

CONSTRUCTION PLANS FOR
WATER, SANITARY SEWER
AND DRAINAGE FACILITIES
&
PAVING AND APPURTENANCES
TO SERVE

BRIARLEY PHASE 1B
DEV. NO. 2006

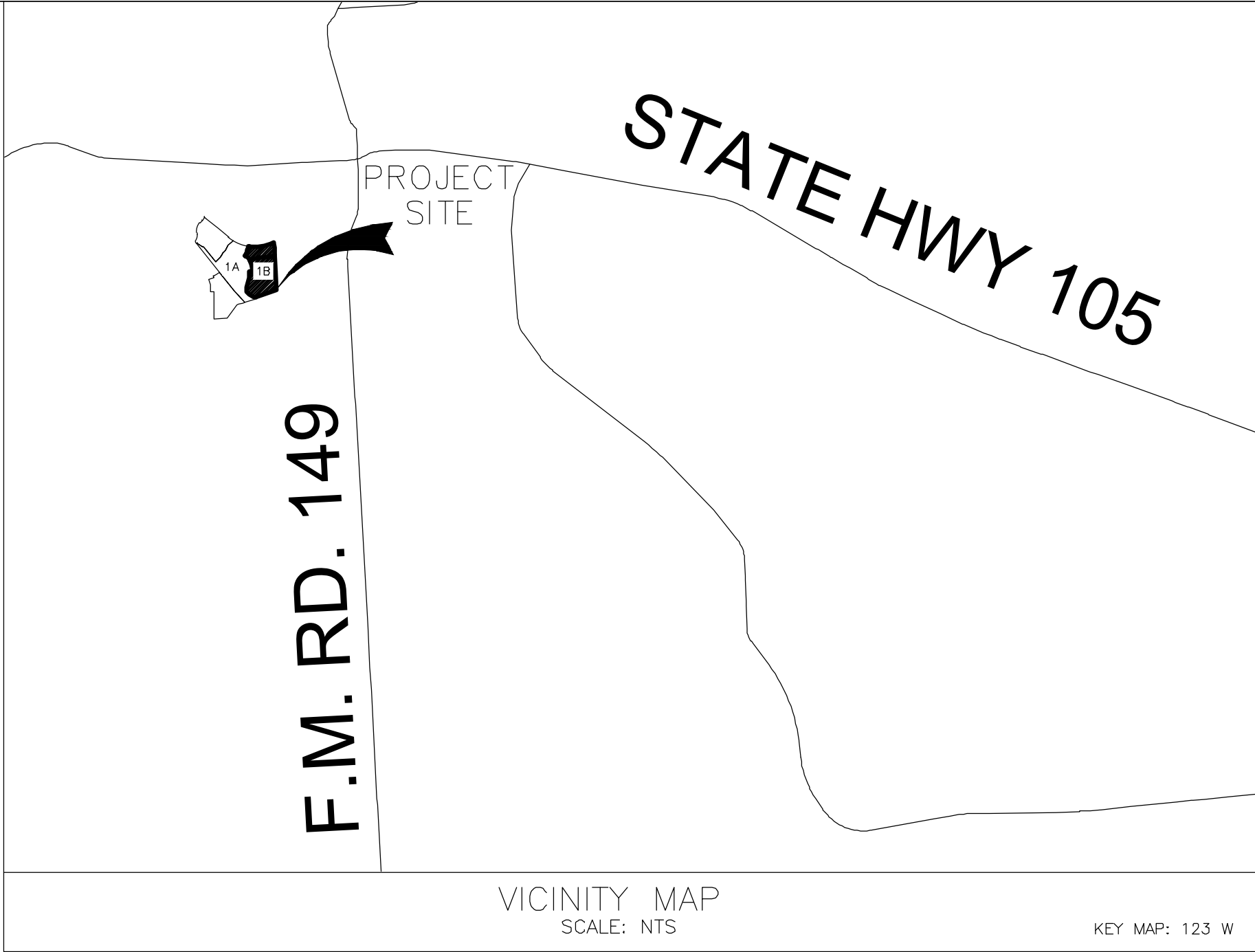
MONTGOMERY COUNTY
MUNICIPAL UTILITY DISTRICT NO. 215
CITY OF MONTGOMERY, TEXAS

JOB. NO. 2980-0104

DATE: April 2025

NOTES

1. ALL STORM SEWER, OVERFLOW SWALES, OUTFALL DITCHES, CHANNELS AND BOX CULVERTS SHALL BE MAINTAINED BY MONTGOMERY COUNTY M.U.D. NO. 215.
2. THE MASTER DRAINAGE FOR THE BRIARLEY DEVELOPMENT (FORMERLY REDBIRD DEVELOPMENT), IS BEING DESIGNED BY LJA TO MEET OR EXCEED MINIMUM REQUIREMENTS OF CITY OF MONTGOMERY & MONTGOMERY COUNTY, TEXAS. ALL STORM SEWERS, NATURAL DRAINAGE COURSES, OR IMPROVED DRAINAGE CHANNELS HAVE ADEQUATE CAPACITY FOR THE FLOWS INDICATED IN THE DRAINAGE ANALYSIS. THE DRAINAGE DATA PRESENTED IN THESE PLANS CONFORMS TO THE LJA MASTER DRAINAGE PLAN AND ALL APPLICABLE CITY OF MONTGOMERY DRAINAGE REQUIREMENTS.



Sheet Index	
Sheet Number	Sheet Title
1	COVER SHEET
2	GENERAL NOTES
3	DRAINAGE LAYOUT
4	PAVING AND SIDEWALK
5	STREET LIGHT LAYOUT
6	DRAINAGE AREA MAP
7	5 YEAR STORM CALCULATIONS
7a	10 YEAR STORM CALCULATIONS
8	100 YEAR STORM CALCULATIONS
9	STORM WATER POLLUTION PREVENTION PLAN
10	CLEARING PLAN
11	LANDSCAPE PLAN
12	HOUNDSTONE HOLLOW (BEGIN TO STA. 13+00)
13	HOUNDSTONE HOLLOW (STA 13+00 TO 24+00)
14	SHEPARD HOLLOW (STA 24+00 TO END)
15	SETTER TRAIL (BEGIN TO STA. 11+50)
16	SETTER TRAIL (STA. 11+50 TO END)
17	POINTER PLACE & COLLIE CREEK
18	STORM OUTFALL 'B'
19	STORM OUTFALL 'B'
20	PAVING DETAILS
21	PAVING DETAILS II
22	SANITARY DETAILS I
23	SANITARY DETAILS II
24	WATER DETAILS I
25	WATER DETAILS II
26	WATER DETAILS III
27	DRAINAGE DETAILS I
28	DRAINAGE DETAILS II
29	DRAINAGE DETAILS III
30	STORM WATER POLLUTION PREVENTION PLAN DETAILS

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY, CITY ENGINEER
SIGNATURE VALID FOR ONE (1) YEAR

DATE



MONTGOMERY COUNTY
FIRE MARSHALL

Approved: _____
Fire Marshal

Date: _____

ENGINEER:
LJA Engineering, Inc.
3600 W Sam Houston Parkway S
Suite 600
Houston, Texas 77042

Phone 713.953.5200
Fax 713.953.5026
FRN - F-1386

JDS OLD PLANTERSVILLE ROAD, LLC
FORMERLY: REDBIRD DEVELOPMENT, LLC

APPROVED FOR CONSTRUCTION

BY _____ DATE _____

Date/Time : Wed, 23 Apr, 2025 - 3:59pm
Path/Name : I:\Projects\2980\0104\Sheets\2 GENERAL NOTES.dwg

GENERAL NOTES:

