

**CONTRACT DOCUMENTS
AND
SPECIFICATIONS
FOR**

**ALLEY RECONSTRUCTION 2023 PROJECT
CITY OF MESQUITE CONTRACT NO. 2024-006**

**FOR THE CITY OF MESQUITE, TEXAS
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION**



Prepared by:
**CITY OF MESQUITE
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION**

BID OPENING: NOVEMBER 2, 2023

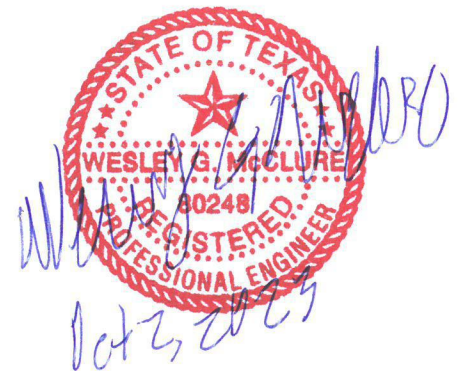


TABLE OF CONTENTS

TENTATIVE SCHEDULE	3
ADVERTISEMENT FOR BIDS	4
INSTRUCTIONS TO BIDDERS	5
STANDARDS OF CONDUCT	7
BID SUBMITTAL	9
PROPOSAL.....	9
BID FORM.....	10
DISADVANTAGED BUSINESS ENTERPRISE (DBE) INFORMATION	15
PROHIBITION ON CONTRACTS WITH COMPANIES BOYCOTTING ISRAEL.....	16
NON-COLLUSION STATEMENT	17
CONFLICT OF INTEREST QUESTIONNAIRE	19
BID BOND	21
BIDDER'S QUALIFICATION INFORMATION (APPARENT LOW BIDDER).....	23
QUALIFICATION STATEMENT OF BIDDER.....	24
REFERENCE STATEMENT OF BIDDER'S SURETY.....	29
BIDDER'S RELEASE OF QUALIFICATION INFORMATION.....	30
BIDDER'S LIST OF PROPOSED SUB-CONTRACTORS.....	31
NON-EXCLUSION AFFIDAVIT - SYSTEM FOR AWARD MANAGEMENT (SAM).....	33
CERTIFICATE OF INTERESTED PARTIES – FORM 1295.....	34
CONTRACT AND BOND FORMS.....	35
CONTRACT CHECKLIST	36
SUPPLEMENT TO ACORD 25	38
CONTRACT	39
WAGE RATE.....	44
PERFORMANCE BOND	49
PAYMENT BOND.....	51
CONTRACTOR'S AFFIDAVIT OF FINAL PAYMENT AND RELEASE	53
CONTRACT GENERAL PROVISIONS	54
ADDENDUM TO DIVISION 100, GENERAL PROVISIONS	55
SPECIAL PROVISIONS	71
TECHNICAL SPECIFICATIONS	73
APPENDIX	123

TENTATIVE SCHEDULE
FOR
ALLEY RECONSTRUCTION 2023 PROJECT
City of Mesquite Contract No. 2024-006

1 st Public Advertisement	Thursday, October 12, 2023
2 nd Public Advertisement	Thursday, October 26, 2023
Questions	2:00 P.M., October 26, 2023
Open Bids <i>(Bid openings are held on Tuesdays and Thursdays)</i>	2:00 P.M., November 2, 2023
Council Awards Contract (Assumes no bidding irregularities or other issues with the low bidder requiring extensive checking of Qualifications)	November 20, 2023
Notice to Proceed - Start Construction (Assumes rapid execution of contract documents by the Contractor with proper insurance and bonds)	January 2, 2024
Substantial Completion (180 Calendar Day Contract)	June 30, 2024

ADVERTISEMENT FOR BIDS

City of Mesquite Contract No. 2024-006

Sealed competitive bids or proposals as set forth and required in the plans and specifications (either of which shall hereinafter be referred to as the “Bid”) addressed to the Mayor and City Council of the City of Mesquite, Texas will be received at the office of Ryan Williams, Manager of Purchasing at City Hall, Purchasing Division, 2nd Floor, 757 North Galloway Avenue, Mesquite, Texas 75149 until **2:00 p.m. on Thursday November 2, 2023**, for the following: **Alley Reconstruction 2023 Project**

As set forth in the plans and specifications, the project is designed to replace approximately 6,500 linear feet of existing 12-ft wide concrete alley.

Instruction to Bidders, proposal forms, plans and specifications (the “Bid Documents”) may be obtained from the Purchasing Department Website and from Periscope Holdings.

The Bid shall be submitted on the form provided in the Bid Documents. Vendors should check the Mesquite Purchasing Department website, <http://www.cityofmesquite.com/674/Bid-Openings-Specifications-Conferences>, and Periscope Holdings, <https://www.cityofmesquite.com/678/Periscope-Bid-Openings>, to view documents relating to this Bid. Questions shall be submitted through Periscope Holdings and response will be posted through Periscope Holdings.

Bidder must submit, with their Bid, a Cashier’s check, Certified check or a Bid Bond from an approved surety company, in the amount of five percent (5%) of their Bid as a guarantee that the Bidder will enter into a contract and guarantee forms, if required, within 10 days after notice of award of contract.

The successful bidder must furnish both a Performance Bond and a Payment Bond, each in the amount of one hundred percent (100%) of the contract price, from an approved Surety company holding a permit from the State of Texas to act as surety, and acceptable according to the latest list of companies holding Certificates of Authority from the Secretary of the Treasury of the United States, or another Surety acceptable to the City.

Further information concerning the procurement may be obtained **by email only** from the City of Mesquite Engineering Division – Briana Santa Ana, Graduate Engineer, bsantaana@cityofmesquite.com

The right is reserved by the City of Mesquite to reject any and all bids.

CITY OF MESQUITE, TEXAS

Sonja Land
City Secretary

CITY OF MESQUITE CONTRACT NO.: 2024-006

Publish: October 12, 2023
October 26, 2023

INSTRUCTIONS TO BIDDERS

1. If you have questions regarding the preparation of your bid, you may contact Ryan Williams, Manager of Purchasing, City of Mesquite, telephone 972-216-6201. For technical questions **send an email to Briana Santa Ana, Graduate Engineer, bsantaana@cityofmesquite.com.**
2. Mailed bids must be submitted in sufficient time to be received and time-stamped at the location in the advertisement on or before the published date and time shown on the Advertisement for Bids. The City of Mesquite is not responsible for mail delivered from the post office. Bids received after the published date and time will not be considered and will be returned unopened.
3. The Bidder/Contractor shall at all times observe and comply with all Federal, State and local laws, ordinances and regulations which in any manner affect the Contract or the work, and shall indemnify and save harmless the City against any claim arising from the violation of any such laws, ordinances and regulations whether by the Bidder/Contractor or his employees.
4. Prices shall be filled in and extended on the bid sheets. In case of discrepancy between unit price and the extension, the unit price will govern. Contractors may utilize the Microsoft Excel spreadsheet bid form available on the City's Purchasing Division web site. No other electronic forms will be accepted. A hard copy printout is required with the bid.
5. Bidder shall complete all information requested and blanks provided shall be filled in beside or under each bid item. Failure to completely describe the item being bid may result in rejection of the bid.
6. Prices quoted in the bid shall prevail for the entire term of the contract.
7. The Contract, Performance Bond and Payment Bond forms are included for Bidders information so that Bidders may be familiar with their contents and requirements. ***Bidder shall not fill in or execute these forms at time of bid submittal.***
8. The City of Mesquite reserves the right to reject any and all bids, waive formalities and to make award of bid as may be deemed to the best advantage of the City. No bid may be withdrawn within one hundred and eighty (180) days after date of opening. The City may, at its sole discretion, release any Bidder and return the bid security prior to that date.
9. The City of Mesquite reserves the right to evaluate variations from these specifications. If exceptions are made, bidder shall state wherein the bid item fails to meet these specifications. Failure to completely describe the item being bid may result in rejection of your bid.
10. Any ambiguity in the bid as a result of omission, error, lack of clarity or non-compliance by the Bidder with specifications, instructions and all conditions shall be construed in favor of the City.
11. Quantities are estimated. It is specifically understood and agreed that these quantities are approximate and any increase or decrease in quantities may result in contract adjustments per General Provision 104.2.
12. Disadvantaged business/HUB vendors listed with the Office of Small Business Assistance of the General Services Commission are requested to provide a copy of their current certificate with the bid.
13. Bidders shall complete the non-collusion statement included in the bid.

14. All BIDDERS must submit **with the bid**, either a Bid Bond provided herein, Cashier's Check or Certified Check in the amount of 5% of the total bid per General Provision Section 102.5.
15. Bidders shall fill out the following forms, as noted in the bid and attach them to their bid and mail or deliver them prior to the bid closing date and time to the City of Mesquite Purchasing Division, City Hall, 757 North Galloway Avenue, Mesquite, Texas 75149:
- Bid Form (Proposal).
 - Disadvantaged Business Enterprises (DBE) Information.
 - Prohibition On Contracts with Companies Boycotting Israel – House Bill 89.
 - Non-Collusion Statement.
 - Conflict of Interest Questionnaire (CIQ).
 - Bid Bond.
16. The **apparent low bidder** shall complete and deliver to the Engineering Division and City's Consulting Engineer **within 48-hours after the bid opening**, the following **Bidder's Qualification Information** documents:
- Qualification Statement of Bidder. If additional space is needed, please use attachments.
 - Reference Statement of Bidder's Surety.
 - Bidder's Release of Qualification Information.
 - Bidder's List of Proposed Sub-contractors.
 - Financial Statement Reviewed or Audited by an Independent Certified Public Accountant (CPA) in accordance with Generally Accepted Accounting Principles (GAAP), prepared in the last 12-months for the bidder's company.
 - Non-Exclusion Affidavit – System for Award Management (SAM).
 - Certificate of Interested Parties (Form 1295)
 - IRS W9 Form – a pdf version of this form can be downloaded from the IRS website.
 - Secretary of State Filing Certificate.

All nine (9) documents shall be delivered to the Engineering Division and City's Consulting Engineer as a single, complete package. No one form or statement will be accepted individually.

If a project is a "joint venture", all partners in the joint venture shall complete the qualification forms.

END OF SECTION

STANDARDS OF CONDUCT

The City of Mesquite conducts business with the public, business partners, vendors and contractors under a set of rules to ensure that all City officials and employees discharge their duties in a manner designed to promote public trust and confidence in our city. This code of ethics, titled Standards of Conduct, is taken from the Mesquite City Code, Chapter 2, Article IV, Sec 2-123.

The City wants you to be aware of the rules that its employees are required to follow while performing their services to you. A violation of state or federal statutes may occur if these rules are broken. It is hoped that by outlining these rules for you, your experience in dealing with the City of Mesquite will be both rewarding and satisfactory.

Acceptance of Gifts or Gratuities

Accepting gifts or gratuities by employees in consideration for the performance of their duties, or as an appreciation for their performance, is strictly prohibited.

- Please do not offer employees any gift, loans or any other thing of value.
- Employees may not receive any fee or compensation for their services from any sources other than the City, so please don't offer.
- Please do not offer to buy meals for employees.
- Employees may accept coffee, tea, soft drinks, snacks, etc. when attending meetings in your office.
- Letters to supervisors for exceptional service by employees are always welcome.

Conflicts of Interest

Employees are prohibited from engaging in any outside activities that conflict with, or have the appearance of conflicting with, the duties assigned to them in the employment of the City.

- Please do not ask employees for any special favor or consideration that is not available to every other citizen.
- Please do not ask an employee to disclose any information that is not available to every other citizen through normal public information channels.
- Please do not offer to compensate the employee by offering to hire, or do business with any business entity of the employee or family member
- Do not ask employees to represent you or your company or make any recommendations on your behalf other than those that are a part of their official duties with the City.
- Please do not ask employees to endorse the products or services of your company.
- Please do not ask employees to hand out or post advertising materials.

Solicitation by City Employees

Employees may not solicit gifts, loans, or any other items of value from people doing City business that will be used by them personally.

- If you are asked to pay a fee for services that you believe is improper or illegal, please contact the City's ethic's officer at **972-329-8723**. (Payments should only be made to designated cashiers or clerks.)
- Employees are prohibited from taking retaliatory action against you for failing to comply with any request unless the request is within the scope of the employee's official duties for the City.

Use of City Equipment, Facilities and Resources

Use of City equipment, facilities and resources is authorized only for City purposes and for those activities permitted by City ordinance and policy.

- Please do not ask employees to use City equipment to run errands or perform tasks for your benefit.
- Employees may not perform tasks, nor conduct any business not related to their official duties while on City time.

Your Rights and Expectations

When dealing with employees of the City of Mesquite you have the right to honest, fair and impartial treatment. You may expect prompt, courteous and professional service from our employees who are expected to understand and practice good customer service skills. Employees are tasked to uphold the public trust through the ethical performance of their duties. We understand that the enforcement of regulatory guidelines and codes may sometimes be a cause for concern; however, you may rest assured that we are responsible to all of the citizens of Mesquite and our goal is to serve them to the best of our ability.

Should you have any concerns or questions concerning this information or the conduct of any of our employees please contact the City's ethics officer at 972-329-8723. All calls to the City's ethics officer are confidential and your name (or any other identifying information) will not be disclosed.

Cliff Keheley
City Manager

BID SUBMITTAL
PROPOSAL

To: The Honorable Mayor and City Council Members
Purchasing Office – City Hall, 2nd Floor
City of Mesquite
757 N. Galloway Avenue
Mesquite, Texas, 75149

Pursuant to the Advertisement for Bid, Proposal, Contract, Bond(s), General Provisions, Special Provision(s), and Requirements and the Plans and Technical Specifications, the undersigned Bidder hereby proposes to do all the work and furnish all necessary superintendence, labor, machinery, equipment, tools and materials, and to complete all the work upon which he bids, as provided by the Specifications, and binds himself, on acceptance of the proposal, to execute a contract and bonds, according to the City of Mesquite forms, for performing and completing the said work within the required time, and furnish all guarantees, for the following prices, and the undersigned certifies that the bid prices contained in this proposal have been carefully checked and are submitted as correct and final, to wit:

ALLEY RECONSTRUCTION 2023 PROJECT
CITY OF MESQUITE CONTRACT NO. 2024-006

BID FORM

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with CITY in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.
2. Bidder accepts all of the terms and conditions of the Advertisement for Bids and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. The Bid will remain subject to acceptance for one hundred and eighty days (180) after the Bid opening date, or for such longer period of time that Bidder may agree to in writing upon request of CITY.
3. In submitting this Bid, Bidder represents, as set forth in the Agreement, that:
 - A. Bidder has examined and carefully studied the Bidding Documents and the other related data identified in the Bidding Documents.
 - B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, and performance of the Work.
 - C. Bidder is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress and performance of the Work.
 - D. Bidder has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site.
 - E. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto.
 - F. Bidder does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the prices bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.
 - G. Bidder is aware of the general nature of work to be performed by CITY and others at the Site that relates to the Work as indicated in the Bidding Documents.
 - H. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.
 - I. Bidder has given CITY written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by CITY is acceptable to Bidder.

- J. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.
- 4. Bidder further represents that this Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any individual or entity to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over CITY.
- 5. Bidder will complete the Work in accordance with the Contract Documents for the following prices:

**ALLEY RECONSTRUCTION 2023 PROJECT
CITY OF MESQUITE CONTRACT NO. 2024-006**

MESQUITE, TEXAS

ITEM NO	BID QTY	UNITS	ITEM DESCRIPTION	UNIT PRICE	AMOUNT
1	1	LS	MOBILIZATION (MAX 5% OF BID TOTAL)	\$	\$
2	1	LS	TRAFFIC CONTROL IMPLEMENTATION AND MAINTENANCE	\$	\$
3	8,700	SY	REMOVE AND REPLACE 8" THICK, 4000 PSI REINFORCED CONCRETE PAVEMENT, 12-FT WIDE ALLEY, COMPLETE IN PLACE	\$	\$
4	300	SY	REMOVE AND REPLACE 6" THICK, 4000 PSI REINFORCED CONCRETE PAVEMENT, DRIVE APPROACH (AS IDENTIFIED BY CITY), COMPLETE IN PLACE	\$	\$
5	2,700	TONS	FURNISH AND INSTALL FLEXIBLE BASE, TxDOT ITEM 247, GRADE 1, TYPE D, CRUSHED RECYCLED CONCRETE, INCLUDING EXCAVATION AND COMPACTION	\$	\$
6	2,900	SY	FURNISH AND INSTALL SODDING, COMPLETE IN PLACE	\$	\$
7	1	LS	OWNER'S RISK MITIGATION ALLOWANCE	\$	\$

TOTAL BASE BID (Items 1 to 7) \$ _____

1. Materials incorporated into the Project: \$ _____

2. All other charges: \$ _____

NOTE: Materials and all other charges incorporated into the **ALLEY RECONSTRUCTION 2023 PROJECT CONTRACT NO. 2024-006** must equal base bid amount.

Pre-bid Inspection

The undersigned declares that he has personally inspected the site where the work is to be performed and that he has informed himself of all:

- (1) surface and subsurface conditions, constraints, and facilities which may in any way affect the work, in terms of cost, time, and/or constructability;
- (2) quantities, types, and nature(s) of materials to be incorporated into the work;
- (3) types and specialties of equipment, tools, labor, and superintendence required to perform the work;
- (4) other matters which in any way will affect the work and/or the performance of the work;
- (5) project plans, specifications and other project documents.

Commencement and Execution

The undersigned bidder agrees to commence the work on or before the date so stated in the written notice to proceed and to diligently perform all of the work and to substantially complete the work **within 180 calendar days**. Time shall commence on the first day of move-in, but in no case later than the date so stated in the written notice to proceed.

The Time of Construction as given above shall include all work related to this project. Included in the above Time and Construction shall be the necessary utility work involved with the franchise utility companies (i.e. Natural Gas, Telecommunications, Cable Television, Electrical Power, etc.).

The right is reserved by the City as is advantageous to the City, to reject any and all bids, award a contract based upon submitted bids, or to re-bid the contract and to waive any and all formalities. Bidder understands and agrees that the unit prices provided above shall be used for all additions and deletions from the accepted option.

Bidder submits as guarantee that he will execute and issue the required contracts, bonds, insurance, and other required agreements and documents, as set forth under the contract, and general and special provisions of agreement, cashier's check or bid bond payable in full without conditions and upon demand to the City of Mesquite in the amount of:

_____ (\$ _____).

representing 5% of the Bidder's total base bid price.

Bidder understands and agrees that, should he fail to execute and issue the contract, bonds, insurance, other agreements, and other documents as set forth under the general and special provisions of agreement for that certain contract known as the **ALLEY RECONSTRUCTION 2023 PROJECT CONTRACT NO. 2024-006** the City will cash or demand payment under the bid bond for payment of agreed upon liquidated damages. Bidder understands and agrees that, for bidding purpose only, liquidated damages shall be 5% of the Bidder's bid proposal, and that upon execution of the Contract, liquidated damages shall be as stated in the General Provisions.

Addenda

Contractor acknowledges receipt and incorporation into the bid of addendums as listed below:

Addendum No. 1 – Acknowledgement of Receipt: _____ **(initial)**

Addendum No. 2 – Acknowledgement of Receipt: _____ **(initial)**

Addendum No. 3 – Acknowledgement of Receipt: _____ **(initial)**

Addendum No. 4 – Acknowledgement of Receipt: _____ **(initial)**

Proposal Approval:

Company Name

Signature:

Printed Name:

Title:

Company Address

Telephone

City State Zip Code

(If Bidder is a Corporation Seal Proposal with Corporate Seal)

SEAL

DISADVANTAGED BUSINESS ENTERPRISE (DBE) INFORMATION

Disadvantaged Business Enterprises (DBEs) are encouraged to participate in City of Mesquite's bid. The Purchasing Office will provide additional clarification on specifications, assistance with Bid Proposal Forms and further explanation of bidding procedures to those DBEs who request it.

Representatives from DBE companies should identify themselves as such and submit a copy of the Certification.

The City of Mesquite recognizes the certifications of both the State of Texas General Services Commission HUB Program and the North Central Texas Regional Certification Agency. All companies seeking information concerning DBE certification are urged to contact

State of Texas HUB Program
General Services Commission
PO Box 13047
Austin, TX 78711-3047
512-463-5872

OR

North Central Texas
Regional Certification Agency
624 Six Flags Drive, Suite 216
Arlington, TX 76011
817-640-0606

If your company is already certified, attach a copy of your certification to this form and return with your bid.

FIRM NAME SUBMITTING THE BID

REPRESENTATIVE

TITLE OF AUTHORIZED REPRESENTATIVE

ADDRESS

CITY, STATE, ZIP

TELEPHONE NUMBER

FACSIMILE NUMBER

Indicate all that apply:

- Minority-Owned Business Enterprise
- Women-Owned Business Enterprise
- Disadvantaged Business Enterprise

NON-COLLUSION STATEMENT

The undersigned affirms that they are duly authorized to execute this contract, that this company, corporation, firm, partnership or individual has not prepared this bid in collusion with any other bidder and that the contents of this bid as to prices, terms or conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any other person engaged in this type of business prior to the official opening of this bid.

Name of Company _____

Address _____

Phone _____

Email _____

Fax _____

Bidder (Signature) _____

Bidder (Print Name) _____

Position with Company _____

Signature of
Company Official
Authorizing This Bid _____

Company Official
(Printed Name) _____

Official Position _____

SUBSCRIBED AND SWORN TO BEFORE ME, this _____ day of _____, 2023.

(Notary Public in and for the State of Texas)

(Printed Name of Notary)

My commission expires _____

CONTRACTING WITH THE CITY OF MESQUITE

Updated: January 8, 2016

**Conflict of Interest Questionnaire
And Disclosure of Interested Parties (Form 1295)**

YOU WILL BE REQUIRED TO COMPLY WITH THE FOLLOWING:

Chapter 176 of the Texas Local Government Code is an ethics law that was initially enacted by the Texas Legislature with HB 914 in 2005 that requires disclosure of employment and business relationships local government officers may have with contractors, consultants and vendors who conduct business with local government entities. The law applies to any written contract for the sale or purchase of real property, goods or services. Further information regarding Texas Conflict of Interest laws and the **Conflict of Interest Questionnaire** (Form CIQ) can be found at the Texas Ethics Commission web site at the following web address:

https://www.ethics.state.tx.us/filinginfo/conflict_forms.htm

PLEASE COMPLETE THE ATTACHED FORM CIQ AND SUBMIT WITH YOUR RESPONSE.

Section 2252.908 of the Texas Government Code was enacted in 2015, by the Texas Legislature pursuant to HB 1295, which provides that a governmental entity may not enter into certain contracts with a business entity on or after January 1, 2016, unless the business entity submits a disclosure of interested parties (Form 1295) to the governmental entity at the time the business entity submits the signed contract to the governmental entity. Further information regarding the disclosure of interested parties law and Form 1295 can be found at the Texas Ethics Commission web site at the following web address:

<https://www.ethics.state.tx.us/filinginfo/1295/>

PLEASE DO NOT COMPLETE FORM 1295 UNTIL YOU HAVE BEEN NOTIFIED OF CONTRACT AWARD AND REQUESTED TO ELECTRONICALLY FILE FORM 1295 WITH THE TEXAS ETHICS COMMISSION.

CONFLICT OF INTEREST QUESTIONNAIRE
For vendor doing business with local governmental entity

FORM CIQ

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 Name of vendor who has a business relationship with local governmental entity.

2 **Check this box if you are filing an update to a previously filed questionnaire.** (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 Name of local government officer about whom the information is being disclosed.

 Name of Officer

4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

Yes No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

Yes No

5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.

6 Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7

 Signature of vendor doing business with the governmental entity

 Date

CONFLICT OF INTEREST QUESTIONNAIRE
For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at <http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm>. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that

(i) a contract between the local governmental entity and vendor has been executed;

or

(ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

(A) 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

(2) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or

(C) of a family relationship with a local government officer.

BID BOND

Bond No.: _____
(by Surety)

STATE OF TEXAS §
 § **KNOW ALL MEN BY THESE PRESENTS:**
COUNTY OF DALLAS §

THAT _____, of the City of _____,
_____ County, State of Texas (hereinafter referred to as "Principal"), and
_____, authorized under the laws of the State of Texas to act as Surety
on bonds for principals (hereinafter referred to as "Surety") are held and firmly bound unto the City of
Mesquite (hereinafter referred to as "City") in the penal sum of \$_____ (an
amount equal to 5% of the approximate total amount of the bid or if the bid is based upon alternates and/or
addenda, at least 5% of the greatest amount bid by the bidder or Principal herein as evidenced in the Bid
Proposal) for the payment whereof, the said Principal and Surety bind themselves, and their heirs,
administrators, executors, successors and assigns, jointly and severally, by these presents;

WHEREAS the Principal has submitted on or about this date, a bid proposal offering to perform the
following: **ALLEY RECONSTRUCTION 2023 PROJECT CITY OF MESQUITE CONTRACT NO. 2024-
006** in accordance with the specifications and terms and conditions related thereto, to which reference is
hereby made;

NOW, THEREFORE, the condition of this obligation is such that if the said Principal's offer as stated
in the bid proposal is accepted by the City, and the said Principal executes and returns to the City the
number of original counterparts of the contract required by the City, on the forms provided by the City, for
the materials, equipment and/or services described herein and also executes and returns the same number
of Performance, Payment and Maintenance Bonds, if required, on the forms provided by the City, within
the time provided in the specifications, then this obligation is null and void, otherwise, it is to remain in full
force and effect;

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument on this _____ day of _____, 2023.

