

CITY OF LONGVIEW

SPECIFICATIONS & CONTRACT FORMS
FOR THE CONSTRUCTION OF

2017 H.M.A.C HOT IN-PLACE RECYCLING

PREPARED BY:

CITY OF LONGVIEW
PUBLIC WORKS ENGINEERING

February 2017



TABLE OF CONTENTS

<u>DESCRIPTION</u>	<u>PAGE OR FORM NO.</u>
Title Sheet	
Addenda	
Table of Contents.....	TC-1, TC-2
Advertisement for Bids.....	ADV-1
Notice to Bidders.....	NB-1
Information for Bidders.....	B-1 thru B-3
Statement of Qualifications.....	SQ-1
Certificate of Final Completion.....	FC-1
Wage Rates.....	TX160011-1 thru 4
Liquidated Damages Calculation.....	L-1
Proposal.....	P-1 thru P-4
Vendor Compliance to State Law.....	VC-1
Certificate of Interested Parties Notice (Form 1295).....	IP-1
Certificate of Interested Parties Instructions &Form...IP-2, IP-3	
Statement of Materials.....	SM-1
Bid Bond.....	1
Certificate of Insurance.....	1
Standard Form of Agreement.....	SF-1, SF-2
Performance Bond.....	PB-1, PB-2
Payment Bond.....	PB-3, PB-4
Maintenance Bond.....	MB-1, MB-2

General Conditions.....G-1 thru G-18
Special Conditions.....SP-1 thru SP-11

TECHNICAL SPECIFICATIONS

Scope of Work-General Information.....SW-1 thru SW-2
Scope of Work.....SC-1, SC-2
Map Locations.....EXHIBIT-A thru EXHIBIT-C
Technical Specifications-General Requirements.....TS-1 thru TS-22
Standard Barrier/Traffic Control Reference.....ST-1

ADVERTISEMENT FOR BIDS

Sealed proposals addressed to Rolin McPhee, P.E., Director of Public Works, City of Longview, Public Works Service Center, 933 Mobile Drive, Longview, Texas 75604 will be received until 2:00 p.m., February 20, 2017, for furnishing all labor, materials, equipment, supplies, and supervision necessary for the construction of 2017 H.M.A.C HOT IN-PLACE RECYCLING, in accordance with the specifications on file at Public Works Engineering. At the time stated, bids will be opened and publicly read in the Public Works Training Room of the Public Works Service Center, 933 Mobile Drive, Longview, Texas 75604.

Plans and specifications may be examined without charge or obtained for a purchase price of \$50.00 per set at the office of Public Works Engineering, 933 Mobile Drive, Longview, Texas, 75604.

EEO/M/F/V/H/D.

ROLIN MCPHEE, P.E.
DIRECTOR OF PUBLIC WORKS
CITY OF LONGVIEW, TEXAS

NOTICE TO BIDDERS OF THE INTENTION OF THE CITY OF LONGVIEW, TX TO LET BIDS FOR THE CONSTRUCTION OF 2017 H.M.A.C HOT IN-PLACE RECYCLING

SEALED PROPOSALS addressed to Rolin McPhee, P.E., Director of Public Works, City of Longview, Texas, Public Works Service Center, 933 Mobile Drive, Longview, Texas, 75604, will be received until 2 p.m., Monday, February 20, 2017, for furnishing all labor, materials, equipment, supplies, and supervision necessary for H.M.A.C. Hot in-place recycling and surface coat of various city streets within Longview, consisting of approximately 41,300 square yards, in accordance with the plans and specifications on file at the Public Works Engineering office. At the time stated, bids will be opened and publicly read at the City of Longview, Texas, Public Works Service Center, 933 Mobile Drive, Longview, Texas 75604.

PLANS AND SPECIFICATIONS may be examined without charge or obtained for a purchase price of \$50.00 per set at the office of the Public Works Engineering Manager, 933 Mobile, Street, P. O. Box 1952, Longview, Texas, 75606-1952. Refunds will be made for undamaged sets returned by actual project bidders at the bid opening, after which time no refunds will be made.

ALL BID PROPOSALS submitted should be marked clearly on the outside of the sealed envelope with the project name and bid opening time and date.

A CERTIFIED OR CASHIER'S CHECK, or an acceptable bid bond in an amount not less than five percent (5%) of the total bid shall accompany each bid as a guaranty that, if awarded the contract, the bidder will promptly enter into contract with the City of Longview, Texas and furnish bonds on the forms provided.

THE SUCCESSFUL BIDDER OR BIDDERS will be required to furnish a Performance Bond, Payment Bond, and Maintenance Bond, in the amount of the contract, written by a responsible surety company authorized to do business in the State of Texas, and satisfactory to the Owner as required by Article 5160 V.A.T.C.S.

BIDDERS ARE EXPECTED TO INSPECT the site of the work and to inform themselves of all local conditions. Time of completion shall be 45 calendar days, including Saturdays, Sundays, and legal holidays.

NO BID may be withdrawn after the scheduled closing time for receipt of bids for at least 90 calendar days.

IN CASE of ambiguity or lack of clearness stating the price in the bids, the Owner reserves the right to consider the most advantageous construction thereof or to reject the bid. The Owner reserves the right to reject any or all bids, waive any or all informalities, and to award the contract to the bidder or bidders who, in the opinion of the Owner, offers the proposal to the best interest of same.

EEO/M/F/V/H/D

**ROLIN MCPHEE, P. E.
DIRECTOR OF PUBLIC WORKS
CITY OF LONGVIEW, TEXAS**

INFORMATION FOR BIDDERS

1. Receipt and Opening of Proposals. The City of Longview (Owner) invites Proposals to be submitted on the forms provided. Proposals will be received by the Owner in the Public Works Training Room, 933 Mobile Drive, Longview, TX, 75604, until the time and date specified in the Notice to Bidders, and then at the stated time and place publicly opened and read aloud. Only the total amount of the bid will be read aloud, however, the Proposals will be open for public inspection immediately following the opening.

The Owner reserves the right to waive any informality and to reject any or all bids. Any Proposal received after the specified time will be returned to the Bidder unopened. No Proposal may be withdrawn within 90 days from the opening date. Conditional bids will not be considered.

2. Preparation of Proposals. Each Proposal must be submitted in a sealed envelope bearing on the outside the name of the bidder, his address, and the name of the project for which the Proposal is submitted. If forwarded by mail, the sealed envelope containing the Proposal must be enclosed in another envelope addressed as specified.
3. Withdrawal or Modification of Bid. Prior to the bid opening, no Proposal may be withdrawn after 48 hours before the time of the bid opening. Any modification of any bid may be made under the same conditions as set forth for submitting a Proposal.
4. Qualifications of Bidders. The Owner may make such investigations as he deems necessary to determine the ability of the bidder to perform the work, and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any Proposal if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that the bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein.
5. Bid Security. Each Proposal must be accompanied by cash, certified check of the Bidder, or a bid bond duly executed by the Bidder as principal and having as surety thereon a surety company approved by the Owner, in the amount of 5% of the base bid. Such cash, checks or bid bonds will be returned to all except the three lowest Bidders within three days after the opening of bids, and the remaining cash, checks, or bid bonds will be returned promptly after the Owner and the accepted Bidder have executed the contract, or if no award has been made within 90 days after the date of the opening of bids, upon demand of the bidder at any time thereafter, so long as he has not been notified of the acceptance of his Proposal.
6. Liquidated Damages for Failure to Enter into Contract. The successful Bidder, upon

his failure or refusal to execute and deliver the Contract and bonds required within 15 days after he has received notice of the acceptance of his Proposal, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his Proposal.

7. Time of Completion and Liquidated Damages. Bidder must agree to commence work within 10 days after the date to be specified in a written "Notice to Proceed" by the Owner and to fully complete the project within the time stated in the Proposal. The bidder must agree to pay, as liquidated damages, the sum of **\$330.00** for each consecutive calendar day thereafter as hereinafter provided for in the General Conditions.
8. Conditions of Work. Each Bidder must inform himself fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful Bidder of his obligation to furnish all material and labor necessary to carry out the provision of his Contract. Insofar as possible, the Contractor, in carrying out his work, must employ such methods or means as will not cause any interruption of or interference with the work of any other Contractor.
9. Addenda and Interpretation. No interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any Bidder orally. Every request for such interpretation should be in writing addressed to Public Works Engineering, 933 Mobile Drive, P. O. Box 1952, Longview, Texas 75606, and to be given consideration must be received at least five days prior to the date fixed for the opening of Proposals. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be mailed by regular mail to all prospective bidders not later than two days prior to the date fixed for the opening of Proposals. Failure of any Bidder to receive any such addendum or interpretation shall not relieve such Bidder from any obligation under his bid as submitted. Each Bidder shall check with Public Works Engineering at an appropriate time to determine that he or she has received all Addenda; failure to do so shall be the complete responsibility of the Bidder. All addenda so issued shall become part of the contract documents.
10. Security for Faithful Performance. Simultaneously with his delivery of the executed Contract, the Contractor shall furnish bonds as security for faithful performance of this Contract and for the payment of all persons performing labor on the project under Contract and furnishing materials in connection with Contract, as specified in the General Conditions included herein. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the Owner. In the case that the total bid is \$25,000. or less, the Contractor may elect not to furnish a Performance and Payment Bond; provided that it is understood and agreed that no progress or monthly payment will be made and that final payment will be made following completion and acceptance by the City of the entire project.

11. Power of Attorney. Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.
12. Laws and Regulations. The bidder's attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the Contract throughout and they will be deemed to be included in the Contract the same as though herein written out in full.
13. Obligation of Bidder. At the time of the opening of Proposals each Bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the plans and contract documents, including all addenda. The failure or omission of any Bidder to examine any form, instrument or document shall in no way relieve any Bidder from any obligation in respect of his bid.
14. Certification of Completion. A Certificate of Completion, which is included in these contract documents, will be required in the final completion and acceptance of the project as provided in the General Conditions of Agreement Item 5.06.

STATEMENT OF QUALIFICATIONS

Bidder: _____

Address: _____

Similar Projects Completed by Bidder:

1. NAME OF PROJECT: _____

OWNER: _____ ADDRESS _____

DATE STARTED _____ DATE COMPLETED: _____

APPROX. QUANTITIES OF MAJOR ITEMS: _____

VALUE OF CONTRACT: _____

2. NAME OF PROJECT: _____

OWNER: _____ ADDRESS _____

DATE STARTED _____ DATE COMPLETED: _____

APPROX. QUANTITIES OF MAJOR ITEMS: _____

VALUE OF CONTRACT: _____

3. NAME OF PROJECT: _____

OWNER: _____ ADDRESS _____

DATE STARTED _____ DATE COMPLETED: _____

APPROX. QUANTITIES OF MAJOR ITEMS: _____

VALUE OF CONTRACT: _____

4. OTHER PROJECT REFERENCES: _____

THIS FORM MUST BE INCLUDED WITH YOUR SEALED BID

**CITY OF LONGVIEW
PUBLIC WORKS DEPARTMENT**

CERTIFICATE OF FINAL COMPLETION OF:

2017 H.M.A.C HOT IN-PLACE RECYCLING

CONTRACT DATED: _____

STATE OF _____

COUNTY OF _____ }

Before me, the undersigned authority, a Notary Public in and for _____ County, _____, on this day personally appeared _____ who, being by me duly sworn on his oath, says that he is/represents _____, the contractor who has performed a contract with the City of Longview for the construction of the work described above, and is duly authorized to make this affidavit; that he has personally examined the work described above as required by the specifications of the City of Longview attached to the contract; that said work and all items thereof have been completed and all known defects made good; that thereof have been completed and all known defects made good; that all surplus material, refuse, dirt and rubbish have been cleaned up, removed and disposed of; that all parts of the work are in a neat, tidy, finished condition and ready in all respects for acceptance by the City; that all the required work has been performed in accordance with the specifications, that rates of pay for all labor employed on said work have not been below the minimum set out in Labor Classification and Minimum Wage Scale in said Specifications and that within the knowledge of affiant all just bills for labor and material and for the rental or use of any equipment or apparatus used in, on, or in connection with the work have been paid in full by the Contractor.

Sworn to and subscribed before me this _____ day of _____, 2017.

Notary Public, _____

This is to certify that I have thoroughly inspected the work performed by the above named contractor on the above described contract and find all things in accordance with the plans and specifications governing this work.

Inspector

Project Engineer

Mounted.....\$ 22.05
 Front End Loader , over 3
 cy.....\$ 12.33
 Front End Loader, 3 cy or
 less.....\$ 13.40
 Loader/Backhoe.....\$ 12.97
 Mechanic.....\$ 17.47
 Milling Machine.....\$ 12.22
 Motor Grader, Fine Grade...\$ 16.88
 Motor Grader, Rough.....\$ 15.83
 Pavement Marking Machine...\$ 13.10
 Roller, Asphalt.....\$ 11.96
 Roller, Other.....\$ 10.44
 Scraper.....\$ 10.85
 Spreader Box.....\$ 13.12

Servicer.....\$ 14.11

Steel Worker (Reinforcing).....\$ 17.53

TRUCK DRIVER

Lowboy-Float.....\$ 13.41
 Off-Road Hauler.....\$ 10.08
 Single Axle.....\$ 10.75
 Single or Tandem Axle Dump..\$ 11.95
 Tandem Axle Tractor w/Semi
 Trailer.....\$ 12.50

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

=====

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

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

The body of each wage determination lists the classification 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.

=====

END OF GENERAL DECISION

Liquidated Damages Calculation

PROJECT 2017 H.M.A.C. HOT IN-PLACE RECYCLING

C.I.P. PROJECT NO. _____	PROJECT MANAGER <u>Kevin Chumbley</u>
CONTRACT NO. _____	PROJECT SPONSOR _____
PREPARED BY <u>Kevin Chumbley</u>	DATE <u>28-Dec-16</u>

ON-SITE PROJECT INSPECTION (CITY FORCES)

Engineer/Architect	<u>4</u> hr/wk @ <u>\$50.00</u> /hr = <u>\$200.00</u> /wk (÷7) = <u>\$28.57</u> /day
Supervising Inspector	<u>12</u> hr/wk @ <u>\$32.00</u> /hr = <u>\$384.00</u> /wk (÷7) = <u>\$54.86</u> /day
Inspector	<u>40</u> hr/wk @ <u>\$25.00</u> /hr = <u>\$1,000.00</u> /wk (÷7) = <u>\$142.86</u> /day
Sub-Total =	<u>\$226.29</u> /day
Overhead: _____ % of Sub-Total	= <u>\$226.29</u> /day

Overtime (over 40 Hours):

Supervising Inspector	<u>0</u> hr/wk @ <u>\$0.00</u> /hr = <u>\$0.00</u> /wk (÷7) = <u>\$0.00</u> /day
Inspector	<u>0</u> hr/wk @ <u>\$0.00</u> /hr = <u>\$0.00</u> /wk (÷7) = <u>\$0.00</u> /day
Sub-Total =	<u>\$0.00</u> /day
Overhead: <u>.00</u> % of Sub-Total	= <u>\$0.00</u> /day

Consulting Services:

Engineer/Architect (Private Sector)	<u>0</u> hr/wk @ <u>\$0.00</u> /hr = <u>\$0.00</u> /wk (÷7) = <u>\$0.00</u> /day
Technician (Private Sector)	<u>0</u> hr/wk @ <u>\$0.00</u> /hr = <u>\$0.00</u> /wk (÷7) = <u>\$0.00</u> /day

Project Management

Project Manager (City)	<u>6</u> hr/wk @ <u>\$50.00</u> /hr = <u>\$300.00</u> /wk (÷7) = <u>\$42.86</u> /day
Technician (City)	<u>4</u> hr/wk @ <u>\$30.00</u> /hr = <u>\$120.00</u> /wk (÷7) = <u>\$17.14</u> /day
Sub-Total =	<u>\$60.00</u> /day
Overhead: <u>.00</u> % of Sub-Total	= <u>\$60.00</u> /day

INTEREST ON MONEY PAID TO THE CONTRACTOR, BUT NOT USABLE

Assuming 80% paid @ completion date:

Construction Cost	<u>\$500,000.00</u>
Total Paid (80%)	<u>\$400,000.00</u>
Daily Interest @ 0.0110 % of Total Paid: (or <u>4</u> % annual interest rate):	= <u>\$44.00</u> /day
Loss of Revenue for Revenue Producing Projects	= <u>\$0.00</u> /day
Loss of Capital Recovery Fees	= <u>\$0.00</u> /day
Actual Expenses Incurred	= <u>\$0.00</u> /day
Equipment Rental	= <u>\$0.00</u> /day
Space Rental	= <u>\$0.00</u> /day
Total per Calendar Day	<u>\$330.29</u>
USE	<u>\$330.00</u>

PROPOSAL

CITY OF LONGVIEW
PUBLIC WORKS SERVICE CENTER
933 MOBILE DRIVE
LONGVIEW, TX 75604
"2017 H.M.A.C HOT IN-PLACE RECYCLING"
2:00 P.M., _____, 2017

Proposal of _____,
(hereinafter called "Bidder"), a corporation, organized and existing
under the laws of the State of _____ a partnership, or an
individual doing business as _____ (strike out
inapplicable terms).

TO THE CITY OF LONGVIEW, TEXAS (OWNER):

The undersigned bidder, in response to the Notice to Bidders for the construction of the above project and in conformance with the Information for Bidders; having examined the plans, specifications, related documents and the site of the proposed work; being familiar with all of the conditions relating to the construction of the proposed project, including the availability of materials and labor; hereby proposes to furnish all labor, materials, supplies, equipment, and superintendence necessary for the construction of the project in accordance with the specifications and contract documents at the unit prices proposed herein.

The undersigned Bidder proposes, acknowledges, and agrees to construct the entire project, fully in accordance with the requirements of the specifications and contract documents for the prices included in this Proposal and fully understands and agrees that the various items of material, labor, and construction not specifically enumerated and provided for herein are considered subsidiary to the several items for which this direct payment is specifically provided. Furthermore, the undersigned agrees that one such subsidiary item is the protection, maintenance, repair, or replacement of all underground lines and services, all to the full satisfaction of the Owner and in a timely manner.