1. MATERIALS, CONSTRUCTION AND TESTING TO BE IN ACCORDANCE WITH THE CITY OF MONTGOMERY ORDINANCES AND SPECIFICATIONS, LATEST PRINTING AND AMENDMENTS THEREON.
2. CONTRACTOR SHALL OBTAIN ALL DEVELOPMENT AND CONSTRUCTION PERMITS REQUIRED BY THE CITY OF MONTGOMERY AT CONTRACTORS EXPENSE PRIOR TO COMMENCEMENT OF WORK.
3. CONTRACTOR SHALL GIVE NOTICE TO ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS OR PERSONS IN CHARGE OF PRIVATE AND PUBLIC UTILITIES OR RAILROADS AFFECTED BY HIS OPERATIONS AND THE CITY OF MONTGOMERY DEPARTMENT OF PUBLIC WORKS, 48 HOURS PRIOR TO COMMENCEMENT OF WORK IN STREET RIGHTS-OF-WAY OR EASEMENTS.
4. ALL EXISTING UNDERGROUND UTILITIES ARE NOT GUARANTEED TO BE COMPLETED OR DEFINITE, BUT WERE OBTAINED FROM THE BEST INFORMATION AVAILABLE. CONTRACTOR HAS SOLE RESPONSIBILITY FOR FIELD VERIFICATION OF ALL EXISTING FACILITIES SHOWN ON DRAWINGS. CONTRACTOR SHALL COORDINATE ALL CONFLICTS WITH THE APPROPRIATE GOVERNING AGENCY.
5. THE LOCATION OF AT&T COMPANY, ENTERPRISE PIPELINE, TEXAS EXPRESS PIPELINE AND TXU UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL REQUEST THE EXACT LOCATION OF THESE FACILITIES BY CALLING THE UTILITY COMPANIES, AT LEAST 48 HOURS BEFORE COMMENCING WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE WHICH OCCURS DUE TO FAILURE TO REQUEST THE LOCATION AND PRESERVATION OF THESE UNDERGROUND FACILITIES. ANY DAMAGE TO EXISTING FACILITIES INCURRED AS A RESULT OF CONSTRUCTION OPERATIONS WILL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.
6. TEXAS LAW ARTICLE 1436G, PROHIBITS ALL ACTIVITIES IN WHICH PERSONS OR EQUIPMENT MAY COME WITHIN 6 FEET OF ENERGIZED OVERHEAD POWER LINES, AND FEDERAL REGULATION, TITLE 29, PART 1910.130(1) AND PART 1926.440 (A) (15) REQUIRE A MINIMUM CLEARANCE OF 10 FEET FROM THESE FACILITIES. THE ABOVE LAWS CARRY BOTH CRIMINAL AND CIVIL LIABILITIES, WITH CONTRACTORS AND OWNERS BEING LEGALLY RESPONSIBLE FOR THE SAFETY OF WORKERS UNDER THESE LAWS. IF YOU OR YOUR COMPANY MUST WORK NEAR ENERGIZED OVERHEAD POWER LINES, CALL THE POWER COMPANY FOR THE LINES TO BE DE-ENERGIZED AND/OR MOVED AT YOUR EXPENSE.
7. CONSTRUCTION SHALL COMPLY WITH THE LATEST REVISIONS OF OSHA REGULATIONS AND STATE OF TEXAS LAW CONCERNING TRENCHING AND SHORING. CONTRACTOR SHALL PROVIDE A TRENCH SAFETY SYSTEM TO MEET, AS A MINIMUM, THE REQUIREMENTS OF OSHA SAFETY AND HEALTH REGULATION, PART 1926, SUB-PART AS PUBLISHED IN THE FEDERAL REGISTER, VOLUME 54, NO. 209, DATED OCTOBER 31, 1989.
8. DETAILS PREPARED BY THE ENGINEER DO NOT EXTEND TO OR INCLUDE DESIGNS OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONTRACTOR OR ITS EMPLOYEES, AGENTS, OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS, INCLUDING THE PLANS AND SPECIFICATIONS REQUIRED BY CHAPTER 756, SUBCHAPTER "C" OF THE TEXAS HEALTH AND SAFETY CODE.
9. CONTRACTOR SHALL COVER OPEN EXCAVATIONS WITH ANCHORED STEEL PLATES DURING NON-WORKING HOURS, ALONG EXISTING ROADWAYS AND TRAFFIC AREAS.
10. 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 CITY OF MONTGOMERY. ALL CONSTRUCTION RUNOFF SHALL COMPLY WITH STORM WATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES AND THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE FLAGMEN, SIGNING, STRIPING AND WARNING DEVICES, ETC., DURING CONSTRUCTION BOTH DAY AND NIGHT IN ACCORDANCE WITH THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". CONTRACTOR SHALL MAINTAIN AT LEAST ONE LANE OF TRAFFIC IN EACH DIRECTION DURING WORKING HOURS OR PROVIDE ALL-WEATHER DETOURS AROUND CONSTRUCTION SITE, PROVIDE PUBLIC NOTIFICATION, AND USE UNIFORMED POLICE OFFICERS TO CONTROL TRAFFIC.
12. EXISTING PAVEMENTS, CURBS, SIDEWALKS AND DRIVEWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED TO CITY OF MONTGOMERY STANDARDS. ALL ASPHALT AND CONCRETE DRIVEWAYS EXCAVATED DURING CONSTRUCTION SHALL BE BACKFILLED WITH STABILIZED MATERIAL AND RETURNED TO EXISTING CONDITIONS. ALL STATE AND COUNTY HIGHWAY PAVEMENT AND RAILROAD RIGHT-OF-WAYS TO BE BORED ACCORDING TO THE RULES, REGULATIONS AND REQUIREMENTS FOR APPROVAL AND ACCEPTANCE BY SAID AGENCIES.
13. EXISTING ROADS AND/OR RIGHT-OF-WAYS DISTURBED DURING CONSTRUCTION SHALL BE AS GOOD OR BETTER THAN THE CONDITION PRIOR TO STARTING THE WORK, UPON COMPLETION OF THE PROJECT. AFTER DISTURBED AREAS HAVE BEEN COMPLETED TO THE LINES, GRADES, AND CROSS-SECTIONS SHOWN ON THE PLANS, SEEDING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS TO ESTABLISH ADEQUATE VEGETATION COVER. IF NO PROVISION FOR PLANTING GRASS IS INCLUDED IN THE PLANS OR SPECIFICATIONS, THE MINIMUM REQUIREMENT FOR THIS ITEM WILL BE IN ACCORDANCE WITH THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR "SODDING OR SEEDING FOR EROSION CONTROL."
14. ALL TRENCHES, INCLUDING TRENCHES FOR LEADS AND STUBS UNDER PAVEMENT AND TO A POINT ONE (1) FOOT BACK OF ALL CURBS SHALL BE BACKFILLED WITH CEMENT STABILIZED SAND AS PER SPECIFICATION TO A POINT IMMEDIATELY BELOW THE SUBGRADE. TRENCHES OTHER THAN UNDER PAVEMENT SHALL BE BACKFILLED WITH SUITABLE EARTH MATERIAL IN 6 INCH LAYERS AND MECHANICALLY COMPACTED TO A DENSITY OF NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM DESIGNATION D-698/AASHTO 99). MOISTURE CONTENT OF BACKFILL SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CEMENT STABILIZED SAND SPECIFICATIONS. SEE STANDARD DETAIL SHEETS FOR BEDDING AND OTHER DESIGN REQUIREMENTS.
15. INCLUDE PRICE OF ALL BEDDING AND BACKFILL OF TYPE REQUIRED, IN PRICE BID PER LINEAR FOOT OF PIPE.
16. CONTRACTOR TO REMOVE EXISTING PLUGS AND CONNECT TO EXISTING UTILITY LINES AS INDICATED ON PLANS.
17. UNLESS OTHERWISE NOTED ON PLANS, WHERE MANHOLES ARE LOCATED WITHIN THE UTILITY EASEMENTS, THE CONTRACTOR SHALL SET RIM ELEVATIONS TWO INCHES ABOVE FINISHED GROUND ELEVATIONS.
18. WHEN TRENCH CONDITION REQUIRES THE USE OF WELL POINTS, THIS IS TO BE REQUESTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING THE MUD AND/OR DIRT DEPOSITED ON EXISTING PAVEMENT DUE TO HIS CONSTRUCTION ACTIVITY DAILY. ALL EQUIPMENT AND DEBRIS FROM CONSTRUCTION TO BE MOVED AT END OF PROJECT.
20. CONTRACTOR SHALL CONTACT THE FOLLOWING A MINIMUM OF 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
MARCUS BOWLES, PE LJA ENGINEERING, INC. (713) 953-5098
MICAH KREIKEMEIER, PE LJA ENGINEERING, INC. (713) 953-5134
KATHERINE VU, PE CITY ENGINEER (713) 789-1900
CHRIS ROZNOVSKY, PE CITY ENGINEER (713) 789-1900
21. ALL AREAS DISTURBED ALONG SIDE AND BACK-OF-LOT EASEMENTS OR OTHER UNNECESSARY DISTURBANCES AS A RESULT OF CONSTRUCTION WORK SHALL BE SEEDD AND FERTILIZED IN ACCORDANCE WITH SEEDING SPECIFICATIONS (NO SEPARATE PAY).
22. ALL STATIONS ARE CENTERLINE OF STREET RIGHT-OF-WAY UNLESS OTHERWISE NOTED.
23. THE CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
24. MATERIAL USED FOR COMPACTED FILL SHALL HAVE A PLASTIC INDEX (P.I.) BETWEEN 10 AND 20.
25. WHEN THE OWNER DETERMINES THAT THE CONTRACTOR IS WORKING IN OR ADJACENT TO DEVELOPED AREAS, NO CONSTRUCTION SHALL COMMENCE PRIOR TO SUNRISE ON WEEK DAYS AND 7:30 A.M. ON WEEKENDS AND/OR HOLIDAYS, AND SHALL CONCLUDE PRIOR TO SUNDOWN UNLESS ARRANGEMENTS TO THE CONTRARY HAVE BEEN COORDINATED AND APPROVED WITH THE OWNER.
26. IN THE CASE OF ONGOING PROJECTS ADJACENT TO OR NEAR THE PROPOSED PROJECT, THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING CONSTRUCTION WITH OTHER CONTRACTORS.

SPECIAL TRENCH BACKFILL NOTES:

1. ALL TRENCH BACKFILL FOR UTILITIES SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DENSITY PER ASTM D-698. MOISTURE CONTENT SHALL BE WITHIN -3% TO +3% OF OPTIMUM.
2. DENSITIES SHALL BE TAKEN AT APPROXIMATE 100-FOOT INTERVALS FOR EACH LIFT, OR AS RECOMMENDED BY THE TESTING LAB, OR AS OTHERWISE DIRECTED BY THE ENGINEER.
3. THE TESTING LAB SHALL BE PAID BY THE OWNER EXCEPT RETESTS REQUIRED DUE TO THE FAILURE OF THE FIRST TEST SHALL BE PAID BY THE CONTRACTOR.
4. LIFTS SHALL BE 8-INCH MAXIMUM, MEASURED LOOSE.
5. ALL TRENCH BACKFILL SHALL BE CONSIDERED SUBSIDIARY TO THE PIPE.

