

REVIEW BY FORT BEND COUNTY COMMISSIONERS COURT

On this 4th day of August, 2015, Commissioners Court came on to be heard and reviewed the accompanying notice of Allgood Construction Co., Inc.

Job Location Roesner Road, Katy, TX 77441

Date 7/24/2015 Bond No. 106280127, Permit No. 2015-1888 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 Kathleen Meyers, seconded by Commissioner Kathleen Meyers, 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 inspection
 Mail 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: [Signature]
County Engineer

Presented to Commissioners Court and approved.
Recorded in Volume 814/15
Minutes of Commissioners Court

By: _____
Drainage District Engineer/Manager

Clerk of Commissioners Court
By: [Signature]
Deputy **RENEE MICHULKA**

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. 2015-1888

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: 106280127

 Amount: \$5,000.00

 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.

 CFM

Johnny Ortega CFM/Permit Administrator

07/28/2015
Date

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

AUTHORIZED

BOND NO 106280127

THE STATE OF TEXAS

§

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF FORT BEND

§

THAT WE, Allgood Construction Company, Inc. whose address is 1702 Settagast Ranch Rd., Richmond, TX 77046 Texas, hereinafter called the Principal, And Travelers Casualty and Surety Company of America, a Corporation existing under and by virtue of the laws of the state of Connecticut and authorized to do an indemnifying business in the state of Texas, and whose principal office is located at 4650 Westway Park Blvd.; Houston, TX 77041, whose officer residing in the State of Texas, authorized to accept service in all suits and actions brought whining said state is Christopher Noble and Whose address is 1301 E. Collins Boulevard, Richardson, TX 75081, 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 Five Thousand 00/100 Dollars (\$ 5,000.00) 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 24th day of July, 2015.



Allgood Construction Company, Inc.

PRINCIPAL

Steve Sterling Moore

BY

Travelers Casualty and Surety Company of America

SURETY

Kelly J. Brooks

BY Kelly J. Brooks Attorney-in-Fact



POWER OF ATTORNEY

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

Attorney-In Fact No. 227687

Certificate No. 006278033

KNOW ALL MEN BY THESE PRESENTS: That Farmington Casualty Company, St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company are corporations duly organized under the laws of the State of Connecticut, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc., is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint

C. A. McClure, Kelly J. Brooks, Kenneth L. Meyer, and Michelle Ulery

of the City of Cypress, State of Texas, their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 9th day of July, 2015.

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company



State of Connecticut
City of Hartford ss.

By: Robert L. Raney, Senior Vice President

On this the 9th day of July, 2015, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, and that he, as such, being authorized so to do, executed 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 hereunto set my hand and official seal. My Commission expires the 30th day of June, 2016.



Signature of Marie C. Tetreault, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which 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 24th day of July, 2015.


Kevin E. Hughes, Assistant Secretary



To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.



IMPORTANT NOTICE

TO OBTAIN INFORMATION OR MAKE A COMPLAINT:

You may contact Travelers Casualty & Surety Company of America, Travelers Casualty & Surety Company, Travelers Indemnity Company, Standard Fire Insurance Company and/or Farmington Casualty Company for information or to make a complaint at:

Travelers Bond
Attn: Claims
1500 Market Street
West Tower, Suite 2900
Philadelphia, PA 19102

(267) 675-3000
(267) 675-3102 Fax

You may contact the Texas Department of Insurance to obtain the information on companies, coverages, rights or complaints at:

Texas Department of Insurance
P.O. Box 149104
Austin, TX 78714-9104

(800) 252-3439

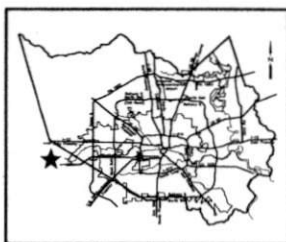
ATTACH THIS NOTICE TO YOUR BOND. This notice is for information only and does not become a part or a condition of the attached document and is given to comply with Section 2253-021, Government Code, and Section 53.202, Property Code, effective September 1, 2001.

FORT BEND COUNTY M.U.D. 58

ROESNER ROAD FM 1463 TO KATY-FLEWELLEN ROAD

CONSTRUCTION PLANS OF PROPOSED STORM DRAINAGE SYSTEM STREET PAVING

SEPTEMBER 2014



LOCATION MAP



VICINITY MAP
S.I.T.S.
FBC KEY MAP 484 S
ZIP CODE: 77484

SHEET INDEX

NO.	DESCRIPTION
1.	COVER SHEET
2.	GENERAL CONSTRUCTION NOTES
3.	UTILITY AND PAVING OVERALL
4.	DRAINAGE AREA MAP & STORM CALCULATIONS
5.	STORM WATER POLLUTION PREVENTION PLAN
6.	TRAFFIC CONTROL PLAN - PHASE I
6A.	TRAFFIC CONTROL PLAN - PHASE II
6B.	CITY OF HOUSTON TOP NOTES CHANNELING DEVICES AND BARRICADES
7.	PAVEMENT STRIPING LAYOUT
8.	PLAN AND PROFILE - ROESNER ROAD (STA 11+70 TO 17+50)
9.	PLAN AND PROFILE - ROESNER ROAD (STA 17+50 TO 27+00)
10.	PLAN AND PROFILE - ROESNER ROAD (STA 27+00 TO 37+09.30)
11.	PLAN AND PROFILE - RED CANYON PARK DRIVE (STA 5+00 TO 8+80.26)
12.	PLAN AND PROFILE - KATY FLEWELLEN ROAD OFFSITE STORM (STA 1+00 TO 9+00)
13.	PLAN AND PROFILE - KATY FLEWELLEN ROAD OFFSITE STORM (STA 9+00 TO 12+25.64)
14.	PLAN AND PROFILE - 80" STORM AND INLETS
15.	STORM SEWER DETAILS
16.	JUNCTION BOX WITH TYPE "E" INLET DETAILS
17.	PAVING DETAILS
18.	PAVEMENT MARKING DETAILS
19.	STORM WATER POLLUTION PREVENTION PLAN DETAILS
20.	TXDOT PEDESTRIAN FACILITIES CURB RAMPS
21.	TXDOT PEDESTRIAN FACILITIES GENERAL NOTES AND DETECTABLE WARNINGS
22.	TXDOT PEDESTRIAN FACILITIES SIDEWALKS
23.	TXDOT PEDESTRIAN FACILITIES INTERSECTION LAYOUTS
24.	TXDOT SINGLE GUARDRAIL TERMINAL (WOOD POST)

ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG!!!
(713) 333-4887 (In Houston)
(New Statewide Number Outside Houston)
1-800-545-8555

FIRM
Flood Insurance Rate Map
Panel(100) of (5753)
Map# 4815700100L
BFE Elevation 126.3 (2001 Adjustment)
THIS SITE IS IN ZONE "X"

I, Philip M. Mullon, P.E., certify that this project is entirely located outside the area with 100-year flood frequency.

FORT BEND COUNTY ENGINEER

ENGINEER: *Richard Stolletis*
RICHARD STOLLETIS, P.E.
DATE: *1/22/14*

THESE SIGNATURES ARE VOID IF CONSTRUCTION HAS NOT COMMENCED IN (1) YEAR FROM DATE OF APPROVAL.

APPROVED: *Richard Stolletis*
DEVELOPMENT COORDINATOR
DATE: *11/25/14*

*NO PROPOSED WASTEWATER WORK IS SHOWN ON THIS PLAN SET NOR INCLUDED IN THE WORK SCOPE

ILMS # 14042321
LOG NO. 14-0573
H.C.F.C. UNIT NO.

REV. NO.	DATE	DESCRIPTION	P.E. APPROV.

BROWN & GAY ENGINEERS, INC. Brown & Gay Engineers, Inc. 18777 Westchase - Suite 400 Houston, TX 77058 Tel: 281-488-8700 Fax: 281-488-8700 --- Civil Engineers and Surveyors --- 1988 Registration No. 014066	

SURVEYED BY: Brown & Gay Eng., Inc. FB NO. _____
NOTE: CITY ORDINANCES APPLY FOR USE. SEAL ONLY AFTER DATE OF SURVEYING.

CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING	
WATER: <i>9-18-2014</i> WASTEWATER: <i>9-18-2014</i> STORM SEWER: <i>9-18-14</i>	TRAFFIC & TRANSPORTATION STORM WATER QUALITY FACILITIES: <i>9-18-14</i>
STREET & BRIDGE CITY ENGINEER: <i>Stolletis</i> 9/18/14 DATE	FOR CITY OF HOUSTON USE ONLY
DIRECTOR OF PUBLIC WORKS AND ENGINEERING DATE	SHEET NO: 1 OF 24

PRIOR TO THE CONSTRUCTION OF THESE FACILITIES WITHIN OR BY THE DISTRICT, THE DISTRICT OR ITS ENGINEER WILL GIVE WRITTEN NOTICE BY REGISTERED OR CERTIFIED MAIL TO THE DIRECTOR OF PUBLIC WORKS AND ENGINEERING, CITY OF HOUSTON STATING THE DATE SUCH CONSTRUCTION WILL BE COMMENCED.

CONTRACTOR SHALL NOTIFY THE CITY OF HOUSTON, DEPARTMENT OF PUBLIC WORKS AND ENGINEERING, OFFICE OF THE CITY ENGINEER, 48 HOURS BEFORE STARTING WORK ON THIS PROJECT. TELEPHONE NO. 832-394-9096, FAX NO. 832-395-9096

ROESNER ROAD FM 1463 TO KATY-FLEWELLEN ROAD / 2009-10

GENERAL

- 1. THESE PLANS WERE PREPARED TO MEET OR EXCEED TEXAS COMMISSION ON ENVIRONMENTAL QUALITY...
2. WATER LINES, WASTEWATER COLLECTION SYSTEMS AND DRAINAGE SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF HOUSTON, DEPARTMENT OF PUBLIC WORKS AND ENGINEERING'S "STANDARD CONSTRUCTION SPECIFICATIONS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE AND STREET PAVING"...

GENERAL CONSTRUCTION NOTES

NOTING

- 19. SANITARY SEWERS WILL HAVE BEDDING AND BACKFILL PER CITY OF HOUSTON SPECIFICATIONS AND DETAILS INCLUDED IN THIS PLAN SET.
20. ALL SANITARY SEWERS UNDER PROPOSED OR FUTURE PAVEMENT AND TO A POINT ONE (1) FOOT BACK OF ALL PROPOSED OR FUTURE CURBS SHALL BE ENCASED WITH 16" SAND CONCRETE/7% STABILIZED SAND BACKFILL UP TO WITHIN ONE (1) FOOT OF PAVING SURFACE...

WATER LINES

GENERAL

- 1. SEPARATION DISTANCES AND ENCASUREMENT REQUIREMENTS FOR INSTALLATION OF POTABLE WATER DISTRIBUTION LINES AND APPURTENANCES MUST CONFORM TO 30 TAC 900.44(1)(4).
2. "R.L.E." INDICATES "WATER LINE EASEMENT".
3. THIS PROJECT SHALL BE CONSTRUCTED BY MEANS OF OPEN CUT, EXCEPT WHERE NOTED ON THE DRAWINGS...

PIPE

- 10. ALL WATER LINE MINIMUM PRESSURE REQUIREMENTS CONFORM TO 30 TAC 900.44(1)(1)-(4), INCLUDING MAINTAINING A MINIMUM PRESSURE OF 30 PSI ABOVE THE MINIMUM ALLOWABLE LEAD CONTENT ALUMINUM 15 0.25% FOR PIPING.
11. "4" THROUGH "12" WATER LINES SHALL BE P.V.C. CLASS 150, SR-18, AWWA C-900.
12. ALL WATER LINES SHALL HAVE A 6" BOTTOM AND SIDE BANK-SAND ENVELOPE PER CITY OF HOUSTON SECTION 02317 AND SHALL BE BACKFILLED TO A MINIMUM DEPTH OF 12" OVER THE TOP OF THE PIPE TO PROVIDE A COMPACTED ENCASUREMENT...

MANHOLES

- 17. WATER LINES UNDER PROPOSED OR FUTURE PAVEMENT AND TO WITHIN ONE (1) FOOT BACK OF ALL PROPOSED OR FUTURE CURBS SHALL BE ENCASED IN BANK SAND TO 12" ABOVE PIPE AND BACKFILLED WITH 1/2 SAND CONCRETE / 7% STABILIZED SAND TO WITHIN ONE (1) FOOT OF PAVING SURFACE.

TESTING

- 16. THE CONTRACTOR SHALL PROVIDE ADEQUATE CONTROLS, MUST BLOCKING TO WITHSTAND TEST PRESSURE AS SPECIFIED IN CITY OF HOUSTON, DEPARTMENT OF PUBLIC WORKS & ENGINEERING SPECIFICATIONS.
20. ALL WATER LINES TO BE DISINFECTED IN CONFORMANCE WITH AWWA C-651. A MINIMUM OF ONE BACTERIOLOGICAL SAMPLE SHALL BE COLLECTED FOR EACH 1,000 FEET OF COMPLETED WATERLINE TO DETERMINE EFFECTIVENESS OF DISINFECTION PROCEDURES...

STORM SEWERS

GENERAL

- 1. CONTRACTOR SHALL PROVIDE 12" MINIMUM CLEARANCE AT STORM SEWER AND WATER LINE CROSSINGS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, MAINTAINING AND RESTORING ANY BACKSLOPE DRAINAGE SYSTEM DISTRIBUTED AS A RESULT OF SUBURBS WORK.
3. ALL JUNCTIONS SHALL BE UPGRADED TO PROPOSED ELEVATIONS TO INSURE PROPER DRAINAGE. ALL OUTFALLS SHALL BE PROPERLY BACKFILLED AND COMPACTED, ALL DISTURBED AREAS SHALL BE REGRADED, SEEDED AND FERTILIZED.

MANHOLES/INLETS

- 6. ADJUST MANHOLE COVERS TO GRADE CONFORMING TO REQUIREMENTS OF SECTION 02088-ADJUSTING MANHOLES, INLETS AND VALVE BOXES TO GRADE.
7. 24" TO 72" STORM SEWERS SHALL HAVE TYPE "C" W.M.S.
8. ALL INLETS TO BE TYPE "B" UNLESS OTHERWISE NOTED.

PIPES

- 10. ALL STORM SEWER PIPES AND INLET LEADS SHALL BE 24" AND LARGER RCP (C-7R, CLASS III).
11. CONCRETE PIPE SHALL BE INSTALLED USING RUBBER GASKET JOINTS ONLY CONFORMING TO ASTM C 443.
12. ALL PROPOSED PIPE STUB-OUTS FROM MANHOLES AND INLET LEADS ARE TO BE PLAGUED WITH EIGHT (8) INCH BRICK WALLS UNLESS OTHERWISE NOTED.

NOTING

- 15. ALL SEWERS CONSTRUCTED IN SIDE LOT EASEMENTS SHALL BE R.C.P. (C-7R, CLASS III) AND SHALL BE EMBESSED IN CONCRETE AND COVERED WITH 16" SAND CONCRETE/7% STABILIZED SAND TO WITHIN ONE (1) FOOT OF SURFACE. THE REMAINING DEPTH OF TRENCH SHALL BE BACKFILLED WITH SUITABLE EARTH MATERIAL.
16. ALL TRENCH BACKFILL SHALL BE 16" INCH LIFTS, WITH TESTS TAKEN AT 150 FOOT INTERVALS IN EACH LIFT AND MECHANICALLY COMPACTED TO 98% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D-1556/ASTM D-1587).

CONSTRUCTION OF SITE FILL

- 1. ALL AREAS TO BE FILLED ARE TO BE FREE OF VEGETATION, DEBRIS, FENCED WASTE, LOOSE SOILS, WAD & MUCK, (STRIP 3) AND ALL REQUIREMENTS FOR THE ISSUANCE OF NECESSARY PERMITS/PERMITS/PERMITS.

SANITARY SEWERS

- 1. "SAN S.E." INDICATES "SANITARY SEWER EASEMENT".
2. PRIOR TO SANITARY SEWER CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE APPROPRIATE ORGANIZATIONS AND COMPLY WITH ALL REQUIREMENTS FOR THE ISSUANCE OF NECESSARY PERMITS/PERMITS/PERMITS.

TESTING

- 1. DEFLECTION TEST, DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE AND RIGID SEWER PIPE. THE TEST SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 0.01 INCH PER FOOT OF SPAN.
2. INFILTRATION OR EXFILTRATION TEST: TOTAL LEAKAGE AS DETERMINED BY A HYDROSTATIC HEAD TEST SHALL NOT EXCEED 10 GALLONS PER 100 LINEAR FEET OF PIPE PER 24 HOURS AT A MINIMUM TEST HEAD OF TWO (2) FEET.

MANHOLES

- 4. ALL MANHOLES ARE TO BE PER CITY OF HOUSTON SPECIFICATIONS AND DETAILS INCLUDED IN THIS PLAN SET. BRICK MANHOLES ARE NOT ACCEPTABLE AS SANITARY SEWERS. ONLY PRECAST MANHOLES ARE ALLOWED FOR THIS PROJECT.
7. SANITARY SEWER MANHOLE RISE ABOVE PROPOSED PAVING SHALL BE SET SIX (6) INCHES ABOVE THE SURROUNDING LEVEL. FINISHED GRADE AFTER PAVING WITH SLOPED BACKFILL, ADDED FOR STORMWATER DRAINAGE, ANY FROM MANHOLE RISE.
8. FOR MANHOLES LESS THAN FOUR (4) FEET DEEP USE SLOPED MANHOLE PER DETAILS INCLUDED IN THIS PLAN SET. (C.O.N. DWG. NO. 02082-01).

PIPES

- 11. SANITARY SEWER PIPE TO BE 20" OR 24" P.V.C. PIPE MEETING ASTM SPECIFICATIONS D3034 WITH RUBBER GASKET JOINTS. EXCESS STRENGTH PIPE SHALL BE 24" OR 30" P.V.C. PIPE.
12. 20" OR 24" P.V.C. PIPE USES "FULL BODIED" SD-20 P.V.C. FITTINGS AWWA C-900 OR 20" OR 24" P.V.C. PIPE USES JOINTS OR 24" P.V.C. FITTINGS. SD-20 P.V.C. PIPE SHALL HAVE A GEL CLASSIFICATION OF 1234-A AS DEFINED IN ASTM D-1784.
13. ALL 20" P.V.C. PIPE IS TO HAVE D.I.P. SIZE D.B. AND RUBBER GASKETS BELL-AND-SPOUT TYPE JOINT ENDS.

W. DRAINAGE

- 18. CONTRACTOR SHALL PROVIDE FOR A MINIMUM HORIZONTAL CLEARANCE OF NINE (9) FEET BETWEEN WATER LINES AND SANITARY SEWER MANHOLES AND LINES.
19. WHENEVER POSSIBLE CENTER 12" WASTEWATER COLLECTION, GREEN 6-30" O.D. OR 18" P.V.C. SANITARY SEWER LINE AND/OR LEAD ON PROPOSED WATER LINE AND 12" WASTEWATER COLLECTION, 6-30" P.V.C. WATER LINE PIPE ON PROPOSED SANITARY LINE AND/OR LEAD. MAINTAINING THE 12" MINIMUM CLEARANCE AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D-1556/ASTM D-1587).

PRIVATE UTILITY NOTES

CAUTION: AT ALL TIMES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION...

VERIFICATION OF PRIVATE UTILITY LINES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION... THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION...

UTILITY BACKFILL

- 1. BACKFILL FOR UTILITIES SHALL BE IN ACCORDANCE WITH CITY OF HOUSTON SPECIFICATION 02317 AND PER CITY OF HOUSTON DETAILS INCLUDED IN THESE PLANS OR ANY OTHER APPLICABLE CITY OF HOUSTON DETAILS.
2. BACKFILL CONTRACTOR TO BE AT A MINIMUM 80 PERCENT (OUTSIDE OF PAVEMENT) AND 90 PERCENT (UNDER) ON WITHIN ONE (1) FOOT OF PAVEMENT OF THE MAXIMUM DRY DENSITY AND AT A MINIMUM CONTACT RECOMMENDED FOR GEOTECHNICAL INVESTIGATION.

PAVING

- 1. CURB LINES SET FORTH IN THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES SHALL BE OBSERVED.
2. CLEAR EXPOSED STEEL AND TIE TO EXISTING PAVEMENT, IF NOT EXPOSED, SAW CUT AND BREAK OFF 24" MINIMUM ABOVE THE FINISH GRADE.
3. ALL CURB RETURN RADIUS ARE 20", UNLESS OTHERWISE NOTED, AND HAVE A 1/4" W/4" GRADE.

PAVING

- 5. ALL STOP SIGNS SHALL BE T.M.U.C.D. STANDARD NO. W-1-1 (30" X 36") STOP SIGN SHALL BE PLACED AS SHOWN AT RADIOUS POINT CURB APPROXIMATELY TWO FEET WITHIN CURB.
6. ALL PROPOSED INLETS TO BE CONSTRUCTED TO AVOID CONFLICTS WITH ANY OTHER DRIVEWAYS.

SPECIAL CONSTRUCTION NOTES

- 1. SUITABLE SURPLUS EXCAVATED MATERIAL FROM CONSTRUCTION OF WATER LINE AND SEWERS SHALL BE SPREAD AND COMPACTED IN ACCORDANCE WITH SUB STANDARD PROCTOR DENSITY IN ACCORDANCE WITH LIFT GRADING LAYOUT.
2. SUITABLE SURPLUS EXCAVATED MATERIAL FROM CONSTRUCTION OF ROADWAY SHALL BE SPREAD AND COMPACTED TO MAXIMUM P-1000 TO 95% STANDARD PROCTOR DENSITY IN ACCORDANCE WITH LIFT GRADING LAYOUT.

Table with columns: REV, DATE, DESCRIPTION, P. NO. Contains revision notes for the drawing.

Professional Engineer stamps for Brown & Gay Engineers, Inc. and Phillip W. Mullan, State of Texas, License No. 4411.

STORM SEWERS

- 1. STORM SEWERS SHALL BE REINFORCED CONCRETE PIPE (C-7R, CLASS III), AND SHALL BE INSTALLED, BEDED, AND BACKFILLED IN ACCORDANCE WITH THE CITY OF HOUSTON DRAWING NOS. 02317-01, 02317-02, 02317-03, 02317-04, 02317-05, 02317-06, AND 02317-07 AS APPLICABLE.
2. ALL STORM SEWERS CONSTRUCTED IN SIDELOT EASEMENT SHALL BE R.C.P. (C-7R, CLASS III) AND SHALL BE REDED IN ACCORDANCE WITH THE CITY OF HOUSTON DRAWING NOS. 02317-01, 02317-02, 02317-03, 02317-04, 02317-05, 02317-06, AND 02317-07 AS APPLICABLE.

GENERAL

- 3. ALL SEWERS UNDER PROPOSED OR FUTURE PAVEMENT AND TO A POINT ONE (1) FOOT BACK OF ALL PROPOSED OR FUTURE CURBS SHALL BE ENCASED WITH 16" SAND CONCRETE/7% STABILIZED SAND TO WITHIN ONE (1) FOOT OF PAVING SURFACE. THE REMAINING DEPTH OF TRENCH SHALL BE BACKFILLED WITH SUITABLE EARTH MATERIAL.
4. ALL TRENCH BACKFILLS SHALL BE IN 6" LIFTS, WITH TESTS TAKEN AT 150 FOOT INTERVALS ON EACH LIFT, AND MECHANICALLY COMPACTED TO A DENSITY OF NOT LESS THAN 98% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D-1556/ASTM D-1587).

MANHOLES/INLETS

- 5. CIRCULAR AND ELLIPTICAL REINFORCED CONCRETE PIPE SHALL BE INSTALLED USING RUBBER GASKET JOINTS CONFORMING TO ASTM C 443 AND ASTM C 827 RESPECTIVELY.
6. ADJUST MANHOLE COVERS TO GRADE CONFORMING TO REQUIREMENTS OF SECTION 02088-ADJUSTING MANHOLES, INLETS AND VALVE BOXES TO GRADE.

PIPES

- 7. ALL PROPOSED PIPE STUB-OUTS FROM MANHOLES AND INLETS ARE TO BE CLOTTED WITH 8" BRICK WALLS UNLESS OTHERWISE NOTED.
8. CONTRACTOR SHALL PROVIDE 12" MINIMUM CLEARANCE AT STORM SEWER AND WATER LINE CROSSINGS.
9. ADJUST MANHOLE COVERS TO GRADE CONFORMING TO REQUIREMENTS OF SECTION 02088-ADJUSTING MANHOLES, INLETS AND VALVE BOXES TO GRADE.

