



City of Waco, Texas

Request for Bid

RFB No. 2020-051

Street Improvements – 2019 Reclamation Phase 1 (18ST2003C)

Issue Date: September 1, 2020

Closing Date & Time: October 1, 2020, at 2:00 p.m.

Opening Date & Time: October 1, 2020, at 2:01 p.m.

RFB Opening Location: Purchasing Services Office, 1415 N. 4th Street, Waco, Texas
Via Zoom Video Conferencing & Telecom Dial-In

For Information Contact: Kasey Gamblin, Purchasing Services, 254-750-8405

Pre-submittal Meeting Location: **Via Zoom Video Conferencing & Telecom Dial-In**
Meeting I.D. 161 6089 2172
Password: 472222
Telecom Dial-In 1-848-220-3300
Conference I.D. 636-7481#
September 22, 2020 @ 10:00 A.M.

Purchasing Services
Post Office Box 2570
Waco, Texas 76702-2570
Telephone 254 / 750-8060
Fax 254 / 750-8063
www.waco-texas.com

TABLE OF CONTENTS

Register Interest form

- I. Schedule for Solicitation
- II. Contact with City of Waco
- III. Definitions
- IV. Requested Services / Products
- V. Request for Bids – Submission and Award Procedures

Appendices

- A. Services/Products Bid Forms
 - (1) Pricing Form(s)
 - (2) Sample Bid Bond Form
- B. Contract Requirements
 - (1) City of Waco General Terms and Conditions
 - (2) General Conditions for Construction Work
 - (3) Insurance & Indemnification Requirements
 - (4) Worker’s Compensation
 - (5) Wage Rates
 - (6) Sales Tax Information
 - (7) House Bill 1295 Information Sheet
 - (8) Protest Procedure
 - (9) Sample Contract Form
 - (10) Sample Payment and Performance Bond Requirements *(Required regardless the amount of the bid)*
- C. Forms to Complete and Return
 - (1) Submission of Bid/Proposal and Acknowledgment of Addenda
 - (2) Business Identification Form
 - (3) Conflict of Interest Questionnaire (CIQ Form)
 - (4) Disclosure of Relationships with City Council/Officers (City Charter)
 - (5) House Bill 89 Israel Form
 - (6) Minority/Women Owned Business
 - (7) Litigation Disclosure
 - (8) Certification Regarding Debarment
 - (9) Non-collusion Affidavit
 - (10) Resident Certification
 - (11) Texas Public Information Act
 - (12) Drug Free Workplace
- D. Special Project Provisions
- E. City of Waco Specifications
- F. Texas Department of Transportation Specifications
- G. Geotechnical Report
- H. Drawings/Plans



City of Waco, Texas

RFB No. 2020-051

Street Improvements – 2019 Reclamation Phase 1 (18ST2003C)

REGISTER INTEREST

You have received a copy of the above described Request document. If you would like to register your interest in this project so that you will receive any future notices or addenda concerning the project, please fill in the information requested below and fax this page to 254-750-8063. You may also scan this page and email to: kaseyg@wacotx.gov.

Company/Firm: _____

Name of Contact Person(s): _____

Email(s): _____

Telephone: _____ Fax: _____

Mailing Address: _____

It is your responsibility to complete and return this form to the City. Failure to do so will result in your not receiving notices and addenda related to this project from the City of Waco. Notices and addenda are posted on the City's website and can be accessed at:

<http://www.waco-texas.com/purchasing-rules.asp>.

City of Waco Purchasing Services
Post Office Box 2570
Waco, Texas 76702-2570
Telephone 254 / 750-8060
Fax 254 / 750-8063
www.waco-texas.com

I. Schedule for Solicitation

The proposed schedule of events is tentative and may be modified throughout the selection process at the discretion of the City of Waco.

Issuance of the RFB	September 1, 2020
Pre-submittal Meeting at 10:00 A.M.	September 22, 2020
Via Zoom Video Conference and Telecom Dial-In	
Zoom Meeting I.D. 161 6089 2172, Password: 472222	
Telecom Dial-In 1-848-220-3300, Conference I.D. 636-7481#	
Deadline for questions in 5:00 p.m.	September 24, 2020
Bids due by 2:00 p.m.	October 1, 2020
Evaluation of submission:	October 1, 2020 to October 9, 2020

Tentatively, the final selection decision will be made and submitters will be notified of award by October 9, 2020. This schedule is subject to change by the City.

II. Contact with City of Waco

The contact person for this solicitation process is: Kasey Gamblin, Purchasing Agent who can be reached at:

Email: kaseyg@wacotx.gov Telephone: (254) 750-8405 Fax: (254) 750-8063

Questions concerning the solicitation must be submitted to contact person **in writing** on or before date shown in the schedule above.

<p>Via U.S. Mail: City of Waco Purchasing Services Attn: Kasey Gamblin, Purchasing Agent P.O. Box 2570 Waco, Texas 76702-2570</p>	<p>Via Delivery Services/Personal Delivery: City of Waco Purchasing Services Attn: Kasey Gamblin, Purchasing Agent 1415 North 4th Street Waco, Texas 76707</p> <p>NOTE: US Mail does NOT deliver to street address</p>
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Contact with someone other than the Purchasing Agent listed above, or his/her designated representative, at the City of Waco concerning this solicitation may be grounds for removal from consideration.

Interpretation, modification, corrections, or changes to the solicitation documents will be made by addenda issued by the City of Waco. Addenda will be made available <http://www.waco-texas.com/bids.asp>. Interested vendors are encouraged to return the Register Interest form on the previous page.

A complete copy of this RFB, including information for bidders, bid forms, contract forms, plans, specifications, bid bond forms, performance and payment bond forms and all other contract documents related to this project are available at <http://www.waco-texas.com/bids.asp>.

III. Definitions

The following definitions apply to this document and the transaction between the City and the selected submitter unless otherwise designated in the context. Terms, which are singular, may include multiple, where applicable and when in the best interests of the City:

- (1) “City” means and refers to the City of Waco, Texas.
- (2) “Company” or “Firm” means and refers to any submitter, whether such submitter be a sole proprietor, corporation, company, partnership, company, or any other entity legally defined or recognized under the laws of the State of Texas.
- (3) “Bid” or “Submission” refers to a response submitted to an RFB.
- (4) “RFB” means and refers to a Request for Bid that will be awarded based on lowest responsible bid or best value to City of Waco.
- (5) “Selected submission” means and refers to the submission sent to the City of Waco by the Selected Firm.
- (6) “Selected Firm” means the firm who is selected by the City and to whom the City Council/City Manager awards a contract for the services or commodities requested in this solicitation.
- (7) “Solicitation” means an RFB issued by the City Waco seeking products or services described in the document.
- (8) “Submitter” or “Vendor” or “Bidder” or “Contractor” means a firm that submits a response to a solicitation.
- (9) “Contract documents” includes the RFB and all of the Appendices attached to the RFB.
- (10) “Day” means a calendar day unless otherwise specifically defined.

IV. REQUESTED SERVICES/PRODUCTS

A. Scope of Services / Specifications

- (1) **Street Improvements - 2019 Reclamation Phase 1 will include street reclamation and pedestrian and drainage improvements along 1.12 centerline miles of City streets.**
- (2) Detailed specifications are attached as Appendices.
- (3) Engineer's Cost Estimate for Construction: \$1,260,000.00
- (4) A digital version of this document can be obtained from the City of Waco website at <http://www.waco-texas.com/bids.asp>.

B. Terms, Conditions, and Requirements

In addition to the specifications for the Project, the attached Appendices include the City's Contract Requirements.

C. Duration of Service

The City of Waco is seeking to have the work that is the subject of this RFB completed within **110 working days** from the date of the Notice to Proceed. In determining the number of days for completion of the work under this Contract, it is anticipated that work will not be performed on Saturdays, Sundays, or City holidays unless specifically approved by City. Since "day" is defined as a calendar day, Saturdays, Sundays, and City holidays shall be counted as days and included in calculating the Contract time. If a Contractor wants to perform work on Saturdays, Sundays, or City holidays, the Contractor shall seek approval by making a written request to City. Contractor shall be responsible for all City staff and third-party time, costs, expenses and overtime for work performed on Saturdays, Sundays, or City holidays, unless excused in writing by the City prior to the work.

C. Reservations by City: The City of Waco reserves the right to reject any and all submittals. This issuance of this solicitation does not obligate the City to contract for expressed or implied services. The City of Waco will not reimburse vendors for any costs incurred during the preparation or submittal of responses to this solicitation.

- (1) Furthermore, the City expressly reserves the right to:
 - (a) Waive any defect, irregularity, or informality in any submittal or procedure;
 - (b) Extend the solicitation closing time and date;
 - (c) Reissue this solicitation in a different form or context;
 - (d) Procure any item by other allowable means;
 - (e) Waive minor deviations from specifications, conditions, terms, or provisions of the solicitation, if it is determined that waiver of the minor deviations improves or enhances the City's business interests under the solicitation; and/or

- (f) Extend any contract when most advantageous to the City, as set forth in this solicitation.
- (g) Retain all bids submitted and to use any ideas in a bid regardless of whether or not that bid is selected.

V. REQUEST FOR BIDS – SUBMISSION AND AWARD PROCEDURES

A. Requirements

- (1) Qualified vendors should submit one (1) original and two (2) copies of the Pricing Forms for the services/products sought by this solicitation and complete all of the required forms by the stated deadline.
- (2) Pricing Forms and Submission/Bid Security
 - (a) Pricing Forms.
 - 1. Bids are to be submitted with a response on each item and the total extended. More than one (1) bid may be submitted on items that meet the specifications and the other RFB requirements.
 - 2. Pricing is to be submitted on units of quantity specified on the Pricing Form with extended totals. In the event of a discrepancy in any extension total, the unit prices shall govern and be binding for purposes of this RFB.
 - 3. All prices included are to be submitted less Federal Excise and State of Texas Sales Taxes. A tax exemption certificate will be executed upon request. The City's federal tax identification number is 1-74-6002468-4.
 - (b) Security – Bid Bond. (**Applies only to Construction work**)
 - 1. Each submission must be accompanied by a **certified check** of the submitter, or a **bid bond** executed by the submitter as principal and having as surety thereon a surety company approved by the City in the amount of 5% of the submission. The Surety's Power of Attorney must accompany the bid bond. The bid bond and surety's Power of Attorney must both carry the same date which is no earlier than three (3) days prior to the scheduled bid opening date.
 - 2. Checks will be returned to all except the three lowest bidders within three days after the opening of bids. The remaining checks will be returned promptly after the City and the selected bidder have executed the contract.
 - 3. If no award has been made within ninety (90) days after the date of the opening of bids, a bidder may demand that the security submitted be returned so long as said bidder has not been notified of the acceptance of his bid.

4. If the selected bidder refuses or fails to execute and deliver the contract and bonds (payment and/or performance) required within 10 days after receiving notice of the acceptance of his bid, the bid security shall forfeit to the City as liquidated damages for such failure or refusal.
5. A Bid Bond form can be found in the Appendices.

B. Completeness of Submission

- (1) Vendors are responsible for examining and being familiar with all specifications, drawings, standard provisions, instructions, and terms and conditions of the solicitation and their responses.
- (2) The vendor must attach all required forms with each submission copy. Forms must be signed by a representative of the vendor authorized to bind the vendor contractually. The vendor must include a statement identifying any exceptions to this RFB or declare that there are no exceptions taken to the RFB.

C. Bid Response Date and Location

Bids must be received at the office of Purchasing Department by 2:00 p.m. (Central Time) on October 1, 2020.

Interested parties may submit their bids **Via Delivery Services or Personal Delivery** to:

City of Waco Purchasing Services
 Attn: Kasey Gamblin, Purchasing Agent
 1415 North 4th Street
 Waco, Texas 76707

Interested parties may also submit their bids through **U.S. Mail** delivered to:

City of Waco Purchasing Services
 Attn: Kasey Gamblin, Purchasing Agent
 P.O. Box 2570
 Waco, Texas 76702-2570

If using U.S. Mail, note that U.S. Mail is initially received at Waco City Hall and then delivered to the office of Purchasing Services by a City courier. That delivery may occur a day or more after being received at Waco City Hall. Allow additional time in advance of the bid due date for U.S. Mail delivery. If the Purchasing Office has not received the bids by the stated deadline, the bid will be returned unopened.

All submittals shall be sent to the attention of the Purchasing Agent in a sealed envelope that is clearly marked on the outside as follows:

**“RFB 2020-051, Street Improvements – 2019 Reclamation Phase
 1 (18ST2003C)”**

Bid Opening: 2:01 p.m. (Central Time) on October 1, 2020.

Vendors accept all risk of late delivery bids regardless of instance or fault. A bid received after the submission deadline will not be considered and will be returned unopened to the submitter. Vendors accept all risks of delivery.

The City will NOT accept a response submitted by facsimile transmission (fax) or by electronic mail (email).

All submissions and accompanying documentation will become the property of the City.

D. Modification to or Withdrawal of Submission

Submissions cannot be altered or amended after the submission deadline passes. Submissions may be modified prior to the deadline by providing a written notice to the Purchasing contact person at the address previously stated. To modify a submission prior to the submission deadline:

- (1) Submit a written notice of the modification WITHOUT revealing the bid price. The modification should provide the addition, subtraction, or other modifications so that the final prices or terms will not be revealed to the City until the sealed bid is opened.
- (2) The written modification may be submitted by electronic transmission (fax or email or personal delivery to Purchasing Agent identified earlier in this document. The written modification must be received by the City prior to the closing time.
- (3) If the modification is submitted through an electronic transmission (fax or email), the City must receive an original of the modification document signed by the bidder and submitted to a delivery company (UPS, FedEx, etc.) prior to the bid closing time. If the original of the modification was not submitted to a delivery company prior to the closing time or is not received within three (3) days after the closing time of the bid, consideration will not be given to the modifications provided in the electronic transmission.

A submission may also be withdrawn by providing the notice in person by a representative of the vendor who can provide proof of his authority to act for the vendor. The representative will be required to execute a receipt reflecting the submission is being withdrawn. If a submission is withdrawn before the submission deadline stated herein, the vendor may submit a new sealed bid provided the new bid is received prior to the closing date and time deadline stated on the cover page and in the Schedule for the Solicitation. This provision does not change the common law right of a submitter to withdraw a submission due to a material mistake in the submission.

E. Submission Validity Period

A submission responding to this RFB signifies the vendor's agreement that the submission, and the content thereof, are **valid for ninety (90)** days following the submission deadline unless otherwise agreed to in writing by all parties. The

submission may become part of the contract that is negotiated between the City and the successful vendor.

F. Vendor's Cost to Develop Submission

Costs for developing and assembling submissions in response to this solicitation are entirely the responsibility and obligation of the vendor and shall not be reimbursed in any manner by the City.

G. References

The submission shall include a list of 5 references of similar work.

H. Method of Award and Evaluation of Factors

(1) For this solicitation, the City will award the contract to the:

- Lowest responsible bidder
- Bidder who provides goods or services at the best value for the City.

(2) Lowest Responsible Bidder:

- (a) The contract will be awarded to the lowest responsible bidder based on the base bid plus any selected alternatives provided the amount does not exceed the funds then estimated by the City as available to finance the contract.
- (b) If the contract is bid with alternatives, the City reserves the right to select any combination of alternatives and will then compare all bids using the selected alternatives. If the amount of the bids exceeds the funds available to finance the contract, the City may (i) reject all bids or (ii) may award the contract based on the base bid with such deductions as produces a net total which is available within the available funds.

(3) Best Value:

- (a) In determining best value for the City, the City may consider:
 1. the purchase price;
 2. the reputation of the bidder and of the bidder's goods or services;
 3. the quality of the bidder's goods or services;
 4. the extent to which the goods or services meet the municipality's needs;
 5. the bidder's past relationship with the municipality;
 6. the impact on the ability of the municipality to comply with laws and rules relating to contracting with historically underutilized businesses and non-profit organizations employing persons with disabilities;

7. the total long-term cost to the municipality to acquire the bidder's good or services; and
- (b) Compliance with all bid requirements, delivery and needs of the City are considerations in evaluating bids. The City of Waco reserves the right to contact any offeror, at any time, to clarify, verify or request information with regard to any bid.
- (4) During the evaluation process, the City reserves the right, where it may serve the City's best interest, to request additional information or clarifications from bidders.

I. Contact Award and Execution

The final contract must be awarded and approved by the Waco City Council if the amount of the contract will exceed \$50,000.00. If the contract is for less than that amount, depending on the amount, the contract may be executed by the City Manager, an Assistant City Manager, department head or director.

APPENDIX A

Services/Products Bid Forms

- (1) Pricing Form(s)
- (2) Sample Bid Bond Form

**BID PROPOSAL FOR
STREET IMPROVEMENTS 2019 RECLAMATION PHASE 1 (18ST2003C)**

ITEM NO	DESCRIPTION	EST QTY	UNIT	UNIT PRICE	ITEM AMOUNT
1	MOBILIZATION	1	LS		
2	SWPP PLAN AND IMPLEMENTATION	1	EA		
3	TRAFFIC CONTROL PLAN AND IMPLEMENTATION	1	EA		
4	BETTER STREETS WACO SIGN ASSEMBLY AND INSTALLATION	2	EA		
5	MILLING (2")	694	SY		
6	2" D-GR HMAC TY-C SAC-B PG 64-22 (OVERLAY)	897	SY		
7	CEMENT TREAT (EXIST MATL) (CTRB), 8" DEPTH (NOT INCLUDING CEMENT)	14,937	SY		
8	CEMENT SLURRY (58 LBS/SY FOR 8" DEPTH)	433	TN		
9	CEMENT TREATED BASE (PLANT MIX)	430	CY		
10	LIME TREAT (SUBGRADE)(6")	2,678	SY		
11	LIME (HYDRATED LIME (SLURRY)) (EST. @ 35 LB LIME/SY FOR 6" DEPTH)	47	TN		
12	MATERIAL HAUL OFF	1,053	CY		
13	2" D-GR HMA TY-C SAC B PG 64-22 FOR RECLAMATION	17,620	SY		
14	3" D-GR HMA TY-B PG64-22 FOR RECLAMATION	2,683	SY		
15	REMOVE EXISTING REINFORCED CONCRETE DRIVE APPROACH	770	SF		
16	REMOVE EXISTING CURB AND GUTTER	1,366	LF		
17	REMOVE EXISTING GUTTER	4	LF		
18	REMOVE EXISTING SIDEWALK	1,174	SF		
19	REMOVE EXISTING SIDEWALK RAMP	52	SF		
20	REMOVE EXISTING SOD	3,452	SF		
21	PROPOSED REINFORCED CONCRETE DRIVE APPROACH	1,370	SF		
22	PROPOSED GRAVEL DRIVE - CRUSHED ROCK (D=6")	88	SY		
23	PROPOSED CURB AND GUTTER	1,496	LF		
24	PROPOSED GUTTER	4	LF		
25	PROPOSED CONCRETE VALLEY GUTTER AND/OR CONCRETE FILLET	1,522	SF		
26	SIDEWALK TIE-IN	320	SF		
27	PROPOSED 6" TOPSOIL & SOD	2,409	SF		
28	ADJUST MANHOLE COVER TO GRADE & INSTALL CONCRETE DIAMOND	19	EA		
29	ADJUST WATER VALVE COVER TO GRADE & INSTALL CONCRETE DIAMOND	11	EA		
30	REPLACE OLD WATER VALVE COVER, ADJUST TO GRADE & INSTALL CONCRETE DIAMOND	7	EA		
31	MOVE FIRE HYDRANT	1	EA		
32	TXDOT TYPE 2 RAMP (REINFORCED)	2	EA		

ALL PAGES OF THE BID PROPOSAL SHOULD BE RETURNED

1 OF 3

BID PROPOSAL FOR		2019 RECLAMATION PH 1			
33	TXDOT TYPE 5 RAMP (REINFORCED)	1	EA		
34	TXDOT TYPE 7 RAMP (REINFORCED)	14	EA		
35	TXDOT TYPE 10 RAMP (REINFORCED)	2	EA		
36	REFL PAV MRK TY 1 (W)24"(SLD)(100MIL)	180	LF		
37	REFL PAV MRKR TY II-B-B	15	EA		
38	MOVE TRAFFIC SIGN	3	EA		
39	REMOVE TREES	6	EA		
40	REMOVE DRIFT AT BRIDGE CULVERT INLET	1	LS		
41	PAINT STEEL BRIDGE RAILS (INCLUDING POSTS AND BASE PLATES)	1	LS		
42	BRIDGE MARKERS AND DELINEATORS	5	EA		
43	RIP RAP BEDDING MATERIAL (TXDOT ITEM 432)	12	CY		
44	18" GROUTED RIP RAP (TXDOT ITEM 432)	124	CY		
45	18" RCP (CLASS III) INCLUDING EXCAVATION & BACKFILL	82	LF		
46	24" RCP (CLASS III) INCLUDING EXCAVATION & BACKFILL	172	LF		
47	10' STANDARD CURB INLET (COMPLETE-IN-PLACE)	2	EA		
48	15' STANDARD INLET	2	EA		
49	6' STANDARD INLET	1	EA		
50	C900 PVC 6"	40	LF		
51	45 DEG BENDS (6" WATER LINE)	4	EA		
			TOTAL AMOUNT BID:		

I WILL USE THE FOLLOWING SUBCONTRACTORS FOR THIS WORK:

<u>SUBCONTRACTOR</u>	<u>TYPE OF WORK</u>
----------------------	---------------------

FIRM NAME: _____

BY (SIGNED): _____

TITLE: _____

ADDRESS: _____

Contractor acknowledges and agrees that the official TOTAL AMOUNT OF BID is determined by multiplying the unit bid prices by the respective estimated quantities shown in this bid proposal and then totaling all of the extended amounts. Extended amounts SHOULD NOT be rounded up or down. All dollar amounts should be either written legibly or typed. Any mistakes should be rewritten and initialed by the Contractor.

BID BOND

THE STATE OF TEXAS §

COUNTY OF _____ §

KNOW ALL MEN BY THESE PRESENTS, THAT _____
_____, (hereinafter called the Principal), as Principal,
and _____,
(hereinafter called the Surety), as Surety, are bound unto the **City of Waco**, Texas, a home
rule municipal corporation of McLennan County, Texas (hereinafter called Obligee) in
the amount _____ **DOLLARS**
(\$_____), which is five percent (5%) of the bid, for the payment
whereof said Principal and Surety bind themselves, and their heirs, administrators,
executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a Bid to enter into a certain written
Contract with Obligee for *{enter description of contract below}*
_____,
which is scheduled to be opened on _____, 20_____.

**NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS
SUCH**, that if the said Principal shall faithfully, enter into such written Contract, then this
obligation shall be void; otherwise to remain in full force and effect.

IT IS EXPRESSLY UNDERSTOOD AND AGREED that if said Principal
should withdraw its Bid any time after such Bid is opened and before official rejection of
such Bid or, if successful in securing the award thereof, said Principal should fail to enter
into the Contract and furnish, if required, satisfactory Performance Bond and Payment
Bond, the Obligee, in either of such events, shall be entitled and is hereby given the right
to collect the full amount of this Bid Bond as liquidated damages.

The Surety, for value received, hereby stipulates and agrees that the obligation of
said Surety and its bond shall be in no way impaired or affected by any extension of the
time within which the Obligee may accept such Bid, and said Surety does hereby waive
notice of any such extension.

Bid Bond – Page 2

PROVIDED, further that if any legal action be filed upon this Bond, venue shall lie in McLennan County, Texas.

IN WITNESS WHEREOF, the said Principal and Surety do sign and seal this instrument this _____ day of _____, 20_____.

ATTEST/WITNESS:

Secretary (if corporation) / Witness

Name of Principal - Contractor

(if corporation Corporate Seal)

BY: _____
signature

Title: _____

Address: _____

ATTEST:

Surety Secretary

Name of Surety

(Surety Seal)

BY: _____
Attorney-in-Fact signature

Witness to Surety

Address: _____
For Attorney in Fact

Address: _____

NOTE: Submit an original bid bond and a certified copy of the power of attorney along with full contact information for the Surety. Both the bid bond and the power of attorney should be **dated for the same date which is no earlier than three (3) business days prior to the scheduled bid opening**. [Count back from the day of the bid opening and do not count the bid opening day. Example: bid opening on Thursday, count back Wednesday, Tuesday, and Monday.] If the opening is delayed or rescheduled, Principal and/or Surety may be asked to provide proof that the bid bond executed is still valid. (11/03/2016)

COMPLETED FORM MUST BE RETURNED WITH BID/PROPOSAL

APPENDIX B

Contract Requirements

- (1) City of Waco General Terms and Conditions
- (2) General Conditions for Construction Work
- (3) Insurance & Indemnification Requirements
- (4) Worker's Compensation
- (5) Wage Rates
- (6) Sales Tax Information
- (7) House Bill 1295 Information Sheet
- (8) Protest Procedure
- (9) Sample Contract Form
- (10) Sample Payment and Performance Bond Requirements (***Required regardless the amount of the bid***)

APPENDIX B.(1)

General Waco Terms and Conditions

- (a) **Applicable Law and Venue.** This solicitation and any resulting contract will be governed and construed according to the laws of the State of Texas. The terms and conditions of the contract awarded pursuant to the solicitation are fully performable in McLennan County, Texas and venue for any dispute regarding contract shall be in McLennan County, Texas.
- (b) **Arbitration / Mediation.** The City of Waco will not agree to binding or mandatory arbitration or mediation.
- (c) **Conflict of Interest.** Vendor agrees to comply with the conflict of interest provisions of the Waco City Charter, Waco Code of Ordinances, and/or state law. Vendor agrees to maintain current, updated disclosure of information on file with the Purchasing Services Division throughout the term of the contract.
- (d) **Gratuities.** The City may, by written notice to the Vendor, cancel this contract without liability to the City, if it is determined by the City that gratuities have been offered to any officer or employee of the City with a view toward securing a contract, securing favorable treatment with respect to the awarding, amending, or the making of any determinations in respect to the performance of such a contract. In the event this contract is canceled by City as set forth in this paragraph, the City shall be entitled to recover from Vendor all additional costs incurred by City as a result of the cancellation.
- (e) **Unfunded Liability.** City's obligation is payable only and solely from funds available for the purpose of this purchase. Lack of funds shall render this contract null and void to the extent funds are not available and any delivered but unpaid for goods will be returned to Vendor by City. The City will not incur a debt or obligation to pay selected bidder any amounts the City does not have the current funds available to pay, unless the contract includes a provision for the City to appropriate funding for the debt or obligation.
- (f) **Advance Payments.** The City will not make advance payments to a selected firm or any third party pursuant to this solicitation or resulting contract.
- (g) **Gift of Public Property.** The City will not agree to any terms or conditions that cause the City to lend its credit or grant public money or anything of value to the selected firm.
- (h) **Procurement Laws.** The City will not agree to any terms or conditions that cause the City to violate any federal, Texas, or local procurement laws, including its own charter.
- (i) **Limitation of Liability.** The City of Waco will not agree to an artificial limitation of liability (e.g. liability limited to contract price or liability capped at an amount actually paid in previous 3 months, etc.) or an artificial statute of limitations (e.g. any lawsuit must be commenced within one year of the event).
- (j) **Waiver.** No claim or right arising out of a breach of the contract resulting from this solicitation can be discharged in whole or in part by a waiver or renunciation of the

claim or right unless the waiver or renunciation is supported by consideration and is in writing signed by the aggrieved party.

