

## **REIMBURSEMENT AGREEMENT**

This Reimbursement Agreement ("Agreement") is made and entered into and effective the 27th day of December, 2017, by and between Atmos Energy Corporation (hereinafter referred to as "Utility"), and Williamson County, Texas, (hereinafter referred to as "County").

### **WITNESSETH:**

WHEREAS, Utility is the owner of certain 8" high pressure gas line crossing CR 119: (herein called Facilities).

WHEREAS, County desires to construct proposed CR 119: From 850' Limmer Loop to Chandler. (Hereinafter called "Project") and make improvements to Project as shown on plans submitted to Utility;

WHEREAS, to accommodate the Project, County desires Utility to perform certain facility modification/relocation work herein referred to as the "Work" and described as follows:

- Atmos Energy relocation consist of: Installation of approximate 1205' of 8" coated steel pipeline by approved open trench method.
- Upon completion of Project, contractor will provide an as-built drawing of the relocation to the Utility and county.

WHEREAS, Utility, under the terms hereinafter stated, has evaluated the Project and is willing to perform Work to its Facilities to accommodate the Project, provided the County reimburses Utility for 100% of its eligible costs for labor and materials to do the Work.

NOW, THEREFORE, in consideration of the promises and mutual covenants herein contained, Utility agrees to perform the Work and permit the Project subject to the following terms and provisions:

1. County agrees that the description of the Work listed above contains a complete representation of the Work requested of Utility to accommodate the Project.
2. County shall, at its own expense, inspect the Work by Utility hereunder, to assure itself that the Work is being performed in compliance with the standards of County.
3. Though this agreement is based on the proposed "Good Faith Estimate" herein referred to as the "Estimate" listed below: (See Attachment "A" for detailed estimate)

Estimated 1,205 lf of gas line along with apparatus defined as Work = \$493,168.60

County agrees to bear 100% of the eligible costs incurred by utility relating to the Work as referenced in attached estimate. Final eligible costs may be more or less than the Estimate, which shall not be construed as a limitation of costs for such Work. County recognizes that Utility may use one or more contractors to perform the Work. Should the County delay or cancel the Project for any reason, County agrees to reimburse Utility for all associated costs, including but not limited to preliminary design, engineering, survey, material purchasing, contract labor, etc.

4. Upon completion of said Work, Utility shall make an accounting of final costs and provide County an invoice of the same. The final eligible cost may be greater or less than the Estimate and County shall be liable to Utility for 100% of the eligible final cost. After receipt and approval of invoice, County shall pay the full amount within 30 days.
5. County shall perform all operations and construction activities below or adjacent to the Facilities in a workmanlike and safe manner and in conformance with all applicable industry and governmental standards and conditions that may be imposed by Utility from time to time. No construction activity by County shall be performed under, across, or adjacent to the Facilities until the Work of Utility has been completed.
6. Notice shall be given to Utility by County, at least 48 hours in advance of commencement of any construction activity on or adjacent to the Facilities, excepting only cases of emergency. Said notice shall be given to Texas One-Call: 1-800-245-4545. In the event County breaches any of the terms, covenants or provisions of this Agreement and Utility commences litigation to enforce any provisions of this Agreement, the cost of attorneys' fees, interest and the attendant expenses will be payable to Utility by County upon demand.
7. To the fullest extent permitted by law, the County shall indemnify, save, hold harmless, and at Utility's option, defend Utility and its affiliated companies and their directors, officers, employees and agents from any and all claims, demands, cost (including reasonable attorney and expert witness fees and court costs), expenses, losses, causes of action (whether at law or in equity), fines, civil penalties, and administrative proceedings for injury or death to persons or damage or loss to property or other business losses, including those made or incurred by Utility or its directors, officers, employees, or agents and including environmental damage in any way arising from or connected with the existence, construction, operation, maintenance, removal or other operations arising out of the Work as described in this Agreement and the construction, operation and/or use of the Project by County, except those arising from Utility's sole negligence.
8. This Agreement supersedes every antecedent or concurrent oral and/or written declaration and/or understanding pertaining to the Work or construction activity by and between Utility and County.
9. As soon as possible after the document is prepared, Utility and County shall sign a Utility Joint Use Agreement and make a part hereof.

Unless an item below is stricken and initialed by the County and Utility, this agreement in its entirety consists of the following:

1. Utility Agreement - Wilco –U-35 – 100% County – Off System
2. Plans, Specification, and Estimated Costs (Attachment “A”)
3. Utility’s Schedule of Work and Estimated Date of Completion (Attachment “B”)

4. Eligibility Ratio (Attachment "C")
5. Betterment Calculation and Estimates (Attachment "D")
6. Proof of Property Interest – ROW-U-1A (Attachment "E")
7. Wilco-U-80A -- Joint Use Agreement (Attachment "F")

IN WITNESS WHEREOF, we have hereunto set our hands on the day and year below.

**UTILITY**

Utility: Atmos Energy Corporation  
Name of Utility

By: *Jeffrey S. Knights*  
Jeffrey S. Knights

Jeffrey S. Knights  
Print or Type Name

Title: VP Technical Services, Mid-Tex Division

Date: 1/26/18

**WILLIAMSON COUNTY**

By: *[Signature]*  
Authorized Signature

Dan A. Gattis  
Print or Type Name

Title: Williamson County Judge

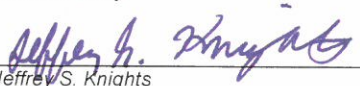
Date: 02-16-2018

4. Eligibility Ratio (Attachment "C")
5. Betterment Calculation and Estimates (Attachment "D")
6. Proof of Property Interest – ROW-U-1A (Attachment "E")
7. Wilco-U-80A – Joint Use Agreement (Attachment "F")

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By:   
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*Print or Type Name*

Title: VP Technical Services, Mid-Tex Division

Date: 1/26/18

**WILLIAMSON COUNTY**

By: \_\_\_\_\_  
*Authorized Signature*

Dan A. Gattis  
*Print or Type Name*

Title: Williamson County Judge

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

**Attachment A**

**Plans, Specifications, and Estimated Costs**

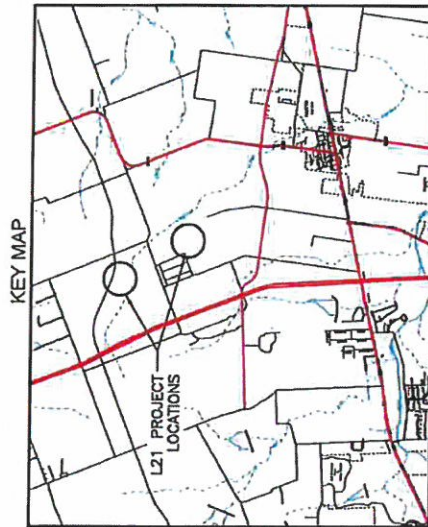


"THE PURPOSE OF THIS DRAWING IS TO RELOCATE ATMOS ENERGY PIPELINES ONLY."