SANITARY SEWER CONSTRUCTION NOTES:

1. SANITARY SEWERS TO BE CONSTRUCTED IN COMPLIANCE WITH THE LATEST CITY SPECIFICATIONS FOR SEWER CONSTRUCTION, AND TESTED AS SPECIFIED IN THE CITY TEST PROCEDURE FOR EITHER LIQUID OR AIR, INCLUDING ALL AMENDMENTS AND REVISIONS THERETO. BACKFILL AND BEDDING FOR SANITARY SEWERS MUST MEET ALL MINIMUM ASPECTS OF ASTM D-2321 AND MUST BE PLACED IN ACCORDANCE WITH CITY OF MONTGOMERY DRAWING NUMBER 1201.
2. ALL SANITARY SEWER MANHOLES SHALL BE STANDARD CITY OF MONTGOMERY PRE-CAST USING RAM-NECK OR CAST IN PLACE CONCRETE IN ACCORDANCE WITH ASTM C-478. NO BRICK MANHOLES ALLOWED. FOR PVC PIPE, USE MANHOLE WATER STOP GASKET AND CLAMP ASSEMBLY AT MANHOLE CONNECTIONS. SANITARY SEWER MANHOLE RIMS SHALL BE 3 INCHES ABOVE NATURAL GROUND. BACKFILL SHALL BE ADDED AND SLOPED AWAY FROM THE MANHOLE RIM FOR DRAINAGE PURPOSES.
3. MANHOLE CONCRETE BOTTOM FOUNDATION SHALL BE 12" REINFORCED WITH #5 BARS AT 12", ON CENTERS, EACH WAY, WITH A MINIMUM OF 6" EXTRA SLAB LENGTH AROUND THE MANHOLE, IF POURED IN PLACE. APPROVED CHEMICALS SHALL BE USED FOR PATCHING AROUND MANHOLE JOINTS. MORTAR CEMENT WILL NOT BE ACCEPTED.
4. SANITARY SEWER PIPE SHALL BE PVC SDR 26 OR PVC SDR 35 (WITH APPROVAL), IN ACCORDANCE WITH ASTM SPECIFICATIONS D-3034, FOR "1" THROUGH 15" AND ASTM F-879 FOR 18" THROUGH 27". MINIMUM SIZE SANITARY SEWER MAIN IS 6". SDR 35 MAY BE USED WHEN DEPTH IS MORE THAN 3 FEET AND LESS THAN 6 FEET.
5. SEWER LINES SHALL BE LOCATED ON THE OPPOSITE SIDE OF THE STREET FROM WHERE WATER IS LOCATED. SEWER LINE AND WATER LINE SEPERATION SHALL BE IN ACCORDANCE WITH TEXAS NATURAL RESOURCE CONSERVATION COMMISSION RULES, CHAPTER 317.13 APPENDIX E. (SEE THIS SHEET FOR THESE RULES).
6. NO SEWER PIPE SHALL BE LAID ON AN UNSTABLE FOUNDATION. SELECTED MATERIAL SHALL BE USED AND/OR WET SAND CONSTRUCTION DETAILS, WHICHEVER APPLIES IN THE OPINION OF THE ENGINEER. NO PIPE SHALL BE COVERED WITHOUT APPROVAL OF THE ENGINEER OR HIS REPRESENTATIVE. SANITARY SEWERS CONSTRUCTED IN WET SAND SHALL HAVE A SPECIAL PROCEDURE AND SHALL BE CONSTRUCTED AS PER CITY OF MONTGOMERY DRAWING NUMBER 1201.
7. WHEN THE NATURAL GROUND LEVEL AROUND MANHOLE LIES BELOW THE 100 YEAR FLOODPLAIN ELEVATION, THE MANHOLE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF MONTGOMERY DRAWING NUMBER 1201, STANDARD SEALED AND VENTED MANHOLE DETAIL.
8. A DEFLECTION TEST SHALL BE REQUIRED AFTER THE BACKFILL HAS BEEN IN PLACE A MINIMUM OF 30 DAYS. THIS TEST SHALL BE DONE BY PULLING A HAND LINE WITH AN ATTACHED MANDREL FROM MAN-HOLE TO MANHOLE. THE MANDREL SHALL HAVE AN OUTSIDE DIAMETER THAT IS AT LEAST 95% OF THE ORIGINAL INSIDE DIAMETER OF THE PIPE. MANDREL TO BE MANUFACTURED WITH A MINIMUM OF SEVEN (7) RUNNERS, WITH EACH RUNNER BEING A MINIMUM OF 5 INCHES LONG. AN PIPE NOT MEETING TEST REQUIREMENTS TO BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.
9. INFILTRATION/EXFILTRATION NOT TO EXCEED 200 GALLONS PER INCH DIAMETER PER MILE OF PIPE FOR 24 HOURS UNDER A MINIMUM OF 2 FEET OF HEAD, OR AN AIR TEST SHALL BE REQUIRED IN ACCORDANCE WITH ASTM C-828.
10. WHERE A SEWER LINE HAS LESS THAN (2) FEET OF COVER, PROVIDE CEMENT STABILIZED SAND BACKFILL MATERIAL.
11. CONTRACTOR SHALL KEEP RECORD OF LOCATION OF ALL STACKS, STUBS, SEWER LEADS, ETC. THE AS-BUILT MYLAR DRAWINGS MUST SHOW THE EXACT LOCATION.
12. IF SANITARY SERVICE LEADS ARE INSTALLED DURING CONSTRUCTION OF MAIN LINE, ALL LEADS TO HAVE A MINIMUM SLOPE OF 0.70% OR GREATER. ALL PVC LEADS TO BE THE SAME MATERIAL AS MAIN LINE. ALL DOUBLE SERVICE LEADS TO HAVE WYE LOCATED ON THE END OF THE LEAD. ALL SINGLE SERVICE LEADS TO BE 4 INCH, AND ALL DOUBLE SERVICE LEADS TO BE 6 INCH.
13. THE INSTALLATION OF ALL SANITARY SEWER LINES SHALL EXTEND ALONG THE ENTIRE LENGTH OF THE PROPERTY TO BE SERVED. SANITARY SEWER LINES THAT DEAD END SHALL EXTEND TO THE PROJECT LIMITS FOR FUTURE EXTENSIONS, WITH DEPTHS BASED ON ENTIRE SERVICE AREA.

WATER LINE CONSTRUCTION NOTES:

1. WATER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST CITY OF MONTGOMERY WILLIS RULES AND REGULATIONS, STANDARD SPECIFICATIONS, AND CONSTRUCTION DETAILS.
2. 4" THROUGH 12" WATER LINES SHALL BE P.V.C. CLASS 150, DR-18, AWWA C-900 AND 1" THROUGH 3" WATER LINES SHALL BE PVC SCHEDULE 40. 4" THROUGH 54" D.I.P. WATER LINES SHALL BE AWWA C151 (ANSI A21.51) AND DOUBLE WRAPPED IN 8-MIL POLYETHYLENE. PIPE SHALL BE LINED IN ACCORDANCE WITH AWWA C104 (ANSI A21.4).
3. CONCRETE THRUST BLOCKS SHALL BE PROVIDED AS NECESSARY TO PREVENT PIPE MOVEMENT. WHERE PREVENTING MOVEMENT OF PIPE 16" OR GREATER AS NECESSARY DUE TO THRUST, USE RESTRAINED JOINTS UNLESS OTHERWISE NOTED ON PLANS.
4. ALL WATER LINES UNDER PROPOSED OR FUTURE PAVING AND TO A POINT ONE (1) FOOT BACK OF ALL PROPOSED OR FUTURE CURBS SHALL BE ENCASED IN BANK SAND TO 12" OVER PIPE AND BACKFILLED WITH CEMENT STABILIZED SAND TO WITHIN ONE (1) FOOT OF SUBGRADE.
5. ALL WATER LINE AND SEWER LINE CROSSINGS SHALL BE CONSTRUCTED PER CITY OF MONTGOMERY AND TCEQ REGULATIONS.
6. ALL WATER VALVES SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C-500 AND SHALL BE OF THE RESILIENT SEAT TYPE.
7. ALL WATER LINES TO BE DISINFECTED IN CONFORMANCE WITH AWWA C-651 AND THE TEXAS STATE DEPARTMENT OF HEALTH. AT LEAST ONE BACTERIOLOGICAL SAMPLE SHALL BE COLLECTED FOR EACH 1,000 LINEAR FEET OF WATER LINE AND SHALL BE REPEATED IF CONTAMINATION PERSISTS.
8. ALL BELOW GRADE VALVES SHALL BE GASKETED, HUB-END GATE VALVES WITH A CAST IRON BOX, EXCEPT WHERE FLANGES ARE CALLED OUT ON THE PLANS.
9. 4" THROUGH 12" FITTINGS SHALL BE DUCTILE IRON PRESSURE FITTINGS PER ANSI A21.10, OR PUSH ON FITTINGS PER ANSI A21.11, PRESSURE RATED AT 150 PSIG.
10. HYDROSTATIC TESTING: ALL WATER PIPE SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH THE LATEST CITY OF MONTGOMERY STANDARD CONSTRUCTION SPECIFICATIONS. TESTS ARE TO BE PERFORMED ON THE TOTAL FOOTAGE OF WATER PIPE LINE INCLUDED IN THE PROJECT.
11. ALL WATER LINES TO HAVE 4' MINIMUM COVER TO FINISHED GRADE AND MINIMUM 12" CLEAR TO OTHER UTILITIES AT CROSSING UNLESS OTHERWISE NOTED ON PLANS. ALL WATER LINE INSTALLED OVER 8' DEEP SHALL UTILIZE RESTRAINED JOINT FITTINGS.
12. CONTRACTOR SHALL KEEP WATER PIPE CLEAN AND CAP (OR OTHERWISE EFFECTIVELY COVER) OPEN PIPE ENDS TO EXCLUDE INSECTS, ANIMALS OR OTHER SOURCES OF CONTAMINATION FROM UNFINISHED PIPE LINES AT TIMES WHEN CONSTRUCTION IS NOT IN PROGRESS.
13. UNLESS OTHERWISE NOTED, ALL WATER LINES 12" AND SMALLER SHALL HAVE A MINIMUM OF 4' OF COVER, AND WATER LINES 16" AND LARGER SHALL HAVE A MINIMUM OF 5' OF COVER.
14. CONCRETE THRUST BLOCKS SHALL BE PROVIDED AT ALL UNDERGROUND TEES, BENDS AND LATERALS. THEY SHALL BE BUILT AS PER THE DETAILS PROVIDED TO PREVENT PIPE MOVEMENT.
15. ALL ABOVE GROUND DUCTILE IRON PIPE CONNECTIONS SHALL BE FLANGED. UNDERGROUND DUCTILE IRON PIPE CONNECTIONS SHALL BE BOLTED AND PUSH-ON AFTER THE FIRST FLANGED FITTING BELOW GRADE UNLESS NOTED OTHERWISE ON THE PLANS.
16. ALL FLANGES BELOW GRADE SHALL HAVE STAINLESS STEEL BOLTS AND NUTS.