- (k) **Right To Assurance.** Whenever one party to this contract in good faith has reason to question the other party's intent to perform, that party may request that the other party give written assurance of his intent to perform. In the event that a request is made and no assurance is given within five (5) days, the requesting party may treat this failure as an anticipatory repudiation of the contract.
- (l) **Attorney's fees; Legal Costs.** The City will not agree to pay the selected firm's attorney's fees or other legal costs under any circumstances.
- (m) **Advertising.** Vendor shall not advertise or publish, without City's prior consent, the fact that City has entered into this contract, except to the extent necessary to comply with proper requests for information from an authorized representative of the federal, state or local government.
- (n) **Arrears In Taxes.** Article VII. Taxation, Section 8, of the City of Waco Home Rule Charter states: The City shall be entitled to counterclaim and offset against any debt, claim, demand or account owed by the City to any person, firm or corporation who is in arrears to the City of Waco for taxes, in the amount of taxes so in arrears, and no assignment or transfer of such debt, claim, demand or account after the said taxes are due, shall affect the right of the City to offset the said taxes against the same.
- (o) **Tax Certification; Offset of Other Debts Against City.** Selected bidder hereby certifies that it is not delinquent in the payment of taxes owed to the City and will pay any taxes owed to the City so that such taxes will not become delinquent. If this certification is subsequently determined to be false, such false certification shall constitute grounds for termination of the contract awarded under this SOLICITATION, at the option of City. Furthermore, Selected bidder agrees the City is entitled to counterclaim and offset against any debt, claim, demand, or account owed by the City to the selected bidder, pursuant to the awarded contract, for any debt, claim, demand, or account owed to the City, including other than the taxes mentioned above. The City may withhold from payment under the awarded contract an amount equal to the total amount of debts, claims, accounts, or demands including taxes owed to the City by the selected bidder. The City may apply the amount withheld to the debts and taxes owed to the City by the selected bidder until said debts are paid in full. No assignment or transfer of such debt, claim, demand or account after the said taxes or debts are due shall affect the right of the City to offset the taxes and the debt against the same.
- (p) **Independent Contractor.** The selected bidder will be an independent contractor under the contract. Professional services provided by the selected bidder shall be by the employees or authorized subcontractors of the selected bidder and subject to supervision by the selected bidder, and not as officers, employees or agents of the City. Selected bidder will be required and agrees to comply with all state and federal employment laws as well as all other federal, state and local laws, rules and regulations affecting the performance of all obligations taken herein.

- (q) **No Joint Enterprise/Joint Venture.** It is not the intent of this solicitation or the contract to be awarded to create a joint enterprise or joint venture.
- (r) **Subcontracting Bid.** If subcontracting with another company or individual is proposed, that fact, along with providing the same information for the subcontractor that is required to be provided by the bidder under this solicitation, must be provided and clearly identified in the bid. Following the award of the contract, no additional subcontracting will be permitted without the express prior written consent of the City.
- (s) **Assignment-Delegation.** No right or interest in the contract shall be assigned or delegation of any obligation made by Vendor without the written permission of the City. Any attempted assignment or delegation by Vendor shall be wholly void and totally ineffective for all purposes unless made in conformity with this paragraph.
- (t) **Modifications:** This contract can be modified or rescinded only by a written instrument signed by both of the parties or their duly authorized agents.
- (u) **Interpretation-Parol Evidence:** This writing is intended by the parties as a final expression of their agreement and is intended also as a complete agreement for dealings between the parties and no usage of the trade shall be relevant to supplement or explain any term used in this agreement. Acceptance or acquiescence in a course of performance rendered under this agreement shall not be relevant to determine the meaning of this agreement even though the accepting or acquiescing party has knowledge of the performance and opportunity for objection.
- (v) **Equal Employment Opportunity:** Vendor agrees that during the performance of its contract it will:
1. Treat all applicants and employees without discrimination as to race, color, religion, sex, national origin, marital status, age, or handicap.
 2. Identify itself as an "Equal Opportunity Employer" in all help wanted advertising or request. The Vendor shall be advised of any complaints filed with the City alleging that Vendor is not an Equal Opportunity Employer. The City reserves the right to consider its reports from its human relations administrator in response to such complaints in determining whether or not to terminate any portion of this contract for which purchase orders or authorities to deliver have not been included, however, the Vendor is specifically advised that no Equal Opportunity Employment complaint will be the basis for cancellation of this contract for which a purchase order has been issued or authority to deliver granted.
- (w) **Israel:** Vendor acknowledges that effective September 1, 2017, the City is required to comply with Section 2270.001 of the Texas Government Code, enacted by House Bill 89 (85th (R) Texas Legislature), which requires that a governmental entity may not enter into a contract with a company for goods or services unless the contract contains a written verification from the company that it does not boycott Israel and will not boycott Israel during the term of the contract. By executing this Agreement, Vendor verifies that it does not boycott Israel and will not boycott Israel during the term of this Agreement.

APPENDIX B.(2)

General Conditions for Construction Work

The “City of Waco Standard Specifications for Construction” (2013 Edition), hereinafter referred to as City Standard Specifications, is incorporated herein by reference for all intents and purposes. The General Provisions of the City Standard Specifications include provisions related to the administration of the contract. If a provision of the City Standard Specifications conflicts with a provision in this solicitation, the provision in this solicitation controls. If the applicable provision is still unclear, the City Manager for the City of Waco, or his designee, will determine which provisions, specification or standard controls and his determination shall be final.

The City Standard Specifications may be obtained by accessing the City of Waco website at www.waco-texas.com and going to Bid Opportunities – Engineering Services. It may also be obtained by contacting the City of Waco Public Works Department at 254-750-5440.

- (a) **Permits and Fees:** All permitting fees from the City will be waived on construction projects. The contractor will still need to apply for all applicable permits. However, there will be no cost associated with issuance of City permits.
- (b) **Time of Completion and Liquidated Damages:** Completing the work described in this solicitation in a timely manner is very important to the City of Waco. Submitter must agree to commence work on or before a date to be specified in a written "Notice to Proceed" of the City and to fully complete the project within the time stated in the contract documents. As it is impracticable and extremely difficult to fix the actual damages, if any, that may proximately result from a failure by Submitter to perform the service, should Submitter fail to complete the project within the calendar days specified in the contract, Submitter agrees to pay to City, or have withheld from monies due it, the amount stated in the contract documents as liquidated damages for each calendar day of delay or nonperformance. Any sums due and payable hereunder by the Submitter shall be payable, not as a penalty, but as liquidated damages representing an estimate of delay damages likely to be sustained by the City, estimated at the time of executing this Contract. Execution of a contract for this Project shall constitute agreement by the City and Submitter that said amount is the minimum value of the costs and actual damage caused by the failure of the Submitter to complete the Project within the allotted time. A sum due as liquidated damages may be deducted from payments due the Contractor if such delay occurs. Adjustments to the contract times can only be made as provided in the contract documents and any conditions or specifications referenced therein.

- (c) **Conditions of Work:** While the City is issuing a solicitation including specifications, each Submitter is still responsible for examining all of the issued documents, attending any pre-bid conference, making a site visit, and taking whatever steps are necessary to inform itself of the conditions relating to the project and the employment of labor thereon. Each Submitter must inform itself of the conditions relating to the project and the employment of labor thereon. Failure to do so will not relieve the Submitter awarded this contract of its obligation to furnish all material and labor necessary to carry out the provisions of the contract. Insofar as possible, the Selected Firm, in carrying out the Project, must employ such methods or means as will not cause any interruption of or interference with the work of any other contractor.
- (d) **Employment Conditions/Requirements:** Submitters shall pay particular attention to the required employment conditions that must be observed and the minimum wage rates to be paid. If federal or state funds are involved in paying for the work, there may be additional requirements that must be followed to comply with the terms of the federal or state funding.
- (e) **Security for Faithful Performance [Payment and Performance Bonds]:** Simultaneously with his delivery of the executed contract, the Selected Firm shall furnish the required surety bonds as security for faithful performance of this contract (Performance Bond) and for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract (Payment Bond), as specified in the documents included herein. For public works contracts, state law requires a Performance Bond if the contract is for an amount in excess of \$100,000.00 and a Payment Bond if the contract is for an amount in excess of \$50,000.00. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the City. The surety who signs contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.
- (f) **Force Majeure:** In the event performance by the Selected Firm of its obligations under this Agreement shall be interrupted or delayed by or as a consequence of a fire, flood, severe weather, or other act of God, war, insurrection, civil disturbance, or act of state, the Selected Firm shall be excused from such performance for the period of time such occurrence shall have lasted or such period as is reasonably necessary to rebuild or take other action necessary to resume performance. The period of time reasonably necessary to rebuild or take other action necessary to resume performance shall be as determined by the agreement of the parties, which agreement shall be negotiated and arrived at in good faith. The Selected Firm shall notify the Contact Person or Contract Administrator of any matter covered above, the occurrence of which interferes or threatens to interfere with the performance of any of its obligations under the bid. Upon such notice, the Selected Firm and the City shall consult and cooperate as to measures which may be taken to overcome the interference or as to alternative measures which may be undertaken by the parties with a view to the continued performance of the bid agreement.

- (g) **Right to Assurance:** Whenever one party to this contract in good faith has reason to question the other party's intent to perform, the questioning party may demand the other party give written assurance of its intent to perform. In the event that a demand is made, and no assurance is given within five (5) days, the demanding party may treat this failure as an anticipatory repudiation of the contract.
- (h) **Invoice Submittal Procedures:** If invoices are submitted or otherwise used pursuant to the bid awarded under this solicitation, the Selected Firm shall present invoices to the City in the following form and content:
1. Each invoice must reference the City of Waco contract, agreement or Purchase Order number;
 2. Only one contract, agreement, or project shall be billed on a particular invoice;
 3. Only one invoice per every thirty (30) days per contract, agreement, or project may be submitted; and
 4. Each invoice must have a billing number, which reflects in sequence the number of invoices that have been submitted on the contract, agreement, or project.

The invoice requirements stated herein shall not be read to disallow or exclude other information that may be otherwise required or requested by the City. Such information required herein must be submitted only on an invoice and not in any other non-invoice form or document.

- (i) **Termination of Contract:** Except as provided elsewhere in the contract documents:
1. The City may terminate the contract for cause for Selected Firm's failure to perform work, non-adherence to established federal, state and/or local laws, or a violation of any of the contract provisions. Upon written termination, the City may exclude the Selected Firm from the Project site and pursue any remedies available to the City.
 2. Upon ten (10) days written notice, City may terminate the contract for convenience, for any reason. In such case, the Selected Firm shall be paid, without duplication, for completed and acceptable work and expenses, including reasonable overhead and profit, and for other reasonable expenses directly attributable to the termination. In no case shall the Selected Firm be paid for anticipated profits or other consequential damages. Upon receipt of written notice, the Selected Firm shall have a duty to mitigate its termination costs and shall not incur additional costs unrelated to the costs directly related to either securing completed work or winding down the Project.

City of Waco Insurance & Indemnification Requirements
Horizontal Construction (03/22/2019)

Insurance Requirements:

A contractor's financial integrity is of interest to the City. Therefore, subject to a contractor's right to maintain reasonable deductibles in such amounts as are approved by the City, a contractor shall obtain and maintain in full force and effect for the duration of the contract, and any extension hereof, at contractor's sole expense, insurance coverage written on an occurrence basis by companies authorized to do business in the State of Texas that are rated A- or better by A.M. Best Company and/or otherwise acceptable to the City in the following types and amounts:

Type	Amount
Workers' Compensation	Statutory
Employer's Liability	\$1,000,000/\$1,000,000/\$1,000,000
Commercial General Liability Including: <ul style="list-style-type: none"> • Premises/Operations • Independent Contractors • Products Liability/Completed Operations • Personal & Advertising Injury • Broad form property damage, to include fire legal liability 	\$1,000,000 per occurrence; \$2,000,000 General Aggregate, or its equivalent in Umbrella or Excess Liability Coverage
Business Automobile Liability <ul style="list-style-type: none"> a. Owned/leased vehicles b. Non-owned vehicles c. Hired vehicles 	\$1,000,000 per occurrence or its equivalent on a combined single limit (CSL basis).

Term of Policy: With regard to any approved claims-made policy form, a contractor shall maintain and keep in force and effect said coverage during the term of this contract and for a period of seven (7) years following the expiration or completion of the contract with the City, either through an existing carrier or a carrier of comparable financial statute and reputation.

Modification of Insurance Requirement: The City reserves the right to review these insurance requirements during the effective period of the contract and any extension or renewal hereof and to modify insurance coverages and their limits when deemed necessary and prudent by City's Risk Manager or designee, based upon changes in statutory law, court decisions, or circumstances surrounding this contract. In no instance will the City allow a modification which results in the City incurring increased risk.

Proof of Insurance Required and When to Submit:

Examination & Approval. All insurance policies shall be subject to the examination and approval of the City for their adequacy as to form and content, form of protection, and financial status of insurance company.

When to Submit. Prior to the execution of the contract by the City of Waco and before commencement of any work under this contract, a contractor shall furnish original proof of insurance to the City's Risk Manager which is clearly labeled with the contract name and City department. The proof will include completed/current Certificate(s) of Insurance, endorsements, exclusions, and/or relevant extracts from the insurance policy, or copies of policies. Thereafter, new certificates, policy endorsements, exclusions, and/or relevant extracts from insurance policies, or policies shall be provided prior to the expiration date of any prior certificate, endorsement, or policy. No officer or employee other than the City's Risk Manager or designee shall have authority to waive this requirement.

Additional Insured. Except for Workers' Compensation, Employers' Liability, and Professional Liability Insurance, the City, its elected officials, officers, servants, agents, volunteers and employees shall be named as additional insureds. No officer or employee, other than the City Risk Manager or designee, shall have authority to waive this requirement.

Other-Insurance Endorsement -- All insurance policies are to contain or be endorsed to state that an "Other Insurance" clause shall not apply to the City where the City is an additional insured shown on the policy.

Agent Information. The certificate(s) or other proof of insurance must be completed by an agent authorized to bind the named underwriter(s) and their company to the coverage, limits, and termination provisions shown thereon, containing all required information referenced or indicated thereon. The original certificate(s) or form must be signed and include the agent information including the agent name, title and phone number. The proof of insurance shall be sent directly from the insurance agent to the City's Risk Management Office by U.S. Postal Service to City of Waco, ATTN: Risk Manager, P.O. Box 2570, Waco, Texas 76702-2570 or by delivery service to 1415 North 4th Street, Waco, Texas 76707. To send by email, please contact the Risk Management Office at 254-750-5730 to obtain the email address.

Precondition to Performance & Basis for Termination. The City shall have no duty to pay or perform under the contract until such certificate(s), policy endorsements, exclusions, and/or relevant extracts from the insurance policy have been delivered to and approved by the City's Risk Manager. The contractor understands that it is the contractor's sole responsibility to provide this necessary information to the City and that failure to timely comply with these insurance requirements shall be a cause for termination of a contract. If the City determines that it will deny payment, not perform, or terminate the contract because of the failure to provide certain information or documents, the City shall give the contractor notice of that determination and allow contractor fifteen (15) days to correct the deficiency.

Waiver of Subrogation. All liability policies will provide a waiver of subrogation in favor of the City.

Notice of Cancellation, Non-renewal, Material Change. The Contractor shall provide written notification to the City of the cancellation, non-renewal, or material change of any insurance

required herein. The Contractor shall provide such written notice within five (5) business days of the date the Contractor is first aware of the cancellation, non-renewal, or material change, or is first aware that the cancellation, non-renewal, or material change is threatened or otherwise may occur, whichever comes first. Contractor shall provide the City with a replacement certificate(s) of insurance, policy endorsements, exclusions, and/or relevant extracts from the insurance policy either before the cancellation, non-renewal, or material change is effective, if it knew in advance of such, or within ten (10) business days of first learning of the cancellation, non-renewal, or change if it did not learn of that such action in advance.

INDEMNIFICATION.

A CONTRACTOR EXECUTING A CONTRACT WITH THE CITY AGREES TO ASSUME FULL RESPONSIBILITY AND LIABILITY FOR THE SERVICES RENDERED PURSUANT TO THE CONTRACT AND AGREES TO INDEMNIFY, PROTECT, DEFEND, AND HOLD HARMLESS THE CITY, ITS EMPLOYEES, AGENTS, AND SERVANTS, OF AND FROM ALL CLAIMS, DEMANDS, AND CAUSES OF ACTIONS OF EVERY KIND AND CHARACTER, INCLUDING THE COST OF DEFENSE THEREOF, FOR ANY INJURY TO, INCLUDING DEATH OF, PERSONS AND ANY LOSSES FOR DAMAGES TO PROPERTY CAUSED BY OR ALLEGED TO BE CAUSED, ARISING OUT OF, OR ALLEGED TO ARISE OUT OF, EITHER DIRECTLY OR INDIRECTLY, OR IN CONNECTION WITH, THE SERVICES TO BE RENDERED HEREUNDER, WHETHER OR NOT SAID CLAIMS, DEMANDS, CAUSES OF ACTIONS ARE CAUSED BY CONCURRENT NEGLIGENCE OF THE CITY AND A PARTY TO THIS AGREEMENT, OR WHETHER IT WAS CAUSED BY CONCURRENT NEGLIGENCE OF THE CITY AND SOME OTHER THIRD PARTY.

Employee Litigation: In any and all claims against any party indemnified hereunder by any employee (or the survivor or personal representative of such employee) of the contractor, any subcontractor, any supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the work, or anyone for whose acts any of them may be liable, the indemnification obligation herein shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for contractor or any such subcontractor, supplier, or other individual or entity under workers' compensation or other employee benefit acts.



CITY OF WACO

Workers' Compensation Coverage Information

The City of Waco, a State of Texas Governmental Entity and Municipality, is required to comply with the Texas Labor Code. Specifically **Texas Labor Code – Section 406.096** directs Contractors who enter into a building or construction Contract with a Municipality to certify in writing that (1) the **contractor** provides workers' compensation insurance coverage for each employee of the contractor employed on public projects, and (2) the contractor receive a certificate from each **subcontractor** showing that every employee of the subcontractor is covered by workers' compensation insurance. Texas Labor Code – Section 406.096 states:

Sec. 406.096. REQUIRED COVERAGE FOR CERTAIN BUILDING OR CONSTRUCTION CONTRACTORS.

(a) A governmental entity that enters into a building or construction contract shall require the contractor to certify in writing that the contractor provides workers' compensation insurance coverage for each employee of the contractor employed on the public project.

(b) Each subcontractor on the public project shall provide such a certificate relating to coverage of the subcontractor's employees to the general contractor, who shall provide the subcontractor's certificate to the governmental entity.

(c) A contractor who has a contract that requires workers' compensation insurance coverage may provide the coverage through a group plan or other method satisfactory to the governing body of the governmental entity.

(d) The employment of a maintenance employee by an employer who is not engaging in building or construction as the employer's primary business does not constitute engaging in building or construction.

(e) In this section:

(1) "Building or construction" includes:

(A) erecting or preparing to erect a structure, including a building, bridge, roadway, public utility facility, or related appurtenance;

(B) remodeling, extending, repairing, or demolishing a structure; or

(C) otherwise improving real property or an appurtenance to real property through similar activities.

(2) "Governmental entity" means this state or a political subdivision of this state.

The term includes a municipality.

Acts 1993, 73rd Leg., ch. 269, Sec. 1, eff. Sept. 1, 1993.

28 Texas Administrative Code Section 110.110(c)(7) follows:

Texas Administrative Code Title 28 Section 110.110(c)(7) requires the following language to be contained in building and construction bid specifications and contracts:

Workers' Compensation Insurance Coverage

A. Definitions:

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

Duration of the project - includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

Persons providing services on the project ("subcontractor" in §406.096) - includes all persons or entities performing all or part of the services the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

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

C. The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract.

D. If the coverage period shown on the contractor's current certificate of coverage ends during the duration of the project, the contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.

E. The contractor shall obtain from each person providing services on a project, and provide to the governmental entity:

(1) a certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

(2) no later than seven days after receipt by the contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

F. The contractor shall retain all required certificates of coverage for the duration of the project and for one year thereafter.

G. The contractor shall notify the governmental entity in writing by certified mail or personal delivery, within 10 days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

H. The contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Workers' Compensation Commission, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

I. The contractor shall contractually require each person with whom it contracts to provide services on a project, to:

(1) provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all of its employees providing services on the project, for the duration of the project;

(2) provide to the contractor, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project;

(3) provide the contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

(4) obtain from each other person with whom it contracts, and provide to the contractor:

(a) a certificate of coverage, prior to the other person beginning work on the project; and

(b) a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

(5) retain all required certificates of coverage on file for the duration of the project and for one year thereafter;

(6) notify the governmental entity in writing by certified mail or personal delivery, within 10 days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and

(7) contractually require each person with whom it contracts, to perform as required by paragraphs (1) - (7), with the certificates of coverage to be provided to the person for whom they are providing services.

J. By signing this contract or providing or causing to be provided a certificate of coverage, the contractor is representing to the governmental entity that all employees of the contractor who will provide services on the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

K. The contractor's failure to comply with any of these provisions is a breach of contract by the contractor which entitles the governmental entity to declare the contract void if the contractor does not remedy the breach within ten days after receipt of notice of breach from the governmental entity.



Prevailing Wage Rates Information

Texas Government Code Chapter 2258 requires a worker employed by a contractor or subcontractor in the execution of a contract for the public work by or on behalf of political subdivision of the state to be paid a prevailing wage rate.

Definition of "public work." A public work to which this provision applies includes but is not limited to construction of a building, highway, road, excavation, and repair work or other project development or improvement, paid for in whole or in part from public funds, without regard to whether the work is done under public supervision or direction. It does not apply to work done directly by a public utility company under an order of a public authority. Whether this Project is a public work shall be determined by the City, and such determination shall be provided in writing to the Contractor before the opening of bids.

Worker wage rate. Contractor agrees, covenants, and guarantees that it and its subcontractor(s) constructing this Project, if a public work, shall pay their workers, other than maintenance workers, employed on this Project:

1. not less than the general prevailing rate of per diem wages for work of a similar character performed within the geographical limits of the City; and
2. not less than the general prevailing rate of per diem wages for legal holiday and overtime work.

"Worker employed on a public work" defined. A worker is employed on a public work for the purposes of this provision if the worker, including a laborer or mechanic, is employed by a contractor or subcontractor in the execution of a contract for a public work with the City, or any officer of the City, or the City Council of the City of Waco.

Determination of prevailing wage rate. The City Council of the City of Waco shall determine the general prevailing rate of per diem wages to be paid for each craft or type of worker needed to construct the Project by:

1. conducting a survey of the wages received by classes of workers employed on public works of a character similar to the contract work in the geographical limits of the City in which this public work is to be performed; or
2. using the prevailing wage rate as determined by the United States Department of Labor in accordance with the Davis-Bacon Act (40 U.S.C. Section 276a et seq.) if the survey used to determine that rate was conducted within a three-year period preceding the date the City Council of the City of Waco issues invitations for bids for this public work.

Sum certain of prevailing wage rate. The City Council shall determine the general prevailing rate of per diem wages as a sum certain, expressed in dollars and cents.

Wage rates incorporated in agreement and in invitation to bid. The prevailing wage rate to be paid for each craft or type of worker needed to construct the public work shall be specified in the invitation to bid for this Project and is incorporated by reference herein.

Determination final. The City Council's determination of the general prevailing rate of per diem wages is final.

Penalty. A contractor or subcontractor who violates this provision shall pay to the City sixty dollars (\$60) for each worker employed for each calendar day or part of the day that the worker is paid less than the wage rates stipulated in the invitation to bid and this contract. The City Council shall use any money collected under this provision to offset the costs incurred in the administration of this provision. A contractor or subcontractor does not violate this provision if the City Council, in awarding the bid for this contract, does not determine the prevailing wage rates and specify the rates in the invitation to bid and in this contract.