WILLIAMSON COUNTY CR 119 PROJECT

LIMITS: FROM LIMMER LOOP TO CHANDLER RD

## L21 RELOCATION



| SHEET INDEX  |                                 |
|--------------|---------------------------------|
| SHEET NUMBER | SHEET DESCRIPTION               |
| 1            | COVER PAGE                      |
| 2            | GENERAL NOTES                   |
| 3            | CR 119 STA 574+88 RELOCATION    |
| 4            | CHANDLER RD STA 297+21 CROSSING |
| 5            | CR 119 STA 132+67 RELOCATION    |

[illegible]

## PIPE SUMMARY

INSTALL - 1.205' OF 6" STEEL  
INSTALL - 2.58' OF 3" STEEL FOR BYPASS  
REMOVE - 490' OF 3" STEEL  
ABANDON - 425' OF 3" STEEL

[illegible]

# GENERAL NOTES:

- All work shall be completed in accordance with all applicable federal, state, and local regulations; including but not limited to the Code of Federal Regulations (CFR) Title 49, Subtitle B, Chapter I, Subchapter D, Part 192 (Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards. Construction practices shall conform to the latest versions of Atmos Energy Construction Procedures Manual and Pipeline Services Engineering Standards, and the Texas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges.
- The Contractor shall abide by all applicable federal, state, and local laws governing excavation. The Contractor shall provide detailed plans and specifications for trench safety systems that comply with applicable laws governing excavation. These plans shall be sealed by an Engineer experienced in the design of trench safety systems and licensed by the State of Texas. Submit plan to the Owner prior to commencing work. The Contractor shall be solely responsible for all aspects of work related to excavation.
- The Contractor shall notify Atmos Energy personnel at least 48 hours prior to the start of construction.
- All existing and proposed Atmos Energy pipelines and other known obstructions shall be staked prior to the start of construction
- The coordinates listed are in N.A.D.83 (1993), Texas State Plane - Central Zone (4203), surface coordinates.
- All constructed pipelines shall be coated and wrapped while also having cathodic protection to ensure longevity and protective measures.
- The Contractor shall maintain a minimum clearance of 24" from any underground obstruction, except upon approval of variance by Atmos personnel.
- Anode beds shall not exceed 48 inches in width and have a depth of coverage of at least 36 inches.
- Fill material shall be placed in lifts not exceeding nine (9) inches in loose thickness. Fill material shall be compacted at a minimum of 95 percent maximum standard Proctor dry density (ASTM D 598). In conjunction with the compacting operation, fill material shall be brought to a moisture content ranging from (-2) percentage points below optimum to (+2) percentage points above optimum (-2 to +2).
- The Contractor shall maintain 4 feet of minimum cover to the top of pipe unless shown otherwise.

- It shall be the Contractor's responsibility to collect and provide as-built coordinate data, including elevation data, as required per Atmos standard E0101-Sep-07 Rev.5.

- For pipeline installations, location markers shall be provided by Atmos Energy and placed at a minimum of every 400 feet. Location markers shall also be placed at important positions along the alignment, including the ROW line and other objects crossing the pipeline alignment, as directed by Atmos Energy personnel.

- Existing utility locations shown are taken from available records provided by the utility Owner and field locations of surface appurtenances. Locations shown are generally schematic in nature and may not accurately reflect the size and location of each particular utility. Some utility lines may not be shown. Contractor shall assume responsibility for actual field location and protection of existing facilities whether shown or not. Contractor shall also assume responsibility for repairs to existing facilities, whether shown or not, damaged by contractor's activities. Differences in horizontal or vertical location of existing utilities shall not be a basis for additional expense.

- Contractor shall locate and adjust existing utility manhole lids, cleanouts, water valves, and other surface appurtenances as required for new construction. Contractor shall coordinate utility adjustments with other disciplines and the appropriate utility agencies and provide for all fees for permits, connections, inspections, etc. These adjustments shall be considered incidental to the construction contract.

- The Contractor shall protect existing property monumentation and primary control. Any such points which the Contractor believes will be destroyed shall have offset points established by the Contractor prior to construction. Any monumentation destroyed by the Contractor shall be reestablished at his expense.

- Baricading and traffic control during construction shall be the responsibility of the Contractor and shall conform to the latest edition of the "Texas Manual on Uniform Traffic Control Devices", Part VI in particular. Traffic flow and access shall be maintained during all phases of the construction. The Contractor is responsible for providing traffic safety measures for work on project.

- Any damages that may occur to real property or existing improvements shall be restored by the Contractor to at least the same condition that the real property or existing improvements were in prior to the damages. This restoration shall be subject to the Owner's approval; moreover, this restoration shall not be a basis for additional compensation to the Contractor. Restoration shall include, but not be limited to, regrassing, revegetation, replacing fences, replacing trees, etc.

- It shall be the responsibility of the Contractor to:
  - Prevent any damage to private property and property owner's poles, fences, shrubs, etc.
  - Provide access to all drives during construction.
  - Protect all underground utilities to remain in service.
  - Notify all utility companies and verify location of all utilities prior to start of construction.
- The drawings contained herein are not, and should not be solely considered to be a storm water pollution prevention plan. Should the Contractor choose to use the information herein, he shall do so with the provision that he at a minimum meets all applicable rules, regulations, codes, and permit requirements for construction activities

HALFF ASSOCIATES, INC.  
 PRELIMINARY - FOR INTERIM REVIEW ONLY  
 These documents are for Interim Review and not intended for Construction, Bidding, or Permit Purposes. They were prepared by, or under the supervision of, a Professional Engineer.  
 EUSTACE L. LECROY 12784 E. 535TH ST. SUITE 100  
 DALLAS, TEXAS 75244