WATER LINE CONSTRUCTION NOTES CONT'D:

17. ALL WATER VALVES SHALL OPEN CLOCKWISE. ALL WATER VALVES SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C-500 AND SHALL BE OF THE RESILIENT SEAT TYPE.
18. ALL BELOW GRADE VALVES SHALL BE GASKETED, HUB-END GATE VALVES WITH A CAST IRON BOX, EXCEPT WHERE FLANGES ARE CALLED OUT ON THE PLANS.
19. ALL FLANGES BELOW GRADE SHALL BE INSULATED.
20. ALL WATERLINES SHALL BE ENCASED IN BANK SAND TO AT LEAST 12" ABOVE THE PIPE. COST OF BANK SAND TO BE INCLUDED IN UNIT PRICE OF WATERLINE.
21. MAINTAIN MINIMUM 9'-FOOT HORIZONTAL CLEARANCE BETWEEN OUTSIDE OF SANITARY SEWER MANHOLE AND WATERLINE.
22. WATER LINES PARALLEL TO SANITARY LINES SHALL BE INSTALLED WITH AT LEAST A 9'-FOOT CLEARANCE AND IN SEPARATE TRENCHES.
23. CENTER OF FIRE HYDRANT TO BE LOCATED 3'-0" FROM BACK OF CURB WITH CENTER LINE OF STEAMER NOZZLE 22-INCHES ABOVE FINISHED GRADE, UNLESS OTHERWISE SHOWN.
24. WATERLINE SHALL BE CONSTRUCTED SUCH THAT ALL CROSSES AND TEES WILL NOT BE LOCATED UNDER PROPOSED OR FUTURE PAVING.
25. UTILITY CONTRACTOR TO TURN FIRE HYDRANTS AND MAKE ALL FINAL ADJUSTMENTS AFTER COMPLETION OF PAVING. NO SEPARATE PAY.

DRY UTILITY NOTES:

CAUTION: UNDERGROUND GAS FACILITIES

1. LOCATIONS OF CENTERPOINT ENERGY MAIN LINES (TO INCLUDE CENTERPOINT ENERGY, INTRASTATE PIPELINE LLC. WHERE APPLICABLE) ARE SHOWN IN AN APPROXIMATE LOCATION ONLY. SERVICE LINES ARE USUALLY NOT SHOWN.
2. CENTERPOINT SIGNATURES ON THESE PLANS ONLY INDICATES THAT ITS FACILITIES ARE SHOWN IN APPROXIMATE LOCATION. IT DOES NOT IMPLY THAT A CONFLICT ANALYSIS HAS BEEN MADE. THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT (713) 223-4567 OR 1-800-669-8344 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.
3. WHEN CENTERPOINT ENERGY PIPELINE MARKINGS ARE NOT VISIBLE, CALL (713) 967-8037 (7:00 A.M. TO 4:30 P.M.) FOR STATUS OF LINE LOCATION REQUEST BEFORE EXCAVATION BEGINS.
4. WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF CENTERPOINT ENERGY FACILITIES, ALL EXCAVATION MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES.
5. WHEN CENTERPOINT ENERGY FACILITIES ARE EXPOSED, SUFFICIENT SUPPORT MUST BE PROVIDED TO THE FACILITIES TO PREVENT EXCESSIVE STRESS ON THE PIPELINE.

WARNING: UNDERGROUND ELECTRICAL FACILITIES

1. UNDERGROUND ELECTRICAL FACILITIES EXIST IN THE AREA OF THIS PROJECT. DO NOT BEGIN CONSTRUCTION UNTIL THESE FACILITIES HAVE BEEN LOCATED AND STAKED. TO HAVE THESE UNDERGROUND FACILITIES STAKED CALL THE UTILITY COORDINATING COMMITTEE AT (713) 223-4567, OR TOLL FREE AT 1-800-669-8344, AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION.

TRAFFIC NOTES:

1. CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART VI OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TEXAS MUTCD, MOST RECENT EDITION WITH REVISIONS) DURING CONSTRUCTION.
 2. LANE CLOSURE PERMITS ARE TO BE OBTAINED WHEN REQUIRED. THE REQUEST MUST BE MADE AT LEAST THREE DAYS PRIOR TO THE DATE FOR WHICH THE CLOSURE IS SOUGHT.
 3. CONTRACTOR SHALL COVER EXCAVATIONS WITH STEEL PLATES, ANCHORED PROPERLY, DURING NON-WORKING HOURS AND OPEN LANES FOR TRAFFIC FLOWS.
 4. IF THE CONTRACTOR DESIRES TO BLOCK A LANE FOR WHICH NO "TRAFFIC CONTROL PLANS" WERE SUBMITTED, (S)HE SHALL SUBMIT REPRODUCIBLE MYLARS SEALED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS TO THE PLAN REVIEW SECTION OF THE ENTITY HAVING JURISDICTION OVER THE ROAD BEING WORKED ON, WITH THE ENTIRE APPROVED SET OF DRAWINGS FOR APPROVAL TEN WORKING DAYS PRIOR TO CONSTRUCTION.
 5. IF THE CONTRACTOR CHOOSES TO USE A DIFFERENT METHOD OF "TRAFFIC CONTROL PLANS" DURING CONSTRUCTION THAN WHAT IS OUTLINED IN THE CONTRACT DRAWINGS, (S)HE SHALL BE RESPONSIBLE TO SUBMIT AN ALTERNATE SET OF REPRODUCIBLE MYLARS SEALED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS WITH THE ENTIRE APPROVED SET OF DRAWINGS TO THE PLAN REVIEW SECTION OF THE ENTITY HAVING JURISDICTION OVER THE ROAD BEING WORKED ON, FOR APPROVAL TEN WORKING DAYS PRIOR TO IMPLEMENTATION.
 6. APPROVED COPIES OF "TRAFFIC CONTROL PLANS" AND LANE/SIDEWALK CLOSURE PERMITS SHALL BE AVAILABLE FOR INSPECTION AT JOB SITE ALL TIMES. ALL REQUESTS FOR LANE/SIDEWALK CLOSURES MUST BE MADE AT LEAST THREE DAYS PRIOR TO THE DATE FOR WHICH THE CLOSURE IS SOUGHT.
- MONTGOMERY COUNTY FIRE MARSHALL NOTES:**
1. FIRE LANE MARKINGS WILL BE REVIEWED DURING FINAL INSPECTION.
 2. NFPA 704 PLACARD SHALL BE PLACED ON THE BUILDING STREETSIDE.
 3. PROVIDE FIRE EXTINGUISHERS PER IFC SECTION 906.
 4. EXIT DOORS SHALL BE READILY OPERABLE FROM THE EGRESS SIDE WITHOUT THE USE OF KEY OR SPECIAL KNOWLEDGE OR EFFORT. DOOR HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES ON DOORS SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE.
 5. EXIT SIGNS AND EMERGENCY LIGHTING NEEDED IN PROPER LOCATIONS WITH BACK UP POWER.
 6. KNOX EQUIPMENT
 - ALL LOCKED ACCESS GATES ARE REQUIRED TO COMPLY WITH THE MONTGOMERY COUNTY ACCESS GATE ACCESS PROGRAM.

CITY OF MONTGOMERY GENERAL NOTES:

GENERAL CONSTRUCTION NOTES:

1. CONTRACTOR SHALL CONTACT CITY OF MONTGOMERY CITY ENGINEER, KATHERINE VU AT (713)789-1900 A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
2. CONTRACTOR SHALL CONTACT CITY OF MONTGOMERY DIRECTOR OF PUBLIC WORKS, MIKE MUCKLERDY AT (936) 597-6434 A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION TO SET UP AN INSPECTION TO VERIFY CITY'S FACILITIES.
3. CONTRACTOR TO CONTACT CITY OF MONTGOMERY UTILITY OPERATOR, PHILIP WRIGHT OF HAYS UTILITY NORTH CORPORATION AT (936)598-1166 A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION TO SET UP AN INSPECTION TO VERIFY CITY'S FACILITIES.
4. THE CITY UTILITY OPERATOR AND PUBLIC WORKS FOREMAN SHALL BE NOTIFIED 24 HOURS IN ADVANCE TO WITNESS AND INSPECT ANY SANITARY SEWER LINE CONNECTION. NO SANITARY SEWER LINES SHALL BE BACKFILLED BEFORE THE CITY'S UTILITY OPERATOR OR PUBLIC WORKS FOREMAN HAS INSPECT THE CONNECTION.
5. ALL TAPS TO THE CITY'S WATER AND SANITARY SEWER SYSTEM SHALL BE MADE BY THE CITY'S OPERATOR AT THE OWNER'S EXPENSE.
6. CONTRACTOR SHALL CONTACT THE CITY'S UTILITY OPERATOR OR PUBLIC WORKS FOREMAN TO OPERATE ANY VALVES. ATH NO TIME IS THE CONTRACTOR OR CONTRACTOR'S REPRESENTATIVE TO OPERATE ANY PART OF THE CITY OF MONTGOMERY WATER SYSTEM.
7. THE OWNER OR CONTRACTOR SHALL INSTALL AND TEST APPROPRIATE BACKFLOW PREVENTION, PER THE CITY OF MONTGOMERY RULES & REGULATIONS.
8. ALL TAPS TO THE CITY'S SYSTEM SHALL BE MADE BY THE CITY'S OPERATOR AT THE OWNERS EXPENSE.
9. STORMWATER POLLUTION PROTECTION MUST BE IN PLACE PRIOR TO ANY CONSTRUCTION COMMENCES AND MUST REMAIN IN PLACE UNTIL CONSTRUCTION HAS CONCLUDED. ALL PROTECTION MEASURES MUST BE INSPECTED EVERY 30 DAYS, OR AFTER A RAIN EVENT OF ANY SIZE, WHICHEVER IS SOONER.
10. ALL CONSTRUCTION DRAWINGS MUST INCLUDE A TRAFFIC CONTROL MEASURES THAT MUST BE APPROVED BY THE APPROPRIATE JURISDICTION PRIOR TO CONSTRUCTION BEGINNING AND COORDINATED WITH SAID JURISDICTION THROUGH THE DURATION OF CONSTRUCTION.

