

**ADDENDUM No. 1**

Date: August 30, 2016

City of Austin

Project Name: Wastewater Collection System Rehabilitation of Lines – Group A

C.I.P. No.: 2231.264

IFB No.: CLMC617

This Addendum forms a part of the Contract and corrects or modifies original Bid Documents, dated August 1, 2016. Acknowledge receipt of this addendum in space provided on bid form. Failure to do so may subject bidder to disqualification.

A. Project Manual Revisions:

**1. Reference Section 00300U**

Delete 00300U 06/01/16 Unit Price Bid Form in its entirety and replace with the attached revised 00300U 06/01/16 Unit Price Bid Form.

For Bidder's convenience, changes to Unit Price Bid Form include the following:

- Revised Pay Item SS5101-26.

**2. Reference Special Specification SS5101 Cured-in-Place Pipe Rehabilitation**

Delete Special Specification SS5101 Cured-in-Place Pipe Rehabilitation in its entirety and replace with the attached revised Special Specification SS5101 Cured-in-Place Pipe Rehabilitation.

For Bidder's convenience, changes to Special Specification SS5101 include the following:

- Revised Section SS5101.1 Description
- Revised Section SS5101.8(A).
- Revised Section SS5101.18 Measurement and Payment to include "reinstating all existing in-line cleanouts".
- Revised Pay Item SS5101-26.

**3. Reference Supporting Documents Location #26 Exeter Drive.**

Delete Supporting Documents pages 196 through 211 of 411 for Location #26 Exeter Drive in its entirety and replace with the attached revised Supporting Documents for Location #26 Exeter Drive.

For Bidder's convenience, changes to Supporting Documents for Location #26 Exeter Drive include the following:

- Deleted references to "Upstream", "Downstream", and "Bypass" in manhole picture descriptions on pages 198 to 209.
- Revised location called out for MH #74403 on Profile A-5159 page 210.

- Revised location of wastewater line segment indicated to be from MH #74402 to MH #74403 on Profile A-5159 page 210.

**4. Reference Supporting Documents Location #31 Rockwood Lane.**

Delete Supporting Documents page 258 of 411 for Location #31 Rockwood Lane in its entirety and replace with the attached revised Supporting Documents for Location #31 Rockwood Lane

For Bidder's convenience, changes to Supporting Documents for Location #31 Rockwood Lane include the following:

- Deleted Profile A-4953 page 258 of 411 and replaced with Profile A-4973.

B. Drawing Revisions:

**None.**

This addendum consists of 49 page(s)/sheet(s).



Approved by OWNER



Approved by ENGINEER/ARCHITECT



**END**

**Bidding Requirements, Contract Forms and Conditions of the Contract**  
**UNIT PRICE BID FORM**  
Section 00300U

The undersigned, in compliance with the Invitation for Bids for construction of the following Project:

(CIP ID# 2231.264) (IFB# CLMC617) for the City of Austin, Texas, having examined the Project Manual, Drawings and Addenda, the site of the proposed Work and being familiar with all of the conditions surrounding construction of the proposed Project, having conducted all inquiries, tests and investigations deemed necessary and proper; hereby proposes to furnish all labor, permits, material, machinery, tools, supplies and equipment, and incidentals, and to perform all Work required for construction of the Project in accordance with the Project Manual, Drawings and Addenda within the time indicated for the following prices of:

Note: The Bidder will enter the line item subtotal in the "Amount" column below, which is the product of the estimated "Quantity" multiplied by the "Unit Price". Any mathematical errors will be corrected for the purpose of determining the correct Amount to be entered in the Bid Form. The Amounts, including any corrected Amounts, will then be totaled to determine the actual amount of the Bid.

MINIMUM WAGES: Workers on Project shall be paid not less than wage rates, including fringe benefits, as published by the Department of Labor (DOL) for Building Construction and Heavy and Highway Trades "AS APPLICABLE" and/or the \$13.03 minimum Wage required by City of Austin Ordinance No. 20160324-015, whichever is higher. The Total Minimum Wage required can be met using any combination of cash and non-cash qualified fringe benefits provided the cash component meets or exceeds the \$13.03 minimum wage required.

<b>Bid Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Item Description</b>	<b>Unit Price</b>	<b>Amount</b>
SS5101-1	1	LS	Location 1: Cured-In-Place Pipe Lining, 175 LF of 10-inch dia. main from MH 27104 to MH 230064, including bypass pumping, temporary traffic control per COA Standard Details 804S-1, 5 of 9 and Alley Closure Detail, Complete and in place.	\$ _____	\$ _____
SS5101-2	1	LS	Location 2: Cured-In-Place Pipe Lining, 35 LF of 8-inch dia. main from MH 31447 to MH 31445, including bypass pumping, temporary traffic control per COA Standard Details 804S-1, 5 of 9, Complete and in place.	\$ _____	\$ _____
SS5101-3	1	LS	Location 3: Cured-In-Place Pipe Lining, 491 LF of 6-inch dia. main from MH 31663 to MH 31662, including bypass pumping, temporary traffic control per COA Standard Details 804S-1, 5 and 6 of 9, Complete in place.	\$ _____	\$ _____

Bid Item	Quantity	Unit	Item Description	Unit Price	Amount
SS5101-4	1	LS	Location 4: Cured-In-Place Pipe Lining, 376 LF of 8-inch dia. main from MH 31525 to MH 31506, including bypass pumping, temporary traffic control per COA Standard Details 804S-1, 5 of 9, Complete and in place.	\$ _____	\$ _____
SS5101-8	1	LS	Location 8: Cured-In-Place Pipe Lining, 599 LF of 8-inch dia. main from MH 49667 to MH 238114, including bypass pumping, temporary traffic control per COA Standard Details 804S-1, 5 of 9 and SPFT-E, Complete and in place.	\$ _____	\$ _____
SS5101-9	1	LS	Location 9: Cured-In-Place Pipe Lining, 390 LF of 6-inch dia. main from MH 32565 to MH 32564 including bypass pumping, temporary traffic control per COA Standard Details SPFT-E, Complete and in place.	\$ _____	\$ _____
SS5101-10	1	LS	Location 10: Cured-In-Place Pipe Lining, 190 LF of 6-inch dia. main from MH 50537 to MH 49493 including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 2 of 9, Complete and in place.	\$ _____	\$ _____
SS5101-11	1	LS	Location 11: Cured-In-Place Pipe Lining, 259 LF of 24-inch dia. main from MH 255399 to MH 50901, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, compete and in place.	\$ _____	\$ _____
SS5101-12	1	LS	Location 12: Cured-In-Place Pipe Lining, 259 LF of 8-inch dia. main from the MH 49363 to MH 49338, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.	\$ _____	\$ _____

Bid Item	Quantity	Unit	Item Description	Unit Price	Amount
SS5101-13	1	LS	Location 13: Cured-In-Place Pipe Lining, 526 Lf of 8-inch dia. main from MH 46244 to MH 214713 including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.	\$ _____	\$ _____
SS5101-14	1	LS	Location 14: Cured-In-Place Pipe Lining, 366 LF of 8-inch dia. main from MH 74251 to MH 74250 including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.	\$ _____	\$ _____
SS5101-15	1	LS	Location 15: Cured-In-Place Pipe Lining, 1671 LF of 8-inch dia. main from MH 75016 to MH 75005, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.	\$ _____	\$ _____
SS5101-16	1	LS	Location 16: Cured-In-Place Pipe Lining, 551 LF of 8-inch dia. main from MH 74388 to MH 74387, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.	\$ _____	\$ _____
SS5101-17	1	LS	Location 17: Cured-In-Place Pipe Lining, 478 LF of 8-inch dia. main from MH 64472 to MH 64267, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.	\$ _____	\$ _____
SS5101-18	1	LS	Location 18: Cured-In-Place Pipe Lining, 308 LF of 8-inch dia. main from MH 64548 to MH 64547, including bypass pumping temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.	\$ _____	\$ _____

Bid Item	Quantity	Unit	Item Description	Unit Price	Amount
SS5101-19	1	LS	Location 19: Cured-In-Place Pipe Lining, 316 LF of 8-inch dia. main from MH 74068 to MH 73579, including bypass pumping, temporary traffic control per COA Standard Details SPTF-A, Complete and in place.	\$ _____	\$ _____
SS5101-20	1	LS	Location 20: Cured-In-Place Pipe Lining, 214 LF of 8-inch dia. main from MH 75640 to MH 75639, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.	\$ _____	\$ _____
SS5101-21	1	LS	Location 21: Cured-In-Place Pipe Lining, 771 LF of 8-inch dia. main from MH 75048 to MH 75044, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.	\$ _____	\$ _____
SS5101-23	1	LS	Location 23: Cured-In-Place Pipe Lining, 166 LF of 8-inch dia. main from MH 230646 to MH 74260, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.	\$ _____	\$ _____
SS5101-24	1	LS	Location 24: Cured-In-Place Pipe Lining, 637 LF of 8-inch dia. main from MH 74352 to MH 74351, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, SPFT-E, Complete and in place.	\$ _____	\$ _____
SS5101-25	1	LS	Location 25: Cured-In-Place Pipe Lining, 84 LF of 8-inch dia. main from MH 74395 to MH 74394, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, SPFT-F, Complete and in place.	\$ _____	\$ _____

Bid Item	Quantity	Unit	Item Description	Unit Price	Amount
SS5101-26	1	LS	Location 26: Cured-In-Place Pipe Lining, 582 LF of 8-inch dia. main from MH 74401 to MH 74403, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, SPFT-F, Complete and in place.	\$ _____	\$ _____
SS5101-27	1	LS	Location 27: Cured-In-Place Pipe Lining, 544 LF of 8-inch dia. main from MH 74416 to MH 74415, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, SPFT-E, Complete and in place.	\$ _____	\$ _____
SS5101-28	1	LS	Location 28: Cured-In-Place Pipe Lining, 219 LF of 8-inch dia. main from MH 35967 to MH 37305, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.	\$ _____	\$ _____
SS5101-29	1	LS	Location 29: Cured-In-Place Pipe Lining, 905 LF of 8-inch dia. main from MH 55377 to MH 55676, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.	\$ _____	\$ _____
SS5101-30	1	LS	Location 30: Cured-In-Place Pipe Lining, 497 LF of 8-inch dia. main from MH 55293 to MH 55670, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.	\$ _____	\$ _____
SS5101-31	1	LS	Location 31: Cured-In-Place Pipe Lining, 178 LF of 8-inch dia. main from MH 56188 to MH 56184, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, SPFT-C. Complete and in place.	\$ _____	\$ _____

