

**Fort Bend County
Engineering Department**
301 Jackson Suite 401
Richmond, Texas 77469
281.633.7500
Permits@fortbendcountytexas.gov

Right of Way Permit

Commercial Driveway Permit

Permit No: 2017-16310

Job Location Site: 7575 Fairchild Road, Richmond, TX 77469

Bond No. [REDACTED] **Date of Bond:** 10/12/2017 **Amount:** \$10,000.00

The above applicant came to make use of certain Fort Bend County property subject to, "The 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, of the Minutes of the Commissioners Court of Fort Bend County, Texas, to the extent that such order is not inconsistent with Chapter 181, Vernon's Texas Statutes and Codes Annotated.

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, submit notification to Permit Administrator thru MyGovernmentOnline.org portal.
3. This permit expires one (1) year from date of permit if construction has not commenced.

On this 7th day of November, 2017, Upon Motion of Commissioner Meyers, seconded by Commissioner Mokale, 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.

Presented to Commissioners Court and approved.

Date Recorded 11-14-2017 Comm. Court No. 12 F

Clerk of Commissioners Court

By: Randy Willis
Deputy



**PERMIT APPLICATION REVIEW FORM FOR
CABLE, CONDUIT, AND POLE LINE ACTIVITY
IN FORT BEND COUNTY**

**Fort Bend County
Engineering Department**
301 Jackson Suite 401
Richmond, Texas 77469
281.633.7500
Permits@fortbendcountytexas.gov

- ☐ Right of Way Permit
☒ Commercial Driveway Permit

Permit No: 2017-16310

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.

(1) COMPLETE APPLICATION FORM:

- ☒ a. Name of road, street, and/or drainage ditch affected.
☒ b. Vicinity map showing course of directions
☒ c. Plans and specifications

(2) BOND:

- ☐ County Attorney, approval when applicable.
- ☐ Perpetual bond currently posted. Bond No: _____ Amount: _____
- ☒ Performance bond submitted. Bond No: [REDACTED] Amount: \$10,000.00
- ☐ Cashier's Check Check No: _____ Amount: _____

(3) DRAINAGE DISTRICT APPROVAL (WHEN APPLICABLE):

Drainage District Approval

Date

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

Charles O. Ay

Permit Administrator

10/30/2017

Date



**PERFORMANCE BOND COVERING ALL CABLE, CONDUIT AND/OR POLE
LINE ACTIVITY IN, UNDER, ACROSS OR ALONG FORT BEND COUNTY
ROAD, COMMERCIAL DRIVEWAY AND MEDIAN OPENINGS OR
MODIFICATIONS (AUTHORIZED)**

BOND NO [REDACTED]

THE STATE OF TEXAS §

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF FORT BEND §

THAT WE, BREWER CUSTOM BUILDERS, LLC whose (713) 292-8177
7102 SPRING RUN LANE, KATY, TX 77494, hereinafter called the Principal, and Merchants Bonding Company (Mutual), a
Corporation existing under and by virtue of the laws of the state of Iowa and authorized to do an indemnifying
business in the state of Texas, and whose principal office is located at 6700 Westown Parkway, West Des Moines, IA 50266,
whose officer residing in the State of Texas, authorized to accept service in all suits and actions brought within said state is
Keenan Lehmann and whose address is 9500 Arboretum Boulevard, Suite 100, Austin, TX 78759
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 Ten Thousand Dollars (\$10,000.00)
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 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 12th day of October, 2017.

BREWER CUSTOM BUILDERS, LLC

PRINCIPAL

BY JAMES COUNCE

Merchants Bonding Company (Mutual)

SURETY

BY Molly Reagan Salazar Attorney-in-Fact

CCM 11-7-2017 #12F
Fort Bend County Clerk
Return Admin Serv Coord.

RAC

MERCHANTS
BONDING COMPANY
POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

Molly Reagan Salazar

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments 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.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the following By-Laws adopted by the Board of Directors of Merchants Bonding Company (Mutual) on April 23, 2011 and amended August 14, 2015 and adopted by the Board of Directors of Merchants National Bonding, Inc., on October 16, 2015.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner-Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 12th day of October, 2017.



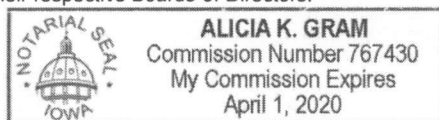
MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.

By

Larry Taylor
President

STATE OF IOWA
COUNTY OF DALLAS ss.

On this 12th day of October, 2017, before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC.; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.



Alicia K. Gram
Notary Public

(Expiration of notary's commission
does not invalidate this instrument)

I, William Warner, Jr., Secretary of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., 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 still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 12th day of October, 2017.



William Warner Jr.
Secretary

FILED AND RECORDED
OFFICIAL PUBLIC RECORDS

Laura Richard

Laura Richard, County Clerk

Fort Bend County Texas

November 13, 2017 04:42:38 PM

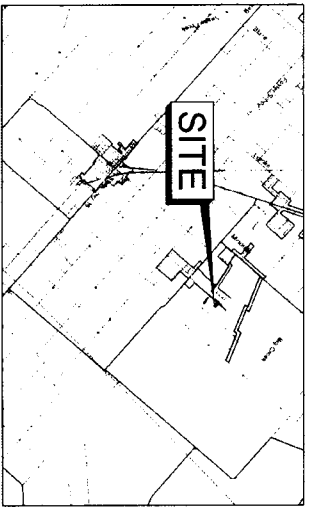
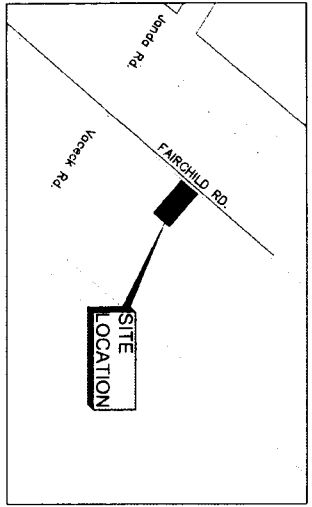
FEE: \$0.00

SB

2017125047



PROPOSED CIVIL PLANS FOR SE CONTRACTORS 7575 FAIRCHILD RD FORT BEND COUNTY



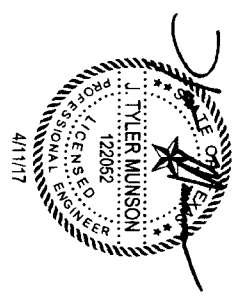
DRAWING INDEX

CO.0	COVER
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C2.2	PUMP DETAILS
C3.1	MISCELLANEOUS DETAILS
C3.2	STORM WATER POLLUTION PREVENTION PLAN DETAILS
C3.3	PAVEMENT DETAILS
C4.1	TRAFFIC CONTROL PLAN
C5.1	FIRE ACCESS PLAN
C6.1	ON-SITE SEWAGE FACILITY PLAN

FORT BEND COUNTY ENGINEER
ENGINEER: Richard W. Stollers, P.E.
DATE: 4/25/17

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

APPROVED: Richard W. Stollers, P.E.
Development Coordinator
DATE: 4/25/17



W|G|A
WARD, GUTZ &
ASSOCIATES, LLP
CONSULTING ENGINEERS
1155 KOSTER DR. SUITE 120
HOUSTON, TEXAS 77063
713.789.1900

APRIL 2017
WGA PROJECT NO. 40009-021

[illegible]

By:  Daniel Swanson, President

CITY OF
COUNTY OF Harris

BEFORE ME, the undersigned authority, on this day personally appeared Erasmus Schrader and Erner Schrader, known to me to be the persons whose names are subscribed to the foregoing instrument, acknowledged to me that they executed the same for the purposes and consideration therein expressed.

