

STANDARD UTILITY AGREEMENT ACTUAL COST – FORT BEND COUNTY

County: Fort Bend
Project No.: 732
Road Project Letting Date: 4/2010

Road: Greenbusch
Limits: From: Mills Manor Drive
To: Falcon Landing Boulevard

This Agreement by and between Fort Bend County, Texas, ("**County**"), acting by and through its duly authorized official, and Houston Pipe Line Company LP, acting by and through its duly authorized representative, ("**Owner**"), shall be effective on the date of approval and execution by and on behalf of the **County**.

WHEREAS, the **County** has determined that it is necessary to make certain improvements to Greenbusch Road, which said changes are generally described as follows: the expansion of the existing two-lane asphalt roadway with open ditches into a four-lane concrete boulevard street with curbs and underground storm sewer.

WHEREAS, these proposed roadway improvements will necessitate the adjustment, removal, and/or relocation of certain facilities of **Owner** as indicated in the following statement of work: as described in Exhibit "A", HPL proposes to relocate approximately 371 LF of its' 30-inch pipeline and extend approximately 39 LF of additional 36-inch O.D. casing pipe and such work is described in **Owner's** Estimate (estimated at \$1,300,493.24), which is attached hereto and made a part hereof, and which is prepared in form and manner required by 23 CFR 645, Subpart A, and amendments thereto; and

WHEREAS, the **Owner**, has provided sufficient legal authority to the **County** to establish an interest in properties affected by the abovementioned roadway improvements. Said facilities are located upon such properties as indicated in the statement of work as described in Exhibit "A".

NOW, THEREFORE, in consideration of the covenants and agreements herein contained, the parties mutually agree as follows:

The **County** will pay for reasonable and necessary eligible costs incurred in the adjustment or relocation of **Owner's** facilities to the extent authorized under Title 23, Code of Federal Regulations, Part 645, Subpart A. The **County's** participation shall consist of one hundred percent (100%) of the cost of the adjustment or relocation.

The **Owner** has determined that the method to be used in developing the adjustment or eligible relocation costs shall be as specified for the method checked and described hereinafter:

- ☒ (1) Actual direct and related indirect eligible costs accumulated in accordance with a work order accounting procedure prescribed by the applicable Federal or State regulatory body.
- ☐ (2) Actual direct and related indirect eligible costs accumulated in accordance with an established accounting procedure developed by the **Owner** and approved by the **County**.

Subject to the participation percentage as set out above, the **County** will, upon satisfactory completion of the adjustment or relocation, and upon receipt of a final billing prepared in the form and manner prescribed by Federal regulations, make payment in the amount of one hundred percent (100%) of the eligible costs as shown in the final billing.

Reasonable and necessary bills for work completed herein shall be submitted to the **County** not later than ninety (90) days after completion of the work. Upon receipt of the final billing and conclusion of the audit, the **County** agrees to pay **Owner** one hundred (100%) of the eligible cost as indicated. The **County** shall make payment within 45 days of acceptance of the final billing.

10-1-10 copy received

In the event there is a substantial change for the statement of work contained in Exhibit "A", reimbursement is limited to the amount approved pursuant to this agreement and its attached exhibits unless written approval is obtained from the **County**. All changes shall be documented on the **Owner's** "as-built" plans supplied to the **County**. **County** shall reimburse **Owner** for any additional cost or expense resulting from any delays waiting for **County's** written approval.

Upon execution of this agreement by all parties, the **County** will, by written notice, authorize the **Owner** to proceed with the necessary adjustment or relocation, and the **Owner** agrees to prosecute such work diligently in accordance with the **Owner's** plans. Such plans are attached as Exhibit "B". **Owner** shall provide the **County** with forty-eight (48) hours written notice prior to proceeding with the adjustment or relocation and agrees to proceed in such a manner that will not result in avoidable delay or interference with the **County's** roadway construction. Should **Owner** by its actions cause interference or delay resulting in the imposition of damages upon the **County** by a third party, **Owner** agrees to be responsible for said damages. Such authorization to proceed shall constitute notice on the part of the **County** that the relocation has been included in an approved program as an item of right of way acquisition, that a project agreement which includes the work has or will be executed, and that the utility relocation or adjustment will be required by the final approved project agreement and plans.

The **Owner** will retain records of such eligible costs in accordance with the provisions of 23 CFR Part 645, Subpart A.

The **Owner**, by execution of this agreement, does not waive any rights to which **Owner** may legally have within the limits of the law.

This agreement is subject to cancellation by the **County** at any time up to the date that work under this agreement has been authorized. **County** shall reimburse **Owner** 100% of all reasonable and necessary cost incurred by **Owner** up to the date of receipt of Notice of Cancellation.

The **County** Auditor may conduct an audit or investigation of any entity receiving funds from the **County** directly under this contract or indirectly through a subcontract under this contract. Acceptance of funds directly under this contract or indirectly through a subcontract under this contract acts as acceptance of the authority of the **County** Auditor, to conduct an audit or investigation in connection with those funds.