Bid Item	Quantity	Unit	Item Description	Unit Price	Amount
SS5101-32	1	LS	Location 32: Cured-In-Place Pipe Lining, 314 LF of 8-inch dia. main from MH 55699 to MH 54611, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, SPFT-A or B, Complete and in place.	\$ _____	\$ _____
SS5101-33	1	LS	Location 33: Cured-In-Place Pipe Lining, 257 LF of 6-inch dia. main from MH 53634 to MH 54465; Including temporary traffic control per COA Standard Detail 804S-1 (7 of 9); Complete and in place.	\$ _____	\$ _____
SS5101-34	1	LS	Location 34: Cured-In-Place Pipe Lining, 570 LF 8-inch dia. main from MH 39363 to MH 40165; Including temporary traffic control per COA Standard Detail 804S-1 (5 of 9); Complete and in place.	\$ _____	\$ _____
SS5101-38	1	LS	Location 38: Cured-In-Place Pipe Lining, 108 LF of 8-inch dia. main from MH 17327 to Junction Box 209638; Including bypass pumping / hauling plan, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9); Complete and in place; Bypass pumping through the creek will not be allowed.	\$ _____	\$ _____
SS5101-40	1	LS	Location 40: Cured-In-Place Pipe Lining, 52 LF of 8-inch dia. main from MH 20090 to MH 20091; Including bypass pumping, and temporary traffic control for cul de sac closure; Complete and in place.	\$ _____	\$ _____
SS5101-46	1	LS	Location 46: Cured-In-Place Pipe Lining, 814 LF of 8-inch dia. main from MH (CO 64500) to MH 137159; Including temporary traffic control per COA Standard Detail 804S-1 (5 of 9); Complete and in place.	\$ _____	\$ _____

Bid Item	Quantity	Unit	Item Description	Unit Price	Amount
SS5101-47	1	LS	Location 47: Cured-In-Place Pipe Lining, 111 LF of 8-inch dia. main from MH (CO 64626) to MH 64828; Including temporary traffic control per COA Standard Detail 804S-1 (5 of 9); Complete and in place.	\$ _____	\$ _____
SS5101-48	1	LS	Location 48: Cured-In-Place Pipe Lining, 417 LF of 8-inch dia. main from MH (CO 64631) to MH 64622; Including temporary traffic control per COA Standard Detail 804S-1 (5 of 9); Complete and in place.	\$ _____	\$ _____
SS5101-49	1	LS	Location 49: Cured-In-Place Pipe Lining, 981 LF of 8-inch dia. main from MH 64338 to MH 123987; Including bypass pumping, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9); Complete and in place.	\$ _____	\$ _____
SS5101-50	1	LS	Location 50: Cured-In-Place Pipe Lining, 313 LF of 8-inch dia. main from MH 54052 to MH 54051; Including temporary traffic control per COA Standard Detail 804S-1 (5 of 9) and COA Special Detail SPFT-E; Complete and in place.	\$ _____	\$ _____
SS5101-51	1	LS	Location 51: Cured-In-Place Pipe Lining, 160 LF of 8-inch dia. main from MH 54055 to MH 54047; Including bypass pumping, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9) and COA Special Detail SPFT-E; Complete and in place.	\$ _____	\$ _____
SS5101-54	1	LS	Location 54: Cured-In-Place Pipe Lining, 330 LF of 8-inch dia. main from MH 91884 to MH 65890; Including bypass pumping, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9) and COA Special Detail SPFT-A and SPFT-B; Complete and in place.	\$ _____	\$ _____

Bid Item	Quantity	Unit	Item Description	Unit Price	Amount
SS5101-55	1	LS	Location 55: Cured-In-Place Pipe Lining, 901 LF of 8-inch dia. main from MH 65835 to MH 245468; Including bypass pumping, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9) and 804S-1 (7 of 9); Complete and in place.	\$ _____	\$ _____
SS5101-56	1	LS	Location 56: Cured-In-Place Pipe Lining, 421 LF of 8-inch dia. main from MH 65861 to MH 245474, and 957 LF of 8-inch dia. main from MH 66727 to MH 245471; Including bypass pumping, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9) and COA Special Detail SPFT-F; Complete and in place.	\$ _____	\$ _____
SS5101-57	1	LS	Location 57: Cured-In-Place Pipe Lining, 513 LF of 8-inch dia. main from MH (CO 54935) to MH 245497; Including bypass pumping, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9); Complete and in place.	\$ _____	\$ _____
SS5101-58	1	LS	Location 58: Cured-In-Place Pipe Lining, 204 LF of 8-inch dia. main from MH (CO51915) to MH 251205; Including temporary traffic control per COA Standard Detail 804S-1 (5 of 9) and COA Special Detail SPFT-B; Complete and in place.	\$ _____	\$ _____
SS5101-60	1	LS	Location 60: Cured-In-Place Pipe Lining, 334 LF of 6-inch dia. main from MH 47688 to MH 47687; Including bypass pumping, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9) and COA Special Detail for alley closure; Complete and in place.	\$ _____	\$ _____

Bid Item	Quantity	Unit	Item Description	Unit Price	Amount
SS5101-61	1	LS	Location 61: Cured-In-Place Pipe Lining, 221 LF of 8-inch dia. main from MH 89192 to MH 89245; Including bypass pumping, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9); Complete and in place.	\$_____	\$_____

**TOTAL BID:** ..... \$\_\_\_\_\_

In the event of a mathematical error, the correct product, determined by using the "Unit Price" and "Quantity", and the correct sum, determined by totaling the correct line item Amounts, will prevail over the amount entered by the Bidder. The unit prices shown above will be the unit prices used to tabulate the Bid and used in the Contract, if awarded by the City.

Optional Information on Bid Prices Submitted by Computer Printout

In lieu of handwritten unit prices in figures in ink on the Bid forms above, Bidders, at their option, may submit an original computer printout sheet bearing certification by, and signature for, the Bidding firm. The unit prices shown on acceptable printouts will be the unit prices used to tabulate the Bid and used in the Contract if awarded by the City. As a minimum, computer printouts must contain all information and in the format shown on the attached page: "Example of Bid Prices Submitted by Computer Printout" form.

If a computer printout is used, the Bidder must still execute that portion of the unit price Bid form which acknowledges the Bid Guaranty, Time of Completion, Liquidated Damages, and all addenda that may have been issued.

Bids with unit prices by computer printout may be rejected, if:

1. The computer printout does not include the required certification, set forth in the attached "Example".
2. The computer printout is not signed in the name of the firm to whom the Project Manual was issued.
3. The computer printout is non-responsive or otherwise omits required Bid items or includes items not shown on the Bid forms in the Project Manual.
4. The other required Bid documents issued by the City are not fully executed as provided above.
5. The signed Section 00300U is not returned with the signed computer printout.

If the Bid submitted by the Bidder contains both the form furnished by the City, completed according the instructions, and also a computer printout, completed according to the instructions, unit prices of only one will be considered. In this situation, the unit Bid prices shown on the computer printout will be used to determine the Bid.

**BID GUARANTY:** A Bid guaranty must be enclosed with this Bid, as required in Section 00020, in the amount of not less than five percent (5%) of the total Bid. Following the Bid opening, submitted Bids may not be withdrawn for a period of 90 Calendar Days. Award of Contract will occur within this period, unless mutually agreed between the parties. The Bid guaranty may become the property of the OWNER, or the OWNER may pursue any other action allowed by law, if:

- Bidder withdraws a submitted Bid within the period stated above;

- Bidder fails to submit the required post Bid information within the period specified in Section 00020 or 00100, or any mutually agreed extension of that period;
- or Bidder fails to execute the Contract and furnish the prescribed documentation (bonds, insurance, etc.) needed to complete execution of the Contract within five (5) Working Days after notice of award, or any mutually agreed extension of that period.

**TIME OF COMPLETION:** The undersigned Bidder agrees to commence work on the date specified in the written "Notice to Proceed" to be issued by the OWNER and to substantially complete construction of the improvements, as required by the Project Manual, Drawings and Addenda for the Work within one hundred fifty (150) Working Days. If a Substantial Completion date has been specified, the Bidder further agrees to reach Final Completion within thirty (30) Working Days after Substantial Completion as required by the Project Manual, Drawings and Addenda for the work. The Bidder further agrees that should the Bidder fail to substantially complete the Work or to complete the Work within the number of days indicated in the Bid or as subsequently adjusted, Bidder shall pay the liquidated damages for each consecutive day thereafter as provided below; unless the OWNER elects to pursue any other action allowed by law.

**WAIVER OF ATTORNEY FEES:** In submitting its bid, in consideration for the waiver of its right to attorney's fees by the OWNER, the Bidder knowingly and intentionally agrees to and shall waive the right to attorney's fees under Section 271.153 of the Texas Local Government Code in any administrative proceeding, alternative dispute resolution proceeding, or litigation arising out of or connected to any Contract awarded pursuant to this solicitation process.