PRINCIPAL:

Signature

Typed or Printed Name

Title: _____

Company: _____

Address: _____

SURETY:

Signature

Typed or Printed Name

Title: _____

Company: _____

Address: _____

SURETY'S DALLAS COUNTY REGISTERED AGENT FOR SERVICE (REQUIRED):

Type or Printed Name

Street Address (P.O. Box is not acceptable)

City, State, and Zip Code

Dallas County Telephone No.

BIDDER'S QUALIFICATION INFORMATION **(APPARENT LOW BIDDER)**

1. The **apparent low bidder** shall complete and deliver to the Engineering Division and City's Consulting Engineer **within 48-hours after the bid opening**, the following **Bidder's Qualification Information** documents:
 - Qualification Statement of Bidder. If additional space is needed, please use attachments.
 - Reference Statement of Bidder's Surety.
 - Bidder's Release of Qualification Information.
 - Bidder's List of Proposed Sub-contractors.
 - Financial Statement Reviewed or Audited by an Independent Certified Public Accountant (CPA) in accordance with Generally Accepted Accounting Principles (GAAP), prepared in the last 12-months for the bidder's company.
 - Non-Exclusion Affidavit – System for Award Management (SAM).
 - Certificate of Interested Parties (Form 1295)
 - IRS W9 Form – a pdf version of this form can be downloaded from the IRS website.
 - Secretary of State Filing Certificate.

All nine (9) documents shall be delivered to the Engineering Division and City's Consulting Engineer as a single, complete package. No one form or statement will be accepted individually.

2. If the 48-hours deadline falls on a weekend or holiday, Bidder shall deliver the eight (8) documents to the Engineering Division and City's Consulting Engineer the next workday after the 48-hours.
3. If a project is a "joint venture", all partners in the joint venture shall complete the pre-qualification forms.
4. The low bidder shall be required to submit evidence that they have a practical knowledge and experience of the particular work bid upon and that they have the financial resources to complete the proposed work.
5. In determining the contractor's qualifications, the following factors will be considered: Work previously completed by the contractor; adequate plant and equipment to do the work properly and expeditiously; financial resources to meet all obligations incidental to the work; technical expertise and safety record.

QUALIFICATION STATEMENT OF BIDDER

**Engineering Division
City of Mesquite
1515 N. Galloway Avenue
Mesquite, Texas 75149**

Bidder: _____

Circle One: Sole Proprietor Partnership Corporation Joint Venture

Name: _____ Partner: _____

Address: _____ Address: _____

City: _____ City: _____

Phone: _____ Phone: _____

Principal Place of Business: _____ Principal Place of Business: _____

County & State

County & State

If the Bidder is a corporation, fill out the following:

State and County of Incorporation: _____

Location of Principal Office: _____

Contact Person(s) at Office: _____ Phone: _____

List Officers of the Corporation and person(s) authorized to execute Contracts on Behalf of the Corporation:

Name: _____ Title: _____

Name: _____ Title: _____

Name: _____ Title: _____

Name: _____ Title: _____

How many years has your organization been in business as a General Contractor? _____

Greatest number of contracts in excess of \$100,000 under construction at one time in company's history: _____

Greatest number of contracts in excess of \$500,000 under construction at one time in company's history: _____

Total approximate value of incomplete work outstanding: \$ _____

List major projects of the type of work qualifying for or similar work completed in the last three years, give the following information for each project:

Project: _____

Owner/Engineer: _____

Contact Person: _____ Phone: _____

Date of Completion: _____ Contract Price: _____

Project: _____

Owner/Engineer: _____

Contact Person: _____ Phone: _____

Date of Completion: _____ Contract Price: _____

Project: _____

Owner/Engineer: _____

Contact Person: _____ Phone: _____

Date of Completion: _____ Contract Price: _____

Project: _____

Owner/Engineer: _____

Contact Person: _____ Phone: _____

Date of Completion: _____ Contract Price: _____

Project: _____

Owner/Engineer: _____

Contact Person: _____ Phone: _____

Date of Completion: _____ Contract Price: _____

Project: _____

Owner/Engineer: _____

Contact Person: _____ Phone: _____

Date of Completion: _____ Contract Price: _____

Project: _____

Owner/Engineer: _____

Contact Person: _____ Phone: _____

Date of Completion: _____ Contract Price: _____

Project: _____

Owner/Engineer: _____

Contact Person: _____ Phone: _____

Date of Completion: _____ Contract Price: _____

Project: _____

Owner/Engineer: _____

Contact Person: _____ Phone: _____

Date of Completion: _____ Contract Price: _____

(If Necessary - List Additional Projects by Using Attachments)

List **incomplete** projects, including the following information for each incomplete project listed:

Project: _____

Owner/Engineer: _____

Contact Person: _____ Phone: _____

Value of Incomplete Work: _____

Project: _____

Owner/Engineer: _____

Contact Person: _____ Phone: _____

Value of Incomplete Work: _____

Project: _____

Owner/Engineer: _____

Contact Person: _____ Phone: _____

Value of Incomplete Work: _____

Project: _____

Owner/Engineer: _____

Contact Person: _____ Phone: _____

Value of Incomplete Work: _____

Project: _____

Owner/Engineer: _____

Contact Person: _____ Phone: _____

Value of Incomplete Work: _____

(If Necessary - List Additional Projects by Using Attachments)

If company is under new management, please list names of staff and qualification and/or experience of said persons. (Please use attachments).

Have you or any present partner(s) or officer(s) failed to complete a contract? _____
If so, name of owner and/or surety:

Contact Person: _____ Phone: _____

List any unsatisfied demands upon you as to your accounts payable, please use attachments.

Bank Reference:

Bank: _____ City: _____

Address: _____ Phone: _____

Contact Officer: _____

Other Credit References:

Name: _____ Name: _____

Address: _____ Address: _____

City: _____ City: _____

Phone: _____ Phone: _____

Municipal Reference:

City: _____

Contact Person: _____ Title: _____

Address: _____ Phone: _____

REFERENCE STATEMENT OF BIDDER'S SURETY

Bidder: _____

Address: _____

1. For this Bidder, how many contracts **that are now complete** has this surety furnished contract bonds? _____
2. For this Bidder, how many **incomplete contracts** has this surety furnished contract bonds? _____
3. What is the maximum bonding capacity of this Bidder? \$ _____
4. Does the current financial information on this Bidder indicate solvency and a financial ability to complete this contract? _____
5. Does the information available to this surety indicate that the contractor pays accounts when due? _____
If not, give details: _____
6. Is it the surety's opinion that the bidder has sufficient experience and financial resources to satisfactorily perform the contract? _____
7. Provided this bidder does not assume other commitments or that this surety does not acquire further information that in your opinion will materially affect the bidder's capacity to perform this contract, will you furnish the bonds as specified: _____

REMARKS:

Surety: _____

Signed: _____

Title: _____

Address: _____ (Local office in Dallas County)

City State Zip

Phone: _____

BIDDER'S RELEASE OF QUALIFICATION INFORMATION

Pursuant to advertisement for bids and in conformance with Instructions to Bidders for types of work outlined in Bidder's Statement of Qualifications, the undersigned is submitting information as required with the understanding that the purpose is for the City's confidential use, only to assist in determining the qualifications of Bidder's organization to perform the type and magnitude of work designated, and further, Bidder guarantees the truth and accuracy of all statements made, and will accept the City's determination of qualifications without prejudice. The surety herein named, any other bonding company(s), bank(s), subcontractor(s), supplier(s), or any other person(s), firm(s) or corporation(s) with whom Bidder has done business, or who have extended any credit to Bidder is (are) hereby authorized to furnish the City with any information the City may request concerning performance on previous work and Bidder's credit standing with any of them; and Bidder hereby releases any and all such parties from any legal responsibility whatsoever on account of having furnished such information to the City:

Signed: _____ Title: _____
Printed Name: _____ Email: _____
Bidder: _____ Date: _____

LOCATION OF LOCAL UNDERWRITING OFFICE OF PROPOSED SURETY (MUST BE IN DALLAS COUNTY)

Name: _____ Phone: _____
Printed Name: _____ Email: _____
Address: _____ City: _____ State: _____

BIDDER'S LIST OF PROPOSED SUB-CONTRACTORS

1. Sub-Contractor / Material Supplier:

Company Name: _____

Type of Work to Be Performed: _____

Contact Person: _____

Title: _____

Email: _____

Phone: _____

2. Sub-Contractor / Material Supplier:

Company Name: _____

Type of Work to Be Performed: _____

Contact Person: _____

Title: _____

Email: _____

Phone: _____

3. Sub-Contractor / Material Supplier:

Company Name: _____

Type of Work to Be Performed: _____

Contact Person: _____

Title: _____

Email: _____

Phone: _____

4. Sub-Contractor / Material Supplier:

Company Name: _____

Type of Work to Be Performed: _____

Contact Person: _____

Title: _____

Email: _____

Phone: _____

5. Sub-Contractor / Material Supplier:

Company Name: _____

Type of Work to Be Performed: _____

Contact Person: _____

Title: _____

Email: _____

Phone: _____

6. Sub-Contractor / Material Supplier:

Company Name: _____

Type of Work to Be Performed: _____

Contact Person: _____

Title: _____

Email: _____

Phone: _____

7. Sub-Contractor / Material Supplier:

Company Name: _____

Type of Work to Be Performed: _____

Contact Person: _____

Title: _____

Email: _____

Phone: _____

8. Sub-Contractor / Material Supplier:

Company Name: _____

Type of Work to Be Performed: _____

Contact Person: _____

Title: _____

Email: _____

Phone: _____

9. Sub-Contractor / Material Supplier:

Company Name: _____

Type of Work to Be Performed: _____

Contact Person: _____

Title: _____

Email: _____

Phone: _____

10. Sub-Contractor / Material Supplier:

Company Name: _____

Type of Work to Be Performed: _____

Contact Person: _____

Title: _____

Email: _____

Phone: _____

NON-EXCLUSION AFFIDAVIT - SYSTEM FOR AWARD MANAGEMENT (SAM)

Federal, state, and local government agencies, not-profits, and other organizations that use federal money to fund all or part of any program or project are required to follow specific requirements regarding the use of such federal funds. One of these requirements is that no contract, subcontract, grant, financial assistance, or other forms of assistance provided using federal funds may be awarded to individuals or entities that have been suspended, debarred, or otherwise excluded from participation in federally funded programs.

The U.S. federal government maintains a Web site known as the "System for Award Management" (SAM) at www.sam.gov. One of the purposes of the SAM Web site is to provide a comprehensive list of all individuals, firms, and other entities that have been suspended, debarred, or otherwise excluded from participation in federally funded contracts, subcontracts, grants, etc. SAM provides a simple means of helping government, non-profit agencies, and other organizations ensure that they do not award federally-funded grants, contracts, subcontracts, or other financial or non-financial benefits to any individual, firm, or other entity that has been excluded by any agency from participation in such federally funded activities.

I, _____ (***Contractor Representative***), hereby certify that neither I nor _____ (***Name of the company or organization I represent***) nor any subcontractors that I or said company may employ to work on any federally funded activity have been suspended, debarred, or otherwise excluded by any federal agency from participation in any federally funded activity. I further acknowledge my understanding that, before entering into a contract with me or with the company or organization I represent, City of Mesquite staff will perform a search on www.sam.gov to verify whether I, the organization I represent, or any subcontractors I may employ to work on any federally funded activity, have been excluded from participation in any federally funded activity.

Signature of Contractor Representative

Date

Notary

Sworn to and subscribed before me this _____ day of _____, 2023.

Notary Public in and for _____ County, _____ (Insert State Name).

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

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

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

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

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 goods or services to be provided under the contract.

Name of Interested Party	City, State, Country (place of business)	Nature of Interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO Interested Party.

6 AFFIDAVIT I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

 Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20 _____, to certify which, witness my hand and seal of office.

 Signature of officer administering oath Printed name of officer administering oath Title of officer administering oath

ADD ADDITIONAL PAGES AS NECESSARY

CONTRACT AND BOND FORMS

NOTICE TO BIDDERS

The following blank spaces in the contract and bonds **are not to be filled in** by the Bidder at the time of submitting his proposal.

The contract and bond forms are submitted at this time to familiarize the Bidder with the form of contract and bonds that the successful Bidder will be required to execute.

CONTRACT CHECKLIST

City contracts must be checked to ensure they are ready for review and signature.

CHECK	CONTRACT ITEM:
	Are all blanks filled in, except for the signatures of the Mayor (or City Manager), City Secretary and City Attorney?
	The date the Contract is "made and entered into" should be the meeting date the bid was awarded by City Council (for contracts over \$50,000), or the date of City Manager approval (for contracts under \$50,000). Is the date of the contract correct?
	units x unit price = amount
	individual amounts = total base bid
	total bid = amount awarded by Council
	Company name is consistent throughout all contractual documents
	If the contractor is a corporation, the President or Vice-President of the corporation should sign the Contract. The Secretary of the corporation must then attest the signature and seal the Contract unless the contract form used provides for an acknowledgment by a notary.
	Contract total matches the awarded amount by Council
	Signed by authorized person for the company
	Printed name matches signed name
	The name of the person signing the Contract on behalf of the contractor and the City must be typed on the appropriate lines as well as their respective titles.
	If the Contract is revised by the striking-out or inserting of new language, both parties should initial the change.
	PERFORMANCE AND PAYMENT BONDS
	Performance Bond = 100% of Contract Amount (City Form) Includes a 1-year warranty period after City Acceptance for materials and workmanship.
	Check that the company name is identical to name listed in contract
	Check for same contract date (reference in top paragraphs)
	The name of the surety on the bond must appear the same on each page of the bond.
	Check for issuance date (date of contract or after)
	Check for same signature & title throughout bond.
	Check for typed name and title of the person signing bond and for legible signature.
	Check for agent in Dallas County.
	The items listed as work to be done must exactly match the improvements listed on the Contract.
	The surety's seal (which is the seal of the bond company) must appear under the surety's signature (not a notary's seal). All corporate sureties have seals. The seal may be a legible facsimile seal, unless the instrument states otherwise.
	Payment Bond = 100% of contract amount (City form)
	Check that the company name is identical to name listed in contract
	Check for same contract date (reference in top paragraphs)
	The name of the surety on the bond must appear the same on each page of the bond.
	Check for issuance date (date of contract or after)
	Check for same signature & title throughout bond
	Check for typed name and title of the person signing bond and for legible signature.
	Check for agent in Dallas County
	The items listed as work to be done must exactly match the improvements listed on the Contract.

CHECK	CONTRACT ITEM:
	The surety's seal (which is the seal of the bond company) must appear under the surety's signature (not a notary's seal). All corporate sureties have seals. The seal may be a legible facsimile seal, unless the instrument states otherwise.
	INSURANCE-GENERAL
	Certificate of Insurance (ACORD form)
	Certificate of Insurance Supplemental Form
	Check that the company name is identical to name listed in contract
	Check the expiration date on policy to ensure it is current.
	Check for City of Mesquite listed as additional insured under General and Auto Liability Policies.
	Check for a waiver of subrogation in favor of the City of Mesquite under General and workers Compensation/Employers Liability.
	Workers Compensation \$100,000 per occurrence
	INSURANCE-CONSTRUCTION
	Commercial Liability \$500,000 per person/\$1,000,000 per occurrence
	Contractual Liability property damage \$500,000 per occurrence with general aggregate of \$1,000,000
	Automobile combined single limit \$500,000
	OTHER
	Filled out Certificate of Interested Parties - Form 1295
	Fill out and Submit Conflict of Interest Questionnaire (CIQ)
	IRS W9 Form Submitted for Setting Up Vendor Account and Processing Payment
<p>Checked by: _____</p> <p>Date: _____</p>	

SUPPLEMENT TO ACORD 25

Reset Form

 <small>INSURANCE CERTIFICATE ADMINISTRATORS</small>	Supplement to ACORD® 25 (Construction)	DATE:
Insured:		Certificate Holder(s):
Commercial General Liability:		
Yes No		
C-1	Provide, in the space below, the appropriate form number(s) of the Additional Insured endorsement(s): Ongoing Operations <input style="width: 150px; height: 15px;" type="text"/> Completed Operations <input style="width: 150px; height: 15px;" type="text"/> Attach a copy of the endorsement(s).	
C-2	Does the Other Insurance clause or an endorsement to the policy state that the CGL policy is primary for the Additional Insured if "agreed in writing in a contract or agreement that this insurance would be primary" or does it contain similar wording? If so, provide a copy of such similar wording clearly highlighting or referencing the applicable language.	
C-3	Does the Other Insurance clause or an endorsement to the policy state that the CGL policy is non-contributory for the Additional Insured if "agreed in writing in a contract or agreement that this insurance...would not seek contribution from any other insurance available to the additional insured " or does it contain similar wording? If so, provide a copy of such similar wording clearly highlighting or referencing the applicable language.	
C-4a	Does the definition of "insured contract" contain the words or phrase "caused in whole or in part by" or "sole negligence"? If YES, attach the policy definition clearly highlighting or referencing the applicable language.	
C-4b	Does the contractual liability provision contain a reference to "residential construction"? If YES, attach a copy clearly highlighting or referencing the applicable language.	
C-5	Is coverage under the policy limited to work performed within certain described operations and/or classification codes? If YES, attach the operations and/or classification codes.	
C-6	Is there a pollution exclusion in the "policy form"?	
C-6a	If C-6 is NO, has a pollution exclusion been added by endorsement?	
C-6b	If C-6 is YES, has a pollution endorsement been added?	
Are the following specifically excluded?		
C-7	Independent Contractors?	
C-8	Explosion? (X)?	
C-9	Collapse? (C)?	
C-10	Underground? (U)?	
C-11	Punitive Damages (other than Terrorism)?	
C-12	Third Party Over Actions?	
C-13	Residential Construction Operations? If YES, attach a copy of the exclusion.	
C-14	Prior Work? If YES, attach a copy of the exclusion.	
Workers Compensation:		
Yes No		
C-1	Does Part 3 provide coverage for "All States"(other than monopolistic states) or list specific states? If specific states are listed, provide a list of the states.	
C-2	Is the Alternate Employer endorsement attached to the policy?	
Excess/Umbrella Liabilities:		
The Excess/Umbrella policy is excess over which of the following primary policies?		
C-1	Commercial General Liability Insurance	
C-2	Automobile Liability Insurance	
C-3	Employers Liability Insurance	
C-4	Pollution Liability Insurance (If provided by separate policy)	
Yes No		
C-5	Does the policy include language addressing reduced or exhausted primary limits over which the policy is excess, frequently referred to as drop-down? If YES, provide a copy of such wording clearly highlighting or referencing the applicable language.	
Notice of Cancellation:		
C-1	Do all policies certified on the attached ACORD® 25 provide at least a 30 day notice to the certificate holder for cancellation (other than non-payment of premium)?	
It is agreed that the coverages, endorsements and conditions shown on these pages are in effect and apply, as indicated, to the coverages certified on the attached ACORD® certificate of insurance. This form neither affirmatively nor negatively amends, extends nor alters the coverage afforded by the policy summarized hereon and is qualified by reference to the policy itself. This form does not constitute a contract between the issuing insurer(s), authorized representatives or producer, and the certificate holder.		Signature:

A25 01C (03-13)

CONTRACT

STATE OF TEXAS §
 § **KNOW ALL MEN BY THESE PRESENTS:**
COUNTY OF DALLAS §

THIS CONTRACT is made and entered into on _____, 20__ by and between the **CITY OF MESQUITE, TEXAS**, a municipal corporation, of the County of Dallas and State of Texas, acting through Cliff Keheley, City Manager, hereinafter termed the CITY, and **ENTITY NAME**, a **What Type of Legal Entity**, with offices located at **Full Street Address, City, State Zip Code**, hereinafter termed the CONTRACTOR.

WITNESSETH: That for and in consideration of the mutual covenants hereinafter set forth, the CITY and CONTRACTOR agree as follows:

I. DESCRIPTION OF WORK

The CONTRACTOR shall perform all of the work as specified in the contract documents such work generally described as:

**ALLEY RECONSTRUCTION 2023 PROJECT,
CITY OF MESQUITE CONTRACT NO. 2024-006**

Plans and Specifications prepared by:

ENGINEERING DIVISION, PUBLIC WORKS DEPARTMENT

All work shall be performed at the CONTRACTOR'S own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, bonds and other accessories and services necessary to complete the work, in accordance with the Contract documents.

II. CONTRACT DOCUMENTS

The Contract documents shall consist of the following:

1. this Contract;
2. all addenda issued prior to award of Contract;
3. the bid specifications including the advertisement for bid, instruction to bidders, bidder's bid form, plans, and drawings (if any);
4. the City of Mesquite General Design Standards;
5. the Standard Specifications for Public Works Construction (North Central Texas Fifth Edition November 2017), Division 100, as amended and supplemented by the City of Mesquite by Addendum (hereinafter referred to as the "General Provisions");
6. a Performance Bond in the sum of ONE HUNDRED PERCENT (100%) of the total Contract price, which Bond shall be in a form acceptable to the City, shall guarantee the work in accordance with the plans and specifications for a period of one (1) year after acceptance by the City, and shall provide for repair or replacement of all defects due to faulty material

and/or workmanship that appear within a period of one (1) years from the date of acceptance by the City;

7. A Payment Bond in the sum of ONE HUNDRED PERCENT (100%) of the total Contract price; and
8. the Contractor's bid/proposal and any other documents identified as pertaining to this Contract, all of which have been identified by the CITY and the CONTRACTOR.

These Contract documents constitute the entire agreement between the CITY and CONTRACTOR, and all are fully incorporated herein. The Contract documents are complementary and what is called for by one shall be as binding as if called for by all. In the event of an inconsistency in any of the provisions of the Contract documents, the inconsistency shall be resolved by giving precedence to the Contract documents in the order in which they are listed above. The Contract may be altered, amended or modified only as provided in the general or special provisions. These Contract Documents supersede all oral or written previous contemporaneous agreements between the parties relating to matters in this Contract.

III. TIME OF COMMENCEMENT, COMPLETION AND LIQUIDATED DAMAGES

The work to be performed under this Contract shall be commenced by the CONTRACTOR upon final execution of this Contract and notice from the CITY to proceed. All work to be performed under this Contract shall be substantially completed within **180 calendar days** of the date of commencement of the work, subject to extensions of time provided in accordance with the Contract documents. Time is of the essence in this Contract and it is understood by the CONTRACTOR and CITY that actual damages caused by the failure of the CONTRACTOR to complete the work within the stated time are impractical or extremely difficult to fix or ascertain, and that per diem deduction from the Contract price shall be retained by the CITY as payment by the CONTRACTOR of liquidated damages, and not as penalty for such failure. Such liquidated damages to be assessed and retained are set forth in the General Provisions.

IV. CONTRACT PRICE

The CITY shall pay the CONTRACTOR for the performance of the work, subject to additions and deductions by change order or as otherwise provided in the provisions of this Contract, in current funds the Contract sum, which has been bid as a separated contract in compliance with the Texas Tax Code, as follows:

Total sum: **INSERT CONTRACT AMOUNT IN WORDS (\$INSERT IN NUMBERS)**

V. CONTRACT ADMINISTRATION

This Contract shall be administered on behalf of the CITY by Public Works Director or their designee (referred to herein as "City Representative") and the CONTRACTOR shall fully comply with any and all instructions from said City Representative. With execution and delivery of the Contract, the CONTRACTOR shall furnish and file with the CITY in the amounts herein required, performance and payment bonds in accordance with the provisions of V.T.C.A. Government Code, Chapter 2253 if this is a public work contract in excess of fifty thousand dollars (\$50,000.00).

VI. LABOR CLASSIFICATION AND MINIMUM WAGE SCALE

The CONTRACTOR is required to follow all provisions of Chapter 2258 of the Texas Government Code in the hiring and payment of all skilled and unskilled labor used on this contract. The CONTRACTOR must pay the prevailing wage rates as shown on the attached Wage Decision.

VII. DISCLOSURE OF CONFLICTS OF INTEREST AND COMPLIANCE WITH OTHER APPLICABLE LAWS

The CONTRACTOR shall at all times observe and comply with all Federal, State and local laws, ordinances and regulations including all amendments and revisions thereto, which in any manner affect the CONTRACTOR or the services and/or items to be provided, specifically and not limited to any ethics laws. In particular, the CONTRACTOR is put on notice that the CITY will require the CONTRACTOR to comply with Chapter 176 of the Texas Local Government Code by completing the attached Conflict of Interest questionnaire (FORM CIQ) and returning the completed FORM CIQ to the CITY. Additionally, CONTRACTOR must comply with Section 2252.908 of the Texas Government Code, which was enacted in 2015 by the Texas Legislature pursuant to HB 1295, providing that a governmental entity may not enter into certain contracts with a business entity on or after January 1, 2016, unless the business entity submits a disclosure of interested parties (FORM 1295) to the governmental entity at the time the business entity submits the signed contract to the governmental entity. Further information regarding the disclosure of interested parties law and instructions on filing FORM 1295 can be found at the Texas Ethics Commission web site at the following web address:

<https://www.ethics.state.tx.us/filinginfo/1295/>

VIII. INSURANCE

The CONTRACTOR agrees to provide and to maintain the types and amounts of insurance set forth in the General Provisions and to include the CITY as an additional insured in all policies providing coverage for the term of this Contract.

IX. CHOICE OF LAW, VENUE AND CONTRACT INTERPRETATION

The obligations of the Parties to this Contract shall be performable in Dallas County, Texas, and if legal action is necessary in connection with or to enforce rights under this Contract, exclusive venue shall lie in Dallas County, Texas

This Contract shall be governed by and construed in accordance with the laws and court decisions of the State of Texas, without regard to conflict of law or law principles of Texas or any other State. Although this Contract is drafted by the CITY, should any part be in dispute, the parties agree this Contract shall not be construed more favorably for either Party.

