

**REVIEW BY FORT BEND COUNTY COMMISSIONERS COURT**

On this 26th day of April, 2016, Commissioners Court came on to be heard and reviewed the accompanying notice of BOARDWALK PIPELINE / Gulf South Pipeline Company, LP by GS Pipeline Company, Its General Partner  
Job Location 2918 Bull Run, Rosenberg, Texas, TX 77471  
Date 4/8/2016 Bond No. 019054083, Permit No. 2016-6540 to make use of certain Fort Bend County property subject to, "A Revised Order Regulating the Laying, Construction, Maintenance, and Repair of Buried Cables, Conduits, and Pole Lines, In, Under, Across or Along Roads, Streets, Highways, and Drainage Ditches in Fort Bend County, Texas, Under the Jurisdiction of the Commissioners Court of Fort Bend County, Texas," as passed by the Commissioners Court of Fort Bend County, Texas the 3rd day of August, 1987, recorded in Volume \_\_\_\_\_ of the Minutes of the Commissioners Court of Fort Bend County, Texas, to the extent that such order is not inconsistent with Article 1436a, Vernon's Texas Civil Statutes. Upon Motion of Commissioner \_\_\_\_\_, seconded by Commissioner \_\_\_\_\_, duly put and carried, it is ORDERED, ADJUDGED AND DECREED that said notice of said above purpose is hereby acknowledged by the Commissioners Court of Fort Bend County, Texas, and that said notice be placed on record according to the regulation order thereof.

Notes:

1. Evidence of review by the Commissioners Court must be kept on the job site and failure to do so constitutes grounds for job shutdown.
2. Written notices are required:
  - a. 48 hours in advance of construction start up, and
  - b. when construction is completed and ready for final inspectionMail notices to: Permit Administrator  
Fort Bend County Engineering  
301 Jackson Street  
Richmond, Texas 77469  
281-633-7500
3. This permit expires one (1) year from date of permit if construction has not commenced.

By: Charles A. [Signature]  
County Engineer

Presented to Commissioners Court and approved.  
Recorded in Volume \_\_\_\_\_

Minutes of Commissioners Court

By: N/A  
Drainage District Engineer/Manager

Clerk of Commissioners Court

By: \_\_\_\_\_  
Deputy

**County of Fort Bend**  
Engineering Department

301 Jackson Street  
Richmond, Texas 77469

Johnny Ortega  
Permit Administrator

Phone: (281) 633-7500

**Permit Application Review Form For  
Cable, Conduit, and Pole Line Activity  
In Fort Bend County**

Permit No. 2016-6540

The following "Notice of Proposed Cable, Conduit, and/or Pole Line activity in Fort Bend County" and accompanying attachments have been reviewed and the notice conforms to appropriate regulations set by Commissioner's Court of Fort Bend County, Texas.

- X      (1) Complete Application Form:
- X      a. Name of road, street, and/or drainage ditch affected.
- X      b. Vicinity map showing course of directions
- X      c. Plans and specifications
- X      (2) Bond:
- District Attorney, approval when applicable.
- Perpetual bond currently posted.
- No: \_\_\_\_\_
- Amount: \_\_\_\_\_
- X      Performance bond submitted.
- No: 019054083
- Amount: \$40,000.00
- Cashier's Check
- No: \_\_\_\_\_
- Amount: \_\_\_\_\_
- (3) Verbal permission given for emergencies, to start construction before approved in Commissioner's Court.

\_\_\_\_\_  
Precinct Engineer Acknowledgment \_\_\_\_\_  
Date

\_\_\_\_\_  
Precinct Commissioner Acknowledgment \_\_\_\_\_  
Date

(4)  
\_\_\_\_\_  
Drainage District Approval when applicable

**We have reviewed this project and agree it meets minimum requirements.**

  
\_\_\_\_\_  
Johnny Ortega CFM/Permit Administrator

  
\_\_\_\_\_  
Date

PERFORMANCE BOND COVERING ALL CABLE, CONDUIT AND/OR POLE LINE  
ACTIVITY IN, UNDER, ACROSS OR ALONG FORT BEND COUNTY ROAD  
AUTHORIZED