NOTING

- 11. ALL DITCHES SHALL BE REGRADED TO PROPOSED ELEVATIONS TO INSURE PROPER DRAINAGE. ALL DISTURBED AREAS SHALL BE REGRADED, SEEDED AND FERTILIZED.
12. ALL DRIVEWAYS WILL BE LOCATED TO AVOID EXISTING CURB INLET STRUCTURES.

FORT BEND M.U.D. 58

ROESNER ROAD FM 1463 TO KATY-FLEWELLEN ROAD

GENERAL CONSTRUCTION NOTES

Table with columns: DATE, REVISION, RECORD, P. NO. Contains revision notes for the drawing.

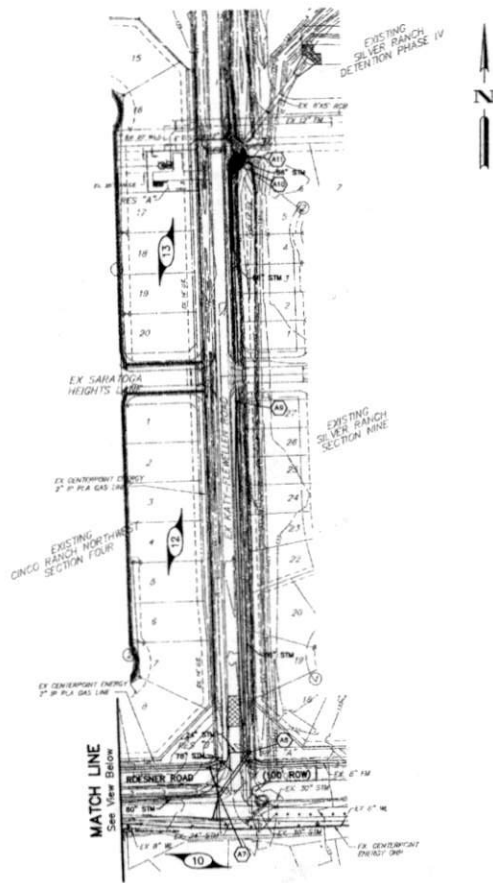
CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

Professional Engineer stamps for Phillip W. Mullan, State of Texas, License No. 4411.

FORT BEND COUNTY ENGINEERING DEPARTMENT

APPROVED: [Signature] COUNTY ENGINEER DATE: 11/25/19

Professional Engineer stamps for Phillip W. Mullan, State of Texas, License No. 4411.



NOTICE
 FOR LOCATION OF UNDERGROUND
 UTILITY LINES, CALL (713) 223-4547
 OR TOLL FREE 1-800-243-4545, 48
 HOURS BEFORE EXCAVATING.

PERMIT NOTES:
 1. CONTRACTOR TO OBTAIN ALL PERMITS REQUIRED BY FORT BEND COUNTY, TEXAS PRIOR TO STARTING CONSTRUCTION OF UTILITIES AND/OR CULVERTS WITHIN COUNTY ROAD RIGHT-OF-WAY. THE PERMIT IS TO BE ISSUED IN THE UNDERGROUND.
 2. CONTRACTOR TO OBTAIN ALL PERMITS REQUIRED BY REGULATION OF FORT BEND COUNTY, TEXAS FOR FLOOD PLAIN MANAGEMENT PRIOR TO STARTING CONSTRUCTION.

GENERAL NOTES:
 1. "U.E." INDICATES "UTILITY EASEMENT".
 2. "W.E." INDICATES "WATER LINE EASEMENT".
 3. "S.W.S.E." INDICATES "SANITARY SEWER EASEMENT".
 4. "S.W.S.E." INDICATES "STORM SEWER EASEMENT".
 5. "D.E." INDICATES "DRAINAGE EASEMENT".
 6. "TEMP. D.E." INDICATES "TEMPORARY DRAINAGE EASEMENT".
 7. ALL 14 FOOT UTILITY EASEMENTS SHOW EXTEND 7 FEET ON EACH SIDE OF A COMMON LOT LINE UNLESS OTHERWISE INDICATED.
 8. ALL RCP STORM SEWERS ARE 24" UNLESS OTHERWISE INDICATED.

BENCHMARKS
 PROJECT BENCHMARK BENCHMARK IS A STAINLESS STEEL ROD STAMPED NUMBER 84788 AT THE INTERSECTION OF FM 1463 AND THE ENTRANCE OF A PRIVATE GRAVEL ROAD 0.3 MILES SOUTH OF CORBITT ROAD, EAST SIDE OF FRANKLIN, 10 FEET EAST OF TRUCK AND APPROXIMATELY 10 FEET SOUTH OF A GRAVEL ROAD. KEY MAP PAGE 484-S
 ELEVATION: 136.32 FT. NAD-83, 2001 ADJUSTMENT
 TBM 1 - BENCHMARK IS A METAL "T-POST" SET 0.5 FEET BELOW NATURAL GROUND LEVEL, LOCATED APPROXIMATELY 1.68 FEET NORTHWEST OF THE INTERSECTION OF KATY-GASTON ROAD AND DISCUSSION ROAD ON THE WEST SIDE OF KATY-GASTON ROAD AT THE SOUTHWEST CORNER OF THE ENTRANCE OF A FARM GRAVEL ROAD TO THE SOUTHWEST BENCHMARK IS 8.8 FEET SOUTHWEST OF THE MOST SOUTHWEST GATE POST, 29.8 FEET SOUTHWEST OF THE WESTERN EDGE OF PAVEMENT OF KATY-GASTON ROAD AND 16.5 FEET NORTHWEST OF A PIPELINE VENT.
 ELEVATION: 127.89 FEET NAD-83, 2001 ADJUSTMENT
 TBM 2 - BENCHMARK IS A METAL "T-POST" SET 0.5 FEET BELOW NATURAL GROUND LEVEL, LOCATED 3.48 FEET EAST OF THE INTERSECTION OF CORBITT ROAD AND KATY-FLEWELLEN ROAD, 78.8 FEET NORTHWEST OF THE NORTHEAST CORNER OF A HOUSTON LIGHTING & POWER TRANSDUCTION TOWER LED AND 20.8 FEET NORTH OF A CROSSROAD PIPELINE PIPELINE MARKER.
 ELEVATION: 128.56 FEET NAD-83, 2001 ADJUSTMENT



VICINITY MAP
 A.T.S.
 FBC KEY MAP 484-S
 2P CODE: 7494

LEGEND

- PROPOSED WATER LINE, CV & BOX WITH FIRE HYDRANT
- EXISTING WATER LINE, CV & BOX WITH FIRE HYDRANT
- PROPOSED SANITARY SEWER LINE, MANHOLE AND STACK
- PROPOSED FAR SIDE SERVICE LEAD WITH STACK
- EXISTING SANITARY SEWER LINE, MANHOLE AND STACK
- PROPOSED STORM SEWER LINE, MANHOLE AND B-B INLETS
- EXISTING STORM SEWER LINE, MANHOLE AND B-B INLETS
- PROPOSED FORCE MAIN
- EXISTING FORCE MAIN
- PROPOSED STOP SIGN
- PROPOSED STREET SIGN
- PROPOSED STOP SIGN WITH STREET SIGN
- EXISTING CENTERPOINT ENERGY H/LAP CONDUIT
- EXISTING CENTERPOINT ENERGY H/LAP OVERHEAD LINE
- EXISTING CENTERPOINT ENERGY GAS LINE
- EXISTING AT&T TEXAS/SBC CABLES
- EXISTING CONTOUR LINE
- STORM SEWER MANHOLE
- SHEET REFERENCE NUMBER

REV	DATE	DESCRIPTION	BY

BROWN & GAY ENGINEERS, INC.
 1277 Westchase, Suite 402
 Houston, TX 77060
 Tel: 281-488-8400
 Fax: 281-488-8401
 12444 Westchase Blvd., Suite 402
 Houston, TX 77060

PHILIP M. HALLAN
 88411
 P.E.
 State of Texas

FORT BEND M.U.D. 58
ROESNER ROAD FM 1463 TO KATY-FLEWELLEN ROAD
UTILITY AND PAVING OVERALL

DATE: SEPTEMBER 2014
 SHEETS: 21
 SHEET: 2

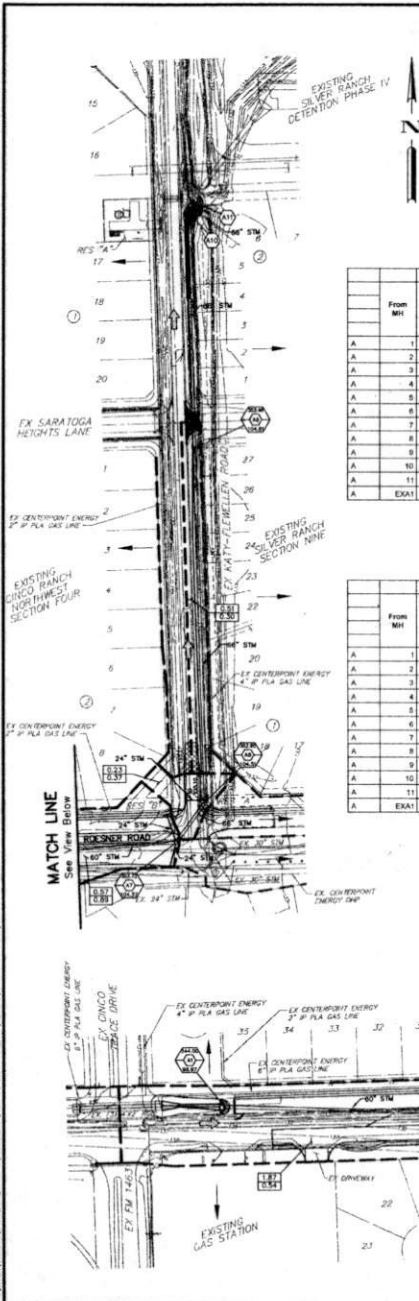
CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

JOB NUMBER: 2001-00
 DATE: 9-13-2014
 DRAWING BY: [Signature]
 CHECKED BY: [Signature]
 DATE: 9-13-2014

FILE NO.:
 DRAWING SCALE:
 HORIZ: 1"=100'
 VERT: 1"=4'
 SHEET: 3 of 24
 FOR CITY OF HOUSTON USE ONLY

FIRST BEND COUNTY ENGINEERING DEPARTMENT
 APPROVED: [Signature]
 DEVELOPMENT SUPERVISOR
 DATE: 11/25/14





INLET PONDING / EXTREME EVENT FLOODING

MH	Curb @ Inlet		Curb @ High Point		Ponding	
	Height (in)	TC	Height (in)	TC	Depth above TC @ Inlet	MAX ELEV.
A2	6	135.45	6	135.05	-0.33	135.15
A3	6	135.22	6	135.52	-0.20	135.02
A4	6	134.54	6	135.05	0.01	134.95
A5	6	134.14	6	135.02	0.37	134.52
A6	6	134.12	6	134.96	0.34	134.40
A8	6	133.10	6	133.55	-0.05	133.05

2-YEAR STORM CALCULATIONS

(CITY OF HOUSTON 2 YEAR STORM SEVER FREQUENCY = 0.175 D1 @ 16.2 + 0.8310)

From MH	To MH	Sub Area (ac)	Sub Runoff Coeff. C	Total Area A (ac)	Sum of CA	Intensity I (in/hr)	Sum of Flow Q (cfs)	Time of Conc. TC (min)	Reach Length (ft)	Diameter (in) or open x dia (ft)	Slope (%)	Manning's "n"	Capacity Q (cfs)	Velocity V (ft/s)	Drop at down stream manhole	Actual Velocity (ft/s)	Hydraulic Gradient (%)	Change in Head (ft)	Elev. Up Stream (ft)	Elev. Down Stream (ft)	TC Upstream (ft)	TC Downstream (ft)	Flowline Upstream (ft)	Flowline Downstream (ft)	
																									DESIGN
A	1	2	0.00	0.20	344.00	66.80	1.44	98.97	100.00	402	80	0.06	0.013	63.79	3.25	0.00	6.04	0.144	0.580	131.04	130.46	137.86	136.65	123.15	122.81
A	2	3	1.87	0.43	345.87	66.64	1.42	100.16	102.06	148	80	0.06	0.013	63.79	3.25	0.00	6.10	0.148	0.215	130.24	130.24	135.65	135.22	122.91	122.83
A	3	4	0.90	0.43	346.77	70.05	1.41	100.73	102.82	400	80	0.06	0.013	63.79	3.25	0.00	6.13	0.150	0.886	130.24	129.84	136.22	134.84	122.83	122.59
A	4	5	1.80	0.43	348.57	70.77	1.39	101.73	104.87	470	80	0.06	0.013	63.79	3.25	0.00	6.18	0.153	0.777	129.64	128.83	134.54	136.83	122.59	122.30
A	5	6	1.94	0.43	350.51	71.64	1.37	102.90	107.28	560	80	0.06	0.013	63.79	3.25	0.00	6.24	0.156	0.821	129.04	128.01	133.83	136.83	122.30	121.95
A	6	7	1.84	0.43	352.35	72.47	1.34	104.04	110.31	475	80	0.06	0.013	63.79	3.25	0.00	6.30	0.160	0.788	128.01	127.25	135.85	136.82	121.95	121.66
A	7	8	0.57	0.43	352.92	72.72	1.32	104.37	112.76	91	80	0.06	0.013	63.79	3.25	0.00	6.32	0.161	0.146	127.25	127.10	131.62	132.10	121.66	121.61
A	8	9	0.23	0.43	353.65	72.83	1.32	104.81	115.21	422	80	0.06	0.013	63.79	3.18	0.00	6.40	0.167	0.802	127.10	126.50	131.10	131.65	121.11	120.80
A	9	10	0.51	0.43	353.68	73.06	1.29	104.81	116.48	422	80	0.05	0.013	75.00	3.16	2.44	4.41	0.067	0.411	126.50	126.08	131.58	130.29	120.80	120.59
A	10	11	0.00	0.43	353.68	73.06	1.27	104.81	118.72	25	80	0.07	0.013	88.84	3.74		4.41	0.067	0.018	126.08	125.83	130.29	129.23	118.13	118.13
A	11	EXA1	0.00	0.43	353.68	73.06	1.27	104.81	118.81	92	8 x 5	0.06	0.015	129.36	3.23	0.00	3.72	0.060	0.085	125.13	125.02	129.96	129.96	118.13	118.08
A	EXA1	OUT	0.00	0.43	353.68	73.06	1.27	104.81	119.25	109	8 x 5	0.06	0.015	129.36	3.23		3.72	0.060	0.085	123.08	123.01	129.96	129.96	118.08	118.01

100-YEAR STORM CALCULATIONS

(CITY OF HOUSTON 100 YEAR STORM SEVER FREQUENCY = 0.0125 @ 24.7 @ 4.0 + 0.7500)

From MH	To MH	Sub Area (ac)	Sub Runoff Coeff. C	Total Area A (ac)	Sum of CA	Intensity I (in/hr)	Sum of Flow Q (cfs)	Time of Conc. TC (min)	Reach Length (ft)	Diameter (in) or open x dia (ft)	Slope (%)	Manning's "n"	Capacity Q (cfs)	Velocity V (ft/s)	Drop at down stream manhole	Actual Velocity (ft/s)	Hydraulic Gradient (%)	Change in Head (ft)	Elev. Up Stream (ft)	Elev. Down Stream (ft)	TC Upstream (ft)	TC Downstream (ft)	Flowline Upstream (ft)	Flowline Downstream (ft)	
																									DESIGN
A	1	2	0.00	0.19	344.00	34.40	4.61	158.60	90.00	402	80	0.06	0.013	63.79	3.25	0.00	8.08	0.571	1.491	130.78	130.25	137.86	136.65	123.15	122.81
A	2	3	1.87	0.43	345.87	35.24	4.61	162.40	90.00	148	80	0.06	0.013	63.79	3.25	0.00	8.27	0.389	0.575	130.25	127.65	135.65	135.22	122.91	122.83
A	3	4	0.90	0.43	346.77	35.05	4.61	164.34	90.00	400	80	0.06	0.013	63.79	3.25	0.00	8.37	0.388	1.583	129.84	128.01	136.22	134.84	122.83	122.59
A	4	5	1.80	0.43	348.57	35.37	4.61	167.86	90.00	470	80	0.06	0.013	63.79	3.25	0.00	8.54	0.414	1.940	129.04	128.15	134.54	136.83	122.59	122.30
A	5	6	1.94	0.43	350.51	37.24	4.61	171.89	90.00	560	80	0.06	0.013	63.79	3.25	0.00	8.74	0.435	2.584	128.01	127.58	133.83	136.83	122.30	121.95
A	6	7	1.84	0.43	352.35	38.07	4.61	175.80	90.00	475	80	0.06	0.013	63.79	3.25	0.00	8.94	0.454	2.157	127.25	127.43	135.85	136.82	121.95	121.66
A	7	8	0.57	0.43	352.92	38.32	4.61	175.80	90.00	91	80	0.06	0.013	63.79	3.25	0.00	9.00	0.460	0.419	127.25	127.01	131.62	132.10	121.66	121.61
A	8	9	0.23	0.43	353.65	38.43	4.61	177.18	90.00	422	80	0.06	0.013	75.00	3.16	0.00	7.48	0.278	1.291	127.01	127.28	131.10	131.65	120.80	120.59
A	9	10	0.51	0.43	353.68	38.66	4.61	178.22	90.00	422	80	0.05	0.013	75.00	3.16	2.44	7.50	0.282	1.189	127.28	126.00	131.58	130.29	120.80	120.59
A	10	11	0.00	0.43	353.68	38.66	4.61	178.22	90.00	25	80	0.07	0.013	88.84	3.74		7.50	0.282	0.090	126.00	125.63	130.29	129.23	118.13	118.13
A	11	EXA1	0.00	0.43	353.68	38.66	4.61	178.22	90.00	92	8 x 5	0.06	0.015	129.36	3.23	0.00	4.40	0.114	0.105	125.24	123.14	130.25	129.96	118.13	118.08
A	EXA1	OUT	0.00	0.43	353.68	38.66	4.61	178.22	90.00	109	8 x 5	0.06	0.015	129.36	3.23		4.40	0.114	0.124	123.14	123.01	129.96	129.96	118.08	118.01

BENCHMARKS

PROJECT BENCHMARK: BENCHMARK IS A STAINLESS STEEL ROD STAMPED H2022 68 1985 AT THE INTERSECTION OF FM 1463 AND THE ENTRANCE OF A PRIVATE GRAVEL ROAD 0.1 MILES SOUTH OF CORBITT ROAD, EAST SIDE OF FARM LANE 15 FEET EAST OF FENCE AND APPROXIMATELY 10 FEET SOUTH OF A GRAVEL ROAD. KEY MAP PAGE 484-S

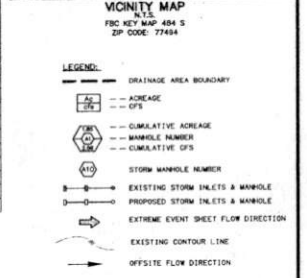
ELEVATION: 136.32 FT. NAVD-83, 2001 ADJUSTMENT

TRM 1 - BENCHMARK: IS A METAL "T"-POST SET 0.5 FEET BELOW NATURAL GROUND LEVEL, LOCATED APPROXIMATELY 1.88 FEET NORTHWEST OF THE INTERSECTION OF KATY-GASTON ROAD AND GREENWOOD ROAD ON THE WEST SIDE OF KATY-GASTON ROAD AT THE SOUTHWEST CORNER OF THE ENTRANCE TO A FARM FIELD ROAD TO THE SOUTHWEST BENCHMARK IS 152 FEET SOUTHWEST OF THE MOST SOUTHWESTLY GATE POST, 28.8 FEET SOUTHWEST OF THE WESTEY LINE OF PAYMENT OF KATY-GASTON ROAD AND 183 FEET NORTHWEST OF A PIPELINE WENT.

ELEVATION: 127.69 FEET NAVD-83, 2001 ADJUSTMENT

TRM 2 - BENCHMARK: IS A METAL "T"-POST SET 0.5 FEET BELOW NATURAL GROUND LEVEL, LOCATED 2.88 FEET EAST OF THE INTERSECTION OF CORBITT ROAD AND KATY-FLEWELLEN ROAD, 79.8 FEET NORTHWEST OF THE NORTHEAST CORNER OF A HOUSTON LIGHTING & POWER TRANSDUCERS, FURN LEE AND 21.8 FEET NORTH OF A CROSSTEX PIPELINE PIPELINE MARKER.

ELEVATION: 128.56 FEET NAVD-83, 2001 ADJUSTMENT



REV.	DATE	DESCRIPTION	APP.
1			
2			
3			

FORT BEND M.U.D. 58

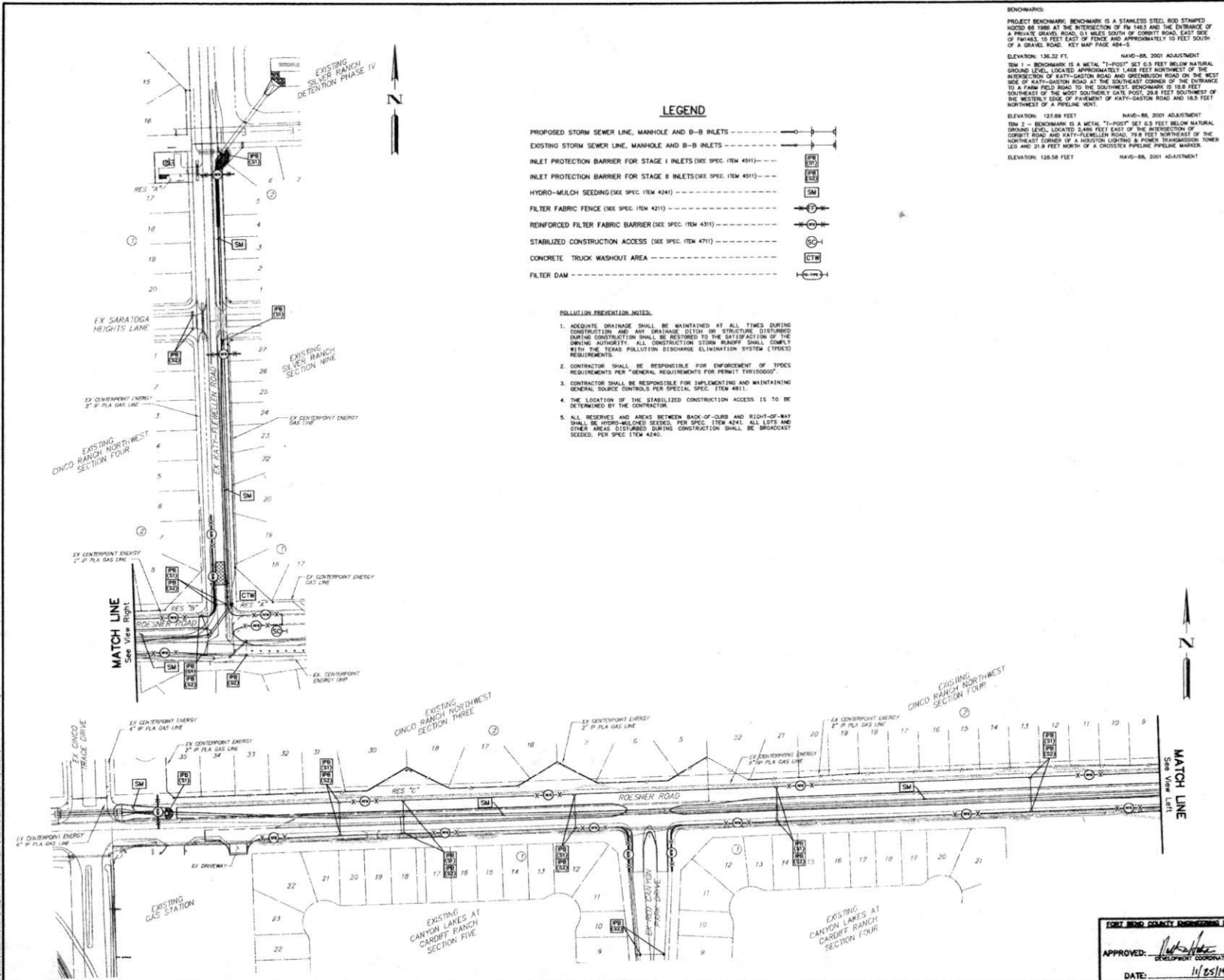
**ROESNER ROAD
FM 1463 TO
KATY-FLEWELLEN ROAD**

**DRAINAGE AREA MAP &
STORM CALCULATIONS**

DATE: SEPTEMBER 2014 SERIAL NO: 2001-00
JOB NUMBER: 2001-00
CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
APPROVED: [Signature] DATE: 11/25/14

FILE NO. FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE: HORIZ: 1"=100' VERT: 1"=10'
SHEET NO. 4 of 24



LEGEND

- PROPOSED STORM SEWER LINE, MANHOLE AND B-B INLETS
- EXISTING STORM SEWER LINE, MANHOLE AND B-B INLETS
- INLET PROTECTION BARRIER FOR STAGE I INLETS (SEE SPEC. ITEM 4511)
- INLET PROTECTION BARRIER FOR STAGE II INLETS (SEE SPEC. ITEM 4511)
- HYDRO-MULCH SEEDING (SEE SPEC. ITEM 4241)
- FILTER FABRIC BARRIER (SEE SPEC. ITEM 4211)
- REINFORCED FILTER FABRIC BARRIER (SEE SPEC. ITEM 4311)
- STABILIZED CONSTRUCTION ACCESS (SEE SPEC. ITEM 4711)
- CONCRETE TRUCK WASHOUT AREA
- FILTER DAM

POLLUTION PREVENTION NOTES:

1. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THE SATISFACTION OF THE OWNING AUTHORITY. ALL CONSTRUCTION STORM RUNOFF SHALL COMPLY WITH THE TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM (TPDES) REQUIREMENTS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ENFORCEMENT OF TPDES REQUIREMENTS PER GENERAL REQUIREMENTS FOR PERMIT TIER TWO/THREE.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING GENERAL SOURCE CONTROLS PER SPECIAL SPEC. ITEM 4811.
4. THE LOCATION OF THE STABILIZED CONSTRUCTION ACCESS IS TO BE DETERMINED BY THE CONTRACTOR.
5. ALL RESERVES AND AREAS BETWEEN BACK-OF-JOB AND RIGHT-OF-WAY SHALL BE HYDRO-MULCH SEEDING PER SPEC. ITEM 4241. ALL LOTS AND OTHER AREAS DISTURBED DURING CONSTRUCTION SHALL BE BROADCAST SEEDING PER SPEC. ITEM 4240.

