

REVIEW BY FORT BEND COUNTY
COMMISSIONERS COURT

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

☐

Right of Way Permit

☒

Commercial Driveway Permit

Permit No: 2018-18739

Applicant: LQC, Inc dba Longhorn Builders

Job Location Site: 21611 West Bellfort Street, Richmond, TX 77406

Bond No. **Date of Bond:** 3/1/2018 **Amount:** \$5,000.00

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.

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, 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 8th day of May, 2018, Upon Motion of Commissioner Meyers, seconded by Commissioner Morales, 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.

Signature

Presented to Commissioners Court and approved.

By:

Rick J Staigle, PE, PTOE
County Engineer

Date Recorded 5-11-2018

Comm. Court No. 12 D

N/A

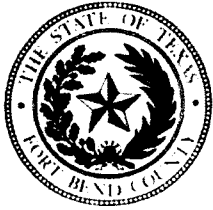
By:

Drainage District Engineer/Manager

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@fortbendcountytx.gov

- ☐ Right of Way Permit
☒ Commercial Driveway Permit

Permit No: 2018-18739

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: XXXXXXXXXX Amount: \$5,000.00
- ☐ 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.

Rick J. Staigle, PE, PTOE

Permit Administrator

4/30/2018

Date

Effective Date: March 1st, 2018

**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 §
COUNTY OF FORT BEND §

KNOW ALL MEN BY THESE PRESENTS:

THAT WE, LQC, INC. DBA Longhorn Builders
whose (address, phone) is 21931 Kobbs Rd, Ste 100, Tomball, TX 77377
(281) 357-1465 Texas,
hereinafter called the Principal, and WESTERN SURETY COMPANY, a Corporation existing under and
by virtue of the laws of the state of South Dakota and authorized to do an indemnifying business in the state of
Texas, and whose principal office is located at (name/address/phone) P.O. Box 5077, Sioux Falls,
SD 57117-5077, (605) 336-0850, whose officer residing in the State of Texas, authorized to accept service in all
suits and actions brought whining said state is R. Y. A. Ins. Agency, Inc.
and whose address is 12155 Jones Rd, Houston, TX 77070,
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 and 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 1st day of March, 2018.

Longhorn Builders
PRINCIPAL
Greg Powers
BY

WESTERN SURETY COMPANY
SURETY
Azra M
BY

CCM 5-8-2018 #12D
Fort Bend County Clerk
Return Admin Serv Coord
Permit # 2018-18739 RAC

Western Surety Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That WESTERN SURETY COMPANY, a corporation organized and existing under the laws of the State of South Dakota, and authorized and licensed to do business in the States of Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming, and the United States of America, does hereby make, constitute and appoint

Aaron Paul Reece of Houston,
State of Texas, with limited authority, its true and lawful Attorney-in-Fact, will full power and authority hereby conferred to sign, execute, acknowledge and deliver for and on its behalf as Surety and as its act and deed, the following bond:

Cable, Conduit and/or Pole line Activity in, under, across or along County
One Roads County of Fort Bend

bond with bond number

for LQC, INC. DBA Longhorn Builders
as Principal in the penalty amount not to exceed: \$ 5,000.00

Western Surety Company further certifies that the following is a true and exact copy of Section 7 of the by-laws of Western Surety Company duly adopted and now in force, to-wit:

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys-in-Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

In Witness Whereof, the said WESTERN SURETY COMPANY has caused these presents to be executed by its
Vice President with the corporate seal affixed this 1st day of March,
2018.

ATTEST

A. Vietor

A. Vietor, Assistant Secretary

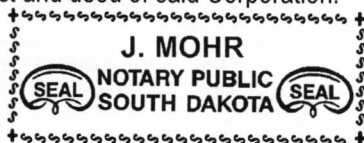
WESTERN SURETY COMPANY

By Paul T. Bruflat
Paul T. Bruflat, Vice President

STATE OF SOUTH DAKOTA }
COUNTY OF MINNEHAHA } ss

On this 1st day of March, 2018, before me, a Notary Public, personally appeared
Paul T. Bruflat and A. Vietor

who, being by me duly sworn, acknowledged that they signed the above Power of Attorney as Vice President
and Assistant Secretary, respectively, of the said WESTERN SURETY COMPANY, and acknowledged said instrument to be the voluntary act and deed of said Corporation.



My Commission Expires June 23, 2021

Notary Public

To validate bond authenticity, go to www.cnasurety.com > Owner/Obligee Services > Validate Bond Coverage.

IMPORTANT NOTICE

- 1 To obtain information or make a complaint:
- 2 You may contact Western Surety Company, Surety Bonding Company of America or Universal Surety of America at 605-336-0850.
- 3 You may call Western Surety Company's, Surety Bonding Company of America's or Universal Surety of America's toll-free telephone number for information or to make a complaint at:

1-800-331-6053

- 4 You may also write to Western Surety Company, Surety Bonding Company of America or Universal Surety of America at:

P.O. Box 5077
Sioux Falls, SD 57117-5077

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

1-800-252-3439

- 6 You may write the Texas Department of Insurance:

P.O. Box 149104
Austin, TX 78714-9104
Fax: (512) 490-1007
Web: www.tdi.texas.gov
E-Mail: ConsumerProtection@tdi.texas.gov

7 PREMIUM OR CLAIM DISPUTES:

Should you have a dispute concerning your premium or about a claim you should contact Western Surety Company, Surety Bonding Company of America or Universal Surety of America first. If the dispute is not resolved, you may contact the Texas Department of Insurance.

8 ATTACH THIS NOTICE TO YOUR POLICY:

This notice is for information only and does not become a part or condition of the attached document.

AVISO IMPORTANTE

Para obtener informacion o para someter una queja:

Puede comunicarse con Western Surety Company, Surety Bonding Company of America o Universal Surety of America al 605-336-0850.

Usted puede llamar al numero de telefono gratis de Western Surety Company's, Surety Bonding Company of America's o Universal Surety of America's para informacion o para someter una queja al:

1-800-331-6053

Usted tambien puede escribir a Western Surety Company, Surety Bonding Company of America o Universal Surety of America:

P.O. Box 5077
Sioux Falls, SD 57117-5077

Puede comunicarse con el Departamento de Seguros de Texas para obtener informacion acerca de companias, coberturas, derechos o quejas al:

1-800-252-3439

Puede escribir al Departamento de Seguros de Texas:

P.O. Box 149104
Austin, TX 78714-9104
Fax: (512) 490-1007
Web: www.tdi.texas.gov
E-Mail: ConsumerProtection@tdi.texas.gov

DISPUTAS SOBRE PRIMAS O RECLAMOS:

Si tiene una disputa concerniente a su prima o a un reclamo, debe comunicarse con el Western Surety Company, Surety Bonding Company of America o Universal Surety of America primero. Si no se resuelve la disputa, puede entonces comunicarse con el departamento (TDI).

UNA ESTE AVISO A SU POLIZA: Este aviso es solo para proposito de informacion y no se convierte en parte o condicion del documento adjunto.

FILED AND RECORDED
OFFICIAL PUBLIC RECORDS

Laura Richard

Laura Richard, County Clerk

Fort Bend County Texas

May 10, 2018 04:42:45 PM



FEE \$0.00

TS1

2018050604

WITHIN FORT BEND COUNTY, TEXAS

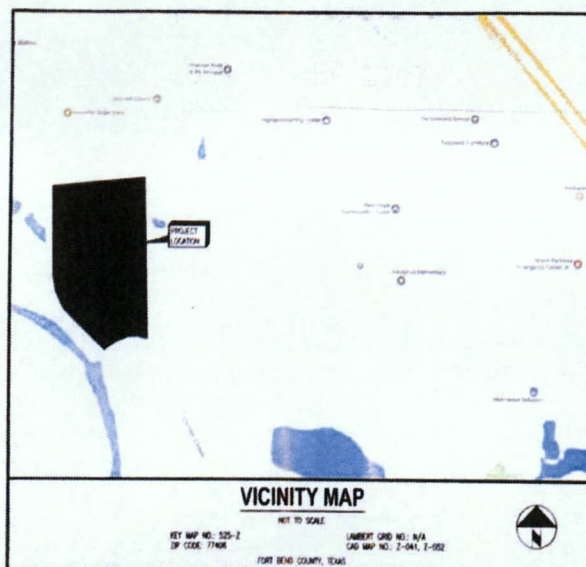
PLANS FOR CONSTRUCTION OF
PAVING, DRAINAGE, GRADING, STORM WATER DETENTION & UTILITIES
TO SERVE:

GRACE COMMUNITY FELLOWSHIP

21611 WEST BELLFORT ST. - RICHMOND, TEXAS 77406

SHEET INDEX

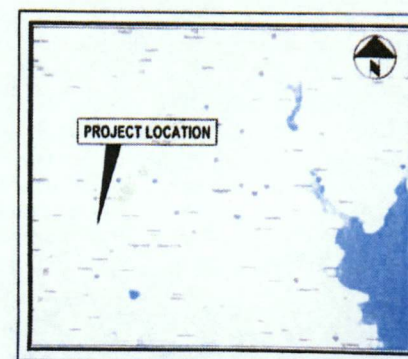
1. COVER SHEET
2. GENERAL CONSTRUCTION NOTES
3. EXISTING CONDITIONS
4. DRAINAGE AREA MAP (PRE-DEVELOPED)
5. DIMENSION CONTROL PLAN
6. UNDERGROUND STORM SEWER PLAN
7. PAVING & GRADING PLAN
8. SITE UTILITY PLAN
9. DRAINAGE COMPUTATIONS
10. TYPICAL SECTIONS
11. SWPP PLAN
12. SWPP DETAILS
13. FIRE LANE EXHIBIT
14. PAVEMENT DETAILS
15. STORM SEWER DETAILS
16. SANITARY SEWER DETAILS
17. WATER LINE DETAILS
18. TRAFFIC CONTROL PLAN



NOTE TO CONTRACTOR:
CONTRACTOR TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CALL UTILITY LOCATOR SERVICE AT LEAST 72 HOURS PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES.

NOTE TO OWNER:
THE DESIGN AND BASIS OF THE INFORMATION PROVIDED BY THE OWNER & ASSOCIATES, INC. THE ENGINEER ACCEPTS NO RESPONSIBILITY FOR UNRECOVERED PIPELINES OR EXISTENCES THAT MAY EXIST ON THIS PROPERTY. THE OWNER SHALL PROVIDE ALL EXISTENCES AND EXISTING FEATURES THAT MAY EXIST.

48 HOUR NOTICE:
CONTRACTOR SHALL NOTIFY FORT BEND COUNTY ENGINEERING DEPT. 48 HOURS PRIOR TO COMMENCING CONSTRUCTION AND/OR BACKFILLING ANY UTILITIES.



