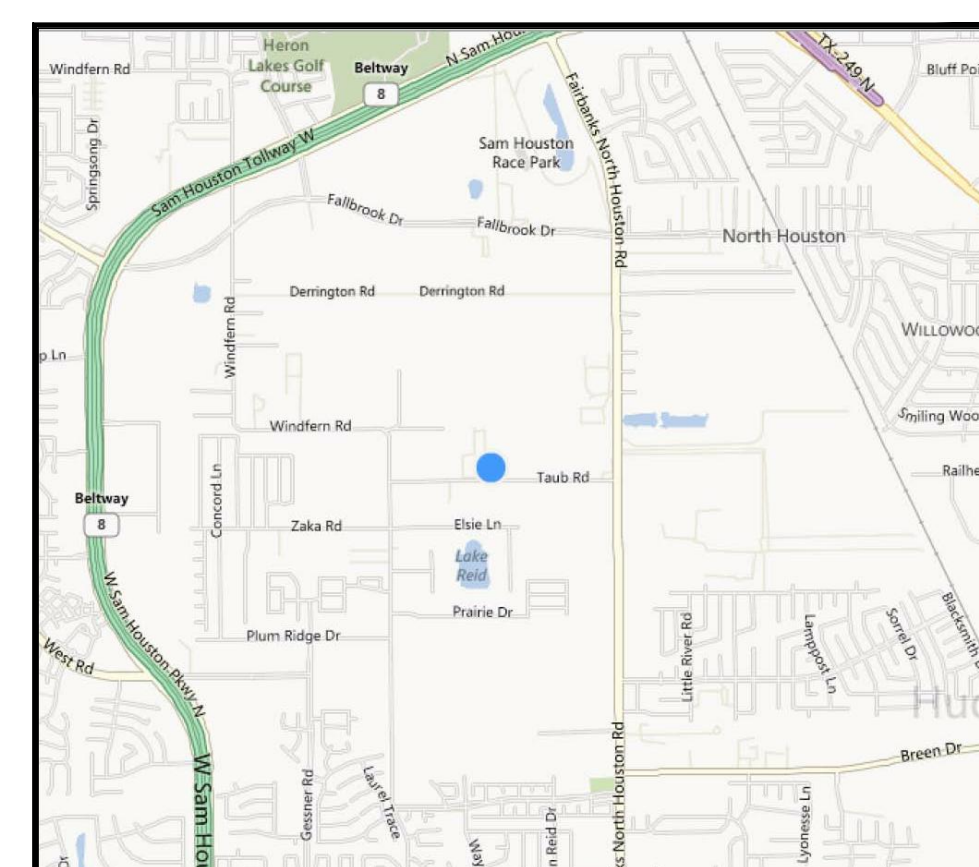
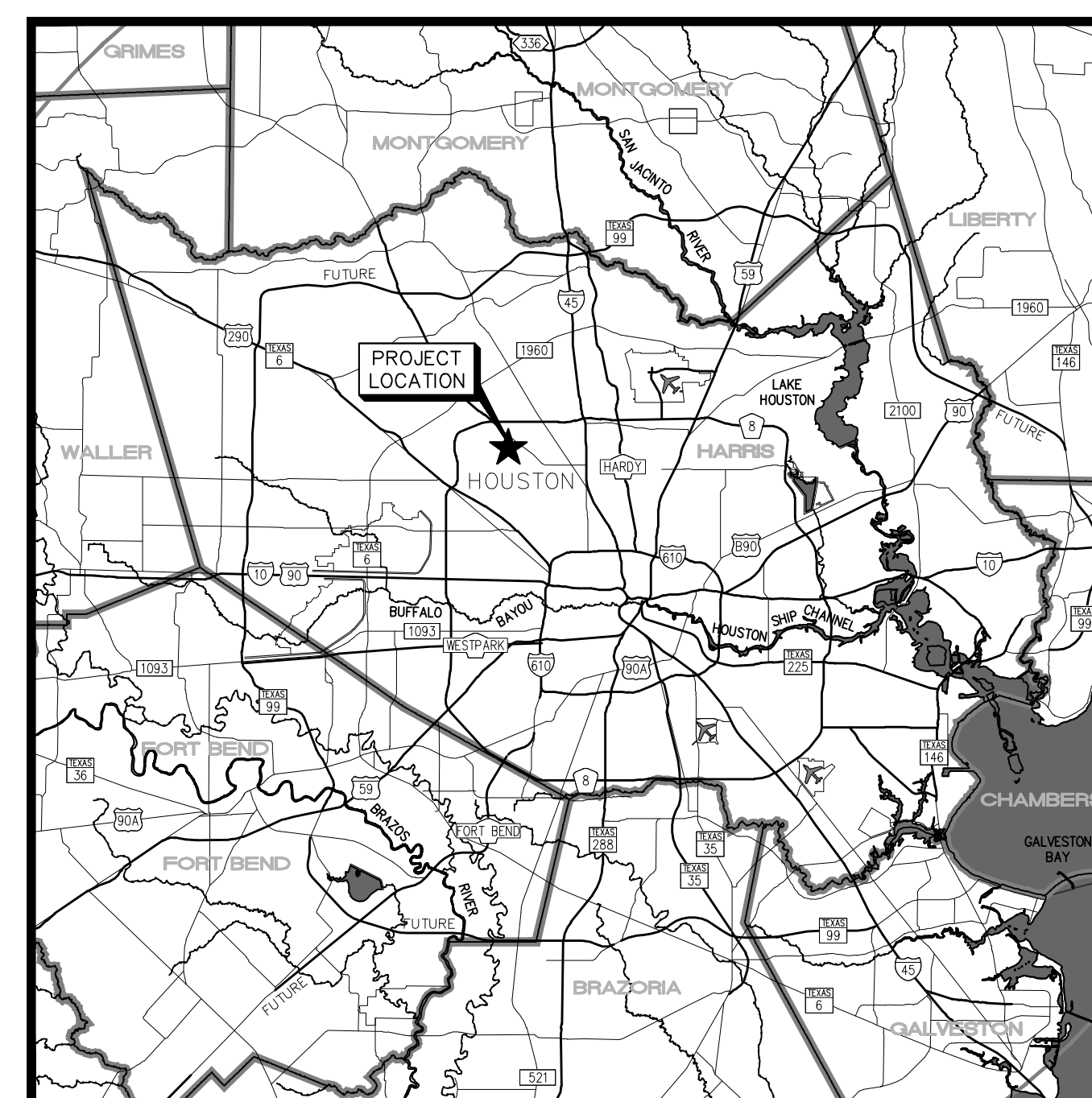


SITE DEVELOPMENT PLANS  
 FOR  
***RC PRECISION, INC.***

8904 TAUB RD  
 HOUSTON, TX  
 APR 2013



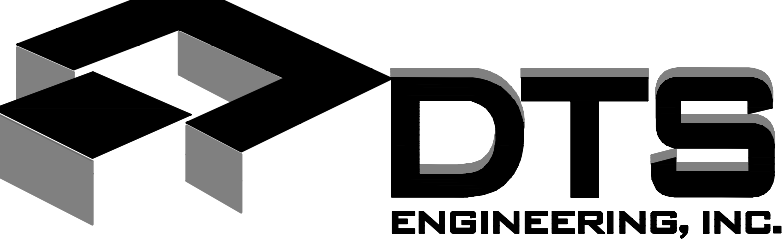
VICINITY MAP  
 HARRIS COUNTY KEY MAP: 4108  
 ZIP CODE: 77042



LOCATION MAP



**SHEET INDEX**

- C-1 COVER SHEET
- C-2 CONSTRUCTION NOTES
- C-3 SITE PLAN
- C-4 UTILITY PLAN
- C-5 GRADING, DRAINAGE & PAVING PLAN
- C-6 STORM WATER POLLUTION PREVENTION PLAN
- C-7 LANDSCAPE PLAN
- C-8 TRAFFIC CONTROL PLAN
- C-9 CONSTRUCTION DETAILS
- C-10 HARRIS COUNTY EXPRESS REVIEW SHEET
- S-1 TOPOGRAPHIC SURVEY



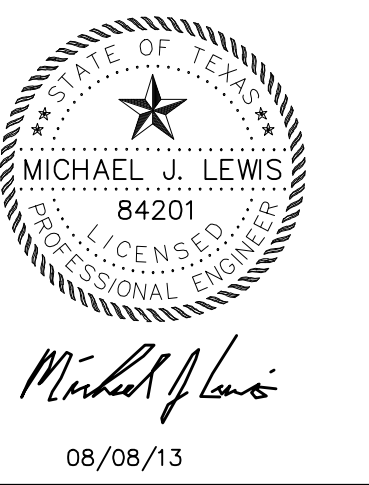
**DTS**  
ENGINEERING, INC.

7 GROGAN'S PARK DR. SUITE 11.  
 THE WOODLANDS, TX 77380  
 PHONE (281) 298-8877 FAX (281) 298-9856  
 TYPE REG. No. 17539

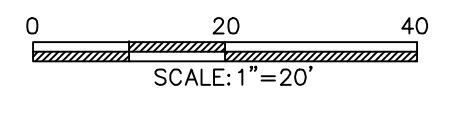
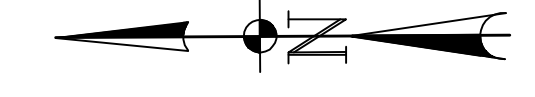
	DMD BY: _____ M.J. DWR BY: _____ M.J. DATE: 04/17/13 PRJ No: 13134 SHEET No:
 04/17/2013	C-1







08/08/13



**KEY NOTES**

- 1 PROP FACILITY, 1-STORY, 7,000 SF
- 2 PROP 10'X20' ENTRY
- 3 PROP 37'X20' CAR PORT W/ REINFORCED CONCRETE PAVEMENT
- 4 PROP 70'X24' CAR PORT W/ REINFORCED CONCRETE PAVEMENT
- 5 PROP 8" CRUSHED CONCRETE/AGGREGATE SURFACE
- 6 PROP 6" CONCRETE PAVEMENT
- 7 PROP 2" ASPHALT COMMERCIAL DRIVEWAY
- 8 PROP 4" REINFORCED CONCRETE SIDEWALK, MAX CROSS SLOPE 1:20
- 9 PROP 4" CONCRETE LANDING, 5'X5', MAX CROSS SLOPE 1:20
- 10 PROP REINFORCED CONCRETE PARKING BLOCK (7'-6"X10"X6" MIN) FINISH TO PAVEMENT
- 11 PROP 4" PAVEMENT STRIPPING, WHITE
- 12 PROP 4" PAVEMENT STRIPPING CROSS HATCH, WHITE @ 45' 4" OC
- 13 PROP VAN ACCESSIBLE HANDICAPPED PARKING W/ SYMBOL, WHITE, SIGN (R7-8, 12"X18") AND PANEL (6"X12"), WALL MOUNTED 5' ABOVE FINISHED SURFACE
- 14 PROP FIRE LANE, SIGN (12"X18"), POST OR WALL MOUNTED 5' ABOVE FINISHED SURFACE, MAX SPACING 75'
- 15 PROP DETENTION, DRAINAGE & FIRE FIGHTING WATER STORAGE SWALE
- 16 PROP FIRE FIGHTING WATER STORAGE, APP. 36,890 GAL
- 17 PROP DRY HYDRANT W/ BOLLARDS
- 18 PROP DRY HYDRANT SIGN (12"X18"), MOUNTED 5' ABOVE FINISHED SURFACE
- 19 PROP RELOCATION OF EXIST MAIL BOX
- 20 EXIST SHED TO REMAIN

**NOTES**

- 1. ALL DIMENSIONS MEASURED FROM FACE OF CURB OR EDGE OF PAVEMENT.
- 2. STRUCTURE PARALLEL TO SOUTH PROPERTY LINE.
- 3. PROJECT SITUATED ON 1.8926 AC TRACT BEING WEST PORTION OF SOUTH 1/2 OF LOT 30, NORTH HOUSTON GARDENS No. 2.

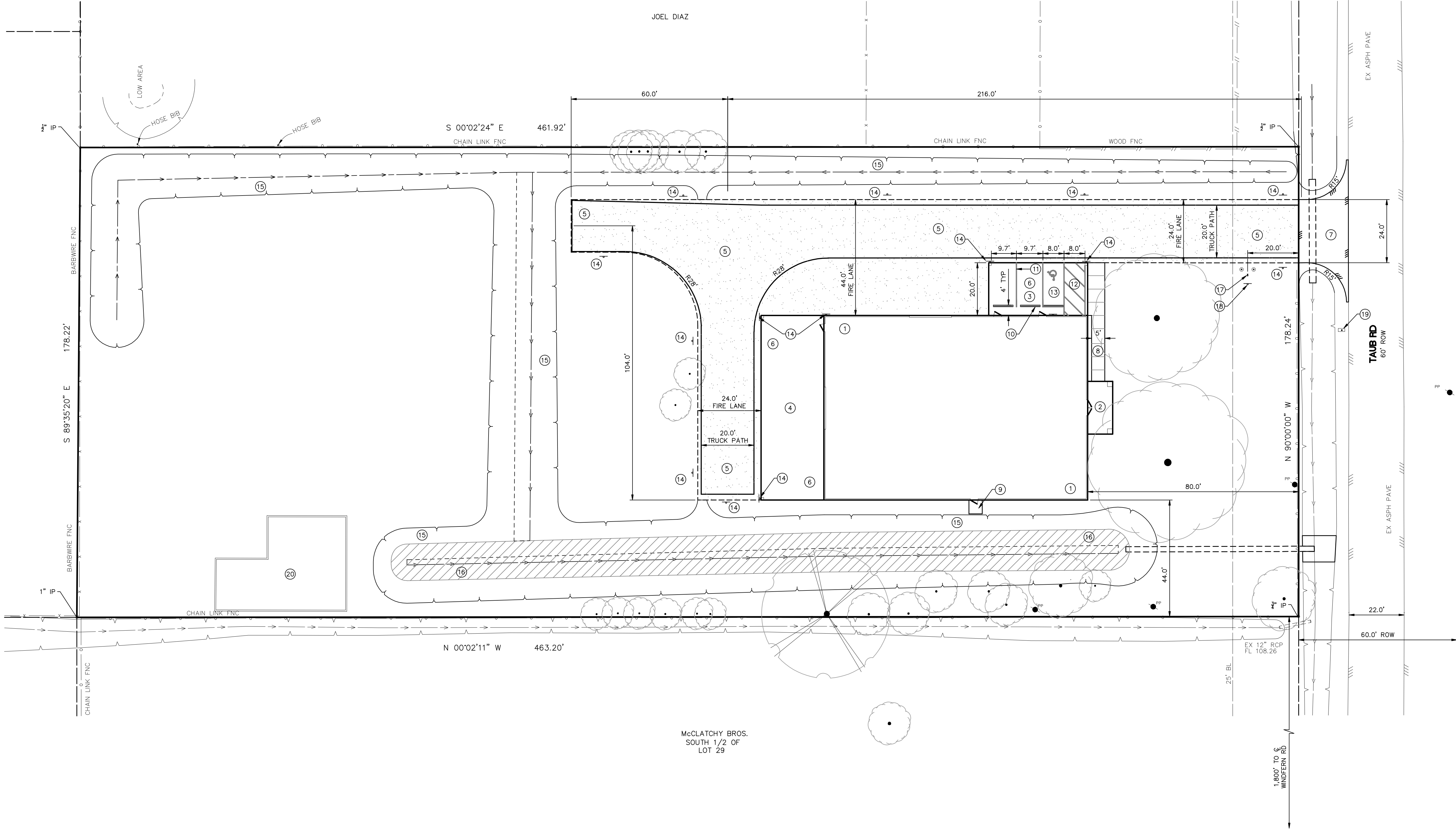
TEXAS LAND & CATTLE  
NORTH 1/2 OF  
LOT 31

NORTH 1/2 OF  
LOT 30

McCLATCHY BROS.  
NORTH 1/2 OF  
LOT 29

JOEL DIAZ

McCLATCHY BROS.  
SOUTH 1/2 OF  
LOT 28



**DTS**  
ENGINEERING, INC.

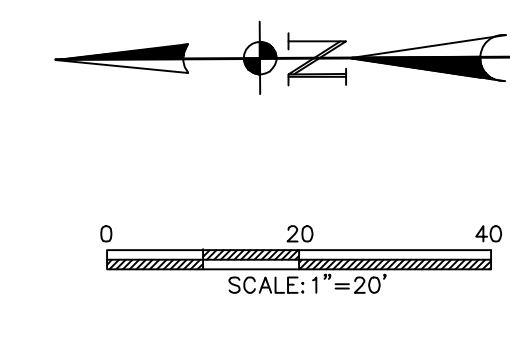
7 GORGANS PARK DR. SUITE 11, THE WOODLANDS, TX 77380  
HOUSTON, TX (281) 250-9858  
TX REG. NO. 27259

**RC PRECISION, INC**  
**8904 TAUB RD**  
**HOUSTON, TX**

**SITE PLAN**

REV	DATE	DESCRIPTION
1	08/08/13	ISSUANCE FOR EXIST SHED TO REMAIN

CHKD BY:	MAJ
DWN BY:	MAJ
DATE:	04/17/13
PRJ No:	13114
SHEET No:	C-3

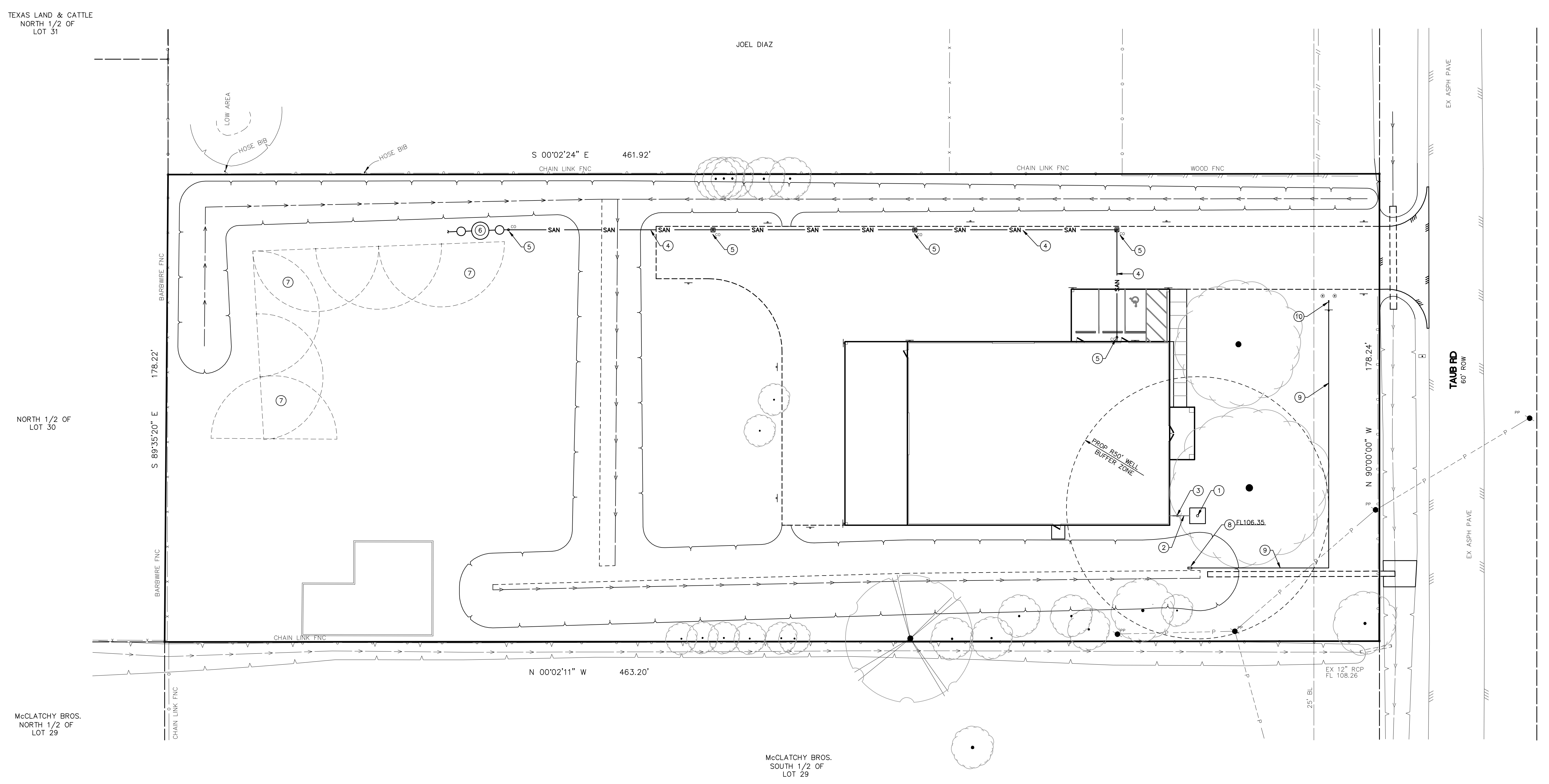


**KEY NOTES**

- ① PROP. WATER WELL, DESIGNED BY OTHERS
- ② PROP. WATER SERVICE, 1" PVC, SCH 40
- ③ PROP. 1" BACKFLOW PREVENTOR
- ④ PROP. 4" PVC, SCH 40, SANITARY SEWER LINE, MIN SLOPE 1.5%
- ⑤ PROP. CLEAN OUT
- ⑥ PROP. ON SITE SEWAGE FACILITY TANK AREA, DESIGN & PERMITTED BY OTHERS
- ⑦ PROP. EFFLUENT DISPOSAL SPRAY FIELD, DESIGN & PERMITTED BY OTHERS
- ⑧ PROP. 6" DIA, 18" STEEL INTAKE SCREEN
- ⑨ PROP. 153LF 8" PVC, SCH 40 FIRE LINE
- ⑩ PROP. DRY HYDRANT W/ 8" CALV STEEL PIPE RISER