BOND NO. 019054083

THE STATE OF TEXAS

§

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF FORT BEND

§

THAT WE, Gulf South Pipeline Company, LP by GS Pipeline Company, LLC, Its General Partner whose address is 9 Greenway Plaza, Suite 2800, Houston, TX 77046 Texas, hereinafter called the Principal, And Liberty Mutual Insurance Company, a Corporation existing under and by virtue of the laws of the state of Massachusetts and authorized to do an indemnifying business in the state of Texas, and whose principal office is located at 512 Township Line Road, Suit 350, Blue Bell, PA 19422, whose officer residing in the State of Texas, authorized to accept service in all suits and actions brought whining said state is Corporations Services Company and Whose address is 211 E. 7th Street, Suite 620, Austin, Texas 78701, hereinafter called the Surety, and held and firmly bound unto, Robert e. Hebert, County Judge of Fort Bend County, Texas, or his successors in office, in the full sum of Forty Thousand and 00/100 Dollars (\$ 40,000 ) current, lawful money of the United States of America, to be paid to said Robert E. Hebert, County Judge of Fort Bend County, Texas, or his successors in office, to which payment well and truly to be made and done, we, the undersigned, bind ourselves and each of us, our heirs, executors, administrators, successors, assigns, and legal representatives, jointly and severally, by these presents.

THE CONDITION OF THIS BOND IS SUCH THAT, WHEREAS, the above bounden principal contemplates laying, constructing, maintaining and/or repairing one or more cables, conduits, and/or pole lines in, under, across and/or along roads, streets and highways, commercial driveway and median openings or modifications in the County of Fort Bend, and the State of Texas, under the jurisdiction of the Commissioners' Court of Fort Bend County, Texas, pursuant to the Commissioners' Court order adopted on the 1st day of December, A.D. 1980, recorded in Volume 13, of the Commissioners' Court Minutes of Fort Bend County, Texas, regulating same, which Commissioners' Court order is hereby referred to and made a part hereof for all purposes as though fully set out herein;

AND WHEREAS, the principal desires to provide Fort Bend County with a performance bond covering all such cable, conduit and/or pole line activity, commercial driveway and median openings or modifications;

NOW, THEREFORE, if the above bounden principal shall faithfully perform all its cable, conduit and/or pole line activity (including, but not limited to the laying, construction, maintenance and/or repair of cables, conduits and/or pole lines) in, under, across and/or along roads, streets and highways, commercial driveway and median openings or modifications in the County of Fort Bend and State of Texas, under the jurisdiction of the Commissioners Court of Fort Bend County, Texas, pursuant to and in accordance with minimum requirements and conditions of the above mentioned Commissioners' Court order set forth and specified to be by said principal done and performed, at the time and in the manner therein specified, and shall pay over and make good and reimburse Fort Bend County, all loss and damages which Fort Bend County may sustain by reason of any failure or default on the part of said principal, then this obligation shall be null and void, otherwise to remain in full force and effect.

This bond is payable at the County Courthouse in the County of Fort Bend and State of Texas.

It is understood that at any time Fort Bend County deems itself insecure under this bond, it may require further and/or additional bonds of the principal.

EXECUTED this 28th day of March, 2016.



Gulf South Pipeline Company, LP by GS Pipeline Company, LLC, Its General Partner

PRINCIPAL

BY

Liberty Mutual Insurance Company

SURETY

BY Brandon Edwards - Attorney-In-Fact

**THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.**

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 7177092

American Fire and Casualty Company  
The Ohio Casualty Insurance Company

Liberty Mutual Insurance Company  
West American Insurance Company

**POWER OF ATTORNEY**

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Brandon Edwards; William L. Minderjahn

all of the city of Montgomeryville, state of PA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 12th day of November, 2015.



American Fire and Casualty Company  
The Ohio Casualty Insurance Company  
Liberty Mutual Insurance Company  
West American Insurance Company

By: David M. Carey  
David M. Carey, Assistant Secretary

STATE OF PENNSYLVANIA ss  
COUNTY OF MONTGOMERY

On this 12th day of November, 2015, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Insurance Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA  
Notarial Seal  
Teresa Pastella, Notary Public  
Plymouth Twp., Montgomery County  
My Commission Expires March 28, 2017  
Member, Pennsylvania Association of Notaries

By: Teresa Pastella  
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

**ARTICLE IV – OFFICERS** – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

**ARTICLE XIII – Execution of Contracts** – SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

**Certificate of Designation** – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

**Authorization** – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Gregory W. Davenport, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 28th day of March, 2016.



By: Gregory W. Davenport  
Gregory W. Davenport, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.