**CITY OF LONGVIEW, TEXAS
 PROPOSAL: "2017 H.M.A.C HOT IN-PLACE RECYCLING"
 BID PROPOSAL**

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>QTY./UNIT</u>	<u>UNIT PRICE</u>	<u>AMOUNT</u>
1.	FURNISH AND INSTALL 1'' THICK HMAC HOT IN-PLACE RECYCLING	<u>41,300</u> S.Y.	\$ _____	\$ _____
2.	INST REJUVENATED OIL	<u>2,700</u> GAL.	\$ _____	\$ _____
3.	FURNISH AND INST 1'' THICK HMAC TYPE D SURFACE COAT	<u>2,500</u> TON	\$ _____	\$ _____
4.	MILL WEDGE 1'' THICK	<u>13,500</u> S.Y.	\$ _____	\$ _____
5.	FULL MILL 1'' THICK	<u>500</u> S.Y.	\$ _____	\$ _____
6.	INST MILLED BUTT JOINT	<u>8</u> EA.	\$ _____	\$ _____
7.	ADJUST VALVE BOX TO OVERLAY GRADE	<u>6</u> EA.	\$ _____	\$ _____
8.	ADJUST MANHOLE TO OVERLAY GRADE	<u>5</u> EA.	\$ _____	\$ _____
9.	8' TURN ARROW PAV MRK (THERMO) & PREP	<u>12</u> EA.	\$ _____	\$ _____
10.	4 INCH (Y) (SOLID) PVMT MARKINGS AND PREP	<u>14,400</u> L.F.	\$ _____	\$ _____
11.	4 INCH (Y) (BRK) PVMT MARKINGS AND PREP	<u>8,100</u> L.F.	\$ _____	\$ _____
12.	4 INCH (W) (BRK) PVMT MARKINGS AND PREP	<u>10,950</u> L.F.	\$ _____	\$ _____
13.	8 INCH (W) PVMT MARKINGS (THERMO) AND PREP	<u>700</u> L.F.	\$ _____	\$ _____
14.	24 INCH (W) PVMT MARKINGS (THERMO) AND PREP	<u>250</u> L.F.	\$ _____	\$ _____
15.	8 FT ``ONLY`` PVMT MARKINGS (THERMO) AND PREP	<u>6</u> EA.	\$ _____	\$ _____

**CITY OF LONGVIEW, TEXAS
 PROPOSAL: "2017 H.M.A.C HOT IN-PLACE RECYCLING"
 BID PROPOSAL (cont.)**

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>QTY./UNIT</u>	<u>UNIT PRICE</u>	<u>AMOUNT</u>
16.	TRAFFIC CONTROL FURNISH, INSTALL, AND MAINTAIN SIGNS, BARRICADES AND TRAFFIC CONTROL per MUTCD.	100% L.S.	XXXXXX	\$ _____
17.	Miscellaneous Allowance	100% L.S.	XXXXXX	\$ 10,000.00
TOTAL BASE BID				\$ _____

NOTE: Quantities are estimates only. Streets may be added or deleted contingent upon available funding with no change in unit cost.

CONTRACTOR'S SIGNATURE: _____

The undersigned Bidder hereby agrees to begin work under the contract on or before the date to be specified in the written Notice to Proceed and to fully complete the project within 45 consecutive calendar days. The undersigned Bidder further agrees to pay, as liquidated damages, the sum of \$330 for each consecutive calendar day thereafter as provided in Item 7 of the Information for Bidders.

The undersigned Bidder has contacted, within 72 hours prior to this bid opening, the office of the City Engineer and has determined that all Addenda are as follows:

Addendum No. 1, dated _____;
 Addendum No. 2, dated _____;

The undersigned Bidder acknowledges and agrees that this Proposal shall be good and may not be withdrawn for a period of 90 calendar days after the date of this bid opening.

The undersigned Bidder is obligated to and shall show accurate unit prices as well as total amounts, and agrees that in the case of ambiguity between unit prices and total amounts or in the case of any other ambiguity the Owner may interpret an ambiguity in a manner most advantageous to the Owner or reject the bid.

The undersigned Bidder further acknowledges and agrees that a bid that has been opened may not be changed for the purpose of correcting an error in the final bid price.

The undersigned Bidder agrees to execute the Contract Agreement and furnish the required Performance Bond, Payment Bond, and Maintenance Bond within 15 calendar days from the date of acceptance of the Proposal.

The undersigned Bidder has attached and made a part of this Proposal a bid security in conformance with Item 5 of the Information for Bidders.

Submitted by:

(Signature)

(Firm)

(Name - Typed or Printed)

(Address)

(Title)

(City, County, State, Zip Code)

(Attest)

(Area Code-Telephone Number)

(Corporation Seal)

(Fax Number)

VENDOR COMPLIANCE TO STATE LAW

The 1985 Session of the Texas Legislature passed House Bill 620 relative to the award of contracts to non-resident bidders. This law provides that, in order to be awarded a contract as low bidder, non-resident bidders (out-of-state contractors whose corporate offices or principal place of business are outside of the state of Texas) bid projects for construction, improvements, supplies or services in Texas at an amount lower than the lowest Texas resident bidder by the same amount that a Texas resident bidder would be required to under bid a non-resident bidder in order to obtain a comparable contract in the state in which the non-residents principal place of business is located. The appropriate blanks in Section A must be filled out by all out-of-state or non-resident bidders in order for your bid to meet specifications. The failure of out-of-state or non-resident contractors to do so will automatically disqualify that bidder. Resident bidders must check the blank in Section B.

A. Non-resident vendors in _____ (insert state), our principal place of business, are required to be _____ percent lower than resident bidders by state law. A copy of the statute is attached.

Non-resident vendors in _____ (insert state), our principal place of business, are not required to underbid resident bidders.

B. _____ Our principal place of business or corporate offices are in the State of Texas.

BIDDER:

(company)

(address)

(city, state, zip)

By: _____
(signature)

(print name)

(title)

THIS FORM MUST BE INCLUDED WITH YOUR SEALED BID

**Certificate of Interested Parties (Form 1295)
Notice and Process**

In 2015, the Texas Legislature adopted House Bill 1295, which added Section 2252.908 of the Government Code. The law states that a governmental entity may not enter into certain contracts with a business entity unless the business entity submits a disclosure of interested parties to the governmental entity. The disclosure of interested parties will be submitted online via Form 1295 and must be submitted to the governmental entity prior to any signed contract and/or vote by the governing authority.

The Filing Process:

1. Prior to award by City Council, your firm will be required to log in to the Texas Ethics Commission, https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm and fill out the Electronic Filing Application.
2. Once submitted, the system will generate an electronic Form 1295 displaying a "Certificate Number." Your firm must print, sign and notarize Form 1295.
3. **Within seven (7) business days** from notification of pending award by the City of Longview Purchasing Department, the completed Form 1295 **must** be submitted to City of Longview.
4. Your firm will need to repeat this process and obtain a separate Form 1295 each time you enter into a new contract, renew a contract or make modification and/or amendments to a City of Longview contract.

Instructions and information are available at <https://www.ethics.state.tx.us/tec/1295-Info.htm> or you may call the Texas Ethics Commission at (512) 463-5800.

BY SUBMITTING A BID YOUR FIRM AGREES TO ADHERE TO HB 1295 REFERENCED ABOVE

Please Note: No action required until notification of potential award by the City of Longview Purchasing Department.

Exhibit A: Instructions for House Bill 1295

This form must be filled out before a recommendation to council for award of a contract can be made.

Since City of Longview is a governmental entity, we are required by law to have you fill out Form 1295 on line at the web address listed below. I have attached a copy of what the form will look like when you access it online. Enter your business name, the agency/entity will be City of Longview, and Contract ID will be the bid # and description of the Bid, which is 001-2017 Recycle Overlay. I have included a definition of interested parties:

Interested Party means a person who has controlling interest in a business entity with whom a governmental entity or state agency contracts or who actively participates in facilitating the contract or negotiating the terms of the contract, including a broker, intermediary, adviser, or attorney for the business entity.

Intermediary for purposes of this rule, means, a person who actively participates in the facilitation of the contract or negotiating the contract, including a broker, adviser, attorney or representative of or agent for the business entity who:

1. receives compensation from the business entity for the person's participation;
2. Communicates directly with the governmental entity or state agency on behalf of the business entity regarding the contract; and
3. Is not an employee of the business entity.

Once you have filled out the form online, the system will generate a form showing a certificate number. Please print this form, sign it and have it notarized. Once it is notarized, please send it to me. I am required by law to keep this certificate on file. Please call me at 903-237-1324 if you have any questions.

Once we have this form, the City can make a recommendation to City Council to award this contract.

Certificate of Interested Parties (Form 1295)

In 2015, the Texas Legislature adopted House Bill 1295, which added Section 2252.908 of the Government Code. The law states that a government entity may not enter into certain contracts with a business entity unless the business entity submits a disclosure of interested parties to the government entity. The disclosure of interested parties will be submitted online via Form 1295 and must be submitted to the governmental entity prior to any signed contract and/or vote by the governing authority.

The Filing Process:

1. **Since your firm was awarded a contract with City of Longview your firm is required to log in to the Texas Ethics Commission, https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm and fill out the Electronic Filing Application.**
2. Once submitted, the system will generate an electronic Form 1295 displaying a "Certificate Number." Your firm must print, sign and notarize Form 1295.
3. **As soon as possible** the completed Form 1295 **must** be submitted to City of Longview.
4. Your firm will need to repeat this process and obtain a separate Form 1295 each time you enter into a new contract, renew a contract or make modification and/or amendments to a City of Longview contract.

Instructions and information are available at <https://www.ethics.state.tx.us/tec/1295-Info.htm> or you may call the Texas Ethics Commission at (512) 463-5800.

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

OFFICE USE ONLY

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

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

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

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

4 Name of Interested Party	City, State, Country (place of business)	Nature of Interest (check applicable)	
		Controlling	Intermediary
<p style="font-size: 24px; color: blue; opacity: 0.5;">TO BE COMPLETED BY SUCCESSFUL BIDDER</p>			

5 Check only if there is NO Interested Party.

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

 Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

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

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

ADD ADDITIONAL PAGES AS NECESSARY

STATEMENT OF MATERIALS AND SERVICES

City of Longview

Project Name: 2017 H.M.A.C HOT IN-PLACE RECYCLING

Total Materials Cost: \$ _____

Total Service Cost: \$ _____

TOTAL CONTRACT PRICE: \$ _____

Note: The total materials cost plus the total services cost must equal the amount shown of the total contract price.

STANDARD FORM OF AGREEMENT

Approved as to Legal Form by
City of Longview Legal Counsel

STATE OF TEXAS }
COUNTY OF GREGG }

THIS AGREEMENT, made and entered into this _____ day of _____, A.D. 2017, by and between the City of Longview of the County of Gregg and State of Texas, acting through its City Manager, thereunto duly authorized so to do, Party of the First Part, hereinafter termed OWNER, and _____ of the City of _____, County of _____ and State of _____, Party of the Second Part, hereinafter termed CONTRACTOR.

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the Party of the First Part (OWNER), and under the conditions expressed in the bond bearing even date herewith, the said Party of the Second Part (CONTRACTOR), hereby agrees with the said Party of the First Part (OWNER) to commence and complete the construction of certain improvements described as follows:

2017 H.M.A.C HOT IN-PLACE RECYCLING

and all extra work in connection therewith, under the terms as stated in this Standard Form of Agreement; all of the documents attached to this Standard Form of Agreement; all Plans, Specifications and drawings for the 2017 HMAc Hot In-Place Recycling, as prepared by the OWNER's engineer (herein entitled "ENGINEER"); and all printed or written explanatory materials of said Plans, Specifications and drawings. The CONTRACTOR hereby agrees with the OWNER that the CONTRACTOR shall commence and complete all such construction and work at the CONTRACTOR's own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said construction and work.

The documents that are attached to and for all purposes made part of this Standard Form of Agreement include the Advertisement to Bidders, Notice to Bidders, Information for Bidders, Statement of Qualifications, Certificate of Final Completion, Wage Rates, Liquidated Damages Calculation, CONTRACTOR's Proposal, Vendor Compliance to State Law, Statement of Materials, Bid Bond, Certificate of Insurance, Performance Bond, Payment Bond, Maintenance Bond, General Conditions of Agreement, Special Conditions of Agreement and Technical Specifications. This agreement shall also include all Plans, Specifications and Drawings for the 2017 HMAc Hot In-Place Recycling, as prepared by the ENGINEER, and all printed or written explanatory materials of said Plans, Specifications and Drawings. This Standard Form of Agreement and the documents listed herein shall collectively evidence and constitute the entire contract between the parties hereto regarding the subject matter hereof.

The CONTRACTOR hereby agrees to commence work within ten (10) days after the date written notice to do so shall have been given to him, and to complete the same within forty-five (45) calendar days after the date of the written notice to commence work, subject to such extensions of time as are provided by the General and Special Conditions of Agreement.

CONTRACTOR's failure to timely commence work or diligently pursue completion of the work within the time limitations set out herein shall constitute a material breach of this contract. **TIME IS OF THE ESSENCE IN THE PERFORMANCE OF THIS CONTRACT.**

The OWNER agrees to pay the CONTRACTOR in current funds the price or prices shown in the Proposal, which forms a part of this contract, such payments to be subject to the terms and conditions of this contract, including without limitation the General and Special Conditions of Agreement.

Without regard to and notwithstanding any rules on conflicts of law, this contract shall be subject to and interpreted in conformance with the laws of the State of Texas, unless expressly required otherwise by federal law or regulations. Venue for any action arising hereunder shall lie exclusively in Gregg County, Texas, for actions in state court and in the Eastern District of Texas, Tyler Division, for actions in federal court.

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

Party of the First Part (OWNER)

Party of the Second Part (CONTRACTOR)

By: _____

By: _____

ATTEST:

ATTEST:

(Seal)

(Seal)

PERFORMANCE BOND

STATE OF TEXAS
COUNTY OF GREGG

KNOW ALL MEN BY THESE PRESENTS: That _____
of the City of _____ County of _____, and State
of _____, as principal, and
_____ authorized under the laws of the
State of Texas to act as surety on bonds for principals, are held and firmly bound unto the City of
Longview, Texas (Owner), in the penal sum of: _____
_____ Dollars (\$_____) for the
payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators,
executors, successors and assigns, jointly and severally, by these presents:

WHEREAS, the Principal has entered into a certain written contract with the Owner, dated
the _____ day of _____, 2017, to complete

2017 H.M.A.C HOT IN-PLACE RECYCLING

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

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the
said Principal shall faithfully perform said Contract and shall in all respects duly and faithfully
observe and perform all and singular the covenants, conditions and agreements in and by said
contract agreed and covenanted by the Principal to be observed and performed, and according to the
true intent and meaning of said Contract and the Plans and Specifications hereto annexed, then this
obligation shall be void; otherwise to remain in full force and effect;

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

Surety, for value received, stipulates and agrees that no change, extension of time, alteration
or addition to the terms of the contract, or to the work performed thereunder, or the plans,
specifications, or drawings accompanying the same, shall in anywise 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.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____, 2017.

Principal

Surety

By _____

By _____

Title _____

Title _____

Address _____

Address _____

The name and address of the Resident Agent of Surety is: _____

PAYMENT BOND

STATE OF TEXAS
COUNTY OF GREGG

KNOW ALL MEN BY THESE PRESENTS: That _____
of the City of _____ County of _____, and
State of _____, as principal, and
_____ authorized under the laws of the State of Texas to act as
surety on bonds for principals, are held and firmly bound unto the City of Longview, Texas (Owner),
in the penal sum of: _____
_____ Dollars (\$ _____)
for the payment whereof, the said Principal and Surety bind themselves, and their heirs,
administrators, executors, successors and assigns, jointly and severally, by these presents:

WHEREAS, the Principal has entered into a certain written contract with the Owner, dated
the _____ day of _____, 2017, to construct

2017 H.M.A.C HOT IN-PLACE RECYCLING

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

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

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

Surety, for value received, stipulates and agrees that no change, extension of time, alteration
or addition to the terms of the contract, or to the work performed thereunder, or the plans,
specifications, or drawings accompanying the same, shall in anywise 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.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____, 2017.

Principal

Surety

By _____

By _____

Title _____

Title _____

Address _____

Address _____

The name and address of the Resident Agent of Surety is: _____

ONE-YEAR MAINTENANCE BOND

STATE OF TEXAS §

COUNTY OF GREGG §

KNOW ALL MEN BY THESE PRESENTS:

That we, _____
as Principal, hereinafter called "Contractor", and the other subscriber hereto as Surety, do hereby
acknowledge ourselves to be held and firmly bound to the City of Longview, a municipal
corporation, in the sum of _____
DOLLARS (\$ _____)
for the payment of which sum well and truly to be made to the City of Longview, and its successors,
the said Contractor and Surety do bind themselves, their successors and assigns jointly and severally.
The conditions of this obligation are such that:

WHEREAS, the said Contractor has entered into a contract in writing with the City of
Longview, Texas, dated of even date herewith, for completion of

2017 H.M.A.C. HOT IN-PLACE RECYCLING

all of such work to be done as set out in full in said contract and the plans and specifications therein
referred to.

NOW, THEREFORE, if the said Contractor shall repair, replace and restore any and all
defects in or damages to said construction, occasioned by, and resulting within one (1) year from and
after the day of the acceptance of said work by said City of Longview from defects in materials
furnished by, or workmanship of the Contractor, in performing the work covered by said contract,
then this obligation shall become null and void, and shall be of no further force and effect;
otherwise, the same is to remain in full force and effect.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument on the respective dates written below their signatures.