**NOTES**

- 1. CONTRACTOR HAS SOLE RESPONSIBILITY FOR FIELD VERIFICATION OF ALL EXISTING UTILITIES. CONTRACTOR SHALL UNCOVER EXISTING UTILITIES AT ALL POINTS OF CROSSING AND CONNECTION TO DETERMINE IF ANY CONFLICTS EXIST BEFORE COMMENCING CONSTRUCTION. ALL UTILITIES SHOWN ON DRAWINGS ARE BASED ON BEST AVAILABLE INFORMATION. NEITHER HORIZONTAL LOCATION NOR DEPTH OF BURIED UTILITIES HAVE BEEN FIELD VERIFIED FOR ANY UTILITY. CONFLICT BETWEEN EXISTING AND PROPOSED UTILITIES MAY OCCUR. CONTRACTOR SHALL NOTIFY ENGINEER AND CLIENT REPRESENTATIVE OF ALL CONFLICTS AND COORDINATE WITH APPROPRIATE AGENCY.
- 2. PROPOSED PRIVATE UTILITY SERVICES AND CONNECTIONS (ELECTRICAL, GAS, TELEPHONE, TELEVISION, ETC.) ARE SHOWN IN APPROXIMATE PROBABLE LOCATIONS. UTILITY AVAILABILITY AT POINT OF CONNECTION SHOWN OR UTILITY CAPACITY HAVE NOT BEEN VERIFIED. CONTRACTOR RESPONSIBLE FOR COORDINATION OF AVAILABILITY, CAPACITY VERIFICATION, FINAL LOCATION, AND CONDUIT/CONDUCTOR OR CABLE SIZE AS WELL AS CONNECTION OF TEMPORARY AND PERMANENT SERVICE WITH APPROPRIATE PRIVATE UTILITY COMPANY. ALL SERVICE CONNECTION COSTS ARE TO BE INCLUDED IN CONTRACT PRICE UNLESS SPECIALLY PAID FOR OTHERWISE.
- 3. PRIVATE UTILITIES (ELECTRICAL, GAS, TELEPHONE, TELEVISION, ETC.) ARE SHOWN IN PLAN THROUGH FIELD LOCATION MEASURES OR UTILITY COMPANY MAPS. PRIVATE UTILITIES SHOWN ARE SHOWN IN PROFILE BASED ON APPROXIMATE BURIAL DEPTHS. NEITHER PLAN NOR PROFILE LOCATIONS HAVE BEEN FIELD VERIFIED. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF PRIVATE UTILITIES LOCATION PRIOR TO START OF CONSTRUCTION. ALL CONFLICTS SHALL BE RESOLVED WITH PRIVATE UTILITY COMPANY.
- 4. COORDINATE LOCATION OF PROPOSED UTILITY LINES W/ ARCHITECTURAL & MECHANICAL DRAWINGS.
- 5. ALL DIMENSIONS MEASURED FROM BACK OF CURB UNLESS OTHERWISE INDICATED.
- 6. EXISTING WATER WELL AND SEPTIC SYSTEM TO BE CAPPED AND DECOMMISSIONED PER REQUIREMENTS OF HARRIS COUNTY AND TEXAS COMMISSION ON ENVIRONMENTAL QUALITY.



**DTS**  
ENGINEERING, INC.

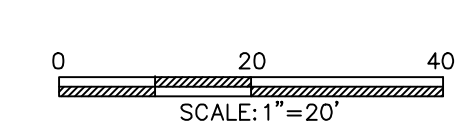
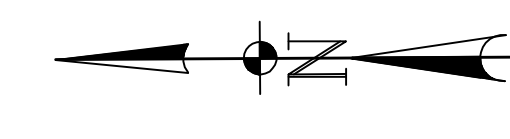
7 CROGGANS PARK DR. SUITE 11, THE WOODLANDS, TX 77380  
HOUSTON, TX 77057 FAX (281) 258-8656  
PHONE (281) 258-8656  
TX REG. NO. 87728

RC PRECISION, INC  
8904 TAUB RD  
HOUSTON, TX  
UTILITY PLAN

REV	DATE	DESCRIPTION
1	08/08/13	ISSUANCE FOR EXIST SHED TO REMAIN

CHKD BY: [ ] M.J.  
 DWN BY: [ ] M.J.  
 DATE: 04/17/13  
 PROJ No: 13124  
 SHEET No:





**STORM SEWER CALCULATIONS**  
**2-YEAR DESIGN STORM**

DRAIN AREA	FROM	TO	AREA (AC)	TOTAL AREA (AC)	RUNOFF C	Sum of C * A	TC (MIN)	2-YR INTENSITY (INHR)	Q INPUT (CFS)	Q TOTAL (CFS)	PIPE DIAMETER (IN)	MANNING COEF	SLOPE (%)	DESIGN Q (CFS)	DESIGN VELOCITY (FT/SEC)
I	POND		1.89	1.89	0.8	1.51	26.19	3.33	5.03	5.03					
	POND DITCH		0	1.89	0.8	0.00	15.00	4.29	0.00	5.03	24	0.013	0.2	10.12	3.22

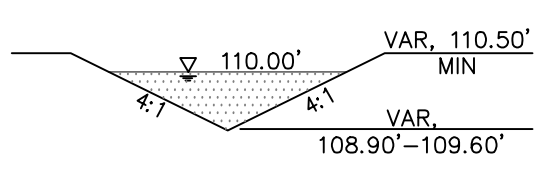
**DETENTION VOLUME REQUIRED**

TOTAL SITE AREA	82,440 SF
PROPOSED IMPERVIOUS AREA	21,892 SF
EXISTING IMPERVIOUS AREA	10,692 SF
INCREASE IMPERVIOUS AREA	11,190 SF
PERCENT PROPOSED IMPERVIOUS COVER	26.8 %
DETENTION RATIO	1.00 CFS/SF
DETENTION STORAGE REQUIREMENT	11,190 CF

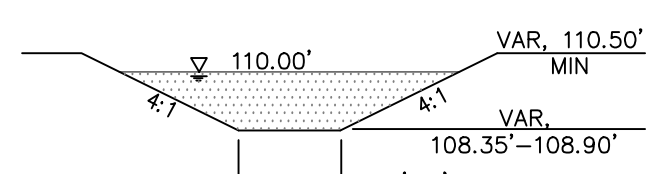
**DETENTION POND VOLUME PROVIDED**

DETENTION POND VOLUME	11,208 CF
POND AREA	12,144 SF
DESIGN WATER SURFACE ELEV	110.00 FT
LOWEST OVERFLOW ELEV	110.50 FT
MAXIMUM POND DEPTH	4.85 FT
DEPTH AT RESTRICTOR	1.65 FT
ALLOWABLE FLOW RATE	0.48 CFS
DESIGN FLOW RATE	1.49 CFS
RESTRICTOR SIZE DIAMETER	6.00 IN

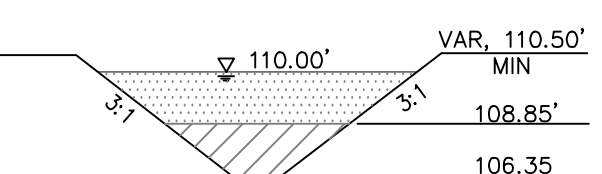
$D = (0.48 \text{ CFS} \times 0.5 / 2.25 (1.65 \times 0.25))^{1/2}$   
 $D = 3.3"$  USE MIN ALLOWED 6"



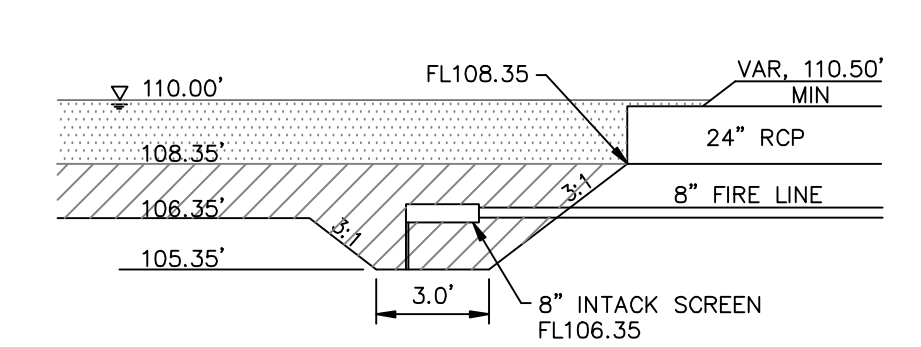
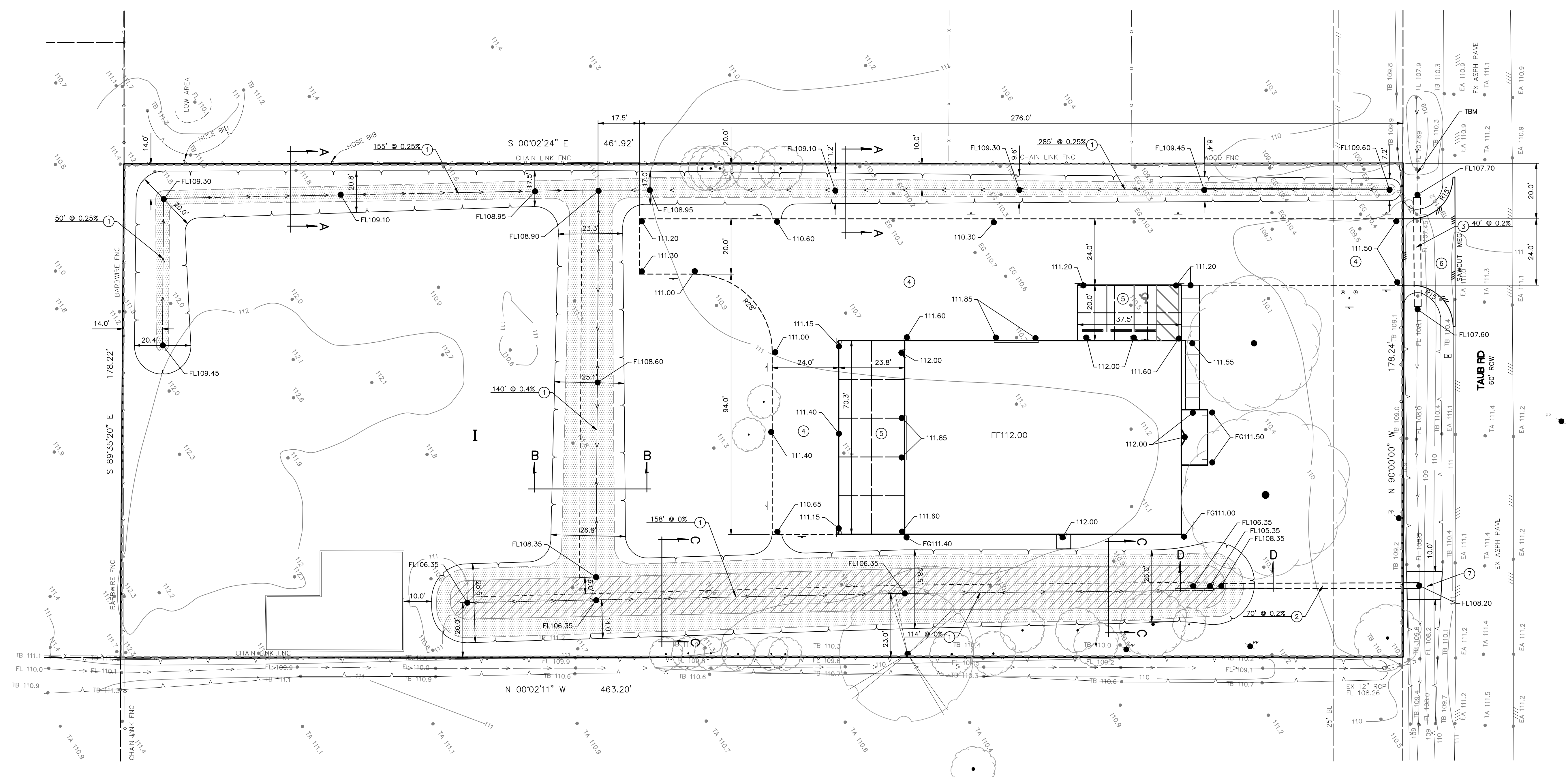
TYPICAL SECTION  
SECTION A-A



TYPICAL SECTION  
SECTION B-B



TYPICAL SECTION  
SECTION C-C



SECTION D-D

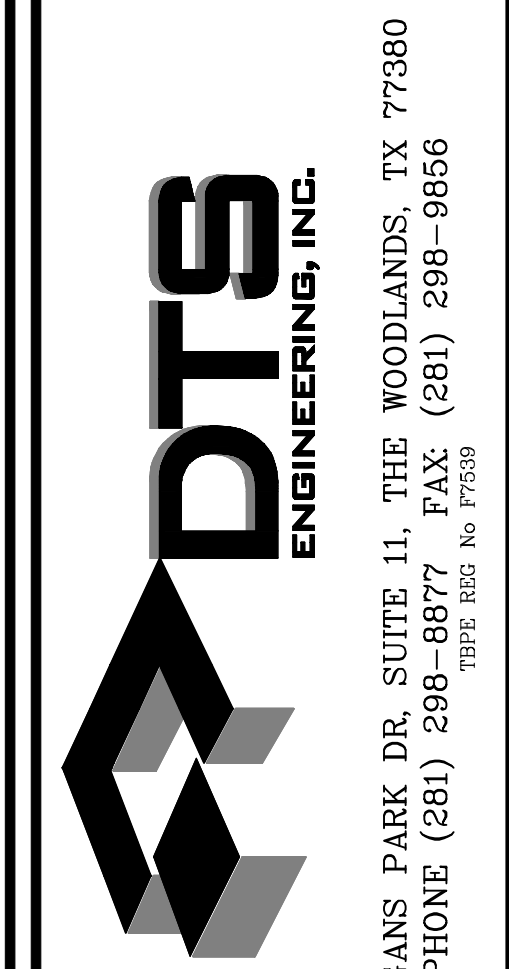
**KEY NOTES & LEGEND**

- PROP DETENTION, DRAINAGE & FIRE FIGHTING WATER STORAGE SHALL
- PROP 24" RCP, W/ 6" RESTRICTOR ON INLET END FROM DETENTION POND
- PROP 30" RCP, FINAL CULVERT SIZES & FLOW LINES TO BE DETERMINED BY HARRIS COUNTY PRECINCT 4
- PROP 8" CRUSHED CONCRETE/AGGREGATE SURFACE ON COMPACTED SUBGRADE
- PROP 8" REINFORCED CONCRETE PAVEMENT ON 4" AGGREGATE BASE ON COMPACTED SUBGRADE
- PROP 2" ASPHALT CONCRETE COMMERCIAL DRIVEWAY ON 10" AGGREGATE BASE ON COMPACTED SUBGRADE
- PROP 4" REINFORCED SLOPE PAVEMENT FROM TOP OF BANK TO TOP OF BANK, MATCH EXIST DITCH GRADE & SIDE SLOPE

- IV  
 --- DRAINAGE AREA BOUNDARY  
 --- DRAINAGE AREA No  
 +XXX EXIST ELEVATION  
 -XXX PROP ELEVATION  
 PROP DETENTION  
 PROP FIRE FIGHTING WATER STORAGE  
 --- PROP SAWCUT CONTROL JOINT

**NOTES**

- SPOT ELEVATIONS SHOWN ARE TOP OF PAVEMENT UNLESS OTHERWISE INDICATED.
- VERTICAL CONTROL:  
BENCH MARK: HARRIS COUNTY RM No 050475, ELEV 115.40', NAVD 1988, 2001 ADJ.  
TEMPORARY BENCH MARK: "X" ON TOP OF CULVERT, ELEV 109.94'
- ALL DIMENSIONS MEASURED FROM BACK OF CURB OR EDGE OF PAVEMENT.
- STATION AND OFFSET, LENGTH OF PIPES, AND GRADES ARE MEASURED FROM CENTER OF STRUCTURES.
- AS PER FIRM PANEL NO. 482010049SL, DATED JUN 18, 2007, THIS TRACT IS NOT WITHIN 100-YEAR FLOOD PLAIN. SITE LOCATION DETERMINED BY SCALED MAP AND GRAPHIC PLOTTING ONLY.
- UPON COMPLETION OF FORM WORK AND PRIOR TO PLACEMENT OF STEEL CONTRACTOR SHALL CONTACT OWNER FOR APPROVAL OF PAVEMENT LAYOUT AND FINAL GRADES.
- STRAIGHT GRADE ASSUMED BETWEEN SPOT ELEVATIONS UNLESS OTHERWISE INDICATED.
- PAVEMENT SECTION DETERMINED WITHOUT BENEFIT OF SOILS INVESTIGATION. SECTION BASE ON TYPICAL REQUIREMENTS FOR AREA IF UNSTABLE SOILS OR OTHER PROBLEMS ENCOUNTERED NOTIFY ENGINEER FOR RESOLUTION.
- CONTOURS SHOWN ARE EXISTING.