LOCATION MAP

ONE CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG!!!
AT LEAST 72 HOURS BEFORE YOU DIG...
(713) 523-4067 (IN HOUSTON)
(800) 545-8005 (STATEWIDE)

PREPARED BY:
DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Bowser Road - Fulshear, Texas 77441
Office and Fax: (281) 346-2616
Cell: (281) 300-1869
Firm Registration No. F9323

NOVEMBER 2017

AUTHORIZED SIGNATURE OF
DAVID P. KELLY, P.E., P.L.C.
November 28, 2017



FORT BEND COUNTY ENGINEER	
ENGINEER: <i>David P. Kelly, P.E.</i>	DATE: <i>11/26/17</i>
THESE SIGNATURES ARE VALID IF CONSTRUCTION HAS NOT COMMENCED IN (1) YEAR FROM DATE OF APPROVAL.	
APPROVED: <i>[Signature]</i>	DATE: <i>11/26/17</i>

GRACE DEVELOPERS
Grace Community Fellowship
Contact: Paul Taylor
mailto:ptaylor@gracefellowship.com
21611 West Bellfort St.
Richmond, Texas 77406
Phone: (281) 239-0999

CIVIL ENGINEER
DPK Engineering LLC
Contact: David P. Kelly, P.E.
david.kelly@dpkengineeringllc.com
Phone: (281) 346-2616
3103 Bowser Rd.
Fulshear, Texas 77441

SURVEYOR
Kraus & Associates, Inc.
3014 Avenue
Houston, Texas 77417
david.kraus@krausandassociates.com
Phone: (281) 341-0908
Fax: (281) 341-8222

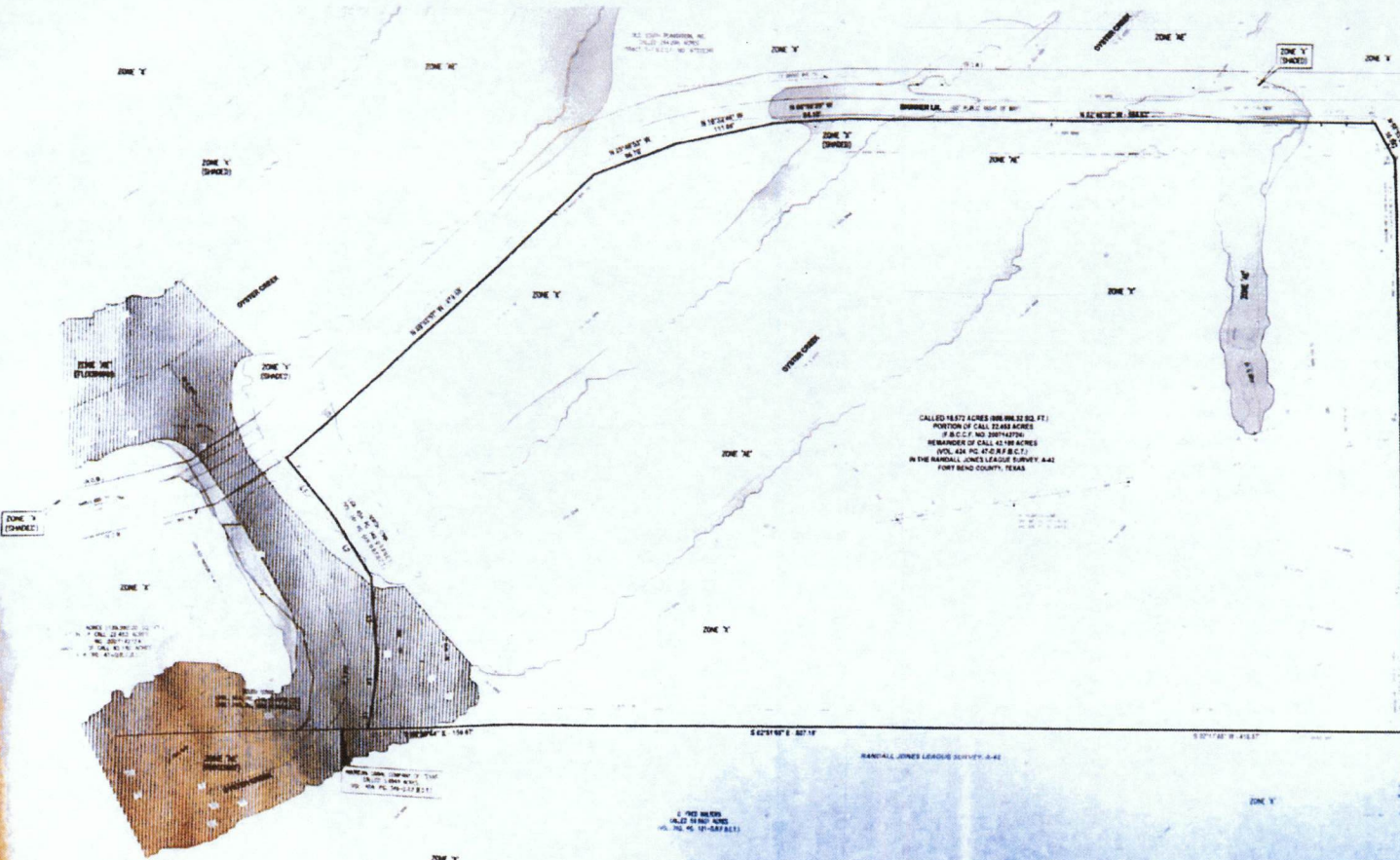
REMARKS:
ELEVATIONS ARE DERIVED FROM THE MEAN SEA LEVEL (MSL) DATUM. THE ELEVATION OF THE SURFACE OF THE WATER IN THE LAGOON IS APPROXIMATELY 10.0 FT. MSL. THE ELEVATION OF THE SURFACE OF THE WATER IN THE LAGOON IS APPROXIMATELY 10.0 FT. MSL. THE ELEVATION OF THE SURFACE OF THE WATER IN THE LAGOON IS APPROXIMATELY 10.0 FT. MSL.

TEMPORARY REVISIONS:
SET OPTION PIERCE SPUR IN 10' DIAMETER PIERCE. THE LOCATION IS APPROXIMATELY 100 FT. SOUTH OF THE 100-FT. WEST OF THE NORTHEAST CORNER OF THE PROPERTY.
ELEVATION = 10.0 FT. MSL

TEMPORARY REVISIONS:
SET OPTION PIERCE SPUR IN 10' DIAMETER PIERCE. THE LOCATION IS APPROXIMATELY 100 FT. SOUTH OF THE 100-FT. WEST OF THE NORTHEAST CORNER OF THE PROPERTY.
ELEVATION = 10.0 FT. MSL

TEMPORARY REVISIONS:
SET OPTION PIERCE SPUR IN 10' DIAMETER PIERCE. THE LOCATION IS APPROXIMATELY 100 FT. SOUTH OF THE 100-FT. WEST OF THE NORTHEAST CORNER OF THE PROPERTY.
ELEVATION = 10.0 FT. MSL

FLUORIDE PLANT:
ACCORDING TO THE FLUORIDE PLANT, THE FLUORIDE PLANT IS LOCATED IN THE 100-FT. WEST OF THE NORTHEAST CORNER OF THE PROPERTY. THE FLUORIDE PLANT IS LOCATED IN THE 100-FT. WEST OF THE NORTHEAST CORNER OF THE PROPERTY. THE FLUORIDE PLANT IS LOCATED IN THE 100-FT. WEST OF THE NORTHEAST CORNER OF THE PROPERTY.



DPK Engineering LLC LAND DEVELOPMENT - SITE DEVELOPMENT - SURVEYING 3000 River Road Houston, Texas 77061 Office and Fax: (281) 348-2816 Cell: (281) 300-1889 Firm Registration No. F8323	
DATE: 08/28/2017 PREPARED BY: J. KELLY	DRAWN BY: J. KELLY CHECKED BY: J. KELLY
AUTHORIZED SIGNATURE BY: J. KELLY, P.E. REGISTERED PROFESSIONAL ENGINEER STATE OF TEXAS EXPIRATION DATE: 08/28/2021	
OWNED BY: GRACE COMMUNITY FELLOWSHIP PROPOSED DEVELOPMENT	
EXISTING CONDITIONS	
FILE NO.: S.F. NO.: SCALE: 1" = 80'	SHEET NUMBER: 3 OF 18

APPROVED: *[Signature]*
DATE: 8/28/17

CHANNEL SECTION ONE ULTIMATE 8.0 IN. WIDTH = 19-Ft. CHANNEL TOP WIDTH = 36-Ft. CHANNEL BOTTOM WIDTH = 6-Ft. 20-Ft. MAINTENANCE BERMS 4:1 SIDE SLOPES GRADE = 0.02% FULL FILL CAPACITY = 554.05 CFS @ 4-Ft. DEEP ACTUAL FILL = 218.00 CFS @ 2.00-Ft. DEEP	CHANNEL SECTION TWO ULTIMATE 8.0 IN. WIDTH = 19-Ft. CHANNEL TOP WIDTH = 36-Ft. CHANNEL BOTTOM WIDTH = 6-Ft. 20-Ft. MAINTENANCE BERMS 4:1 SIDE SLOPES GRADE = 0.03% FULL FILL CAPACITY = 355.79 CFS @ 4-Ft. DEEP ACTUAL FILL = 218.00 CFS @ 3.50-Ft. DEEP	CHANNEL SECTION THREE ULTIMATE 8.0 IN. WIDTH = 19-Ft. CHANNEL TOP WIDTH = 36-Ft. CHANNEL BOTTOM WIDTH = 6-Ft. 20-Ft. MAINTENANCE BERMS 4:1 SIDE SLOPES GRADE = 0.06% FULL FILL CAPACITY = 355.79 CFS @ 4-Ft. DEEP
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TEMPORARY BENCHMARK 1:
SET COTTON PICKER SPINDLE IN 33" DIAMETER PECAN
TREE; LOCATED APPROXIMATELY 870-FT. SOUTH AND
40-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY

TEMPORARY BENCHMARK 2:
SET COTTON PICKER SPINDLE IN 36" DIAMETER PEAR
TREE; LOCATED APPROXIMATELY 1,440-FT SOUTH AND
160-FT. WEST OF THE NORTHEAST CORNER OF
PROPERTY.

FLOOD PLAIN STATEMENT:
ACCORDING TO FEMA F.I.R.M. MAP PANEL NUMBER
48157-C-0120L WITH AN EFFECTIVE DATE OF APRIL 1,
2014, THE MAP INDICATES THIS TRACT TO BE
PARTIALLY WITHIN ZONE "AE", AREAS DETERMINED TO
BE INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE
FLOOD ELEVATION (BFE) OF 85.00'

LEGEND

 PROPOSED STORM SEWER
 PROPOSED SANITARY SEWER

PROPOSED WATER LINE
 EXISTING STORM SEWER
 EXISTING SANITARY SEWER

EXISTING SANITARY SEWER
EXISTING WATER LINE
EXISTING CONTOUR

295	PROPOSED CONTOUR
× 295.00	FINISHED GRADE ELEVATION

PROPOSED DRAINAGE AREA DRAINAGE AREA BOUNDARY

➔ EXISTING FLOW DIRECTION

④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗ ㉘ ㉙ ㉚ ㉛ ㉜ ㉝ ㉞ ㉟ ㊱ ㊲ ㊳ ㊴ ㊵ ㊶ ㊷ ㊸ ㊹ ㊺ ㊻ ㊼ ㊽ ㊾ ㊿

DRAINAGE AREA (ACRES)

	CUMULATIVE AREA (ACRES) CUMULATIVE FLOW (100-YR)
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1

SCALE: 1" = 60'

DPK Engineering LLC

LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Bowser Road
Calgary, Alberta T2C 1P4

Office and Fax: (281) 348-2618
Cell: (281) 300-1880

Firm Registration No. F9323

DATE: May 2017 JOB NO: 017_20_10108	DESIGNED BY: TAA CHECKED BY: JPN
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APPROVED SIGNATURE BY

DAVID P. KELLY & P.E. ON
November 29, 2017

93707
F N 5 10

SUBMITTED BY
 BALUDA & ASSOCIATES, INC.