Given UNDER MY HAND AND SEAL OF OFFICE, this the 2nd day of March 1900.

James Bell
 Insurance Salesperson for the
 State of Texas
 July 03, 2018
 My Commission Expires

1. *Pardon Project*: Naylor, an author noted under the laws of the State of Texas, produce the purchase of anything not having clearly that the above boundary is true and correct, was prepared from an older survey of the property made under his supervision, on his private, that all those surveyors, except possibly, of course, the one who produced the present survey, had been sworn to the truth of their statements. Naylor, however, or not have an outside director of and less than the eighth (1/256) inch of a tenth of an inch than three (3) feet, unless otherwise noted, and the Texas title Pious Certificate System (1940-53).



200
Donald Patrick Kell
 Registered Professional Land Surveyor
 Texas Registration No. 6424
 Date 7/3/17



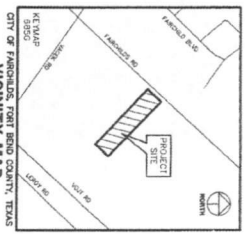
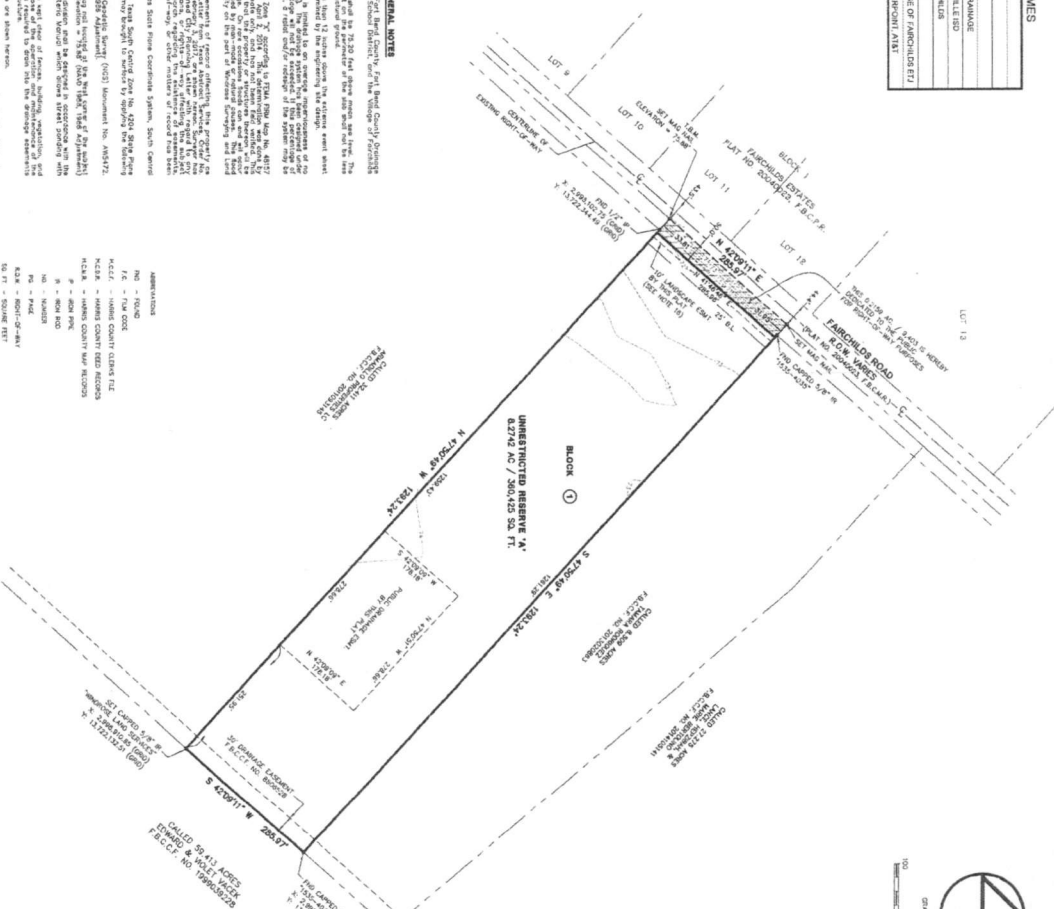
Y. L. Mamon, P.E.
Texas Registration No. 122052
Ward, Catts, and Associates, LLP
Form Number 9756

This part of PARSONS BUILDING was repaired on the 11/18/16 day
11/18/16 2017, by the City of Fort Bend City Commission, or
 signed this the 11/18 day of November 2017, provided
 however, this approval shall be invalid, and null, and void, unless this part is filed
 with the County Clerk of Fort Bend County, Texas, within its (6) months hereafter.

Name David Hanel
 Name Eric Hanel
 Name David Jack
 Name Jeffrey
 Name David Vacker

CITY OF LOS ANGELES	
WFO	NA
MJD	NA
LID	NA
DD	FED DRAINAGE
SCHOOL	NEEDVILLE RD
FIRE	FANCHILD
IMPACT FEE AREA	NONE
CITY ON CITY ETJ	VILLAGE OF FANCHILD ETJ
UTILITIES CO	CENTROPOINT A&T

GENERAL NOTES

[illegible]

1. Richard Stuckey, P.E., Fort Bend County Engineer, do hereby certify that the plot of this subdivision complies with all the existing rules and regulations of this Office as adopted by the Fort Bend County Commissioners' Court. However, no certification is hereby given as to the effect of theories from Don Sabadosh on the interpreting drainage artery, parent stream, or any other area of reduction within the watershed.

[illegible]

I, James Richard, County Clerk in and for Fort Bend County, do hereby certify that the foregoing instrument, with its certificate of authentication was filed for recordation in my office on April 11, 2017, at 3:11 o'clock P.m., and they recorded on April 11, 2017, in Book No. 2017-00374 of the Map Records of Fort Bend County, for said county.

Witness my hand and seal of office, at Richmond, Texas, the day foregoing that signing within.

By Leola Richard
 Clerk 677th County Court
 of Fort Bend County, Texas

20170323 12:00:55
FILED AND RECORDED
OFFICE PUBLIC RECORDS
Diana Rickard
Laura Shepard, County Clerk
Post Office County, Texas
April 11, 2017 11:16 PM
FEE: \$20.00 PER PAGE
20170323

FAIRCHILD BUILDING
A SUBDIVISION OF 8,4901 AC. / 369,828 SQ. FT. OF LAND
SITUATED IN THE
BARNABAS WICKSON LEAGUE, ABSTRACT NO. 95
FORT BEND COUNTY, TEXAS

Owner
SE Construction Inc.
18451 170th Avenue, Suite 100
Edmonton, Alberta
T6E 3G3, CANADA

Surveyor



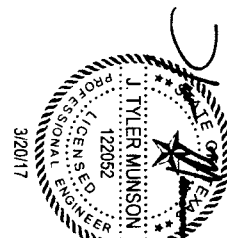
WINDROSE
LAND SURVEYING & PLANNING
2420 170th Avenue, Suite 100
Edmonton, Alberta
T6E 3G3, CANADA
Phone: (780) 443-1111
Fax: (780) 443-1112
E-mail: info@windrose.ca
Web: www.windrose.ca