ATTEST/SEAL: (if a corporation)
WITNESS: (if not a corporation)

(Principal)

Name _____
Title _____

Name _____
Title _____
Date _____

(Full Name of Surety)

ATTEST/WITNESS:

Name _____
Title _____

Name _____
Title _____
Date _____

**TABLE OF CONTENTS
FOR
GENERAL CONDITIONS OF AGREEMENT**

		<u>Page</u>
1. Definition of Terms		
1.01	Owner, Contractor and Engineer	G-3
1.02	Contract Documents.....	G-3
1.03	Sub-Contractor	G-3
1.04	Written Notice.....	G-3
1.05	Work	G-3
1.06	Extra Work.....	G-3
1.07	Working Day.....	G-4
1.08	Calendar Day	G-4
1.09	Substantially Completed.....	G-4
2. Responsibilities of the Engineer and the Contractor		
2.01	Owner-Engineer Relationship.....	G-4
2.02	Professional Inspection by Engineer.....	G-4
2.03	Payments for Work	G-4
2.04	Dispute Determinations	G-4
2.05	Lines and Grades.....	G-5
2.06	Contractor’s Duty and Superintendence	G-5
2.07	Contractor’s Understanding.....	G-6
2.08	Character of Workmen.....	G-6
2.09	Contractor’s Buildings	G-6
2.10	Sanitation	G-6
2.11	Shop Drawings.....	G-6
2.12	Preliminary Approval.....	G-7
2.13	Defects and Their Remedies	G-7
2.14	Changes and Alterations	G-7
3.General Obligations and Responsibilities		
3.01	Keeping Plans and Specifications Accessible.....	G-8
3.02	Ownership of Drawings	G-8
3.03	Adequacy of Design.....	G-8
3.04	Right of Entry	G-8
3.05	Collateral Contracts	G-8
3.06	Discrepancies and Omissions	G-8
3.07	Equipment, Materials, and Construction Plans.....	G-8
3.08	Damages.....	G-8
3.09	Protection Against Accidents to Employees and the Public.....	G-9
3.10	Performance, Payment, and Maintenance Bonds	G-9
3.11	Losses from Natural Causes.....	G-9
3.12	Protection of Adjoining Property.....	G-9
3.13	Protection Against Claims of Sub-Contractors, Etc.	G-10
3.14	Protection Against Royalties or Patented Invented	G-10
3.15	Laws and Ordinances.....	G-10
3.16	Assignment and Subletting	G-10
3.17	Indemnification	G-11

3.18	Insurance	G-11
3.18.1	Certificate of Insurance	G-11

4. Prosecution and Progress

4.01	Time and Order of Completion	G-12
4.02	Extension of Time	G-12
4.03	Hindrances and Delays	G-12

5. Measurement and Payment

5.01	Quantities and Measurements	G-12
5.02	Estimated Quantities	G-13
5.03	Price of Work	G-13
5.04	Partial Payment	G-13
5.05	Use of Completed Portions	G-14
5.06	Final Completion and Acceptance	G-14
5.07	Final Payment	G-14
5.08	Payments Withheld	G-14
5.09	Delayed Payments	G-15

6. Extra Work and Claims

6.01	Change Orders	G-15
6.02	Minor Changes	G-15
6.03	Extra Work	G-15
6.04	Time of Filing Claims	G-16

7. Contractor's Timely Performance

7.01	Contractor's Obligation to Timely Perform	G-17
7.02	Owner's Immediate Remedy	G-17
7.03	Owner's Additional Remedies	G-17
7.03.1	G-17
7.03.2	G-17
7.04.0	G-18

GENERAL CONDITIONS OF AGREEMENT

1. DEFINITIONS OF TERMS

1.01 OWNER, CONTRACTOR AND ENGINEER. The OWNER, the CONTRACTOR, and the ENGINEER are those persons or organizations identified as such in the Agreement and are referred to throughout the contract Documents as if singular in number and masculine in gender. The term ENGINEER means the ENGINEER or his duly authorized representative. The ENGINEER shall be understood to be the ENGINEER of the OWNER, and nothing contained in the Contract Documents shall create any contractual or agency relationship between the ENGINEER and the CONTRACTOR.

1.02 CONTRACT DOCUMENTS. The Contract Documents shall consist of the Notice to Contractors (Advertisement), Special Conditions (Instructions to Bidders), Proposal, Signed Agreement, Performance and Payment Bonds (when required), Special Bonds (when required), General Conditions of the Agreement, Plans, Technical Specifications, and all modifications thereof incorporated in any of the documents before the execution of the agreement.

The Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all. In case of conflict between any of the Contract Documents, priority of interpretation shall be in the following order: Signed Agreement, Performance and Payment Bonds, Special Bonds (if any), Proposal, Special Conditions of Agreement, Notice to Contractors, Technical Specifications, Plans, and General Conditions of Agreement.

1.03 SUB-CONTRACTOR. The term Sub-Contractor, as employed herein, includes only those having a direct contract with the CONTRACTOR and it includes one who furnished material worked to a special design according to the plans or specifications of this work, but does not include one who merely furnished material not so worked.

1.04 WRITTEN NOTICE. Written notice shall be deemed to have been duly served if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, delivered by electronic fax, or if delivered at or sent by registered mail to the last business address known to him who gives the notice.

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

1.06 EXTRA WORK. The term "Extra Work" as used in this contract shall be understood to mean and include all work that may be required by the ENGINEER or OWNER to be done by the CONTRACTOR to accomplish any change, alteration or addition to the work shown upon the plans, or reasonably implied by the specifications, and not covered by the CONTRACTOR'S proposal, except as provided under "Changes and Alterations", herein.

1.07 WORKING DAY. A “Working Day” is defined as any day not including Saturdays, Sundays or any legal holidays, in which weather or other conditions, not under the control of the CONTRACTOR, will permit construction of the principal units of the work for a period of not less than seven (7) hours between 7:00 a.m. and 6:00 p.m.

1.08 CALENDAR DAY. “Calendar Day” is any day of the week or month, no days being excepted.

1.09 SUBSTANTIALLY COMPLETED. By the term “substantially completed” is meant that the structure has been made suitable for use or occupancy or the facility is in condition to serve its intended purpose, but still may require minor miscellaneous work and adjustment.

2. RESPONSIBILITIES OF THE ENGINEER AND THE CONTRACTOR.

2.01 OWNER-ENGINEER RELATIONSHIP. The ENGINEER will be the OWNER’S representative during construction. The duties, responsibilities and limitations of authority of the ENGINEER as the OWNER’S representative during construction are as set forth in the Contract Documents and shall not be extended or limited without written consent of the OWNER and ENGINEER. The ENGINEER will advise and consult with the OWNER, and all of OWNER’S instructions to the CONTRACTOR shall be issued through the ENGINEER.

2.02 PROFESSIONAL INSPECTION BY ENGINEER. The ENGINEER shall make periodic visits to the site to familiarize himself generally with the progress of the executed work and to determine if such work generally meets the essential performance and design features and the technical and functional engineering requirements of the Contract documents; provided and except, however, that the ENGINEER shall not be responsible for making any detailed, exhaustive, comprehensive or continuous on-site inspection of the quality or quantity of the work or be in any way responsible, directly or indirectly, for the construction means, methods, techniques, sequences, quality, procedures, programs, safety precautions or lack of same incident thereto or in connection therewith. Notwithstanding any other provision of this agreement or any other contract document, the ENGINEER shall not be in any way responsible or liable for any acts, errors, omissions, or negligence of the CONTRACTOR, any subcontractor or any of the CONTRACTOR’S or subcontractor’s agents, servants or employees or any other person, firm or corporation performing or attempting to perform any of the work.

2.03 PAYMENTS FOR WORK. The ENGINEER shall review CONTRACTOR’S applications for payment and supporting data, determine the amount owed to the CONTRACTOR and recommend to OWNER, in writing, payment to CONTRACTOR in such amounts. Such recommendation of payment of CONTRACTOR’S application for payment constitutes a representation to the OWNER of ENGINEER’S professional judgement that the work has progressed to the point indicated to the best of his knowledge, information and belief, but such recommendation of payment of an application for payment to CONTRACTOR shall not be deemed as a representation by ENGINEER that ENGINEER has made any examination to determine how or for what purpose CONTRACTOR has used the moneys paid on account of the Contract price. Further, ENGINEER’S determination of the amount owed to the CONTRACTOR and recommendation of payment shall both be advisory only and shall not be binding upon OWNER.

2.04 DISPUTE DETERMINATIONS. The ENGINEER initially shall determine all claims, disputes and other matters in question between the CONTRACTOR and the OWNER relating to

the execution or progress of the work or the interpretation of the Contract Documents and the ENGINEER'S decision shall be rendered in writing within a reasonable time.

2.05 LINES AND GRADES. Unless otherwise specified, all lines and grades shall be furnished by the ENGINEER or his representative. Whenever necessary, construction work shall be suspended to permit performance of this work, but such suspension will be as brief as practicable and the CONTRACTOR shall be allowed no extra compensation therefor. The CONTRACTOR shall give the ENGINEER ample notice of the time and place where lines and grades will be needed. All stakes, marks, etc., shall be carefully preserved by the CONTRACTOR, and in case of careless destruction or removal by him or his employees, such stakes, marks, etc., shall be replaced at the CONTRACTOR'S expense.

2.06 CONTRACTOR'S DUTY AND SUPERINTENDENCE. The CONTRACTOR shall give adequate attention to the faithful prosecution and completion of this contract and shall keep on the work, during its progress, a competent superintendent and any necessary assistants. The superintendent shall represent the CONTRACTOR in his absence and all directions given to him shall be as binding as if given to the CONTRACTOR.

The CONTRACTOR is and at all times shall remain an independent contractor, solely responsible for the manner and method of completing his work under this contract, with full power and authority to select the means, method and manner of performing such work, so long as such methods do not adversely affect the completed improvements, the OWNER and ENGINEER being interested only in the result obtained and conformity of such completed improvements to the plans, specifications and contract.

Likewise, the CONTRACTOR shall be solely responsible for the safety of himself, his employees and other persons, as well as for the protection of the safety of the improvements being erected and the property of himself or any other person, as a result of his operations hereunder. Engineering construction drawings and specifications as well as any additional information concerning the work to be performed passing from or through the ENGINEER shall not be interpreted as requiring or allowing CONTRACTOR to deviate from the plans and specifications, the intent of such drawings, specifications and any other such instructions being to define with particularity the agreement of the parties as to the work the CONTRACTOR is to perform. CONTRACTOR shall be fully and completely liable, at his own expense, for design, construction, installation and use, or non-use, of all items and methods incident to performance of the contract, and for all loss, damage or injury incident thereto, either to person or property, including, without limitation, the adequacy of all temporary supports, shoring, bracing, scaffolding, machinery or equipment, safety precautions or devices, and similar items or devices used by him during construction.

Any review of work in process, or any visit or observation during construction, or any clarification of plans and specifications, by the ENGINEER, or any agent, employee, or representative of either of them, whether through personal observation on the project site or by means of approval of shop drawings for temporary construction or construction processes, or by other means or method, is agreed by the CONTRACTOR to be for the purpose of observing the extent and nature of work completed or being performed, as measured against the drawings and specifications constituting the contract, or for the purpose of enabling CONTRACTOR to more fully understand the plans and specifications so that the completed construction work will conform thereto, and shall in no way relieve the CONTRACTOR from full and complete responsibility for the proper performance of his work on the project, including but without limitation the propriety

of means and methods of the CONTRACTOR in performing said contract, and the adequacy of any designs, plans or other facilities for accomplishing such performance. Deviation by the CONTRACTOR from plans and specifications that may have been in evidence during any such visitation or observation by the ENGINEER, or any of his representatives, whether called to the CONTRACTOR'S attention or not shall in no way relieve CONTRACTOR from his responsibility to complete all work in accordance with said plans and specifications.

2.07 CONTRACTOR'S UNDERSTANDING. It is understood and agreed that the CONTRACTOR has, by careful examination, satisfied himself as to the nature and location of the work, the conformation of the ground, the character, quality and quantity of the materials to be encountered, the character of equipment and facilities needed preliminary to and during the prosecution of the work, the general and local conditions, and all other matters which can in any way affect the work under this contract. No verbal agreement or conversation with any officer, agent or employee of the OWNER or ENGINEER either before or after the execution of this contract, shall affect or modify any of the terms or obligations herein contained.

2.08 CHARACTER OF WORKMEN. The CONTRACTOR agrees to employ only orderly and competent men, skillful in the performance of the type of work required under this contract, to do the work; and agrees that whenever the ENGINEER shall inform him in writing that any man or men on the work are, in his opinion, incompetent, unfaithful or disorderly, such man or men shall be discharged from the work and shall not again be employed on the work without the ENGINEER'S written consent.

2.9 CONTRACTOR'S BUILDINGS. The building of structures for housing men, or the erection of tents or other forms of protection, will be permitted only at such places as the ENGINEER shall direct, and the sanitary conditions of the grounds in or about such structures shall at all times be maintained in a manner satisfactory to the ENGINEER.

2.10 SANITATION. Necessary conveniences for the use of laborers on the work, properly secluded from public observation, shall be constructed and maintained by the CONTRACTOR in such manner and at such points as shall be approved by the ENGINEER, and their use shall be strictly enforced.

2.11 SHOP DRAWINGS. The CONTRACTOR shall submit to the ENGINEER, with such promptness as to cause no delay in his own work or in that of any other Contractor, four checked copies, unless otherwise specified, of all shop and/or setting drawings and schedules required for the work of the various trades, and the ENGINEER shall pass upon them with reasonable promptness, making desired corrections. The CONTRACTOR shall make any corrections required by the ENGINEER, file with him two corrected copies and furnish such other copies as may be needed. The ENGINEER'S approval of such drawings or specification, unless he has in writing called the ENGINEER'S attention to such deviations at the time of submission, nor shall it relieve him from responsibility for errors of any sort in shop drawings or schedules. It shall be the CONTRACTOR'S responsibility to fully and completely review all shop drawings to ascertain their effect on his ability to perform the required contract work in accordance with the plans and specifications and within the contract time.

Such review by the ENGINEER shall be for the sole purpose of determining the sufficiency of said drawings or schedules to result in finished improvements in conformity with the plans and specifications, and shall not relieve the CONTRACTOR of his duty as an independent contractor as previously set forth, it being expressly understood and agreed that the ENGINEER does not

assume any duty to pass upon the propriety or adequacy of such drawings or schedules, or any means or methods reflected thereby, in relation to the safety of either person or property during CONTRACTOR'S performance hereunder.

2.12 PRELIMINARY APPROVAL. The ENGINEER shall not have the power to waive the obligations of this contract for the furnishing by the CONTRACTOR of good material, and of his performing good work as herein described, and in full accordance with the plans and specifications. No failure or omission of the ENGINEER to discover, object to or condemn any defective work or material shall release the CONTRACTOR from the obligations to fully and properly perform the contract, including without limitations, the obligation to at once tear out, remove and properly replace the same at any time prior to final acceptance upon the discovery of said defective work or material; provided, however, that the ENGINEER shall, upon request of the CONTRACTOR, inspect and accept or reject any material furnished, and in event the material has been once accepted by the ENGINEER, such acceptance shall be binding on the OWNER, unless it can be clearly shown that such material furnished does not meet the specifications for this work.

Any questioned work may be ordered taken up or removed for re-examination, by the ENGINEER, prior to final acceptance, and if found not in accordance with the specifications for said work, all expense of removing, re-examination and replacement shall be borne by the CONTRACTOR, otherwise the expense thus incurred shall be allowed as EXTRA WORK, and shall be paid for by the OWNER; provided that, where inspection or approval is specifically required by the specifications prior to performance of certain work, should the CONTRACTOR proceed with such work without requesting prior inspection or approval he shall bear all expense of taking up, removing, and replacing this work if so directed by the ENGINEER.

2.13 DEFECTS AND THEIR REMEDIES. It is further agreed that if the work or any part thereof, or any material brought on the site of the work for use in the work or selected for the same, shall be deemed by the ENGINEER as unsuitable or not in conformity with the specifications, the CONTRACTOR shall, after receipt of written notice thereof from the ENGINEER, forthwith remove such material and rebuild or otherwise remedy such work so that it shall be in full accordance with this contract.

2.14 CHANGES AND ALTERATIONS. The CONTRACTOR further agrees that the OWNER may make such changes and alterations as the OWNER may see fit, in the line, grade, form, dimensions, plans or materials for the work herein contemplated, or any part thereof, either before or after the beginning of the construction, without affecting the validity of this contract and the accompanying Performance, Payment, and Maintenance Bonds.

If such changes or alterations diminish the quality of the work to be done, they shall not constitute the basis for a claim for damages, or anticipated profits on the work that may be dispensed with, except as provided for unit price items under Section 5 "Measurement and Payment." If the amount of work is increased, and the work can fairly be classified under the specifications, such increase shall be paid for according to the quantity actually done and at the unit price, if any, established for such work under this contract, except as provided for unit price items under Section 5 "Measurement and Payment;" otherwise, such additional work shall be paid for as provided under Extra Work. In case the OWNER shall make such changes or alterations as shall make useless any work already done or material already furnished or used in said work, then the OWNER shall recompense the CONTRACTOR for any material or labor so used, and for any actual loss occasioned by such change, due to actual expenses incurred in preparation for the work

as originally planned.

3. GENERAL OBLIGATIONS AND RESPONSIBILITIES

3.01 KEEPING PLANS AND SPECIFICATIONS ACCESSIBLE. The ENGINEER shall furnish the CONTRACTOR with an adequate and reasonable number of copies of all plans and specifications without expense to him, and the CONTRACTOR shall keep one copy of the same constantly accessible on the work, with the latest revisions noted thereon.

3.02 OWNERSHIP OF DRAWINGS. All drawings, specifications and copies thereof furnished by the ENGINEER shall not be reused on other work, and, with the exception of the signed contract sets, are to be returned to him on request, at the completion of the work. All models are the property of the OWNER.

3.03 ADEQUACY OF DESIGN. It is understood that the OWNER believes it has employed competent engineers and designers. It is, therefore, agreed that the OWNER shall be responsible for the adequacy of the design, sufficiency of the Contract Documents, the safety of the structure and the practicability of the operations of the completed project; provided the CONTRACTOR has complied with the requirements of the said Contract Documents, all approved modifications thereof, and additions and alterations thereto approved in writing by the OWNER. The burden of proof of such compliance shall be upon the CONTRACTOR to show that he has complied with the said requirements of the Contract Documents, approved modifications thereof and all approved additions and alterations thereto.

3.04 RIGHT OF ENTRY. The OWNER reserves the right to enter the property or location on which the works herein contracted for are to be constructed or installed, by such agent or agents as he may elect, for the purpose of inspecting the work, or for the purpose of constructing or installing such collateral work as said OWNER may desire.

3.05 COLLATERAL CONTRACTS. The OWNER agrees to provide by separate contract or otherwise, all labor and material essential to the completion of the work specifically excluded from this contract, in such manner as not to delay the progress of the work, or damage said CONTRACTOR, except where such delays are specifically mentioned elsewhere in the Contract Documents.

3.06 DISCREPANCIES AND OMISSIONS. It is further agreed that it is the intent of this contract that all work must be done and all material must be furnished in accordance with the generally accepted practice, and in the event of any discrepancies between the separate contract documents, the priority of interpretation defined under "Contract Documents" shall govern. In the event that there is still any doubt as to the meaning and intent of any portion of the contract, specifications or drawings, the ENGINEER shall define which is intended to apply to the work.

3.07 EQUIPMENT, MATERIALS AND CONSTRUCTION PLANT. The CONTRACTOR shall be responsible for the care, preservation, conservation, and protection of all materials, supplies, machinery, equipment, tools, apparatus, accessories, facilities, all means of construction, and any and all parts of the work, whether the CONTRACTOR has been paid, partially paid, or not paid for such work, until the entire work is completed and accepted.