MANHOLES:

1. CONSTRUCT MANHOLES A MAXIMUM OF FOUR HUNDRED (400) FEET APART.
2. ALL CHANGES OF DIRECTION IN THE SANITARY SEWER LINE SHALL TAKE PLACE AT A MANHOLE.
3. USE PRE-CAST CONCRETE MANHOLE. NO BRICK MANHOLES SHALL BE ALLOWED.
4. PROVIDE MANHOLES IN ACCORDANCE WITH CITY OF MONTGOMERY STANDARD DETAILS.

SERVICE LEAD:

1. FOR DEVELOPMENTS WITH MORE THAN 5,000 GALLONS-PER-DAY FLOW IN SINGLE SERVICE, CONNECT THE SERVICE DIRECTLY TO A PROPOSED OR EXISTING MANHOLE.
2. FOR SINGLE RESIDENTIAL SERVICE, PROVIDE A SERVICE LEAD WITH A MINIMUM 4-INCH DIAMETER AND A MINIMUM SLOPE OF 1%.
3. DOUBLE SERVICE LEADS ARE ONLY ALLOWED WITH AN APPROVED VARIANCE BY THE CITY COUNCIL.
4. IF THE LENGTH OF THE SERVICE LEAD EXCEEDS 100-FEET OR THE WIDTH OF THE PUBLIC RIGHT-OF-WAY BY MORE THAN 20-FEET, THE MINIMUM DIAMETER SHALL BE 6-INCHES.

LINE DEPTH:

1. CONSTRUCT SEWER PIPE WITH THE TOP OF PIPE A MINIMUM OF 3 FEET BELOW NATURAL GROUND.
2. SEWERS LAID IN STREET RIGHT-OF-WAYS WITH CURB AND GUTTER PAVED STREETS SHALL HAVE A MINIMUM COVER OF 4'-FEET FROM THE TOP OF PIPE TO TOP OF CURB.
3. SEWERS LAID IN STREET RIGHT-OF-WAYS WITH OPEN DITCHES, SHALL HAVE A MINIMUM COVER OF 6'-FEET FROM THE AVERAGE GROUND LINE AT THE ADJACENT STREET RIGHT-OF-WAY TO THE TOP OF PIPE.

LIFT STATIONS:::

1. COMPLY WITH THE REQUIREMENTS SET FORTH BY THE TCEQ.
2. USE A PEAKING FACTOR OF 4 IN THE DESIGN CALCULATIONS.
3. PROVIDE THE CITY OF MONTGOMERY WITH A COPY OF THE ENGINEERING DESIGN REPORT SATISFYING TCEQ CRITERIA.
4. THE CITY OF MONTGOMERY SHALL APPROVE THE BRAND OF PUMP USED IN THE LIFT STATION.
5. CONSTRUCT ALL LIFT STATIONS OF CONCRETE, NO FIBERGLASS LIFT STATIONS SHALL BE ALLOWED.

PIPE MATERIALS:

1. THE FOLLOWING TYPES OF SANITARY SEWER PIPE MATERIALS ARE NOT ALLOWED:
 - (A) PLASTIC "TRUSS"-PIPE.
 - (B) CLAY PIPE.

BENCHMARK:

ALL ELEVATIONS SET TO NGS. NAVD 88.

MONUMENT 1 DESIGNATION ELEV. 239.00
BRASS DISC SET IN CONCRETE LOCATED BY
COORDINATES X = 376,481.91322 Y = 10,135,441.47530

MONUMENT 2 DESIGNATION ELEV. 301.880
BRASS DISC SET IN CONCRETE LOCATED BY
COORDINATES X = 3,757,800.73970 Y = 10,131,535.69490

100YR. W.S.E. = 298.83' AT OUTFALL #1000
100YR. W.S.E. = 298.83' AT OUTFALL #2000

FIRM PANEL NO.48339C0200G & 48339C0350G
EFFECTIVE DATE: AUGUST 18, 2014
THIS AREA LIES IN ZONE "X".

NOTES:

1) ALL UTILITIES ARE PROPOSED UNLESS OTHERWISE NOTED.

2) THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.

3) PAVING CONTRACTOR SHALL TAKE EXTREME CAUTION IN SUBGRADE MANIPULATION IN THIS AREA. STORM SEWER PIPE IS IN OR WITHIN 6" OF SUBGRADE.

4) CONTRACTOR TO PROVIDE SURVEYED "AS BUILT" DATA ON THE FLOWLINE AND CROSS SECTIONAL AREA OF ALL OVERFLOW SWALES MINIMUM EVERY 50'.

5) CEMENT STABILIZED SAND FOR BACKFILL CROSSING ALL PAYEMENT SHALL BE INCIDENTAL.

6) ALL STORM SEWER TO BE MAINTAINED BY MUNICIPAL UTILITY DISTRICT NO. 215.

7) ALL MANHOLE RIM ELEVATIONS WILL NEED TO BE FLUSH WITH PAVEMENT/SIDEWALK OR 3"-6" ABOVE NATURAL GROUND.

8) IF ELECTRICAL UTILITY PROVIDER STANDARDS CONFLICT WITH THE APPROVED LAYOUT BY THE CITY AND/OR CITY STANDARDS A VARIANCE REQUEST MUST BE REQUESTED FROM CITY COUNCIL.

9) ALL LIGHT POLES MUST BE A MINIMUM OF 3' OFF BACK OF CURB.

10) SIDEWALKS TO BE LOCATED A MINIMUM OF 3' FROM THE BACK OF CURB.

10a) SIDEWALKS TO BE LOCATED A MINIMUM OF 5' FROM THE BACK OF CURB WHERE LIGHT POLES ARE PRESENT.

10b) CONSTRUCT SIDEWALKS AND CURB RAMPS IN CONFORMANCE WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND THE AMERICAN WITH DISABILITIES ACT (ADA).

10c) DO NOT PLACE SIDEWALK OVER PARALLEL UTILITY LINES.

10d) AT DRIVEWAYS, ALIGN A MINIMUM 5 FOOT WIDE SIDEWALK SECTION MEETING TAS AND ADA AS THE SIDEWALK CROSSES THE DRIVEWAY.

11) AS-BUILT ELECTRICAL PLANS TO BE SUBMITTED WITH THE AS-BUILT DRAWINGS FOR THE SUBDIVISION.

12) CONTRACTOR SHALL CLEAR, GRUB, ROOT RAKE, BACK DRAG, CHIP AND DISPOSE OFFSITE OF ALL CLEARED AND GRUBBED MATERIAL.

13) SIDEWALK RAMPS AND SIDEWALKS WITHIN COMMON AREAS TO BE CONSTRUCTED WITH WS&D SIDEWALKS IN FRONT OF HOMES TO BE CONSTRUCTED BY HOMEOWNERS. ALL SIDEWALKS TO BE INSTALLED BY END OF 1 YEAR WARRANTY PERIOD.

14) CONTRACTOR TO STAMP THE FACE OF THE CURB WITH AN "S" AT THE LOCATION OF EACH SANITARY SEWER LEAD AND "W" AT THE LOCATION OF EACH WATER LEAD.

DATE	REVISION	BY

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY, CITY ENGINEER
SIGNATURE VALID FOR ONE (1) YEAR

DATE

MONTGOMERY COUNTY
MUNICIPAL UTILITY
DISTRICT NO. 215

BRIARLEY PHASE 1B

GENERAL NOTES

LJA Engineering, Inc.
3600 W Sam Houston Parkway S Suite 600
Houston, Texas 77042
LJA PROJECT NO.: 2980-0104
Phone 713.953.5200
Fax 713.953.5026
FRN - F-1386

DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025

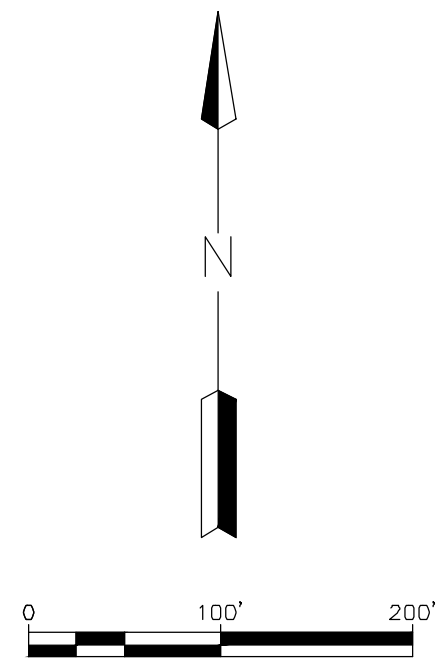
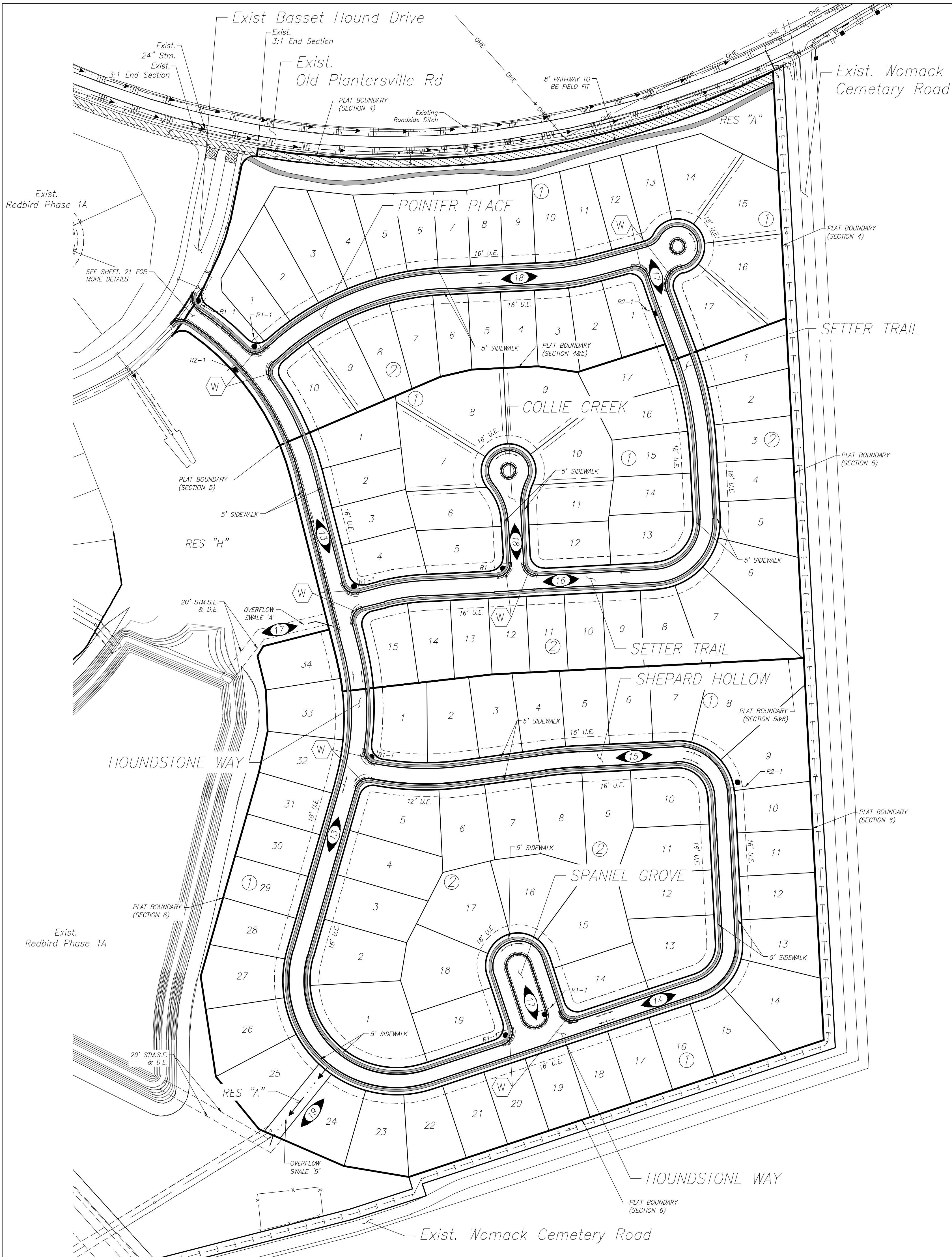
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SHEET NO. 2 OF 30

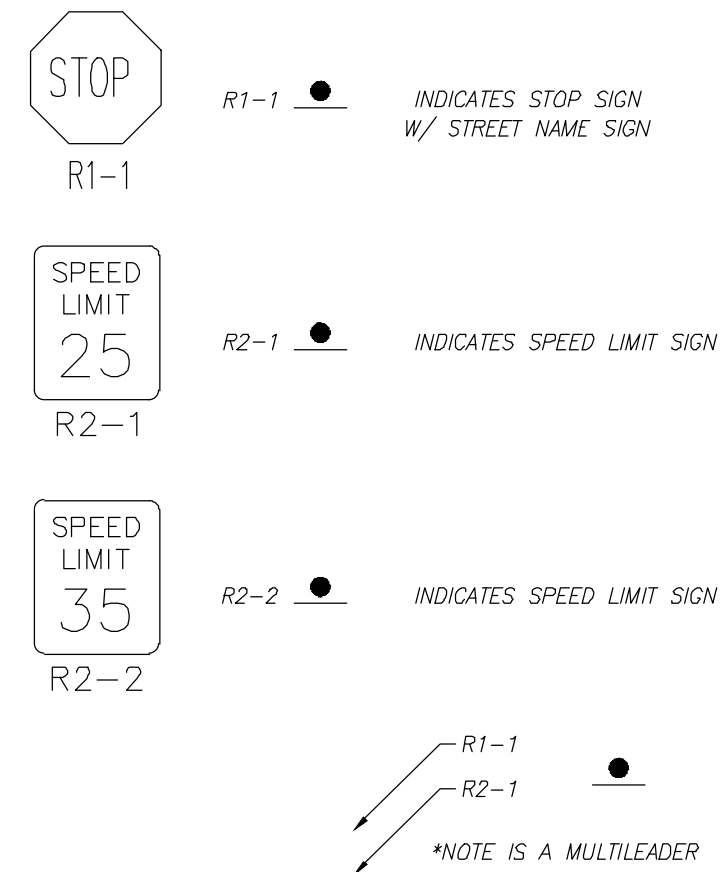


04/24/2025

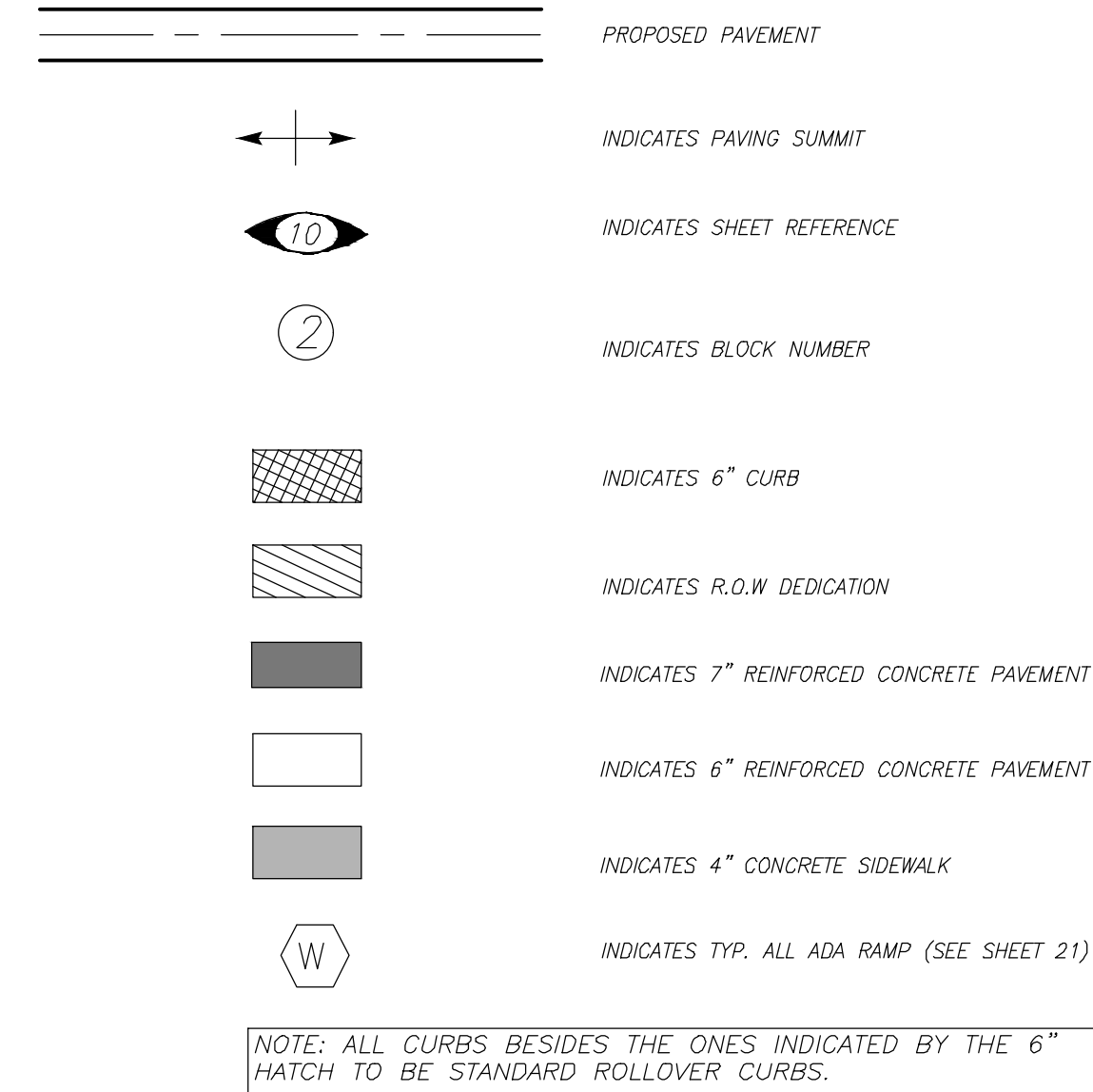
Date/Time : Wed, 23 Apr 2025 - 4:00pm
Path Name : I:\Projects\2980\0104\Sheets\4 paving and sidewalk.dwg



TRAFFIC CONTROL LEGEND



PAVING LEGEND



WARNING! HIGH PRESSURE PIPELINE
EXCAVATION AND/OR CONSTRUCTION PROHIBITED
WITHOUT PRIOR WRITTEN PERMISSION FROM
ENTERPRISE PRODUCTS OPERATING LLC.