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| PROJECT NAME<br>ATMOS ENERGY<br>L21 RELOCATION<br>HUTTO, TEXAS |  | PROJECT NO.<br>12784 E. 535TH ST. SUITE 100<br>DALLAS, TEXAS 75244 |  | PROJECT DATE<br>11-03-2007 |  | PROJECT SCALE<br>1" = 40' |  | PROJECT SHEET<br>2 OF 5 |  |
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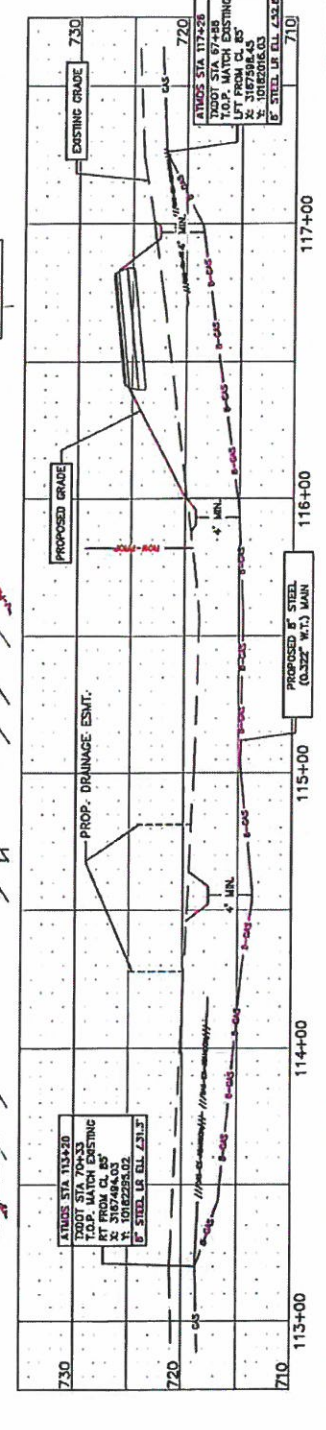
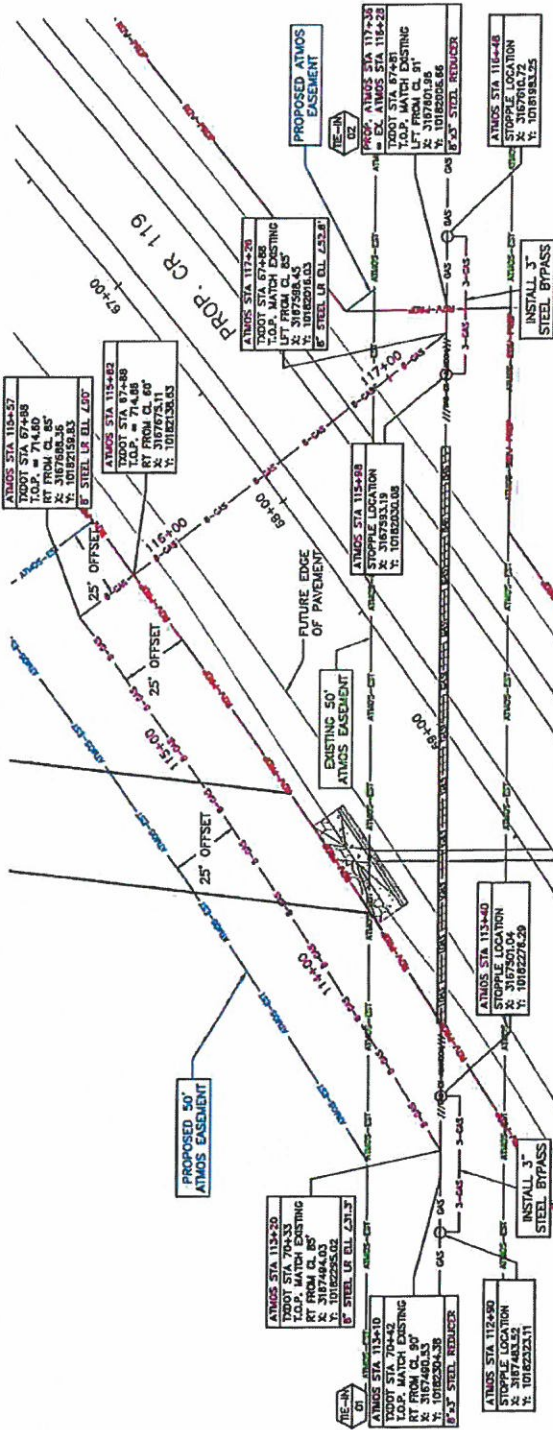
|                                                                |  |                                                                    |  |                            |  |                           |  |                         |  |
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| PROJECT NAME<br>ATMOS ENERGY<br>L21 RELOCATION<br>HUTTO, TEXAS |  | PROJECT NO.<br>12784 E. 535TH ST. SUITE 100<br>DALLAS, TEXAS 75244 |  | PROJECT DATE<br>11-03-2007 |  | PROJECT SCALE<br>1" = 40' |  | PROJECT SHEET<br>2 OF 5 |  |
|----------------------------------------------------------------|--|--------------------------------------------------------------------|--|----------------------------|--|---------------------------|--|-------------------------|--|

|                                                                |  |                                                                    |  |                            |  |                           |  |                         |  |
|----------------------------------------------------------------|--|--------------------------------------------------------------------|--|----------------------------|--|---------------------------|--|-------------------------|--|
| PROJECT NAME<br>ATMOS ENERGY<br>L21 RELOCATION<br>HUTTO, TEXAS |  | PROJECT NO.<br>12784 E. 535TH ST. SUITE 100<br>DALLAS, TEXAS 75244 |  | PROJECT DATE<br>11-03-2007 |  | PROJECT SCALE<br>1" = 40' |  | PROJECT SHEET<br>2 OF 5 |  |
|----------------------------------------------------------------|--|--------------------------------------------------------------------|--|----------------------------|--|---------------------------|--|-------------------------|--|

|                                                                |  |                                                                    |  |                            |  |                           |  |                         |  |
|----------------------------------------------------------------|--|--------------------------------------------------------------------|--|----------------------------|--|---------------------------|--|-------------------------|--|
| PROJECT NAME<br>ATMOS ENERGY<br>L21 RELOCATION<br>HUTTO, TEXAS |  | PROJECT NO.<br>12784 E. 535TH ST. SUITE 100<br>DALLAS, TEXAS 75244 |  | PROJECT DATE<br>11-03-2007 |  | PROJECT SCALE<br>1" = 40' |  | PROJECT SHEET<br>2 OF 5 |  |
|----------------------------------------------------------------|--|--------------------------------------------------------------------|--|----------------------------|--|---------------------------|--|-------------------------|--|



"THE PURPOSE OF THIS DRAWING IS TO RELOCATE ATMOS ENERGY PIPELINES ONLY."



**BASELINE INFORMATION FOR STEEL PIPE:  $t = (D \times P) / (2 \times E \times S)$**

|                                       |       |
|---------------------------------------|-------|
| OUTSIDE DIAMETER (IN) = D             | 8.63  |
| PRESSURE PS (LB/IN <sup>2</sup> ) = P | 600   |
| DESIGN FACTOR = F                     | 0.5   |
| YIELD STRENGTH (PSI) = S              | 60000 |

MINIMUM WALL THICKNESS (IN) = 0.12

| REV. | DATE | BY | CHKD | APPD | REV. | DESCRIPTION |
|------|------|----|------|------|------|-------------|
| A    |      |    |      |      |      |             |
| B    |      |    |      |      |      |             |
| C    |      |    |      |      |      |             |
| D    |      |    |      |      |      |             |

| REV. | DATE | BY | CHKD | APPD | REV. | DESCRIPTION |
|------|------|----|------|------|------|-------------|
| A    |      |    |      |      |      |             |
| B    |      |    |      |      |      |             |
| C    |      |    |      |      |      |             |
| D    |      |    |      |      |      |             |