X. SEVERABILITY

If any part of this Contract shall be stricken for any reason whatsoever or found to be invalid or unenforceable, that part will be severed and the remainder of this Contract will continue in full force and effect.

XI. SURVIVAL

Any liabilities or obligations of a Party for acts or omissions prior to the cancellation or termination of this Contract, and any other provisions of this Contract which, by their terms, are contemplated to survive (or to be performed after) termination of this Contract, shall survive cancellation or termination thereof.

XII. MISCELLANEOUS

Pursuant to Section 2271.002, Texas Government Code, CONTRACTOR hereby (i) represents that it does not boycott Israel, and (ii) subject to or as otherwise required by applicable federal law, including without limitation 50 U.S.C. Section 4607, agrees it will not boycott Israel during the term of the Agreement. As used in the immediately preceding sentence, "boycott Israel" shall have the meaning given such term in Section 2271.001, Texas Government Code.

CONTRACTOR further represents that (i) it does not engage in business with Iran, Sudan or any foreign terrorist organization and (ii) it is not listed by the Texas Comptroller under Section 2252.153, Texas Government Code, as a company known to have contracts with or provide supplies or services to a foreign terrorist organization. As used in the immediately preceding sentence, "foreign terrorist organization" shall have the meaning given such term in Section 2252.151, Texas Government Code.

Pursuant to Texas Government Code Chapter 2274, unless otherwise exempt, if CONTRACTOR employs at least ten (10) fulltime employees and this Contract has a value of at least \$100,000 that is paid wholly or partly from public funds of the governmental entity, CONTRACTOR represents that: (i) the CONTRACTOR does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and (ii) the CONTRACTOR will not discriminate during the term of the contract against a firearm entity or firearm trade association.

Pursuant to Texas Government Code Chapter 2274, unless otherwise exempt, if the CONTRACTOR is a company with at least ten (10) or more full-time employees and this Contract has value of at least \$100,000 or more that is paid wholly or partly from public funds of the governmental entity, the CONTRACTOR represents that: (i) the CONTRACTOR does not boycott energy companies; and (ii) will not boycott energy companies during the term of the Contract.

XIII. AUTHORITY TO SIGN

The undersigned officers and/or agents of the parties hereto are the properly authorized officials and have the necessary authority to execute this Contract on behalf of the parties hereto.

IN WITNESS WHEREOF, the CITY and CONTRACTOR have executed this Contract in the year and day first written above.

**CITY OF MESQUITE
(CITY)**

**INSERT CONTRACTOR NAME
(CONTRACTOR)**

By: _____
Cliff Keheley
City Manager

By: _____
(signature)

TYPED NAME: _____

TITLE: _____

ATTEST:

ATTEST: _____

By: _____
Sonja Land, City Secretary

APPROVED AS TO FORM:
David L. Paschall, City Attorney

By: _____
Assistant City Attorney

SAMPLE CONTRACT

WAGE RATE

General Decision Number: TX20230025 01/06/2023

Superseded General Decision Number: TX20220025

State: Texas

Construction Type: Highway

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

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

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none"> • Executive Order 14026 generally applies to the contract. • The contractor must pay all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022	<ul style="list-style-type: none"> • Executive Order 13658 generally applies to the contract. • The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/06/2023

* SUTX2011-007 08/03/2011

	Rates		Fringes
CONCRETE FINISHER (Paving and Structures)	\$ 14.12	**	
ELECTRICIAN	\$ 19.80		
FORM BUILDER/FORM SETTER Paving & Curb	\$ 13.16	**	

Structures	\$ 13.84	**
LABORER		
Asphalt Raker	\$ 12.69	**
Flagger	\$ 10.06	**
Laborer, Common	\$ 10.72	**
Laborer, Utility	\$ 12.32	**
Pipelayer	\$ 13.24	**
Work Zone Barricade Servicer	\$ 11.68	**
POWER EQUIPMENT OPERATOR:		
Asphalt Distributor	\$ 15.32	**
Asphalt Paving Machine	\$ 13.99	**
Broom or Sweeper	\$ 11.74	**
Concrete Pavement Finishing Machine	\$ 16.05	**
Concrete Saw	\$ 14.48	**
Crane Operator, Lattice Boom 80 Tons or Less	\$ 17.27	
Crane Operator, Lattice Boom over 80 Tons	\$ 20.52	
Crane, Hydraulic 80 Tons or Less	\$ 18.12	
Crawler Tractor	\$ 14.07	**
Excavator, 50,000 pounds or less	\$ 17.19	
Excavator, over 50,000 pounds	\$ 16.99	
Foundation Drill, Truck Mounted	\$ 21.07	
Foundation Drill, Crawler Mounted	\$ 17.99	
Front End Loader 3 CY or Less	\$ 13.69	**
Front End Loader, over 3 CY	\$ 14.72	**
Loader/Backhoe	\$ 15.18	**
Mechanic	\$ 17.68	
Milling Machine	\$ 14.32	**
Motor Grader, Fine Grade	\$ 17.19	
Motor Grader, Rough	\$ 16.02	**
Pavement Marking Machine	\$ 13.63	**
Reclaimer/Pulverizer	\$ 11.01	**
Roller, Asphalt	\$ 13.08	**
Roller, Other	\$ 11.51	**
Scraper.	\$ 12.96	**
Small Slipform Machine	\$ 15.96	**
Spreader Box	\$ 14.73	**
Servicer	\$ 14.58	**
Steel Worker (Reinforcing)	\$ 16.18	**
TRUCK DRIVER		
Lowboy-Float	\$ 16.24	
Off Road Hauler	\$ 12.25	**
Single Axle	\$ 12.31	**
Single or Tandem Axle Dump Truck.	\$ 12.62	**
Tandem Axle Tractor with Semi Trailer	\$ 12.86	**
Transit-Mix	\$ 14.14	**
WELDER	\$14.84	**

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

** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$16.20) or 13658 (\$12.15). Please see the Note at the top of the wage determination for more information.

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

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

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

Union Rate Identifiers

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

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

Survey Rate Identifiers

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

producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

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

Union Average Rate Identifiers

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

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

WAGE DETERMINATION APPEALS PROCESS

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

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

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Division National Office Branch of Wage Surveys. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

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

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

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

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

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

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

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

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

=====

END OF GENERAL DECISION

PERFORMANCE BOND

Bond No. _____

STATE OF TEXAS §
§ **KNOW ALL MEN BY THESE PRESENTS:**
COUNTY OF DALLAS §

THAT _____, an _____,
duly authorized to transact business in the State of Texas (hereinafter referred to as "Principal"),
and _____ (hereinafter referred to as "Surety"), authorized under
the laws of the State of Texas to act as Surety on bonds for principals are held and firmly bound
unto the **City of Mesquite** (hereinafter referred to as "City") in the penal sum of
\$ _____ (not less than 100% of the approximate total amount of the Contract as
evidenced in the Proposal) for the payment whereof, the said Principal and Surety bind
themselves, and their heirs, administrators, executors, successors and assigns, jointly and
severally, by these presents:

WHEREAS the Principal has entered into a certain written contract with the City, dated the
_____ day of _____, 2023, for the **ALLEY RECONSTRUCTION 2023 PROJECT,**
CITY OF MESQUITE CONTRACT NO. 2024-006 to which said Contract is hereby referred to and
made a part hereof and 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 fully
and faithfully executes the work and performance of the Contract, as amended, in accordance
with the Plans, Specifications and Contract Documents, including any extensions thereof, and
according to the true intent and meaning of said Contract and the Plans and Specifications hereto
annexed, 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 V.T.C.A.
Government Code Chapter 2253, Public Work Performance and Payment bonds, as amended,
and Article 53.201 of the Property Code, and all liabilities on this Bond shall be determined in
accordance with the provisions of said articles to the same extent as if they were fully copied at
length herein.

Surety, for value received, stipulates and agrees that the Bond shall automatically be
increased by the amount of any change order or supplemental agreement which increases the
Contract price with or without notice to the Surety and that no change, extension of time, alteration
or addition to the terms of the Contract, or to the work performed thereunder, or the Plans,
Specifications or Drawings accompanying the same shall in any way affect its obligation on this
Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition
to the terms of the Contract or to the work to be performed thereunder.

Surety must be approved by the Texas State Board of Insurance under Article 7.19-1 of
the Insurance Code and authorized under the laws of Texas to act a surety on bonds for principals.

Surety agrees that the bond provides for the repairs and/or replacement of all defects due
to faulty materials and workmanship that appear within a period of **one (1) year** from the date of

completion and acceptance of all the improvements by the City.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument on this the _____ day of _____, 2023.

PRINCIPAL:

SURETY:

Signature

Signature

Printed Name

Printed Name

Title

Title

Company

Company

Street Address

Street Address
(P. O. Box is not acceptable)

City State Zip Code

City State Zip Code

Phone Number
(Dallas Telephone Number)

SURETY’S DALLAS COUNTY REGISTERED AGENT FOR SERVICE (REQUIRED):

Printed Name: _____

Title: _____

Company: _____

Street Address: _____
(P. O. Box is not acceptable)

City State Zip Code

Phone Number: _____
(Dallas County Telephone Number)

(Attach dated Power of Attorney for Surety)

PAYMENT BOND

Bond No. _____

**STATE OF TEXAS §
 § **KNOW ALL MEN BY THESE PRESENTS:**
COUNTY OF DALLAS §**

THAT _____, an _____,
duly authorized to transact business in the State of Texas (hereinafter referred to as "Principal"),
and _____ (hereinafter referred to as "Surety"), authorized under
the laws of the State of Texas to act as Surety on bonds for principals are held and firmly bound
unto the **City of Mesquite** (hereinafter referred to as "City") in the penal sum of
\$_____ (not less than 100% of the approximate total amount of the Contract as
evidenced in the Proposal) for the payment whereof, the said Principal and Surety bind
themselves, and their heirs, administrators, executors, successors and assigns, jointly and
severally, by these presents:

WHEREAS the Principal has entered into a certain written contract with the City, dated the
_____ day of _____, 2023, for the **ALLEY RECONSTRUCTION 2023 PROJECT,
CITY OF MESQUITE CONTRACT NO. 2024-006** to which said Contract is hereby referred to and
made a part hereof and as fully and to the same extent as if copied at length herein;

NOW, THEREFORE, the condition of this obligation is such that the bond guarantees the
full and proper protection of all claimants supplying labor and material in the prosecution of the
work provided for in said Contract and for the use of each claimant, and that conversely should
the Principal faithfully perform said Contract and in all respects duly and faithfully observe and
perform all and singular the covenants, conditions and agreements in and by said Contract agreed
to by the Principal, and according to the true intent and meaning of said Contract, and the claims
and specifications hereto annexed, 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 V.T.C.A.
Government Code Chapter 2253, Public Work Performance and Payment bonds, as amended,
and Article 53.201 of the Property Code, and all liabilities on this Bond shall be determined in
accordance with the provisions of said articles to the same extent as if they were fully copied at
length herein.

Surety, for value received, stipulates and agrees that no change, extension of time,
alteration or addition to the terms of the Contract, or to the work performed thereunder, or the
Plans, Specifications or Drawings accompanying same shall in any way affect its obligation on
this bond, and it does hereby waive notice of any such change, extension of time, alteration or
addition to the terms of the Contract or to the work to be performed thereunder.

Surety must be approved by the Texas State Board of Insurance under Article 7.19-1 of
the Insurance Code and authorized under the laws of Texas to act a surety on bonds for principals.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this

instrument on this the _____ day of _____, 2023.

PRINCIPAL:

SURETY:

Signature

Signature

Printed Name

Printed Name

Title

Title

Company

Company

Street Address

Street Address
(P. O. Box is not acceptable)

City State Zip Code

City State Zip Code

Phone Number
(Dallas Telephone Number)

SURETY'S DALLAS COUNTY REGISTERED AGENT FOR SERVICE (REQUIRED):

Printed Name: _____

Title: _____

Company: _____

Street Address: _____
(P. O. Box is not acceptable)

City State Zip Code

Phone Number: _____
(Dallas County Telephone Number)

(Attach dated Power of Attorney for Surety)

SECTION GP

CONTRACT GENERAL PROVISIONS

For this Contract, the City of Mesquite has adopted the *North Central Texas Council of Governments Public Works Construction Standards, Fifth Edition (November 2017), Division 100 General Provisions* with modifications by addendum. The modifications to the above referenced Division 100 General Provisions are contained in the below City of Mesquite Addendum.

CITY OF MESQUITE

ADDENDUM
TO
DIVISION 100, GENERAL PROVISIONS

OF SECTION 1, STANDARD SPECIFICATIONS

OF THE

PUBLIC WORKS CONSTRUCTION STANDARDS
NORTH CENTRAL TEXAS
Fifth Edition

This addendum to Division 100, “General Provisions,” of Section I, “Standard Specifications,” of the *Public Works Construction Standards, North Central Texas, Fifth Edition, dated November 2017* sets forth exceptions or requirements of the City of Mesquite and thereby takes precedence over any conditions or requirements of the *Public Works Construction Standards, North Central Texas, Standard Specifications, Division 100 General Provisions* with which it is in conflict.

The comments are itemized by the ***Public Works Construction Standards, North Central Texas, Standard Specifications, Division 100 General Provisions*** section reference number followed by specific comments.

101.1. DEFINITIONS

Add the following definitions:

Apparent Low Bidder: The bidder determined to have the numerically lowest bid as a result of the tabulation of bids by the OWNER.

Award: The City Council's formal acceptance of the Bidder's bid for a proposed contract that authorizes the OWNER to enter into a contract.

Bid Bond: The approved form of bid/proposal guarantee furnished by the Bidder and Bidder's surety as security for compliance with all conditions of such bid/proposal as set forth in the General Provisions.

City: The City of Mesquite, Texas, a home rule municipal corporation, acting by and through (a) its governing body, (b) its Mayor, or (c) its City Manager, each of whom is required by Charter to perform specific duties.

Claim: Compensation for any alleged damage by reason of the acts or omissions of the OWNER.

CONTRACTOR's Qualification Information: Qualification forms completed by a Bidder reflecting a Bidder's financial data and experience.

Effective Start Date: The date indicated in the Notice to Proceed as the date of commencement of Work which is the date from which the start of Contract Time is measured.

Field Order: A written order issued by the OWNER's Representative which orders minor changes or clarifications in the Work which do not involve a change in the Contract Time or Contract Price.

General Design Standards: The General Design Standards developed, adopted and published by the City of Mesquite - Engineering Division, as may be amended.

Holiday: Official City-recognized holidays, the Wednesday before Thanksgiving, and December 31st (New Year's Eve). The list of official City-recognized holidays will be provided by the Director of Public Works upon request.

Product: The term "product" includes materials, systems, and equipment.

Proposal Guaranty: The security designated in the advertisement and proposal, to be furnished by each Bidder as a guaranty of good faith to enter into a contract with the OWNER and execute the required bonds for the work contemplated after the work is awarded to the Bidder and payment of damages upon the Bidder's failure to enter into the contract in compliance with Section 102.5.

Provide: The term "provide" means to both furnish and install.

Request for Information (RFI): A written request from the CONTRACTOR to the OWNER's Representative for plan or specification interpretation or clarification.

Shop Drawings or Submittals: All drawings, diagrams, illustrations schedules, and other data which are specifically prepared by or for the CONTRACTOR to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, manufacturer's data, diagrams, and other information submitted by the CONTRACTOR to the OWNER's Representative for approval (reference Section 105.3).

Standard Details: Standard details developed, adopted and published by the City of Mesquite Engineering Division as may be amended, or the standard details developed by other agencies or engineers that are included in the project plans or specifications.

Substantially Complete: In the opinion of the Engineer, that the Work has been made suitable for use or occupancy, or is serving its full intended purpose, but may require minor miscellaneous work or adjustment as evidenced by issuance of a Certification of Substantial Completion by the OWNER's Representative.

Working Hours: The hours in which Work shall be done, and unless otherwise indicated in any special provisions, Working Hours are the hours of 7:00 a.m. to 6:00 p.m. central time. No work shall be done during other hours, Sundays, or Holidays unless advance written permission is given by the OWNER's Representative.

Written Notice: A notice, in writing, either: (1) hand delivered to the individual, or if to a legal entity, to a member of the firm or officer of the legal entity; or (2) if delivered at or sent by registered mail, to the last business address designated in the Contract for the Work.

Replace the definitions of "OWNER", "OWNER's Representative", and "Proposal" with the following:

OWNER: The City of Mesquite, Texas, a home rule municipal corporation.

OWNER's Representative: The City Engineer of the City of Mesquite or the person designated by the City Engineer to represent the City, or such other person as authorized by the City in the contract documents.

Proposal: The written statement(s) and any other documents duly filed with the Purchasing Agent, whether in the form of a sealed bid, proposal, quotation or other form, of the person, persons, partnership, company, firm, association or corporation proposing to do the work contemplated in accordance with the provisions of the plans and specifications, special and general provisions, and all contract documents.

Add to the end of the Section the following Subsection:

102.1.1. Pay Items. Items not listed in the bid proposal shall be considered subsidiary to the construction and under no circumstance shall the OWNER provide additional compensation for said subsidiary items.

102.3. EXAMINATION OF PLANS, SPECIFICATIONS AND SITE OF THE WORK

Add to End of Section the Following Subsections:

102.3.1. Addenda. Bidders desiring further information, or interpretation of the plans and specifications, must make request for such information in writing to the OWNER's Representative five (5) working days prior to the date of the bid opening. Answers to such requests will be given in writing to all bidders by Addendum and such Addendum shall be made a part of the Contract Documents. No other explanation or interpretation will be considered official or binding. Should a Bidder find discrepancies in the plans, specifications or quantities, or should the bidder be in doubt as to their meaning, the Bidder shall at once notify the OWNER's Representative in order that a written Addendum may be sent to all Bidders. Any Addendum issued prior to twenty-four (24) hours before the opening of bids will be delivered by facsimile or email to all plan holders on record with the City of Mesquite. The proposal as submitted by the Bidder will be so constructed as to include any Addendum issued by the OWNER's Representative prior to twenty-four (24) hours before the opening of bids.

The Bidder must acknowledge in the proposal bid forms that all Addenda have been received.

102.3.2. Pre-Bid Inspection. Bidder shall inspect the site prior to bidding and prior to move in. Bidder's inspection shall include but not be limited to observation and verification of existing grades, topographic conditions, surface and subsurface soil conditions and surface and subsurface water drainage conditions, observation and verification of any existing utility, appurtenance, or structure as it may relate to the contract. This shall include but not be limited to:

- Water and sewer appurtenances.
- Storm sewer structures and appurtenances.
- Concrete structures and appurtenances.
- Petroleum pipeline systems and appurtenances.
- Natural Gas pipeline systems and appurtenances.
- Telecommunications systems and appurtenances.
- Electrical systems and appurtenances.
- Television cable systems and appurtenances.
- Irrigation systems and appurtenances.

102.3.3. Geotechnical Data. Soil Borings, soil profiles, ground water elevations, and underground utilities shown on the plans have been obtained for use in preparation of the plans. The OWNER makes no representation or warranty regarding the accuracy of this geotechnical data.

102.3.4. Quantity Verification. Bidders shall verify all quantities included in the bid proposal prior to submitting their bid. Should any quantity discrepancy between stated bid quantities and Bidder's estimate be found, Bidder shall notify the OWNER's Representative in writing, prior to submitting bid, and obtain a clarification and/or correction to the stated bid quantity. By submitting a bid, Bidder represents that estimates were performed and no quantity discrepancies were found.

102.3.5. Subsidiary Cost: It is the intent of the Contract Documents, Technical Specifications, Supplemental Specifications, and plans to describe the construction and subsidiary activities and materials necessary to furnish and install a complete in place project, ready for its intended use, accepted by the OWNER's Representative. Those materials and work necessary to furnish and install a complete in place project, conforming to the plans and specifications, that are not specifically identified in the bid proposal, technical specifications, or the supplemental technical specifications as pay items shall be considered as subsidiary to the contract as a whole, and as such shall not be submitted for individual payment by the CONTRACTOR. The cost of those subsidiary items shall be reflected in the prices stated in the bid proposal. It shall be the responsibility of the Bidder to review the bid proposal, plans, technical specifications, and supplemental technical specifications and site conditions to determine those materials and work which are not specifically identified but which shall be necessary to furnish and install a complete project in place.

102.4. PREPARATION OF PROPOSAL

Change: Replace first three sentences with the following:

The bidder shall submit its proposal on the forms furnished or approved by the OWNER. The bidder shall submit Bid Proposals on Bid Forms in the contract document or from computer generated forms supplied by the OWNER. Modifications or revisions to the OWNER-supplied form or the creation of a new computer generated form shall be considered an irregular proposal and may disqualify the bidder. Unit prices shown on the Bid Proposals shall state the prices for which the bidder proposes to perform the work or supply the required material. Bidder shall fill in all blank spaces in the form and shall numerically state the bid prices. All costs in connection with the proper and successful completion of the Work, including furnishing all materials, equipment, supplies, and appurtenances; providing all construction plant, equipment, and tools; and performing all necessary labor and supervision to fully complete the Work, shall be included in the unit and lump sum prices bid. All Work not specifically set forth as a pay item in the Bid Form shall be considered a subsidiary obligation of CONTRACTOR and all costs in

connection therewith shall be included in the prices bid. All prices shall be written in ink distinctly and legibly or submitted electronically if allowed by OWNER.

102.5 PROPOSAL GUARANTY

Add to the end of the section: An acceptable Surety per the terms of GP Section 103.3 SURETY BONDS shall execute the Bidder's surety bond, together with the bidder, as Principal. In addition, the Bidder and its agents shall have no financial interest in the Surety.

102.7. WITHDRAWING PROPOSALS

Change: In the last sentence, change "90 days" to "120 days".

Add after the last sentence: After the 120-day period, if agreed to in writing between Bidder and OWNER, the bid will stay in effect, without change, for a period agreed to between the Bidder and OWNER.

102.8 OPENING PROPOSALS

Delete the last sentence of this section.

102.9. CONSIDERATION OF PROPOSAL

Add after the last sentence: When required by the bid documents, within 48-hours of the bid opening, the apparent low Bidder must submit to the OWNER, the Bidder's Qualification Information on the forms provided in the bid documents providing evidence that the Bidder is capable of properly executing the work.

102.10. IRREGULAR PROPOSALS

Add: After the words "irregular if" add ", in the sole opinion of the OWNER,".

102.12. DISQUALIFICATION OF BIDDERS

Add:

- (12) The bidder being in arrears on any existing contract or other financial obligation or debt.
- (13) Lack of a current financial report as required in the Bidder's Qualification Information submission requirements.
- (14) The quality, availability and adaptability of the supplies, materials, equipment or contractual services, to the particular use required.
- (15) For request for proposals, the number and scope of conditions attached to the proposal.
- (16) Whether the bidder can perform the contract or provide the service promptly, or within the time required, without delay or interference.
- (17) The previous and existing compliance by the bidder with laws relating to the contract or service.
- (18) The ability of the bidder to provide future maintenance, repair parts, and service for the subject contract.
- (19) Evidence that CONTRACTOR, subcontractor have been suspended, debarred, or otherwise excluded from participation in federally funded programs.

103.2. AWARD OF CONTRACT

Change: In the first sentence, change "90 days" to "120 days".

103.3.3. Sureties.

Delete second to last sentence and Replace with: The surety shall designate an agent in Dallas County, Texas who is acceptable to the OWNER to whom any requisite notices may be delivered and on whom service of process may be had in matters arising out of such suretyship. Legal venue for enforcement of the bonds shall lie exclusively in Dallas County, Texas.

103.4 INSURANCE

Delete entire subsection 103.4.1. CONTRACTOR’s Insurance, including subsections and Replace with:

103.4.1 CONTRACTOR’s Insurance. The CONTRACTOR and his subcontractor(s) shall not commence work on any contract in the City of Mesquite until the CONTRACTOR has obtained, for himself and all subcontractors, all of the insurance required under this paragraph, and such insurance has been approved by the OWNER.

The CONTRACTOR and his subcontractor(s) shall provide and maintain the following types and amounts of insurance, which may be satisfied by any combination of primary, excess or umbrella liability insurance, for the term of this Contract:

Amounts and Types of Insurance:

	Type	Amount	
1	Workers Compensation/Employer's Liability	Statutory	
2	Employer’s Liability	No less than \$100,000 Limit Ea. Occ/Disease/Aggregate	City shall be an Additional Insured with Waiver of Subrogation
3	Commercial (Public) Liability, including, but not limited to: A. Premises/Operations B. Independent Contractors C. Personal Injury D. Products/Completed Operations E. Contractual Liability (insuring the indemnity provisions in the contract) F. Explosion or Cave-in	No less than \$1,000,000 per Occurrence and Aggregate Limits	<u>All insurance policies shall be written on a primary basis and be non-contributory with any other coverages carried by the City. City is to be an Additional Insured with Waiver of Subrogation.</u>
4	Automobile Policy	The OWNER shall be an Additional Insured at No less than Combined Single Limit - \$500,000.00	City shall be an Additional Insured

The required limits may be satisfied by any combination of Primary, Excess or Umbrella liability coverage. The preceding amounts notwithstanding, OWNER reserves the right to decrease or increase the minimum required insurance either as provided in the contract documents or after thirty (30) days’ notice is sent to the CONTRACTOR’s address as shown on CONTRACTOR’s Proposal. The CONTRACTOR may pass through to the OWNER all costs for obtaining the increase in the insurance coverage.

The CONTRACTOR understands that it is its sole responsibility to provide Certificates of each policy before any work is started and that failure to timely comply with the stated policy endorsements and special conditions hereinafter specified shall be a cause for termination of this Contract. Prior to the effective date of cancellation of any coverage, the CONTRACTOR must deliver to the OWNER a replacement Certificate or proof of reinstatement. In addition to the Certificates, all Policies shall be subject to examination and approval by City Risk Management for their adequacy as to form, content, form of protection and the providing company.