David M. Baluda

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

DRAINAGE AREA MAP

(PRE-DEVELOPED)

FILE NO:	
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G.F. NO.:	INDEX NUMBER
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SCALE: $1'' = 100'$

4

[illegible]

OF 10

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TEMPORARY BENCHMARK 1:
SET COTTON PICKER SPINDLE IN 3.3" DIAMETER PECAN
TREE, LOCATED APPROXIMATELY 870'-FT. SOUTH AND
40'-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY.
ELEVATION = 82.31' MVD 1988

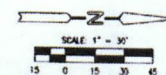
TEMPORARY BELOMBARKS 2:
SET COTTON PICKER SPINDLE IN 36" DIAMETER PECAN
TREE; LOCATED APPROXIMATELY 1,440-FT. SOUTH AND
160-FT. WEST OF THE NORTHEAST CORNER OF
PROPERTY.

ELEVATION = 55.97' NAVD 1988

FLOOD PLAIN STATEMENT:
ACCORDING TO FEMA FIRM MAP PANEL NUMBER
48157-C-0120L WITH AN EFFECTIVE DATE OF APRIL 1,
2014, THE MAP INDICATES THIS TRACT TO BE
PARTIALLY WITHIN ZONE "AE". AREAS DETERMINED TO
BE INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE
FLOOD ELEVATION (BFE) OF 85.00'.

CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF OVERHEAD POWER LINES. CONTACT CENTERPOINT ENERGY AT LEAST 72 HOURS PRIOR TO ANY ACTIVITY WITHIN THE LIMITS OF THE EASEMENT, OR ADJACENT TO THE FACILITY.

CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF BURIED GAS LINES. EXISTING GAS LINES ARE SHOWN AT APPROXIMATE LOCATIONS AND DEPTH BASED ON THE BEST INFORMATION AVAILABLE. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL EXISTING GAS LINES PRIOR TO COMMENCING CONSTRUCTION.



DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Banner Road
Fulshear, Texas 77441
Office and Fax: (281) 346-2616
Cell: (281) 306-1869
Firm Registration No. F9323

DATE: May, 2017
JNO NO. D17-SD-10108

114

AUTHORIZED SIGNATURE
DAVID P. KELLY R. P.E. C
January 7, 2018

SURVEYED BY
KALIZA & ASSOCIATES, INC.

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

DIMENSION CONTROL PLAN

FILE NO.:

GF. NO.:

SCALE: 1" = 1'

SHEET NUMBER

5

26.18

NOTES

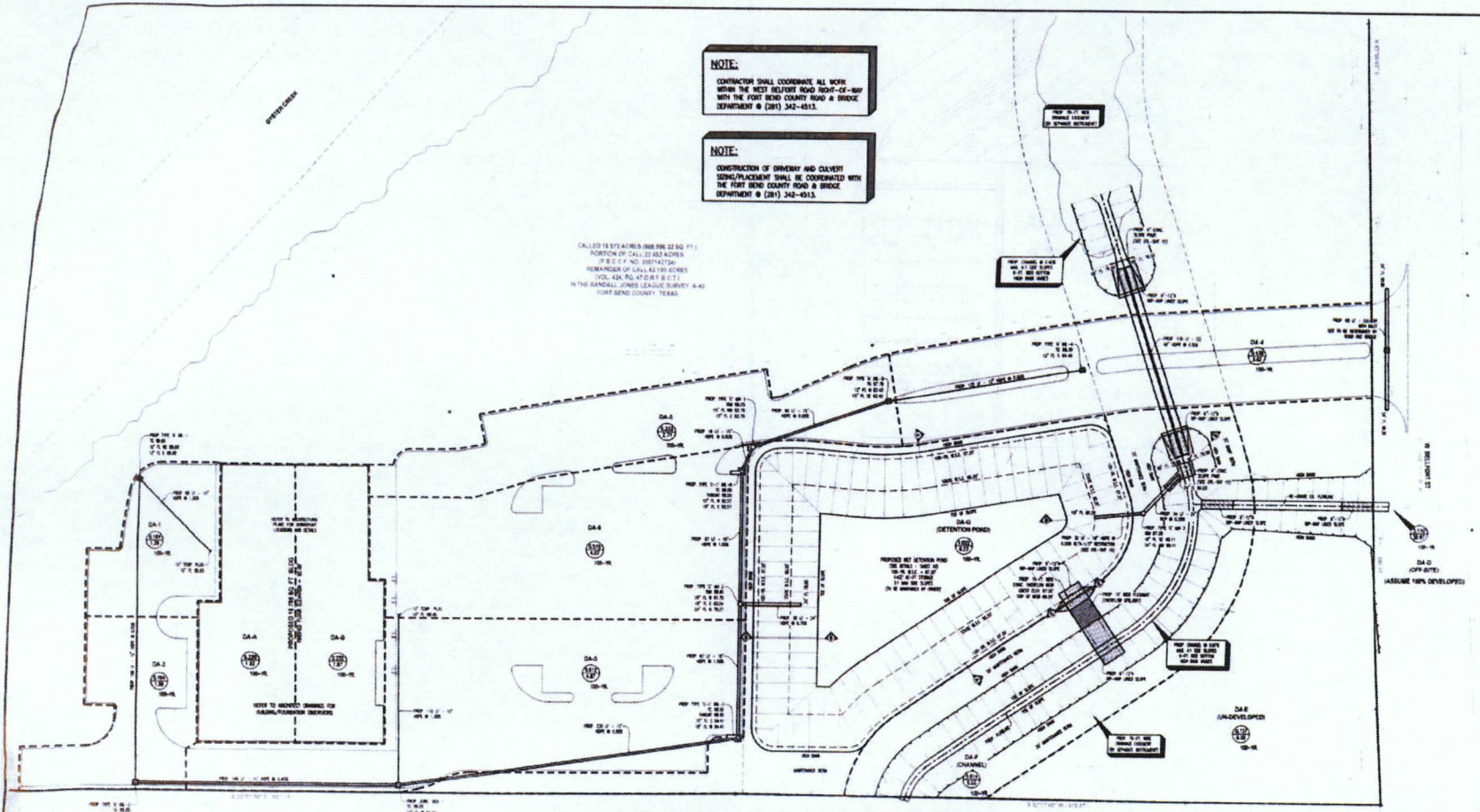
1. BUILDINGS, FENCES, INCLUDING WALLS ON OTHER STRUCTURES SHALL NOT BE ERECTED WITHIN PUBLIC RIGHT-OF-WAY OR VIOLATE EASEMENTS.
2. REFER TO SITE ELECTRICAL PLAN (IF PROVIDED) FOR SITE LIGHTING LOCATIONS.
3. REFER TO ARCHITECTURAL PLANS FOR BUILDING/FOUNDATION INDICATIONS.
4. THE LOCATION OF ALL UTILITIES PRESENTED ON THESE DRAWINGS ARE SHOWN BY AN APPROPRIATE BUT ONLY THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION PRIOR TO COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MUST BE OCCURRED BY HIS FAILURE TO EXPLICITLY LOCATE AND PRESENT THESE UNDERGROUND UTILITIES.
5. THE LOCATION OF ALL UTILITIES PRESENTED ON THESE DRAWINGS ARE SHOWN BY AN APPROPRIATE BUT ONLY THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION PRIOR TO COMMENCING WORK.
6. REFER TO IRRIGATION PLAN (IF PROVIDED) FOR LOCATION OF IRRIGATION SLOTS.
7. PREVENT DRAINAGES AND PAVES ARE TO BE FREE OF CURBS, UNLESS OTHERWISE NOTED.

LEGEND

- | | |
|---|---|
|  | PROPOSED 5" CONCRETE
PAVEMENT W/ 1/2" STABILIZED
SUBGRADE & NO. 4 REBAR
@ 16" O.C. BOTH WAYS |
|  | PROPOSED SIDEWALK |
|  | PROPOSED LANDSCAPE AREA |
|  | PROPOSED MATCH AREA
(4" WHITE PAINTED 45°
STRIPES @ 2'-4" O.C.) |
|  | PROPOSED WHITE PAINTED
HANDICAP SYMBOL, 8" LIGHT
BLUE PAINTED BORDER |

APPROVED: Mary B.
Development Coordinator

DATE: 2/16/11



NOTE:
CONTRACTOR SHALL COORDINATE ALL WORK WITHIN THE WEST RELEASE ROAD RIGHT-OF-WAY WITH THE PORT BEND COUNTY ROAD & BRIDGE DEPARTMENT @ (281) 342-4513.

NOTE:
CONSTRUCTION OF DRAINAGE AND CULVERT SHALL BE COORDINATED WITH THE PORT BEND COUNTY ROAD & BRIDGE DEPARTMENT @ (281) 342-4513.

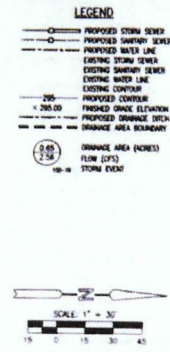
CALL TO 15.875 ACRES (SEE THE 22.80 1:1) PORTION OF CALL TO 22.80 1:1
OF 22.80 1:1 ACRES
REMANDED OF CALL TO 22.80 1:1
VOL. 424, PG. 470 (R.F. & C.T.)
IN THE RANDALL, JONES LEASE SURVEY 3-42
FORT BEND COUNTY, TEXAS

BENCHMARK:
ELEVATIONS ARE DERIVED FROM THE MONUMENT 100 WEST 1740' (ELEVATION AS A 200.00' IN CONCRETE) ON SOUTH BEAST-OF-WAY OF STATE FARM MARKET HIGHWAY AND 72.0' APPROXIMATELY 2,200'-0" WEST OF STATE FARM MARKET HIGHWAY NO. 358.
ELEVATION = 94.54' MVD 1988

TEMPORARY BENCHMARK 1:
SET COTTON PICKER SPHERE IN 3" DIAMETER PEGS. THE, LOCATED APPROXIMATELY 870'-0" SOUTH AND 40'-0" WEST OF THE NORTHEAST CORNER OF PROPERTY.
ELEVATION = 92.11' MVD 1988

TEMPORARY BENCHMARK 2:
SET COTTON PICKER SPHERE IN 3" DIAMETER PEGS. THE, LOCATED APPROXIMATELY 1,440'-0" SOUTH AND 160'-0" WEST OF THE NORTHEAST CORNER OF PROPERTY.
ELEVATION = 88.97' MVD 1988

FLOOD PLAIN STATEMENT:
ACCORDING TO FEMA FIRM MAP PANEL NUMBER 49157-A-0100, WITH AN EFFECTIVE DATE OF APRIL 1, 2014, THE MAP INDICATES THIS TRACT TO BE PARTIALLY WITHIN ZONE "X1" AREAS DETERMINED TO BE IN THE 100-YEAR FLOOD PLAIN WITH A BASE FLOOD ELEVATION (BFE) OF 85.00'



DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3153 Superior Road
Fulshear, Texas 77441
Office and Fax: (281) 344-7416
Cell: (281) 330-1889
Firm Registration No. 73323

DATE: FEB 2017
JOB NO: 17-02-0000

DESIGNED BY: DAVID P. KELLY, P.E.
CHECKED BY: DAVID P. KELLY, P.E.
DATE: FEBRUARY 5, 2019

SIGNED BY: DAVID P. KELLY, P.E.
DATE: FEBRUARY 5, 2019

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

UNDERGROUND STORM SEWER PLAN

FILE NO.		SHEET NUMBER 6 OF 18
S.F. NO.		
SCALE: 1" = 30'		
DATE: 2/6/19		

WARNING-O/H POWER LINE
CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF OVERHEAD POWER LINES. CONTACT ELECTRICAL ENERGY AT LEAST 10 FEET PRIOR TO ANY ACTIVITY WITHIN THE LIMITS OF THE EXPOSURE OR ADJACENT TO THE FACILITY.

