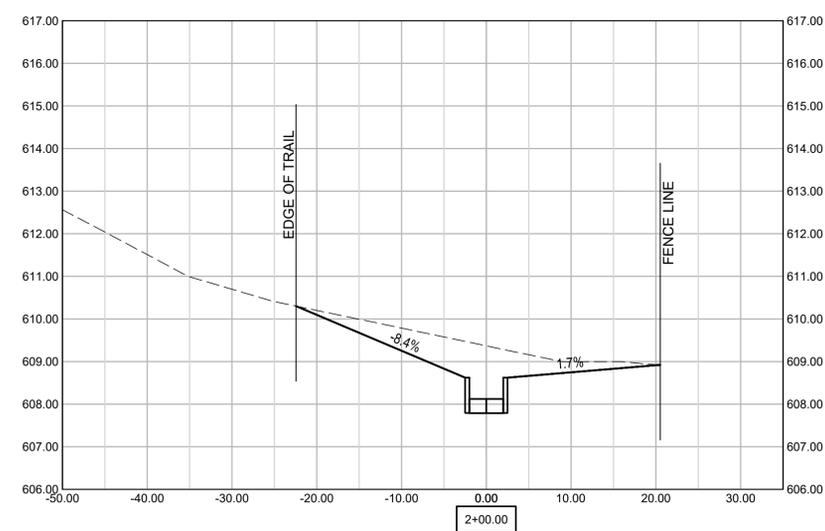
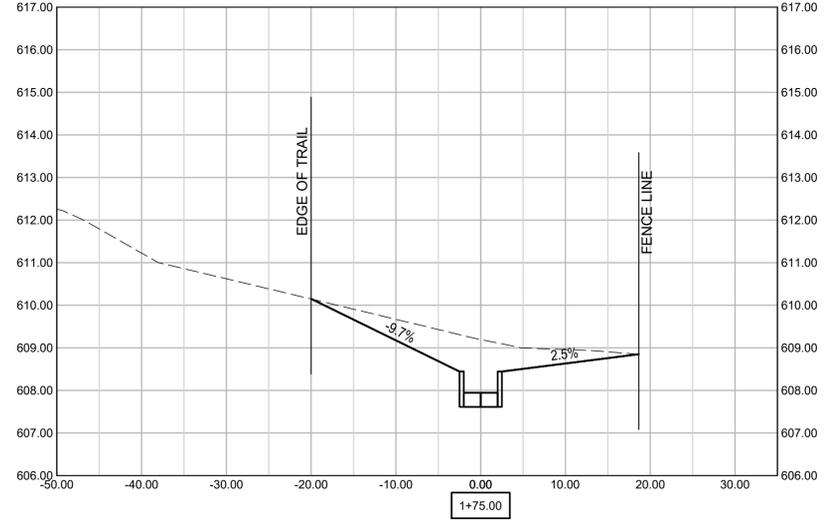
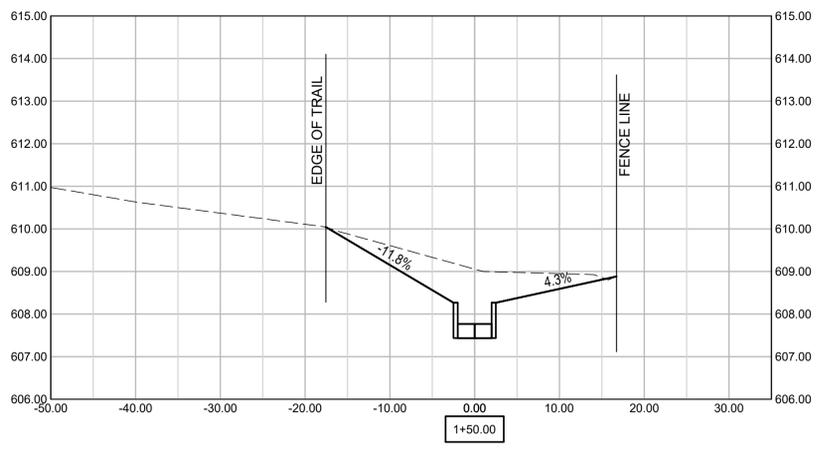
D



C



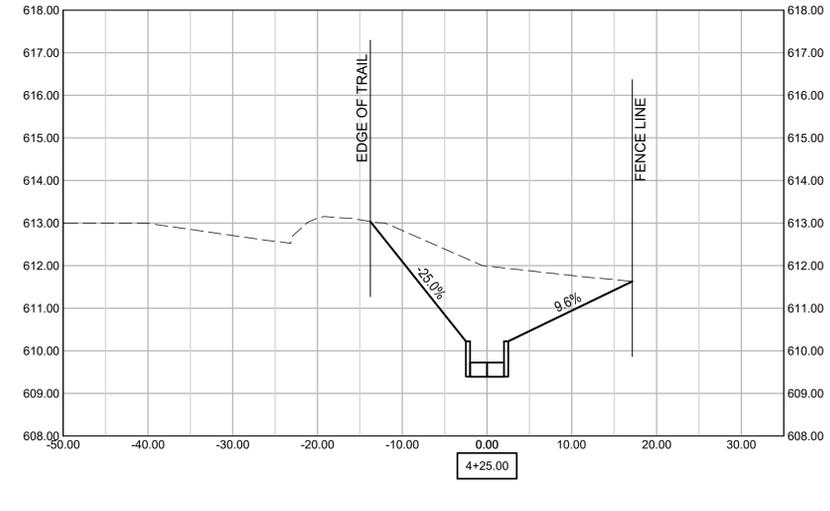
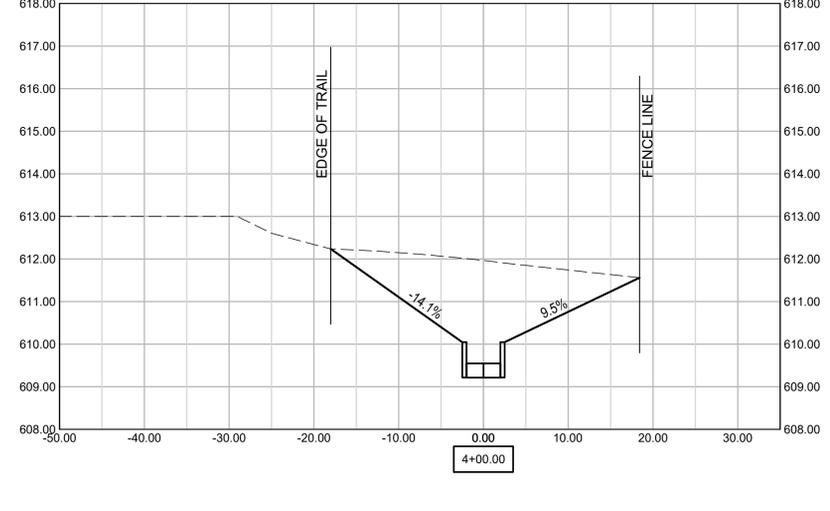
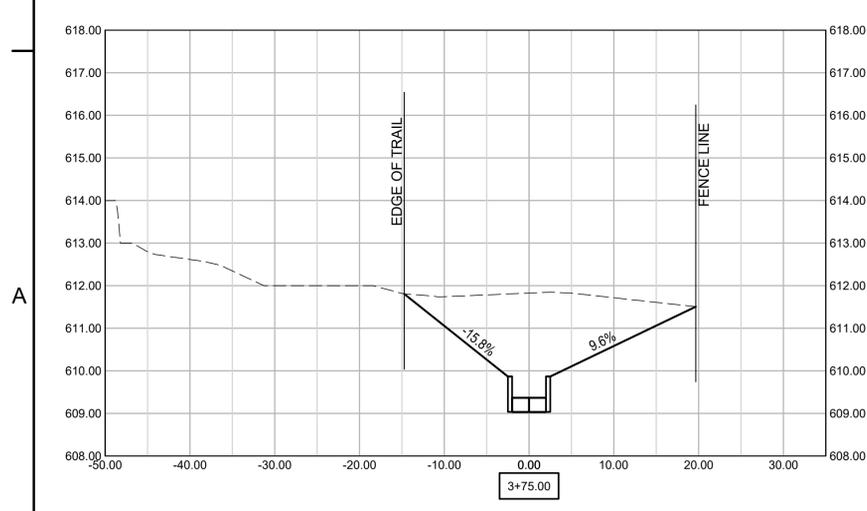
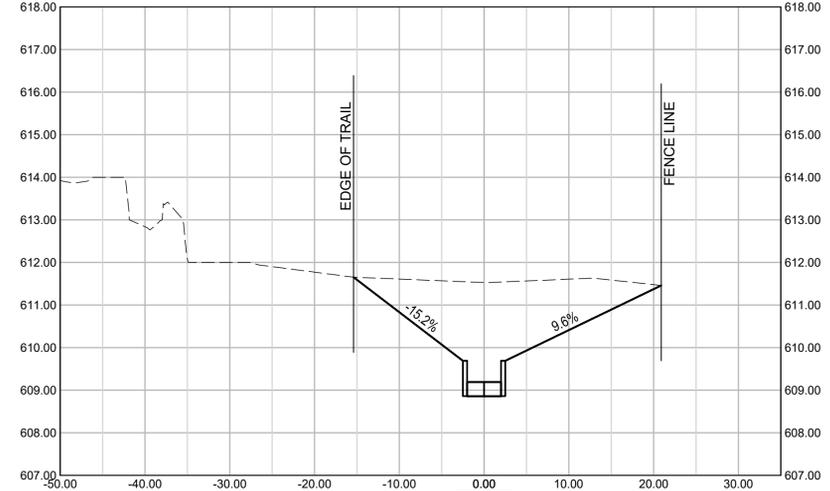
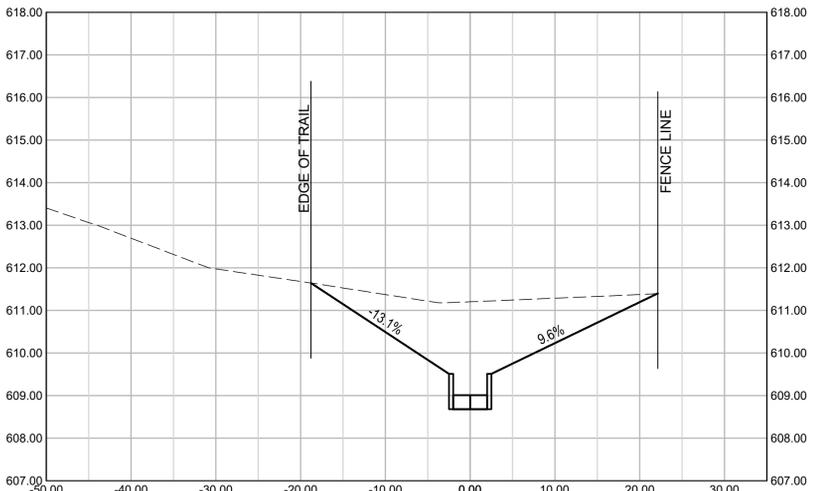
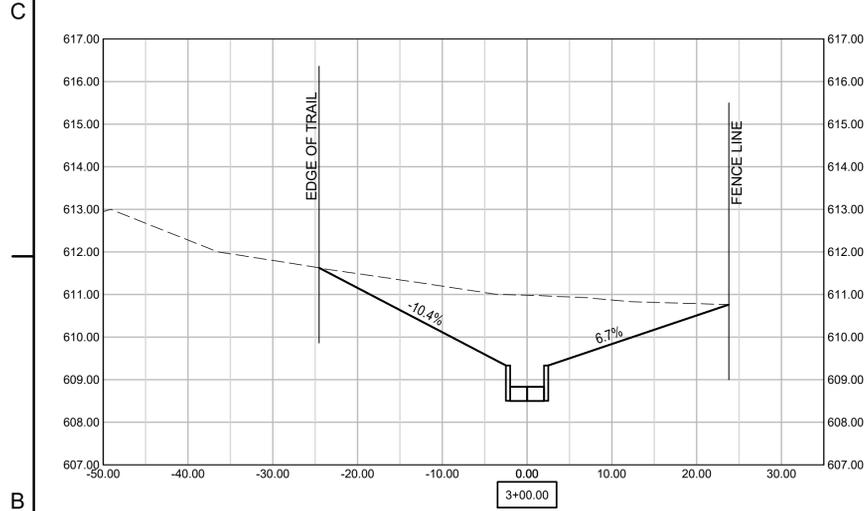
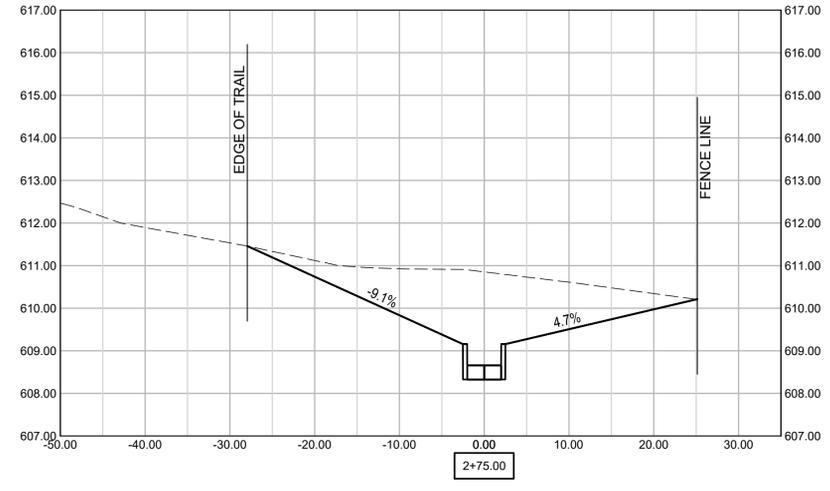
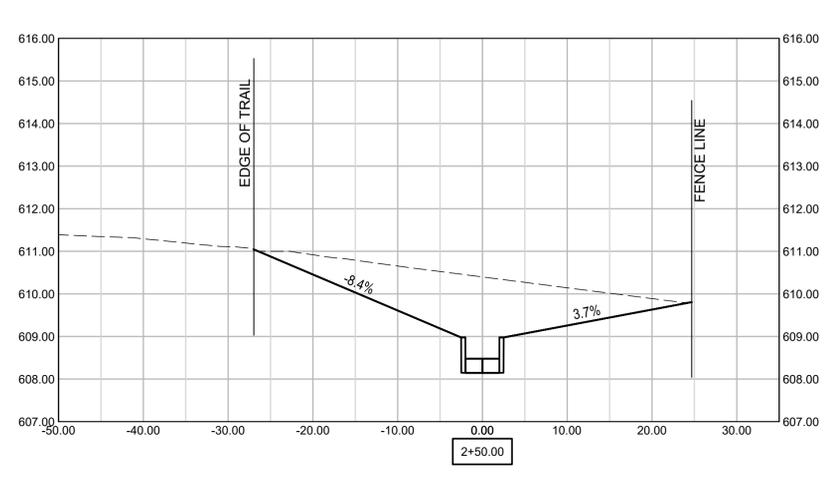
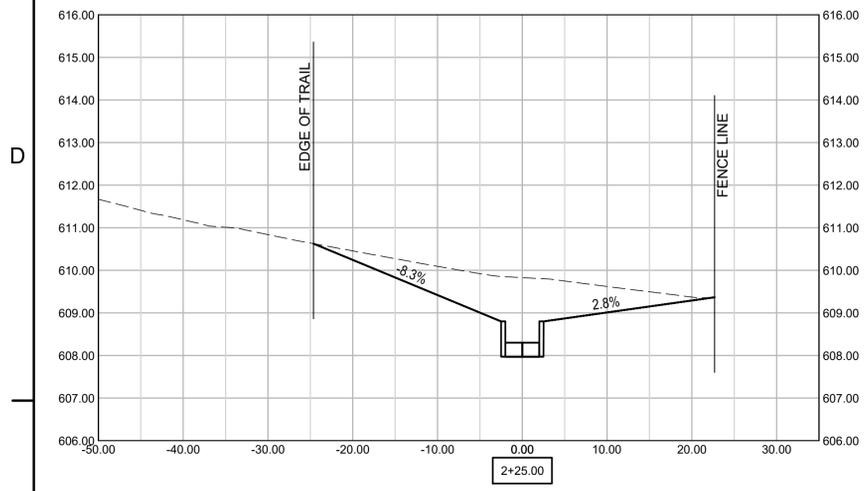
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A

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CHANNEL A SECTIONS



Parkhill.com

Redding Trail Package One Drainage Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1068.21
KEY PLAN

#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

Package One Channel Sections C-108

FILE NAME: \\data1\projects\3\2021\1068.21\03_DSGN\01_DWG\050_civil\C-107-110-1068.dwg LAYOUT NAME: C-108 PRINTED: Tuesday, January 11, 2022 - 8:06am USER: CHadsall

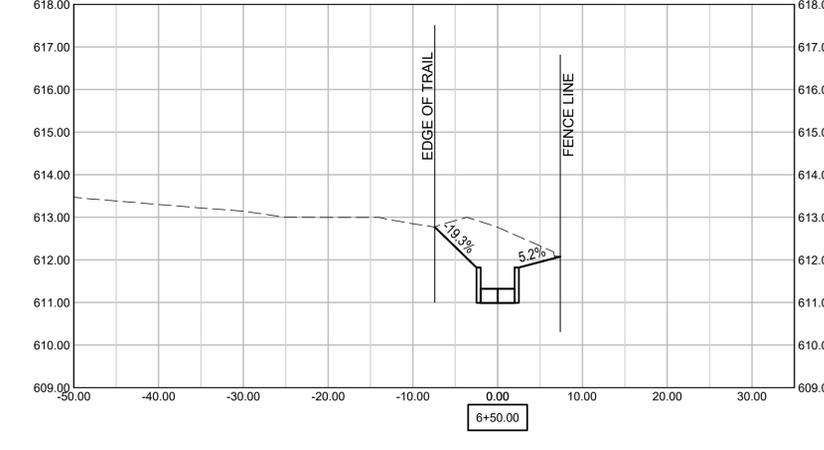
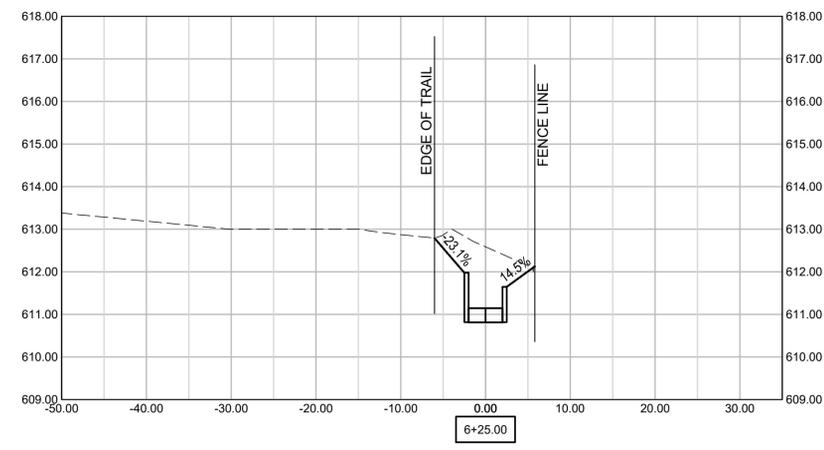
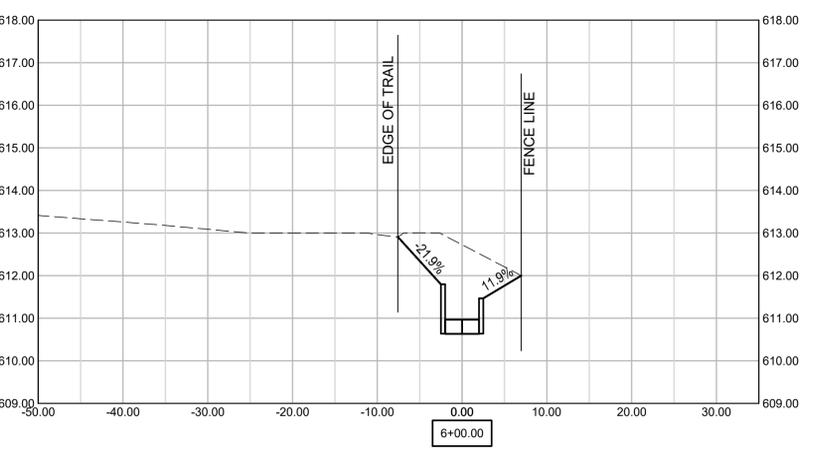
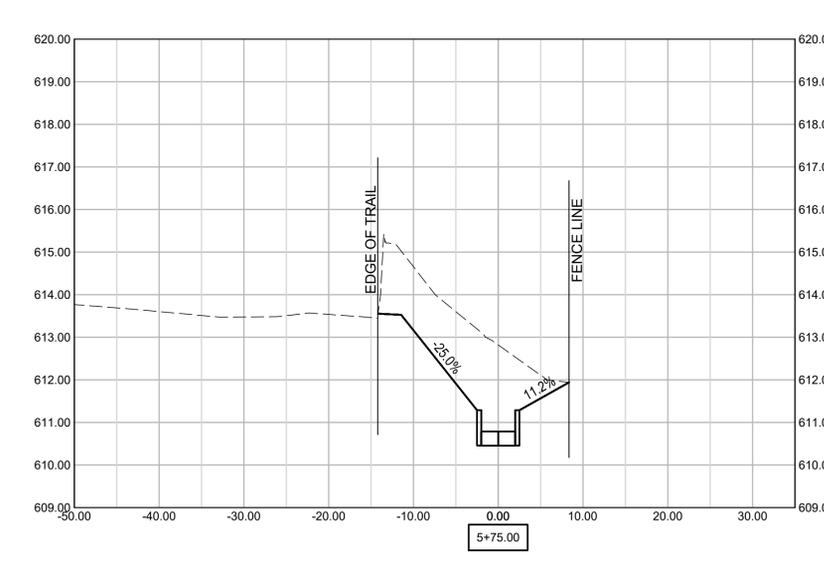
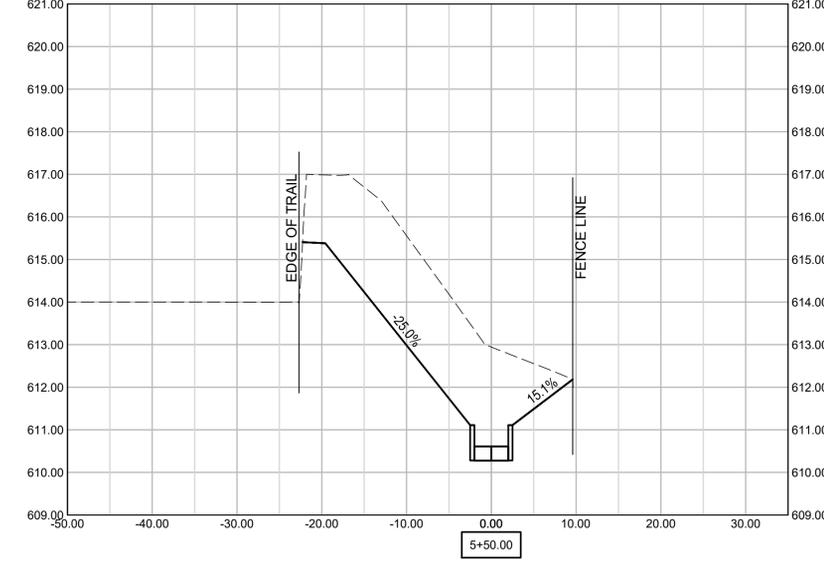
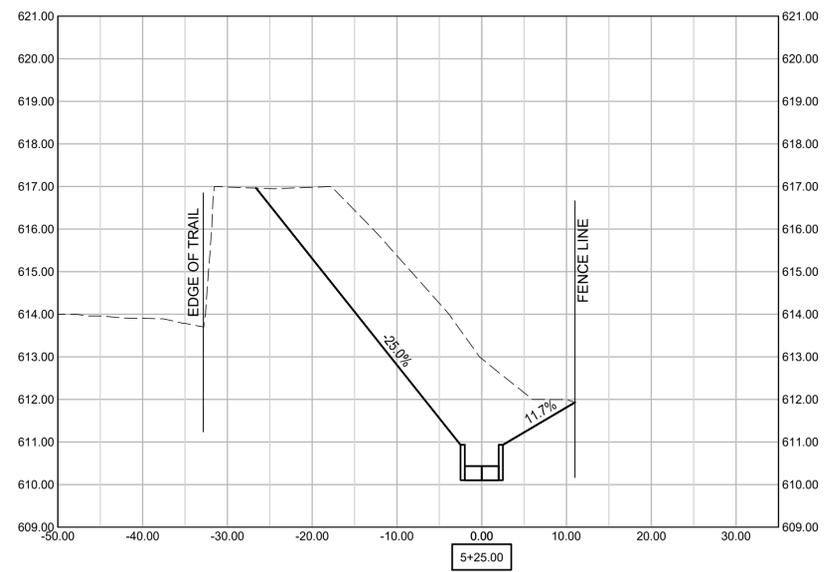
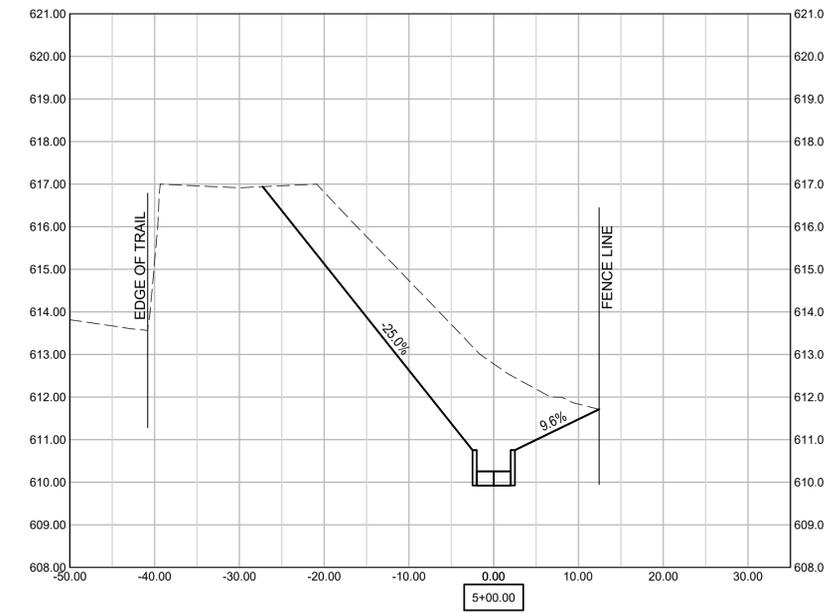
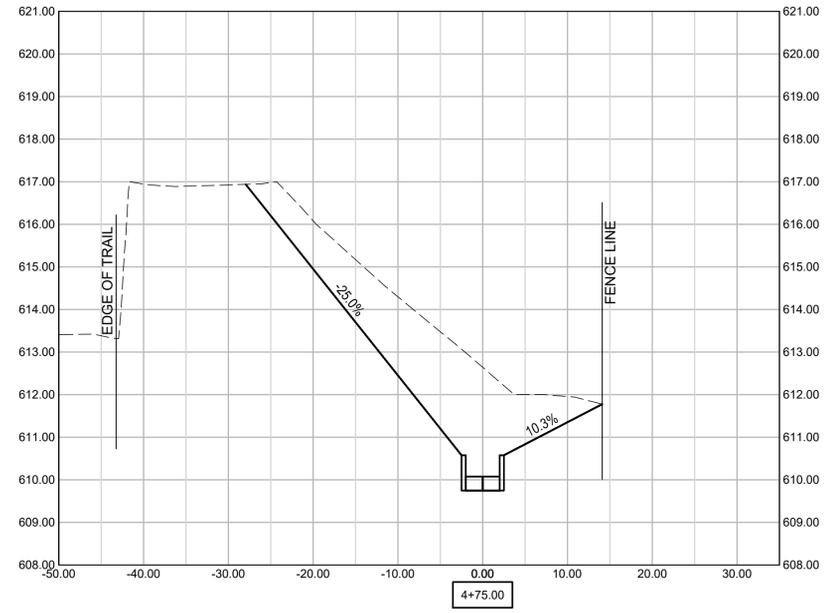
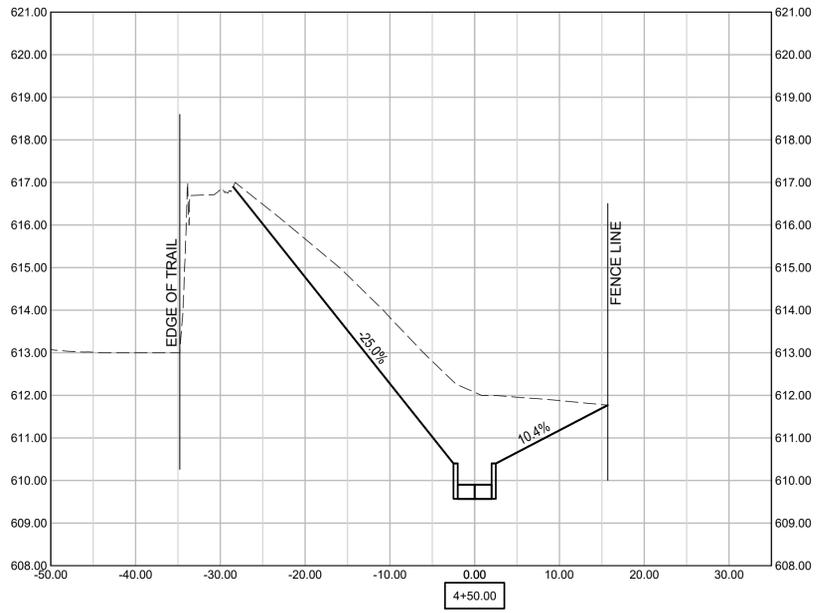
CHANNEL A SECTIONS

D

C

B

A



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Redding Trail Package One Drainage Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1068.21

KEY PLAN

#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

Package One

Channel Sections C-109

FILE NAME: \\data1\projects\3\2021\1068.21\03_DSGN\01_DWG\050_civ\10-1068.dwg LAYOUT NAME: C-109 PRINTED: Tuesday, January 11, 2022 - 8:20am USER: CHadsall



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Redding Trail Package One Drainage Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

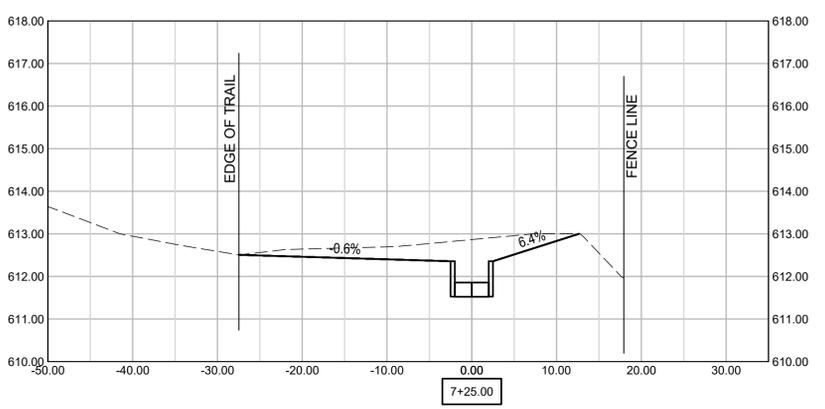
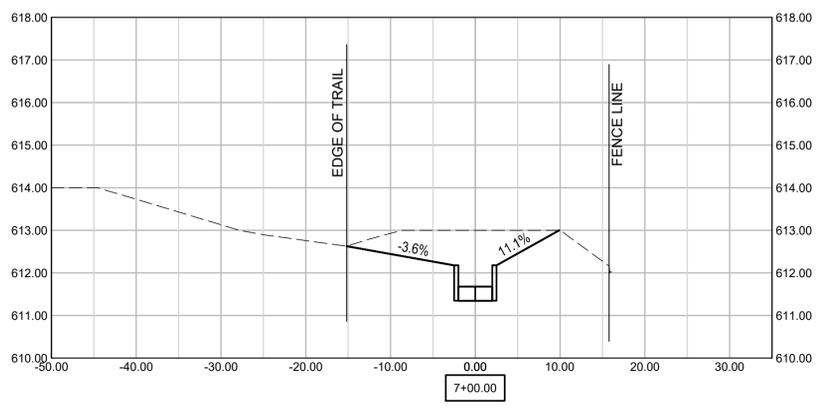
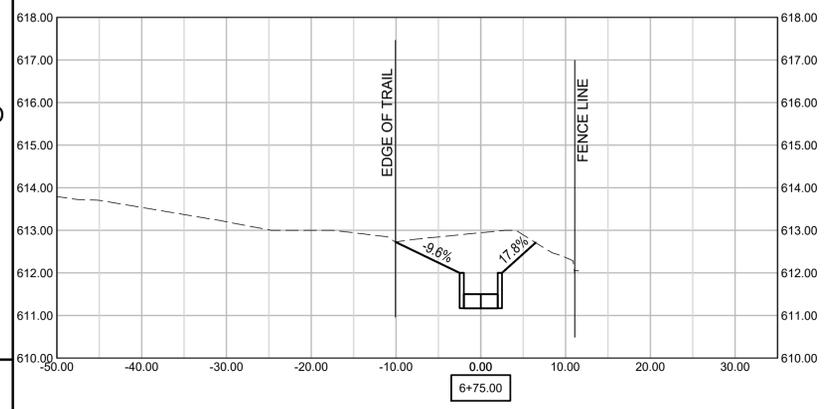
PROJECT NO.
1068.21
KEY PLAN