BENCHMARKS:

PROJECT BENCHMARK: BENCHMARK IS A STAINLESS STEEL ROD STAMPED WOODS 68 1986 AT THE INTERSECTION OF FM 1463 AND THE ENTRANCE OF A PRIVATE GRAVEL ROAD 13 FEET SOUTH OF CORBITT ROAD, EAST SIDE OF A GRAVEL ROAD. KEY MAP PAGE 484-S
ELEVATION: 136.32 FT. NAVD-88, 2001 ADJUSTMENT

BM 1 - BENCHMARK IS A METAL "T"-POST SET 0.5 FEET BELOW NATURAL GROUND LEVEL, LOCATED APPROXIMATELY 1468 FEET NORTHWEST OF THE INTERSECTION OF KATY-GASTON ROAD AND GREENSBURG ROAD ON THE WEST SIDE OF KATY-GASTON ROAD AT THE SOUTHWEST CORNER OF THE ENTRANCE TO A FARM FIELD ROAD TO THE SOUTHWEST. BENCHMARK IS 18.8 FEET SOUTHWEST OF THE MOST SOUTHWESTLY GATE POST, 29.4 FEET SOUTHWEST OF THE WESTERN CORNER OF A PIPELINE VENT.
ELEVATION: 127.88 FEET NAVD-88, 2001 ADJUSTMENT

BM 2 - BENCHMARK IS A METAL "T"-POST SET 0.5 FEET BELOW NATURAL GROUND LEVEL, LOCATED 3.46 FEET EAST OF THE INTERSECTION OF CORBITT ROAD AND KATY-FLEWELLEN ROAD, 79.9 FEET NORTHEAST OF THE NORTHEAST CORNER OF A HOUSTON LIGHTING & POWER TRANSMISSION TOWER 110 AND 21.8 FEET NORTH OF A CROSS-TIE PIPELINE PIPELARK MARKER.
ELEVATION: 128.56 FEET NAVD-88, 2001 ADJUSTMENT



VICINITY MAP
R.I.T.E.
FBC KEY MAP 484-S
2P CODE: 7484

REV. NO.	DATE	DESCRIPTION	P.L.E.
1			
2			
3			

BROWN & GAY
ENGINEERS, INC.

Brown & Gay Engineers, Inc.
10717 Westheimer Road, Suite 500
Houston, Texas 77042
Tel: 281-488-8900
Fax: 281-488-8901
- Civil Engineering and Surveying
1985 Registered Professional Engineers

FORT BEND M.U.D. 58
ROESNER ROAD FM 1463 TO KATY-FLEWELLEN ROAD

STORM WATER POLLUTION PREVENTION PLAN

DATE: SEPTEMBER 2014	DESIGNED BY: SAJ
JOB NUMBER: 2001-00	DRAWN BY: SAJ

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

REVISIONS: 1-18-14
APPROVED: [Signature]
DATE: 1/25/14

APPROVED: [Signature]
DEVELOPMENT COORDINATOR
DATE: 1/25/14

FILE NO.: [] FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE:
HORIZ: 1"=100'
VERT: []

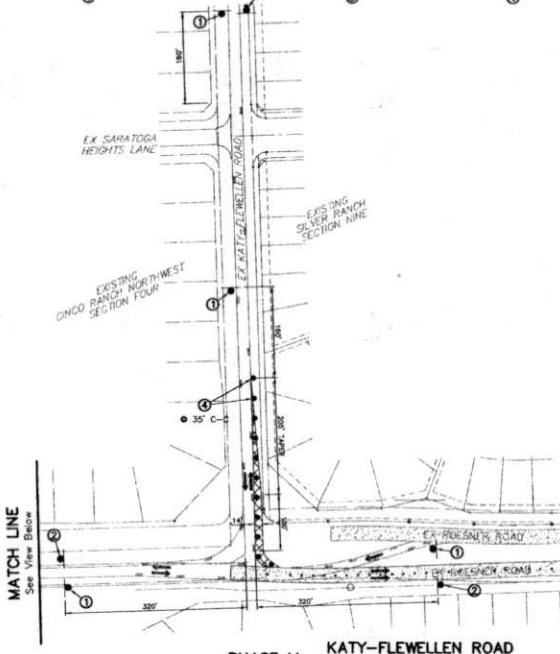
SHEET No. 5 of 24



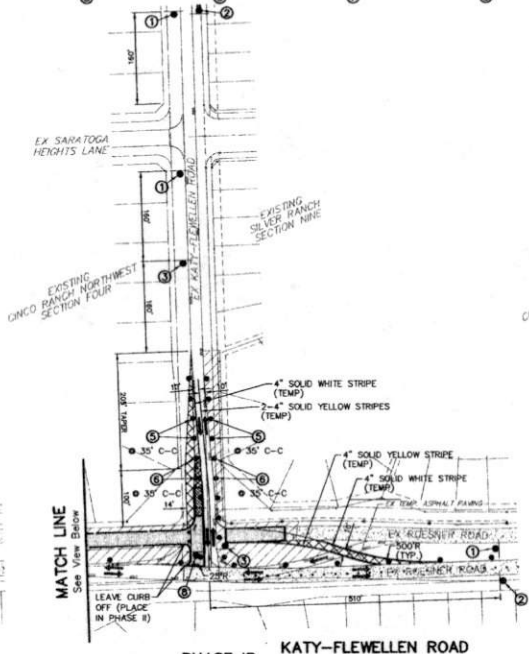
VICINITY MAP
S.L.T.
FBC KEY MAP 484 S
2P CODE 7784

LEGEND

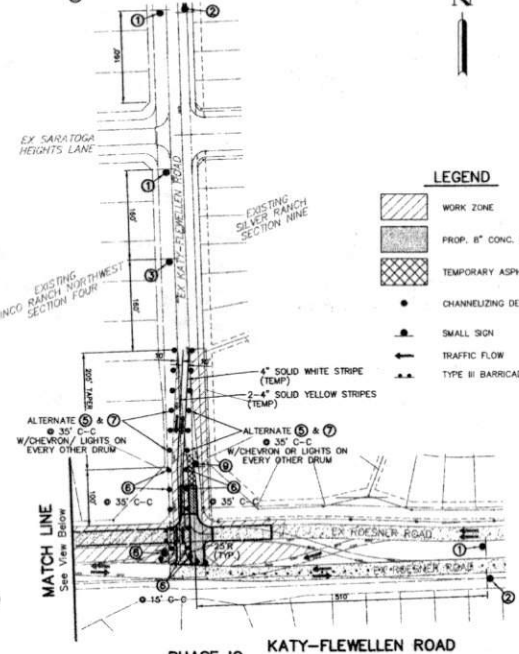
- WORK ZONE
- PROP. 6" CONC. PAVEMENT
- PROP. 8" CONC. PAVEMENT
- TEMPORARY ASPHALT PAVEMENT
- EX CONC. PAVEMENT
- CHANNELIZING DEVICE
- SMALL SIGN
- TRAFFIC FLOW
- TYPE II BARRICADE



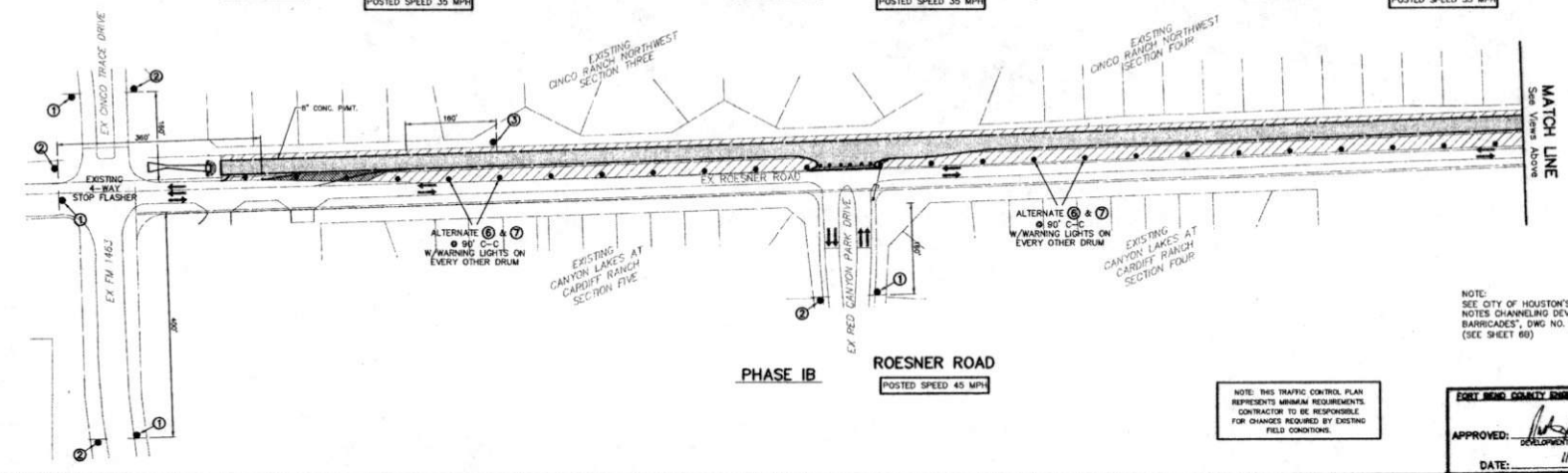
PHASE IA KATY-FLEWELLEN ROAD
POSTED SPEED 35 MPH



PHASE IB KATY-FLEWELLEN ROAD
POSTED SPEED 35 MPH



PHASE IC KATY-FLEWELLEN ROAD
POSTED SPEED 35 MPH



PHASE IB ROESNER ROAD
POSTED SPEED 45 MPH

NOTE: SEE CITY OF HOUSTON'S "TOP NOTES CHANNELIZING DEVICES AND BARRICADES", DWG NO. 01512-01. (SEE SHEET 68)

NOTE: THIS TRAFFIC CONTROL PLAN REPRESENTS MINIMUM REQUIREMENTS. CONTRACTOR TO BE RESPONSIBLE FOR CHANGES REQUIRED BY EXISTING FIELD CONDITIONS.

APPROVED: *[Signature]*
DEVELOPMENT COORDINATOR
DATE: 11/25/14

REV NO.	DATE	DESCRIPTION	P.E. APP.

BROWN & GAY ENGINEERS, INC.
10777 Westchase, Suite 400
Houston, TX 77036
Tel: 281.419.4400
Fax: 281.419.4401
City Engineer and Surveyor
Texas Registration No. 7-1688

FORT BEND M.U.D. 58
ROESNER ROAD
FM 1463 TO
KATY-FLEWELLEN ROAD

TRAFFIC CONTROL PLAN
PHASE I

DATE: 11/25/14
JOB NUMBER: 2001-00

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

REVISIONS:
1. 11/25/14
2. 11/25/14
3. 11/25/14

FILE NO.:
FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE:
HORIZ: 1"=100'
VERT: 1"=100'

SHEET No. 6 of 24

52870

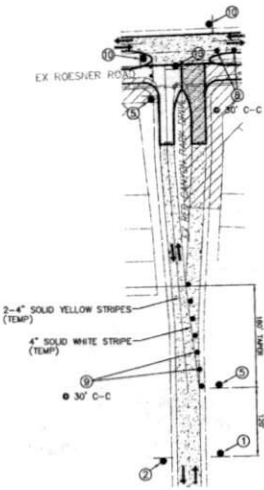
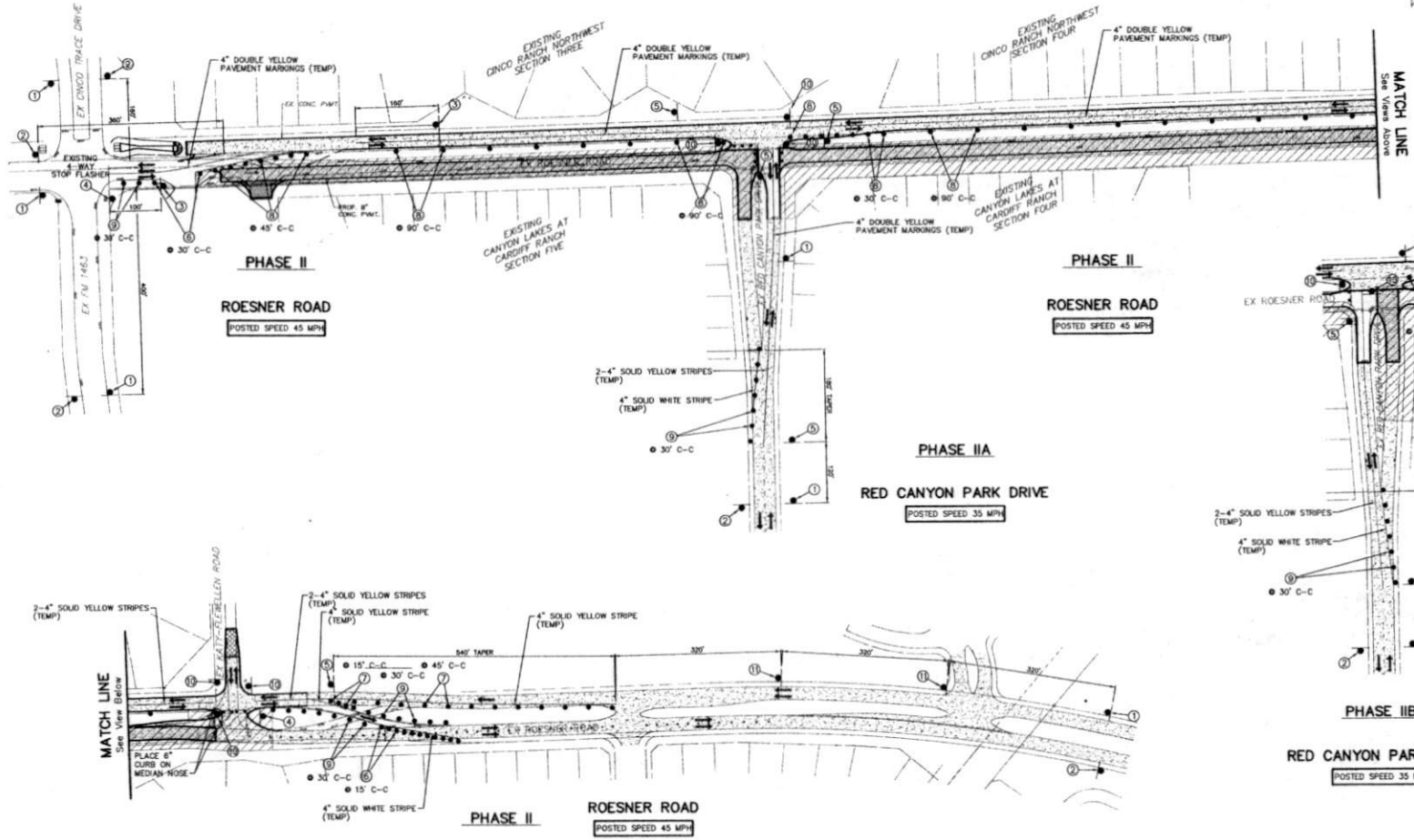
- 1 ROAD WORK AHEAD (36"x36") CW20-10
- 2 ROAD WORK (36"x18") G20-2
- 3 W1-AL (36"x36") CW3-3 (24"x24")
- 4 W1-4R (36"x36") CW3-1 (24"x24")
- 5 W2-3 (36"x36")
- 6 DRUM WITH CHEVRON CW1-B
- 7 DRUM WITH CHEVRON CW1-B
- 8 DRUM WITH VERTICAL PANELS
- 9 DRUM
- 10 STOP R11-1
- 11 LEFT LANE CLOSED (36"x36") CW20-31L



VICINITY MAP
FBC KEY MAP 404 S
2P CODE: 77494

NOTE: THIS TRAFFIC CONTROL PLAN REPRESENTS MINIMUM REQUIREMENTS. CONTRACTOR TO BE RESPONSIBLE FOR CHANGES REQUIRED BY EXISTING FIELD CONDITIONS.

NOTE: SEE CITY OF HOUSTON'S "TOP NOTES" CHANNELIZING DEVICES AND BARRICADES", DWG NO. 01512-01. (SEE SHEET 66)



LEGEND

- WORK ZONE
- PROP. 6" CONC. PAVEMENT
- PROP. 8" CONC. PAVEMENT
- EX CONC. PAVEMENT
- CHANNELIZING DEVICE
- SMALL SIGN
- TRAFFIC FLOW
- TYPE II BARRICADE

FORT BEND COUNTY ENGINEERING DEPARTMENT
APPROVED: *[Signature]*
DATE: 11/25/14

REV.	DATE	DESCRIPTION	BY

BROWN & GAY ENGINEERS, INC.
Brown & Gay Engineers, Inc.
10777 Memorial Drive, Suite 100
Houston, TX 77036
Tel: 281-488-8800
Fax: 281-488-8801
Professional Seal: *[Seal]*

FORT BEND M.U.D. 58
ROESNER ROAD FM 1463 TO KATY-FLEWELLEN ROAD

TRAFFIC CONTROL PLAN
PHASE II

DATE: SEPTEMBER 2014
JOB NUMBER: 2001-00

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
DATE: 11-18-14
PROJECT: *[Signature]*
DRAWN BY: *[Signature]*
CHECKED BY: *[Signature]*

FILE NO. FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE: 1"=100'
SHEET NO. 6A OF 24
5870

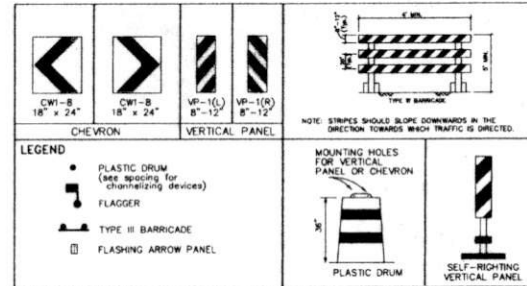
GENERAL NOTES

1. The Contractor shall provide and install traffic control devices in conformance with Part VI of Texas Manual on Uniform Traffic Control Devices (TMUTCD) latest edition with revisions during the entire construction period.
2. All signs and traffic control devices shall conform to the latest version of the TMUTCD.
3. No lanes shall be closed during the hours of 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM Monday thru Friday without approval of the City Traffic Engineer.
4. No work shall be performed in residential areas from 7:00 PM to 7:00 AM.
5. Contractor shall maintain approved number of thru lanes of traffic in each direction during construction working hours. Traffic control plans shall include one way and/or detour plans.
6. Contractor shall maintain traffic lanes and detours according to traffic control plans during working hours.
7. Contractor shall cover open pavement excavations for minor utility work with anchored steel plates during non-working hours, and open lanes for normal traffic flow when feasible.
8. If the Contractor chooses to use a different method of "Traffic Control Plans" during the construction than what is outlined in the contract drawings, the Contractor shall be responsible to prepare and submit an alternate set of traffic control plans to the City of Houston Project Manager for approval ten working days prior to implementation. These plans shall be drawn to scale on reproducible mylar and shall be sealed by a Licensed Engineer in the State of Texas. Traffic Operations Division representative approval is required to accept the proposed change.
9. Contractor shall secure lane/sidewalk closure permits from Traffic Operations Division (Mobility Permit Section at <http://www.ci.houston.tx.us/transportation/trafficcontrol.aspx>) before implementing the traffic control plan. The application must be submitted at least ten business days prior to the implementation of the traffic control plan and/or beginning construction work. The contractor shall provide traffic control plans, construction sequencing, and schedule with the application.
10. Contractor shall have approved traffic control plan and permit at the job site for inspection at all times.
11. During pavement surface restoration projects, the Contractor shall not open closed lanes until the pavement surface has cured enough to allow vehicular traffic according to City of Houston Standard Specifications.
12. The Contractor is responsible for scheduling and coordinating all construction activities with stake holders in the vicinity including emergency response agencies such as Houston Police Department, Houston Fire Department, and Metropolitan Transit Authority.
13. Contractor shall be responsible for issuing all work directives to all sub-contractors, utility companies, and all other entities performing construction work associated with the project.
14. Nothing in these notes or plans shall relieve the Contractor of the responsibility for job site conditions during the course of construction of the project, including safety of all modes of transportation, persons, and property, and that this requirement shall apply continuously and not be limited to working hours.
15. The Traffic Operation Division (Mobility Permits Group) per the direction of the City Traffic Engineer has the right to demand the installation of additional traffic control devices or modifications to these plans and notes, as deemed necessary to promote the safe and orderly flow of traffic and pedestrians through the construction work zone. The Contractor shall comply with these additional requests or modifications with due diligence.
16. All existing traffic control signs and pavement markings shall be maintained in visible locations during construction unless prior written approval is obtained from City of Houston Project Manager. The Contractor shall restore or replace (at the discretion of the City Traffic Engineer) any pavement marking or signing damaged during construction operations, including Raised Pavement Markers (RPMs) and chip seal markers.
17. When entering or leaving roadways carrying public traffic, the Contractor's equipment, whether empty or loaded shall in all cases yield to public traffic with assistance by Contractor provided certified flagger/peace officer.
18. Access to driveways adjacent to the construction work zone shall be maintained at all times as much as possible. Additional cones/barricades may be required to delineate the driveway access route through the construction work zone. A minimum of one travel lane shall be maintained across the driveways, unless prior written approval is obtained from City of Houston Project Manager.
19. Spillage resulting from hauling operations along or across any public traveled way shall be removed immediately by the Contractor.
20. The Contractor shall submit an application for temporary parking restrictions if there are parking meters located at the proposed lane closures from Parking Management Division (832-393-8690) at least ten business days before implementation of lane closures. In addition, temporary no parking signs shall be posted 24 hours prior to commencement of work.
21. Additional off duty police officers/flaggers may be requested to direct traffic when lanes are blocked at the discretion of the City Project Manager even if they are not specifically identified on the project plans.
22. The Contractor shall replace within 72 hours, all traffic signal loop detectors damaged during construction.
23. In general, a solar powered flashing arrow board shall be required on all major thoroughfare lane closures. Exceptions to flashing arrow boards and/or implementation on residential lane closures shall be approved by the City Traffic Engineer.
24. Approved traffic control plan shall be in place before starting any excavation.

SPACING FOR CHANNELIZING DEVICES

- A. Plastic drums on merging taper @ 30' c-c with chevron sign @ 60' c-c and warning lights for overnight closure.
- B. Plastic drums on downstream taper @ 30' c-c (return taper and barricade are optional and divided roadway section)
- C. Plastic drums on radii @ 30' c-c.
- D. Plastic drums on tangent @ 35' c-c with vertical panel at 70' c-c and approved warning light @ 70' c-c (for overnight closure).
- E. Plastic drums in front of construction zone @ 20' c-c with vertical panel at 40' c-c and approved warning light @ 40' c-c (for overnight closure).
- F. Concrete Traffic Barrier (CTB) or Low Profile Concrete Traffic Barrier (LPCTB) with approved reflectors @ 10' c-c if pavement drop is greater than 1 foot.
- G. Plastic drums w/guard rail mounted.
 - 4 lanes to 2 lanes undivided roadway section @ 20' c-c.
 - 4 lanes divided roadway to one side two way roadway @ 20' c-c.
 - Left lane and right lane storage bays @ 35' c-c.
- H. Self-lighting vertical panel spacing.
 - 4 lanes to 2 lanes undivided roadway section @ 20' c-c.
 - 4 lanes divided roadway to one side two way roadway @ 20' c-c.
 - Left lane and right lane storage bays @ 35' c-c.
- I. Spacing shown on traffic control shall supersede the above spacing.
- J. Spacing may be adjusted to provide driveways, intersections and/or median openings.

