

"A PERMIT MUST BE OBTAINED PRIOR TO ANY WORK WITHIN THE FORT BEND COUNTY DRAINAGE DISTRICT RIGHT-OF-WAY. CONTACT THE FORT BEND COUNTY ENGINEERING DEPARTMENT, 281-633-7500"

(D.C.L) N 85°40'00" E 317.77'

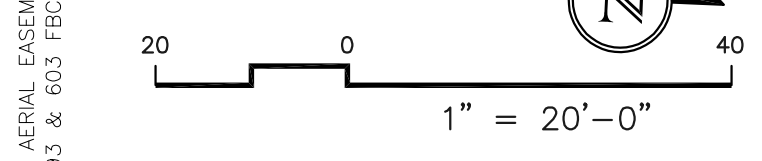
CALLED 1.6845 ACRES
LOT 8, BLOCK 6
FORT BEND M.U.D. NO. 50
FBCCF NO. 2008102639

VACANT

1/2" CAPPED IRON ROD SET (PRECISION)

NORTH PARK DRIVE
(60' R.O.W. - VOL. 1071, PG. 730 FBCDR)

DELLAIRE BOULEVARD
(120' R.O.W.)



FORT BEND COUNTY DRAINAGE DISTRICT VOL. 1929, PG. 2198 FBCDR

INLET ELEV.=98.64
SW, 18" GALV. PIPE;
F.L.=94.34

PROPOSED EXTREME EVENT OVERFLOW SPILLWAY STRUCTURE REF. TO C.002 FOR DETAIL

END OF THE PIPE TO BE MATCHED WITH THE DITCH SIDE SLOPE. REF. TO C.005 FOR STABILIZATION AND CONNECTION DETAILS

KEYNOTES

- 1. PROVIDE 24" FLAP GATE AT THE DOWNSTREAM POINT OF 24" PIPE INSIDE THE INLET TO PREVENT WATER BACKFLOW DISCHARGE TO THE ADJACENT PROPERTIES FROM INLET#1 IN TIME OF OVERFLOW. REF. TO C.003 FOR DETAIL AND SPECIFICATION
- 2. PROVIDE STUBOUT FOR FUTURE CONNECTION
- 3. KEEP THESE AREAS PERVIOUS (GRASS AREA) TO PRESERVE THE NATURAL DRAIN TO AVOID INCREASING RUNOFF TO THE ADJACENT PROPERTY.

STORM SEWER SYSTEM NOTES (THESE NOTES CONTROL EXCEPT AS NOTED OTHERWISE IN PLANS AND/OR DETAILS)

1. ALL MANHOLES ARE TO BE CONSTRUCTED TO ALLOW FOR A MINIMUM OF 1 FOOT OF VERTICAL ADJUSTMENT.
2. FOR PRIVATE DEVELOPMENT WITH INTERNAL SITE DRAINAGE, ONLY ONE CONNECTION IS PERMITTED TO ANY ONE INLET, AND THAT CONNECTION (LEAD) SHALL BE MADE TO THE BACK OF THE INLET. CONNECTION SHALL NOT BE MADE TO THE FRONT FACE AND TO THE SHORT SIDES OF THE INLET UNLESS APPROVED BY THE ENGINEER/ CITY/ COUNTY.
3. FOR NEW CONNECTIONS TO CURBSIDE INLETS, EXISTING B INLETS SHALL BE ENLARGED TO BB INLETS. B INLETS ARE NOT ALLOWED.
4. ALL PROPOSED PIPE STUB-OUTS FROM MANHOLES OR INLETS ARE TO BE PLUGGED WITH 8" THICK BRICK WALLS UNLESS OTHERWISE NOTED.
5. DO NOT USE "BEEHIVE" GRATE INLETS OR OTHER "SPECIALTY" INLETS.
6. DO NOT USE UNPROTECTED GRATE-TOP INLETS IN UNLINED ROADSIDE DITCH.
7. INLETS INCLUDE ALL DEPTHS AND SHALL BE CONSTRUCTED IN TWO (2) PHASES.
8. PIPE CULVERTS SHALL CONFORM TO ASTM SPECIFICATION C-76, CLASS III, FOR R.P.C. U.N.O.
9. STORM WATER DISCHARGING FROM A DITCH INTO A STORM SEWER SYSTEM MUST BE INTERCEPTED BY USE OF AN APPROPRIATE STRUCTURE (I.E., STUBS WITH RING GRATES OR TYPE "E" MANHOLES).
10. A MINIMUM DISTANCE OF TWO FEET (2') SHALL BE ESTABLISHED AND MAINTAINED BETWEEN THE RIGHT-OF-WAY LINE AND THE ADJACENT EDGE OF THE BANK OF A DITCH.
11. MATCH CROWNS OF PIPE AT ANY SIZE CHANGE UNLESS SEVERE DEPTH CONSTRAINTS PROHIBIT.
12. CONDUITS SHALL CONNECT TO MANHOLES AND INLETS PREFERABLY ON A STRAIGHT ALIGNMENT, HOWEVER ANGLED CONNECTIONS NO GREATER THAN 10 DEGREES NORMAL TO THE WALL WILL BE PROVIDED.
13. MINIMUM VERTICAL CLEARANCE BETWEEN ANY STORM PIPE OR BOX AND OTHER CROSSING PUBLIC OR