It is also expressly understood that the **Owner** conducts the adjustment, removal, or relocation at its own risk, and that the **Owner** agrees to indemnify and hold the **County** harmless for damage to existing facilities caused by the **Owner's** conduct.

The signatories to this agreement warrant that each has the authority to enter into this agreement on behalf of the party represented.

UTILITY

Owner: Houston Pipe Line Company LP

Executed and approved by Houston Pipe Line Company LP for the purpose and effect of activating and/or carrying out the orders, established policies, or work programs heretofore approved and authorized by Houston Pipe Line Company LP, By HPL GP, LLC, it's general partner

By: 
Michael L. Spears

Title: Senior Vice President

Date: 9/19/10

COUNTY

Fort Bend County

Executed and approved by Fort Bend County for the purpose and effect of activating and/or carrying out the orders, established policies, or work programs heretofore approved and authorized by Fort Bend County.

By: 
Robert Hebert

Title: Judge, Fort Bend County

Date: 9-28-2010

Fort Bend County Project: #732
Utility: Houston Pipe Line Company LP
Utility Project Number:
Roadway: Greenbusch Road (Phase II)
Eligibility Ratio: 100%

EXHIBIT A

INCLUDES:

Scope of Work: HPL proposes to relocate approximately 371 LF of 30-inch pipeline and extend approximately 39 LF of additional 36-inch O.D. split casing pipe that will be covered by the proposed widening of Greenbusch Road and/or it's proposed improvements to outside of the proposed ROW and within HPL's existing fifty (50) wide easement

Summary Estimate

Labor Estimate

Materials Estimate

Voucher Estimate (if applicable)

Exhibit "A" – Scope of Work

HOUSTON PIPE LINE COMPANY LP

**HPL 30-INCH PEARLAND – KATY (3015) PIPELINE RELOCATION
ASSOCIATED WITH FORT BEND COUNTY'S GREENBUSCH RD. IMPROVEMENTS PROJECT**

(September 14th, 2010)

AFE No.: 19110721

PROJECT OVERVIEW:

Fort Bend County has requested that Houston Pipe Line Company, LP (HPL) relocate the existing 30" Pearland – Katy (3015) Pipeline to accommodate their proposed Greenbusch Road Improvements Project in Fort Bend County, Texas. The physical location of the project is just South of Katy Mills Mall near Katy, Texas. The location is depicted on drawing P1-1.

THE SCOPE OF WORK FOR RELOCATING A PORTION OF HPL'S 30-INCH PEARLAND – KATY (3015) PIPELINE IS AS FOLLOWS:

The Contractor shall mobilize initially to the project, demobilize after the project is completed and furnish all labor, technical expertise, supervision, equipment and material; excluding that material which Company herein agrees to provide for the installation of approximately 371 feet of 30" carrier pipe and approximately 39 feet of 36" split casing pipe and related vent pipes, insulators, end seals, boots, etc., all on the Southwest side of Greenbusch Rd. generally in the same alignment as the existing 30" Pearland-Katy (3015) Pipeline but shifted 18 feet to the Southwest. The above stated work shall include, but not be specifically limited to, providing temporary and permanent fencing and fence gaps/gates, clearing and grading the right-of-way, clearing of trees, trenching including all rock removal, handling of ground water and rain water, loading and transporting and off-loading of all equipment and materials, pipe stringing, laying, welding and lowering-in, fabrication and installation, including the bore section, all civil work, sleeper pads, coating of all field joints and split weld seams using Protal 7200 via brush or roll application in accordance with manufacturer's specifications, inspect coating with Holiday Detector and repair damaged coating, install padding, fill, backfill, & crushed surface rock as required, sand blasting and painting, make final cleanup, re-seeding, return all unused material to HPL, and all other work necessary to construct and complete the work in accordance with this scope of work Exhibit "A", the bid drawings dated 9/28/2010 referenced in Exhibit "B", the Energy Transfer Construction Specifications referenced in Exhibit "B", and the Specific Requirements as follows:

SPECIFIC REQUIREMENTS:

1. It is anticipated that the Contractor will be released to begin work on 10/18/2010 and he shall perform the work at such a rate to achieve a final completion date of 11/04/2010. The Contractor shall base his proposal on a 6 day work week and a 10 hour/day work day.
2. The Contractor shall access the proposed job site by using HPL's existing right of way from Fort Bend County's existing Greenbusch right of way and adjacent access roads.

3. The available temporary work space is shown on drawings P4-1TEMP. The Contractor shall contain all of his construction activities within this temporary work space. Should the Contractor not have adequate space to stockpile the excavated spoil within the temporary work space he will be responsible for hauling and stockpiling the spoil elsewhere (at a site provided by the Contractor) until it is needed for backfill and cleanup. Should some spoil be lost due to this activity, the Contractor shall furnish and place new select backfill. The Contractor is responsible for disposing of any unused soil or spoil left over after the construction activities are complete at an approved disposal site.

4. The Contractor shall be responsible for furnishing and installing a temporary chain link fence with lockable gates around the proposed work area to totally enclose the proposed work area to prevent animals and people from entering the property and the proposed work area during non-work hours. Upon completion of the construction activities, the Contractor shall be responsible for removing and disposing of the temporary fencing materials.