CHANNELIZATION AND BARRICADES



Posted Speed (mph)	Sign Spacing "x"	Min. Desirable Taper Length "x"			Suggested Maximum Spacing Of Device		Length for Buffers	
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent	Posted Speed (mph)	Length in Feet (ft)
30	120'	150'	165'	180'	30'	60' - 75'	20	40
35	160'	205'	225'	245'	35'	70' - 90'	25	60
40	240'	265'	295'	320'	40'	80' - 100'	30	90
45	320'	450'	495'	540'	45'	90' - 110'	40	150
50	400'	500'	550'	600'	50'	100' - 125'	45	195
55	500'	550'	605'	660'	55'	110' - 140'	50	240
							55	295
							60	300
							65	410
							70	475

DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

TCP NOTES
CHANNELIZING DEVICES
AND BARRICADES

(NOT TO SCALE)

APPROVED BY: *[Signature]*
CITY ENGINEER

DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: JUL-01-2012 DWG NO. 01512-01

REV. NO.	DATE	DESCRIPTION	P.E. APPROV.

BROWN & GAY
ENGINEERS, INC.

Brown & Gay Engineers, Inc.
1077 Westwood, Suite 600
Houston, TX 77042
Tel: 281-468-8700
Fax: 281-468-8899
— Civil Engineers and Surveyors
State Registration No. 1-1508

[Signature]
Phillip W. Mullins
P.E.

FORT BEND M.U.D. 58

ROESNER ROAD
FM 1463 TO
KATY-FLEWELLEN ROAD

CITY OF HOUSTON TCP NOTES
CHANNELIZING DEVICES
AND BARRICADES

DATE: SEPTEMBER 2014 DRAWN BY: SJA
JOB NUMBER: 2001-00

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

APPROVED BY: *[Signature]*
CITY ENGINEER

DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: JUL-01-2012 DWG NO. 01512-01

FILE NO. FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE

HORIZ: NTS
VERT: NTS

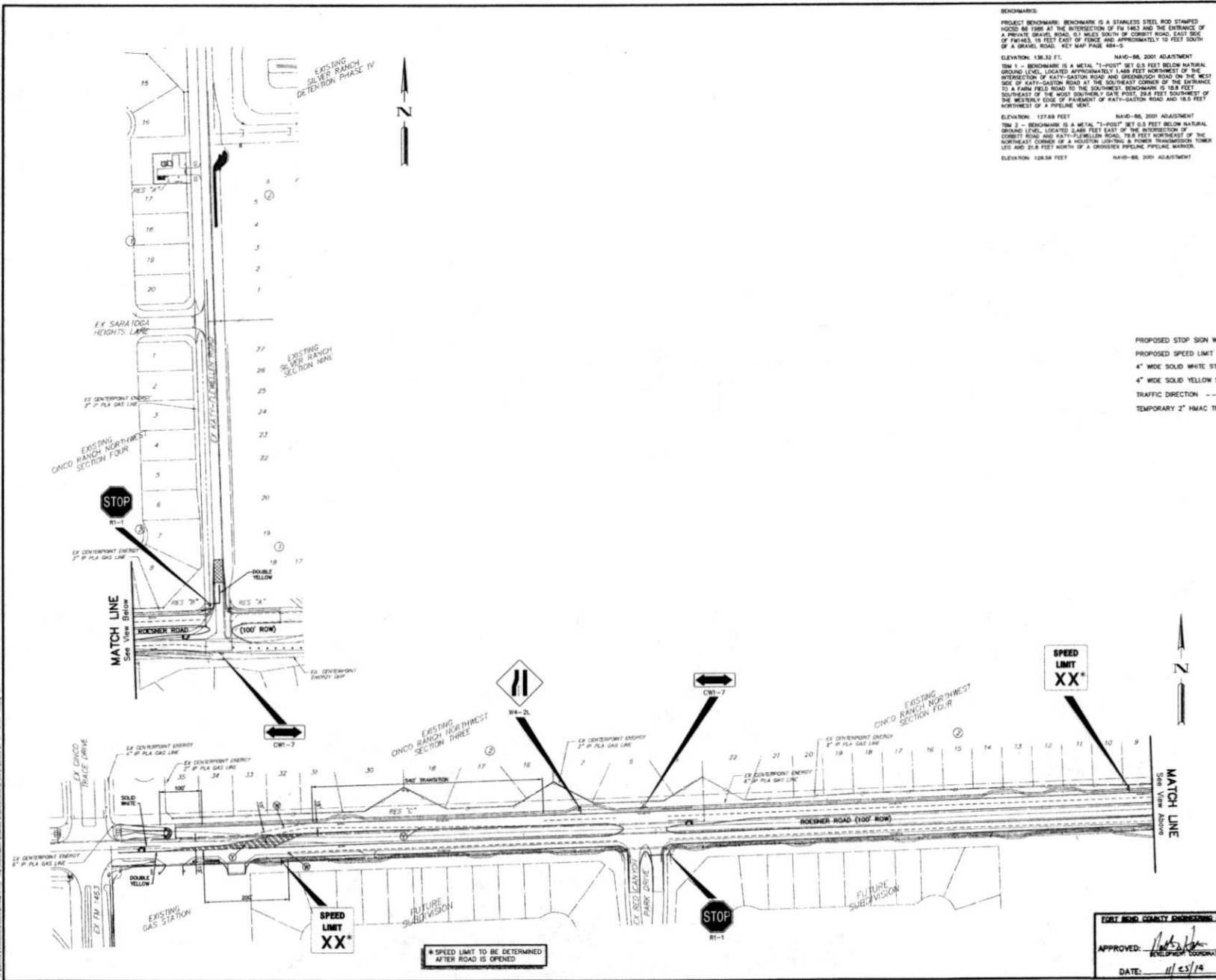
52870

SHEET NO. 6B of 24

FORT BEND COUNTY ENGINEERING DEPARTMENT

APPROVED: *[Signature]*
DEVELOPER/COORDINATOR

DATE: 11/25/14



BENCHMARKS

PROJECT BENCHMARK: BENCHMARK IS A STAINLESS STEEL ROD STAMPED HOOD 86 1986 AT THE INTERSECTION OF FM 1463 AND THE ENTRANCE OF A PRIVATE GRAVEL ROAD, 0.1 MILES SOUTH OF CORRETT ROAD, EAST SIDE OF PARCELS 15 FEET EAST OF FENCE AND APPROXIMATELY 10 FEET SOUTH OF A GRAVEL ROAD. KEY MAP PAGE 88-5

ELEVATION: 136.32 FT. NAVD-86, 2001 ADJUSTMENT

TIM 1 - BENCHMARK IS A METAL "I-POST" SET 0.5 FEET BELOW NATURAL GROUND LEVEL, LOCATED APPROXIMATELY 1.68 FEET NORTHWEST OF THE INTERSECTION OF KATY-GASTON ROAD AND GREENBUSH ROAD ON THE WEST SIDE OF KATY-GASTON ROAD AT THE SOUTHWEST CORNER OF THE ENTRANCE TO A FARM FIELD ROAD TO THE SOUTHWEST. BENCHMARK IS 10.8 FEET SOUTHWEST OF THE MOST SOUTHWESTY GATE POST, 20.8 FEET SOUTHWEST OF THE WESTERLY EDGE OF PAVEMENT OF KATY-GASTON ROAD AND 18.5 FEET NORTHWEST OF A PIPELINE MARK.

ELEVATION: 127.68 FEET NAVD-86, 2001 ADJUSTMENT

TIM 2 - BENCHMARK IS A METAL "I-POST" SET 0.5 FEET BELOW NATURAL GROUND LEVEL, LOCATED 3.86 FEET EAST OF THE INTERSECTION OF CORRETT ROAD AND KATY-FLEWELLEN ROAD, 78.8 FEET NORTHEAST OF THE NORTHEAST CORNER OF A HOUSTON LIGHTING & POWER TRANSMISSION TOWER LED AND 20.8 FEET NORTH OF A CROSSSTICK PIPELINE MARKER.

ELEVATION: 128.58 FEET NAVD-86, 2001 ADJUSTMENT



LOCALITY MAP
 FBC KEY MAP 404 S
 ZIP CODE: 77404

LEGEND

- PROPOSED STOP SIGN WITH STREET SIGN -----
- PROPOSED SPEED LIMIT SIGN (35 MPH) -----
- 4" WIDE SOLID WHITE STRIPE -----
- 4" WIDE SOLID YELLOW STRIPE -----
- TRAFFIC DIRECTION -----
- TEMPORARY 2" HMA-C TRANSITION -----

REV. NO.	DATE	DESCRIPTION	BY
1			
2			

BROWN & GAY ENGINEERS, INC.

Brown & Gay Engineers, Inc.
 4077 Regency Square, Suite 200
 Houston, TX 77025
 Tel: 281-984-4700
 Fax: 281-984-4701
 1100 Regency Square, Suite 200
 Houston, TX 77025

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

FORT BEND M.U.D. 58
 ROESNER ROAD
 FM 1463 TO
 KATY-FLEWELLEN ROAD

PAVEMENT STRIPING
 LAYOUT

DATE: SEPTEMBER 2004
 JOB NUMBER: 2001-00

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

DESIGNED BY: [Signature]
 CHECKED BY: [Signature]
 DATE: 11/25/10

FILE NO.: [Blank]
 FOR CITY OF HOUSTON USE ONLY

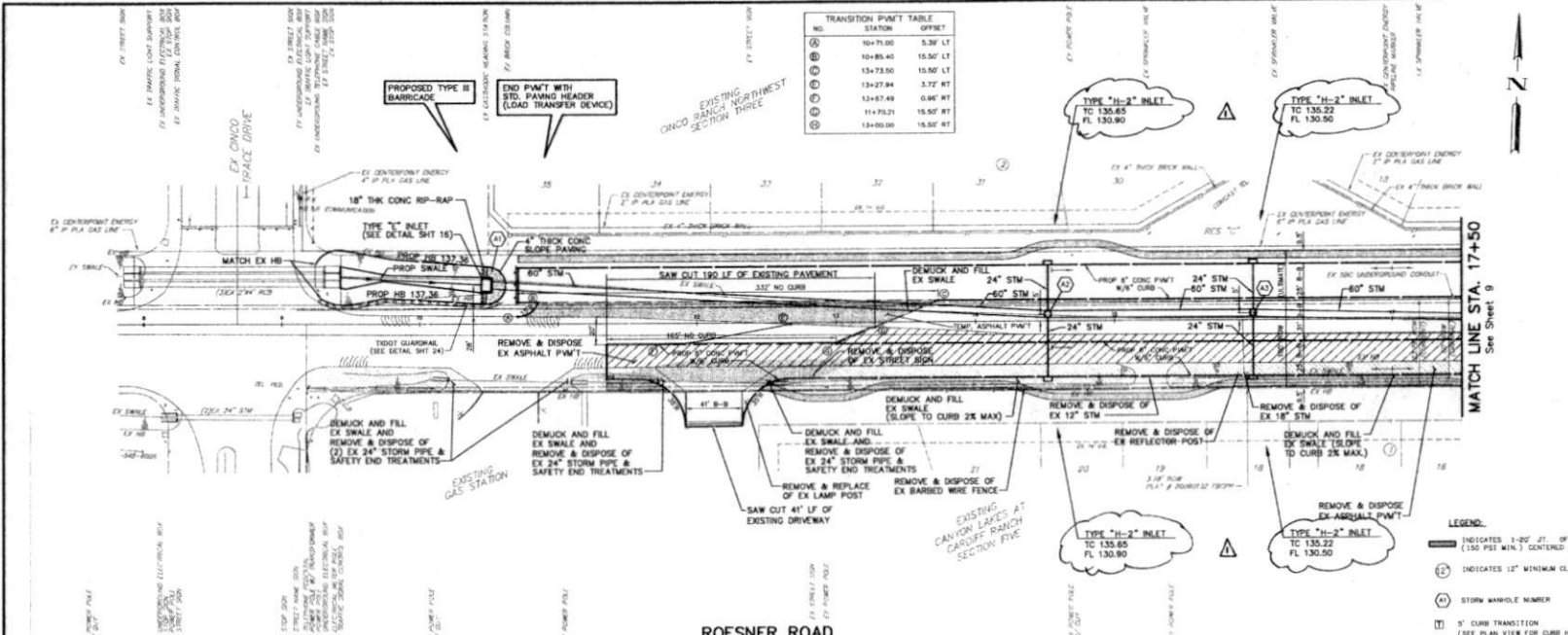
FORT BEND COUNTY ENGINEERING DEPARTMENT
 APPROVED: [Signature]
 DEVELOPER COORDINATOR
 DATE: 11/25/10

DRAWING SCALE
 HORIZ: 1"=100'
 VERT: 1"=10'

SHEET 7 of 24

8270

* SPEED LIMIT TO BE DETERMINED AFTER ROAD IS OPENED



BENCHMARKS

PROJECT BENCHMARK BENCHMARK IS A STAINLESS STEEL ROD STAMPED 6600 68 1086 AT THE INTERSECTION OF FM 1463 AND THE ENTRANCE OF A PRIVATE GRAVEL ROAD 0.3 MILES SOUTH OF CORRETT ROAD, EAST SIDE OF FM1463, 15 FEET EAST OF FENCE AND APPROXIMATELY 10 FEET SOUTH OF A GRAVEL ROAD. MET MAP PAGE 484-5

ELEVATION: 136.32 FT. NAVD-83, 2001 ADJUSTMENT

TRM 1 - BENCHMARK IS A METAL "T"-POST SET 0.5 FEET BELOW NATURAL GROUND LEVEL, LOCATED APPROXIMATELY 1.68 FEET NORTHWEST OF THE INTERSECTION OF KATY-GASTON ROAD AND GREENSBORO ROAD ON THE WEST SIDE OF KATY-GASTON ROAD AT THE SOUTHWEST CORNER OF THE ENTRANCE TO A FARM FIELD ROAD TO THE SOUTHWEST. BENCHMARK IS 18.8 FEET SOUTHWEST OF THE MOST SOUTHWEST GATE POST, 20.8 FEET SOUTHWEST OF THE WESTERN EDGE OF PAVEMENT OF KATY-GASTON ROAD AND 18.3 FEET NORTHWEST OF A PAVEMENT LINE.

ELEVATION: 127.68 FEET NAVD-83, 2001 ADJUSTMENT

TRM 2 - BENCHMARK IS A METAL "T"-POST SET 0.5 FEET BELOW NATURAL GROUND LEVEL, LOCATED 0.48 FEET EAST OF THE INTERSECTION OF THE CORRETT ROAD AND KATY-FLEWELLEN ROAD, 7.8 FEET NORTHWEST OF THE NORTHWEST CORNER OF A HOUSTON LIGHTING & POWER TRANSFORMER TOWER LES AND 21.8 FEET NORTH OF A CROSSED PIPELINE MARKER.

ELEVATION: 128.56 FEET NAVD-83, 2001 ADJUSTMENT

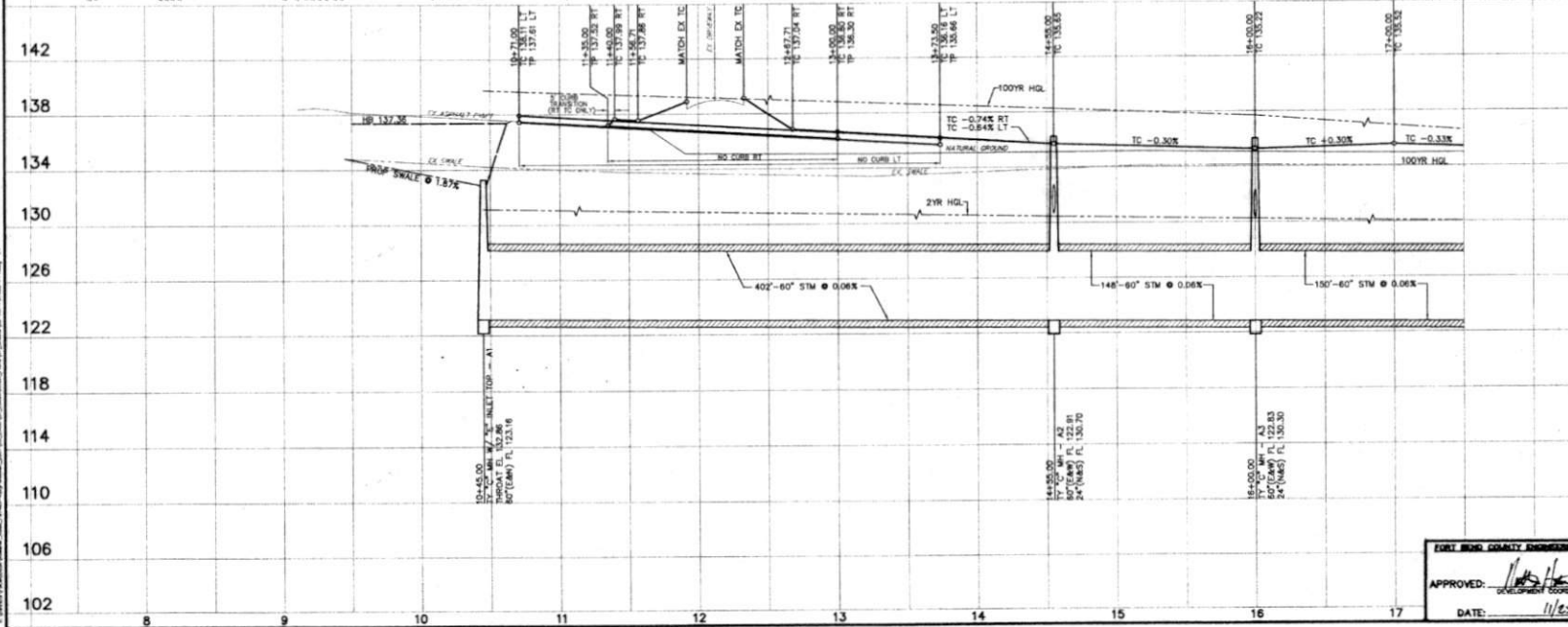
- NOTES:**
- SANITARY SEWERS SHALL BE PROPOSED 30"-28" PVC, UNLESS OTHERWISE INDICATED.
 - STORM SEWERS SHALL BE PROPOSED REINFORCED CONCRETE PIPE C-18, CLASS 112 UNLESS OTHERWISE INDICATED. ALL JOISTS SHALL BE RUBBER SANDWICH.
 - ALL WATER LINES TO BE PROPOSED PVC CLASS 150, DR-18, AWWA C-300 UNLESS OTHERWISE INDICATED.
 - WHenever possible, COVER 12" OF 1/2" JACOBI C-900 PVC PIPE, CLASS 150 SANITARY SEWER LEAD ON PROPOSED WATER LINE AND 12" OF 1/2" JACOBI C-900 WATER LINE PIPE ON PROPOSED SANITARY SEWER LEAD, 12" MIN. CLEARANCE.

VERIFICATION OF PRIVATE UTILITY LINES

Investigation conducted on location on 08/11/14. All utilities shown on this plan were verified by ground penetrating radar (GPR) and/or other methods. The location and depth of all utilities are shown on this plan. All utilities shown on this plan are assumed to be in place unless otherwise indicated. All utilities shown on this plan are assumed to be in place unless otherwise indicated.

LEGEND:

- INDICATES 1'-0" 2" OF C-900 PVC (150 PSI MIN.) CENTERED ON CROSSING
- INDICATES 12" MINIMUM CLEARANCE
- STORM MANHOLE NUMBER
- CURB TRANSITION (SEE PLAN VIEW FOR CURB HEIGHTS)



BROWN & GAY ENGINEERS, INC.

PHILIP W. MULLAN
Professional Engineer
No. 00111

FORT BEND M.U.D. 58
ROESNER ROAD
FM 1463 TO
KATY-FLEWELLEN ROAD

PLAN AND PROFILE
ROESNER ROAD
(STA 11+70 TO 17+50)

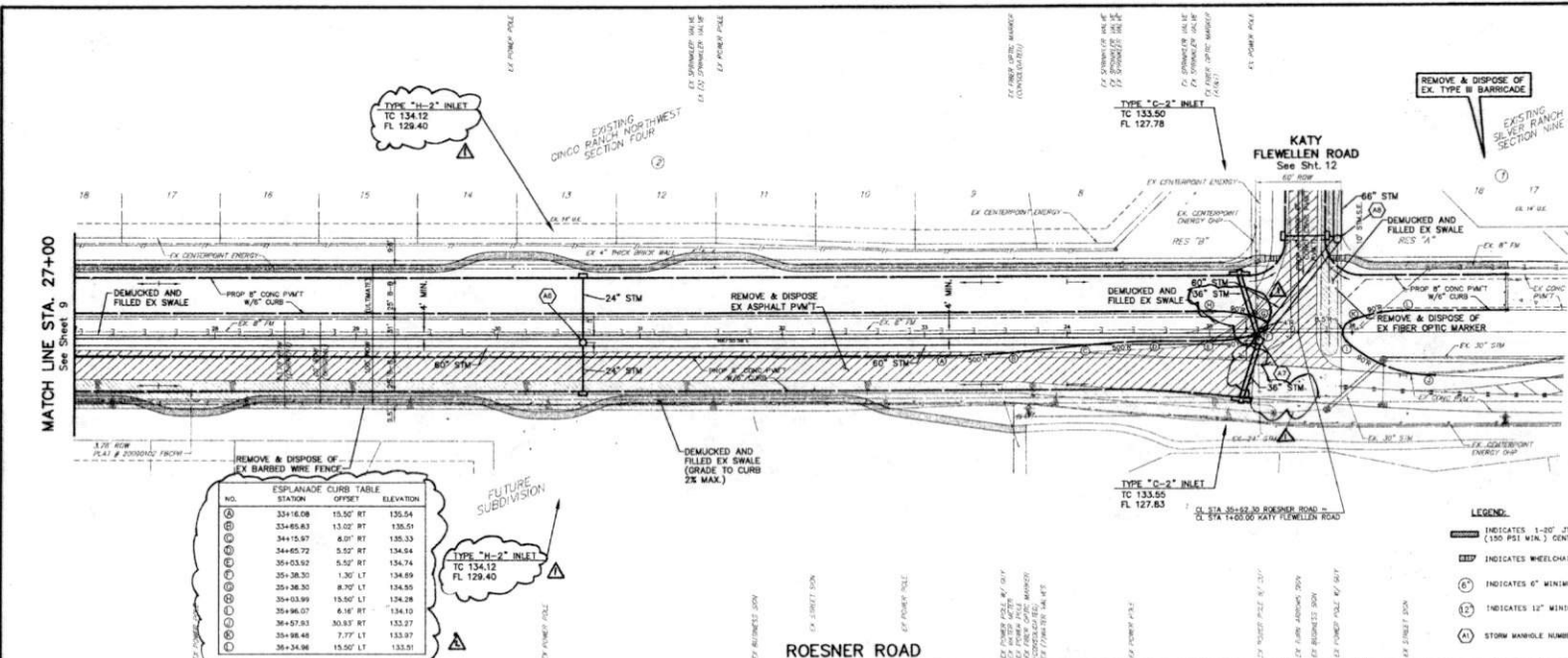
DATE: SEPTEMBER 2014
JOB NUMBER: 2001-00

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS & ENGINEERING

APPROVED: [Signature]
DATE: 11/25/14

DRAWING SCALE: HORIZ: 1"=40' VERT: 1"=4'

SHEET 8 of 24



ESPLANADE CURB TABLE

NO.	STATION	OFFSET	ELEVATION
1	33+16.08	15.50' RT	135.54
2	33+45.83	13.00' RT	135.51
3	34+15.97	6.00' RT	135.53
4	34+65.72	5.52' RT	134.54
5	35+03.92	5.52' RT	134.74
6	35+38.30	1.30' LT	134.89
7	35+38.30	8.30' LT	134.95
8	35+03.99	15.50' LT	134.28
9	35+96.07	6.16' RT	134.10
10	36+57.83	30.82' RT	133.27
11	38+98.48	7.77' LT	133.97
12	38+34.96	15.50' LT	133.51

BENCHMARKS
 PROJECT BENCHMARK BENCHMARK IS A STAINLESS STEEL ROD STAMPED HOUSE NO 1986 AT THE INTERSECTION OF FM 1463 AND THE ENTRANCE OF A PRIVATE DRIVE ROAD, 0.1 MILES SOUTH OF COMBETT ROAD, EAST SIDE OF FM 1463, 15 FEET EAST OF FENCE AND APPROXIMATELY 10 FEET SOUTH OF A GRAVEL ROAD. KEY MAP PAGE 484-5
 ELEVATION: 136.32 FT. NAD-88, 2001 ADJUSTMENT
 TM 1 - BENCHMARK IS A METAL "T-POST" SET 0.5 FEET BELOW NATURAL GROUND LEVEL, LOCATED APPROXIMATELY 1.48 FEET NORTHWEST OF THE INTERSECTION OF KATY-GASTON ROAD AND GREENBUSH ROAD ON THE WEST SIDE OF KATY-GASTON ROAD AT THE SOUTHEAST CORNER OF THE ENTRANCE OF A FARM DRIVE ROAD TO THE SOUTHWEST CORNER OF THE ENTRANCE SOUTHEAST OF THE MOST SOUTHERLY GATE POST 29.6 FEET SOUTHWEST OF THE WESTERN CORNER OF ALIGNMENT OF KATY-GASTON ROAD AND 18.5 FEET NORTHWEST OF A PIPELINE. VENT
 ELEVATION: 127.89 FEET NAD-88, 2001 ADJUSTMENT
 TM 2 - BENCHMARK IS A METAL "T-POST" SET 4.86 FEET EAST OF THE INTERSECTION OF GREENBUSH ROAD AND KATY-GASTON ROAD, 78.8 FEET WEST OF THE NORTHEAST CORNER OF A HOUSTON LIGHTING & POWER TRANSMISSION TOWER LEG AND 21.6 FEET NORTH OF A CROSS-TIE PIPELINE PIPELINE MARKER.
 ELEVATION: 128.58 FEET NAD-88, 2001 ADJUSTMENT

- NOTES:**
- SANITARY SEWERS SHALL BE PROPOSED SDR-35 PVC UNLESS OTHERWISE INDICATED.
 - STORM SEWERS SHALL BE PROPOSED REINFORCED CONCRETE PIPE C-76, CLASS III, UNLESS OTHERWISE INDICATED. ALL JOINTS SHALL BE RUBBER GASKETED.
 - ALL WATER LINES TO BE PROPOSED PIPE CLASS 150, DR-18, ANNA C-900 UNLESS OTHERWISE INDICATED.
 - WHENEVER POSSIBLE, CENTER 1'-20" JOINT C-900 PVC PIPE, CLASS 150, SANITARY SEWER LEAD ON PROPOSED WATER LINE AND 1'-20" JOINT, C-900 PVC WATER LINE PIPE OR PROPOSED SANITARY SEWER LEAD, 12" MIN. CLEARANCE.