WARNING-U/G GAS LINE
CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF BURIED GAS LINES. EXISTING GAS LINES ARE SHOWN BY APPROPRIATE LOCATION AND DEPTH BASED ON THE BEST INFORMATION AVAILABLE. CONTRACTOR SHALL FILL WITH LOCATION OF ALL EXISTING GAS LINES PRIOR TO COMMENCING CONSTRUCTION.

- GENERAL NOTES:**
- BUILDINGS, FENCES, HYDRAULIC WALLS OR OTHER STRUCTURES SHALL NOT BE DETECTED WITHIN PUBLIC RIGHT-OF-WAY OR DRAINAGE ELEVATIONS.
 - PERMITS AND SUB-SURFACE RECOMMENDATIONS ARE FOR REFERENCE ONLY. REFER TO THE SITE GEO-TECHNICAL REPORT TO VERIFY SPECIFICATIONS PRIOR TO CONSTRUCTION.
 - THE LOCATION OF ALL UTILITIES PRESENTED ON THESE DRAWINGS ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION PRIOR TO COMMENCING WORK.
 - REFER TO IRRIGATION PLAN (BY OTHERS) FOR LOCATION OF IRRIGATION SYSTEMS.
 - CONTRACTOR TO COORDINATE WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR CONNECTION AND/OR LOCATION OF ALL DRAIN SYSTEMS, EXISTING PROTECTION TRENCH BLOCKS AND ALL PLUMBING AND SERVICE UTILITIES.
 - DETENTION POND AND DRAINAGE CHANNELS TO BE OWNED & MAINTAINED BY GRACE COMMUNITY FELLOWSHIP CHURCH.

- GRADING & DRAINAGE NOTES:**
- STOP AND REMOVE ALL SURFACE OBSTACLES, TOPSOIL AND UN-SURFABLE MATERIALS FROM ALL BUILDING AND PAVING AREAS. TREE STUMPS INCLUDING THE ROOT SYSTEM SHALL BE REMOVED.
 - PROOF ROLL THE SUB-GRADE TO DETECT ANY WET, SOFT OR PUMPING AREAS. TREAT THESE AREAS WITH SPRING OR STABILIZING AGENTS AS NECESSARY OR REMOVE AND REPLACE THEM WITH DRAINABLE FILL MATERIAL.
 - COMPACT THE SUB-GRADE TO A MINIMUM OF NINETY-FIVE (95) PERCENT OF ITS MAX. DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D 1556).
 - ADDITIONAL FILL MATERIAL WITHIN THE BUILDING AREA SHOULD BE A SILT OR SANDY CLAY HAVING A PLASTICITY INDEX (PI) OF TEN (10) TO TWENTY (20) AND A LIQUID LIMIT OF 25 OR MORE. FILL MATERIALS SHOULD BE PLACED IN 18" (18") TO 24" (24") LIFT AND COMPACTED AT OPTIMUM MOISTURE CONTENT TO NINETY-FIVE (95) PERCENT OF THEIR MAX. DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST.
 - ALL SIDEWALKS AND PARKING AREAS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2% AND MAXIMUM TYP. SLOPE OF 5%. CURB RAMP SHALL HAVE A MAXIMUM SLOPE OF 1:12.
 - CONTRACTOR SHALL PROVIDE FOR A MINIMUM OF 6-INCHES OF CLEARANCE AT ALL SANITARY SEWER AND WATER MAIN CROSSINGS AND 8-INCHES OF MINIMUM CLEARANCE AT ALL SANITARY AND STORM SEWER CROSSINGS.
 - REFER TO ARCHITECTURAL PLANS FOR CHANGES INSIDE THE BUILDING ENVELOPE.
 - PAVING CONTRACTOR TO CONFIRM AND/OR ADJUST ALL EXISTING AND PROPOSED UTILITIES AND APPURTENANCES TO FINISHED GRADE PRIOR TO PLACEMENT OF ANY PAVING.
 - CONTRACTOR TO MATCH EXISTING TOP OF FINISH AND CURB ELEVATIONS.
 - INSTALL STORM DRAINAGE FEATURES AND ESTABLISH POSITIVE DRAINAGE.
 - ALL DRAINAGE FEATURES SHALL HAVE EROSION CONTROL ESTABLISHED UPON COMPLETION. CONTRACTOR TO COORDINATE WITH OWNER ON PROPOSED GRASS TYPE, APPLICATION RATE AND METHOD FOR APPROVAL PRIOR TO COMMENCEMENT.

DATE: FEB 2017
JOB NO: 17-02-0000

DESIGNED BY: DAVID P. KELLY, P.E.
CHECKED BY: DAVID P. KELLY, P.E.
DATE: FEBRUARY 5, 2019

α

ELEVATION = 94.54' NAVD 1983

TEMPORARY BENCHMARK 1

SET COTTON PICKER SPINDLE IN 35" DIAMETER PEAR
TREE; LOCATED APPROXIMATELY 870-FT SOUTH AND
40-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY

ELEVATION = 92.11' NAVD 1988

TIMOTHY BENCHMAN 2

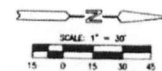
SET COTTON PICKER SPINDLE IN 36" DIAMETER PECAN TREE; LOCATED APPROXIMATELY 1,440-FT. SOUTH AND 180-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY.

(15 JANUARY 1957)

ACCORDING TO FEMA FIRM MAP PANEL NUMBER 48157-C-0120D, WITH AN EFFECTIVE DATE OF APRIL 1, 2014, THE MAP INDICATES THIS TRACT TO BE PARTIALLY WITHIN ZONE "AE", AREAS DETERMINED TO BE INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE FLOOD ELEVATION (BFE) OF 85.00'

LEGEND

-  PROPOSED STORM SEWER
 PROPOSED SANITARY SEWER
 PROPOSED WATER LINE
 EXISTING STORM SEWER
 EXISTING SANITARY SEWER
 EXISTING WATER LINE
 295.00 PROPOSED CONTOUR
 x 295.00 FINISHED GRADE ELEVATION
 PROPOSED DRAINAGE DIRECTION



DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Browner Road
Fulshear, Texas 77441
Office and Fax: (281) 346-2616
Cell: (281) 500-1869
Firm Registration No. F9323

DATE: May, 2017
JOB NO: 017-SB-1010

[illegible]

DAVID P. KELLY R. P.E.

November 29, 2017

PREPARED BY
FALICK & ASSOCIATES, INC.

GRACE.COM

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

SITE UTILITY PLAN

FILE NO.

100

DATE: 1-30

SHEET NUMBER

8

OF 18

WATER & SANITARY SEWER NOTES:

1. INTERFERE SANITARY SEWER WATER LINE NOTES (SHEET 2) OF PROJECT WATER REQUIREMENTS.
2. CONTRACTOR SHALL PROVIDE FOR A MINIMUM OF 6-INCHES OF CLEARANCE AT ALL SANITARY SEWER WATER MAIN CROSSINGS, AND 6-INCHES OF MINIMUM CLEARANCE AT ALL SANITARY AND STORM SEWER INTERSECTIONS.
3. INTERFERE W.E.P. PLAN (OR OTHERS) FOR CONTINUATION OF SANITARY AND WATER UTILITIES BEHIND THE BUILDING.
4. ALL CLEARANCES LOCATED WITHIN CONCRETE PAVEMENT TO BE SHAFED IN.
5. SANITARY SEWER PIPE SHALL HAVE A 6" OR MORE CONTINUOUS METALLIC DETECTABLE WARNING TAPE ATTACHED TO THE PIPE AT 10' MAXIMUM.
6. ALL SANITARY SEWER MAINS SHALL HAVE A MINIMUM OF 2 FEET COVER.
7. PROPOSED WATER PIPE SHALL BE INSTALLED A MINIMUM OF TWO (2) FEET (VERTICAL) DEPTH BELOW WHERE IT CROSSES PROPOSED CONCRETE DRIVE LINE.
8. CONTRACTOR SHALL METAL LIP, FILL SECTION WITH 20% (BY WEIGHT) OF FILL, OR SANITARY SEWER CROSSING.
9. WHEN CROSSING A SANITARY SEWER LINE, THE PROPOSED WATER PIPE SHALL BE ENCASED IN A 30 FOOT LINE, AND 10" COVER SIDEWALK OR P.C. PIPE. THE APPROVED CARRIER PIPE SHALL BE SUPPORTED AT THE JOINTS WITHIN THE SPACES OR SPACED OR PLACED TO THE SURROUNDING WITH INSIDE SHALL THE ENCASEMENT PIPE SHALL BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR UNSATURATED SAND.
10. PONDING INSULATED HOT OR COLD OR INSULATE ALL AROUND GROUND PIPES AND FITTINGS OF REDUCED OR FILL FLOOD PROTECTION IN ACCORDANCE WITH FORT BEND COUNTY REQUIREMENTS.
11. EXISTING WATER AND WATER PIPES SHALL HAVE 6" OF CONTINUOUS METALLIC DETECTABLE WARNING TAPE ATTACHED TO THE PIPE AT 10' MAXIMUM.
12. 10" PVC INSULATED PRESTRESS SHALL BE SUPPORTED ON FOUNDATION SLAB FOUNDATION SLAB SHALL BE 4.000 P.C. CONC. PIPE, REINFORCED WITH NO. 4 REBAR @ 8" MAX. SPAC. TOP AND BOTTOM. PROTECT DETECTABLE FILL (WATER) ROADS BETWEEN ROAD AND COMPACTED SLAB-6".
13. DOUBLE DETECTABLE OVERHEAD INSULATED PRESTRESS SHALL BE LOCATED ABOVE UNDERGROUND WALK. INSULATED PRESTRESS SHEET AND INSULATING SHALL BE MANUFACTURED BY FIRM-USA OF 100% POLYESTER TENSILE STRENGTH APPROVED (LOCAL) ENCLOSEDURE SHALL HAVE

WARNING-O/H POWER LINE

CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF OVERHEAD POWER LINE CONTACT CENTERPOINT ENERGY AT LEAST 72 HOURS PRIOR TO ANY ACTIVITY WITHIN THE LIMITS OF THE EASEMENT, OR ADJACENT TO THE FACILITY

WARNING--U/G GAS LINE

CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF BURIED GAS LINES. EXISTING GAS LINES ARE SHOWN AT APPROXIMATE LOCATIONS AND DEPTH BASED ON THE BEST INFORMATION AVAILABLE. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL EXISTING GAS LINES PRIOR TO COMMENCING CONSTRUCTION.