The proof will include completed/current Certificate(s) of Insurance, endorsements, exclusions, and/or relevant extracts from the insurance policy, or copies of policies. The City shall have no duty to pay or perform under this contract until the proof of insurance has been delivered to and approved by the CITY's Risk Management Department. No officer or employee other than the CITY's Risk Manager shall have authority to waive this requirement.

Insurance required by this Contract for the OWNER as additional insured shall be primary insurance and not contributing with any other insurance available to the OWNER, under any third party liability policy.

Delete entire subsection 103.4.2. OWNER's Protective Liability Insurance and Replace with:

103.4.2 Worker's Compensation Insurance. The OWNER shall require workers' compensation insurance coverage as defined in Section 401.011(44) of the Texas Labor Code as may be amended, from any contractor before entering into a building or construction contract to prove in writing that the CONTRACTOR and all subcontractors shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements set forth in Section 406.096 of the Texas Labor Code as may be amended, for all persons providing services on the project, for the duration of the project. The City shall be an Additional Insured, and, with a Waiver of Subrogation.

103.4.5.1 Endorsements.

Delete 103.4.5.1(1) and Replace with:

(1) With the exception Professional Liability coverage, the Certificate of Insurance must state that "The City of Mesquite-Texas, its trustees, officers, agents and employees are Additional Insureds as their interests appear relating to the contractually stipulated service, project or product";

103.4.5.2(2) Insurance Requirements.

Add to the end of the sentence: and rated at least "A-" in A.M. Best's Key Rating Guide; and with a financial strength of VII or greater

103.6 NOTICE TO PROCEED AND COMMENCEMENT OF WORK

Replace last sentence with: Prior to the start of work, the OWNER may arrange a Pre-Construction Conference with the CONTRACTOR and appropriate OWNER staff. The Pre-Construction Conference shall be scheduled no later than 10 days after the Contract is fully executed. The Notice to Proceed (NTP) shall state the date upon which the Contract time (the Effective Start date) shall start. The Effective Start date will be within 10 days after the Pre-Construction Conference for the Project is held unless requested otherwise in writing by the OWNER's Representative.

Add The Following Section:

103.9. COST BREAKDOWN (SCHEDULE OF VALUES FOR LUMP SUM BIDS OR BID ITEMS)

The CONTRACTOR shall prepare and submit for approval to the OWNER's Representative, prior to the start of construction, a breakdown of lump sum items, identified by the OWNER, for the various parts and classes of work to be performed under the Contract.

105.1.1 Priority of Contract Documents.

Delete numbers (1) through (9) of subsection 105.1.1 and Replace with:

In case of conflict between Contract documents, priority of interpretation shall be in the following order:

1. signed Contract Agreement;
2. properly authorized change orders;
3. any listed and numbered addenda;
4. special provisions;
5. construction drawings;
6. project specific details;

7. Division 100 of the Public Works Construction Standards, North Central Texas, Fifth Edition, dated November 2017 with City of Mesquite Addendum;
8. technical specifications;
9. City of Mesquite Standard Details;
10. the OWNER's written notice to proceed to the CONTRACTOR;
11. the CONTRACTOR's bid proposal;
12. the Performance and Payment Bonds;
13. City of Mesquite General Design Standards
14. Public Works Construction Standards, North Central Texas, Fifth Edition, dated November 2017
15. Texas Department of Transportation (TxDOT) Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges, 2014

105.1.3. Contract Drawings and Specifications.

Add at the end of the first paragraph: The only plans authorized for use are stamped:

**RELEASED FOR CONSTRUCTION
CITY OF MESQUITE
ENGINEERING DIVISION
(DATE)
THESE PLANS SHALL
BE ON THE JOB SITE AT ALL TIMES**

105.3. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

Delete: The last sentence in the last paragraph.

105.4. CONSTRUCTION STAKES

Delete: Entire first paragraph of section.

Add: The CONTRACTOR is responsible for furnishing, at CONTRACTOR's expense, all construction staking necessary to establish line and grade. The Consulting Engineer will provide one-time location of survey control points for the CONTRACTOR's surveyor. Prior to construction, the CONTRACTOR shall field-verify elevations and locations of tie-in points for existing utilities. If discrepancies are discovered between field conditions and plan elevations, the CONTRACTOR shall notify the OWNER immediately of the discrepancies. All construction staking is subject to checking and verification by the OWNER's Representative.

105.6. SUPERVISION BY CONTRACTOR

Add: The CONTRACTOR superintendent and general foreman shall both be fluent in speaking, reading, and writing English.

105.7.1 Authority of the Engineer

Add: The Engineer has the authority to stop the work whenever such stoppage may be necessary to insure the proper execution of the Contract.

105.7.2. OWNER's Representative's Final Determination

Add: Should the CONTRACTOR object to any order by any subordinate of the OWNER's Representative (i.e. City inspector), the CONTRACTOR may, within six days make written appeal to the OWNER's Representative for his decision.

105.9 INSPECTION

Add: The OWNER's Inspector shall not have the power to waive the obligations of this Contract for the furnishing by the CONTRACTOR of good material, and of his performing good work as herein described, and in full accordance with the plans and specifications. No failure or omission of the OWNER's Inspector to condemn any defective work or material shall release the CONTRACTOR from the

obligation to at once remove and properly replace the same at any time prior to OWNER's final acceptance upon the discovery of said defective work or material.

105.9.1. Removal of Defective and Unauthorized Work.

Delete the first sentence and Replace with the following:

(1) Except as provided in Paragraph (2) of this 105.9.1, 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.

Add after first paragraph: (2) If the OWNER prefers to accept Work which is defective and/or not in accordance with the requirements of the Contract Documents, the OWNER's Representative may accept Work instead of requiring its removal and correction, prior to recommendation of final payment. Work found to be defective and accepted by the OWNER shall be, at the discretion of the OWNER and without recourse by the CONTRACTOR, subject to partial or non-payment. CONTRACTOR shall bear all direct, indirect, and consequential costs attributable to the OWNER's evaluation of any determination to accept such defective work (such costs to be approved by the OWNER's Representative as to reasonableness, and to include, but not be limited to, fees and charges of engineers, inspectors, architects, attorneys, laboratories and other professionals). If any such acceptance occurs prior to the OWNER's Representative's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and the OWNER shall be entitled to an appropriate decrease in the Contract Price. If the acceptance occurs after such recommendation, an appropriate amount will be paid by the CONTRACTOR to the OWNER.

105.9.3. Inspection Overtime

Delete the second and third sentences in the first paragraph and Replace with the following: The CONTRACTOR will be required to reimburse the OWNER or its designated representative for the cost of all inspection overtime which may be necessary for the successful and expeditious prosecution of the work included in this contract. Inspector's normal working hours are 7:30 a.m. to 11:30 a.m. and 12:30 p.m. to 4:30 p.m., Monday through Friday with the exclusion of Holidays. **The CONTRACTOR will reimburse the OWNER for all Inspection overtime outside the Inspector's normal working hours.** To arrange for inspection outside Inspector's normal working hours, a written request for overtime inspection must be communicated to the OWNER's Inspector two working days in advance. Work on Sundays and Holidays is prohibited except in the case of emergency and authorized, in writing, by the OWNER's Representative. Work between the hours of 6:00 P.M. and 7:00 A.M. must be approved by the OWNER's Representative. Overtime inspection shall be charged portal to portal. There is a two-hour minimum charge for inspection on weekends or Holidays. The CONTRACTOR will be charged a 2-hour minimum overtime charge if the CONTRACTOR schedules inspection on weekends or Holidays but then cancels work without notice to the Public Works Construction Inspector before the inspector shows up to the project.

Delete: The last paragraph.

Add: Inspection overtime will be reimbursed to the OWNER by the CONTRACTOR at the rate of time-and-one-half plus workman's compensation, F.I.C.A. and other normal City benefits and any other additional rates paid to the inspector by the City. The CONTRACTOR will be billed monthly by the City for overtime charges. The OWNER will not release final payment or give final acceptance of a project until inspector overtime charges are paid.

106.4. OFF-SITE STORAGE

Delete the second paragraph including (1) through (6), and Replace with:

The costs incurred in storage of materials or equipment away from the project site will not be made by the OWNER. All costs incurred shall be the full responsibility of the CONTRACTOR and included in the CONTRACTOR's bid.

106.5 SAMPLES AND TESTS OF MATERIALS

Delete the first paragraph and Replace with:

Where called for in the specifications or, in the opinion of the OWNER, tests and retests of materials or completed work are necessary, such tests will be made **at the sole expense of the CONTRACTOR** unless otherwise specified.

Add at the end of the last paragraph:

The CONTRACTOR shall designate and pay a City Approved testing laboratory to perform all testing, if any, for this project. Such designation is subject to the approval of the OWNER's Representative. The hiring of the testing laboratory shall comply with Article 2254.004 of the Texas Governmental Code (Professional Services Procurement Act) and other applicable laws.

The Testing Laboratory must furnish the inspector with one field copy of the test results. A typed paper copy must be mailed to the OWNER's Representative identified at the Pre-Construction Conference. The OWNER's Representative may approve the submission of final test reports to the OWNER by electronic means.

Collection of potable water samples for bacterial sampling will be accomplished by the CONTRACTOR. The CONTRACTOR must prepare the sample point and assist the City Public Works Construction Inspector in collecting the sample. All work and materials used for the sampling point and taking the samples must conform to the latest version of the American Water Works Association Standards. Delivery of the potable water sample to the testing laboratory and testing of the potable water sample will be at the OWNER's expense.

107.3. INDEMNIFICATION

Add the following subsections:

107.3.1 CONTRACTOR's Responsibility. CONTRACTOR further agrees that it shall at all times exercise reasonable precautions on behalf of, and be solely responsible for, the safety of its officers, agents, employees, subcontractors, licensees, invitees, and other persons, as well as their property, while in the vicinity where the improvements are being made. It is expressly understood and agreed that OWNER shall not be liable or responsible for the negligence of the CONTRACTOR, including but not limited to its officers, agents, employees, subcontractors, licensees, invitees, and other persons.

107.3.2 Premise Defects. Further, OWNER assumes no responsibility or liability for harm, injury, or any damaging events which are directly or indirectly attributable to premise defects, real or alleged, in improvements constructed by CONTRACTOR which may now exist or which may hereafter arise upon the premises, responsibility for any and all such defects being expressly assumed by CONTRACTOR. CONTRACTOR understands and agrees that this indemnity provision shall apply to any and all claims, suits, demands, and/or actions based upon or arising from any such premise defects or conditions, including but not limited to any such claim asserted by or on behalf of CONTRACTOR, including but not limited to its officers, agents, employees, subcontractors, licensees, invitees, and other persons.

107.3.3 Notice of Claim. It is further agreed with respect to the above indemnity that OWNER and CONTRACTOR will provide the other prompt and timely notice of any event covered which in any way, directly or indirectly, consequently or otherwise, affects or might affect the CONTRACTOR or OWNER, and OWNER shall have the right to compromise and defend the same to the extent of its own interests.

107.13 LABOR AND MATERIALS

Add the following subsection:

107.13.1. LABOR CLASSIFICATION AND MINIMUM WAGE SCALE

In compliance with Texas state law, the CONTRACTOR is required to pay all employees, and is required to make all subcontractors pay their employees, for the construction of any public work project not less

than the general prevailing rate of per diem wages in the locality for work of a similar character as determined by the City. The City, as provided by law, has adopted the prevailing wage rates as determined by the U.S. Department of Labor in accordance with the Federal Davis Bacon Act for this Contract.

Attention is called to the fact that the inclusion of a minimum scale of wages to be paid to employees engaged in the work under this Contract does not release the CONTRACTOR from compliance with any Federal or State Wage Law that may be applicable to the project. The CONTRACTOR shall abide by Federal and State Wage and Hour Laws and must not pay less than the wages legally prescribed as set forth therein. In order to verify compliance with Federal or State wage laws and regulations, the CONTRACTOR may be required to submit a weekly certified payroll of all workers on the project listing name, social security number, labor classification, wage rates, hours worked and compensation paid.

Under the provisions of the Texas Government Code, Title 10, Subchapter F, Section 2258.023, the CONTRACTOR shall forfeit as a penalty to the City on whose behalf the Contract is made or awarded, Sixty Dollars (\$60.00) for each laborer, workman or mechanic employed, for each calendar day or portion thereof that such laborer, workman or mechanic is paid less than the said stipulated rates for any work under the Contract, by him or by any subcontractor under him.

Such wage determinations must be for projects in Dallas County, Texas dated no more than 3 years prior to the date this Contract was advertised for bid.

In addition, the CONTRACTOR is required to obtain skilled and unskilled labor used on the work, when qualified, fit and available, first from residents within the City and secondly, from residents of Dallas County, if practical and available. However, the CONTRACTOR may bring his superintendent, foreman, sub-foreman, machine operators and sufficient key men to round his organization.

107.14 EQUAL EMPLOYMENT OPPORTUNITY

107.14.5 Reports

Add at the end of the first sentence: "if required by the OWNER."

Add the following subsections:

107.14.6. Protection of Resident Workers: The OWNER actively supports the immigration and Nationality Act (INA), which includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, employers may hire only persons who may legally work in the United States (i.e., citizens and nationals of the U.S.) and aliens authorized to work in the U.S. The employer must verify the identity and employment eligibility of anyone to be hired, which includes completing the Employment Eligibility Verification Form (I-9). The CONTRACTOR shall establish appropriate procedures and controls so no services or products under the Contract Documents will be performed or manufactured by any worker who is not legally eligible to perform such services or employment.

107.14.7. Handicapped Discrimination Regulations:

The handicapped discrimination regulations mandate equal opportunity and require that outside organizations such as labor unions and contractors who provide services to the local governments must not discriminate against qualified handicapped persons in employment decisions.

107.14.8. Non-Compliance with Equal Employment Opportunity Provisions

In the event of the CONTRACTOR's non-compliance with the nondiscrimination clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the CONTRACTOR may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

107.15 STATE AND LOCAL SALES AND USE TAXES

Add at the end of the section:

If the CONTRACTOR performs under a separated contract as defined by Texas Administrative Code Rule 3.291 by obtaining the necessary permit or permits from the State Comptroller's office allowing the purchase of materials for incorporation in this project without having to pay the Limited Sales and Use Tax at the time of purchase, the CONTRACTOR shall identify separately from all other charges the total agreed contract price for materials incorporated into the project. Total materials shall include only materials physically incorporated into the project.

If the CONTRACTOR operates under a "separated contract," the City of Mesquite Purchasing Division will furnish the CONTRACTOR with an exemption certificate for the applicable materials. In order to comply with the requirements of Texas Administrative Code Rule 3.291, as mentioned above, Bidder shall obtain a sales tax permit. It shall be necessary that the Bidder issue resale certificates to suppliers.

Sales tax application for a sales tax permit and information regarding resale certificates may be obtained by writing to:

Texas Comptroller of Public Accounts
Capitol Station
Austin, Texas 78774

The CONTRACTOR may also receive information or request sales tax permit applications by calling the State Comptroller's local Mesquite office at **(214) 289-3400**.

Subcontractors are eligible for sales tax exemption if the subcontract is made in such a manner that the charge for materials is separated from all other charges. The procedure described above will effect a satisfactory separation. When subcontracts are handled in this manner, the CONTRACTOR shall issue a resale certificate to the subcontractor, who in turn, must issue a resale certificate to his supplier.

107.17 COMPLIANCE WITH LAWS

Add at the end of the section:

THE CONTRACTOR SHALL INDEMNIFY AND SAVE HARMLESS THE OWNER AGAINST ANY CLAIMS ARISING FROM THE VIOLATION OF ANY SUCH LAW, ORDINANCES AND REGULATIONS.

107.19 PUBLIC CONVENIENCE AND SAFETY

Add the following subsections:

107.19.1. Temporary Water and Sanitary Sewer Service. When existing water or sanitary sewer mains or services have to be taken up or removed, the CONTRACTOR shall, at his own cost and expense, provide and maintain temporary outlets and connections for all private or public water, sanitary sewer and drain connections affected. The CONTRACTOR shall also take care of all sewage and drainage that will be received from these sanitary sewers and drains; and for this purpose, he shall provide and maintain, at his own expense, adequate pumping facilities and temporary outlets or diversions. The CONTRACTOR, at his own expense, shall construct such piping, troughs, or other necessary structures, and be prepared at all times to dispose of sanitary sewer and drainage received from these temporary connections until such time as the permanent connections are built and in service. The existing water, sanitary sewer and drain connections shall be kept in service and maintained under the Contract, except where specified or ordered to be abandoned by the OWNER's Representative. All water, sewage or drainage shall be disposed of in a legal and satisfactory manner so that no nuisance is created and the work under construction adequately protected.

107.19.2. Explosives. Explosives shall not be used under any circumstances in relation to this project.

Add at the end of section 107.19:

In order to document site conditions and assist in resolving claims for construction damage the CONTRACTOR shall take digital pictures and/or digital video recordings of the site before construction. In addition, the CONTRACTOR shall, during the course of construction, periodically record site conditions using digital pictures and/or digital video recordings. The CONTRACTOR shall make these recordings at least monthly or more frequently if the OWNER's Inspector so orders. Copies of all digital photographs and/or video recordings shall be burned to DVD or other digital media acceptable to the OWNER and provided to the OWNER's Inspector.

Add to end of section 107.20.2 the following subsection:

107.20.2.1. Access to Property. The CONTRACTOR shall schedule the work such that inconvenience to the public and adjoining property owner's shall be at a minimum. Access to all businesses shall be provided at all times during business hours.

The CONTRACTOR will schedule work through residential areas in a manner that would expedite construction operations and will restore drive approach access at the end of each working day during execution of the project (except during paving operations of the specific residential drive approach). The CONTRACTOR shall maintain temporary drive approaches to the satisfaction of the OWNER's Representative. Private drives to residences shall not be closed for more than 10 days at any one time during paving operations.

The CONTRACTOR will notify the OWNER's Representative Office in writing one (1) week prior to any street or driveway closure.

107.20.3.6. Payment for Trench Safety and Special Shoring.

Delete the first sentence and Replace with: Payment for trench safety shall be by the lineal feet of trench regardless of depth.

107.24.4. Utility Coordination and Protection

Delete the first sentence and Replace with:

No franchise utility relocations have taken place in preparation for the project, and the location of existing utilities may not be shown on the plans. It is the CONTRACTOR's responsibility to notify utility companies to arrange for exact locations at least 48 hours prior to beginning construction. The CONTRACTOR is fully responsible to coordinate necessary utility relocation with the utility companies and will make all efforts to coordinate necessary relocation of utilities with the utility owner. The OWNER shall not be held responsible by the CONTRACTOR for any delays created by a franchise utility company relocating their facilities. The time of construction given for the project includes all necessary utility work involved with franchise utility companies. The OWNER will make an effort to assist the CONTRACTOR in coordinating relocations before and during the project.

Delete: Table 107.24.4.(a) Utility Coordination and Replace with:

Entity	Contact Information
Texas One Call system	811
City of Mesquite Water/Sewer Locates	972-216-6278 972-216-6973 972-216-8797
City of Mesquite: Record Drawings	GIShelpdesk@cityofmesquite.com
City of Mesquite Traffic Signal Conduit & Loop Detectors	972-216-6278

Add to the end of section 107.24 the following subsections:

107.24.5. Arrangement and Charge for Water Furnished by the City. Where CONTRACTOR desires to use City water in connection with any construction work, he shall make prior arrangements with the Mesquite Water Accounting Division for so doing. Where meters are used, the charge for water will be at the regular established rate; where no meters are used, the charge will be as prescribed by ordinance; or, where no ordinance applies, payment shall be made on estimates made by the Mesquite Engineering Division.

107.24.6. Use of Fire Hydrants. No person shall open, turn off, interfere with, attach any pipe or hose to, or connect anything with any fire hydrant, stop valve or stopcock, or tap any water main belonging to the City, unless duly authorized to do so by the Mesquite Utilities Division.

107.24.7. Operation of Existing Valves. The CONTRACTOR is not permitted to operate any valve in the existing City of Mesquite water system. The valves must be operated by City of Mesquite Utility Division employees only.

107.27 RESTORATION OF PROPERTY

Add to the end of the section:

The CONTRACTOR shall exercise special care to minimize damage to trees, plants, shrubs and irrigation systems along the route of the work. The CONTRACTOR shall notify adjacent property owners before beginning construction operations adjacent to their property of trees, plants and shrubs that lie inside the right-of-way or easements lines and within the normal limits of work. The property owners shall be allowed to remove and protect their property, and all trees, plants and shrubs not so protected by the adjacent property owners shall be removed and disposed of by the CONTRACTOR, as directed by the OWNER's Representative.

107.28.1 Spill Prevention Plan

Add to beginning of first sentence: "When required by federal and/or state law, rules or regulations,"

107.28.5 Failure to Comply

Delete item (3) and Replace with:

(3) terminate the contract for default as provided in the Contract Documents; or

Add the following as Item (4):

(4) terminate the contract in any other applicable manner provided in the Contract Documents.

Add the following section to the end of Item 107:

107.29 ANTI-KICKBACK ACT

For any project funded by a Federal grant, the CONTRACTOR shall comply with the Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented by Department of Labor regulations (29 CFR, Part 3). This Act provides that each contractor or sub grantee shall be prohibited from inducing, by any means, any person employed in the construction, completion or repair of public work or to give up any part of the compensation to which he is otherwise entitled. The City shall report all suspected or reported violations to the grantor agency.

108.8.1 Liquidated Damages for Failure to Complete on Time.

Delete the entire subsection and replace with the following:

The time of completion is the essence of this Contract. For each day that any work shall remain uncompleted after the time specified in the proposal and the Contract, or the increased time granted by the OWNER, or as equitably increased by additional work or materials ordered after the Contract is signed, the sum per day given in the Schedule 108.8.1. (a) Liquidated Damages, unless otherwise specified, shall be deducted from the monies due the CONTRACTOR.

Schedule 108.8.1. (a) Liquidated Damages

Amount of Contract (\$)	Amount of Liquidated Damages (\$)
Less than 25,000.00	200.00 Per Day
100,000.00 to 999,999.99	500.00 Per Day
More than 1,000,000.00	1000.00 Per Day

The sum of money thus deducted for such delay, failure or noncompletion is not to be considered as a penalty, but shall be deemed, taken and treated as reasonable liquidated damages, per day that the CONTRACTOR shall be in default after the time stipulated in the Contract for completing the work. The said amounts are fixed and agreed upon by and between OWNER and CONTRACTOR because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the OWNER in such event would sustain; and said amounts are agreed to be the amount of damages which the OWNER would sustain and which shall be retained from the monies due, or that may become due, the CONTRACTOR under this Contract; and if said monies be insufficient to cover the amount owing, then the CONTRACTOR or its surety shall pay any additional amounts due.

In the event that the actual damages incurred by the OWNER exceed the amount of liquidated damages, OWNER shall be entitled to recover its actual damages.

109.1 PAYMENT FOR LABOR AND MATERIAL; NO LIENS

Add the following paragraph to this section:

The CONTRACTOR is not required to furnish payrolls and records unless this submittal is otherwise required by the Special Provisions or the Contract Documents. The CONTRACTOR is still required to comply with the minimum wage rates published by the OWNER.

109.2 PAYMENT FOR MATERIALS

109.2.1. Materials On-Hand. Delete the text of subsection and replace with the following: The OWNER will not pay for Materials on Hand unless otherwise specified in a Special Provision or the Contract Documents.

109.2.2. Materials Stored Off-Site. Delete entire subsection.

Re-number Subsection 109.2.3. "Measurement of Quantities" to 109.2.2.

109.5.1 MONTHLY ESTIMATE

Replace the second sentence of the first paragraph with the following: "The monthly estimate may include acceptable nonperishable materials if allowed by Special Provisions or the Contract Documents."

Replace the fourth sentence of the first paragraph with the following: "The monthly estimate may include acceptable nonperishable materials delivered to and stored at the work site or a storage facility accessible to the OWNER if allowed by Special Provisions or the Contract Documents."

109.5.4. Final Payment.

Revise the last sentence of the first paragraph to read as follows:

The amount of the final estimate, less any sums that have been previously paid, deducted or retained under the provisions of this Contract, shall be paid to the CONTRACTOR within a reasonable period of time (not to exceed 90 days) after final acceptance and the CONTRACTOR has provided to the OWNER:

- (1) a consent of surety to final payment;
- (2) the final CONTRACTOR's Report of SUBCONTRACTOR/Supplier Payment, evidencing that all indebtedness connected with the work and all sums of money due for any labor, materials, apparatus, fixtures or machinery furnished for or used in the performance of the work have been paid or otherwise satisfied, or that the person or persons to whom the same may be respectively due have consented to final payment;

- (3) such other affidavits, lien waivers and other documentation as the OWNER may reasonably require to protect its interests; and
- (4) a marked-up set of plans showing all changes, revisions and alterations to the original plans.

109.6 WIRE TRANSFERS

Delete entire text of Section 109.6 and Replace with:

The City of Mesquite has chosen the Paymode-X™ service through Bank of America to make electronic payments to contractors, vendors and suppliers.

The City of Mesquite recognizes the importance of expediting the payment process to CONTRACTOR's vendors and suppliers. Our Accounts Payable department utilizes Paymode-X to replace paper checks with electronic payments. We strongly encouraging our vendors and suppliers to enroll in Paymode-X so that future payments are made electronically. Contract the assigned OWNER's Inspector to receive further information on how to process online enrollment to the Paymode-X electronic payment system.