CONSTRUCTION - GENERAL NOTES

1. FORT BEND COUNTY MUST BE INVITED TO THE PRE-CONSTRUCTION MEETING.
2. CONTRACTOR SHALL NOTIFY FORT BEND COUNTY ENGINEERING DEPARTMENT 48 HOURS PRIOR TO COMMENCING CONSTRUCTION AND 48 HOUR NOTICE TO ANY CONSTRUCTION ACTIVITY WITHIN THE LIMITS OF THE PAVING AT CONSTRUCTION@FORTBENDCOUNTYTX.GOV.
3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FROM FORT BEND COUNTY PRIOR TO COMMENCING CONSTRUCTION OF ANY IMPROVEMENTS WITHIN COUNTY ROAD RIGHT OF WAYS.
4. ALL PAVING IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FORT BEND COUNTY "RULES, REGULATIONS, AND REQUIREMENTS" RELATING TO THE APPROVAL AND ACCEPTANCE OF IMPROVEMENTS IN SUBDIVISIONS AS CURRENTLY AMENDED.
5. ALL ROAD WIDTHS, CURB RADI AND CURB ALIGNMENT SHOWN INDICATES BACK OF CURB.
6. A CONTINUOUS LONGITUDINAL REINFORCING BAR SHALL BE USED IN THE CURBS.
7. ALL CONCRETE PAVEMENT SHALL BE 5 1/2 SACK CEMENT WITH A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI AT 28 DAYS. TRANSVERSE EXPANSION JOINTS SHALL BE INSTALLED AT EACH CURB RETURN AND AT A MAXIMUM SPACING OF 80 FEET.
8. ALL WEATHER ACCESS TO ALL EXISTING STREETS AND DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES.
9. 4" X 12" REINFORCED CONCRETE CURB SHALL BE PLACED IN FRONT OF SINGLE FAMILY LOTS ONLY. ALL OTHER AREAS SHALL BE 6" REINFORCED CONCRETE CURB.
10. AT ALL INTERSECTION LOCATIONS, TYPE 7 RAMPS SHALL BE PLACED IN ACCORDANCE WITH TxDOT PED-12A STANDARD DETAIL SHEET A.D.A. - HANDICAP RAMPS SHALL BE INSTALLED WITH STREET PAVING AT ALL INTERSECTIONS AND COMPLY WITH CURRENT A.D.A. REGULATIONS.
11. CURB HEADERS ARE REQUIRED AT CURB CONNECTIONS TO HANDICAP RAMPS, WITH NO CONSTRUCTION JOINT WITHIN 5' OF RAMPS.
12. ALL INTERSECTIONS UTILIZING TRAFFIC CONTROL MEASURES SHALL HAVE A.D.A. WHEEL CHAIR RAMPS INSTALLED.
13. GUIDELINES ARE SET FORTH IN THE TEXAS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". AS CURRENTLY AMENDED. SHALL BE OBSERVED. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE FLAGMEN, SIGNING, STRIPING, AND WARNING DEVICES, ETC., DURING CONSTRUCTION - BOTH DAY AND NIGHT.
14. ALL R1-1 STOP SIGNS SHALL BE 30" X 30" WITH DIAMOND GRADE SHEETING PER TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
15. STREET NAME SIGNAGE SHALL BE ON A 9" HIGH SIGN FLAT BLADE WITH REFLECTIVE GREEN BACKGROUND. STREET NAMES SHALL BE UPPER AND LOWERCASE LETTERING WITH UPPERCASE LETTERS OF 6" MINIMUM AND LOWERCASE LETTERS OF 4.5" MINIMUM. THE LETTERS SHALL BE REFLECTIVE WHITE. STREET NAME SIGNS SHALL BE MOUNTED ON STOP SIGN POST.
16. A BLUE DOUBLE REFLECTIVE BUTTON SHALL BE PLACED AT ALL FIRE HYDRANT LOCATIONS. THE BUTTON SHALL BE PLACED 12 INCHES OFF TO THE CENTERLINE OF THE STREET ON THE SAME SIDE AS THE HYDRANT.

STORM SEWER CONSTRUCTION NOTES

1. STORM SEWERS SHALL BE REINFORCED CONCRETE PIPE (C-76, CLASS III), AND SHALL BE INSTALLED, BEDDED, AND BACKFILLED IN ACCORDANCE WITH THE CITY OF HOUSTON DRAWING NOS. 02317-02, 02317-03, 02317-05, 02317-06, AND 02317-07 (OCT 2002) AS APPLICABLE UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
2. ALL STORM SEWER CONSTRUCTED IN SIDE OF EASEMENT SHALL BE R.C.P. (C-76, CLASS III) AND SHALL BE BEDDED IN ACCORDANCE WITH THE CITY OF HOUSTON DRAWING NOS. 02317-02, 02317-03, 02317-05, 02317-06, AND 02317-07 AS APPLICABLE.
3. ALL SEWER UNDER PROPOSED OR FUTURE PAVEMENT AND TO A POINT ONE (1) FOOT BACK OF ALL PROPOSED OR FUTURE CURBS SHALL BE BACKFILLED WITH 1-1/2 SACK CEMENTIC Y STABILIZED SAND TO WITH IN ONE (1) FOOT OF SUBGRADE THE REMAINING DEPTH OF TRENCH SHALL BE BACKFILLED WITH SUITABLE EARTH MATERIAL.
4. ALL TRENCH BACKFILLS SHALL BE IN 8' LIFTS, WITH TESTS TAKEN AT 100 FOOT INTERVALS ON EACH LIFT, AND MECHANICALLY COMPACTED TO A DENSITY OF NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D-698/MSHTO 199).
5. CIRCULAR AND ELLIPTICAL REINFORCED CONCRETE PIPE SHALL BE INSTALLED USING RUBBER GASKET JOINTS CONFORMING TO ASTM C443 AND ASTM C877 RESPECTIVELY.
6. ALL STORM SEWER PIPES AND INLET LEADS SHALL BE 24 INCH AND LARGER R.C.P. (C-76, CLASS III).
7. ALL PROPOSED PIPE STUB-OUTS FROM MANHOLES AND INLETS ARE TO BE PLUGGED WITH 6" 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 02086-ADJUSTING MANHOLES, INLETS AND VALVE BOXES TO GRADE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, MAINTAINING AND RESTORING ANY BACK SLOPE DRAINAGE SYSTEM DISTURBED AS A RESULT OF HIS WORK.
11. ALL DITCHES SHALL BE REGRADED TO PROPOSED ELEVATIONS TO INSURE PROPER DRAINAGE. ALL OUTFALLS SHALL BE PROPERLY BACKFILLED AND COMPACTED. ALL DISTURBED AREA SHALL BE REGRADED, SEEDED, AND FERTILIZED.
12. ALL DRIVEWAYS WILL BE LOCATED TO AVOID EXISTING CURB INLET STRUCTURES.