#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

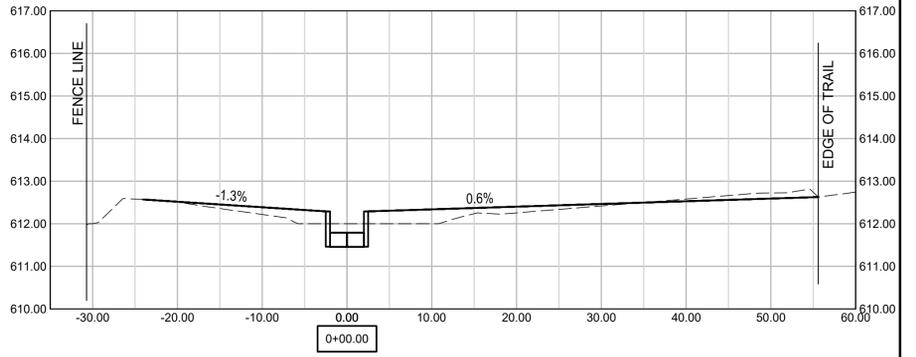
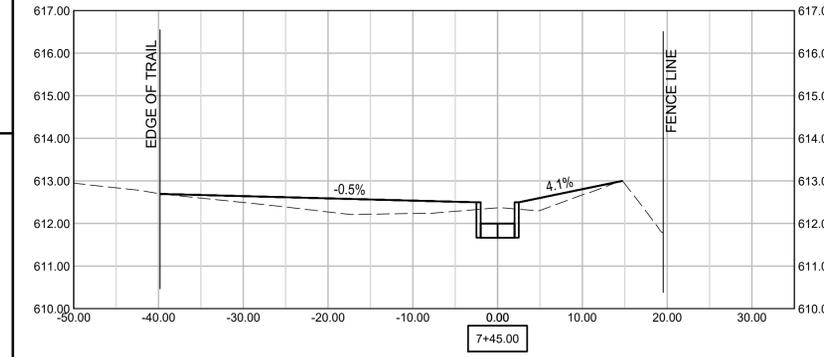
Package One

Channel Sections C-110

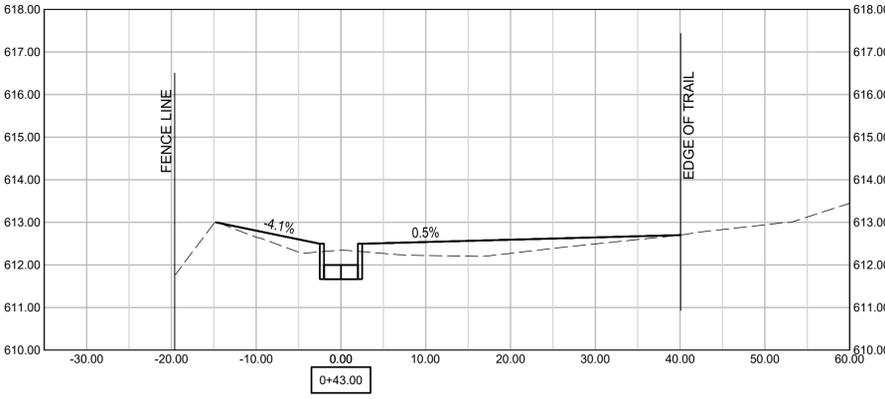
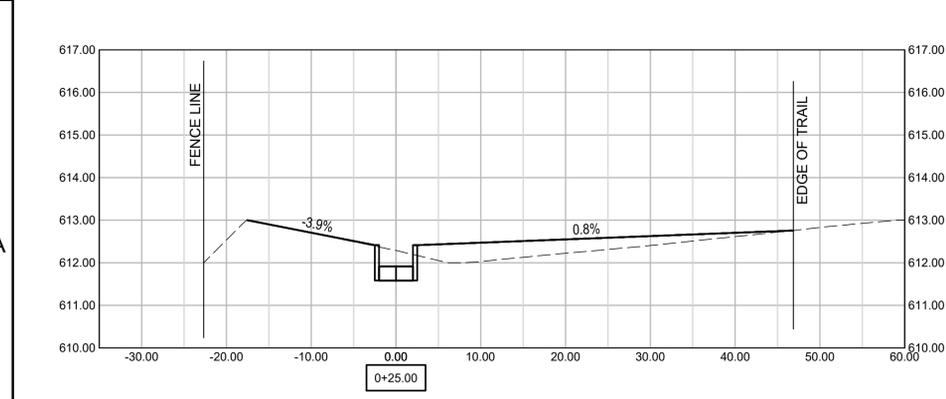
CHANNEL A SECTIONS



CHANNEL B SECTIONS



CHANNEL B SECTIONS



FILE NAME: \\data1\projects\3\2021\1068.21\03_DSGN\01_DWG\050_civil\C-107-110-1068.dwg LAYOUT NAME: C-110 PRINTED: Tuesday, January 11, 2022 - 8:20am USER: CHadsall



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Redding Trail Package One Drainage Improvements



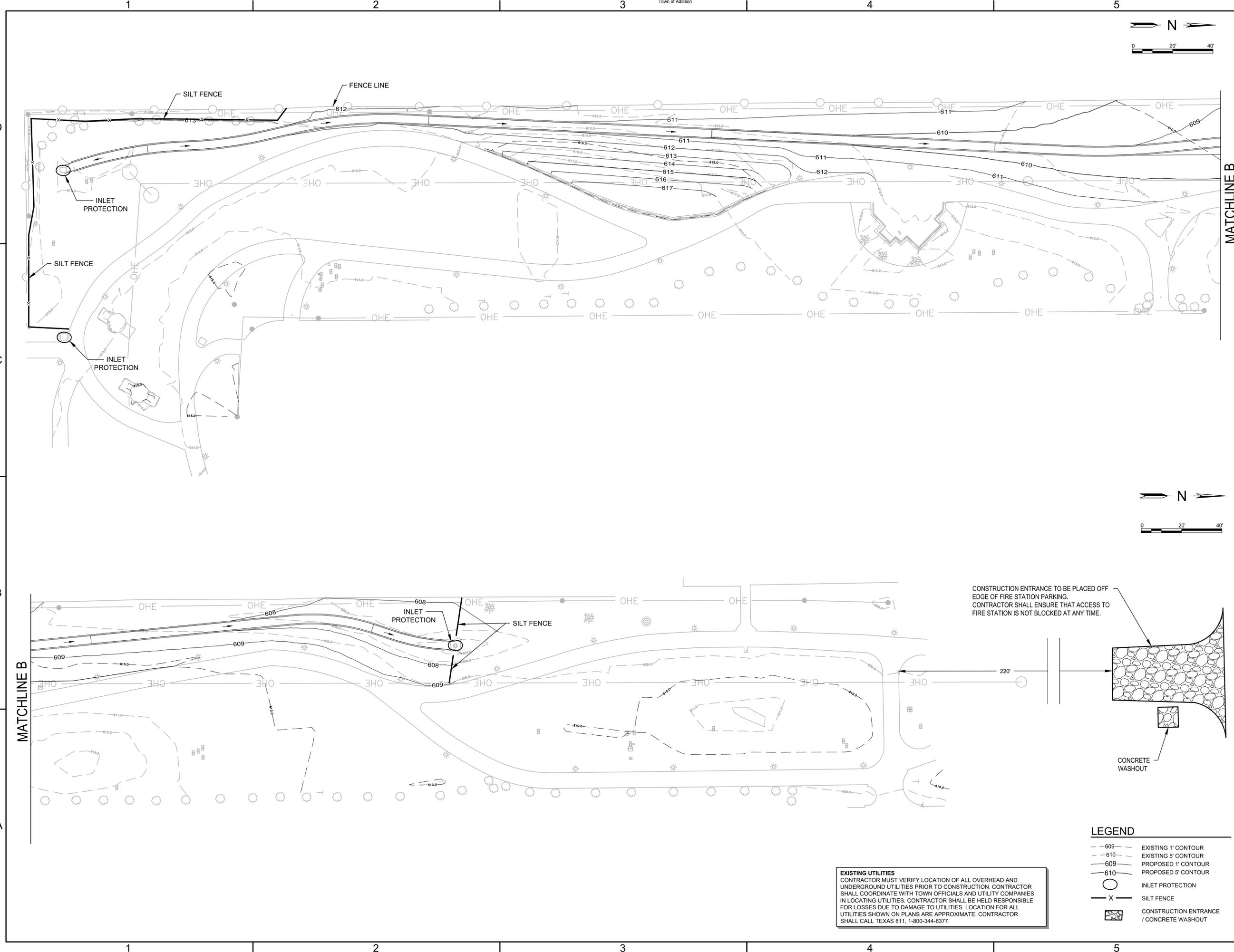
CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1068.21

KEY PLAN

#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

Package One Erosion Control Plan C-111



EXISTING UTILITIES
CONTRACTOR MUST VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH TOWN OFFICIALS AND UTILITY COMPANIES IN LOCATING UTILITIES. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR LOSSES DUE TO DAMAGE TO UTILITIES. LOCATION FOR ALL UTILITIES SHOWN ON PLANS ARE APPROXIMATE. CONTRACTOR SHALL CALL TEXAS 811, 1-800-344-8377.

LEGEND

- 609 - EXISTING 1' CONTOUR
- 610 - EXISTING 5' CONTOUR
- 609 - PROPOSED 1' CONTOUR
- 610 - PROPOSED 5' CONTOUR
- INLET PROTECTION
- X - SILT FENCE
- ▣ CONSTRUCTION ENTRANCE / CONCRETE WASHOUT

FILE NAME: \\data1\projects\3\2021\1068.21\03_DSGN\01_DWG\050_civ\11-068.dwg LAYOUT NAME: C-111 PRINTED: Tuesday, January 11, 2022 - 8:21am USER: Chadsall



**Redding Trail
Package One
Drainage Improvements**



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1068.21

KEY PLAN

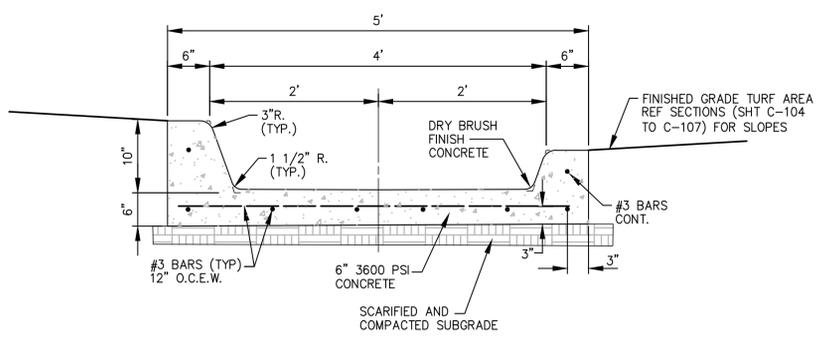
#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

Package One

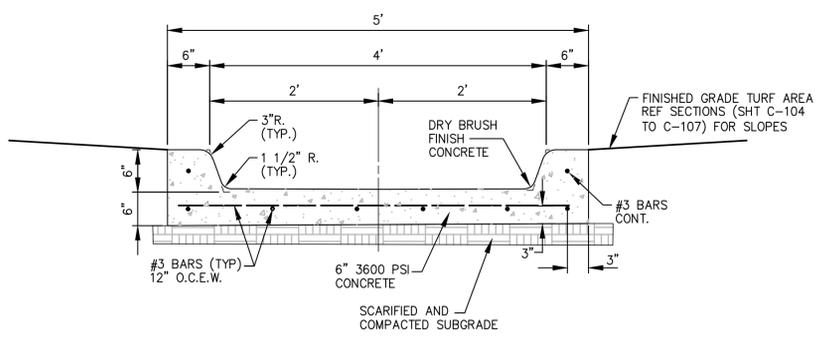
**Drainage
Details
C-500**

FILE NAME: \\data1\Projects\3\2021\1068.21\03_DSGN01_DWG050.dwg LAYOUT NAME: C-500 PRINTED: Tuesday, January 11, 2022 - 8:22am USER: CHadsall

D
C
B
A



C2 CONCRETE FLUME CHANNEL A: STA 5+90 TO STA 6+30
1"=1'-0"



C1 CONCRETE FLUME CHANNEL A: STA 0+00 TO STA 5+85
CHANNEL A: STA 6+35 TO STA 7+45.38 (END)
CHANNEL B: STA 0+00 TO STA 0+43.22 (END)
1"=1'-0"



Redding Trail Package One Drainage Improvements

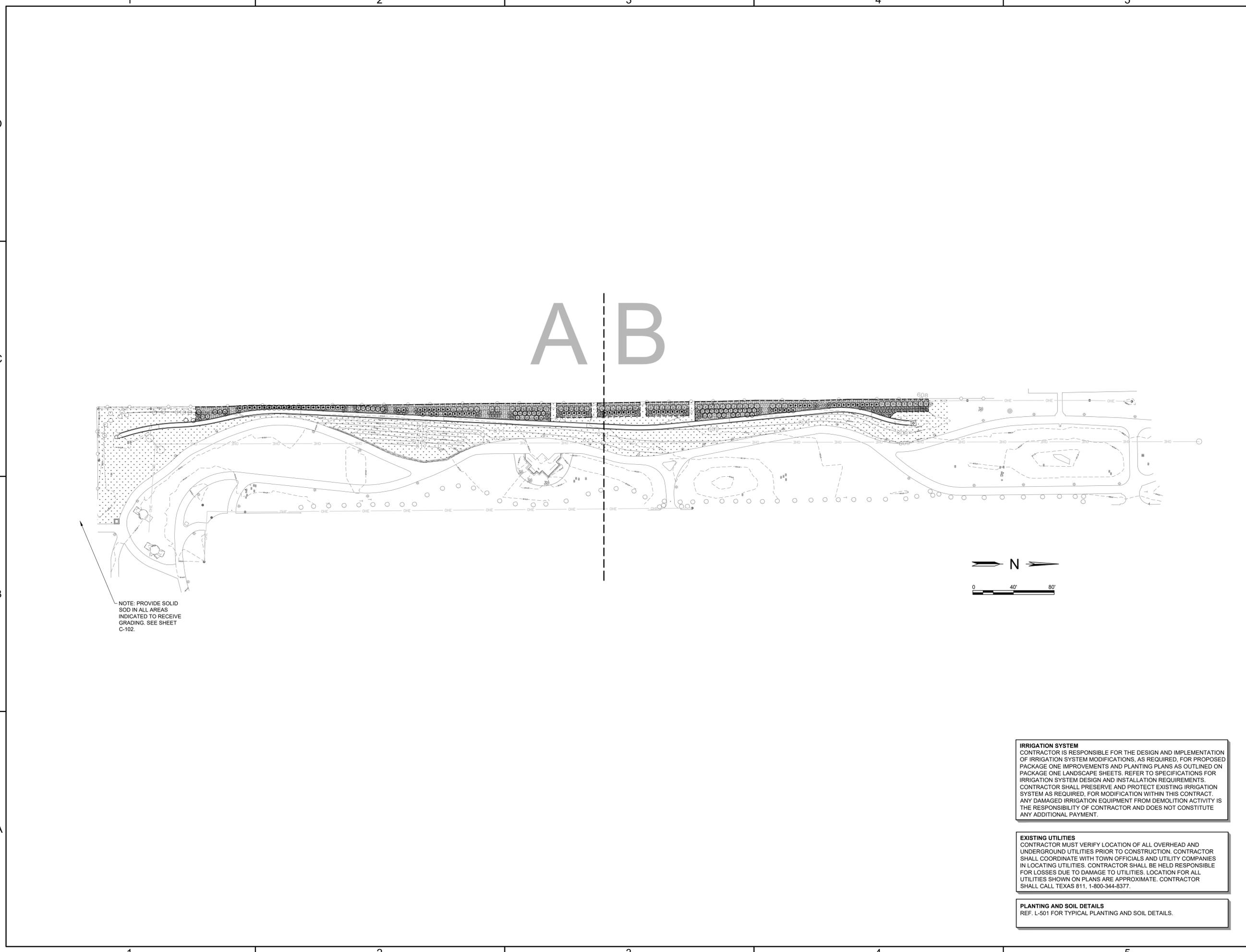


CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1068.21
KEY PLAN

01/12/2022 Bid Set

Package One Overall Planting Plan L-100



NOTE: PROVIDE SOLID SOD IN ALL AREAS INDICATED TO RECEIVE GRADING. SEE SHEET C-102.

IRRIGATION SYSTEM
CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF IRRIGATION SYSTEM MODIFICATIONS, AS REQUIRED, FOR PROPOSED PACKAGE ONE IMPROVEMENTS AND PLANTING PLANS AS OUTLINED ON PACKAGE ONE LANDSCAPE SHEETS. REFER TO SPECIFICATIONS FOR IRRIGATION SYSTEM DESIGN AND INSTALLATION REQUIREMENTS. CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING IRRIGATION SYSTEM AS REQUIRED, FOR MODIFICATION WITHIN THIS CONTRACT. ANY DAMAGED IRRIGATION EQUIPMENT FROM DEMOLITION ACTIVITY IS THE RESPONSIBILITY OF CONTRACTOR AND DOES NOT CONSTITUTE ANY ADDITIONAL PAYMENT.

EXISTING UTILITIES
CONTRACTOR MUST VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH TOWN OFFICIALS AND UTILITY COMPANIES IN LOCATING UTILITIES. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR LOSSES DUE TO DAMAGE TO UTILITIES. LOCATION FOR ALL UTILITIES SHOWN ON PLANS ARE APPROXIMATE. CONTRACTOR SHALL CALL TEXAS 811, 1-800-344-8377.

PLANTING AND SOIL DETAILS
REF. L-501 FOR TYPICAL PLANTING AND SOIL DETAILS.

FILE NAME: \\data\projects\3\2021\1068.2109_DSGN01_DWG\060_LAND\L-100-1068.dwg LAYOUT NAME: L-100 PRINTED: Tuesday, January 11, 2022 - 9:14am USER: LGBell

KEY NOTES

- AS INDICATED BY:
- EXISTING SHRUB TO BE PRESERVED AND PROTECTED.
 - SOLID SOD AS SPEC'D.
 - LANDSCAPE EDGE, REF. A4/L-501
 - HARDWOOD MULCH AS SPEC'D, REF. A5/L-501.
 - EXISTING UTILITY POLE TO REMAIN.
 - GATE OPENING WITH SOD, PROVIDE 5' WIDE OPENING AT EACH GATE LOCATION WITH 5' WIDE SOD STRIP AND LANDSCAPE EDGE EACH SIDE OF SOD CENTERED ON GATE OPENING. FIELD VERIFY GATE OPENING LOCATIONS.
 - GATE OPENING AT PLANTING BED, PROVIDE 8' WIDE CLEAR SPACE WITH SHREDDED WOOD MULCH AT EXISTING GATES WITHIN PLANTING BEDS. FIELD VERIFY GATE OPENING LOCATIONS.

EXISTING UTILITIES
CONTRACTOR MUST VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH TOWN OFFICIALS AND UTILITY COMPANIES IN LOCATING UTILITIES. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR LOSSES DUE TO DAMAGE TO UTILITIES. LOCATION FOR ALL UTILITIES SHOWN ON PLANS ARE APPROXIMATE. CONTRACTOR SHALL CALL TEXAS 811, 1-800-344-8377.

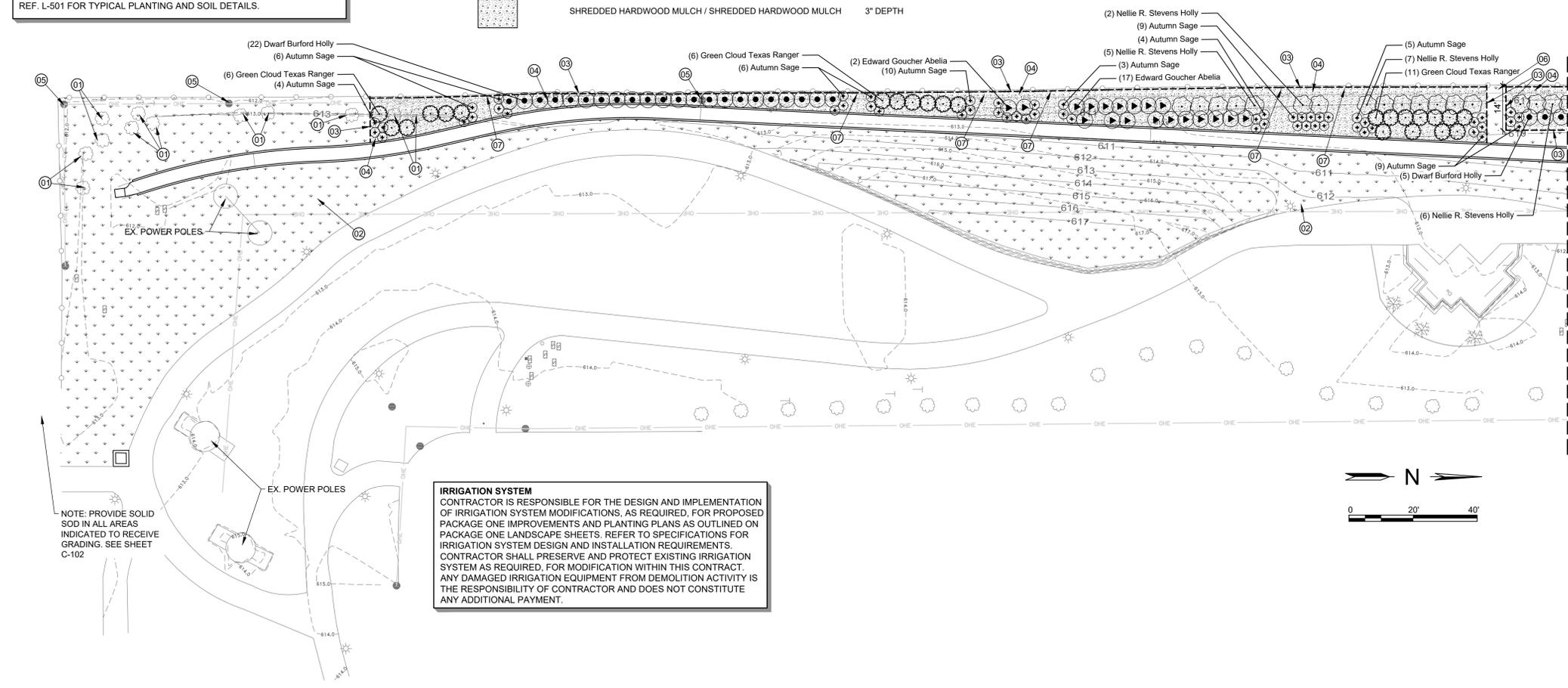
PLANTING AND SOIL DETAILS
REF. L-501 FOR TYPICAL PLANTING AND SOIL DETAILS.

PACKAGE I PLANT SCHEDULE

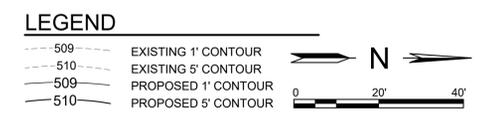
SHRUBS	QTY	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPREAD
▲	39	ABELIA X 'EDWARD GOUCHER' / EDWARD GOUCHER ABELIA	#5	18"	18"
●	41	ILEX CORNUTA 'BURFORDII NANA' / DWARF BURFORD HOLLY	#5	18"	18"
○	57	ILEX X 'NELLIE R. STEVENS' / NELLIE R. STEVENS HOLLY	#30	5-6 FT	3 FT
⊙	43	LEUCOPHYLLUM FRUTESCENS 'GREEN CLOUD' TM / GREEN CLOUD TEXAS RANGER	#5	2 FT	2 FT
⊕	148	SALVIA GREGGII / AUTUMN SAGE	#3	18"	18"
GROUND COVERS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPREAD	
⊛	CYNODON DACTYLON 'TIFWAY 419' / BERMUDA GRASS 'TIFWAY 419'	SOD			
⊞	SHREDDED HARDWOOD MULCH / SHREDDED HARDWOOD MULCH	3" DEPTH			

PLANTING GENERAL NOTES

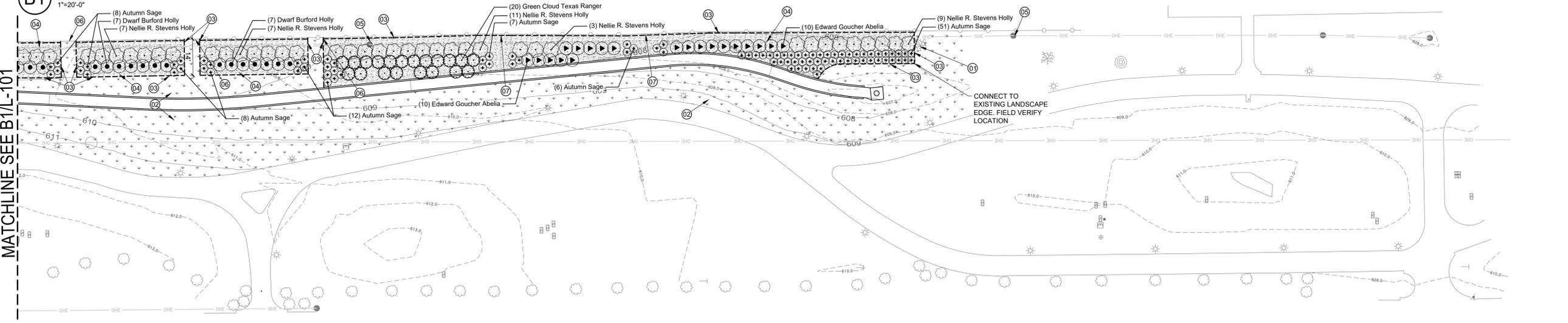
- THE LANDSCAPE CONTRACTOR SHALL REFER TO THE CONTRACT AND SPECIFICATIONS FOR REQUIREMENTS NOT LISTED HEREIN.
- THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
- THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING PLAN SHOWN ON ALL DRAWINGS. PLANT COUNTS AND SQUARE FOOTAGES ARE PROVIDED AS A COURTESY ONLY.
- ALL PLANT MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN OR EQUIVALENT.
- IN THE CASE OF A DISCREPANCY BETWEEN THE CONTAINER SIZE CALLED OUT IN PLANT LIST AND THE CALIPER AND HEIGHT OF PLANT MATERIAL, THE SPECIFIED BALL MUST MEET THE CALIPER AND HEIGHT REQUIREMENTS SPECIFIED, EVEN IF THE LARGER CONTAINER SIZE IS REQUIRED TO MEET THESE SPECIFICATIONS AT NO ADDITIONAL COST TO THE OWNER.
- ALL PLANTS TO BE GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND.
- WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE PLANT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO VERTICAL LOCATIONS.
- ALL PLANTS TAGGED AS APPROVED AT NURSERY OR SUPPLIER SHALL BEAR THE SAME TAG WHEN DELIVERED ON SITE.
- THE RIGHT TO REJECT PLANT MATERIALS DELIVERED TO THE SITE THAT DO NOT BEAR APPROVAL TAGS IS RESERVED BY THE PROJECT LANDSCAPE ARCHITECT.
- IN AREAS WHERE PAVING SUBGRADES AND BUILDING PADS EXTEND INTO PLANT BED AREAS, 6 INCH HOLES SHALL BE DRILLED EVERY 3 FEET AND FILLED WITH 1 INCH DIAMETER GRAVEL TO PROVIDE PERCOLATION AND DRAINAGE FOR THE PLANTING BED. HOLES SHALL BE DRILLED THROUGH IMPROVED SUBGRADES INTO EXISTING SITE SOILS BUT NO DEEPER THAN FOUR FEET.
- ALL PLANTING BEDS TO RECEIVE 2 INCHES OF BACK TO EARTH COMPOST PER SQUARE FOOT AND 1 POUND OF A 4(N):1(P):2(K) RATIO FERTILIZER PER 100 SQUARE FEET. BOTH MATERIALS SHALL BE INCORPORATED INTO THE SOIL TO A DEPTH OF 12 INCHES.
- ALL FINAL PLANTING BED GRADES IN AREAS WHERE ORGANIC AND/OR INORGANIC MULCH IS BEING APPLIED SHOULD BE 3 INCHES BELOW ADJACENT HARD SURFACES.
- NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING IS COMPLETE AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT.
- ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANTS ORIGINAL GRADE BEFORE DIGGING OR AS ESTABLISHED IN CONTAINER.
- ALL PLANTS SHALL BE INSTALLED AS PER DETAILS.
- ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR MORE OFTEN AS NEEDED DURING THE FIRST GROWING SEASON.
- ALL PLANTING BEDS TO RECEIVE ORGANIC AND/OR INORGANIC MULCH MATERIALS AS NOTED ON PLANS.
- THE DAY PRIOR TO PLANTING, THE LOCATION OF ALL TREES AND SHRUBS SHALL BE STAKED FOR APPROVAL BY THE LANDSCAPE ARCHITECT.
- THE CONTRACTOR SHALL PRUNE ALL BRANCHES 6 FEET ABOVE FINISH GRADE ON ALL DECIDUOUS TREES 12 FEET OR TALLER.
- AREAS TO BE FILLED WITH INORGANIC MULCHES WITH A DIAMETER LESS THAN 1/4 INCH IN SIZE SHALL BE COMPACTED TO 85% PROCTOR DENSITY BEFORE MULCH IS PLACED.
- REFER TO SPECIFICATIONS FOR SPECIFIED PLANTING SOIL AND AMENDMENTS IN BOTH PLANTING BEDS AND TURF AREAS.
- ALL PLANTING BEDS TO RECEIVE 3" DEPTH SHREDDED HARDWOOD MULCH UNLESS SPECIFIED OTHERWISE. SUBMIT SAMPLE FOR ARCHITECT APPROVAL.
- SOD SHALL BE PLANTED AND ESTABLISHED, AS SPECIFIED, OVER ANY AREAS DISTURBED BY CONSTRUCTION. THE GRASS LIMITS LINES SHOWN ARE NOT ABSOLUTE. TURFGRASS PLANTING SHALL TAKE PLACE BEYOND THE LIMITS IF THE AREA IS DISTURBED.