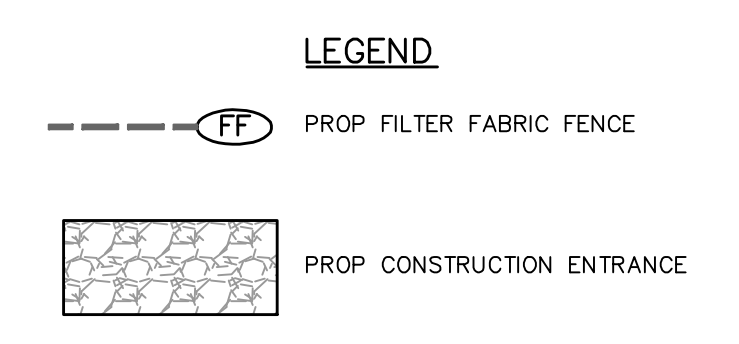
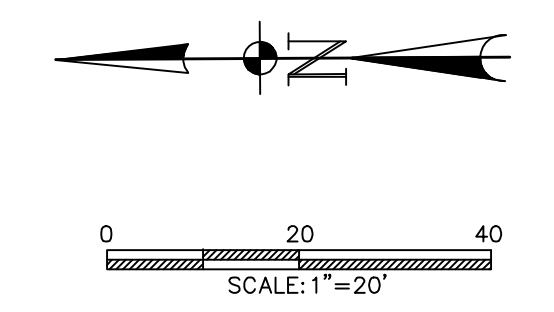
7 CROGGANS PARK DR. SUITE 11, THE WOODLANDS, TX 77380  
 HOUSTON, TX (281) 508-9656  
 TEXAS REG. NO. 27259

RC PRECISION, INC  
 8904 TAUB RD  
 HOUSTON, TX  
 GRADING, DRAINAGE & PAVING PLAN

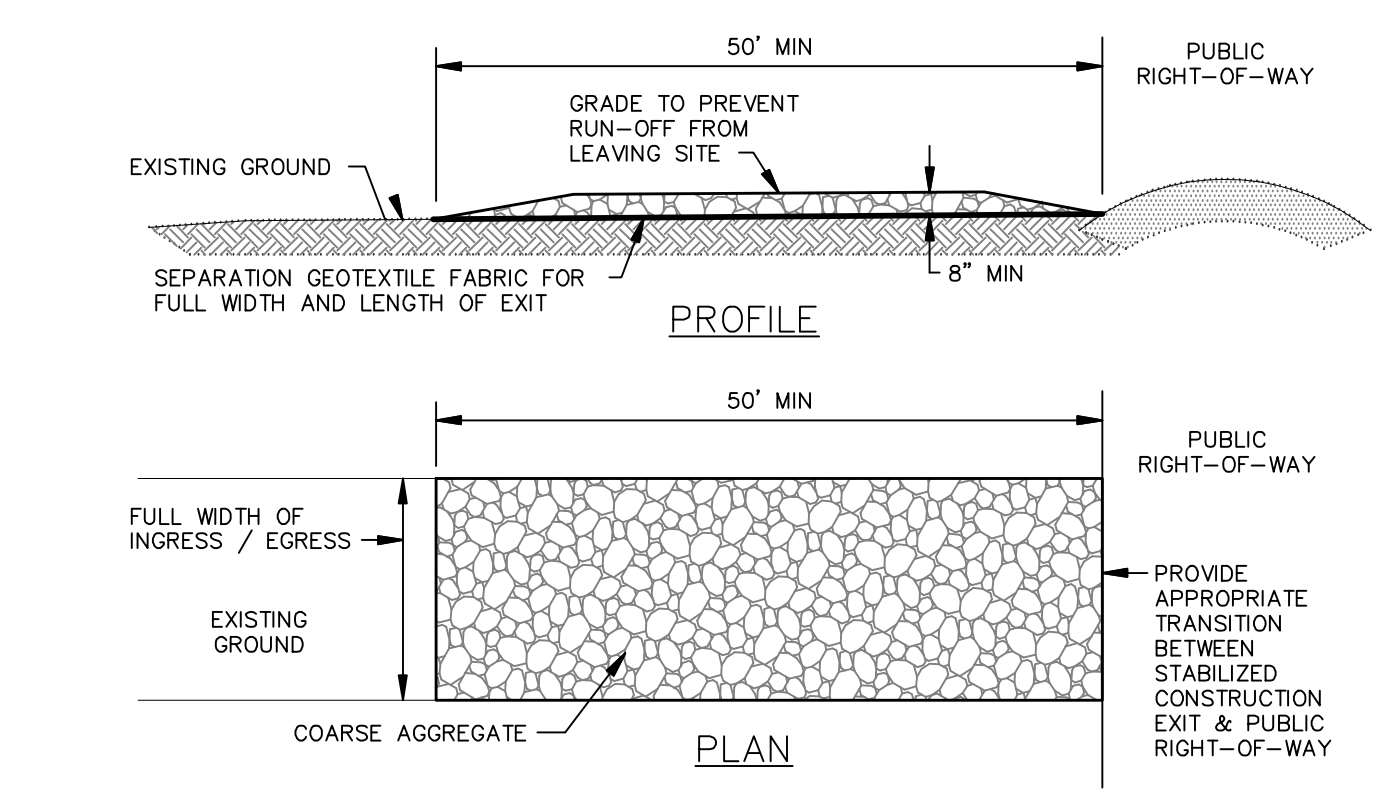
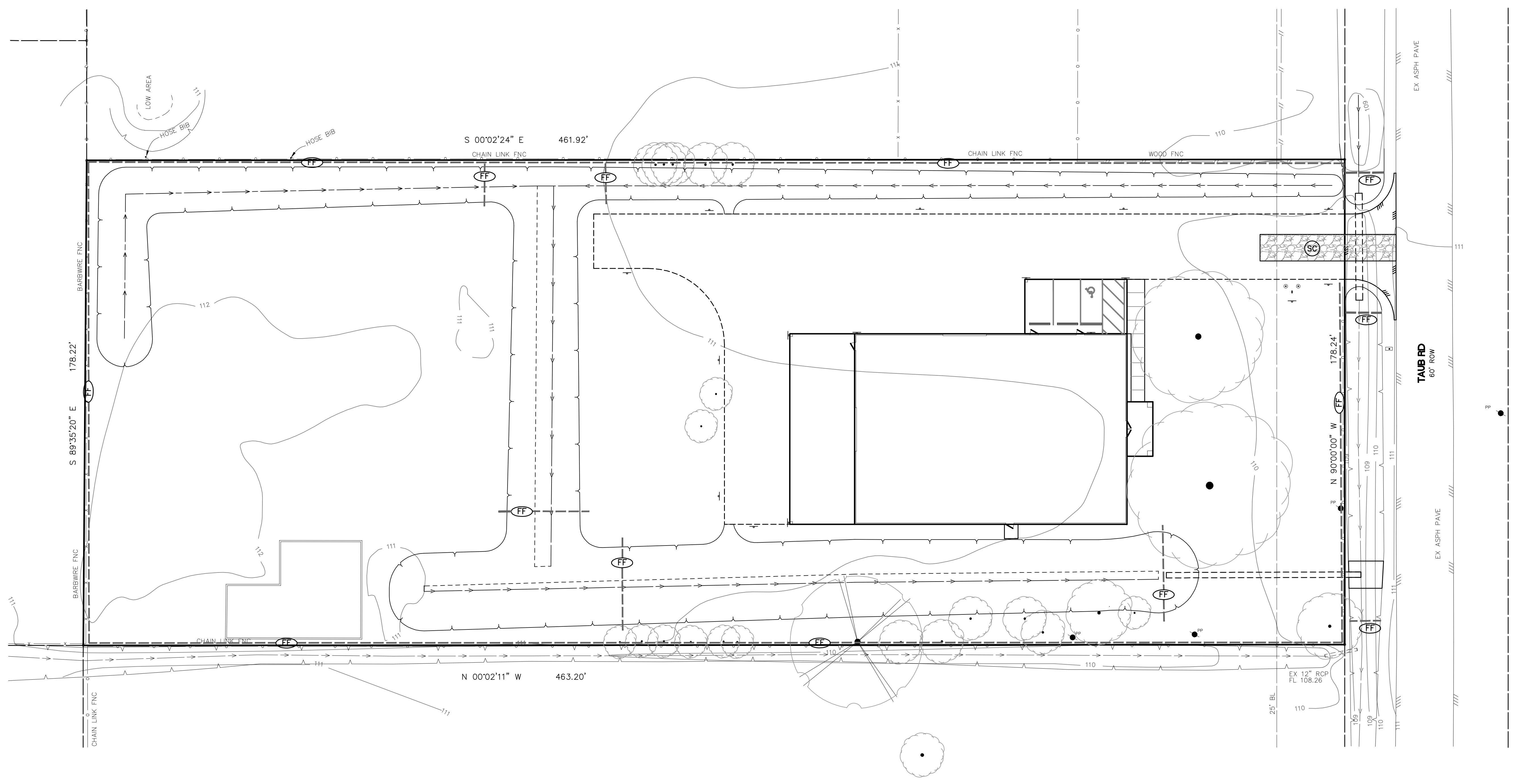
REV	DATE	ISSUE	DESCRIPTION
1	08/08/13	1	REVISION FOR EXIST SHED TO REMAIN

CHKD BY: MAL  
 DWN BY: MAL  
 DATE: 04/17/13  
 PROJ No: 13124  
 SHEET No:



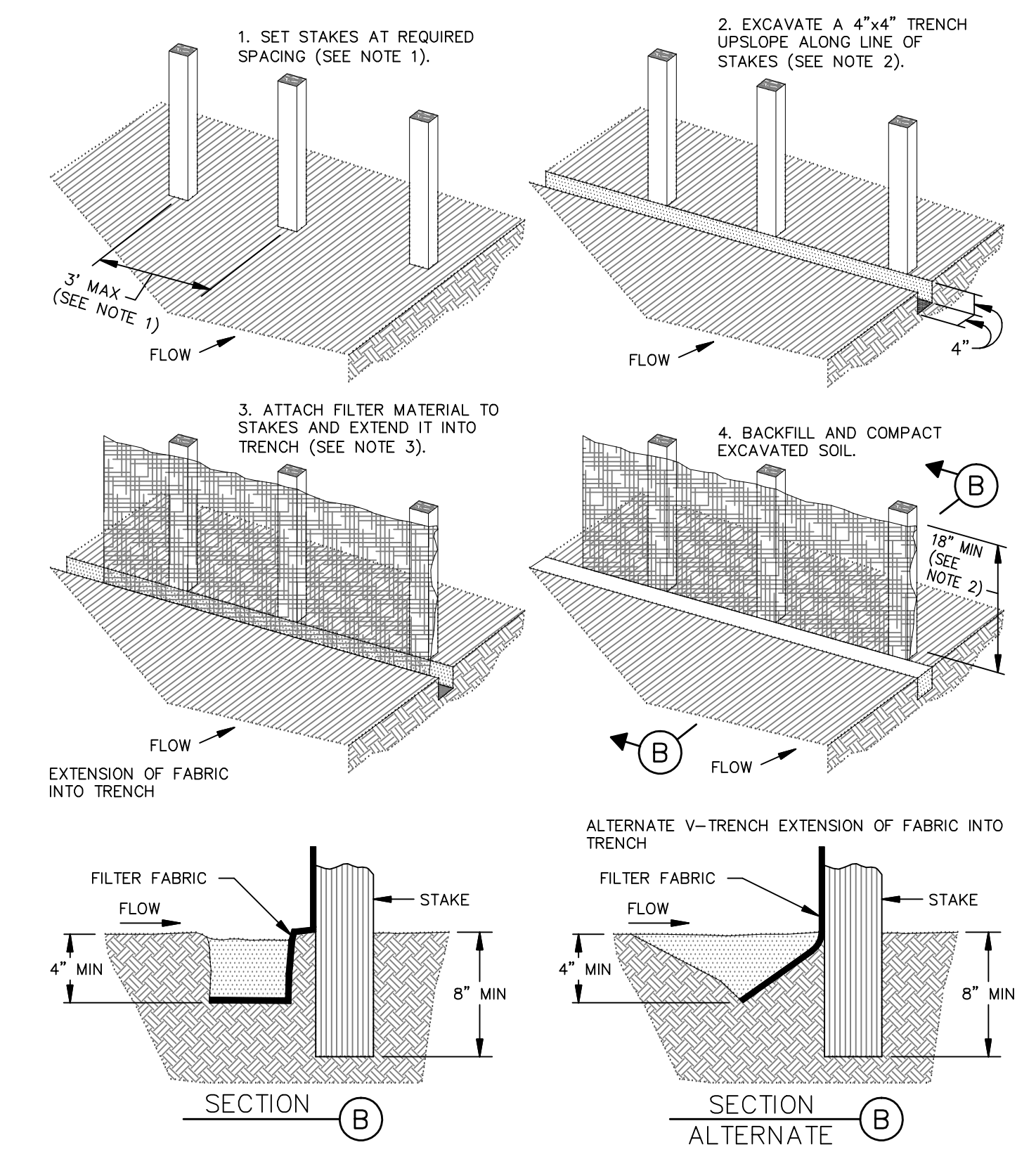


- NOTES**
1. CONTRACTOR SHALL MINIMIZE REMOVAL OF VEGETATION COVER ON PROJECT SITE. PROVIDE "WASH-DOWN" AREAS FOR CONSTRUCTION EQUIPMENT AND CONFINE MAINTENANCE AND REFUELING AREAS.
  2. CONTRACTOR SHALL KEEP TRUCK AND OVER-THE-ROAD EQUIPMENT PROBS AND TIRES CLEAN OF MUD AND DEBRIS. SEDIMENT AND DEBRIS LEAVING SITE SHALL BE REMOVED AND DISPOSED OF AT CONTRACTOR'S EXPENSE AS DIRECTED BY ENGINEER.
  3. ALL STOCKPILES OF EXCAVATED SOIL SHALL BE REMOVED WITHIN 72 HOURS AFTER START OF STOCKPILE. WHEN NOT REMOVED WITHIN 72 HOURS, CONTRACTOR SHALL ERECT FILTER FABRIC FENCE AROUND STOCKPILE.
  4. HYDROMULCH SEEDING OF PROJECT SITE SHALL BE COMPLETED WITHIN 2 WEEKS OF GRADING ACTIVITY COMPLETION.
  5. ALL WORK SHALL COMPLY WITH APPLICABLE STATE AND/OR LOCAL WASTE DISPOSAL, SANITARY SEWER OR SEPTIC SYSTEM REGULATIONS.
  6. NO SOIL, SOLID METALS OR DEBRIS SHALL BE PLACED ONTO WATERS OF UNITED STATES EXCEPT AS AUTHORIZED BY SECTION 404 PERMIT.
  7. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. ALL STORM POLLUTION PREVENTION MEASURES SHALL COMPLY WITH "STORM WATER MANAGEMENT HANDBOOK FOR CONSTRUCTION ACTIVITIES" AS PREPARED BY CITY OF HOUSTON, HARRIS COUNTY AND HARRIS COUNTY FLOOD CONTROL DISTRICT.
  8. STABILIZED CONSTRUCTION EXITS SHALL BE REQUIRED FOR ALL POINTS OF INGRESS AND EGRESS. NUMBER OF ACCESS POINTS SHALL BE DETERMINED BY GENERAL CONTRACTOR.
  9. UNLESS OTHERWISE SHOWN ON DRAWINGS, NO CONCRETE WASHOUT FACILITY PROVIDED ON SITE. ALL CONCRETE WASHOUT SHALL BE CONDUCTED AT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY APPROVED WASHOUT AREA.
  10. ONCE INLET PROTECTION IS NO LONGER CAPABLE WITH UPRIGHT FILTER FABRIC FENCE, COVER INLET OPENINGS BY PLACING FILTER FABRIC UNDER CASTING AND OVER CURB, SECURE WITH SAND BAGS AND STAKES.
  11. CONTRACTOR SHALL OBTAIN ALL PERMITS AND MEET ALL REQUIREMENTS OF TEXAS COMMISSION ON ENVIRONMENTAL QUALITY'S GENERAL PERMIT NO. TXR150000.
  12. CONTRACTOR SHALL OBTAIN COPY OF NOTICE OF INTENT AND MAINTENANCE CHECKLIST. ONE SHALL CONSTRUCTION SITE NOTICE NO LATER THAN 3 WORKING DAYS PRIOR TO COMMENCING WORK.



- CONSTRUCTION NOTES**
1. LENGTH SHALL BE AS SHOWN ON CONSTRUCTION DRAWINGS, BUT NOT LESS THAN 50 FEET.
  2. THICKNESS SHALL BE NOT LESS THAN 8 INCHES.
  3. WIDTH SHALL BE NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
  4. STABILIZATION FOR OTHER AREAS SHALL HAVE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS STABILIZED CONSTRUCTION EXIT, UNLESS OTHERWISE SHOWN ON CONSTRUCTION DRAWINGS.
  5. STABILIZED AREA MAY BE WIDENED OR LENGTHENED TO ACCOMMODATE TRUCK WASHING AREA. AN OUTLET SEDIMENT TRAP MUST BE PROVIDED FOR TRUCK WASHING AREA.
  6. STABILIZED CONSTRUCTION EXIT SHALL BE MAINTAINED FREE OF SEDIMENT FOR DURATION OF PROJECT.

**STABILIZED CONSTRUCTION EXIT**



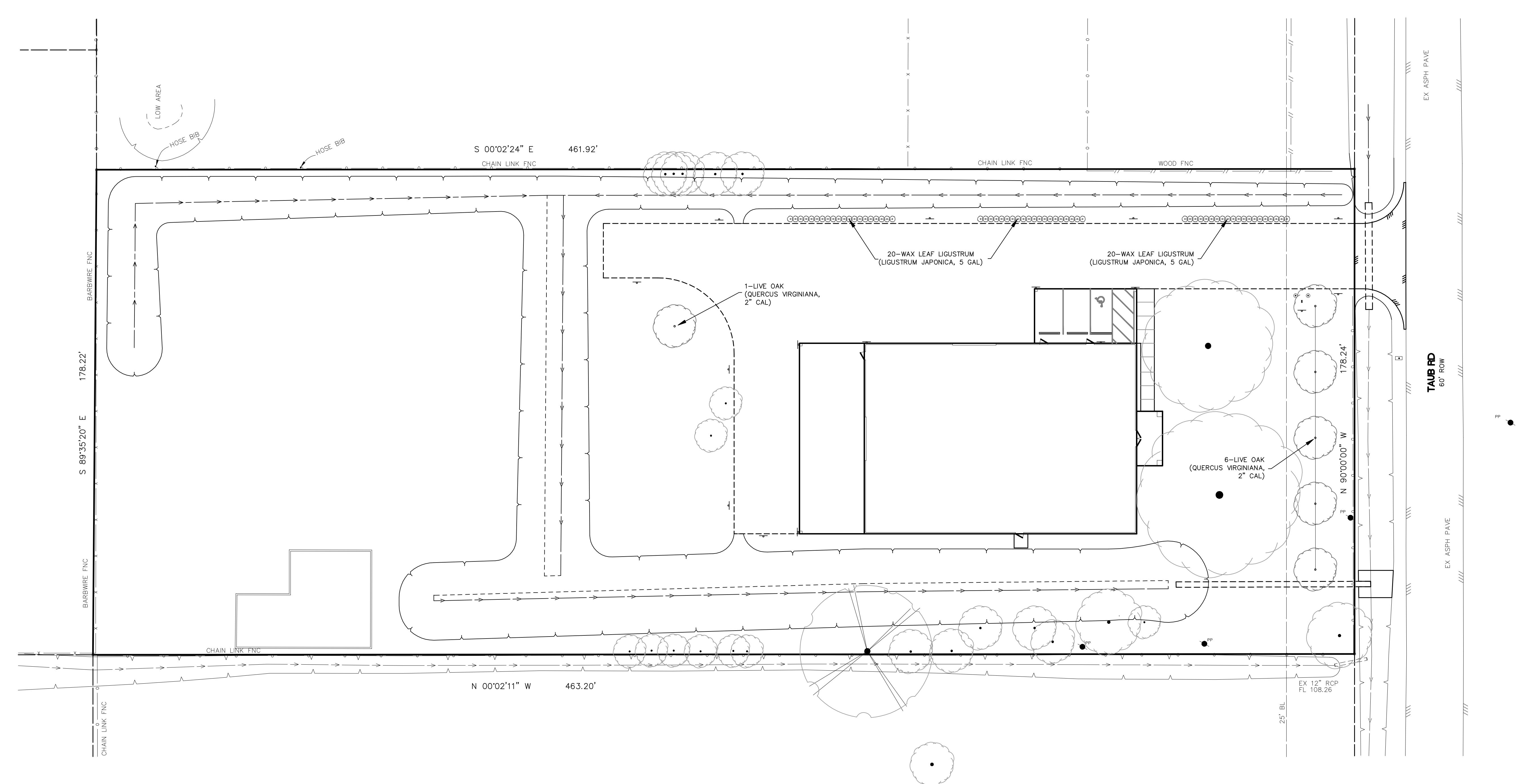
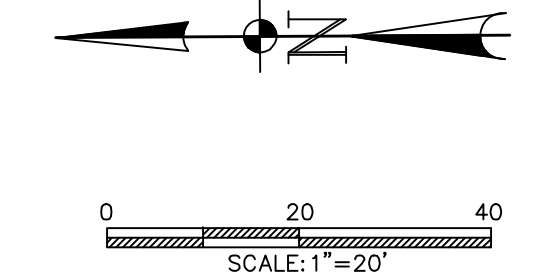
- NOTES**
1. 2 INCH BY 2 INCH THICK WOODEN STAKES SHALL SET AT MAXIMUM SPACING OF 3 FEET AND EMBEDDED A MINIMUM OF 8 INCHES. IF PRE-ASSEMBLED FENCE WITH SUPPORT NETTING IS USED, SPACING OF STAKES MAY BE INCREASED TO 8 FEET MAXIMUM.
  2. ATTACH FILTER FABRIC TO WOODEN STAKES. FILTER FABRIC FENCE SHALL HAVE A MINIMUM HEIGHT OF 18 INCHES AND MAXIMUM HEIGHT OF 36 INCHES ABOVE NATURAL GROUND.
  3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED 6 INCHES AT STAKES, AND FOLDED.