5. The Contractor shall be responsible for grading/furnishing/installing/compacting select fill, geotextile material, and 4" of crushed rock and/or paving, whichever is currently installed, in the disturbed areas on the existing access roads off the Greenbusch Road right of way.

6. The Contractor shall leave the existing HPL 30" Pearland – Katy (3015) Line in place and in-service while completing the casing extensions. The materials to be permanently removed are depicted on drawing P4-1 and P12-1.

7. The Contractor is reminded that this project is alongside Greenbusch Road, which has high volumes of traffic. The Contractor shall be responsible for all vehicular and pedestrian traffic control at the job site, including the traffic control plan. This means the appropriate flagman, barrels, flashing lights, road warning signs, safety netting around excavations, barricades (including concrete barricades if required), uniform officer(s), etc., are the responsibility of the Contractor. The traffic control plan shall comply with all Fort Bend's standards, specifications, and requirements. The Contractor shall also be responsible for obtaining permission and/or permits for any road closers, as required, to perform the work, from the applicable governing authorities.

8. Materials:

- a. The 371 feet of 30.000" O.D., 0.375" W.T. Gr. X-60 with 14-16 MILS of FBE carrier pipe will be located at a Houston area Materials Supplier yard. Approximately 150 feet of this pipe will have an additional 30-40 MILS of ARO for the bore section.
- b. The 39 feet of 36.000" O.D., 0.375" W.T. casing pipe for this project will be located at a Houston area coating yard.
- c. The 40 feet of 4.5" O.D. vent pipe for this project will be located at Womble's Houston area coating yard.
- d. The related casing materials for this project will be located at Energy Transfer's Pearland Operations Warehouse in Pearland, Texas.

The Contractor shall be responsible for hauling the pipe and casing materials from these locations to the job site. The Contractor shall be responsible for arranging the loading of the pipe with the coating vendor. ETC's Pearland Operations personnel will be responsible for loading the casing materials on the Contractor's haul trucks. Once the project is awarded to the Contractor, Pegasus will provide the Contractor with a Material Expediting and Tracking Report (METS) documenting the details of the materials.

Prior to picking up materials, the Contractor shall give 48 hours notice to both ETC's Chief Inspector, Operations and Procurement personnel and Pegasus Procurement personnel. The contact information for ETC's personnel is as follows:

ETC Pearland Operations – Kory Parton (281-850-1417, cell)
ETC Victoria Procurement – Perry Roberts (361-648-6364, cell)
Pegasus Procurement – Brooke Wooddell (281-605-4492, office)

At the completion of the project, the Contractor shall return all new surplus materials to ETC's Victoria Warehouse yard. All new surplus pipe greater than 15 feet is to be beveled by the Contractor, prior to returning it to the yard. The Contractor shall ensure that all paperwork related to the surplus materials goes with the shipment and the material documentation is noted on the materials. It is preferred that the Contractor does **NOT** stack the pipe in a pyramid arrangement on the haul trucks. ETC's Victoria Warehouse staff shall be responsible for off loading all returned new surplus materials from Contractor's trucks at the ETC's Victoria Warehouse yard. The Contractor shall give 48 hour notice to ETC's Victoria staff, prior delivering the new surplus materials.

At the completion of the project, the Contractor shall return all removed and junk materials to ETC's Pearland Operations Yard. ETC's Pearland Operations personnel shall be responsible for off loading and stacking the removed and junk materials from Contractor's trucks at the ETC's Pearland Operations Yard. The Contractor shall give 48 hour notice to both ETC's Chief Inspector and Pearland Operations personnel, prior delivering the materials. The Contractor is responsible for disposing of all unusable existing materials such as barbed wire, fence posts, chain link fencing materials, etc. at an approved disposal site.

The Contractor shall furnish all labor and equipment to off load and load the materials at the Greenbusch Road job site.

9. Materials to be furnished by the Contractor are depicted on the material list by an asterisk "*" in the CTR FUR Column. In addition, some of the Contractor furnished materials are noted on the bid drawings such as fencing materials, bollards, coating materials, paint, cement, etc.
10. The Contractor's bid proposal is to include all state and local taxes such as sales tax, use tax and gross receipt tax, etc.
11. The Contractor shall acquire and be responsible for all required state and local permits and licenses. Examples of this requirement are local building permits, traffic control plans, permits and notices to the Railroad Commission & State Health Department and the TNRCC for asbestos abatement.
12. The coating on the existing pipeline is considered to contain asbestos; therefore, the Contractor shall be responsible for providing trained asbestos abatement workers to remove and dispose of the coating per the applicable regulatory requirements. The Contractor shall provide paper documentation that the coating was properly removed and disposed of in accordance with applicable regulatory requirements. This is required for all coating removed by the Contractor on this project.
13. A staff manpower and equipment loading schedule is to be submitted by the Contractor with his bid proposal and a bar chart schedule of key work activities.