**LIQUIDATED DAMAGES:** The Bidder understands and agrees that the timely completion of the described Work is of the essence. The Bidder and OWNER further agree that the OWNER's actual damages for delay caused by failure to timely complete the Project are difficult, if not impossible to measure. However, with respect to the additional administrative and consultant costs to be incurred by OWNER, the reasonable estimate of such damages has been calculated and agreed to by OWNER and Bidder. Therefore, the Bidder and the OWNER agree that for each and every Working Day the Work or any portion thereof, remains incomplete after the Substantial Completion date as established by the above paragraph, "Time of Completion", payment will be due to the Owner in the amount of one thousand seven hundred forty dollars and zero cents (\$1,740.00) per Working Day as liquidated damages, not as a penalty, but for delay damages to the OWNER. If both Substantial and Final Completion dates have been specified, the Bidder and the OWNER further agree that for each and every Working Day the Work or any portion thereof, remains incomplete after the Final date as established by the above paragraph, "Time of Completion", payment will be due to the OWNER in the amount of five hundred seventy dollars and zero cents (\$570.00) per Working Day as liquidated damages, not as a penalty, but for delay damages to the OWNER. Such amount shall be deducted by the OWNER from any Contract payment due. In the event of a default or breach by the CONTRACTOR and demand is made upon the surety to complete the project, in accordance with the Contract Documents, the surety shall be liable for liquidated damages pursuant to the Contract Documents in the same manner as the CONTRACTOR would have been.

OWNER reserves the right to reject any or all Bids and to waive any minor informality in any Bid or solicitation procedure (a minor informality is one that does not affect the competitiveness of the Bids).

The undersigned acknowledges receipt of the following addenda:

- Addendum No. 1 dated \_\_\_\_\_ Received \_\_\_\_\_
- Addendum No. 2 dated \_\_\_\_\_ Received \_\_\_\_\_
- Addendum No. 3 dated \_\_\_\_\_ Received \_\_\_\_\_
- Addendum No. 4 dated \_\_\_\_\_ Received \_\_\_\_\_
- Addendum No. 5 dated \_\_\_\_\_ Received \_\_\_\_\_

**BID DOCUMENT EXECUTION AND ACKNOWLEDGEMENT:**

The undersigned Bidder certifies that he/she has read and understands the Section 00020 Invitation for Bids, the Section 00100 Instructions to Bidders, and all other requirements applicable to the bidding process provided in the Bid and Contract Documents.

Bidder will initial each of the blanks set forth below to represent and certify that the Bidder has completed, executed, and enclosed the corresponding supplemental Bid Documents with its Bid.

**Bidder acknowledges and agrees by its signature below that in addition to any signatures required to be set forth in the following supplemental Bid Documents, Bidder is bound to the terms and conditions of each of the following documents, which are incorporated herein by reference:**

\_\_\_\_ 00425A Insurance Cost Form (*ROCIP projects only*)

\_\_\_\_ 00440 Affidavit - Prohibited Activities

\_\_\_\_ 00475 Nonresident Bidder Provisions

\_\_\_\_ 00630 Non-Discrimination and Non-Retaliation Certificate

**(NOTE: THIS FORM MUST STILL BE SEPARATELY SIGNED AND PROPERLY NOTARIZED)**

\_\_\_\_ MBE/WBE Compliance Document

\_\_\_\_\_  
Secretary, \*if Bidder is a Corporation

\_\_\_\_\_  
Bidder

(Seal)

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
Address

\_\_\_\_\_  
Telephone Number / FAX Number

\_\_\_\_\_  
Email Address for Person Signing Bid

\_\_\_\_\_  
Email Address for Bidder's Primary Contact Person

\* Copy of Corporate Resolution and minutes with certificate of officer of Bidder as to authority of signatory to bind Bidder is to be signed and dated no earlier than one week before Bid date, and attached to this document.

EXAMPLE: BID PRICES SUBMITTED BY COMPUTER PRINTOUT

<b>Project Name:</b>
<b>CIP ID #:</b>
<b>IFB #:</b>

<b>Bid Item #</b>	<b>Bid Item Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Unit Bid Price</b>	<b>Total Amount</b>
<b>Total Bid:</b>					

(YOUR FIRM'S NAME) certifies that the unit prices shown on this completed computer printout for all of the bid items and the alternates contained in this proposal are the unit prices intended and that its Bid will be tabulated using these unit prices and no other information from this printout. (YOUR FIRM'S NAME) acknowledges and agrees that the total bid amount shown will be read as its total bid. In the event of a mathematical error, the correct product, determined by using the "Unit Price" and "Quantity", and the correct sum, determined by totaling the correct line item Amounts, will prevail over the amount entered by the Bidder.

Signed: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**End**

### **SS5101.1 Description**

This item shall govern approved methods and materials for the rehabilitation of deteriorated gravity sewer lines by a Cured-In-Place Pipe (CIPP) lining method. This method of rehabilitation shall consist of installation of an uncured resin-impregnated flexible tube into existing sewer pipe using the inversion process and subsequent curing using hot water or steam. Ultra violet light (UV) cured products and unplasticized PVC products will require additional submittal by the contractor to be reviewed and approved by the owner.

### **SS5101.2 Definitions**

Cured-in-place pipe (CIPP) – the end result of a process of inserting an uncured flexible tube into a deteriorated pipe and then curing the resin with hot water or steam.

Inversion – the technique of inserting an uncured tube by turning the tube inside out and using hydrostatic or compressed air to force the tube into the host pipe.

Resin – a suitable compound that can be used in liquid state to saturate the tube and which cures to a solid state in a few hours in the presence of hot water or steam.

Tube – a synthetic material sewn into a circular cross-section with adequate pore space to hold resin. The tube may consist of one or more layers.

### **SS5101.3 Related Standards**

The work shall be performed in accordance with the methods given in:

ASTM F1216 Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube; and

NASSCO Performance Specification Guideline for the installation of Cured-In-Place-Pipe (CIPP). All items related to the payment are subject to the provisions of this specification.

This specification references the American Society for Testing and Materials (ASTM) standards and specifications, which are made a part hereof by such reference and shall be the latest edition and revision thereof.

D543 Test Method for Resistance of Plastics to Chemical Reagents.

D-790 Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.

D3681 Test Method for Chemical Resistance of “Fiberglass (Glass-Fiber-Reinforced-Thermosetting-Resin) Pipe in a Deflected Condition.

- D5199 Standard Test Method for Measuring the Nominal Thickness of Geosynthetics.
- D5813 Standard Specification for Cured-In-Place Thermosetting Resin Sewer Piping Systems.
- F-1216 Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube.

**SS5101.4 Submittals****A. Resin**

1. Submit technical data sheet showing physical and chemical properties.
2. Submit test results of chemical resistance of the CIPP composite.

**B. Flexible Liner**

1. Submit technical data sheet showing physical properties
2. Provide certification from the manufacturer that the liner's "dry" thickness is greater than or equal to the required cured laminate thickness. Thickness measurements shall be in accordance with ASTM D5199.

**C. CIPP**

1. Prepare calculations to support the design thickness of the CIPP after curing. The calculations shall be sealed by Professional Engineer licensed in Texas. The calculations shall be provided as a submittal to the Owner for review. The design shall meet the minimum thickness according the calculation in ASTM F1216 according to the following minimum parameters:
  - a. Fully deteriorated host pipe
  - b. Ground water table elevation within 2 feet of ground surface
  - c. Depth of cover at deepest manhole
  - d. Unit weight of soil at 130 pcf
  - e. Constrained soil modulus from AASHTO LRFD Section 12 and AWWA M45.
  - f. Long term (50-year extrapolation) modulus of elasticity based on laboratory testing of products used and not greater than half of the

initial flexural modulus

- g. H-20 Live Load
- h. 2.0 Factor of Safety against buckling
- i. 2% Pipe Ovality
- j. Creep retention factor of 50%

D. Though the process may be licensed, no change of material design values, or procedures may be made during the course of the Work without the prior approval of the Owner.

### **SS5101.5 Materials**

#### **A. Liner**

1. The liner shall consist of a flexible tube. The liner shall be constructed to withstand installation pressures and have sufficient strength to bridge any deteriorated or missing pipe.
2. The liner will be manufactured and fabricated under quality-controlled conditions set by the process manufacturer.
3. The liner shall be sized so that, when installed, the liner will snugly fit the internal circumference of the original pipe and produce the specified thickness and physical properties when the resin cures.
4. Use a liner length necessary to fully span the distance between manholes. Include sufficient amount of material for sealing at manholes and product sampling.
5. The resin impregnated or "wet out" liner shall have a uniform thickness that when compressed at installation pressures will meet or exceed the design thickness.
6. The liner shall consist of one or more layers of absorbent non-woven felt fabric and meet the requirements of ASTM F1216, Section 5.1 or ASTM F1743, Section 5.2.1.
7. Overlapped layers of felt in longitudinal seams that cause lumps in the final product shall not be utilized.
8. Fabric tube shall have a minimum tensile strength of 750 psi in both the longitudinal and transverse directions when tested in accordance to ASTM

D5035.

**B. Resin**

1. Provide a liquid thermosetting resin to saturate and produce a properly cured-in-place pipe system liner, which is resistant to abrasion due to solids, grit, and/or sand. The cured-in-place pipe system shall also be resistant to corrosion due to acids and gases such as sulfuric acid, carbonic acid, hydrogen sulfide, methane, and carbon monoxide. The cured-in-place pipe system shall utilize thermosetting resins, which will withstand the corrosive effect of the existing residential, commercial, and industrial effluents, liquids and/or gases.
2. Use polyester, npg, orthothalic or vinyl ester resin, which meet the requirements of this specification.

**SS5101.6 Testing Requirements**

- A. As a preconstruction submittal, provide laboratory test results or certification meeting the requirements of Section 3.6.4 Chemical Resistance in NASSCO's Performance Specification Guideline for the Installation of Cured-in-Place Pipe (CIPP).
- B. Field samples shall be taken at the rate of one sample per 3,000 linear feet of CIPP installed. Test reports on the structural properties of the CIPP field samples from designated inserted lengths shall be submitted to the Owner to demonstrate compliance with the minimum values in this section. All testing costs are incidental to, and shall be included in the unit price bid for CIPP. The Owner shall be provided with an untested sample from each location tested by the Contractor. The Owner's sample shall be labeled to identify the City's GIS ID of the manhole location where the sample was obtained, date, host pipe diameter, contractor's name, and contractor's project number (if any), and sample identification for the sample that was laboratory tested.