**FILTER FABRIC FENCE**

REV	DATE	DESCRIPTION
1	08/08/13	REVISION FOR EXIST SHED TO REMAIN

CHKD BY:	MAL
DRN BY:	MAL
DATE:	04/17/13
PRJ No:	13134
SHEET No:	C-6





**NOTES**

1. ALL PLANTINGS SHALL BE LOCATED AS SHOWN ON PLANS.
2. CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. IF DISCREPANCIES ARE DISCOVERED, CONTRACTOR SHALL NOTIFY ENGINEER/ARCHITECT IMMEDIATELY. ADJUSTMENTS DUE TO CHANGES OF CONSTRUCTION SHALL BE APPROVED BY INSPECTOR.
3. IN INSTALLATION OF ANY PLANT MATERIAL, FINAL LEVEL OF THE ROOT BALL'S TOP SHALL BE LEVEL OR HIGHER WITH EXISTING GROUND SURFACE.
4. AS HOLE FOR PLANTING IS DUG, TOPSOIL SHALL BE KEPT SEPARATE FROM SUBSOIL, DISCARD OR AMEND SUBSOIL AND REPLACE WITH GOOD TOPSOIL.
5. ALL PLANTS AND BEDS SHALL HAVE A 3-INCH TOP DRESSING OF MULCH IMMEDIATELY AFTER PLANTING. MULCH SHALL ENTIRELY COVER BEDS, PITS OR SAUCERS AROUND EACH PLANT.
6. AT TIME OF PLANTING, AND THROUGHOUT CONTRACT PERIOD, EACH PLANT AND SOIL AROUND IT SHALL BE THOROUGHLY WATERED. CARE SHALL BE TAKEN TO AVOID FLOODING PLANTS, BEDS, AND DISPLACEMENT OF SOIL OR MULCH MATERIALS.
7. NECESSARY QUANTITIES OF TOPSOIL SHALL BE APPROVED BY INSPECTOR. CONTRACTOR MAY USE TOPSOIL AFTER SECURING SOIL TESTS AND APPLYING RECOMMENDED TREATMENT.
8. TOPSOIL SHALL BE FERTILE, FINE LOAM, TYPICAL OF LOCALITY. SOIL SHALL BE FREE OF STONES LARGER THAN TWO INCHES, NOXIOUS WEEDS AND OTHER DELETERIOUS MATERIALS.
9. SOIL TESTS SHALL BE MADE TO DETERMINE EXACT REQUIREMENTS FOR LIME AND FERTILIZER. SOIL TESTS SHALL BE CONDUCTED BY A REPUTABLE LABORATORY.
10. PRIOR TO PLANTING SURFACE SHALL BE CLEARED OF TRASH, DEBRIS, ROOTS, BRANCHES, STONES AND GROSS IN EXCESS OF 2-INCHES IN LENGTH OR DIAMETER. SOIL AND SEED SHALL NOT BE APPLIED TO GRAVEL OR OTHER NON-SOIL SURFACES.
11. ANY IRREGULARITIES IN SOIL SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS, SHALL BE FILLED OR CORRECTED IN ORDER TO PREVENT FORMATION OF DEPRESSIONS OR WATER POCKETS.
12. MULCH SHALL BE CLEAN GROUND OR SHREDED HARDWOOD MULCH.
13. PEAT MOSS SHALL BE BROWN, NATURALLY SHREDED OR GRANULATED, LOW IN CONTENT OF WOODY MATERIAL, AND FREE OF MATERIAL MATTER HARMFUL TO PLANT LIFE. WATER ABSORBING CAPACITY SHALL BE 100 TO 200%, AND MOISTURE CONTENT OF 30%. ACID REACTION SHALL BE ABOUT 5-1/2 TO 7 PH CONTENT.
14. ALL PLANTS SHALL BE PLANTED UPRIGHT AND FACED TO GIVE BEST APPEARANCE OR RELATIONSHIP TO ADJACENT STRUCTURES.
15. LOOSE ROOTS SHALL BE CUT CLEANLY OFF.
16. TREES SHALL BE STAKED AND SECURED WITH NO. 12 GAUGE PLIABLE GALVANIZED WIRE AND ENCASED IN A RUBBER GARDEN HOSE TO PREVENT DIRECT CONTACT WITH TREE BARK, AND SHALL BE PLACED AROUND TRUNK ABOVE FIRST MAJOR BRANCH IN A SINGLE LOOP. STAKES FOR SUPPORTING TREES SHALL BE 2-INCHES SQUARE BY 24-INCHES LONG SOUND WOOD, PRESERVATIVE TREATED.
17. STAKES FOR TREES SHALL BE DRIVEN INTO GROUND IN A MANNER AS TO NOT INJURE BALL OR ROOTS.
18. SOIL USED FOR PLANTING SHALL BE SUITABLE EXISTING SOIL OR TOPSOIL WHICH SHALL BE THOROUGHLY MOVED, BY VOLUME, ONE PART PEAT, AND ONE PART MANURE TO FOUR PARTS SOIL. FERTILIZER SHALL NOT BE MIXED WITH PREPARED SOIL. APPLICATION RATES SHALL BE ONE TABLET PER 1/2-INCH CALIBER OF TREE.
19. FERTILIZER APPLICATION FOR TREES AND SHRUBS SHALL BE "AGRIFORM" SLOW-RELEASE FERTILIZER TABLETS, OR EQUAL, APPLIED TO PLANTING PIT PRIOR TO PLACEMENT OF MATERIALS. FERTILIZER SHALL NOT BE MIXED WITH PREPARED SOIL. APPLICATION RATES SHALL BE ONE TABLET PER 1/2-INCH CALIBER OF TREE.
20. ALL PLANTS SHALL HAVE HABIT OF GROWTH THAT IS NORMAL FOR THEIR SPECIES, AND SHALL BE SOUND, HEALTHY, AND VIGOROUS, WITH WELL DEVELOPED ROOT SYSTEMS.
21. ALL PLANTS SHALL BE FREE FROM INSECT PESTS, PLANT DISEASES AND INJURIES.
22. ALL SUBSTITUTIONS SHALL BE AUTHORIZED BY INSPECTOR AND SHALL MEET ORIGINAL INTENT, WITH SIMILAR CHARACTERISTICS OF MATERIAL TO BE SUBSTITUTED.
23. PLANTING OPERATIONS SHALL BE CONDUCTED UNDER FAVORABLE WEATHER CONDITIONS DURING SEASONS WHICH ARE NORMAL FOR SUCH WORK.
24. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING HIS WORK AFTER PLANTING THROUGH COMPLETION OF INSTALLATION CONTRACT. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, CULTIVATING, MULCHING, REMOVAL OF DEAD MATERIALS, RE-SETTING OF PLANTS TO PROPER GRADES, RESTORATION OF SAUCERS, AND OTHER NECESSARY OPERATIONS.
25. ADEQUATE PROTECTION FOR LAMN AREAS AGAINST TRESPASSING DURING PLANTING OPERATIONS, AND AGAINST DAMAGE OF ANY KIND SHALL BE PROVIDED BY CONTRACTOR. CONTRACTOR IS RESPONSIBLE TO REPAIR EXISTING LAMN AREAS DAMAGED IN COMPLETION OF THIS PROJECT.
26. NURSERY STOCK SHALL BE FULLY GUARANTEED THROUGH TO COMPLETION OF PROJECT AND ONE YEAR AFTER. ALL PLANTS THAT FAIL TO MAKE NEW GROWTH FROM DORMANT CONDITION, DECLINE OR DIE SHALL BE REPLACED. ALL REPLACEMENTS SHALL CONFORM TO ORIGINAL INTENT OF THE PLANTING DESIGN. ALL COSTS OF REPLACEMENTS SHALL BE BORNE BY CONTRACTOR.
27. ALL GUARANTEES ARE PREDICATED ON ASSURANCE THAT OWNER HAS PROPERLY CARED FOR PLANTS AFTER CONTRACTOR HAS BEEN RELEASED FROM HIS MAINTENANCE OBLIGATIONS. ALL COSTS OF REPLACEMENTS SHALL BE BORNE BY CONTRACTOR.

**PLANTING**

1. CONTRACTOR SHALL BE FAMILIAR WITH SITE CONDITIONS.
2. CONTRACTOR SHALL ACCEPT SITE CONDITIONS AND DO WORK SPECIFIED WITHOUT ADDITIONAL COMPENSATION FOR POSSIBLE VARIATION FROM GRADES AND CONDITIONS SHOWN.
3. ALL PLANT MATERIAL SIZES, AND MEASUREMENTS, INCLUDING TRUNK, HEAD, AND SPREAD SIZES, CONTAINER, AND ROOT BALL SIZES, QUALITY, AND CONDITION, SHALL CONFORM TO STANDARDS SET FORTH IN CURRENT ISSUE OF "AMERICAN STANDARDS FOR NURSERY STOCK" (ANSI Z60.1) AND ANY AMENDMENTS AND ADDENDUMS THERETO.
4. ALL PLANT MATERIALS ARE SUBJECT TO APPROVAL BY OWNER, AND MAY BE INSPECTED AT PLACE OF GROWTH, OR ON-SITE BEFORE PLANTING.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING IN FULL, ALL LANDSCAPE PLANTING WORK DURING INSTALLATION, AND UNTIL ACCEPTANCE BY OWNER, INCLUDING WATERING, SPRAYING FOR INSECTS AND DISEASES, MULCHING, MOWING, FERTILIZING, CULTIVATING, EDGING AND WEEDING.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING SOIL SAMPLES FROM TOPSOIL, AND MATING OR FILL SOILS AT SITE, AND SUBMITTING THEM TO AN APPROVED SOIL TESTING LABORATORY. CONTRACTOR SHALL ALSO OBTAIN ANALYSES AND RECOMMENDATIONS FOR AMENDING THESE SOILS, AND FERTILIZATION OF SPECIFIED PLANT MATERIAL.
7. ALL PLANTING AREAS, SHRUB BEDS, AND TREES, SHALL BE MULCHED WITH A MINIMUM COMPACTED DEPTH OF 3-INCHES OF MULCH AS SPECIFIED. PRIOR TO MULCHING, CONTRACTOR SHALL APPLY A PRE-EMERGENT HERBICIDE (APPROVED BY OWNER), AS RECOMMENDED BY MANUFACTURER, TO PREVENT RECURRING WEED AND GRASS GROWTH.
8. ALL DISTURBED AREAS OF SITE SHALL BE EITHER GRASSED OR PLANTED IMMEDIATELY AFTER GRADING, IN ORDER TO PREVENT SOIL EROSION.
9. ALL GRASSED AREAS SHALL RECEIVE A PRE-EMERGENT HERBICIDE (APPROVED BY OWNER) AFTER GRASS HAS EMERGED.
10. PERMANENT VEGETATION COVER SHALL BE PROVIDED THROUGHOUT ALL UNPAVED AREAS OF SITE, ADJACENT DISTURBED AREAS, AND WITH PUBLIC AND PRIVATE RIGHTS-OF-WAY. ALL WORK WITHIN ANY RIGHT-OF-WAY SHALL CONFORM TO STANDARDS AND SPECIFICATIONS OF LOCAL AND/OR STATE JURISDICTIONS.
11. ALL TREES LOCATED WITHIN GRASSED AREAS SHALL BE PLANTED AS PER DETAIL ON PLANS, AND MULCHED TO WITHIN AT LEAST A 4-FOOT DIAMETER OF APPROVED HARDWOOD MULCH. DO NOT FILL WITHIN 5-FEET OF ANY TREE TRUNK.

**GRASSING**

1. ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 4-INCHES OF TOPSOIL (COMPACTED), AND GRASSED WITH SEED AS INDICATED ON PLANS.
2. IF NO SEED IDENTIFIED ON PLANS USE MIXTURE OF COMMON BERBERIDA GRASS OR APPROVED FOAL, AT A RATE OF 10 POUNDS PER 1,000 SQUARE FEET OF GRASSED AREA. SEED SHALL BE SPREAD EVENLY OVER ENTIRE AREA WITH AN APPROVED MECHANICAL SPREADER, SOWING EQUAL QUANTITIES IN TWO DIRECTIONS AT RIGHT ANGLES TO EACH OTHER.
3. SEED SHALL BE RAINED LIGHTLY INTO TOP 1/8-INCH OF SOIL, ROLLED LIGHTLY, AND WATERED WITH A FINE SPRAY.
4. ALL SEEDING AREAS SHALL BE MULCHED WITH A CLEAN, SEED-FREE, DRY HAY OR STRAW, SPREAD UNIFORMLY TO FORM A CONTINUOUS BLANKET NOT LESS THAN 1-1/2 INCHES OF LOOSE THICKNESS.
5. SEEDING AREAS SHALL BE KEPT MOST FOR A PERIOD OF 2-3 WEEKS OR UNTIL GERMINATION.
6. DURING PERIODS OF HIGH TEMPERATURE, THE SOIL SHALL BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO SEEDING TO COOL THE SOIL AND REDUCE ROOT BURNING AND DIE-BACK.
7. ON SLOPES 3:1 OR GREATER, OR WHEREVER EROSION MAY BE A PROBLEM, SPREAD HAY MULCH EVENLY TO STABILIZE.
8. SEED SHALL NOT BE LAD IN EXCESSIVELY WET OR DRY WEATHER.
9. FERTILIZATION AND SOIL AMENDMENTS FOR ALL GRASSED AREAS SHALL BE AS PER LABORATORY ANALYSIS.
10. HYDROSEEDING MAY BE SUBSTITUTED FOR MECHANICAL SEEDING BY MIXING SEED, FERTILIZER AND PLYVERIFIED MULCH IN WATER, USING EQUIPMENT SPECIFICALLY DESIGNED FOR HYDROSEED APPLICATION. MIX UNTIL UNIFORMLY BLENDED INTO HOMOGENEOUS SLURRY SUITABLE FOR HYDRAULIC APPLICATION. APPLY UNIFORMLY AT A RATE AS-REQUIRED TO OBTAIN SPECIFIED SEEDING RATE.
11. ALL GRASSED AREAS SHALL BE APPROVED BY ENGINEER/ARCHITECT.

**COUNTY OF HARRIS  
PUBLIC INFRASTRUCTURE DEPARTMENT**

**LANDSCAPE DESIGN AND COMPLIANCE REVIEW SHEET**  
(Please attach to permit site plan)

**Commercial Establishments and Public Buildings**  
(Must meet or exceed all)

**1. TREE AND SHRUB PLANTING REQUIREMENTS**

**A. STREET TREES: Sec. 13.09**

STREET NAME	Lineal Feet	Tree Planting Requirement	Total Trees Planted*
TAUB DR	179 / 30	6	6
	/ 30		
	/ 30		
<b>TOTAL STREET TREES</b>			

**B. PARKING LOT TREES: Sec. 13.09**  
(Must meet or exceed all)

Total Number of Proposed Planting Spaces	# of Spaces	Tree Planting Requirement	Total Trees Planted*
4	3 / 10	1	1

**C. SHRUBS: Sec. 13.09**  
(75% of the shrubs must be planted along the perimeter of the parking lot. (Must meet or exceed all)

Street Tree Planting Requirement	Requirement	Total Shrub Requirement**
6	6 X 10	60

**D. LANDSCAPE BUFFER: Sec. 13.09** Wood, concrete masonry opaque screening fence. (Min. 6')  
(Must meet or exceed all)

**PLEASE ATTACH TO PERMIT SITE PLAN**

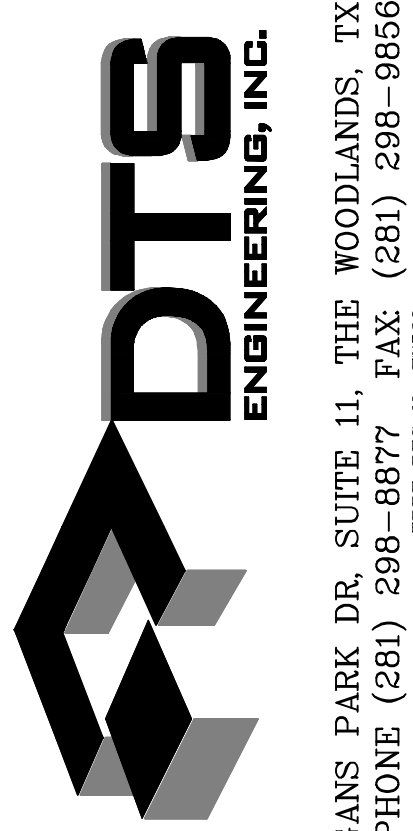
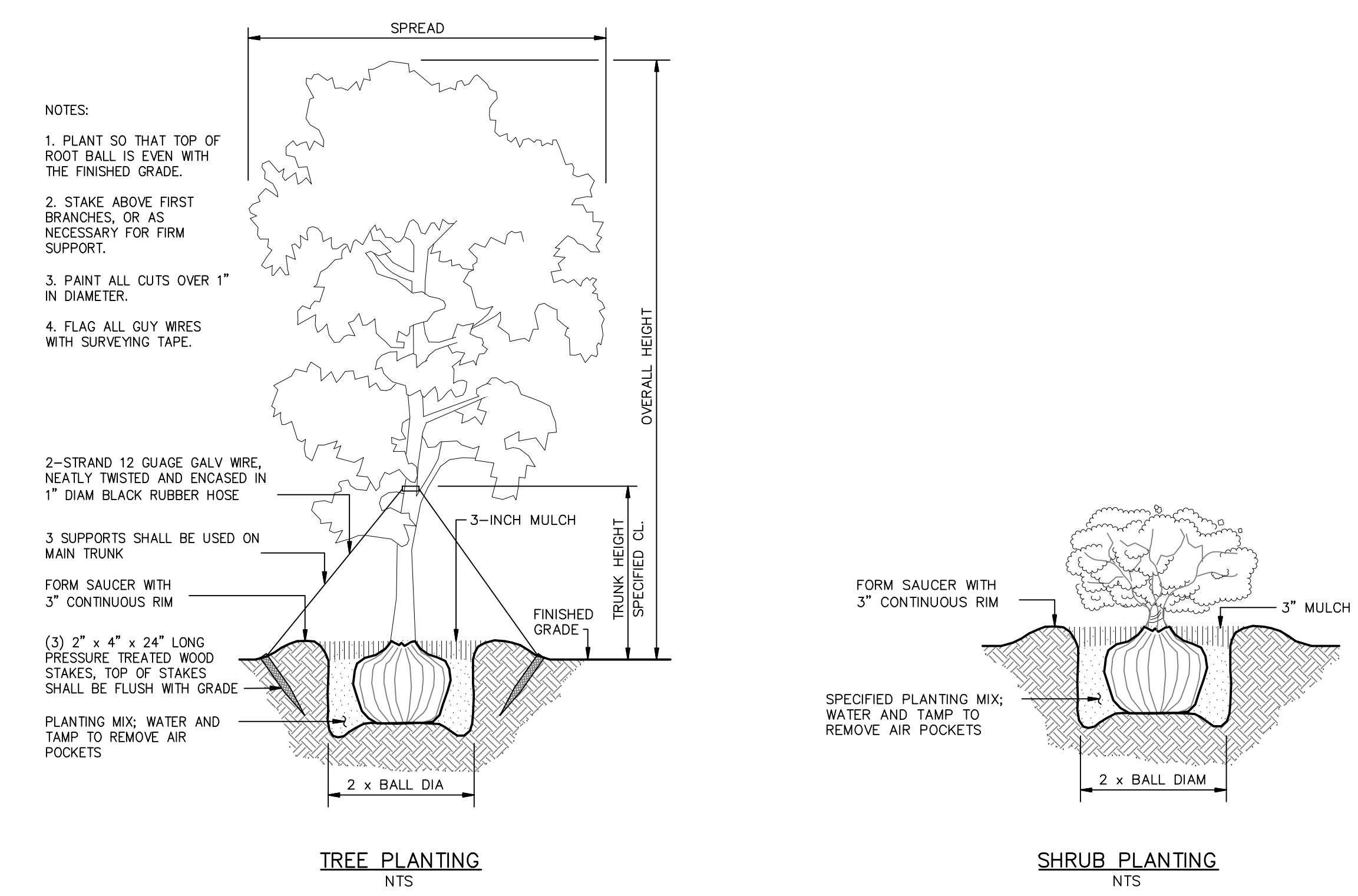
**2. TREE PROTECTION REQUIREMENTS**

**Sec. 13.11** Preservation of existing trees.

Street Name/Location	Inches Protected	Inches Required

**Preservation of existing trees and associated understorey.**

\* Trees shall be a minimum of 1.5 caliper inches in size and from the approved list found in Appendix "A" of Chapter 13 of the City of Houston Code of Ordinances.  
\*\* The shrubs shall be a minimum of 18 inches in height and shall be selected from the City of Houston's approved shrub list found in Appendix "D" of Chapter 13 of the City of Houston Code of Ordinances.