14. The Contractor is to conduct a safety meeting (tailgate) every morning with ETC's Chief Inspector to identify, discuss, and document the construction activities that will be performed during the work day, to identify/discuss/mitigate potential risks, and to implement a safe work plan.
15. The Contractor is to submit with his bid proposal a copy of his current safety record (i.e. TRIR – Total Recordable Incident Rate).
16. This project is considered a D.O.T. project; therefore, the Contractor shall submit with his bid proposal and for Company approval, an "Anti-Drug Policy" and an "Anti-Drug Plan".
17. The Contractor shall have written authorization from Company for all extra work, prior to commencing with extra work. The Contractor's proposal shall include labor and equipment rate sheets to cover such approved extra work.
18. The Contractor shall furnish the Manufacture's Material Safety Data Sheet for all Contractor furnished cleaning solvents to be used on this project and the product must be EPA approved.
19. The Contractor shall be responsible for notifying the Texas One Call System, Lone Star Notification Center, Common Ground Alliance (811), and the local water line and sewer line companies 48 hours prior to excavation. Also, Contractor shall locate all foreign lines and utilities and notify ETC's Chief Inspector, before excavation or welding, of any conflicts or busts in drawings. The Contractor is responsible for field checking all sizes, dimensions, locations, and elevations and notifying ETC's Chief Inspector of any discrepancies or conflicts, prior to construction.
20. The Contractor shall be responsible for excavating the pipeline at both ends of the existing casing pipe at the proposed work area, as required, to confirm the location (horizontal and vertical position) of the existing 30" pipeline and 36" casing pipe and to ensure that the proposed facilities are aligned and depicted correctly on the Released for Construction drawings. If minor adjustments are required to the proposed casing pipe such as mitering, this is considered part of the Contractor scope of work and shall not be considered an extra cost to the Company.
21. The Contractor shall submit, with his bid proposal, a list of sub-contractors to be utilized. ETC reserves the right to approve or disapprove the sub-contractor.
22. The Contractor shall perform a daily site cleanup of trash and dispose of same at an approved location.
23. The Contractor shall provide sanitary waste facilities for his personnel during construction. The Contractor shall have the sanitary waste facilities serviced on a frequent basis to maintain a clean environment.
24. The Contractor shall be responsible for the R-O-W cleanup and grade settling at the work area for twenty-four (24) months from its completion should it need repair.
25. The Contractor shall furnish, install, maintain, and remove silt screens around the entire work site, as necessary, to prevent silt runoff.

26. The proposed 36" casing pipe and 4" vent pipe will be provided to Contractor with FBE coating. The Contractor shall sandblast in accordance with the coating manufacturer's specifications all below grade uncoated line pipe, casing pipe, vent pipe, fittings, field joints, split weld seams, damaged coating areas, holidays and shall furnish and coat these items with Protal 7200 coating in accordance with manufacturer's coating standards.

27. The Contractor shall sandblast to "Near White" all above grade piping materials, furnish paint, and paint these facilities per ETC's painting standards. This includes the proposed vent pipes.

28. The Contractor is responsible for all dewatering (both ground and rain water) of the bell holes and work areas as required to perform the work. This work includes furnishing, installing, maintaining, and removing well points, if required.

29. The Contractor shall provide and install temporary mats, shoring materials, bore boxes, etc. as required, to perform the work, including mats to offload equipment to the job site.

30. Hydrostatic Testing Activities:

- The Contractor shall furnish all hydrostatic test equipment (i.e. test headers, dead weights, pressure chart recorder, temperature chart recorder, charts, gauges, hoses, pumps, blinds, skillets, bull plugs, weld caps, small hand valves, pigs, gauging plate, potable water, and drying equipment) for the pre and in-place hydrostatic tests. The dead weights, pressure and temperature recorders, and gauges are to be calibrated within the last 12 months. The deadweight gauge calibration shall be traceable to the U.S. Bureau of Standards. The Contractor shall include the calibration records with the final hydrostatic test report.
- The Contractor shall be responsible for furnishing potable water for the pre-test and in-place hydrostatic tests.
- The Contractor shall be responsible for completing the following:
 - (1) A pre-hydrostatic test in accordance with drawings P1-1 for a minimum continuous duration of 4 hours on the Bore section of pipe prior to the bore.
 - (2) An in-place hydrostatic test in accordance with drawings P1-1 for a minimum continuous duration of 8 hours on the Bore section of pipe after it is in place with the tie-in/interconnecting piping. Prior to conducting the in-place hydrostatic test, the Contractor shall install the field bends and interconnecting piping on each end of the proposed relocation.
- The Contractor shall provide a qualified representative to validate the pre-test and in-place hydrostatic tests.
- Following the pre-test and in-place hydrostatic tests, the Contractor may drain the clean spent hydrostatic test water in either the Greenbusch Rd. ROW or 50' ETC/HPL easement. Any costs for disposal shall be included in the Contractor's proposal.
- All frac-tanks and vacuum trucks used by the Contractor to fill, hydrostatic test, and dewater shall be certified clean (in writing) by the Contractor prior to their use.

Following their use the Contractor is responsible for cleaning these trucks to their original condition.