Maintenance of wage record. Contractor agrees, covenants, and guarantees that it and its subcontractor(s) shall keep a record showing:

1. the name and occupation of each worker employed by the contractor(s) and subcontractor(s) in the construction of this public work; and
2. the actual per diem wages paid to each worker.

Inspection of wage record. The record shall be open at all reasonable hours to inspection by the officers and agents of the City.

Payment greater than prevailing rate not prohibited. This provision does not prohibit the payment to a worker employed on a public work an amount greater than the general prevailing rate of per diem wages.

Reliance on certificate of subcontractor. The contractor awarded this bid is entitled to rely on a certificate by a subcontractor regarding the payment of all sums due those working for the subcontractor until the contrary has been determined.

Duty of City to hear complaints and withhold payment. The City Council shall:

1. take cognizance of complaints of all violations of this provision committed in the execution of the construction of this public work; and
2. withhold money forfeited or required to be withheld under this provision from the payments to the contractor(s) under the bid contract, except that the City may not withhold money from other than the final payment without a determination by the City Council that there is good cause to believe that the contractor has violated this provision.

Complaint; initial determination. The City Council shall comply with Sections 2258.023 and 2258.056, Government Code, in the initial determination of a complaint presented pursuant to this provision.

For the purposes of this Project, the general prevailing rate of per diem wages are the wage the rates set forth on the following page(s).

"General Decision Number: TX20200007 01/03/2020

Superseded General Decision Number: TX20190007

State: Texas

Construction Types: Heavy and Highway

Counties: Atascosa, Bandera, Bastrop, Bell, Bexar, Brazos, Burleson, Caldwell, Comal, Coryell, Guadalupe, Hays, Kendall, Lampasas, McLennan, Medina, Robertson, Travis, Williamson and Wilson Counties in Texas.

HEAVY (excluding tunnels and dams, not to be used for work on Sewage or Water Treatment Plants or Lift / Pump Stations in Bell, Coryell, McClennon and Williamson Counties) and HIGHWAY Construction Projects

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

Modification Number	Publication Date
0	01/03/2020

* SUTX2011-006 08/03/2011

	Rates	Fringes
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CEMENT MASON/CONCRETE FINISHER (Paving and Structures).....	\$ 12.56	
ELECTRICIAN.....	\$ 26.35	

FORM BUILDER/FORM SETTER

Paving & Curb.....\$ 12.94
Structures.....\$ 12.87

LABORER

Asphalt Raker.....\$ 12.12
Flagger.....\$ 9.45
Laborer, Common.....\$ 10.50
Laborer, Utility.....\$ 12.27
Pipelayer.....\$ 12.79
Work Zone Barricade
Servicer.....\$ 11.85

PAINTER (Structures).....\$ 18.34

POWER EQUIPMENT OPERATOR:

Agricultural Tractor.....\$ 12.69
Asphalt Distributor.....\$ 15.55
Asphalt Paving Machine.....\$ 14.36
Boom Truck.....\$ 18.36
Broom or Sweeper.....\$ 11.04
Concrete Pavement
Finishing Machine.....\$ 15.48
Crane, Hydraulic 80 tons
or less.....\$ 18.36
Crane, Lattice Boom 80
tons or less.....\$ 15.87
Crane, Lattice Boom over
80 tons.....\$ 19.38
Crawler Tractor.....\$ 15.67
Directional Drilling
Locator.....\$ 11.67
Directional Drilling
Operator.....\$ 17.24
Excavator 50,000 lbs or
Less.....\$ 12.88
Excavator over 50,000 lbs...\$ 17.71
Foundation Drill, Truck
Mounted.....\$ 16.93
Front End Loader, 3 CY or
Less.....\$ 13.04
Front End Loader, Over 3 CY.\$ 13.21
Loader/Backhoe.....\$ 14.12
Mechanic.....\$ 17.10
Milling Machine.....\$ 14.18
Motor Grader, Fine Grade...\$ 18.51
Motor Grader, Rough.....\$ 14.63
Pavement Marking Machine...\$ 19.17
Reclaimer/Pulverizer.....\$ 12.88
Roller, Asphalt.....\$ 12.78
Roller, Other.....\$ 10.50
Scraper.....\$ 12.27
Spreader Box.....\$ 14.04
Trenching Machine, Heavy...\$ 18.48

Servicer.....\$ 14.51

Steel Worker

Reinforcing.....\$ 14.00
Structural.....\$ 19.29

TRAFFIC SIGNAL INSTALLER

Traffic Signal/Light Pole
Worker.....\$ 16.00

TRUCK DRIVER

Lowboy-Float.....\$ 15.66
 Off Road Hauler.....\$ 11.88
 Single Axle.....\$ 11.79
 Single or Tandem Axle Dump
 Truck.....\$ 11.68
 Tandem Axle Tractor w/Semi
 Trailer.....\$ 12.81

WELDER.....\$ 15.97

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

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

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

The body of each wage determination lists the classification 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

Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

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

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

2.) If the answer to the question in 1.) is yes, then an 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.

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END OF GENERAL DECISION

"

TEXAS SALES TAX EXEMPTION INFORMATION

This information is being provided to assist contractors and is therefore general in nature. It is not a substitute for advice from the contractor's attorney or accountant.

Under the Texas Tax Code Section 151.309, the City of Waco is exempt the payment of sales tax. In addition, when the City contracts with a third party to make certain improvements to real property, purchases of materials/consumable items that are physically incorporated into that real property may also exempt from state and local sales tax. Items qualifying for this exemption must be used up entirely on a job for the City of Waco.

To claim this exemption, a contractor who has a Texas Taxpayer Number (the number on their Texas Sales and Use Tax Permit number) can complete the Texas Sales and Use Tax Resale Certificate (front side of Form 01-339) and provide it to the vendor from whom the contractor is purchasing materials and supplies for use under a contract with the City of Waco. The form is available on the Texas Comptroller website at:

<http://www.window.state.tx.us/taxinfo/taxforms/01-forms.html>

or

<http://www.window.state.tx.us/taxinfo/taxforms/01-339.pdf>

A copy of a blank form has been attached for your convenience. In completing the exemption form (01-339 front) when purchasing materials and supplies, a contractor will:

- (1) List itself (the contractor) as the purchaser and complete required information;
- (2) Fill in the name and required information about the seller;
- (3) Describe the item being purchased or attached order or invoice – the only items included must be items that will be entirely consumed or used in the project for the City of Waco – might include statement that purchase is related to contract with City of Waco, Texas, for Project {description, e.g., New Street sewer lien project};
- (4) Describe the type of business activity generally engaged in by purchaser or type of items normally sold by the purchaser

Since the City of Waco is a governmental entity, the contract or purchase order with the City provides the necessary documentation that the materials are acquired for an exempt contract [See 34 TAC §3.291(c)(1)]. However, if requested, the City of Waco will provide to the contractor awarded the contract an executed exemption certification showing that the city is exempt from sales tax (Form 01-339 back).

The state statutes and rules related to sales tax can be accessed from the Texas Comptroller website: <http://www.window.state.tx.us/taxinfo/sales/>

In addition, the Texas Comptroller's office can be contacted at 1-800-252-555 for questions about Sales and Use Taxes.

State statutes regarding sales tax can be found in Texas Tax Code Chapter 151 at:

<http://www.statutes.legis.state.tx.us/Docs/TX/htm/TX.151.htm>

Rules related to sales tax in the Texas Administrative Code can be found at:

[http://info.sos.state.tx.us/pls/pub/readtac\\$ext.ViewTAC?tac_view=5&ti=34&pt=1&ch=3&sch=O&rl=Y](http://info.sos.state.tx.us/pls/pub/readtac$ext.ViewTAC?tac_view=5&ti=34&pt=1&ch=3&sch=O&rl=Y)



INFORMATION ABOUT FORM 1295 DISCLOSURE

Beginning January 1, 2016, a business entity entering into a contract which is approved by the Waco City Council for services, goods or other property to be used by the City of Waco was required to complete a Certificate of Interested Parties Form 1295 on the Texas Ethics Commission website. A Form 1295 may also be required if a contract with the City is changed, amended, extended, or renewed.

House Bill 1295 found in Texas Government Code Chapter 2252 requires a “business entity” that:

- (1) enters into a contract which must be approved by the Waco City Council
- (2) for services, goods or other property
- (3) to be used by the City of Waco

to complete a Certificate of Interested Parties Form 1295 on the Texas Ethics Commission website. **"Business entity" means any entity recognized by law through which business is conducted, including a sole proprietorship, partnership, or corporation. It includes for-profit and non-profit entities. A contract with an individual is not a contract with a business entity.** A Form 1295 is not required for contracts with a publicly traded business entity, including a wholly owned subsidiary of the business entity.

The Texas Ethics Commission has adopted rules to implement the law and adopted the Certificate of Interested Parties form (Form 1295). The Commission states that it does not have any additional authority to enforce or interpret House Bill 1295 (approved in 2015).

Form 1295 requires disclosure of interested parties (a) who have a controlling interest in a business entity with whom the government entity contracts or (b) who actively participate in facilitating a contract or negotiating the terms of a contract (such as a broker, advisor, or attorney for business entity) if the person receives compensation from the business entity (but is not an employee of the entity) and communicates directly with the governmental entity regarding the contract. A person has a controlling interest if the person: (1) has an ownership interest or participating interest in a business entity by virtue of units, percentage, shares, stock, or otherwise that exceeds 10 percent; (2) has membership on the board of directors or other governing body of a business entity of which the board or other governing body is composed of not more than 10 members; or (3) serves as an officer of a business entity that has four or fewer officers, or serves as one of the four officers most highly compensated by a business entity that has more than four officers.

Filing Process:

The Texas Ethics Commission has made the filing Form 1295 available on its website as an electronic form at: https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

A business entity entering into a contract for services, goods or other property with the City of Waco must use that website application to enter the required information on Form 1295 and then print or download a copy of the form. The printed Form 1295 will have unique certification number assigned by the Commission in the upper right part of the Form. An authorized agent of the business entity must sign a printed copy of the Form. The executed Form 1295 must be filed with the City of Waco. The form can be scanned and emailed to the City, faxed to the City, mailed to the City, or delivered to the City. The City is then required to notify the Commission using the Commission’s website that the Form 1295 has been received by the City. The information from the completed Form 1295 will then be posted on the Commission’s website.

Procedure to Protest Award Recommendation

- A. If a firm or person believes it is injured as a result of an RFB, a written protest may be filed.
- B. The written protest may be delivered to the City's Purchasing Services Department ("Purchasing") in person to the department offices located at **1415 N. 4th St., Waco, Texas, 76707**, or by certified mail, return receipt requested, to the following address:

**Purchasing Services c/o City of Waco
Post Office Box 2570
Waco, Texas 76702-2570**
- C. The written protest must be filed no later than 5:00 p.m. on the fifth (5th) business day from the date of receipt of notification of the recommendation for the contract award.
- D. The written protest must include the following information before it may be considered:
 1. Name, mailing address, and business phone number of the protesting party;
 2. Identification of the RFB being protested;
 3. A precise and concise statement of the reason(s) for the protest which should provide enough factual information to enable a determination of the basis of the protest; and
 4. Any documentation or other evidence supporting the protest.
- E. In conjunction with the department that requested the RFB, Purchasing will attempt to resolve the protest, which may at Purchasing's discretion include meeting with the protesting party. If the protest is successfully resolved by mutual agreement, written verification of the resolution of each ground addressed in the protest will be provided to the city manager or designee assistant city manager.
- F. If the Purchasing is unable to resolve the protest, the protesting party may request the protest be reviewed and resolved by the city manager or designee assistant city manager.
- G. A request for the city manager's review must be in writing and received by the Purchasing within three (3) business days from the date the Purchasing informs the protesting party the protest cannot be resolved. The request for review must be delivered in person to the Purchasing at the address stated above or by certified mail, return receipt requested, to the mailing address stated above.
- H. If a protesting party fails or refuses to request a review by the city manager within the three (3) days, the protest is deemed finalized and no further review by the city is required.
- I. Applicable documentation and other information applying to the protest may be submitted by the protesting party to the Purchasing before review by the city manager. If the protesting party requests a review by the city manager, such documentation will be forwarded to the city manager or designee assistant city manager for consideration. The city manager or designee assistant city manager may likewise notify the protesting party or any city department to provide additional information. The decision reached by the city manager or designee assistant city manager will be final, but the protesting party may still appear before the City Council during the Hearing of the Visitors session of a City Council meeting.

SAMPLE CONTRACT

A sample contract is being provided for information purposes so that the Bidder will be familiar with the possible form of the contract. The City of Waco reserves the right to revise this contract form.

SAMPLE

CONTRACT

THIS CONTRACT ("the Contract"), made this ____ day of _____, 2016, by and between **CITY OF WACO**, herein called "Owner" acting herein through its City Manager or Assistant City Manager, and _____, of _____, herein called "Contractor".

WITNESSETH: that for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the OWNER, the CONTRACTOR hereby agrees with the OWNER to commence and complete the construction and repair work for the, **Street Improvements – 2019 Reclamation Phase 1 (18ST2003C)** hereinafter called the Project, for the sum of _____ (\$_____) and all extra work in connection therewith, and at his (its or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said Project in accordance with the Contract Documents. The Contract Documents consist of the following:

1. This Contract;
2. Permits and licenses from other agencies as may be required by law;
3. The Specifications/Plans which consist of:
 - a. Specifications prepared by the City of Waco.
 - b. City of Waco Standard Specifications for Construction" dated 2013, as revised by Special Provisions listed on the City of Waco website at <http://www.waco-texas.com/engineering-specifications.asp> ("Standard Specifications"); and
 - c. City of Waco, Texas – Manual of Standard Details revised April 15, 2015, (also referred to as "Standard Plans" in the Standard Specifications), the Special Project Provisions, and the Plans (as defined in the Standard Specifications); and
4. Addenda to the RFB (if any);
5. All documents included in RFB No. 2020-051
6. Contractor's Bid Proposal;
7. Required bonds;
8. Reference Specifications (as defined in the Standard Specifications);
9. Change Directives and Change Orders (as defined in the Standard Specifications);
10. All Modifications issued after the execution of the Agreement; and
11. Any other drawings and printed or written explanatory matter.

The Contractor hereby agrees to commence work under this Contract on or before a

Contract
Page 2

date to be specified in a written "Notice to Proceed" of the Owner and to fully complete the Project within **110 WORKING days** thereafter and perform the work in accordance with the Contract Documents. The Contractor further agrees to pay, as liquidated damages, the sum of **\$250.00** for each CALENDAR day thereafter as provided in Section 7.8 of the General Provisions of the Standard Specifications.

The **OWNER** agrees to pay the **CONTRACTOR** in current funds for the performance of the contract, subject to additions and deductions, as provided in Section 4 of the City of the General Provisions of the Standard Specifications.

IN WITNESS WHEREOF, the parties to these presents have executed this contract, in the year and day first above mentioned.

CITY OF WACO, TEXAS

BY: _____
Bradley Ford, City Manager

APPROVED AS TO FORM & LEGALITY

Jennifer Richie, City Attorney

APPROVED:

(Corporate Seal)

CONTRACTOR

ATTEST/WITNESS:

By: _____

Corporate Secretary or Witness

Title: _____

Address: _____

Note: If Contractor is a corporation, corporate secretary should attest. For other types of entities, a witness should sign.

Bond No. _____

PERFORMANCE BOND

Required by City of Waco where contract is over \$100,000

STATE OF TEXAS
COUNTY OF McLENNAN

KNOW ALL BY THESE PRESENTS: That we (1) _____
_____, (2) a _____ of (3) _____
hereinafter called **Principal** and (4) _____
_____ of _____, State of _____,
which is duly authorized to do business in the State of Texas and is hereinafter called **Surety**, are
held and firmly bound unto City of Waco of McLennan County, Texas in the amount of _____
_____ Dollars
(\$ _____) in lawful money of the United States, to be paid in McLennan
County, Texas, for the payment of which sum well and truly to be made, we bind ourselves, our
heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into
a certain contract with City of Waco dated the (5) _____ day of _____,
A.D., 20____, a copy of which is hereto attached and make a part hereof for the construction of:

- | |
|--|
| <ul style="list-style-type: none"> (1) Correct legal name of Contractor (2) A Corporation, a Partnership, Limited Liability Company or an Individual, whatever the business entity form (3) City and state of contractor’s office (4) Correct name of Surety along with city and state (5) Leave dates blank. City will fill in with date of City Council action. |
|--|

NOW THEREFORE, if the Principal shall well, truly and faithfully perform the work in
accordance with the plans, specifications and contract documents during the original term
thereof, and any extensions thereof which may be granted by the City of Waco, with or without
notice to the Surety, and if Principal shall fully satisfy all claims and demands incurred under
such contract, and shall fully indemnify and save harmless the City of Waco from all costs and
damages which it may suffer by reason of failure to do so, and shall reimburse and repay the
City of Waco all outlay and expense which the City of Waco may incur in making good any
default, then this obligation shall be void. Otherwise, this obligation remains in full force and
effect.

For value received, Surety hereby 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, drawings, etc. accompanying same, with or without notice to Surety,
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.

Performance Bond

Surety's telephone number is (_____) _____. Any notice of claim shall be sent to Surety at:

Mailing address: _____

Address of surety company: _____.

IN WITNESS WHEREOF, this instrument is executed, this the ____ day of _____, A.D. 20____.

NOTE: Date of Bond must NOT be prior to date of Contract or date of Council action, whichever is later.

ATTEST:

(Principal) Secretary

Principal - Contractor*

(Corporate Seal)

BY: _____

Witness as to Principal

Title: _____

Address: _____

Address: _____

ATTEST:

(Surety) Secretary

Surety

(Surety Seal)

BY: _____
Attorney-in-Fact

Witness to Surety

Address: _____

Address: _____

*If Contractor is Partnership, all partners should execute bond. Use extra pages if necessary.

Bond No. _____

PAYMENT BOND

Required by City of Waco where contract is over \$50,000

**THE STATE OF TEXAS
COUNTY OF McLENNAN**

KNOW ALL MEN BY THESE PRESENTS: That we (1) _____

(2) _____ of (3) _____ hereinafter called

Principal and (4) _____

_____ of _____, State of _____

_____, which is duly authorized to do business in the State of Texas and is hereinafter called

Surety, are held and firmly bound unto THE CITY OF WACO of McLENNAN COUNTY, TEXAS,

and unto all persons, firms, and corporations, who may furnish materials for, or perform labor upon

the building or improvements hereinafter referred to in the amount of

_____ Dollars

(\$ _____) in lawful money of the United States, to be paid in McLENNAN

COUNTY, TEXAS, for the payment of which sum well and truly to be made, we bind ourselves,

our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a

certain contract with THE CITY OF WACO dated the (5) _____ day _____, A.D.,

20____, a copy of which is hereto attached and made a part hereof for _____

_____ (herein called the "Work").

- | |
|--|
| <ul style="list-style-type: none"> (1) Correct name of Contractor (2) A Corporation, a Partnership, Limited Liability Company or an Individual, whatever the business entity form (3) City and state of contractor's office (4) Correct name of Surety along with city and state (5) Leave dates blank. City will fill in with date of City Council action. |
|--|

NOW, THEREFORE, the condition of this obligation is such that, if the Principal shall promptly make payment to all payment bond beneficiaries as defined in Chapter 2253 of the Texas Government Code, supplying labor and materials in the prosecution of the work provided for in said Contract, then this obligation shall be null and void; otherwise the obligation shall remain in full force and effect.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the Work to be performed under the Contract, with or without notice to Surety, 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 under the Contract.

The Surety agrees to pay the City of Waco upon demand all loss and expense, including attorney's fees and court costs, incurred by the City of Waco by reason of or on account of any breach of this obligation by the Surety.

Payment Bond

This bond is made for and entered into solely for the protection of all payment bond beneficiaries supplying labor and materials in the prosecution of the work provided for in said contract, and all such payment bond beneficiaries shall have a direct right of action under the bond as provided in Chapter 2253 of the Texas Government Code.

PROVIDED FURTHER, that no final settlement between the City of Waco and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

Surety's telephone number is (_____) _____. Any notice of claim shall be sent to Surety at:

Mailing address: _____

Address of surety company: _____

IN WITNESS WHEREOF, this instrument is executed, this the _____ day of _____, A.D. 20_____.

NOTE: Date of Bond must NOT be prior to date of Contract or date of Council action, whichever is later.

ATTEST:

(Principal) Secretary

(Corporate Seal)

Witness as to Principal

Address: _____

ATTEST:

(Surety) Secretary

(Surety Seal)

Witness to Surety

Address: _____

Principal - Contractor*

BY: _____

Title: _____

Address: _____

Surety

BY: _____

Attorney-in-Fact

Address: _____

*If Contractor is Partnership, all partners should execute bond. Use extra pages if necessary.

APPENDIX C

Forms to Complete and Return

- (1) Submission of Bid/Proposal and Acknowledgment of Addenda
- (2) Business Identification Form
- (3) Conflict of Interest Questionnaire (CIQ form)
- (4) Disclosure of Relationships with City Council/Officers (City Charter)
- (5) House Bill 89 Israel Form
- (6) Minority/Women Owned Business
- (7) Litigation Disclosure
- (8) Certification Regarding Debarment
- (9) Non-collusion Affidavit
- (10) Resident Certification
- (11) Texas Public Information Act
- (12) Drug Free Workplace



Submission of Bid and Acknowledgment of Addenda

RFB No. 2020-051 issued by City of Waco, Texas

The entity identified below hereby submits its response to the above identified RFB. The entity affirms that it has examined and is familiar with all of the documents related to RFB.

DECLARATION OF INTENT

As per the "SUBSTITUTIONS" section of the "STANDARD INSTRUCTIONS FOR ALL BIDS" contained within these bid documents, I attest that the bid submitted is: (check one box below)

- 1. to the exact Specifications and the Terms and Conditions of the bid documents.
 - 2. to the exact specifications with modifications to the Specifications and/or the Terms and Conditions as noted in the attached documentation.
- or
- 3. NOT to the exact Specifications and/or the Terms and Conditions and is therefore an alternate bid, submitted for the City's consideration, with attached justification(s) and documentation defending the alternate bid as meeting or exceeding the intent of the specifications or scope of work.

Submitter further acknowledges receipt of the following addenda:

Addendum No ____ issued _____

Date : _____

Proposal of (entity name) _____

Signature of Person Authorized
to Sign Submission: _____

Signor's Name and Title
(print or type): _____

PLEASE SIGN AND RETURN WITH BID



Business Entity Identification

To identify the appropriate person to execute documents, please fill in this form:

Full Legal Name of Business Entity: _____

Doing Business As (assumed name): _____

Main Contact Person: _____

Registered Office Address: _____

Mailing Address: _____

Business Phone #: _____ Fax #: _____

Email Address: _____

DUNS Number: _____

Check the appropriate box to designate the type of business entity & complete the information below.

Is entity: Sole Proprietorship Corporation Professional Corporation
 General Partnership Limited Partnership Limited Liability Partnership
 Limited Liability Company Professional Limited Liability Company
 Other _____

Date Business Started: _____ State Where Started: _____

If the entity was formed in another state, registration with the Texas Secretary of State may be required before transacting business in Texas. See http://www.sos.state.tx.us/corp/foreign_outofstate.shtml

Publicly traded company No Yes – where traded: _____

Depending on the type of business entity, the business will have owners, corporate officers, corporate directors, partners, managers, members, etc. Complete the information below.

To provide information on more than one person or entity for boxes 1 to 5, please use back of page, blank page, or another copy of this form.

1	Name of Primary Officer, Partner, Owner, Manager, Member, Director	
2	Position or title with business entity	
3	Address (if different from above)	
4	Who is authorized to execute contracts and other documents?	
5	What is the title or position of the person listed in #4?	
6	Please provide a document (resolution, bylaw, agreement, etc.) that states the person identified in #4 has authority to execute contracts or execute affidavit.	

In signing this form, I acknowledge that I have read the above and state that the information contained therein is true and correct.

Signature: _____ Date: _____

Print Name: _____ Print Title: _____

ESTABLISHING AUTHORITY TO EXECUTE CONTRACT

When an instrument is signed on behalf of a business entity, documentation must be submitted that states the person signing on behalf of the business entity has the authority to do so. That documentation may be in the form of a resolution approved by a corporate board of directors, charter provisions, by-laws, partnership agreement, etc.

If a business entity has a document authorizing one or more individuals to enter into contracts or execute any instrument in the name of the business entity that it may deem necessary for carrying on the business of the entity, a certified copy of that document may be submitted.

If the business has a document stating who can execute documents for the business (such as a corporate resolution, charter provision, corporate bylaw, etc), the certification below may be signed and that document attached to this page.

CERTIFICATION REGARDING ATTACHED DOCUMENT

I, the undersigned person, as the *{title}* _____ of
{business entity} _____, certify that the attached
document authorizes *{name of person}* _____ to execute
contracts and other documents on behalf of said business entity and said document has not been
revoked, altered, or amended and is still in full force and effect.

SIGNED this _____ day of _____, 20_____

(Signature)

Print Name

Attach document to this form

If a corporation does not have a document authorizing someone to execute contracts on behalf of the corporation, this resolution form may be used to establish that authority.

RESOLUTION FOR CORPORATION

BE IT RESOLVED by the Board of Directors of _____

_____ that
(Name of Corporation)

_____ is hereby authorized to execute a contract
(Name)

with the City of Waco to complete/construct _____

(Name of Project, Project No.)