LIBERTY MUTUAL INSURANCE COMPANY  
 FINANCIAL STATEMENT — DECEMBER 31, 2014

Assets		Liabilities	
Cash and Bank Deposits .....	\$744,221,142	Unearned Premiums .....	\$6,288,178,795
*Bonds — U.S Government .....	1,718,117,704	Reserve for Claims and Claims Expense .....	16,879,324,618
*Other Bonds .....	11,205,872,087	Funds Held Under Reinsurance Treaties .....	211,983,009
*Stocks .....	9,533,437,819	Reserve for Dividends to Policyholders .....	1,246,547
Real Estate .....	277,742,849	Additional Statutory Reserve .....	40,877,587
Agents' Balances or Uncollected Premiums .....	4,150,041,316	Reserve for Commissions, Taxes and	
Accrued Interest and Rents .....	129,261,358	Other Liabilities .....	<u>2,664,248,124</u>
Other Admitted Assets .....	<u>14,896,464,393</u>	<b>Total .....</b>	<b><u>\$26,085,858,680</u></b>
		Special Surplus Funds .....	\$53,954,363
		Capital Stock .....	10,000,000
		Paid in Surplus .....	8,829,117,542
		Unassigned Surplus .....	7,676,228,083
<b>Total Admitted Assets .....</b>	<b><u>\$42,655,158,668</u></b>	<b>Surplus to Policyholders .....</b>	<b><u>16,569,299,988</u></b>
		<b>Total Liabilities and Surplus .....</b>	<b><u>\$42,655,158,668</u></b>



\* Bonds are stated at amortized or investment value; Stocks at Association Market Values.  
 The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the state of Massachusetts Department of Insurance.

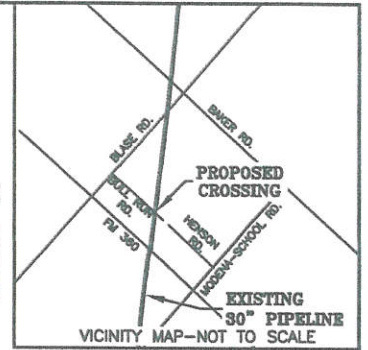
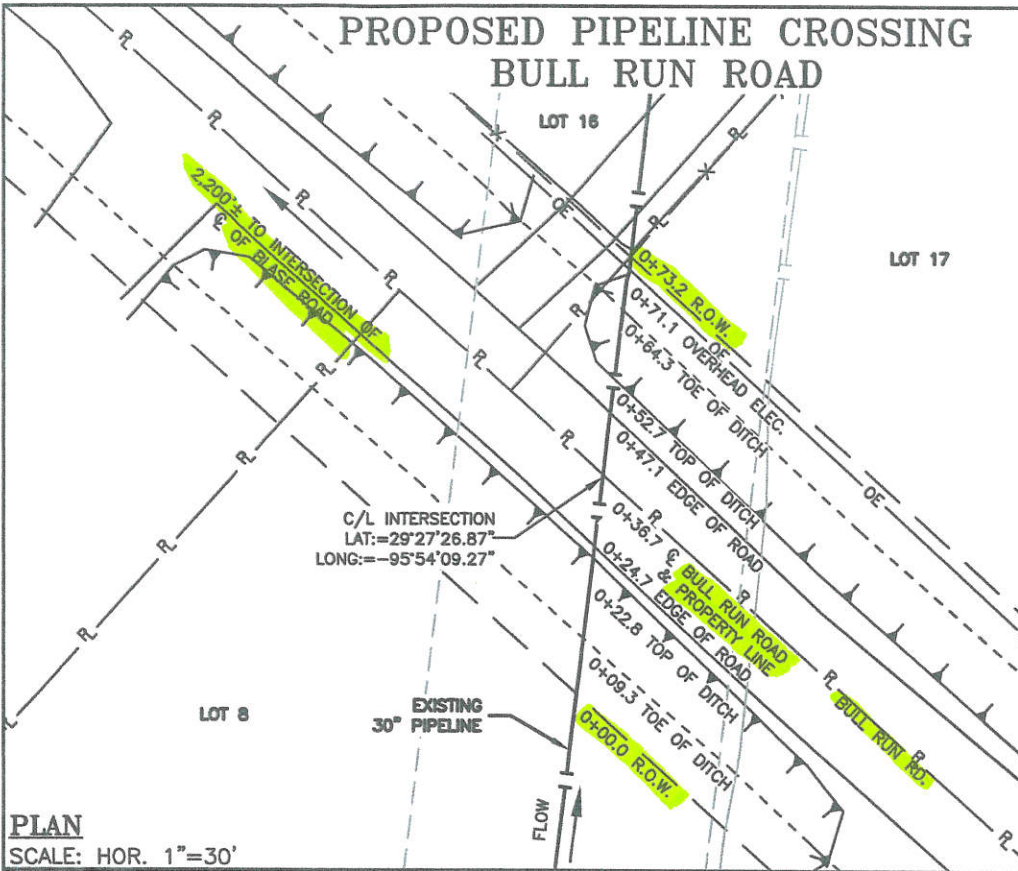
I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2014, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 20th day of March, 2015.