WGA
WARD, GETZ & ASSOCIATES, L.L.P.
CONSULTING ENGINEERS
TEXAS REGISTERED ENGINEERING FIRM NO. 122052
2500 Lakeshore Suite 1200
Houston, Texas 77057
713.789.1882

SE CONTRACTORS
7575 FAIRCHILD RD
RICHMOND, TEXAS 77469
FORT BEND COUNTY

DATE: 3-3-2017
DRAWN: NRI
CHECKED: JGJ
SCALE:

GENERAL
NOTES

SHEET

C1.1

APPROVED: *[Signature]*
The City Engineer
DATE: 4/25/17

DEFLECTION VOLUME BASED IN % IMPERVIOUS PER FT. BEND COUNTY DRAINAGE MANUAL TABLE F-1

DRIVEWAY & BUILDING IMPERVIOUS AREA: 68,699 SF = 1.58 AC.
 POND IMPERVIOUS AREA: 41,645 SF = 0.96 AC.
 TOTAL IMPERVIOUS AREA: 68,699 + 41,645 = 110,344 SF => 2.54 AC
 TOTAL SITE AREA: 362,088 SF => 8.31 AC
 PERCENT IMPERVIOUS COVER: $2.54/8.31 = 0.31$, (31%)
 FROM FIGURE F-1 DETENTION VOLUME: 30% = 0.70 AC-FT/AC
 VOLUME REQUIRED: 8.31 AC x 0.70 AC-FT/AC = 5.82 AC-FT
 VOLUME PROVIDED: 6.00 AC-FT
 MAXIMUM ALLOWABLE 100-YR RELEASE RATE: 0.125 CFS/ACRE
 100-YR RELEASE RATE: $0.125 \times 8.31 = 1.04$ CFS
 72 HR RELEASE RATE = 72.5 GPM

RESTRICTOR SIZE

NO HYDRAULIC HEAD USE MANNING'S EQUATION FOR GRAVITY FLOW
 OUTFALL PIPE DIAMETER = 12 IN
 OUTFALL PIPE SLOPE = 0.40%
 MANNING'S "N" VALUE = 0.024
 RESTRICTED FLOW: $Q = (1.49/N)(0.25 \times D^3)^{2/3}(S)^{1/2}$
 RESTRICTED FLOW: $Q = 1.31$ CFS
 ALLOWABLE FLOW: $Q = 1.32$ CFS+
 PROPOSED FLOW: $Q = 0.16$ CFS

GRADING LEGEND:

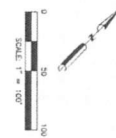
78.50	EXISTING GRADE
79.50	PROPOSED FLOWLINE
HB79.5	PROPOSED HIGH BANK
79.5	PROPOSED GRADE
SWALE	SWALE

SWPPP LEGEND:

[SC-1]-1	STABILIZED CONSTRUCTION EXIT
X- [RFB] - X-	REINFORCED FILTER FABRIC FENCE
[CTV]	CONCRETE TRUCK WASHOUT AREA

DIRECTION OF FLOW:

100-YEAR SHEET FLOW



WGA
 WARD, GETZ & ASSOCIATES, LLP
 CONSULTING ENGINEERS
 TEXAS REGISTERED ENGINEERING FIRM # 9756
 2509 Langloisville, Suite 120
 Houston, Texas 77063
 713.799.1900

SE CONTRACTORS
 7575 FAIRCHILD RD
 RICHMOND, TEXAS 77469
 FORT BEND COUNTY

DATE: 4.11.2017
 DRAWN: NPH
 CHECKED: JGJ
 SCALE

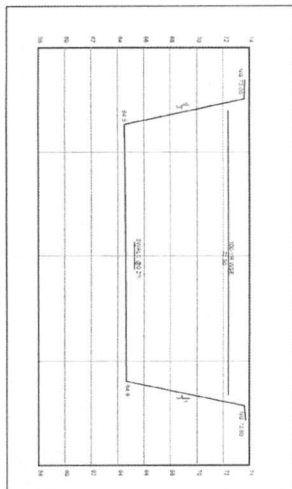
DRAINAGE
 PLAN

SHEET

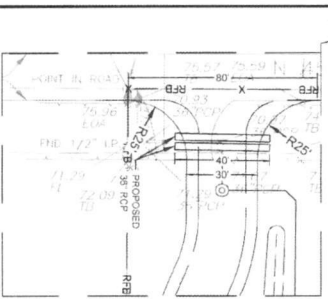
C2.1

PROJECT No. 40009-021

CROSS-SECTION "A-A"
 N.T.S.



NOTE:
 CONTRACTOR SHALL REPLACE EXISTING CULVERTS WITH A DOUBLE ROW OF 36" REINFORCED CONCRETE PIPES (RCP). THE PROPOSED CULVERTS SHALL BE BEDDED AND WRAPPED IN STABILIZED SAND. CONTRACTOR MUST OBTAIN NECESSARY PERMITS AND COORDINATE PROPOSED CULVERT INSTALLATION, INCLUDING PROPOSED FLOWLINE ELEVATIONS, GRADES, AND STABILIZED SAND SPECIFICATIONS WITH THE FORT BEND COUNTY ROAD AND BRIDGE DEPARTMENT. (281) 342.4513. PRIOR TO ANY WORK WITHIN THE FAIRCHILD RD RIGHT-OF-WAY.





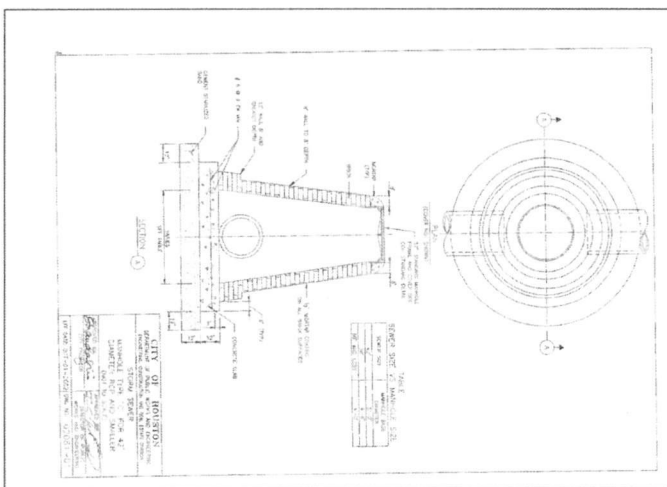
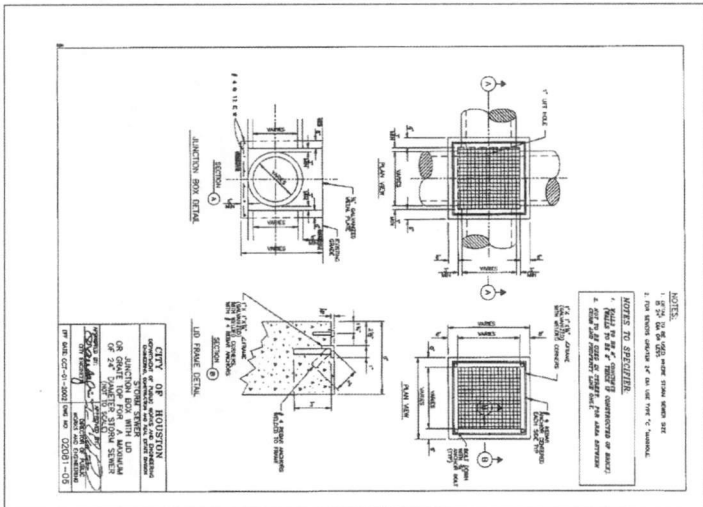
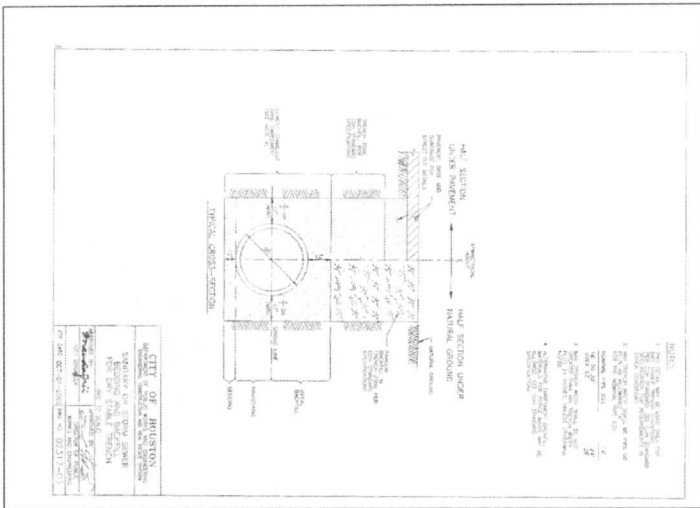
DATE: 4/25/17