The CIPP system shall conform to the minimum structural standards, as listed below:

Property	Test Method	Results
Flexural Strength (Short-term)	ASTM D-790	4,500 psi
Flexural Modulus of Elasticity (Short-term)	ASTM D-790	250,000 psi

**SS5101.7 Notification Procedures**

- A. The Contractor and Owner will agree to a schedule for the work. The Owner will prepare and distribute notices to residents and businesses in the vicinity of the work area prior to clearing brush, raising a manhole, installing a stabilized construction entrance, delivering or setting up bypass pumping equipment, or similar work. The Contractor will have to adhere to the agreed to schedule. The need for advance notice will limit the Contractor's ability to work outside the agreed to schedule. The Owner requires a week to prepare and distribute notices.
- B. The Contractor must comply with the One Call requirements for any excavation.

**SS5101.8 Cleaning and TV Inspection**

- A. The Contractor shall clean mains and then perform an inspection of the mains to verify the lengths of pipe segments, locations and severity of any bends, manhole locations, and any service connections. The Contractor shall review the inspections and verify that no problems exist that will negatively impact the planned lining work. This "pre" lining inspection will be performed prior to ordering the CIPP tube.

The inspection may need to be performed during off peak wastewater flow times; i.e. during the early morning. The "pre" lining inspection does not have to be compatible with Granite XP. This "pre" lining inspection shall be provided to the Owner upon request.

The Contractor shall notify the Owner prior to ordering the CIPP tube of any structural defects, bends, or other problems that exist that may negatively impact the planned lining work. Existing problems that require point repairs shall be resolved by the Owner prior to the Contractor ordering the CIPP tube.

The Contractor shall notify the Owner prior to ordering the CIPP tube of any obstructions that cannot be removed by high-velocity water jet machine and that may negatively impact the planned lining work. The City and the Owner shall agree upon a Change Order or other means of resolving the problem prior to the Contractor ordering the CIPP tube or performing any work to remove the obstruction.

- B. Once the bypass operation is underway, and immediately prior to the insertion of the liner, the Contractor shall clean and inspect the pipe. The inspection shall be used to confirm that no debris or defect is present that will compromise the final CIPP product. This inspection does not have to be compatible with Granite XP. This inspection shall be provided to the Owner upon request.

- C. Once the liner is cured, services have been reinstated, and while the bypass operations are still underway from the lining operation, a video inspection of the final product shall be performed. This video shall be called the "post" lining inspection and must be provided in and uploaded to the Owner's Granite XP database.
- D. All cleaning and television inspection shall be performed in accordance with Special Specification 04001 and all work is subsidiary to the lining pay items.

**SS5101.9 By-Pass Pumping**

- A. The Contractor will be responsible for the bypass pumping operations.
- B. By-pass will be required for all pipe segments to be lined. The Contractor shall prepare and submit a Bypass Pumping Plan for each work area. The plan should detail sequence of CIPP installation, plug locations, suction manholes, discharge manholes, pump sizes and pump locations. The figures should show the preferred lane closures, if necessary.

The by-pass pumping system must be sized to accommodate the maximum wet weather flow. The Owner will provide flow data for dry weather conditions and peaking factors to estimate wet weather peak flows. The Contractor is responsible for all pump selection, setup, installation, operation, and maintenance of the system. The bypass pumping piping must not obstruct stormwater conveyance.

Self-priming pumps with an integral vacuum pump with a sound attenuating enclosure shall be provided for both the primary and backup pumps. In situations where a single pump is capable of handling the flow, the backup pump shall be of capacity equal to the primary pump. In situations where more than one pump is needed to provide the required capacity, the backup pump shall have the same capacity of the largest of the primary pumps. When three pumps are used for the base flow, at least 2 backup pumps are required. While bypass pumping operations are underway, the pumps and discharge piping must be monitored by 2 attendants.

The by-pass system must be tested for a minimum of 24 hours prior to beginning lining operations. Pump and open manholes must be secured from public access with chain link fence panels.

Prior to disassembling, a volume of clean water at least equal to five times the volume of the pipe shall be pumped through the piping. After flushing, water in the piping shall be removed using a pig and the water should be discharged into the wastewater system and pig shall be retained and captured prior to entering the wastewater manhole.

The by-pass pumping system must additionally meet the requirements of Special Specification SS1540. By-pass pumping is subsidiary to the CIPP bid items.

### **SS5101.10 Installation Procedures**

#### **Preparation**

- A. The Contractor must photographically document the work area prior to mobilizing. The existing condition of the sidewalks, curb and gutter, natural areas, and other related features must be documented. The Contractor is urged to be thorough with the accumulation of his photographs. The authenticity of any claims by area residents will be based upon this information. Photographs of the pre-existing conditions will be made available to the Owner upon request.
- B. The Contractor must obtain and maintain copies onsite of all City issued Temporary Use of Right of Way and Street Cut permits.
- C. Any tree removal or pruning must be performed under the direction of a certified arborist.
- D. Access routes may require stabilized construction entrances or temporary erosion controls.
- E. The Contractor must setup and maintain any necessary traffic control devices.
- F. The Contractor will be expected to comply with all City, State and Federal standards. The contractor is to comply with their written plan for confined space entry.
- G. Pre-lining cleaning and inspection to verify condition of the line, document service connections, and measure the length of the main to order liner tube.
- H. Provide a schedule to the Owner at least 2 weeks prior to the first "wet out". Provide a 24-hour notice to the Owner for the opportunity to witness the "wet out" process.
- I. The Contractor shall designate a location where the tube will be impregnated ("wet-out") with resin to thoroughly saturate the tube prior to its dispatch for installation.
- J. Initiate bypass pumping.
- K. While the bypass pumping operations are underway and immediately prior to beginning the inversion, the Contractor shall clean and inspect the pipe to be lined to verify that the pipe is clean and ready for lining.

L. Installation of the resin-impregnated flexible tube into an existing pipe shall be by the method given in ASTM F 1216, or other approved method, and the manufacturer's recommendations. The wetted out fiber-felt tube shall be inserted through an existing manhole or other approved access by means of an inversion using a hydrostatic head sufficient to fully extend it to the next designated manhole. Water for the Work shall be metered and furnished by the Contractor.

M. Curing

- a. After installation of the liner is completed, the Contractor shall provide a heat source and water recirculation equipment capable of delivering hot water and/or steam throughout the section to uniformly raise the temperature of the liner to the temperature required to achieve a consistent cure of the resin. Maintain the curing temperature as recommended by the resin/catalyst system manufacturer.
- b. Provide suitable monitors near the heat source to gauge the temperature of incoming and outgoing water or steam supply. Place additional temperature sensors between the impregnated tube and invert of the original pipe at each manhole to monitor the outside temperature of the liner while curing.
- c. Continue uninterrupted heating until the required curing temperature is achieved. Precisely measure temperatures at both ends of the CIPP. Initial cure is considered complete when exposed portions of the flexible tube pipe appear to be cured and the remote temperature sensors have achieved the external temperature recommended by the manufacturer. Contractor shall document the measured temperatures and times.

N. Measures shall be taken to reduce atmospheric styrene concentration to an acceptable level at all times during the cured-in-place pipe installation procedure. The Percent Lower Explosive Limit, temperature and styrene concentration shall be measured and recorded for each inversion taken to ensure the following conditions are met:

- a. Percent Lower Explosive Limit (LEL) shall not exceed 2% using an atmospheric monitor calibrated within at least six (6) months of the day reading is taken. The LEL shall be measured at the top of the downstream manhole adjacent to the section of pipe being lined.
- b. Atmospheric styrene levels shall not exceed 50 ppm as measured five feet above and within 3 feet downwind of the downstream manhole. Measurement shall be performed using a Drager Tube, or equivalent, capable of reading Styrene in the 10-200 PPM range. The Contractor shall be responsible for satisfactorily resolving customer complaints

involving styrene odors.

O. Cool Down

- a. Initiate a controlled cool-down of the hardened pipe to a temperature below 110 degrees F, in accordance with the cure schedule.
- b. Care should be exercised in releasing the curing water such that a vacuum does not develop that could damage the newly installed pipe.
- c. No process water shall be discharged until cooled to below 100 degrees Fahrenheit.

P. Finished Pipe

The finished liner shall be continuous over the entire length of each section lined, and be free as commercially practical from visual defects. Sufficient reason for rejecting the liner include: the finished liner contains "dry spots," pinholes, lifts, delaminating, wrinkles or kinks exceeding ½-inch in pipe 24-inches or greater, or 5% of the pipe inside diameter for pipe less than 24-inches in diameter, and areas which have not cured sufficiently. Also, lack of adequate seal to the existing main shall be sufficient reason to reject the liner.

### SS5101.11 Service Connections

- A. Service connection shall be partially opened to the lined main within 2 hours after the cool down process is completed. Service connections shall be completely re-instated within 8 hours after the cool down process.
- B. Service connections shall be reconnected by a remote-operated internal cutting device. Cutting devices utilizing high-pressure water shall not be utilized as they may cause damage to the existing lateral.
  1. An internal tap cut shall be considered acceptable if the bottom third of the tap matches the invert of the wye or tee, there are no jagged edges and a minimum of 95% of the tap is restored. The service line invert must be open.
  2. Blind holes, over cutting, and holes that miss the tap must be repaired in a manner acceptable to the Owner at the Contractor's expense.
- E. If the method of tap cutting, as outlined above, does not prove satisfactory, the service connection will be restored by excavation and direct replacement by the Contractor as follows:
  1. The Contractor shall carefully break and remove the host pipe to expose the CIPP near the existing service connection.

2. The CIPP shall be cored using an appropriate sized bit to install an Inserta-Tee connection.
3. The service connections shall be installed at the existing elevation and locations indicated unless changed by the Owner.
4. If the service line is not PVC, then the existing service shall be coupled to the Inserta-Tee using an appropriate size and type of semi-rigid adapter from the AWU Standard Product's List.
5. There will be no direct pay for excavation and physical tie-in of house connections due to failure of internal tap cutting method.