- After dewatering activities, the Contractor shall, at a minimum, run three Knapp 2B foam pigs followed with three 5B foam swab pigs to clean and dry the pipeline. Running up to 2 additional 5B foam swab pigs (should they be necessary in the opinion of Houston Pipe Line Company's Chief Inspector) is considered part of the scope. The desired dryness will be ¼" penetration on a foam pig. The Contractor shall obtain written sign off from both Houston Pipe Line Company's Chief Inspector and Operations when pipeline is dried.

31. When excavating existing foreign lines to install the new facilities, the Contractor shall **NOT** be allowed to dig closer than the allowed Tolerance Zone per 16 TAC Chapter 18.9 and 18.10 (which is defined as half the width of the underground pipeline plus a minimum of eighteen inches (18") on either side of the outside edge of the underground pipeline on a horizontal plane. The tolerance zone shall not be less than twenty-four inches (24")) with the equipment. The Contractor shall complete the remaining distance by hand. Additionally, the side cutters shall be removed from the buckets and a piece of plate will be welded across the teeth, or the teeth are to be removed.

32. The Contractor's proposal shall include the cost to furnish its employees Flash Fire Protection "FFP" outer wearing apparel which will be made of either Nomex III, Kevlar or Fire Retardant Cotton. It will be either one piece coveralls or pants and shirt and it must be worn as the outer layer of clothing. The FFP shall be worn by employees when working in an area where ignition hazards are present or are likely to be present. This includes but is not limited to "Hot Tie-ins" and while working in or near an area with escaping gas or flammable gas.

33. **Welding:**

- All pipe welds will be x-rayed in accordance with the current API 1104. The X-ray will be furnished by Houston Pipe Line Company and managed by Houston Pipe Line Company's Chief Inspector. All such welds shall be made by a welder qualified in accordance with the current approved API 1104 regulations. Such welder qualification shall be in accordance with the current approved API 1104 regulations for Multiple Qualification using existing Houston Pipe Line Company's welding procedures as follows:
 - a. Butt (Bellhole) Weld - Per Houston Pipe Line Company's welding standards make one weld on 12.750" O.D. x 0.250"W.T. grade X60 using E6010 Fleetweld 5P+ for the root bead and E8010G Shield-Arc 70+ for the fillers and cap.
 - b. Branch (T) Weld - Per Houston Pipe Line Company's welding standards make one 12" on 12" weld using 12.750" O.D. x 0.250"W.T. Grade X60. Use E8010G Shield-Arc 70+ all the way.
- ETC will furnish only the pipe for the welder test. All other material required for the welder tests, including the pulling machine, is to be furnished by the Contractor.
- All cracks and arc burns in welds shall be cut out. If pipe or fittings are arc burned, the Contractor shall cut out said arc burn and install new pipe or fittings which will be provided by ETC, but charged to the Contractor's account. The Contractor shall furnish

and install non-flammable protective backing material between the casing longitudinal weld seam and the carrier pipe.

34. The Contractor will **NOT** be required to set up a temporary construction office at the project site.

35. Mustang Engineering will perform the initial construction staking for the existing pipeline centerline and the temporary work space corners, and will be on site towards the end of the project to perform as-built surveying, as deemed necessary by ETC. Contractor shall be responsible for off setting the construction stakes, as required, to allow the excavation and installation activities to proceed unencumbered, but still maintain reference points for proper alignment. The Contractor shall do all detailed staking, layout, and elevation survey work during the construction phase of the project.

36. ETC's Chief Inspector shall be responsible for performing the as-built activities such as material tracking, pipe tally, and red lining as-built drawings.

37. ETC's personnel will be responsible for furnishing and installing the proposed cathodic protection test stations. The Contractor shall be very careful during back fill activities to prevent damage to the test stations.

38. The Contractor shall be responsible for furnishing and installing the proposed pipeline marker poles. The marker poles shall be the same type that Energy Transfer normally uses.

39. The Contractor will **NOT** be required to have a designated safety person on the job site at all times.

40. The Contractor shall furnish and install sand bags under the existing 30" pipeline and the proposed/existing 36" casing pipe, as required, to support the piping. The Contractor will also be responsible for supporting existing water line and any foreign pipelines in excavated area during construction activities.

41. . The Contractor shall be responsible for backfilling in 12" lifts to a 95% compaction density of ASTM D 1557 (Modified Proctor) with moisture +/- 3% of optimum under the proposed roadway. The Contractor shall be responsible for backfilling in 12" lifts to a 90% compaction density of ASTM D 698 (Standard Proctor) or to a 85% compaction density of ASTM D 1557 (Modified Proctor) with moisture +/- 3% outside of the proposed roadway area. The compaction density may be obtained using cement stabilized sand (1 sk/CY). The cement stabilized sand shall NOT be poured around the existing or proposed casing pipe. Adequate soil cover shall be installed around the casing pipe. The Contractor shall be responsible for coordinating an approved Fort Bend County laboratory to complete the compaction density tests and for the testing costs.

42. ETC's Chief Inspector is the point of contact for the Contractor.

43. Following the clean-up activities, the Contractor shall disc, harrow, and rake clean the right of way and disturbed areas to a smooth service.