7 CROGGANS PARK DR. SUITE 11, THE WOODLANDS, TX 77380  
PHONE (281) 506-7777 FAX (281) 506-8656  
WWW.DTSENG.COM TEXAS REG. NO. 17328

RC PRECISION, INC  
8004 TAUB RD  
HOUSTON, TX

LANDSCAPE PLAN

NO.	DATE	DESCRIPTION	BY	CHECKED BY
1	08/08/13	PRELIMINARY FOR EXIST SHEET TO		
2		REVISION		
3				
4				
5				
6				
7				
8				
9				
10				
11				

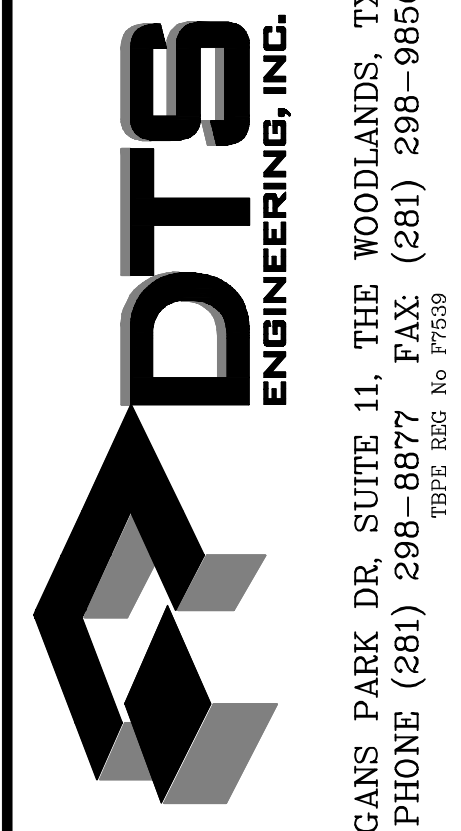
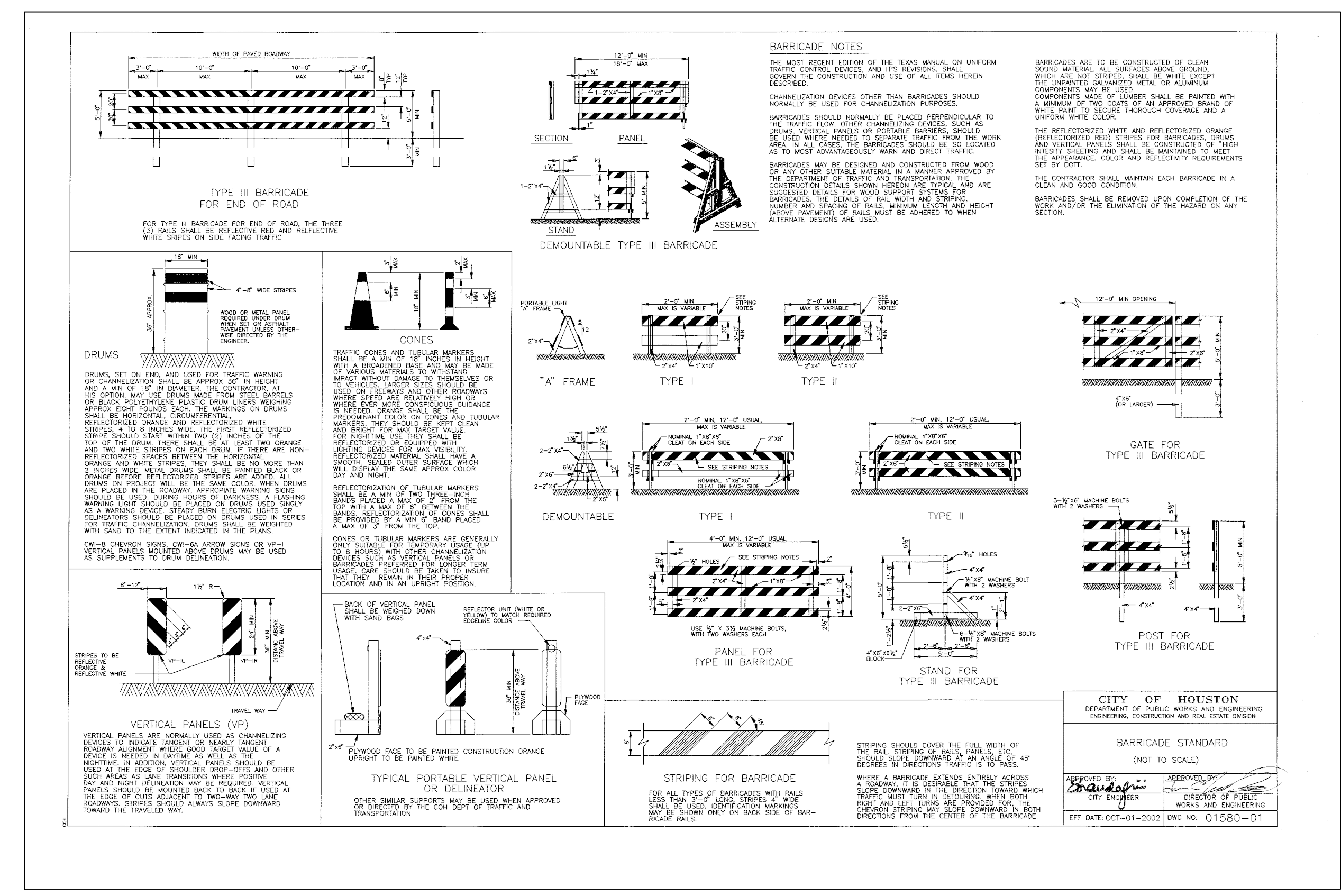
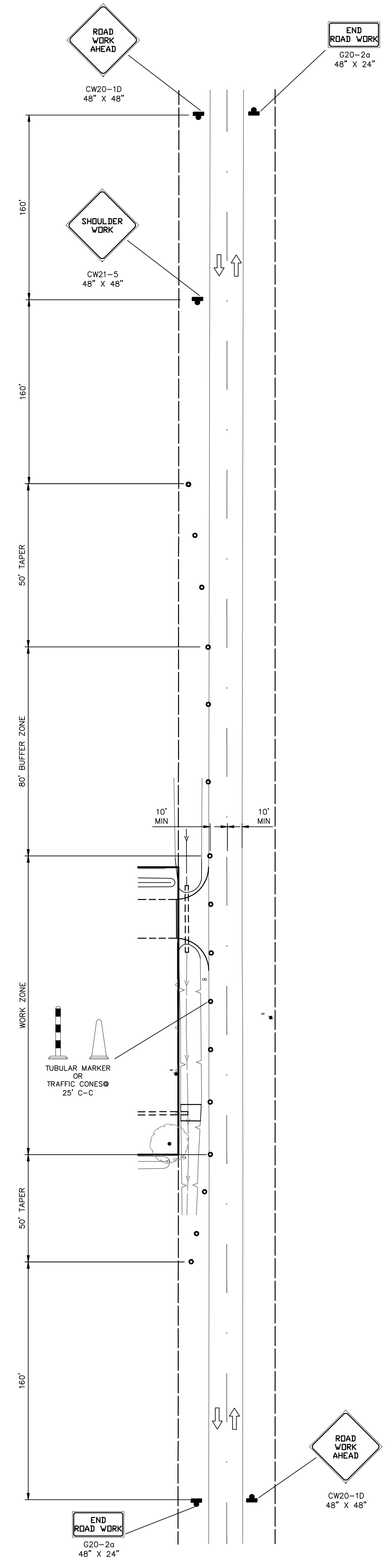
CHKD BY: M.J.  
OWN BY: M.J.  
DATE: 04/17/13  
PRJ No: 13124  
SHEET No: 13124

**C-7**

- TRAFFIC CONTROL NOTES**
- CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART V OF TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUD), LATEST EDITION WITH REVISIONS DURING CONSTRUCTION.
  - NO LANES SHALL BE BLOCKED FROM 7:00 AM TO 9:00 AM, AND 4:00 PM TO 6:30 PM MONDAY THROUGH FRIDAY.
  - OFF DUTY UNIFORMED POLICE OFFICERS/FLAGGERS ARE REQUIRED TO DIRECT TRAFFIC WHEN LANES ARE BLOCKED.
  - CONTRACTOR SHALL COVER EXCAVATION WITH STEEL PLATES AND/OR PROPERLY DURING NON-WORKING HOURS AND ALLOW NORMAL TRAFFIC FLOW. IF COVERING IS NOT FEASIBLE, USE TRAXTEK FR 336 17X 36" DELINEATOR OR APPROVED EQUAL WITH SHEETING AND BASE EPOXYED TO PAVEMENT NEXT TO EXCAVATION DURING NON-WORKING HOURS.
  - APPROVED COPIES OF "TRAFFIC CONTROL PLANS" SHALL BE AVAILABLE FOR INSPECTION AT ALL TIMES.
  - IF CONTRACTOR CHOOSES TO USE DIFFERENT METHOD OF TRAFFIC CONTROL PLAN DURING CONSTRUCTION THAN WHAT IS OBTAINED IN CONTRACT DRAWINGS, CONTRACTOR SHALL BE RESPONSIBLE TO PREPARE AND SUBMIT ALTERNATIVE PLAN TO TRAFFIC SECTION OF MOPD FOR APPROVAL 10 WORKING DAYS PRIOR TO IMPLEMENTATION.
  - THESE PLANS SHALL BE DRAWN TO SCALE ON REPRODUCIBLE MYLAR AND SEALED BY LICENSED PROFESSIONAL ENGINEER IN STATE OF TEXAS. PLANS WILL BECOME PART OF CONTRACT DRAWINGS.
  - IF PROJECT IS WITHIN 400' FROM SIGNALIZED INTERSECTION, CONTRACTOR SHALL CONTACT HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT, SIGNAL DIVISION, AT 713-881-3210, 5 WORKING DAYS PRIOR TO START OF CONSTRUCTION.
  - MAINTAIN AT LEAST ONE LANE OF TRAFFIC IN EACH DIRECTION DURING WORKING HOURS.
  - ACCESS SHALL BE PROVIDED TO ADJACENT PROPERTIES AT ALL TIMES.
  - ALL EXISTING TRAFFIC CONTROL SIGNS SHALL BE MAINTAINED IN PLACE AS NECESSARY DURING CONSTRUCTION. CONTRACTOR SHALL REMOVE OR COVER ANY EXISTING SIGNS OR MARKINGS WHICH CONFLICT WITH CONSTRUCTION TRAFFIC CONTROL. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING AND MAINTAINING EXISTING PAVEMENT MARKINGS.
  - CONSTRUCTION VEHICLES SHALL BE OPERATED SO AS NOT TO CREATE NUISANCE OR HAZARD TO PUBLIC TRAFFIC.
  - CONTRACTOR SHALL INSURE ALL TRAFFIC CONTROL DEVICES ARE MAINTAINED IN CLEAN AND FUNCTIONAL CONDITION AT ALL TIMES.

LENGTH FOR LONGITUDINAL BUFFER		LEGEND	TYPICAL SIGN SPACING & TAPER LENGTHS			
POSTED SPEED (mph)	LENGTH IN FEET (ft)		POSTED SPEED (mph)	SIGN SPACING "A"	MIN DESIRABLE TAPER LENGTH "L"	MIN DESIRABLE TAPER LENGTH "L"
20	35	● PLASTIC DRUM	30	120'	10'	10'
25	55	○ CHANEL CONE	30	120'	10'	10'
30	85	▲ TRAFFIC SIGN	30	120'	10'	10'
35	120	▲ POLICE OFFICER	30	120'	10'	10'
40	170	▲ OFF-DUTY UNIFORMED	40	240'	265'	290'
45	220	▲ TYPE III BARRICADE	45	320'	400'	495'
50	280	▲ FLASHING ARROW PANEL	50	400'	500'	600'
55	335		55	500'	550'	660'