**SS5101.12 Access Manholes**

During the course of the work, the Contractor must restrict inadvertent access to manholes. Fencing, railings, or similar devices must restrict access. When the cone section is removed from a manhole, equipment and materials must be onsite to allow replacement of the cone. When the cone is removed, a new precast concrete cone section must be installed with a new 32" diameter bolted frame and cover. No direct payment will be made for accessing manholes nor restoring them.

**SS5101.13 Final Cleanup**

Upon completion of rehabilitation work and testing, clean and restore project area affected by the Work to a condition at least equal to that existing prior to work. Vegetated areas will require seeding with a native grass and wildflower mix. Some areas will require erosion control matting. Any concrete sidewalks, curb and gutter, or pavement around manholes must be removed and replaced. No direct payment will be made for restoration work.

**SS5101.14 Non-Conforming Work**

- A. If laboratory testing of the cured liner reveals that the thickness, flexural strength, or flexural modulus of elasticity of the installed CIPP are less than 90% of the specified values, the product is considered unacceptable. A method of repair or replacement shall be submitted for review and approved by the Owner.
- B. Defects that are unacceptable and require repair include:
  - a. Uncured or areas of inadequate resin,
  - b. Defects that allow water to leak through the CIPP,

- c. Wrinkles in the liner
  - d. Other defects which the Owner deems to have a negative potential effect on the operation of the wastewater system.
- C. If a point repair is required after the liner has cured, use a tube segment to splice across the point repair. The overlap on each end shall be twice the diameter, or 12 inches, whichever is greater. Cure the segment using the same process as used for the original liner.
- D. If the pipe liner fails to make a tight seal at a manhole wall, the Contractor shall apply a seal at that point. The seal shall be of resin mixture compatible with the CIPP.
- a. For all instances where the CIPP is deemed unacceptable, the Contractor shall submit a method of repair or replacement for review and approval by the City.
  - b. All work required to remedy non-conforming work shall be at the sole cost of the Contractor.
- E. Any open cut spot repairs must meet the applicable standard specifications for this work. The Owner will provide copies should open cut work be necessary to repair non-conforming CIPP. Additional submittals may be necessary.

**SS5101.15 Traffic Controls**

- A. Disruption to normal flow of traffic should be carried out in compliance to City of Austin Transportation Criteria Manual and Texas Department of Transportation Manual on Uniform Traffic Control Devices. The Contractor is required to use traffic control setups in accordance with their permits from the Right of Way Management Division of the City's Transportation Department. Traffic control devices must be setup and maintained by a person who holds a current competent person for traffic control.
- B. Any flagging required must be performed by persons with current training as a flagger.
- C. If standard details for traffic control setups are not adequate and a site specific traffic control plan is necessary, the Owner will provide an approved traffic control plan. The Contractor must adhere to site specific changes requested by City staff.

**SS5101.16 Meetings**

- A. The Contractor shall attend progress meetings that may be as frequent as weekly. Progress updates and schedule updates shall be provided via email to the Owner. The progress updates may need to be as frequent as daily.

**SS5101.17 Warranty**

- A. The warranty period for the liner, tap cuts, manhole restoration, and all other work shall be one (1) year after substantial completion.
- B. During this warranty period, any defects, which will affect the integrity or strength of the liner, shall be repaired at the Contractor's expense, in a manner acceptable to the Owner.

**SS5101.18 Measurement & Payment**

Measurement and payment for cured-in-place pipe is on a lump sum basis per location and shall be considered full compensation for all mobilization, cleaning and TV inspections, reinstating all existing in-line cleanouts, labor and materials required to install the liner to the specified requirements described in this specification.

Payment will be made under the following Pay Items:

- |                   |  |
|-------------------|--|
| Pay Item SS5101-1 | Location 1: Cured-In-Place Pipe Lining, 175 LF of 10-inch dia. main from MH 27104 to MH 230064, including bypass pumping, temporary traffic control per COA Standard Details 804S-1, 5 of 9 and Alley Closure Detail, Complete and in place. |
| Pay Item SS5101-2 | Location 2: Cured-In-Place Pipe Lining, 35 LF of 8-inch dia. main from MH 31447 to MH 31445, including bypass pumping, temporary traffic control per COA Standard Details 804S-1, 5 of 9, Complete and in place.                             |
| Pay Item SS5101-3 | Location 3: Cured-In-Place Pipe Lining, 491 LF of 6-inch dia. main from MH 31663 to MH 31662, including bypass pumping, temporary traffic control per COA Standard Details 804S-1, 5 and 6 of 9, Complete in place.                          |
| Pay Item SS5101-4 | Location 4: Cured-In-Place Pipe Lining, 376 LF of 8-inch dia. main from MH 31525 to MH 31506, including bypass pumping, temporary traffic control per COA Standard Details 804S-1, 5 of 9, Complete and in place.                            |

- Pay Item SS5101-8 Location 8: Cured-In-Place Pipe Lining, 599 LF of 8-inch dia. main from MH 49667 to MH 238114, including bypass pumping, temporary traffic control per COA Standard Details 804S-1, 5 of 9 and SPFT-E; Complete and in place.
- Pay Item SS5101-9 Location 9: Cured-In-Place Pipe Lining, 390 LF of 6-inch dia. main from MH 32565 to MH 32564 including bypass pumping, temporary traffic control per COA Standard Details SPFT-E, Complete and in place.
- Pay Item SS5101-10 Location 10: Cured-In-Place Pipe Lining, 190 LF of 6-inch dia. main from MH 50537 to MH 49493 including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 2 of 9, Complete and in place.
- Pay Item SS5101-11 Location 11: Cured-In-Place Pipe Lining, 259 LF of 24-inch dia. main from MH 255399 to MH 50901, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, complete and in place.
- Pay Item SS5101-12 Location 12: Cured-In-Place Pipe Lining, 259 LF of 8-inch dia. main from the MH 49363 to MH 49338, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.
- Pay Item SS5101-13 Location 13: Cured-In-Place Pipe Lining, 526 Lf of 8-inch dia. main from MH 46244 to MH 214713 including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.
- Pay Item SS5101-14 Location 14: Cured-In-Place Pipe Lining, 366 LF of 8-inch dia. main from MH 74251 to MH 74250 including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.
- Pay Item SS5101-15 Location 15: Cured-In-Place Pipe Lining, 1671 LF of 8-inch dia. main from MH 75016 to MH 75005, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.
- Pay Item SS5101-16 Location 16: Cured-In-Place Pipe Lining, 551 LF of 8-inch dia. main from MH 74388 to MH 74387, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.
- Pay Item SS5101-17 Location 17: Cured-In-Place Pipe Lining, 478 LF of 8-inch dia. main from MH 64472 to MH 64267, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.

- Pay Item SS5101-18 Location 18: Cured-In-Place Pipe Lining, 308 LF of 8-inch dia. main from MH 64548 to MH 64547, including bypass pumping temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.
- Pay Item SS5101-19 Location 19: Cured-In-Place Pipe Lining, 316 LF of 8-inch dia. main from MH 74068 to MH 73579, including bypass pumping, temporary traffic control per COA Standard Details SPTF-A, Complete and in place.
- Pay Item SS5101-20 Location 20: Cured-In-Place Pipe Lining, 214 LF of 8-inch dia. main from MH 75640 to MH 75639, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.
- Pay Item SS5101-21 Location 21: Cured-In-Place Pipe Lining, 771 LF of 8-inch dia. main from MH 75048 to MH 75044, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.
- Pay Item SS5101-23 Location 23: Cured-In-Place Pipe Lining, 166 LF of 8-inch dia. main from MH 230646 to MH 74260, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.
- Pay Item SS5101-24 Location 24: Cured-In-Place Pipe Lining, 637 LF of 8-inch dia. main from MH 74352 to MH 74351, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, SPFT-E, Complete and in place.
- Pay Item SS5101-25 Location 25: Cured-In-Place Pipe Lining, 84 LF of 8-inch dia. main from MH 74395 to MH 74394, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, SPFT-F, Complete and in place.
- Pay Item SS5101-26 Location 26: Cured-In-Place Pipe Lining, 582 LF of 8-inch dia. main from MH 74401 to MH 74403, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, SPFT-F, Complete and in place.
- Pay Item SS5101-27 Location 27: Cured-In-Place Pipe Lining, 544 LF of 8-inch dia. main from MH 74416 to MH 74415, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, SPFT-E, Complete and in place.
- Pay Item SS5101-28 Location 28: Cured-In-Place Pipe Lining, 219 LF of 8-inch dia. main from MH 35967 to MH 37305, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.

- Pay Item SS5101-29 Location 29: Cured-In-Place Pipe Lining, 905 LF of 8-inch dia. main from MH 55377 to MH 55676, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.
- Pay Item SS5101-30 Location 30: Cured-In-Place Pipe Lining, 497 LF of 8-inch dia. main from MH 55293 to MH 55670, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, Complete and in place.
- Pay Item SS5101-31 Location 31: Cured-In-Place Pipe Lining, 178 LF of 8-inch dia. main from MH 56188 to MH 56184, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, SPFT-C. Complete and in place.
- Pay Item SS5101-32 Location 32: Cured-In-Place Pipe Lining, 314 LF of 8-inch dia. main from MH 55699 to MH 54611, including bypass pumping, temporary traffic control per COA Standard Details 804s-1, 5 of 9, SPFT-A or B, Complete and in place.
- Pay Item SS5101-33 Location 33: Cured-In-Place Pipe Lining, 257 LF of 6-inch dia. main from MH 53634 to MH 54465; Including temporary traffic control per COA Standard Detail 804S-1 (7 of 9); Complete and in place.
- Pay Item SS5101-34 Location 34: Cured-In-Place Pipe Lining, 570 LF 8-inch dia. main from MH 39363 to MH 40165; Including temporary traffic control per COA Standard Detail 804S-1 (5 of 9); Complete and in place.
- Pay Item SS5101-38 Location 38: Cured-In-Place Pipe Lining, 108 LF of 8-inch dia. main from MH 17327 to Junction Box 209638; Including bypass pumping / hauling plan, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9); Complete and in place; Bypass pumping through the creek will not be allowed.
- Pay Item SS5101-40 Location 40: Cured-In-Place Pipe Lining, 52 LF of 8-inch dia. main from MH 20090 to MH 20091; Including bypass pumping, and temporary traffic control for cul de sac closure; Complete and in place.
- Pay Item SS5101-46 Location 46: Cured-In-Place Pipe Lining, 814 LF of 8-inch dia. main from MH (CO 64500) to MH 137159; Including temporary traffic control per COA Standard Detail 804S-1 (5 of 9); Complete and in place.
- Pay Item SS5101-47 Location 47: Cured-In-Place Pipe Lining, 111 LF of 8-inch dia. main from MH (CO 64626) to MH 64828; Including temporary traffic control per COA Standard Detail 804S-1 (5 of 9); Complete and in place.