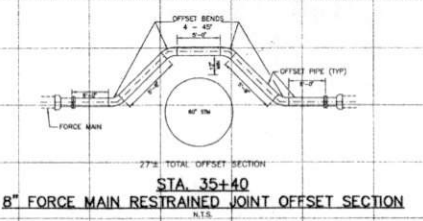
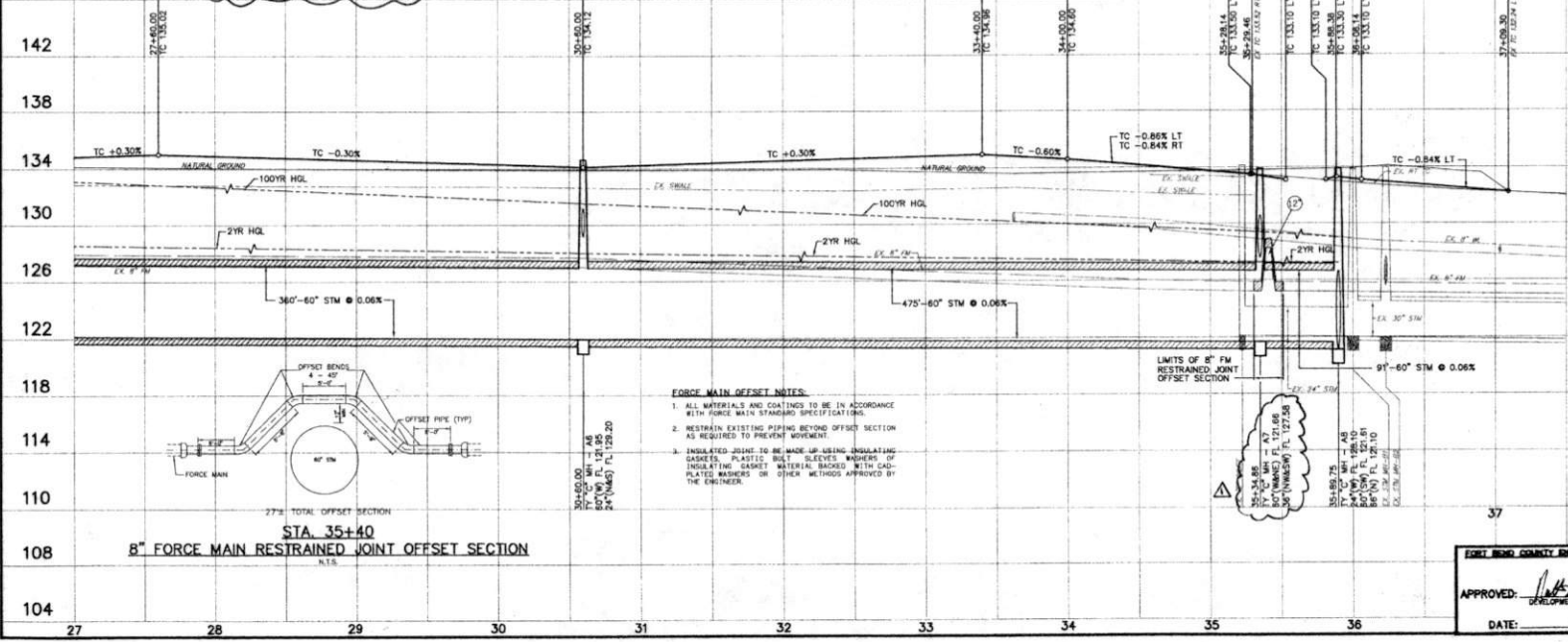
LEGEND:

- INDICATES 1'-20" J.T. OF C-900 PVC (150 PSI MIN.) CENTERED ON CROSSING
- INDICATES WHEELCHAIR RAMP (TYPE 7)
- INDICATES 6" MINIMUM CLEARANCE
- INDICATES 12" MINIMUM CLEARANCE
- STORM MANHOLE NUMBER

VERIFICATION OF PRIVATE UTILITY LINES

Contractor shall verify the location and depth of all existing utility lines (gas, electric, water, sewer, etc.) prior to construction. The contractor shall be responsible for any damage to existing utility lines. The contractor shall be responsible for any damage to existing utility lines. The contractor shall be responsible for any damage to existing utility lines.

NO.	DATE	DESCRIPTION	BY
1	4/21/15	Revise Esplanade Table	JL
2	4/21/15	Change Joint & Pipe Size	JL



- FORCE MAIN OFFSET NOTES:**
- ALL MATERIALS AND COATINGS TO BE IN ACCORDANCE WITH FORCE MAIN STANDARD SPECIFICATIONS.
 - RESTRAIN EXISTING PIPING BEYOND OFFSET SECTION AS REQUIRED TO PREVENT MOVEMENT.
 - INSULATED JOINT TO BE MADE UP USING INSULATING GASKETS, PLASTIC BOLT SLEEVES INSTEAD OF INSULATING GASKET MATERIAL BACKED WITH CAD-PLATED MANHOLES OR OTHER METHODS APPROVED BY THE ENGINEER.

BROWN & GAY ENGINEERS, INC.

PHILIP M. WILLIAMS, P.E. 09411

Brown & Gay Engineers, Inc.
 1011 West Loop South
 Houston, TX 77060
 Phone: 281-488-8200
 Fax: 281-488-8201
 E-mail: info@brownandgay.com
 TDEC Registration No. 71246

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

DATE: SEPTEMBER 2014
 JOB NUMBER: 2001-00

FOR CITY OF HOUSTON USE ONLY

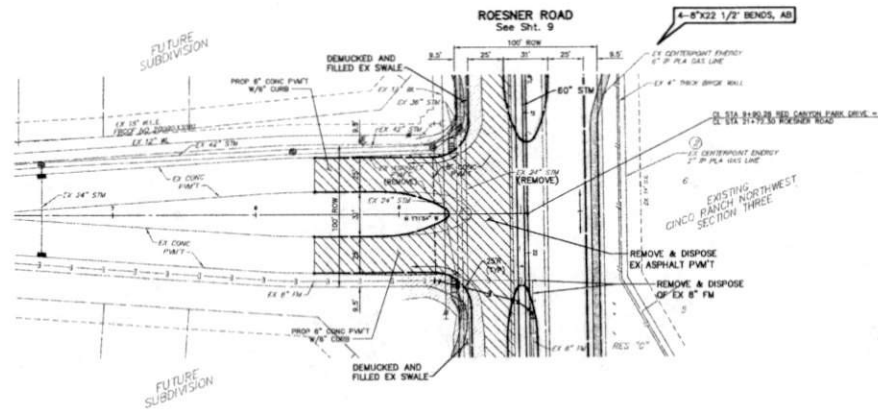
DRAWING SCALE:
 HORIZ: 1"=40'
 VERT: 1"=4'

APPROVED: [Signature]
 DEVELOPMENT COORDINATOR

DATE: 11/25/14

SHEET 10 OF 24

52870



- 2
- 4-8"X22 1/2" BENDS, AB
- EXISTING CONCRETE DRIVE -
CINCO RANCH NORTHWEST SECTION THREE
- REMOVE & DISPOSE EX ASPHALT PAVT
- REMOVE & DISPOSE OF EX 8" FM
- LEGEND:
- INDICATES 1-20' JT. OF C-900 PVC (150 PSI MIN.) CENTERED ON CROSSING
 - 6" INDICATES 6" MINIMUM CLEARANCE
 - ⊕ INDICATES WHEELCHAIR RAMP (TYPE 7)
 - ⊙ STORM MANHOLE NUMBER

BENCHMARKS:

PROJECT BENCHMARK: BENCHMARK IS A STAINLESS STEEL, ROD STAMPED HOLED BE 1086 AT THE INTERSECTION OF FM 1463 AND THE ENTRANCE OF A PRIVATE GRAVEL ROAD 53 FEET SOUTH OF CORBITT ROAD, EAST SIDE OF FM 1463, 15 FEET EAST OF FENCE AND APPROXIMATELY 10 FEET SOUTH OF A GRAVEL ROAD. SET W/4 FACE 884-5
ELEVATION: 136.32 FT. NAVD-83 2001 ADJUSTMENT

BM 1 - BENCHMARK IS A METAL "T"-POST SET 0.5 FEET BELOW NATURAL GROUND LEVEL, LOCATED APPROXIMATELY 1.488 FEET NORTHWEST OF THE INTERSECTION OF KATY-GASTON ROAD AND GREENBUSH ROAD ON THE WEST SIDE OF KATY-GASTON ROAD AT THE SOUTHWEST CORNER OF THE ENTRANCE TO A FARM FIELD ROAD TO THE SOUTHWEST. BENCHMARK IS 18.8 FEET SOUTHWEST OF THE NORTH SOUTHWEST GATE POST, 29.8 FEET SOUTHWEST OF THE WESTERN EDGE OF PAVEMENT OF KATY-GASTON ROAD AND 18.5 FEET NORTHWEST OF A PIPELINE MARK.

ELEVATION: 127.68 FEET NAVD-83 2001 ADJUSTMENT

BM 2 - BENCHMARK IS A METAL "T"-POST SET 0.5 FEET BELOW NATURAL GROUND LEVEL, LOCATED 2.688 FEET EAST OF THE INTERSECTION OF CORBITT ROAD AND KATY-FLEWELLEN ROAD, 79.8 FEET NORTHEAST OF THE NORTHEAST CORNER OF A HOUSTON LIGHTING & POWER TRANSMISSION TOWER LES AND 21.8 FEET NORTH OF A CROSSSTREX PIPELINE PIPELINE MARK.

ELEVATION: 128.56 FEET NAVD-83 2001 ADJUSTMENT

NOTES:

1. SANITARY SEWERS SHALL BE PROPOSED 800-80 PVC, UNLESS OTHERWISE INDICATED.
2. STORM SEWERS SHALL BE PROPOSED REINFORCED CONCRETE PIPE C-75, CLASS III, UNLESS OTHERWISE INDICATED. ALL JOINTS SHALL BE RUBBER GASKETED.
3. ALL WATER LINES TO BE PROPOSED PVC GLASS 150, DR-15, CLASS C-900 UNLESS OTHERWISE INDICATED.
4. WHENEVER POSSIBLE, CENTER 1-20' JOINT C-900 PVC PIPE, CLASS 150 SANITARY SEWER LEAD ON PROPOSED WATER LINE AND 1-20' JOINT, C-900 PVC WATER LINE PIPE ON PROPOSED SANITARY SEWER LEAD, 12" MIN. CLEARANCE.

TO ADVISE FOR LINES TO BE TORN UP OR MOVED, CALL CHECKPOINT BEND AT 713-757-8333.

NOTICE:
The City of Houston, Texas, is not responsible for the accuracy of the information provided in this drawing. The user of this drawing is responsible for the accuracy of the information provided in this drawing.

VERIFICATION OF PRIVATE UTILITY LINES

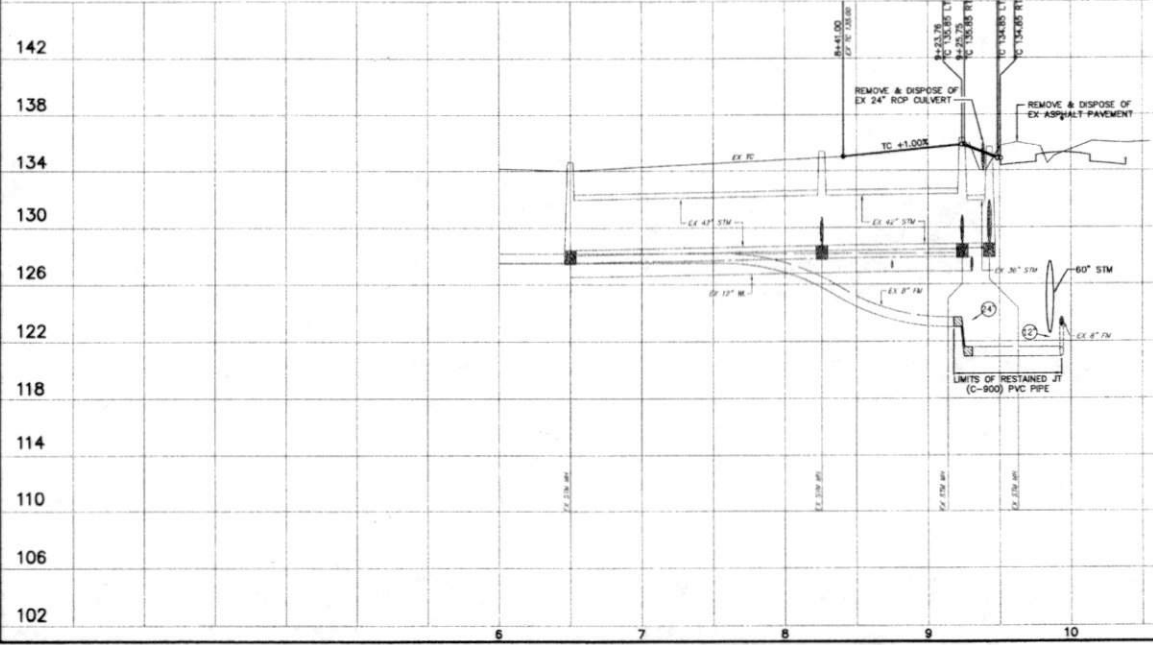
Responsible Engineering/Architect/Professional Engineer:

Responsible Engineering/Architect/Professional Engineer:

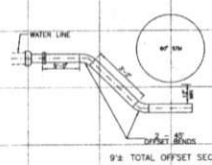
Responsible Engineering/Architect/Professional Engineer:

REV.	DATE	DESCRIPTION	APP.
1			
2			
3			
4			

RED CANYON PARK DRIVE



- FORCE MAIN OFFSET NOTES:
1. ALL MATERIALS AND COATINGS TO BE IN ACCORDANCE WITH FORCE MAIN STANDARD SPECIFICATIONS.
 2. RESTRAIN EXISTING PIPING BEYOND OFFSET SECTION AS REQUIRED TO PREVENT MOVEMENT.
 3. INSULATED JOINT TO BE MADE UP USING INSULATING GASKETS, PLASTIC BUTT JOINTS, WRAPERS OF INSULATING GASKET MATERIAL, Banded WITH CALCULATED WRAPERS OR OTHER METHODS APPROVED BY THE ENGINEER.



STA. 9+34
8" FORCE MAIN RESTRAINED JOINT OFFSET SECTION

142

138

134

130

126

122

118

114

110

106

102

BROWN & GAY ENGINEERS, INC.

Fort Bend County Engineering Department

REVISIONS:

NO.	DATE	DESCRIPTION	APP.
1	SEPTEMBER 2014	ISSUED FOR PERMITS	PA
2	2001-00		

FILE NO. FOR CITY OF HOUSTON USE ONLY

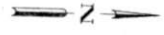
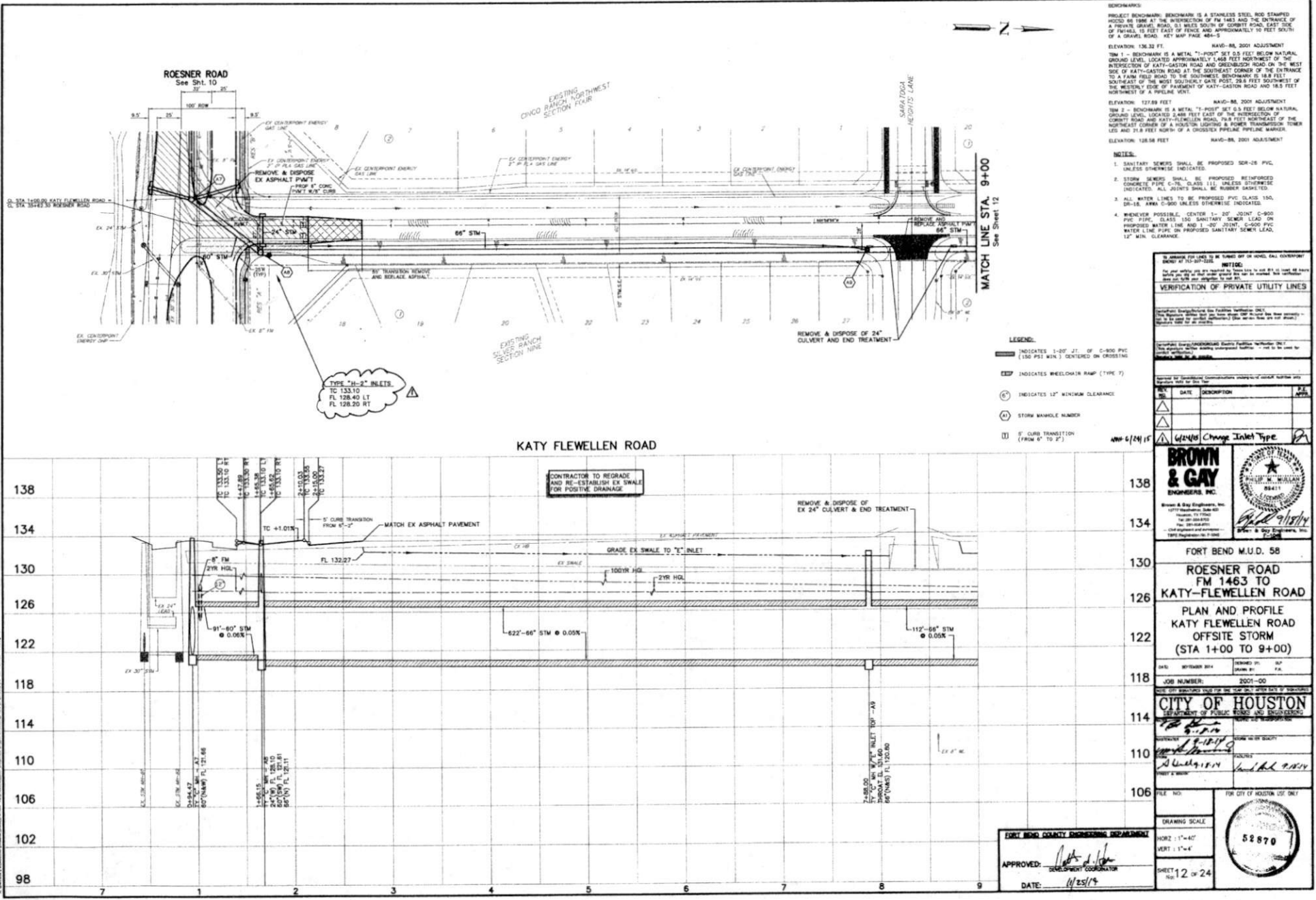
DRAWING SCALE:

HORIZ: 1"=40'

VERT: 1"=4'

SHEET No. 11 of 24

DATE: 11/25/14



BENCHMARKS:
 PROJECT BENCHMARK: BENCHMARK IS A STAINLESS STEEL ROD STAMPED
 HICED 88 1886 AT THE INTERSECTION OF FM 1463 AND THE ENTRANCE OF
 A PRIVATE GRAVEL ROAD, 51 FEET SOUTH OF CORNER (NEAST) END
 OF PARCEL, 15 FEET EAST OF FENCE AND APPROXIMATELY 10 FEET SOUTH
 OF A GRAVEL ROAD. KEY MAP PAGE 484-5
 ELEVATION: 126.32 FT. NAVD-83, 2001 ADJUSTMENT
 TBM 1 - BENCHMARK IS A METAL "T-POIN" SET 0.5 FEET BELOW NATURAL
 GROUND LEVEL, LOCATED APPROXIMATELY 1,450 FEET NORTHWEST OF THE
 INTERSECTION OF KATY-FLEWELLEN ROAD AND GREENBERRY ROAD ON THE WEST
 SIDE OF KATY-GASTON ROAD AT THE SOUTHEAST CORNER OF THE ENTRANCE
 TO A FARM FIELD ROAD TO THE SOUTHWEST. BENCHMARK IS 18.8 FEET
 SOUTHWEST OF THE MOST SOUTHWEST GATE POST, 28.8 FEET SOUTHWEST OF
 THE WESTERN EDGE OF PARAPET OF KATY-GASTON ROAD AND 18.5 FEET
 NORTHWEST OF A PIPELINE VENT.
 ELEVATION: 127.89 FEET NAVD-83, 2001 ADJUSTMENT
 TBM 2 - BENCHMARK IS A METAL "T-POIN" SET 0.5 FEET BELOW NATURAL
 GROUND LEVEL, LOCATED 2,488 FEET EAST OF THE INTERSECTION OF
 CORBERT ROAD AND KATY-FLEWELLEN ROAD, 128 FEET NORTHWEST OF THE
 NORTHEAST CORNER OF A HOUSTON LIGHTING & POWER TRANSMISSION TOWER
 LEG AND 18.8 FEET NORTH OF A CROSSOVER PIPELINE MANHOLE.
 ELEVATION: 128.56 FEET NAVD-83, 2001 ADJUSTMENT

NOTES:
 1. SANITARY SEWERS SHALL BE PROPOSED 8" OR 12" PVC, UNLESS OTHERWISE INDICATED.
 2. STORM SEWERS SHALL BE PROPOSED REINFORCED CONCRETE PIPE C-30, CLASS 112 UNLESS OTHERWISE INDICATED. ALL JOINTS SHALL BE RUBBER GASKETS.
 3. ALL WATER LINES TO BE PROPOSED PVC CLASS 150, DR-18, AWWA C-900 UNLESS OTHERWISE INDICATED.
 4. WHENEVER POSSIBLE, CENTER 1'-20" JOINT C-900 PVC PIPE, CLASS 150, SHALL BE SET ON PROPOSED WATER LINE AND 1'-20" JOINT C-900 PVC WATER LINE SHALL BE ON PROPOSED SANITARY SEWER LEAD, 12" MIN. CLEARANCE.

LEGEND:
 [Symbol] INDICATES 1'-20" J.T. OF C-900 PVC (150 PSI MIN.) CENTERED ON CROSSING
 [Symbol] INDICATES WHEELCHAIR RAMP (TYPE 7)
 [Symbol] INDICATES 12" MINIMUM CLEARANCE
 [Symbol] STORM MANHOLE NUMBER
 [Symbol] 5' CURB TRANSITION (FROM 6" TO 2")

VERIFICATION OF PRIVATE UTILITY LINES

NOTES:
 THE OWNER SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL EXISTING PRIVATE UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL EXISTING PUBLIC UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL EXISTING PRIVATE UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL EXISTING PUBLIC UTILITIES.