STREET NAME	SPEED LIMIT
TAUB RD	35 MPH



7 CROGANS PARK DR, SUITE 11, THE WOODLANDS, TX 77380  
PHONE (281) 299-8677 FAX (281) 299-9856  
dts@dtse.com

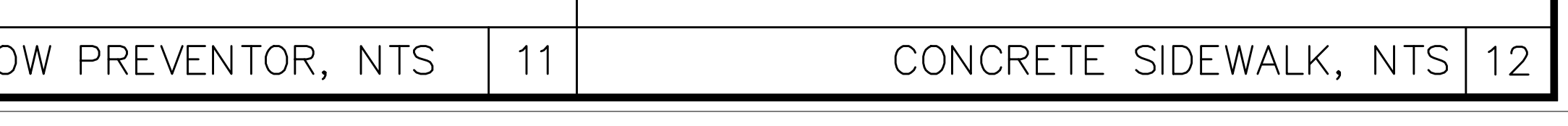
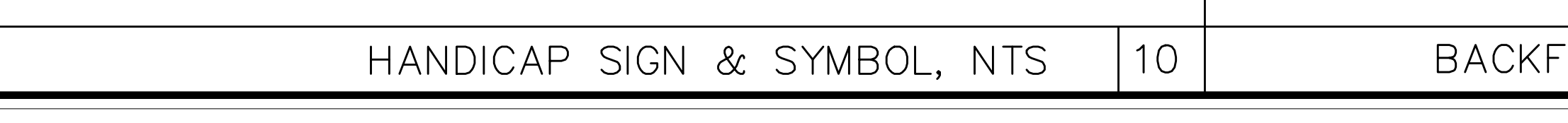
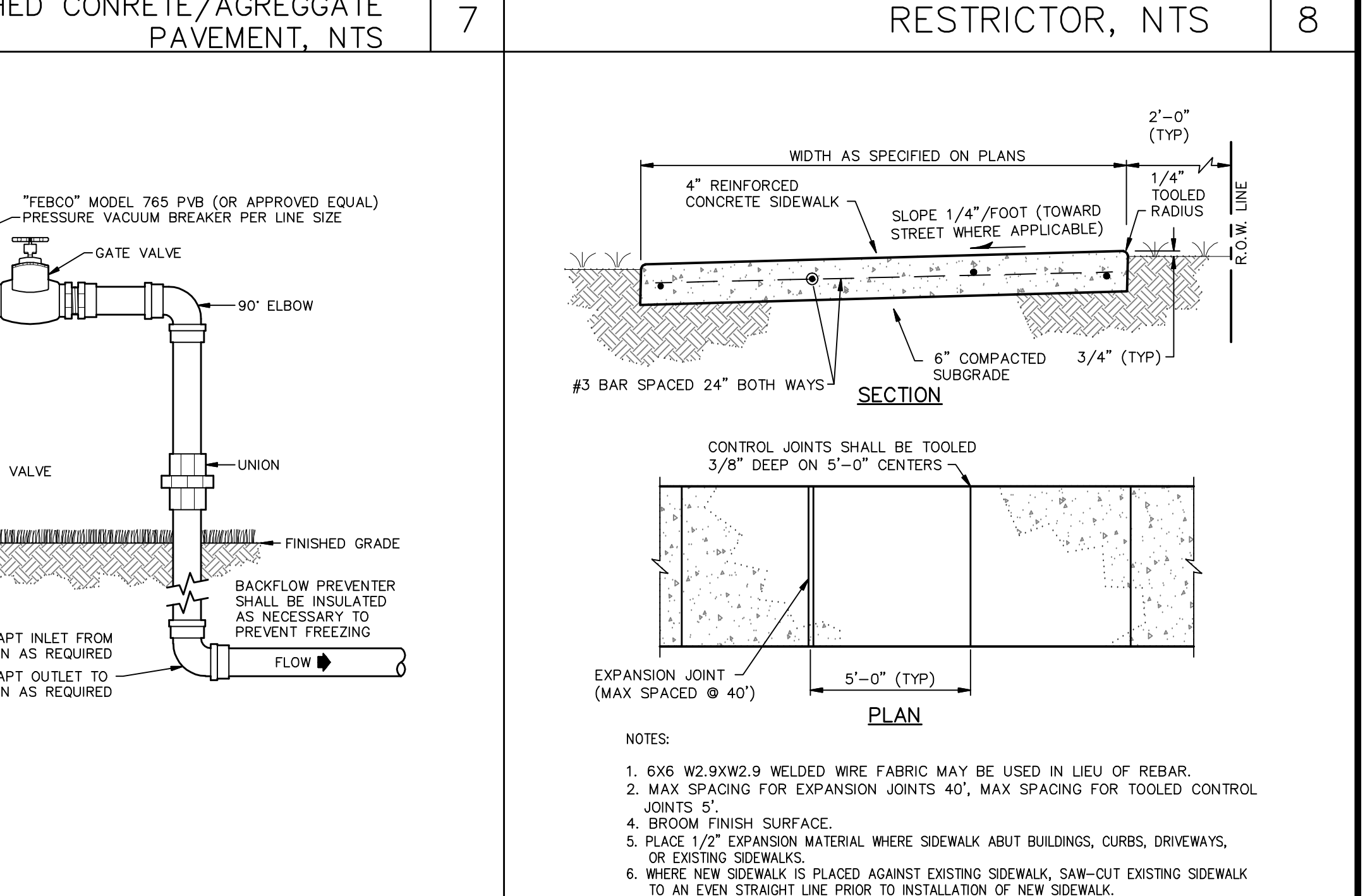
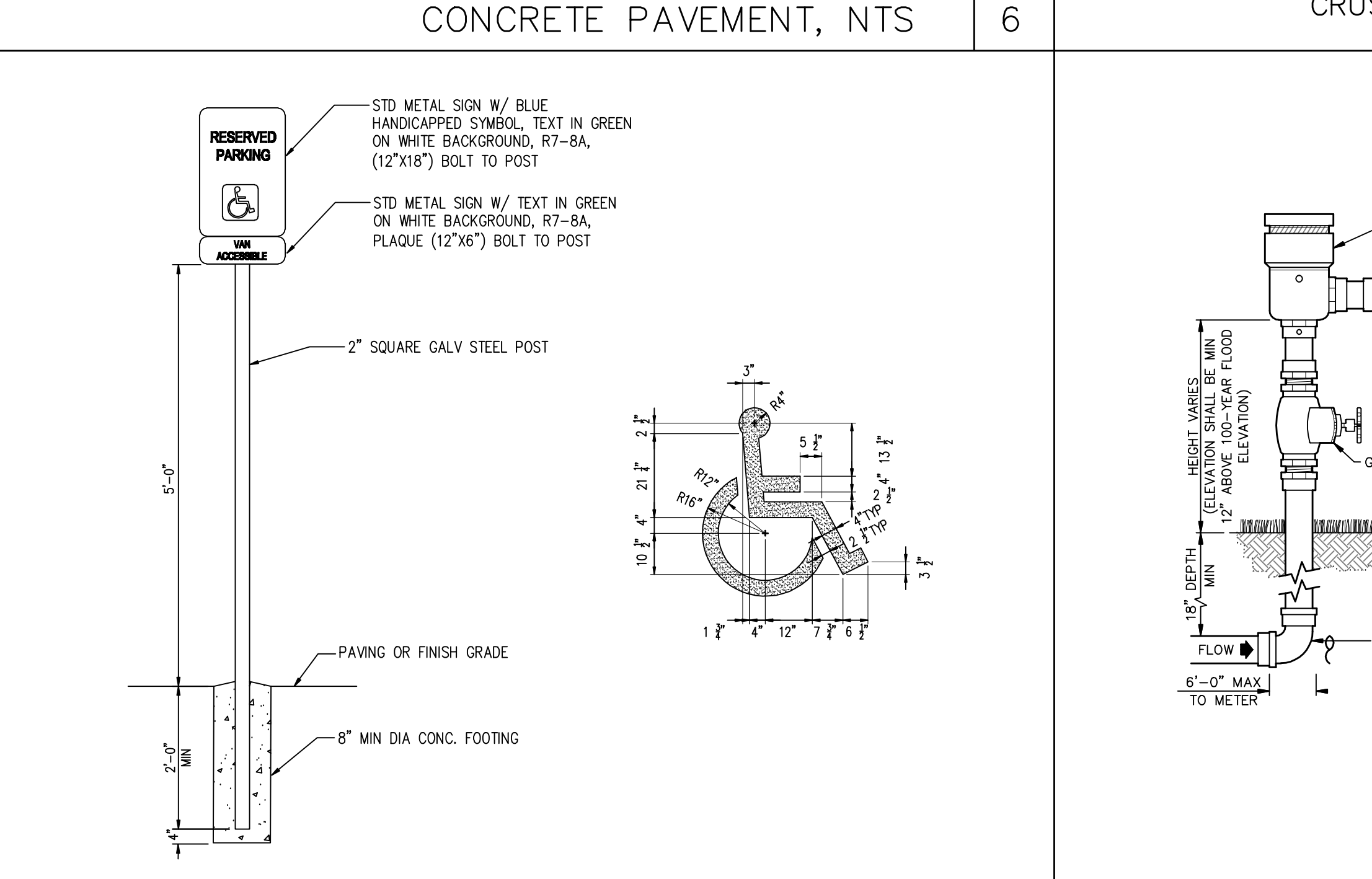
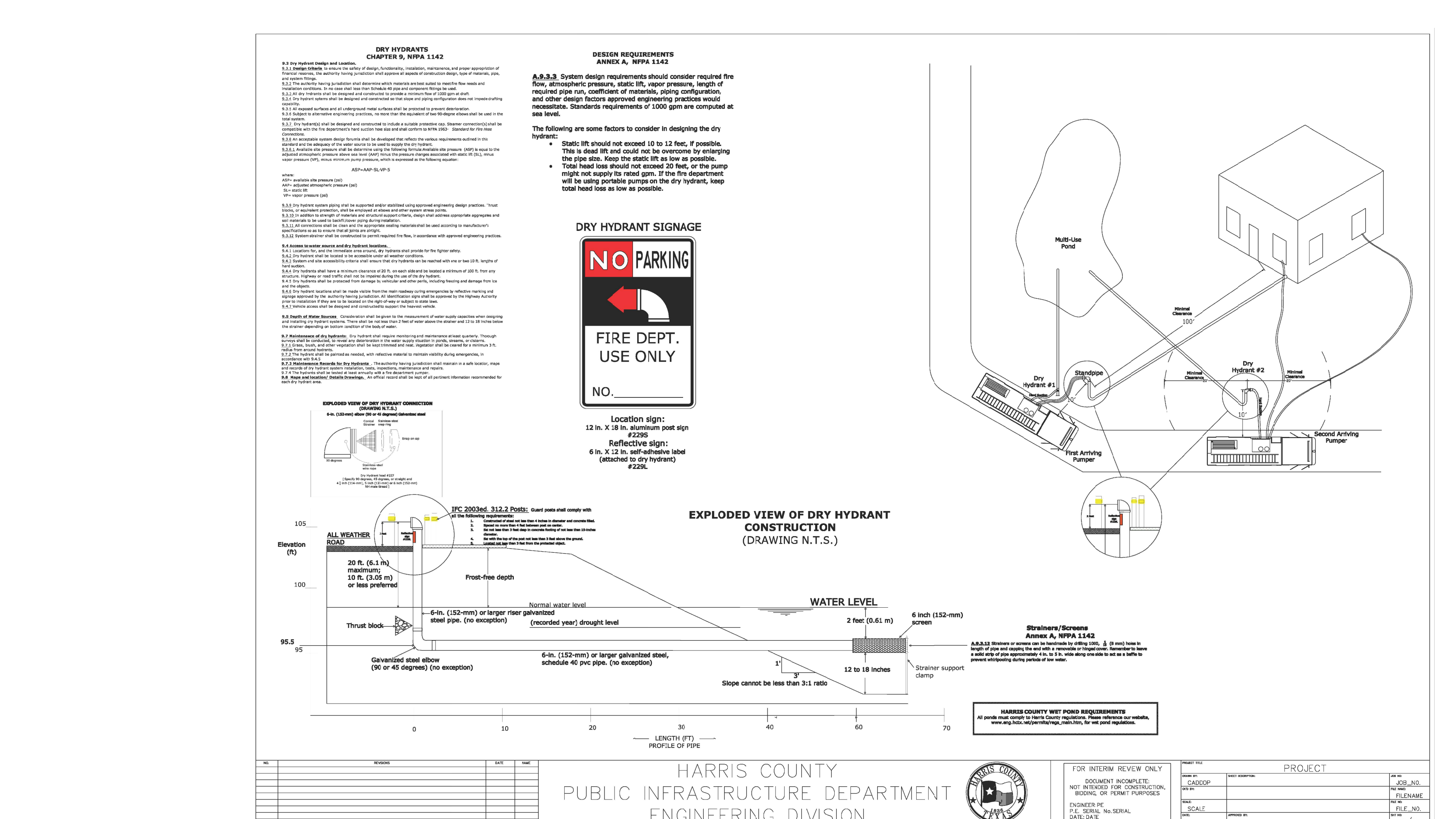
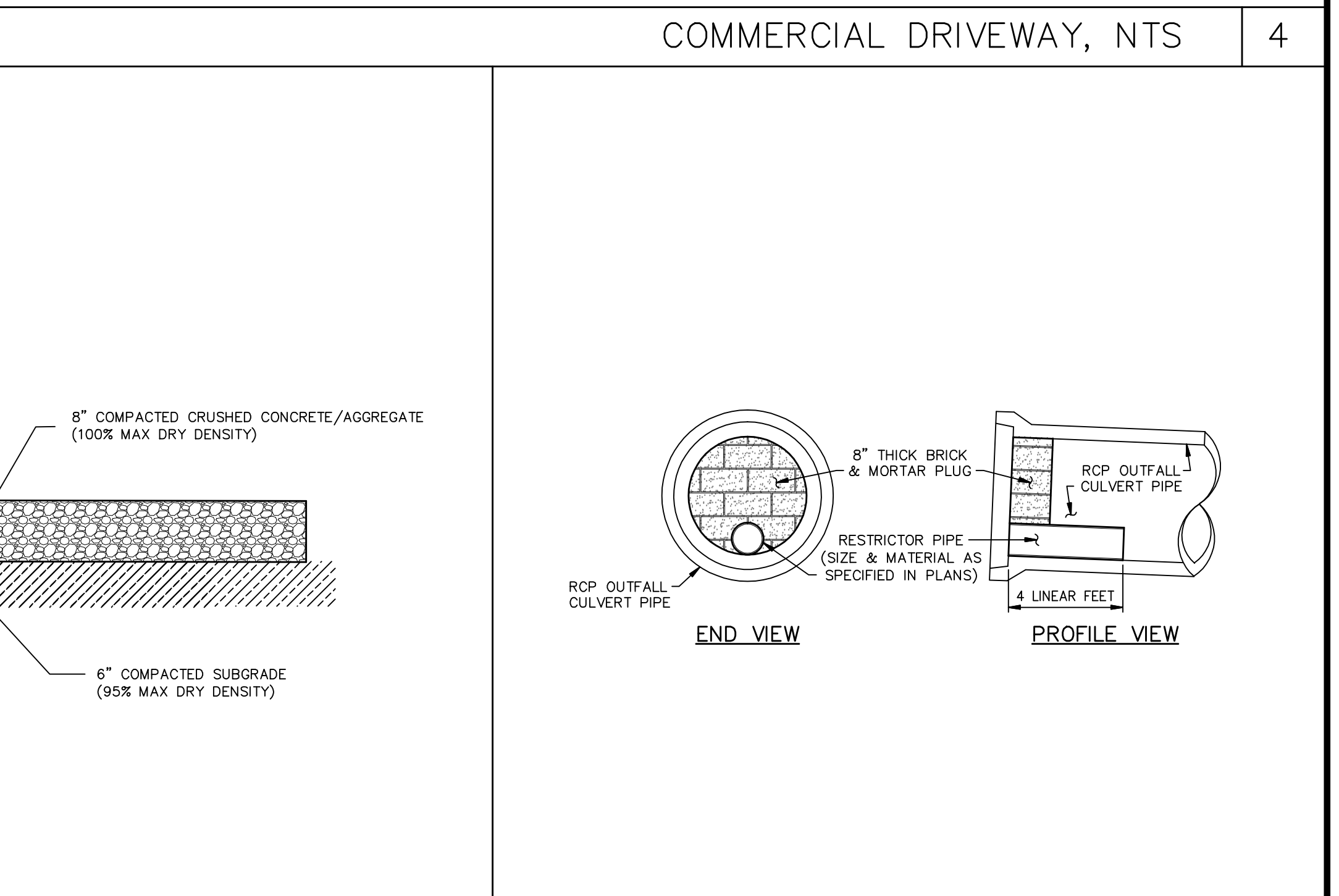
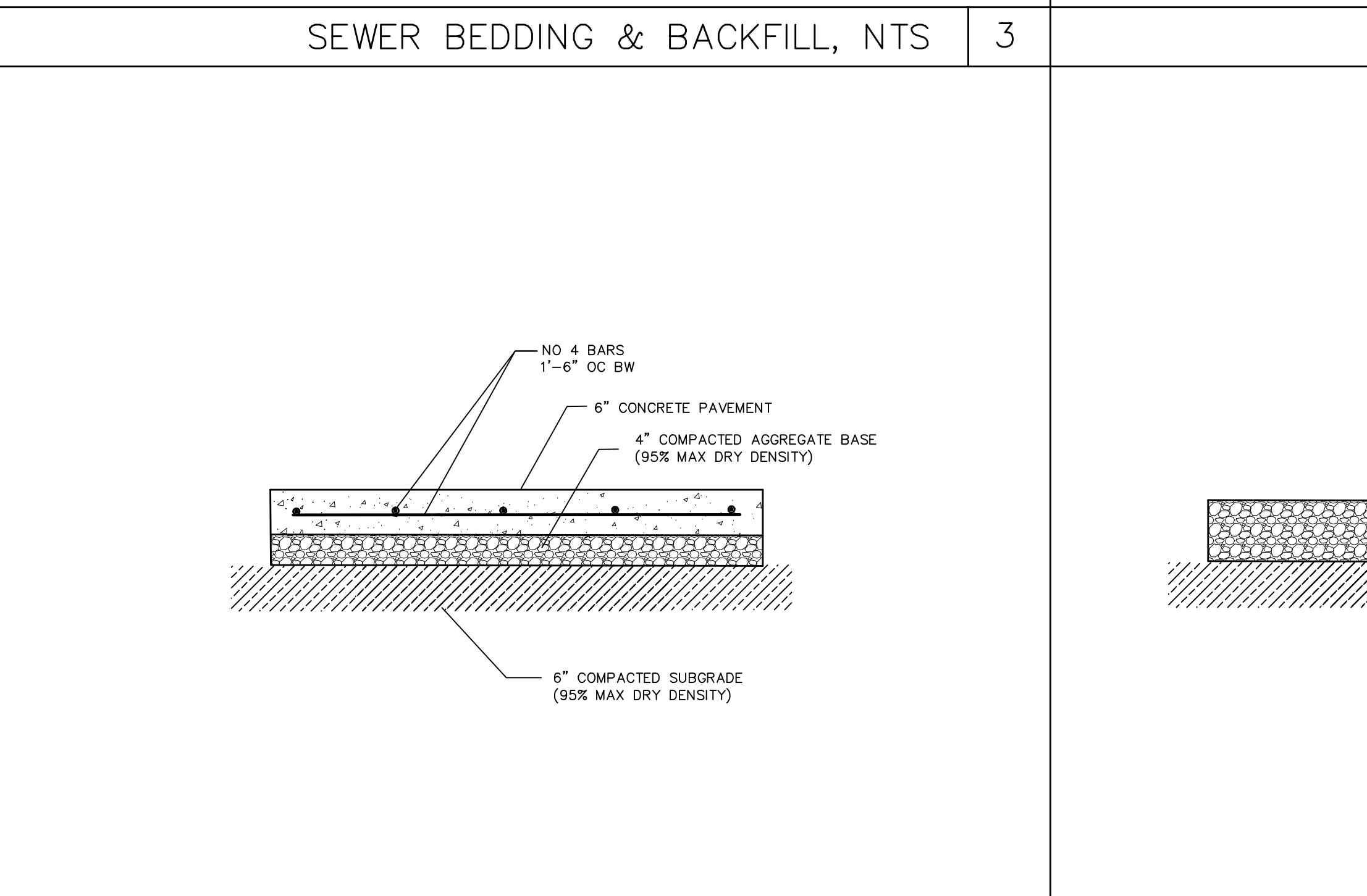
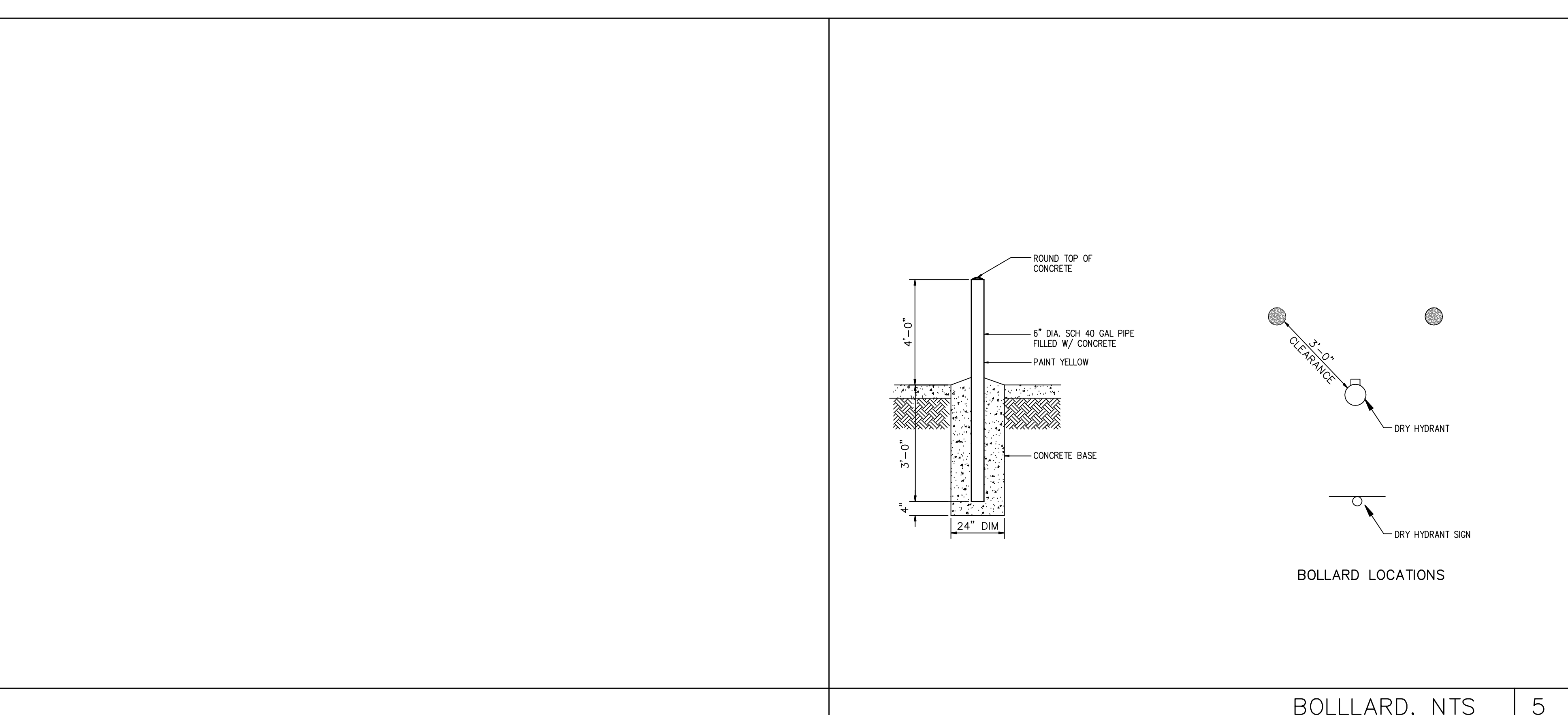
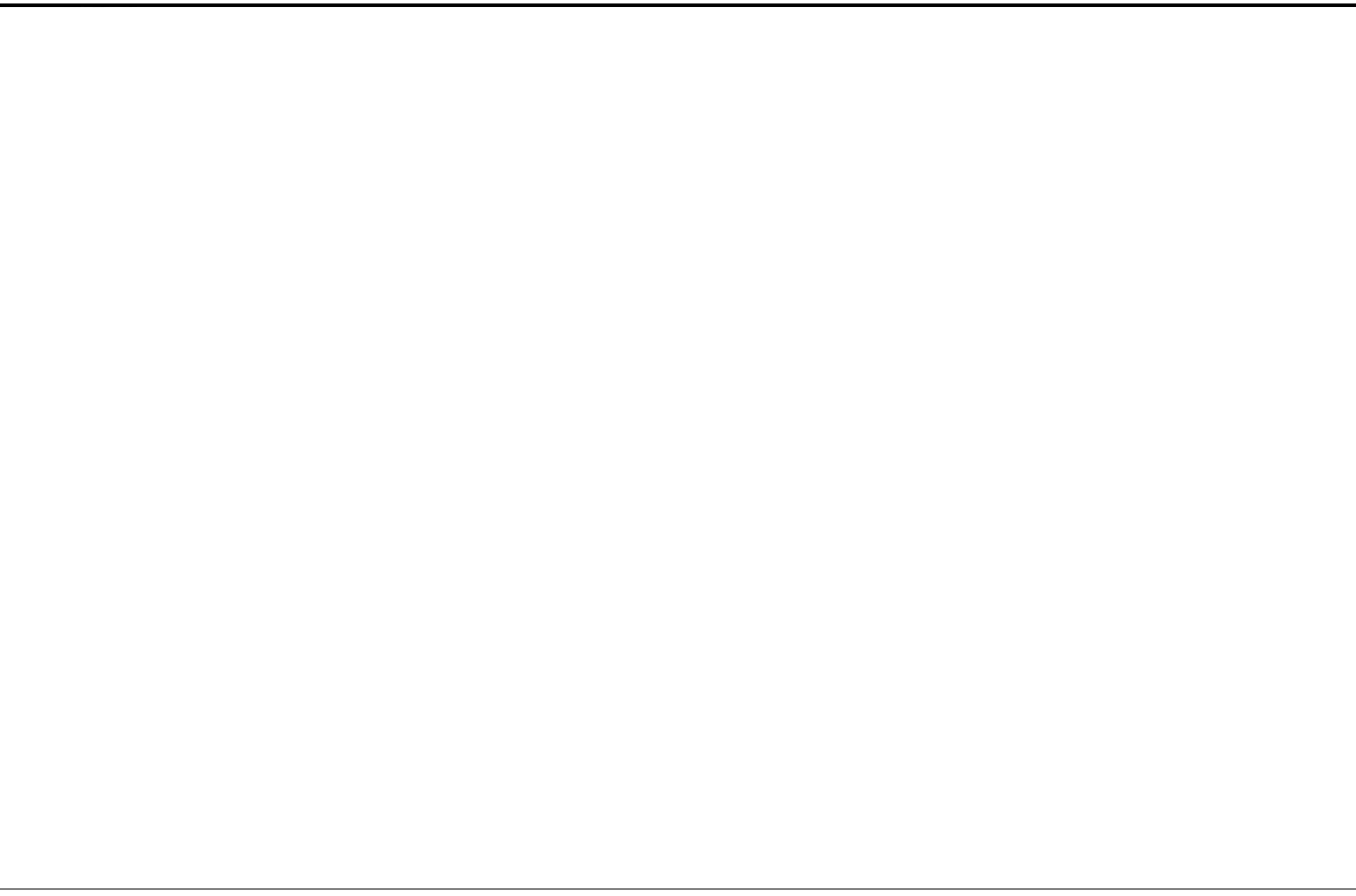
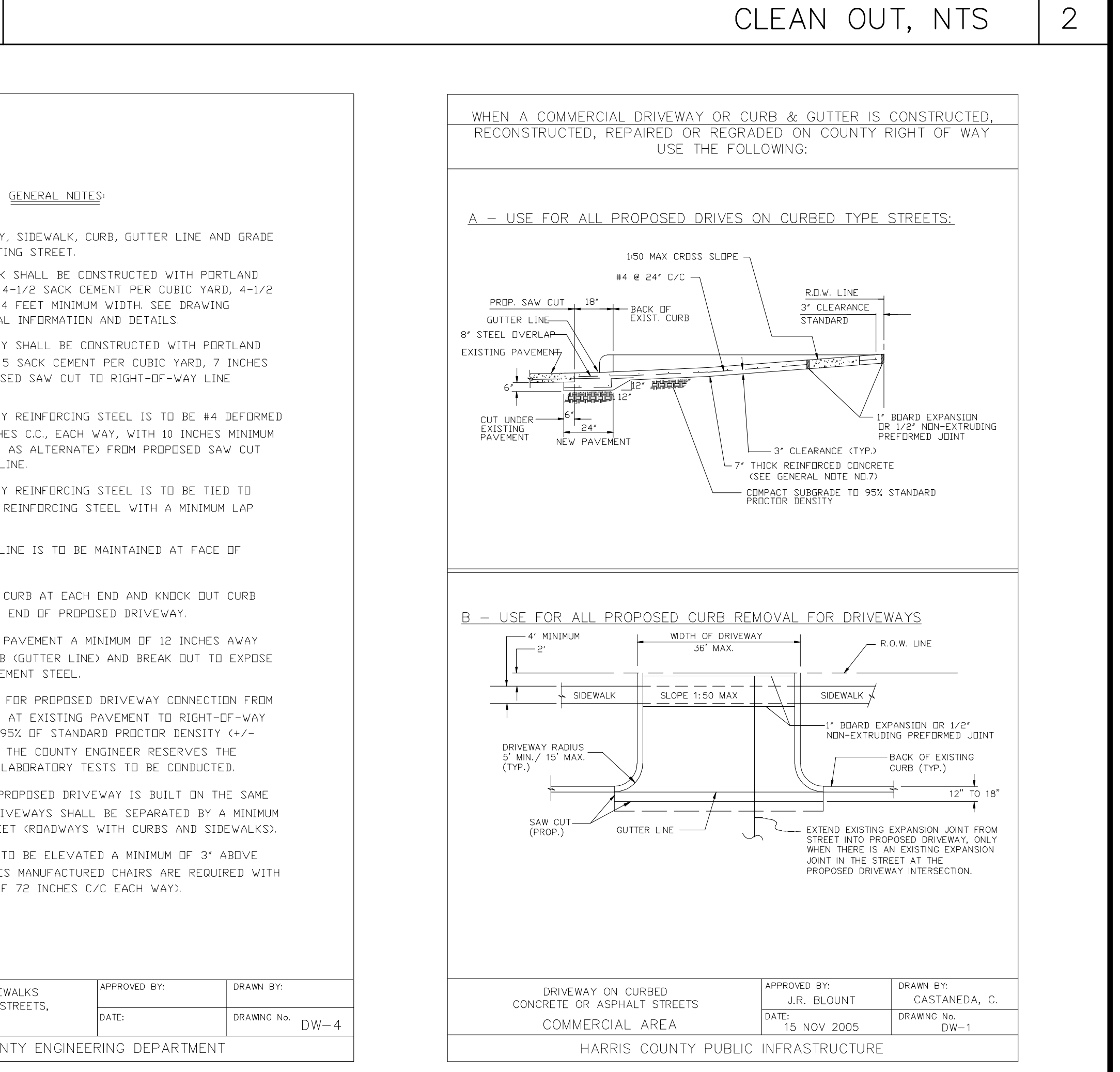
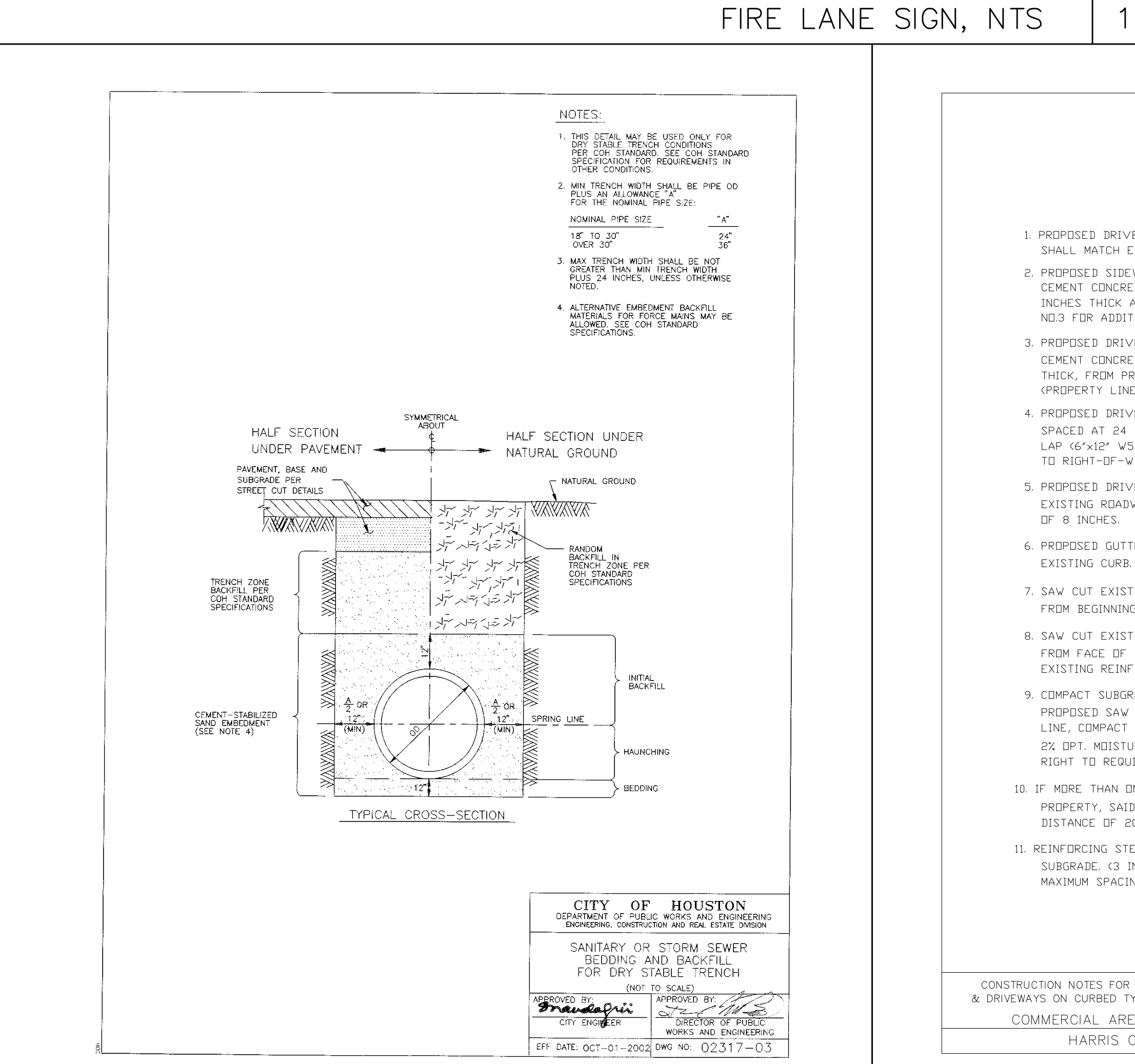
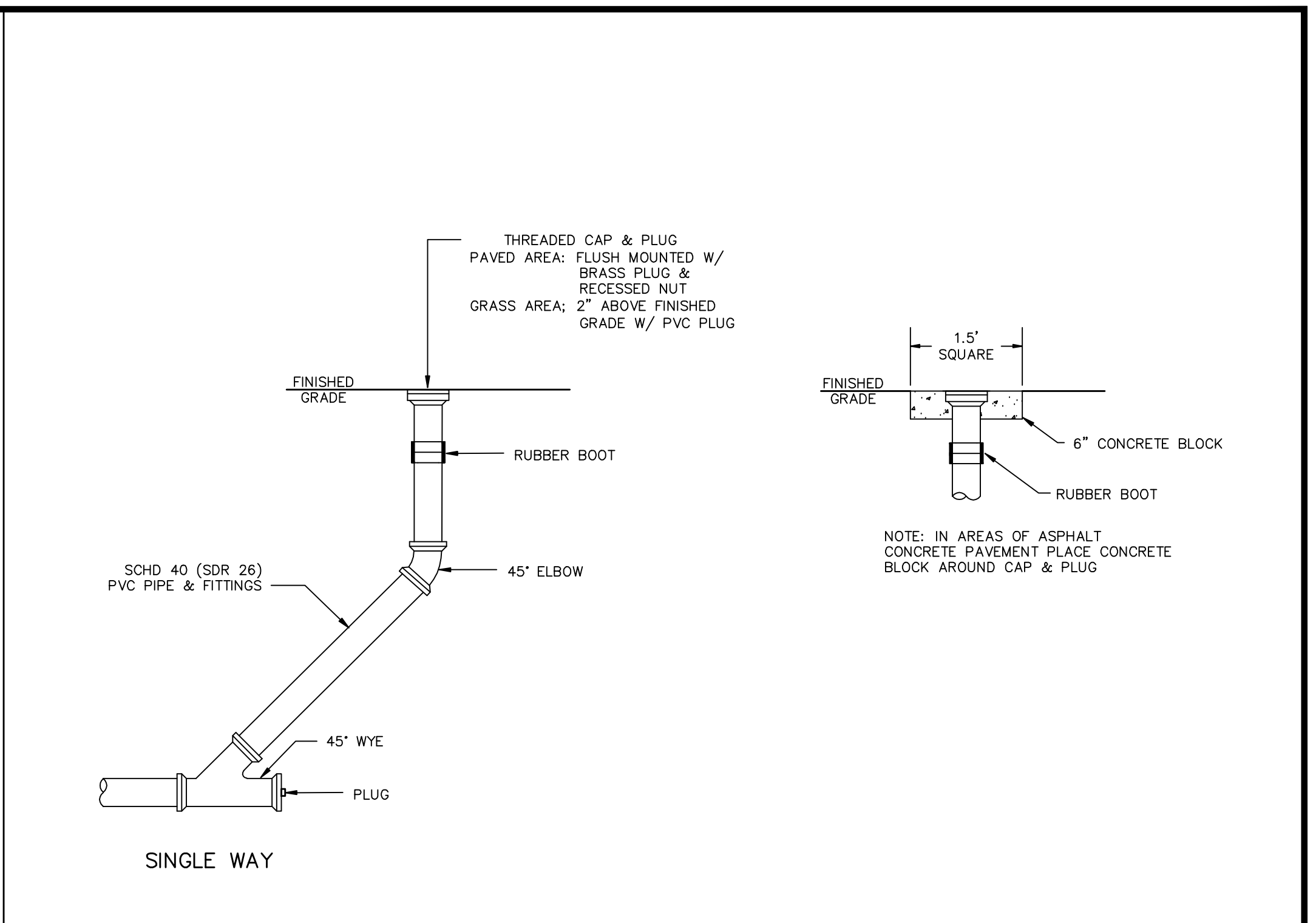
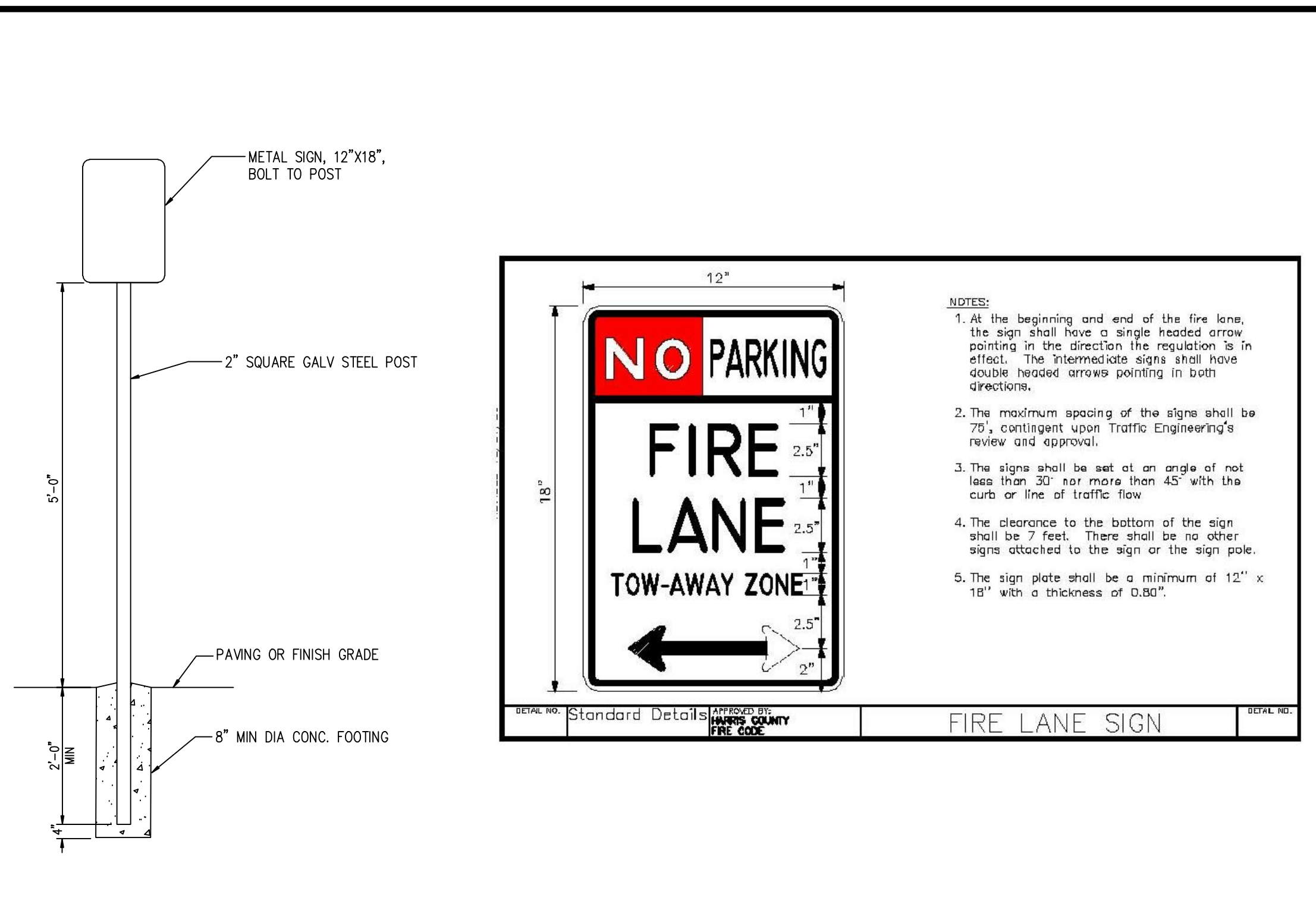
RC PRECISION, INC  
8904 TAUB RD  
HOUSTON, TX