- Pay Item SS5101-48 Location 48: Cured-In-Place Pipe Lining, 417 LF of 8-inch dia. main from MH (CO 64631) to MH 64622; Including temporary traffic control per COA Standard Detail 804S-1 (5 of 9); Complete and in place.
- Pay Item SS5101-49 Location 49: Cured-In-Place Pipe Lining, 981 LF of 8-inch dia. main from MH 64338 to MH 123987; Including bypass pumping, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9); Complete and in place.
- Pay Item SS5101-50 Location 50: Cured-In-Place Pipe Lining, 313 LF of 8-inch dia. main from MH 54052 to MH 54051; Including temporary traffic control per COA Standard Detail 804S-1 (5 of 9) and COA Special Detail SPFT-E; Complete and in place.
- Pay Item SS5101-51 Location 51: Cured-In-Place Pipe Lining, 160 LF of 8-inch dia. main from MH 54055 to MH 54047; Including bypass pumping, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9) and COA Special Detail SPFT-E; Complete and in place.
- Pay Item SS5101-54 Location 54: Cured-In-Place Pipe Lining, 330 LF of 8-inch dia. main from MH 91884 to MH 65890; Including bypass pumping, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9) and COA Special Detail SPFT-A and SPFT-B; Complete and in place.
- Pay Item SS5101-55 Location 55: Cured-In-Place Pipe Lining, 901 LF of 8-inch dia. main from MH 65835 to MH 245468; Including bypass pumping, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9) and 804S-1 (7 of 9); Complete and in place.
- Pay Item SS5101-56 Location 56: Cured-In-Place Pipe Lining, 421 LF of 8-inch dia. main from MH 65861 to MH 245474, and 957 LF of 8-inch dia. main from MH 66727 to MH 245471; Including bypass pumping, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9) and COA Special Detail SPFT-F; Complete and in place.
- Pay Item SS5101-57 Location 57: Cured-In-Place Pipe Lining, 513 LF of 8-inch dia. main from MH (CO 54935) to MH 245497; Including bypass pumping, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9); Complete and in place.
- Pay Item SS5101-58 Location 58: Cured-In-Place Pipe Lining, 204 LF of 8-inch dia. main from MH (CO51915) to MH 251205; Including temporary traffic control per COA Standard Detail 804S-1 (5 of 9) and COA Special Detail SPFT-B; Complete and in place.

**SPECIAL SPECIFICATIONS**  
**SS5101**

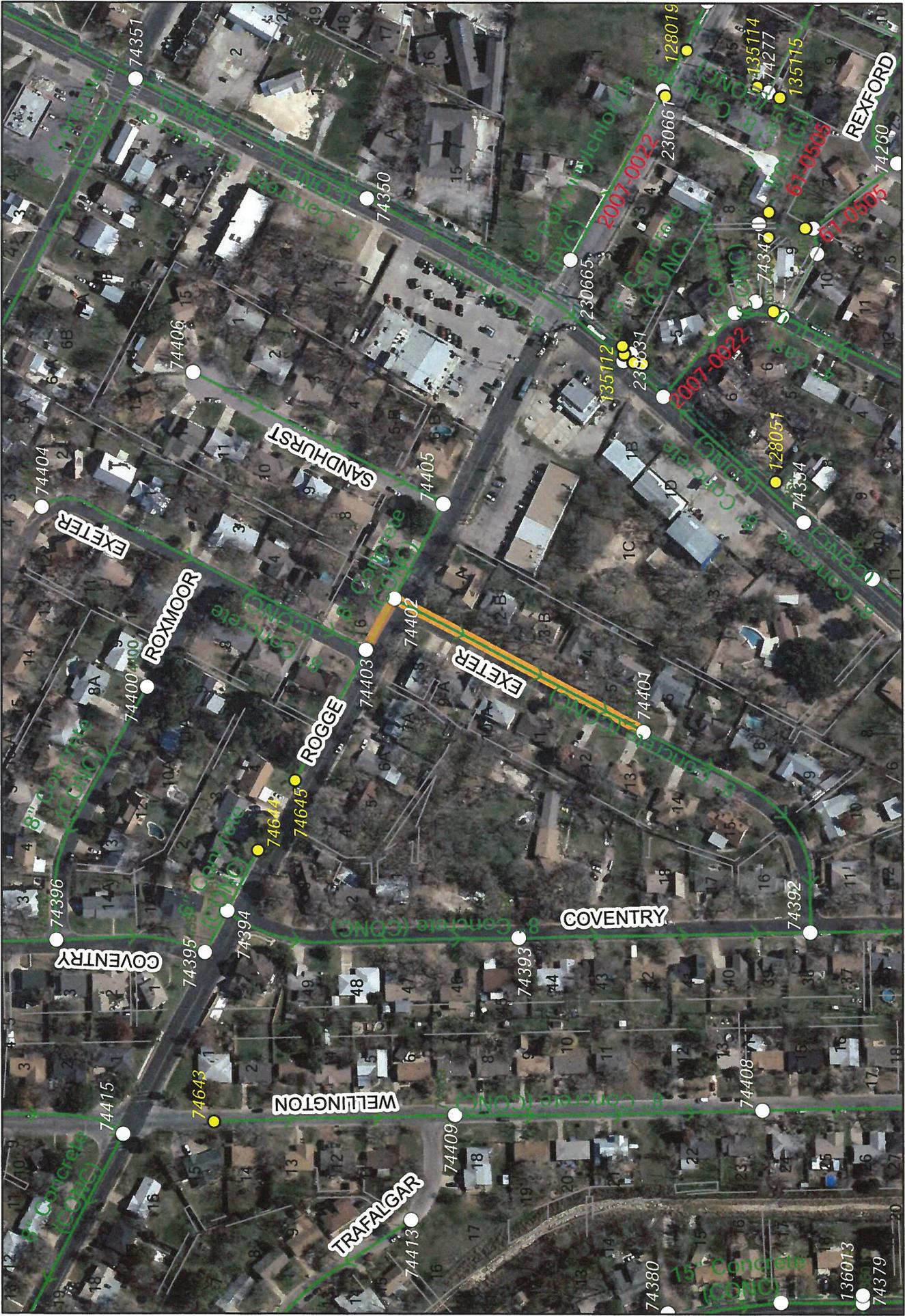
**CURED-IN-PLACE PIPE REHABILITATION**

Pay Item SS5101-60 Location 60: Cured-In-Place Pipe Lining, 334 LF of 6-inch dia. main from MH 47688 to MH 47687; Including bypass pumping, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9) and COA Special Detail for alley closure; Complete and in place.

Pay Item SS5101-61 Location 61: Cured-In-Place Pipe Lining, 221 LF of 8-inch dia. main from MH 89192 to MH 89245; Including bypass pumping, and temporary traffic control per COA Standard Detail 804S-1 (5 of 9); Complete and in place.

**End**

Location #26  
Exeter Dr



0 60 120 240 360 480

# Loc. No. 26 - Exeter Dr - Roxmoor In



LOCATION:  
VISIT DATE:

#26 Exeter Drive  
August 20, 2015



PICTURE 1

DESCRIPTION: MH#74402 looking North



PICTURE 2

DESCRIPTION: MH#74402 looking South



PICTURE 3  
DESCRIPTION: MH#74402 looking East



PICTURE 4  
DESCRIPTION: MH#74402 looking West



PICTURE 5

DESCRIPTION: **MH#74401** looking North



PICTURE 6

DESCRIPTION: **MH#74401** looking South



PICTURE 7  
DESCRIPTION: **MH#74401 looking East**



PICTURE 8  
DESCRIPTION: **MH#74401 looking West**



PICTURE 9  
DESCRIPTION: MH#74403 looking North



PICTURE 10  
DESCRIPTION: MH#74403 looking South



PICTURE 11

DESCRIPTION: **MH#74403 looking East**



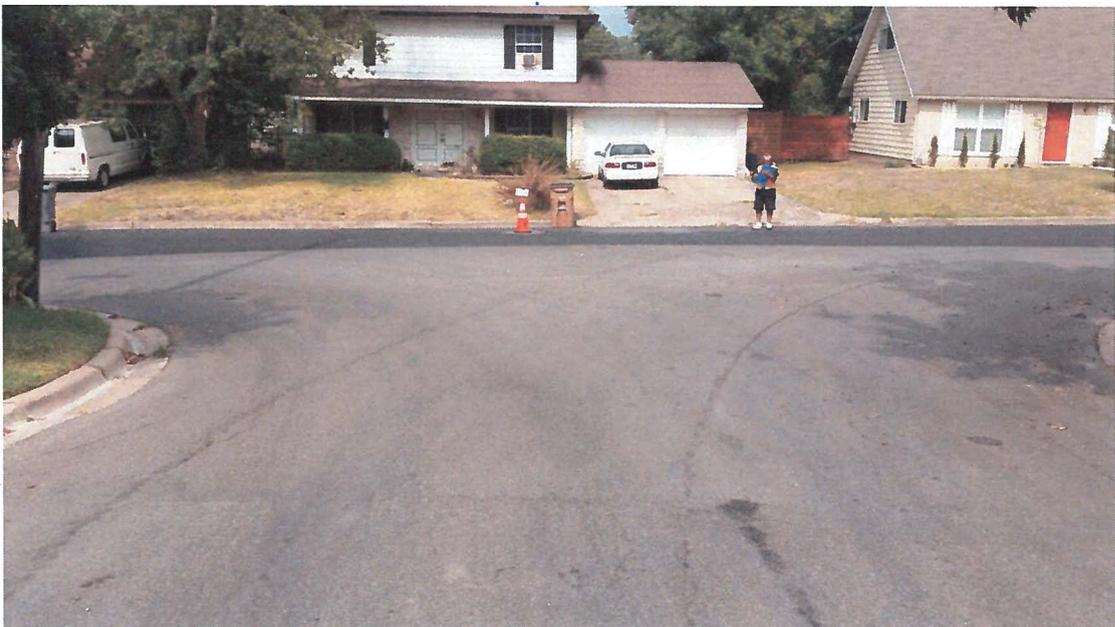
PICTURE 12

DESCRIPTION: **MH#74403 looking West**



PICTURE 13

DESCRIPTION: [MH#74392 looking East](#)