IRRIGATION SYSTEM
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B1 PLANTING PLAN - AREA 'A'



A1 PLANTING PLAN - AREA 'B'



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Redding Trail Package One Drainage Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

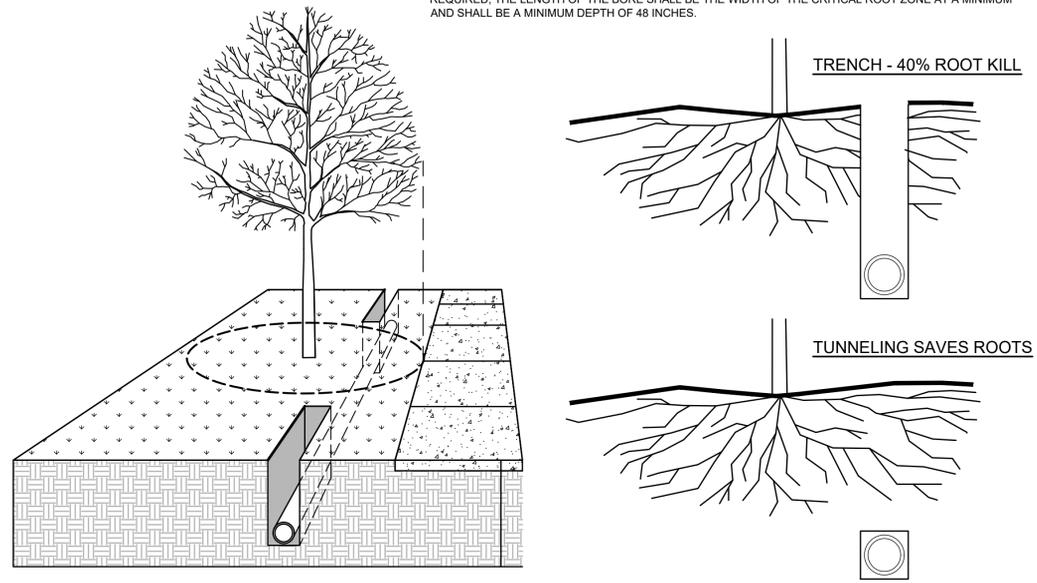
PROJECT NO.
1068.21
KEY PLAN

Package One

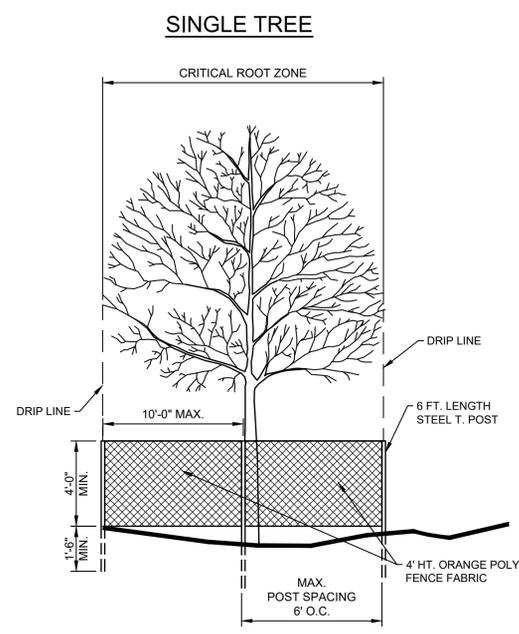
Planting Plan
L-101

FILE NAME: \data\projects\2022\110688.2103_DSGN01_LAND\101-1068.dwg LAYOUT NAME: L-101 PRINTED: Tuesday, January 11, 2022 - 9:15am USER: LGBell

BORING:
BORING OF UTILITIES UNDER PROTECTED TREES SHALL BE REQUIRED IN THOSE CIRCUMSTANCES WHERE IT IS NOT POSSIBLE TO TRENCH AROUND THE CRITICAL ROOT ZONE OF PROTECTED TREES. WHEN REQUIRED, THE LENGTH OF THE BORE SHALL BE THE WIDTH OF THE CRITICAL ROOT ZONE AT A MINIMUM AND SHALL BE A MINIMUM DEPTH OF 48 INCHES.



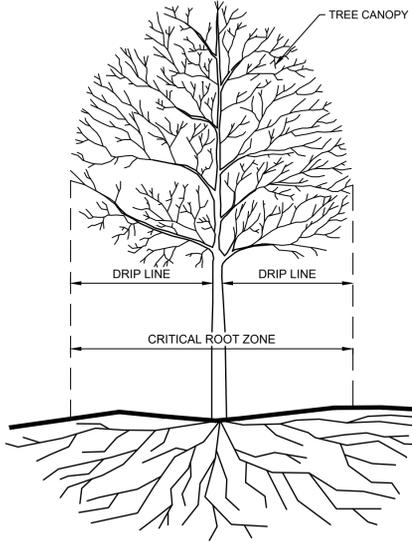
TYPICAL TREE BORING AND TUNNELING



SINGLE TREE

PROTECTIVE FENCING:
ORANGE VINYL CONSTRUCTION FENCING, CHAIN LINK FENCING, SNOW FENCING OR OTHER SIMILAR FENCING AT LEAST FOUR FEET (4') HIGH AND SUPPORTED AT A MAXIMUM OF TEN-FOOT (10') INTERVALS BY APPROVED METHOD SUFFICIENT ENOUGH TO KEEP THE FENCE UPRIGHT AND IN PLACE. THIS FENCING SHALL BE OF A HIGHLY VISIBLE MATERIAL.

PRIOR TO CONSTRUCTION:
THE CONTRACTOR OR SUBCONTRACTOR SHALL CONSTRUCT AND MAINTAIN, FOR EACH PROTECTED TREE OR GROUP OF TREES ON A CONSTRUCTION SITE, A PROTECTIVE FENCING WHICH ENCLOSES THE OUTER LIMITS OF THE CRITICAL ROOT ZONE OF THE TREES TO PROTECT THEM FROM CONSTRUCTION ACTIVITY. ALL PROTECTIVE FENCING SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF ANY SITE WORK AND REMAIN IN PLACE UNTIL ALL EXTERIOR WORK HAS BEEN COMPLETED.



CRITICAL ROOT ZONE:
THE AREA OF UNDISTURBED NATURAL SOIL AROUND A TREE DEFINED BY A CONCENTRIC CIRCLE WITH A RADIUS TO THE DISTANCE FROM THE TREE TRUNK TO THE OUTERMOST PORTION OF THE DRIP LINE.

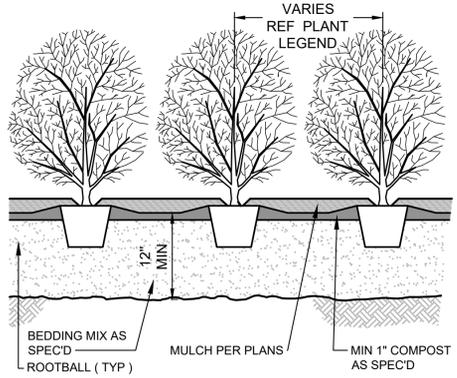
DRIP LINE:
A VERTICAL LINE RUN THROUGH THE OUTERMOST PORTION OF THE CANOPY OF A TREE AND EXTENDING TO THE GROUND.

THE FOLLOWING ACTIVITIES ARE PROHIBITED WITHIN THE LIMITS OF THE CRITICAL ROOT ZONE OF ANY TREES TO REMAIN.

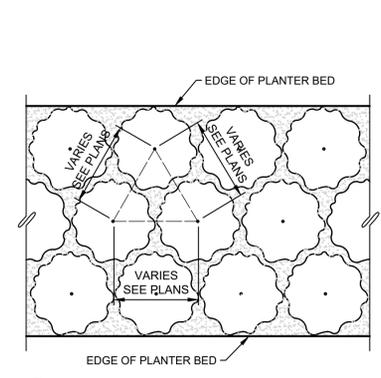
1. MATERIAL STORAGE: NO STORAGE OR PLACEMENT OF MATERIALS INTENDED FOR USE IN CONSTRUCTION OR WASTE MATERIALS ACCUMULATED DUE TO EXCAVATION OR DEMOLITION SHALL BE PLACED WITHIN THE LIMITS OF THE CRITICAL ROOT ZONE OF ANY PROTECTED TREE.
2. EQUIPMENT CLEANING/LIQUID DISPOSAL: NO EQUIPMENT SHALL BE CLEANED OR OTHER LIQUIDS, INCLUDING, WITHOUT LIMITATION, PAINT, OIL, SOLVENTS, ASPHALT, CONCRETE, MORTAR OR SIMILAR MATERIALS DEPOSITED OR ALLOWED TO FLOW INTO THE CRITICAL ROOT ZONE OF A PROTECTED TREE.
3. TREE ATTACHMENTS: NO SIGNS, WIRES OR OTHER ATTACHMENTS, OTHER THAN THOSE OF A PROTECTIVE NATURE, SHALL BE ATTACHED TO ANY PROTECTED TREE.
4. VEHICULAR TRAFFIC: NO VEHICULAR AND/OR CONSTRUCTION EQUIPMENT TRAFFIC OR PARKING SHALL TAKE PLACE WITHIN THE CRITICAL ROOT ZONE OF ANY PROTECTED TREE OTHER THAN ON EXISTING STREET PAVEMENT. THIS RESTRICTION DOES NOT APPLY TO SINGLE INCIDENT ACCESS WITHIN THE CRITICAL ROOT ZONE FOR PURPOSES OF ESTABLISHING THE BUILDING PAD AND ASSOCIATED LOT GRADING, VEHICULAR TRAFFIC NECESSARY FOR ROUTINE UTILITY MAINTENANCE, EMERGENCY RESTORATION OF UTILITY SERVICE, OR ROUTINE MOWING OPERATIONS.
5. GRADE CHANGES: NO GRADE CHANGES SHALL BE ALLOWED WITHIN THE LIMITS OF THE CRITICAL ROOT ZONE OF ANY PROTECTED TREE UNLESS ADEQUATE PROTECTIVE CONSTRUCTION METHODS ARE APPROVED IN WRITING BY THE ADMINISTRATIVE OFFICIAL.
6. IMPERVIOUS PAVING: NO PAVING WITH ASPHALT, CONCRETE OR OTHER IMPERVIOUS MATERIAL SHALL BE PLACED WITHIN THE LIMITS OF THE CRITICAL ROOT ZONE.
7. NO HEAVY EQUIPMENT: INCLUDING BUT NOT LIMITED TO TRUCKS, TRACTORS, TRAILERS, BULLDOZERS, BOBCAT TRACTORS, TRENCHERS, COMPRESSORS, AND HOISTS SHALL BE ALLOWED INSIDE THE DRIP-LINE OF ANY PROTECTED TREE ON ANY CONSTRUCTION SITE WITHOUT PRIOR WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
8. ROOT PRUNING: ALL ROOTS TWO INCHES OR LARGER IN DIAMETER WHICH ARE EXPOSED AS A RESULT OF TRENCHING OR OTHER EXCAVATION SHALL BE CUT OFF SQUARE WITH A SHARP MEDIUM TOOTH SAW AND COVERED WITH PRUNING COMPOUND WITHIN TWO HOURS OF INITIAL EXPOSURE.

B2 TYPICAL TREE PROTECTION FENCE
1/2"=1'-0" L_TYP_TREE_PROTECTION_FENCE

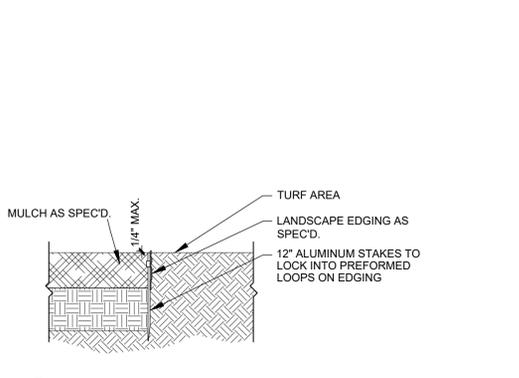
B4 TREE PROTECTION
1/2"=1'-0" L_TREE_PROTECTION



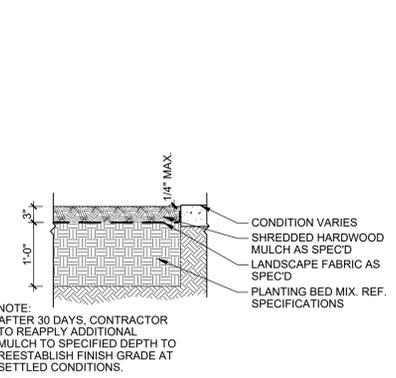
A2 SHRUB PLANTING
1"=1'-0" L_PLANTING_SHRUB



A3 PLANT LAYOUT
1/2"=1'-0" L_PLANT_LAYOUT



A4 LANDSCAPE EDGE
1"=1'-0" LNSCPE_EDG



A5 MULCH
3/4"=1'-0" L_MULCH



**Redding Trail
Package One
Drainage Improvements**



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1068.21
KEY PLAN

#	DATE	DESCRIPTION
1	01/12/2022	Bid Set

**Package One
Landscape
Details
L-501**

FILE NAME: \\data1\projects\3\2021\1068.21\03_DSGN01_LAND\501-1068.dwg LAYOUT NAME: L-100 PRINTED: Tuesday, January 11, 2022 - 9:15am USER: LGBell



Redding Trail Package Two Amenity Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

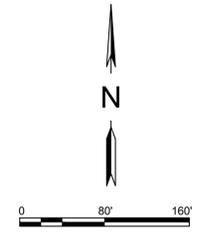
PROJECT NO.
1094.21
KEY PLAN

#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

Package Two Erosion Control Plan C-100

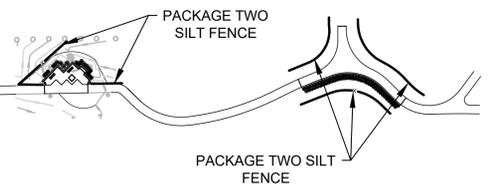
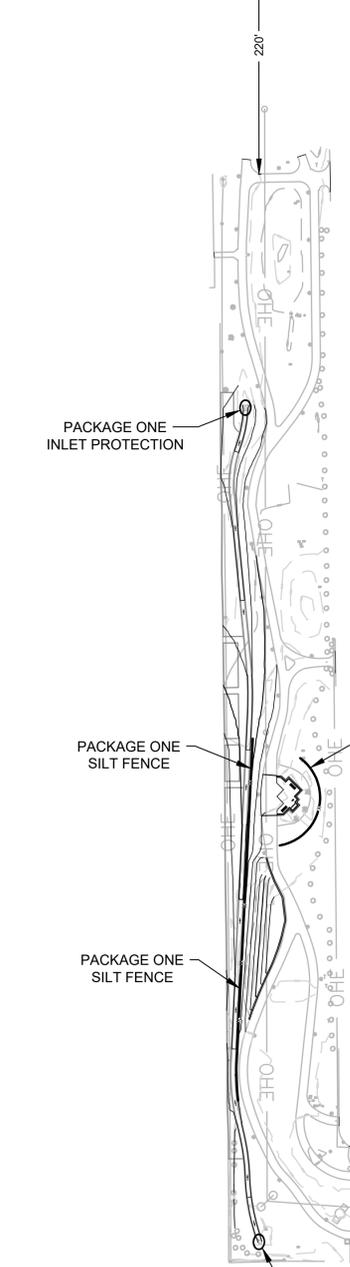
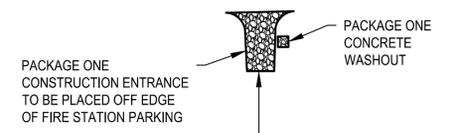
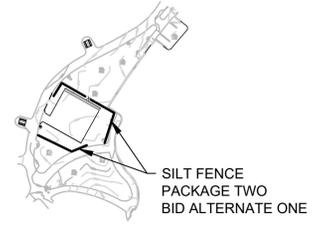
LEGEND

- 509 - EXISTING 1' CONTOUR
- 510 - EXISTING 5' CONTOUR
- 509 - PROPOSED 1' CONTOUR
- 510 - PROPOSED 5' CONTOUR
- INLET PROTECTION
- X - SILT FENCE
- ▣ CONSTRUCTION ENTRANCE / CONCRETE WASHOUT



EXISTING UTILITIES
CONTRACTOR MUST VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH TOWN OFFICIALS AND UTILITY COMPANIES IN LOCATING UTILITIES. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR LOSSES DUE TO DAMAGE TO UTILITIES. LOCATION FOR ALL UTILITIES SHOWN ON PLANS ARE APPROXIMATE. CONTRACTOR SHALL CALL TEXAS 811, 1-800-344-8377.

EXISTING IRRIGATION SYSTEM
CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING IRRIGATION SYSTEM. ANY DAMAGED IRRIGATION EQUIPMENT FROM DEMOLITION ACTIVITY IS THE RESPONSIBILITY OF CONTRACTOR AND DOES NOT CONSTITUTE ANY ADDITIONAL PAYMENT. OWNER WILL PROVIDE ANY REQUIRED PACKAGE TWO IRRIGATION SYSTEM MODIFICATIONS TO ACCOMMODATE SCOPE OF WORK WITHIN PACKAGE TWO.



FILE NAME: A:\2021\1068.2103_DSGN01_DWG\050_CIVIL\C-100-1094.dwg LAYOUT NAME: C-100 PRINTED: Tuesday, January 11, 2022 - 8:24am USER: CHadsall

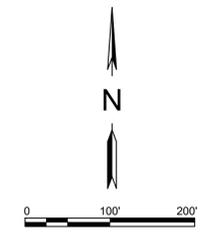
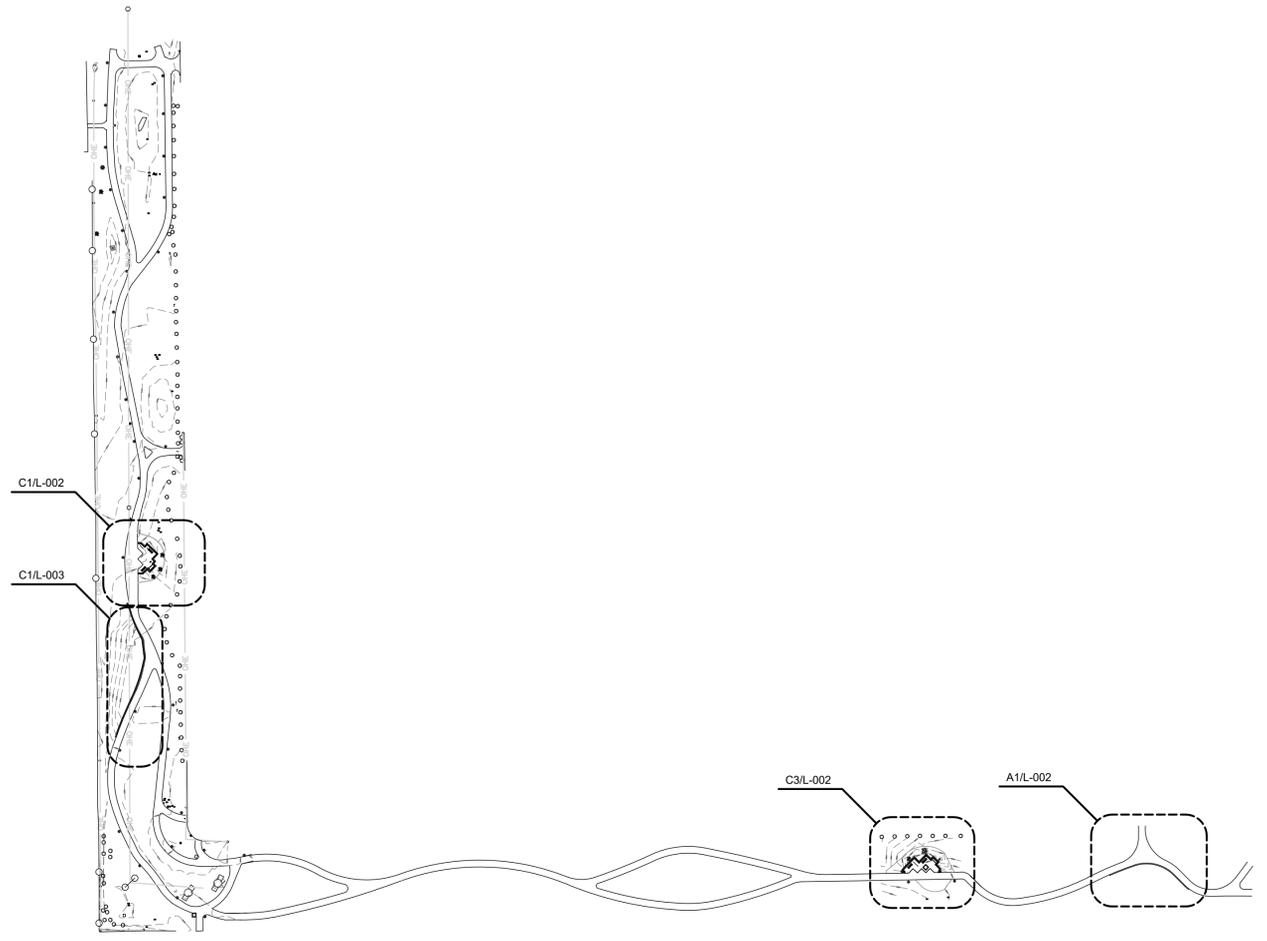
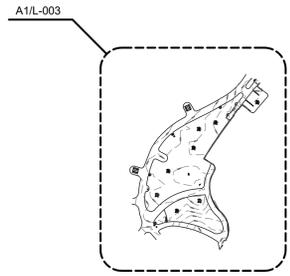
SITE DEMOLITION GENERAL NOTES

- A. CALL BEFORE YOU DIG: THE CONTRACTOR SHALL VERIFY THE LOCATION, SIZE AND MATERIAL OF ALL UTILITIES THAT WILL BE AFFECTED BY CONSTRUCTION OPERATIONS PRIOR TO BREAKING GROUND, DEMOLITION, OR CONSTRUCTION. THE CONTRACTOR SHALL CONTACT ALL AFFECTED UTILITIES 48 HOURS PRIOR TO THE START OF DEMOLITION. THIS INCLUDES BUT IS NOT LIMITED TO CONTACTING THE APPROPRIATE ONE-CALL UTILITY NOTIFICATION SERVICE, I.E. TEXAS811 (800) 344-8377. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
- B. PREPARE THE PROJECT SITE AND DESIGNATED EASEMENTS FOR CONSTRUCTION OPERATIONS BY REMOVING AND DISPOSING OF ALL OBSTRUCTIONS. WHEN REMOVAL OF SUCH OBSTRUCTIONS IS NOT SPECIFICALLY SHOWN ON THE PLANS, IT SHALL BE CONSIDERED INTEGRAL TO THE NEW CONSTRUCTION BID ITEM.
- C. PROTECT DESIGNATED FEATURES ON THE RIGHT OF WAY AND PRUNE TREES AND SHRUBS AS DIRECTED. DO NOT PARK EQUIPMENT, SERVICE EQUIPMENT, STORE MATERIALS, OR DISTURB THE ROOT AREA UNDER THE BRANCHES OF TREES DESIGNATED FOR PRESERVATION.
- D. NOTIFY THE LANDSCAPE ARCHITECT IN WRITING WHEN ITEMS NOT SHOWN ON THE PLANS AND NOT REASONABLY DETECTABLE (BURIED WITH NO OBVIOUS INDICATION OF PRESENCE) ARE ENCOUNTERED AND REQUIRED TO BE REMOVED.
- E. REMOVE OBSTRUCTIONS NOT DESIGNATED FOR PRESERVATION TO A DEPTH OF 2 FEET BELOW NATURAL GROUND IN AREAS RECEIVING EMBANKMENT (FILL). REMOVE OBSTRUCTIONS TO A DEPTH OF 2 FEET BELOW THE EXCAVATION LEVEL IN AREAS TO BE EXCAVATED (CUT). REMOVE OBSTRUCTIONS TO A DEPTH OF 1 FOOT BELOW NATURAL GROUND IN ALL OTHER AREAS, AND CUT TREES AND STUMPS LEVEL WITH EXISTING GRADE, UNLESS OTHERWISE SHOWN ON CONSTRUCTION DOCUMENTS. BACKFILL, COMPACT, AND RESTORE AREAS WHERE OBSTRUCTIONS HAVE BEEN REMOVED WITH APPROVED FILL MATERIAL.
- F. THE CONTRACTOR SHALL ACCEPT OWNERSHIP AND DISPOSE OF REMOVED MATERIALS AND DEBRIS AT LOCATIONS OFF SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS, UNLESS OTHERWISE SHOWN ON CONSTRUCTION DOCUMENTS.
- G. STOCKPILE MATERIALS DESIGNATED SALVAGEABLE AT DESIGNATED SITES WHEN SHOWN ON THE PLANS OR AS DIRECTED. PREPARE STOCKPILE SITE BY REMOVING VEGETATION AND TRASH AND BY PROVIDING FOR PROPER DRAINAGE. MATERIAL NOT DESIGNATED TO BE SALVAGED WILL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
- H. EXCAVATE (CUT) AREAS AS SHOWN ON THE PLANS OR AS DIRECTED. REMOVE MATERIALS ENCOUNTERED TO THE LINES, GRADES, AND TYPICAL SECTIONS SHOWN ON THE CONSTRUCTION DOCUMENTS; ACCEPT OWNERSHIP OF UNSUITABLE OR EXCESS MATERIAL AND DISPOSE OF MATERIAL IN ACCORDANCE

- I. WITH LOCAL, STATE, AND FEDERAL REGULATIONS AT LOCATIONS OFF SITE. MAINTAIN DRAINAGE IN THE EXCAVATED AREA TO AVOID DAMAGE TO AREAS OF CUT/FILL; CORRECT ANY DAMAGE TO THE SUBGRADE CAUSED BY WEATHER AT NO ADDITIONAL COST.
- J. THE CONTRACTOR SHALL FURNISH APPROVED FILL MATERIAL CAPABLE OF FORMING A STABLE EMBANKMENT FROM REQUIRED EXCAVATION IN THE AREAS SHOWN ON THE CONSTRUCTION DOCUMENTS FROM APPROVED SOURCES OFF SITE.
- K. EXCAVATION: EXCAVATE SOIL FROM AREAS IN WHICH GRADE CHANGE WILL OCCUR TO A DEPTH OF 6 INCHES AND STOCKPILE UNTIL AMENDED.
- L. THE SCOPE OF WORK SHALL INCLUDE DISPOSAL OF ALL DEBRIS ASSOCIATED WITH DEMOLITION AND CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION, INSPECTION, AND TESTING REQUIRED FOR LAWFUL DISPOSAL AS REQUIRED BY THE OWNER, LOCAL, AND STATE CODE.
- M. WHERE EXISTING UTILITIES AND/OR SERVICE LINES ARE CUT, BROKEN, OR DAMAGED, THE CONTRACTOR SHALL REPAIR THE UTILITY OR SERVICE LINES WITH THE SAME MATERIAL AND CONSTRUCTION OR BETTER UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DOCUMENTS AT NO ADDITIONAL COST.
- N. THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY OF FIELD VERIFICATION AND PROTECTION OF EXISTING CONDITIONS AND UTILITIES. THE ACTUAL HORIZONTAL OR VERTICAL LOCATION OF THE EXISTING UTILITIES SHALL NOT BE A BASIS FOR ADDITIONAL COMPENSATION.
- O. THE CONTRACTOR SHALL NOT BEGIN DEMOLITION OPERATIONS UNTIL WRITTEN CONFIRMATION FROM THE OWNER HAS BEEN RECEIVED VERIFYING THAT ALL ITEMS TO BE SALVAGED BY THE OWNER HAVE BEEN REMOVED FROM THE SITE AND ADJACENT RESIDENTIAL PROPERTY.
- P. ALL DAMAGES TO THE OWNER'S PROPERTY ON THE PROJECT SITE PRIOR TO SUBSTANTIAL COMPLETION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AS APPROVED BY THE OWNER, AT NO ADDITIONAL COST.
- Q. EXISTING PAVING TO BE REMOVED SHALL BE SAW-CUT, OR REMOVED TO THE NEAREST JOINT TO CREATE CLEAN EDGES TO TIE INTO THE NEW CONSTRUCTION.
- R. DEMOLITION DIMENSIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. ANY DISCREPANCIES SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT IMMEDIATELY FOR RESOLUTION.
- S. THE CONTRACTOR IS RESPONSIBLE FOR ALL ASPECTS OF STORM WATER POLLUTION PREVENTION, SITE DRAINAGE, DUST CONTROL, NOISE POLLUTION, TRAFFIC CONTROL, SECURITY, FENCING, LIGHTING, PERMITTING, OR OTHER LOCAL OR STATE CODE REQUIREMENTS REQUIRED FOR CONSTRUCTION OPERATIONS, UNLESS OTHERWISE SHOWN ON CONSTRUCTION DOCUMENTS.

EXISTING UTILITIES
 CONTRACTOR MUST VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH TOWN OFFICIALS AND UTILITY COMPANIES IN LOCATING UTILITIES. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR LOSSES DUE TO DAMAGE TO UTILITIES. LOCATION FOR ALL UTILITIES SHOWN ON PLANS ARE APPROXIMATE. CONTRACTOR SHALL CALL TEXAS 811, 1-800-344-8377.

EXISTING IRRIGATION SYSTEM
 CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING IRRIGATION SYSTEM. ANY DAMAGED IRRIGATION EQUIPMENT FROM DEMOLITION ACTIVITY IS THE RESPONSIBILITY OF CONTRACTOR AND DOES NOT CONSTITUTE ANY ADDITIONAL PAYMENT. OWNER WILL PROVIDE ANY REQUIRED PACKAGE TWO IRRIGATION SYSTEM MODIFICATIONS TO ACCOMMODATE SCOPE OF WORK WITHIN PACKAGE TWO.