APPROVED: Maggie D
Development Director
DATE: 2/6/18

[illegible]

MAX ALLOWABLE RELEASE RATE:
0.125 CFS PER ACRE ALLOWED

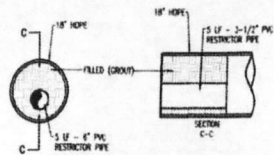
$5.073 \text{ AC} \times 0.125 = 0.634 \text{ CFS ALLOWED}$

RELEASE RATE PROVIDED:
 $0 = 0.614 \text{ CFS (3-1/2" RESTRICTOR)}$

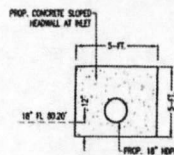
NOTE:
MITIGATION VOLUMES DO NOT
ACCOUNT FOR THE MATERIAL
REMOVED FROM THE DETENTION
POND AREA.

STAGE STORAGE TABLE						
Stage	Elevation	Total		18" RCP @ 0.20%	Overflow	Total
		Storage	Surf	W/ 9'-1 1/2" Retainer		
	(ft)	(cu ft)	(sq ft)	(cu ft)		(cu ft)
0.00	80.20	0.000	0.000	0.000	0.000	0.000
0.50	80.70	10.610	0.123	0.000	0.000	0.123
1.00	81.20	21.210	0.208	0.000	0.000	0.208
2.00	82.20	44.351	0.314	0.000	0.000	0.314
3.00	83.20	69.478	0.393	0.000	0.000	0.393
4.00	84.20	96.959	0.458	0.000	0.000	0.458
5.00	85.20	126.451	0.516	0.000	0.000	0.516
6.00	86.20	157.915	0.567	0.000	0.000	0.567
7.00	87.20	192.844	0.614	0.000	0.000	0.614
7.50	87.70	208.067	0.637	17.64	0.000	18.30
8.00	88.20	227.051	0.658	48.91	0.000	50.61

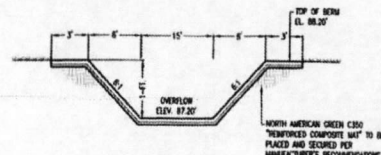
APPROVED: [Signature]
Investment Consultant
DATE: 2/6/18



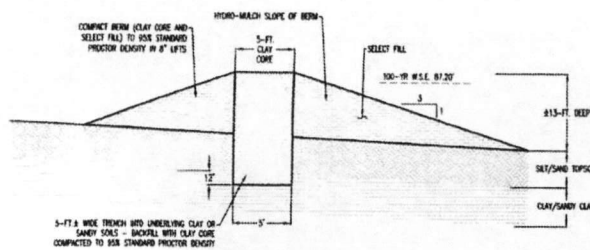
RESTRICTOR PIPE DETAIL
NOT TO SCALE



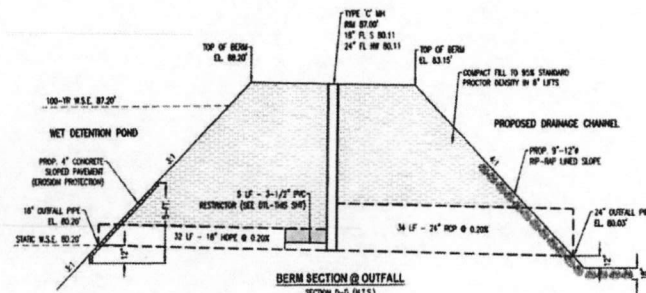
OUTFALL PROTECTION
(N.T.S.)



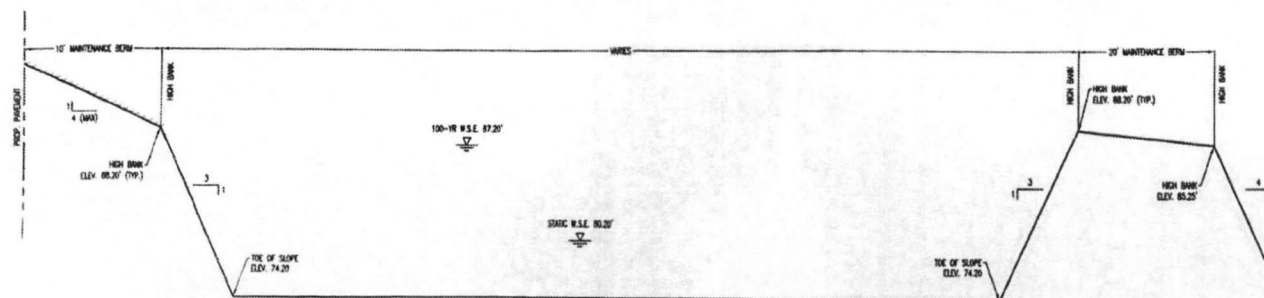
EMERGENCY SPILLWAY
SECTION C-C (N.T.S.)



TYPICAL BERM SECTION
SECTION B-B (N.T.S.)



BERM SECTION @ OUTFALL
SECTION D-D (N.T.S.)



TYPICAL CROSS SECTION
SECTION A-A (N.T.S.)

NOTES:

1. FILL SHALL BE PLACED IN 8-INCH LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY (ASTM D-1556) - UNLESS OTHERWISE SPECIFIED.
2. CONTRACTOR TO INSTALL A 2-FOOT CLAY LINER PLACED AS SHOWN. CLAY MATERIAL TO BE OBTAINED FROM ON-SITE MATERIAL. THE 2-FOOT CLAY LINER SHALL BE CONSTRUCTED IN EIGHT (8) INCH LIFT LAYERS AND SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DENSITY (UNLESS OTHERWISE SPECIFIED) AS DETERMINED BY ASTM D-1556 PROCEDURE. (NOTED AREA INDICATES LAYERS OF CLAY LINER).

BENCHMARKS:
ELEVATIONS ARE DERIVED FROM MONUMENT LUGS
NEAREST THIS DESCRIBED AS A HIGH SET IN CONCRETE
ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET
HIGHWAY NO. 723, APPROXIMATELY 2,200-FT WEST OF
STATE FARM MARKET HIGHWAY NO. 308
ELEVATION = 94.54' NAVD 1988
TEMPORARY BENCHMARK 1:
SET COTTON PICKER SPINDLE IN 3" DIAMETER PINE
TREE, LOCATED APPROXIMATELY 870-FT SOUTH AND
40-FT WEST OF THE NORTHEAST CORNER OF PROPERTY.
ELEVATION = 82.11' NAVD 1988
TEMPORARY BENCHMARK 2:
SET COTTON PICKER SPINDLE IN 3" DIAMETER PINE
TREE, LOCATED APPROXIMATELY 1,440-FT SOUTH AND
160-FT WEST OF THE NORTHEAST CORNER OF
PROPERTY.
ELEVATION = 88.97' NAVD 1988
FLOOD PLAIN STATEMENT:
ACCORDING TO FEMA FIRM MAP PANEL NUMBER
48152-C-01210, WITH AN EFFECTIVE DATE OF APRIL 1,
2014, THE MAP INDICATES THIS TRACT TO BE
PARTIALLY WITHIN ZONE "A", AREAS DETERMINED TO
BE INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE
FLOOD ELEVATION (BFE) OF 85.00'.

DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MINOR
3103 Brewer Road
Falmouth, Texas 77441
Office and Fax: (281) 346-2816
Cell: (281) 300-1889
Firm Registration No. 19523

DATE: May 2017
JOB NO. 17-05-1008

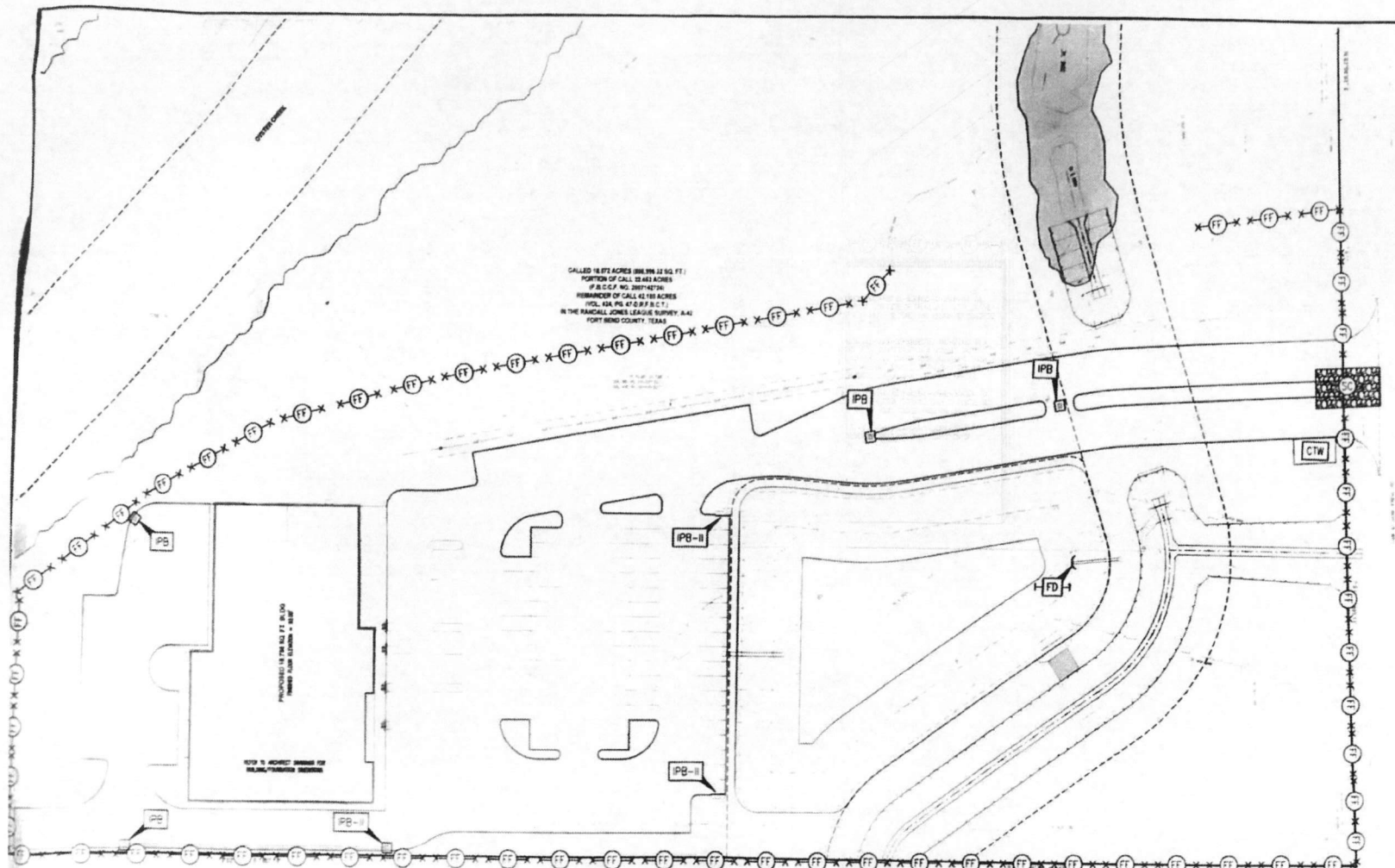
DESIGNED BY: SLA
CHECKED BY: JVA
AUTHORIZED SIGNATURE BY:
CHAD P. KELLY, P.E., C.E.
November 28, 2017
SEAL
SURVEYED BY:
HALL & ASSOCIATES, INC.
David A. Hall