PICTURE 14

DESCRIPTION: [MH#74392 looking West](#)



PICTURE 15  
DESCRIPTION: **MH#74392 looking South**



PICTURE 16  
DESCRIPTION: **MH#74392 looking North**



PICTURE 17

DESCRIPTION: MH#74404 looking North



PICTURE 18

DESCRIPTION: MH#74404 looking South



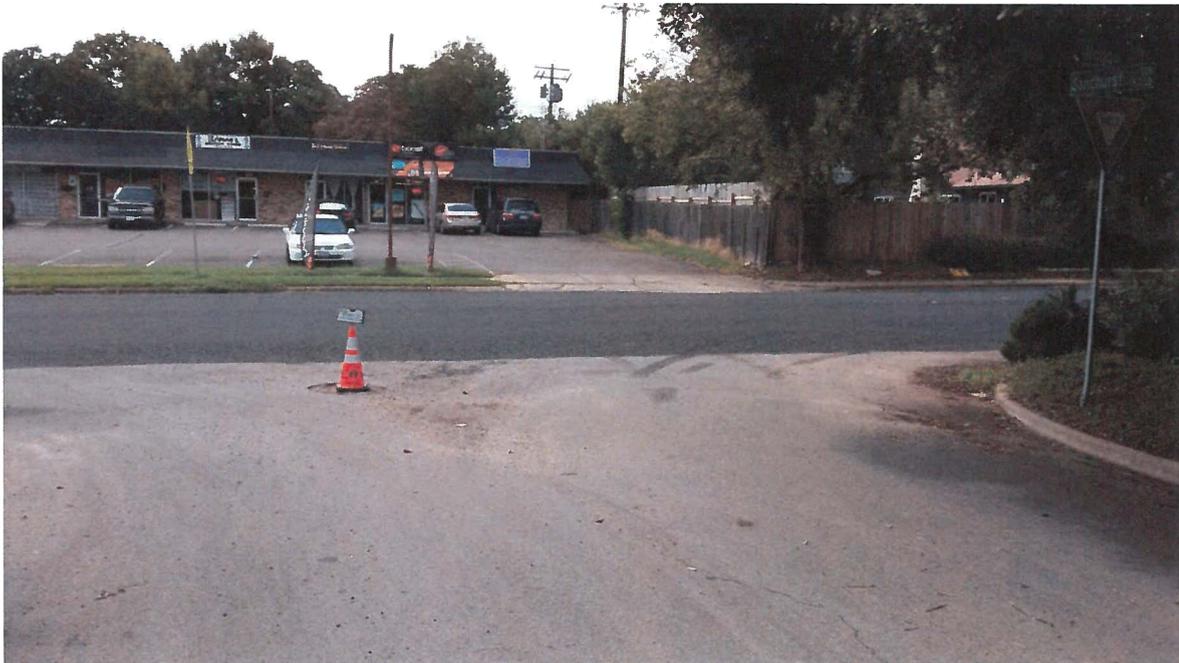
PICTURE 19  
DESCRIPTION: **MH#74404 looking East**



PICTURE 20  
DESCRIPTION: **MH#74404 looking West**

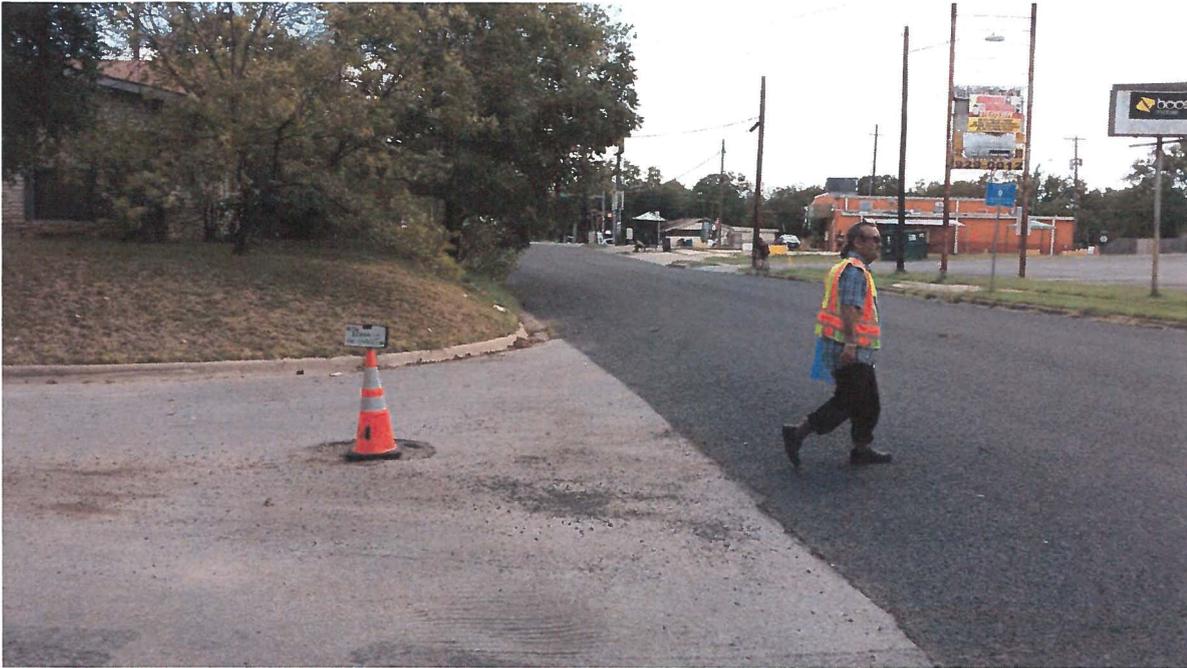


**PICTURE 21**  
**DESCRIPTION: MH#74405 looking North**



**PICTURE 22**  
**DESCRIPTION: MH#74405 looking South**

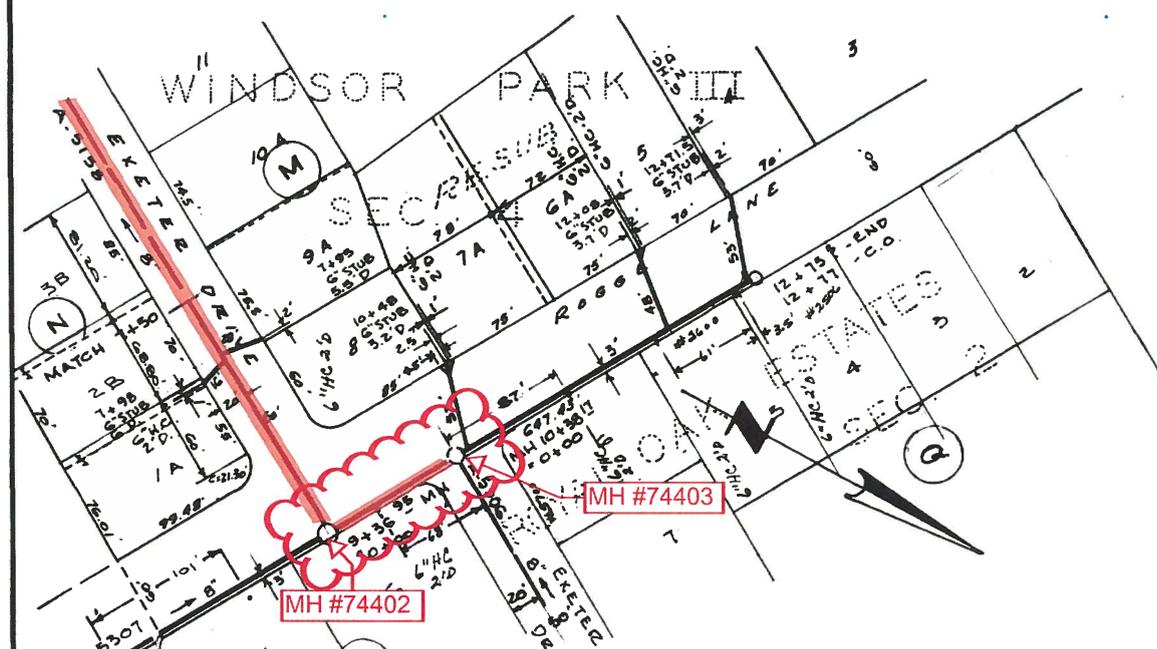
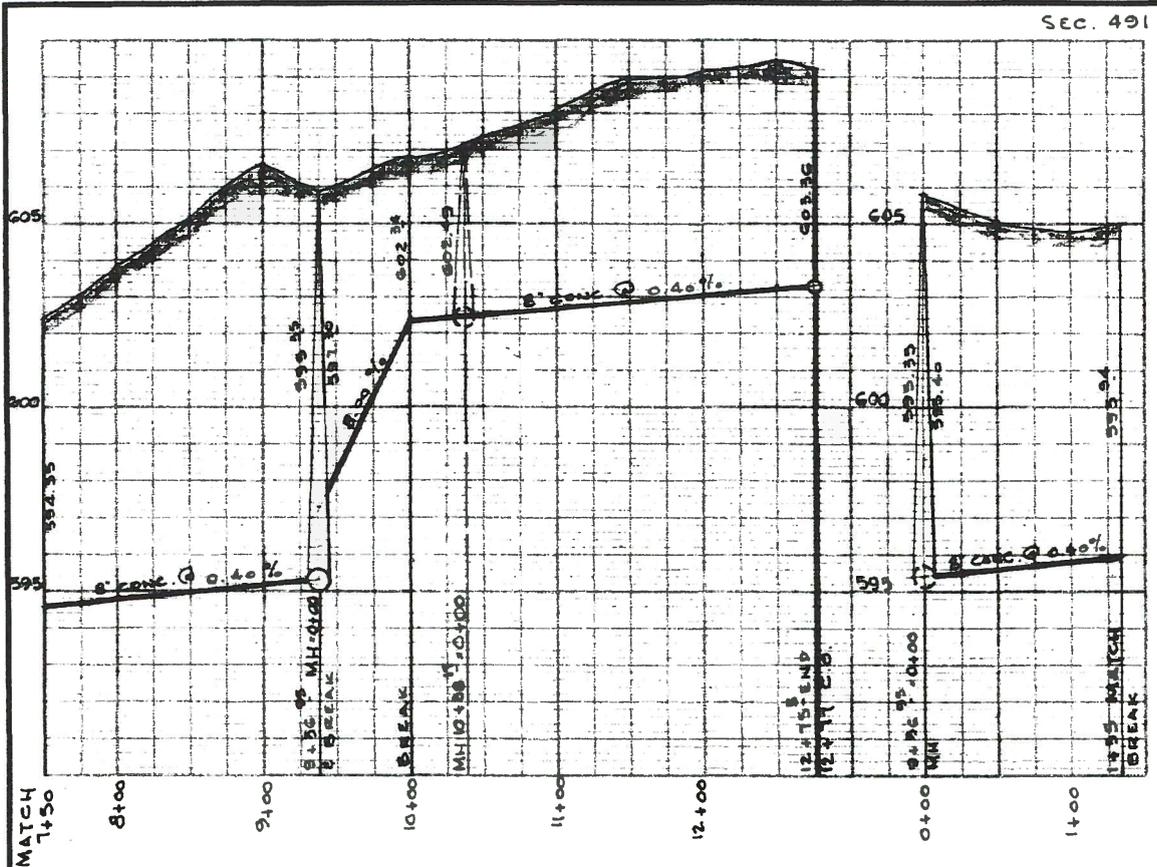
Exeter Dr\_Pictures\_26.docx