TRAFFIC CONTROL PLAN

REV	DATE	DESCRIPTION
1	08/08/13	REVISED FOR BEST PRACTICES

CHKD BY	MUL
DWN BY	MUL
DATE	04/17/13
PRJ No	13134
SHEET No	







1. PAVING

- I. DESIGN THICKNESS OF PAVING 8"
II. STABILIZED SUBGRADE TO A DEPTH OF 6"
III. DESIGN STRENGTH OF CONCRETE psi
IV. TYPE AND PLACEMENT OF STEEL:

DRIVEWAYS

- I. NUMBER OF DRIVEWAY APPROACHES PROPOSED: 1
II. HARRIS COUNTY STANDARD DRIVEWAY DETAIL APPEARS ON SHEET C-9

FIRE APPARATUS ACCESS ROAD

- REQUIRED AND SHOWN ON SHEET(S) C-3
NOT REQUIRED DUE TO

CURBING

- ISLANDS AND MEDIANS REQUIRE STANDARD 6" CURBING
STANDARD 6" CURBING PROPOSED
4" x 12" CURBING PROPOSED EXCEPT AT MEDIANS AND ISLANDS

TRAFFIC CONSIDERATIONS

- MEDIAN CUTS
NO MEDIAN CUT OR RELOCATION IS PROPOSED
MEDIAN MODIFICATIONS ARE SHOWN ON SHEET

- LEFT / RIGHT TURN LANE
NO LEFT / RIGHT TURN LANE IS PROPOSED
LEFT / RIGHT TURN LANE IS SHOWN ON SHEET

- TRAFFIC CONTROL PLAN
NO WORK IN THE RIGHT OF WAY IS PROPOSED THAT WOULD INTERFERE WITH TRAFFIC FLOW
TRAFFIC CONTROL SHOWN ON SHEET C-8

- TRAFFIC SIGNAL
NO TRAFFIC SIGNAL IS EXISTING / PROPOSED
EXISTING TRAFFIC SIGNAL DEVICES (T.C. BOXES AND LOOPS) SHOWN ON SHEET
PROPOSED TRAFFIC SIGNAL (BY OTHERS)

- TRAFFIC IMPACT ANALYSIS
NO TRAFFIC IMPACT ANALYSIS IS REQUIRED
TRAFFIC IMPACT ANALYSIS HAS BEEN APPROVED ON DATE:

FLOOD CONTROL DISTRICT CRITERIA

Table with columns: RAINFALL EVENT PROBABILITY, DEVELOPED PEAK INFLOW (CFS), POST-DEVELOPED PEAK RUNOFF (CFS), DETENTION BASIN PEAK FLOW (CFS), DETENTION BASIN SURFACE ELEVATION, PEAK STORAGE VOLUME (AC-FT), STORAGE RATE (AC-FIT PER AC)

ADDITIONAL CRITERIA FOR PUMPED DETENTION BASINS:
VOLUME OF PUMPED 1% EXCEEDANCE STORAGE VOLUME AC-FT
MAXIMUM DESIGN OUTFLOW VELOCITY INTO FLOOD CHANNEL
DRAIN TIME FOR BASIN HEAD CONDITIONS.