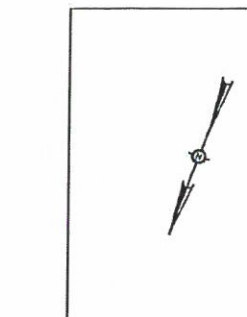
**HALFF ASSOCIATES, INC.**  
 11000 N. CENTRAL EXPRESSWAY, SUITE 100, DALLAS, TEXAS 75243  
 TEL: 214.343.8800 FAX: 214.343.8801  
 WWW.HALFF-ATMOS.COM

**ATMOS ENERGY**  
 121 RELOCATION  
 HUTTO, TEXAS

**SCALE:** AS NOTED  
**DATE:** 11-15-2017  
**PROJECT:** STA 67+48 CROSSING  
**SHEET:** 3 OF 5

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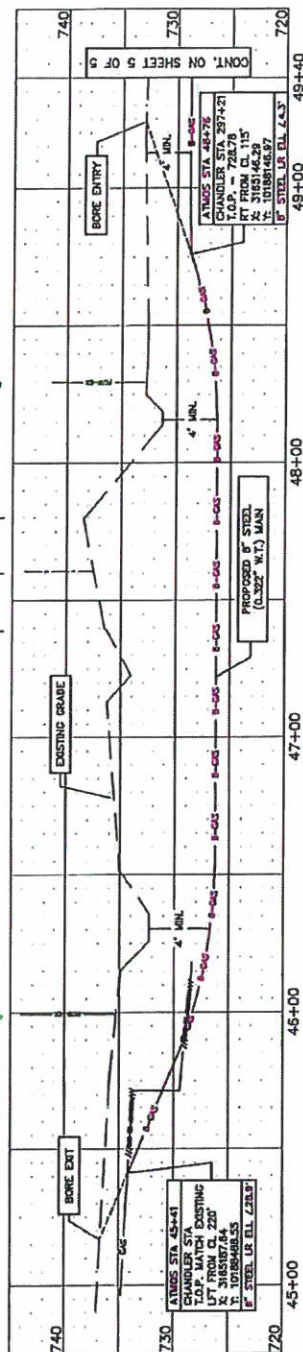
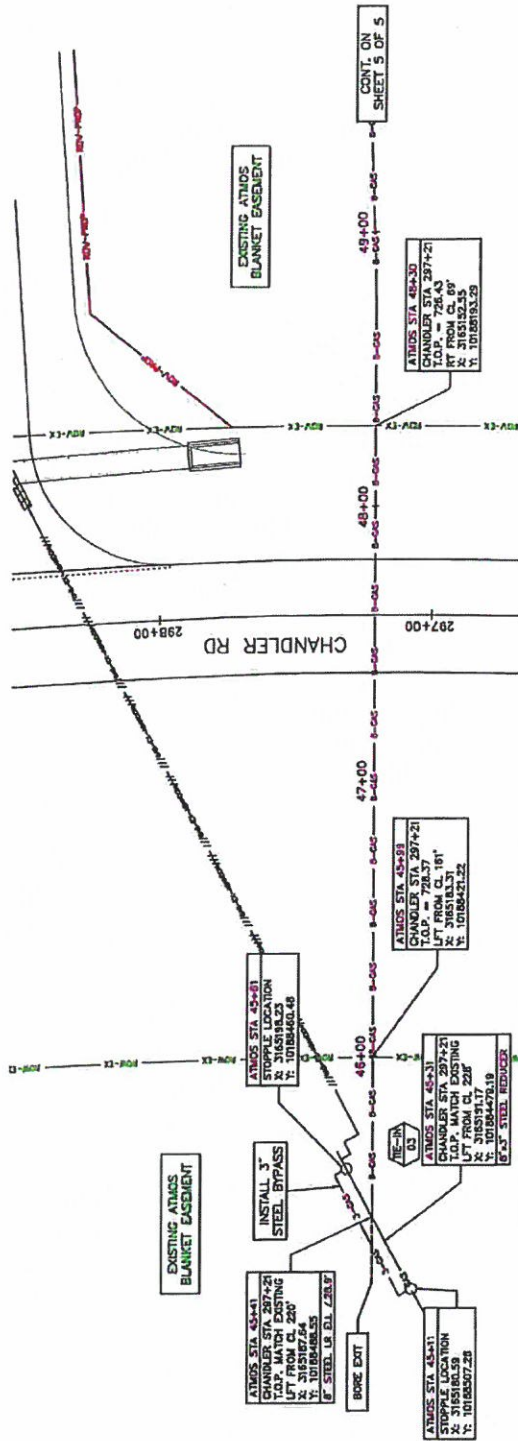
- CAUTION**  
REBAR CONSTRUCTION  
REBAR CONSTRUCTION MAY NOT BE LOCATED PRIOR TO CONSTRUCTION.
- CAUTION**  
UNDERGROUND UTILITIES  
UNDERGROUND UTILITIES MAY NOT BE LOCATED PRIOR TO CONSTRUCTION.
- NOTE:**  
ALL UNDERGROUND UTILITIES TO BE LOCATED PRIOR TO CONSTRUCTION.
- NOTE:**  
PROPOSED AND EXISTING PIPELINES TO BE LOCATED AS STAKED PRIOR TO CONSTRUCTION.
- NOTE:**  
EXISTING PIPE TO BE ABANDONED AND REMOVED PRIOR TO CONSTRUCTION OF PROPOSED PIPELINES.
- NOTE:**  
ALL NEW PIPING SHALL BE 3" UNDER PAVEMENT SURFACE OR 18" UNDER EXISTING PAVEMENT SURFACE AND 4" DEEP WHEN PLACED OUTSIDE OF PAVEMENT STRUCTURES OR UNDER ATTACHES.
- NOTE:**  
INSTALL 3" STEEL BYPASS PIPE TO BE CATCHED AND PROTECTED.
- NOTE:**  
EXISTING GRADE TO BE MAINTAINED AND PROTECTED.



**REFERENCE DRAWING**  
**ATMOS ALIGNMENT SHEET**  
**H1547**



"THE PURPOSE OF THIS DRAWING IS TO RELOCATE ATMOS ENERGY PIPELINES ONLY."