44. The Contractor shall perform all construction activities in accordance with Energy Transfer's Construction Specifications for Land Pipeline Construction and Meter Stations (dated May 27th, 2005) referenced in Exhibit "B", unless otherwise noted in this scope of work or

related bid drawings. If conflict(s) exist between ETC Construction Specifications, this scope of work, and related bid drawings, the Contractor is note concerns in bid proposal and request for clarification from ETC. It should be noted that after the bid is awarded to the Contractor, ETC will have the option to select the specification that they deem is the most practical if the Contractor does **NOT** note concerns or clarifications prior to receiving the bid award.

HOUSTON PIPELINE COMPANY, LP

PROJECT COST ESTIMATE

September 7, 2010

20%

Est

CUSTOMER COMPANY NAME: HOUSTON PIPELINE COMPANY, LP
Fort Bend County Greenbusch Road
PROJECT NAME: Improvements - HPL's Pearland - Katy 30"
Pipeline Relocation (3015) and Casing
Extension (Phase I & II)
PIPELINE NAME HPL PEARLAND - KATY 30" PIPELINE (3015)
AFE NUMBER: 19110721
HPL PROJECT MANAGER: Calvin Dodd
MUSTANG ENGINEERING PROJECT MANAGER: Jim Pearson
REVISION NUMBER:

Summary Page

	Estimate	Contingencies	Estimate with Contingencies
Material and Equipment Cost	\$ 127,085.07		
Field Direct Costs	\$ 649,271.86		
Project Support Costs	\$ 259,067.62		
Other	\$ 265,068.69		
Total	\$ 1,300,493.24		

Project Scope

This cost estimate captures the normal resources required to relocate HPL's 30" Pearland - Katy (3015) Pipeline to accommodate Fort Bend County's proposed Greenbusch Road (Phase I & II) improvements project near Katy, TX. Approximately 371 feet of 30" carrier pipeline and approximately 39 feet of 36" casing pipeline (including associated casing materials) will have to be relocated to the resolve the conflicts due to the proposed road widening. Approximately 150' of the proposed relocation will be installed via a boring method due to excavation/work area constraints around the existing home along the southwest side of Greenbusch Road.

MAOP:

The existing ETF 30" Pearland - Katy (3015) pipeline has a Maximum Allowable Operating Pressure (MAOP) of 740 psig.

Design Code/Regulations:

The section of pipeline to be relocated will be designed in accordance with 49 CFR 192.

Gas Blowdown Requirements:

The existing HPL 30" Pearland - Katy line is approximately 10.03 miles in length from the Katy Plant to the Pecan Grove Main Line Valve. The pipeline will be blown down temporarily to complete tie-ins. Monies are included for the gas blow down of the 30" pipeline.

Right-Of-Way:

An adjustment of the existing easement will be required for the proposed HPL 30" Pearland - Katy pipeline relocation project. Construction activities will require additional temporary workspace, in addition to HPL's permanent 50' wide ROW.

Temporary Work Space for the project is as follows for the 30" Pearland - Katy pipeline relocation project:

1. RELOCATION : 25 foot wide strip on the Southwest side of the existing HPL permanent easement for the entire length of the proposed relocation. Also, a 100 foot x 50 foot site is required at both the bore entry and exit locations.

HOUSTON PIPELINE COMPANY, LP

PROJECT COST ESTIMATE

September 7, 2010

CUSTOMER COMPANY NAME: HOUSTON PIPELINE COMPANY, LP

PROJECT NAME: Fort Bend County Greenbusch Road Improvements - HPL's Pearland - Katy 30" Pipeline Relocation (3015) and Casing Extension (Phase I & II)

PIPELINE NAME HPL PEARLAND - KATY 30" PIPELINE (3015)

AFE NUMBER: 19110721

ETC PROJECT MANAGER: Calvin Dodd

MUSTANG PROJECT MANAGER: Jim Pearson

REVISION NUMBER:

Notes and Assumptions

1. Ingress and egress can be obtained at all locations at minimum costs. (A)
2. Temporary work space can be obtained at all required locations at minimum costs. (A)
3. Job duration is estimated at 22 Days (mobilization to clean-up), weather permitting. (N)
4. Per requester, cost estimate accuracy is order of magnitude (+ or - 20%). (N)
5. Cost est. is based on completing the proposed work in dry lay conditions. (N)
6. Materials can be obtained without expediting or hot shotting services. (A)
7. No major road closing will be required. (A)
8. Cost est. is based on minimum site preparation (i.e. stable soil conditions). (N)
9. Cost est. is based on clearing all of the timber and brush in the permanent ROW and disposing off-site. (N)
10. Base lay price for pipe assumes Contractor will pick-up the pipe at a local pipe distributor in the Houston area. (A)
11. Cost est. assumes environmental surveys and permits will be completed by ETC staff, if required.(N)
12. Cost est. assumes right of way work will be completed by Mustang staff. (N)
13. Cost est. assumes purchasing and expediting work will be completed by Mustang staff. (N)
14. Cost est. assumes construction management will be completed by ETC staff. (N)
15. Cost est. contains costs for 25.6% overhead. (N)
16. Cost est. assumes existing home along southwest side of Greenbusch Road will not be removed by the County. (A)
17. Cost est. does NOT contain costs for AFUDC or Income Tax Gross-Up charges. (N)
18. Cost est. does NOT include costs for any unforeseen re-routes or overbends. (N)
19. Cost est. does NOT include costs for condemnation activities or related activities. (N)
20. Cost est. does NOT include costs for repair of drain tiles. (N)
21. Cost est. does NOT include costs for encountering extensive rock. (N)
22. Cost estimate does NOT include monies for encountering or addressing extensive environmental issues. (N)
23. Cost estimate does NOT include monies for encountering or addressing any Archeological areas. (N)
24. Cost estimate does NOT include monies for contingencies. (N)
25. Cost est. does NOT include costs for extensive shoring and matting materials. (N)
26. Cost est. does NOT include costs for additional move out/move in or stand-by requirements due to heavy rains (N)