*T. Mikolajewski*

Assistant Secretary

# PROPOSED PIPELINE CROSSING BULL RUN ROAD



SECTION 84  
H.&T.C. RR. CO. SURVEY  
ABSTRACT NO. 539

### LEGEND

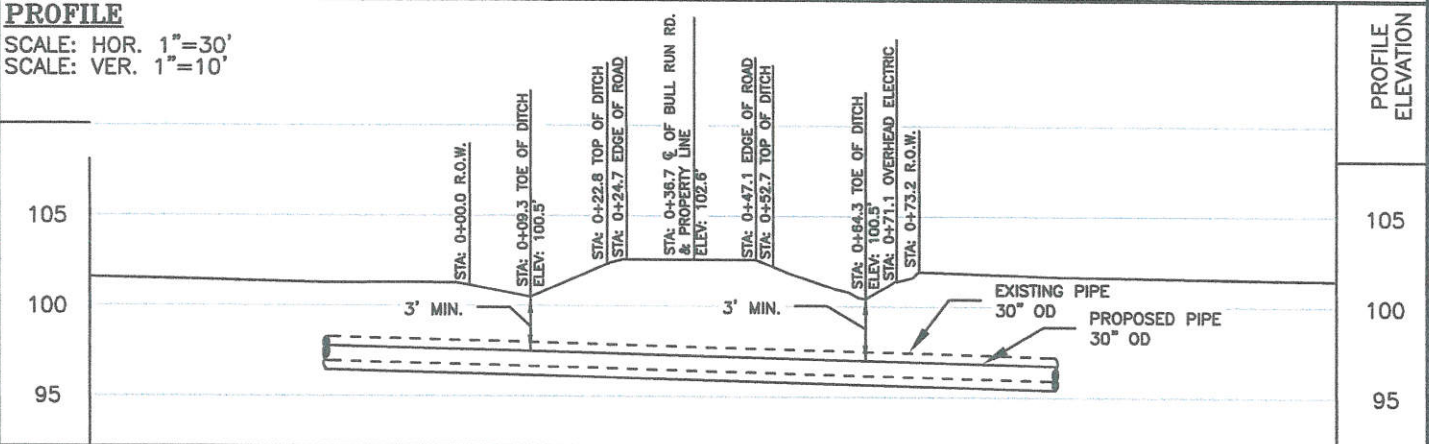
- PROPERTY LINE
- R.O.W. LINE
- EDGE OF ROAD
- FENCE
- EXISTING EASEMENT
- EXISTING PIPELINE
- OVERHEAD POWER LINE
- TOP OF DITCH
- TOE OF DITCH

### PLAN

SCALE: HOR. 1"=30'

### PROFILE

SCALE: HOR. 1"=30'  
SCALE: VER. 1"=10'



**PIPE DATA**  
 CONTENT: NATURAL GAS  
 CARRIER PIPE: 30" O.D. X 0.441" WALL THICKNESS  
 APISL PSL2, GRADE X-70  
 MIN. TEST PRESSURE: 1,410 PSIG  
 MAOP: 936 PSIG

- NOTES:**
- HORIZONTAL DATUM: TEXAS COORDINATE SYSTEM, SOUTH CENTRAL ZONE (4204), NAD 83 (2007). ALL DISTANCES ARE REPRESENTED IN GRID VALUES, MEASURED IN U.S. SURVEY FEET, AND ARE BASED ON SAID HORIZONTAL DATUM.
  - ORTHOMETRIC HEIGHTS BASED ON NAVD 88 AS DERIVED FROM GPS OBSERVATIONS.
  - EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATION GENERATED FROM PREVIOUS MAPS AND SURVEY. CONTRACTOR SHALL VERIFY EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES IN THE AREA OF WORK PRIOR TO CONSTRUCTION AND CALL TEXAS ONE CALL SYSTEM AT 1-800-344-8377 AND ALL OTHER UTILITY COMPANIES AT LEAST 2 WORKING DAYS (48 HOURS) PRIOR TO CONSTRUCTION.
  - THIS CROSSING IS DESIGNED AND WILL BE CONSTRUCTED IN ACCORDANCE WITH TITLE 49, CODE OF FEDERAL REGULATIONS, PART 192.
  - NEW CARRIER PIPE WILL BE INSTALLED BY OPEN CUT. EXISTING CARRIER PIPE WILL BE REMOVED. ACCESS AT CROSSING WILL BE MAINTAINED AT ALL TIMES.
  - CONTRACTORS; IT IS YOUR RESPONSIBILITY TO CONTACT THE COUNTY ENGINEER 48 HOURS PRIOR TO START OF CONSTRUCTION.