### BORE GUIDELINES

| MARK | NAME            | ENTRY | TAKEOFF | ANGLE  | RADIUS | EXT    | TOTAL LENGTH |
|------|-----------------|-------|---------|--------|--------|--------|--------------|
| A    | L21 Bore, CH210 | 8"    | 770 FT  | 135 FT | 8"     | 780 FT | 468.02 FT    |

\* TOTAL LENGTH OF BORES ARE CALCULATED FROM ENTRY GRADE TO EXIT GRADE.

|                                                                            |
|----------------------------------------------------------------------------|
| BARLOW EQUATION FOR STEEL PIPE: $t = (D \times P) / (2 \times S \times E)$ |
| OUTSIDE DIAMETER (N) = 0.63                                                |
| PRESSURE PS (LB/N) = P 800                                                 |
| DESIGN FACTOR = F 0.5                                                      |
| YIELD STRENGTH (PSI) = S 60000                                             |
| MINIMUM WALL THICKNESS (IN) = 0.12                                         |

|          |          |    |      |      |                               |
|----------|----------|----|------|------|-------------------------------|
| REVISION | DATE     | BY | CHKD | APPD | DESCRIPTION                   |
| 1        | 05/20/17 | AC |      |      | DESIGN FOR REVIEW             |
| 2        | 05/20/17 | AC |      |      | ADDRESS AT-ATMOS COMMENTS     |
| 3        | 05/20/17 | AC |      |      | REVISED FOR AT-ATMOS COMMENTS |
| 4        | 05/20/17 | AC |      |      | REVISED FOR AT-ATMOS COMMENTS |

|          |          |    |      |      |                               |
|----------|----------|----|------|------|-------------------------------|
| REVISION | DATE     | BY | CHKD | APPD | DESCRIPTION                   |
| 1        | 05/20/17 | AC |      |      | DESIGN FOR REVIEW             |
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| 3        | 05/20/17 | AC |      |      | REVISED FOR AT-ATMOS COMMENTS |
| 4        | 05/20/17 | AC |      |      | REVISED FOR AT-ATMOS COMMENTS |

|          |          |    |      |      |                               |
|----------|----------|----|------|------|-------------------------------|
| REVISION | DATE     | BY | CHKD | APPD | DESCRIPTION                   |
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| 4        | 05/20/17 | AC |      |      | REVISED FOR AT-ATMOS COMMENTS |

|          |          |    |      |      |                               |
|----------|----------|----|------|------|-------------------------------|
| REVISION | DATE     | BY | CHKD | APPD | DESCRIPTION                   |
| 1        | 05/20/17 | AC |      |      | DESIGN FOR REVIEW             |
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| 3        | 05/20/17 | AC |      |      | REVISED FOR AT-ATMOS COMMENTS |
| 4        | 05/20/17 | AC |      |      | REVISED FOR AT-ATMOS COMMENTS |

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- CAUTION: BEWARE OF OBSTRUCTIONS. ALL UNDERGROUND UTILITIES ARE LOCATED PRIOR TO CONSTRUCTION.
- CAUTION: ALL UNDERGROUND UTILITIES ARE LOCATED PRIOR TO CONSTRUCTION.
- NOTE: INSTALLER PIPELINE SHALL BE 5' UNDER EXISTING SURFACE OR 18" UNDER EXISTING STRUCTURES AND 4' DEEP UNDER EXISTING STRUCTURES OR UNDER UTILITIES.
- NOTE: EXISTING PIPE TO BE ABANDONED AND REMOVED PRIOR TO CONSTRUCTION OF PROPOSED PIPELINE.

|          |          |    |      |      |                               |
|----------|----------|----|------|------|-------------------------------|
| REVISION | DATE     | BY | CHKD | APPD | DESCRIPTION                   |
| 1        | 05/20/17 | AC |      |      | DESIGN FOR REVIEW             |
| 2        | 05/20/17 | AC |      |      | ADDRESS AT-ATMOS COMMENTS     |
| 3        | 05/20/17 | AC |      |      | REVISED FOR AT-ATMOS COMMENTS |
| 4        | 05/20/17 | AC |      |      | REVISED FOR AT-ATMOS COMMENTS |

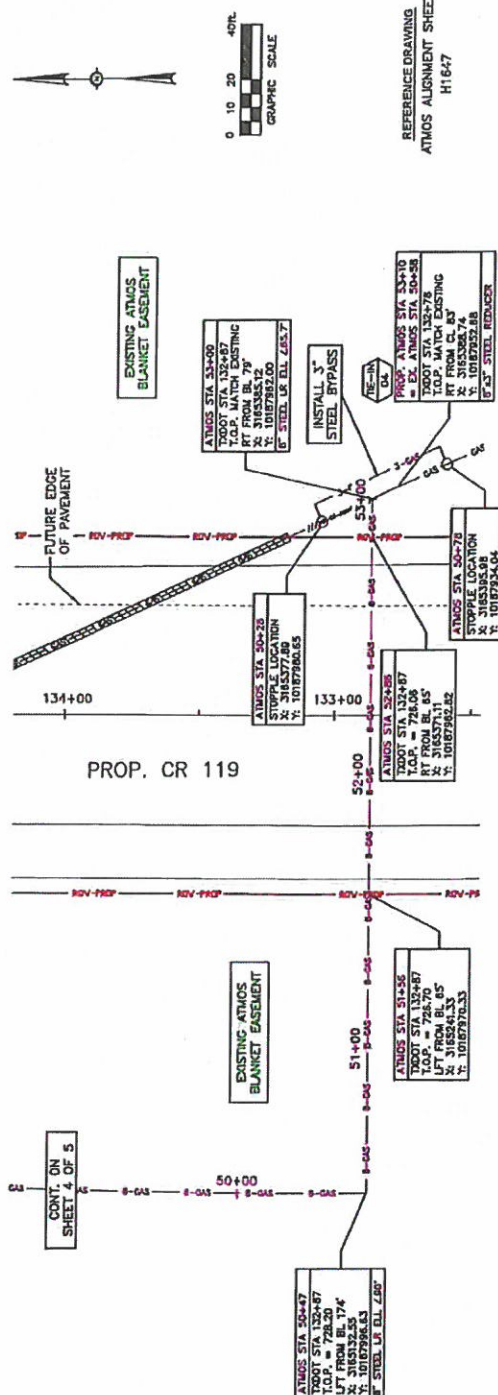
|          |          |    |      |      |                               |
|----------|----------|----|------|------|-------------------------------|
| REVISION | DATE     | BY | CHKD | APPD | DESCRIPTION                   |
| 1        | 05/20/17 | AC |      |      | DESIGN FOR REVIEW             |
| 2        | 05/20/17 | AC |      |      | ADDRESS AT-ATMOS COMMENTS     |
| 3        | 05/20/17 | AC |      |      | REVISED FOR AT-ATMOS COMMENTS |
| 4        | 05/20/17 | AC |      |      | REVISED FOR AT-ATMOS COMMENTS |

|          |          |    |      |      |                               |
|----------|----------|----|------|------|-------------------------------|
| REVISION | DATE     | BY | CHKD | APPD | DESCRIPTION                   |
| 1        | 05/20/17 | AC |      |      | DESIGN FOR REVIEW             |
| 2        | 05/20/17 | AC |      |      | ADDRESS AT-ATMOS COMMENTS     |
| 3        | 05/20/17 | AC |      |      | REVISED FOR AT-ATMOS COMMENTS |
| 4        | 05/20/17 | AC |      |      | REVISED FOR AT-ATMOS COMMENTS |

|          |          |    |      |      |                               |
|----------|----------|----|------|------|-------------------------------|
| REVISION | DATE     | BY | CHKD | APPD | DESCRIPTION                   |
| 1        | 05/20/17 | AC |      |      | DESIGN FOR REVIEW             |
| 2        | 05/20/17 | AC |      |      | ADDRESS AT-ATMOS COMMENTS     |
| 3        | 05/20/17 | AC |      |      | REVISED FOR AT-ATMOS COMMENTS |
| 4        | 05/20/17 | AC |      |      | REVISED FOR AT-ATMOS COMMENTS |