SHEET

PUMP DETAIL

3/20/17

W | G | A
WARD, GETZ & ASSOCIATES, LLP
CONSULTING ENGINEERS
TEXAS REGISTERED ENGINEERING FIRM # 9756
2500 Tanglesville, Suite 120
Houston, Texas 77063
713.789.1900



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WARD, GETZ & ASSOCIATES, LLP
CONSULTING ENGINEERS
TEXAS REGISTERED ENGINEERING FIRM # 9756
2500 Tanglewilde, Suite 120
Houston, Texas 77063
713.789.1900

SE CONTRACTORS
7575 FAIRCHILD RD
RICHMOND, TEXAS 77469
FORT BEND COUNTY

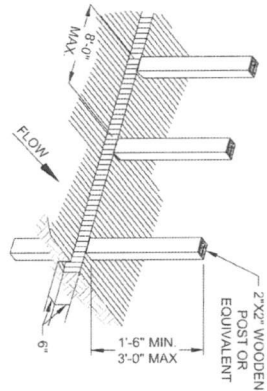
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DRAWN: NHI
CHECKED: JGI
SCALE:

MISC.
DETAILS

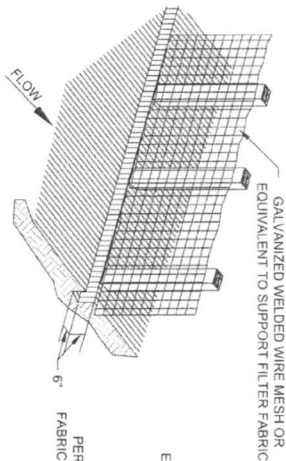
APPROVED: *Goodrich*
Development Coordinator
DATE: 4/25/17

SHEET
C3.1

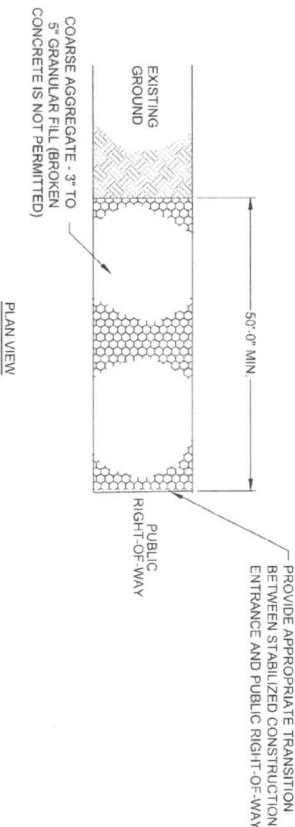
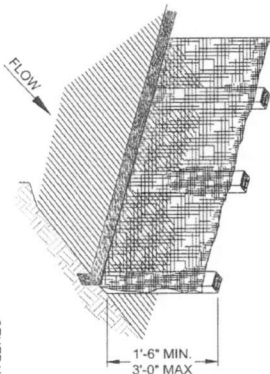
1. SET POSTS AT REQUIRED SPACING AND DEPTH EXCAVATE 6" x 6" TRENCH UPSLOPE ALONG THE LINE OF POSTS.



2. SECURE MESH FENCING TO POSTS



3. ATTACH FILTER MATERIAL TO WIRE FENCE AND EXTEND IT INTO THE TRENCH BACKFILL AND COMPACT THE EXCAVATED SOIL.



GENERAL NOTES:

1. MINIMUM LENGTH IS AS SHOWN ON CONSTRUCTION DRAWINGS OR 50 FEET, WHICHEVER IS MORE.
2. CONSTRUCT AND MAINTAIN CONSTRUCTION EXIT WITH CONSTANT WIDTH ACROSS ITS LENGTH, INCLUDING ALL POINTS OF INGRESS OR EGRESS.
3. UNLESS SHOWN ON THE CONSTRUCTION DRAWINGS, STABILIZATION FOR OTHER AREAS WILL HAVE THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION EXIT.
4. WHEN SHOWN ON THE CONSTRUCTION DRAWINGS, WIDEN OR LENGTHEN STABILIZED AREA TO ACCOMMODATE A TRUCK WASHING AREA.
5. PROVIDE PERIODIC TOP DRESSING WITH ADDITIONAL COARSE AGGREGATE TO MAINTAIN THE REQUIRED DEPTH OR WHEN SURFACE BECOMES PACKED WITH MUD.
6. PERIODICALLY TURN AGGREGATE TO EXPOSE A CLEAN DRAINING SURFACE.
7. ALTERNATIVE METHODS OF CONSTRUCTION INCLUDE:
 - CEMENT STABILIZED SOIL: COMPACTED CEMENT STABILIZED SOIL, LIMESTONE AGGREGATE, OR OTHER FILL MATERIAL IN AN APPLICATION OF THICKNESS OF 8 INCHES.
 - WOOD MATS: OAK OR OTHER HARDWOOD TIMBERS PLACED EDGE TO EDGE AND ACROSS SUPPORT WOODEN BEAMS WHICH ARE PLACED ON TOP OF EXISTING SOIL IN AN APPLICATION THICKNESS OF 6 INCHES.
 - STEEL MATS: PERFORATED MATS PLACED ACROSS PERPENDICULAR SUPPORT MEMBERS.