_____, Secretary, is authorized to attest the
signature binding the corporation.

Corporate Name

(Corporate Seal)

By: _____

Title: _____

ATTEST:

Secretary of Corporation

CERTIFICATION

I, _____, certify that the above resolution
(Secretary of Corporation)

was adopted by the Board of Directors of _____
(Corporation)

at a meeting on the _____ day of _____, 20__.

(Signature of Secretary)

(Print Name of Secretary)

Business Entity Identification

Complete and Return with Bid/Proposal/Qualifications

If business entity has no document declaring who has authority to execute a contract on behalf of a business entity, this affidavit must be completed.

**AFFIDAVIT OF AUTHORITY TO SIGN FOR COMPANY,
CORPORATION, OR PARTNERSHIP**

Name of Business Entity: _____

Which is Corporation Professional Corporation
 General Partnership Limited Partnership Limited Liability Partnership
 Limited Liability Company Professional Limited Liability Company

On behalf of the above named business entity, I, the undersigned, certify and affirm that the following named person has authority to execute contracts and other documents on behalf of said business entity:

Name: _____

Title: _____

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

Signature

Print Name

Print Title

STATE OF _____

COUNTY OF _____

SWORN TO AND SUBSCRIBED BEFORE ME this ____ day of _____,
A.D., 20____.

(seal)

Notary Public

My Commission Expires:



INSTRUCTIONS FOR CONFLICTS OF INTEREST QUESTIONNAIRE [Form CIQ]

Chapter 176 of the Texas Local Government Code requires vendors who wish to conduct business or be considered for business with a city to file a “conflict of interest questionnaire.” The Texas Ethics Commission (TEC) created the conflict of interest questionnaire (Form CIQ).

Who must complete and file CIQ form?

Every vendor doing business with the City or seeking to do business with the City must complete Box 1 and sign and date in Box 7. Whether or not a conflict exists determines the other information to include on the form.

Who is a vendor?

The term “vendor” includes a partnership, corporation or other legal entities, including those performing professional services. Partnerships or corporations act through individuals, but it is the partnership or corporation that is doing business with or seeking to do business with the City.

If the vendor seeking to do business with the City is a sole proprietorship, then just the name of the person who is the vendor is needed.

What triggers the requirement to file the Form CIQ?

When a vendor (or an agent of the vendor) begins (1) contract discussions or negotiations with the city or (2) submits an application, quote, response to request for proposals or bids, or anything else that could result in an agreement (contract or purchase order) with the City, Form CIQ must be completed. Whether the vendor initiates the discussion or the City initiates the discussions, Form CIQ must be completed. The monetary amount or value of the contract/purchase does not matter. The contract or purchase may involve the sale or purchase of property, goods, or services with the City of Waco

When does a conflict requiring disclosure exist? What has to be revealed?

- A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with the City of Waco and the vendor:
 - (1) has an employment or other business relationship with an officer of the City of Waco, or a family member of an officer, that results in taxable income exceeding **\$2,500** during the 12 month period preceding the date a contract/purchase is executed or a contract/purchase is being considered; or
 - (2) has given an officer of the City of Waco, or a family member of an officer, one or more gifts with the aggregate value of more than **\$100** in the 12 month period preceding the date a contract/purchase is executed or a contract/purchase is being considered
 - (3) has a family relationship with an officer of the City of Waco.

What family relationships create a conflict?

A “family member” is a person related to another person within the first degree by consanguinity (blood) or affinity (marriage), as described by Subchapter B, Chapter 573, Texas Government Code. The ending of a marriage by divorce or the death of a spouse ends relationships by affinity created by that marriage unless a child of that marriage is living, in which case the marriage is considered to continue as long as a child of that marriage lives.

“Family relationship” means a relationship between a person and another person within the third degree by consanguinity or the second degree by affinity, as those terms are defined by Subchapter B, Chapter 573, Texas Government Code.

Who are officers of the City of Waco?

Officers are the members of the Waco City Council, the City Manager, and any agent or employee who exercises discretion in the planning, recommending, selecting, or contracting with a vendor. An agent may include engineers and architects, as well as others, who assist the City is making a decision on some contract or purchase.

When must a vendor file the conflict of interest questionnaire?

No later than seven days after the date the vendor: (a) begins contract discussions or negotiations with the city, or (b) submits an application or response to a request for proposals or bids, correspondence, or another writing related to a potential agreement with a city, or (c) becomes aware of an employment or other business relationship with an officer or family member of the officer that the vendor (i) has made one or more gifts of more than \$100 or (ii) has a family relationship with.

How do I go about filling out the Conflict of Interest Questionnaire form?

Section 1: Fill in the full name of the **person or company** who is trying to do business with the City. If the “person” is a corporation, partnership, etc., then it is the name of that corporation, partnership, etc., that is required on Form CIQ. If a sole proprietorship, then just the name of the individual is needed. If the “person” is an individual acting as an agent for some other person or a company, then it is the agent’s name. **Any time an agent is involved, two FORM CIQs must be completed and submitted:** one for the agent, and one for the person or company that the agent acted for. The agent’s FORM CIQ must note the vendor that the agent acted for.

Section 2: Check box if the form is an update to a form previously completed. Updates are required by the 7th business day after an event that makes a statement in a previously filed questionnaire incomplete or inaccurate. Updates are also required by September 1 of each year in which the person submits a proposal, bid or response to the City of Waco or begins contract discussions or negotiations with the City.

Section 3: Insert the name of the City of Waco officer with whom there is an affiliation to or business relationship. If there is more than one City officer with whom there is an affiliation or business relationship, a separate form should be completed for each officer.

Section 4: Check the “Yes” or “No” box in Section 4 A or B.

4.A: State whether the officer named on the form receives or is likely to receive taxable income, other than investment income, from the vendor filing the questionnaire.

4.B: State whether the vendor receives or is likely to receive taxable income, other than investment income, from or at the direction of the officer named on the form AND the taxable income is not received from the City.

Section 5: Describe each employment or business relationship with the local government officer named on the form.

Section 6: Check box to acknowledge gifts made that require disclosure.

Section 7. Person completing form must date and sign the form. If the form is being completed for a corporation, partnerships, etc., the person signing should be someone who is authorized to act on behalf of the corporation, partnership, etc.

A signature is required in box #4 regardless of any other entry on the form.

A copy of Chapter 176 of the Texas Local Government Code can be found at:

<http://www.statutes.legis.state.tx.us/SOTWDocs/LG/html/LG.176.htm>

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

This includes the vendor name even if a conflict does not exist

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

Insert name of vendor seeking to do business with the City of Waco

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.

Insert name of officer with whom there is business, employment or family relationship. If no conflict, insert N/A.

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.

Complete A-B if a conflict exist

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.

Identify and describe the relationship, if applicable

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 required -- so sign and date, even if no conflict

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.

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



**DISCLOSURE OF RELATIONS WITH
CITY COUNCIL MEMBER, OFFICER, OR EMPLOYEE OF CITY OF WACO**

Failure to fully and truthfully disclose the information required by this form may result in the termination of any business the City is now doing with the entity listed below and/or could impact future dealings.

1. Name of Entity/Business/Person doing business with City: _____

Is the above entity: **(Check one)**

- A corporation A partnership A sole proprietorship or an individual
 Other (specify): _____

Check all applicable boxes.

2. Is any person involved as an owner, principal, or manager of name listed in #1 related to or financially dependent on Council member, officer, or employee of the City of Waco?

- NO -- there is no such relationship between Entity/Business/Person and the City of Waco.
 YES, a person who is a/an owner, principal, or manager of this entity/business/person

is: **(Check all applicable boxes below)**

- related to by blood or marriage* and/or a member of the same household as
and / or financially dependent upon** and/or financially supporting**
to a City of Waco City Council member, officer or employee.

* As used here, "related to" means a spouse, child or child's spouse, and parent or parent's spouse. It also includes a former spouse if a child of that marriage is living (the marriage is considered to continue as long as a child of that marriage lives).

** As used herein, "financially dependent upon" and "financially supporting" refers to situations in which monetary assistance—including for lodging, food, education, and debt payments—is provided by owner, principal or manger of #1 to Council member, officer or employee of City of Waco, or that Council member, officer or employee of City of Waco provides to owner, principal or manger of #1.

If YES, provide (a) the name of owner, principal, or manager, **and** (b) the name of the City Council member, officer or employee (include the department the City officer or employee works for, if known), **and** (c) if a relationship by marriage or by blood/kinship exists. (Use back of sheet if more space is needed)

(a) Name of owner, principal, or manager	(b) Name of Council member, officer or employee & department	(c) What is relationship or household arrangement

3. Is a current City Council member or City employee involved with the name listed in #1 as an owner, principal, manager, or employee, or employed as a contractor for name listed in #1?

- NO (no person involved/working for Entity/Business/Person is Council member, officer or employee of the City).
 YES, a person is **(Check all applicable boxes)**

- (a) a current City of Waco City Council member, officer or employee ,
(b) and is an owner, a principal, or a manager of the entity/business/person listed in #1,
or an employee or an independent contractor of the entity/business/person listed in #1.

If YES, provide the name of owner, principal, manager, employee or independent contractor who is a City Council member, officer or employee. Include the department the City officer or employee works for, if known.

Signature: _____ Phone #: _____ Date: _____

Print Name: _____ Print Title: _____

CERTIFICATION REQUIRED BY TEXAS GOVERNMENT CODE SECTION 2271.002

State law requires certification from a Company for contracts (which includes contracts formed through purchase orders) involving goods or services: (1) between a government entity and a Company with 10 or more full-time employees, and (2) has a value of \$100,000 or more that is to be paid wholly or partly from public funds of the governmental entity.

By signing below, Company hereby certifies the following:

- 1. Company does not boycott Israel; and
- 2. Company will not boycott Israel during the term of the contract.

PRINT COMPANY NAME: _____

SIGNED BY: _____

Print Name & Title: _____

Date Signed: _____

The following definitions apply to this state statute:

(1) "Boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes; and

(2) "Company" means a for-profit organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or limited liability company, including a wholly owned subsidiary, majority-owned subsidiary, parent company, or affiliate of those entities or business associations that exists to make a profit.

By signing below, Contractor hereby certifies that Section 2271.002 does not apply to this contract due to the following (check all that apply):

- Contractor is a sole proprietor; or
- Contractor has less than 10 full-time employees; or
- Contract value is for less than \$100,000.00.

PRINT COMPANY NAME: _____

SIGNED BY: _____

Print Name & Title: _____

Date Signed: _____



CITY OF WACO
Purchasing Services
Minority/Women Owned Business Certification

The City of Waco is committed to assuring that all businesses are given prompt, courteous, and equal opportunity to provide goods and services to the City. To achieve this goal, the City Council requests the minority women owned status of each vendor on the City vendor list.

Definition: A Disadvantaged Minority and Woman owned Business Enterprise means a business concern owned and controlled by socially and economically disadvantaged individuals. This means any business concern that (a) is at least 51% owned by one or more socially and economically disadvantaged individuals; or in the case of publicly owned businesses, at least 51% of the stock which is owned by one or more socially or economically disadvantaged individuals; and (b) whose management and daily operations are controlled by one or more other socially and economically disadvantaged individuals who own it. The groups included in this program are Black Americans, Hispanic Americans, Women, Asian Pacific Americans, Service Disabled Veterans, and Native Americans

Certification: Bidder declares a minority and/or women owned business status:

_____ YES _____NO

If yes, check one of the blocks (indicate male or female):

Black M/F_____; Hispanic M/F_____; Woman_____; Asian M/F_____;

Native American M/F_____; Service Disabled Veteran of 20% or more M/F_____.

HUB certified _____ YES _____ NO

COMPANY NAME: _____

AUTHORIZED SIGNATURE: _____

TITLE: _____

DATE: _____



CITY OF WACO

LITIGATION DISCLOSURE

Failure to fully and truthfully disclose the information required by this Litigation Disclosure form may result in the disqualification of your bid/proposal/qualifications from consideration or termination of the contract, once awarded.

1. Have you or any member of your Firm or Team to be assigned to this engagement ever been indicted or convicted of a felony or misdemeanor greater than a Class C in the last five (5) years?

Yes No

2. Have you or any member of your Firm or Team been terminated (for cause or otherwise) from any work being performed for the City of Waco or any other Federal, State or Local Government, or Private Entity?

Yes No

3. Have you or any member of your Firm or Team been involved in any claim or litigation with the City of Waco or any other Federal, State or Local Government, or a Private Entity during the last ten (10) years?

Yes No

If you have answered “Yes” to any of the above questions, please indicate the name(s) of the person(s), the nature, and the status and/or outcome of the information, indictment, conviction, termination, claim or litigation, as applicable. Any such information should be provided on a separate page, attached to this form and submitted with your bid/proposal/qualifications.



INSTRUCTIONS FOR CERTIFICATION REGARDING
Certification Regarding Debarment, Suspension, Ineligibility,
and Voluntary Exclusion

1. By signing and submitting this proposal and the certification form, the prospective lower tier participant (BIDDER/PROPOSER/SUBRECIPIENT) is providing the certification set out on the following form (or reverse side) in accordance with these instructions.
2. The certifications in this clause are a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant (BIDDER/PROPOSER/ SUBRECIPIENT) knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant (BIDDER/PROPOSER/SUBRECIPIENT) shall provide immediate written notice to the person to whom this bid/proposal is submitted if at any time the prospective lower tier participant (BIDDER/PROPOSER/SUBRECIPIENT) learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant (BIDDER/PROPOSER/SUBRECIPIENT) agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant (BIDDER/PROPOSER/SUBRECIPIENT) further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction, "without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.



Purchasing Department

Post Office Box 2570
Waco, Texas 76702-2570
254 / 750-8060
Fax: 254 / 750-8063
www.waco-texas.com

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY,
AND VOLUNTARY EXCLUSION**

Project Name: _____

Location: _____

RFB/RFP #: _____

This certification is required (or may be required) by the federal regulations implementing Executive Order 12549, Debarment and Suspension. The regulations were published as Part VII of the May 26, 1988 *Federal Register* (pages 19160-19211). For further assistance in obtaining a copy of the regulations, contact the City of Waco Purchasing Department.

READ INSTRUCTIONS BEFORE COMPLETING CERTIFICATION

- (1) The prospective lower tier participant (BIDDER/PROPOSER/SUBRECIPIENT) certifies, by submission of this proposal that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal or State department or agency.
- (2) Where the prospective lower tier participant (BIDDER/PROPOSER/SUBRECIPIENT) is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Company

Name and Title of Authorized Representative

Signature

Date



NON-COLLUSION AFFIDAVIT

STATE OF TEXAS §

§

COUNTY OF _____ §

§

By the signature below, the signatory for the bidder certifies that neither he nor the firm, corporation, partnership or institution represented by the signatory or anyone acting for the firm bidding this project has violated the antitrust laws of this State, codified at Section 15.01, *et seq.*, Texas Business and Commerce Code, or the Federal antitrust laws, nor communicated directly or indirectly the bid made to any competitor or any other person engaged in the same line of business, nor has the signatory or anyone acting for the firm, corporation or institution submitting a bid committed any other act of collusion related to the development and submission of this bid proposal.

Signature:

Printed Name: _____

Title: _____

Company: _____

Date: _____

THE STATE OF _____

COUNTY OF _____

Before me, the undersigned authority, on this day personally appeared _____ (the person who signed above), known to me to be the persons whose names are subscribed to the foregoing instruments, and acknowledged to me that they executed same for the purposes and considerations therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE on this _____ day of _____ A.D., 20____.

(Seal)

Notary Public Signature

RESIDENT CERTIFICATION

Chapter 2252 of the Texas Government Code “CONTRACTS WITH GOVERNMENTAL ENTITY, SUBCHAPTER A. NONRESIDENT BIDDERS”:

In accordance with Chapter 2252 of the Texas Government Code, a governmental entity may not award a governmental contract to a nonresident bidder unless the nonresident underbids the lowest bid submitted by a responsible resident bidder by an amount that is not less than the amount by which a resident bidder would be required to underbid the nonresident bidder to obtain a comparable contract in the state in which the nonresident’s principle place of business is located.

- (1) "Government contract" means a contract awarded by a governmental entity for general construction, an improvement, a service, or a public works project or for a purchase of supplies, materials, or equipment.
- (2) "Governmental entity" means a municipality, county, public school district, or special-purpose district or authority.
- (3) “Nonresident bidder” refers to a person who is not a resident.
- (4) “Resident bidder” refers to a person whose principal place of business is in this state, including a contractor whose ultimate parent company or majority owner has its principal place of business in this state.

I certify that as defined in Texas Government Code, Chapter 2252 that:

Yes, I am a Texas Resident bidder

No, I am not a Texas Resident bidder

COMPANY NAME: _____

PRINTED NAME: _____

SIGNATURE: _____

PLEASE SIGN AND RETURN WITH PROPOSAL



Texas Public Information Act

Steps To Assert Information Confidential or Proprietary

All proposals, data, and information submitted to the City of Waco are subject to release under the Texas Public Information Act (“Act”) unless exempt from release under the Act. You are not encouraged to submit data and/or information that you consider to be confidential or proprietary unless it is absolutely required to understand and evaluate your submission.

On each page where confidential or proprietary information appears, you must label the confidential or proprietary information. Do not label every page of your submission as confidential as there are pages (such as the certification forms and bid sheet with pricing) that are not confidential. It is recommended that each page that contains either confidential or proprietary information be printed on colored paper (such as yellow or pink paper). At a minimum the pages where the confidential information appears should be labeled and the information you consider confidential or proprietary clearly marked.

Failure to label the actual pages on which information considered confidential appears will be considered as a waiver of confidential or proprietary rights in the information.

In the event a request for public information is filed with the City which involves your submission, you will be notified by the City of the request so that you have an opportunity to present your reasons for claims of confidentiality to the Texas Attorney General.

In signing this form, I acknowledge that I have read the above and further state:

The proposal/bid submitted to the City **contains NO confidential information** and may be released to the public if required under the Texas Public Information Act.

The proposal/bid submitted **contains confidential information** which is labeled and which may be found on the following pages: _____

_____ and any information contained on page numbers not listed above may be released to the public if required under the Texas Public Information Act.

Vendor/Proposer Submitting: _____

Signature: _____ Date: _____

Print Name: _____ Print Title: _____

PLEASE SIGN AND RETURN WITH PROPOSAL/BID

Revised 10/15/2012

DRUG-FREE WORKPLACE ACT CERTIFICATION

1. Contractor certifies that he/she will provide a drug-free workplace by:
 - (a) publishing a statement notifying employees that unlawfully manufacturing, distributing, dispensing, possessing or using a controlled substance in Contractor's workplace is prohibited and specifying the actions that will be taken against employees for violation of such prohibition;
 - (b) establishing a drug-free awareness program to inform employees about:
 - (1) the dangers of drug abuse in the workplace;
 - (2) Contractor's policy of maintaining a drug-free workplace;
 - (3) any drug counseling, rehabilitation, and employee assistance programs that are available; and
 - (4) penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
 - (c) making it a requirement that each employee to be engaged in the performance of the contract be given a copy of the statement required by paragraph (a);
 - (d) notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the contract the employee will:
 - (1) abide by the terms of the statement; and
 - (2) notify City of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such a conviction;
 - (e) notifying City within ten (10) days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction;
 - (f) taking one of the following actions within thirty (30) days of receiving notice under subparagraph (d)(2) with respect to any employee so convicted:
 - (1) taking appropriate personnel action against such an employee, up to and including termination; or
 - (2) requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state or local health, law enforcement, or other appropriate agency; and
 - (g) making a good faith effort to continue to maintain a drug-free workplace through implementation of the above paragraphs.

2. Contractor's headquarters is located at the following address. The addresses of all other workplaces maintained by Contractor, if any, are provided on an accompanying list.

Name of Contractor: _____
 Street Address: _____
 City: _____
 County: _____
 State: _____ Zip Code: _____

SIGNED BY: _____

Print Name & Title: _____

Date Signed: _____

APPENDIX D

Special Project Provisions

Special Project Provisions

1. GENERAL

1.1. **Project Specifications** – In addition to the project’s Special Project Provisions and the instructions provided in the drawings, the following specifications shall be followed as noted:

1.1.1. **City of Waco Standard Specifications for Construction (2013) and City of Waco Manual of Standard Details (2015):** The *City of Waco Standard Specifications for Construction* (2013) and the *City of Waco Manual of Standard Details* (2015) are incorporated herein by reference for all intents and purposes. If a standard specified in the *City of Waco Standard Specifications* and/or *City of Waco Manual of Standard Details* conflicts with a standard included within the project’s Special Project Provisions and/or drawings, the project’s Special Project Provisions and/or drawings control. If the standard is unclear, the City Engineer for the City of Waco will determine which standard controls and their determination shall be final. The *City of Waco Standard Specifications for Construction* include any Special Provisions published by the City Engineer on the City’s website (<https://www.waco-texas.com/engineering-specifications.asp>). Copies of the *City of Waco Standard Specifications for Construction* and the *City of Waco Manual of Standard Details* may be obtained by contacting the Public Works Department for the City of Waco (254-750-5440) or by accessing the City of Waco’s website (<https://www.waco-texas.com/engineering-specifications.asp>).

1.1.2. **Texas Department of Transportation Specifications and Special Provisions:** Portions of this project require the Contractor to follow *Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges* adopted by the Texas Department of Transportation (November 2014). A copy of these specifications may be found on the Texas Department of Transportation’s (TxDOT) website:

<https://ftp.txdot.gov/pub/txdot-info/cmd/cserve/specs/2014/standard/specbook-2014.pdf>.

Any TxDOT Special Provisions to Specifications referenced in this project and published on their website:

(<http://www.dot.state.tx.us/apps-cg/specs/toc.asp?year=4&type=SP&list=sd>) shall be followed. TxDOT Specifications and Special Provisions utilized for this project include, but are not limited to:

ITEM	TITLE
104	REMOVING CONCRETE
164	SEEDING FOR EROSION CONTROL
432	RIP RAP
446	FIELD CLEANING AND PAINTING STEEL
502	BARRICADES, SIGNS, AND TRAFFIC HANDLING
658	DELINEATOR AND OBJECT MARKER ASSEMBLIES
666	RETROREFLECTORIZED PAVEMENT MARKINGS
672	RAISED PAVEMENT MARKERS
3076	DENSE-GRADED HOT-MIX ASPHALT

- 1.1.3. **TxDOT Standard Plans and Details:** The Contractor shall follow the TxDOT standard plans and details provided in the drawings.
- 1.2. **TxDOT Waco District General Notes:** For TxDOT Standard Specification and Special Provision Items utilized on this project, the Contractor shall follow the General Notes utilized by TxDOT's Waco District. Requirements included in the General Notes are included at the end of these Special Project Provisions.
- 1.3. **Construction Surveying** - All construction staking shall be provided by the Contractor. This provision supersedes the most current Standard Specifications for Construction and all other city contract documents.
- 1.4. **Site Restoration** - All areas (vegetated, gravel, paved, etc.) disturbed by the work of this contract must be restored to pre-project or better condition. Payment for this work will be considered to be subsidiary to completion of the associated work item unless otherwise provided. All existing vegetated areas must be restored to existing condition or better with topsoil and either seed or sod as appropriate. In yards, sod shall be utilized and shall match existing turf. In undeveloped areas, Contractor shall use seed or sod. Contractor is responsible for watering and all required care until project acceptance. This work will be considered subsidiary to the project, unless otherwise specified.
- 1.5. **Protection of Facilities in Right of Way** - The Contractor shall be responsible for adequately protecting all facilities (mailboxes, trees, bushes, sidewalks, handicap ramps, etc.) not designated for removal. Any facilities that sustain damage shall be restored to existing or better condition, and the cost of the restoration shall be subsidiary to the work.
- 1.6. **Underground Utilities** - The attention of the Bidder is drawn to requirements in State law regarding location of underground utilities prior to excavation and the reporting of damage to any gas line.
- 1.7. **Above Ground Utilities** - The Contractor is responsible for coordinating with the appropriate utilities owning any poles or signs that may be impacted during the work of this contract. Bracing and protective measures per the requirements of the signs' owners shall be provided by the Contractor and shall be considered subsidiary to the work.
- 1.8. If the Contractor chooses to utilize a private lot(s) as a staging area, the Contractor shall provide the City written permission from the property owner(s). The project shall not be finalized until the Contractor provides a written letter from the property owner(s) saying that the property owner is satisfied with the said lot(s) once the Contractor demobilizes.
- 1.9. Material on hand shall not be considered for payment.
- 1.10. All earthwork (cut and fill) required for the work of this contract, unless otherwise specified, is subsidiary to payment for the various bid items.
- 1.11. The Contractor shall coordinate all work with schools affected by the construction at the beginning of construction and maintain communication until final acceptance of the roadway. Coordination will be required if any bus routes (Waco ISD, Midway ISD, Waco Transit, or other) are affected or there is a school within one block of construction.
- 1.12. The Contractor shall coordinate all work with the City's Waste Management Division to avoid interruption of service on trash pickup days. Contact information is provided in the plans.