BENCHMARK:
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100YR. W.S.E. = 298.83' AT OUTFALL #1000
100YR. W.S.E. = 298.83' AT OUTFALL #2000
FIRM PANEL NO. 48339C0200G & 48339C0350G
EFFECTIVE DATE: AUGUST 18, 2014
THIS AREA LIES IN ZONE "X".

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 - 3) PAVING CONTRACTOR SHALL TAKE EXTREME CAUTION IN SUBGRADE MANIPULATION IN THIS AREA. STORM SEWER PIPE IS IN OR WITHIN 6" OF SUBGRADE.
 - 4) CONTRACTOR TO PROVIDE SURVEYED "AS BUILT" DATA ON THE FLOWLINE AND CROSS SECTIONAL AREA OF ALL OVERFLOW SWALES MINIMUM EVERY 50'.
 - 5) CEMENT STABILIZED SAND FOR BACKFILL CROSSING ALL PAVEMENT SHALL BE INCIDENTAL.
 - 6) ALL STORM SEWER TO BE MAINTAINED BY MUNICIPAL UTILITY DISTRICT NO. 215.
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DATE	REVISION	BY

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY, CITY ENGINEER
SIGNATURE VALID FOR ONE (1) YEAR

MONTGOMERY COUNTY
MUNICIPAL UTILITY
DISTRICT NO. 215

BRIARLEY PHASE 1B

PAVING AND SIDEWALK

LJA Engineering, Inc.
3600 W Sam Houston Parkway S Phone 713.953.5200
Suite 600 Fax 713.953.5026
Houston, Texas 77042 FRN - F-1386
LJA PROJECT NO.: 2980-0104

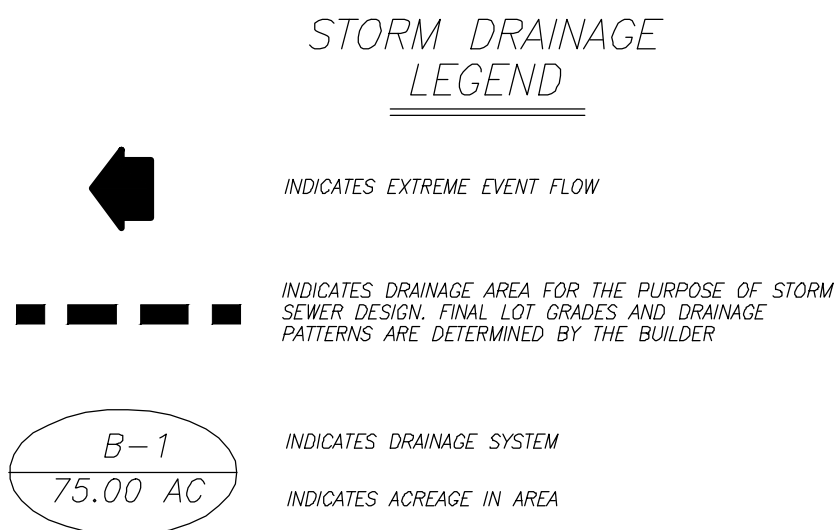
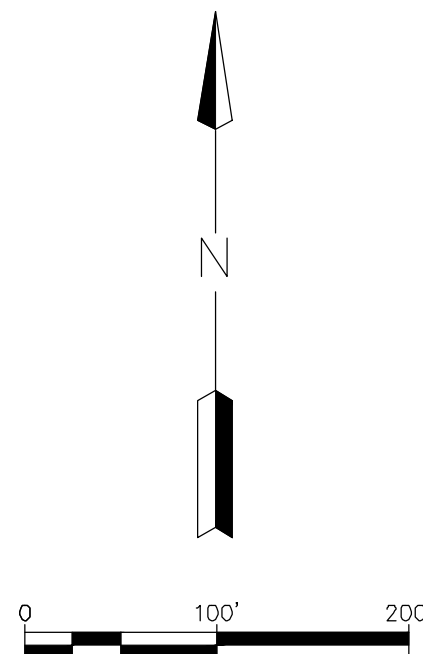
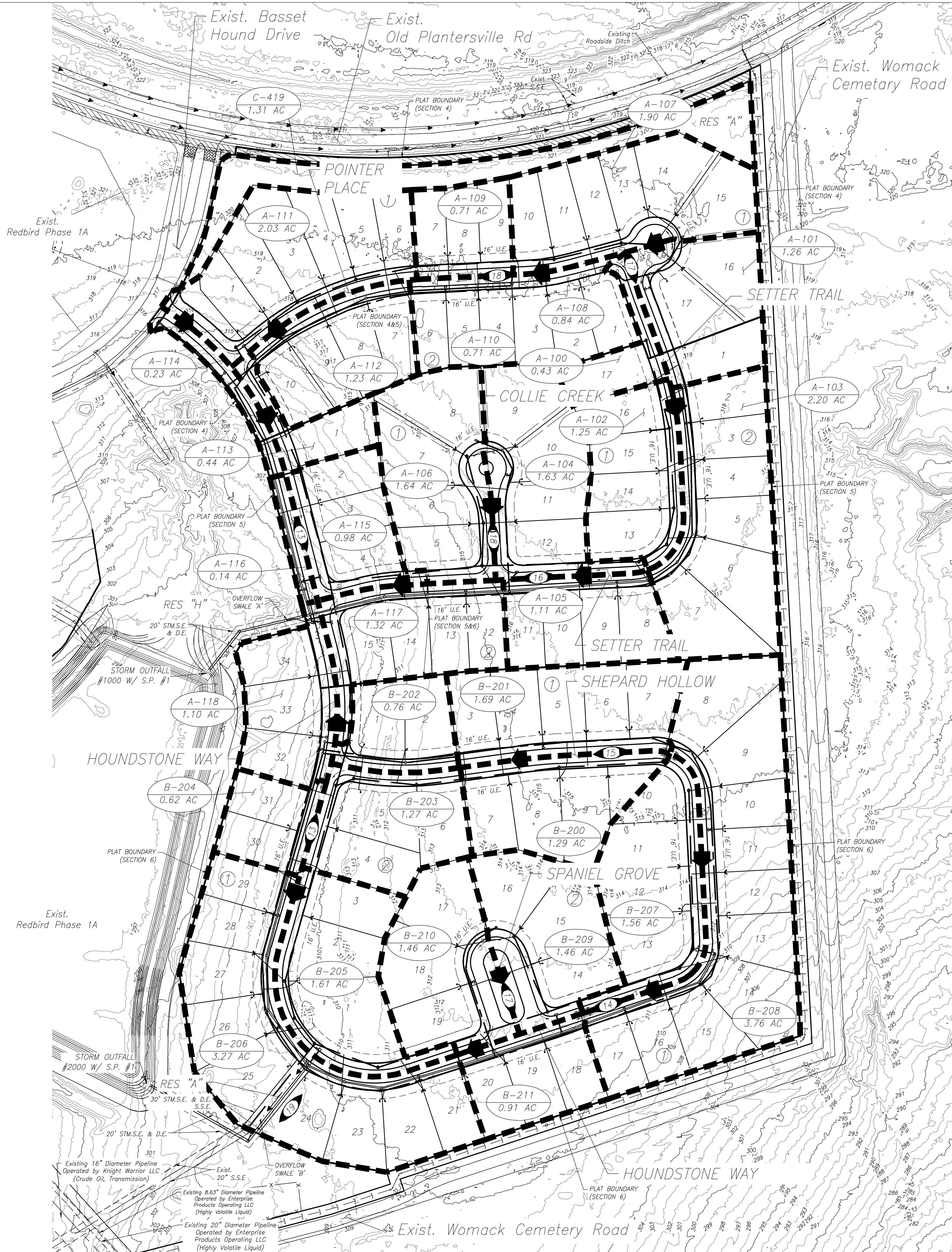
DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025

SCALE: 1" = 100'

SHEET NO. 4 OF 30

BRIARLEY PHASE 1B - 2980-0104

Date/Time : Wed, 23 Apr 2025 - 4:01pm
Path Name : I:\Projects\2980\0104\Sheets\6 Drainage Area Map.dwg



BENCHMARK:
ALL ELEVATIONS SET TO NGS. NAVD 88.
MONUMENT 1 DESIGNATION ELEV. 239.00
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DATE	REVISION	BY

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY, CITY ENGINEER SIGNATURE VALID FOR ONE (1) YEAR

MONTGOMERY COUNTY MUNICIPAL UTILITY DISTRICT NO. 215

BRIARLEY PHASE 1B

DRAINAGE AREA MAP

LJA Engineering, Inc.
3600 W Sam Houston Parkway S Suite 600
Houston, Texas 77042
Phone 713.953.5200 Fax 713.953.5026
FRN - F-1386
LJA PROJECT NO.: 2980-0104

DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025

SCALE: 1" = 100'

SHEET NO. 6 OF 30



04/24/2025

Date/Time : Wed, 23 Apr 2025 - 4:01pm
Path/Name : i:\Projects\2980\0104\Sheets\7 5 YEAR STORM CALCULATIONS.dwg