REINFORCED FILTER FABRIC BARRIER

STABILIZED CONSTRUCTION ACCESS

APPROVED: *[Signature]*
DATE: 4/24/17

C3.2

SHEET

STORM WATER
PREVENTION PLAN
DETAILS

DATE: 3-3-2017
DRAWN: NPH
CHECKED: JGI
SCALE:

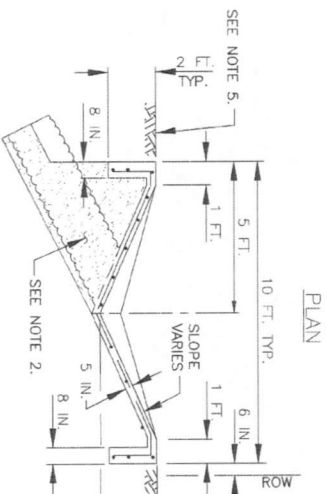
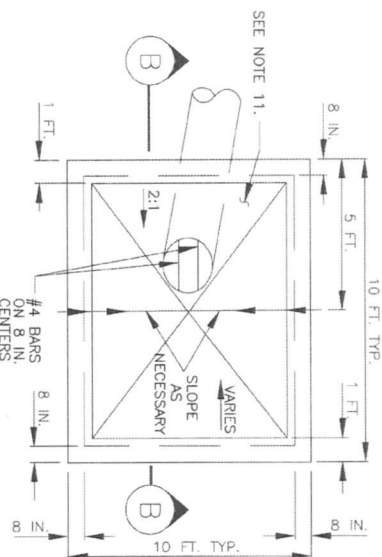
SE CONTRACTORS
7575 FAIRCHILD RD
RICHMOND, TEXAS 77469
FORT BEND COUNTY

WGA
WARD, GETZ & ASSOCIATES, LLP
CONSULTING ENGINEERS
TEXAS REGISTERED ENGINEERING FIRM # 9756
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713.780.1900

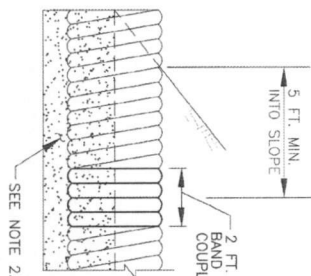


INTERCEPTOR STRUCTURE DETAIL NOTES:

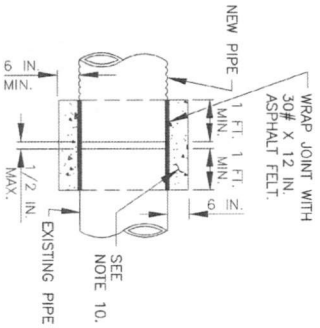
1. INTERCEPTOR OUTFALL PIPES WITHIN THE HCFD RIGHT-OF-WAY SHALL BE CMP OR HDPE PIPE IN ACCORDANCE WITH SPECIFICATION SECTION 02642 - CORRUGATED METAL PIPE. INTERCEPTOR PIPES SHALL BE POLYETHYLENE (HDPE) PIPE IN ACCORDANCE WITH SPECIFICATION SECTION 2805-HIGH DENSITY POLYETHYLENE, OR APPROVED EQUAL. USE TABLE BELOW FOR CORRUGATED GALVANIZED STEEL PIPE.
2. PROVIDE AND PLACE CEMENT STABILIZED SAND IN ACCORDANCE WITH SPECIFICATION SECTION 02317-CEMENT STABILIZED SAND AND SECTION 02316 - STRUCTURAL EXCAVATING.
3. EXCAVATION, FILL AND BACKFILL FOR STORM SEWER OUTFALLS SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 02316-STRUCTURAL EXCAVATING AND BACKFILLING. CONCRETE SHALL BE STRUCTURAL CONCRETE IN ACCORDANCE WITH SPECIFICATION SECTION 03310-CONCRETE.
4. INTERCEPTOR STRUCTURES:
 - a. ADJUST LENGTH AND WIDTH IN FIELD AS NECESSARY.
 - b. FIELD LENGTH SHALL BE SUCH THAT THE TOTAL LENGTH OF THE STRUCTURE (GRADE 40) AT 12 INCHES ON CENTER.
 - c. ANY INTERCEPTOR OUTFALL PIPE LARGER THAN MAXIMUM SIZE INDICATED REQUIRES A SEPARATE DETAIL.
 - d. INTERCEPTOR CONCRETE WITH IN DETENTION BASINS, SET FLOWLINE OF OUTFALL AT TOE OF SLOPE. IN CHANNEL, USE ELEVATION INDICATED IN THE TABLE OR 1 FOOT ABOVE NORMAL WATER LEVEL, WHICH EVER IS HIGHER.
 - e. SEE CONCRETE CHANNEL LINING DETAILS THROUGH OUTFALL CHANNEL LINING.
5. CONCRETE PAD AROUND TYPE "B" INLET: PAD FOR AS CONCRETE INTERCEPTOR STRUCTURE PER UNIT PRICE SCHEDULE, TYPE "B" INLET BOX, COH DWS, NO. 02632-02 WITH GRADE TOP, VULCAN FOUNDRY COMPANY, V-4880-1 OR APPROVED EQUAL, APPROX. 489 SQ. IN.
6. BACKSLOPE SMALE AND INTERCEPTOR STRUCTURE ELEVATIONS AND LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. FINAL ELEVATIONS AND LOCATIONS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO INSTALLATION.
7. STRUCTURAL CONCRETE WITH #4 BARS (GRADE 40) 12 INCH O.C. EACH WAY FOR DOWELS ONLY. EXPOSURE OF REINFORCING STEEL LOCATION TO BE DETERMINED BY THE ENGINEER.



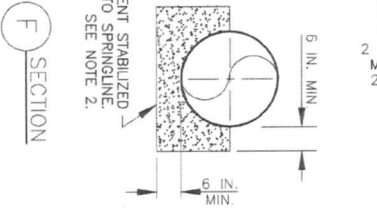
TYPICAL BACKSLOPE INTERCEPTOR STRUCTURE
(24 INCH & 30 INCH ONLY)



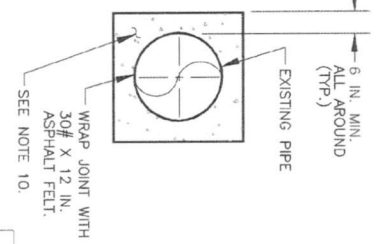
CMP BAND COUPLER DETAIL



CONCRETE COLLAR DETAIL



BEDDING CMP DETAIL



BEDDING CONCRETE PIPE DETAIL



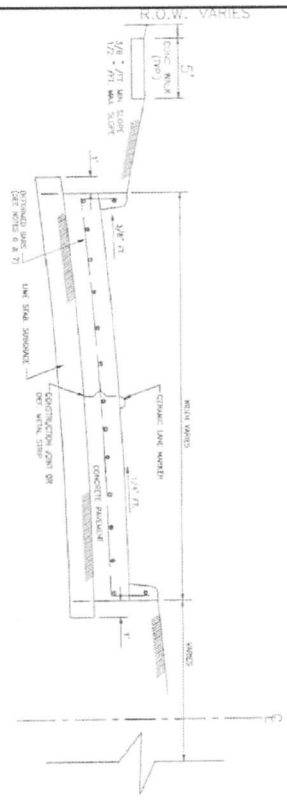
WGA
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SE CONTRACTORS
7575 FAIRCHILD RD
RICHMOND, TEXAS 77469
FORT BEND COUNTY

DATE	3-8-2017
DRAWN	NRH
CHECKED	JGI
SCALE	

APPROVED: *[Signature]*
DATE: 4/25/17
Development Coordinator

BACKSLOPE DETAILS
SHEET
C3.3



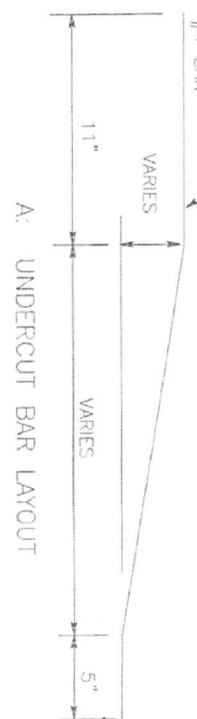
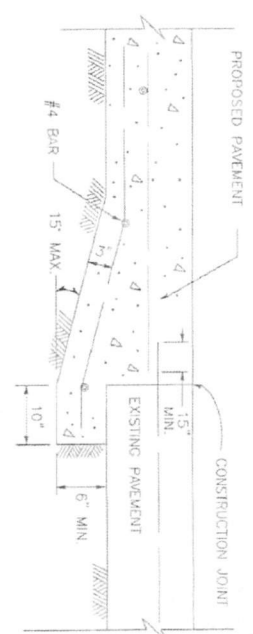
NOTES

1. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A-615, CURRENT GRADE 60 MINIMUM LAP AT ALL SPLICES SHALL BE A MINIMUM OF 16" UNL. LAP SPLICES SHALL BE STAGGERED. ADJACENT LAP SPLICES ARE NOT ACCEPTABLE.
2. CONCRETE SHALL BE CLASS "B" CONCRETE, FC=3000 PSI (28 DAY STRENGTH), 5000 PSI MINIMUM FLEXURAL STRENGTH AT 7 DAYS, REFER TO SPECIFICATION SECTION 02301.
3. THE LOCATION OF CONSTRUCTION JOINTS AND DEFORMED METAL STRIPS MAY BE VARYED, WITH THE APPROVAL OF THE FORT BEND COUNTY ENGINEERING DEPARTMENT, AND THE APPROVAL OF THE FORT BEND COUNTY ENGINEERING DEPARTMENT, THE MAXIMUM WIDTH BETWEEN LONGITUDINAL JOINTS SHALL NOT EXCEED 14'-0"
4. 6" LANE STABILIZED SURFACING SHALL BE A MINIMUM OF 6" LANE. LUTESS SPECIFICALLY APPROVED BY THE FORT BEND COUNTY ENGINEERING DEPARTMENT REFER TO SPECIFICATION SECTION 02244.
5. THE SLOPE BEND PAVEMENT MAY BE INCREASED, WITH THE APPROVAL OF THE FORT BEND COUNTY ENGINEERING DEPARTMENT.
6. FOR 7" PAVING, USE 1/2" DEFORMED BARS, 24" CENTER-TO-CENTER, 10" LAPS (18" CENTER-TO-CENTER FOR MAJOR THROUGH-TRAFFIC).
7. FOR 8" PAVING, USE 3/8" DEFORMED BARS, 24" CENTER-TO-CENTER, 10" LAPS.
8. CONCRETE WALK (REFER TO DETAIL, FBC-011)

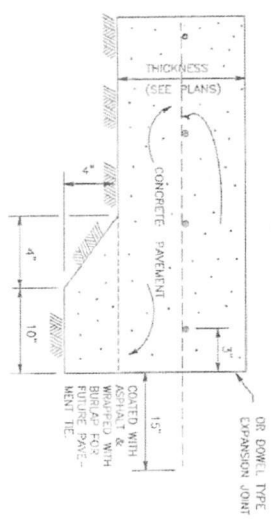
TYPICAL DOUBLE ROADWAY SECTION

APPROVED BY:	LOUIS HOOD
DATE DRAWN: 2-1-94	DRAWING NO. FBC-002
REVISED:	

FORT BEND COUNTY ENGINEERING DEPARTMENT



A: UNDERCUT BAR LAYOUT



B: TYPICAL HEADER

PAVEMENT HEADER/ UNDERCUT

APPROVED BY:	LOUIS HOOD
DATE DRAWN: 2-1-94	DRAWING NO. FBC-007
REVISED:	

FORT BEND COUNTY ENGINEERING DEPARTMENT

APPROVED: *Louis Hood*
DATE: 4/25/17
Development Coordinator



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WARD, GETZ & ASSOCIATES, LLP
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2500 Tanglewood, Suite 120
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713.780.1900

SE CONTRACTORS
7575 FAIRCHILD RD
RICHMOND, TEXAS 77469
FORT BEND COUNTY

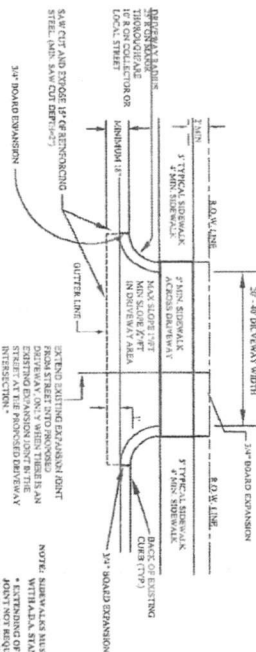
DATE:	3-3-2017
DRAWN:	NRH
CHECKED:	JOI
SCALE:	

PAVEMENT DETAILS

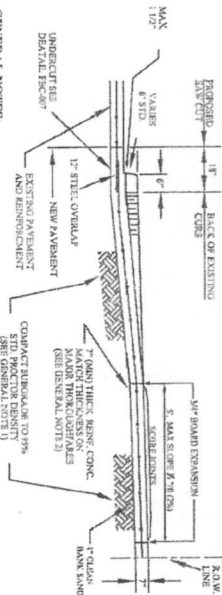
SHEET
C4.1

WHEN A COMMERCIAL SIDEWALK, DRIVEWAY, CURB OR GUTTER IS CONSTRUCTED, RECONSTRUCTED, REPAIRED OR REGRADED ON COUNTY RIGHT-OF-WAY, FOR USE WITH CONCRETE OR ASPHALT CURB TYPE STREETS, USE SECTIONS APPLICABLE.

A. USE FOR ALL PROPOSED EXISTING CURB REMOVAL FOR DRIVEWAYS (PLAN VIEW NOT TO SCALE)



B. USE FOR ALL PROPOSED DRIVES ON CURBED TYPE STREETS



GENERAL NOTES:

1. CONSTRUCTION OF PROPOSED DRIVEWAY CONNECTION FROM PROPOSED SIDE CUT AT EXISTING PAVEMENT TO R.O.W. LINE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, AS ADOPTED BY THE BOARD OF SUPERVISORS OF FORT BEND COUNTY, TEXAS.
2. PROPOSED DRIVEWAY REINFORCING STEEL IS TO BE 4.0 DIAMETER REINFORCING BARS (ASTM A601) UNLESS NOTED OTHERWISE.
3. PROPOSED DRIVEWAY SHALL BE CONSTRUCTED WITH PORTLAND CEMENT AS SPECIFIED IN THE GENERAL NOTES.
4. PROPOSED DRIVEWAY SHALL BE CONSTRUCTED WITH PORTLAND CEMENT AS SPECIFIED IN THE GENERAL NOTES.
5. FOR TYPICAL SIDEWALK DETAILS, SEE DETAIL 100-101.