STORMWATER DRAINAGE DESIGN REPORT
REPORT TITLE
REPORT DATE
DATE OF ACKNOWLEDGEMENT BY HCFCO OR FLOODPLAIN DISTRICT FOR HCFCO PROJECT #

STORMWATER DETENTION FOR THE PROPOSED PROJECT CONTAINED IN THESE PLANS IS PROVIDED BY OTHER PLANS:
ENGINEERING FIRM
DATE SHOWN BY HCFCO
HCFCO PROJECT #

HCFCO STANDARD NOTES: SEE SHEET OF THESE PLANS.

HCFCO STANDARD DETAILS: SEE SHEET OF THESE PLANS.

REFER TO PLAN SHEETS FOR EXISTING AND PROPOSED RIGHT OF WAY DELINEATION AND COMPLETE RECORDING INFORMATION TO INCLUDE CLERK'S FILE NUMBERS, TYPE OF ESTATE (e.g., DRAINAGE EASEMENT, FEE STRIP, ETC.) AND GRantee (e.g. COH, HCFCO, PUBLIC, TXDOT, ETC.)

- NOTES:
I. COMPLETE ONLY IF HOUSTON OR HARRIS COUNTY IS REQUIRING DETENTION.
II. COMPLETE ONLY IF PROJECT HAS WITHIN IT OR IS IMMEDIATELY ADJACENT TO AN EXISTING OR PROPOSED HCFCO MAINTAINED CHANNEL OR DETENTION BASIN.
III. COMPLETE ONLY IF PROJECT INCLUDES NEW OUTFALL BACKSLOPE INTERCEPTOR OR OTHER RELATED WORK WITHIN AN EXISTING OR PROPOSED HCFCO MAINTAINED CHANNEL OR DETENTION BASIN.
IV. COMPLETE ONLY IF PROJECT HAS WITHIN OR IMMEDIATELY ADJACENT TO IT AN EXISTING OR PROPOSED PUBLIC DRAINAGE CHANNEL OR DETENTION BASIN.

RESIDENTIAL / SUBDIVISION DRAINAGE

- DRAINAGE SYSTEM TYPE
STORM SEWER
ROADSIDE DITCH

- DESIGN METHOD USED
CITY OF HOUSTON FREQUENCY
OTHER

DRAINAGE SYSTEM OUTFALL

- TO DETENTION POND
TO DETENTION POND MAINTAINED BY
TO HCFCO DRAINAGE DISTRICT UNIT NO.
TO HARRIS COUNTY ROADSIDE DITCH ROAD NAME:

- STATIC W.S.E. @ OUTFALL IS
PROPOSED STORM SEWER IS SUBMERGED

STORM SEWER OUTFALL

- CAPACITY ALLOCATED TO TRACT FROM D. A. MAP: (CFS)
DRAINAGE AREA MAP DATED:
PREPARED BY: (CFS)
ACTUAL OUTFALL RATE: (CFS)

DRAINAGE SYSTEM FLOW RATE

- FLOW PRIOR TO DETENTION: CFS
FLOW AFTER DETENTION (IF REQUIRED):

COMMERCIAL / OTHER SITE DRAINAGE

- PROPOSED DRAINAGE AREA
NEW DEVELOPMENT AREA:
RE-DEVELOPMENT AREA (AMOUNT INCREASED IMPERVIOUS AREA): 0.2569

- DETENTION VOLUME
NEW AREA 0.2569 x = 0.2569 ACRE FEET
DETENTION REQUIRED
PROPOSED VOLUME = 0.2573 ACRE FEET

OUTFALL

- H.C. ROADSIDE DITCH
EXISTING H.C. STORM SEWER
OTHER

- ROADSIDE DITCH OUTFALL:
ALLOWABLE OUTFALL RATE: 0.0027 x 179 LF Frontage = 0.48 (CFS)
PROPOSED OUTFALL RATE: 1.49

- STORM SEWER OUTFALL
CAPACITY ALLOCATED TO TRACT FROM D. A. MAP: (CFS)
DRAINAGE AREA MAP DATED:
PREPARED BY: (CFS)
ACTUAL OUTFALL RATE: (CFS)

PUMPED DETENTION FACILITIES

- VOLUME THAT GRAVITY FLOWS: ACRE FEET
VOLUME THAT IS PUMPED: ACRE FEET
ENTRANCE VELOCITY INTO ROADSIDE DITCH OR STORM SEWER:
PUMP SPECIFICATIONS AND OPERATING PLAN APPEAR ON SHEET

- FLOW RESTRICTOR SIZE
OUTFALL PIPE SIZE: 24" RCP
RESTRICTOR PIPE SIZE: 6"

FLOOD PLAIN STATUS

- GENERAL INFORMATION
FIRM PANEL(S) FOR PROPERTY: 48201C0445L
FIRM PANEL(S) DATE: JUN 18, 2007
STATUS OF PROPERTY ON MAP

- ENTIRELY LOCATED IN UNSHADED ZONE "X"
LOCATED PARTIALLY IN ANY "A" ZONE OR SHADED ZONE "X", DELINEATE FLOODPLAIN BOUNDARY ON CONSTRUCTION DRAWINGS (DRAINAGE LAYOUT PG. NO. ) (BASE FLOOD LEVEL )
LOCATED ENTIRELY IN ANY "A" ZONE OR SHADED ZONE "X", (INDICATE BASE FLOOD LEVEL )
LOCATED IN THE 10-YEAR FLOODPLAIN
LOCATED IN CYPRESS CREEK LOMR 08-06-2369P (INDICATE BASE FLOOD LEVEL )
SITE REMOVED FROM FLOODPLAIN BY LOMA OR LOMR-F CASE NO.
OTHER

- ELEVATION INFORMATION
BENCHMARK USED
HARRIS COUNTY FLOODPLAIN REFERENCE MARK
HARRIS-GALVESTON COASTAL SUBSIDENCE DISTRICT BENCHMARK (FOR COASTAL AREAS)
DESCRIPTION OF BENCHMARK INCLUDING ELEVATION, DATUM AND YEAR OF ADJUSTMENT (2001 ADJ.)
RM 050475: Brass disk Stamped "050475" on West end of headwall at Southwest corner of intersection of Windfern Rd. and Fairbrook Dr. Whitetank Watershed near stream E141-00-00. ELEV 115.40', NAVD 1988, 2001 ADJT

- PERMIT
US ARMY CORPS OF ENGINEERS REGIONAL PERMIT NUMBER
US ARMY CORPS OF ENGINEERS INDIVIDUAL PERMITS
OTHER
NO PERMITS REQUIRED EXPLAIN:

- FLOOD PLAIN DETERMINATION BASED ON GROUND ELEVATION
PROPERTY LIES ENTIRELY ABOVE THE BASE FLOOD LEVEL AND IN SHADED ZONE "X"
PROPERTY LIES PARTIALLY OR ENTIRELY BELOW THE BASE FLOOD LEVEL

- FLOODPLAIN STORAGE SUMMARY (APPLIES ONLY TO PORTION OF LAND LOCATED WITHIN FLOODPLAIN AS DELINEATED BY FIRM PANEL)
TOTAL VOLUME OF MATERIAL PROPOSED TO BE PLACED WITHIN THE FIRM DELINEATED FLOODPLAIN (FILL, BASE, CONCRETE, ASPHALT, ETC.) i.e., BELOW ELEVATION (2001 ADJ.) CUBIC YARDS
TOTAL VOLUME OF MATERIAL PROPOSED TO BE REMOVED FROM THE FIRM DELINEATED FLOODPLAIN: i.e., BELOW ELEVATION (2001 ADJ.) CUBIC YARDS
FILL AREA IN FLOODPLAIN IS SHOWN ON SHEET

- NOTES:
I. COMPLETE FOR ALL PROJECTS
II. COMPLETE ONLY IF PROJECT IS ADJACENT TO 100-YEAR FLOOD PLAIN

- LOMR REQUIRED
CLOMR REQUIRED

FOR PROJECTS LOCATED IN ANY FLOODPLAIN
Development constructed or placed in accordance with these plans will comply with all provisions of the Regulations of Harris County, Texas for Floodplain Management.
No net fill is allowed in the flood plain and no fill is allowed in the floodway.
FOUNDATION NOTES: (Apply to only buildings or building additions requiring a clean fill permit)
All water heaters, furnaces, air conditioning units, electrical distribution panels, and any other mechanical or electrical equipment must be elevated in accordance with Section 4.6.6 of Harris County Floodplain regulations.
Any electrical circuit serving a light switch or outlet located below the base (100-year) flood elevation shall be dropped from above and be on a separate breaker.
All materials used below the (100-year) base flood elevation are on approved FEMA Technical Bulletin 3-93 or Class 3 water-resistant, and approved in accordance with FEMA Technical Bulletin 1-99 for non-synthetic.
If the property is located within the designated 10% floodplain or sea-level rise floodplains all construction up to twenty-four (24) inches above the base flood elevation must use masonry, concrete or steel. These materials must be used for piers, columns and foundation walls.
Construction of critical care facilities on land located below the base (100-year) flood elevation or within the base (100-year) flood plain shall have the lowest floor elevated to three feet or more above the base flood elevation.
Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters.
Access routes elevated to or above the level of the base flood shall be provided to all critical facilities to the extent possible.
Completed "Retention Certificate" to be submitted one at permitting, a second after the job is started or sub-floor is installed and before the framing starts, and a third is required once construction is finished. "POST CONSTRUCTION FLOOD DAMAGE TO THE Harris County Public Infrastructure, Architecture and Engineering Division, 15155 Northwest Freeway, Suite 128, Houston, TX 77060"
A completed as-built certificate must be submitted after the structure is complete and before it is occupied.
The County Engineer's Office will post a final inspection notice on the structure once all requirements have been met.

WORK IN HCFCO RIGHT-OF-WAY

- TYPE OF WORK TO BE PERFORMED IN CHANNEL
OUTFALL
UTILITY CROSSING
ROADWAY BRIDGE / CULVERT CROSSING
FILL ACTIVITY
REHABILITATION OF CHANNEL
MAINTENANCE
TEMPORARY CROSSING
OTHER

- ENVIRONMENTAL CONSULTANT REPORT
BY
REPORT TITLE
REPORT DATE
OTHER

- NOTES:
I. - III. REQUIRED ON PROJECTS WITH WORK IN A HCFCO CHANNEL. PLEASE REFERENCE SECTION 17 OF THE FLOOD CONTROL DISTRICT POLICY, CRITERIA, AND PROCEDURE MANUAL FOR MORE INFORMATION.

PERMITS REQUIRED

- TOTAL ESTIMATED SITE CONSTRUCTION COST, (EXCLUDING ENCLOSED BUILDINGS/STRUCTURES) \$100,000
STORM WATER QUALITY
PHASE II PERMIT CLASS I
PHASE II PERMIT CLASS II CRITICAL FACILITY

- DRIVEWAY WITH CULVERT 1 CURB AND GUTTER
SEPTIC (EXISTING) SEPTIC (PROPOSED)
NOTICE OF DETENTION REQUIRED
FILL AFFIDAVIT REQUIRED
BUILDING PERMITS (NO. OF BUILDINGS = 1 )
SUBDIVISION INFRASTRUCTURE PHASE II (NO. OF LOTS = )

- NOTES:
WORK IN HARRIS COUNTY R.O.W.
UTILITY 24" RCP OUTFALL
CONSTRUCTION
OTHER DRIVEWAY

- NOTES:
I. - III. REQUIRED ON PROJECTS WITH WORK IN A HCFCO CHANNEL. PLEASE REFERENCE SECTION 17 OF THE FLOOD CONTROL DISTRICT POLICY, CRITERIA, AND PROCEDURE MANUAL FOR MORE INFORMATION.

- CURB RAMPS PROPOSED YES NO
SIDEWALKS PROPOSED YES NO
A. HOME BUILDER YES
B. DEVELOPER YES
C. H.O.A. YES
D. OTHERS

CURB RAMPS / SIDEWALK

- REQUIRED AND SHOWN ON SHEET(S) C-7
NOT REQUIRED

- NOTES:
A PERMIT IS REQUIRED FOR EACH SCOPE OF WORK ON SITE. A NOTIFICATION IS REQUIRED FOR EACH SCOPE OF WORK IN HC OR HCFCO ROW. REFER TO www.eng.hctx.net/permits FOR EACH SCOPE OF WORK IN HC OR IN HCFCO ROW.

LANDSCAPING

- REQUIRED AND SHOWN ON SHEET(S) C-7
NOT REQUIRED

- NOTES:
A PERMIT IS REQUIRED FOR EACH SCOPE OF WORK ON SITE. A NOTIFICATION IS REQUIRED FOR EACH SCOPE OF WORK IN HC OR HCFCO ROW. REFER TO www.eng.hctx.net/permits FOR EACH SCOPE OF WORK IN HC OR IN HCFCO ROW.

DESCRIPTION OF PROPERTY

- LEGAL DESCRIPTION
ACREAGE: 1.8926

- SUBDIVISION: NORTH HOUSTON GARDENS No 2
SURVEY & ABSTRACT:

- ADJACENT ROADS: TAUB RD

- PLATTING
SUBDIVISION PLAT
PROPOSED PLAT / REPLAT
RECORDED PLAT / REPLAT

- PLAT NAME: NORTH HOUSTON GARDENS No 2
PLAT NUMBER V 275, P. 265
NO PLAT REQUIRED

- STREETS PROPOSED
PUBLIC
PRIVATE
PUBLIC & PRIVATE
NONE

- JURISDICTIONS
CITY OF HOUSTON
CITY OF
ETJ, CITY OF HOUSTON
ETJ, CITY OF
NO ETJ

- HCAD ACCOUNT NOS. (ALL)
027-256-0000-042

- UNOBSTRUCTED VISIBILITY EASEMENT (U.V.E.)
REQUIRED AND SHOWN ON SHEET(S)
NOT REQUIRED
KEY MAP page(s) 410B
CPC 101 FORM MAY BE REQUIRED

STORM WATER QUALITY

- CONSTRUCTION PROTECTIVE MEASURES
SWPPP SITE PLAN AND DETAILS ON SHEET(S) C-6

- APPLICABILITY FOR PERMANENT FEATURES
EXEMPT NEW DEVELOPMENT OF LESS THAN 5 ACRE PARCEL.
EXEMPT REDEVELOPMENT OF A 5 ACRE OR LARGER PARCEL WHERE TOTAL IMPERVIOUS SURFACE (EXISTING PLUS PROPOSED) IS LESS THAN 1 ACRE.
EXEMPT "GRAND FATHERED" BY AN EXISTING STORM SEWER LINE.
STORM WATER QUALITY PERMIT REQUIREMENT FOR THIS PROJECT IS COVERED BY
"STORM WATER QUALITY MANAGEMENT PLAN" INCLUDED. SWOMP SITE PLAN ON SHEET(S)

- PERMANENT STORM WATER QUALITY FEATURES
VEGETATIVE CONTROLS USED: (FILTER STRIP, GRASSY SWALE, URBAN FORESTRY) DETAILS AND CALCULATIONS APPEAR ON SHEET(S)
POND STRUCTURE USED (WET, DRY, WETLANDS) DETAILS AND CALCULATIONS APPEAR ON SHEET(S)

- HYDRODYNAMIC TYPE SEPARATOR MODEL:
OTHER(S):

- NOTES:
I. REQUIRED ON ALL PROJECTS. II IF NOT EXEMPT OR "GRANDFATHERED"
\*\* INCLUDE: PROJECT TITLE, HARRIS COUNTY PROJECT NUMBER, AND SWO PERMIT NUMBER, OR THE NAME OF THE PERMITTING AUTHORITY IF OTHER THAN HARRIS COUNTY.

- NOTES:
I. REQUIRED ON ALL PROJECTS. II IF NOT EXEMPT OR "GRANDFATHERED"
\*\* INCLUDE: PROJECT TITLE, HARRIS COUNTY PROJECT NUMBER, AND SWO PERMIT NUMBER, OR THE NAME OF THE PERMITTING AUTHORITY IF OTHER THAN HARRIS COUNTY.

- NOTES:
I. REQUIRED ON ALL PROJECTS. II IF NOT EXEMPT OR "GRANDFATHERED"
\*\* INCLUDE: PROJECT TITLE, HARRIS COUNTY PROJECT NUMBER, AND SWO PERMIT NUMBER, OR THE NAME OF THE PERMITTING AUTHORITY IF OTHER THAN HARRIS COUNTY.

HCPID SIGNATURE BLOCK

PROJECT NAME:
RC PRECISION
8904 TAUB RD

ADDRESS:
WAS ACCEPTED BY THE FOLLOWING GROUPS FOR THE PURPOSES LISTED BELOW:
ENGINEERING DIVISION

BY INTERPOSE NO OBJECTION DATE
BY AS TO PAVING AND/OR DRAINAGE ONLY DATE

BY AS TO LOCATION OF ITEMS IN COUNTY RIGHT OF WAY DATE

BY AS TO STORM WATER QUALITY DATE

ADDITIONAL COMMENTS:

HARRIS COUNTY FLOOD CONTROL DISTRICT

INTERPOSE NO OBJECTION
BY FOR ITEMS LOCATED OUTSIDE OF HCFCO RIGHT-OF-WAY DATE

APPROVED: DATE
BY FOR ITEMS LOCATED WITHIN EXISTING HCFCO RIGHT-OF-WAY DATE

APPROVED: DATE
BY FOR ITEMS LOCATED WITHIN PROPOSED HCFCO RIGHT-OF-WAY DATE

ADDITIONAL COMMENTS:

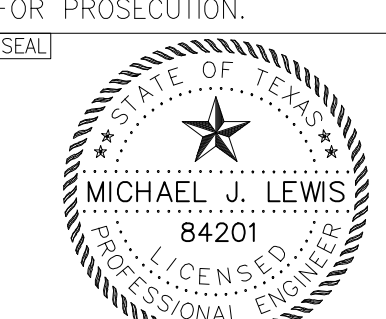
THE PROJECT WAS REVIEWED, HOWEVER, THIS DOES NOT MEAN THE ENTIRE PROJECT, INCLUDING ALL SUPPORTING DATA AND CALCULATIONS HAVE BEEN COMPLETELY CHECKED AND VERIFIED. THESE DRAWINGS ARE SIGNED, DATED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF TEXAS, WHICH THEREFORE CONVEYS THE ENGINEER'S RESPONSIBILITY AND ACCOUNTABILITY. THIS DOES NOT RELIEVE ANY PARTY FROM COMPLYING WITH APPROPRIATE FEDERAL, STATE AND LOCAL ENVIRONMENTAL RULES, LAWS, AND REGULATIONS AND ANY OTHER LEGALLY ADOPTED REGULATION OR ORDINANCE RELATED TO LAND DEVELOPMENT. IF THE CITY SIGNATURES ARE REQUIRED BY ORDINANCE, COUNTY PERMITS WILL NOT BE ISSUED UNTIL SUCH SIGNATURES ARE OBTAINED. THESE SIGNATURES ARE VALID FOR A MAXIMUM OF TWO YEARS.

ENGINEER'S CERTIFICATION

I, MICHAEL J. LEWIS, A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THE INFORMATION PRESENTED ON THIS SHEET IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND THAT I AM NOT VIOLATING ANY PROVISION OF THE CURRENT TEXAS ENGINEERING PRACTICE ACT AND RULES CONCERNING THE PRACTICE OF ENGINEERING AND PROFESSIONAL ENGINEERING LICENSURE.

ANY VIOLATIONS WILL BE FORWARDED TO THE HARRIS COUNTY DISTRICT ATTORNEY'S OFFICE FOR PROSECUTION.
THE COMPLETED PROJECT CONSISTS OF DRAWING SHEETS C-1 THRU C-10.

Michael J. Lewis 08/08/2013
SIGNATURE DATE



REVISIONS DTS ENGINEERING, INC
TBPCE REG No F7539

Table with columns: DATE, SHEET NO., REV, DESCRIPTION, P.E. INITIAL, H.C. APPROVED DATE

PROJECT NO. 2024272 SHEET NUMBER C-10

HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT EXPRESS REVIEW SHEET