**PICTURE 23**  
**DESCRIPTION: MH#74405 looking East**

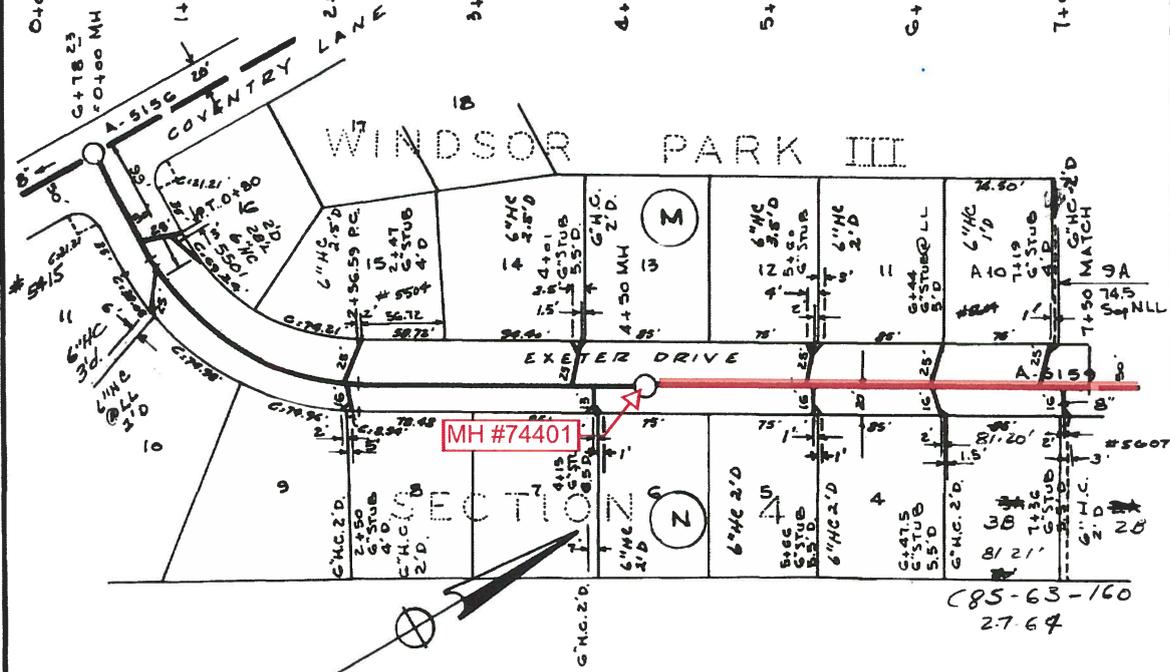
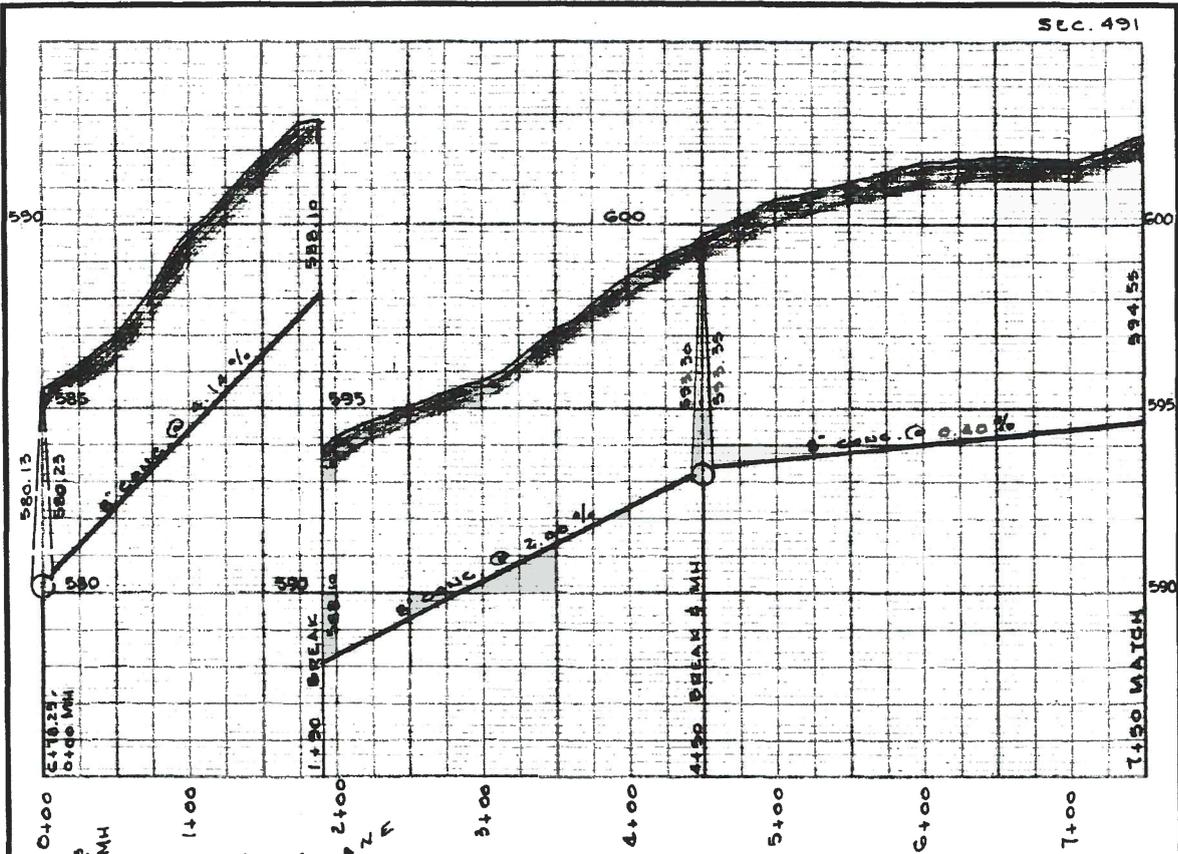


**PICTURE 24**  
**DESCRIPTION: MH#74405 looking West**



**SEWER LOCATIONS  
AUSTIN, TEXAS**

BUILT BY FAIRLEY-SIMONS DATE JUNE 1960 SANI. SEWER: JOB NO. W.O. 2843-S321.3  
 FIELD BOOK 2429 p. 59 DATE JUNE 1960 LOCATION ROGGE LANE  
 DRAWN BY S. RIPLEY DATE 6-21-60 FROM EXETER DRIVE  
 REVISED BY DATE 3-67 TO ± 338' WEST & 135' EAST  
 CHECKED BY B.F. DATE 6-24-60 BOOK NO. A SHEET NO. 5159



**SEWER LOCATIONS  
AUSTIN, TEXAS**

BUILT BY FAIREY-SIMONS	DATE JUNE 1960	SANI. SEWER:	JOB NO. W.O. 2843-5321,3
FIELD BOOK 2429, P. 58	DATE JUNE 1960	LOCATION	EXETER DRIVE
DRAWN BY S. RIPLEY	DATE 6-21-60	FROM	COVENTRY LANE
REVISED BY	DATE 2 68	TO	±200' S. OF ROGGE LANE
CHECKED BY B.F.	DATE 6-24-60	BOOK NO.	A SHEET NO. 5158

Addendum #1