3.08 DAMAGES. In the event the OWNER is damaged in the course of the work by the act, negligence, omission, mistake or default of the CONTRACTOR, or should the CONTRACTOR

unreasonably delay the progress of the work being done by others on the job so as to cause loss for which the OWNER becomes liable, then the CONTRACTOR shall reimburse the OWNER for such loss.

3.09 PROTECTION AGAINST ACCIDENT TO EMPLOYEES AND THE PUBLIC.

The CONTRACTOR shall at all times exercise reasonable precautions for the safety of employees and others on or near the work and shall comply with all applicable provisions of Federal, State, and Municipal safety laws and building and construction codes. All machinery and equipment and other physical hazards shall be guarded in accordance with the "Manual of Accident Prevention in Construction" of the Associated General Contractors of America except where incompatible with Federal, State, or Municipal laws or regulations. The CONTRACTOR shall provide such machinery guards, safe walkways, ladders, bridges, gangplanks, and other safety devices. The safety precautions actually taken and their adequacy shall be the sole responsibility of the CONTRACTOR, acting at his discretion as an independent contractor.

3.10 PERFORMANCE, PAYMENT & MAINTENANCE BONDS. Unless otherwise specified, it is further agreed by the parties to this Contract that the CONTRACTOR will execute separate performance, payment, and maintenance bonds, each in the sum of one hundred (100) percent of the total contract price, in standard forms for this purpose, guaranteeing faithful performance of the work and the fulfillment of any guarantees required, and further guaranteeing payment to all persons supplying labor and materials or furnishing him any equipment in the execution of the contract, and it is agreed that this Contract shall not be in effect until such performance, payment, and maintenance bonds are furnished and approved by the OWNER.

Unless otherwise approved in writing by the OWNER, the surety company underwriting the bonds shall be acceptable according to the latest list of companies holding certificates of authority from the Secretary of the Treasury of the United States.

Unless otherwise specified, the cost of the premium for the performance and payment bonds shall be included in the CONTRACTOR'S proposal

3.11 LOSSES FROM NATURAL CAUSES. Unless otherwise specified, all loss or damage to the CONTRACTOR arising out of the nature of the work to be done, or from the action of the elements, or from any unforeseen circumstance in the prosecution of the same, or from unusual obstructions or difficulties which may be encountered in the prosecution of the work, shall be sustained and borne by the CONTRACTOR at his own cost and expense.

3.12 PROTECTION OF ADJOINING PROPERTY. The said CONTRACTOR shall take proper means to protect the adjacent or adjoining property or properties in any way encountered, which might be injured or seriously affected by any process of construction to be undertaken under this Agreement, from any damage or injury by reason of said process of construction; and he shall be liable for any and all claims for such damage on account of his failure to fully protect all adjoining property. The CONTRACTOR agrees to indemnify, save and hold harmless the OWNER and ENGINEER against any claim or claims for damages due to any injury to any adjacent or adjoining property, arising or growing out of the performance of the contract; but any such indemnity shall not apply to any claim of any kind arising out of the existence or character of the work.

3.13 PROTECTION AGAINST CLAIMS OF SUB-CONTRACTORS, LABORERS, MATERIALMEN AND FURNISHERS OF MACHINERY, EQUIPMENT AND SUPPLIES. The CONTRACTOR agrees that he will indemnify and save the OWNER and ENGINEER harmless from all claims growing out of the lawful demands of sub-contractors, laborers, workmen, mechanics, materialmen and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in the furtherance of the performance of this contract. When so desired by the OWNER, the CONTRACTOR shall furnish satisfactory evidence that all obligations of the nature hereinabove designated have been paid, discharged or waived. If the CONTRACTOR fails so to do, then the OWNER may at the option of the CONTRACTOR either pay directly any unpaid bills of which the OWNER has written notice, or withhold from the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to liquidate any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged, whereupon payments to the CONTRACTOR shall be resumed in full, in accordance with the terms of this contract, but in no event shall the provisions of this sentence be construed to impose any obligation upon the OWNER by either the CONTRACTOR or his Surety.

3.14 PROTECTION AGAINST ROYALTIES OR PATENTED INVENTION. The CONTRACTOR shall pay all royalties and license fees, and shall provide for the use of any design, device, material or process covered by letters patent or copyright by suitable legal agreement with the patentee or owner. The CONTRACTOR shall defend all suits or claims for infringement of any patent or copyright rights and shall indemnify and save the OWNER and ENGINEER harmless from any loss on account thereof, except that the OWNER shall defend all such suits and claims and shall be responsible for all such loss when a particular design, device, material or process or the product of a particular manufacturer or manufacturers is specified or required by the OWNER; provided, however, if choice of alternate design, device, material or process is allowed to the CONTRACTOR, then CONTRACTOR shall indemnify and save OWNER harmless from any loss on account thereof. If the material or process specified or required by the OWNER is an infringement, the CONTRACTOR shall be responsible for such loss unless he promptly gives such information to the OWNER.

3.15 LAWS AND ORDINANCES. The CONTRACTOR shall at all times observe and comply with all Federal, State and local laws, ordinances and regulations, which in any manner affect the contract or the work, and shall indemnify and save harmless the OWNER and ENGINEER against any claim arising from the violation of any such laws, ordinances, and regulations whether by the CONTRACTOR or his employees, except where such violations are called for by the provisions of the contract Documents. If the CONTRACTOR observes that the plans and specifications are at variance therewith, he shall promptly notify the ENGINEER in writing, and any necessary changes shall be adjusted as provided in the contract for changes in the work. If the CONTRACTOR performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the ENGINEER, he shall bear all costs arising therefrom. In case the OWNER is a body politic and corporate, the law from which it derives its powers, insofar as the same regulates the objects for which, or the manner in which, or the conditions under which the OWNER may enter into contract, shall be controlling, and shall be considered as part of this contract, to the same effect as though embodied herein.

3.16 ASSIGNMENT AND SUBLETTING. The CONTRACTOR further agrees that he will retain personal control and will give his personal attention to the fulfillment of this contract and that he will not assign by Power of Attorney, or otherwise, or sublet said contract without the written consent of the ENGINEER, and that no part or feature of the work will be sublet to anyone

objectionable to the ENGINEER or the OWNER. The CONTRACTOR further agrees that the subletting of any portion or feature of the work, or materials required in the performance of this contract, shall not relieve the CONTRACTOR from his full obligations to the OWNER, as provided by this Agreement.

3.17 INDEMNIFICATION. The CONTRACTOR shall defend, indemnify and hold harmless the OWNER and the ENGINEER and their respective officers, agents and employees, from and against all damages, claims, losses, demands, suits, judgments and costs, including reasonable attorneys' fees and expenses, arising out of or resulting from the performance of the work, provided that any such damages, claim, loss, demand, suit, judgment, cost or expense:

- (1) is attributable to bodily injury, sickness, disease or death or to injury to or destruction of tangible property (other than the work itself) including the loss of use resulting therefrom; and,
- (2) is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any one of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

The obligation of the CONTRACTOR under this Paragraph shall not extend to the liability of the ENGINEER, his agents or employees arising out of the preparation or approval of maps, drawings, reports, surveys, Change Orders, designs or specifications, or the giving of or the failure to give directions or instructions by the ENGINEER, his agents or employees, provided such giving or failure to give is the primary cause of the injury or damage.

3.18 INSURANCE. The CONTRACTOR at his own expense shall purchase, maintain and keep in force such insurance as will protect him from claims set for the below which may arise out of or result from the CONTRACTOR'S operations under the Contract, whether such operations be by himself or by any Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- (1) workmen's compensation claims, disability benefits and other similar employee benefit acts;
- (2) claims for damages because of bodily injury, personal injury, occupational sickness or disease, or death of his employees, and claims insured by usual bodily injury liability coverages;
- (3) claims for damages because of bodily injury, personal injury, sickness or disease, or death of any person other than his employees, and claims insured by usual bodily injury liability coverages; and
- (4) claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.

3.18.1 CERTIFICATE OF INSURANCE. Before commencing any of the work, CONTRACTOR shall file with the OWNER valid Certificates of Insurance acceptable to the OWNER and the ENGINEER. Such Certificates shall contain a provision that coverages afforded under the policies will not be canceled until at least ten days prior written notice has been given to the OWNER.

The CONTRACTOR shall also file with the OWNER valid Certificates of Insurance covering

all sub-contractors.

4. PROSECUTION AND PROGRESS

4.01 TIME AND ORDER OF COMPLETION. It shall be the responsibility of the CONTRACTOR to commence work within ten(10) days after the date of written notice to proceed, and to diligently prosecute the project to completion within the time set out herein. This responsibility to proceed diligently shall not be interpreted as OWNER'S right to dictate CONTRACTOR'S order of precedence in performance of the work; provided, however, that the order and the time of prosecution shall be such that the work shall be substantially completed as a whole and in part, in accordance with this contract, the plans and specifications, and within the time of completion designated in the Proposal; provided, also, that when the OWNER is having other work done, either by contract or by his own force, the ENGINEER may direct the time and manner of constructing the work done under this contract, so that conflict will be avoided and the construction of the various works being done for the OWNER shall be harmonized.

The CONTRACTOR shall submit, at such times as may reasonably be requested by the ENGINEER, schedules which shall show the order in which the CONTRACTOR proposes to carry on the work, with dates at which the CONTRACTOR will start the several parts of the work, and estimated dates of completion of the several parts.

4.02 EXTENSION OF TIME. Should the CONTRACTOR be delayed in the completion of the work by any act or neglect of the OWNER or ENGINEER, or of any employee of either, or by other contractors employed by the OWNER, or by changes ordered in the work, or by strikes, lockouts, fires, and unusual delays by common carriers, or unavoidable cause or causes beyond the CONTRACTOR'S control, or by any cause which the ENGINEER shall decide justifies the delay, then an extension of time shall be allowed for completing the work, sufficient to compensate for the delay, the amount of the extension to be determined by the ENGINEER, provided, however, that the CONTRACTOR shall give the ENGINEER prompt notice in writing of the cause of such delay.

4.03 HINDRANCES AND DELAYS. No claims shall be made by the CONTRACTOR for damages resulting from hindrances or delays from any cause (except where the work is stopped by order of the OWNER) during the progress of any portion of the work embraced in this contract. In case said work shall be stopped by the act of the OWNER, then such expense as in the judgment of the ENGINEER is caused by such stoppage of said work shall be paid by the OWNER to the CONTRACTOR; provided, however, that OWNER shall not be responsible for damages attributable to work stoppages by OWNER in the instance of CONTRACTOR'S failure to timely perform as set out in Paragraph 7 of these General Conditions.

5. MEASUREMENT AND PAYMENT

5.01 QUANTITIES AND MEASUREMENTS. No extra or customary measurements of any kind will be allowed, but the actual measured and/or computed length, area, solid contents, number and weight only shall be considered, unless otherwise specifically provided.

5.02 ESTIMATED QUANTITIES. This agreement, including the specifications, plans and estimate, is intended to show clearly all work to be done and material to be furnished hereunder.

where the estimated quantities are shown for the various classes of work to be done and material to be furnished under this contract, they are approximate and are to be used only as a basis for estimating the probable cost of the work and for comparing the proposals offered for the work. It is understood and agreed that the actual amount of work to be done and material to be furnished under this contract may differ somewhat from these estimates, and that where the basis for payment under this contract is the unit price method, payment shall be for the actual amount of such work done and the material furnished.

Where payment is based on the unit price method, the CONTRACTOR agrees that he will make no claim for damages, anticipated profits or otherwise on account of any differences which may be found between the quantities of work actually done, the material actually furnished under this contract and the estimated quantities contemplated and contained in the proposal; provided, however, that in case the actual quantity of any major item should become as much as 20% more than, or 20% less than the estimated or contemplated quantity for such items, than either party to this Agreement, upon demand, shall be entitled to a revised consideration upon the portion of the work above or below 20% of the estimated quantity.

A "Major Item" shall be construed to be any individual bid item incurred in the proposal that has a total cost equal to or greater than five(5) percent of the total contract cost, computed on the basis of the proposal quantities and the contract unit prices.

Any revised consideration is to be determined by agreement between the parties, otherwise by the terms of this Agreement, as provided under "Extra Work".

5.03 PRICE OF WORK. In consideration of the furnishing of all the necessary labor, equipment and material, and the completion of all work by the CONTRACTOR, and on the completion of all work and of the delivery of all material embraced in this Contract in full conformity with the specifications and stipulations herein contained, the OWNER agrees to pay the CONTRACTOR the prices set forth in the Proposal hereto attached, which has been made a part of this contract. The CONTRACTOR hereby agrees to receive such prices in full for furnishing all material and all labor required for the aforesaid work, also for all expense incurred by him, and for well and truly performing the same and the whole thereof in the manner and according to this Agreement.

5.04 PARTIAL PAYMENTS. On or before the 10th day of each month, the CONTRACTOR shall prepare and submit to the ENGINEER a statement showing as completely as practicable the total value of the work done by the CONTRACTOR up to and including the last day of the preceding month; said statement shall also include the value of all sound materials delivered on the site of the work that are to be fabricated into the work. The ENGINEER shall review said statement and recommend to the OWNER approval, modification or rejection of same.

Within 30 consecutive calendar days after approval of the aforesaid statement by the OWNER, the OWNER shall pay the CONTRACTOR the total amount of the approved statement, less 10 percent of the amount thereof, which 10 percent shall be retained until final payment, and further less all previous payments and all further sums that may be retained by the OWNER under the terms of this Agreement. It is understood, however, that in case the whole work be near to completion and some unexpected and unusual delay occurs due to no fault or neglect on the part of the CONTRACTOR, the OWNER may, upon written recommendation of the ENGINEER, pay a reasonable and equitable portion of the retained percentage to the CONTRACTOR; or the CONTRACTOR at the OWNER'S option, may be relieved of the obligation to fully complete the

work and, thereupon, the CONTRACTOR shall receive payment of the balance due him under the contract subject only to the conditions stated under “Final Payment”.

5.05 USE OF COMPLETED PORTIONS. The OWNER shall have the right to take possession of and use any completed or partially completed portions of the work, notwithstanding the time for completing the entire work or such portions may not have expired but such taking possession and use shall not be deemed an acceptance of any work not completed in accordance with the Contract Documents. If such prior use increases the cost of or delays the work, the CONTRACTOR shall be entitled to such extra compensation, or extension of time, or both, as the ENGINEER may determine.

The CONTRACTOR shall notify the ENGINEER when, in the CONTRACTOR’S opinion, the contract is “substantially completed” and when so notifying the ENGINEER, the CONTRACTOR shall furnish to the ENGINEER in writing a detailed list of unfinished work. The ENGINEER will review the CONTRACTOR’S list of unfinished work and will add thereto such items as the CONTRACTOR has failed to include. The “substantial completion” of the structure or facility shall not excuse the CONTRACTOR from performing all of the work undertaken, whether of a minor or major nature, and thereby completing the structure or facility in accordance with the Contract Documents.

5.06 FINAL COMPLETION AND ACCEPTANCE. Within ten(10) days after the CONTRACTOR has given the ENGINEER written notice that the work has been completed, or substantially completed, the ENGINEER and the OWNER shall inspect the work and within said time, if the work is found to be completed or substantially completed in accordance with the Contract Documents, the ENGINEER shall issue to the OWNER and the CONTRACTOR his Certificate of Completion, and thereupon shall place the project on the next available City Council agenda for final acceptance and approval of final payment.

5.07 FINAL PAYMENT. Upon the issuance of the Certificate of Completion, the ENGINEER shall proceed to make final measurements and prepare final statement of the value of all work performed and materials furnished under the terms of the Agreement and shall certify same to the OWNER, who shall pay to the CONTRACTOR, within 30 consecutive calendar days after formal acceptance of the completed project by the City Council, the balance due the CONTRACTOR under the terms of this Agreement, provided he has fully performed his contractual obligations under the terms of this contract; and said payment shall be come due in any event upon said performance by the CONTRACTOR. Neither the Certificate of Acceptance nor the final payment, nor any provision in the contract Documents, shall relieve the CONTRACTOR of the obligation for fulfillment of any warranty which may be required.

5.08 PAYMENTS WITHHELD. The OWNER may, on account of subsequently discovered evidence, withhold or nullify the whole or part of any certificate to such extent as may be necessary to protect himself from loss on account of:

- (a) defective work not remedied
- (b) claims filed or reasonable evidence indicating probable filing of claims
- (c) failure of the CONTRACTOR to make payments properly to subcontractors or for material or labor
- (d) damage to another contractor
- (e) reasonable doubt that the work can be completed for the unpaid balance of the contract amount
- (f) reasonable indication that the work will not be completed within the contract time

When the above grounds are removed or the CONTRACTOR provides a Surety Bond satisfactory to the OWNER, which will protect the OWNER in the amount withheld, payment shall be made for amounts withheld because of them.

5.09 DELAYED PAYMENTS. Should the OWNER fail to make payment to the CONTRACTOR of the sum named in any partial or final statement, when payment is due, then the OWNER shall pay to the CONTRACTOR, in addition to the sum shown as due by such statement, interest thereon at the rate of six(6) percent per annum, unless otherwise specified, from date due as provided under "Partial Payments" and "Final Payments", until fully paid, which shall fully liquidate any injury to the CONTRACTOR growing out of such delay in payment.

6. EXTRA WORK AND CLAIMS

6.01 CHANGE ORDERS. Without invalidating this Agreement, the OWNER may, at any time or from time to time, order additions, deletions or revisions to the work; such changes will be authorized by Change Order to be prepared by the ENGINEER for execution by the OWNER and the CONTRACTOR. The Change Order shall set forth the basis for any change in contract price, as hereinafter set forth for Extra Work, and any change in contract time which may result from the change.

In the event the CONTRACTOR shall refuse to execute a Change Order which has been prepared by the ENGINEER and executed by the OWNER, the ENGINEER may in writing instruct the CONTRACTOR to proceed with the work as set for the in the Change Order and the CONTRACTOR may make claim against the OWNER for Extra Work involved therein, as hereinafter provided.

6.02 MINOR CHANGES. The ENGINEER may authorize minor changes in the work not inconsistent with the overall intent of the Contract Documents and not involving an increase in Contract Price. If the CONTRACTOR believes that any minor change or alteration authorized by the ENGINEER involves Extra Work and entitles him to an increase in the Contract Price, the CONTRACTOR shall make written request to the ENGINEER for a written Field Order.

In such case, the CONTRACTOR by copy of his communication to the ENGINEER or otherwise in writing shall advise the OWNER of his request to the ENGINEER for a written Field Order and that the work involved may result in an increase in the Contract Price.