DATE: 11/25/14

CHANGE INLET TYPE

BROWN & GAY ENGINEERS, INC.
 58411
 FORT BEND COUNTY ENGINEERING DEPARTMENT

FORT BEND M.U.D. 58
ROESNER ROAD FM 1463 TO KATY-FLEWELLEN ROAD
PLAN AND PROFILE KATY FLEWELLEN ROAD OFFSITE STORM (STA 14+00 TO 9+00)

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

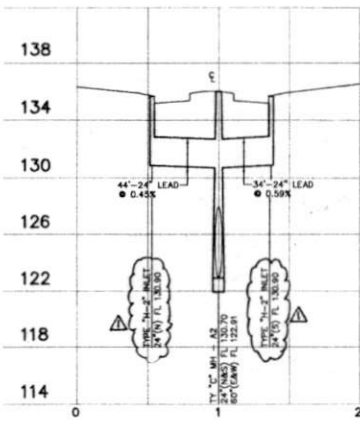
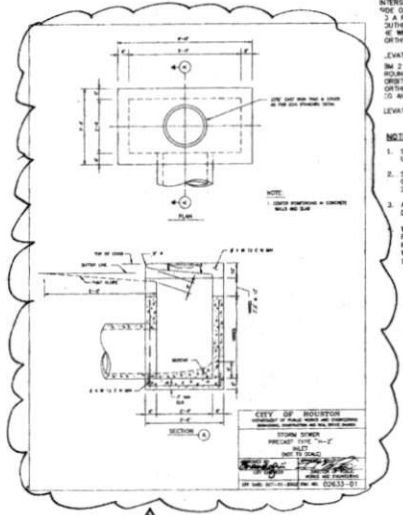
APPROVED: [Signature]
 DEVELOPMENT COORDINATOR
DATE: 11/25/14

DRAWING SCALE:
 HORIZ: 1"=40'
 VERT: 1"=4'
SHEET 12 OF 24

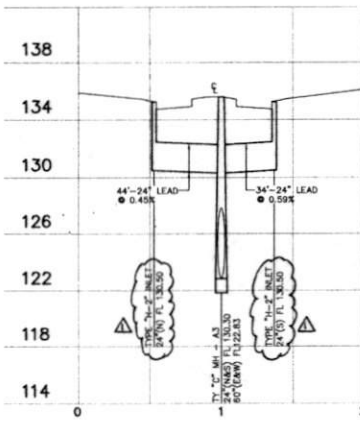
52870

BENCHMARKS:
 PROJECT BENCHMARK: BENCHMARK IS A STAINLESS STEEL ROD STAMPED HOOD 88 1880 AT THE INTERSECTION OF FM 1463 AND THE ENTRANCE OF A PRIVATE GRAVEL ROAD, 51 FEET SOUTH OF CORBIT ROAD, EAST SIDE OF A GRAVEL ROAD, KEY MAP PAGE 484-5
 ELEVATION: 136.32 FT. NAVD-83, 2001 ADJUSTMENT
 BM 1 - BENCHMARK IS A METAL "T"-POST SET 0.5 FEET BELOW NATURAL GROUND LEVEL, LOCATED APPROXIMATELY 1.463 FEET NORTHWEST OF THE INTERSECTION OF KATY-GASTON ROAD AND GREENSBURG ROAD ON THE WEST SIDE OF KATY-GASTON ROAD AT THE SOUTHEAST CORNER OF THE ENTRANCE OF A FARM FIELD ROAD TO THE SOUTHWEST. BENCHMARK IS 10.8 FEET OUTSIDE OF THE MOST SOUTHERLY GATE POST, 20.8 FEET SOUTHWEST OF THE WESTERN EDGE OF PAVEMENT OF KATY-GASTON ROAD AND 18.5 FEET OUTSIDE OF A PIVELINE SIGN.
 ELEVATION: 127.68 FEET NAVD-83, 2001 ADJUSTMENT
 BM 2 - BENCHMARK IS A METAL "T"-POST SET 0.5 FEET BELOW NATURAL GROUND LEVEL, LOCATED 2.848 FEET EAST OF THE INTERSECTION OF CORBIT ROAD AND KATY-FLEWELLEN ROAD, 79.8 FEET NORTHEAST OF THE OUTRIGHT CORNER OF A SOLUTION LIGHTING & POWER TRANSDUCERS TOWER 10 AND 21.8 FEET NORTH OF A CROSS-TEE PIPELINE PIPELINE MARKER.
 ELEVATION: 128.58 FEET NAVD-83, 2001 ADJUSTMENT

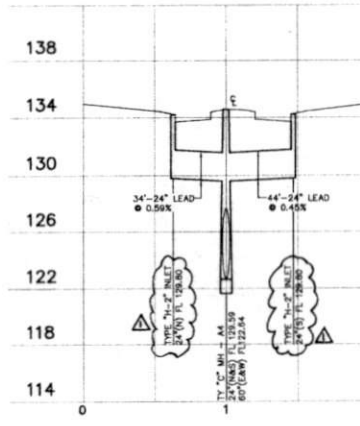
NOTES:
 1. SANITARY SEWERS SHALL BE PROPOSED 300-26 PVC, UNLESS OTHERWISE INDICATED.
 2. STORM SEWERS SHALL BE PROPOSED REINFORCED CONCRETE PIPE C-78, CLASS III, UNLESS OTHERWISE INDICATED. ALL JOINTS SHALL BE RUBBER GASKETED.
 3. ALL WATER LINES TO BE PROPOSED PVC CLASS 150, DR-18, AWWA C-900 UNLESS OTHERWISE INDICATED.
 WHENEVER POSSIBLE, CENTER 1'-20" JOINT C-900 PVC PIPE, CLASS 150 SANITARY SEWER LEAD OR PROPOSED WATER LINE AND 1'-20" JOINT, C-500 PVC WATER LINE PIPE OR PROPOSED SANITARY SEWER LEAD, 12" MIN. CLEARANCE.



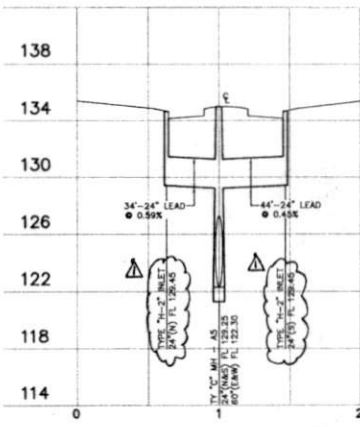
ROESNER ROAD (ULTIMATE 100' ROW)
 SHEET 8
 14+55.00



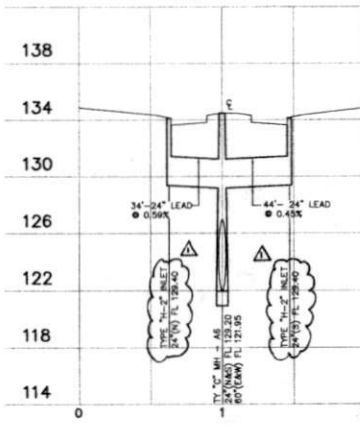
ROESNER ROAD (ULTIMATE 100' ROW)
 SHEET 9
 16+00.00



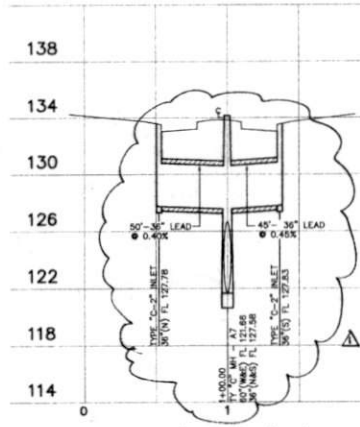
ROESNER ROAD (ULTIMATE 100' ROW)
 SHEET 9
 20+00.00



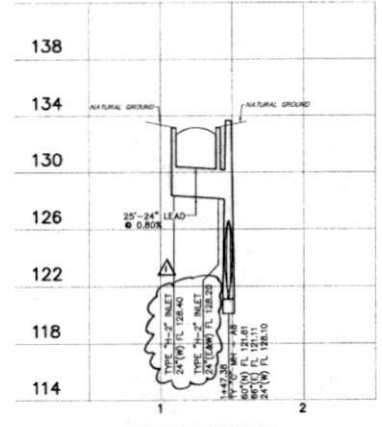
ROESNER ROAD (ULTIMATE 100' ROW)
 SHEET 9
 24+70.00



ROESNER ROAD (ULTIMATE 100' ROW)
 SHEET 10
 30+60.00



ROESNER ROAD (ULTIMATE 100' ROW)
 SHEET 10
 35+34.86



KATY-FLEWELLEN ROAD
 SHEET 12
 1+66.15

VERIFICATION OF PRIVATE UTILITY LINES

NOTICE: THE CITY OF HOUSTON IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED BY THE UTILITY OWNERS. THE UTILITY OWNERS SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED.

NO.	DATE	DESCRIPTION	BY
1	6/24/15	Add Inlet Detail	[Signature]
2	6/24/15	Change Inlet Type B	[Signature]

BROWN & GAY
 ENGINEERS, INC.

PHILIP M. WILLIAMS
 P.E.

1981 Registration No. 1-1048

FORT BEND M.U.D. 58
 ROESNER ROAD
 FM 1463 TO
 KATY-FLEWELLEN ROAD

PLAN AND PROFILE
 60" STORM AND INLETS

DATE: SEPTEMBER 2014
 JOB NUMBER: 2001-00

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

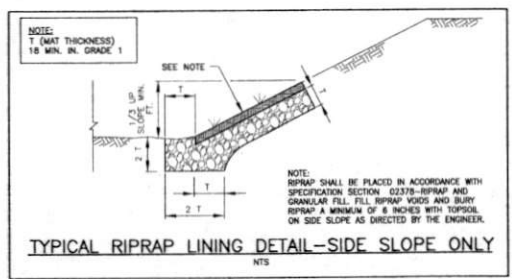
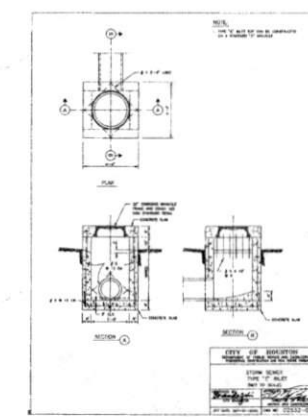
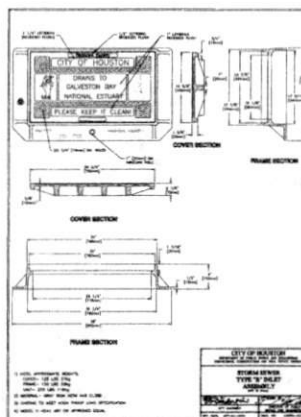
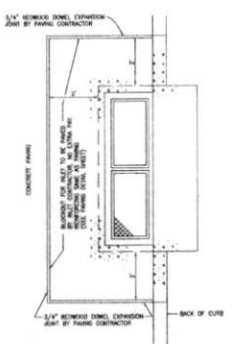
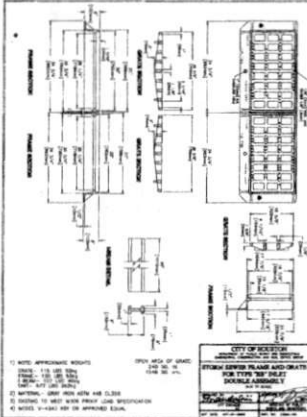
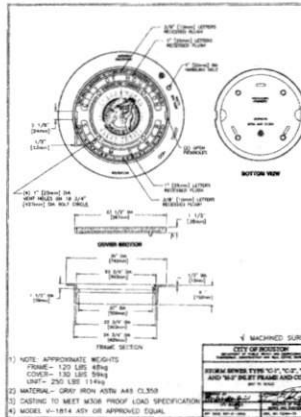
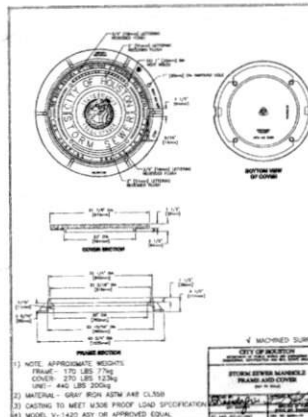
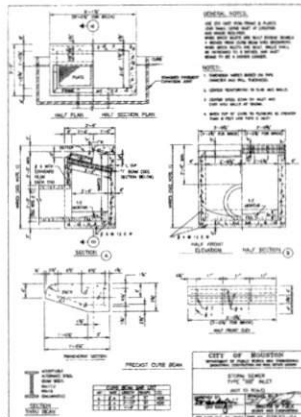
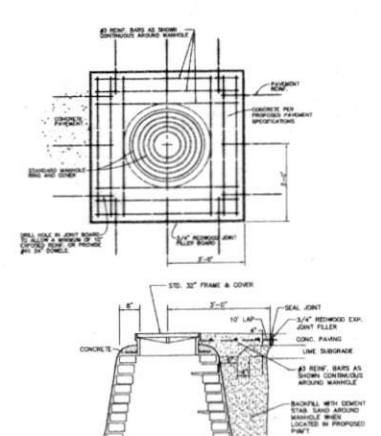
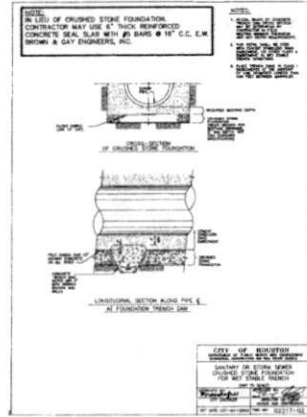
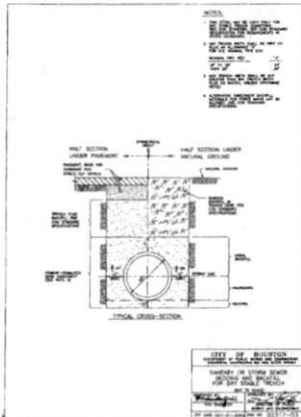
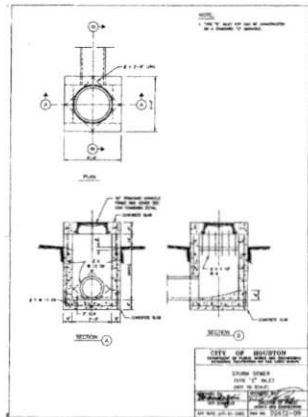
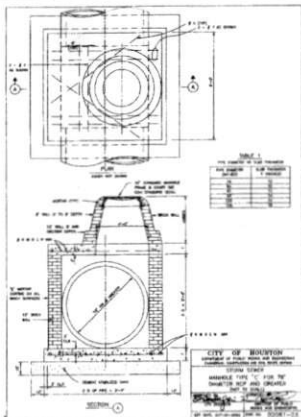
FILE NO. FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE
 HORIZ: 1"=40'
 VERT: 1"=4'

SHEET 14 OF 24

APPROVED: [Signature]
 DATE: 11/25/14

11/25/14 11:25 AM C:\Users\p111111\Desktop\1463-1463\1463-1463.dwg



REV. NO.	DATE	DESCRIPTION	P.L.	A.P.L.

BROWN & GAY
 ENGINEERS, INC.
 Brown & Gay Engineers, Inc.
 1077 Westheimer Road #10
 Houston, TX 77060
 Tel: 281-488-3700
 Fax: 281-488-3701
 www.browngay.com
 100% Registered Professional Engineer

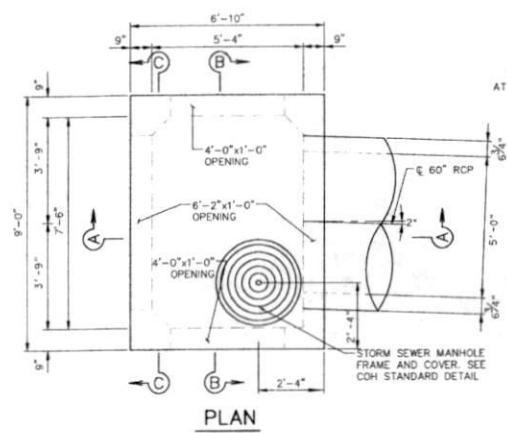
Philip M. Williams
 Philip M. Williams, P.E.
 Brown & Gay Engineers, Inc.

FORT BEND M.U.D. 58

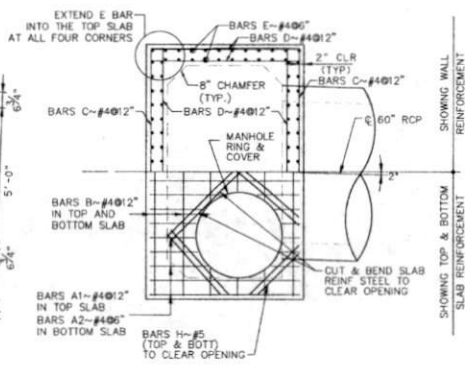
ROESER ROAD
FM 1463 TO
KATY-FLEWELLEN ROAD

STORM SEWER DETAILS

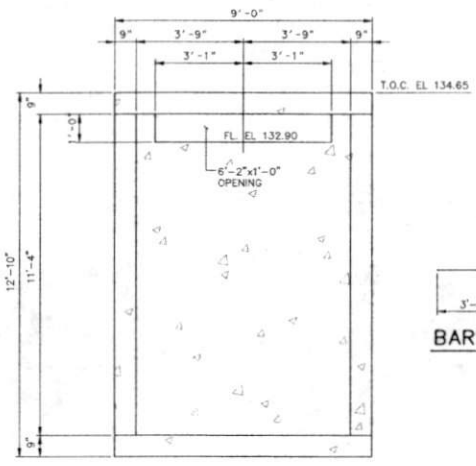
DATE: SEPTEMBER 2014	DESIGNED BY: SLP
	DRAWN BY: P.A.
JOB NUMBER: 2001-00	
NOTE: SEE SPECIFICATIONS FOR THE SEW PIPE ONLY AFTER DATE OF SUBMITTAL	
CITY OF HOUSTON	
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING	
APPROVED: <i>[Signature]</i>	DATE: 8/11/14
APPROVED: <i>[Signature]</i>	DATE: 8/11/14
FILE NO:	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE:	58870
HORIZ: N.T.S.	
VERT: N.T.S.	
APPROVED: <i>[Signature]</i>	
DATE: 8/28/14	
SHEET 15 OF 24	



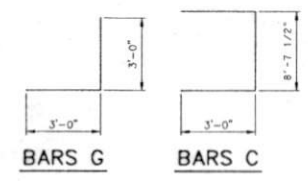
PLAN



TYPICAL TOP SLAB/WALL SECTION

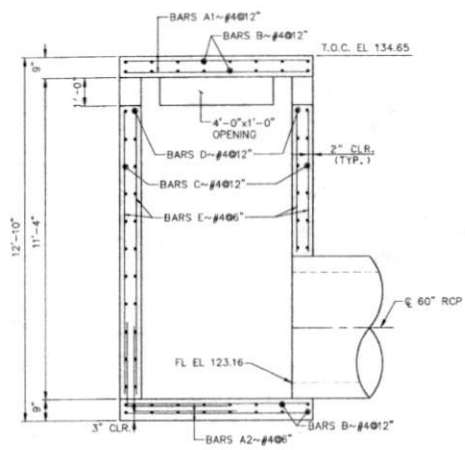


SECTION C-C
(REINFORCEMENT NOT SHOWN)

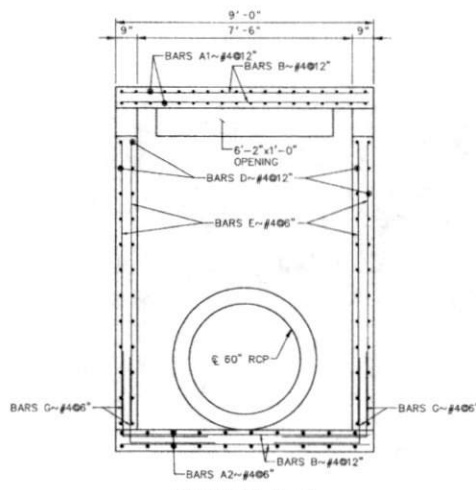


BARS G

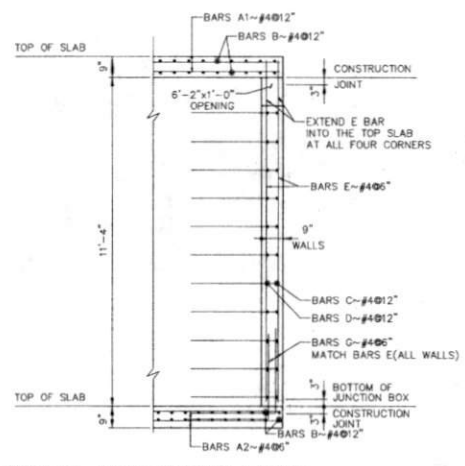
BARS C



SECTION A-A



SECTION B-B



TYPICAL REINFORCING DETAIL

- GENERAL NOTES:
1. DELIVERED IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS.
 2. ALL CONCRETE SHALL BE F_c'=4000 PSI.
 3. ALL REINFORCING STEEL SHALL BE GRADE 60.
 4. IN AREAS OF CONFLICT BETWEEN REINFORCING STEEL AND BLOCKOUTS, PIPES, OR OTHER REINFORCING STEEL, THE REINFORCEMENT SHALL BE BENT OR ADJUSTED TO CLEAR.
 5. TOTAL CONCRETE REQUIRED = 11.4 CY.

REV. NO.	DATE	DESCRIPTION	P.L. APPR.

BROWN & GAY
ENGINEERS, INC.