**ENGINEERS NOTE:**  
 I, DANIEL ALCORN, REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, P.E. NO. 79234, AN EMPLOYEE OF NC NORTH STAR ENERGY SERVICES, INC., TX FIRM NO. F-14939, HAVE REVIEWED THE PIPELINE DESIGN AND PIPE TESTING SPECIFICATIONS OF THIS PERMIT AND HAVE FOUND THEM ACCURATE AND SUITABLE FOR THE PROPOSED PROJECT. I DO NOT ATTEST TO THE ACCURACY, COMPLETENESS, OR CORRECTNESS OF OTHER ASPECTS OF THE PERMIT, INCLUDING BUT NOT LIMITED TO, SURVEY, RIGHT-OF-WAY, PROPERTY OWNERSHIP DETERMINATION, AND LOCATION OF EXISTING FACILITIES THAT ARE THE RESPONSIBILITY OF OTHER PARTIES.



PROJECT: INDEX 129
JOB NUMBER: 35530
SURVEY DATE: 05/27/2015
SCALE: 1"=30'
SURVEYOR: N. HINES
TECHNICIAN: F. NANCE
DRAWING: -
TRACT ID: BULL RUN ROAD
PARTY CHIEF: J. KETCHUM
FIELD BOOKS: 15206



4801 SOUTHWEST PARKWAY  
 PARKWAY TWO, SUITE 100  
 AUSTIN, TEXAS 78735  
 (512) 447-0575  
 FAX: (512) 326-3029  
 EMAIL: SAM@SAMINC.BIZ

GULF SOUTH PIPELINE, LP  
 PROPOSED 30" PIPELINE CROSSING  
 BULL RUN ROAD  
 WIECKER ESTATES  
 SLIDE 641 B  
 P.R.F.B.C.TX.  
 FORT BEND COUNTY, TEXAS

February 24, 2016

RE: Proposed Gulf South 30" Pipeline Crossing, Bull Run Road, Wiecker Estates

To Whom It May Concern:

This memo is to calculate the minimum pipe wall thickness of the above referenced pipeline in accordance with the design formula,  $P=(2St/D) \times E \times F \times T$  (Barlow equation), as described in 49 CFR Part 192 for *Transportation of Natural and Other Gas by Pipeline*, where:

$P$  = Internal design pressure in pounds per square inch (kPa) gage.

$S$  = Yield strength in pounds per square inch (kPa) determined in accordance with §192.107

$t$  = Nominal wall thickness of the pipe in inches (millimeters).

$D$  = Nominal outside diameter of the pipe in inches (millimeters).

$E$  = Seam joint factor determined in accordance with §192.113

$T$  = Temperature de-rating factor determined in accordance with §192.115

$F$  = A design factor determined in accordance with §192.111

The project specific values for the Barlow's equation are:

$P$  = 936 PSIG (MAOP)

$S$  = 70,000 lb/in<sup>2</sup>

$D$  = 30.000 inch

$E$  = 1.0

$T$  = 1.0 (Operating Temperature less than 250°F)

$F$  = 0.50 must be used in the design formula for steel pipe in Class 2 locations that cross without casing, or make a parallel encroachment on the right-of-way of either a hard surfaced road, a highway, a public street, or a railroad.

Rearranging Barlow's equation to solve for the minimum wall thickness; existing Class Location provided to Engineer is Class 2 -

$$t_{\min} = \frac{P \cdot D}{2 \cdot S \cdot F \cdot E \cdot T} \Rightarrow \frac{\frac{936 \text{ lb}}{\text{in}^2} \cdot 30.00 \text{ in}}{\frac{2}{1} \cdot \frac{70,000 \text{ lb}}{\text{in}^2} \cdot 0.50 \cdot 1 \cdot 1}$$

$t_{\min} = 0.4011$  ; Actual design wall thickness is 0.441 inch. 0.441" > 0.4011" so acceptable.



2-24-16

NC NorthStar Energy Services, Inc.  
1250 E. Copeland Road, Suite 600  
Arlington, Texas 76011



Google earth



Bull Run/ Blase Rd Intersection to yellow pin  
2,200' ±