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

TYPICAL SECTIONS

FILE NO.:
SHEET NO.:
SCALE: N.T.S.
SHEET NUMBER
10
OF 18

APPROVED: [Signature]
DATE: 2/1/18

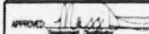


PERMIT & REGULATORY NOTES:

1. THE CONTRACTOR SHALL COMPLETE AND SIGN THE "CONSTRUCTION SITE NOTICE" (ATTACHMENT NO. 2 OF TROCS GENERAL PERMIT FOR 150000).
2. THE CONTRACTOR SHALL POST A SIGNED COPY OF THE "CONSTRUCTION SITE NOTICE" WHERE IT IS READILY AVAILABLE FOR VIEWING BY THE GENERAL PUBLIC AND LOCAL, STATE AND FEDERAL AUTHORITIES PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES AND SHALL MAINTAIN THE NOTICE UNTIL COMPLETION OF THE WORK.
3. THE CONTRACTOR SHALL PROVIDE A COPY OF THE SIGNED "CONSTRUCTION SITE NOTICE" TO THE OPERATOR OF ANY MUNICIPAL STORM SEWER SYSTEMS RECEIVING STORM WATER DRAINAGE FROM THE SITE AT LEAST TWO (2) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

SWPPP CONSTRUCTION NOTES:

1. ALL SEDIMENT AND EROSION CONTROLS ARE SHOWN ON THE STORM WATER POLLUTION PREVENTION PLAN. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE STORM WATER POLLUTION PREVENTION CONTROLS PRIOR TO, AND DURING ALL CONSTRUCTION PHASES.
2. SEDIMENT SHALL BE RETAINED ON-SITE TO THE MAXIMUM EXTENT PRACTICABLE.
3. WHEN DE-WATERING (PUMPING) THE SITE, THE SEDIMENT-LADEN DISCHARGE SHALL BE DETAINED FOR A SUFFICIENT TIME TO ALLOW THE HEAVIEST OF THE SEDIMENT TO SETTLE AND DIRECT DISCHARGE INTO STORM SEWER SHALL NOT BE ALLOWED.
4. IF SEDIMENT ESCAPES FROM THE SITE ACCUMULATION SHALL BE REMOVED TO PREVENT BECOMING A POLLUTANT SOURCE.
5. ALL OFF-SITE MATERIALS STORAGE AREAS AND STOCKPILES OF DIRT USED BY THE CONTRACTOR ARE CONSIDERED PART OF THE PROJECT AND WILL FOLLOW THE SAME CONTROLS TO PREVENT ANY POLLUTION TO THE STORM SEWER SYSTEMS.
6. AFTER PAVING COMPLETION, ALL EXPOSED SOILS SHALL BE ADEQUATELY STABILIZED THROUGH HYDRO-MULCH SEEDING OR EQUIVALENT.
7. CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR SPILL WASH WATER ON THE SITE, UNLESS A PROPERLY DESIGNED AND DESIGNED CONCRETE WASHOUT AREA IS USED.
8. ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A SECURE LEAK-PROOF METAL TANKER FROM A LICENSED WASTE MANAGEMENT COMPANY. ALL CONSTRUCTION DEBRIS AND TRASH FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER AND CONSTRUCTION WASTE MATERIAL SHALL BE REMOVED ON-SITE.
9. CONTRACTOR SHALL CLEAN THE PAVED AREA ADJACENT TO THE STABILIZED CONSTRUCTION DISTANCE DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKS FROM THE SITE.
10. CONTRACTOR TO REMOVE ALL TEMPORARY STORM WATER POLLUTION PREVENTION MEASURES UPON COMPLETION OF CONSTRUCTION.

APPROVED: 
DATE: 2/14/18

NOTES:
ELEVATIONS ARE DERIVED FROM NOS MONUMENT AND RESET 1943 DISCOVERED AS A DWP SET IN CONCRETE ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET HIGHWAY NO. 723, APPROXIMATELY 2,200-FT. WEST OF STATE FARM MARKET HIGHWAY NO. 358.

ELEVATION = 54.54' NAVD 1988

TEMPORARY BENCHMARK 1:
SET COTTON PICKER SPINDLE IN 3" DIAMETER PEAR TREE, LOCATED APPROXIMATELY 870-FT. SOUTH AND 40-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY.

ELEVATION = 52.11' NAVD 1988

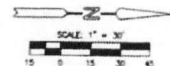
TEMPORARY BENCHMARK 2:
SET COTTON PICKER SPINDLE IN 3" DIAMETER PEAR TREE, LOCATED APPROXIMATELY 1,440-FT. SOUTH AND 180-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY.

ELEVATION = 50.57' NAVD 1988

FLOOD PLAIN STATEMENT:
ACCORDING TO FIRM 1718A MAP PANEL NUMBER 48157-C-0120, WITH AN EFFECTIVE DATE OF APRIL 2014, THE MAP INDICATES THIS TRACT TO BE PARTIALLY WITHIN FLOOD ZONE "X" WHICH IS DETERMINED TO BE IN THE 100-YEAR FLOOD PLAIN WITH A BASE FLOOD ELEVATION (BFE) OF 56.00'.

SWPPP LEGEND

- FF FILTER FABRIC FENCE
- FFB REINFORCED FILTER FABRIC BARRIERS
- SC STABILIZED CONSTRUCTION DISTANCE
- IPB INLET PROTECTION BARRIERS STATE 1 INLETS
- IPB-2 INLET PROTECTION BARRIERS STATE 2 INLETS
- FD FILTER DRAIN
- CTW CONCRETE TRUCK WASHOUT AREA



DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Browner Road
Falmouth, Maine 04101
Office and Fax: (207) 346-2514
Cell: (207) 300-1889
Firm Registration No. 75323

DATE: May 2017
JOB NO. 1717.02.1008

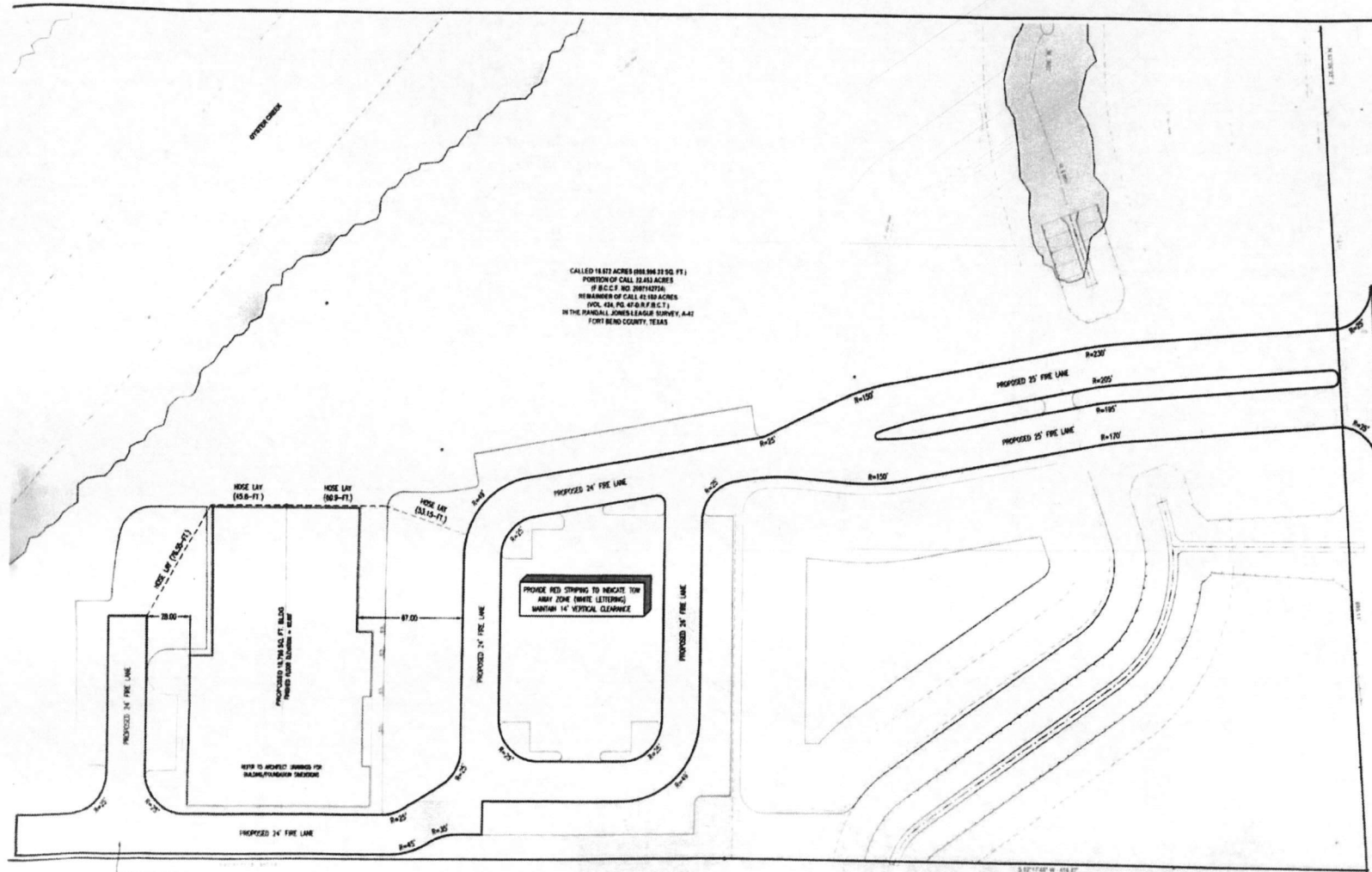
AUTHORIZED SIGNATURE BY:
DAVID P. KELLY, P.E., ON
November 29, 2017

SEAL OF DAVID P. KELLY, P.E.
MAINE PROFESSIONAL ENGINEER
NO. 10423

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

SITE UTILITY PLAN

FILE NO.:
S.F. NO.:
SCALE: 1" = 30'
SHEET NUMBER:
11
OF 18



CALLED 18.87 ACRES (88.86 ± 0.01 AC)
 PORTION OF CALL 12.43 ACRES
 IF BEC'S NO IMPROVEMENTS
 REMAINDER OF CALL 41.82 ACRES
 (VOL. 40A PG. 47 & 48 F.B.C.)
 IN THE PANOLA JONES & LEAGUE SURVEY, A-1
 FORT BEND COUNTY, TEXAS

PROVIDE RED STROPPING TO INDICATE TEN
 FOOT ZONE (WHITE LETTERING)
 MAINTAIN 14' VERTICAL CLEARANCE

FIRE LANE NOTES:

1. FIRE APPROPRIATE ACCESS ROADS SHALL BE MARKED BY PAINTED LINES OF RED TRAFFIC PAINT SIX INCHES (6") IN WIDTH TO SHOW THE BOUNDARIES OF THE LANE. THE WORDS LETTERED "FIRE LANE - NO PARKING - TEN FOOT ZONE" SHALL APPEAR IN FOUR INCH (4") WHITE LETTER AT 25 FEET INTERVALS ON THE RED BORDER MARKINGS ALONG BOTH SIDES OF THE FIRE LANE. WHERE A CURB IS AVAILABLE, THE STROPPING SHALL BE ON THE VERTICAL FACE OF THE CURB.
2. SIGNS SHALL READ "NO PARKING FIRE LANE" OR "FIRE LANE NO PARKING" AND SHALL BE 12" WIDE AND 18" HIGH. SIGNS SHALL BE PAINTED ON A WHITE BACKGROUND WITH LETTERS AND BORDERS IN RED. SIGNS NOT LESS THAN 2" LETTERING. SIGNS SHALL BE PERMANENTLY ATTACHED TO A STATIONARY POST AND THE BOTTOM OF THE SIGN SHALL BE SIX FEET SIX INCHES (6'6") ABOVE FINISHED GRADE. SIGNS SHALL BE SPACED NOT MORE THAN 150 FEET (150') APART. SIGNS MAY BE INSTALLED ON PERMANENT BUILDINGS OR WALLS OR AS APPROVED BY THE MARSHAL.