Delete entire ITEM 110. AIR QUALITY REQUIREMENT FOR EQUIPMENT

SPECIAL PROVISIONS

These Special Provisions are to be used in conjunction with the **North Central Texas Council of Governments Public Works Construction Standards, Fifth Edition (November 2017), Division 100 General Provisions, as amended**. Should any discrepancies arise, the governing order shall be: Special Provisions, Plans, Technical Specifications, and General Provisions.

THE FOLLOWING SPECIAL PROVISIONS HEREBY MODIFY THE North Central Texas Council of Governments Public Works Construction Standards, Fifth Edition (November 2017), Division 100 General Provisions. Where reference is made in these specifications to specifications compiled by others, such reference is made for expediency and standardization, and such specifications referred to are hereby made a part of these specifications.

SP-01 SUBMITTALS:

The Contractor shall provide submittals of the following items to the Owner's Representative at the pre-construction conference

1. Comprehensive list of Subcontractors and Material Suppliers (including Material's Testing Laboratory and Surveyor for construction staking).
2. Submittals for all materials to be incorporated into the project unless expressly stated otherwise in the Contract Documents. A submittal is not required for an item if it is an item is listed on the City of Mesquite Approved Materials list by brand name and model number.
3. Concrete batch designs and paving equipment.
4. Project Schedule.
5. Listing of all testing required by the specifications and plans with frequency requirements.
6. Traffic Control Plan
7. Contractor Contact List with listing of personnel for 24 hour – 7 days a week contact.
8. Construction Sequencing Plan as described in SP-02

SP-02 CONSTRUCTION SEQUENCE:

The Contractor shall prepare a Construction Sequencing Plan which shows staging for the installation of the construction by street or alley segment or other division of the work as requested by the Owner's Representative and submit it to the Owner's Representative at the Pre-Construction Conference.

SP-03 DISPOSAL OF TREES AND SHRUBS:

The City's compost facility at 3550 Lawson Road (Mapsco 60A-T) will accept trees and brush from the project under the following terms:

- Trees that have root balls will not be accepted.
- All brush must be cut.
- Tree trunks and limbs with a diameter larger than 18-inches must be cut in lengths no longer than three-feet.
- Tree trunks and limbs with a diameter smaller than 18-inches must be cut in lengths no longer than six-feet.
- The contractor will be charged by truck or trailer size and volume according to the attached Fee Schedule. There is an option for monthly billing if the contractor sets up an account with the City with a \$100.00 non-refundable deposit.

(1) Compost materials charge.	
a. Pick-up.....	\$ 20.00
b. 10-foot trailer.....	\$ 25.00
c. 12-foot trailer.....	\$ 30.00
d. 14-foot trailer.....	\$ 34.00

	e.	16-foot trailer.....	\$ 38.00
	f.	18-foot trailer.....	\$ 42.00
	g.	20-foot trailer.....	\$ 47.00
(2)		Chipped loads.	
	a.	10-cubic-yard box truck.....	\$ 25.00
	b.	20-cubic-yard box truck.....	\$ 45.00
	c.	30-cubic-yard box truck.....	\$ 65.00
(3)		Roll-off containers and tract trailers.	
	a.	10-cubic-yard.....	\$ 36.00
	b.	20-cubic-yard.....	\$ 67.00
	c.	30-cubic-yard.....	\$ 98.00
	d.	40-cubic-yard.....	\$129.00
	e.	50-cubic-yard.....	\$160.00
	f.	60-cubic-yard.....	\$191.00

TECHNICAL SPECIFICATIONS

SECTION 02441	IRRIGATION SYSTEM
SECTION 02900	LANDSCAPING
SECTION 10010	MOBILIZATION
SECTION 10011	TRAFFIC CONTROL
SECTION 10020	TESTING LABORATORY SERVICES
SECTION 20010	STEEL REINFORCEMENT
SECTION 20022	REPLACEMENT OF EXISTING PAVEMENT
SECTION 20030	REINFORCED CONCRETE PAVEMENT, CURB AND GUTTER AND SIDEWALK
SECTION 20082	CLEANING AND SEALING OF JOINTS AND CRACKS
SECTION 30051	ADJUSTMENT OF UTILITY APPURTENANCES
SECTION 30052	IRRIGATION AND WATER SERVICE REPAIR ALLOWANCE
SECTION 50010	SODDING

SECTION 02441

IRRIGATION SYSTEM

PART 1 - GENERAL

1.1 DESCRIPTION

Provide an underground irrigation system as shown and specified. The work includes:

- A. Automatic irrigation system, including piping, fittings, sprinkler heads, and accessories.
- B. Valves, and fittings.
- C. Meters provided and installed by the contractor
- D. Controller, sensors, control wire, phone modem, flow meter, and phone line. E. Testing.
- E. Excavating and backfilling irrigation system work.

1.2 QUALITY ASSURANCE AND APPLICABLE STANDARDS

- A. Installer's qualifications:
 - 1. Minimum of 5 years' experience installing irrigation systems of comparable size.
 - 2. Contractor shall employ a State of Texas Licensed Irrigator.
 - 3. Contractor shall also employ a licensed Texas Irrigation installer or State of Texas Licensed Irrigator as a continuous on-site representative to the Contractor.
- B. Materials, equipment, and methods of installation shall comply with the following codes and standards:
 - 1. The City of Mesquite Ordinances and Building Codes.
 - 2. National Electrical Code.
 - 3. American Society for Testing and Materials, (ASTM).
 - 4. National Sanitation Foundation, (NSF).
 - 5. Texas Commission on Environmental Quality rules and regulations.
- C. Excavating, backfilling, and compacting operations:
- D. Obtain Park Project Manager's acceptance of installed and tested irrigation system prior to installing backfill materials. Notification must precede requested inspection by 24 hours.

1.3 SUBMITTALS

- A. Submit manufacturer's product data and installation instructions for each of the system components to be installed.
- B. "As-Built" Drawings: Contractor shall submit a set of reproducible "As-Built" drawings on a Mylar base or a vector based electronic file (AutoCAD 2006 or compatible format) upon completion of the project. The Park Project Manager will provide a base sheet for temporary use by contractor. "As-Built" drawings shall give dimensions to objects from two permanent objects. Dimensions shall be 300' or less unless approved by the Park Project Manager. Permanent objects are

considered non-perishable and not likely to be moved i.e., buildings, street curbs, fire hydrants, tennis/basketball court corners, concrete footings or slabs around facilities, street signs, etc. (plant material is perishable). If permanent objects are not close enough to take measurements from, consult with the Park Project Manager. Objects to be dimensioned include but are not limited to: electric valves, routing of wiring, mainline, double check valve assembly, any deviations from the plan (including any and all lateral lines). Prior to taking measurements, consult with the Park Project Manager as to what other objects, if any, are to be dimensioned. Identify field changes and Change Order changes by dimension and detail.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver irrigation system components in manufacturer's original undamaged and unopened containers with labels intact and legible.
- B. Deliver plastic piping in bundles, packaged to provide adequate protection of pipe ends, either threaded or plain.
- C. Store and handle materials to prevent damage and deterioration. Do not store P.V.C. pipe in direct sunlight for more than 48 hours.
- D. Remove uninstalled components and construction debris each day from site. No storage will be permitted.

1.5 PROJECT CONDITIONS

- A. Known underground and surface utility lines are indicated on the drawings. Contractor shall request utility locating services provided by utility companies.
- B. Water Service - The Contractor shall connect the proposed system into existing stub-out as indicated on the plans.
- C. Protect existing trees, plants, lawns, and other features designated to remain as part of the final landscape work. Restore turf and planting area to original condition after trenching, backfilling, and cleaning.
- D. Promptly repair damage to adjacent facilities caused by irrigation system work operations. Cost of repairs shall be contractor's expense.
- E. Promptly notify the Park Project Manager of unexpected sub-surface conditions.
- F. Irrigation system layout is diagrammatic. Exact locations of piping, sprinkler heads, valves, and other components shall be established by contractor in the field at time of installation. Obtain Park Project Manager's approval of head layout prior to installation.
- G. Space sprinkler components as per manufacturer's recommendations.
- H. Minor adjustments in system layout will be permitted to clear existing fixed obstructions. The Park Project Manager shall approve final system layout.
- I. A pre-construction inspection will be conducted by Park Project Manager with the Contractor to observe original site conditions.
- J. Electric power supply shall be furnished by the City to a location indicated on the plans. Acceptable drop location shall be verified during the design phase. A ten-amp breaker box will be provided to irrigation contractor at park sign. Contractor shall be responsible for directly wiring the automatic controllers into 120 V power supply. NOTE: NO plug in devices will be accepted.

1.6 WARRANTY AND GUARANTEE

- A. Materials and workmanship shall be fully guaranteed for one (1) year following Owner's final acceptance of project at 100% completion. Manufacturer's warranty shall extend beyond 1 year if applicable.
- B. Backfilling of all excavation shall be guaranteed for the one (1) year guarantee period.
- C. Provide a one (1) year warranty against material, installation and operation defects. Repairs, adjustments and replacement of defective irrigation system materials, including materials that have been installed on the work during the warranty period shall be at Contractor's expense.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Parts List: Materials provided and installed by irrigation contractor

DESCRIPTION	MANUFACTURER / MODEL NO.
Controller	Weathermatic Smartline: SL4800 (12 station base model) 12 Station Module: SLM12 (up to 3 needed depending on station quantity) Aircard: SL-AIRCARD1
Flow meter	Data Industrial #IR220p-? (Match size to mainline) w/ all necessary wiring and accessories for proper operation
Electric Valve	Weathermatic 11000 series (size as noted on drawings)
Wire Splice Kit	King One Step socket seal
Freeze Sensor	Weathermatic Wireless Weather Station: SLW15 (this one product satisfies both sensors)
Rain Sensor	Weathermatic Wireless Weather Station: SLW15 (this one product satisfies both sensors)
Pop-up Spray Head (turf & bed areas)	Rainbird 1800 SAM/PRS w/ MPR nozzles (arc & radius as shown on the plans)
Small Rotary Head (turf areas)	Rainbird 5004 + PRS (stainless steel) 3/4" inlet
Large Rotary Head (turf areas)	Rainbird 7005, stainless steel, 1" inlet (50' – 70' radius)
Large Rotary Head (turf areas)	Rainbird 8005, stainless steel, 1" inlet (70' – 80' radius)
Rotary Head (clay infield)	Rainbird 6504 HS Falcon, stainless steel, 3/4" inlet (arc & radius as shown on the plans)
Low pressure rotor, 40 operating	Rainbird 6504 Falcon, stainless steel, (20' – 70' radius)
Golf / large turf rotors 80'+ radius	Toro 690 Golf Course Rotor / Rainbird Eagle 700 & 900

DESCRIPTION	MANUFACTURER / MODEL NO.
Tree / shrub bubbler	Rainbird RWS - M – BG02 Root Watering System
Quick Coupler Valve	Weathermatic V-100
Ball Valve (at remote Valve,	Spears Schedule 80 PVC (size to match valve)
Valve Box, and lid, 12" x 17" (for remote valve, and Q.C.V.)	DFW Plastics D-1200
Valve Box Extension	DFW Plastics D-600
Wire splice box	DFW Plastics 10" round
Concrete Valve Box	Brooks #65 concrete box with 2-piece cast iron cover
Reduced Pressure Zone Assembly (RPZ)	Febco Model 860 or Watts Regulator Series 009 (sized for optimum system performance)
RPZ device enclosure	HB-1 (1" RPZ) HB-2 (2" RPZ)
Main Line PVC	Class 200 PVC
Lateral PVC	Class 200 PVC
Swing Joint Assembly, 1" size	Lasco G-132-212
Drip (4' and narrower)	Netafim
Sleeves	Schedule 40 PVC 4" or 6" (size as noted on drawings)

B. Manufacturers:

1. TORO, 523 Camp Wisdom Rd., Duncanville, TX 75116, 972-709-3528
2. Weathermatic, Inc. Telsco Industries, P. O. Box 180205, Dallas, TX 75218-0205, 972-278-6131
3. Glen-Hilton Products, Inc., P. O. Box 31614, Richmond, VA 23294, 804-765-1101
4. Rainbird Corporation, 972-217-5961

2.2 MATERIALS

- A. Provide only new materials, without flaws or defects and of the highest quality of their specified class and kind.
- B. Comply with pipe sizes indicated. No substitution of smaller pipes will be permitted. Remove damaged and defective pipe.
- C. Provide pipe continuously and permanently marked with manufacturer's name or trademark, size schedule and type of pipe, working pressure at 73 degrees F. and National Sanitation Foundation (NSF) approval.
- D. Plastic pipe, fittings, and connections:
 1. Polyvinyl chloride pipe: ASTM D2241, rigid, unplasticized PVC, extruded from virgin parent material.
 2. Provide pipe homogeneous throughout and free from visible cracks, holes, foreign materials, blisters, wrinkles, and dents. SDR21, Class 200.
 3. PVC pipe fittings: ASTM D2241 schedule 40 PVC molded fittings suitable for solvent weld, slip joint ring tight seal, or screwed connections. Fittings made of other materials are not permitted. PVC Pipe Fittings - All PVC

fittings shall be Type I, medium weight Schedule 40, as manufactured by LASCO Manufacturing Company, or approved equal. Provide 24" minimum dimensions between fittings (exception: threaded couplings).

- E. Size slip fitting socket taper to permit a dry unsoftened pipe end to be inserted no more than halfway into the socket. Saddle and cross fittings are not permitted.
- F. Schedule 80 PVC pipe may be threaded.
- G. Use male adapters for plastic to metal connections. Tighten male adapters by hand plus one turn with a strap wrench.
- H. Copper pipe, fittings, and connections of RPZ device: Refer to Water Utilities specifications. Contact Ron Self, City Backflow Inspector, for details at 972-216-6973.
 - 1. Water piping, fittings and connectors: ASTM B88 Type "L" hard tempered copper tubing. Fittings shall be 150-pound working water pressure standard, solder end type, constructed of wrought copper, bronze, or brass.
 - 2. Joints made with tin-lead solder, approximately 50/50 composition. Thoroughly polish joints and use proper flux to provide sound joints.
- I. Associated equipment:
 - 1. Electric control: Type UF 12/2 gauge or 14/3-gauge insulation. UL listed approved for direct underground burial when used in National Electrical Code Class II Circuit,
 - 2. Wire color code: Provide control or "hot" wires red in color. Provide common or "ground" wires white in color.
 - 3. Ground Rod and Wire for Controller
 - a. Ground shall be 6-gauge uncoated copper bus wire.
 - b. Ground rod shall be a copper coated steel rod or as per local code. Length and diameter shall be as per local code.
 - c. Refer to manufacturer's requirements for wire sizing to valves, and sensors.
- J. Valve box to enclose electric valves shall be a 12" rectangular valve box with a snap in lid. Valve box to be installed with 6" extension (as needed), and supported with bricks around the entire base of the box
- K. Automatic sprinkler controllers shall be capable of operating the number of stations specified. Power source shall be standard 120V AC, 60 Hz., @1.0A for 5 valves. Output for operation of companion solenoid operated valves shall be 24/28V AC, 2.5A (60/70VA). All conduits shall be ridged type for controller wire and electrical to breaker box. The controller shall be of solid-state construction. The operation of the controller shall be a fully automatic, incorporating the following features: pump start/master valve relay with flow sensing, telephone modem, internal surge protection for AC input and valve outputs, & program information memory during power outages. A computer chip bypass switch for the rain sensor shall be installed inside the controller housing.
- L. Paco LC Model 15705 Simplex Booster System. Each system is pre-wired, skid mounted and assembled as a packaged system requiring only suction and discharge field connection and field wiring to panel. Each system consists of:
 - 1. Paco LC close-coupled bronze fitted pump with mechanical seal, bronze impeller, bronze case wear ring and bronze shaft sleeve. Full load capacity

of pump to be 160 GPM at 147' TDH. Motor to be a 10HP/3500 RPM/1PH/220 VAC/TEFC.

2. Nema 3R enclosure control panel containing fusible disconnect switch with control power transformer, 220/110 volt. Starter with hand/off/auto switch, ambient compensated overload and run light. Also mounted on panel is external duplex receptacle for 110 volt service minimum 1KVA capacity and circuit breaker. Panel to have alarm system to indicate a non-flow condition and shut pump down. Pump on/off to be controlled by 24 volt signal provided by others. Controller and pump system to be wired and tested.
3. Accessories and fittings to include ball valve and check valve on discharge piping, and ball valve flow switch on suction piping. Suction and discharge gauges to be furnished. Galvanized pipe to connect fittings. Only galvanized pipe should be connected to the pumps galvanized fittings. Thermostatically controlled tape furnished for freeze protection of piping, valve and pump case, etc., inside fiberglass enclosure. Drain valves to be included on suction and discharge side of pump.
4. Unit to have fiberglass lockable enclosure with external gel coat color green. Commercial grade resin and reinforcing material furnished. Enclosed to have 2" flat flange lip plate. Bottom side with replaceable rubber gasket. Flange suitable to accept padlock device and with two (2) padlocks keyed alike. Two (2) lifting handles, six (6) 3" vents also furnished. Fiberglass enclosure designed 1/4" thick and for 300# line load. Enclosure includes electric fan ventilation system.
5. Unit with heavy duty galvanized steel skid with four (4) anchor bolts holes. Holes inside enclosure. Suction and discharge openings provided through skid.
6. Start-up assistance and operation and maintenance instructions to be furnished by contractor to Park Supervisory personnel.

2.3 ACCESSORIES

- A. Drainage fill: 1/2" washed pea gravel.
- B. Fill: Clean soil free of stones larger than 1" diameter, foreign matter, organic material, and debris.
- C. Suitable excavated materials removed to accommodate the irrigation system work may be used as fill material subject to the Park Project Manager's review and acceptance.
- D. Concrete Thrust block: 3000 psi, 5 sack concrete mix.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Examine final grades and installation conditions. Do not start irrigation system work until unsatisfactory conditions are corrected.
- B. The contractor shall verify existing and proposed locations of all site utilities (i.e. gas, water, electric, telephone, sanitary and storm sewers etc.) prior to any trenching and laying of pipe. In addition, this contractor shall request for inspection

of reduced pressure zone assembly (RPZ) with the Water Utilities Division in connection to City provided meter and exhaust.

3.2 PREPARATION

- A. Lay out and stake the location of each pipe run and all sprinkler heads and sprinkler valves. Obtain Park Project Manager's acceptance of layout prior to excavating.

3.3 INSTALLATION

- A. Excavating and backfilling:
1. Excavation shall include all materials encountered, except materials that cannot be excavated by normal mechanical means.
 2. Excavate trenches of sufficient depth to provide 18" maximum and 12" minimum cover over installed pipe.
 3. Fill to match adjacent grade elevations with approved earth fill material. Place and compact fill in layers not greater than 8" depth. Backfill all voids in soil. Material shall not be placed to cause shifting or compression of pipe and valve boxes.
 4. Provide clean original material fill free of rocks, concrete and debris for backfill.
 5. Provide drainage fill aggregate around each valve and double check assembly.
 6. Irrigation mainline: The mainline shall be installed in a 6" wide (minimum) trench with all electric wire to valves laid directly below mainline (upon inspection the wires should be hidden from sight). Trench shall allow a minimum of 12" of cover. All mains and laterals up to and including 4" shall have a maximum 18" of cover. Mainline shall be flushed before attaching valves. If splices are made in mainline, use gasket repair fittings. Compression fittings are not allowed. Mainline may be backfilled except at joints prior to inspection by the Owner. Mainline shall be tested for leaks under pressure for a 6-to-8-hour period. Joints may be backfilled after Park Project Manager verifies and approves that no leaks exist.
 7. Thrust block shall be required at all 3" or larger fittings.
 8. Lateral Piping - Shall be installed in a 4" wide (minimum) trench 12" deep. Excavate trenches and install piping and fill during the same working day. Do not leave open trenches or partially filled trenches open overnight. Fill at joints in pipe may remain open.
 9. Sleeves installed to accommodate irrigation piping shall be installed with 18" of cover, as measured from finished grade. Costs for providing and installing these sleeves shall be included in the irrigation system bid item.
- B. Plastic pipe:
1. Install plastic pipe in accordance with manufacturer's installation instructions. Provide for thermal expansion and contraction.
 2. Saw cut plastic pipe to ensure a square cut. Remove burrs and shavings at cut ends prior to installation.
 3. Make plastic-to-plastic joints with solvent weld joints or slip seal joints. Use

only solvent recommended by the pipe manufacturer. Install plastic pipe fittings in accordance with pipe manufacturer's instructions. Solvent primer is required on all joints/fittings. Excess primer and/or solvent dripped on pipe or squeezed from fitting is not permitted and shall be grounds for removal and replacement of the joint.

4. Make plastic to metal joints with plastic male adapters.
5. Maintain a minimum of 24" between all glued joints.
6. Allow joints to set at least 24 hours before pressure is applied to the system.
7. Maintain pipe interiors free of dirt and debris. Close open ends of pipe by acceptable methods when pipe installation is not in progress.
8. Inspection of all fittings and coupling will be made by the Park Project Manager. Backfill of approved soil is not permitted until Park Project Manager has inspected all fittings, valves, and couplings.
9. Install in-ground control valves in valve box as indicated. Valve boxes shall be installed in accordance with the manufacturer's installation instructions and with an 8" layer of washed pea gravel under the valve. Each valve box shall be supported by bricks around the entire perimeter of the box. Install valve boxes on a suitable base to provide a level foundation. Set the top of the box 2" below surrounding grade and cover to protect from vandalism.
10. Seal threaded connections on both sides of the control valves with Teflon tape.
11. Install freeze and rain sensors as directed by the Park Project Manager.

C. Sprinklers, fittings, valves, and accessories:

1. Install fittings, valves, sprinkler heads, risers, and accessories in accordance with manufacturer's instructions, except as otherwise indicated. Maintain a minimum of 24" between all glued fittings. All fittings shall be installed in a horizontal manner. Fittings that join pipe vertically or at angles other than horizontal will be subject to removal. Use of fittings that appears excessive and inappropriate for normal installation and not in compliance with standard industry practice, shall be rejected.
2. Set sprinkler heads perpendicular to finished grades, except as otherwise indicated.
3. Set top of quick coupler, gate, and isolation valve boxes flush to finish grade.
4. Set top of electric valve box at 2" below finish grade.
5. Provide pop-up spray heads with 1/2" flex cut-off nipples joint assembly.
6. Install reduced pressure zone (RPZ) backflow device above grade in an insulated aluminum or stainless steel enclosure appropriately sized for the RPZ device. The enclosure shall be securely anchored and vandal resistant. The concrete pad for the enclosure shall be a 3000 PSI 4" concrete slab that extends 6" beyond the enclosure on all sides. Reinforce the concrete pad with #3 rebar @ 12" on-center, both ways.
7. Install the specified controller in the location shown on the drawings. Install per manufacturer's recommendations.
8. The contractor shall pull valve wires, program controller by labeling station

position for zones and put controller in operation.

- D. Control wiring:
1. Contractor shall run a single wire to each solenoid, for the control and a common neutral wire to all solenoids from the controller. Wire shall be sized and color-coded according to device requirements of manufacturer.
 2. Install enough wire to allow raising the valve bonnet or splice to the surface without disconnecting the wires when repair is required.
 3. Pull each remote control valve wire through rigid conduit in base, which shall then be connected to controller.
 4. Make wire connections to remote control electric valves and splices of wire in 10" valve boxes. All wire splices must be properly insulated and waterproofed. Splices shall be made with a King One-Step in accordance with manufacturer's recommendations. Provide 2" of soil cover to protect from vandalism. Show location of any and all splices on the "As-Built" drawings
- E. Sensors: Install rain, freeze and flow sensors as noted on the plans (or as directed by the Park Project Manager) with control wire enclosed in 1/2" rigid conduit (above grade).
- F. RPZ device/enclosure shall be installed according to the construction details shown on the plans and the heater shall be wired directly to the breaker box/disconnect. A licensed electrician shall perform all electrical connections.
- G. Flushing, testing, and adjustment:
1. After sprinkler piping and main are installed and before sprinkler heads are installed, open control valves and flush out the system with full head of water until pipes are clear of debris.
 2. Perform system testing upon completion of each section. Make necessary repairs and re-test repaired sections as required. Trench and pipe must be dry at inspection. System must be under operating pressure for 24 hours prior to observation of every joint and coupling, by the Park Project Manager. Backfill is permitted after inspection and approval by Park Project Manager.
 3. Adjust sprinklers after installation for proper and adequate distribution of the water over the coverage pattern. Adjust for the proper arc of coverage.
 4. Tighten nozzles on spray type sprinklers after installation. Adjust sprinkler-adjusting screw on lateral line or circuit as required for proper radius. Interchange nozzle patterns as directed by the Park Project Manager, to give best arc of coverage.
 5. Adjust all electric remote control valve flow control stems for system balance.
 6. Adjust all rain and temperature sensors as directed by the Park Project Manager. Test as required to obtain satisfactory operating conditions. Demonstrate correct operation of sensors to the Park Project Manager.
 7. Test and demonstrate the controller by operating appropriate day, hour, and station selection features as required to automatically start and shut down irrigation cycles to accommodate plant requirements and weather conditions.

- H. Spare Parts: Provide to the City of Mesquite additional parts as per noted on plan, including installation and operations manuals to all products.
- I. Booster Pump: Install Paco LC model 15705 Simplex Booster System according to manufacturer recommendations.

3.4 DISPOSAL OF WASTE MATERIAL

- A. Stockpile, haul from site, and legally dispose of waste materials, including unsuitable excavated materials, rock, trash, and debris. Debris must be removed at the end of work time each day.
- B. Maintain pavement and curb clear, clean, and free of debris and soil. Pavement and curb shall remain clear, clean and free of debris.