1.13. Projectmates

- 1.13.1. The City has setup an Internet-based project management system called Projectmates for managing design and construction projects. The Contractor will be required to utilize Projectmates as follows:
- 1.13.2. Contract management related processes including RFIs, submittals, field reports, meeting minutes, change orders, pay application, punch lists, and close-out documents shall be submitted, tracked, and responded to, by the Contractor, City, and Project Engineer through Projectmates over the Internet. Paper copies shall not be accepted unless specifically requested.
- 1.13.3. The City of Waco Projectmates software portal is:
<https://cityofwaco.projectmates.com>
- 1.13.4. One (1) Projectmates user license will be provided to the Contractor by the City without charge. The City will recover the license upon project completion.
- 1.13.5. The Contractor shall be familiar with Projectmates prior to the pre-construction meeting. Training can be arranged by contacting software vendor Systemates Inc. Training expenses shall be borne by the Contractor. Contact Systemates, Inc., Richardson, Texas 214-217-4100 or email info@systemates.com.

- 1.14. **Right of Way Clearing** – The Contractor shall be responsible for clearing the right of way of trees, shrubs, and other vegetative growth as needed for equipment clearance prior to beginning construction and in areas specifically identified on the drawings. Any cut limbs shall be sealed with Spectracide Pruning Seal, or approved equal. This work shall be subsidiary to all pay items unless otherwise noted on the drawings.

2. CHANGE MANAGEMENT

- 2.1. See section 4 in the General Provisions of the City of Waco Standard Specifications for Construction.

3. COMMUNICATION

- 3.1. Contractor shall contact the Engineering Inspector (EI) a minimum of seventy-two (72) hours and a maximum of ninety-six (96) hours prior to beginning (or recommencing after a hiatus) work; and notify the EI immediately upon any change in schedule.
- 3.2. All homeowners and businesses affected by the construction shall be notified by the Contractor **a minimum of seventy-two (72) hours and a maximum of ninety-six (96) hours** in advance of any street/construction work. See **Attachment “A”** in the plans for a flier example. Should the work not occur on the specified day, new notification will be distributed when required. The notification shall be in a form of written posting, with the contractor’s representative’s local cellular telephone number and stating the time and date the work will take place. Flier shall be submitted for approval prior to distribution.
- 3.3. **Portable Changeable Message Signs** – The Contractor shall provide two portable changeable message signs at each work location in accordance with TxDOT Item 6001. A work location is generally defined as a neighborhood, section of neighborhood, or individual street (collectors and arterials). The signs shall be placed at the beginning and end of the neighborhood or street seven (7) days before construction or any major traffic pattern

changes/shifts. This item shall be subsidiary to the Traffic Control Plan and Implementation bid item.

4. HOUSEKEEPING

- 4.1. During the progress of the Work and on a daily basis, Contractor shall keep all the premises (including any staging areas) free from accumulation of all waste materials, rubbish and other debris resulting from the Work.
- 4.2. The Contractor shall remove all material stockpiles, equipment left overnight or any obstructions within thirty (30) feet of a travel way or clearly mark by warning lights and barricades.
- 4.3. At the completion of the Work, Contractor shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery and surplus materials. Contractor shall leave the site clean and ready for the Owner prior to initiating project completion process (requesting punch list, etc.).
- 4.4. It shall be the responsibility of the Contractor to keep the roadway, drive approaches, and sidewalk clean of mud, sand, rock, and other debris.
- 4.5. If the Contractor fails to comply with these requirements, the Owner may do so and pass along all related costs to the Contractor.

5. SAFETY

- 5.1. **Temporary Traffic Control Plans (TCP)** - TCPs shall be compiled by licensed or certified personnel (Texas Licensed Professional Engineer; IMSA Certified Work Zone - Work Zone Traffic Control Safety Certification; TEEX, Texas A&M Engineering Extension Services, American Traffic Safety Service Association (ATSSA) Traffic Control Design Specialist (TCDS); or Work Zone Traffic Control Certification, HWS002). Documentation of current certification shall be submitted with all TCPs. The TCP's shall be drawn in AutoCAD and provided to the City in PDF format.
 - 5.1.1. After the contract has been awarded and during the submittal phase, the Contractor shall provide acceptable Traffic Control Plans along with evidence of certification for the person creating the Traffic Control Plans. Each TCP must be developed to address the specific conditions of the planned construction work zone location. Multiple phases of construction will require a separate TCP for each phase. All may be submitted at one time for acceptance. The Contractor shall incorporate the various TxDOT Barricade Standards, Traffic Control Plan Standards, and Work Zone Standards included in the project plans into the TCPs as appropriate.
- 5.2. **Construction Constraints** – The Contractor shall be constrained to the following when planning and executing the Work:
 - 5.2.1. Street and lane closures shall be limited to working hours between 8:00 AM and 5:00 PM. Outside of those working hours, the Contractor shall provide access to existing driveways and smooth transitions at each end of the working limits.
 - 5.2.2. No more than one block's length of street may be left without reclaimed cement treated base at any one time.

6. EROSION CONTROL

- 6.1. The Contractor shall use Best Management Practices (BMPs) to provide erosion control measures for this project. This is subsidiary to the “SWPP PLAN” and “SWPPP IMPLEMENTATION” line items. Erosion control measures to be used must be submitted in writing to the Engineer and approved by the Engineer before work begins. Contractor shall be responsible for providing a plan that meets regulatory requirements and implementation of that plan across the entire project site. Additional erosion control measures beyond what is shown in the plans may be required and shall be subsidiary to the SWPPP IMPLEMENTATION line item.

7. PERMITS – NOT USED

8. SCHEDULE

- 8.1. The pre-construction meeting will be scheduled by City of Waco staff. The construction schedule for this project is set at **110 working days**, beginning on the Notice to Proceed date and ending on the date of final acceptance. The Notice to Proceed will be issued after receipt of executed contracts and completion of the pre-construction meeting.
- 8.2. A Working Day is defined as any day of the week, not including Saturdays, Sundays, or Legal Holidays during which conditions under the CONTRACTOR’s control will permit work for a continuous period of not less than seven (7) hours between 7:00 a.m. and 6:00 p.m. Upon agreement with the Owner’s Representative, work on Saturdays, Sundays and/or Legal Holidays may be allowed and will be considered a Working Day.
- 8.3. The project schedule includes time to:
- 8.3.1. Develop, submit, review, approve and implement the SWP3/erosion control plan;
 - 8.3.2. Develop, submit, review, and approve safety and material submittals;
 - 8.3.3. Complete and commission the Work;
 - 8.3.4. Complete the project closure activities and paperwork.
- 8.4. The Contractor shall maintain a work force adequate to accomplish the work within the contract time. The Contractor agrees to employ only orderly, competent, and knowledgeable workers, skillful in performance of the type of work required under this contract.
- 8.5. Contractor’s representative (City of Waco Standard Specifications for Construction, General Provisions, Section 8.7, page 58) - “Before starting work, the Contractor shall designate in writing a representative who shall have complete authority to act for it. . . The representative or alternate shall be present at the Work site whenever work is in progress . . .”
- 8.6. The Contractor is required to provide an approved construction schedule within two weeks of the effective date of the notice to proceed. The schedule shall be in a Gantt, CPM, or PERT format suitable to depict the project work plan.
- 8.7. The Contractor shall supply the Project Engineer with a tentative schedule at least ten (10) days in advance of placement, along with weekly schedule.
- 8.8. The Contractor shall also provide updated schedules as warranted by the progress of the work or as requested by Project Engineer or Representative.
- 8.9. Work in conflict with special events or ongoing utility work may be suspended, delayed, or redirected when determined by the City at no additional expense to the City.

9. PROJECT COMPLETION

- 9.1. It is expected that the Contractor shall complete the “final” phase of the project in no more than ten (10) working days after completion of pay items, within the constraints of paragraphs 7.3 and 7.4.
- 9.2. When Contractor completes all work or pay items, the Contractor shall submit a written request for a punch list.
- 9.3. The EI will coordinate a “walk of the project” with the Contractor and other City representatives and issue the punch list.
- 9.4. When Contractor deems all punch list items are complete, the Contractor shall submit a written request for a final inspection.
- 9.5. When the EI finds all items complete to their satisfaction the EI shall submit a letter of final acceptance which will request the Contractor submit a one-year guarantee and an all bills paid affidavit, both notarized.
 - 9.5.1. The final acceptance letter will include an accurate description of the Work being accepted.
 - 9.5.2. If private property is used the EI shall receive from the Contractor a written release from the property owner accepting the condition of their property.
 - 9.5.3. Once the guarantee and affidavit are received the project will be deemed final.
- 9.6. **Warranty** – (City of Waco Standard Specifications for Construction, General Provisions, Section 7.7, page 51). The EI will schedule a warranty walk approximately eleven (11) months after project completion. If any issues arise during the warranty period, the EI will send written request to the Contractor to remedy the issue(s).

10. SUBMITTALS

- 10.1. All submittals shall be complete shop drawings and design data, providing the information necessary to document compliance with all specifications. See section 2.6 C in the General Provisions of the City of Waco Standard Specifications for Construction.

11. CURB, GUTTER AND PEDESTRIAN IMPROVEMENTS

- 11.1. The Contractor will be responsible for construction of all curb and gutter, and other tie-ins to meet existing grades as shown in the plans and described in all details and notes.
- 11.2. The Contractor shall work with property owners when working on or near driveways in order to ensure that access is maintained at all times.
- 11.3. All subgrade, fill, and HMAC work required in the curb and gutter details in the plans shall be subsidiary to the Curb and Gutter bid item. This work includes the asphalt removal and replacement in front of curb and gutter, drive approaches, and concrete fillets required to provide a smooth transition between the existing pavement elevation and the new edge of gutter/drive approach/fillet elevation.
- 11.4. The following shall be used to clarify the Curb and Gutter notes shown in the City of Waco Details with regards to new curb and gutter:
 - 11.4.1. Contractor shall extend the depth of the curb or curb and gutter if the extension required is less than 4”.

- 11.4.2. If the extension required is greater than 4", Contractor may either extend the depth of the concrete or use compacted road gravel.
- 11.4.3. In all cases for new curb and gutter, the Contractor shall stabilize the subgrade to a depth of 6" with a lime application rate of 30 lb/SY. Reference the City of Waco Standard Specifications for Construction for additional requirements.
- 11.5. The EI and Contractor will walk lanes to receive surface treatment and determine where curb and gutter replacement is required, and the specific locations/elevations given in the plans may change. The final decision will be the City's. The unit price as bid will be used regardless of the quantity.
- 11.6. Where vegetation is to be established in an area where concrete or asphalt is being removed, Contractor will be paid per square foot for the work. This pay item includes watering and all required care until project acceptance. Either cool weather or warm weather seed/sod shall be used (depending on the season), and quantities have been estimated based on a two-foot-wide strip behind sidewalk and/or curb and gutter. For erosion control in the cool season, temporary seed must be placed and then followed by either permanent seed or block sodding. Sod will be required for developed properties.
- 11.7. All earthwork (cut and fill) required for the work of this contract, unless otherwise specified, is subsidiary to payment for the sidewalk, retaining wall, etc.
- 11.8. At all pedestrian ramp locations, the change in elevation between the curb and gutter and beginning of the ramp rise shall not exceed 1/4-inch.
- 11.9. The maximum cross slope in any direction on the new sidewalk shall be 2% and graded to drain with a minimum slope of 0.5%, unless otherwise noted on plans.
- 11.10. The maximum slope in any direction across a landing shall be 2%. Landings shall be graded to drain with a minimum slope of 0.5%, unless otherwise noted on plans.
- 11.11. The Contractor may scale the length of ramps, dimensions of landings, etc. from the plans for estimating purposes, but these lengths and dimensions are approximate. The Contractor will be responsible for construction of all ramps and landings, sidewalk, vegetated areas, driveways and other tie-ins to comply with maximum and minimum slopes and widths and to meet existing grades as shown in the plans and described in all details and notes.
- 11.12. Each ramp will be bid as a unit price item. The unit price bid will be full compensation for materials, tools, labor and incidentals to construct the ramp, upper and lower landings, detectable warning surface, and flares as shown on the plans.
- 11.13. Each ramp will be bid as a unit price item. The unit price bid will be full compensation for materials, tools, labor and incidentals to construct the ramp, upper and lower landings, detectable warning surface, curbs, and flares as shown on the plans.

12. STREET WORK

- 12.1. The Contractor may pave any time (during working hours established in Section 7) the roadway has no standing water on the roadway surface, the roadway surface temperature is at least 60°F and the ambient temperature is at least 50°F and rising. Place mixtures only when the EI determines the roadway surface weather and moisture conditions are suitable. The EI may restrict the Contractor from paving if the ambient temperature is below 60°F and falling. Cease placement twenty-four (24) hours before the National Weather Service forecast predicts temperatures below 32°F unless otherwise approved.

- 12.2. No asphalt treatments will be applied just prior to a rain event that could result in chemical asphalt or any asphalt by-product pollutant being washed into a stream or stormwater collection system.
- 12.3. No AC or Emulsion for surface treatment items will be placed between October 1 and April 1 unless approved in writing by the Project Engineer.
- 12.4. Installation of new curb and gutter, concrete fillets and valley gutters; completion of base failure repair; and HMAC grinding and level up work **shall all be completed prior to the HMAC work.**
- 12.5. All aggregate for each project will come from the same source or blended sources approved by the Project Engineer.
- 12.6. Remove all dirt and debris accumulated in the curb and gutter sections prior to beginning paving. Likewise, remove all vegetation from pavement edges prior to operations. This work will be subsidiary to bid items.
- 12.7. The Contractor shall submit phasing plans for each roadway including request(s) for night work for approval prior to construction.
- 12.8. Surfacing required as repair due to unsatisfactory workmanship by the Contractor will not be paid for directly but shall be deemed the cost responsibility of the Contractor.
- 12.9. Any tracking of asphalt material will be the responsibility of the Contractor to mitigate at no additional expense to the City.
- 12.10. Any conflicts between City of Waco specifications and Texas Department of Transportation specifications will be directed to the Project Engineer to provide clarification.
- 12.11. The elevation adjustment of any “SWB Manholes” shall be coordinated through Calvin Pewitt of AT&T who can be contacted at (254)757-7810 (office), (254)715-7869 (mobile) or at cp8237@att.com.
- 12.12. Any signs removed shall be replaced the same day.

13. MILL AND OVERLAY

- 13.1. **General Process** - The mill and overlay process generally consists of milling to a depth of 2” where HMAC is to be placed (unless otherwise specified), base failure repair if needed, cleaning, and applying a bonding course (either Tracking-Resistant Asphalt Interlayer of product type Hot Asphalt or placing Spray-Applied Underseal Membrane), and placement of 2” of HMAC, Type C.
- 13.2. Adjustments to mill depth shall be made based on the geotechnical boring information provided in the contract book, plans, and/or varying site conditions. The following table shall be used to determine mill and overlay depth based on existing pavement thickness:

EXISTING PAVEMENT THICKNESS	MILL DEPTH	HMAC OVERLAY DEPTH
< 2”	To Base	2”
≥2”	2”	2”

Mill depth transitions shall occur over a distance of 100 ft (minimum).

- 13.3. The minimum thickness of the HMAC overlay in all locations shall be 2 inches. HMAC milling shall be adjusted over a 4-foot width (min) at edges of pavement to ensure final surface course matches the elevation of the gutter lip. Edge milling to depths exceeding those in the table above (i.e. milling into the base if the existing asphalt is less than 2" thick) will be allowed to ensure the new 2" pavement surface matches the existing or proposed gutter lip.
- 13.4. **Exposed base shall receive a prime coat the same day it is exposed.**
- 13.5. Overlay must occur within 7 days of milling.
- 13.6. Do not mill or overlay concrete pavement.
- 13.7. Milling shall be done to match the grade of new and existing surfaces at concrete aprons and valleys, utility vaults (transition so that utility vaults do not need adjustment and a smooth ride is achieved), concrete street intersections, and along intersecting streets identified in the plans.
- 13.8. Where, due to milling, there is a transverse joint greater than ½" in depth in a travel way a temporary ramp acceptable to the EI shall be placed prior to opening to traffic.
- 13.9. Millings shall become the property of the Contractor and removed from site. This removal is subsidiary to the unit price for milling.
- 13.10. **Prime Coat**
- 13.10.1. The Contractor shall utilize a prime coat asphalt applied as a solid and uniform coat over any base material that will receive new HMAC. Prime coat material shall be AE-P, MC-30, or approved equal. Before the prime coat is applied, the surface shall be cleaned thoroughly to the satisfaction of the EI. The rate of application shall be 0.16 gal/SY of residual asphalt and shall provide complete and uniform coverage of the repair surface. The EI must approve proper coverage and may suspend paving operations until satisfactory prime coat has been applied. This item shall be subsidiary to the unit price for base failure repair.
- 13.10.2. If base material is exposed, the Contractor shall apply a prime coat of the same material and application rate above within the same day of exposure. Base material shall not be left without a prime coat overnight or if rain is forecasted within 8 hours. This item shall be subsidiary to the mill and overlay work.
- 13.11. **Bonding Course**
- 13.11.1. **General** – For the mill and overlay bonding course, the Contractor has the option of using either Spray Applied Underseal Membrane (per TxDOT Special Specifications 3002 and 3042) or Tracking-Resistant Asphalt Interlayer (TRAIL), product type Hot Asphalt (per TxDOT Special Specification 3042).
- 13.11.2. **Spray Applied Underseal Membrane** - City specifications call for RC-2, but for this project, spray applied underseal membrane shall be used (see TxDOT Special Specification 3002, "Spray Applied Underseal Membrane"), with a solid and uniform coat of oil which shall be a consistently dark color over the entire area. Before the bonding course is applied the surface shall be cleaned thoroughly to the satisfaction of the EI or designated representative. This membrane shall be applied at the rate of 0.19 GAL/SY (residual asphalt) to provide complete and uniform coverage of the underlying milled material. The Contractor shall also apply a

uniform coat to all contact surfaces including curbs, castings, structures and joints to provide a closely bonded, watertight joint. The EI or designated representative must approve proper coverage and may suspend paving operations until satisfactory underseal membrane has been applied. This item shall be subsidiary to the unit price for milling.

13.11.3. **TRAIL, product type Hot Asphalt** - Tracking-Resistant Asphalt Interlayer (TRAIL) of the product type Hot Asphalt shall be used per TxDOT Special Specification 3042. The following TRAIL product manufacturers are acceptable for use, without exception:

- *UltraFuse – Trackless Hot Applied* by Blackledge
- *Underseal* by Jebro
- *eTac-HB* by Ergon Asphalt and Emulsions
- *DOT-C-LT* by Texas Materials Group

Before the bonding course is applied the surface shall be cleaned thoroughly to the satisfaction of the EI or designated representative. This product shall be applied at a minimum rate of 0.19 GAL/SY to provide complete and uniform coverage of the underlying milled material. The Contractor shall also apply a uniform coat to all contact surfaces including curbs, castings, structures and joints to provide a closely bonded, watertight joint. The Engineer or designated representative must approve proper coverage and may suspend paving operations until satisfactory coverage has been achieved. This item shall be subsidiary to the unit price for milling.

14. HOT-MIX ASPHALT CONCRETE (HMAC)

- 14.1. The Contractor may not place the pavement course until approval is requested and written approval is received by the Contractor from the Engineer.
- 14.2. HMAC utilized on this project shall be either TxDOT Special Specification 3076 Dense-Graded Hot-Mix Asphalt Type C or Type B (as shown on the plans) performance graded asphalt 64-22 and shall be applied at a rate of 110 lbs/SY/in of compacted pavement.
- 14.3. The Contractor shall provide results from the mix prior to construction.
- 14.4. A City of Waco representative shall inspect the stockpile prior to construction.

15. RECLAMATION MATERIALS

- 15.1. **General** - The reclamation process consists of the following: break up and process surfacing, base and cement; compact & sweep base; moisten (no standing water); keep moist; prime coat; sub-surface course (if included) with bonding course, and final surface course.
- 15.2. When reclaiming more than one section of continuous street, the Engineer or designated representative will have the final decision whether to reclaim cross streets.
- 15.3. In locations where the lip of the gutter is displaced along the street and matching at these points proves difficult, it shall be the Contractor's primary responsibility to maintain a "smooth ride" and secondarily to attempt to follow the lip of the gutter while still maintaining a 2" minimum depth of asphalt along the lip.

- 15.4. At various locations, hot-mix that currently exists in the gutter shall be milled to the gutter level. Payment for this work shall be subsidiary to various bid items in the contract.
- 15.5. Hot-mix Asphalt Concrete (HMAC) shall be TxDOT Special Specification 3076 Dense-Graded Hot-Mix Asphalt Type C performance graded asphalt 64-22 (final surface) and TxDOT Special Specification 3076 Dense-Graded Hot-Mix Asphalt Type B performance graded asphalt 64-22.
 - 15.5.1. Contractor shall use a laydown machine for all HMAC placement. "Balding in" HMAC Type B is prohibited.
 - 15.5.2. Contractor shall allow sufficient time for each HMAC lift to cool prior to placing next lift or surface course.
- 15.6. The Contractor shall provide results from the mix prior to construction.
- 15.7. The Engineer or designated representative shall inspect the stockpile prior to construction.
- 15.8. The Contractor shall windrow the mixed base to the side and excess subgrade will be excavated and hauled off. Excess material shall become the property of the Contractor and removed from the site.
- 15.9. For this reclamation work RC-250 or AE-P shall be considered an approved equal to RC-2, using the same procedure within Section 2.5 of the Standard Specifications for Construction (2013).
- 15.10. The prime coat must be solid and uniform, with a consistently dark color over the entire area. The street shall be clean of any sediment or debris prior to paving. The oil may need to be reapplied as required to ensure a solid, uniform, and complete coat prior to paving.
- 15.11. Application rates for the oils utilized shall be discussed and approved by the Project Engineer or designated representative.
- 15.12. Any haul off required to meet grade in plans shall be taken from subgrade material.

16. RECLAMATION PROCESS - CEMENT STABILIZATION

- 16.1. Portland Cement shall be placed at a rate of 58 lbs/SY for an 8-inch depth on average. The Contractor shall work with the testing laboratory hired by the City to determine the appropriate amount of cement required as the subgrade is exposed. Variations in cement quantities may occur based on soil characteristics. **Slurry Portland Cement is required.**
- 16.2. After the mixing has occurred, not sooner than twenty-four (24) hours nor after seventy-two (72) hours, roll the finished course with a vibratory roller to induce microcracking. The vibratory roller shall be performed in accordance with TXDOT Item 270, "Rolling," with a static weight equal to or more than 12 tons and the vibratory drum must be not less than 20 in. wide. The roller must travel at a speed of 2 mph, vibrating at maximum amplitude, and make 2 to 4 passes with 100% coverage exclusive of the outside 1 ft. of the surface crown, unless otherwise directed by the Project Engineer. Additional passes may be required to achieve the desired crack pattern as directed. Notify the Project Engineer 24 hours before the microcracking begins. Maintain in a thorough and continuously moist condition by sprinkling until prime coat is applied.
- 16.3. **Protection and Cover:** After the cement treated course has been finished, the surface shall be protected against rapid drying by the following curing method. The protection method

shall be continued: (a) for the specified period, but in no case less than 7 days or (b) until the surface course is placed.

16.3.1. Maintain in a thorough and continuously moist condition by sprinkling until prime coat is applied.

16.4. **Prime Coat**

16.4.1. Before prime coat is applied the surface shall be cleaned thoroughly to the satisfaction of the Engineer or designated representative. Immediately prior to application of the curing seal, the section shall be wetted so that voids in the surface are filled with water, but without free water standing on the surface.

16.4.2. **RC-2, RC-250, or AE-P:** Apply an approved asphaltic material to the treated course. The application rate shall provide complete coverage and seal the total surface of the base and fill all voids. This work will be paid for by the gallon of residual asphalt. For bidding purposes, this residual rate is estimated at 0.16 gallon per square yard. The Project Engineer or designated representative reserves the right to increase this residual rate during construction with no adjustment to the unit cost. If the base will be opened to traffic before surface coat applied, it shall be the Contractor's responsibility to sand the surface in order to protect the membrane from being picked up by traffic. Prior to the HMAC subsurface or surface course, surface shall be swept clean and free of sand before applying tack coat. This additional layer of tack coat is subsidiary to the base work.

16.5. **Tack Coat**

16.5.1. For the reclamation area shall be the same as the prime coat. Before hot-mix surface course is applied the surface shall be cleaned thoroughly to the satisfaction of the Engineer or designated representative. The Contractor shall also apply a uniform coat to all contact surfaces including curbs and gutters, castings, structures and joints to provide a closely bonded, watertight joint. The Project Engineer or designated representative must approve proper coverage and may suspend paving operations until satisfactory tack has been applied. This work will be paid for by the gallon of residual asphalt. For bidding purposes this residual rate is estimated at 0.06 gallons per square yard and is subsidiary to the base work.

16.5.2. The Project Engineer or designated representative may require the use of additional tack coat where insufficient adhesion is provided by the prime coat.

16.6. Pavement edge blading shall be subsidiary to the various pay items.

16.7. The tack coat shall not be placed within 300 feet of approaches to signalized intersections.

17. **LIME STABILIZATION OF SUBGRADE**

17.1. Lime stabilization of the existing subgrade shall meet the requirements in Section 2.4 of the City of Waco Standard Specifications for Construction.

17.2. Lime treatment shall include all portions of the work except the lime material and shall be measured and paid for by the square yard.