14. ALL STORM SEWERS UNDER OR WITHIN THREE (3) FT. OF PROPOSED OR FUTURE PAVEMENTS SHALL BE BACKFILLED WITH NO LESS THAN 1-1/2 SACKS OF CEMENT PER TON OF CEMENT STABILIZED SAND TO WITHIN ONE (1) FT. OF SUBGRADE.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, MAINTAINING, AND RESTORING ANY BACKSLOPE DRAINAGE SYSTEMS DISTURBED AS A RESULT OF HIS WORK.
16. ALL DITCHES SHALL BE REGRADED TO PROPOSED ELEVATIONS TO INSURE PROPER DRAINAGE. ALL OUTFALLS SHALL BE PROPERLY BACKFILLED AND COMPACTED AND ALL DISTURBED AREAS SHALL BE REGRADED, SEEDED, AND FERTILIZED WITHIN 10 WORKING DAYS OF EACH OCCURRENCE.
17. THE CONTRACTOR SHALL RESTORE ALL DRAINAGE EASEMENT AREAS DISTURBED AS A RESULT OF HIS WORK.
18. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THE SATISFACTION OF THE OWNING AUTHORITY.
19. ALL CONSTRUCTION STORM RUNOFF SHALL COMPLY WITH THE FINAL DRAFT OF STORMWATER MANAGEMENT REGULATIONS PREPARED BY OWNING AUTHORITY, ALL IN COMPLIANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS.
20. ALL DRAINAGE FACILITIES SHALL BE INSPECTED VISUALLY TO VERIFY ACCURACY OF ALIGNMENT AND FREEDOM FROM DEBRIS AND OBSTRUCTION.