Brown & Gay Engineers, Inc.
1017 Professional Plaza, Suite 200
Houston, TX 77002
Tel: 281-584-0700
Fax: 281-584-0700
City of Houston and other projects
100% Registered Professional Engineer

STEVEN K. SHREVE
REGISTERED PROFESSIONAL ENGINEER
NO. 23533
EXPIRES 12/31/2014

FORT BEND M.U.D. 58
ROESNER ROAD
FM 1463 TO
KATY-FLEWELLEN ROAD

JUNCTION BOX
WITH TYPE "E" INLET
DETAILS

DATE: AUGUST 2014 DESIGNED BY: JLP
DRAWN BY: JLP

JOB NUMBER: 2001-00
CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

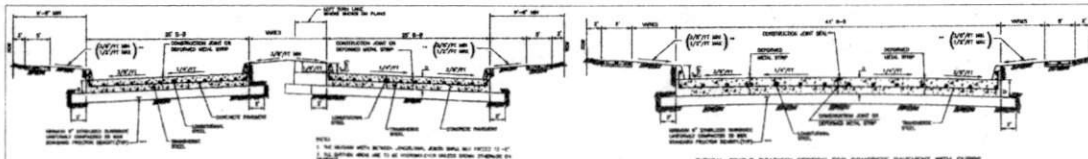
REVISIONS:
1. 8-18-14
2. 8-18-14
3. 8-18-14
4. 8-18-14
5. 8-18-14
6. 8-18-14
7. 8-18-14
8. 8-18-14
9. 8-18-14
10. 8-18-14

FILE NO. FOR CITY OF HOUSTON USE ONLY

FORT BEND COUNTY ENGINEERING DEPARTMENT
APPROVED: *[Signature]*
DEVELOPER COORDINATOR
DATE: 11/25/14

DRAWING SCALE:
HORIZ: N.T.S.
VERT: N.T.S.
SHEET 16 OF 24

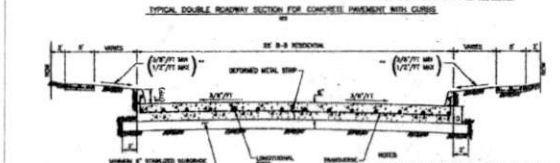




TYPICAL SINGLE ROADWAY SECTION FOR CONCRETE PAVEMENT WITH CURBS

REINFORCING STEEL	NO.	SIZE	SPACING	LENGTH	WEIGHT	NO.	SIZE	SPACING	LENGTH	WEIGHT
1	1	1/2"	12'-0"	12'-0"	1.00	2	1/2"	12'-0"	12'-0"	1.00
2	2	1/2"	12'-0"	12'-0"	2.00	3	1/2"	12'-0"	12'-0"	2.00
3	3	1/2"	12'-0"	12'-0"	3.00	4	1/2"	12'-0"	12'-0"	3.00
4	4	1/2"	12'-0"	12'-0"	4.00	5	1/2"	12'-0"	12'-0"	4.00
5	5	1/2"	12'-0"	12'-0"	5.00	6	1/2"	12'-0"	12'-0"	5.00
6	6	1/2"	12'-0"	12'-0"	6.00	7	1/2"	12'-0"	12'-0"	6.00
7	7	1/2"	12'-0"	12'-0"	7.00	8	1/2"	12'-0"	12'-0"	7.00
8	8	1/2"	12'-0"	12'-0"	8.00	9	1/2"	12'-0"	12'-0"	8.00
9	9	1/2"	12'-0"	12'-0"	9.00	10	1/2"	12'-0"	12'-0"	9.00
10	10	1/2"	12'-0"	12'-0"	10.00	11	1/2"	12'-0"	12'-0"	10.00
11	11	1/2"	12'-0"	12'-0"	11.00	12	1/2"	12'-0"	12'-0"	11.00
12	12	1/2"	12'-0"	12'-0"	12.00	13	1/2"	12'-0"	12'-0"	12.00
13	13	1/2"	12'-0"	12'-0"	13.00	14	1/2"	12'-0"	12'-0"	13.00
14	14	1/2"	12'-0"	12'-0"	14.00	15	1/2"	12'-0"	12'-0"	14.00
15	15	1/2"	12'-0"	12'-0"	15.00	16	1/2"	12'-0"	12'-0"	15.00
16	16	1/2"	12'-0"	12'-0"	16.00	17	1/2"	12'-0"	12'-0"	16.00
17	17	1/2"	12'-0"	12'-0"	17.00	18	1/2"	12'-0"	12'-0"	17.00
18	18	1/2"	12'-0"	12'-0"	18.00	19	1/2"	12'-0"	12'-0"	18.00
19	19	1/2"	12'-0"	12'-0"	19.00	20	1/2"	12'-0"	12'-0"	19.00
20	20	1/2"	12'-0"	12'-0"	20.00	21	1/2"	12'-0"	12'-0"	20.00
21	21	1/2"	12'-0"	12'-0"	21.00	22	1/2"	12'-0"	12'-0"	21.00
22	22	1/2"	12'-0"	12'-0"	22.00	23	1/2"	12'-0"	12'-0"	22.00
23	23	1/2"	12'-0"	12'-0"	23.00	24	1/2"	12'-0"	12'-0"	23.00
24	24	1/2"	12'-0"	12'-0"	24.00	25	1/2"	12'-0"	12'-0"	24.00
25	25	1/2"	12'-0"	12'-0"	25.00	26	1/2"	12'-0"	12'-0"	25.00
26	26	1/2"	12'-0"	12'-0"	26.00	27	1/2"	12'-0"	12'-0"	26.00
27	27	1/2"	12'-0"	12'-0"	27.00	28	1/2"	12'-0"	12'-0"	27.00
28	28	1/2"	12'-0"	12'-0"	28.00	29	1/2"	12'-0"	12'-0"	28.00
29	29	1/2"	12'-0"	12'-0"	29.00	30	1/2"	12'-0"	12'-0"	29.00
30	30	1/2"	12'-0"	12'-0"	30.00	31	1/2"	12'-0"	12'-0"	30.00
31	31	1/2"	12'-0"	12'-0"	31.00	32	1/2"	12'-0"	12'-0"	31.00
32	32	1/2"	12'-0"	12'-0"	32.00	33	1/2"	12'-0"	12'-0"	32.00
33	33	1/2"	12'-0"	12'-0"	33.00	34	1/2"	12'-0"	12'-0"	33.00
34	34	1/2"	12'-0"	12'-0"	34.00	35	1/2"	12'-0"	12'-0"	34.00
35	35	1/2"	12'-0"	12'-0"	35.00	36	1/2"	12'-0"	12'-0"	35.00
36	36	1/2"	12'-0"	12'-0"	36.00	37	1/2"	12'-0"	12'-0"	36.00
37	37	1/2"	12'-0"	12'-0"	37.00	38	1/2"	12'-0"	12'-0"	37.00
38	38	1/2"	12'-0"	12'-0"	38.00	39	1/2"	12'-0"	12'-0"	38.00
39	39	1/2"	12'-0"	12'-0"	39.00	40	1/2"	12'-0"	12'-0"	39.00
40	40	1/2"	12'-0"	12'-0"	40.00	41	1/2"	12'-0"	12'-0"	40.00
41	41	1/2"	12'-0"	12'-0"	41.00	42	1/2"	12'-0"	12'-0"	41.00
42	42	1/2"	12'-0"	12'-0"	42.00	43	1/2"	12'-0"	12'-0"	42.00
43	43	1/2"	12'-0"	12'-0"	43.00	44	1/2"	12'-0"	12'-0"	43.00
44	44	1/2"	12'-0"	12'-0"	44.00	45	1/2"	12'-0"	12'-0"	44.00
45	45	1/2"	12'-0"	12'-0"	45.00	46	1/2"	12'-0"	12'-0"	45.00
46	46	1/2"	12'-0"	12'-0"	46.00	47	1/2"	12'-0"	12'-0"	46.00
47	47	1/2"	12'-0"	12'-0"	47.00	48	1/2"	12'-0"	12'-0"	47.00
48	48	1/2"	12'-0"	12'-0"	48.00	49	1/2"	12'-0"	12'-0"	48.00
49	49	1/2"	12'-0"	12'-0"	49.00	50	1/2"	12'-0"	12'-0"	49.00
50	50	1/2"	12'-0"	12'-0"	50.00	51	1/2"	12'-0"	12'-0"	50.00
51	51	1/2"	12'-0"	12'-0"	51.00	52	1/2"	12'-0"	12'-0"	51.00
52	52	1/2"	12'-0"	12'-0"	52.00	53	1/2"	12'-0"	12'-0"	52.00
53	53	1/2"	12'-0"	12'-0"	53.00	54	1/2"	12'-0"	12'-0"	53.00
54	54	1/2"	12'-0"	12'-0"	54.00	55	1/2"	12'-0"	12'-0"	54.00
55	55	1/2"	12'-0"	12'-0"	55.00	56	1/2"	12'-0"	12'-0"	55.00
56	56	1/2"	12'-0"	12'-0"	56.00	57	1/2"	12'-0"	12'-0"	56.00
57	57	1/2"	12'-0"	12'-0"	57.00	58	1/2"	12'-0"	12'-0"	57.00
58	58	1/2"	12'-0"	12'-0"	58.00	59	1/2"	12'-0"	12'-0"	58.00
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60	60	1/2"	12'-0"	12'-0"	60.00	61	1/2"	12'-0"	12'-0"	60.00
61	61	1/2"	12'-0"	12'-0"	61.00	62	1/2"	12'-0"	12'-0"	61.00
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63	63	1/2"	12'-0"	12'-0"	63.00	64	1/2"	12'-0"	12'-0"	63.00
64	64	1/2"	12'-0"	12'-0"	64.00	65	1/2"	12'-0"	12'-0"	64.00
65	65	1/2"	12'-0"	12'-0"	65.00	66	1/2"	12'-0"	12'-0"	65.00
66	66	1/2"	12'-0"	12'-0"	66.00	67	1/2"	12'-0"	12'-0"	66.00
67	67	1/2"	12'-0"	12'-0"	67.00	68	1/2"	12'-0"	12'-0"	67.00
68	68	1/2"	12'-0"	12'-0"	68.00	69	1/2"	12'-0"	12'-0"	68.00
69	69	1/2"	12'-0"	12'-0"	69.00	70	1/2"	12'-0"	12'-0"	69.00
70	70	1/2"	12'-0"	12'-0"	70.00	71	1/2"	12'-0"	12'-0"	70.00
71	71	1/2"	12'-0"	12'-0"	71.00	72	1/2"	12'-0"	12'-0"	71.00
72	72	1/2"	12'-0"	12'-0"	72.00	73	1/2"	12'-0"	12'-0"	72.00
73	73	1/2"	12'-0"	12'-0"	73.00	74	1/2"	12'-0"	12'-0"	73.00
74	74	1/2"	12'-0"	12'-0"	74.00	75	1/2"	12'-0"	12'-0"	74.00
75	75	1/2"	12'-0"	12'-0"	75.00	76	1/2"	12'-0"	12'-0"	75.00
76	76	1/2"	12'-0"	12'-0"	76.00	77	1/2"	12'-0"	12'-0"	76.00
77	77	1/2"	12'-0"	12'-0"	77.00	78	1/2"	12'-0"	12'-0"	77.00
78	78	1/2"	12'-0"	12'-0"	78.00	79	1/2"	12'-0"	12'-0"	78.00
79	79	1/2"	12'-0"	12'-0"	79.00	80	1/2"	12'-0"	12'-0"	79.00
80	80	1/2"	12'-0"	12'-0"	80.00	81	1/2"	12'-0"	12'-0"	80.00
81	81	1/2"	12'-0"	12'-0"	81.00	82	1/2"	12'-0"	12'-0"	81.00
82	82	1/2"	12'-0"	12'-0"	82.00	83	1/2"	12'-0"	12'-0"	82.00
83	83	1/2"	12'-0"	12'-0"	83.00	84	1/2"	12'-0"	12'-0"	83.00
84	84	1/2"	12'-0"	12'-0"	84.00	85	1/2"	12'-0"	12'-0"	84.00
85	85	1/2"	12'-0"	12'-0"	85.00	86	1/2"	12'-0"	12'-0"	85.00
86	86	1/2"	12'-0"	12'-0"	86.00	87	1/2"	12'-0"	12'-0"	86.00
87	87	1/2"	12'-0"	12'-0"	87.00	88	1/2"	12'-0"	12'-0"	87.00
88	88	1/2"	12'-0"	12'-0"	88.00	89	1/2"	12'-0"	12'-0"	88.00
89	89	1/2"	12'-0"	12'-0"	89.00	90	1/2"	12'-0"	12'-0"	89.00
90	90	1/2"	12'-0"	12'-0"	90.00	91	1/2"	12'-0"	12'-0"	90.00
91	91	1/2"	12'-0"	12'-0"	91.00	92	1/2"	12'-0"	12'-0"	91.00
92	92	1/2"	12'-0"	12'-0"	92.00	93	1/2"	12'-0"	12'-0"	92.00
93	93	1/2"	12'-0"	12'-0"	93.00	94	1/2"	12'-0"	12'-0"	93.00
94	94	1/2"	12'-0"	12'-0"	94.00	95	1/2"	12'-0"	12'-0"	94.00
95	95	1/2"	12'-0"	12'-0"	95.00	96	1/2"	12'-0"	12'-0"	95.00
96	96	1/2"	12'-0"	12'-0"	96.00	97	1/2"	12'-0"	12'-0"	96.00
97	97	1/2"	12'-0"	12'-0"	97.00	98	1/2"	12'-0"	12'-0"	97.00
98	98	1/2"	12'-0"	12'-0"	98.00	99	1/2"	12'-0"	12'-0"	98.00
99	99	1/2"	12'-0"	12'-0"	99.00	100	1/2"	12'-0"	12'-0"	99.00

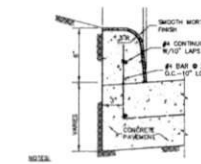
TYPICAL DOUBLE ROADWAY SECTION FOR CONCRETE PAVEMENT WITH CURBS



TYPICAL DOUBLE ROADWAY SECTION FOR CONCRETE PAVEMENT WITH CURBS

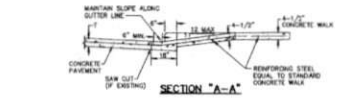


TYPICAL SINGLE ROADWAY SECTION FOR CONCRETE PAVEMENT WITH CURBS

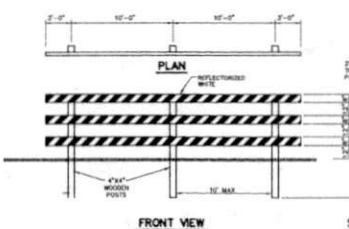


1. MORTAR FINISH NOT REQUIRED WHEN CURB IS FORMED BY A MACHINE, BUT CURB WILL HAVE THE SAME OUTSIDE DIMENSIONS.
2. WHEN CONCRETE CURB IS TO BE PLACED ON EXISTING CONCRETE BASE, SET BY EXPANDED BASE, SET LINES, 1/4\"/>

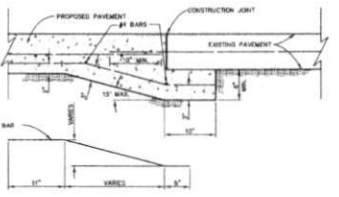
6" CONCRETE CURB



SECTION "A-A"



TYPE III BARRICADE



PAVEMENT UNDERCUT DET

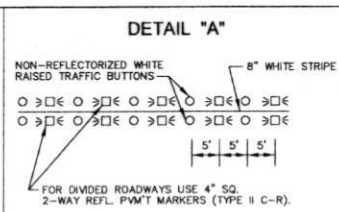
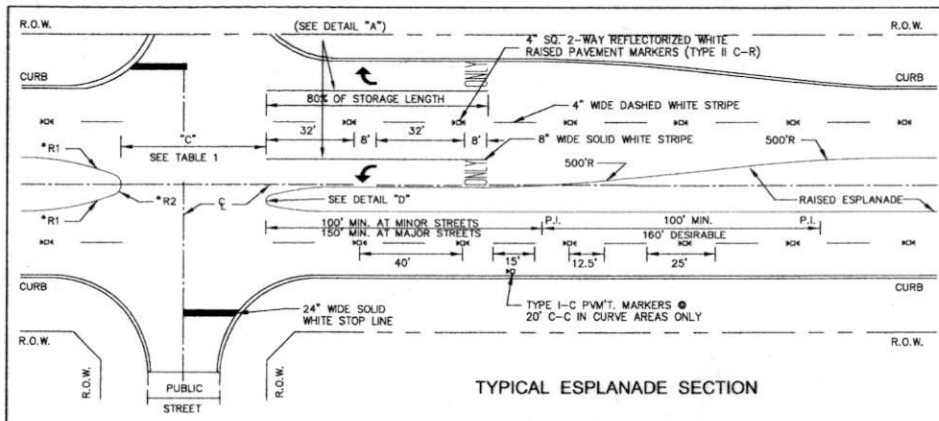


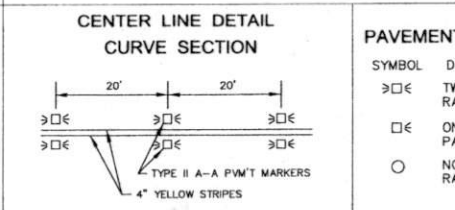
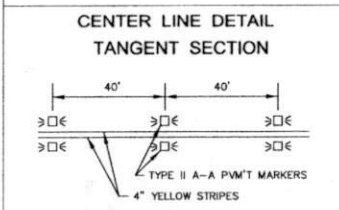
TABLE 1
TYPICAL LENGTH OF ESPLANADE OPENING "C" FOR PUBLIC STREET

ESPLANADE INTERRUPTION	NO. LTB		
	(1)	(1)	(1)
UNDIVIDED STREET < 40'	45'	52.5'(2)	60'
44'	50'	55'(2)	60'
DIVIDED STREET	D+10'	D+10'	D+10'

NOTES:
(1) LEFT TURN BAY
(2) DISTANCE FROM CENTERLINE OF OPENING TO ESPLANADE NOSE WITH LEFT TURN LANE MUST BE 30'

RADIUS DIMENSIONS

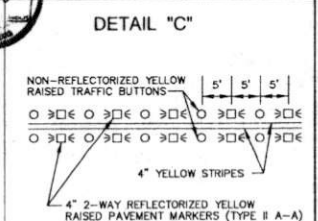
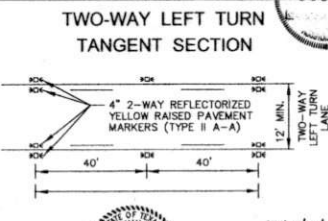
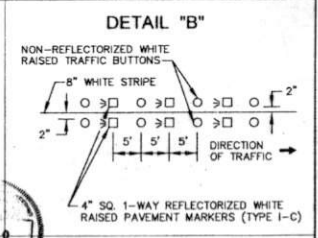
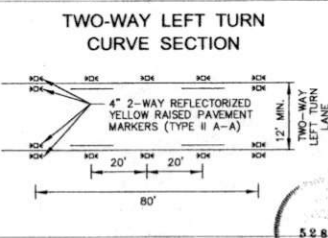
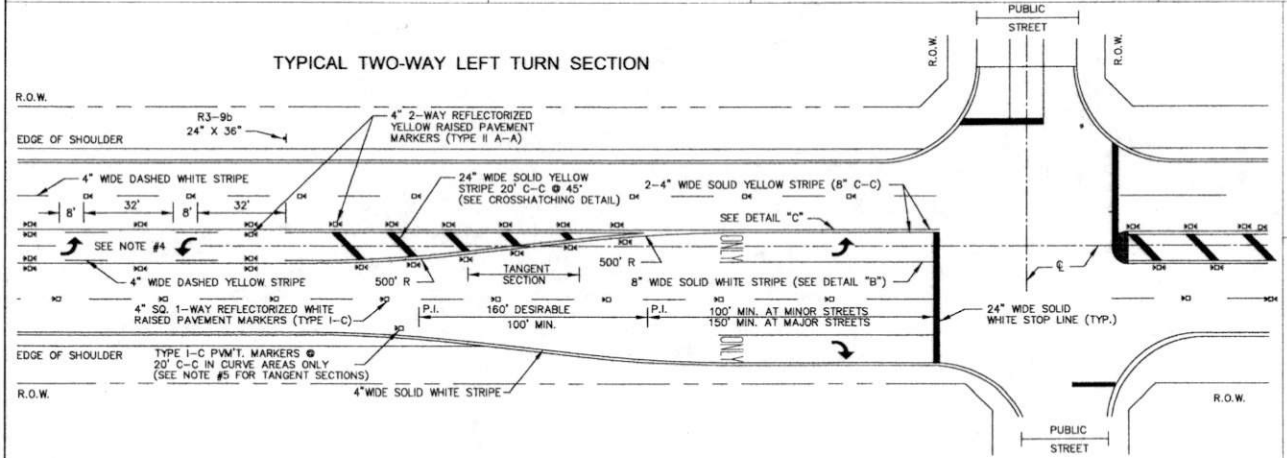
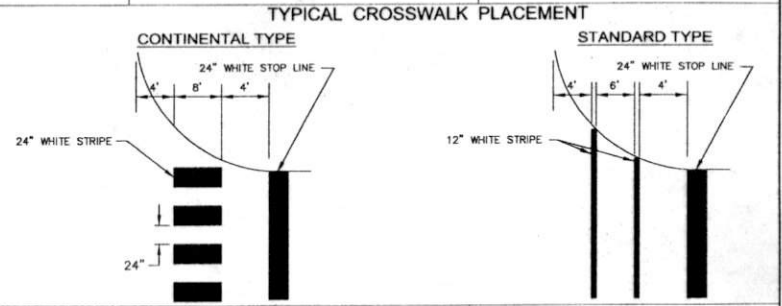
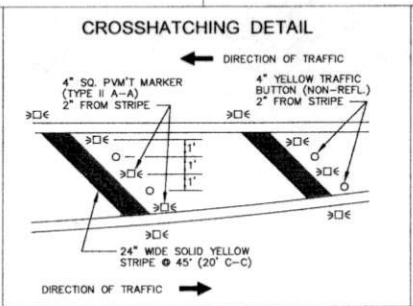
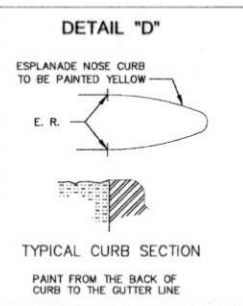
ESPLANADE	*R1	*R2
<8'	N/A	W/2
8'-38'	90'	W/5
>38'	N/A	15'



PAVEMENT MARKER LEGEND

SYMBOL	DESCRIPTION
▷◁◁	TWO SIDED REFLECTORIZED RAISED PAVEMENT MARKER
◁◁	ONEE SIDED REFLECTORIZED PAVEMENT MARKER
○	NON-REFLECTIVE 4" DIA. RAISED TRAFFIC BUTTON

- NOTES:**
- ALL STRIPING & MARKERS SHALL CONFORM WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
 - ALL TRAFFIC BUTTONS AND MARKERS SHALL BE INSTALLED ADJACENT TO STRIPES (APPROX. 2').
 - LEFT TURN STORAGE BAYS SHALL BE A MIN. OF 100' AT MINOR STREETS AND A MIN. OF 150' AT MAJOR STREETS.
 - REPEAT ARROWS AT APPROX. 1000' INTERVALS WITHIN TWO-WAY LEFT TURN SECTION.
 - WITHIN A TANGENT SECTION THE TYPE I-C PAVEMENT MARKERS CAN BE PLACED AT 40' C-C ON ROADWAYS WITHOUT CURB AND GUTTERS.



NO.	REVISION	DATE	BY
1	CHANGED TITLE BLOCK	7/2/20	RLS
2	ADDED CONTINENTAL CROSSWALK	8/3/20	ALP
3	ADDED HOPE TURN LANE	8/16/20	ALP
4	ADDED BUTTON LEGEND	1/26/21	ALP



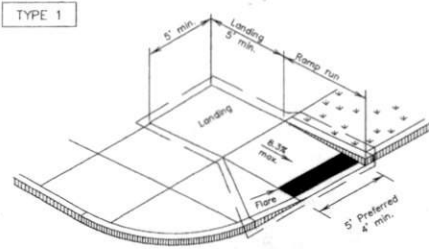
HWB 1/23/14

ROESNER ROAD-FM 1463 TO KATY FLEWELLEN ROAD

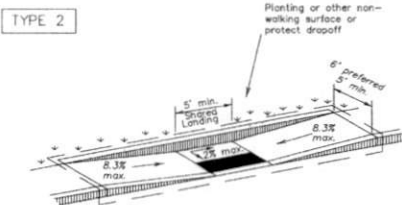
PROJECT NO.	2001-00
REV.	PAVEMENT MARKING DETAILS
DATE	01/20/14
BY	ALP
CHECKED BY	NTS
DATE	01/20/14
APPROVED BY	ALP
DATE	18/24

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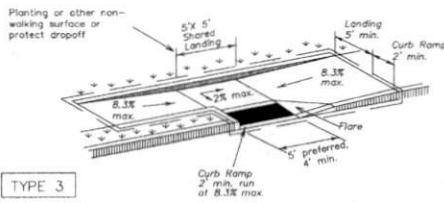
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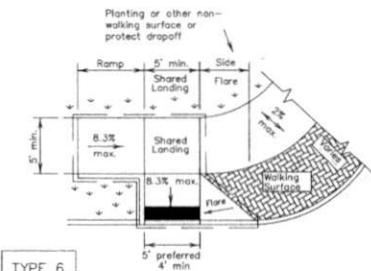
PERPENDICULAR CURB RAMP



PARALLEL CURB RAMP
(Use only where water will not pond in the landing.)

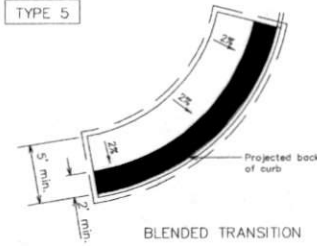


TYPE 3



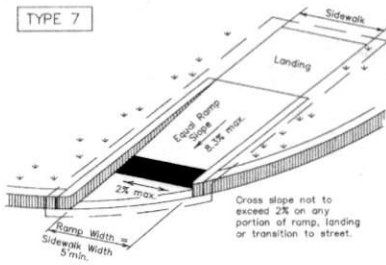
TYPE 6

COMBINATION CURB RAMPS



TYPE 5

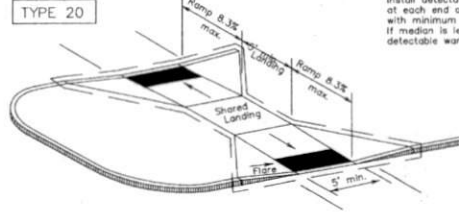
BLENDED TRANSITION



TYPE 7

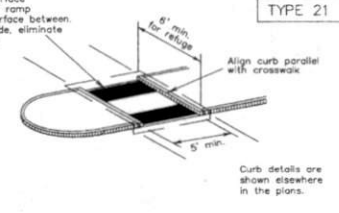
(Sidewalk set back from curb)

DIRECTIONAL RAMPS WITHIN RADIUS



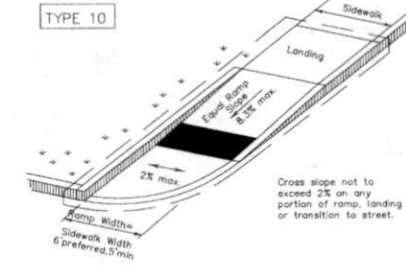
TYPE 20

CURB RAMPS AT MEDIAN ISLANDS



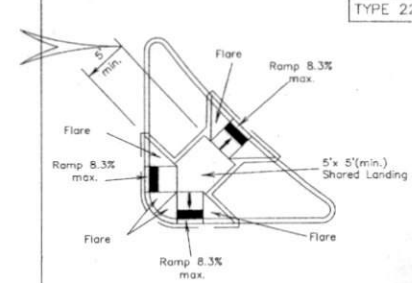
TYPE 21

Curb details are shown elsewhere in the plans.