Parkhill



Parkhill.com

**Redding Trail
 Package Two
 Amenity Improvements**



CLIENT
 Town of Addison, Texas
 16801 Westgrove Drive
 Addison, TX 75001

PROJECT NO.
 1094.21
KEY PLAN

#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

**Package Two
 Overall Existing
 Conditions and
 Removal Plan
 L-001**

FILE NAME: \\data1\Projects\3\2021\1068.2103_DSGN01_DWG\060_LAND\L-001-1094.dwg LAYOUT NAME: L-001 PRINTED: Tuesday, January 11, 2022 - 9:22am USER: LGBell
 2/8/2022 3:44 PM



Redding Trail Package Two Amenity Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1094.21
KEY PLAN

SITE DEMOLITION GENERAL NOTES

- A. CALL BEFORE YOU DIG: THE CONTRACTOR SHALL VERIFY THE LOCATION, SIZE AND MATERIAL OF ALL UTILITIES THAT WILL BE AFFECTED BY CONSTRUCTION OPERATIONS PRIOR TO BREAKING GROUND, DEMOLITION, OR CONSTRUCTION. THE CONTRACTOR SHALL CONTACT ALL AFFECTED UTILITIES 48 HOURS PRIOR TO THE START OF DEMOLITION. THIS INCLUDES, BUT IS NOT LIMITED TO, CONTACTING THE APPROPRIATE ONE-CALL UTILITY NOTIFICATION SERVICE, I.E. TEXAS811 (800) 344-8377. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
- B. PREPARE THE PROJECT SITE AND DESIGNATED EASEMENTS FOR CONSTRUCTION OPERATIONS BY REMOVING AND DISPOSING OF ALL OBSTRUCTIONS. WHEN REMOVAL OF SUCH OBSTRUCTIONS IS NOT SPECIFICALLY SHOWN ON THE PLANS, IT SHALL BE CONSIDERED INTEGRAL TO THE NEW CONSTRUCTION BID ITEM.
- C. PROTECT DESIGNATED FEATURES ON THE RIGHT OF WAY AND PRUNE TREES AND SHRUBS AS DIRECTED. DO NOT PARK EQUIPMENT, SERVICE EQUIPMENT, STORE MATERIALS, OR DISTURB THE ROOT AREA UNDER THE BRANCHES OF TREES DESIGNATED FOR PRESERVATION.
- D. NOTIFY THE LANDSCAPE ARCHITECT IN WRITING WHEN ITEMS NOT SHOWN ON THE PLANS AND NOT REASONABLY DETECTABLE (BURIED WITH NO OBVIOUS INDICATION OF PRESENCE) ARE ENCOUNTERED AND REQUIRED TO BE REMOVED.
- E. REMOVE OBSTRUCTIONS NOT DESIGNATED FOR PRESERVATION TO A DEPTH OF 2 FEET BELOW NATURAL GROUND IN AREAS RECEIVING EMBANKMENT (FILL). REMOVE OBSTRUCTIONS TO A DEPTH OF 2 FEET BELOW THE EXCAVATION LEVEL IN AREAS TO BE EXCAVATED (CUT). REMOVE OBSTRUCTIONS TO A DEPTH OF 1 FOOT BELOW NATURAL GROUND IN ALL OTHER AREAS, AND CUT TREES AND STUMPS LEVEL WITH EXISTING GRADE, UNLESS OTHERWISE SHOWN ON CONSTRUCTION DOCUMENTS. BACKFILL, COMPACT, AND RESTORE AREAS WHERE OBSTRUCTIONS HAVE BEEN REMOVED WITH APPROVED FILL MATERIAL.
- F. THE CONTRACTOR SHALL ACCEPT OWNERSHIP AND DISPOSE OF REMOVED MATERIALS AND DEBRIS AT LOCATIONS OFF SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS, UNLESS OTHERWISE SHOWN ON CONSTRUCTION DOCUMENTS.
- G. STOCKPILE MATERIALS DESIGNATED SALVAGEABLE AT DESIGNATED SITES WHEN SHOWN ON THE PLANS OR AS DIRECTED. PREPARE STOCKPILE SITE BY REMOVING EXCESS MATERIAL AND TRASH AND PROVIDING PROPER DRAINAGE. MATERIAL NOT DESIGNATED TO BE SALVAGED WILL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
- H. EXCAVATE (CUT) AREAS AS SHOWN ON THE PLANS OR AS DIRECTED; REMOVE MATERIALS ENCOUNTERED TO THE LINES, GRADES, AND TYPICAL SECTIONS SHOWN ON THE CONSTRUCTION DOCUMENTS; ACCEPT OWNERSHIP OF UNSUITABLE EXCESS MATERIAL AND DISPOSE OF MATERIAL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS AT LOCATIONS OFF SITE. MAINTAIN DRAINAGE IN THE EXCAVATED AREA TO AVOID DAMAGE TO AREAS OF CUT/FILL; CORRECT ANY DAMAGE TO THE SUBGRADE CAUSED BY WEATHER AT NO ADDITIONAL COST.
- I. THE CONTRACTOR SHALL FURNISH APPROVED FILL MATERIAL CAPABLE OF FORMING A STABLE EMBANKMENT FROM REQUIRED EXCAVATION IN THE AREAS SHOWN ON THE CONSTRUCTION DOCUMENTS FROM APPROVED SOURCES OFF SITE.
- J. EXCAVATION: EXCAVATE SOIL FROM AREAS IN WHICH GRADE CHANGE WILL OCCUR TO A DEPTH OF 6 INCHES AND STOCKPILE UNTIL AMENDED.
- K. THE SCOPE OF WORK SHALL INCLUDE DISPOSAL OF ALL DEBRIS ASSOCIATED WITH DEMOLITION AND CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION, INSPECTION, AND TESTING REQUIRED FOR LAWFUL DISPOSAL AS REQUIRED BY THE OWNER, LOCAL AND STATE CODE.
- L. WHERE EXISTING UTILITIES AND/OR SERVICES ARE CUT, BROKEN, OR DAMAGED, THE CONTRACTOR SHALL REPAIR THE UTILITY OR SERVICE LINES WITH THE SAME MATERIAL AND CONSTRUCTION OR BETTER UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DOCUMENTS AT NO ADDITIONAL COST.
- M. THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY OF FIELD VERIFICATION AND PROTECTION OF EXISTING CONDITIONS AND UTILITIES. THE ACTUAL HORIZONTAL OR VERTICAL LOCATION OF THE EXISTING UTILITIES SHALL NOT BE A BASIS FOR ADDITIONAL COMPENSATION.
- N. THE CONTRACTOR SHALL NOT BEGIN DEMOLITION OPERATIONS UNTIL WRITTEN CONFIRMATION FROM THE OWNER HAS BEEN RECEIVED VERIFYING THAT ALL ITEMS TO BE SALVAGED BY THE OWNER HAVE BEEN REMOVED FROM THE SITE AND ADJACENT RESIDENTIAL PROPERTY.
- O. ALL DAMAGES TO THE OWNER'S PROPERTY ON THE PROJECT SITE PRIOR TO SUBSTANTIAL COMPLETION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AS APPROVED BY THE OWNER, AT NO ADDITIONAL COST.
- P. EXISTING PAVING TO BE REMOVED SHALL BE SAW-CUT, OR REMOVED TO THE NEAREST JOINT TO CREATE CLEAN EDGES TO TIE INTO THE NEW CONSTRUCTION.
- Q. DEMOLITION DIMENSIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR; ANY DISCREPANCIES SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT IMMEDIATELY FOR RESOLUTION.
- R. THE CONTRACTOR IS RESPONSIBLE FOR ALL ASPECTS OF STORM WATER POLLUTION PREVENTION, SITE DRAINAGE, DUST CONTROL, NOISE POLLUTION, TRAFFIC CONTROL, SECURITY, FENCING, LIGHTING, PERMITTING, OR OTHER LOCAL OR STATE CODE REQUIREMENTS REQUIRED FOR CONSTRUCTION OPERATIONS, UNLESS OTHERWISE SHOWN ON CONSTRUCTION DOCUMENTS.

LEGEND

- EXISTING WOOD RAILROAD TIE RETAINING WALL TO BE REMOVED
- EXISTING CONCRETE PAVING TO BE REMOVED
- EXISTING CONCRETE FLUSH CURB TO BE REMOVED
- EXISTING PAVERS AND CONCRETE BASE TO BE REMOVED
- EXISTING VEGETATION TO BE REMOVED ONLY AS REQUIRED FOR INSTALLATION OF PROPOSED IMPROVEMENTS
- EXISTING FENCE LINE
- EXISTING OVERHEAD ELECTRIC LINE

DEMOLITION NOTES

- REMOVE EXISTING CONSTRUCTION AS INDICATED BY: (00)
- EXISTING TO REMAIN AND PROTECT IN PLACE AS INDICATED BY: (00)
1. EXISTING CONCRETE PAVING TO REMAIN AND PROTECT IN PLACE.
 2. EXISTING LIGHT FIXTURE TO REMAIN AND PROTECT IN PLACE.
 3. EXISTING LANDSCAPE EDGE TO REMAIN AND PROTECT IN PLACE.
 4. EXISTING TREE TO REMAIN AND PROTECT IN PLACE.
 5. EXISTING PLANTING TO REMAIN AND PROTECT IN PLACE.
 6. EXISTING IRRIGATION VALVE BOX TO REMAIN AND PROTECT IN PLACE.
 7. EXISTING BIKE RACK TO REMAIN AND PROTECT IN PLACE.
 8. EXISTING DRINKING FOUNTAIN TO REMAIN AND PROTECT IN PLACE.
 9. EXISTING TRASH RECEPTACLE TO REMAIN AND PROTECT IN PLACE.
 10. APPROXIMATE LOCATION OF EXISTING TREE TO REMAIN AND PROTECT IN PLACE. NOT SHOWN ON SURVEY. FIELD VERIFY.
 11. EXISTING FLUSH CONCRETE CURB TO BE REMOVED.
 12. EXISTING BENCH TO BE REMOVED AND HAULED OFF.
 13. EXISTING OVERHEAD ELECTRICAL LINE.
 14. SAWCUT EXISTING CONCRETE PAVING.
 15. EXISTING CONCRETE PAVING TO BE REMOVED.
 16. EXISTING PAVERS AND CONCRETE PAVEMENT BASE TO BE REMOVED.
 17. EXISTING WOOD RAILROAD TIE RETAINING WALL TO BE REMOVED.

EXISTING UTILITIES
CONTRACTOR MUST VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH TOWN OFFICIALS AND UTILITY COMPANIES IN LOCATING UTILITIES. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR LOSSES DUE TO DAMAGE TO UTILITIES. LOCATION FOR ALL UTILITIES SHOWN ON PLANS ARE APPROXIMATE. CONTRACTOR SHALL CALL TEXAS 811, 1-800-344-8377.

C1 EXISTING CONDITIONS AND REMOVAL PLAN
1"=10'-0"

C3 EXISTING CONDITIONS AND REMOVAL PLAN
1"=10'-0"

A1 EXISTING CONDITIONS AND REMOVAL PLAN
1"=10'-0"

EXISTING IRRIGATION SYSTEM
CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING IRRIGATION SYSTEM. ANY DAMAGED IRRIGATION EQUIPMENT FROM DEMOLITION ACTIVITY IS THE RESPONSIBILITY OF CONTRACTOR AND DOES NOT CONSTITUTE ANY ADDITIONAL PAYMENT. OWNER WILL PROVIDE ANY REQUIRED PACKAGE TWO IRRIGATION SYSTEM MODIFICATIONS TO ACCOMMODATE SCOPE OF WORK WITHIN PACKAGE TWO.

FILE NAME: \\data11\Projects\3\2022\110668.2103_DSGN01_DWG\060_LAND\L_002-1094.dwg LAYOUT NAME: L-002 PRINTED: Tuesday, January 11, 2022 - 9:22am USER: LGSbell



Redding Trail Package Two Amenity Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1094.21
KEY PLAN

SITE DEMOLITION GENERAL NOTES

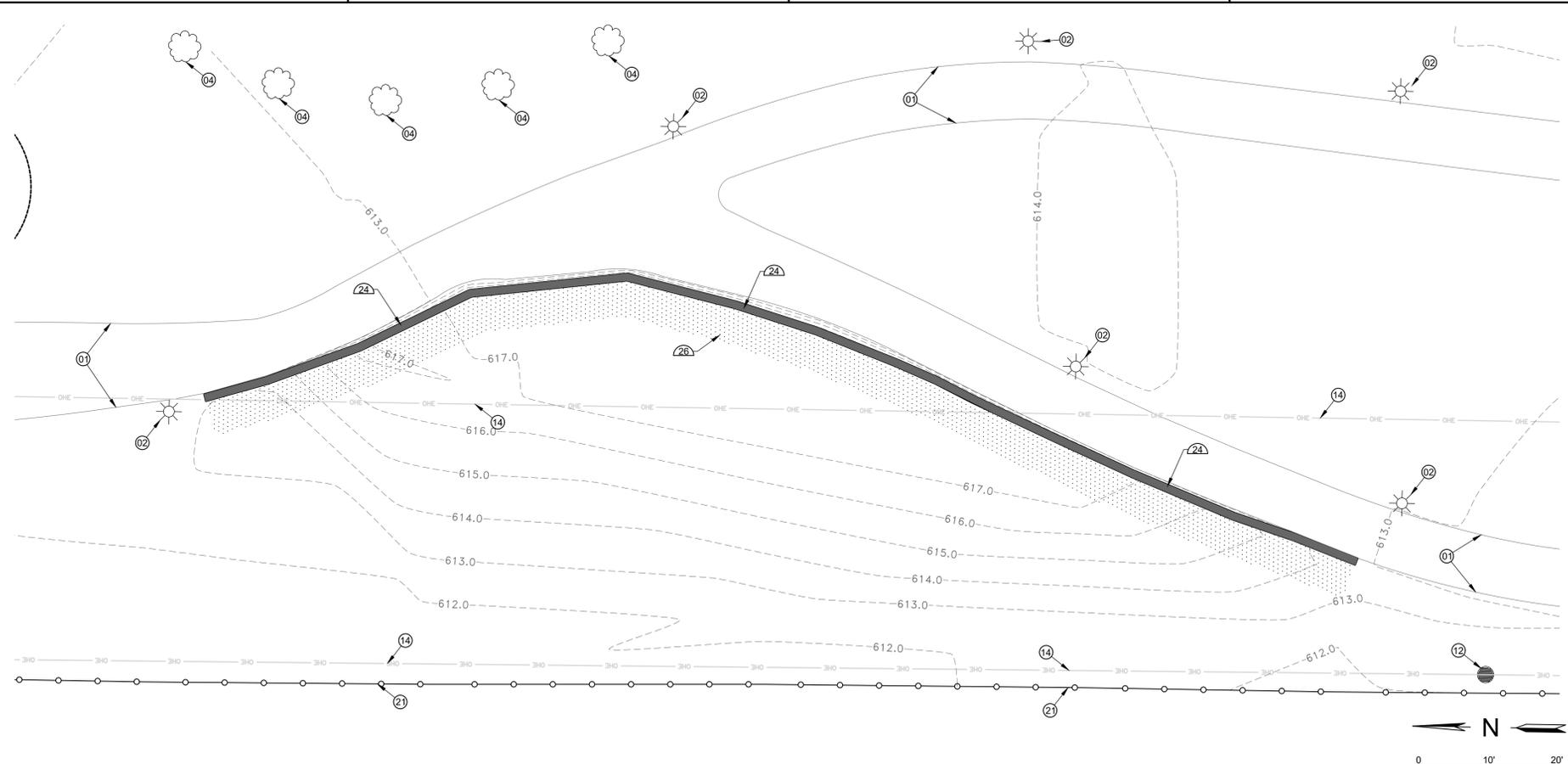
- A. CALL BEFORE YOU DIG: THE CONTRACTOR SHALL VERIFY THE LOCATION, SIZE AND MATERIAL OF ALL UTILITIES THAT WILL BE AFFECTED BY CONSTRUCTION OPERATIONS PRIOR TO BREAKING GROUND, DEMOLITION, OR CONSTRUCTION. THE CONTRACTOR SHALL CONTACT ALL AFFECTED UTILITIES 48 HOURS PRIOR TO THE START OF DEMOLITION. THIS INCLUDES, BUT IS NOT LIMITED TO, CONTACTING THE APPROPRIATE ONE-CALL UTILITY NOTIFICATION SERVICE, I.E. TEXAS811 (800) 344-8377. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
- B. PREPARE THE PROJECT SITE AND DESIGNATED EASEMENTS FOR CONSTRUCTION OPERATIONS BY REMOVING AND DISPOSING OF ALL OBSTRUCTIONS, WHEN REMOVAL OF SUCH OBSTRUCTIONS IS NOT SPECIFICALLY SHOWN ON THE PLANS, IT SHALL BE CONSIDERED INTEGRAL TO THE NEW CONSTRUCTION BID ITEM.
- C. PROTECT DESIGNATED FEATURES ON THE RIGHT OF WAY AND PRUNE TREES AND SHRUBS AS DIRECTED. DO NOT PARK EQUIPMENT, SERVICE EQUIPMENT, STORE MATERIALS, OR DISTURB THE ROOT AREA UNDER THE BRANCHES OF TREES DESIGNATED FOR PRESERVATION.
- D. NOTIFY THE LANDSCAPE ARCHITECT IN WRITING WHEN ITEMS NOT SHOWN ON THE PLANS AND NOT REASONABLY DETECTABLE (BURIED WITH NO OBVIOUS INDICATION OF PRESENCE) ARE ENCOUNTERED AND REQUIRED TO BE REMOVED.
- E. REMOVE OBSTRUCTIONS NOT DESIGNATED FOR PRESERVATION TO A DEPTH OF 2 FEET BELOW NATURAL GROUND IN AREAS RECEIVING EMBANKMENT (FILL). REMOVE OBSTRUCTIONS TO A DEPTH OF 2 FEET BELOW THE EXCAVATION LEVEL IN AREAS TO BE EXCAVATED (CUT). REMOVE OBSTRUCTIONS TO A DEPTH OF 1 FOOT BELOW NATURAL GROUND IN ALL OTHER AREAS, AND CUT TREES AND STUMPS LEVEL WITH EXISTING GRADE, UNLESS OTHERWISE SHOWN ON CONSTRUCTION DOCUMENTS; BACKFILL, COMPACT, AND RESTORE AREAS WHERE OBSTRUCTIONS HAVE BEEN REMOVED WITH APPROVED FILL MATERIAL.
- F. THE CONTRACTOR SHALL ACCEPT OWNERSHIP AND DISPOSE OF REMOVED MATERIALS AND DEBRIS AT LOCATIONS OFF SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS, UNLESS OTHERWISE SHOWN ON CONSTRUCTION DOCUMENTS.
- G. STOCKPILE MATERIALS DESIGNATED SALVAGEABLE AT DESIGNATED SITES WHEN SHOWN ON THE PLANS OR AS DIRECTED; PREPARE STOCKPILE SITE BY REMOVING VEGETATION AND TRASH AND BY PROVIDING FOR PROPER DRAINAGE; MATERIAL NOT DESIGNATED TO BE SALVAGED WILL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
- H. EXCAVATE (CUT) AREAS AS SHOWN ON THE PLANS OR AS DIRECTED; REMOVE MATERIALS ENCOUNTERED TO THE LINES, GRADES, AND TYPICAL SECTIONS SHOWN ON THE CONSTRUCTION DOCUMENTS; ACCEPT OWNERSHIP OF UNSUITABLE OR EXCESS MATERIAL AND DISPOSE OF MATERIAL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS AT LOCATIONS OFF SITE; MAINTAIN DRAINAGE IN THE EXCAVATED AREA TO AVOID DAMAGE TO AREAS OF CUT/FILL; CORRECT ANY DAMAGE TO THE SUBGRADE CAUSED BY WEATHER AT NO ADDITIONAL COST.
- I. THE CONTRACTOR SHALL FURNISH APPROVED FILL MATERIAL CAPABLE OF FORMING A STABLE EMBANKMENT FROM REQUIRED EXCAVATION IN THE AREAS SHOWN ON THE CONSTRUCTION DOCUMENTS FROM APPROVED SOURCES OFF SITE.
- J. EXCAVATION: EXCAVATE SOIL FROM AREAS IN WHICH GRADE CHANGE WILL OCCUR TO A DEPTH OF 6 INCHES AND STOCKPILE UNTIL AMENDED.
- K. THE SCOPE OF WORK SHALL INCLUDE DISPOSAL OF ALL DEBRIS ASSOCIATED WITH DEMOLITION AND CONSTRUCTION OPERATIONS; THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION, INSPECTION, AND TESTING REQUIRED FOR LAWFUL DISPOSAL AS REQUIRED BY THE OWNER, LOCAL AND STATE CODE.
- L. WHERE EXISTING UTILITIES AND/OR SERVICE LINES ARE CUT, BROKEN, OR DAMAGED, THE CONTRACTOR SHALL REPAIR THE UTILITY OR SERVICE LINES WITH THE SAME MATERIAL AND CONSTRUCTION OR BETTER UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DOCUMENTS AT NO ADDITIONAL COST.
- M. THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY OF FIELD VERIFICATION AND PROTECTION OF EXISTING CONDITIONS AND UTILITIES, THE ACTUAL HORIZONTAL OR VERTICAL LOCATION OF THE EXISTING UTILITIES SHALL NOT BE A BASIS FOR ADDITIONAL COMPENSATION.
- N. THE CONTRACTOR SHALL NOT BEGIN DEMOLITION OPERATIONS UNTIL WRITTEN CONFIRMATION FROM THE OWNER HAS BEEN RECEIVED VERIFYING THAT ALL ITEMS TO BE SALVAGED BY THE OWNER HAVE BEEN REMOVED FROM THE SITE AND ADJACENT RESIDENTIAL PROPERTY.
- O. ALL DAMAGES TO THE OWNER'S PROPERTY ON THE PROJECT SITE PRIOR TO SUBSTANTIAL COMPLETION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AS APPROVED BY THE OWNER, AT NO ADDITIONAL COST.
- P. EXISTING JOINTS TO BE REMOVED SHALL BE SAWCUT, OR REMOVED TO THE NEAREST JOINT TO CREATE CLEAN EDGES TO TIE INTO THE NEW CONSTRUCTION.
- Q. DEMOLITION DIMENSIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR; ANY DISCREPANCIES SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT IMMEDIATELY FOR RESOLUTION.
- R. THE CONTRACTOR IS RESPONSIBLE FOR ALL ASPECTS OF STORM WATER POLLUTION PREVENTION, SITE DRAINAGE, DUST CONTROL, NOISE POLLUTION, TRAFFIC CONTROL, SECURITY, FENCING, LIGHTING, PERMITTING, OR OTHER LOCAL OR STATE CODE REQUIREMENTS REQUIRED FOR CONSTRUCTION OPERATIONS, UNLESS OTHERWISE SHOWN ON CONSTRUCTION DOCUMENTS.

LEGEND

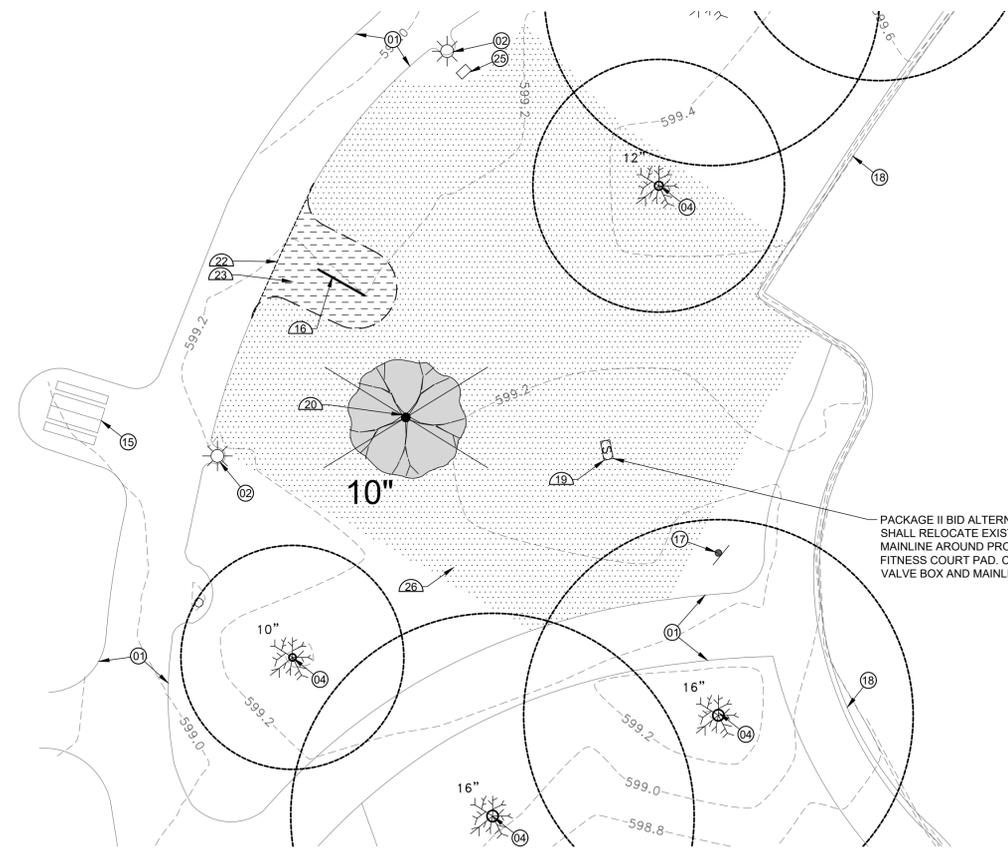
- EXISTING WOOD RAILROAD TIE RETAINING WALL TO BE REMOVED
- EXISTING CONCRETE PAVING TO BE REMOVED
- EXISTING CONCRETE FLUSH CURB TO BE REMOVED
- EXISTING PAVERS AND CONCRETE PAVER BASE TO BE REMOVED
- EXISTING VEGETATION TO BE REMOVED ONLY AS REQUIRED FOR INSTALLATION OF PROPOSED IMPROVEMENTS
- EXISTING FENCE LINE
- EXISTING OVERHEAD ELECTRIC LINE

DEMOLITION NOTES

- REMOVE EXISTING CONSTRUCTION AS INDICATED BY: (00)
- EXISTING TO REMAIN AND PROTECT IN PLACE AS INDICATED BY: (0)
1. EDGE OF EXISTING CONCRETE PAVING TO REMAIN AND PROTECT IN PLACE.
 2. EXISTING LIGHT FIXTURE TO REMAIN AND PROTECT IN PLACE.
 3. EXISTING LANDSCAPE EDGE TO REMAIN AND PROTECT IN PLACE.
 4. EXISTING TREE TO REMAIN AND PROTECT IN PLACE.
 5. EXISTING PLANTING TO REMAIN AND PROTECT IN PLACE.
 6. EXISTING IRRIGATION VALVE BOX TO REMAIN AND PROTECT IN PLACE.
 7. EXISTING BIKE RACK TO REMAIN AND PROTECT IN PLACE.
 8. EXISTING WATER FOUNTAIN TO REMAIN AND PROTECT IN PLACE.
 9. EXISTING TRASH RECEPTACLE TO REMAIN AND PROTECT IN PLACE.
 10. APPROXIMATE LOCATION OF EXISTING TREE TO REMAIN AND PROTECT IN PLACE. NOT SHOWN ON SURVEY. FIELD VERIFY.
 11. EXISTING FLUSH CONCRETE CURB TO REMAIN AND PROTECT IN PLACE.
 12. EXISTING POWER POLE TO REMAIN AND PROTECT IN PLACE.
 13. EXISTING BENCH TO BE REMOVED AND HAULED OFF.
 14. EXISTING OVERHEAD POWER LINES.
 15. EXISTING TABLE TO REMAIN AND PROTECT IN PLACE.
 16. EXISTING TABLE TO BE REMOVED AND HAULED OFF.
 17. EXISTING SIGN TO REMAIN AND PROTECT IN PLACE.
 18. EXISTING 6" CURB TO REMAIN AND PROTECT IN PLACE.
 19. EXISTING IRRIGATION VALVE BOX TO BE RELOCATED. COORDINATE WITH TOWN.
 20. EXISTING 10" CALIPER TREE TO BE REMOVED AND HAULED OFF.
 21. EXISTING FENCE TO REMAIN AND PROTECT IN PLACE.
 22. SAWCUT EXISTING CONCRETE PAVING.
 23. EXISTING CONCRETE PAVING TO BE REMOVED.
 24. EXISTING WOOD RAILROAD TIE RETAINING WALL TO BE REMOVED.
 25. EXISTING ELECTRIC BOX TO REMAIN, PROTECT IN PLACE.
 26. EXISTING SOD TO BE REMOVED ONLY AS REQUIRED FOR INSTALLATION OF PROPOSED IMPROVEMENTS.



(C1) EXISTING CONDITIONS AND REMOVAL PLAN - RETAINING WALL
1"=10'-0"



(A1) BID ALTERNATE 'A' - EXISTING CONDITIONS AND REMOVAL PLAN
1"=10'-0"

EXISTING IRRIGATION SYSTEM
CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING IRRIGATION SYSTEM. ANY DAMAGED IRRIGATION EQUIPMENT FROM DEMOLITION ACTIVITY IS THE RESPONSIBILITY OF CONTRACTOR AND DOES NOT CONSTITUTE ANY ADDITIONAL PAYMENT. OWNER WILL PROVIDE ANY REQUIRED PACKAGE TWO IRRIGATION SYSTEM MODIFICATIONS TO ACCOMMODATE SCOPE OF WORK WITHIN PACKAGE TWO.

EXISTING UTILITIES
CONTRACTOR MUST VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH TOWN OFFICIALS AND UTILITY COMPANIES IN LOCATING UTILITIES. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR LOSSES DUE TO DAMAGE TO UTILITIES. LOCATION FOR ALL UTILITIES SHOWN ON PLANS ARE APPROXIMATE. CONTRACTOR SHALL CALL TEXAS 811, 1-800-344-8377.

PACKAGE II BID ALTERNATE 'A' - CONTRACTOR SHALL RELOCATE EXISTING VALVE BOX AND MAINLINE AROUND PROPOSED CONCRETE FITNESS COURT PAD. COORDINATE NEW VALVE BOX AND MAINLINE LOCATION WITH TOWN.

FILE NAME: \\data\Projects\3\2022\11\068\2103_DSGN01_DWG\060_LAND\1094.dwg LAYOUT NAME: L-003 PRINTED: Tuesday, January 11, 2022 - 9:23am USER: LGSbell



Parkhill.com

Redding Trail Package Two Amenity Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1094.21

KEY PLAN

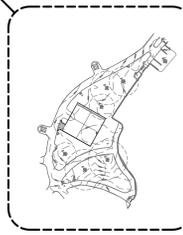
#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

Package Two Overall Plan Annotation Layout & Grading L-100

EXISTING UTILITIES
CONTRACTOR MUST VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH TOWN OFFICIALS AND UTILITY COMPANIES IN LOCATING UTILITIES. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR LOSSES DUE TO DAMAGE TO UTILITIES. LOCATION FOR ALL UTILITIES SHOWN ON PLANS ARE APPROXIMATE. CONTRACTOR SHALL CALL TEXAS 811, 1-800-344-8377.

EXISTING IRRIGATION SYSTEM
CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING IRRIGATION SYSTEM. ANY DAMAGED IRRIGATION EQUIPMENT FROM DEMOLITION ACTIVITY IS THE RESPONSIBILITY OF CONTRACTOR AND DOES NOT CONSTITUTE ANY ADDITIONAL PAYMENT. OWNER WILL PROVIDE ANY REQUIRED PACKAGE TWO IRRIGATION SYSTEM MODIFICATIONS TO ACCOMMODATE SCOPE OF WORK WITHIN PACKAGE TWO.

A1/L-102, A1/L-104, A1/L-106



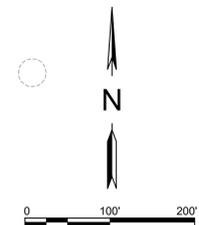
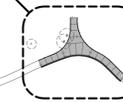
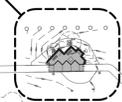
C1/L-101, C1/L-103, C1/L-105

C1/L-102, C1/L-104, C1/L-106



C3/L-101, C3/L-103, C3/L-105

A1/L-101, A1/L-103, A1/L-105



FILE NAME: \\data1\Projects\3\2021\1068.2103_DSGN01_DWG\060 LAND\L-100-1094.dwg LAYOUT NAME: L-100 PRINTED: Tuesday, January 11, 2022 - 9:23am USER: LGBell

SITE CONSTRUCTION GENERAL NOTES

EXAMINATION OF SITE OF WORK
 BEFORE SUBMITTING A BID, EACH BIDDER SHALL CAREFULLY EXAMINE THE SITE OF WORK. EACH BIDDER SHALL INFORM HIMSELF/HERSELF PRIOR TO BIDDING AS TO THE EXISTING CONDITIONS AND LIMITATIONS UNDER WHICH THE WORK IS TO BE PERFORMED, AND SHALL INCLUDE IN HIS/HER BID A SUM TO COVER ALL COSTS OF ALL ITEMS NECESSARY TO PERFORM THE WORK AS SET FORTH IN THE CONTRACT DOCUMENTS. NO ALLOWANCE WILL BE MADE TO ANY BIDDER BECAUSE OF LACK OF SUCH EXAMINATION OR KNOWLEDGE. THE SUBMISSION OF A BID SHALL BE CONSTRUED AS CONCLUSIVE EVIDENCE THAT THE BIDDER IS SUFFICIENTLY FAMILIAR WITH ALL RELEVANT CONDITIONS.

CONCRETE FORMWORK AND REINFORCEMENT
 THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE A MINIMUM OF 48 HOURS PRIOR TO THE PLANNED PLACEMENT OF CONCRETE. THE OWNER'S REPRESENTATIVE MUST HAVE OBSERVED AND APPROVED THE FORMWORK AND REINFORCEMENT PRIOR TO ANY PLACEMENT OF CONCRETE.