3.5 SUBSTANTIAL COMPLETION

- A. An inspection of the irrigation system will be made by the Park Project Manager upon request for Application of Substantial Completion by the Contractor. The irrigation system must be sufficiently complete so that all plant material can be sustained by the system and all valve boxes are properly installed. All electric valves shall have 2" of fill over the top of the box. Contractor shall deliver complete "As-Built" drawings (section 1.03B) to Park Project Manager for review and comment prior to application of final payment.

3.6 CLEANING

- A. Perform daily cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, soil, debris, and equipment. Repair damage resulting from irrigation system installation. Restore site to the original condition prior to damage caused by construction activities.

3.7 FINAL COMPLETION

- A. The Park Project Manager, upon written request, will make an inspection of the irrigation system for Final Completion by the Contractor. Provide notification of at least two (2) working days before requested inspection date. Contractor shall submit on forms approved by the Park Project Manager, a Waiver of Release of Lien, Affidavit of Payment of Debts and Claim, and a fully executed "Consent of Surety for Payment".

END OF SECTION

SECTION 02900

LANDSCAPING

PART 1 - GENERAL

1.1 GENERAL CONDITIONS

- A. The requirements of the "General Provisions" shall apply to all work of this Section with the same force and effect as though repeated in full herein.

1.2 WORK INCLUDED

- A. Furnish all labor, material, equipment and services necessary to provide all landscape planting, and related items complete in place, as shown on the Drawings and specified, herein. Work Specified in this Section: Fine grading, steel edging, soil preparation, gravel groundcover, planting, clean-up, and all other miscellaneous items related to landscaping as shown on the drawings.

1.3 QUALITY ASSURANCE

- A. Standards:
 - 1. Standardized Plant Names, 1942 Edition, American Joint Committee on Horticulture Nomenclature.
 - 2. American Standards for Nursery Stock, Latest Edition, American Association of Nurserymen.
- B. Source Quality Control:
 - 1. Submit documentation to Park Project Manager within ten (10) days after award of Contract that all plant material to be supplied by Contractor is available. Any and all substitutions due to unavailability must be requested in writing prior to confirmation of ordering. All materials shall be subject to inspection by Park Project Manager at any time after confirmation of ordering.
 - 2. Plants to be supplied by Contractor shall be subject to inspection and approval of Park Project Manager at place of growth or upon delivery for conformity to Specifications. Such approval shall not impair the right of inspection and rejection during progress of the work. Inspection and tagging of plant material by the Park Project Manager is for design intent only and does not constitute the Park Project Manager's approval of the plant materials in regard to their health and vigor. The health and vigor of the plant material is the sole responsibility of the Contractor. Submit written request for inspection of plant material at place of growth to Park Project Manager. Written request shall state the place of growth and quantity of plants to be inspected. Park Project Manager reserves the right to refuse inspection at this time if, in their judgment, a sufficient quantity of plants is not available for inspection.
 - 3. The Contractor shall submit specifications of any item being used on site upon the request of the Park Project Manager.

1.4 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Delivery:

1. Deliver packaged materials to site in original unopened containers bearing manufacturer's guaranteed chemical analysis, name, trademark, and conformance to State Law.
2. Deliver all plants with legible identification labels.
 - a. Label trees, evergreens, bundles of containers of like shrubs, or groundcover plants.
 - b. State correct plant name and size indicated on plant list.
 - c. Use durable waterproof labels with water-resistant ink which will remain legible for at least 60 days.
3. Protect plant material during and after delivery to prevent damage to root ball or desiccation of leaves.

B. Storage:

1. Store plant material in shade and protect from weather.
2. Storage at the site is allowed, however, Contractor accepts full responsibility for damage, theft, or vandalism.
3. Any plant material balled or burlapped, not installed within 24 hours of delivery shall be healed in until such time as it is installed.
4. Maintain and protect plant material not to be planted within four (4) hours in a healthy, vigorous condition.

C. Handling: The Contractor is cautioned to exercise care in handling, loading, unloading and storing of plant materials. Plant materials that have been damaged in any way will be discarded and if installed, shall be replaced with undamaged materials at the Contractor's expense.

1.5 JOB CONDITIONS

- A. Perform actual planting only when weather and soil conditions are suitable in accordance with locally accepted practice.
- B. Scheduling: Install trees, shrubs, and liner stock plant material before grassing is commenced.
- C. Contractor shall note that rock and/or construction materials from previous site use may be encountered on some areas of the site. Rock or construction material excavation shall be included as part of bid.

1.6 QUALIFICATIONS OF WORKMEN

- A. Provide at least one person who shall be present at all times during execution of this portion of the Work, who shall be thoroughly familiar with the type of materials being installed and the proper materials and methods for their installation, who speaks understandable English, and who shall direct all work performed under this Section.

1.7 SAMPLES AND TESTS

- A. Park Project Manager reserves the right to take and analyze samples of materials for conformity to specifications at any time. Contractor shall furnish

samples upon request by Park Project Manager. Rejected materials shall be immediately removed from the site at Contractor's expense. Cost of testing of materials not meeting Specifications shall be paid by Contractor.

1.8 PLANT GUARANTEE

- A. All trees, shrubs, vines, and groundcovers will be guaranteed for a twelve (12) month period after Final Acceptance. The Contractor will replace all dead or defective materials upon notification (weather permitting) with plants of the same kind and size as those originally planted. Plants, including trees, which have partially died so that shape, size, or symmetry has been damaged, shall be considered subject to replacement, and the opinion of the Park Project Manager will be final. At the direction of the Park Project Manager, plants may be replaced at the start of the next planting or digging season, but in such cases, Contractor will remove dead plants within two (2) working days.
- B. All replacement work (including materials, labor and equipment) will be done at no cost to the Owner. Any damage, such as ruts in lawn or bed areas, that occurs when Contractor makes replacements, will be repaired immediately by the Contractor.
- C. The guarantee will not apply where plants die after Final Acceptance because of injury by storms, drowning, drought, hail, freeze, insects, disease, mechanical injury by humans or machines, and theft.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. All materials shall be of standard, approved and first-grade quality and shall be in prime condition when installed and accepted. Any commercially processed or packaged material shall be delivered to the site in the original unopened container bearing the manufacturer's guaranteed analysis. Contractor shall supply Park Project Manager with a sample of all supplied materials accompanied by analytical data from an approved laboratory source illustrating compliance or bearing the manufacturer's guaranteed analysis.
- B. Product Manufacturer's name(s) and/or model numbers are used herein to set a standard of quality and are not intended to be a restraint of trade or prevent submittals of other manufacturer's products of equal quality.
- C. Soil Amendment:
 - 1. Compost Mix: "A Professional Bedding Soil" as produced by Living Earth Technologies, Inc., 1808 W. Northwest Highway, Dallas, Texas (phone: 214/869-4332) composed of 45% Compost, 45% Composted Pine Bark, and 10% Sandy Loam, or approved equal.
- D. Tree Backfill Fertilizer:
 - 1. 13.13.13 analysis bulk fertilizer.
- E. Tree Shrub, Groundcover, and Seasonal Color Fertilizer:
 - 1. Provide commercial balanced slow release fertilizer (Osmocote), delivered to the site in bags labeled with the manufacturer's guaranteed analysis. If stored on the site, protect fertilizer from the elements at all times.

- F. Tree, Shrub, and Groundcover Planting Tablets:
1. Shall be slow-released type with potential acidity of not more than 5% by weight containing the following percentages of nutrients by weight:
 - a. 20% nitrogen
 - b. 10% phosphoric acid
 - c. 5% potash
- G. Plant Material:
1. Plant names indicated, comply with "Standardized Plant Names" as adopted by the latest edition of the American Joint Committee of Horticultural Nomenclature. Names of varieties not listed conform generally with names accepted by the nursery trade. Provide stock true to botanical name and legibly tagged.
 2. Plant material shall meet and/or exceed grades and standards set forth by the Texas Association of Nurserymen. All plants shall have a normal habit of growth and shall be sound, healthy, vigorous and free of insect infestations, plant diseases, sunscalds, fresh abrasions of the bark, excessive abrasions, or other objectionable disfigurements. Tree trunks shall be sturdy and have well "hardened" systems and vigorous and fibrous root systems that are not root or pot-bound. In the event of disagreement as to condition of root system, the root condition of the plants furnished by the Contractor in containers will be determined by removal of earth from the roots of not less than two or more than two percent of the total number of plants of each species or variety. Where container-grown plants are from several sources, the roots of not less than two plants of each species or the variety from each source will be inspected. In case the sample plants inspected are found defective, the Park Project Manager reserves the right to reject the entire lot or lots of plants represented by the defective samples. Any plants rendered unsuitable for planting because of this inspection will be considered as samples and will be provided at the expense of the Contractor.
 3. The size of the plants will correspond with that normally expected for species and variety of commercially available nursery stock or as specified on Drawings. The minimum acceptable size of all plants measured before pruning with the branches in normal position, shall conform to the measurements, if any, specified on the drawings in the list of plants to be furnished. Plants larger in size than specified may be used with the approval of the Park Project Manager, but the use of larger plants will make no change in Contract price. If the use of larger plants is approved, the ball of earth, container size, or spread of roots for each plant will be increased proportionately.
 4. Provide "specimen" plants with a special height, shape, or character of growth. Tag specimen trees or shrubs at the source of supply. Plants may be inspected by the Park Project Manager and reviewed at the place of growth, for compliance with specification requirement for quality, size, and variety. Such approval shall not impair the right of inspection and rejection upon delivery at the site or during the progress of the work.

5. Field-selected or Nursery Grown Balled and Burlapped Tree Stock (B&B): Dig balled and burlapped plants with, natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Provide 10" of root ball per 1" caliper of trunk (measured 6" above grade level for trees 4" caliper and less and 12" above grade for larger trees). If a tree is of multi-trunk variety, the caliper of the tree is the average caliper of all its trunks. Cracked or mushroomed balls are not acceptable. Selectively remove 1/2 to 2/3 of twig growth.
 6. Container-grown Stock (General): Grown in a container for sufficient length of time for the root system to have developed to hold the soil together, firm and whole.
 - a. No plants shall be loose in the container.
 - b. Container stock shall not be pot bound.
 7. Container-grown Tree Stock: Grown in a container from seedling stage and complies with Paragraph 2.1 - G-6, Container-grown Stock requirements.
 8. Containerized Tree Stock: Grown in a container for not less than one (1) year and complies with Paragraph 2.1 - G-6, Container-grown Stock requirements.
 9. Plants planted in rows shall be matched in form, height and overall character.
 10. Shrubs and small plants shall meet the requirements for spread and height indicated in the plant list.
 - a. The measurements for height shall be taken from the ground level to the average height of the top of the plant and not the longest branch.
 - b. Single stemmed or thin plants will not be accepted. Side branches shall be generous, well-twiggged, and the plant as a whole well-bushed to the ground.
 - c. Plants shall be in a moist, vigorous condition, free from dead wood, bruises, or other root or branch injuries.
 11. Pruning: At no time shall trees or plant materials be pruned, trimmed or topped prior to delivery and any alteration of their shape shall be conducted only with the approval and when in the presence of the Park Project Manager.
 12. All plants not conforming to the requirements herein specified, shall be considered defective and such plants, whether in place or not, shall be marked as rejected and immediately removed from the site of the work and replaced with new plants at the Contractor's expense. The plants shall be of the species, variety, size and conditions specified herein or as shown on the Drawings. Under no conditions will there be any substitutions of plants or sizes listed on the accompanying plans, except with the express consent of the Park Project Manager.
- H. Tree Paint: Morrison Tree Seal, Cabort Tree Paint, or equal.
- I. Water: Furnished by Owner; transport as required.
- J. Mulch Topdressing: Shall be shredded, fine textured, hardwood mulch as approved by Park Project Manager. Minimum 2" layer spread uniformly.

- K. Steel Edging and Stakes: 3/16" x 4" Ryerson 'Estate' edging, as manufactured by Joseph Ryerson Co., Inc., Houston, Texas (phone 713-675-6111), or approved equal.
- L. Soil Saver/Jute Mesh (if required): Heavy weight (green) jute mesh as manufactured by Jim Walls Company, 12820 Hillcrest Road, Dallas, Texas 75230, or approved equal. Install on all groundcover or shrub bed slopes greater than 3:1 slope.
- M. Anchoring Materials: In-ground type tree anchors approved by the Park Project Manager or the city's designated representative.
- N. Gravel Mulch (if applicable): 3/4" to 1-1/2" native washed stone. Install 3" layer over layer of filter fabric (to be approved by Park Project Manager). Provide sample of gravel mulch for Park Project Manager approval.
- O. Other Materials: All other materials, not specifically described but required for a complete and proper installation, shall be as selected by the Contractor subject to the approval of the Park Project Manager.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Obtain Park Project Manager certification that final grades to +0.10' have been established prior to commencing planting operations. Provide for inclusion of all amendments, settling, etc. Landscape Contractor shall be responsible for shaping all planting areas as indicated on Plans or as directed by Park Project Manager.
- B. Inspect trees, shrubs and groundcover plant material for injury, insect infestation and trees and shrubs for improper pruning.
- C. Do not begin planting of trees until deficiencies are corrected or plants replaced.

3.2 PLANTING PREPARATION

- A. Soil Preparation for Groundcover, Shrub Beds:
 - 1. Excavate existing soil, if necessary, and add to complete shrub, groundcover, and seasonal color beds the following:
 - a. 4" layer of Compost Mix
 - b. 14-14-14 slow release fertilizer (Osmocote) at a rate of 5 lbs./100 sq.ft.
 - 2. Spread materials uniformly and cultivate thoroughly by means of a mechanical tiller. Till to a minimum depth of 8".
- B. Final Grades:
 - 1. Minor modifications to grade may be required to establish the final grade.
 - 2. Finish grading shall ensure proper drainage of the site as determined on Drawings.
 - 3. All areas shall be graded so that the final grades will be 1" below adjacent paved areas, curbs, valve boxes, edging, clean-outs, drains, manholes, etc., or as indicated on Plans.
 - 4. At time of planting, the top 6" of all areas to be planted or seeded shall be free of stones, stumps, or other deleterious matter 1" in diameter or larger,

and shall be free from all wire, plaster, or similar objects that would be a hindrance to planting or maintenance.

- C. Disposal of Excess Soil: Disposal of any unacceptable or excess soil shall be the sole responsibility of the Contractor. Excess soil may be spoiled on-site per direction of Owner.

3.3 PLANTING INSTALLATION

A. General:

1. Actual planting shall be performed during those periods when weather and soil conditions are suitable and in accordance with locally accepted practice, as approved by the Park Project Manager.
2. Only as many plants as can be planted and watered on that same day shall be distributed in a planting area.
3. Containers shall be opened and plants shall be removed in such a manner that the ball of earth surrounding the roots is not broken and they shall be planted and watered as herein specified immediately after removal from the containers. Containers shall not be opened prior to placing the plants in the planting area.

- B. Layout of Major Plantings: Locations for plants and outlines of areas to be planted shall be marked on the ground by the Contractor before any plant pits are dug. All such locations shall be approved by the Park Project Manager. If underground construction or utility line is encountered in the excavation of planting areas, other locations for planting may be selected by the Park Project Manager. Layout shall be accomplished by flagged grade stakes indicating plant names and specified container size on each stake. It shall be the Contractor's responsibility to confirm with the Park Project Manager superintendent and governing agencies the location and depth of all underground utilities, and obstructions.

C. Excavation:

1. Excavation for planting shall include the stripping and stacking of all acceptable topsoil encountered within the areas to be excavated for trenches, tree holes, plant pits and planting beds.
2. Excess soil generated from the planting holes and not used as backfill, or in establishing the final grades may be spoiled on-site per direction of Owner.
3. Protect all areas from excessive compaction when trucking plants or other material to the planting site.
4. Tree and shrub pits shall be excavated to allow the root ball to set on undisturbed soil and excavated to the following diameters:

<u>Plant Size</u>	<u>Pit Diameter</u>
a. Up to 5 gallon container	12" greater than root ball diameter
b. 5 gallon container and larger (including trees)	24" greater than root ball diameter

5. All excavated holes shall have vertical sides with roughened surfaces.

6. All holes for trees and large shrubs shall be tested for water retention prior to tree or shrub installation. After hole is excavated, it is to be filled with water to the top of the excavation. If, after 24 hours, the hole still holds water, the Contractor shall excavate an additional 6" from the bottom of hole. The Contractor shall then install (the hole) with filter fabric. The Contractor shall also install a capped 3" diameter PVC sump which will extend from near the bottom of the rock layer to 3" above the proposed finish grade so the hole can be evacuated through mechanical means.
- D. Planting Trees:
1. Container Removal:
 - a. Cut cans (if applicable) with an acceptable can cutter. Remove tree from plastic container or box carefully so container can be re-used.
 - b. Do not injure root ball.
 2. Center tree in pit.
 3. Face plants with fullest growth into prevailing wind, or away from building facade.
 4. Set plants plumb and hold rigidly in position until soil has been tamped firmly around ball.
 5. Tree Pit Backfill:
 - a. Tree backfill should be composed of 5 parts existing soil excavated from the hole to one part Soil Amendment, thoroughly mixed with 5 lbs. per cubic yard tree backfill fertilizer. Tree backfill to be mechanically mixed prior to backfill operations.
 6. Set tree in upright position in the center of the hole and compact the backfill mixture around the ball or roots. Thoroughly water each plant after back filling. After planting trees not in beds, surround the pits with a 3" height berm.
 7. Plant Tablets:
 - a. After the water has completely drained from the plant pit, planting tablets shall be placed in the top 3" of the plant pit, four tablets per every foot of rootball diameter per tree.
 - b. Planting tablets shall be set with each plant on the top of the rootball while the plants are still in their containers so the required number of tablets to be used in each hole can be easily verified by the Park Project Manager.
 8. Pruning: Pruning shall be limited to the minimum necessary to remove injured twigs and branches or to limb-up trees as directed by the Park Project Manager. Pruning may not be done prior to delivery of plants. Cuts over 3/4" in diameter shall be painted with tree paint.
 9. Newly planted trees must be anchored the first year to help the tree become established. Some flexibility must be provided to allow the stem and root system to develop strength. For trees up to a 4" caliper diameter, use a minimum of two in- ground tree anchors; 4" - 8" use a minimum of three in-ground tree anchors. Information about in-ground tree anchoring

products can be found at the website www.treestaple.com. This product and its web site are offered as an example of one type of tree anchoring system to establish a standard of quality. Similar products with equal specifications will be accepted.

E. Planting Shrubs:

1. Container Removal:
 - a. Cut cans on two sides with an acceptable can cutter. Do not cut cans with spade or ax.
 - b. Do not injure root system.
2. Center plant in pit or trench.
3. Face plants with fullest growth into prevailing wind, or away from building facade.
4. Set plants plumb and hold rigidly in position until soil has been tamped firmly around ball or roots.
5. Fill holes with backfill composed of 50% soil taken from the hole and 50% Soil Amendment, thoroughly mixed.
6. Set plant in upright position in the center of the hole and compact the backfill mixture around the ball or roots. Thoroughly water each plant after back filling. After shrubs not in beds, surround the pits with a 3" height berm.
7. Plant Tablets:
 - a. After the water has completely drained from plant pit, planting tablets shall be placed in the top 3" of the plant pit as indicated:
 - i. One tablet per one-gallon container and two-gallon container
 - ii. Two tablets per five-gallon container
 - b. Planting tablets shall be set with each tablet on the top of the rootball while the plants are still in their containers so the required number of tablets to be used in each hole can be easily verified by the Park Project Manager.
8. Pruning: Pruning shall be limited to the minimum necessary to remove injured twigs and branches. Pruning may not be done prior to delivery of plants.

F. Planting Groundcover:

1. Space the plants evenly as indicated on the Drawings, staggering.
2. After planting is completed, cover the bed uniformly with a minimum 2" layer of mulch topdressing.
3. Thoroughly water entire planting bed.

G. Grass Installation:

1. Sod Grass:
 - a. All areas to receive sod must be roto-tilled to a depth of 2" (inches), cleaned of any rocks, bricks or other debris and fine graded before sod is planted. Soil preparation must be reviewed by the Park Project Manager prior to installation of sod/seed.
 - b. Sod must be fresh and free of any weeds. Sod may not sit on pallets for more than 48 hours without being planted. Any sod

allowed to sit on pallets for more than 24 hours is subject to rejection by the Park Project Manager and will be replaced at contractor's expense.

- c. All sod is to be planted in a "running bond" pattern.
 - d. All sod planted on the site must be watered and rolled with a grass roller the same day it is planted.
2. Grass seed:
- a. All areas to receive grass seed must be roto-tilled to a depth of 2" (inches), cleaned of any rocks, bricks or other debris, and fine graded before seed is spread. Soil preparation must be reviewed by the Park Project Manager prior to installation of sod/seed.
 - b. All seed must be distributed in a uniform fashion as per product manufacturer's or grower's recommendations.
 - c. All areas that have been seeded must remain moist for 7 to 10 days from the time of the first watering or until seed has germinated. Seed that is allowed to dry before germination will be subject to replacement at Contractor's expense. It is the Contractor's responsibility to coordinate site watering.

3.4 CLEAN-UP

- A. After all planting operations have been completed, remove all trash, excess soil, empty plant containers and rubbish from the property. All scars, ruts or other marks in the ground caused by this work shall be repaired and the ground left in a neat and orderly condition throughout the site. Contractor shall pick up all trash resulting from this work on a daily basis. All trash shall be removed completely from the site.
- B. The Contractor shall leave the site area broom-clean and shall wash down all paved areas within the Contract area, leaving the premises in a clean condition.

3.5 MAINTENANCE

- A. Maintain the trees, shrubs, groundcovers, and sod grass until Final Completion and Acceptance of the entire project.
- B. Maintenance shall include pruning, cultivating, weeding, watering, and application of appropriate insecticides and fungicides necessary to maintain plant free of insects and disease.
 - 1. Re-set settled plants to proper grade and position. Restore planting saucer and adjacent material and remove dead material.
 - 2. Correct defective work as soon as possible after deficiencies become apparent and weather and season permits.
 - 3. Deep-water trees, plants, and groundcover beds within the first 24 hours of initial planting, and not less than twice per week until final acceptance.

3.6 OBSERVATION SCHEDULE

- A. When observations are conducted by someone other than the Park Project Manager, the Contractor shall show evidence in writing of when and by whom these observations were made.
- B. No site visits shall commence without all items noted in previous Observation Reports either completed or remedied unless such compliance has been waived by the Owner and/or Park Project Manager.

END OF SECTION

SECTION 10010

MOBILIZATION

PART 1 – GENERAL

1.1 DESCRIPTION

- A. This item shall be for the procurement of payment and performance bonds, required insurance, full execution of contract documents, attendance at the project preconstruction meeting, submission of required submittals to the City Project Engineer, field office and other facilities at the project site and the movement of adequate personnel, construction equipment and materials to the project site and the Contractor beginning work on the contract items outlined in the contract documents.

PART 2 – MATERIALS AND EQUIPMENT

Not used.

PART 3 – EXECUTION

Not used.

PART 4 – MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

- A. The maximum bid amount for this item shall be five percent (5%) of the total amount bid for the project.

4.2 PAYMENT

- A. Payment shall be full compensation when all the items outlined in Part 1.1 above have been completed. The **total payment for mobilization shall not exceed 5% of the total bid** and shall be payable when in the opinion of the City Project Engineer all the items outlined in Part 1.1 above have been completed.

END OF SECTION

SECTION 10011

TRAFFIC CONTROL

PART 1 – GENERAL

1.1 DESCRIPTION

- A. This item shall govern for traffic control & barricading in accordance with these specifications and as shown on the plans. This item includes the design, application, installation and implementation of traffic control.

PART 2 – MATERIALS AND EQUIPMENT

2.1 MATERIALS

- A. All barricades, fences, lights, danger signals, and other precautionary devices and measures shall conform to the current edition of the Texas Manual on Uniform Traffic Control Devices.

PART 3 – EXECUTION

3.1 GENERAL

- A. All work shall conform to the current edition of the Texas Manual on Uniform Traffic Control Devices.
- B. The Contractor shall provide a traffic control plan at least 48 hours prior to any work in a City street. The City Project Engineer may require the traffic control plan to be designed and sealed by an engineer licensed in the State of Texas. The Contractor shall plan his work in accordance with the traffic control plan, and/or as indicated in the plans. Any revisions must receive the City's approval prior to beginning work. As deemed necessary, the City Representative may require the Contractor to provide and maintain additional traffic control devices at any time.
- C. Prior to beginning work the Contractor shall designate, in writing, a competent person who will be responsible and available on the project site or in the immediate area to insure compliance with the traffic control plan.
- D. The Contractor will not remove any regulatory signs, instructional signs, street name signs or other signs which have been erected by the City. If removal or relocation of traffic signs, traffic control equipment or other traffic control appurtenances is deemed necessary, the Contractor shall contact the City of Mesquite Traffic Engineering Division at (972) 216-4104.
- E. All traffic control devices must be installed prior to beginning construction.
- F. One lane in each direction is to be kept open at all times on existing streets, except as necessary for short-term, temporary vicinity construction operations which would warrant adequate signs, barricades and flagmen as required by the current Texas Manual on Uniform Traffic Control Devices. Unless approved in writing, access to adjacent properties, driveways, alleys and intersecting streets shall be maintained at all times.
- G. If paving operations result in a vertical longitudinal face greater than 1" in depth between lanes or at shoulders, Contractor shall erect either sign CW8-11 (UNEVEN LANES) or sign CW8-9a (SHOULDER DROP OFF) in advance of the area in accordance with the Texas Manual on Uniform Traffic Control Devices.