The drawing illustrates the atmospheric alignment for Highway CR 119. It includes stationing from 50+00 to 134+00, with a future edge of pavement shown. Key features include:
 

- Atmospheric Stationing and Data:**
  - Atmos STA 50+47: TPOOT STA 132+87, T.O.P. = 728.70, LT FROM BL 174' 4", N: 3165132.53, S: 10167996.53, E: STEEL LF ELL 280'
  - Atmos STA 51+56: TPOOT STA 132+87, T.O.P. = 728.70, LT FROM BL 85' 4", N: 3165132.53, S: 10167972.53, E: STEEL LF ELL 280'
  - Atmos STA 52+88: TPOOT STA 132+87, T.O.P. = 728.06, LT FROM BL 85' 4", N: 3165377.89, S: 10167861.82, E: STEEL LF ELL 285.7'
  - Atmos STA 53+10: TPOOT STA 132+87, T.O.P. = 728.06, LT FROM BL 70' 4", N: 3165385.12, S: 10167892.00, E: STEEL LF ELL 285.7'
  - Atmos STA 50+70: STOPPLE LOCATION, N: 10167934.04, S: 10167834.04
  - Atmos STA 50+28: STOPPLE LOCATION, N: 3165377.89, S: 10167861.82
- Easements:** Existing Atmos Blanket Easement and Proposed Atmos STA 53+10.
- Other Features:** Future Edge of Pavement, Steel Bypass, and a graphic scale (0 to 40 feet).



**REFERENCE DRAWING**  
**ATMOS ALIGNMENT SHEET**  
**H1647**

**HALFF ASSOCIATES, INC.**

PRELIMINARY - FOR INTERIM REVIEW ONLY

These documents are for Interim Review and not intended for Construction, Bidding, or Permit Purposes. They were prepared by, or under the supervision of:

|                 |       |            |
|-----------------|-------|------------|
| DUSTIN L. LECHE | 12784 | 12-13-2017 |
|                 | 12784 | 12-13-2017 |

**CAUTION !  
BEWARE OF OVERHEAD  
OBSTRUCTIONS.**

**CAUTION!**  
ALL UNDERGROUND  
OBSTRUCTIONS MAY NOT BE  
LOCATED.

**NOTE:**  
ALL UNDERGROUND UTILITIES  
TO BE LOCATED PRIOR TO

INQUIRY: PROPOSED AND  
EXISTING ATMOSPHERIC PIPELINES TO  
BE LOCATED & STAYED PROPOSED

UPDATE DATE 13-NOV-17  
SCALE AS NOTED

**NOTE:**  
ALL NEW PIPING SHALL BE 5' UNDER  
PAVEMENT SURFACE OR 18" UNDER  
PAVEMENT STRUCTURES AND 4' DEEP

**NOTE: INSTALLED PIPELINE**  
TABLE 1. 2017 AND 2018 DATA

WILL BE COATED, WRAPPED  
AND CATHODICALLY  
PROTECTED.

**NOTE:**  
EXISTING PIPE TO BE ABANDONED  
OR REMOVED TO FACILITATE THE  
CONSTRUCTION OF PROPOSED  
ROADWAY.

|       |              |
|-------|--------------|
| HALFF | AFE<br>MT MD |
|-------|--------------|

|                        |                     |
|------------------------|---------------------|
| UPDATE DATE: 13-NOV-17 | STA 132+87 CROSSING |
| SCALE: AS NOTED        | SHT. 5 OF 5         |
| DRAWING NUMBER         |                     |

ATMOS ENERGY  
L21 RELOCATION  
HUTTO, TEXAS

AFE 0813-031/  
MTTNO 15723

**ATMOS**  
energy



**HALFF**  
 100% American Made  
 100% Recycled Paper  
 100% Satisfaction  
 100% Quality  
 100% Service

**EX** A WHOLLY OWNED  
SUBSIDIARY OF  
HARVEY ASSOCIATES, INC.

**HALFF TR**

[illegible]

|    |  |
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| At |  |
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|    |  |

DECLARATION

[illegible]

| SL | DATE       | QTY |
|----|------------|-----|
| DL | 10/4/2017  |     |
| DL | 10/25/2017 |     |
| DL | 11/23/2017 |     |

|                 |
|-----------------|
| 8 COMMENTS      |
| 35 COMMENTS     |
| POLICY COMMENTS |
| NOTATION        |

|             |  |
|-------------|--|
| ADDED       |  |
| REVISED PER |  |
| REVISED PER |  |

|      |   |   |   |   |
|------|---|---|---|---|
| REV. | D | C | B | A |
|------|---|---|---|---|

|                                                                                     |
|-------------------------------------------------------------------------------------|
| BARLOW EQUATION FOR STEEL PIPE: $t = (D \times F \times S) / (2 \times F \times S)$ |
| OUTSIDE DIAMETER (IN) = D 16.63                                                     |
| PRESSURE PSI (LB/IN) = P 600                                                        |
| DESIGN FACTOR = F 0.5                                                               |
| YIELD STRENGTH (PSI) = S 60000                                                      |
| MINIMUM WALL THICKNESS (IN) = 1.012                                                 |



| MATERIALS WITH STORES (ITEMS ORDERED THROUGH MCJUNKIN OR ON ATMOS POs)                        |      |       |             |      |              |
|-----------------------------------------------------------------------------------------------|------|-------|-------------|------|--------------|
| DESCRIPTION                                                                                   | SIZE | QTY   | PRICE       | UNIT | COST         |
| PIPE ERW 3 X .216W CS FBE BEV DRL X42                                                         | 3    | 1,320 | \$ 7.00     | FT   | \$ 9,240.00  |
| 3-INCH STEEL FITTINGS                                                                         | 3    | 9     | \$ 30.00    | FT   | \$ 270.00    |
| 3-INCH STOPPLE FITTINGS & BYPASSES                                                            | 3    | 8     | \$ 975.00   | EA   | \$ 7,800.00  |
| Temporary Purge, Pressure Test & Load Assemblies, Wire, Caution Tap, Signage and Marker Balls |      | 1     | \$ 1,750.00 | EA   | \$ 1,750.00  |
| MATERIALS WITH STORES SUBTOTAL                                                                |      |       |             |      | \$ 19,060.00 |
| SALES TAX (4.38%)                                                                             |      |       |             |      | \$ 834.83    |
| FREIGHT (2.5%)                                                                                |      |       |             |      | \$ 476.50    |
| MATERIALS WITH STORES TOTAL                                                                   |      |       |             |      | \$ 20,371.33 |