CONCRETE FINISH AND SAW JOINTS
 THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ON THE SITE SAMPLE PANELS OF PAVEMENT, SIZE PER SPECIFICATIONS, OR 4' X 4' IF NOT SPECIFIED, IN SIZE FOR EACH FINISH OF CONCRETE PAVEMENT. THE SURFACE FINISHES SHALL BE AS APPROVED BY THE ARCHITECT. ANY CONCRETE PLACED WITH AN IMPROPER FINISH SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. ALL SAW JOINTS SHALL BE SAWN WITHIN 24 HOURS OF CONCRETE PLACEMENT. ANY CONCRETE SAWN LATER THAN THIS WHICH, IN THE OPINION OF THE OWNER'S REPRESENTATIVE, HAS EXCESSIVE SHRINKAGE CRACKS DUE TO NOT HAVING BEEN SAWN SOON ENOUGH, SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

ALIGNMENT AND TANGENCY OF PAVEMENTS
 THE EDGES OF ALL FINISHED PAVING SHALL BE STRAIGHT OR SMOOTH CURVES (AS DELINEATED ON THE PLANS) WITH NO INTERRUPTIONS SUCH AS CHORDS, WAVES, JOGS, OR MISSED TANGENTS. PAVEMENT WITH SUCH INTERRUPTION SHALL BE REMOVED.

TOWN STANDARDS
 ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE TOWN OF ADDISON, TEXAS, STANDARD SPECIFICATIONS, AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

DIMENSIONS
 DIMENSIONS ARE TO BACKS OF CURBS, TO CENTERLINES OF FENCES, OR TO EDGES OF PAVEMENTS, UNLESS OTHERWISE INDICATED. WRITTEN AND NUMBERED DIMENSIONS HOLD PRECEDENCE OVER SCALED DIMENSIONS.

ADJUSTMENTS
 IF THE CONTRACTOR BELIEVES IT IS NECESSARY TO MAKE AN ADJUSTMENT IN THE LAYOUT OR GRADE OF PROPOSED IMPROVEMENTS, SUCH AN ADJUSTMENT SHALL BE PROPOSED TO THE OWNER'S REPRESENTATIVE. NO ADJUSTMENT WILL BE PERMITTED UNTIL IT HAS FIRST BEEN APPROVED BY THE OWNER'S REPRESENTATIVE.

GROUND COVER
 ALL DISTURBED AREAS BY GRADING OR CONSTRUCTION SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS.

GRADING
 • CROSS SLOPES OF SIDEWALKS ARE NOT TO EXCEED 1.5%.
 • LONGITUDINAL SLOPES OF SIDEWALKS ARE NOT TO EXCEED 4.5%.

DIMENSIONS
 DIMENSIONS ARE TO BACKS OF CURBS, TO CENTERLINES OF FENCES, OR TO EDGES OF PAVEMENTS, UNLESS OTHERWISE INDICATED. WRITTEN AND NUMBERED DIMENSIONS HOLD PRECEDENCE OVER SCALED DIMENSIONS.

LEGEND

- SEGMENTAL RETAINING WALL. REF. B3/L-501
- CONCRETE PAVING. REF. A1,A3,A4/L-501
- PAVERS. REF. B1,B2/L-501
- EXISTING FENCE LINE
- EXISTING OVERHEAD ELECTRIC LINE

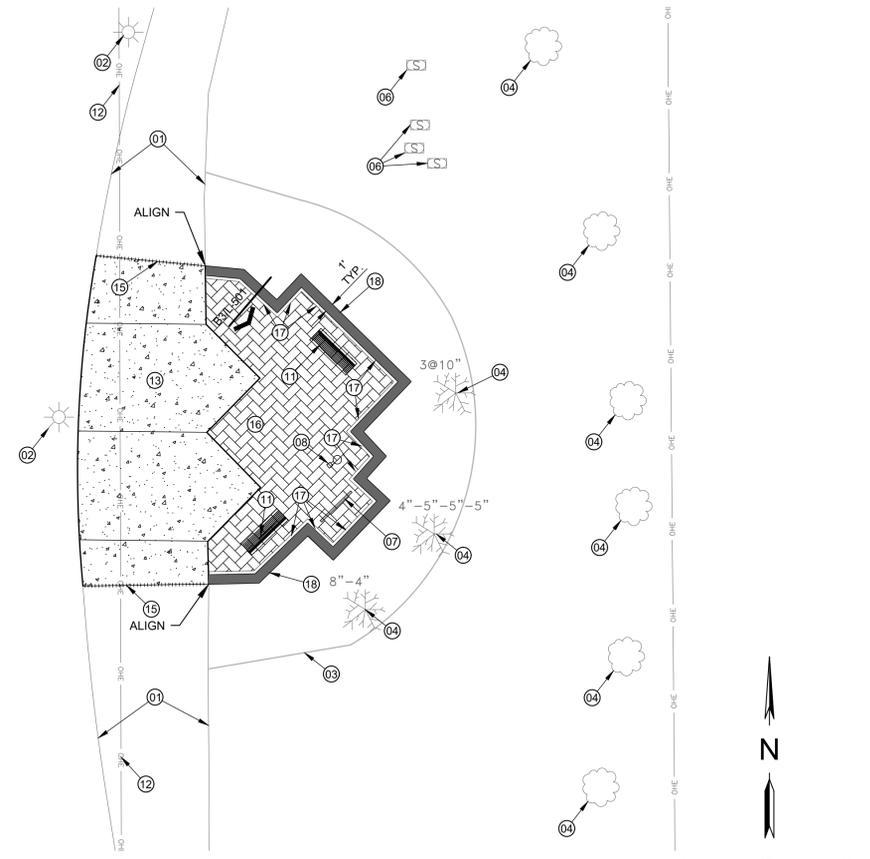
KEY NOTES

- AS INDICATED BY: (00)
1. EDGE OF EXISTING CONCRETE PAVING TO REMAIN AND PROTECT IN PLACE.
 2. EXISTING LIGHT FIXTURE TO REMAIN AND PROTECT IN PLACE.
 3. EXISTING LANDSCAPE EDGE TO REMAIN AND PROTECT IN PLACE.
 4. EXISTING TREE TO REMAIN AND PROTECT IN PLACE.
 5. EXISTING PLANTING TO REMAIN AND PROTECT IN PLACE.
 6. EXISTING IRRIGATION VALVE BOX TO REMAIN AND PROTECT IN PLACE.
 7. EXISTING BIKE RACK TO REMAIN AND PROTECT IN PLACE.
 8. EXISTING WATER FOUNTAIN TO REMAIN AND PROTECT IN PLACE.
 9. EXISTING TRASH RECEPTACLE TO REMAIN AND PROTECT IN PLACE.
 10. APPROXIMATE LOCATION OF EXISTING TREE TO REMAIN AND PROTECT IN PLACE. NOT SHOWN ON SURVEY. FIELD VERIFY.
 11. BENCH. REF. C1/L-501.
 12. EXISTING OVERHEAD ELECTRIC LINE.
 13. 5" PEDESTRIAN CONCRETE PAVING. REF. A1/L-501.
 14. WALK EXPANSION JOINT. REF. A3/L-501.
 15. CONNECTION TO EXISTING SIDEWALK. REF. A5/L-501.
 16. PAVERS (TYP.). LAYOUT TO MATCH EXISTING PAVERS. REF. B1/L-501.
 17. PAVER EDGE (TYP.). REF. B1/L-501.
 18. SEGMENTAL RETAINING WALL. REF. B3/L-501. LAYOUT AND HEIGHTS OF RETAINING WALL TO MATCH EXISTING WALL.

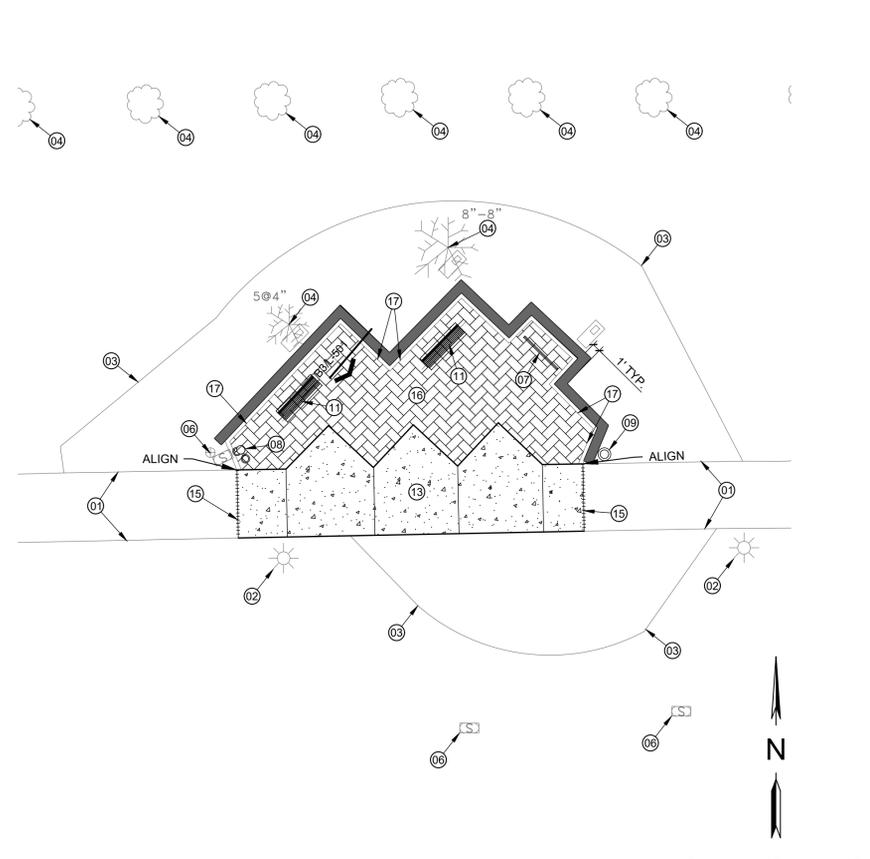
WALL AND SIDEWALK LAYOUT
 CONTRACTOR SHALL MATCH EXISTING WALL, SIDEWALK AND PAVER LAYOUT.

EXISTING IRRIGATION SYSTEM
 CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING IRRIGATION SYSTEM. ANY DAMAGED IRRIGATION EQUIPMENT FROM DEMOLITION ACTIVITY IS THE RESPONSIBILITY OF CONTRACTOR AND DOES NOT CONSTITUTE ANY ADDITIONAL PAYMENT. OWNER WILL PROVIDE ANY REQUIRED PACKAGE TWO IRRIGATION SYSTEM MODIFICATIONS TO ACCOMMODATE SCOPE OF WORK WITHIN PACKAGE TWO.

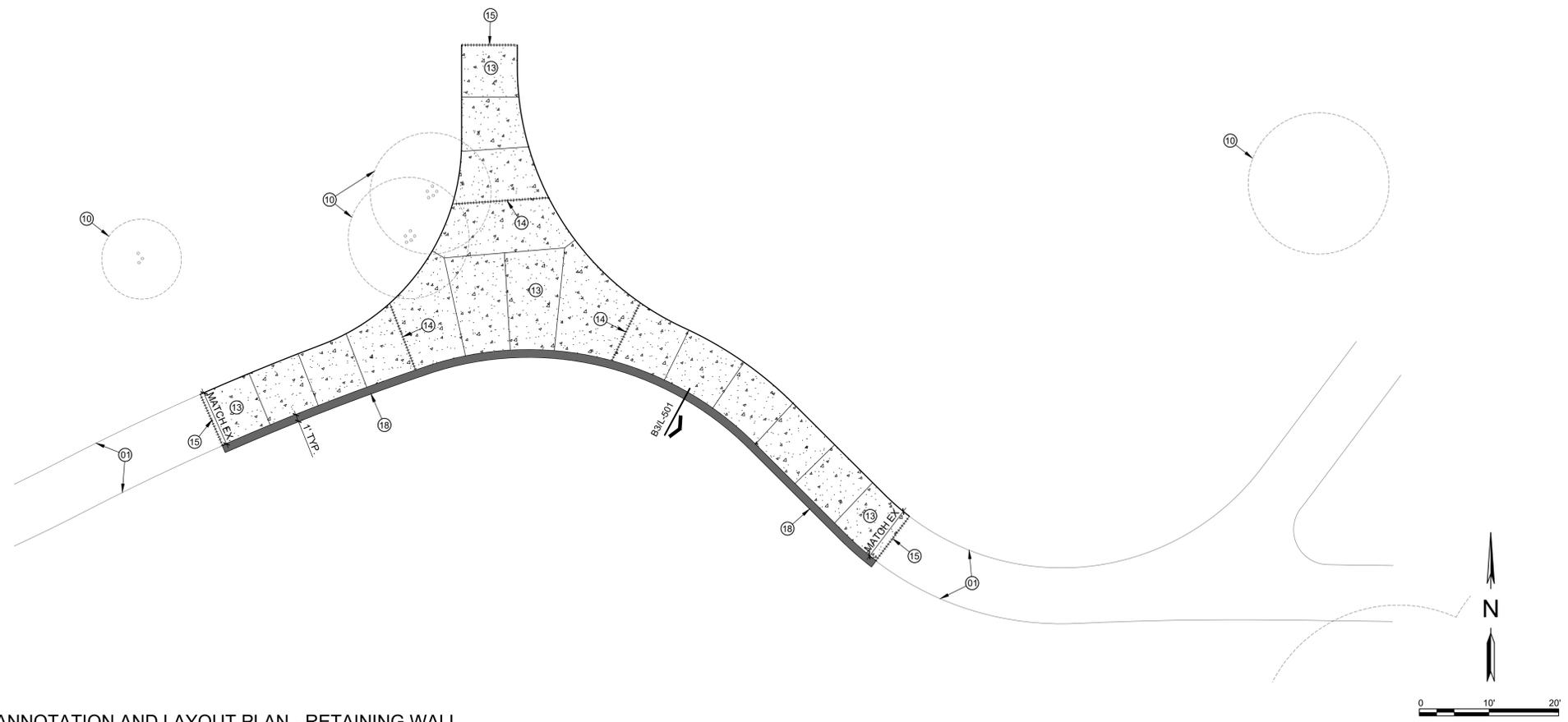
EXISTING UTILITIES
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C1 ANNOTATION AND LAYOUT PLAN
 1"=10'-0"



C3 ANNOTATION AND LAYOUT PLAN
 1"=10'-0"



A1 ANNOTATION AND LAYOUT PLAN - RETAINING WALL
 1"=10'-0"



Parkhill.com

**Redding Trail
 Package Two
 Amenity Improvements**



CLIENT
 Town of Addison, Texas
 16801 Westgrove Drive
 Addison, TX 75001

PROJECT NO.
 1094.21
KEY PLAN

#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

**Package Two
 Annotation
 and Layout
 Plan
 L-101**



01/12/2022

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Redding Trail Package Two Amenity Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1094.21
KEY PLAN

Package Two Annotation and Layout Plan L-102

SITE CONSTRUCTION GENERAL NOTES

EXAMINATION OF SITE OF WORK
BEFORE SUBMITTING A BID, EACH BIDDER SHALL CAREFULLY EXAMINE THE SITE OF WORK. EACH BIDDER SHALL INFORM HIMSELF PRIOR TO BIDDING AS TO THE EXISTING CONDITIONS AND LIMITATIONS UNDER WHICH THE WORK IS TO BE PERFORMED, AND SHALL INCLUDE IN HIS/BID BID A SUM TO COVER ALL COSTS OF ALL ITEMS NECESSARY TO PERFORM THE WORK AS SET FORTH IN THE CONTRACT DOCUMENTS. NO ALLOWANCE WILL BE MADE TO ANY BIDDER BECAUSE OF LACK OF SUCH EXAMINATION OR KNOWLEDGE. THE SUBMISSION OF A BID SHALL BE CONSTRUED AS CONCLUSIVE EVIDENCE THAT THE BIDDER IS SUFFICIENTLY FAMILIAR WITH ALL RELEVANT CONDITIONS.

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LEGEND

- SEGMENTAL RETAINING WALL. REF. B3/L-501
- CONCRETE PAVING. REF. A1, A3, A4/L-501
- PAVERS. REF. B1/L-501
- FITNESS COURT PAVING. REF. A1, C1/L-502, A1/L-503
- EXISTING FENCE LINE
- EXISTING OVERHEAD ELECTRIC LINE

EXISTING UTILITIES
CONTRACTOR MUST VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH TOWN OFFICIALS AND UTILITY COMPANIES IN LOCATING UTILITIES. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR LOSSES DUE TO DAMAGE TO UTILITIES. LOCATION FOR ALL UTILITIES SHOWN ON PLANS ARE APPROXIMATE. CONTRACTOR SHALL CALL TEXAS 811, 1-800-344-8377.

KEY NOTES

- AS INDICATED BY: (C)
1. EDGE OF EXISTING CONCRETE PAVING TO REMAIN AND PROTECT IN PLACE.
 2. EXISTING LIGHT FIXTURE TO REMAIN AND PROTECT IN PLACE.
 3. SEGMENTAL RETAINING WALL REF. B3/L-501. LAYOUT AND HEIGHTS OF RETAINING WALL TO MATCH EXISTING WALL.
 4. EXISTING TREE TO REMAIN AND PROTECT IN PLACE.
 5. EXISTING PLANTING TO REMAIN AND PROTECT IN PLACE.
 6. EXISTING 6" CURB TO REMAIN AND PROTECT IN PLACE.
 7. BID ALTERNATE 'A' FITNESS COURT PAVING REF. A1, C1/L-502, A1/L-503.
 8. WALK EXPANSION JOINT. REF. A3/L-501.
 9. 5" PEDESTRIAN CONCRETE PAVING. REF. A1/L-501.
 10. CONNECTION TO EXISTING SIDEWALK. REF. A5/L-501.
 11. EXISTING POWER POLE TO REMAIN AND PROTECT IN PLACE.
 12. EXISTING FENCE TO REMAIN AND PROTECT IN PLACE.
 13. EXISTING OVERHEAD POWER LINES.
 14. EXISTING TABLE TO REMAIN AND PROTECT IN PLACE.
 15. EXISTING SIGN TO REMAIN AND PROTECT IN PLACE.
 16. FITNESS COURT CONTRACTION JOINT PER MANUFACTURER.

EXISTING IRRIGATION SYSTEM
CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING IRRIGATION SYSTEM. ANY DAMAGED IRRIGATION EQUIPMENT FROM DEMOLITION ACTIVITY IS THE RESPONSIBILITY OF CONTRACTOR AND DOES NOT CONSTITUTE ANY ADDITIONAL PAYMENT. OWNER WILL PROVIDE ANY REQUIRED PACKAGE TWO IRRIGATION SYSTEM MODIFICATIONS TO ACCOMMODATE SCOPE OF WORK WITHIN PACKAGE TWO.

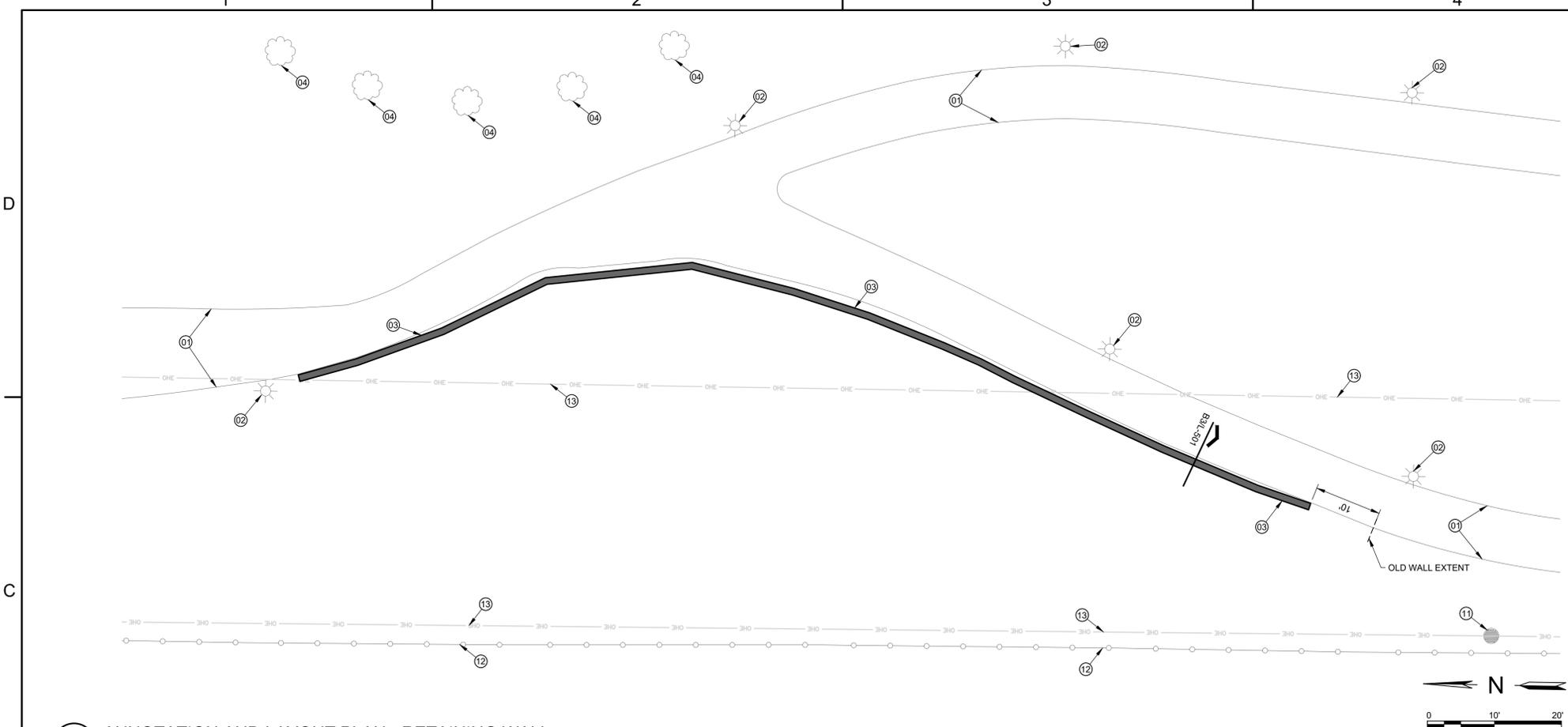
BID ALTERNATE 'A'

BID ALTERNATE 'A' INCLUDES FITNESS COURT CONCRETE SLAB, DEMOLITION AND SITEWORK REQUIRED FOR INSTALLATION OF CONCRETE FITNESS COURT SLAB. REF. A1, C1/L-501 AND A1/L-503 FOR FITNESS COURT SLAB INSTALLATION DETAILS.

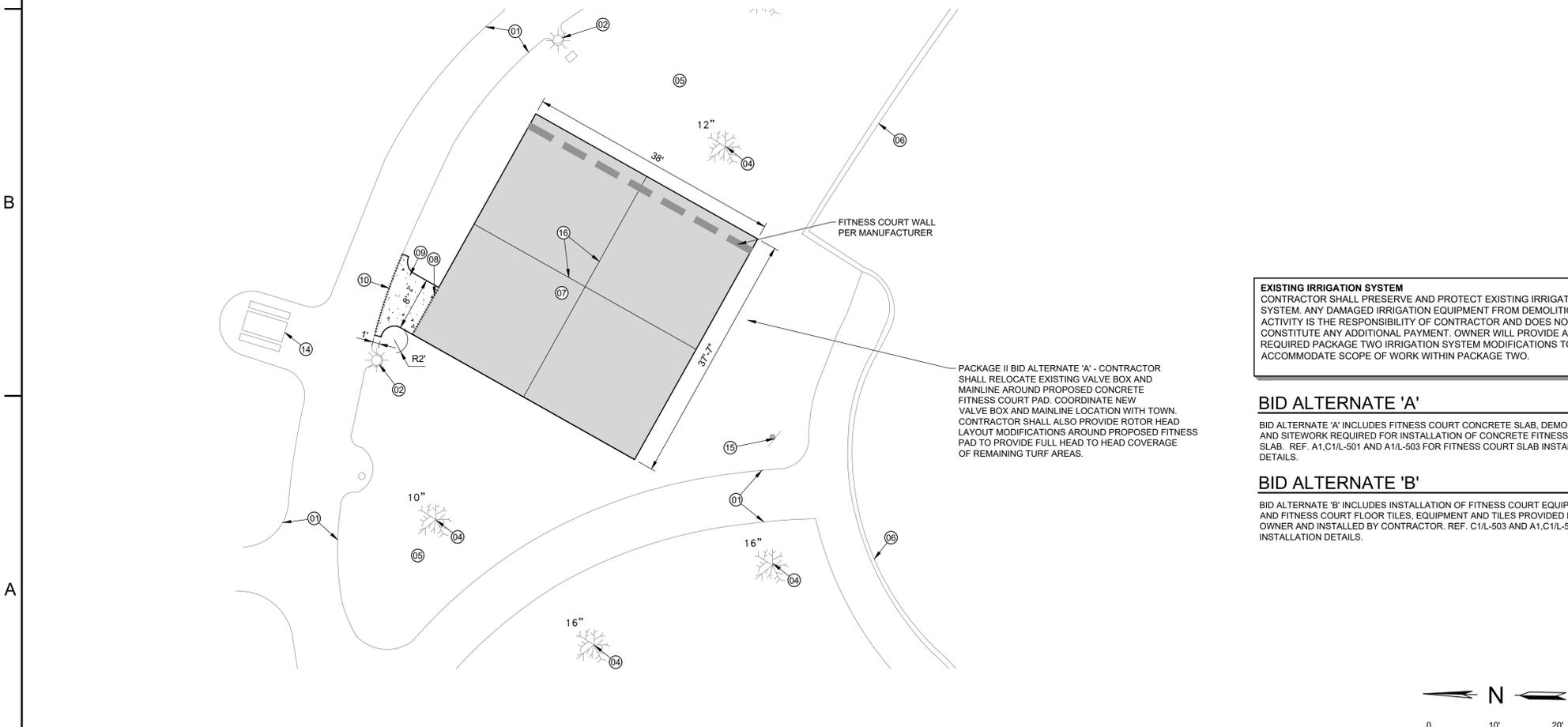
BID ALTERNATE 'B'

BID ALTERNATE 'B' INCLUDES INSTALLATION OF FITNESS COURT EQUIPMENT AND FITNESS COURT FLOOR TILES, EQUIPMENT AND TILES PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. REF. C1/L-503 AND A1, C1/L-504 FOR INSTALLATION DETAILS.

PACKAGE II BID ALTERNATE 'A' - CONTRACTOR SHALL RELOCATE EXISTING VALVE BOX AND MAINLINE AROUND PROPOSED CONCRETE FITNESS COURT PAD. COORDINATE NEW VALVE BOX AND MAINLINE LOCATION WITH TOWN. CONTRACTOR SHALL ALSO PROVIDE ROTOR HEAD LAYOUT MODIFICATIONS AROUND PROPOSED FITNESS PAD TO PROVIDE FULL HEAD TO HEAD COVERAGE OF REMAINING TURF AREAS.



(C1) ANNOTATION AND LAYOUT PLAN - RETAINING WALL
1"=10'-0"



(A1) BID ALTERNATE 'A' - ANNOTATION AND LAYOUT PLAN - FITNESS COURT
1"=10'-0"

FILE NAME: \\data11\Projects\3\2021\1066.2103_DSGN01_DWG\060_LAND\L-102-1094.dwg LAYOUT NAME: L-102 PRINTED: Tuesday, January 11, 2022 - 9:23am USER: LGBell



Redding Trail Package Two Amenity Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1094.21
KEY PLAN

#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

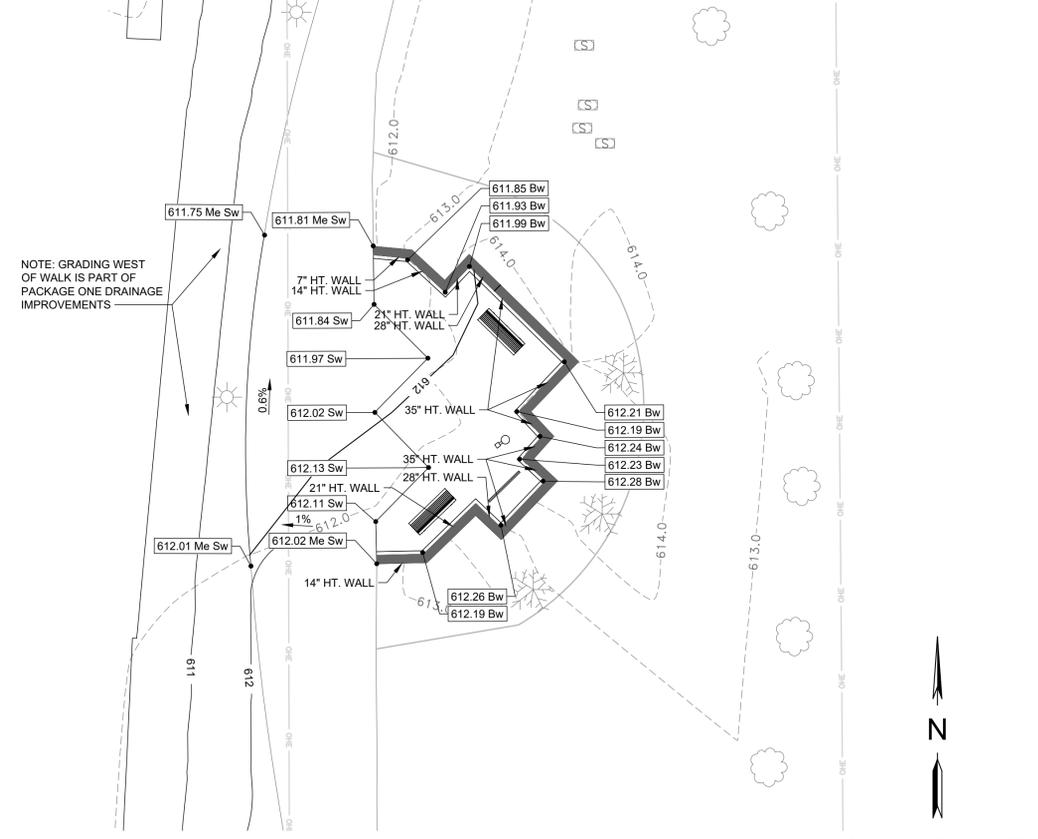
Package Two Grading Plan L-103

GRADING LEGEND

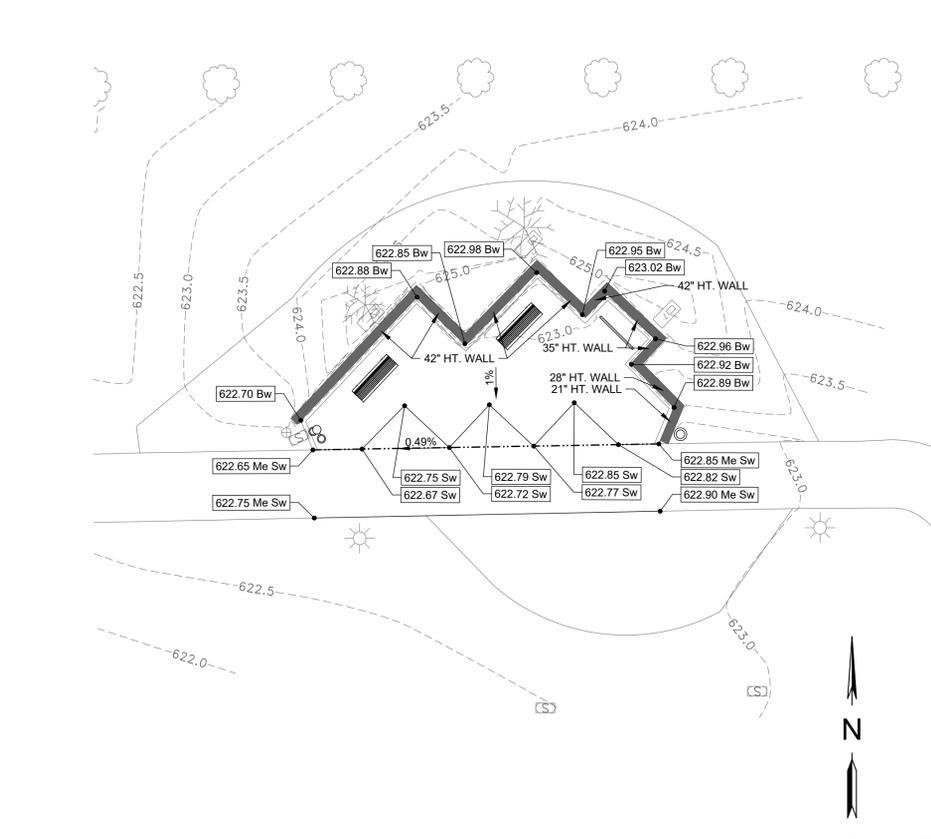
- SWALE
- - - 599 EXISTING 1' CONTOUR
- - - 600 EXISTING 5' CONTOUR
- - - 599 PROPOSED 1' CONTOUR
- - - 600 PROPOSED 5' CONTOUR
- GRADE BREAK
- EXISTING SPOT GRADE
- 599.00 PROPOSED SPOT GRADE
- Sw TOP OF SIDEWALK / PAVEMENT
- Fg FINISH GRADE
- Me MATCH EXISTING GRADE
- DIRECTION OF FLOW
- Hp HIGH POINT
- Tw TOP OF WALL
- Bw BOTTOM OF WALL
- FI FLOW LINE

RETAINING WALL LAYOUT AND GRADING
CONTRACTOR SHALL MATCH EXISTING WALL LAYOUT AND WALL HEIGHTS WITH INSTALLATION OF NEW WALL. WALL HEIGHTS PROVIDED ARE NOT ABSOLUTE AND REQUIRE CONTRACTOR TO FIELD DOCUMENT EXISTING CONDITIONS PRIOR TO CONSTRUCTION.