17.3. The lime material shall be measured and paid for by the ton.

17.4. **Hydrated lime slurry shall be used.**

18. PAVEMENT THICKNESS TESTING

- 18.1. Any pavement placed on this project shall be subject to the following testing and deficiency requirements, which supersede those provided in the City of Waco Standard Specifications for Construction.
- 18.2. During and upon completion of the work and before final acceptance and final payment shall be made, pavement thickness tests shall be made by the City or its authorized representative unless otherwise specified in these special project provisions or in the plans. The number and location of tests shall be at the discretion of the City, but will typically be not more than every 2,000 LF and in each lane. In the event a deficiency in thickness of pavement is revealed during normal testing operations, subsequent tests necessary to isolate the deficiency to the satisfactory of the City shall be made at the Contractor's expense and shall be completed by a City-approved laboratory. The cost for the additional coring tests shall be at the same rate charged by commercial laboratories.
- 18.3. **Pavement Thickness, Deficiencies, any Payment**
- 18.3.1. Any area of pavement with a specified depth of 2 inches or greater shall be removed and replaced at the Contractor's expense if the tested depth of the new pavement is less than 2 inches. Depending on the deficiency, the Project Engineer may give the Contractor the option to leave the material in place and forfeit payment for that material.
- 18.3.2. If the specified new pavement depth is greater than 2 inches, the following table shall be used to determine payment for deficiency in thickness:

Deficiency in Thickness Determined by Cores (inches)	Proportional Part of Contract Price Allowed
0.00 – 0.20	80 percent
0.21 – 0.30	70 percent
0.41 – 0.50	60 percent

If the pavement thickness deficiency is less than 0.50 inches, the Contractor shall remove and replace the deficient pavement at their own expense.

This table shall not be used once the deficient pavement depth drops below 2 inches, in which case the preceding section will govern.

- 18.3.3. No additional payment over the contract unit price shall be made for any pavement of a thickness exceeding that required by the plans.

19. PAVEMENT MARKINGS

- 19.1. Temporary Markings shall be placed before lanes are open to traffic.
- 19.2. Place temporary traffic markings that meet the Texas Manual on Uniform Traffic Control Devices on all streets currently marked.
- 19.3. Placement of permanent markings on all streets shall be done as existing, unless indicated in plans. Markings shall meet the requirements of TxDOT Item 666, "Retroreflectorized Pavement Markings." This shall include any non-overlaid concrete sections within the street limits.

- 19.3.1. Type 1 markings must meet the following minimum retroreflectivity values for edgeline markings, centerline or no passing barrier-line, and lane lines when measured any time after 3 days, but not later than 10 days after application:
- White markings: 250 millicandelas per square meter per lux (mcd/m²/lx)
 - Yellow markings: 175 mcd/m²/lx
- 19.3.2. Contractor shall complete the retroreflectivity testing in accordance with TxDOT Item 666 and shall provide written report with test results confirming conformance the required retroreflectivity values.
- 19.4. Placement of Raised Pavement Markers shall be done in accordance with TxDOT Item 672, “Raised Pavement Markers.”
- 19.5. The Contactor will supply and install the blue raised reflective markers utilized for all fire hydrants within the work limits. This item shall be subsidiary to the various bid items.
- 19.6. Two-way left-turn use arrow pavement markings are to be placed, with 16 feet typical spacing, at or just downstream from the beginning of the two-way left-turn lane, as indicated in plans, per the Texas Manual on Uniform Traffic Control Devices, Section 3B.20.
- 19.7. Pedestrian Crossings are to have 10 feet long by 2 feet wide white bars with 2 feet spacing.
- 19.8. Reflective pavement markings of the break type shall be measured and paid for by the linear feet of pavement marking applied. Contractor shall note that the length and spacing of the yellow and white break lines shown on the plans may not be to scale. The length of the lines shall be 10’ and the length of the spacing shall be 30’.
- 19.9. Contractor shall arrange construction operations to prevent the hauling of materials through the completed pavement sections unless otherwise approved by the EI or City Engineer.
- 19.10. The Contractor shall open the pavement to traffic each night.
- 19.11. When work is within 400 feet of a signalized intersection, Contractor shall call for utility locates (811) to identify location of loop detectors, conduits, etc. Any damage to these facilities done by the Contractor shall be repaired by the Contractor to the City of Waco standards and shall be subsidiary to the work.
- 19.12. Removal of raised pavement markers as work progresses shall be subsidiary to the various bid items.

20. WATER VALVE BOXES AND MANHOLE LIDS

- 20.1. Manhole and water valve lids shall be adjusted in accordance with the details provided in the plans.
- 20.2. Adjustment of manholes and valves shall be made to within ¼” of adjacent proposed grade. Manhole and water valve lids shall be adjusted in accordance with COW Standard Details, and all shall include a concrete pad as shown in the “Manhole Lid Height Adjustment” detail and “Valve Box Height Adjustment” detail. Note that abandoned valves may exist and will be addressed by the EI during construction. If old style valve boxes are encountered during the raising process, the Contractor shall replace them with boxes meeting the new details. The boxes will be either raised or replaced and paid for by the

appropriate bid item. **Contractor will not be paid for both.** Salvage all water valve covers and deliver to the City's Utilities Department at 200 Colcord Avenue.

21. CHERRY STREET BRIDGE REQUIREMENTS

- 21.1. Contractor shall paint all exposed metal surfaces (rail, posts, base plates) in accordance with TxDOT Item 446, "Field Cleaning and Painting Steel".
- 21.2. Contractor shall use paint System II.
- 21.3. Per TxDOT Item 446, Contractor shall provide a plan with details on how painting application will be contained from adversely affecting the waterway below the bridge. This containment plan and implementation shall be subsidiary to the painting work.

22. TXDOT WACO DISTRICT, GENERAL NOTES

- 22.1. The following TxDOT Waco District General Notes shall be included as part of the contract documents:

ITEM	GENERAL NOTES
164	SEEDING FOR EROSION CONTROL
	<ol style="list-style-type: none"> a) Temporary seeding mixtures (cool and warm) will also include three (3) lbs of Bermuda grass seed per acre, with all seeds being planted concurrently. b) Contractor will mow or disc wheat and or oats in spring prior to vegetation going to seed. c) Permanent seed mixes for both urban and rural projects including sand or clay soils in the Waco District will be bid and installed to include a minimum of one & one-half (1.5) pounds per acre Green Sprangletop seed and four (4) pounds per acre Bermudagrass seed, with other seed types also being included and quantities remaining unchanged.
658	DELINEATOR AND OBJECT MARKER ASSEMBLIES
	<ol style="list-style-type: none"> a) All flexible and GF2 delineators will have a tubular body. b) The delineator assembly BRF Class A (D-SW) and (D-SY) are to be single delineators (Class I) attached to a flat, plastic bracket to facilitate the mounting of the delineator on top of the bridge rail at the locations shown on the plans. Submit a sample for approval before ordering materials.

APPENDIX E

General Specifications

In addition to the attached Specification and/or Drawings, the “City of Waco Standard Specifications for Construction” dated January 2013 is incorporated herein by reference for all intents and purposes. If a standard specified in the City of Waco Standard Specifications conflicts with a standard included within an attached specification and/or drawing, the attached specification and/or drawing controls. If the standard is unclear, the Director of Public Works for the City of Waco will determine which standard controls and his determination shall be final.

A copy of “City of Waco Standard Specifications for Construction” and the City of Waco Standard Details may be obtained by contacting the Public Works Department for the City of Waco at 254-750-5440 or by accessing the City of Waco website at www.waco-texas.com and going to Bid Opportunities – Engineering Services (Public Works).

APPENDIX F

Texas Department of Transportation Specifications

Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges
Adopted by the Texas Department of Transportation, November 1, 2014.

<https://ftp.txdot.gov/pub/txdot-info/cmd/cserve/specs/2014/standard/specbook-2014.pdf>

APPENDIX G

Geotechnical Report



**LANGERMAN FOSTER
ENGINEERING COMPANY**

October 5, 2018

City of Waco
Engineering Services
401 Franklin Avenue
Waco, TX 76701

Attention: Mr. Jim Reed, Capital Improvement Program Manager
JimR@wacotx.gov

Reference: Geotechnical Investigation Report
2018 Waco Street Improvements 2
Waco, Texas
LFE Report No. W18-065

Dear Mr. Reed:

This letter transmits our report for the referenced project. It has been electronically produced. We appreciate the opportunity to provide geotechnical engineering services for you.

Once the project plans and specifications are completed, we would be pleased to review those portions that pertain to this report. We would also appreciate the chance to provide construction phase services such as materials testing as a part of the success of the project.

If you have any questions regarding our report, please call me at (254) 235-1048.

Regards,

LANGERMAN FOSTER ENGINEERING COMPANY

Texas Registered Engineering Firm No. F-13144

Joe L. Dickinson
Graduate Engineer

Distribution List:

1. City of Waco – Mr. Jim Reed (JimR@WacoTX.gov)
2. City of Waco – Mr. Cody Petillo, P.E. (KodyP@WacoTX.gov)
3. City of Waco – Mr. Tom Dahl, P.E. (ThomasD@WacoTX.gov)

GEOTECHNICAL PAVEMENT INVESTIGATION 2018 WACO STREET IMPROVEMENTS 2 Waco, Texas

LFE Project No. W18-065
October 5, 2018



Report Prepared For:

City of Waco
Waco, Texas

Report Prepared By:

Joe Dickinson, E.I.T.
Graduate Engineer



October 5, 2018

**Report Prepared Under The
Direction Of And Reviewed By:**

Ottis Foster, P.E.
Principal / Geotechnical Engineer



**LANGERMAN FOSTER
ENGINEERING COMPANY**

Waco and Harker Heights (Killeen), Texas
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GEOTECHNICAL PAVEMENT INVESTIGATION 2018 WACO STREET IMPROVEMENTS 2 WACO, TEXAS

1.0 INTRODUCTION

- Purpose:** The purpose of this geotechnical investigation is to provide recommendations for reconstruction or rehabilitation of portions of the following 6 Waco streets: Cherry Street, Colcord Avenue, New Road, 38th Street, 40th Street, and 43rd Street.
- Authorization:** Services were performed in general accordance with LFE Proposal No. GEO18-102, dated August 9, 2018. Authorization to proceed and Purchase Order No. 21802756 was provided by Mr. Kody Petillo, P.E. from the City of Waco on August 23, 2018. Cement strength series of recycled base material were not included in the proposal fee and were not conducted.

2.0 SUBSURFACE EXPLORATION

- Drilling Date:** Pavement cores were drilled on September 4, 5 and 7, 2018. Borings through the pavement and into the subgrade were drilled on September 6 and 7, 2018.
- Boring Layout:** The borings and cores were marked in the field by LFE personnel based on information provided by the City of Waco. Plates 1 and 2 show the approximate boring locations.
- If precise location and elevation data are desired, then a registered professional land surveyor should be retained to locate the borings and determine the ground surface elevations.
- Sampling Methods:** Existing pavement and cement treated base (CTB) were cored when possible. Augering was done through pavement base that was not cored. Push-tubes were used in cohesive soils, and Standard Penetration Tests (SPT, ASTM D 1586) in clayey and granular soils.
- Boring B-3 was only cored due to potential conflicts with subsurface utilities. Subgrade was not sampled at this location.

3.0 LABORATORY TESTS

Test Procedures: The following tests were conducted in general conformance with the standards noted in Table 3.1.

TABLE 3.1: LABORATORY TESTS	
<i>Test Name</i>	<i>Test Method</i>
Atterberg Limits	ASTM D 4318
-#200 Mesh Sieve	ASTM D 1140
Moisture Content	ASTM D 2216
Unconfined Compression (soil)	ASTM D 2166

Test Results: Laboratory test results are shown on Plate 3 in the Appendix, and selected test results on the boring logs. Results are also discussed subsequently.

Sulfate tests were not conducted because sulfates are not anticipated in these locations. Lime series testing is anticipated during construction to determine the exact percentage of lime to use.

4.0 SUBSURFACE MATERIALS

Geology: The Geologic Atlas of Texas¹ and the Environmental Atlas of McLennan County² map the site in the Austin Chalk and Terrace Deposit geologic formations. The Austin Chalk is a limestone with clayey (marl) seams and layers. Residual soils overlying the limestone vary from fat to lean clays with varying granular content. The Terrace Deposits consist of varying amounts of clay, silt, sand, and gravel with significant variation in materials possible over short lateral and vertical distances.

Stratigraphy: Individual boring logs are in the Appendix. Material descriptions are general and range of depths approximate because boundaries between different strata are seldom clear and abrupt in the field.

The stratigraphy generally consists of existing pavement and base material overlying clay, sand, and gravel soils and severely weathered limestone.

¹ Virgil E. Barnes, Project Director, Geologic Atlas of Texas, Waco Sheet, The University of Texas at Austin Bureau of Economic Geology, 1970.

² Joe Yelderian and Robert Cervenka, Baylor Geological Studies, Spring 1992, Bulletins No. 13 & 14, Environmental Atlas of McLennan County.

Coring usually preserves the quality of cement treated base with high cement content, and that quality is assessed later in the report. The quality of other base materials in the borings is hard to determine because coring and auger drilling disturbs the looser base materials significantly. Asphalt and base thickness measurements are shown in Table 4.1. These measurements are approximate because measuring depths of asphalt and base are difficult in small diameter borings.

TABLE 4.1: EXISTING PAVEMENT THICKNESS MEASUREMENTS IN BORINGS				
<i>Street</i>	<i>Boring No.</i>	<i>Asphalt (in)</i>	<i>Existing Base (in)</i>	<i>Total Pavement Thickness (in)</i>
Colcord Avenue	B-1	2	14 - CTB	16
	B-2	2	10½ - CTB	12½
	B-3	2	4½ - CTB	6½
	B-4	3	8 - CTB	11
Cherry Street	B-5	1	8	9
	B-6	1	10	11
	B-7	1	10	11
38 th Street	B-8	2	6 - CTB	8
	B-9	2	5 - CTB	7
	B-10	1½	5 - CTB	6½
40 th Street	B-11	2	6 - CTB	8
	B-12	1½	5 - CTB	6½
	B-13	1	4 - CTB	5
	B-14	1	5 - CTB	6
43 rd Street	B-15	2	8 - CTB	10
	B-16	1	3	4
	B-17	4	4 - CTB	8
	B-18	2½	7 - CTB	9½
New Road	B-19	5	18	23
	B-20	6	18	24
	B-21	3	15 - CTB	18
Note: Measurements of asphalt and base thicknesses are approximate due to the small diameter of the boreholes.				

Core Photos: Photos 4.1 through 4.21 were taken of the recovered samples from pavement coring. They are provided below.



Photo 4.1: Core B-1



Photo 4.2: Core B-2



Photo 4.3: Core B-3



Photo 4.4: Core B-4



Photo 4.5: Core B-5



Photo 4.6: Core B-6



Photo 4.7: Core B-7



Photo 4.8: Core B-8



Photo 4.9: Core B-9



Photo 4.10: Core B-10



Photo 4.11: Core B-11



Photo 4.12: Core B-12



Photo 4.13: Core B-13



Photo 4.14: Core B-14



Photo 4.15: Core B-15



Photo 4.16: Core B-16



Photo 4.17: Core B-17



Photo 4.18: Core B-18



Photo 4.19: Core B-19



Photo 4.20: Core B-20



Photo 4.21: Core B-21

Groundwater: Boring B-1 was drilled to a depth of about 5½ feet using dry drilling methods, meaning that water was not used in the drilling process. Groundwater was observed at a depth of about 4 feet. After a 10-minute observation period, groundwater remained at a depth of about 4 feet. After reaching the termination depth, water remained at about 4 feet. The boring was backfilled immediately after drilling was completed.

Boring B-3 was drilled to a depth of about ½ foot, only coring at this location. Borings B-7 and B-16 were each drilled to a depth of about 3½ feet. Borings B-14 and B-15 were each drilled to a depth of about 4 feet. The remaining borings were each drilled to a depth of about 5 feet. All of the borings were drilled using dry drilling methods. Groundwater was not observed in these borings at the time of drilling.

Since groundwater was observed on Colcord Avenue, near the Brazos River, the City of Waco should anticipate groundwater for any excavations related to the pavement improvements in this area.

Although only encountered on the north end of Colcord Avenue during our field exploration, transient groundwater is common in Waco, and may be present during construction. The water tends to percolate down through the surficial soils until encountering a relatively impervious layer, and then either flow down gradient or become trapped.

The water observations conducted for this investigation are short-term and should not be interpreted as a groundwater study. However, the presence of groundwater may affect construction and long-term performance of the proposed foundations and pavements.



If groundwater is encountered at locations not identified in this report during construction, then LFE must be contacted to reevaluate our recommendations.

Existing Cement

Treated Base (CTB): The following statements are qualitative observations of the CTB quality and only describe the quality of CTB as observed in a discrete sample. The quality of CTB can vary greatly between coring locations. These statements should not govern any pavement design.

Generally, the quality of the existing CTB in cores at B-1, B-2, B-3, B-8, B-9, B-10, B-11, B-14, and B-18 appeared good to very good. Samples recovered from cores at B-4, B-12, B-13, B-15, B-17, and B-21 appeared to have a lower cement content and lower strength. LFE considers the samples with observed lower cement content to be poor-quality cement treated base. Samples of the base material at B-5, B-6, B-7, B-16, B-19, and B-20 did not appear to have been treated with cement.

5.0 PAVEMENT RECOMMENDATIONS

General: The project consists of reconstruction or rehabilitation of about 8,300 linear feet of existing streets. LFE understands the existing pavement will be milled and overlaid or completely reconstructed, depending on the thickness and condition of the pavement and that asphaltic pavement is planned. Recommendations are included for re-using the existing asphalt/base with the addition of Portland cement for reconstruction options. The City will decide whether to mill and overlay or to reconstruct.

Risk: In general, rigid pavement (concrete) is more durable and expected to require less maintenance than flexible pavement (asphalt). However, rigid pavement is usually costlier initially.

Flexible pavement is more susceptible to deterioration where traffic will be stopping and turning, and where heavier truck traffic will be concentrated. Such areas include entryways, intersections, dumpster pad locations, and service truck loading areas. If flexible pavement is generally desired for this project, LFE recommends rigid pavement for these specific areas to achieve better long-term pavement performance.

Expansive Soils: Pavement design methods are intended to provide an adequate thickness of structural materials over the subgrade to support the wheel loads. Design methods do not account for shrink and swell movements of expansive clays, nor do design methods account for settlement of randomly placed fill materials. *The pavement may be adequate from a*

structural standpoint, yet still experience cracking due to shrink/swell movement of the subgrade. It is critical to minimize moisture changes in the subgrade to reduce shrink/swell movements.

Expansive soils such as were encountered for this project increase the risk of less desirable performance and premature failure. Lime stabilizing the fat clay subgrade reduces this risk³, as does the use of geogrid such as TENSAR TX130S. These options are discussed subsequently.

Extending the base material out about 2 feet from the edge of the pavement curb aids in reducing edge-related cracking. Even with these precautions, some movements and related cracking may still occur. Routine maintenance is essential.

Trees and vegetation adjacent to paved areas can worsen crack formation in pavements due to moisture loss in the subgrade from transpiration to the root systems of the vegetation. Soil moisture loss from vegetation can extend a distance from the vegetation about equal to its height.

Surface and Subsurface Water:

Water entry into the base and subgrade weakens these materials and can result in potholes and/or rutting. Expansive soils can swell when given access to water. To reduce these risks, the pavement and adjacent areas must be well drained. Proper maintenance must be performed on cracks in the pavement surface to prevent water from passing through to the base or subbase material.

Pavement “islands” often provide a means of water infiltration into the base and subgrade materials below the pavement. If islands are used, then we recommend that a synthetic lining or clay soils be used to limit infiltration of water into the base and subgrade.

Rock and clay seams and layers can be conduits for subsurface water, usually as seepage water that is more prevalent or only prevalent during rainy periods or resulting from other water sources (such as site irrigation or areas of water ponding). Such water is often not evident until rainy periods or irrigation starts and may not be encountered unless an excavation exposes a water-carrying stratum. LFE should be retained to provide additional recommendations if such water is known to exist prior to construction or encountered during or after construction. Corrective measures may include installing subsurface drains to remove such water.

³ However, lime should not be used in soils with high sulfate content unless special procedures are followed to make sure the lime reacts appropriately with the soil. Lime improperly mixed with high-sulfate soils can cause premature pavement failure, sometimes immediately and sometimes soon after opening for traffic.

Traffic Loads:

In order to calculate pavement thickness, an estimate of the vehicle types and count is required. These items are used to determine the Equivalent 18-kip Single Axle Loads (ESAL) that are used for pavement design. We have assumed traffic loading options as presented in Tables 5.1A through 5.1E.

Since the City of Waco does not assign ESAL values to their street classifications for typical traffic loading conditions, we used City of Killeen street classifications as target traffic loading conditions. ***We recommend that the City of Waco determine the appropriate traffic loads for each street addressed in this report before selecting pavement designs. Calculated pavement thicknesses are highly dependent on the traffic loading.***

TABLE 5.1A: 20,000 ESAL: LOCAL STREET CLASSIFICATION		
Vehicle Type	Gross Vehicle Weight	Vehicles per Day
Cars and Light Trucks	4 kips	3,000
Delivery Trucks/Buses	26 kips	2
Trash Trucks/Semis	60 kips	1 per week

TABLE 5.1B: 60,000 ESAL: COLLECTOR STREET CLASSIFICATION		
Vehicle Type	Gross Vehicle Weight	Vehicles per Day
Cars and Light Trucks	4 kips	5,000
Delivery Trucks/Buses	26 kips	5
Trash Trucks/Semis	60 kips	1

TABLE 5.1C: 150,000 ESAL: MINOR ARTERIAL STREET CLASSIFICATION		
Vehicle Type	Gross Vehicle Weight	Vehicles per Day
Cars and Light Trucks	4 kips	6,000
Delivery Trucks/Buses	26 kips	10
Trash Trucks/Semis	60 kips	2

TABLE 5.1D: 250,000 ESAL: ALTERNATE MINOR ARTERIAL STREET CLASSIFICATION

<i>Vehicle Type</i>	<i>Gross Vehicle Weight</i>	<i>Vehicles per Day</i>
Cars and Light Trucks	4 kips	6,000
Delivery Trucks/Buses	26 kips	15
Trash Trucks /Semis	60 kips	4

TABLE 5.1E: 500,000 ESAL: MAJOR ARTERIAL STREET CLASSIFICATION

<i>Vehicle Type</i>	<i>Gross Vehicle Weight</i>	<i>Vehicles per Day</i>
Cars and Light Trucks	4 kips	6,000
Delivery Trucks/Buses	26 kips	20
Trash Trucks /Semis	60 kips	15

Subgrade: Subgrade materials (below the existing asphalt and base) consist primarily of soils ranging from clay to clayey sand/gravel. Based on correlations between soil index properties and pavement strength parameters, a resilient modulus (M_r) of 3,200 psi was assigned. **This assumes that any soft or weak subgrade areas are re-worked or replaced with better material, and proper compaction of the subgrade materials per the specifications of this report.**

Drainage: Good drainage is critical for desirable pavement performance and should be obvious to the casual observer. In no case should water be allowed to pond on or near the pavement during the life of the pavement.

Lime Stabilization: Lime stabilization of the subgrade is included in the pavement options. In our opinion, the pavement sections that include lime⁴ offer superior performance as compared to the sections without lime. Lime increases the strength of the subgrade, lowers the plasticity of the clay soils, reduces vertical moisture migration, and eliminates swelling in the limed section. These benefits reduce long-term maintenance and improve the long-term appearance.

Some of the existing pavement sections have clayey gravel as the “base” below the asphalt. Depending on the final profile of the road, some of these materials may be wasted, recycled, or remain in place. Using lime on clayey gravel soils will not have the same benefits as using lime on clay, but it will still have a positive effect.

⁴ See footnote 3.

The City of Waco details and specifications (ST-2) dictate that if the PI of the soil is greater than 15, then subgrade stabilization must be performed.

Geogrid: LFE understands that the City of Waco does not intend to use geogrid, so no options using geogrid have been provided. However, LFE believes using a geogrid such as TENSAR TX130S is beneficial for asphaltic pavements. Geogrid acts as reinforcement in asphalt pavement sections to help reduce pavement cracking in expansive clay soils. It also allows the use of thinner base sections. Geogrid may not completely prevent cracking in the pavement, but it will help to reduce cracking.

Design Method: AASHTO and American Concrete Institute guidelines.

Design Parameters: Pavement design parameters are shown in Table 5.2.

TABLE 5.2: PAVEMENT DESIGN PARAMETERS			
Design Parameter	Value	Design Parameter	Value
Design Life	20 years	Initial Serviceability	4.2 flexible, 4.5 rigid
Reliability	80% for <500,000 ESALs, 90% for >500,000 ESALs	Terminal Serviceability	2.0
Soil Resilient Modulus ⁵ , psi	3,200 for fat clay	HMAC ^A Layer Coefficient	0.44
Modulus of Rupture (4,000 psi 28-day compressive)	570 psi	Layer Coefficient, CTRB ^B	0.21
Overall Deviation	0.45 flexible, 0.35 rigid	Layer Coefficient, CLB ^C	0.14
Load Transfer (no edge support)	3.2	Layer Coefficient, LSS ^D	0.11
Drainage Coefficient	1.0		
^A HMAC... Hot Mix Asphaltic Concrete ^B CTRB... Cement Treated Recycled Base ^C CLB... Crushed Limestone Base or Crushed Concrete Base ^D LSS... Lime Stabilized Subgrade			

The reliability value corresponds to occasional interruption of traffic for pavement repairs. The pavement "design life" is defined as the expected life at the end of which pavement reconstruction will be needed. Normal maintenance, including crack sealing, slurry sealing, and/or chip sealing, should be expected and performed during the pavement life.