Any request by the CONTRACTOR for a change in Contract Price shall be made prior to beginning the work covered by the proposed change.

6.03 EXTRA WORK. It is agreed that the basis of compensation to the CONTRACTOR for work either added or deleted by a Change Order or for which a claim for Extra Work is made shall be determined by one or more of the following methods:

Method (A): by agreed unit prices; or

Method (B): by agreed lump sum; or

Method (C): if neither Method (A) nor Method (B) be agreed upon before the Extra Work is commenced, then the CONTRACTOR shall be paid the "actual field cost" of the work, plus fifteen

(15) percent.

In the event said Extra Work be performed and paid for under Method (C), then the provisions of this paragraph shall apply and the “actual field cost” is hereby defined to include the cost to the CONTRACTOR of all workmen, such as foreman, timekeepers, mechanics and laborers, and materials, supplies, teams, trucks, rentals on machinery and equipment, for the time actually employed or used on such Extra Work, plus actual transportation charges necessarily incurred, together with all power, fuel, lubricants, water and similar operating expenses, also all necessary incidental expenses incurred directly on account of such Extra Work, including Social Security, Old Age Benefits, and other payroll taxes, and, a rateable proportion of premiums on Performance, Payment, and Maintenance Bonds, Public Liability and Property Damage and Workmen’s Compensation, and all other insurance as may be required by any law or ordinance, or directed by the OWNER, or by them agreed to. The ENGINEER may direct the form in which accounts of the “actual field cost” shall be kept and the records of these accounts shall be made available to the ENGINEER. The ENGINEER or OWNER may also specify in writing, before the work commences, the method of doing the work and the type and kind of machinery and equipment to be used; otherwise these matters shall be determined by the CONTRACTOR. Unless otherwise agreed upon, the prices for the use of machinery and equipment shall be determined by using 100 percent, unless otherwise specified, of the latest schedule of Equipment Ownership Expense adopted by the Associated General Contractors of America. Where practicable the terms and prices for the use of machinery and equipment shall be incorporated in the Written Extra Work Order. The fifteen (15%) percent of the “actual field cost” to be paid the CONTRACTOR shall cover and compensate him for his profit, overhead, general superintendence and field office expense, and all other elements of cost and expense not embraced within the “actual field cost” as herein defined, save that where the CONTRACTOR’S Camp or Field Office must be maintained primarily on account of such Extra work; then the cost to maintain and operate the same shall be included in the “actual field cost”.

No claim for Extra work of any kind will be allowed unless ordered in writing by the ENGINEER. In case any orders or instructions, either oral or written, appear to the CONTRACTOR to involve Extra Work for which he should receive compensation or an adjustment in the construction time, he shall make written request to the ENGINEER for written order authorizing such Extra Work. Should a difference of opinion arise as to what does or does not constitute Extra Work, or as to the payment therefor, and the ENGINEER insists upon its performance, the CONTRACTOR shall proceed with the work after making written request for written order and shall keep an accurate account of the “actual field cost” thereof, as provided under Method (C).

6.04 TIME OF FILING CLAIMS. It is further agreed by both parties hereto that all questions of dispute or adjustment presented by the CONTRACTOR shall be in writing and filed with the ENGINEER within thirty (30) days after the ENGINEER has given any directions, order or instruction to which the CONTRACTOR desires to take exception. The ENGINEER shall reply within thirty (30) days to such written exceptions by the CONTRACTOR and render his final decision in writing. It is further agreed that final acceptance of the work by the OWNER and the acceptance by the CONTRACTOR of the final payment shall be a bar to any claims by either party, except where noted otherwise in the Contract Documents. Contractor’s failure to timely comply with the time limitations set out herein shall waive any entitlement to dispute or adjustment.

7. CONTRACTOR'S TIMELY PERFORMANCE

7.01 CONTRACTOR'S OBLIGATION TO TIMELY PERFORM. In case the CONTRACTOR should abandon or otherwise fail or refuse to commence, continue, or resume work within ten (10) days after written notification from the OWNER, or the ENGINEER, or if the CONTRACTOR fails to comply with the orders of the ENGINEER, when such orders are consistent with the Contract Documents, then, and in that case, where performance and payment bonds exist, the Sureties on these bonds shall be notified in writing and directed to complete the work, and a copy of said notice shall be delivered to the CONTRACTOR.

7.02 OWNER'S IMMEDIATE REMEDY. After receiving said notice of failure to perform the CONTRACTOR shall not remove from the work any machinery, equipment, tools, materials, or supplies then on the job, but the same, together with any materials and equipment under contract for the work, may be held for use on the work by the OWNER or the Surety on the performance bond, or another contractor in completion of the work; and the CONTRACTOR shall not receive any rental or credit therefor (except when used in connection with extra work, where credit shall be allowed as provided for under Section 6, Extra Work and Claims), it being understood that the use of such equipment and materials will ultimately reduce the cost to complete the work and be reflected in the final settlement.

7.03 OWNER'S ADDITIONAL REMEDIES. Where there is no performance bond provided or in case the Surety should fail to commence compliance with the notice of failure to perform hereinbefore provided for, within ten (10) days after service of such notice, then the OWNER may provide for completion of the work in either of the following elective manners:

7.03.1 The OWNER may thereupon employ such force of men and use such machinery, equipment, tools, materials and supplies as said OWNER may deem necessary to complete the work and charge the expense of such labor, machinery, equipment, tools, materials and supplies to said CONTRACTOR, and expense so charged shall be deducted and paid by the OWNER out of such moneys as may be due, or that may thereafter at any time become due to the CONTRACTOR under and by virtue of this Agreement. In case such expense is less than the sum which would have been payable under this contract, if the same had been completed by the CONTRACTOR, then said CONTRACTOR shall receive the difference. In case such expense is greater than the sum which would have been payable under this contract, if the same had been completed by said CONTRACTOR, then the CONTRACTOR and/or his Surety shall pay the amount of such excess to the OWNER; or

7.03.2 In the instance of CONTRACTOR'S failure to perform in the commencement of the contract, and if bids remain outstanding and enforceable from the original bid process, OWNER may award the contract to the next qualified low bidder who will accept the contract. If all bids have expired or no qualified bidder will accept the work, then the OWNER under sealed bids, after five (5) days notice published one or more times in a newspaper having general circulation in the county of the location of the work, may let the contract for the completion of the work under substantially the same terms and conditions which are provided in this contract. In case any increase in cost to the OWNER under the new contract as compared to what would have been the cost under this contract, such increase shall be charged to the CONTRACTOR and the Surety shall be and remain bound therefor. However, should the cost to complete any such new contract prove to be less than what would have been the cost to compete under this contract, the CONTRACTOR and/or his Surety shall be credited therewith.

When the work has been substantially completed, the CONTRACTOR and his Surety shall be so notified and Certificates of Completion and Acceptance, as provided in Paragraph 5.06 hereinabove, shall be issued. A complete itemized statement of the contract accounts, certified to by the ENGINEER as being correct, shall then be prepared and delivered to the CONTRACTOR and his Surety, whereupon the CONTRACTOR and/or his Surety, or the OWNER as the case may be, shall pay the balance due as reflected by said statement, within fifteen (15) days after the date of such Certificate of Completion.

In the event the statement of accounts shows that the cost to complete the work is less than that which would have been the cost to the OWNER had the work been completed by the CONTRACTOR under the terms of this contract; or when the CONTRACTOR and/or his Surety shall pay the balance shown to be due by them to the OWNER, then all machinery, equipment, tools, materials, or supplies left on the site of the work shall be turned over to the CONTRACTOR and/or his Surety. Should the cost to complete the work exceed the contract price, and the CONTRACTOR and/or his Surety fail to pay the amount due the OWNER within the time designated hereinabove, and there remains any machinery, equipment, tools, materials, or supplies on the site of the work, notice thereof, together with an itemized list of such equipment and materials, shall be mailed to the CONTRACTOR and his Surety at the respective addresses designated in this contract, provided, however, that actual written notice given in any manner will satisfy this condition. After mailing, or other giving of such notice, such property shall be held at ordinary care to protect such property. After fifteen (15) days from the date of said notice the OWNER may sell such machinery, equipment, tools, materials, or supplies and apply the net sum derived from such sale to the credit of the CONTRACTOR and his Surety. Such sale may be made at either public or private sale, with or without notice, as the OWNER may elect. The OWNER shall release any machinery, equipment, tools, materials, or supplies, which remain on the work, and belong to persons other than the CONTRACTOR or his Surety, to their proper owners. The books on all operations provided herein shall be open to the CONTRACTOR and his Surety.

7.04 The remedies set herein for CONTRACTOR'S failure to timely perform shall not be exclusive; OWNER shall be entitled to exercise any and all other remedies under this contract or available to OWNER at law or in equity, in the event of CONTRACTOR'S failure to timely perform.

SPECIAL CONDITIONS OF AGREEMENT

- SP-1. LINES AND GRADES. The construction plans include a horizontal control line (baseline) and vertical control points (bench marks). These have been established in the field and will be re-established or shown to the Contractor prior to commencing construction. After construction has started, the Contractor shall be responsible for protecting and preserving these controls. From these controls, the Contractor shall stake all alignments for the work and will be responsible for all horizontal and vertical construction staking.
- SP-2. SUPERINTENDENCE. The Contractor or his appointed Superintendent(s) shall provide proper superintendence for this entire project. Correspondence, questions concerning the project, interpretations and instructions shall be to or through the Contractor or the Superintendent. The Engineer will not in any manner supervise the Contractor's workmen or subcontractors. The Contractor or his Superintendent shall be on the job site whenever work is in progress.
- SP-3. PROJECT MAINTENANCE. The project area shall be maintained by the Contractor in a neat, passable condition. Vehicular access shall be maintained to every house and adjacent property. The Contractor shall provide a crew to maintain streets and driveways during holidays and weekends for the period of this contract.
- SP-4. EXTENSION OF TIME. The Contractor may make written request for an extension of time because of acts of God, acts of war, strikes, or unavailability of materials because of failure of the manufacturer or transporter. The Contractor shall support, by written evidence, any claim for a time extension because of any delay in receipt of material. An extension of time will not be granted for normal material delivery times, or failure of the Contractor to act properly toward the timely completion of the project.
- Upon written request, additional contract time will be granted only for the number of days that exceed the National Climatic Data Center's historical average number of days of rainfall of 0.1". Rain days shall be defined as a day with 0.1" or more of measured rainfall, as measured at the Gregg County Airport.
- SP-5. INSURANCE. The Contractor shall not commence work under this contract until he has obtained at his expense all insurance required under this section of the Special Provisions and by the Contract Documents and such insurance has been approved by the Owner, nor shall the Contractor allow any subcontractor to commence work on any subcontract until all similar insurance required of the subcontractor has been so obtained and approved. Such insurance shall remain in full force and effect on all phases of the work, whether or not the work is

occupied or utilized by the Owner, until all work under the Contract is completed and has been accepted by the Owner.

Nothing contained in the insurance requirements shall be construed as limiting the extent of the Contractor's responsibility for payment of damages resulting from his operations under the Contract.

Any insurance bearing an adequacy of performance will be maintained after completion of the project for the full guarantee period.

The Contractor shall obtain and maintain for the full period of the Contract the following types of insurance in the form, minimum limits and amounts herein specified or as may be otherwise required in the Contract Documents. The Contractor shall automatically renew any policy which expires during the performance of his Contract and notify the Owner and Engineer of such a renewal prior to expiration date.

A. Workmen's Compensation including Occupational Disease, and Employer's Liability Insurance.

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.

The contractor shall provide coverage, 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.

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

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.

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.

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

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.

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.

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 certificate of coverage to be provided to the person for whom they are providing services.

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.

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.

B. Public Liability Insurance. (Note "Indemnity" clause hereinafter). Before commencement of the work, the Contractor shall submit written evidence that he and all his subcontractors have obtained for the period of the Contract full Comprehensive General Liability Insurance coverage. This coverage shall protect the Contractor; the Owner; the Engineer, its architects and engineers; and each of their officers, agents and employees from claims for damages for bodily or personal injury, sickness or disease, including death, and from claims for damages to property, which may arise directly or indirectly out of, or in connection with the performance of work under this Contract by the Contractor, by any of his subcontractors, or by anyone directly or indirectly employed of either of them, or under the control of either of them, and the minimum amount of such insurance shall be as follows unless higher minimum amounts are otherwise required in the Contract Documents:

Public Liability Insurance in an amount not less than One Million Dollars (\$1,000,000) for damages arising out of bodily or personal injury, sickness or disease, or death of one person and subject to the same limit for each person in an amount not less than One Million Dollars (\$1,000,000) in any one occurrence; and property damage in an amount not less than One Million Dollars (\$1,000,000) for all single combined damages arising out of injury to or destruction of property of others in any one occurrence with an aggregate limit in the same amount.

The Property Damage portion of this coverage shall include explosion, collapse and underground exposure coverage. In addition, where Completed Operation Insurance coverage is applicable, such coverage will be maintained after completion and acceptance of the project for the full guarantee period.

C. Automobile Liability Insurance: Before commencement of the work, the Contractor shall submit written evidence that he and all his subcontractors have obtained Automobile Liability Insurance coverage on all self-propelled vehicles designed for travel on public roads used in connection with the Contract, whether owned, non-owned, or hired. The liability limits shall not be less than Two Hundred Fifty Thousand Dollars (\$250,000) for injury or death of one person and in an amount not less than Five Hundred Thousand Dollars (\$500,000) in any one occurrence; and Property Damage limits of not less than One Hundred Thousand Dollars (\$100,000) in any one occurrence.

D. Contractual Liability Coverage: Each and every policy for Liability Insurance carried by each Contractor and Subcontractor will include a "Contractual Liability Coverage" endorsement sufficiently broad to insure the provision titled "Indemnity" hereinafter set forth.

E. Indemnity: The Contractor shall defend, indemnify and hold harmless the Owner; the Engineer, its Engineers; and each of their officers, agents, servants, and employees; from any and all suits, actions, claims, losses or damage of any character and from all expenses incidental to the defense of such suits, actions or claims, based upon or arising out of or alleged to be based upon or arising out of (1) any injury, disease, sickness or death of any person or persons, (2) any damages to any property including in part loss of use thereof, caused by any act or omission of the Contractor, of any subcontractor of the Contractor, or by their officers, agents, servants, employees, or anyone else under the Contractor's direction and control, and arising out of, occurring in connection with, resulting from, or caused by the performance or failure of performance of any work or services called for by the Contract or from conditions created by the performance or non-performance of said work or services, but not including the sole negligence of any party herein indemnified.

F. Builders' Risk "All-Risk" Insurance: In addition to such Fire and Extended Insurance coverage which the Contractor or his subcontractors elect to carry for their own protection, the Contractor, before commencement of the work, shall effect and maintain for the life of his Contract Builders' Risk "All Risk" completed Value Insurance coverage upon the full insurable value of all portions of the project which is the subject of this Contract and subject to a loss for which Builders' Risk "All-Risk" Insurance coverage gives protection, and shall include completed work and work in progress. This coverage shall be with an insurance company or companies acceptable to the Owner.

Such insurance shall include as Additional Named Insured: The Owner; the Engineer, its architects and engineers; and any of their officers, agents,

and employees; and any other persons with an insurable interest designated by the Owner as an Additional Named Insured.

Duplicate originals of the policy of insurance required herein shall be furnished to the Engineer as provided under "Evidence of Insurance Coverage" hereinafter.

G. Evidence of Liability & Builders' Risk Insurance Coverage: Before commencement of any work, the Contractor shall submit written evidence that he and all his subcontractors have obtained the minimum insurance required by the Contract Documents. Such written evidence shall be in the form of a Certificate of Insurance executed by the Contractor's insurance carrier showing such policies in force for the specified period or by furnishing a copy of the actual policy or policies. Each policy or certificate will bear an endorsement or statement waiving right of cancellation or reduction in coverage without ten (10) days notice in writing to be delivered by registered mail to the Owner.

The Contractor shall furnish duplicate originals of Builders' Risk "All-Risk" Completed Value Insurance coverage to the Engineer, one copy of which shall be for the Owner and one copy for the Engineer.

- SP-6. WATER FOR CONSTRUCTION. The Owner will furnish a fire hydrant meter for construction water on this project. The Contractor will be responsible for paying an \$800 meter deposit before the meter will be set. In addition, the Contractor will be responsible for hiring a licensed plumber to install the backflow prevention device on the fire hydrant meter. The Contractor shall provide for all labor and equipment necessary. Such water shall be taken from the system at times, locations, and under conditions approved by the Engineer. Contractor shall notify Owner at least one week in advance of when construction water will be needed.
- SP-7. ELECTRICITY. The Contractor shall make his own arrangement for electricity.
- SP-8. EXPLOSIVES. The use of explosives will not be permitted.
- SP-9. SANITARY REQUIREMENTS. The operations of the Contractor shall be in full conformance with all of the rules and regulations of boards and bodies having jurisdiction with respect to sanitation. The Contractor shall supply safe and sufficient drinking water to all of his employees, shall obey and enforce all sanitary regulations and orders, and shall take precaution against the spread of infectious diseases. Acceptable, portable, chemical-type toilets shall be provided and maintained by the Contractor.

- SP-10. DISPOSAL OF SURPLUS MATERIALS. All surplus materials not included or incorporated in the project shall be removed from the site to the satisfaction of the Engineer.
- SP-11. SIGNS, BARRICADES, AND LIGHTING. The Contractor shall provide and erect construction signing, barricades and lighting to protect the public in connection with the work, all in accordance with the latest published provisions of the Texas Manual of Uniform Traffic Control Devices and as approved by the Engineer. The construction drawings indicate only the general signing required and do not detail the requirements for protection in connection with trenching and other construction operations.
- Existing street signs, traffic signs and all other signs within the project area shall be protected, maintained and replaced if damaged or stolen; all by the Contractor as approved by the Engineer.
- SP-12. MATERIALS AND WORKMANSHIP. All materials incorporated into this project shall be new and of first quality except as specifically provided for in the technical specifications. The workmanship shall be of the highest level as approved by the Engineer.
- SP-13. EXISTING FACILITIES. Whether shown on the plans or not, the Contractor shall be completely responsible for the protection or replacement of all facilities within the project area and in connection with the work.
- SP-14. GUARANTEE. As a part of this project, the Contractor shall guarantee all materials and workmanship and shall repair or remove and replace any defective condition as determined by the Engineer. Such guarantee shall be effective for a period of one year from the date of written acceptance by the Owner or date of final payment whichever is first. The maintenance bond shall be in full effect throughout the warranty period.
- SP-15. STATE SALES TAX. The Contractor's attention is directed to paragraph No. 3 of Ruling No. 9 by obtaining the necessary permit or permits from the State Comptroller allowing the purchase of materials for incorporation in this project without having to pay the Limited Sales, Excise and Use Tax at the time of purchase. Such bidders must submit segregated prices for the total cost of materials and total cost of services, and the successful bidder must require his sub-contractors to obtain such permits and to sign written sub-contracts in which the prices are segregated for the total cost of materials and the total cost of services. Total materials cost should not include materials which are used or consumed in performing the work, but do not become a part of the completed installation.