| LAND RIGHTS             |        |         |        |              |
|-------------------------|--------|---------|--------|--------------|
| DESCRIPTION             | QTY    | PRICE   | UNIT   | COST         |
| DAMAGES AND RESTORATION | 24,100 | \$ 0.75 | Sq.Ft. | \$ 18,075.00 |
| NEW EASEMENT            | 10,642 | \$ 2.75 | Sq.Ft. | \$ 29,265.50 |
| LAND RIGHTS TOTAL       |        |         |        | \$ 47,340.50 |

| COMPANY LABOR (TOTAL DIRECT CAPITAL LABOR) |     |       |      |              |
|--------------------------------------------|-----|-------|------|--------------|
| DESCRIPTION                                | QTY | PRICE | UNIT | COST         |
| ENGINEERING                                | 120 | \$ 70 | HR   | \$ 8,400.00  |
| FIELD OPERATIONS                           | 160 | \$ 50 | HR   | \$ 8,000.00  |
| ENVIRONMENTAL                              | 24  | \$ 35 | HR   | \$ 840.00    |
| RIGHT OF WAY AGENT                         | 40  | \$ 35 | HR   | \$ 1,400.00  |
| FIELD CONSTRUCTION COORDINATOR (FCC)       | 150 | \$ 35 | HR   | \$ 5,250.00  |
| COMPANY LABOR TOTAL                        |     |       |      | \$ 23,890.00 |

| CONTRACT LABOR                            |      |             |      |               |
|-------------------------------------------|------|-------------|------|---------------|
| DESCRIPTION                               | QTY  | PRICE       | UNIT | COST          |
| CONTRACT ENGINEERING                      | 240  | \$ 95.50    | HR   | \$ 22,920.00  |
| SURVEY CREW                               | 40   | \$ 150.00   | HR   | \$ 6,000.00   |
| INSTALL 3-INCH STEEL PIPE VIA BORE/TRENCH | 1205 | \$ 70.00    | FT   | \$ 84,350.00  |
| ABANDONMENT/REMOVAL                       | 915  | \$ 13.00    | FT   | \$ 11,895.00  |
| STOPPLE INSTALLATION                      | 8    | \$ 3,500.00 | EA   | \$ 28,000.00  |
| X-RAY CREW                                | 2    | \$ 1,500.00 | DAY  | \$ 3,000.00   |
| CONSTRUCTION INSPECTOR (3RD PARTY)        | 240  | \$ 85.00    | HR   | \$ 20,400.00  |
| CONTRACT LABOR TOTAL                      |      |             |      | \$ 176,565.00 |
| SALES TAX (4.38%)                         |      |             |      | \$ 7,733.55   |
| CONTRACT LABOR TOTAL                      |      |             |      | \$ 184,298.55 |

| OTHER COSTS            |     |       |      |      |
|------------------------|-----|-------|------|------|
| DESCRIPTION            | QTY | PRICE | UNIT | COST |
| COST OF GAS LOST (MCF) | 0   | \$ 9  | EA   | \$ - |
| OTHER COSTS TOTAL      |     |       |      | \$ - |

| DIRECT COST OVERHEADS                           |  |  |  |              |
|-------------------------------------------------|--|--|--|--------------|
| DESCRIPTION                                     |  |  |  | COST         |
| BENEFITS OVERHEADS(52.53% OF COMPANY LABOR)     |  |  |  | \$ 12,549.42 |
| STORES OVERHEADS(4.0% OF MATERIALS WITH STORES) |  |  |  | \$ 814.85    |
| DIRECT OVERHEADS TOTAL                          |  |  |  | \$ 13,364.27 |

TOTAL DIRECT COSTS \$ 289,264.65

| INDIRECT COSTS                                                     |               |
|--------------------------------------------------------------------|---------------|
| DESCRIPTION                                                        | COST          |
| RHUTTS (25.0% OF COMPANY LABOR + 15.0% OF CONTRACTOR LABOR)        | \$ 33,617.28  |
| AFUDC DEBT (0.6300% OF DIRECT AND INDIRECT TOTALS EXCLUDING AFUDC) | \$ 2,516.90   |
| DIVISION OVERHEADS (16.24% OF DIRECT COSTS)                        | \$ 46,976.58  |
| CORPORATE OVERHEADS (10.25% OF DIRECT COSTS)                       | \$ 29,649.63  |
| TOTAL INDIRECT COSTS                                               | \$ 112,760.39 |

TOTAL DIRECT AND INDIRECT COSTS \$ 402,025.03

|                                               |               |
|-----------------------------------------------|---------------|
| ESTIMATED TOTAL PROJECT COST (CAPITALIZED)    | \$ 402,025.03 |
| INCOME TAX ADJUSTMENT (0.0% OF PROJECT TOTAL) | \$ -          |
| FRANCHISE FEE (0.0%)                          | \$ -          |
| TOTAL COSTS ASSOCIATED WITH PROJECT           | \$ 402,025.03 |



**Attachment B**

**Utility's Schedule of Work and Estimated Date of Completion**

**To be supplied in a Supplemental Agreement**

**Estimated Start Date: Approx. 2 Weeks From NTP (Subject to Contractor Availability)**

**Estimated Completion Date: Approx. 3 Weeks Construction Duration**

**Attachment C**

**Eligibility Ratio**

**See Attachment "E" for proof of property interest, which is established at 100% eligible.**

## Attachment D

### Betterment Calculation and Estimates

|                            |              |
|----------------------------|--------------|
| Total Cost with Betterment | \$493,168.60 |
| Total Cost w/o betterment  | \$402,025.03 |
| Difference                 | \$91,143.57  |
| % Betterment               | 18.48%       |



| MATERIALS WITH STORES (ITEMS ORDERED THROUGH MCJUNKIN OR ON ATMOS POs)                        |      |       |             |      |              |
|-----------------------------------------------------------------------------------------------|------|-------|-------------|------|--------------|
| DESCRIPTION                                                                                   | SIZE | QTY   | PRICE       | UNIT | COST         |
| PIPE ERW 8 X .322W CS FBE BEV DRL X42                                                         | 8    | 1,320 | \$ 23.00    | FT   | \$ 30,360.00 |
| 8-INCH STEEL FITTINGS                                                                         | 8    | 9     | \$ 155.00   | FT   | \$ 1,395.00  |
| 3-INCH STOPPLE FITTINGS & BYPASSES                                                            | 3    | 8     | \$ 975.00   | EA   | \$ 7,800.00  |
| Temporary Purge, Pressure Test & Load Assemblies, Wire, Caution Tap, Signage and Marker Balls |      | 1     | \$ 1,750.00 | EA   | \$ 1,750.00  |
| MATERIALS WITH STORES SUBTOTAL                                                                |      |       |             |      | \$ 41,305.00 |
| SALES TAX (4.38%)                                                                             |      |       |             |      | \$ 1,809.16  |
| FREIGHT (2.5%)                                                                                |      |       |             |      | \$ 1,032.63  |
| MATERIALS WITH STORES TOTAL                                                                   |      |       |             |      | \$ 44,146.78 |