PIPE MATERIAL

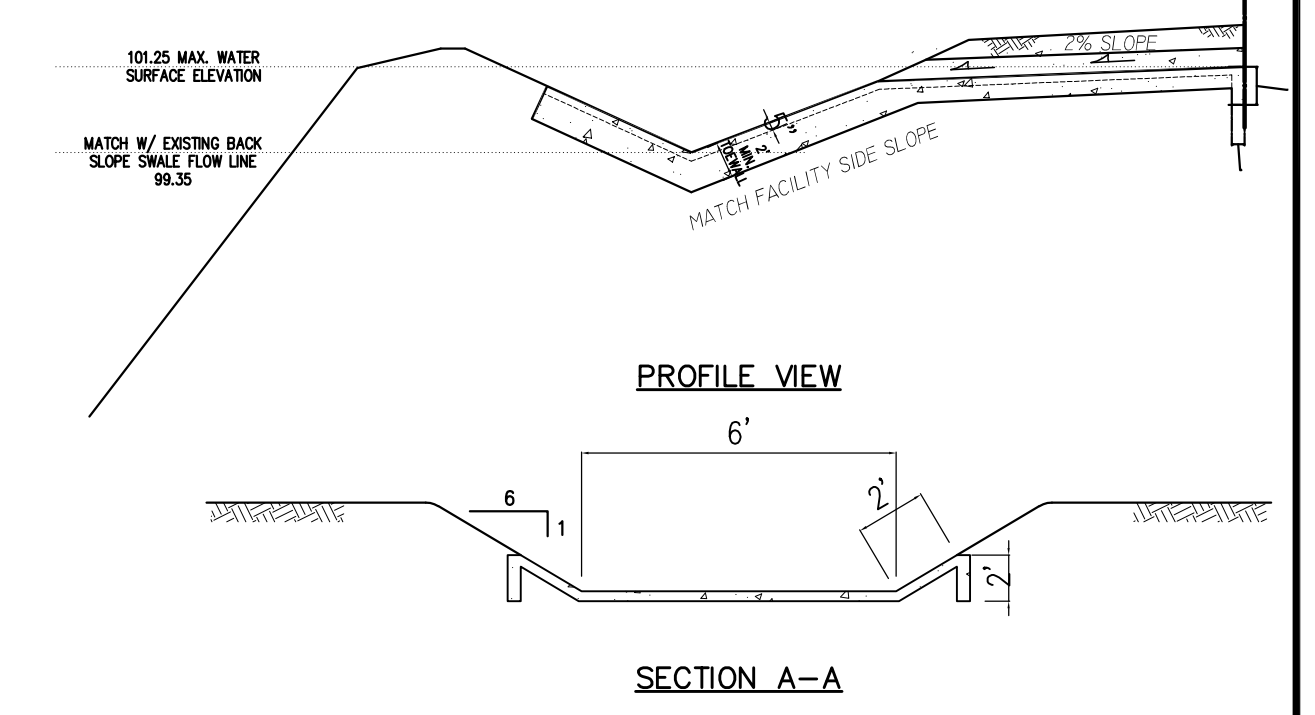
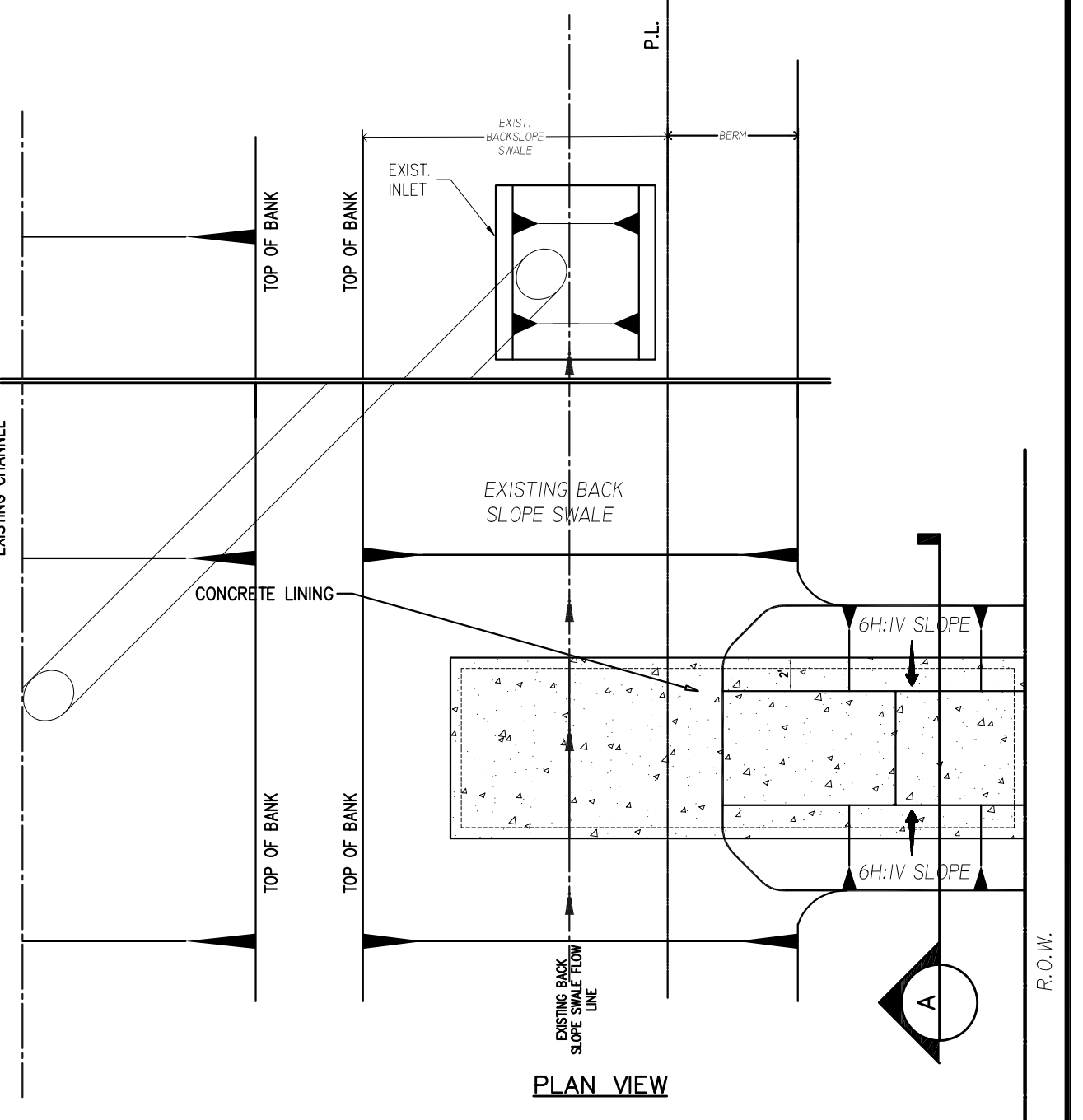
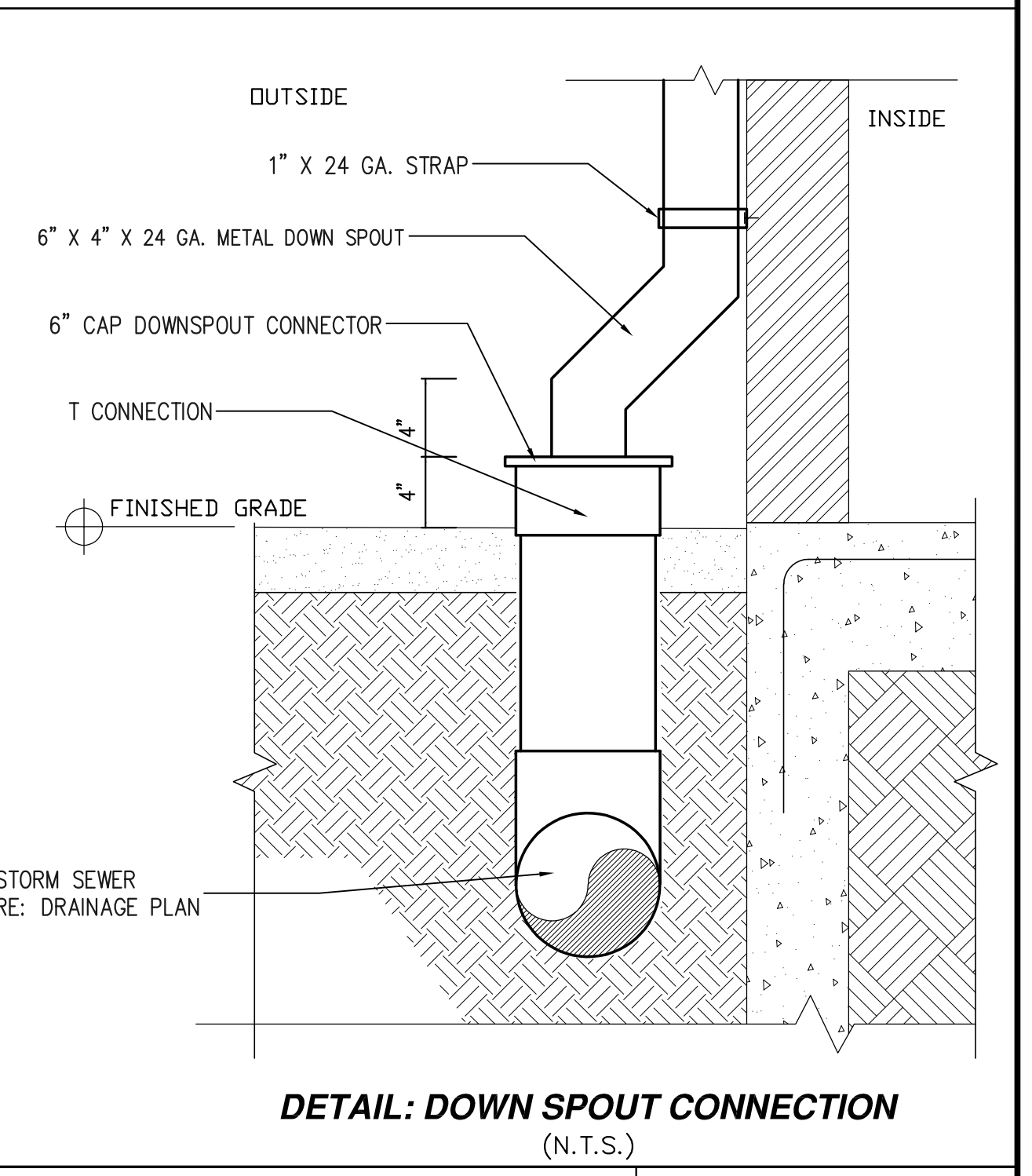
- PRIVATE STORM SEWER MAY BE SELECTED PER FOLLOWING CRITERIA:
- A. CORRUGATED HIGH-DENSITY POLYETHYLENE (HDPE) (4 INCHES TO 48 INCHES IN DIAMETER): AASHTO M 294, DUAL WALL WITH WATER TIGHT (ASTM D3212) BELL-TO-BELL COUPLER, TRADE NAME N-12 BY ADS OR EQUAL.
 - B. POLYVINYL CHLORIDE (PVC) CORRUGATED PIPE WITH SMOOTH INTERIOR PER ASTM F 949 (4 INCHES TO 36 INCHES) WITH ELASTOMETRIC GASKET JOINTS. TRADE NAME A-2000 BY CONTECH OR EQUAL.
 - C. STEEL REINFORCED HIGH-DENSITY POLYETHYLENE (HDPE) (24 INCHES TO 48 INCHES IN DIAMETER); AASHTO M 294, HIGH PERFORMANCE JOINTS (ASTM D3212), TRADE NAME DUROMAXX OR EQUAL.
 - D. REINFORCED CONCRETE PIPE (RCP): ASTM C76, CLASS III WITH O-RING JOINTS PER ASTM C-443
- C. THE RESTRICTOR SHALL BE PVC OR OTHER MATERIAL ACCEPTABLE TO THE CITY / COUNTY.