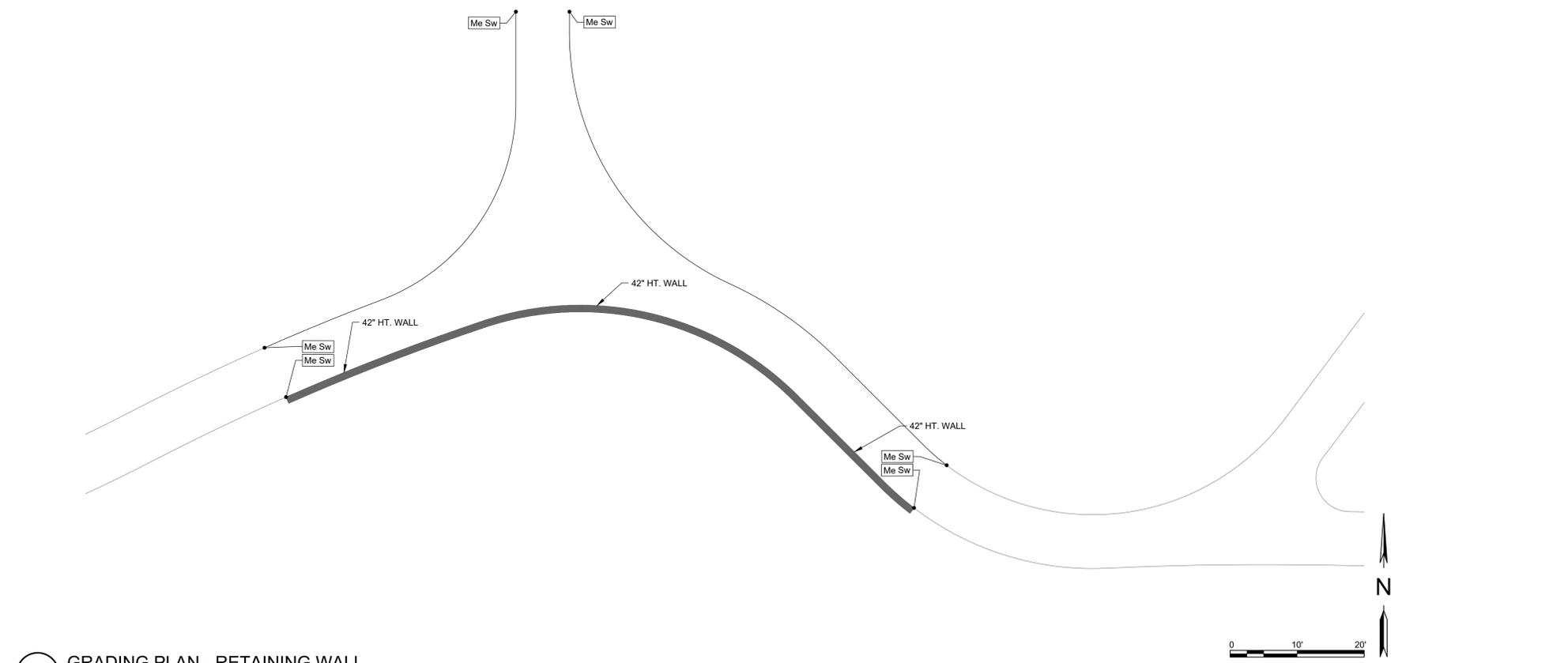
EXISTING IRRIGATION SYSTEM
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C1 GRADING PLAN
1"=10'-0"



C3 GRADING PLAN
1"=10'-0"



A1 GRADING PLAN - RETAINING WALL
1"=10'-0"



Redding Trail Package Two Amenity Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1094.21
KEY PLAN

#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

Package Two Grading Plan L-104

GRADING LEGEND

- SWALE
- - - 599 EXISTING 1' CONTOUR
- - - 600 EXISTING 5' CONTOUR
- - - 599 PROPOSED 1' CONTOUR
- - - 600 PROPOSED 5' CONTOUR
- - - GRADE BREAK
- 599.00 EXISTING SPOT GRADE
- 599.00 PROPOSED SPOT GRADE
- Sw TOP OF SIDEWALK / PAVEMENT
- Fg FINISH GRADE
- Me MATCH EXISTING GRADE
- DIRECTION OF FLOW
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RETAINING WALL LAYOUT AND GRADING
CONTRACTOR SHALL MATCH EXISTING WALL LAYOUT AND WALL HEIGHTS WITH INSTALLATION OF NEW WALL. WALL HEIGHTS PROVIDED ARE NOT ABSOLUTE AND REQUIRE CONTRACTOR TO FIELD DOCUMENT EXISTING CONDITIONS PRIOR TO CONSTRUCTION.

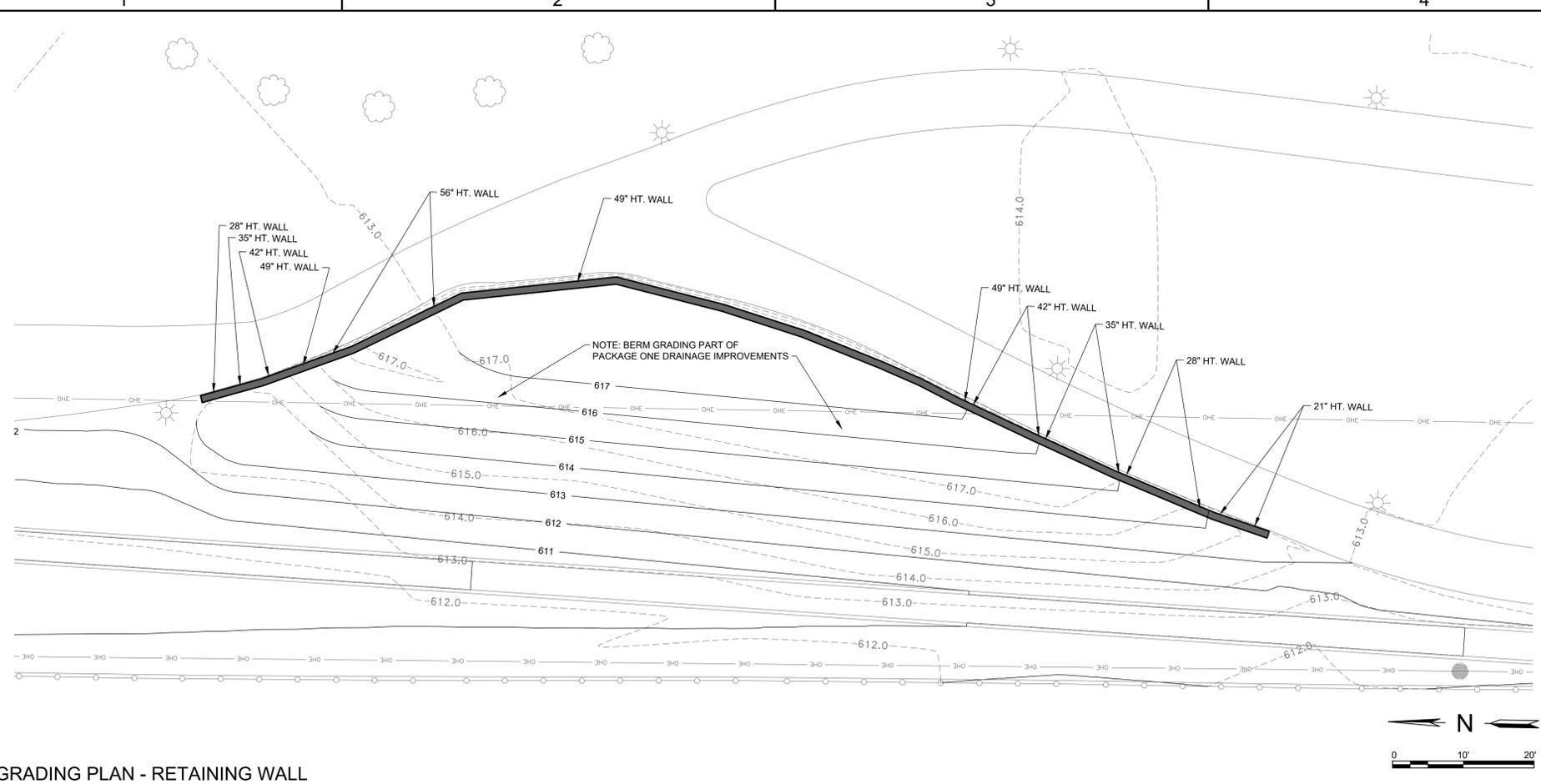
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BID ALTERNATE 'A'

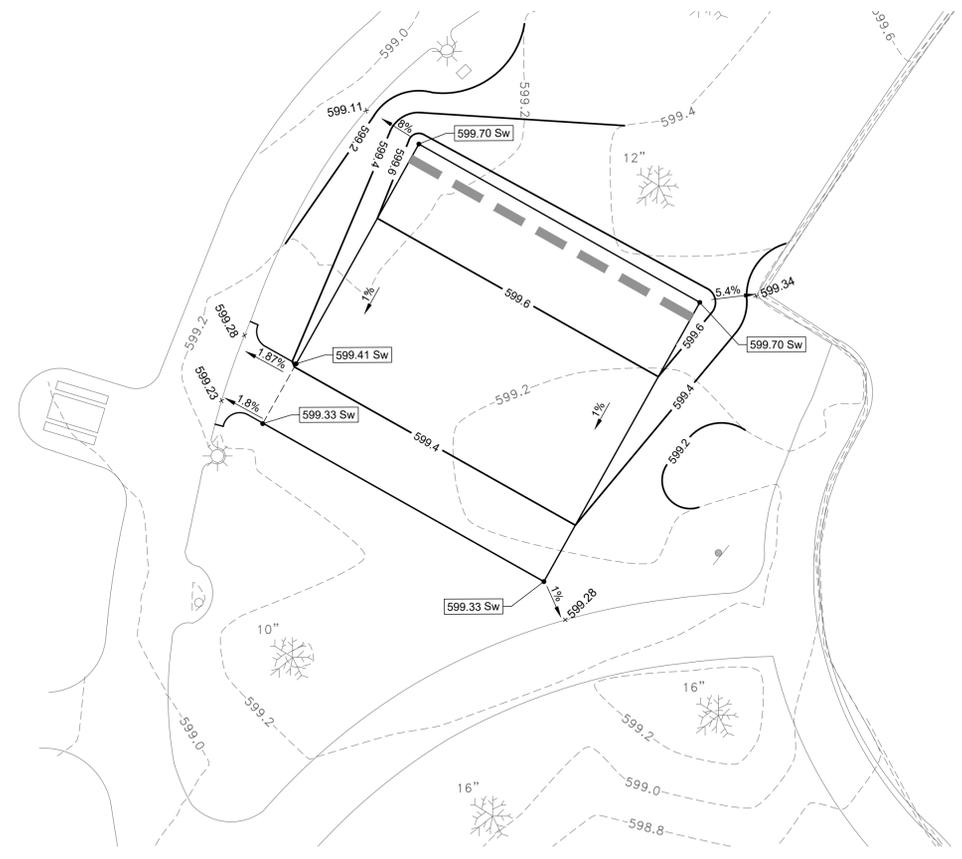
BID ALTERNATE 'A' INCLUDES FITNESS COURT CONCRETE SLAB, DEMOLITION AND SITEWORK REQUIRED FOR INSTALLATION OF CONCRETE FITNESS COURT SLAB. REF. A1.C1/L-501 AND A1/L-503 FOR FITNESS COURT SLAB INSTALLATION DETAILS.

BID ALTERNATE 'B'

BID ALTERNATE 'B' INCLUDES INSTALLATION OF FITNESS COURT EQUIPMENT AND FITNESS COURT FLOOR TILES. EQUIPMENT AND TILES PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. REF. C1/L-503 AND A1.C1/L-504 FOR INSTALLATION DETAILS.



C1 GRADING PLAN - RETAINING WALL
1"=10'-0"



A1 BID ALTERNATE 'A' - GRADING PLAN - FITNESS COURT
1"=10'-0"

FILE NAME: \\data1\projects\3\2021\1068.2103_DSGN01_DWG\060_LAND\L-104-1094.dwg LAYOUT NAME: L-104 PRINTED: Tuesday, January 11, 2022 - 9:24am USER: LG8ell



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Redding Trail Package Two Amenity Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1094.21
KEY PLAN

PLANTING GENERAL NOTES

- A. THE LANDSCAPE CONTRACTOR SHALL REFER TO THE CONTRACT AND SPECIFICATIONS FOR REQUIREMENTS NOT LISTED HEREIN.
- B. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
- C. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING PLAN SHOWN ON ALL DRAWINGS. PLANT COUNTS AND SQUARE FOOTAGES ARE PROVIDED AS A COURTESY ONLY.
- D. ALL PLANT MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN OR EQUIVALENT.
- E. IN THE CASE OF A DISCREPANCY BETWEEN THE CONTAINER SIZE CALLED OUT IN PLANT LIST AND THE CALIPER AND HEIGHT OF PLANT MATERIAL, THE SPECIFIED TREE MUST MEET THE CALIPER AND HEIGHT REQUIREMENTS SPECIFIED, EVEN IF THE LARGER CONTAINER SIZE IS REQUIRED TO MEET THESE SPECIFICATIONS AT NO ADDITIONAL COST TO THE OWNER.
- F. ALL PLANTS TO BE GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND.
- G. WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE PLANT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO VERTICAL LOCATIONS.
- H. ALL PLANTS TAGGED AS APPROVED AT NURSERY OR SUPPLIER SHALL BEAR THE SAME TAG WHEN DELIVERED ON SITE.
- I. THE RIGHT TO REJECT PLANT MATERIALS DELIVERED TO THE SITE THAT DO NOT BEAR APPROVAL TAGS IS RESERVED BY THE PROJECT LANDSCAPE ARCHITECT.
- J. IN AREAS WHERE PAVING SUBGRADES AND BUILDING PADS EXTEND INTO PLANT BED AREAS, 6 INCH HOLES SHALL BE DRILLED EVERY 3 FEET AND FILLED WITH 1 INCH DIAMETER GRAVEL TO PROVIDE PERCOLATION AND DRAINAGE FOR THE PLANTING BED. HOLES SHALL BE DRILLED THROUGH IMPROVED SUBGRADES INTO EXISTING SITE SOILS BUT NO DEEPER THAN FOUR FEET.
- K. ALL PLANTING BEDS TO RECEIVE 2 INCHES OF BACK TO EARTH COMPOST PER SQUARE FOOT AND 1 POUND OF A 4(N):1(P):2(K) RATIO FERTILIZER PER 100 SQUARE FEET. BOTH MATERIALS SHALL BE INCORPORATED INTO THE SOIL TO A DEPTH OF 12 INCHES.
- L. ALL FINAL PLANTING BED GRADES IN AREAS WHERE ORGANIC AND/OR INORGANIC MULCH IS BEING APPLIED SHOULD BE 3 INCHES BELOW ADJACENT HARD SURFACES.
- M. NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING IS COMPLETE AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT.
- N. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING OR AS ESTABLISHED IN CONTAINER.
- O. ALL PLANTS SHALL BE INSTALLED AS PER DETAILS.
- P. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR MORE OFTEN AS NEEDED DURING THE FIRST GROWING SEASON.
- Q. ALL PLANTING BEDS TO RECEIVE ORGANIC AND/OR INORGANIC MULCH MATERIALS AS NOTED ON PLANS.
- R. THE DAY PRIOR TO PLANTING, THE LOCATION OF ALL TREES AND SHRUBS SHALL BE STAKED FOR APPROVAL BY THE LANDSCAPE ARCHITECT.
- S. THE CONTRACTOR SHALL PRUNE ALL BRANCHES 6 FEET ABOVE FINISH GRADE ON ALL DECIDUOUS TREES 12 FEET OR TALLER.
- T. AREAS TO BE FILLED WITH INORGANIC MULCHES WITH A DIAMETER LESS THAN 1/4 INCH IN SIZE SHALL BE COMPACTED TO 85% PROCTOR DENSITY BEFORE MULCH IS PLACED.
- U. REFER TO SPECIFICATIONS FOR SPECIFIED PLANTING SOIL AND AMENDMENTS IN BOTH PLANTING BEDS AND TURF AREAS.
- V. ALL PLANTING BEDS TO RECEIVE 3" DEPTH SHREDDED HARDWOOD MULCH UNLESS SPECIFIED OTHERWISE. SUBMIT SAMPLE FOR ARCHITECT APPROVAL.
- W. SOD SHALL BE PLANTED AND ESTABLISHED, AS SPECIFIED, OVER ANY AREAS DISTURBED BY CONSTRUCTION. THE GRASS LIMITS LINES SHOWN ARE NOT ABSOLUTE. TURF-GRASS PLANTING SHALL TAKE PLACE BEYOND THE LIMITS IF THE AREA IS DISTURBED.

EXISTING IRRIGATION SYSTEM
CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING IRRIGATION SYSTEM. ANY DAMAGED IRRIGATION EQUIPMENT FROM DEMOLITION ACTIVITY IS THE RESPONSIBILITY OF CONTRACTOR AND DOES NOT CONSTITUTE ANY ADDITIONAL PAYMENT. OWNER WILL PROVIDE ANY REQUIRED PACKAGE TWO IRRIGATION SYSTEM MODIFICATIONS TO ACCOMMODATE SCOPE OF WORK WITHIN PACKAGE TWO.

PLANTING AND SOIL DETAILS
REF. L-505 FOR TYPICAL PLANTING AND SOIL DETAILS.

- LEGEND**
- SEGMENTAL RETAINING WALL, REF. B3/L-501
 - EXISTING FENCE LINE
 - EXISTING OVERHEAD ELECTRIC LINE

- KEY NOTES**
AS INDICATED BY: (01)
1. SOLID SOD AS SPEC'D. EXTENTS NOT ABSOLUTE. CONTRACTOR SHALL REPLACE ALL SOD WITHIN GRADING EXTENTS OR CONSTRUCTION AREA.

PACKAGE II PLANT SCHEDULE

SHRUBS	QTY	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPREAD
●	6	ILEX CORNUTA 'BURFORDII NANA'	#5	18"	18"
+	88	SALVIA GREGGII AUTUMN SAGE MATCHED, FULL, 5'-0" O.C.	#3	18"	18"
GROUND COVERS		BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPREAD
□		CYNODON DACTYLON 'TIFFWAY 419' BERMUDA GRASS 'TIFFWAY 419'	SOD		
■		EUONYMUS COLORATUS PURPLE WINTERCREEPER 18" OC	#1	6"	12"
■		SHREDDED HARDWOOD MULCH SHREDDED HARDWOOD MULCH	3" DEPTH		

C1 PLANTING PLAN
1"=10'-0"

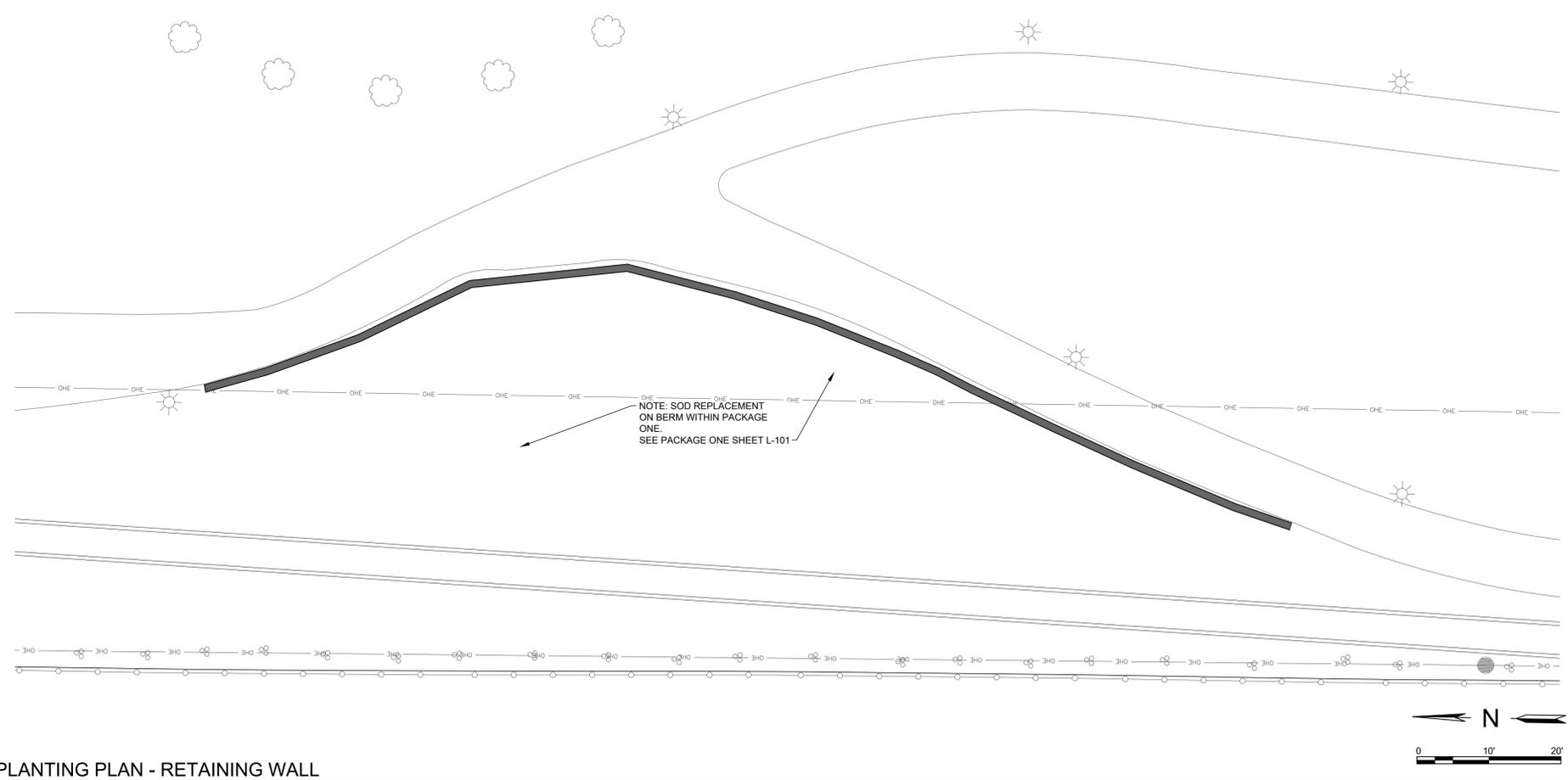
C3 PLANTING PLAN
1"=10'-0"

A1 PLANTING PLAN - RETAINING WALL
1"=10'-0"

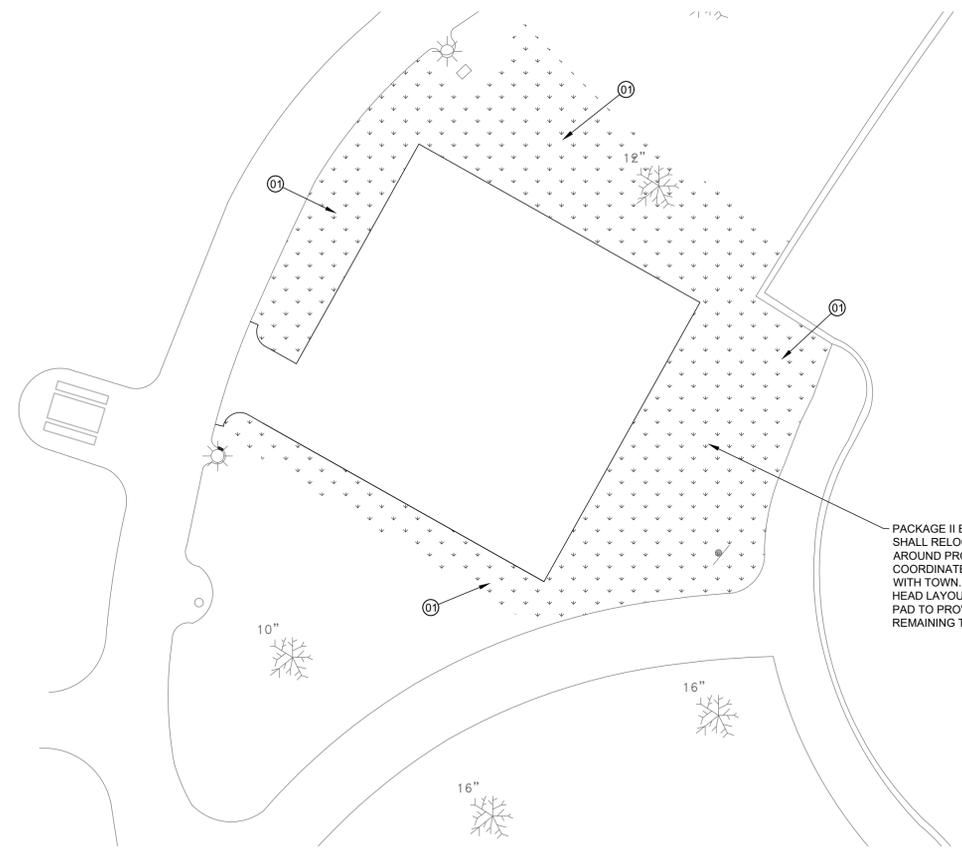
FILE NAME: \\data1\projects\3\2021\10668.2103_DSGN01_DWG\060_LAND\L-105-1094.dwg LAYOUT NAME: L-105 PRINTED: Tuesday, January 11, 2022 - 9:24am USER: LGBeil

PLANTING GENERAL NOTES

- A. THE LANDSCAPE CONTRACTOR SHALL REFER TO THE CONTRACT AND SPECIFICATIONS FOR REQUIREMENTS NOT LISTED HEREIN.
- B. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
- C. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING PLAN SHOWN ON ALL DRAWINGS. PLANT COUNTS AND SQUARE FOOTAGES ARE PROVIDED AS A COURTESY ONLY.
- D. ALL PLANT MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN OR EQUIVALENT.
- E. IN THE CASE OF A DISCREPANCY BETWEEN THE CONTAINER SIZE CALLED OUT IN PLANT LIST AND THE CALIPER AND HEIGHT OF PLANT MATERIAL, THE SPECIFIED TREE MUST MEET THE CALIPER AND HEIGHT REQUIREMENTS SPECIFIED, EVEN IF THE LARGER CONTAINER SIZE IS REQUIRED TO MEET THESE SPECIFICATIONS AT NO ADDITIONAL COST TO THE OWNER.
- F. ALL PLANTS TO BE GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND.
- G. WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE PLANT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO VERTICAL LOCATIONS.
- H. ALL PLANTS TAGGED AS APPROVED AT NURSERY OR SUPPLIER SHALL BEAR THE SAME TAG WHEN DELIVERED ON SITE.
- I. THE RIGHT TO REJECT PLANT MATERIALS DELIVERED TO THE SITE THAT DO NOT BEAR APPROVAL TAGS IS RESERVED BY THE PROJECT LANDSCAPE ARCHITECT.
- J. IN AREAS WHERE PAVING SUBGRADES AND BUILDING PADS EXTEND INTO PLANT BED AREAS, 6 INCH HOLES SHALL BE DRILLED EVERY 3 FEET AND FILLED WITH 1 INCH DIAMETER GRAVEL TO PROVIDE PERCOLATION AND DRAINAGE FOR THE PLANTING BED. HOLES SHALL BE DRILLED THROUGH IMPROVED SUBGRADES INTO EXISTING SITE SOILS BUT NO DEEPER THAN FOUR FEET.
- K. ALL PLANTING BEDS TO RECEIVE 2 INCHES OF BACK TO EARTH COMPOST PER SQUARE FOOT AND 1 POUND OF A 4(N):1(P):2(K) RATIO FERTILIZER PER 100 SQUARE FEET. BOTH MATERIALS SHALL BE INCORPORATED INTO THE SOIL TO A DEPTH OF 12 INCHES.
- L. ALL FINAL PLANTING BED GRADES IN AREAS WHERE ORGANIC AND/OR INORGANIC MULCH IS BEING APPLIED SHOULD BE 3 INCHES BELOW ADJACENT HARD SURFACES.
- M. NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING IS COMPLETE AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT.
- N. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING OR AS ESTABLISHED IN CONTAINER.
- O. ALL PLANTS SHALL BE INSTALLED AS PER DETAILS.
- P. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR MORE OFTEN AS NEEDED DURING THE FIRST GROWING SEASON.
- Q. ALL PLANTING BEDS TO RECEIVE ORGANIC AND/OR INORGANIC MULCH MATERIALS AS NOTED ON PLANS.
- R. THE DAY PRIOR TO PLANTING, THE LOCATION OF ALL TREES AND SHRUBS SHALL BE STAKED FOR APPROVAL BY THE LANDSCAPE ARCHITECT.
- S. THE CONTRACTOR SHALL PRUNE ALL BRANCHES 6 FEET ABOVE FINISH GRADE ON ALL DECIDUOUS TREES 12 FEET OR TALLER.
- T. AREAS TO BE FILLED WITH INORGANIC MULCHES WITH A DIAMETER LESS THAN 1/4 INCH IN SIZE SHALL BE COMPACTED TO 85% PROCTOR DENSITY BEFORE MULCH IS PLACED.
- U. REFER TO SPECIFICATIONS FOR SPECIFIED PLANTING SOIL AND AMENDMENTS IN BOTH PLANTING BEDS AND TURF AREAS.
- V. ALL PLANTING BEDS TO RECEIVE 3" DEPTH SHREDDED HARDWOOD MULCH UNLESS SPECIFIED OTHERWISE. SUBMIT SAMPLE FOR ARCHITECT APPROVAL.
- W. SOD SHALL BE PLANTED AND ESTABLISHED, AS SPECIFIED, OVER ANY AREAS DISTURBED BY CONSTRUCTION. THE GRASS LIMITS LINES SHOWN ARE NOT ABSOLUTE. TURFGRASS PLANTING SHALL TAKE PLACE BEYOND THE LIMITS IF THE AREA IS DISTURBED.



C1 PLANTING PLAN - RETAINING WALL
1"=10'-0"



A1 BID ALTERNATE 'A' - PLANTING PLAN - FITNESS COURT
1"=10'-0"

BID ALTERNATE 'A'

BID ALTERNATE 'A' INCLUDES FITNESS COURT CONCRETE SLAB, DEMOLITION AND SITEWORK REQUIRED FOR INSTALLATION OF CONCRETE FITNESS COURT SLAB. REF. A1,C1/L-501 AND A1/L-503 FOR FITNESS COURT SLAB INSTALLATION DETAILS.

BID ALTERNATE 'B'

BID ALTERNATE 'B' INCLUDES INSTALLATION OF FITNESS COURT EQUIPMENT AND FITNESS COURT FLOOR TILES, EQUIPMENT AND TILES PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. REF. C1/L-503 AND A1,C1/L-504 FOR INSTALLATION DETAILS.