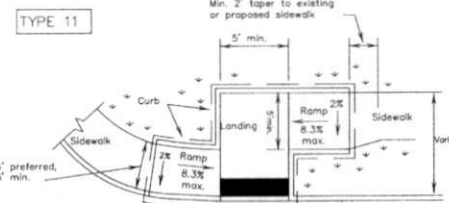
TYPE 10

(Sidewalk adjacent to curb)



TYPE 22

COMBINATION ISLAND RAMPS



TYPE 11

OFFSET PARALLEL CURB RAMP

NOTES / LEGEND:

See General Notes on sheet 2 of 4 for more information.

Planting or non-walking surface not part of pedestrian circulation path.

— Ramp Limits of Payment

■ Detectable Warning Surface



DATE: 11/25/12

SHEET 1 OF 4



Texas Department of Transportation
Design Division Standard

PEDESTRIAN FACILITIES
CURB RAMPS

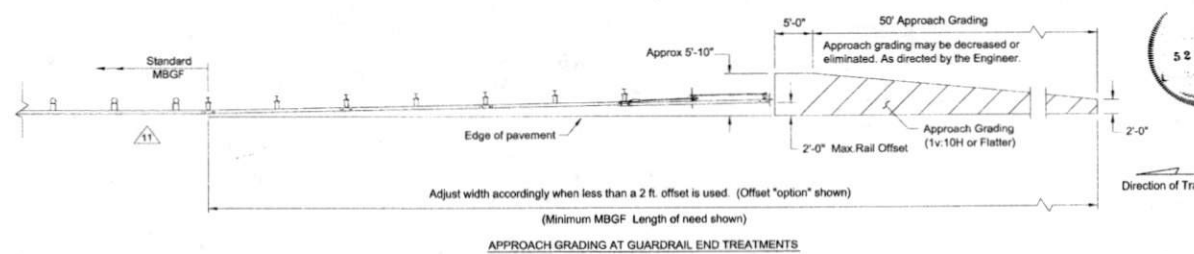
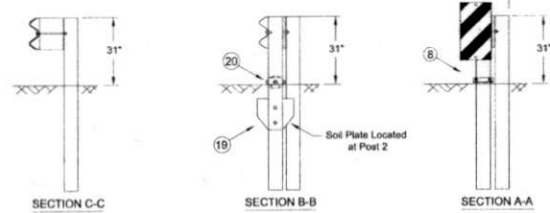
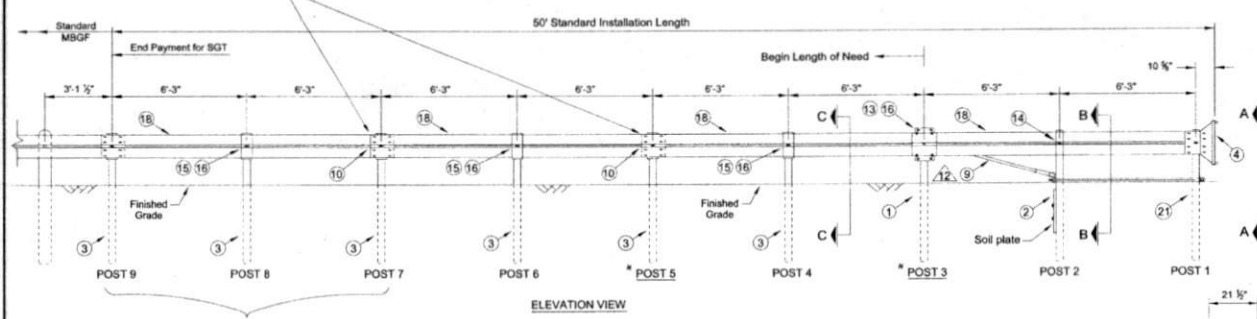
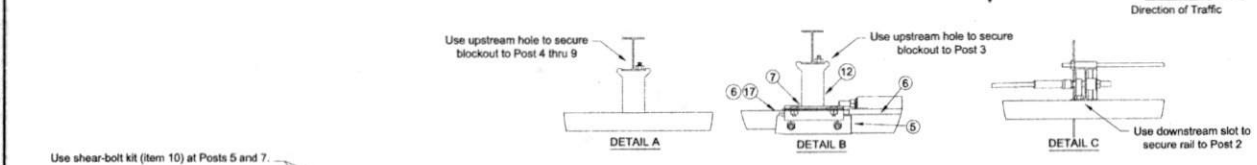
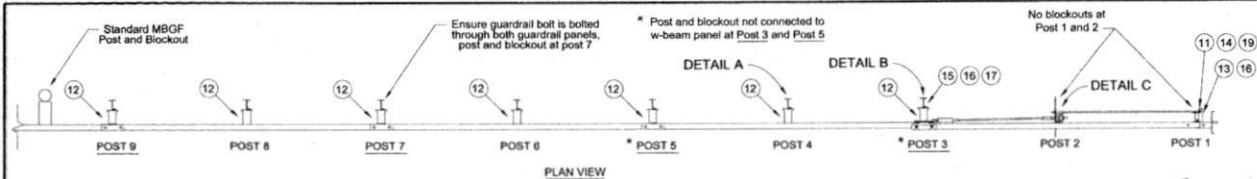
PED-12A

FILE: ped12a.dgn	DATE: 11/20/12	BY: PK	DATE: 11/20/12	DR: HD
REVISED: March 2002	DATE: 03/01/02	BY: JEB	DATE: 03/01/02	PROJECT: HIGHWAY
VP: June 13, 2012	DATE: 06/13/12	COUNTY: 2001-00	PROJECT: 2001-00	SHEET NO.:
	DATE: 05/08	COUNTY: FORT BEND	PROJECT: 2001-00	SHEET NO.: 20 OF 24

GENERAL NOTES

- For additional information contact: Lindsay Transportation Solutions - Barrier Systems, 180 River Road, Rio Vista, CA 94571, (707) 374-6800
- All dimensions are shown in inches except as otherwise indicated.
- All cable assemblies, cable anchor, ground struts, slider pieces, impact heads, nuts, bolts and all steel components shall be galvanized unless otherwise is noted.
- X-LITE placed within the minimum 150 ft. radius shall be installed straight. Standard rail elements may be installed within the radius without special fabrication.
- A flare rate of 37.5:1 may be used over the first 50 ft. of the system to prevent the terminal head from encroaching on the shoulder the flare may be decreased or eliminated for specific installations, or as directed by the engineer.
- At curbed locations the post shall be installed at the proper grade of elevation behind the curb. The post will then require field drilling new holes to accommodate the rail to post connection bolt to maintain the proper height of the rail above the gutter pan. The excess post length above the rail will be removed as directed by the engineer.
- If rock excavation is encountered, the soil plate maybe modified if approved by the project engineer.
- When site conditions permit, post may be driven. If posts are placed in a drilled hole, the backfill material must be satisfactorily compacted to prevent settlement.
- An object marker shall be installed on the impact head as detailed on D&OM(VIA)
- The X-LITE is a steel POST SGT that is suitable for locations calling for wood post SGT (Type I, II or III) or steel post SGT. When used with wood post guardrail system, post 7 thru 9 may be replaced with CRT wood posts.
- Minimum length of MBGF shown. See current guard fence Standards for further information.
- The breakaway cable assembly must be taut. A locking device (vice-grips or channel lock-pliers) should be used to prevent the cable from twisting when tightening the nut.

ITEM	PART NO.	DESCRIPTION	QTY
1	BSI-1310027-00	X-LITE, CRIMPED POST HOLES, GALV	1
2	BSI-1012086-00	POST II, X-LITE, GALV	1
3	BSI-1012078-00	LINE POST, X-LITE, GALV	6
4	BSI-1012103-00	IMPACT HEAD, X-LITE, GALV	1
5	BSI-1012093-00	SLIDER PANEL, FRONT, X-LITE, GALV	1
6	BSI-1012090-00	SLIDER BRACKET, X-LITE	1
7	BSI-1012096-00	BACK SLIDER PANEL, X-LITE, GALV	1
8	BSI-1102001-KT	GROUND STRUT KIT, X-LITE	1
9	BSI-1012104-00	CABLE ANCHOR ASSEMBLY, X-LITE	1
10	K080123	KIT, X-TENSION SHEAR BOLT,	2
11	BSI-1102027-00	WASHER, SQUARE, X-LITE, GALV	1
12	B090534	W-BEAM COMPOSITE BLOCKOUT 8 IN.	7
13	4001115	GUARDRAIL BOLT 5/8"-11X1 1/4"	24
14	2005302	BOLT CH 5/8"-11X2	2
15	2001635	BOLT CH 5/8"-11X10" GRADE 5 MGAL	7
16	4001116	GUARDRAIL NUT RECESSED 5/8"-11	33
17	2001580	WASHER 1 F436 FLAT RD STRUCT	1
18	4000443	W-BEAM GUARDRAIL, RWM02a	4
19	BSI-1106016-KT	X-LITE, SOIL PLATE KIT	1
20	BSI-1303005-00	BRACKET, X-LITE CABLE RETENTION	1
21	BSI-1310024-00	X-LITE, CRIMPED POST SLOTS, GALV	1
22	MANXLT	X-LITE TANGENT INSTALLATION MANUAL	1



Texas Department of Transportation
Design Division Standard

SINGLE GUARDRAIL TERMINAL (X-LITE) STEEL POST

SGT(9S)31-14

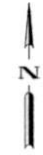
FILE: 3114-001
DATE: JULY 2014
REV: 10/06

REV	DATE	BY	CHK	APP
1	10/18/14			

JOB: 2001-00
COUNTY: FORT BEND
SHEET NO: 24 OF 24

DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by the Texas Department of Transportation for the accuracy or completeness of this standard or other documents or for the correct results or damages resulting from its use.

DATE: 11/25/14

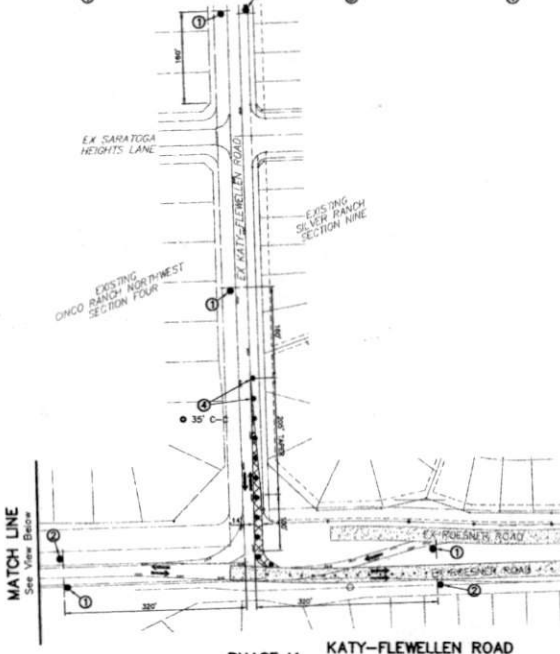


VICINITY MAP
FBC REF MAP 484 S
3P CODE: 7744

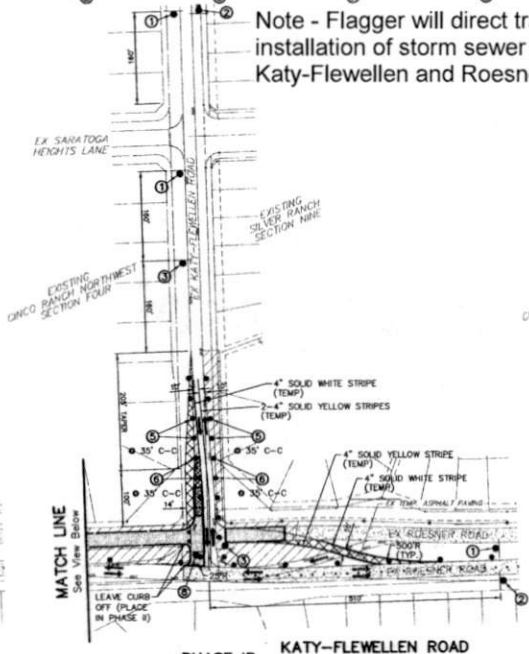
Note - Flagger will direct traffic during installation of storm sewer along Katy-Flewellen and Roesner.

LEGEND

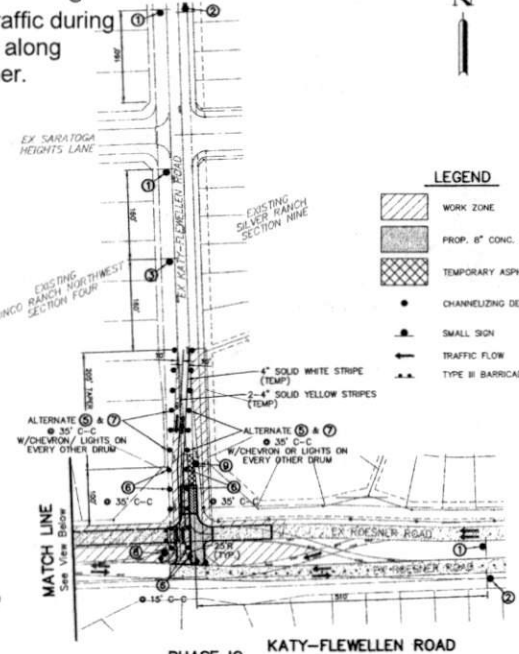
- WORK ZONE
- PROP. 6" CONC. PAVEMENT
- PROP. 8" CONC. PAVEMENT
- TEMPORARY ASPHALT PAVEMENT
- PROP. 2" HMAC
- EX CONC. PAVEMENT
- CHANNELIZING DEVICE
- SMALL SIGN
- TRAFFIC FLOW
- TYPE II BARRICADE



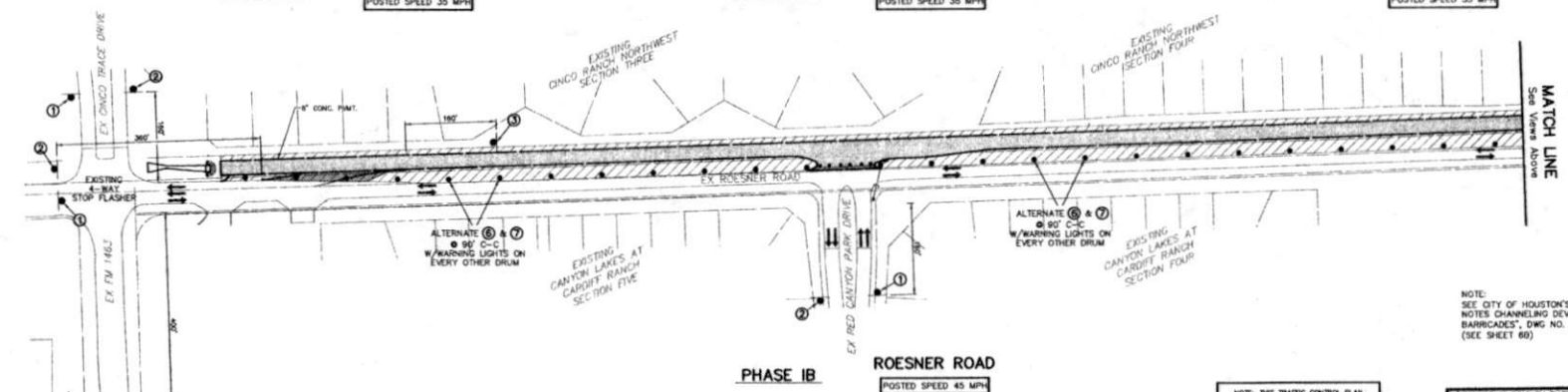
PHASE IA KATY-FLEWELLEN ROAD
POSTED SPEED 35 MPH



PHASE IB KATY-FLEWELLEN ROAD
POSTED SPEED 35 MPH



PHASE IC KATY-FLEWELLEN ROAD
POSTED SPEED 35 MPH



PHASE IB ROESNER ROAD
POSTED SPEED 45 MPH

NOTE: SEE CITY OF HOUSTON'S TOP NOTES CHANNELIZING DEVICES AND BARRICADES. DRG NO. 01512-01. (SEE SHEET 68)

NOTE: THIS TRAFFIC CONTROL PLAN REPRESENTS MINIMUM REQUIREMENTS. CONTRACTOR TO BE RESPONSIBLE FOR CHANGES REQUIRED BY EXISTING FIELD CONDITIONS.

APPROVED: *[Signature]*
DEVELOPMENT COORDINATOR
DATE: 11/25/14

REV NO.	DATE	DESCRIPTION	P.L.
1			
2			
3			

BROWN & GAY ENGINEERS, INC.
10777 Westheimer, Suite 400
Houston, TX 77042
Tel: 281.486.8800
Fax: 281.486.8801
City Engineer and Surveyor
Texas Registration No. 14144

FORT BEND M.U.D. 58
ROESNER ROAD
FM 1463 TO
KATY-FLEWELLEN ROAD

TRAFFIC CONTROL PLAN
PHASE I

DATE: 11/25/14
JOB NUMBER: 2001-00

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

REVISIONS:
1. 11/25/14
2. 11/25/14
3. 11/25/14

FILE NO. FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE
HORIZ: 1"=100'
VERT: 1"=10'
SHEET No. 6 of 24



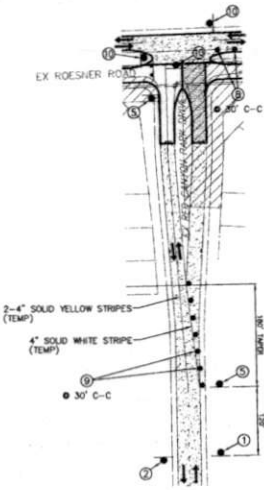
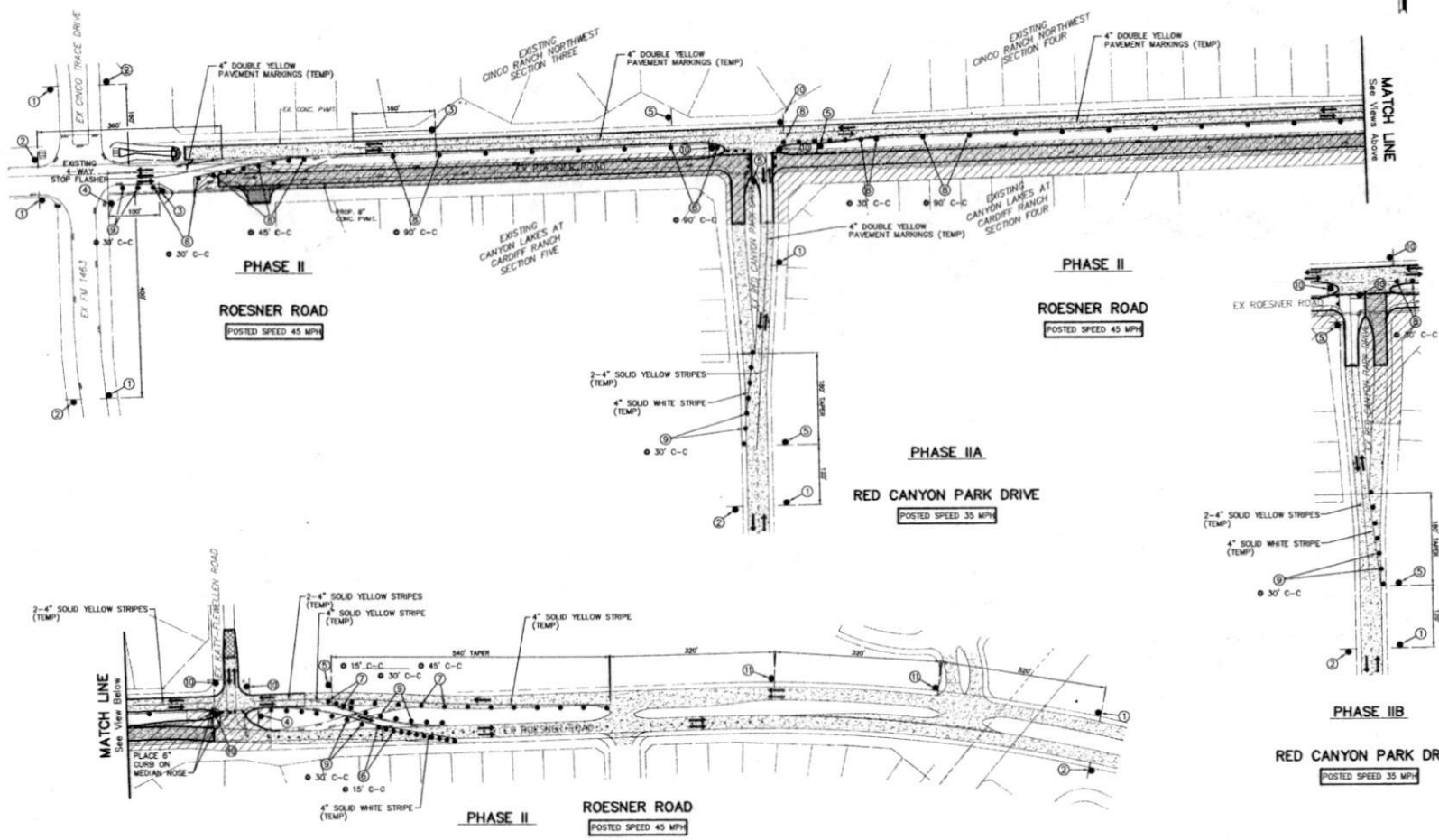
- 1 ROAD WORK AHEAD
CW20-10 (36"x36")
- 2 ONE ROAD WORK
C20-2 (36"x18")
- 3 W1-4L (36"x36")
25 mph
- 4 W1-4R (36"x36")
25 mph
- 5 W2-3 (36"x36")
- 6 DRUM WITH CHEVRON CW1-B
- 7 DRUM WITH CHEVRON CW1-B
- 8 DRUM WITH VERTICAL PANELS
- 9 DRUM
- 10 STOP
R1-1
- 11 LEFT LANE CLOSED
C20-5L (36"x36")



VICINITY MAP
FBC KEY MAP 404 S
2P CODE: 77404

NOTE: THIS TRAFFIC CONTROL PLAN REPRESENTS MINIMUM REQUIREMENTS. CONTRACTOR TO BE RESPONSIBLE FOR CHANGES REQUIRED BY EXISTING FIELD CONDITIONS.

NOTE: SEE CITY OF HOUSTON'S "TOP NOTES" CHANNELLING DEVICES AND BARRICADES, DNG NO. 01512-01. (SEE SHEET 88)



LEGEND

- WORK ZONE
- PROP. 6" CONC. PAVEMENT
- PROP. 8" CONC. PAVEMENT
- EX CONC. PAVEMENT
- CHANNELLING DEVICE
- SMALL SIGN
- TRAFFIC FLOW
- TYPE II BARRICADE

REV.	DATE	DESCRIPTION	BY	CHK.
1				
2				

BROWN & GAY ENGINEERS, INC.
 10777 Westheimer Road, Suite 100
 Houston, TX 77042
 Tel: 281-488-8800
 Fax: 281-488-8801
 14818 Westheimer Road, Suite 100
 Houston, TX 77042

PHILIP W. HULLIAN
 28411
Philip W. Hullian

FORT BEND M.U.D. 58
ROESNER ROAD FM 1463 TO KATY-FLEWELLEN ROAD

TRAFFIC CONTROL PLAN
 PHASE II

DWG. NO. SEPTEMBER 2004
 DRAWING #1: 04/20/04
 JOB NUMBER: 2001-00

CITY OF HOUSTON
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

DATE: 9/21/04
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 PROJECT: [Signature]
 CITY ENGINEER: [Signature]

FORT BEND COUNTY ENGINEERING DEPARTMENT

APPROVED: [Signature]
 DATE: 11/25/14

FILE NO. FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE: 1"=100'

NEXT: SHEET 6A OF 24

58870

2015-1888

07/24/2015 01:27 PM

Roesner Road

Applicant:
Allgood Construction Co., Inc.
Michael Boenig

Paid By: Applicant

Allgood Construction Co., Inc.
Michael Boenig
1702 Settegast Ranch Road Richmond, TX

Permit Type

Type	Fee
Commercial Driveway Permit (\$150)	\$150.00
Total	\$150.00

Payments

Payment ID	Payment Date	Payment Type	Description	Ref. Number	Amount
656263	07/24/2015	Check	commercial driveway	045957	\$150.00
Total					\$150.00
Discount Total					(\$0.00)
Payment Amount					\$150.00
Balance Due					\$0.00

THIS IS NOT A PERMIT. This receipt does not authorize you to begin construction of your project.