BENCHMARKS:
 ELEVATIONS ARE DERIVED FROM NAD83 MONUMENT MARK RESET 1963 DESCRIBED AS A DIRM SET IN CONCRETE ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET HIGHWAY NO. 723, APPROXIMATELY 2,250'-FT. WEST OF STATE FARM MARKET HIGHWAY NO. 359.
 ELEVATION = 94.54' NAVD 1988

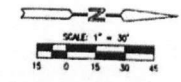
TEMPORARY BENCHMARK 1:
 SET COTTON PICKER SPWIDE IN 33" DIAMETER PEAN TREE, LOCATED APPROXIMATELY 830'-FT. SOUTH AND 40'-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY.
 ELEVATION = 92.11' NAVD 1988

TEMPORARY BENCHMARK 2:
 SET COTTON PICKER SPWIDE IN 34" DIAMETER PEAN TREE, LOCATED APPROXIMATELY 1,440'-FT. SOUTH AND 180'-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY.
 ELEVATION = 88.97' NAVD 1988

FLOOD PLAIN STATEMENT:
 ACCORDING TO FEMA FIRM MAP PANEL NUMBER 48157-C-0128, WITH AN EFFECTIVE DATE OF APRIL 1, 2014, THE MAP INDICATES THIS TRACT TO BE PARTIALLY WITHIN ZONE "AE". AREAS DETERMINED TO BE INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE FLOOD ELEVATION (BFE) OF 85.00'.

LEGEND

- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED WATER LINE
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATER LINE
- EXISTING CONDUIT
- PROPOSED CONDUIT
- 205.50
- PROPOSED GRADE ELEVATION
- PROPOSED DRAINAGE DITCH



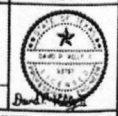
DPK Engineering LLC
 LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
 3103 River Road
 Fairport, Texas 77441
 Office and Fax: (281) 346-2616
 Cell: (281) 300-1880
 Firm Registration No. F9323

DATE: Nov. 2017
 JOB NO.: D17-03-1906

AUTHORIZED SIGNATURE BY:
 DARRYL P. KELLY, P.E.
 November 29, 2017

SIGNED BY:
 KALIA A. HARRISON, INC.

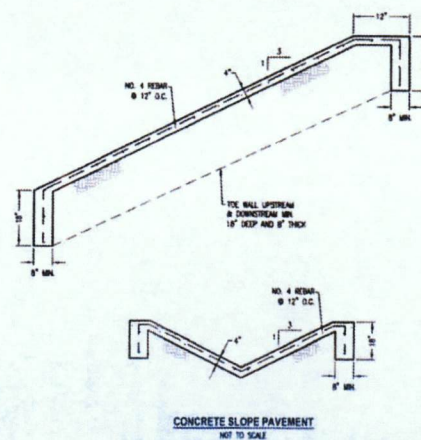
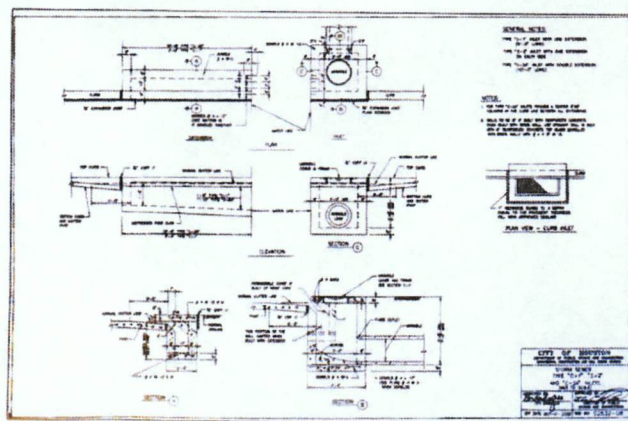
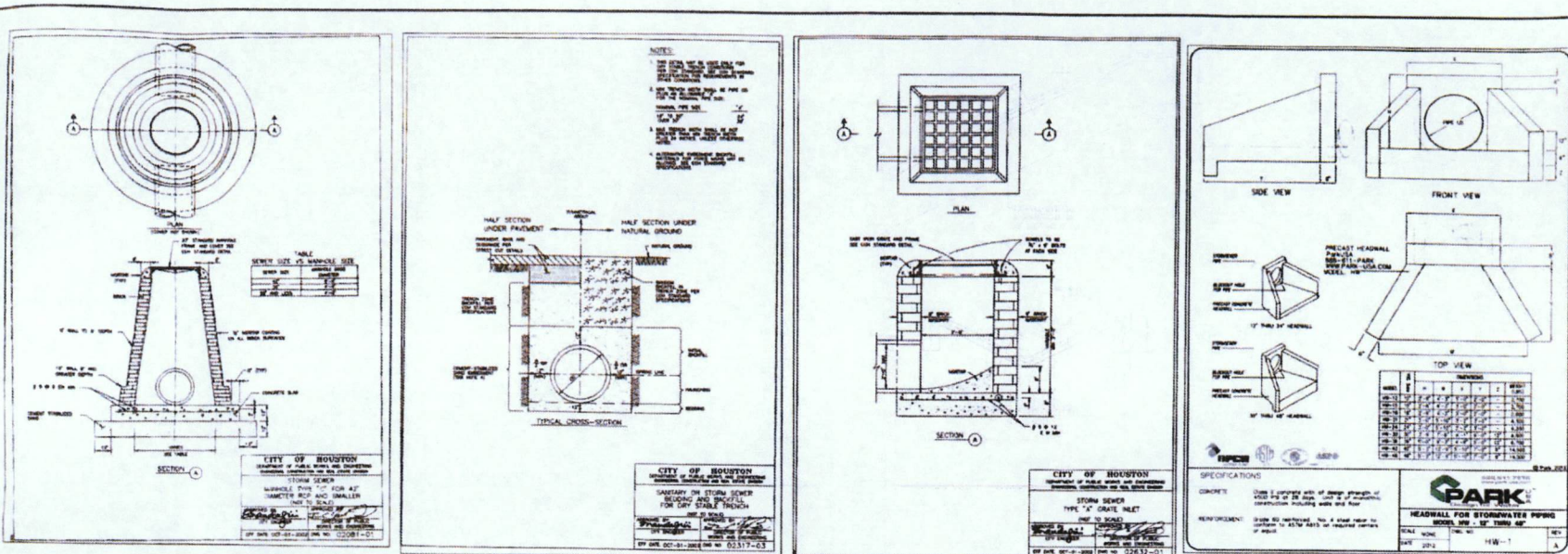
GRACE COMMUNITY FELLOWSHIP
 PROPOSED DEVELOPMENT



FIRE LANE EXHIBIT

FILE NO.	SHEET NUMBER 13 OF 18
D.P. NO.	
SCALE: 1" = 30'	
DATE: 2/16/18	

APPROVED: *[Signature]*
 DATE: 2/16/18



ELEVATIONS: ARE DERIVED FROM NGS MONUMENT (1988) WHICH WAS RECORDED AS A PILE IN 1971 IN CONCRETE ON SOUTH 100'-FT. NORTH OF STATE FARM MOUNTAIN. HIGHEST NET 723, APPROXIMATELY 1,200'-FT. WEST OF STATE FARM MOUNTAIN. HIGHEST NET 304.

ELEVATION = 9454 NAD80 1988

TEMPORARY BENCHMARK 1

DESCRIPTION: 1" DIAMETER SPINDLE IN 33" DIAMETER PILE. THIS LOCATED APPROXIMATELY 40'-FT. SOUTH AND 40'-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY.

ELEVATION = 9211 NAD80 1988

TEMPORARY BENCHMARK 2

DESCRIPTION: SET OPTION PILE SPINDLE IN 33" DIAMETER PILE. THIS LOCATED APPROXIMATELY 1,400'-FT. SOUTH AND 180'-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY.

ELEVATION = 9837 NAD80 1988

FLOOR PLAN STATISTICS:

ACCORDING TO FIRM F104 MP PAVEL NAME, 40137-0137-01, WITH AN EFFECTIVE DATE OF APRIL 1, 1997, THE TOTAL AREA OF THE PROPERTY IS 1.00 AC. THE PROPERTY WAS ZONED "R-1" AND WAS DETERMINED TO BE PARTIALLY WITHIN ZONE "M-1". AREAS DETERMINED TO BE WITHIN ZONE "M-1" ARE 0.00 AC.