EXISTING IRRIGATION SYSTEM
CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING IRRIGATION SYSTEM. ANY DAMAGED IRRIGATION EQUIPMENT FROM DEMOLITION ACTIVITY IS THE RESPONSIBILITY OF CONTRACTOR AND DOES NOT CONSTITUTE ANY ADDITIONAL PAYMENT. OWNER WILL PROVIDE ANY REQUIRED PACKAGE TWO IRRIGATION SYSTEM MODIFICATIONS TO ACCOMMODATE SCOPE OF WORK WITHIN PACKAGE TWO.

PLANTING AND SOIL DETAILS
REF. L-505 FOR TYPICAL PLANTING AND SOIL DETAILS.

LEGEND

- SEGMENTAL RETAINING WALL. REF. B3/L-501
- EXISTING FENCE LINE
- EXISTING OVERHEAD ELECTRIC LINE

KEY NOTES

- AS INDICATED BY: (00)
- 1. SOLID SOD AS SPEC'D. EXTENTS NOT ABSOLUTE. CONTRACTOR SHALL REPLACE ALL SOD WITHIN GRADING EXTENTS OR CONSTRUCTION AREA.

PACKAGE II PLANT SCHEDULE

SHRUBS	QTY	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPREAD
	6	ILEX CORNUTA 'BURFORDII NANA' DWARF BURFORD HOLLY MATCHED, FULL, 5'-0" O.C.	#5	18"	18"
	88	SALVIA GREGGII AUTUMN SAGE MATCHED, FULL, 3'-0" O.C.	#3	18"	18"
GROUND COVERS		BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPREAD
		CYNODON DACTYLON 'TIFFWAY 419' BERMUDA GRASS 'TIFFWAY 419'	SOD		
		EUONYMUS COLORATUS PURPLE WINTERCREEPER 18" OC	#1	6"	12"
		SHREDDED HARDWOOD MULCH SHREDDED HARDWOOD MULCH		3" DEPTH	



Parkhill.com

Redding Trail
Package Two
Amenity Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1094.21
KEY PLAN

Package Two

Planting
Plan
L-106

FILE NAME: \\data1\projects\3\2021\10668.2103_DSGN01_DWG\060_LAND\106-1094.dwg LAYOUT NAME: L-106 PRINTED: Tuesday, January 11, 2022 - 9:39am USER: LGBeil 2/8/2022 3:44 PM



Redding Trail Package Two Amenity Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

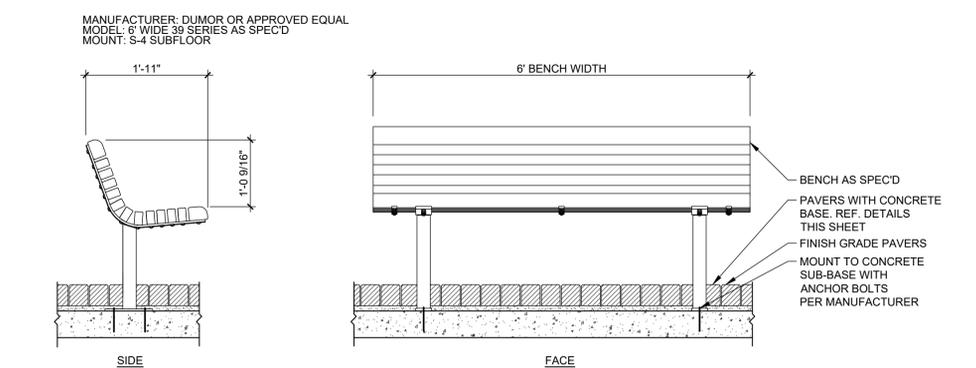
PROJECT NO.
1094.21

KEY PLAN

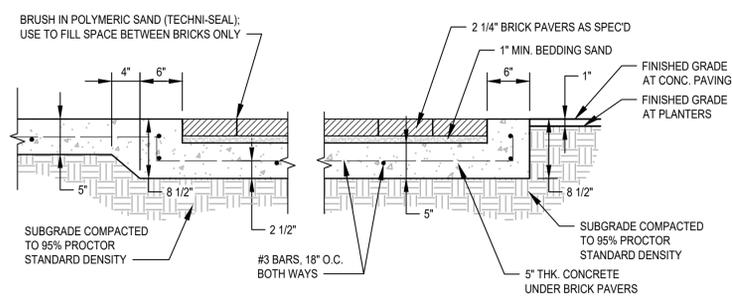
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-	01/12/2022	Bid Set

Package Two

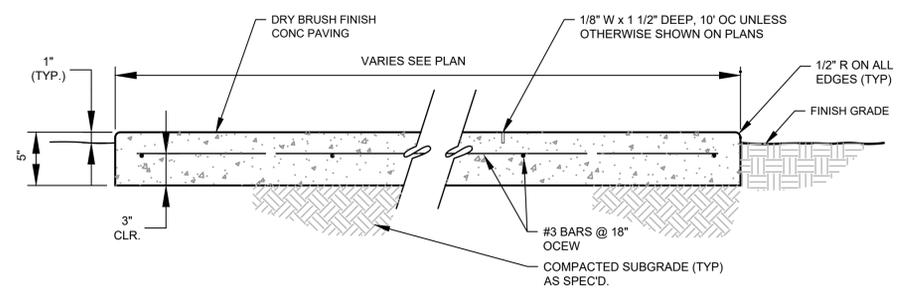
Landscape Details L-501



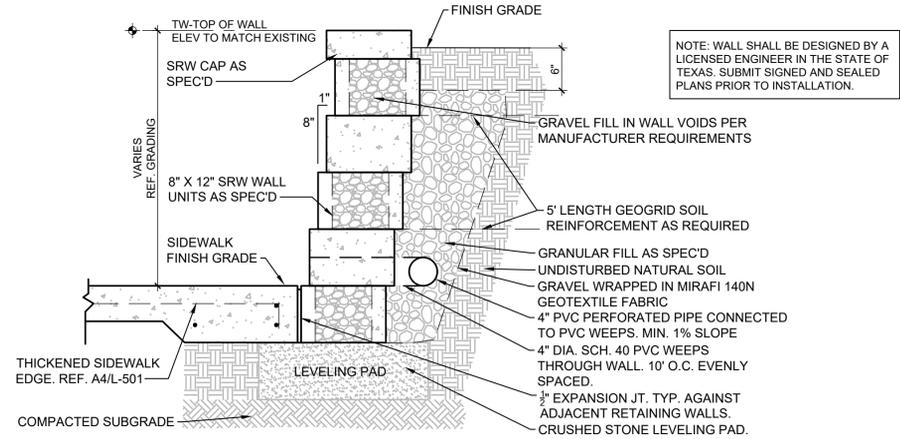
C1 BENCH
3/4"=1'-0"
BNCH



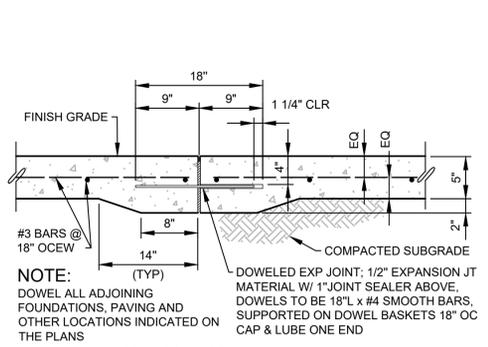
B1 BRICK PAVERS
1"=1'-0"
PVMT_BRICK_PAVERS



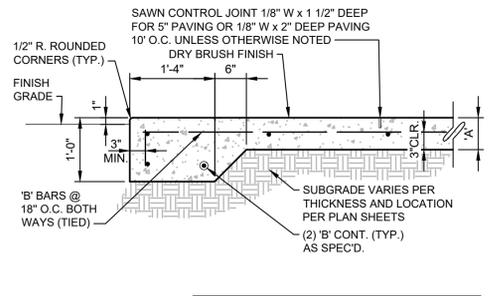
A1 5" PEDESTRIAN CONCRETE PAVING
1 1/2"=1'-0"
PVMT_CONC_5IN_PEDESTRIAN_PAVING



B3 SEGMENTAL RETAINING WALL
1"=1'-0"
WL_SRW_WALL

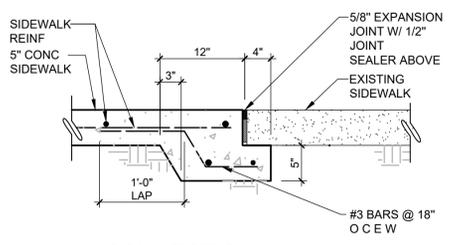


A3 WALK AND PLAZA EXPANSION JOINT
1"=1'-0"
PVMT_CONC_WALK_PLAZA_EXP_JOINT



A4 THICKENED CONCRETE EDGE
3/4"=1'-0"
PVMT_CONC_THICKENED_EDGE

REINFORCING SCHEDULE	
PAVING THICKNESS ('A')	REBAR SIZE ('B')
5"	#3



A5 CONNECTION TO EXISTING SIDEWALK
1"=1'-0"
PVMT_CONC_CONN_TO_EXIST

FILE NAME: \\data\Projects\3\2022\11\0666_2103_DSGN01_DWG\060_LAND\L-501-1094.dwg LAYOUT NAME: L-100 PRINTED: Tuesday, January 11, 2022 - 9:25am USER: LGBell

SLAB NOTES

(FOR FLAT TOP SLAB / TILE FLOOR INSTALLATION)

NOTES:

- CONCRETE:**
1. ALL SLAB CONCRETE TO BE 4,000 PSI AT 28 DAYS. A HIGH EARLY MIX MAY BE UTILIZED ONLY IF THE MIX DESIGN IS APPROVED BY THE ENGINEER.
 2. CEMENT SHALL CONFORM TO ASTM C 150, TYPE II.
 3. FINE AGGREGATE SHALL CONFORM TO ASTM C 33.
 4. COARSE AGGREGATE SHALL BE GRAVEL OR CRUSHED STONE CONFORMING TO ASTM C 33. COARSE AGGREGATE FOR FLOOR SLAB SHALL NOT EXCEED 1-1/2" AT ITS MAXIMUM WIDTH.
 5. WATER SHALL BE CLEAN AND FREE FROM INJURIOUS AMOUNTS OF OILS, ACIDS, ALKALIES, ORGANIC MATERIALS OR DELETERIOUS SUBSTANCES.
 6. AIR ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C 260.
 7. CALCIUM CHLORIDE ADMIXTURES, THIOCYANATE ADMIXTURES OR ANY ADMIXTURES CONTAINING MORE THAN 0.5% CHLORIDE IONS ARE NOT PERMITTED.
 8. REINFORCING STEEL AND CONCRETE TO BE PLACED IN ACCORDANCE WITH ACI 308 LATEST EDITION.
 9. THE ALLOWABLE CONCRETE SLUMP SHALL BE 3" PLUS OR MINUS 1" UNLESS SUPERPLASTICIZERS ARE USED. THE ENGINEER SHALL APPROVE SUPERPLASTICIZER USE.
 10. AS REQUIRED BY OWNER, SLUMP TEST SHALL BE MADE IN ACCORDANCE WITH ASTM C 143.
 11. NO CONCRETE SHALL BE PLACED WHEN THE ATMOSPHERIC TEMPERATURE IS BELOW 40° F WITHOUT PERMISSION OF THE ENGINEER.
 12. THE ENGINEER OR THE OWNER MAY ACCEPT OR REJECT ANY WORK THAT DOES NOT MEET THE REQUIREMENTS OF THESE NOTES OR THE PROJECT DRAWINGS.
 13. AS REQUIRED BY OWNER, CONTRACTOR SHALL MAKE ARRANGEMENTS FOR TESTING THE SLUMP, AIR CONTENT, AND CONCRETE CYLINDERS.
 14. AS REQUIRED BY OWNER, COMPRESSIVE STRENGTH OF THE CONCRETE CYLINDERS SHALL BE TESTED AT 3 DAYS, 7 DAYS AND 28 DAYS. APPROPRIATE NUMBER OF CYLINDERS SHALL BE COLLECTED TO PERFORM THE TESTING. CYLINDERS SHALL BE TESTED IN ACCORDANCE WITH ASTM C 39.
 15. SLAB TO BE POURED IN EITHER 20 FT X 20 FT SECTIONS (MAX) OR PROVIDE 1/2" SAW CUT CONTRACTION JOINTS AT 20 FT MAXIMUM SPACING. SAW CUT JOINTS TO BE MADE AS SHOWN AS THE CONCRETE HAS CURED SUFFICIENTLY TO ALLOW THE WORK WITHOUT DAMAGING THE CONCRETE.
 16. CONFIRM ANCHOR PLACEMENT PRIOR TO CUTTING JOINTS. ENSURE 3" CLEARANCE BETWEEN ANCHOR CENTERS AND JOINT AND CUT JOINTS AS SHOWN ON PLAN VIEW.
 17. PROVIDE 4" TO 6" OF CRUSHER RUN GRAVEL AS SHOWN IN SECTION DETAIL.
 18. SOIL TO BE COMPACTED TO MEET THE REQUIREMENTS OF 95% MODIFIED PROCTOR.

REINFORCEMENT

1. INSTALL SLAB REINFORCING 6 X 6 X 6/16 WELDED WIRE MESH (WWM) PLACED IN THE CENTER OF THE SLAB TO EXTEND THROUGH ENTIRE SLAB. UTILIZE SUFFICIENT NUMBER OF CHAIRS TO MAINTAIN WWM POSITION.
2. INSTALL ADDITIONAL / UPGRADED REINFORCEMENT AS REQUIRED BY LOCAL CODE.
3. REINFORCING TO BE NEW BILLET STEEL MEETING THE REQUIREMENTS OF ASTM A618 IS GRADE 60.
4. PROVIDE WPPR BARRERS BELOW THE SLAB AS REQUIRED BY LOCAL CODE AND CONDITIONS.

CONCRETE FINISHING NOTES

1. THE FINISHED CONCRETE SURFACE SHOULD BE SLOPED AWAY FROM THE WALL. THE SURFACE SLOPE SHOULD BE 1/8" IN 12".
2. THE FINISHED CONCRETE SURFACE SHOULD BE SMOOTH TO PREVENT IRREGULARITIES, ROUGHNESS, OR OTHER DEFECTS THAT WOULD AFFECT THE FINISHED FLOOR SURFACE. THE SURFACE SHOULD BE FLAT TO THE EQUIVALENT OF 3/16" OVER 10'.
3. THE FINISHED CONCRETE SURFACE SHOULD HAVE A LIGHT BROOM FINISH TO PROVIDE THE BEST SURFACE FOR COURT SURFACE ADHESION.
4. IMPORTANT: FOR INSTALLATIONS THAT REQUIRE FLOORING INSTALLATION SOON (LESS THAN 30 DAYS) AFTER CONCRETE PLACEMENT, APPLICATION OF "SPRAYLOCK" PRODUCT SCP 327 OR EQUIVALENT IS REQUIRED. THE SPRAYLOCK PRODUCT WILL ALLOW FLOORING INSTALLATION AS SOON AS 14 DAYS AFTER CONCRETE PLACEMENT AND SPRAYLOCK APPLICATION. CONFIRM PRODUCT SELECTION WITH THE MANUFACTURER. APPLY SPRAYLOCK PRODUCT THE DAY OF THE CONCRETE PLACEMENT PER MANUFACTURER'S INSTRUCTIONS.

ANCHOR NOTES

1. FIELD VERIFY ALL ANCHOR LOCATION DIMENSIONS AND PATTERNS PRIOR TO DRILLING.
2. DRILL THROUGH TILE FLOOR (1" TILE THICKNESS) WHERE NECESSARY WITH APPROPRIATE DRILL BIT TO MATCH ANCHOR HOLE IN CONCRETE.
3. SEE ANCHOR DETAILS FOR APPLICABLE CONCRETE EMBEDMENT DEPTH AND HOLE DIAMETER.
4. STAINLESS STEEL MUST BE USED WHERE SPECIFIED.
5. COMPONENTS SPECIFIED AS HOT-DIP GALVANIZED MAY BE SUBSTITUTED WITH 304 SS COMPONENTS.
6. WHEN INSTALLING ANCHORS, TAKE CARE TO USE THREAD PROTECTORS TO PREVENT THREAD DAMAGE.

GENERAL

1. SITE PREPARATION REQUIREMENTS AND CONCRETE SLAB DESIGN SHOULD BE REVIEWED BY LOCAL CIVIL OR SOILS ENGINEER TO CONFIRM SUITABILITY BASED UPON SITE SPECIFIC NEEDS AND CONDITIONS.

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ANCHOR BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	NOTES
ANCHOR A	30	WALL ANCHOR	SEE ANCHOR DETAILS
ANCHOR B	28	DROP-IN ANCHOR	SEE ANCHOR DETAILS
ANCHOR C	48	MECHANICAL ANCHOR	SEE ANCHOR DETAILS
ANCHOR EPOXY	AS REQD	HILTI HIT-HY 200 FOR WALL ANCHORS (SEE ANCHOR DETAILS RE: ALTERNATE EPOXY)	SEE ANCHOR DETAILS

INSTALLATION SEQUENCE

(FOR FLAT TOP SLAB / TILE FLOOR INSTALLATION)

1. REVIEW ALL DRAWINGS INCLUDING ALL NOTES TO BECOME FAMILIAR WITH SEQUENCE AND DETAILS.
2. DURING INSTALLATION SEQUENCE, REFER TO AND COMPLY WITH APPLICABLE NOTES.
3. PREPARE AREA BELOW SLAB WITH COMPACTED SOIL AND GRAVEL PER PREP SECTION DETAIL.
4. BUILD FORMS FOR OUTER PERIMETER OF THE SLAB WITH DIMENSIONS PER SLAB PLAN AND SELECTED WIDTH OF OUTER BAND AROUND FITNESS COURT AREA.
5. INSTALL REINFORCEMENT STEEL PER THE REINFORCEMENT PREP DETAIL.
6. PLACE SPECIFIED CONCRETE PER THICKNESS SHOWN IN SECTION A-A AND SECTION B OF CONCRETE SLAB PLAN & CROSS-SECTION DRAWING.
7. FINISH CONCRETE TO THE SLOPE SPECIFIED FOR DRAINAGE.
8. ALLOW CONCRETE TO CURE FOR 3 DAYS MINIMUM PRIOR TO INSTALLING ANCHORS.
9. TILE FLOOR SHOULD BE INSTALLED PRIOR TO INSTALLING ANCHORS IN THE TILE FLOOR AREA.
10. PLACE ANCHORS PER WALL ANCHOR LOCATIONS DRAWING AND FLOOR ANCHOR LOCATIONS DRAWING. ANCHOR LOCATION DIMENSIONS ARE ORDINATE DIMENSIONS MEASURED FROM THE UPPER LEFT CORNER OF THE TILE FLOOR. CONFIRM CORRECT DIMENSIONS ARE USED FOR PLACING ANCHORS.
11. REFER TO TILE FLOOR ANCHOR DETAILS DRAWING FOR ANCHOR DRILLING DIAMETER AND DEPTH.
12. NOTE: MAKE SURE THE HAMMER DRILL IS VERTICAL WHEN DRILLING HOLES FOR ANCHORS.
13. DRILL HOLES IN TILE AND IN CONCRETE FOR ANCHORS USING TEMPLATES FOR HOLE PLACEMENT.
14. NOTE: FLOOR AND BOND STATION TEMPLATES WILL REQUIRE REBARS TO LOCATE ALL ANCHORS. REFER TO TEMPLATE NOTES FOR DETAILS OF SUPPLIED TEMPLATES.
15. INSTALL EPOXY ANCHORS TO THE DEPTH INDICATED UTILIZING THE SPECIFIED EPOXY AND THE MANUFACTURER'S EPOXY INSTALLATION INSTRUCTIONS.
16. INSTALL MECHANICAL ANCHORS TO THE DEPTH INDICATED. BE CAREFUL TO AVOID INSTALLING ANCHORS TOO DEEP FOR THE BOND STATIONS.

DATE: 3/15/2021
BY: MAXIMUS INNOVATIONS
NAME: TILE SLAB
REV: 7.1 PAGE 1/6

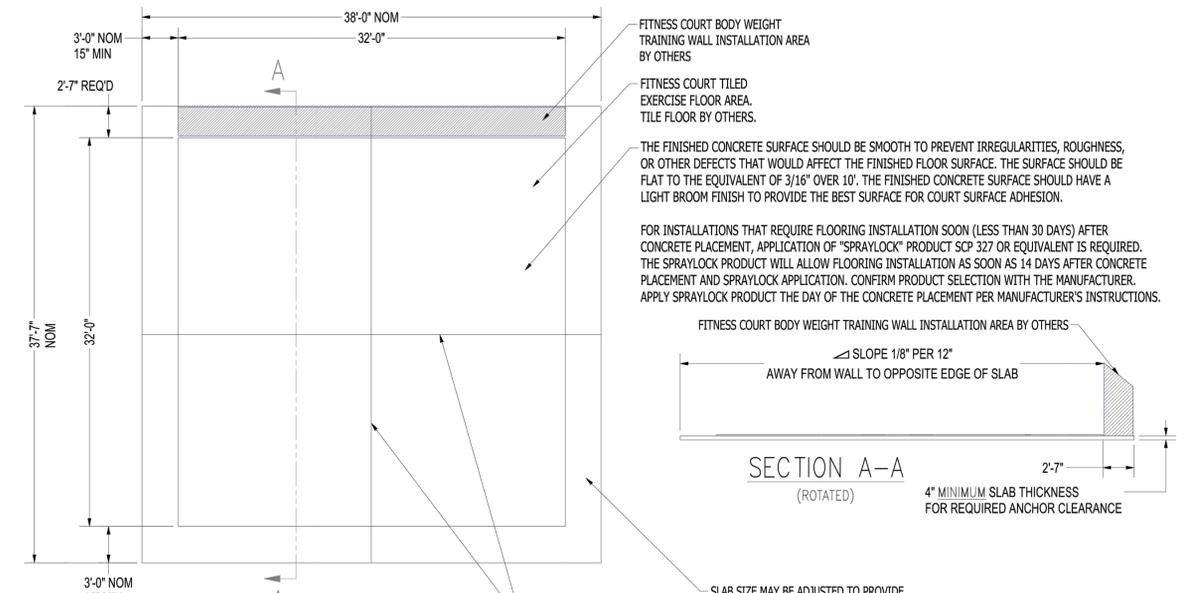
NATIONAL FITNESS CAMPAIGN
SAN FRANCISCO, CA

C1 BID ALTERNATE 'A' - FITNESS COURT SLAB

NOT TO SCALE

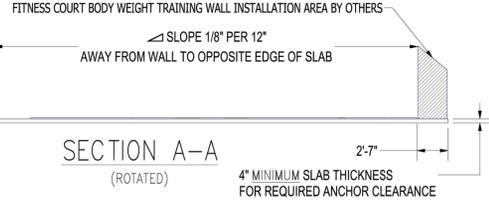
CONCRETE SLAB PLAN & CROSS-SECTION

(FOR FLAT TOP SLAB / TILE FLOOR INSTALLATION)



THE FINISHED CONCRETE SURFACE SHOULD BE SMOOTH TO PREVENT IRREGULARITIES, ROUGHNESS, OR OTHER DEFECTS THAT WOULD AFFECT THE FINISHED FLOOR SURFACE. THE SURFACE SHOULD BE FLAT TO THE EQUIVALENT OF 3/16" OVER 10'. THE FINISHED CONCRETE SURFACE SHOULD HAVE A LIGHT BROOM FINISH TO PROVIDE THE BEST SURFACE FOR COURT SURFACE ADHESION.

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SLAB SIZE MAY BE ADJUSTED TO PROVIDE THE BAND WIDTH SHOWN AROUND THE PERIMETER OF THE TILED COURT SURFACE. A NARROW 15" BAND MAY BE UTILIZED WITH A SHADE STRUCTURE. ANY SHADE STRUCTURE (BY OTHERS) SHALL HAVE ITS OWN INDEPENDENT FOUNDATIONS.

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DATE: 3/15/2021
BY: MAXIMUS INNOVATIONS
NAME: TILE SLAB
REV: 7.1 PAGE 2/6

NATIONAL FITNESS CAMPAIGN
SAN FRANCISCO, CA

A1 BID ALTERNATE 'A' - FITNESS COURT SLAB

NOT TO SCALE

Parkhill



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Redding Trail Package Two Amenity Improvements



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1094.21
KEY PLAN

DATE	DESCRIPTION
01/12/2022	Bid Set

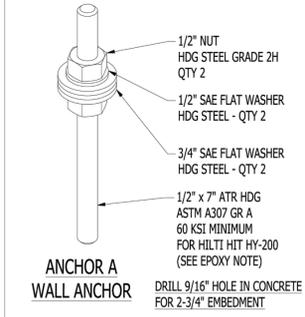
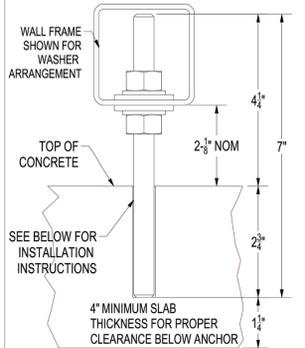
Package Two

Landscape Details L-502

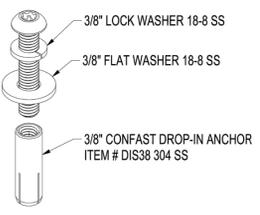
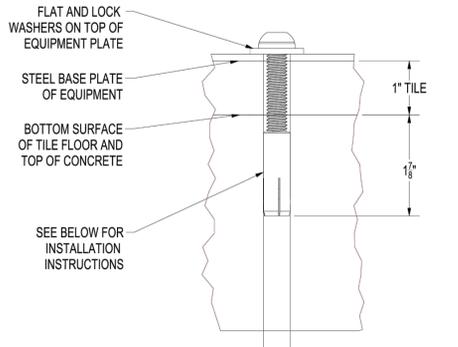
FILE NAME: \\data1\projects\3\2021\10668.2103_DSGN01_DWG\060_LAND\L-502-1094.dwg LAYOUT NAME: L-502 PRINTED: Tuesday, January 11, 2022 - 9:25am USER: LG8ell

ANCHOR DETAILS FOR TILE

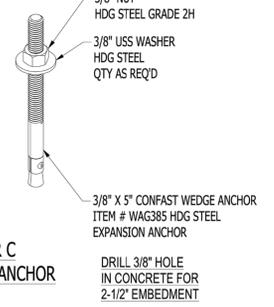
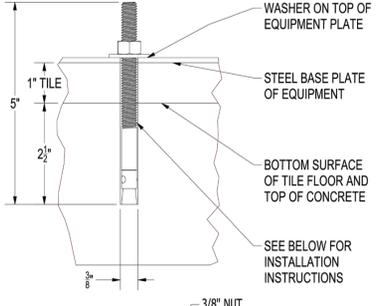
APPLIES TO TILE INSTALLATION ONLY.
REQUEST ALTERNATE DRAWING FOR FOUR-IN-PLACE
(ALSO SEE ANCHOR NOTES ON SLAB NOTES DRAWING)



ANCHOR A WALL ANCHOR
DRILL 9/16" HOLE IN CONCRETE FOR 2-3/4" EMBEDMENT



ANCHOR B DROP-IN ANCHOR
DRILL 1/2" HOLE IN CONCRETE FOR 1 - 9/16" EMBEDMENT



ANCHOR C MECHANICAL ANCHOR
DRILL 3/8" HOLE IN CONCRETE FOR 2-1/2" EMBEDMENT

- ANCHOR HOLE INSTRUCTIONS**
1. DRILL HOLES FOR ANCHORS TO SPECIFIED DIAMETER AND DEPTH
 2. USE COMPRESSED AIR TO REMOVE CONCRETE DUST AND DEBRIS FROM HOLES PRIOR TO ANCHOR INSTALLATION
 3. REFER TO FITNESS COURT INSTALLATION INSTRUCTIONS FOR ADDITIONAL ANCHOR INSTALLATION STEPS

ANCHOR A EPOXY NOTE:
ANCHOR A MUST BE INSTALLED WITH THE ANCHOR EPOXY SPECIFIED OR ACCEPTABLE ALTERNATIVE. HILTI HY-200 IS RECOMMENDED. ALTERNATE EPOXY SIMPSON SET-XP IS ACCEPTABLE FOR NEW UNCRACKED CONCRETE ONLY. ALTERNATE EPOXY SIKA ANCHORFIX-2 IS ACCEPTABLE FOR NEW, UNCRACKED CONCRETE ONLY. FOLLOW EPOXY MANUFACTURER'S INSTALLATION PROCEDURES.

DATE: 3/15/2021
BY: MAXIMUS INNOVATIONS
NAME: TILE SLAB
REV: 7.1 PAGE 4/6

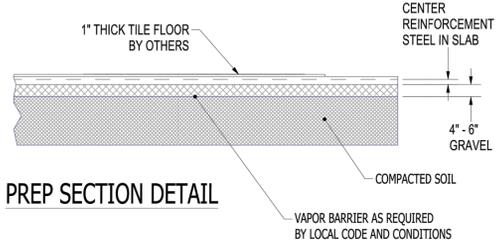
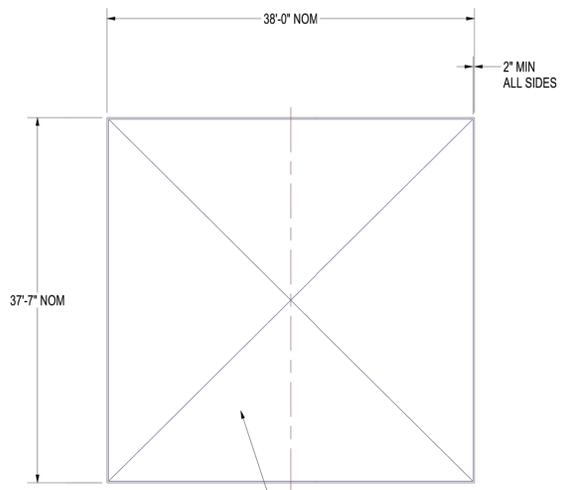
NATIONAL FITNESS CAMPAIGN
SAN FRANCISCO, CA

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C1 BID ALTERNATE 'B' - FITNESS COURT EQUIPMENT INSTALLATION
NOT TO SCALE

REINFORCEMENT / PREP DETAIL

(FOR FLAT TOP SLAB / TILE FLOOR INSTALLATION)



REINFORCING TO BE 6 X 6 X 6/6 WELDED WIRE MESH (WWM) PLACED IN THE CENTER OF THE SLAB TO EXTEND THROUGH ENTIRE SLAB. UTILIZE SUFFICIENT NUMBER OF CHAIRS TO MAINTAIN WWM POSITION. INSTALL ADDITIONAL REINFORCEMENT AS REQUIRED BY LOCAL CODE.