- H. Arrow boards are required and additional advance warning traffic control devices used where an arterial street has lane closures overnight. The effective placement of arrow boards is contingent on sight visibility; attention must be paid to the road geometry and speed of the roadway when determining placement. Arrow boards will be placed at the direction of the City Public Works Construction Inspector.
- I. If 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. The Contractor will be held responsible for all damage to the work due to the failure of barricades, signs, lights, danger signals, watchmen, and other devices to protect it, and whenever evidence of such damage is found, the City Representative may order the Contractor to immediately remove and replace the damaged portion at his cost and expense.
- J. The Contractor's responsibility for maintenance of all traffic control devices shall not cease until the project is accepted by the City.

PART 4 – MEASUREMENT AND PAYMENT

- A. Traffic control implementation and maintenance shall be paid based upon percent of contract time completed and shall be full compensation for all traffic control devices, maintenance of devices, moving, placing and removing of devices; and for all manipulation, labor, tools, equipment and incidentals necessary to complete the work, all in accordance with the plans and these specifications.

END OF SECTION

SECTION 10020

TESTING LABORATORY SERVICES

PART 1 – GENERAL

1.1 DESCRIPTION

- A. The Contractor shall employ and pay for an independent testing laboratory, **APPROVED BY THE CITY ENGINEER**, to perform testing of construction materials. Contractor shall submit the name of the testing laboratory prior to beginning of Work.
- B. Contractor shall coordinate all testing activities and shall assist in whatever manner necessary so that the testing laboratory may provide all testing services.
- C. All re-testing costs for failed testing shall be at the expense of the Contractor.
- D. The City's Public Works Construction Inspector may initiate any test.
- E. The Contractor shall notify the assigned City Public Works Construction Inspector of all density testing 24 hours prior to the scheduled test. Copies of all test reports shall be sent to the Public Works Inspector for review and acceptance and inclusion in the City project file. Projects will not receive City acceptance until all test results are complete and satisfactory.
- F. Materials and products incorporated in the Work, shall be inspected, tested and approved by the Contractor. Tests by the Contractor, Subcontractors or by Suppliers shall be performed by certified technicians using certified laboratories. Laboratory technicians shall hold current certification in accordance with ASTM E 329, Standard Practice for Use in Evaluation of Testing and Inspection Agencies as Used in Construction or have a nationally recognized certification acceptable to the Engineer. Work in which materials are used without prior test and approval may be ordered removed and replaced at the Contractor's expense. The Contractor will be required to furnish such facilities and equipment as may be necessary to perform the tests and inspection and shall be responsible for calibration of all test equipment required. When requested, the Contractor shall furnish a complete written statement of the origin, composition, and/or manufacture of any or all materials that are to be used in the Work.
- G. Contractor shall have testing laboratory include requested City personnel on email distribution list for all test reports. Testing reports must be submitted within five days after the test has been made. Construction shall not proceed where materials are to be placed upon materials previously placed and these previously placed materials have not been tested or the test results have not been made available to the Engineer.
- H. The most current specifications for all specifications listed herein shall govern testing methods.

1.2 STANDARD TEST METHODS FOR COMPACTION AND MOISTURE CONTENT OF SOIL

- A. Moisture and Compaction Testing Standards: Testing laboratory shall sample, test in laboratory, and test in field moisture content and compaction per the following ASTM designations:
 - 1. D-698 – Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort.

2. D-6938 - Standard Test Methods for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth).
 3. D-4318 - Standard Test Methods for Liquid Limit, Plastic Limit and Plasticity Index of Soils.
 4. D-1140 - Standard Test Methods for Amount of Material in Soils Finer Than the No. 200 Sieve.
 5. D-2487 – Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System).
- B. Results: Density tests must meet a minimum compaction of 95% Standard Proctor Density (ASTM D698) at a moisture content of 0% to 6% of optimum moisture.
- C. Test Report: Laboratory shall provide both field and final copies of test results to the Engineer, Owner and other parties as directed by the Contractor.

1.3 STANDARD TEST METHODS FOR CONCRETE AND CORING

- A. Concrete
1. Samples shall be drawn from mid-load or from point of discharge if concrete is pumped. Sampling and making of cylinders shall conform to ASTM C-172 and ASTM C-31, respectively.
 2. Field Test Methods: For concrete, laboratory shall perform field test(s) and provide the following information for each set of cylinders or beam:
 - a. Contractor's name.
 - b. Name of project.
 - c. Exact location and description of area where concrete was placed.
 - d. Date of sampling.
 - e. Concrete supplier.
 - f. Concrete batch design number.
 - g. Minimum required strength.
 - h. Ambient temperatures.
 - i. Concrete temperature.
 - j. Weather condition; e.g., raining, windy, cloudy, sunny, etc.
 - k. Truck number.
 - l. Ticket number.
 - m. Any admixtures.
 - n. Slump per ASTM C-143; visual inspection will not be accepted.
 - o. Air content in percent per ASTM C-231.
 3. Tests and Standards for Concrete:
 - a. ASTM C-172 - Sampling of Freshly Mixed Concrete.
 - b. ASTM C-31 - Making and Curing of Concrete Test Specimens in the Field.
 - c. ASTM C-143 - Slump of Portland Cement Concrete.
 - d. ASTM C-231 - Concrete Air Content by Pressure Method (for Fresh Concrete) Test.
 - e. ASTM C-39 - Concrete, Cylindrical, Compressive Strength Test.
 - f. ASTM C-793 - Standard Test Method for Flexural Strength of Concrete (Using Simple Beam with Center Point Loading.)
 - g. ASTM A-1064 Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete
- B. Coring
1. Tests and Standards for Concrete Coring:

- a. Samplings and tests of concrete cores shall conform to ASTM C-42 - Obtaining and Testing Drilled Cores Sawed Beams of Concrete.
- b. Should coring be required to demonstrate acceptable thickness, measuring of concrete cores shall conform to ASTM C-174 - Measuring Length of Drilled Concrete Cores.
- c. Testing for Comprehensive Strength shall be in accordance with ASTM C-39 Concrete Cylindrical Strength Test.

1.4 STANDARD TEST METHODS FOR WATER SYSTEMS

A. Bacterial Sampling

- 1. The City Public Works Construction Inspector shall supervise the taking of water samples from a suitable tap (not through a fire hydrant) for analysis by the North Texas Municipal Water District laboratory. The sample(s) shall be transported by City staff to the laboratory at 9:00 AM on Tuesdays and Thursdays. Samples may not be taken earlier than 3:00 PM on the day prior to delivery. The City Public Works Construction Inspector shall notify the Contractor of the results.
- 2. Microbiological sampling shall be done prior to connecting the new conduit into the existing distribution system in accordance with AWWA C651 Disinfecting Water Mains. Samples shall be tested in accordance with **Standard Methods for the Examination of Water and Wastewater**. Samples for bacteriological analysis shall be collected in sterile bottles treated with sodium thiosulfate. At least one sample shall be collected from every 1,000-linear-feet of new water conduit, plus one set from the end of the line and at least one set from each branch. If trench water has entered the new conduit during construction or, if in the opinion of the City inspector, excessive quantities of dirt or debris have entered the new conduit, samples shall be taken at intervals of approximately 200-linear-feet. Samples shall be taken of water that has been in the new conduit for at least 16-hours.
- 3. Unsatisfactory test results shall require a repeat of the disinfection process and resampling as required above until a satisfactory sample is obtained.
- 4. In the event there are two unsatisfactory test results from the same sampling point, the Contractor must “poly-pig” the new water main and samples taken again until a satisfactory sample is obtained.

B. Hydrostatic (Pressure) Test

- 1. All water mains, fittings and services shall be tested with a hydraulic test pressure of not less than 200 psi over a period of not less than 2 hours. The allowable leakage, in gallons, of all pipe tested shall be calculated per the following equation:

$$Allowable\ Leakage = \frac{28.28 * L * D}{148,000} \quad \text{where} \quad L = \text{Length of Pipe, feet,}$$

$$D = \text{Diameter of Pipe,}$$

inches

- 2. For a two hour pressure test at a pressure of 200 psi. If the tests indicate a leakage in excess of the acceptable rate, the Contractor shall be required to find and repair the leak. Even if the test requirements are met, all apparent leaks shall be repaired and stopped.
- 3. The hydrostatic pump shall be connected to a system where the amount of leakage can be determined by measurement or gauge. The 200-psi pressure shall be maintained at the highest point of the main being tested

over the entire 2-hour test period. The leakage shall be determined by comparing the quantity of water in the measuring system at the beginning of the test and quantity of water at the end of the test. The difference in these quantities shall be the leakage. An alternate method is to add water to the measuring system during the test. At the end of the 2-hour test, the quantity of water added shall be the leakage.

4. Hydrostatic pressure test for HDPE pipe shall be per NCTCOG Standard Specifications.
- C. Tapping Sleeve and Valve Air Test
1. Prior to tapping, all tapping sleeves and valves shall be air tested at 120 psi for three (3) minutes with no pressure loss.

1.5 STANDARD TEST METHODS FOR SANITARY SEWER SYSTEMS

- A. Deflection Testing
1. Mains less than thirty-six (36) inches in diameter shall pass deflection mandrel test per NCTCOG Standard Specifications for Public Works Construction, Item 507.5.1.4 Flexible Pipe (Deflection) Testing and TCEQ regulations Chapter 217.57(b) Deflection Testing.
 2. Alternate methods for measuring deflection for pipes larger than thirty-six (36) inches in diameter subject to City approval. Testing of mains thirty-six (36) inches and larger shall occur at least 30 days after installation and backfill.
 3. Pipe with deflection exceeding the percentage allowed deflection per NCTCOG table 507.5.1.4.2(a) at the time of testing shall be uncovered and reinstalled. If deflection exceeds 7% at the time of testing, pipe shall be removed and replaced with new materials. All failed joints, pipes, sections or structures shall be retested upon completion of remedial actions. Failed sections shall be retested after the remedial construction has been in place for 30 days.
- B. Air Testing
1. Mains less than thirty-six (36) inches in diameter and laterals shall pass a Low Pressure Air Test per NCTCOG Standard Specifications for Public Works Construction, Item 507.5.1.3 Low Pressure Air Testing and TCEQ regulations 30 TAC Chapter 217.57(a)(1) Low Pressure Air Test.
 2. Pipes 36-inches and larger may be tested per NCTCOG item 507.5.1.3.3 (individual joint air test method). Testing of mains thirty-six (36) inches and larger shall occur at least 30 days after installation and backfill. All failed joints, pipes, sections or structures shall be retested upon completion of remedial actions. Failed sections shall be retested after the remedial construction has been in place for 30 days.
- C. TV Camera Inspection
1. After the deflection mandrel and air pressure test, the contractor shall conduct a color television camera inspection of the interior of the installed sanitary sewer system. The main must be laced with enough water to fill any low points. A copy of the recording in digital format and storage device (DVD disk, flash drive, etc.) as specified by the City, with written log of the inspection, shall be provided to the Public Works Construction Inspector prior to final acceptance of the project.
 2. General Approach:

- a. Television inspection of pipelines shall be performed by experienced personnel trained in locating breaks, obstacles and service connections by closed circuit color television.
 - b. The camera should be set at the appropriate height for the pipe size and shape (centered in the middle of the circular pipe +/- 10%).
 - c. The camera shall be moved through the pipe at a steady pace not to exceed 30 feet per minute.
 - d. If the line needs to be flushed prior to TV inspection, a minimum of 1-hour time must lapse between flushing and TV inspection.
 - e. All flows tributary to reach of sewer being inspected are to be completely by-passed around the reach during inspection if necessary and required by City.
3. Television inspection deliverables shall include the following:
- a. A digital copy of the video (post) with a written report to be submitted to the City as they are made. Video recordings to remain property of the City; Contractor to retain second copy for his use.
 - b. Post construction video upon completion of reconstruction of each reach of sewer with the voice description, as appropriate with stationing of services indicated. Data and stationing to be on video.
 - c. Should any portion of the inspection video be of inadequate quality or coverage, as determined by the City, the Contractor will have the portion inspected again and video documentation provided at no additional expense to the City.
- D. Manhole Testing
- 1. All manholes shall be vacuum tested including grade rings and casting per NCTCOG Public Works Construction Standard 502.1.5.2 and meet TCEQ regulations 30 TAC 217 and ASTM C1244, "*Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test Prior to Backfill*". The time for the vacuum to drop from 10 inches of mercury to 9 inches shall not be less than two (2) minutes.

1.6 FREQUENCY OF TESTS

- A. Refer to City of Mesquite Standard Details and Project Specifications for the required frequency of tests.

PART 2 – MATERIALS AND EQUIPMENT

Not used.

PART 3 – EXECUTION

Not used.

PART 4 – MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

- A. This section shall not be measured as a separate contract section.

4.2 PAYMENT

- A. The work performed and materials furnished in accordance with this section will not be paid for directly but will be subsidiary to pertinent sections.

END OF SECTION

SECTION 20010

STEEL REINFORCEMENT

PART 1 – GENERAL

1.1 DESCRIPTION

- A. The work as specified in this section includes all labor, equipment and materials necessary to furnish and install steel reinforcement for concrete.

1.2 SUBMITTALS

- A. Submit certification that reinforcing steel meets or exceeds the applicable ASTM specification. Certification shall include origin of steel.
- B. For structures, submit shop drawing showing bar number, size, length, configuration, spacing and location of all reinforcement bars. Shop drawings shall be prepared in accordance with ACI SP66, ACI Detailing Manual.
- C. Submit dowel baskets, mechanical splicing devices and welded rebar mat layout where applicable.

1.3 QUALITY CONTROL

- A. All reinforcement shall be inspected prior to placing any concrete.

PART 2 – MATERIALS AND EQUIPMENT

2.1 MATERIAL

- A. Reinforcing steel bars shall conform to ASTM A 615, Grade 60.
- B. Welded wire reinforcement in roll form is prohibited from use on all projects.
- C. Prefabricated welded wire reinforcement sheets are allowed. Mats shall be produced on automatic welding machines. Welding of rebar in the field in lieu of tie wires is not acceptable. Welded wire reinforcement shall conform to ASTM A 1064.
 - 1. Minimum weld shear strength: 35,000 psi times the area of the rebar wire
 - 2. Minimum yield strength: 70,000 psi
- D. Stirrups and Ties shall conform to ASTM A 615, Grade 60.
- E. Dowels: ASTM A 36, smooth, saw cut to lengths indicated on drawing and remove all burrs.
- F. Mechanical Splicing Devices: Full mechanical connections for reinforcement splices shall be of the type indicated and shall develop at least 125 percent of the specified yield strength of the bar when tested in tension and compression.
- G. Tie wire: Black annealed type, 16 gage or heavier.
- H. Bar Supports
 - 1. Shall be plastic bar supports for concrete pavement placement.
 - 2. Class I Wire Bar Supports will be used for structures. Class I supports are plastic protected metal.
 - 3. All supports must be able to sufficiently support the weight of the steel.

2.2 FABRICATION

- A. Cutting & Bending: Reinforcement shall be cut and bent to the shapes shown on the plans. Fabrication tolerances shall be in accordance with the requirements of

- ACI 318. All reinforcement shall be cold bent, unless otherwise permitted by the Engineer.
- B. Coated reinforcement shall not be field cut, unless permitted by the Engineer. Field cutting of coated reinforcement should be performed using hydraulic-powered or friction cutting tools to minimize coating damage and field touch-up. Flame cutting of coated reinforcement will not be permitted. Field cut coated reinforcement shall be repaired immediately with compatible patching material and suitable for repairs in the field.
 - C. Hooks & Bend Dimensions: Hook dimensions and diameters of bends shall be as shown on the plans. When hook dimensions and diameters of bends are not shown, they shall be in accordance with the ACI 318.
 - D. Identification and Availability: Reinforcement shall be shipped in bundles, tagged and marked in accordance with the CRSI "Manual of Standard Practice".

PART 3 – EXECUTION

3.1 DELIVERY, STORAGE AND HANDLING

- A. Deliver reinforcement to project site bundled and tagged with metal tags indicating bar size, lengths, and other data corresponding to information shown on placement drawings.
- B. Use care in loading, unloading, handling, and storage of reinforcement materials to prevent damage to bar marking labels.
- C. Stack reinforcement materials on blocks in a neat and orderly manner in such a location as to limit the possibility of damage by construction equipment, prevent ground contact, and permit easy access

3.2 PREPARATION

- A. Inspect subgrade and forms for proper location, grade and alignment before placing reinforcement.
- B. Clean reinforcement, removing loose rust and mill scale, earth, mud, cement, oil, paint, ice, and other materials which reduce or destroy bond with concrete.

3.3 INSTALLATION

- A. Reinforcing steel shall not be damaged, bent, or misshapen prior to, during, or after installation. Re-bending or straightening shall not be allowed, except where field bends are specifically indicated on drawings. Do not use reinforcement having kinks or bends that are not required. Heating of reinforcement shall not be allowed.
- B. Tack welding and welding of reinforcement on site is prohibited. Only factory welded rebar mats are permitted.
- C. Bar supports shall be provided for all reinforcement no matter the depth of the concrete member.
- D. Install reinforcing steel bar in the exact position shown on the plans. Reinforcing splices shall conform to ACI 318 12.15. Reinforcing bar laps shall be 30 bar diameters or per ACI 318, section 12.15, whichever is greater. All reinforcing steel bar intersections shall be secured with tie wire.
- E. Accurately position reinforcements on bar supports, spacers, hangers or other approved supports. Supporting reinforcement directly on concrete, masonry units, brick or rocks in lieu of approved wire chairs is prohibited. Wire sizing and spacing

of the chairs shall be sufficient to properly support the steel and shall be in accordance with applicable CRSI standards.

- F. Secure reinforcement in place with ties or clips. Set wire ties so that ends are directed into concrete and not toward exposed concrete surfaces. Remove all wire clippings and debris from bottom of formwork before placement of concrete. Tack welding of reinforcing is not permitted.
- G. Vertical stirrups shall pass around the main tension members and be securely tied to the members. The reinforcing shall be wired together at a sufficient number of intersections to produce a sound or sturdy mat or cage of reinforcement that will maintain the reinforcement in the intended positions when the concrete is poured.
- H. Splices not shown on the plans may be made provided such splices meet the requirements of ACI 318. Install mechanical splicing devices in accord with manufacturer's literature. The Owner shall inspect all splices prior to concrete operations.
- I. Where changes in cross section of a column occur, offset longitudinal bars in a region where lateral support is afforded. Where offset is 3 inches or less, slope of inclined portion with axis of column shall not exceed 1 in 6. Where a column face is offset greater than 3 inches, longitudinal bars shall not be offset bent. Separate dowels, lap spliced with the longitudinal bars adjacent to the offset column faces, shall be provided. Use templates to insure proper placement of column dowels.
- J. Place reinforcement in position such that the concrete cover between the outside of any bar and the concrete form conforms to the following schedule unless shown otherwise in the drawings and details.
 - 1. For concrete cast against and permanently exposed to earth: 3"
 - 2. For concrete exposed to weather or earth: 2"

3.4 TOLERANCES

- A. Concrete cover to formed surface - plus or minus 1/4".
- B. Minimum spacing between bars - two times the bar diameter.
- C. Bars spacing - plus or minus 1/4" in 12".
- D. Conform to ACI 318.

PART 4 – MEASUREMENT AND PAYMENT

- A. This section shall not be measured as a separate bid item. The work performed and materials furnished in accordance with this section will not be paid for directly but will be subsidiary to pertinent sections.

END OF SECTION

SECTION 20022

REMOVAL OF EXISTING PAVEMENT

PART 1 – GENERAL

1.1 DESCRIPTION

- A. The work as specified in this section includes all labor, equipment and materials necessary to remove and dispose of existing pavement of all types (i.e. driveways, sidewalks, street, etc.) and materials (i.e. asphalt, concrete, etc.) in conformity with the plans and these specifications.

PART 2 – MATERIALS AND EQUIPMENT

Not used.

PART 3 – EXECUTION

3.1 GENERAL

- A. When removing portions of concrete pavement from existing pavement that will remain in place, Contractor shall delineate the line of removal neatly and accurately with a full-depth saw-cut to facilitate removal without damaging the remaining pavement. Saw-cut shall be considered incidental. Contractor shall ensure the removal methods do not chip or damage surrounding pavement or curb. If any existing concrete beyond the removal limits is damaged or destroyed, it shall be replaced at the Contractor's entire expense. Removed concrete pavement shall be disposed of off-site by the Contractor.

PART 4 – MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

- A. This section shall be measured by each plan view square yard of pavement removed. Payment shall be full compensation for materials and installation including saw cutting, removal, excavation, haul off and lawful disposal of spoils, and all manipulation, labor, tools, equipment and incidentals necessary to complete the work, all in accordance with the plans and these specifications.

END OF SECTION

SECTION 20030

REINFORCED CONCRETE PAVEMENT, CURB AND GUTTER AND SIDEWALK

PART 1 – GENERAL

1.1 DESCRIPTION

- A. The work as specified in this section includes all labor, equipment and materials necessary to construct the reinforced concrete pavement of the thickness shown on the plans and in conformity with the plans and these specifications.

1.2 SUBMITTALS

- A. The Contractor shall submit the proposed concrete mix design for approval and record.
- B. Paving equipment
- C. Pattern and color for stamped, colored concrete as applicable.
- D. Submittals as required by Section 20010 Steel Reinforcement

1.3 QUALITY CONTROL

- A. General
 - Locations for testing will be determined by the City Public Works Construction Inspector.
- B. Testing Requirements, reference Section 10020 Testing Laboratory Services
 - 1. Subgrade / Sub-base
 - Moisture content and compaction shall be tested every 300 ft. per lane
 - 2. Concrete During Placement
 - a. At least one test shall be made on fresh concrete each day for each class of concrete. On large placements, at least one test shall be made on each 150 cubic yards of concrete placed, per class of concrete. Each set of tests shall consist of one (1) slump test, one (1) air entrainment test, one (1) temperature test and three (3) compression test cylinders.
 - i. One cylinder shall be broken at 7 days and the other two at 28 days or as instructed by the Public Works Construction Inspector.
 - ii. The Contractor may have additional cylinders taken if desired to determine the strength of the concrete in addition to a 7-day break and 28-day break.
 - b. Temperature shall be tested throughout the day on each load of concrete
 - 3. Concrete Cores (4" diameter)
 - a. As directed by City Engineer to verify pavement thickness or additional 28-day strength test.
 - 4. Reinforcement
 - a. Inspected by City Representative for layout prior to placing any concrete

1.4 INSPECTION

- A. Reinforcing steel must be inspected and approved prior to placement of concrete
- B. Any subgrade and/or base material testing required must be completed and shown to have passed requirements of project specifications prior to placement of concrete.

PART 2 – MATERIALS AND EQUIPMENT

2.1 GENERAL

- A. All materials and requirements for concrete shall conform to the requirements of NCTSSPWC Item 303 “Portland Cement Concrete Pavement” with the exception of items specified herein.
- B. Slip Form Paving Machine(s) equipped with external vibrators shall be used for all street pavements. Vibrating screeds will only be allowed for hand finished placement or if authorized by the City Engineer.

2.2 CONCRETE

- A. Concrete shall have a 28-day minimum compressive strength of 4,000 psi, containing 6 sacks of cement per cubic yard minimum, with 1” to 3” slump for machine placement and 3” to 5” slump for hand placement.
- B. Fly ash may be substituted for up to 20% of the cement content requirement at 1 to 1.25 cement to fly ash substitution rate.

2.3 REINFORCEMENT

- A. Reinforcing shall conform to ASTM A 615 and be a minimum grade of 60 ksi per ASTM A 370. Reinforcement may be rejected for failure to meet the following: reinforcement exceeding the allowable variations; reinforcement with a coating of dirt, loose scale, paint, oil, or other foreign substance which would prevent the bonding of the concrete and reinforcement; reinforcement not bent in accordance with the standard details; or twisted bars. Reinforcement shall be stored above the ground surface upon skids, platforms, or other supports, and shall be protected from mechanical injury and surface deterioration caused by exposure to the conditions producing rust.
- B. Reinforcement shall conform to Section 20010 Steel Reinforcement.

2.4 JOINTS

- A. Joints shall be filled with hot-poured rubber joint sealing compound that conforms to ASTM D 3406 and meets the requirements of NCTSSPWC 303.2.14.1.1.(a) Hot Poured Polymer Sealant Requirements
- B. Expansion joint materials shall consist of:
 - 1. Redwood shall be standard for all expansion joints.
 - 2. Pre-molded asphalt board tested in accordance with ASTM D 545 Test Methods for Prefomed Expansion Joint Fillers for Concrete Construction (Non-extruding and Resilient Types) if approved by City Representative.

2.5 CURING MATERIALS

- A. White Curing compound is to be applied, per manufacturer’s recommendations, to all exposed concrete surfaces (including back-of-curbs) immediately after completion of finishing operations. Clear curing compound shall be used on stained concrete surfaces only. Curing compounds shall be ASTM C-309, Type 2

and shall be per NCTSSPWC Section 303.2.13.1.1. The compound shall be delivered to the jobsite in the manufacturer's original containers only, which shall be clearly labeled.

2.6 STAMPED CONCRETE

- A. Pattern and color per plans. City shall be provided mold upon completion of project.
- B. Prepare for approval a 9-sq. ft., 3-in. thick specimen for each color, pattern, and texture required before beginning work

PART 3 – EXECUTION

3.1 GENERAL

- A. All requirements for concrete shall conform to the requirements of the current NCTSSPWC Item 303 "Portland Cement Concrete Pavement" with the exception of items specified herein.

3.2 JOINTS

- A. Joints shall be used where shown on the plans or where directed by the Engineer. The plane of all joints shall make a right angle with the surface of the pavement. No joint shall have an error in alignment of more than one half (1/2) inch at any point. The concrete along the face of all joints, except dummy joints, shall be thoroughly consolidated by vibration to insure a surface which is free from honeycombing. All joints shall be constructed in accordance with Standard City of Mesquite Joint Details.