MANHOLES / INLETS / CATCH BASINS

ALL PRECAST MANHOLES AND INLETS BOXES MUST CONFORM TO ASTM C 913. CORED OR BLOCKED OUT PIPE OPENINGS MUST BE DESIGNED TO CLOSELY FIT THE OUTSIDE DIAMETER OF THE PROPOSED TIE IN. PRECAST MANHOLES WITH THIN-WALL KNOCKOUTS TO ACCOMMODATE A RANGE OF PIPE SIZES WILL NOT BE ALLOWED IN THE RIGHT-OF-WAY.

APPROVED: _____
Development Coordinator

DATE: _____



EXTREME EVENT OVERFLOW CONCRETE-LINED SWALE

HOUTEX Engineering, LLC
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Houston, Texas 77024
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Phone: (713) 973-1400 Fax: (281) 888-9001
Civil Engineering and Consultant

FIRM NAME: HOUTEX ENGINEERING
FIRM REGISTRATION NUMBER: F-12522

STATE OF TEXAS
PROFESSIONAL ENGINEERING
67635
REGISTERED PROFESSIONAL ENGINEER
9/5/2018

#	DATE	REVISION
1	6/26/2018	Revised for MUD Comments
2	7/05/2018	Revised for LID 12 Comments
3	8/16/2018	Revised for FBC Eng. & Drainage District comments
4	9/5/2018	Revised for Drainage District comments

PROP. OFFICE WAREHOUSE
NORTH PARK
WAREHOUSE (PHASE 1)
7123 NORTH PARK DRIVE
HOUSTON, TX 77407

DRAINAGE PLAN

SCALE: 1"=20'

CONTROL: _____

DRAWN BY: SCBP 15-May-18

RVSD BY: SLP 5-Sep-18

CHK'D BY: SLP APRV'D BY: ZM

PROJECT NO. HT1713901

C.002
SHEET 5 OF 9

9/5/2018 5:40 PM Houtex, Inc. 18 13070417-1713901 - Houtex - 1713901.dwg - 1713901.dwg