SIDEWALKS & DRIVEWAYS ON CURB TYPE STREETS COMMERCIAL AREA	DRAWN BY: L. BROECKA	REVIEWED BY: J. NEJEDLIK
	DATE DRAWN: 2-1-94	DATE REVIEWED: 4-7-09
	APPROVED BY: L. HOOB	DRAWING NO. FBC-025A
	DATE: 2-1-94	

FORT BEND COUNTY ENGINEERING DEPARTMENT



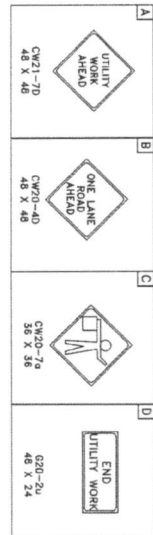
WGA
WARD, GETZ & ASSOCIATES, L.L.P.
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2500 Tanglewood, Suite 120
Houston, Texas 77063
713.789.1900

SE CONTRACTORS
7575 FAIRCHILD RD
RICHMOND, TEXAS 77469
FORT BEND COUNTY

DATE:	3-3-2017
DRAWN:	NRH
CHECKED:	JOI
SCALE:	

PAVEMENTS
DETAILS

SHEET
C4.2



TRAFFIC NOTES

- NOTE:** CONTRACTOR SHALL REPLACE EXISTING CULVERTS WITH A DOUBLE ROW OF 36" REINFORCED CONCRETE PIPES (RCP). THE PROPOSED CULVERTS SHALL BE BEDDED AND WRAPPED IN STABILIZED SAND. CONTRACTOR MUST OBTAIN NECESSARY PERMITS AND COORDINATE PROPOSED CULVERT INSTALLATION, INCLUDING PROPOSED FLOW LINE ELEVATIONS, GRADES, AND STABILIZED SAND SPECIFICATIONS WITH THE PORT BEARD COUNTRY ROAD AND BRIDGE DEPARTMENT. (281) 542-4153. PRIOR TO ANY WORK WITHIN THE FAIRCHILDZ RD RIGHT-OF-WAY.

Street	Posted Speed
FAIRCHILD ROAD	45 MPH

LEGEND
(TYPICAL)

- PLASTIC DRUM
(see spacing for
channelizing devices)
- OFF-DUTY UNIFORMED
POLICE OFFICER
- ≡ TYPE III BARRICADE
- TUBULAR MARKER

APPROVED: Cassidy
Development Coordinator

DATE: 4/25/17



3/31/17

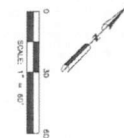
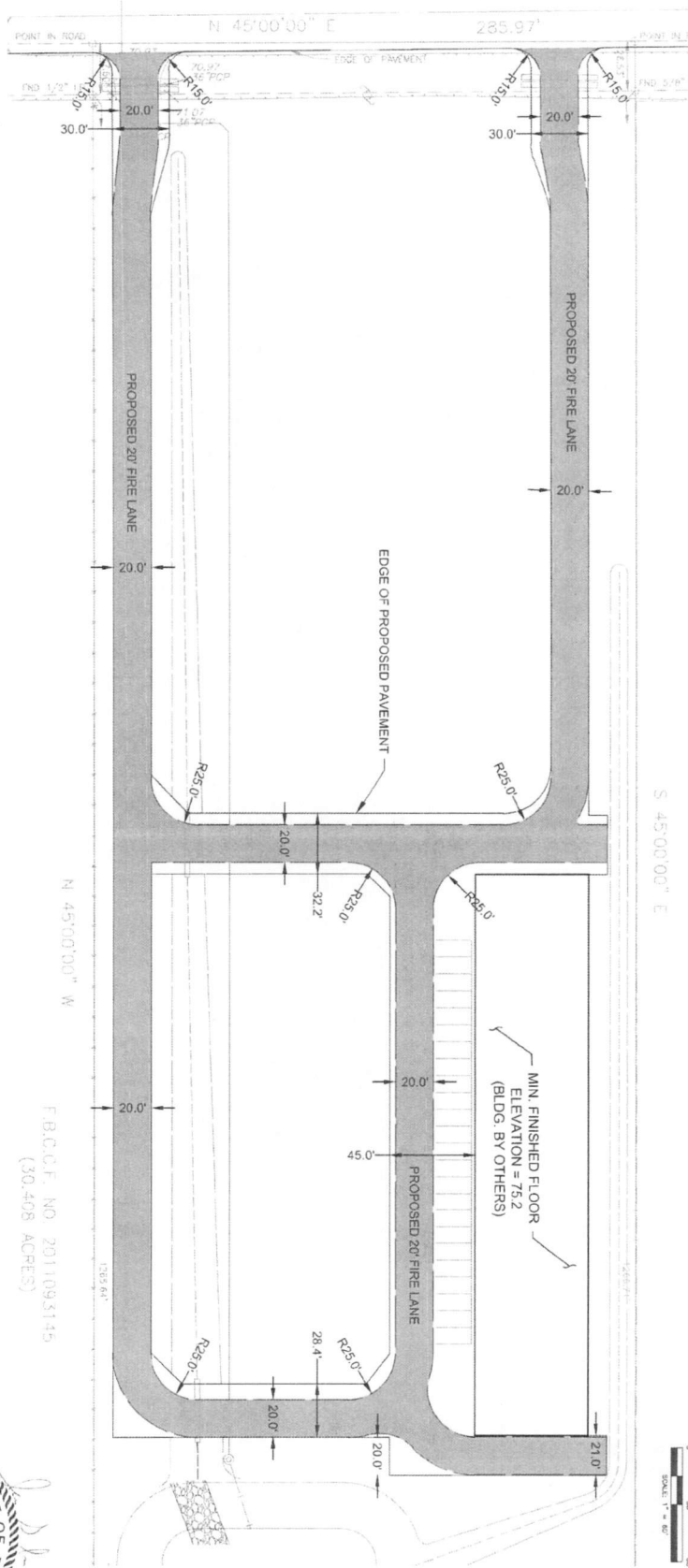
C5.1

SHEET

TRAFFIC CONTROL PLAN

SE CONTRACTORS
7575 FAIRCHILD RD
RICHMOND, TEXAS 77469
FORT BEND COUNTY

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713.789.1900



F.B.C.F. NO. 2011093145
(30.408 ACRES)



APPROVED: *[Signature]*
Development Coordinator
DATE: 4/25/17

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FORT BEND COUNTY

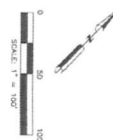
DATE: 4-11-2017
DRAWN: NRI
CHECKED: JGI
SCALE:

**FIRE
ACCESS
PLAN**

SHEET
C6.1



VEHICLE VOLUMES DALEY FLOW AREA REQUIRED (SQ FT) AREA PROPOSED (SQ FT)		CANINET SHOP WITH 24 EMPLOYEES AT 10 GPD = 240 GPD 240 GPD 6,533.3 5,656.67
COMPONENTS PRE-TREATMENT AERobic TREATMENT UNIT PUMP TANK SUMP/IN LINE SHAW HEADS DISINFECTION BOO CALCULATIONS		
PUMP/TANK PARAMETERS INCLUDED IN PACKAGE INTERNAL TANK DIMENSIONS DEPTH = 6' PUMP OFF = 32' RESERVE CAPACITY DESIGN FLOW STATIC VOLUME		
93 GALLONS 776 GALLONS PER LUMP/FACETER AVERAGE GALLONS PER IN = 11.24 PUMP ON = 36' ALARM OVERRIDE = 91' 424 GALLONS		335 GALLON TRASH TANK CLASSTREEM 300 LBS. IN ONE OR EQUIVALENT 786 GALLON INCLUDED IN UNIT 1 SCH 40 PVC WEATHERMASTER PLUS (OW ANGLE ADJUSTED AS SHOWN) CH ORINATION 0.00204 X 3.2 X 590 = 1.24 LBS 500 AT0 TREATS - 175 LBS - WE WILL USE 1



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713.789.1900

SE CONTRACTORS
7575 FAIRCHILD RD
RICHMOND, TEXAS 77469
FORT BEND COUNTY

APPROVED: Carol H. [Signature]
Development Coordinator

DATE: 4/25/17

SHEET
C7.1