After the bid opening and prior to execution of contract, the low bidder will be required to provide a separation of materials costs and labor costs for the

amounts of the base bid and any alternatives. The following form shall be used to provide this information. This form shall be submitted in six(6) copies with the executed contract and such statement will become a part of the contract:

STATEMENT OF MATERIALS AND SERVICES

City of Longview

Project Name: _____

Total Materials Cost: \$ _____

Total Service Cost: \$ _____

TOTAL CONTRACT PRICE: \$ _____

Note: The total materials cost plus the total services cost must equal the amount shown of the total contract price.

SP-16. CLEANUP. The entire project site shall be left in as good or better condition as the condition at the time construction is started, all as approved by the Engineer. All cleanup shall be completed within the time specified for the project construction and liquidated damages will be applied to cleanup time in the event such is performed after the contract time has expired.

SP-17. CERTIFICATE OF INCORPORATION. In the event the contractor is a corporation, the contractor shall furnish a certificate issued by the Secretary of the State of Texas dated not more than thirty days prior to commencement of construction evidencing that the contractor is a corporation duly incorporated under the laws of the State of Texas and currently in good standing, or in the case of a corporation not incorporated under the laws of the State of Texas, the certificate shall evidence that such corporation currently holds a permit to do business in the State of Texas and it is in good standing. Such corporate contractor shall at all times pay all franchise taxes and other taxes and assessments levied against it by the State of Texas and at all times maintain its corporate status and good standing according to the laws of the State of Texas.

SP-18. ALTERNATE MATERIALS AND METHODS. Consistent with the intent and character of this project, the Contractor may request from the Engineer the substitution of materials or methods of construction which he believes will give equal results. The request shall be in writing and shall contain detailed information. The Engineer will consider such requests and shall give his answer in writing. The Engineer's judgement will be final and no reason for denial will be required except as may be offered by the Engineer. The Engineer may require additional information on which to make a judgement; in which case it shall be the entire responsibility of the Contractor to provide such information.

SP-19. EXPECTED EARNINGS SCHEDULE. At the pre-construction conference for this project, the successful bidder shall submit to the City Engineer an "Expected Earnings Schedule". This table or chart shall show the amount of payment the contractor expects to receive from the City on this project each month until the project is completed. The table can be handwritten or typed. Though the contractor shall make his best effort in estimating these payments accurately, the schedule shall be used for estimating purposes only and shall not bind the City nor the Contractor to the listed payments. Payments, as usual, will be made upon actual work performed less the appropriate retainage.

SP-20. PERFORMANCE, PAYMENT, AND MAINTENANCE BONDS. Surplus lines carriers under Article 1.14-2 of the Insurance Code are not eligible to act as sureties on performance, payment, and maintenance bonds.

SP-21. RETAINAGE. Retainage is that part of the contract payment withheld by the City to secure performance of the contract.

Retainage shall be withheld at the following rates:

A. For any contract where the total contract price estimate at the time of execution of the contract is less than \$400,000 retainage shall be 10%.

B. For any contract where the total contract price estimate at the time of execution of the contract is greater than or equal to \$400,000 retainage shall be 5%.

SP-22. MATERIAL ON HAND. Unless otherwise specified in a writing signed by the Owner prior to the bid opening for this project, the Owner will pay the Contractor for materials on hand for this project, subject to the provisions of this Contract. Such payment will be made only for materials stored on-site in a manner acceptable to the Owner. At a minimum, materials must be stored in a manner that prevents damage, theft, and vandalism. Additionally, payment will be made only for materials for which the Contractor has supplied invoices to the Engineer that substantiate the amount paid for said materials.

SP-23. INSPECTION. Contractor will be allowed to work prior to 8:00 a.m. and after 4:30 p.m. on weekdays, and may also elect to work on Saturdays. The City will provide an inspector at these times as necessary. The Contractor, however, will be required to reimburse the City of Longview for the actual hours worked by the inspector outside of the regular 8:00 a.m. to 4:30 p.m. Monday through Friday hours. Such reimbursement will be made at a rate of \$25 per hour.

SP-24 AS-BUILT DRAWINGS. The Contractor will provide the City, prior to final payment, one set of construction drawings red-lined to show any changes in actual construction.

- SP-25 FIREARMS PROHIBITED. Contractor agrees that Contractor, Contractor's officers, employees, agents, and representatives, shall not carry any firearms, including without limitation concealed handguns, while in the performance of this Contract and on City premises (including City rights-of-way, utility easements, or drainage easements) or when meeting with City officers or employees regarding this Contract. Contractor agrees that failure by Contractor to comply with this requirement shall constitute a substantial breach of this Contract, entitling City to all remedies under the law or this Contract for such breach, including without limitation the City's right to terminate this Contract for substantial nonperformance.
- SP-26 PREVAILING WAGE RATES. Contractor agrees to abide by the requirements of Texas Government Code Chapter 2258, entitled "Prevailing Wage Rates," as applicable. Contractor understands that a contractor or subcontractor subject to the requirements of that Chapter must pay the prevailing wage rates as set forth in this Contract. Any contractor or subcontractor who violates this requirement may be subject to penalties as provided in Chapter 2258, including but not limited to a penalty of \$60 for each worker employed for each calendar day or part of the day that the work is paid less than the wage rates stipulated in this Contract."
- SP-27 ALLOWANCE FOR MISCELLANEOUS EXTRA WORK: A discretionary allowance has been established in the Bid Proposal for extra work for which a method of payment, such as individual bid items, has not been established. This allowance is not intended to be used to procure payment for items specifically named as subsidiary to other bid items within the contract documents such as the subsurface conditions described in the General Provisions or Special Conditions.

Prior to initiating any item of extra work under the allowance bid item the Owner, Engineer, and Contractor shall agree as to the scope of extra work to be performed and the amount of payment to be made for the particular item of extra work under consideration. Expenditure of the allowance funds is at the sole discretion of the Owner. The allowance may be used in full or in part, as the Owner deems necessary. If no extra work is identified, and approved by the Owner, the allowance funds will not be expended.

TECHNICAL SPECIFICATIONS

2017 H.M.A.C HOT IN-PLACE RECYCLING
PROJECT SCOPE

1. GENERAL INFORMATION:

This project will provide for the repaving of existing asphaltic pavement in a simultaneous multi-step process of heating, scarifying, thoroughly remixing to the specified depth and reshaping of the old asphaltic surface, applying an asphalt recycling modifier, then placing an overlay of new asphaltic concrete pavement for the specified thickness and miscellaneous improvements upon selected City streets.

A wedge will be milled in the curb and gutter streets along the gutter lines. The wedge will be 1" deep and 5 feet to 8 feet wide. The mill depth will be measured from the curb edge.

Street terminations will be wedge milled 1.0 " over a width of 20 feet.

Some driveways may require additional work for property owners to be able to access their property without dragging of vehicle undercarriages.

All construction for this project shall be performed in accordance with the Texas Department of Transportation 1993 Standard Specifications for Construction of Highways, Streets, and Bridges, except as modified in Technical Specification Section G2 - Reference to Texas Department of Transportation Standard Specifications.

2. LIMITS ON CONCURRENT CONSTRUCTION:

The Contractor is allowed to mobilize and work upon up to one street at one time. The selection of the streets is at the discretion of the Contractor. This street must be substantially completed prior to mobilizing upon additional streets. A street will be considered substantially complete when all asphalt has been placed and temporary pavement striping / marking has been applied.

3. LIMITS ON TIME OF CONSTRUCTION PER STREET; LIMITS ON TIME OF CONSTRUCTION FOR CURB AND GUTTER WORK PER STREET; PENALTIES:

The Contractor will be required to substantially complete the overlay on any given street within twenty-one (21) calendar days from the day milling operations begin on the street. A monetary penalty of four hundred dollars (\$ 330.00) per day in excess of twenty-one days shall be deducted from the payment made for each street that is not completed within the specified time frame.

4. Not Used.

5. SEQUENCE OF CONSTRUCTION:

Unless otherwise authorized in writing, the sequence of construction shall be as follows:

- A. Erect barricades and signs
- B. Complete street repairs (patching, leveling, and/or curb and gutter repairs)
- C. Clean and fill joints (if required)
- D. Mill pavement edges
- E. Proof-roll existing pavement (if directed by Engineer)
- F. Adjust manholes and water valves
- G. Clean street
- H. Recycle and overlay operations
- I. Apply temporary pavement markings
- J. Place shoulder material (if required)
- L. De-mobilize barricades and signs

6. BARRICADES AND SIGNS:

All barricades and signs will be supplied by the Contractor and will conform to the latest edition of the Texas Manual of Uniform Traffic Control Devices (Texas MUTCD). Payment will be in accordance with the "Barricades, signs, and traffic control" pay item included in the Bid Proposal.

Closure of traffic lanes will not be allowed until all signs, barricades, and other traffic control devices required by the Texas MUTCD and Technical Specifications Section G3 and the City of Longview are in place and installed properly. It is to be expressly understood that the Contractor must maintain traffic flow on each street through the duration of the Contract and that every effort is made to allow immediate access to adjacent property owners at all driveway entrances located along the streets.

Refer to Technical Specifications Section G3 - Barricades, Signs, and Traffic Handling for additional specifications.

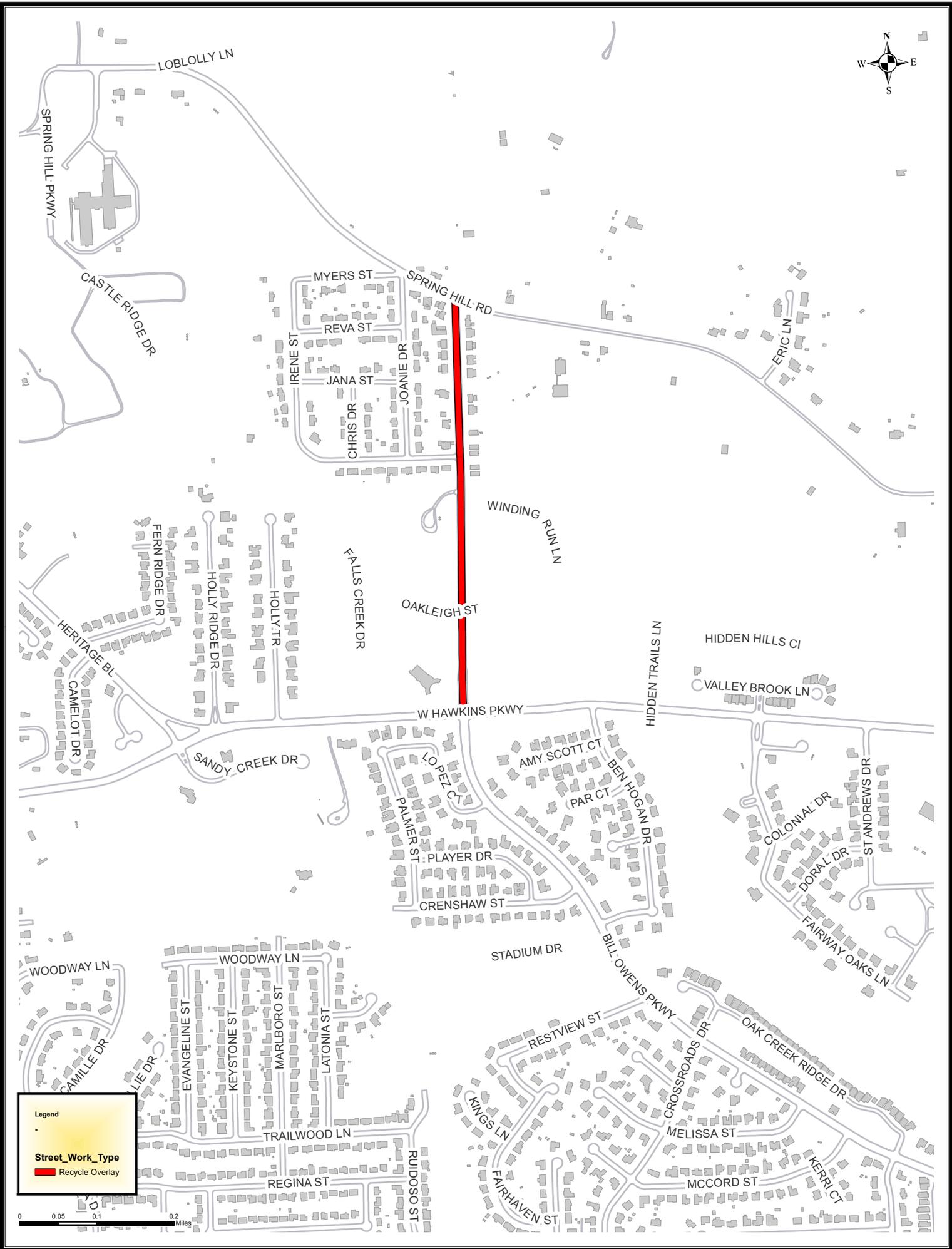
PROJECT SCOPE
EXHIBITS
2017 H.M.A.C HOT IN-PLACE RECYCLING

2017 H.M.A.C HOT IN-PLACE RECYCLING

Exhibit	Street	Limits	Length (ft)*	Area (SY)*
C	6TH ST.	ROSE ST.-SHORT ST.	231	970
C	6TH ST.	SHORT ST.-JEFFERSON ST.	355	1,459
C	6TH ST.	JEFFERSON ST.-WILSON ST.	389	1,599
C	6TH ST.	WILSON ST.-SANDIFER ST.	313	1,287
C	6TH ST.	SANDIFER ST.-SANDIFER ST.	234	962
C	6TH ST.	SANDIFER ST.-MARSHALL AV. E.	189	798
B	BILL OWENS PK.	SPRING HILL RD.-IRENE ST.	1069	5,956
B	BILL OWENS PK.	IRENE ST.-HAWKINS PK. W.	1741	9,692
C	H.G. MOSLEY PK.	MCCANN RD.-VILLAGE GREEN DR.	647	4,544
C	H.G. MOSLEY PK.	VILLAGE GREEN DR.-JUDSON RD.	2002	14,029
Total			7,170	41,296

* values provided are approximate

EXHIBIT B



Legend

Street_Work_Type

- Recycle Overlay



TECHNICAL SPECIFICATIONS
SECTION G1 - GENERAL INFORMATION

G1.1. PERMITS AND RIGHT-OF-WAY: The Owner will provide rights-of-way for the purpose of construction without cost to the Contractor by securing permits in areas of public dedication or by obtaining easements across privately owned property. It shall be the responsibility of the Contractor, five (5) days prior to the initiation of construction on easements through private property, to inform the Owner's Representative of his intent to begin construction. The Owner's representative will notify property owners of intent to begin construction. Before beginning construction in areas of public dedication, the Contractor shall inform the agency having jurisdiction in the area forty-eight (48) hours prior to initiation of the work.

G1.2. CONSTRUCTION IN PUBLIC ROADWAYS AND PRIVATE DRIVEWAYS: No public road shall be entirely closed overnight. It shall be the responsibility of the Contractor to build and maintain by-passes and detours, if necessary, and to properly light, barricade and mark all by-passes and detours that might be required on and across the road involved in the work included in this contract.

The Contractor shall make every effort to complete construction and allow immediate access to adjacent property at all driveway entrances located along the roads. Owners and tenants of improvements where access and/or entrance drives are located shall be notified at least forty-eight (48) hours prior to the time the construction will be started at their drive-ins or entrances and informed as to the length of time driveways will be closed, which period shall not exceed ten (10) hours.

The Contractor shall be responsible for all road and entrance reconstruction, and repairs and maintenance of same, for a period of one (1) year from the date of acceptance. In the event the repairs and maintenance are not made immediately to the satisfaction of the Engineer, and it becomes necessary for the Owner to make such repairs, the Contractor shall reimburse the Owner for the cost of such repairs.

Where sufficient right-of-way is not available and prior approval is obtained from the Engineer, dirt from the excavation may be temporarily placed on city streets. Where this is necessary, the Contractor shall provide proper barricading and other traffic control measures to provide at least one lane of open traffic. Where prior approval of the Engineer is obtained, the roadway may be completely closed, provided alternate routes for traffic are available and detour routings clearly marked by the Contractor.

Where construction alongside roadways is required, it shall be the Contractor's responsibility to insure that precautions are taken to avoid damage to the roadway surface. Damages to the roadway from the Contractor's construction activities shall be repaired by the Contractor to return the roadway to its original condition prior to construction.

The Contractor is responsible for traffic handling and safety in the construction area during the construction period. Signs, barricades and other necessary devices shall be furnished and maintained by the Contractor in compliance with Part IV of the Texas Manual of Uniform Traffic Control Devices (MUTCD), current edition.

The Contractor shall not begin work at a project site until signs and barricades meeting the requirements of the MUTCD and this contract are in place. Throughout the performance of the work at each project site, the Contractor shall maintain the signs and barricades in compliance with MUTCD and this contract. If the Contractor fails to make corrections to and maintain the signs and barricades in compliance with the MUTCD within a reasonable amount of time, as determined by the Engineer, the Contractor shall be considered in non-compliance at the subject project site, and no payment will be made for the traffic control bid item on that project site.

G1.3. PUBLIC UTILITIES AND OTHER PROPERTY TO BE CHANGED: In case it is necessary to change or move the property of any owner or of a public utility, such property shall not be moved or interfered with until ordered to do so by the Engineer. The right is reserved to the owner of public utilities to enter upon the limits of the project for the purpose of making such changes or repairs of their property that may be made necessary by performance of this Contract.

Any time the Contractor intends to expose, cross, or otherwise work in the area of the existing petroleum pipelines, telephone lines, water lines, etc. the Contractor shall notify the Owner's Representative five (5) days in advance. The Owner's Representative will notify the utility or pipeline owner.

G1.4. POLES. GUY WIRES. ETC.: All utility poles, guy wires, private signposts, signs and similar private obstructions which interfere with the construction of this project will be removed and replaced by the Contractor at his own expense.