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DATE: 3/15/2021
BY: MAXIMUS INNOVATIONS
NAME: TILE SLAB
REV: 7.1 PAGE 3/6

NATIONAL FITNESS CAMPAIGN
SAN FRANCISCO, CA

A1 BID ALTERNATE 'A' - FITNESS COURT SLAB
NOT TO SCALE

Parkhill



Parkhill.com

**Redding Trail
Package Two
Amenity Improvements**



CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1094.21

KEY PLAN

#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

Package Two

**Landscape
Details
L-503**



01/12/2022

Parkhill.com

Redding Trail Package Two Amenity Improvements

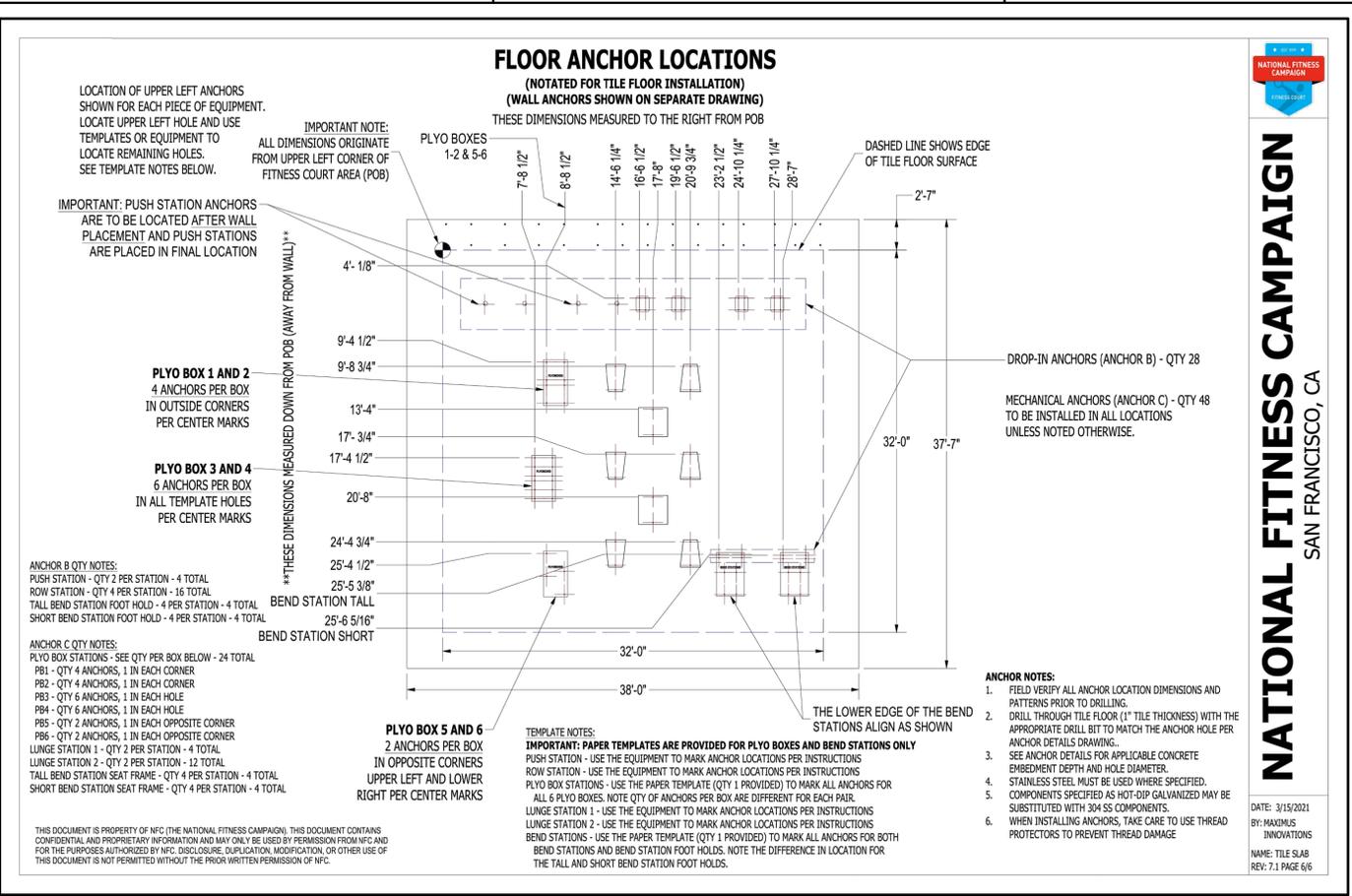


CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

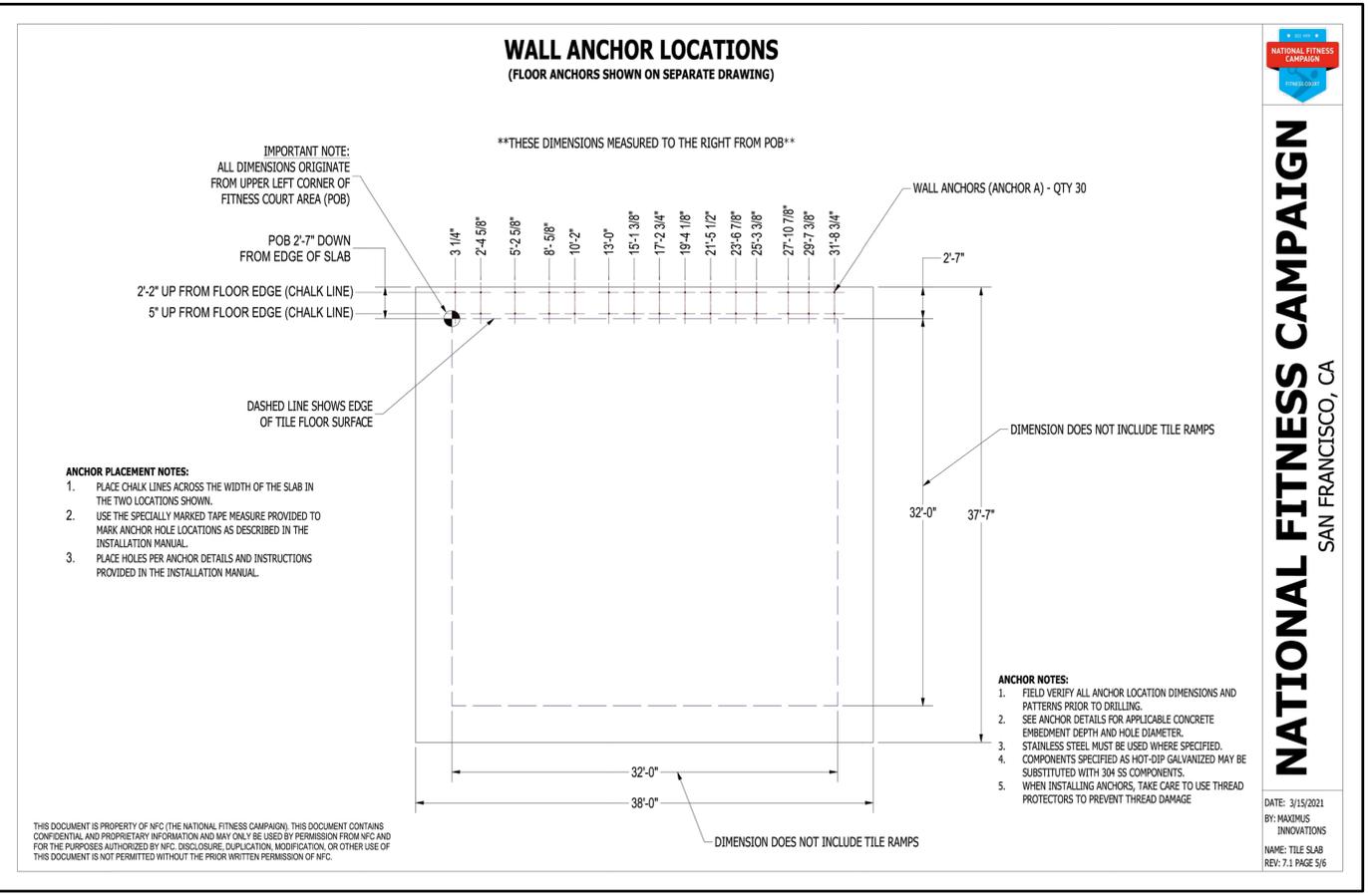
PROJECT NO.
1094.21
KEY PLAN

#	DATE	DESCRIPTION
-	01/12/2022	Bid Set

Package Two Landscape Details L-504



C1 BID ALTERNATE 'B' - FITNESS COURT EQUIPMENT INSTALLATION
NOT TO SCALE



A1 BID ALTERNATE 'B' - FITNESS COURT EQUIPMENT INSTALLATION
NOT TO SCALE

FILE NAME: \\data1\projects\3\2021\10668.2103_DSGN01_DWG\060_LAND\L-504-1094.dwg LAYOUT NAME: L-504 PRINTED: Tuesday, January 11, 2022 - 9:25am USER: LGBell



Redding Trail Package Two Amenity Improvements



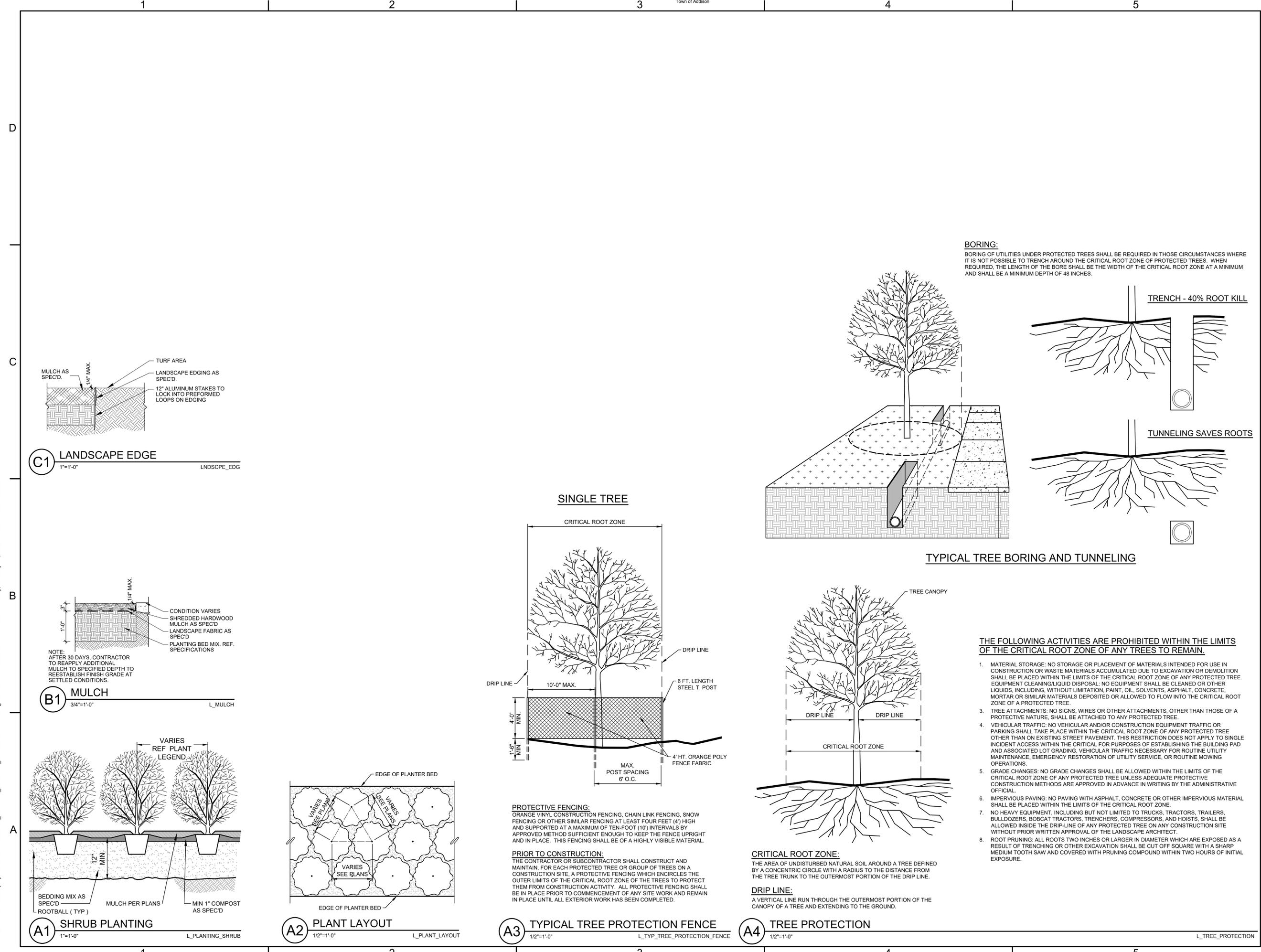
CLIENT
Town of Addison, Texas
16801 Westgrove Drive
Addison, TX 75001

PROJECT NO.
1094.21

KEY PLAN

01/12/2022 Bid Set

Package Two Landscape Details L-505



FILE NAME: \\data1\projects\3\2022\110668.2103_DSGN01_DWG060_LAND_L-505-1094.dwg LAYOUT NAME: L-505 PRINTED: Tuesday, January 11, 2022 - 9:25am USER: LGBell



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.

TOWN OF ADDISON, TEXAS
CONTRACTOR INSURANCE REQUIREMENTS & AGREEMENT

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: (a) each accident (b) Disease Policy Limits (c) Disease each employee	Statutory Limits per occurrence Each accident \$1,000,000 Disease Policy Limits \$1,000,000 Disease each employee \$1,000,000	<u>TOWN OF ADDISON to be provided a WAIVER OF SUBROGATION AND 30 DAY NOTICE OF CANCELLATION</u> or material change in coverage. Insurance company must be A-:VII rated or above.
2. Commercial (Public) General Liability to include coverage for: a) Bodily Injury b) Property damage c) Independent Contractors d) Personal Injury e) 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	<u>TOWN OF ADDISON to be listed as ADDITIONAL INSURED and provided 30 DAY NOTICE OF CANCELLATION</u> or material change in coverage. Insurance company must be A-:VII rated or above.
3. Business Auto Liability to include coverage for: a) Owned/Leased vehicles b) Non-owned vehicles c) Hired vehicles	Combined Single Limit \$1,000,000	<u>TOWN OF ADDISON to be listed as ADDITIONAL INSURED and provided 30 DAY NOTICE OF CANCELLATION</u> or material change in coverage. Insurance company must be A-:VII-rated or above.

Certificate of Liability Insurance forms (together with the endorsements necessary to meet the requirements and instructions contained herein) may be **faxed** to the Purchasing Department: **972-450-7074** or **emailed to: purchasing@addisontx.gov**. Questions regarding required insurance should be directed to the Purchasing Manager.

With respect to the foregoing insurance,

- 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, Texas 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:** _____

Town of Addison

Indemnification Agreement

Contractor's Indemnity Obligation. Contractor covenants, agrees to, and shall DEFEND (with counsel reasonably acceptable to Owner), INDEMNIFY, AND HOLD HARMLESS Owner, its past, present and future elected and appointed officials, and its past, present and future officers, employees, representatives, and volunteers, individually or collectively, in both their official and private capacities (collectively, the "Owner Persons") and each being an "Owner Person"), from and against any and all claims, liabilities, judgments, lawsuits, demands, harm, losses, damages, proceedings, suits, actions, causes of action, liens, fees (including attorney's fees), fines, penalties, expenses, or costs, of any kind and nature whatsoever, made upon or incurred by Owner and/or Owner Person, whether directly or indirectly, (the "Claims"), that arise out of, result from, or relate to: (i) the services to be provided by Contractor pursuant to this Agreement, (ii) any representations and/or warranties by Contractor under this Agreement, (iii) any personal injuries (including but not limited to death) to any Contractor Persons (as hereinafter defined) and any third persons or parties, and/or (iv) any act or omission under, in performance of, or in connection with this Agreement by Contractor or by any of its owners, directors, officers, managers, partners, employees, agents, contractors, subcontractors, invitees, patrons, guests, customers, licensees, sublicensees, or any other person or entity for whom Contractor is legally responsible, and their respective owners, directors, officers, directors, officers, managers, partners, employees, agents, contractors, subcontractors, invitees, patrons, guests, customers, licensees, sublicensees (collectively, "Contractor Persons"). SUCH DEFENSE, INDEMNITY AND HOLD HARMLESS SHALL AND DOES INCLUDE CLAIMS ALLEGED OR FOUND TO HAVE BEEN CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE OR GROSS NEGLIGENCE OF OWNER OR ANY OTHER OWNER PERSON, OR CONDUCT BY OWNER OR ANY OTHER OWNER PERSON THAT WOULD GIVE RISE TO STRICT LIABILITY OF ANY KIND.

Contractor shall promptly advise Owner in writing of any claim or demand against any Owner Person related to or arising out of Contractor's activities under this Agreement and shall see to the investigation and defense of such claim or demand at Contractor's sole cost and expense. The Owner Persons shall have the right, at the Owner Persons' option and own expense, to participate in such defense without relieving Contractor of any of its obligations hereunder. This defense, indemnity, and hold harmless provision shall survive the termination or expiration of this Agreement.

The provisions in the foregoing defense, indemnity and hold harmless are severable, and if any portion, sentence, phrase, clause or word included therein shall for any reason be held by a court of competent jurisdiction to be invalid, illegal, void, or unenforceable in any respect, such invalidity, illegality, voidness, or unenforceability shall not affect any other provision thereof, and this defense, indemnity and hold harmless provision shall be considered as if such invalid, illegal, void, or unenforceable provision had never been contained in this Agreement. **In that regard, if the capitalized language included in the foregoing indemnity is so determined to be void or unenforceable, the parties agree that:**

(i) the foregoing defense, indemnity, and hold harmless obligation of Contractor shall be to the extent Claims are caused by, arise out of, or result from, in whole or in part, any act or omission of Contractor or any Contractor Persons; and

(ii) notwithstanding the provisions of the foregoing subparagraph (i), to the fullest extent permitted by law, Contractor shall INDEMNIFY, HOLD HARMLESS, and DEFEND Owner and Owner Persons from and against all Claims arising out of or resulting from bodily injury to, or sickness, disease or death of, any employee, agent or representative of Contractor or any of its subcontractors, regardless of whether such Claims are caused, or are alleged to be caused, in whole or in part, by the negligence, or any act or omission, of Owner or any Owner Persons, it being the expressed intent of Owner and Contractor that IN SUCH EVENT THE CONTRACTOR'S INDEMNITY, HOLD HARMLESS, AND DEFENSE OBLIGATION SHALL AND DOES INCLUDE CLAIMS ALLEGED OR FOUND TO HAVE BEEN CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE OR GROSS NEGLIGENCE OF OWNER OR ANY OTHER OWNER PERSON, OR CONDUCT BY OWNER OR ANY OTHER OWNER PERSON THAT WOULD GIVE RISE TO STRICT LIABILITY OF ANY KIND. The indemnity obligation under this subparagraph (ii) shall not be limited by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor under workers compensation acts, disability benefit acts, or other employee benefit acts.

I understand that the indemnification provisions are required of all Town of Addison Contracts. I have read the provisions and agree to the terms of these provisions.

Project/Bid#:

Company Name:

Signature:

Date:



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 (hereinafter 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.bidsync.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 BidSync 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: Send ORIGINAL INVOICE to address indicated on the purchase order. 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 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 an 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.

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: The Town of Addison uses BidSync to distribute and receive bids and proposals. There will be **NO COST** to the Contractor/Supplier for Standard bids or proposals. For **Cooperative Bids and Reverse Auctions ONLY**, the successful contractor/supplier agrees to pay BidSync a transaction fee of one percent (1%) of the total amount of all contracts for goods and/or services. **Cooperative Bids and Reverse Auctions** will be clearly marked on the bid documents. To assure that all contractors/suppliers are treated fairly, the fee will be payable whether the bid/proposal is submitted electronically, or by paper means. Refer to www.bidsync.com for further information.

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

5350 Beltline 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 _____ 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/cmb/cmbhub.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



Solicitation #22-56 Rebid Redding Trail Drainage and Amenity Improvements

2:00 P.M. Local Time

Addison Athletic Club

January 19, 2022

Attendance Sheet

Please print clearly. If attending on behalf of someone else who will be the primary contact for your company's bid,

please also provide that person's name and contact information.

(*Optional - Filling in these areas authorizes the Town to publically share this information.)

	Company Name	Name	(*Optional) Phone	(*Optional) E-Mail
1	Peckare Services LLC	Scott's Redman	714-597-5861	estate.serv@yellow.com
2	Town of Addison	W.I. Newcomer	978-450-7091	conclusion@addition.gov
3	TOA	Jenna Tisdall	—	—
4	Parkville	London Ball	—	—
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PERIMETER CONTROL - Compost Filter Sock

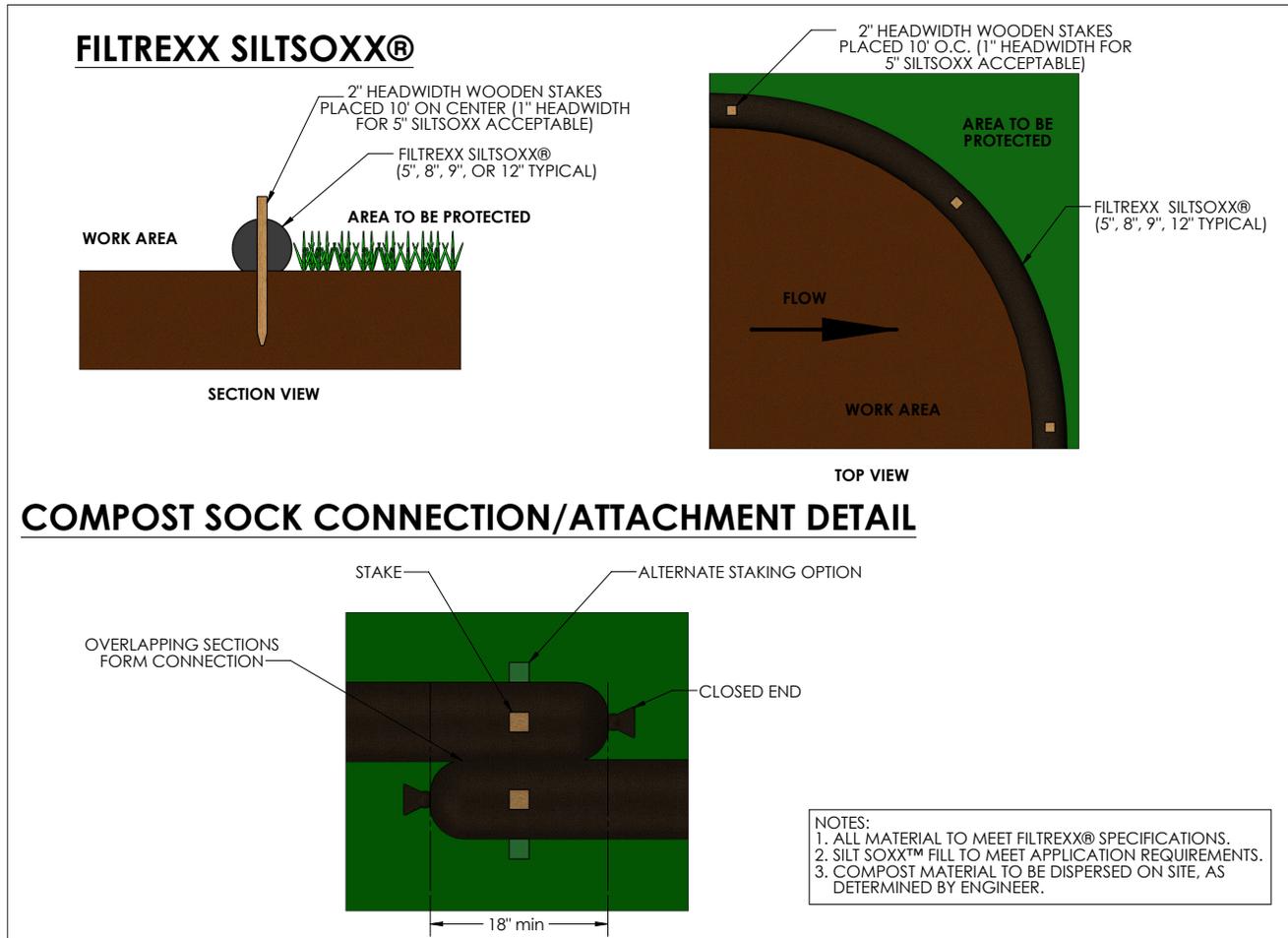
INSTALLATION

1. Perimeter control (Filtrex SiltSoxx[®]/Soxx) will be placed at locations indicated on plans and in a manner as directed by the Engineer or Manufacturer.
2. Perimeter control should be installed parallel to the base of the slope or other disturbed area. In challenging conditions (i.e., 2:1 slopes), a second perimeter control shall be constructed at the top of the slope, or staking may be increased.
3. Effective Soxx height in the field should be as follows: 5" diameter Soxx = 4" high; 8" diameter Soxx = 6.5" high; 12" diameter Soxx = 9.5" high; 18" diameter Soxx = 14.5" high; 24" diameter Soxx = 19" high.
4. Stakes should be installed through the middle of the perimeter control on 10 ft (3m) centers, using nominal 2 in (50mm) by 2 in (50mm) by 3 ft (1m) wooden stakes. 5" diameter Soxx may use 1" (25 mm) x 1" (25 mm) x 18" (0.5 m) wooden stakes. In the event staking is not possible, i.e., when perimeter control is used on highly compacted soils or impervious surfaces, sand bags (or equivalent) may be used to stabilize Soxx, as long as effective height is not compromised. On impervious surfaces, concrete blocks (or equivalent) may be used behind the perimeter control to help stabilize during rainfall/runoff events.
5. Alternatively, stakes may be installed directly behind the Soxx at a 90-degree angle to level ground (regardless of slope angle), where stakes are in direct contact with the downslope side of Soxx. If high runoff or sediment accumulation is expected, staking through the Soxx may be required.

6. Staking depth for sand and silt loam soils shall be 12 in (300mm), and 8 in (200mm) for clay soils.
7. Straighten or position the Soxx as needed on the ground, ensuring there is good ground contact and no void spaces under the Soxx.
8. Do not drag Soxx across rough surfaces. If dragging across a rough surface is necessary, place a barrier such as plastic or a tarp under Soxx to prevent tearing.
9. Loose compost may be backfilled along the upslope side of the perimeter control, filling the seam between the soil surface and the device, improving filtration and sediment retention.
10. If the perimeter control is to be left as a permanent filter or part of the natural landscape, it may be seeded at time of installation for establishment of permanent vegetation. The Engineer will specify seed requirements.

MAINTENANCE & DISPOSAL

1. The contractor shall remove sediment at the base of the upslope side of the perimeter when accumulation has reached 1/2 of the effective height of the sock, or as directed by the Engineer. Alternatively, a new perimeter control sock can be placed on top of and slightly behind the original one creating more sediment storage capacity without soil disturbance.
2. Perimeter control shall be maintained until disturbed area above the device has been permanently stabilized and construction activity has ceased.
3. The FilterMedia will be dispersed on site once disturbed area has been permanently stabilized, construction activity has ceased, or as determined by the Engineer.



Refer to Design Specification for complete application, design, installation, maintenance, and removal documentation.

Filtrex SiltSoxx® ORIGINAL

PURPOSE & DESCRIPTION

Filtrex SiltSoxx ORIGINAL is a pre-filled compost filter sock comprised of mesh material and certified FilterMedia™. Filtrex SiltSoxx ORIGINAL strength mesh is the most widely recognized and used product in the industry. Available in green/black stripe or tan.

APPLICATIONS

- Perimeter Control
- Inlet Protection
- Check Dams
- Slope Interruption

FOR ADDITIONAL INFORMATION

Refer to the **Filtrex Catalog** for full item listings.

Refer to **Filtrex Design Specifications** for complete application, design, installation, maintenance, and removal documentation at www.filtrex.com/specs

FIELD APPLICATION PHOTO REFERENCES



Filtrex SiltSoxx ORIGINAL used as Perimeter Control.

Filtrex SiltSoxx ORIGINAL Specifications

Product Name	SiltSoxx ORIGINAL
Mesh Material Type	Multi-Filament Polypropylene (MFPP) Photodegradable
Uses	standard sediment control applications
Mesh Opening Size	1/8"
Diameters	5", 8", 12", 18", 24"
Functional Longevity/ Project Duration ¹	up to 5 yr
Tensile Strength (ASTM D4595) ²	MD: 670 lbs TD: 423 lbs
Fill Material	Locally sourced FilterMedia™
Mesh Color	 green/thin black stripe  tan (5" & 8" only)
Mesh Sample	 
FilterMedia Sample	

¹Functional longevity ranges are estimates only. Site specific environmental conditions may result in significantly shorter or longer time periods.

²Tensile Strength is based on 12" diameter using ATSM D4595. See Filtrex TechLink #3342 for full tensile strength testing.

Filtrex SiltSoxx is in compliance with most state & federal agencies including:



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Question and Answers for Bid #22-56 - Rebid Redding Trail Drainage & Amenity Improvements

Overall Bid Questions

Question 1

What is the engineer's estimate for this project? (Submitted: Jan 18, 2022 3:07:46 PM CST)

Answer

- N/A at this time. (Answered: Jan 19, 2022 10:55:40 AM CST)

Question 2

Why is this project being re-bid? (Submitted: Jan 18, 2022 3:07:54 PM CST)

Answer

- Due to irregularities in all the first submittals. (Answered: Jan 19, 2022 10:55:40 AM CST)

Question 3

Who pays for construction materials testing? (Submitted: Jan 18, 2022 3:08:05 PM CST)

Answer

- The Town. (Answered: Jan 19, 2022 10:55:40 AM CST)

Question 4

Who pays for construction water usage? (Submitted: Jan 18, 2022 3:08:14 PM CST)

Answer

- The contractor. (Answered: Jan 19, 2022 10:55:40 AM CST)

Question 5

Are there any existing utility/ irrigation set of plans that can be provided for this project? (Submitted: Jan 27, 2022 9:59:11 AM CST)

Answer

- The plans we have the for irrigation are very old and there are concerns that there has been some changes overtime and the plans would not be accurate.

Staff is going to mark up on an aerial the location of the mainline and location of the controller. If available, staff can also meet onsite to run the system if contractors would like. Please, contact the Parks Department for scheduling. Availability is limited due to the holiday and there is no guarantee for staff availability.

*Q/A Copied from first bidding. (Answered: Jan 27, 2022 10:01:30 AM CST)

Question 6

1) Will the contractor be responsible for anything coming from resident backyards along the fence line(drainage, brick landings, etc..?)

2) Will the city consider letting us use Azure Lane as a construction entrance due to the fact we will be regrading

the entire west side of the trail from Azure Lane back to the main trail?

3) Will the contractor be required to install any temporary trail access when removing the sections of trail at the nodes?

4) Can the city mark the electrical running to all the light poles along the trail in within the work site limits?

5) The city will be responsible to removing, storing, and reinstalling the water fountains? **(Submitted: Jan 27, 2022 9:59:43 AM CST)**

Answer

- 1.) The Contractor will not be responsible for anything coming from the resident backyards but will be responsible for ensuring the existing residential fences are not damaged.

2.) Azure Lane and Les Grande may be used to bring in concrete and materials. The main construction entrance must be located off of Beltway.

3.) No

4.) The city will mark electrical for the selected contractor.

5.) The city will store the water fountains. The contractor will be responsible for removing and reinstalling

*Q/A Copied from first bidding. **(Answered: Jan 27, 2022 10:01:30 AM CST)**

Question 7

Hello on the project Redding Trail can the silt fence be substituted with a compose sock? What size or diameter of sock is recommended? Lastly is there a compose makeup? **(Submitted: Jan 28, 2022 1:11:42 PM CST)**

Answer

- A Compost Sock is an acceptable substitution for the silt fence as specified in Plans. Contractor shall follow specifications and installation instructions for "Filtrex SiltSoxx Original"™, or Engineer approved equal. Socks shall be a minimum of 12-inches in diameter. Additional product specifications are indicated in the attached product specifications. **(Answered: Jan 28, 2022 1:14:48 PM CST)**

Question 8

A new question, I believe I read in the spec. documents that I can recreate the bid tab form to give me enough space to write in the amounts, is this correct?

Lastly the bonding agent wants to know if there is a particular bonding form that they are to use? **(Submitted: Feb 1, 2022 2:43:34 PM CST)**

Answer

- Yes, you may create your own form BUT it needs to be easy to read and follow the same order and structure and the provided form. Please, also make sure it totals out.

For the bid bond, their standard form is acceptable. For the other forms, yes and we will provide them. **(Answered: Feb 1, 2022 2:43:53 PM CST)**

Question 9

I noticed that it says we need to provide the water tap and water meter. Are we not using the current meter and backflow device that waters that area now? **(Submitted: Feb 2, 2022 8:42:24 AM CST)**

Answer

- We have the water tap and meter listed under unit prices so we will have a bid number to add or subtract either way if it turns out the tap and meter is not required. **(Answered: Feb 2, 2022 8:42:48 AM CST)**