FLOOR ELEVATION (NET) OF 85.00'

DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - LANDSCAPE
3103 Brewer Road
Fulshear, Texas 77441
Office and Fax: (281) 346-2616
Cell: (281) 300-1860
Firm Registration No. 79323

DATE: May 2017 JOB NO. 017_NL_10108	DRAWN BY: SL CHECKED BY: DM
--	--------------------------------

AUTHORIZED SIGNATURE BY
DAVID P. KELLY & P.E. ON
November 29, 2017

DAVID P. KELLY & P.E. ON
11/29/17

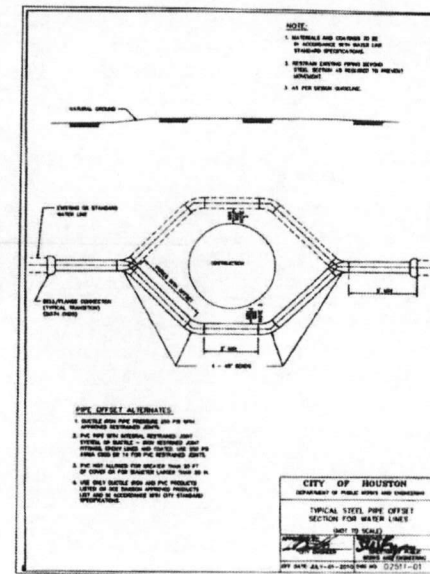
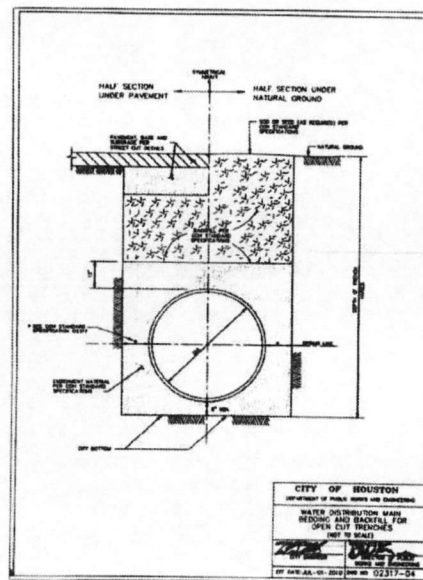
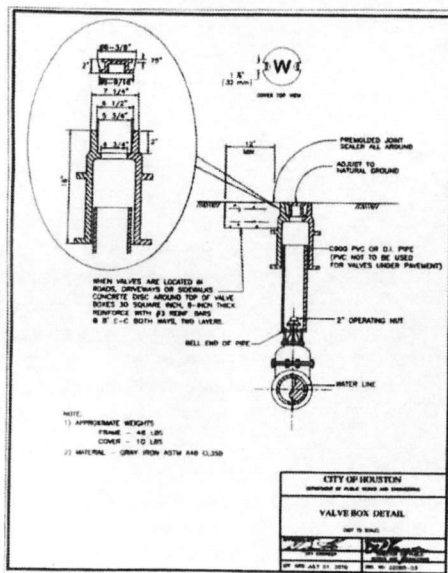
DAVID P. KELLY & P.E. ON
11/29/17

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

STORM SEWER DETAILS

FILE NO.:	SHEET NUMBER 15 OF 18
G.F. NO.:	
SCALE: MTS.	

15



BENCHMARKS:
ELEVATIONS ARE DERIVED FROM NGVD MONUMENT LEON RESEY 1983 DESCRIBED AS A DOW SET IN CONCRETE ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET HIGHWAY NO. 723 APPROXIMATELY 2,200-FT WEST OF STATE FARM MARKET HIGHWAY NO. 330.
ELEVATION = 94.54' NAVD 1983
TEMPORARY BENCHMARK 1:
SET COTTON PICKER SPIKES IN 3.3\"/>

TEMPORARY BENCHMARK 2:
SET COTTON PICKER SPIKES IN 3.3\"/>

ELEVATION = 92.11' NAVD 1983
TEMPORARY BENCHMARK 3:
SET COTTON PICKER SPIKES IN 3.3\"/>

ELEVATION = 88.97' NAVD 1983

FLOOD PLAIN STATEMENTS:
ACCORDING TO FEMA FIRM MAP NUMBER 48157-C-0120L WITH AN EFFECTIVE DATE OF APRIL 1, 2014, THE MAP INDICATES THIS TRACT TO BE PARTIALLY WITHIN ZONE "A1", AREAS DETERMINED TO BE INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE FLOOD ELEVATION (BFE) OF 85.00'.

DPK Engineering LLC LAND DEVELOPMENT - SITE DEVELOPMENT - MAINTENANCE 3103 Breckenridge Road Houston, Texas 77041 Office and Fax: (281) 346-2616 Cell: (281) 346-1889 Firm Registration No. 19123	
DATE: May, 2017 AND REV: 01/28/2018	DESIGNED BY: SA CHECKED BY: JPN
AUTHORIZED SIGNATURE BY DAVID P. KELLY & P.C. ON November 28, 2017	
SIGNED BY: GRACE COMMUNITY FELLOWSHIP PROPOSED DEVELOPMENT	
WATER LINE DETAILS	
FILE NO.: C.F. NO.: SCALE: N.T.S.	SHEET NUMBER 17 OF 18

APPROVED: [Signature]
DATE: 2/14/18

BENCHMARKS:
ELEVATIONS ARE DERIVED FROM NOS MONUMENT LINK RESET 1983 DESCRIBED AS A DISK SET IN CONCRETE ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET HIGHWAY NO. 723, APPROXIMATELY 2,200-FT. WEST OF STATE FARM MARKET HIGHWAY NO. 359.

ELEVATION = 94.54' NAVD 1988

TEMPORARY BENCHMARK 1:

SET COTTON PICKER SPINDLE IN 33" DIAMETER PECAN TREE, LOCATED APPROXIMATELY 170-FT. SOUTH AND 40-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY.

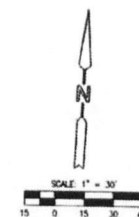
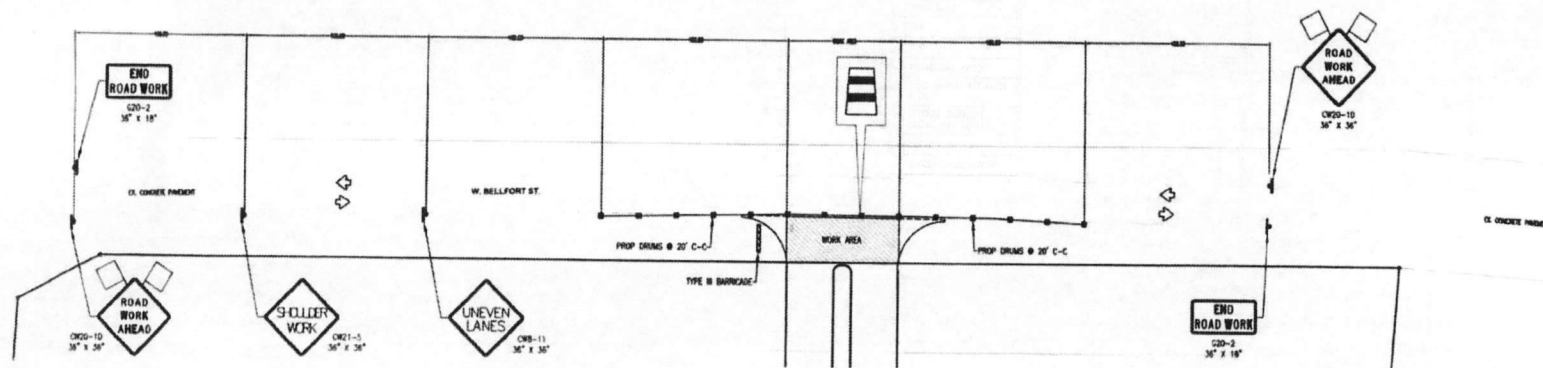
ELEVATION = 92.11' NAVD 1988

TEMPORARY BENCHMARK 2:

SET COTTON PICKER SPINDLE IN 34" DIAMETER PECAN TREE, LOCATED APPROXIMATELY 1,440-FT. SOUTH AND 180-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY.

ELEVATION = 88.97' NAVD 1988

FLOOD PLAIN STATEMENT:
ACCORDING TO FEMA 7.1 R.M. MAP PANEL NUMBER 48153-C-0125, WITH AN EFFECTIVE DATE OF APRIL 1, 2014, THE MAP INDICATES THIS TRACT TO BE PARTIALLY WITHIN ZONE "X", AREAS DETERMINED TO BE INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE FLOOD ELEVATION (BFE) OF 85.00'.



TYPICAL SIGN SPACING, TAPER LENGTHS AND SUGGESTED SPACING OF CHANNELIZATION DEVICES						
POSTED SPEED (MPH)	SIGN SPACING "ft"	MIN. DESIRABLE TAPER LENGTH "ft"			SUGGESTED MAXIMUM SPACING OF DEVICE	
		10' OFFSET	11' OFFSET	12' OFFSET	ON A TAPER	ON A TANGENT
30	120	150'	180'	180'	30	60' - 75'
35	140	200'	250'	240'	35	70' - 90'
40	240	280'	295'	320'	40	90' - 100'
45	320	400'	485'	540'	45	90' - 110'
50	400	500'	550'	600'	50	100' - 125'
55	500	550'	605'	660'	55	110' - 140'

BUFFER LENGTH	
POSTED SPEED (MPH)	LENGTH IN FEET (ft)
20	40
25	60
30	80
35	120
40	150
45	185
50	225
55	295
60	350
65	410
70	475

TCP LEGEND	
	TYPE 3 BARRICADE
	HEAVY WORK VEHICLE
	TRAILER MOUNTED FLASHING ARROW BOARD
	SIGN
	FLAG
	CHANNELIZATION DEVICES
	TRUCK MOUNTED ATTENUATOR (TMA)
	PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
	TRAFFIC FLOW
	FLAGGER (POLICE OFFICER)

TRAFFIC NOTES:

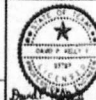
- CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART 14 OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TEXAS MUTCD, MOST RECENT EDITION WITH REVISIONS) DURING CONSTRUCTION.
- NO LINES SHALL BE CLOSED DURING THE HOURS OF 7:00 AM TO 5:00 PM AND 4:00 PM TO 6:30 PM - MONDAY THRU FRIDAY.
- OFF DUTY POLICE OFFICERS/FLAGGERS ARE REQUIRED TO DIRECT TRAFFIC WHEN LINES ARE BLOCKED.
- CONTRACTOR SHALL COVER THE EXCAVATION WITH STEEL PLATES INCHESD PROPERLY DURING NON-WORKING HOURS AND ALLOW NORMAL TRAFFIC FLOW.
- IF CONCRETE IS NOT FEASIBLE, USE THINBED IN 3/4" 17% 34" DELAYATOR OR APPROVED EQUAL WITH SHEETING AND BASE EXPOSED TO PREVENT HOT TO EXCAVATION DURING NON-WORKING HOURS.
- APPROVED COPIES OF "TRAFFIC CONTROL PLANS" SHALL BE AVAILABLE FOR INSPECTION AT JOB SITE AT ALL TIMES.
- IF THE CONTRACTOR CHOOSES TO USE A DIFFERENT METHOD OF "TRAFFIC CONTROL PLANS" DURING THE CONSTRUCTION THAN WHAT IS OUTLINED IN THE CONTRACT DRAWINGS, CONTRACTOR SHALL BE RESPONSIBLE TO PREPARE AND SUBMIT AN ALTERNATE SET OF PLANS TO PLANNING SECTION FOR APPROVAL, TEN WORKING DAYS PRIOR TO IMPLEMENTATION.
- *THESE PLANS SHALL BE DRAWN TO SCALE ON REPRODUCIBLE MYLAR AND SEALED BY A LICENSED ENGINEER IN THE STATE OF TEXAS. PLANS WILL BECOME A PART OF THE CONTRACT DRAWINGS.

DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - SURVEYING
3103 Boyer Road
Fulshear, Texas 77441
Office and Fax: (281) 346-2616
Cell: (281) 300-1809
Firm Registration No. 70323

DATE: May 2017
JOB NO. 1717-01-10108

DESIGNED BY: JLA
CHECKED BY: JLA

AUTHORIZED SIGNATURE BY:
DAVID P. KELLY, P.E.
November 29, 2017



DRAWN BY:
MELISSA A. REEDER, INC.

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

TRAFFIC CONTROL PLAN

FILE NO.:
S.F. NO.:
SCALE: 1" = 30'

SHEET NUMBER

18

OF 18

APPROVED:
DATE: 2/6/18