G1.5. PROTECTION OF TREES. PLANTS AND SHRUBS: The Contractor shall make every effort to protect all trees, plants, and shrubs encountered during construction outside of the construction area. Where Owner-planted shrubbery must be removed for construction, it shall be stored by the Contractor and replaced in good condition. In all cases where questions arise, the Contractor shall request clarification from the Engineer.

Contractor shall not cut down, remove or trim existing trees without prior approval from the Engineer. Trees be protected from construction activity by construction of a barrier fence at a minimum of 5 ft. radius around the trunk of the trees. The barrier fence shall be constructed a minimum of 4 ft. high with polyethylene/polypropylene grid safety barricade fencing supported by steel t-posts or approved equivalent. Payment for tree protection shall be considered subsidiary to various items of work within the contract. The alignment of the storm sewer pipe may need to be slightly adjusted in the field to avoid significant root damage to the trees. Field alignment adjustments shall have prior approval of the Engineer.

G1.6. ARCHAEOLOGICAL DISCOVERIES: The Contractor may encounter unanticipated cultural or archaeological deposits during construction. If ARCHAEOLOGICAL sites or historic structures are discovered after construction operations are begun, the Contractor shall immediately cease operations in that particular area and notify the Owner. The Contractor shall take reasonable steps to protect and preserve the discoveries until they have been inspected by the Owner's Representative. The Owner will promptly coordinate with the Texas Historical Commission and any other appropriate agencies to obtain any necessary approvals or permits to enable the work to continue. The Contractor shall not resume work in the area of the discovery until authorized to do so by the Owner.

G1. 7. CONSTRUCTION STAKING The Contractor shall provide for his own horizontal and vertical construction staking as a subsidiary cost to his bid.

TECHNICAL SPECIFICATIONS
SECTION G2 - REFERENCE TO TEXAS DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS

G2.1 GENERAL: All construction in this project shall be performed in accordance with the Texas Department of Transportation (TxDOT) 1993 Standard Specifications for Construction of Highways, Streets and Bridges as amended in this section.

G2.2 STANDARD SPECIFICATIONS: TxDOT Standard Specifications applicable to this project are identified as follows:

<u>ITEM NO.</u>	<u>DESCRIPTION</u>
Item 134	Backfilling Pavement Edges
Item 162	Sodding for Erosion Control
Item 166	Fertilizer
Item 213	Rolling (Pneumatic Tire)
Item 216	Rolling (Proof)
Item 217	Rolling (Vibratory)
Item 300	Asphalts, Oils and Emulsions
Item 305	Salvaging, Hauling, and Stockpiling Reclaimable Asphalt Pavement
Item 310	Prime Coat
Item 340	Hot Mix Asphaltic Concrete Pavement
Item 352	Cleaning and/or Sealing Joints and Cracks
Item 354	Planing and/or Texturing Pavement
Item 420	Concrete Structures
Item 421	Portland Cement Concrete
Item 437	Concrete Admixtures
Item 440	Reinforcing Steel
Item 479	Adjusting Manholes and Inlets
Item 529	Concrete Curb, Gutter and Combined Curb and Gutter
Item 662	Work Zone Pavement Markings
Item 666	Reflectorized Pavement Markings
Item 672	Raised Pavement Markers
Item 678	Pavement Surface Preparation for Markings

Copies of the referenced specifications are available from TxDOT.

G2.3 MODIFICATION TO STANDARD SPECIFICATIONS: The following modifications shall govern and take precedence over the standard specifications:

- A. All Items: Measurement and payment shall only be made for those items listed in the Proposal. The unit of measurement shall be as shown in the Proposal. Items not listed in the Proposal shall be considered subsidiary to the involved item for which it pertains.

It is to be expressly understood that the measurement and payment sections of each of the items listed in Article G2.2 are to be omitted from the applicable specification when incorporating the specification in this project.

- B. All Items: In adoption of the TxDOT Standard Specifications as a part of the Technical Specifications, it is understood that any reference made to TxDOT shall be interpreted to include the City of Longview or their representative as applicable.

Other modifications are included in subsequent technical specification sections.

- C. Modification to Item 134 - Backfilling Pavement Edges:

For this project, Item 134 of the Standard Specifications, is hereby modified with respect to the clause and clarification cited below and no other clauses or requirements of this item are waived or changed hereby, except as heretofore stated in G2.3.A. and G2.3.B.:

Article 134.2(2) - Backfill Material: Backfill material for this project is to be either (Mulch Sodding) or HMAC (Type "C"), as specified in the contract.

- D. Modification to Item 216 - Rolling (Proof):

For this project, Item 216 of the Standard Specifications, is hereby modified with respect to the clause and clarification cited below and no other clauses or requirements of this item are waived or changed hereby, except as heretofore stated in G2.3.A. and G2.3.B.:

Article 216.3 - Construction Methods: Delete the first paragraph and replace it with the following:

"This work shall be done only when directed by the Engineer. The existing asphalt pavement, including spot repairs, shall be proofrolled to locate unstable areas when directed by the Engineer."

- E. Modification to Item 300 - Asphalts, Oils, and Emulsions:

For this project, Item 300 of the Standard Specifications, is hereby modified with respect to the clause and clarification cited below and no other clauses or requirements of this item are waived or changed hereby, except as heretofore stated in G2.3.A. and G2.3.B.:

Article 300.2(1) - Asphalt Cement: The asphalt cement to be used in this project shall be PG 64-22, in accordance with TxDOT Special Specification Item 3116.

Article 300.2(3) - Cutback Asphalt: The prime coat to be used in this project, if necessary, shall be Type MC-30.

Article 300.2(4) - Emulsified Asphalt: The emulsified asphalt for this project shall be Type SS-1.

F. Modification to Item 340 - Hot Mix Asthmatic Concrete Pavement:

For this project, Item 340 of the Standard Specifications, is hereby modified with respect to the clause and clarification cited below and no other clauses or requirements of this

item are waived or changed hereby, except as heretofore stated in G2.3.A. and G2.3.B.:

Article 340.2(1)(a) - Course Aggregate: Aggregate for Type "D" HMAC shall be 100% crushed. The course aggregates for the surface course shall be a minimum of Class B as published in the TxDOT Aggregate Quality Monitoring Program Source Quality Catalogue.

Article 340.2(1)(b) - Reclaimed Asphalt Pavement (RAP): RAP nor RAS will not be allowed in this project. This section of the standard specifications is to be deleted in its entirety.

Article 340.3 - Paving Mixtures: The paving mixture for this project shall be as follows:

Patches	Type "A" or Type "B"
Asphalt Shoulder Material	Type "C"
Overlay and Leveling Courses	Type "D"

Article 340.3(1) - Mixture Design: The Contractor shall submit mix designs to the Project Engineer for review prior to construction.

Article 340.6(4)(f) - Placing Construction Joints: The following section shall be added.

Transverse joints shall be papered, in accordance with this specification.

When terminating paving operations at the end of a day's work, the pavement mat shall be cut off vertically so that a full depth lift can be placed squarely against it. The paver shall be shifted into low gear as it approaches the location of the proposed transverse joint. As the hopper empties and the amount of material in the screed chamber decreases below normal operating level, the paver shall be stopped. The screed shall be raised and the paver moved out of the way. HMAC shall then be shoveled away from the end of the mat to form a clean, vertical edge. Heavy wrapping paper shall be placed along the edge. The material that was shoveled away shall be hand-placed to form a taper.

When construction is ready to resume, the taper of material shall be removed along with the paper a straightedge shall be used to check the longitudinal grade of the mat. Because the paver was running out of material as it laid the last few feet of mat, it is possible that those last few feet taper slightly (ramp down) from the specified level of the mat. If this is

the case, a new transverse edge must be cut behind the point where the ramping down begins. The vertical face of the mat shall be tack-coated. The paver shall be backed up to the edge of the mat and the screed rested on the mat surface. The screed shall be heated while it rests on the mat. The heated screed shall be raised and shims as thick as the difference between the uncompacted mat shall be positioned under its ends.

Once the paver has moved away, excess hot-mix shall be cleaned off the surface of the mat and the evenness of the joint shall be checked with a straightedge. If the joint is satisfactory, a 6 inch width of the hot-mix shall be rolled transversely and the joint shall be checked for smoothness. If the joint is satisfactory, transverse rolling shall be continued in 6 to 12 inch wide increments until the entire width of the roller is on the new hot-mix. If straightedging shows an uneven joint, the surface of the new mat must be scarified while still warm and workable. Excess material can then be removed or additional material added, and the joint rolled. During rolling, timbers shall be placed along the edges of the mat to prevent the roller from driving off the longitudinal edge and distorting it.

Article 340.6(6)(a) - Air Void Control: The following section shall be added.

Should the density of the HMAC overlay fail to meet the compaction densities specified, pay deductions will be made in conformance with Technical Specification Section G4.11.

G. Modification to Item 352 - Cleaning and/or Sealing Joints and Cracks:

For this project, Item 352 of the Standard Specifications, is hereby modified with respect to the clauses and clarifications cited below and no other clauses or requirements of this item are waived or changed hereby, except as heretofore stated in G2.3.A. and G2.3.B.:

Article 352.2 - Materials: Crack sealing material for this project, if required, shall be a rubber- asphalt crack sealing compound, in accordance with Article 300.2(8).

H. Modification to Item 354 - Planing and/or Texturing Pavement:

For this project, Item 354 of the Standard Specifications, is hereby modified with respect to the clauses and clarifications cited below and no other clauses or requirements of this item are waived or changed hereby, except as heretofore stated in G2.3.A. and G2.3.B.:

Article 354.1 - Description: Replace the last word in the section ("State") with "City". The following section shall be added:

Millings not used by the Contractor for this project are to be stockpiled at the City Yard on Timpson Street, at the direction of the City's Public Works Director.

I. Modification to Item 420 - Concrete for Structures:

For this project, Item 420 of the Standard Specifications, is hereby modified with respect to the clauses and clarifications cited below and no other clauses or requirements of this item are waived or changed hereby, except as heretofore stated in G2.3.A. and G2.3.B.:

Article 420.2(1) - Materials Concrete: Concrete used for this item shall be Class A (5 bag mix), 3000 psi (28 day) compressive strength.

J. Modification to Item 421 - Portland Cement Concrete:

For this project, Item 421 of the Standard Specifications, is hereby modified with respect to the clause and clarification cited below and no other clauses or requirements of this item are waived or changed hereby, except as heretofore stated in G2.3.A. and G2.3.B.:

Article 421.9 - Quality of Concrete: Add the following sentences:

For this project, concrete for curb and gutter shall be a Class A concrete with a minimum compressive strength of 3000 psi @ 28 days. Fly ash will not be allowed.

K. Modification to Item 440 - Reinforcing Steel:

For this project, Item 440 of the Standard Specifications, is hereby modified with respect to the clause and clarification cited below and no other clauses or requirements of this item are waived or changed hereby, except as heretofore stated in G2.3.A. and G2.3.B.:

Article 440.10 - Measurement and Payment: Delete this section and replace with the following:

Reinforcing steel will be checked for proper size and spacing as indicated on the plans, but shall not be measured for payment as a separate item and shall be considered subsidiary to the items in which it is used.

L. Modification to Item 479 - Adjusting Manholes and Inlets:

For this project, Item 479 of the Standard Specifications, is hereby modified with respect to the clause and clarification cited below and no other clauses or requirements of this item are waived or changed hereby, except as heretofore stated in G2.3.A. and G2.3.B.:

Article 479.1 - Description: Add the following paragraph to the end of the article:

"This item shall also govern for adjusting water, gas, or other valve extension box in the line of work. The Contractor shall be responsible for verifying the location of all valves and manholes. All valves and manholes are to be brought up to adjusted grades as necessary."

Article 479.3 - Construction Methods: For this project, only cast iron extension rings and boxes will be allowed. Extension rings shall be model MS-101 TB as

manufactured by Manhole Systems, Inc. or prior approved equal. Water valve box extensions are to be cast iron.

M. Modification to Item 662 - Work Zone Pavement Markings:

For this project, Item 662 of the Standard Specifications, is hereby modified with respect to the clause and clarification cited below and no other clauses or requirements of this item are waived or changed hereby, except as heretofore stated in G2.3.A. and G2.3.B.:

Article 662.3 - Materials: For this project, the Contractor shall provide removable tape work zone pavement markings or temporary raised reflective pavement markers (Contractor's option). Temporary pavement markings must be removed by the Contractor either during or subsequent to the application of permanent pavement markings.

N. Modification to Item 666 - Reflectorized Pavement Markings:

For this project, Item 666 of the Standard Specifications, is hereby modified with respect to the clause and clarification cited below and no other clauses or requirements of this item are waived or changed hereby, except as heretofore stated in G2.3.A. and G2.3.B.:

Article 666.2 - Materials: For this project, only Type I markings and glass beads shall be used.

O. Modification to Item 672 - Raised Pavement Markers:

For this project, Item 672 of the Standard Specifications, is hereby modified with respect to the clause and clarification cited below and no other clauses or requirements of this item are waived or changed hereby, except as heretofore stated in G2.3.A. and G2.3.B.:

Article 672.2 - Materials: For this project, only class B, Type I-C and Class B, Type II-A-A raised pavement markers shall be used.

P. Other modifications are included in subsequent technical specification sections.

TECHNICAL SPECIFICATIONS
SECTION G3 - BARRICADES, SIGNS, AND TRAFFIC HANDLING

- G3.1. DESCRIPTION: This Item shall consist of the construction, maintenance and removal, if required, of detours of the type and length, and to the lines, grades and typical cross sections. The work shall be done in accordance with the provisions of this specification.
- A. Prior to closing any section of the project to traffic, the Contractor shall furnish, erect, and maintain barricades, warning signs and devices, temporary suitable removable lane delineation striping and all other applicable requirements at and in the vicinity of all road and bridge construction projects at all times; both day and night during the construction period of the contract. The "Texas Manual on Uniform Traffic Control Devices for Streets and Highways" as adopted in 1980 as revised by the Federal Highway Administration in accordance with Title 23, U.S. Code, Section 109 (b), 109 (d), and 402 (1) (latest revision thereof), shall serve as a guideline for the installation and maintenance of barricades and warning devices. All of the above does not preclude the requirements of the City of Longview General Requirements and covenants.
- B. Responsibility for damage or claims: The Contractor shall hold harmless the Owner, the City of Longview, and all its representatives from all suits, actions or claims of any damages sustained by any person or property in consequence of any neglect in safeguarding the work or through the use of unacceptable materials in the construction of the improvement, or on account of any act of omission by said Contractor. Said Contractor shall not be released from said responsibility until the roadway shall have been completed and accepted, and so much of the money due the said Contractor under and by virtue of his contract may be retained by the Owner, the City of Longview may be held until such claims have been settled and suitable evidence to that effect furnished to the Owner.
- C. In areas where traffic re-alignment is required, all conflicting existing lane lines shall be obliterated and re-alignment made by use of temporary, removable lane delineation striping until construction is completed and then the temporary striping is removed and permanent striping applied in accordance with the City of Longview specifications for traffic lane striping or buttons, either non- reflectorized or reflectorized, as was the original.

Whenever temporary pavement marking is required either for re-aligning existing traffic lane striping or for new temporary locations as suitable degradable or removable lane marking material shall be used as required by the F.H.W.A. Addendum Notice N 5160.21 dated May 10, 1976, which amended the manual on

Uniform Traffic Control Devices for Streets and Highways as it relates to temporary traffic lane marking systems.

G3.2. MEASUREMENT: Barricades, signs, and traffic handling will be measured by lump sum.

G3.3. PAYMENT: Payment shall be by the lump sum per bid proposal. The work and materials as prescribed by this item, measured as provided under "Measurement", will be paid for as a percentage of the lump sum for "Barricades, Signs, and Traffic Handling". This price shall be compensation for furnishing all labor, materials, supplies, equipment, and incidentals necessary to complete the work as specified.

Payment will be made on the following basis:

- A. Payment for this item will begin on the first payable monthly construction estimate after barricades, signs, and traffic handling devices have been installed in accordance with Texas MUTCD requirements and construction has begun.
- B. Monthly payment will be made each succeeding month for this item, provided the barricades, signs, and traffic handling devices have been installed and maintained in accordance with the Texas MUTCD until the contract has been completed.
- C. Monthly payments will be based on the percentage of the streets barricaded that month. No partial payments will be made for traffic handling and barricades for incomplete sites.
- D. The quantity under this item will not exceed the total plan quantity except when additional work is added by an approved field change. No increase in quantity will be allowed for this item unless the additional quantity is included in the field change adding the additional work. When work is suspended for the convenience of the Contractor, through no fault of the City, payment for this item shall cease until work commences again.
- E. An overrun of the plan quantity for this item will not be allowed for approving designs, testing, material shortages, closed construction season, curing periods, test periods, failure to complete the work prior to payment of the amount allowed by A. and B. above nor delays caused directly or indirectly by requirements of the contract.
- F. If the Contractor fails, within the time frame established by the Engineer, to provide or properly maintain signs and barricades in compliance with the contract requirements, as determined by the Engineer, the Contractor will be considered in non-compliance with this Item and no payment will be made for the Item for the month(s) in question.

TECHNICAL SPECIFICATIONS

SECTION G4 - PAVEMENT CONSTRUCTION

G4.1. GENERAL:

This section of the specifications governs the repair of the existing street section, including patching, leveling, and / or curb and gutter repairs; crack sealing; milling; proof-rolling (if directed by Engineer); adjustment of valve and manhole covers; street cleaning; tacking; overlaying; and application of temporary pavement markings, and placing of shoulder material.

G4.2. PATCHES:

Patching has been conducted by the City prior to overlay operations. If any patching is required, please notify the owner.

G4.3. LEVELING:

Not Required.

G4.4. MILLING:

Milling is required at a minimum width of 5 feet and maximum width of 8 feet along the edges of pavement containing curb and gutter. The depth of milling will vary from a depth of 1 inch at the edge of the gutter to a depth of 0 inches at the opposite edge. Measurement of the milling will be based on the actual milling width. Pavement shall be milled to a depth such that the final surface of overlay shall be 1.0 inches below the existing edge of the gutter section. At terminations and intersections of overlay, milling shall be at 1.0 “ such that the final surface of overlay will be on grade with the existing pavement.

Full milling will be for the entire width of the street. Pavement shall be milled to a depth such that the final surface of overlay shall be 1.0 inches below the existing edge of the gutter section.

If a base material is exposed by milling operations, the Contractor shall remove loose asphalt and / or earthen material and create a clean, sharp edged depression in the base. The Contractor shall prime the excavation using Type M C-30 cutback asphalt at a rate of 0.25 gallons per square yard, and place a minimum of 2 inches of Type "A" or Type "B" HMAC. Any failures in the new overlay due to the Contractor's failure to perform these measures will be removed, patched, and fog sealed in a manner acceptable to the City and to the Engineer.