(A) - Assumption

(N) - Note

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HOUSTON PIPELINE COMPANY, LP

PROJECT COST ESTIMATE

September 7, 2010

CUSTOMER COMPANY NAME: HOUSTON PIPELINE COMPANY, LP

PROJECT NAME: Fort Bend County Greenbusch Road Improvements - HPL's Pearland - Katy 30" Pipeline Relocation (3015) and Casing Extension (Phase I & II)

PIPELINE NAME HPL PEARLAND - KATY 30" PIPELINE (3015)

AFE NUMBER: 19110721

ETC PROJECT MANAGER: Calvin Dodd

MUSTANG PROJECT MANAGER: Jim Pearson

REVISION NUMBER:

MATERIAL AND EQUIPMENT COSTS

		Est. Quantity	Est. Unit	A.F.E. Unit Cost	A.F.E. COST ESTIMATE		
Mark No.	RELOCATION OF 30" PIPELINE						
P-001	Pipe, 30.000" O.D., 0.375" W.T., (118.65 lb/ft), Gr. X60, DSAW. Coated with 14 - 16 Mils of FBE and 30 - 40 Mils of ARO Protective Overcoat.	400	FT	\$215.00	\$86,000.00		
P-002	Pipe, 36.000" O.D., 0.375" W.T., (142.81 lb/ft), Gr. B, DSAW, Coated with 14 - 16 Mils of FBE.	40	FT	\$160.00	\$6,400.00		
P-003	ELL, 30". Weld, 0.375" W.T., Gr. Y60, 45 Degree, 3R, Bare, Fully Segmentable.	3	EA	\$5,600.00	\$16,800.00		
P-004	Pipe, 2.375" O.D., 0.218" W.T., Gr. B, ERW, Coated with FBE (For Vent Pipe)	40	FT	\$15.00	\$600.00		
P-005	Casing Insulators, PSI Model PE to fit 36" O.D. x 0.375" W.T. Casing Pipe and 30" O.D. Carrier Pipe coated with 156 mils of Type "A-2" Coal Tar Enamel coating. Insulators to be installed at a maximum distance of 6 feet (center to center).	7	Ea	\$55.01	\$385.07		
P-006	Casing End Seals to fit 36" O.D. x 0.375" W.T. Casing Pipe and 30" O.D. Carrier Pipe, Wrap-Around Type, PSI Model W or equal.	1	Ea	\$171.72	\$171.72		
P-007	Casing Link Seal, Thunderline Corp Type, 500 Series, Model LS-500-C, Complete Link Seal Order No. 3036, to fit 36" O.D. x 0.375" W.T. Casing Pipe and 30" O.D. Carrier Pipe Coated with Type "A-2" Coal Tar Enamel Coating (i.e. 156 mils).	1	Ea	\$647.37	\$647.37		
P-008	Casing Vent Cap, 2", 180 degree Weld Ell or Equal.	1	FT	\$30.07	\$30.07		
P-009	Test Station, Cathodic Protection.	2	EA	\$100.00	\$200.00		
	PIPELINE RELOCATION MATERIALS SUB-TOTAL				\$111,234.20	\$	-
FREIGHT (6.00% of materials)					\$6,674.05		
TAX (8.25% of material costs)					\$9,176.82		
MATL. & EQUIP. SUB-TOTAL					\$127,085.07	\$	-
CONTINGENCIES (10%)					\$12,708.51		
MATL. & EQUIP. SUB-TOTAL WITH CONTINGENCIES					\$127,085.07		

HOUSTON PIPELINE COMPANY, LP

PROJECT COST ESTIMATE

September 7, 2010

CUSTOMER COMPANY NAME: HOUSTON PIPELINE COMPANY, LP

PROJECT NAME: Fort Bend County Greenbusch Road improvements - HPL's Pearland - Katy 30" Pipeline Relocation (3015) and Casing Extension (Phase I & II)

PIPELINE NAME HPL PEARLAND - KATY 30" PIPELINE (3015)

AFE NUMBER: 19110721

ETC PROJECT MANAGER: Calvin Dodd

MUSTANG PROJECT MANAGER: Jim Pearson

REVISION NUMBER:

FIELD DIRECT COSTS

	Est. Quantity	Est. Unit	A.F.E. Unit Cost	A.F.E. COST ESTIMATE		
CONSTRUCTION SUPPORT:						
ETC Construction Coordinator	0	Days	\$420.00	\$0.00		
ETC Project Manager	0	Days	\$700.00	\$0.00		
CONSTRUCTION SUPPORT SUB TOTAL				\$0.00	\$	-
SURVEY						
Preliminary Survey for Pipeline (Includes 2 man crew, GPS unit, Pipe Locator, Mileage, RPLS Support)	5	Days	\$1,500.00	\$7,500.00		
Property Plat and Legal Description	2	Ea	\$3,000.00	\$0.00		
Survey Supervisor	8	Hrs	\$75.00	\$600.00		
Survey Technician	20	Hrs	\$70.00	\$1,400.00		
Construction Staking	1	Days	\$1,500.00	\$1,500.00		
As-Built Survey	3	Days	\$1,500.00	\$4,500.00		
SURVEY SUB TOTAL				\$78,000.00	\$	-
X-RAY						
X-Ray	4	Days	\$1,500.00	\$6,000.00		
X-RAY SUB TOTAL				\$6,000.00	\$	-
FIELD INSPECTION:						
Construction - 1 Chief Inspector	24	Days	\$750.00	\$18,000.00		
Construction - Pipe Mill Load Out & Receiving	0	Days	\$0.00	\$0.00		
Construction - Material Clerk	0	Days	\$0.00	\$0.00		
Construction - Welding Inspector	0	Days	\$0.00	\$0.00		
Construction - Cost Tracking and Scheduling - Inspector	0	Days	\$0.00	\$0.00		
Construction - Utility Inspector	0	Days	\$0.00	\$0.00		
Pipe Mill QA Inspection - Inspector	0	Days	\$0.00	\$0.00		
Pipe Coating QA Inspection - Inspector	0	Days	\$0.00	\$0.00		
Heat Induction Bend QA Inspection - Inspector	0	Days	\$0.00	\$0.00		
FIELD INSPECTION SUB TOTAL				\$18,000.00	\$	-

RELOCATION OF 30" PIPING (VIA OPEN CUT & BORE METHODS)

Install new 30" O.D. x 0.375" W.T., Gr. X60 Carrier Line Pipe via open cut method to accommodate Greenbusch Road improvements (Approx. 288 feet - 40 foot joints). (The work includes: Mob/Demob, Clearing of Trees/Brush, Material Handling and Hauling, Furnishing/Installing/Removing Silt Fences, Stringing, Field Trimming Weld Ells, Welding, Transitioning required to complete tie-ins, Field Coating joints and Repairing damaged coating, Top Soil Separation, Digging, Furnishing/Installing/Removing Matting, Ditch and Ground Water Dewatering which includes installation of temporary well points and/or Large Water Wells if necessary, Perform 8 Hour Post Hydrostatic Test/Dewatering/Drying, Furnishing/disposing of hydrostatic test water, Furnishing/installing/maintaining/operating Air Movers, Clean-Up, Final Grading, Replacing Existing Fencing with equal/better, Depositing of Debris/Brush/Rocks offsite, Collect/Haul/Dispose of 5 bbls of pipeline liquids.)	371	LF	\$972.00	\$360,612.00		
Bore a new 30" O.D. x 0.375" W.T., Grade X60 Line Pipe Crossing under landowner's property. (Approximately 150 feet - 40 foot joints). (The work includes all costs associated with the boring that are NOT already included in the base lay cost).	150	LF	\$250.00	\$37,500.00		
Install new 36-inch Split Casing Pipe with insulators, end seal, wrap around boot, and 4" vent pipe on one side of the Greenbusch Road crossing. This work includes: Disposing of debris and junk materials offsite, Hauling and Handling Materials, Stringing, Welding, Transitioning to complete welds, Coating Field Joints and split seam, Repairing damaged coating, Installing spacers, end seal, vent pipe, and other casing materials (Top of pipe is approximately 6 feet deep)	39	LF	\$2,110.00	\$82,290.00		
Remove existing 30" pipe, Cut in 40 foot joints, and Haul all removed materials to Greenbusch Road area, and load surplus vendor truck. (Approx. 288 feet of 30" Pipe). (Costs to include pigging the existing crossing clean, handling and disposal of the asbestos coating from the torch cut areas and wrapping removed pipe to prevent coating from falling off of the existing pipe.)	358	LF	\$185.67	\$66,469.66		
Install Pipeline Markers.	2	EA	\$100.00	\$200.00		
Install Cathodic Protection Test Stations.	2	EA	\$100.00	\$200.00		
CONTRACT INSTALLATION SUB TOTAL				\$547,271.86	\$	-
FIELD DIRECT SUB TOTAL				\$649,271.86	\$	-
CONTINGENCIES				\$0.00		
FIELD DIRECT SUB TOTAL WITH CONTINGENCIES				\$649,271.86		

TOTAL INSTALLED COST (Labor + Material)	\$776,356.93
CONTINGENCIES	\$0.00
TOTAL INSTALLED COST (Labor + Material) WITH CONTINGENCIES	\$776,356.93

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