Typical Waco

Pavement Sections: The City of Waco Municipal Code describes 2 typical minimum pavement sections as shown in Table 5.3. Table 5.3 also shows the estimated ESAL

⁵ Based on correlations with soil index properties obtained from laboratory test results.

capacities for these sections using 2 different layer coefficients for comparison purposes. ***These are not design recommendations, only estimated ESAL capacities based on current City standards.*** Both of these estimates use new cement treated base (CTB)/pug base. Cement treated recycled base (CTRB) generally has a slightly lower layer coefficient and is not included in Table 5.3.

City of Waco CTB/pug base mixes also commonly have higher strengths than CTB used by others. If CTB strengths are around 600 psi, then a layer coefficient of 0.22 is appropriate. If CTB strengths range from about 1,000 to 1,200 psi, then a higher layer coefficient, perhaps on the order of 0.26, can be used. However, harder CTB typically increases the degree of reflective cracking.

TABLE 5.3: CITY OF WACO TYPICAL PAVEMENT THICKNESSES				
Option	Surface Course*	Base Course*	ESALs (CTB layer coefficient = 0.22)	ESALs (CTB layer coefficient = 0.26)
Asphalt	1.5" Type C or D	6" CTB	8,000	16,000
Asphalt	2.0" Type C or D	8" CTB	48,000	102,000
Type C or D... Hot Mix Asphalt Concrete, TxDOT Type C or D CTB... Cement Treated Base (pug base) *Minimum pavement thicknesses per City of Waco requirements (Section 5.205 of the Waco Municipal Code)				

The ESAL capacities predicted in Table 5.3 appear to be lower than what many Waco streets seem to have successfully supported for more than a 20-year design life. If these streets have in fact supported more traffic, then some of the design assumptions in Table 5.2 may be too conservative. The layer coefficient for cement treated base may be too low, as well as the soil resilient modulus, but without test data to support higher values, LFE used what we understand are generally accepted values for these parameters in this area.

Pavement Thickness Options:

Recommended thicknesses for rigid and flexible pavement options are shown in Table 5.4. The road classifications for the provided ESAL values are according to the City of Killen road classification system. Additionally, an alternative minor arterial ESAL value of 250,000 is provided.

We are willing to participate a meeting with the City to discuss the numerous options provided in Table 5.4 and to explore other options the City determines may be more appropriate.

The existing asphalt and base combined ranged in thickness from 4 to 24 inches. A pavement section has been calculated with a base course that efficiently uses available materials from the existing pavement section; however, variations in the existing pavement section may be present. *If some of the clay subgrade materials are mixed in with base, then a higher percentage of cement will be needed to yield the design strength of the CTRB.*

As the subgrade is exposed, Langerman Foster or a similarly qualified testing laboratory will need to work with the contractor to make sure that appropriate mixtures of CTRB are constructed.

- ***For streets that are rehabilitated in-place, we recommend 8% cement for planning purposes. Laboratory tests must be conducted to determine the appropriate amount of cement for the soils actually encountered.***

Table 5.5 contains the approximate weights of cement to add per square yard for the various thicknesses of CTRB and percentages of cement.

TABLE 5.5: CEMENT WEIGHTS AND PERCENTAGES	
<i>Thickness of CTRB (inches)</i>	<i>Lbs. Cement per Square Yard at 8%</i>
6	44
7	51
8	58
<p>*A material unit weight of 120 pcf was used to calculate the weight of cement. Note: The above weights are for planning purposes. Laboratory tests must be conducted to determine the appropriate amount of cement for the soils actually encountered to meet a laboratory target strength of at least 500 psi.</p>	

If CTRB is used, LFE recommends that a design mix be specified with a minimum 7-day compressive strength of 500 psi for lab testing. During placement of the CTRB, a minimum 7-day compressive strength of 400 psi is acceptable for field testing.

Although the use of cement in the base material produces a material of superior structural performance as compared to untreated base material, the addition of cement also produces a material subject to shrinkage and cracking as the base matures. Just like CTB, these cracks will propagate to the surface of asphalt pavements and will require cracking sealing, possibly soon after completion of the pavement installation.

One method to reduce reflective cracking is a procedure termed “pre-cracking” in accordance with TxDOT Item 275.4.7. The concept of pre-cracking is to induce multiple microcracks instead of occasional transverse cracks. After placement and compaction, the CTB must be kept continuously moist for 24 to 48 hours. The pre-cracks are created within one or two days after construction using a 10- to 12-ton vibratory roller with the vibrator set on the maximum amplitude and traveling at a speed of about 2 mph. Usually, two vibratory rolling passes are sufficient to generate the microcracks. *Do not make more than 2 passes to reduce the risk of damaging the CTB. One pass may be sufficient for CTB.*

LFE understands that using a Hot Mix Asphalt Concrete (HMAC) thickness of at least 3 inches decreases the degree of reflective cracking from CTB and CTB substantially.

Recycling: The procedures provided in TxDOT Item 275.4 apply to recycling of the existing base with the addition of Portland cement. Refer to TxDOT Item 275 for the detailed procedure.

Cement Treated Base (CTB): New CTB generally provides slightly better strength and support for a pavement section than CTB. Pavement sections with CTB/pug base are not provided in this report, however CTB can be used in place of CTB in Table 5.4 and achieve a slight increase in ESAL capacity.

Specifications: Pavement specifications. The TxDOT citations below reference the 2014 Edition unless stated otherwise.

1. Hot Mix Asphalt Concrete (HMAC): TxDOT Item 340, Type B, C or D.
2. Reinforced Concrete Pavement (RCP): TxDOT Item 360, Concrete Pavement. The concrete class should be specified as Class P in accordance with TxDOT Item 421, Portland Cement Concrete.

The project Civil Engineer should use their discretion to decide on the joint and reinforcement details, and should follow ACI recommended practices. Reinforcement often consists of #4 or #5 bars placed at 12-to 16-in intervals in each direction. Sawcut joints are often placed at about twice the concrete thickness, where the thickness is in inches and the joint spacing in feet (a 6-inch thickness would have a 12-foot spacing). Sawcut joints when used should be made within a few hours of concrete placement. *Sawcuts must not be delayed to the following day.* A bond breaker should be placed between CTB or CTB and concrete.

3. Cement Treated Recycled Base (CTRB): TxDOT Item 275 or City of Waco specifications. Consists of a mixture of recycled asphalt/base and Portland cement. Use the procedure in TxDOT Item 275.4, with approximate weights of cement listed in Table 5.5 of this report for planning purposes. A 7-day laboratory compressive strength of at least 500 psi is desired, although variations will occur due to the mixed nature of the base materials. Trial mixtures will be needed to assess the appropriate percentage of cement to add. A 7-day compressive strength of at least 400 psi is acceptable for field-tested CTRB. During field placement, strength samples should be taken twice per day.

If there is a shortage of available asphalt/base material within the existing roadways, then imported materials can also be used. In general, pit run sands/gravels with low percentages of fines are preferred. Sources and materials will need to be evaluated on a case-by-case basis.

4. Crushed Limestone Base or Crushed Concrete Base (CLB): TxDOT Item 247, Type A or D, Grade 1-2. Compact to at least 95% of ASTM D1557 (or 100% of TEX-113) at a moisture content range of $\pm 3\%$ of optimum moisture content in 6-inch compacted lifts.
5. Subgrade: For roads that will be completely reconstructed, if the subgrade is exposed, scarify and re-compact the existing subgrade (and/or existing base), where practical, to at least 95% of ASTM D698 (or TEX-113-E) maximum dry density at a moisture content range of 0% to +3% of optimum moisture content. Each section of road should be proof-rolled, and any soft, weak, or otherwise problematic material should be either be re-worked or replaced with better material.
6. Lime Stabilized Subgrade (LSS): Follow TxDOT Item 260. For budgeting, use 6% by dry soil unit weight for the lime solids application rate. A soil unit weight of 105 pcf was used for estimating purposes and results in an application rate of about 29 pounds of lime per square yard for a 6-inch lift and 38 pounds of lime per square yard for an 8-inch lift. However, conduct at least 2 pH tests on the exposed subgrade to confirm or increase this amount. Compact the LSS in 6-inch or 8-inch compacted lifts, as appropriate, to at least 95% of TEX-113-E or ASTM D698 maximum dry density within 0% to +3% of optimum moisture content.

Make sure the treatment depth is no deeper than 6½ inches for a 6-inch lift or 8½ inches for an 8-inch lift unless additional lime is added to maintain the required 6% application rate, otherwise the lime quantity will not stabilize the treated section. Make sure the treatment depth



is not less than 5½ inches for a 6-inch lift or 7½ inches for an 8-inch lift, otherwise the structural capacity is reduced and may be inadequate to support the intended traffic.

LFE recommends a Team meeting with a representative from the Lime Association of Texas to discuss appropriate liming procedures.

7. **Pavement Transitions:** Transitions from an asphalt pavement to a rigid pavement are often problematic in that over time a depression usually forms in the asphalt at the joint. This is caused when vehicle tires pass from the rigid concrete pavement to the flexible asphalt pavement. One method to reduce this effect is to continue a “lip” of concrete under the asphalt.
8. **Drainage:** The pavement must have positive drainage, and water must not pond in areas directly adjoining paved sections.

Quality Control: In addition to the usual quality control practices, LFE advises that the AC, RCP, base or LSS thicknesses be measured, as applicable, during construction to document compliance with the minimum thicknesses advised herein, and to require corrective action if not. A confirmation interval of about every 200 linear feet is advised.

6.0 DESIGN REVIEW AND LIMITATIONS

Design Review: LFE should be retained to review construction documents to affirm that our recommendations have been interpreted correctly. We cannot be responsible for misinterpretations if not given the opportunity to review aspects of the project that are based on the contents of this report.

Limitations: This report has been prepared for the exclusive use of our client and their designated project design team. Preparation of the report has been performed using that degree of care and skill ordinarily exercised under similar conditions by reputable geotechnical engineers practicing in the same locality. No warranties, express or implied, are intended or made.

As stated in the attachment “Important Information about Your Geotechnical Engineering Report”, the subsurface conditions are interpreted from samples taken only at the boring locations. During construction, variations will be encountered, and will require interpretation by LFE to verify the adequacy of the geotechnical recommendations.



This investigation did not include environmental testing or evaluations, and does not address whether landfilling operations, as defined by the State of Texas, have occurred on the property.

7.0 APPENDIX

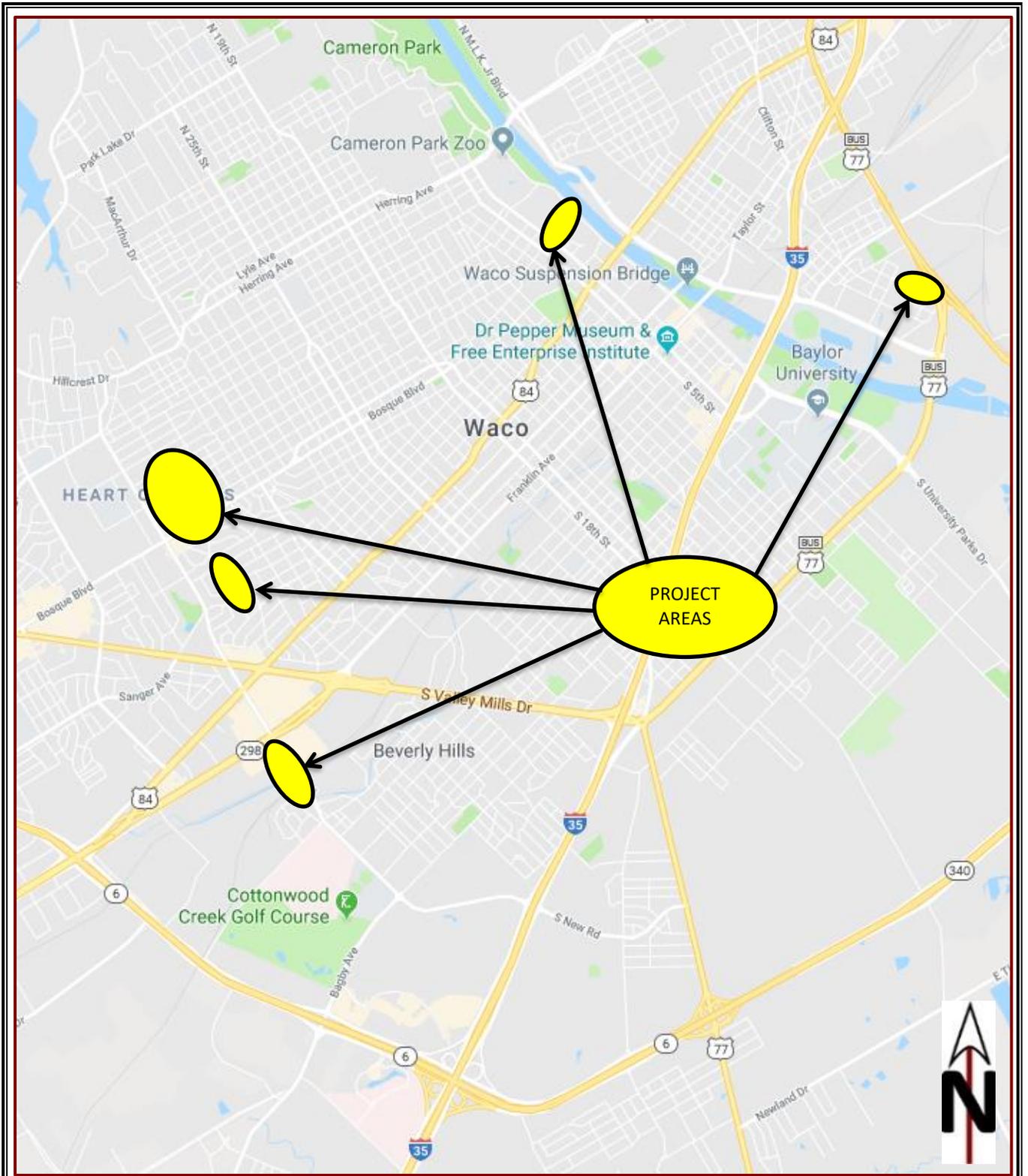
Site Location Map – Plate 1

Boring Location Sketch – Plate 2

Laboratory Test Results – Plate 3

Boring Logs

Important Information About Your Geotechnical Engineering Report



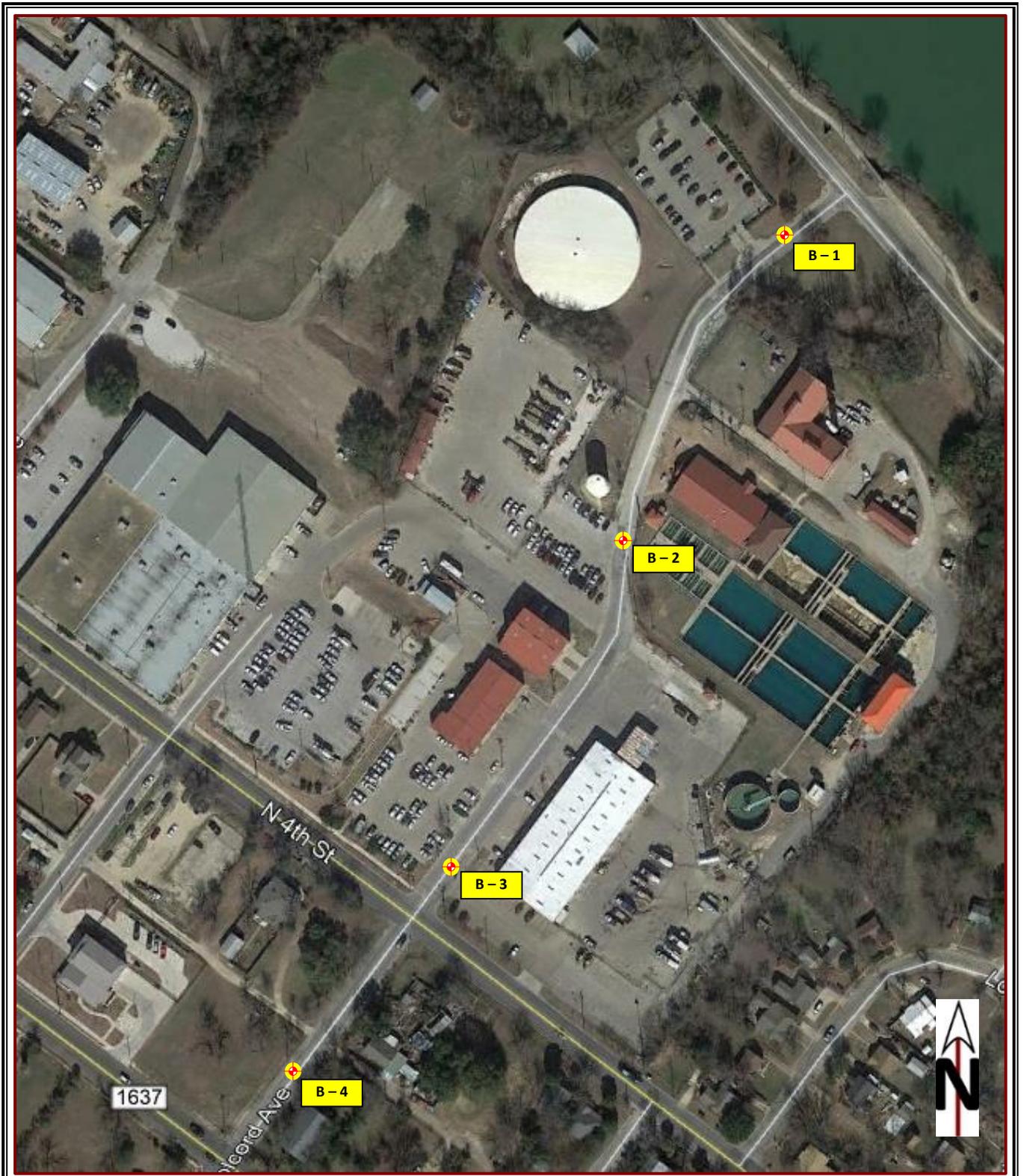
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SITE LOCATION MAP

2018 WACO STREET IMPROVEMENTS 2
WACO, TEXAS
LFE PROJECT NO. W18-065

PLATE

1



**LANGERMAN FOSTER
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BORING LOCATION MAP

2018 WACO STREET IMPROVEMENTS 2
WACO, TEXAS
LFE PROJECT NO. W18-065

PLATE

2A



**LANGERMAN FOSTER
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BORING LOCATION MAP

2018 WACO STREET IMPROVEMENTS 2
WACO, TEXAS
LFE PROJECT NO. W18-065

PLATE

2B



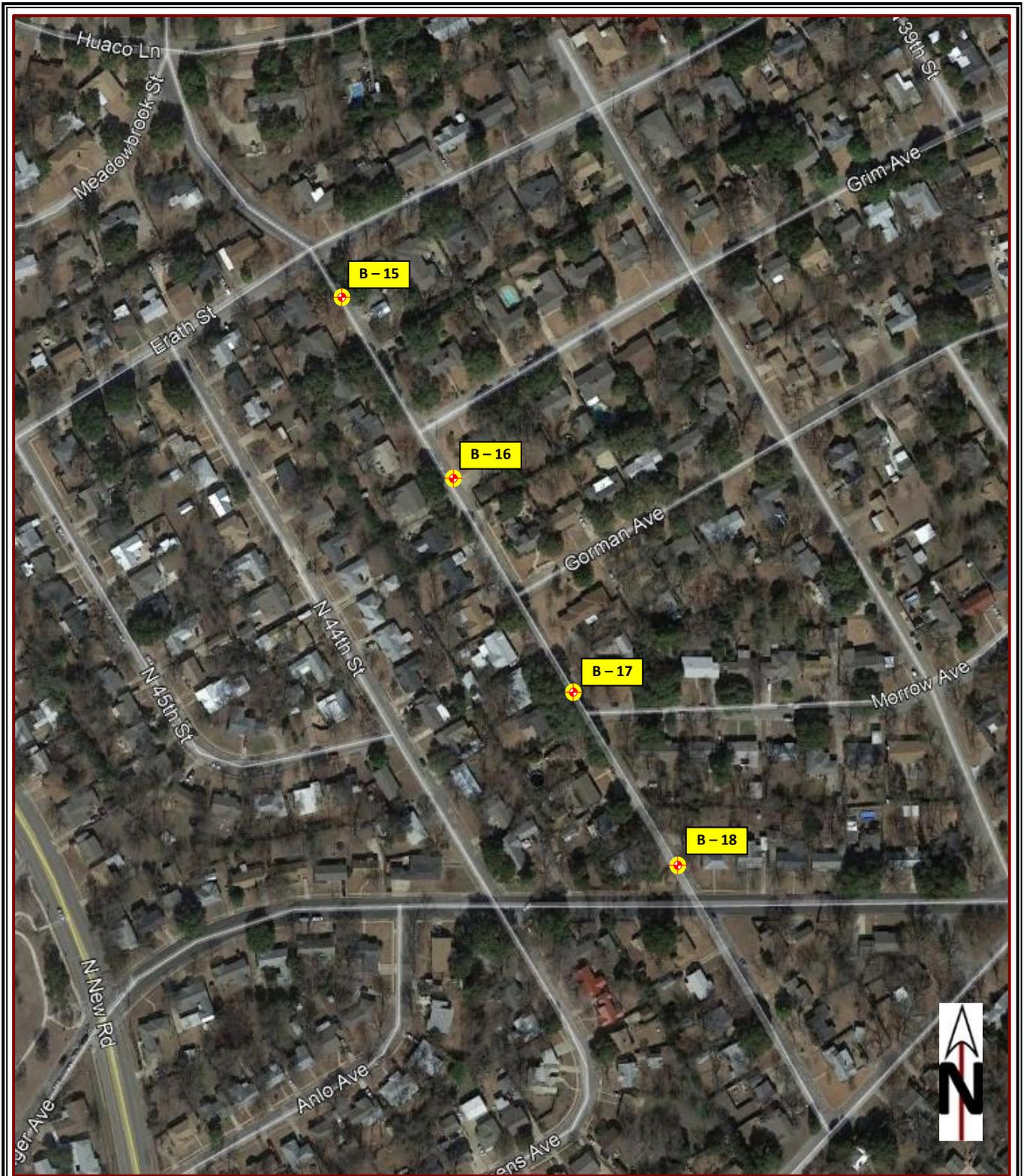
**LANGERMAN FOSTER
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BORING LOCATION MAP

2018 WACO STREET IMPROVEMENTS 2
WACO, TEXAS
LFE PROJECT NO. W18-065

PLATE

2C



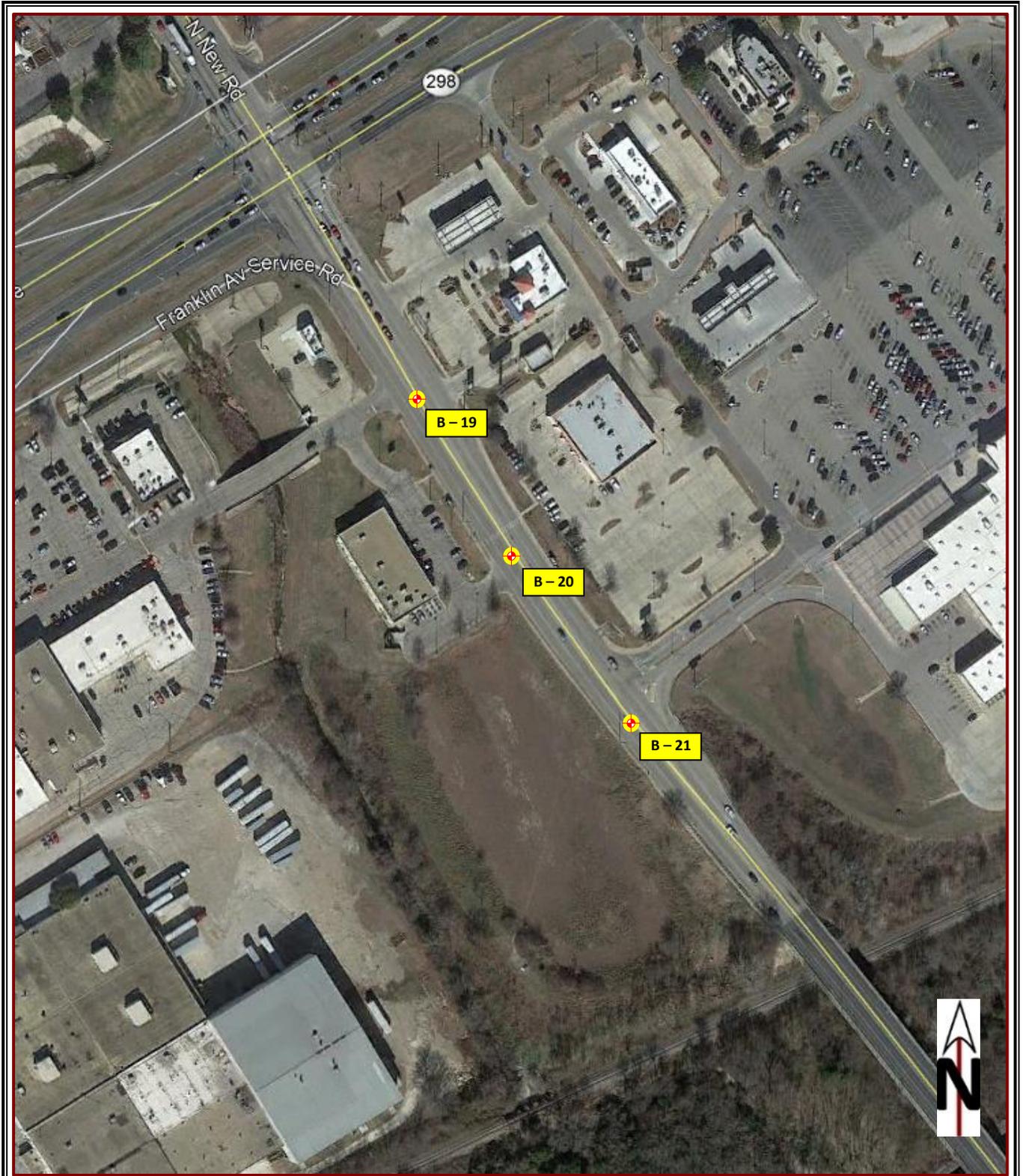
**LANGERMAN FOSTER
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BORING LOCATION MAP