At those locations where milling operations create vehicle drag problems as determined by the Engineer, the Contractor shall place temporary and permanent asphalt transitions at the lip of the gutter edge in front of the subject driveways in a manner acceptable to the Engineer. These temporary and permanent transitions will not be paid for directly, but will be considered subsidiary to the various bid items listed in the Bid Proposal.

The millings shall be delivered to the City yard on Timpson Street where they will become the property of the City of Longview.

G4.5. Not Used:

G4.6. CLEANING AND FILLING OF CONCRETE JOINTS:

On streets designated as requiring concrete joint cleaning and filling, the Contractor shall furnish necessary equipment to remove existing joint material to a depth of 4 inches, as measured from the top of the existing concrete pavement. The joint may be blown with air, cleaned with a grader blade, or a combination of the two, or other equipment may be used as the Contractor requires. The joint shall be filled with Type "B" hot mix asphaltic concrete level to the top of the concrete pavement. In the event the joint is too narrow to accommodate Type "B" HMAC then Type "D" HMAC may be used.

G4.7. PROOF-ROLLING:

The Engineer may direct the Contractor, at the Engineer's discretion, to proof-roll the existing pavement with a loaded dump truck or 9-wheel rubber tire roller to determine weak (soft) spots in the existing pavement structure. The proof rolling shall be accomplished in accordance with TxDOT Standard Specification Item 216, as modified by these specifications. This work will not be paid for separately, but will be considered subsidiary to the various bid items in the Bid Proposal.

A 9-wheel rubber tire roller shall be made available to the Engineer at all times during construction.

G4.8. ADJUSTMENT OF WATER VALVE EXTENSION BOXES AND MANHOLE COVERS:

The Contractor shall be responsible for verifying the location of all water valves, manholes, and any other structural items in the line of work. Each location shall be identified upon the edge of the pavement in such a manner that the structural item can be located after an overlay course is placed.

The Contractor shall develop, furnish, and install steel extension rings for manholes to raise the manhole to the elevation of the new overlay. The rings shall be expandable manhole risers by **American Highway Products**. Rings shall have ¼ (one fourth) inch increments. The Contractor shall adjust existing cast iron valve extension boxes to the height of the new overlay. The construction of these adjustments shall be in accordance with the Contract Plans.

Some manholes may be discovered during construction to be of such poor condition that an extension ring is not possible, or the manhole may be undersized or oversized to fit a standard ring. In these cases, the Contractor is to remove and dispose of the existing top cone, ring, and cover and furnish and install a new top cone, ring, cover, and lid to grade to comply with city standards. A pay item is provided for this work.

G4.9. STREET CLEANING:

The gutter shall be scraped to remove built up asphaltic materials, debris, mud, soil, etc prior to the overlay operations.

The existing street shall be thoroughly cleaned a head of the lay-down machine. The Contractor shall sweep the street and remove debris, silt, sediment, grass, and any other items in the way of construction. The cleaned street shall be approved by the Project Representative prior to overlaying. Street cleaning will not be measured for payment, and will be considered subsidiary to the bid items listed in the Bid Proposal. Provide herbicide in areas with grass and weed growth.

G4.10. PAVEMENT REHABILITATION - 1 INCH HMAC HOT IN-PLACE RECYCLING AND INSTALL REJUVENATED OIL:

PART 1 – GENERAL

- I. ASPHALT RECYCLING – The Type “D” hot mix asphaltic concrete surfacing may be installed using an alternate technique. The following are the requirements:
 - A. Description: This item is a process of asphalt surface rehabilitation that consists of repaving the existing asphaltic pavement in a simultaneous multi-step process of heating, scarifying, thoroughly remixing to the specified depth and reshaping the

old asphaltic surface, applying as asphalt recycling modifier, and then placing and overlay of new asphaltic concrete pavement for the required thickness as specified.

B. Materials

1. Hot Mix Asphaltic Concrete surfacing shall be of the specified type and shall be in accordance with the Standard Specification.
2. Recycling modifier or other asphaltic material shall be of the specified type or as approved by the Engineer.

C. The machine that heats, scarifies, rejuvenates and levels must also lay the new Hot Mix. New Hot Mix must be laid within 30 seconds after scarification begins to ensure a Hot Monolithic Bond with the old pavement.

Specifications:

Property	Test Procedure	Min	Max
Viscosity, Saybolt Furol, 77° F, sec	T72	75	400
Sieve test, %	T59	-	0.1
Storage stability, 1 day, %	T59	-	1
Distillation test:	T59 Modified		
Residue by distillation, % by wt.		65	-
Oil distillate, % by volume of emulsion		-	7
Test on residue from distillation:			
Penetration, 77°F, 100g, 5 sec.	T49	300	-
Solubility in trichloroethylene, %	T44	97	-
Ductility, 77°F, 5 cm./min., cm.	T51	50	
Float test, 140°F, sec.	T50	1200	-

1. Heater, Scarifier, Repaver Unit: This machine shall be a self-contained machine specifically designed to reprocess upper layers of existing asphaltic pavements. This machine shall be as approved by the ENGINEER with due consideration being given to proven past performances of the unit of similar work. The heater-scarifier-repaver unit shall consists of at least the following:
 - a. A heating mechanism capable of heating the asphaltic concrete pavement surface to a temperature high enough to allow full depth of required scarification of the material without breaking aggregate particles; without charring the pavement; and without producing undesirable pollutants. The heating mechanism shall be so equipped that heat application shall be under an enclosed hood to prevent damage to outlying grass, shrubs, or trees.

- b. Scarifying sections shall be equipped with separate automatic height adjustments in order to clear utility manholes and/or other obstruction in the pavement surface. These sections shall be able to penetrate the surface a minimum of one inch. The machine must have sufficient power to push scarifiers through the high spots and create a leveled surface conforming to the desired finished profile of the pavement.
- c. A leveling unit capable of gathering the heated and scarified material into a windrow or otherwise mixing and leveling the material in a manner acceptable to the ENGINEER, and then distributing the material over the width being processed so as to produce a uniform cross-section.
- d. A system for adding and blending recycling modifier to be applied at a rate determined by the ENGINEER based on laboratory test on pavement samples. The application rate will be synchronized with the machine speed to provide uniform application and maintain a tolerance of less than 5% from the rate determined by the ENGINEER.
- e. A spreading and finishing mechanism capable of producing a surface that will meet the requirements of the typical cross-section and surface tests, when required. Automatic screed controls, if required, shall meet the requirements of the Item “Automatic Screed Controls for Asphaltic Concrete Spreading and Finishing Machines”.

II. CONSTRUCTION METHODS

- A. The pavement surface to be heated scarified shall be cleaned of all deleterious material by blading, brooming or other approved methods, prior to the beginning of the heater-scarification operations. It shall be the responsibility of the contractor to protect the adjacent landscape from heat damage. This protection may consist of individual shielding and/or water spray or other methods approved by the ENGINEER.
- B. The existing asphaltic pavement shall be evenly heated, scarified, and remixed to the minimum of specified depth by a continuously moving heater-scarifier-repaver unit. It shall be controlled to assure uniform heat penetration without causing differential burning of the surface. Charring of the asphalt will not be permitted. The scarified material shall be gathered by the leveling device, and spread uniformly to a minimum depth of one inch. Under no circumstances shall the scarifying penetrate into the existing flexible base course.
- C. The heated material shall have temperature in range between 225° F and 265° F as measured immediately behind the heated scarifier. The ENGINEER will determine the temperature within these limitations, and mixture shall not vary from this selected temperature more than 25° F.

- D. Recycling more modifier or other asphaltic material, if required, shall be applied during mixing and leveling operations or immediately following the leveling operation. The rate of application shall be as specified or as directed by the ENGINEER.
- E. New asphaltic concrete pavement overlay shall be placed over the leveled hot-scarified material, which shall have residual temperature of at least 190° F. Rate of placement will be specified. The new asphaltic material shall meet the requirements of Texas Department of Transportation standard specifications.
- F. H.M.A.C. shall be placed and spread using vibratory screed; and, unless otherwise directed by the ENGINEER, an automatic longitudinal screed control system shall be required.
- G. To the varying properties of the existing asphalt pavement, the following adjustments shall be made as required, as directed by the ENGINEER.
 - 1. Depth of scarification may be varied.
 - 2. Rate of recycling modifier application or other asphaltic material may be adjusted as necessary to maintain a uniform mixture.
 - 3. Rate of H.M.A.C. application (lbs. Per S.Y.) may be adjusted to maintain the design depth of combined recycled and new asphaltic concrete pavement.

PART 2 – PRODUCTS

I. GENERAL REQUIREMENTS

- A. The work under this specification will not be allowed when the air temperature is below 60° F and is falling, but it may be allowed when the air temperature is 60° F and rising. The air temperature shall be taken in the shade away from artificial heat.

II. MEASUREMENT

- A. The asphalt recycling process as described above will be measured by the square yard of area repaved to the depth shown on the specifications. The Rejuvenated Oil will be counted by the gallon.
- B. Payment. The work performed and material furnished as prescribed by these items and construction in accordance with the applicable provisions of “Measurement” above will be paid as follows:

1. The work shall be paid for in accordance with the Item “HMAC Hot In-Place Recycling” and the item “Rejuvenated Oil”. The unit price quoted for these items shall be full compensation of cleaning existing pavement, all heating and scarifying, mixing and relaying of scarified materials; for furnishing, hauling and placing material; and for all manifestations, labor, tools, equipment and incidentals necessary to complete the work.

G4.11.INSTALL 1 INCH-SURFACE COURSE-TYPE D MIX:

The following amendments to the above TxDOT’s specifications shall govern, take precedence and shall include:

Item No. 340 “Dense—Graded Hot-Mix Asphalt (Method)” (referenced):

- Under Item 340.2, Materials, A. Aggregates:
The surface aggregate classification (SAC) shall be Class B.

The Contractor shall perform the Los Angeles abrasion, magnesium sulfate soundness, Micro-Deval and all other aggregate quality tests listed in Table 1.

RAP nor RAS will not be allowed, for use, in surface course Type “D” mix.
- Under Item 340.2, Materials, D. Asphalt Binder:
Furnish performance-graded PG 64-22 for H.M.A.C. surface course, level up and pavement/base repair or replacement.
- Under Item 340.4, Construction, A. Mixture Design:
The contractor shall furnish mixture design of the proposed hot mix asphalt, at or before the pre-construction meeting. The Contractor shall submit to the Engineer a mixture design prepared by a AASHTO accredited laboratory, for the materials to be used in the project. Using the typical weight design example in Tex-204-F, Part I, the mixture design shall meet the requirements contained in Tables 1 through Table 5 of Item 340. The Indirect Tensile-Dry (Tex-226-F) and the Hamburg Wheel-tracking (Tex-242-F) tests shall be waived.

The mixture design report must be certified and signed by a Level II Specialist and submitted on TxDOT’s software forms.

The Engineer may verify the mixture design at optimum asphalt content.
- Under Item 340.4, Construction, B. Job-Mix Formula Approval:
The Contractor will perform the Boil Test (Tex-530-C).
- Under Item 340.4, Construction, J. Ride Quality:
The Ride Quality Surface Type A test (10-foot straight edge) shall be measured.

- Under Item 340.5, Measurement:
Hot mix will be measured by the ton of the composite hot mix, which includes asphalt, aggregate and additives.
- Under Item 340.6, Payment:
The work performed and materials furnished in accordance with this Item and measured as provide under “Measurement”, will be paid for at the unit price bid per ton, for “Dense-Graded Hot Mix Asphalt (Method)”. Payment will also be based on average thickness, average density and surface quality as specified:

A. Requirements: All rolling compaction shall be completed before the mixture temperature drops below 175F per TxDOT Standard Specification 340.6(6)(c).

The paving surface shall be inspected by the Engineer immediately prior to rolling operations. The pavement surface must exhibit tightness, cohesiveness, flatness, and homogeneity. Failures in the surface due to segregation or other reasons must be removed and patched at the Contractor's expense. Visible patches from repairs of slippages or other problem areas will not be acceptable. Fog sealing or microsealing must be placed over the entire street section in order to eliminate the visible patches. This work shall be conducted at no cost to the City.

Failures in the pavement will be monitored over the one-year warranty period of the project, and any and all failures that occur must be addressed in the above-described manner.

The Engineer will require, as a minimum, one (1) sample of HMAC from each day's production from each asphalt plant. Laboratory tests may be conducted on each sample to include, but not be limited to, extraction / gradation tests; maximum theoretical (Rice) specific gravity tests; laboratory density tests; and HVEEM stability tests. The Contractor will be required to furnish the Owner a testing laboratory at the asphalt plant for the use of the Owner and the Engineer. The laboratory shall be equipped to perform the tests required in these specifications. All test equipment at the laboratory shall be calibrated and certified in accordance with applicable TxDOT Test Procedures or the manufacturer's recommendations. The Engineer will verify that the laboratory meets these requirements prior to the production of hot mix asphalt.

The overlay course will be randomly cored as directed by the Engineer. The Engineer requires, as a minimum, one (1) set of three (3) asphalt cores on each street for verification of in-place density corresponding to each set of HMAC laboratory tests. A minimum of one (1) set of cores shall be taken for each day's HMAC production. The Contractor shall fill the boreholes with HMAC.

Contractor shall be responsible for coring and patching.

Contractor shall be responsible for establishing the rolling pattern.

Payment of the overlay course shall be made on a street-by-street basis in accordance with the following schedule. Partial payments will not be made for incomplete streets.

B. Average thickness. The Inspectors will continuously monitor the thickness of the mat during laydown operations; however, it will be the Contractor's responsibility to assure the required post-compaction thickness of 2.0 inches. The average thickness of the cores shall establish the thickness of the street overlay. Consideration will be given to cores that exhibit an unanticipated thickness of less than the design thickness. Probing will be conducted around 'thin' cores to determine if an unusually thin core is the result of an apparent 'high spot' in the existing pavement. If a 'thin' core is determined to be the result of an unusually high spot in the existing paving, that core will not be considered in the calculation of the average thickness.

Payment of the overlay course based upon the average thickness shall be as follows:

AVERAGE THICKNESS PAYMENT SCHEDULE:

<u>Average thickness:</u>	<u>Payment (percentage of Bid Price)</u>
2 .0 inches or greater	100%
1.75 inches to 2.0 inches	75%
1.50 inches to 1 .75 inches	50%

An average thickness of less than 1.5 inches is unacceptable. If this occurs, an additional 1.0 inch thick lift of the entire street will be required. This lift is necessary for aesthetics and continuity of the structural riding surface. Following the second lift, the Contractor shall be paid at 100 % of the Bid Price. Under no circumstances shall the Contractor be compensated above and beyond 100 % of the Bid Price in this situation.

C. Mat density. Cores will be tested in accordance with TxDOT testing requirements to obtain the average density of the completed mat. Density will be based upon maximum theoretical density. Failure to obtain 91.0% or greater of the maximum theoretical density of the mix on a street-by-street basis will result in deduction of payment to the Contractor in accordance with the following schedules. Streets with an average mat density less than 87.0% of maximum theoretical density shall be considered unacceptable and a 1" thick lift of Type "D" HMAC shall be overlaid on top of this course at no direct pay, or, at the Contractor's option, the unacceptable lift may be removed and replaced.

MAT DENSITY PAYMENT SCHEDULE:

<u>Percent of maximum theoretical density:</u>	<u>Payment (percentage of Bid Price)</u>
91.0% or greater	100%
90.0% to 90.9%	95%
89.0% to 89.9%	90%
88.0% to 88.9%	85%
87.0% to 87.9%	80%

G4.12. APPLICATION OF TEMPORARY PAVEMENT MARKINGS:

On streets with pavement markings, the Contractor shall furnish, install, and remove temporary raised reflective work zone pavement markers (tabs) upon the pavement in accordance with TxDOT Standard Specification Item 662. Contractor shall videotape street marking prior to the start of the work. This work shall be considered subsidiary to the sign and traffic control unit price bid.

TECHNICAL SPECIFICATIONS
SECTION G5 - SAWCUT EXISTING PAVEMENT

G5.1 DESCRIPTION: This item shall govern for the sawcutting of existing hot mix asphalt concrete or reinforced concrete pavement at the transition of new and existing pavement or as directed by the Engineer.

G5.2 EQUIPMENT: Joint sawing equipment must be approved by the Project Engineer and must be in proper working order. Wet-sawing, with diamond impregnated blades, or dry-sawing, with silicon carbide or Carborundum blades may be used. Silicon carbide or Carborundum blades are suitable for producing a clean-cut edge through the existing hot mix asphaltic concrete.

G5.3 CONSTRUCTION METHODS: Contractor shall sawcut existing hot mix asphaltic concrete or reinforced concrete pavement at the transition of new and existing pavement. Minimum depth of cut shall be two (2) inches. Pavement removal adjacent to the sawcut shall leave a clean and sharply defined pavement edge, thereby creating a smooth and straight paving joint at the existing pavement and the proposed pavement interface.

G5.4 MEASUREMENT: Sawcut shall not be measured separately but shall be considered subsidiary to the various bid items relating to pavement removal.

G5.5 PAYMENT: The work performed and equipment furnished in accordance with this item will not be paid separately but will be considered subsidiary to various bid items relating to pavement removal.

TXDOT STANDARD SHEET INCLUDED BY REFERENCE

BC(1)-03	BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS
BC(2)-03	BARRICADE AND CONSTRUCTION PROJECT LIMIT STANDARD
BC(3)-03	BARRICADE AND CONSTRUCTION WORK ZONE SPEED LIMIT STANDARD
BC(4)-03	BARRICADE AND CONSTRUCTION TEMPORARY SIGN NOTES STANDARD
BC(5)-03	BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT
BC(6)-03	BARRICADE AND CONSTRUCTION ARROW AND MESSAGE SIGNS, REFLECTORS AND WARNING LIGHT STANDARD
BC(7)-03	BARRICADE AND CONSTRUCTION PLASTIC DRUM STANDARD
BC(8)-03	BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES STANDARD
BC(9)-03	BARRICADE AND CONSTRUCTION TYPE III BARRICADE & CONES
BC(10)-03	BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS
BC(11)-03	BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS
BC(12)-03	BARRICADE AND CONSTRUCTION REGULATORY AND GUIDE SIGNS STANDARDS
TCP(7-1)-98	TRAFFIC CONTROL DETAILS FOR SURFACING OPERATIONS
WZ STPM-03	WORK ZONE SHORT TERM PAVEMENT MARKINGS