3.3 INTEGRAL CURB

- A. Integral curb shall be constructed along the edge of the pavement as an integral part of the slab and of the same concrete as the slab. The concrete for the curb shall be deposited not more than thirty (30) minutes after the concrete in the slab.
- B. If curb is formed by hand finishing a curb finish mule must be used to ensure a uniform cross-section.
- C. Provide finished work with a well-compacted mass and a surface free from voids and honeycomb, in the required shape, line, and grade. Round exposed edges with an edging tool of the radius shown on the plans. Construct joints at locations shown on the plans. Cure for at least 72 hr.
- D. Set and maintain a guideline that conforms to alignment data shown on the plans, with an outline that conforms to the details shown on the plans. Ensure that changes in curb grade and alignment do not exceed 1/4 in. between any 2 contacts on a 10-ft. straightedge.
- E. Conventionally Formed Concrete.
 - 1. Shape and compact subgrade, foundation, or pavement surface to the line, grade, and cross-section shown on the plans. Lightly sprinkle subgrade or foundation material immediately before concrete placement.
 - 2. Pour concrete into forms, and strike off with a template 1/4 to 3/8 in. less than the dimensions of the finished curb unless otherwise approved. After initial set, plaster surface with mortar consisting of 1 part hydraulic cement and 2 parts fine aggregate. Brush exposed surfaces to a uniform texture.
 - 3. Place curbs, gutters, and combined curb and gutters in 50-ft. maximum sections unless otherwise approved.

- F. Extruded or Slip formed Concrete.
 - 1. Hand-tamp and sprinkle subgrade or foundation material before concrete placement. Provide clean surfaces for concrete placement. Coat cleaned surfaces, if required, with approved adhesive or coating at the rate of application shown on the plans or as directed. Place concrete with approved self-propelled equipment.
 - 2. The forming tube of the extrusion machine or the form of the slipform machine must be easily adjustable vertically during the forward motion of the machine to provide variable heights necessary to conform to the established gradeline.
 - 3. Attach a pointer or gauge to the machine so that a continual comparison can be made between the extruded or slipform work and the grade guideline. Other methods may be used when approved.
 - 4. Finish surfaces immediately after extrusion or slipforming.

3.4 REINFORCEMENT

- A. Reinforcement shall be placed at locations and spacing shown on the plans, or as directed by the Engineer, and shall be supported above the sub-grade on chairs approved by the Engineer.
- B. Placement and work methods shall conform to Section 20010 Steel Reinforcement
- C. Contractor shall drill dowel holes using approved equipment that will ensure proper depth and alignment. Dowel holes shall be mechanically drilled at mid-depth of the slab. The holes shall be on alignment, level with the top surface of the slab, with minimal wandering. In some instances, dowel locations may have to be adjusted due to field conditions such as cracks, heavy mesh reinforcement, or other obstructions at the plan location for a dowel hole. After drilling holes, Contractor shall clean out the dowel holes with compressed air at a minimum 125 psi and then brush the holes out. Contractor shall insert the air nozzle to the back of the hole to force out all dust and debris, which might prevent the epoxy from bonding to the concrete. Contractor shall occasionally check the air for oil and moisture contamination from the compressor. To place the anchoring material, Contractor shall use a long nozzle that feeds the material to the back of the hole, assuring that the anchoring material will flow forward along the entire dowel embedment length during insertion. Contractor shall not use any method that attempts to pour or push the anchoring material into the hole. The injection wand on the installation unit shall contain an auger-type mixing spindle that mixes the two-part epoxy. Contractor shall insert dowels by twisting the dowel about one full revolution to evenly distribute the material around the dowel's circumference. Contractor shall verify that the dowels are installed to the proper insertion depth and to the correct orientation (perpendicular to the vertical face of pavement). A plastic grout-retention disk shall be used to prevent the escape of epoxy. Some anchoring material shall be visible from the sides of the disk after installation to ensure proper amount of epoxy was placed in the hole. Dipping dowels into epoxy and inserting the dowel into the drilled hole is not acceptable.
- D. Standard pavement reinforcing steel bar laps are to be 30 bar diameters or 15" per ACI 318, section 12.15, whichever is greater. All bars shall be wired at their intersections and at all laps or splices. All reinforcement necessary for a section of concrete shall be placed and approved by the Owner before any concrete is placed in the section. The pavement reinforcing steel shall be supported on chairs and care shall be exercised to keep all steel in its proper locations. After the

reinforcing steel is securely installed above the subgrade, there shall be no loading imposed upon (or walking upon) the bar mats or individual bars before or during the placing or finishing of the concrete. When placed in the work, the reinforcement shall be free from dirt, loose rust, scale, painting, oil, or other foreign material.

3.5 CONCRETE PLACEMENT

- A. The Contractor shall do all necessary filling, leveling, and fine grading required to bring the subgrade to the exact grades needed for repair.
- B. Fill and Level Up: Approved fill and level-up material is crushed concrete Flexible Base per TXDOT Item No. 247, Grade 1, Type D. **Sand may not be used as fill or level-up material under any pavement.**
- C. The subgrade shall be compacted using City approved vibratory sheep's foot rollers, or other mechanical compaction equipment approved by the City. The subgrade and all level-up material must be compacted to 95% standard proctor density with a moisture content of 0% to plus 6% of optimum moisture. Moisture level must be maintained by wetting, until placing of concrete. All fill and level-up shall have densities taken at the interval and locations determined by the City Public Works Construction Inspector.
- D. Subgrade shall be prepared per plans and pass required testing prior to setting forms.
- E. Placement of Concrete
 - 1. Forms shall be straight, free of warp and kinks, and of a depth equal to the thickness of the finished work. Forms shall be a minimum of 10' in length for each individual form or of a section satisfactory to the Owner, securely staked to the line and grade, and maintained in a true position during the depositing of concrete. Forms shall be of ample strength and shall be provided with adequate devices for secure setting so that when in place they shall withstand the impact and vibration of equipment imposed thereupon without appreciable springing or settlement. Forms shall be thoroughly cleaned and oiled before each use. Forms shall remain in place until the concrete has taken its final set. Removal of forms shall be followed immediately by banking earth against the sides of the slab and wetting it. Care shall be taken in removing forms to prevent spalling or other damage of the concrete. All forms showing a deviation of 1/8" in 10' from a straight line shall be rejected.
- F. Thickness of concrete shall be per plans.
- G. Hot-Weather Concreting
 - 1. The temperature of concrete as delivered shall not exceed 95 degrees F. Take immediate corrective action or cease concrete production when the concrete temperature exceeds 95 degrees F.
 - 2. If concrete is to be placed before sunrise or after there is sufficient natural light the contractor must provide their own supplemental artificial lighting enough to do work safely and properly and in accordance with the City of Mesquite specifications.
- H. Cold-Weather Concreting
 - 1. No concrete shall be placed on a frozen subgrade
 - 2. If the ambient air temperature is less than 40 degrees F and dropping concrete shall not be placed.

3. If concrete is placed and there is an anticipated low temperature of less than 40 degrees F within 5 days after placement the concrete must be covered and kept at a temperature of no less than 50 degrees F.
4. In all cases, concrete should not be kept at a temperature of less than 50 degrees F for a period of 5 days' minimum.

3.6 FINISHING

- A. Immediately after finishing all concrete surfaces, the surfaces shall be finished to a true, even surface and the required line, grade, and section with all surface voids filled. Finish all concrete street paving wider than 37' with a tine finish (1"), perpendicular to traffic flow. Broom curb and gutter parallel to traffic 12" from curb. The edges of slabs and all joints requiring edging shall be carefully tooled with a suitable tool at the time the concrete begins to take its "initial set" and becomes non-workable. Before street pavement will be accepted and reopened, all foreign debris shall be removed and pavement cleaned.
- B. Stamped Concrete: Contractor shall apply concrete stamping as shown on the plans. Upon completion, contractor shall provide concrete stamping mats used for construction to City.

3.7 SIDEWALKS

- A. Shape and compact subgrade, foundation, or pavement surface to the line, grade, and cross-section shown on the plans. Lightly sprinkle subgrade or foundation material immediately before concrete placement. Hand-tamp and sprinkle foundation when placement is directly on subgrade or foundation materials. Remove and dispose of existing concrete. Provide a clean surface for concrete placement directly on the surface material or pavement.
- B. Mix and place concrete in accordance with the pertinent Sections. Hand-finishing is allowed for any method of construction. Finish exposed surfaces to a uniform transverse broom finish surface. Curb ramps must include a detectable warning surface and conform to details shown on the plans. Install joints as shown on the plans. Ensure that abrupt changes in sidewalk elevation do not exceed 1/4 in., sidewalk cross slope does not exceed 2%, curb ramp grade does not exceed 8.3%, and flares adjacent to the ramp do not exceed 10% slope. Ensure that the sidewalk depth and reinforcement are not less than the driveway cross-sectional details shown on the plans where a sidewalk crosses a concrete driveway.
- C. Provide finished work with a well-compacted mass, a surface free from voids and honeycomb, and the required true-to-line shape and grade.

3.8 PROTECTION OF PAVEMENT AND OPENING TO TRAFFIC

- A. No vehicle traffic shall be permitted on newly paved areas for a minimum of seven days after placement or until 3000 psi has been achieved.
- B. Contractor shall protect concrete during curing period. Any damage done to pavement shall be remedied at contractor's expense.

3.9 PAVEMENT TOLERANCES

- A. No concrete pavement with ponded or standing water over 1/8" deep will be accepted.
- B. Contractor shall measure the transverse and lateral profile of the finished riding surface using a 10-ft straightedge to measure and evaluate the ride quality of the pavement surfaces. The texture and ride quality of the new pavement should

closely match of that of the existing pavement to which it connects. Contractor shall use an approved grinding or other acceptable method to correct localized roughness and surface areas that have more than 1/8-in variation between any 2 contacts on a 10-ft straight edge. This shall be considered incidental to this bid item.

- C. Comply with tolerances of ACI 117 and as follows:
 - 1. Elevation: 1/4 inch.
 - 2. Thickness: Plus 3/8 inch, minus 1/4 inch.
 - 3. Surface: Gap below 10-foot- long, unlevelled straightedge not to exceed 1/4 inch.
 - 4. Joint Spacing: 3 inches.

3.10 CLEANUP

- A. After the construction work has been completed, the Contractor shall remove all debris, trash, excess materials, forms, stakes, etc. from the premises. The site shall be left with a neat appearance. All excavation shall be backfilled, and all excess excavated materials shall be disposed of.

3.11 PENALTY FOR DEFICIENT PAVEMENT THICKNESS AND STRENGTH

- A. Where the pavement is deficient in strength from that called for by the plans or specifications, as determined by the proper compressive strength testing, the Contractor is responsible for addition testing to determine the actual strength deficiency.
- B. Where the pavement thickness is deficient from that called for by the plans or specifications, as determined by core test set up in the contract, the Contractor is responsible for additional core tests to determine actual limits of deficient pavement thickness. The length of the area of such deficient thickness shall be determined by additional cores at intervals of 10 feet along the length of the pavement in each direction until cores are obtained which are at least plan thickness. The width of such area shall be the entire placement width.
- C. Contract payment will be made at an adjusted rate based on the following tables. If area of pavement is deficient in both measurements, then the more stringent payment deduction will be in effect:

Percent Deficient from Required Strength	Percent of Contract Price Allowed
Greater than 0%- Not more than 5%	95%
Greater than 5%- Not more than 10%	90%
Greater than 10%- Not more than 15%	80%

Deficiency in Thickness Determined By Cores	Percent of Contract Price Allowed
0.00 – 0.20	100%
0.21 – 0.30	80%
0.31 – 0.40	70%
0.41 - .050	60%

- D. Any area of pavement found deficient in strength by more than 15% or deficient in thickness by more than 0.50 inches shall be removed and replaced by the Contractor at his entire expense for the width of the street or alley and as directed by the Engineer.

3.12 REMOVAL OF DEFICIENT CONCRETE

- A. If the above tests indicate that a particular batch of previously placed concrete has less than the design strength, the Engineer may direct that the defective concrete be removed and replaced.
 - 1. The removal of the defective concrete shall also include the removal of concrete that has obtained the required strength if the Engineer deems this necessary to obtain structural or visible continuity when the concrete is replaced.
 - 2. The removal, and replacement of any defective concrete, shall be made at no additional cost to the Owner. This shall include any formwork required and any reinforcing steel required. The Owner will not accept any additional costs for extra work required because of the failure of placed concrete to meet the minimum requirements.

PART 4 – MEASUREMENT AND PAYMENT

- A. Concrete street pavement and sidewalks shall be measured by square yard of reinforced concrete street pavement and sidewalks in place and accepted for the depth specified in the plans. The area of concrete pavement includes the portion of the pavement slab extending beneath the curb. Payment shall be full compensation for concrete paving including reinforcement, joints, joint sealing, forms, base for level up, curing compound, testing, clean-up and for all manipulation, labor, tools, equipment and incidentals necessary to complete the work, all in accordance with the plans and these specifications.
- B. Curb or curb and gutter shall be measured by linear foot of curb or curb and gutter in place and accepted. Payment shall be full compensation for concrete paving including reinforcement, joints, joint sealing, forms, base for level up, curing compound, testing, clean-up and for all manipulation, labor, tools, equipment and incidentals necessary to complete the work, all in accordance with the plans and these specifications

END OF SECTION

SECTION 20082

CLEANING AND SEALING OF JOINTS AND CRACKS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. This item shall govern for application of sealing cracks and joints in concrete and asphalt pavement.
- B. Work shall be done in accordance with the current Texas Department of Transportation's Standard Specifications for Construction of Highways, Streets and Bridges, Item 712 "Cleaning and Sealing Joints and Cracks (Asphalt Pavement)", Item 713 "Cleaning and Sealing Joints and Cracks (Concrete Pavement)" with the exception of items specified herein.

1.2 SUBMITTALS

- A. Crack Sealing Compound
- B. Application Method and Equipment

PART 2 – MATERIALS AND EQUIPMENT

2.1 MATERIALS

- A. **Crack Sealing Compound.**
 - 1. For asphalt pavement contractor shall use asphalt-rubber hot-applied sealant, Type 3 per TxDOT DMS 6310 "Joint Sealants and Fillers"
 - 2. For concrete pavement
 - a. Type 3, Type 5, or Type 7 per TxDOT DMS 6310 "Joint Sealants and Fillers"

PART 3 – EXECUTION

Not used.

PART 4 – MEASUREMENT AND PAYMENT

- A. Unless listed as separate bid item, joint sealing shall be subsidiary to pavement construction bid items.
- B. Crack sealing shall be measured by gallon of material used, linear feet of crack sealed or by the lane mile of pavement crack sealed, whichever is specified on the plans and shall be full compensation for pavement preparation, routing, cleaning, and sealing of joints and cracks, crack sealing material; and for all manipulation, labor, tools, equipment and incidentals necessary to complete the work, all in accordance with the plans and these specifications.

END OF SECTION

SECTION 30051

ADJUSTMENT OF UTILITY APPURTENANCES

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Adjustment of existing water valve covers to proposed grade.
- B. Adjustment or replacement of existing meter boxes to proposed grade.
- C. Adjustment of existing sanitary sewer manholes to proposed grade.

PART 2 – MATERIALS AND EQUIPMENT

2.1 MATERIALS

- A. General: Materials shall be in accordance with City of Mesquite Standard Details and current approved materials as listed in the Engineering Design Manual.

PART 3 – EXECUTION

3.1 GENERAL

- A. Contractor shall take care that all existing utilities remain in service during adjustment of appurtenances.

3.2 WATER VALVE COVER ADJUSTMENT

- A. Contractor shall adjust the top of the water valve box to the proposed finished surface elevations by adjusting or lowering it to conform to the final grade in accordance with the plans. The existing valve box and cover, if in good condition, may be salvaged and reused. Where the valve box is of the adjustable type, the top section of the existing valve box shall be adjusted up or down as necessary within its adjustable limits. A valve box extension adapter also may be added to the top of the existing valve box. If the existing valve box is tilted/ and/or far enough off center on the valve nut to make valve operation difficult, the Contractor shall plumb and center the valve box over the valve nut prior to placement of adjacent material. The valve box lid ears shall be aligned parallel to the direction of water flow. Final adjustment of water valve shall be made after paving.

3.3 WATER METER ADJUSTMENT

- A. Contractor shall adjust the top of the water meter box to the proposed finished surface elevations by adjusting or lowering it to conform to the final grade in accordance with the plans.
- A. If meter box needs to be replaced, a new box will be provided by the City, unless otherwise specified that contractor shall provide new box.

3.4 SANITARY SEWER MANHOLE ADJUSTMENT

- A. Contractor shall install a false bottom in the manhole prior to initiation of grading and/or liming operations. The false bottom shall be 3/4" plywood. Contractor shall remove and salvage existing manhole lid and ring. Contact areas shall be cleaned of all mortar and grease. Contractor shall adjust the existing manhole casting to proper grade. If the adjustment involves lowering the top of a manhole, a sufficient

depth of concrete shall be removed to permit reconstruction on a batter if necessary to adjust the fixture to proposed new surface. If the adjustment involves raising the elevation of the top of the manhole, Contractor shall install grade rings as necessary to conform to the finished surface elevations. Installed grade rings shall fit within the existing casting without interference, shall not cause binding to the manhole lid, be immobile and watertight.

- B. Contractor shall install a new bolt down type manhole lid and ring along with installing new anchor bolts to attach ring to cone. All manhole rings shall be sealed and contain a wrap as shown per the *City of Mesquite's Approved Sanitary Sewer Materials List*. The space between risers and cone basin, between risers and cover frame, and between multiple risers shall be sealed with an approved mastic sealer. Concrete grade rings are not allowed.

PART 4 – MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

- A. This section shall be measured by each adjustment of existing water valve covers completed and accepted. Payment shall be full compensation for materials and installation including backfill, compaction, haul off and lawful disposal of spoils, and all manipulation, labor, tools, equipment and incidentals necessary to complete the work, all in accordance with the plans and these specifications.
- B. This section shall be measured by each adjustment and/or replacement of existing water meter boxes completed and accepted. Payment shall be full compensation for materials and installation including backfill, compaction, haul off and lawful disposal of spoils, and all manipulation, labor, tools, equipment and incidentals necessary to complete the work, all in accordance with the plans and these specifications.
- C. This section shall be measured by each adjustment of existing sanitary sewer manhole completed and accepted. Payment shall be full compensation for materials and installation including backfill, compaction, haul off and lawful disposal of spoils, grade rings, chimney seal and all manipulation, labor, tools, equipment and incidentals necessary to complete the work, all in accordance with the plans and these specifications.

END OF SECTION

SECTION 30052

IRRIGATION AND WATER SERVICE REPAIR ALLOWANCE

PART 1 – GENERAL

1.1 DESCRIPTION

- A. This item includes repair and/or replacement of existing irrigation systems and water services unavoidably damaged during construction activities.

1.2 SUBMITTALS

- A. Licensed sub-contractor

PART 2 – MATERIALS AND EQUIPMENT

2.1 MATERIALS

- A. General: Materials shall be in accordance with City of Mesquite Standard Details and current approved materials as listed in the Engineering Design Manual.

PART 3 – EXECUTION

3.1 GENERAL

- A. Contractor shall protect all existing irrigation and water service systems encountered during construction from damage. Any avoidable (as determined by the City) damage caused to systems by the contractor's operation shall be repaired to the satisfaction of the City and property owner at the contractor's expense. Any unavoidable damage caused to systems by the contractor's operation shall be repaired to the satisfaction of the City and property owner at and shall be charged against the Irrigation and Water Service Repair Allowance.

3.2 IRRIGATION REPAIR

- A. The Contractor must contact the Park Project Manager – Robert Blankenship at 972-216-6413 (office) prior to cutting, removing or altering City irrigation systems and to determine the location of any City sprinkler systems.
- B. All irrigation repairs must be performed by a licensed irrigator.
- C. Contractor shall follow TCEQ's laws and regulations for irrigation repair. Repair to City owned irrigation systems shall be per the City of Mesquite's Irrigation System Specifications (Section 02441) contained in the Engineering Design Manual. Inspection of the City owned irrigation system repair shall be by the Park Project Manager, at 972-216-6413.

3.3 WATER SERVICE REPAIR

- A. All water service repairs must be performed by a licensed plumber.
- B. All water service repairs shall adhere to City of Mesquite General Design Standards.

PART 4 – MEASUREMENT AND PAYMENT

- A. This item will be paid from invoices paid by the contractor to a licensed irrigator for irrigation repair or licensed plumber for water service repair that was unavoidably damaged by the contractor. The amount of the invoices is subject to review and approval by the City. Once invoices are approved by the City Project Engineer, the amount of the invoice shall be paid against the contract allowance for this item. Payment shall be per an allowance as per the bid form. Invoices will be required that shows the cost of materials and labor. Payment shall be full compensation for materials and installation including backfill, compaction, haul off and lawful disposal of spoils, and all manipulation, labor, tools, equipment and incidentals necessary to complete the work, all in accordance with the plans and these specifications.

END OF SECTION

SECTION 50010

SODDING

PART 1 – GENERAL

1.1 DESCRIPTION

- A. This item shall govern for furnishing, hauling, and placement of sod (Bermuda grass, St. Augustine grass, or other approved grass) as directed by the City and in accordance with the requirements of this specification.

1.2 SUBMITTALS

- A. Sod Supplier

PART 2 – MATERIALS AND EQUIPMENT

2.1 MATERIALS

- A. The sod placed by the contractor shall be live, growing grass with a healthy root system and dense matted roots throughout the sod for a minimum thickness of 1-inch. If turf exists adjacent to the disturbed area, the Contractor shall match type of sod to the existing turf. Sod shall be healthy, free of insects, disease, stones, undesirable foreign materials, and weeds detrimental to its growth or that might affect its livelihood or hardiness when transplanted. All sod shall be in a fertile soil with a high percentage of loamy topsoil. Sod, including the soil containing roots, shall be cut to uniform thickness. It shall be mowed to a height not to exceed three inches before the sod is lifted. Sod shall be protected from exposure to wind, sun, and freezing. If sod is stacked, it shall be kept moist. Sod shall not be planted when its moisture condition is so excessively wet or dry that its survival shall be affected. Grass sod with dried roots shall be considered unacceptable and rejected. Sod placed during dormancy shall be inspected by the City to verify that the grass is satisfactory. Broken or torn pads and uneven ends shall be rejected.
- B. Water for sodded areas shall be potable, or otherwise free from harmful materials that might injure the sod.
- C. Soil testing is not required. Fertilizer shall be 1-1-1 or 1-2-1 (N-P-K) ratio applied at a rate of 10 lbs fertilizer per 1,000 sq ft.

2.2 EQUIPMENT

- A. Suitable equipment necessary for proper ground surface preparation and for the transporting and placing of all required materials shall be on hand, in good condition, and approved by the Owner before the various operations begin. Adequate watering equipment must also be on hand before sodding begins. A truck mounted pumping unit capable of injecting high density polyurethane material beneath the pavement. The pumping unit will be capable of controlling the rate of material as required to densify the soils.

PART 3 – EXECUTION

- A. After the designated areas have been completed to the lines and grades required, areas to be sodded shall be tilled and free of large stones, sticks, and other debris

- that might interfere with sodding, livelihood of the grasses, or future maintenance of grass-covered areas. If any damage occurs after the grading of areas to be sodded and before the placement of sod, the Contractor shall repair such damage.
- B. Sod shall be carefully placed by hand on the prepared areas. Sod shall be placed so that the entire designated areas are covered. The entire sodded area shall immediately be rolled and tamped with approved equipment to force the sod in firm contact with the underlying soil and form a solid mass and provide an even surface. Any voids left shall be filled with additional sod and tamped. Surfaces that in the opinion of the Owner may slide due to the height or slope of the surface, shall be stapled with steel turf staples driven through the sod and flush with the surface of the sod.
 - C. Fertilizing shall consist of providing and distributing fertilizer under the sod before placing in accordance with these specifications. The fertilizer shall be in acceptable condition for distribution and applied uniformly over the area. All fertilizer shall be delivered in bags or containers clearly labeled showing the analysis of the contents. A sample label or specification of proposed fertilizer shall be submitted to the Owner for approval prior to use.
 - D. Sodded areas shall be thoroughly watered immediately after they are planted and as directed by the City for two-weeks after placement. In all cases the sod shall be kept moist until it is established and watered in a manner that will avoid the application of excess quantities.

PART 4 – MEASUREMENT AND PAYMENT

- A. Sodding shall be measured by the square yard of sodded area completed and accepted and shall be full compensation for furnishing and placing all materials required; for all staking, rolling and tamping; fertilizing; for all water; and for all manipulation, labor, tools, equipment and incidentals necessary to complete the work, all in accordance with the plans and these specifications.

END OF SECTION

APPENDIX

TO THE BIDDER / VENDOR

DID YOU REMEMBER TO?

- Abide by the General and Special Conditions
- Make note of the opening date and time. All bids must be submitted by 2:00 p.m. Bids received after 2:00 p.m. will not be accepted.
- Fill in the **unit** and **extended price** on your bid proposal.
- Fill in the **total amount**.
- Fill in the **alternate bid amounts**, if requested.
- Fill in the terms, if requested.
- Acknowledge receipt of all addendums.
- Fill in the **delivery time** or the **calendar days** (if applicable).
- Fill in the **company name, address and phone number**.
- **Sign bid proposal**.
- Include on the front of your sealed envelope the following information: **Company name, address, bid number, opening date and time**.

Mailing Address:

City of Mesquite
P.O. Box 850137
Mesquite, TX 75185-0137

Purchasing Office
972-216-6201
972-216-6397 Fax

Physical Address:

City of Mesquite
757 N. Galloway
Mesquite, TX 75149