2018 WACO STREET IMPROVEMENTS 2
WACO, TEXAS
LFE PROJECT NO. W18-065

PLATE

2D



**LANGERMAN FOSTER
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BORING LOCATION MAP

2018 WACO STREET IMPROVEMENTS 2
WACO, TEXAS
LFE PROJECT NO. W18-065

PLATE

2E

Boring No.	Sample Depth (ft.)	Liquid Limit	Plastic Limit	Plasticity Index	Percent Passing No. 200 Sieve	Moisture Content (%)	Unit Dry Weight (pcf)	Unconfined Compressive Strength (tsf)	Strain at Failure (%)
B-1	2.0 - 4.0	39	14	25	42	12			
B-2	1.0 - 3.0	46	17	29	42	14			
B-4	1.0 - 3.0	68	20	48	97	28			
B-5	0.0 - 1.0				34	11			
B-5	1.0 - 3.0	22	13	9	39	11			
B-6	0.0 - 1.0				44	14			
B-6	1.0 - 3.0	44	16	28	74	14			
B-7	0.0 - 1.0				34	10			
B-7	1.0 - 3.0	31	14	17	61	13			
B-8	1.0 - 3.0	66	25	41	90	27			
B-8	3.0 - 5.0					19	105.1	3.6	6.3
B-9	1.0 - 3.0	67	24	43	96	29			
B-10	1.0 - 3.0	68	25	43	97	22			
B-11	1.0 - 3.0	77	22	55	97	39			
B-11	3.0 - 5.0					22	98.4	2.5	5.0
B-12	1.0 - 3.0	64	21	43	93	25			
B-12	3.5 - 5.0	39	18	21	77	12			
B-13	1.5 - 3.0	41	16	25	72	9			
B-14	1.5 - 2.8	37	17	20	84	13			
B-15	1.0 - 3.0	44	17	27	66	8			
B-16	0.0 - 1.0				27	8			
B-16	1.0 - 3.0	53	19	34	42	12			
B-17	1.0 - 3.0	70	25	45	94	22			
B-18	1.0 - 3.0	66	24	42	93	29			
B-18	3.0 - 5.0					26	96.0	3.2	5.5
B-19	0.0 - 1.0	23	11	12	25	6			
B-19	1.0 - 3.0				26	6			
B-19	3.0 - 5.0	70	26	44	86	28			
B-20	0.0 - 2.0				40	7			
B-20	2.0 - 3.0	70	25	45	92	30			
B-20	3.0 - 5.0					30	90.3	2.6	2.3
B-21	2.0 - 3.0	67	21	46	92	26			



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Summary of Laboratory Results

Project: 2018 Waco Street Improvements 2
Project Number: W18-065



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BORING NO. B-1

PAGE 1 OF 1

CLIENT City of Waco **PROJECT NAME** 2018 Waco Street Improvements 2
PROJECT NUMBER W18-065 **PROJECT LOCATION** Waco, Texas

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		2" ASPHALT over 14" CEMENT TREATED BASE	A											
2.5		CLAYEY SAND; tan, with gravel	ST			4.5+	39	14	25	42	12			
5.0		LEAN CLAY; tan, with sand and calcareous fragments	SS		2-4-1 (5)									

LANGERMAN FOSTER - GINT STD US LAB.GDT - 10/5/18 15:22 - S:\GINT PROJECTS\W18-065, WACO STREET IMPROVEMENTS 2.GPJ

Completion Depth: 5.5 ft.
Date Started: 9/7/18
Completed: 9/7/18
Logged by: I. Lovett

Remarks: Boring was advanced to a depth of 5.5 feet using dry drilling techniques. Groundwater was observed at a depth of 4 feet. After a 10 minute observation period, the groundwater remained at 4 feet.



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BORING NO. B-2

PAGE 1 OF 1

CLIENT City of Waco **PROJECT NAME** 2018 Waco Street Improvements 2
PROJECT NUMBER W18-065 **PROJECT LOCATION** Waco, Texas

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		2" ASPHALT over 10½" CEMENT TREATED BASE	A											
		CLAYEY GRAVEL; gray and brown, with sand	ST			4.5+	46	17	29	42	14			
2.5		SEVERELY WEATHERED LIMESTONE; tan, consists of interbedded layers of marly clay and broken limestone	A											
		WEATHERED LIMESTONE; tan, highly fractured, with marly clay seams and layers	SS		50/4"									
		LIMESTONE; gray, highly fractured	A											
5.0														

LANGERMAN FOSTER - GINT STD US LAB.GDT - 10/5/18 15:23 - S:\GINT PROJECTS\W18-065, WACO STREET IMPROVEMENTS 2.GPJ

Completion Depth: 5 ft.
Date Started: 9/7/18
Completed: 9/7/18
Logged by: I. Lovett

Remarks: Boring was advanced to a depth of 5 feet using dry drilling techniques. Groundwater was not observed above that depth.



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BORING NO. B-3

PAGE 1 OF 1

CLIENT City of Waco **PROJECT NAME** 2018 Waco Street Improvements 2
PROJECT NUMBER W18-065 **PROJECT LOCATION** Waco, Texas

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		2" ASPHALT over 4½" CEMENT TREATED BASE	C											

LANGERMAN FOSTER - GINT STD US LAB.GDT - 10/5/18 15:23 - S:\GINT PROJECTS\W18-065, WACO STREET IMPROVEMENTS 2.GPJ

Completion Depth: 0.7 ft. Date Started: 9/7/18 Completed: 9/7/18 Logged by: I. Lovett	Remarks: Boring had asphalt and base cored. Boring could not be drilled do to locations of underground and overhead utilities.
--	--



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BORING NO. B-4

PAGE 1 OF 1

CLIENT City of Waco **PROJECT NAME** 2018 Waco Street Improvements 2
PROJECT NUMBER W18-065 **PROJECT LOCATION** Waco, Texas

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		3" ASPHALT over 8" CEMENT TREATED BASE	A											
		FAT CLAY; dark brown	ST			3.5	68	20	48	97	28			
2.5														
		LEAN CLAY; tan, with gravel and calcareous fragments	ST			4.5+								
5.0														

LANGERMAN FOSTER - GINT STD US LAB.GDT - 10/5/18 15:23 - S:\GINT PROJECTS\W18-065, WACO STREET IMPROVEMENTS 2.GPJ

Completion Depth: 5 ft.
Date Started: 9/7/18
Completed: 9/7/18
Logged by: I. Lovett

Remarks: Boring was advanced to a depth of 5 feet using dry drilling techniques. Groundwater was not observed above that depth.



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BORING NO. B-5

PAGE 1 OF 1

CLIENT City of Waco **PROJECT NAME** 2018 Waco Street Improvements 2
PROJECT NUMBER W18-065 **PROJECT LOCATION** Waco, Texas

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		1" ASPHALT over 8" BASE - CLAYEY SAND; brown, with gravel	A						34	11				
		CLAYEY SAND; brown	ST			1.5	22	13	9	39	11			
2.5														
			ST			4.5+								
5.0														

LANGERMAN FOSTER - GINT STD US LAB.GDT - 10/5/18 15:23 - S:\GINT PROJECTS\W18-065, WACO STREET IMPROVEMENTS 2.GPJ

Completion Depth: 5 ft.
Date Started: 9/6/18
Completed: 9/6/18
Logged by: J. Dickenson

Remarks: Boring was advanced to a depth of 5 feet using dry drilling techniques. Groundwater was not observed above that depth.



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BORING NO. B-6

PAGE 1 OF 1

CLIENT City of Waco PROJECT NAME 2018 Waco Street Improvements 2
 PROJECT NUMBER W18-065 PROJECT LOCATION Waco, Texas

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		1" ASPHALT over 10" BASE - CLAYEY SAND; brown, with gravel	A							44	14			
		LEAN CLAY; red-brown, with sand												
2.5		SANDY LEAN CLAY; brown	ST			4.5+	44	16	28	74	14			
5.0		SANDY LEAN CLAY; brown	ST			4.5+								

LANGERMAN FOSTER - GINT STD US LAB.GDT - 10/5/18 15:23 - S:\GINT PROJECTS\W18-065, WACO STREET IMPROVEMENTS 2.GPJ

Completion Depth: 5 ft.
 Date Started: 9/6/18
 Completed: 9/6/18
 Logged by: J. Dickenson

Remarks: Boring was advanced to a depth of 5 feet using dry drilling techniques. Groundwater was not observed above that depth.



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BORING NO. B-7

PAGE 1 OF 1

CLIENT City of Waco **PROJECT NAME** 2018 Waco Street Improvements 2
PROJECT NUMBER W18-065 **PROJECT LOCATION** Waco, Texas

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		1" ASPHALT over 10" BASE - CLAYEY SAND; brown, with gravel	A						34	10				
		SANDY LEAN CLAY; red-brown	ST			4.5+	31	14	17	61	13			
2.5			ST											

LANGERMAN FOSTER - GINT STD US LAB.GDT - 10/5/18 15:23 - S:\GINT PROJECTS\W18-065, WACO STREET IMPROVEMENTS 2.GPJ

Completion Depth: 3.3 ft.
Date Started: 9/6/18
Completed: 9/6/18
Logged by: J. Dickenson

Remarks: Boring was advanced to a depth of 3.3 feet using dry drilling techniques. Groundwater was not observed above that depth.



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BORING NO. B-8

PAGE 1 OF 1

CLIENT City of Waco **PROJECT NAME** 2018 Waco Street Improvements 2
PROJECT NUMBER W18-065 **PROJECT LOCATION** Waco, Texas

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		2" ASPHALT over 6" CEMENT TREATED BASE	A											
		FAT CLAY; dark brown, with calcareous fragments												
2.5			ST			3.0	66	25	41	90	27			
		LEAN CLAY; tan, with sand and calcareous fragments												
5.0			ST			4.5+					19	105	3.6	6.3

LANGERMAN FOSTER - GINT STD US LAB.GDT - 10/5/18 15:23 - S:\GINT PROJECTS\W18-065, WACO STREET IMPROVEMENTS 2.GPJ

Completion Depth: 5 ft.
Date Started: 9/7/18
Completed: 9/7/18
Logged by: I. Lovett

Remarks: Boring was advanced to a depth of 5 feet using dry drilling techniques. Groundwater was not observed above that depth.



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BORING NO. B-9

PAGE 1 OF 1

CLIENT City of Waco **PROJECT NAME** 2018 Waco Street Improvements 2
PROJECT NUMBER W18-065 **PROJECT LOCATION** Waco, Texas

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		2" ASPHALT over 5" CEMENT TREATED BASE	A											
		FAT CLAY; dark brown, with calcareous fragments												
2.5			ST			4.5+	67	24	43	96	29			
		LEAN CLAY; tan, with sand and calcareous fragments	ST			4.5+								
5.0														

LANGERMAN FOSTER - GINT STD US LAB.GDT - 10/5/18 15:23 - S:\GINT PROJECTS\W18-065, WACO STREET IMPROVEMENTS 2.GPJ

Completion Depth: 5 ft.
Date Started: 9/7/18
Completed: 9/7/18
Logged by: I. Lovett

Remarks: Boring was advanced to a depth of 5 feet using dry drilling techniques. Groundwater was not observed above that depth.



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DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		1½" ASPHALT over 5" CEMENT TREATED BASE	A											
		FAT CLAY; dark brown, with calcareous fragments												
2.5			ST			4.5+	68	25	43	97	22			
		LEAN CLAY; tan, with sand and calcareous fragments												
5.0			ST			4.5+								

LANGERMAN FOSTER - GINT STD US LAB.GDT - 10/5/18 15:23 - S:\GINT PROJECTS\W18-065, WACO STREET IMPROVEMENTS 2.GPJ

Completion Depth: 5 ft.
Date Started: 9/7/18
Completed: 9/7/18
Logged by: I. Lovett

Remarks: Boring was advanced to a depth of 5 feet using dry drilling techniques. Groundwater was not observed above that depth.



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DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		2" ASPHALT over 6" CEMENT TREATED BASE	A											
		FAT CLAY; dark brown												
2.5			ST			2.0	77	22	55	97	39			
		LEAN CLAY; tan, with sand and calcareous fragments	ST			3.0					22	98	2.5	5.0
5.0														

LANGERMAN FOSTER - GINT STD US LAB.GDT - 10/5/18 15:23 - S:\GINT PROJECTS\W18-065, WACO STREET IMPROVEMENTS 2.GPJ

Completion Depth: 5 ft.
Date Started: 9/7/18
Completed: 9/7/18
Logged by: I. Lovett

Remarks: Boring was advanced to a depth of 5 feet using dry drilling techniques. Groundwater was not observed above that depth.



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DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		1 1/2" ASPHALT over 5" CEMENT TREATED BASE	A											
		FAT CLAY; dark brown, with calcareous fragments	ST			4.5+	64	21	43	93	25			
2.5														
		LEAN CLAY; tan and gray, with sand and calcareous fragments	A											
			SS		21-30-14 (44)		39	18	21	77	12			
5.0														

LANGERMAN FOSTER - GINT STD US LAB.GDT - 10/5/18 15:23 - S:\GINT PROJECTS\W18-065, WACO STREET IMPROVEMENTS 2.GPJ

Completion Depth: 5 ft.
Date Started: 9/7/18
Completed: 9/7/18
Logged by: I. Lovett

Remarks: Boring was advanced to a depth of 5 feet using dry drilling techniques. Groundwater was not observed above that depth.



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DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		1" ASPHALT over 4" CEMENT TREATED BASE												
		LEAN CLAY; tan, with sand and calcareous fragments	A											
2.5			SS		20-17-24 (41)		41	16	25	72	9			
		SEVERELY WEATHERED LIMESTONE; tan, consists of interbedded layers of marly clay and broken limestone	A											
			SS		50/6"									
5.0			A											

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Completion Depth: 5 ft.
Date Started: 9/7/18
Completed: 9/7/18
Logged by: I. Lovett

Remarks: Boring was advanced to a depth of 5 feet using dry drilling techniques. Groundwater was not observed above that depth.



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DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		1" ASPHALT over 5" CEMENT TREATED BASE												
		LEAN CLAY; tan, with sand and calcareous fragments	A											
2.5		SEVERELY WEATHERED LIMESTONE; tan, consists of interbedded layers of marly clay and broken limestone	SS		6-17-50/3"		37	17	20	84	13			
		WEATHERED LIMESTONE; tan, highly fractured, with marly clay seams and layers	A											
			SS		29-50/1"									

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Completion Depth: 4.1 ft.
Date Started: 9/7/18
Completed: 9/7/18
Logged by: I. Lovett

Remarks: Boring was advanced to a depth of 4.1 feet using dry drilling techniques. Groundwater was not observed above that depth.



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CLIENT City of Waco **PROJECT NAME** 2018 Waco Street Improvements 2
PROJECT NUMBER W18-065 **PROJECT LOCATION** Waco, Texas

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		2" ASPHALT over 8" CEMENT TREATED BASE	A											
		SANDY LEAN CLAY; tan, with calcareous fragments	ST			4.5+	44	17	27	66	8			
2.5		SEVERELY WEATHERED LIMESTONE; tan, consists of interbedded layers of marly clay and broken limestone	A SS		50/4"									

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Completion Depth: 3.9 ft.
Date Started: 9/7/18
Completed: 9/7/18
Logged by: I. Lovett

Remarks: Boring was advanced to a depth of 3.85 feet using dry drilling techniques. Groundwater was not observed above that depth.



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DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		1" ASPHALT over 3" BASE - CLAYEY GRAVEL; brown, with sand	A							27	8			
		CLAYEY GRAVEL; brown, with sand and calcareous fragments	ST			4.5+	53	19	34	42	12			
2.5		SEVERELY WEATHERED LIMESTONE; tan, consists of interbedded layers of marly clay and broken limestone	SS		50/5"									

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Completion Depth: 3.5 ft.
Date Started: 9/7/18
Completed: 9/7/18
Logged by: I. Lovett

Remarks: Boring was advanced to a depth of 3.45 feet using dry drilling techniques. Groundwater was not observed above that depth.



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PROJECT NUMBER W18-065 **PROJECT LOCATION** Waco, Texas

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		4" ASPHALT over 4" CEMENT TREATED BASE	A											
		FAT CLAY; dark brown, with calcareous fragments	ST			4.5+	70	25	45	94	22			
2.5		--- brown from 3 feet to 4½ feet												
		LEAN CLAY; tan, with sand and calcareous fragments	ST			4.5+								
5.0														

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Completion Depth: 5 ft.
Date Started: 9/7/18
Completed: 9/7/18
Logged by: I. Lovett

Remarks: Boring was advanced to a depth of 5 feet using dry drilling techniques. Groundwater was not observed above that depth.



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DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		2½" ASPHALT over 7" CEMENT TREATED BASE	A											
		FAT CLAY; dark brown, with calcareous fragments	ST			2.0	66	24	42	93	29			
2.5														
			ST			2.5					26	96	3.2	5.5
5.0														

LANGERMAN FOSTER - GINT STD US LAB.GDT - 10/5/18 15:23 - S:\GINT PROJECTS\W18-065, WACO STREET IMPROVEMENTS 2.GPJ

Completion Depth: 5 ft.
Date Started: 9/7/18
Completed: 9/7/18
Logged by: I. Lovett

Remarks: Boring was advanced to a depth of 5 feet using dry drilling techniques. Groundwater was not observed above that depth.



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							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		5" ASPHALT over 18" BASE - CLAYEY SAND; tan, with gravel	A				23	11	12	25	6			
2.5		FAT CLAY; dark gray	ST							26	6			
5.0			ST			2.5	70	26	44	86	28			

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Completion Depth: 5 ft.
Date Started: 9/7/18
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DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		6" ASPHALT over 18" BASE - CLAYEY SAND; tan, with gravel	A						40	7				
2.5		FAT CLAY; dark gray, with calcareous fragments	ST			3.5	70	25	45	92	30			
5.0			ST			3.0					30	90	2.6	2.3

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Completion Depth: 5 ft.
Date Started: 9/7/18
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DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	ATTERBERG LIMITS			FINES CONTENT (%)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	STRAIN AT FAILURE (%)
							LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0.0		Approximate Surface Elevation feet												
		3" ASPHALT over 15" CEMENT TREATED BASE	A											
		CLAYEY GRAVEL; tan, with sand												
2.5		FAT CLAY; dark brown and gray, with trace gravel	ST			2.5	67	21	46	92	26			
			ST			3.5								
5.0														

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Completion Depth: 5 ft.
Date Started: 9/7/18
Completed: 9/7/18
Logged by: I. Lovett

Remarks: Boring was advanced to a depth of 5 feet using dry drilling techniques. Groundwater was not observed above that depth.

Important Information about This Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, clients can benefit from a lowered exposure to the subsurface problems that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed below, contact your GBA-member geotechnical engineer. Active involvement in the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Geotechnical-Engineering Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. *Those who rely on a geotechnical-engineering report prepared for a different client can be seriously misled.* No one except authorized client representatives should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one – not even you – should apply this report for any purpose or project except the one originally contemplated.*

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read it *in its entirety*. Do not rely on an executive summary. Do not read selected elements only. *Read this report in full.*

You Need to Inform Your Geotechnical Engineer about Change

Your geotechnical engineer considered unique, project-specific factors when designing the study behind this report and developing the confirmation-dependent recommendations the report conveys. A few typical factors include:

- the client's goals, objectives, budget, schedule, and risk-management preferences;
- the general nature of the structure involved, its size, configuration, and performance criteria;
- the structure's location and orientation on the site; and
- other planned or existing site improvements, such as retaining walls, access roads, parking lots, and underground utilities.

Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.*

This Report May Not Be Reliable

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, that it could be unwise to rely on a geotechnical-engineering report whose reliability may have been affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If your geotechnical engineer has not indicated an “apply-by” date on the report, ask what it should be, and, in general, if you are the least bit uncertain about the continued reliability of this report, contact your geotechnical engineer before applying it.* A minor amount of additional testing or analysis – if any is required at all – could prevent major problems.

Most of the “Findings” Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface through various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing were performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgment to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team from project start to project finish, so the individual can provide informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, *they are not final*, because the geotechnical engineer who developed them relied heavily on judgment and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* revealed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a full-time member of the design team, to:

- confer with other design-team members,
- help develop specifications,
- review pertinent elements of other design professionals' plans and specifications, and
- be on hand quickly whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction observation.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for informational purposes only*. To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report, but they may rely on the factual data relative to the specific times, locations, and depths/elevations referenced. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may

perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely*. Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures*. If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. As a general rule, *do not rely on an environmental report prepared for a different client, site, or project, or that is more than six months old*.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, none of the engineer's services were designed, conducted, or intended to prevent uncontrolled migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration*. Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. *Geotechnical engineers are not building-envelope or mold specialists*.



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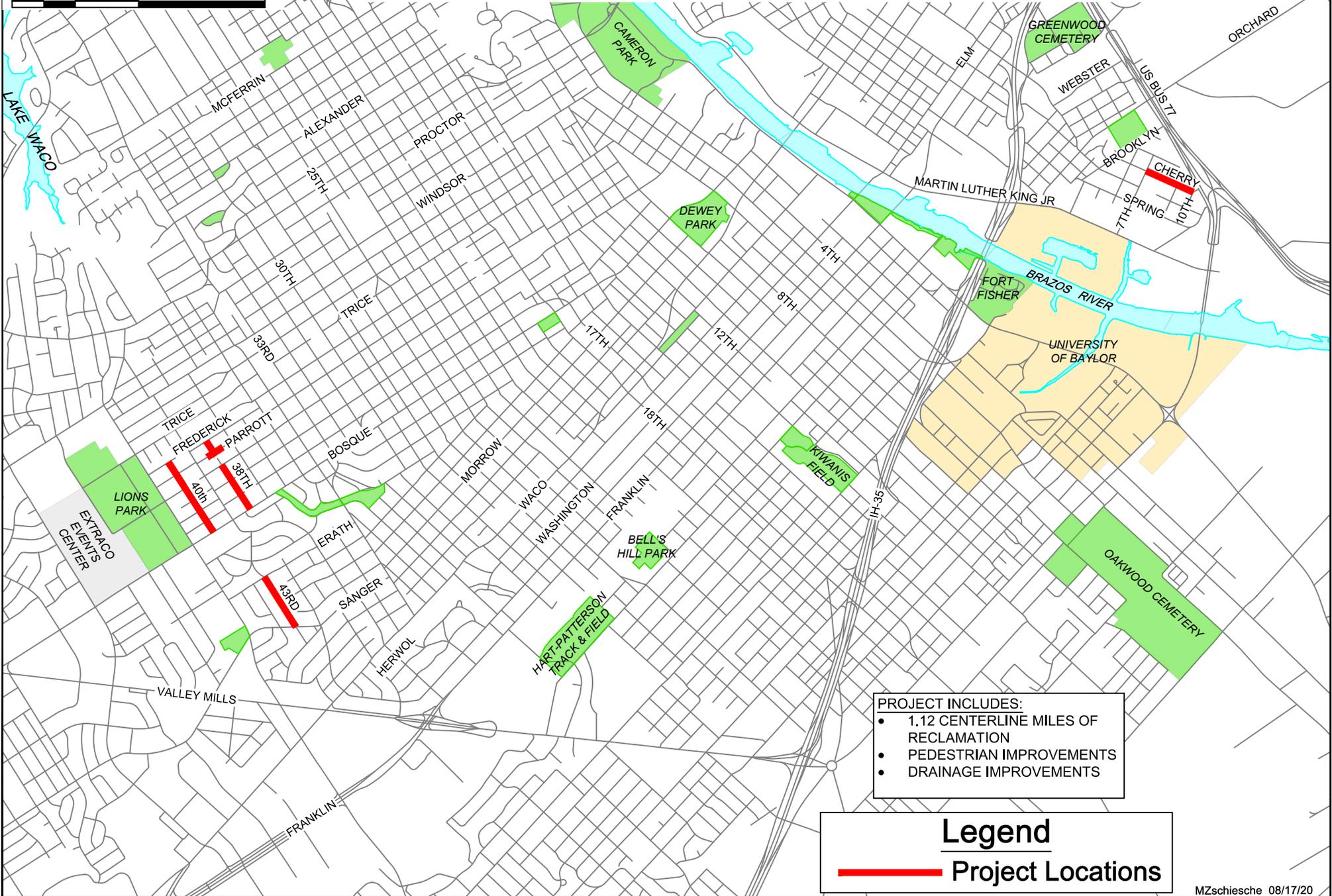
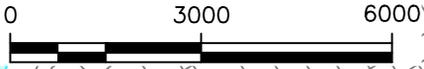
APPENDIX H
Drawings/Plans
(Separate File)

Link address:

<https://file.ac/8D4BGV7-FQ8/>

2019 Reclamation Phase 1

N 38th St, Parrott Ave, N 40th St, N 43rd St & Cherry St



- PROJECT INCLUDES:**
- 1.12 CENTERLINE MILES OF RECLAMATION
 - PEDESTRIAN IMPROVEMENTS
 - DRAINAGE IMPROVEMENTS

Legend

 **Project Locations**