| LAND RIGHTS             |        |         |        |              |
|-------------------------|--------|---------|--------|--------------|
| DESCRIPTION             | QTY    | PRICE   | UNIT   | COST         |
| DAMAGES AND RESTORATION | 24,100 | \$ 0.75 | Sq.Ft. | \$ 18,075.00 |
| NEW EASEMENT            | 10,642 | \$ 2.75 | Sq.Ft. | \$ 29,265.50 |
| LAND RIGHTS TOTAL       |        |         |        | \$ 47,340.50 |

| COMPANY LABOR (TOTAL DIRECT CAPITAL LABOR) |     |       |      |              |
|--------------------------------------------|-----|-------|------|--------------|
| DESCRIPTION                                | QTY | PRICE | UNIT | COST         |
| ENGINEERING                                | 120 | \$ 70 | HR   | \$ 8,400.00  |
| FIELD OPERATIONS                           | 160 | \$ 50 | HR   | \$ 8,000.00  |
| ENVIRONMENTAL                              | 24  | \$ 35 | HR   | \$ 840.00    |
| RIGHT OF WAY AGENT                         | 40  | \$ 35 | HR   | \$ 1,400.00  |
| FIELD CONSTRUCTION COORDINATOR (FCC)       | 150 | \$ 35 | HR   | \$ 5,250.00  |
| COMPANY LABOR TOTAL                        |     |       |      | \$ 23,890.00 |

| CONTRACT LABOR                            |      |             |      |               |
|-------------------------------------------|------|-------------|------|---------------|
| DESCRIPTION                               | QTY  | PRICE       | UNIT | COST          |
| CONTRACT ENGINEERING                      | 240  | \$ 95.50    | HR   | \$ 22,920.00  |
| SURVEY CREW                               | 40   | \$ 150.00   | HR   | \$ 6,000.00   |
| INSTALL 8-INCH STEEL PIPE VIA BORE/TRENCH | 1205 | \$ 100.00   | FT   | \$ 120,500.00 |
| ABANDONMENT/REMOVAL                       | 915  | \$ 13.00    | FT   | \$ 11,895.00  |
| STOPPLE INSTALLATION                      | 8    | \$ 4,000.00 | EA   | \$ 32,000.00  |
| X-RAY CREW                                | 2    | \$ 1,500.00 | DAY  | \$ 3,000.00   |
| CONSTRUCTION INSPECTOR (3RD PARTY)        | 240  | \$ 85.00    | HR   | \$ 20,400.00  |
| CONTRACT LABOR TOTAL                      |      |             |      | \$ 216,715.00 |
| SALES TAX (4.38%)                         |      |             |      | \$ 9,492.12   |
| CONTRACT LABOR TOTAL                      |      |             |      | \$ 226,207.12 |

| OTHER COSTS            |     |       |      |      |
|------------------------|-----|-------|------|------|
| DESCRIPTION            | QTY | PRICE | UNIT | COST |
| COST OF GAS LOST (MCF) | 0   | \$ 9  | EA   | \$ - |
| OTHER COSTS TOTAL      |     |       |      | \$ - |

| DIRECT COST OVERHEADS                           |  |  |  |              |
|-------------------------------------------------|--|--|--|--------------|
| DESCRIPTION                                     |  |  |  | COST         |
| BENEFITS OVERHEADS(52.53% OF COMPANY LABOR)     |  |  |  | \$ 12,549.42 |
| STORES OVERHEADS(4.0% OF MATERIALS WITH STORES) |  |  |  | \$ 1,765.87  |
| DIRECT OVERHEADS TOTAL                          |  |  |  | \$ 14,315.29 |

TOTAL DIRECT COSTS \$ 355,899.69

| INDIRECT COSTS                                                     |               |
|--------------------------------------------------------------------|---------------|
| DESCRIPTION                                                        | COST          |
| RHUTTS (25.0% OF COMPANY LABOR + 15.0% OF CONTRACTOR LABOR)        | \$ 39,903.57  |
| AFUDC DEBT (0.6300% OF DIRECT AND INDIRECT TOTALS EXCLUDING AFUDC) | \$ 3,087.51   |
| DIVISION OVERHEADS (16.24% OF DIRECT COSTS)                        | \$ 57,798.11  |
| CORPORATE OVERHEADS (10.25% OF DIRECT COSTS)                       | \$ 36,479.72  |
| TOTAL INDIRECT COSTS                                               | \$ 137,268.91 |

TOTAL DIRECT AND INDIRECT COSTS \$ 493,168.60

|                                               |               |
|-----------------------------------------------|---------------|
| ESTIMATED TOTAL PROJECT COST (CAPITALIZED)    | \$ 493,168.60 |
| INCOME TAX ADJUSTMENT (0.0% OF PROJECT TOTAL) | \$ -          |
| FRANCHISE FEE (0.0%)                          | \$ -          |
| TOTAL COSTS ASSOCIATED WITH PROJECT           | \$ 493,168.60 |

**Attachment E**  
**Proof of Property Interest**

# Received

# CobbFendley

FEB 07 2018

HNTB Corporation  
Round Rock

## LETTER OF TRANSMITTAL

To: HNTB  
101 E. Old Settlers Blvd., Suite 100  
Round Rock, Texas 78644

Date: February 6, 2018

CobbFendley Job: 1703-011-41A

Re: CR 119

Atmos' Utility Agreement Package

ATTENTION: Eddie Church 512-744-9082

WE ARE SENDING YOU THE FOLLOWING VIA: courier

☐ Prints

☒ Originals

☐ Other

| QUANTITY | DESCRIPTION                     |
|----------|---------------------------------|
| 4        | Atmos Utility Agreement Package |
|          |                                 |
|          |                                 |
|          |                                 |
|          |                                 |
|          |                                 |
|          |                                 |
|          |                                 |

### PURPOSE OF TRANSMITTAL:

☒ For Approval

☐ For Your Use

☐ As Requested

☐ For Review & Comment

### REMARKS:

Mr. Church

We have reviewed and recommend approval of Atmos' Utility Agreement Package in the amount of \$493,168.60.

If you have any questions, please let me know.

Thank you,

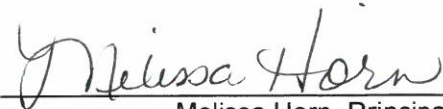
Copy To

File

Received By:

Date & Time:

SIGNED

  
Melissa Horn, Principal