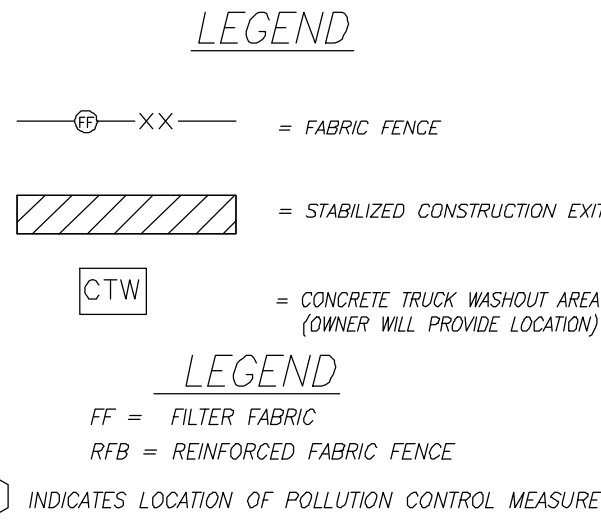
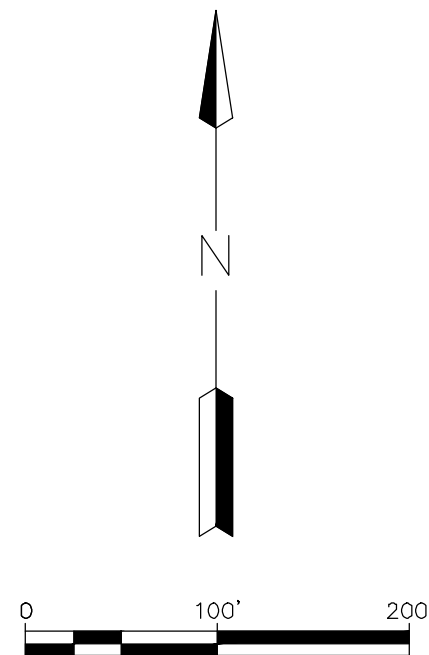
5 YEAR FREQUENCY SYSTEM A																																																	
Area	MANHOLES/INLETS from	MANHOLES/INLETS to	Area ac.	Total Area ac.	tc min.	Frequency Factor f	C	Intensity I in./hr.	Q c.f.s.	Additional Q c.f.s.	Total Q c.f.s.	Q Pass c.f.s.	Reach ft.	LINE size in. slope		DESIGN Q c.f.s. V f.p.s.		Actual V f.p.s.	Friction Loss ft.	Minor Loss ft.	FLOWLINES upstrm. elev. dnstrm. elev.		Line Size ft.	HYDR. GRAD. upstrm. elev. dnstrm. elev. slope %		TC/NG	Pipe Size	BOX CULVERT SIZE		AREA	WETTED PERIMETER	HYDRAULIC RADIUS	HYDRAULIC DIAMETER	X-Coord	Y-Coord	Junction													
A-100	100	101	0.43	0.43	23.62	1.00	0.55	4.70	1.11	0.00	1.11	0.00	30	24	0.86%	0.013	18.38	5.9	0.4	0.20	0.02	313.35	313.15	2.0	315.45	315.25	0.66	318.91	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
A-101	101	1	1.26	1.69	25.97	1.00	0.55	4.47	3.10	0.00	4.16	0.00	8	24	1.21%	0.013	24.88	7.9	1.3	0.10	0.00	313.15	313.05	2.0	315.25	315.15	1.25	318.91	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
-	1	2	0.00	1.69	25.97	1.00	0.55	4.47	0.00	0.00	4.16	0.00	138	24	0.45%	0.013	15.18	4.8	1.3	0.62	0.00	313.15	312.53	2.0	315.15	314.53	0.45	318.91	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
-	2	3	0.00	1.69	25.97	1.00	0.55	4.47	0.00	0.00	4.16	0.00	138	24	0.45%	0.013	15.16	4.8	1.3	0.62	0.00	312.53	311.91	2.0	314.53	313.91	0.45	318.92	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
-	3	4	0.00	1.69	25.97	1.00	0.55	4.47	0.00	0.00	4.16	0.00	59	24	0.45%	0.013	15.20	4.8	1.3	0.26	0.00	311.91	311.64	2.0	313.91	313.64	0.45	317.85	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
-	4	5	0.00	1.69	25.97	1.00	0.55	4.47	0.00	0.00	4.16	0.00	59	24	0.45%	0.013	15.13	4.8	1.3	0.26	0.10	311.64	311.38	2.0	313.64	313.38	0.45	317.24	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
-	5	6	0.00	5.14	28.34	1.00	0.55	4.27	0.00	0.00	12.06	0.00	273	24	0.45%	0.013	15.17	4.8	3.8	1.22	0.00	310.93	309.70	2.0	312.93	311.70	0.45	316.64	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
-	6	7	0.00	7.88	29.38	1.00	0.55	4.18	0.00	0.00	18.13	0.00	140	24	0.95%	0.013	22.04	7.0	5.8	1.32	0.00	307.56	306.23	2.0	309.56	308.23	0.95	316.42	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
-	7	8	0.00	9.52	29.87	1.00	0.55	4.14	0.00	0.00	21.70	0.00	80	30	0.95%	0.013	39.96	8.1	4.4	0.76	0.00	303.52	302.76	2.5	306.02	305.26	0.95	316.20	30		X		4.91	7.85	0.63	2.50	3500636.055	255485.154	M										
-	8	9	0.00	9.52	29.87	1.00	0.55	4.14	0.00	0.00	21.70	0.00	141	30	0.95%	0.013	39.92	8.1	4.4	1.33	0.00	300.99	299.66	2.5	303.49	302.16	0.95	314.95	30		X		4.91	7.85	0.63	2.50	3500636.055	255485.154	M										
-	9	34	0.00	21.15	32.12	1.00	0.55	3.98	0.00	0.00	46.31	0.00	135	42	0.26%	0.013	51.24	5.3	4.8	0.35	0.00	294.60	294.25	3.5	298.10	297.75	0.26	311.38	42		X		9.62	11.00	0.88	3.50	3500636.055	255485.154	M										
-	34	1000	0.00	21.15	32.12	1.00	0.55	3.98	0.00	0.00	46.31	0.00	98	42	0.26%	0.013	50.81	5.3	4.8	0.25	0.00	294.25	294.00	3.5	297.75	297.50	0.26	306.84	42		X		9.62	11.00	0.88	3.50	3500636.055	255485.154	M										
A-102	102	103	1.25	1.25	25.40	1.00	0.55	4.52	3.11	0.00	3.11	0.00	24	24	0.83%	0.013	20.65	6.6	1.0	0.20	0.01	311.65	311.45	2.0	313.65	313.45	0.83	317.85	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
A-103	103	5	2.20	3.45	27.44	1.00	0.55	4.34	5.25	0.00	8.24	0.00	8	24	1.19%	0.013	24.67	7.9	2.6	0.10	0.00	311.45	311.35	2.0	313.45	313.35	1.19	317.85	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
A-104	104	105	1.63	1.63	25.90	1.00	0.55	4.48	4.01	0.00	4.01	0.00	36	24	0.55%	0.013	16.84	5.4	1.3	0.20	0.00	310.54	310.34	2.0	312.54	312.34	0.55	316.20	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
A-105	105	6	1.11	2.74	26.94	1.00	0.55	4.38	2.68	0.00	6.61	0.00	8	24	1.25%	0.013	25.29	8.1	2.1	0.10	0.00	310.34	310.24	2.0	312.34	312.24	1.25	316.20	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
A-106	106	7	1.64	1.64	25.91	1.00	0.55	4.48	4.04	0.00	4.04	0.00	33	24	0.61%	0.013	17.61	5.6	1.3	0.20	0.00	306.50	306.30	2.0	308.50	308.30	0.61	311.57	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
A-117	117	118	1.32	1.32	25.50	1.00	0.55	4.52	3.28	0.00	3.28	0.00	28	24	0.71%	0.013	19.08	6.1	1.0	0.20	0.00	300.12	299.92	2.0	302.12	301.92	0.71	314.96	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
A-118	118	10	1.10	2.42	26.68	1.00	0.55	4.41	2.67	0.00	5.87	0.00	6	24	1.67%	0.013	29.21	9.3	1.9	0.10	0.00	299.92	299.82	2.0	301.92	301.82	1.67	314.96	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
-	10	9	0.00	2.42	26.68	1.00	0.55	4.41	0.00	0.00	5.87	0.00	21	24	1.24%	0.013	25.20	8.0	1.9	0.26	0.00	296.74	296.48	2.0	298.74	298.48	1.24	314.96	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
A-107	107	108	1.90	1.90	26.20	1.00	0.55	4.45	4.65	0.00	4.65	0.00	28	24	0.70%	0.013	18.99	6.0	1.5	0.20	0.00	314.43	314.23	2.0	316.43	316.23	0.70	318.34	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
A-108	108	11	0.84	2.74	26.94	1.00	0.55	4.38	2.03	0.00	6.61	0.00	6	24	1.67%	0.013	29.21	9.3	2.1	0.10	0.00	314.23	314.13	2.0	316.23	316.13	1.25	318.34	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
-	11	12	0.00	2.74	26.94	1.00	0.55	4.38	0.00	0.00	6.61	0.00	188	24	0.30%	0.013	12.35	3.9	2.1	0.56	0.00	314.11	313.55	2.0	316.11	315.55	0.30	318.34	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
-	12	13	0.00	4.16	27.85	1.00	0.55	4.31	0.00	0.00	9.85	0.00	83	24	0.30%	0.013	12.42	4.0	3.1	0.25	0.00	313.55	313.30	2.0	315.55	315.30	0.30	317.91	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
-	13	14	0.00	4.16	27.85	1.00	0.55	4.31	0.00	0.00	9.85	0.00	167	24	1.24%	0.013	25.22	8.0	3.1	2.07	0.00	313.30	311.22	2.0	315.30	313.22	1.24	315.94	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
-	14	15	0.00	4.16	27.85	1.00	0.55	4.31	0.00	0.00	9.85	0.00	67	24	1.24%	0.013	25.19	8.0	3.1	0.83	0.00	307.84	307.01	2.0	309.84	308.01	1.24	311.81	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
-	15	16	0.00	7.42	29.23	1.00	0.55	4.19	0.00	0.00	17.12	0.00	65	24	1.24%	0.013	25.20	8.0	5.4	0.81	0.00	307.01	306.20	2.0	309.01	308.20	1.24	310.52	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
-	16	17	0.00	7.42	29.23	1.00	0.55	4.19	0.00	0.00	17.12	0.00	109	24	1.24%	0.013	25.24	8.0	5.4	1.35	0.00	304.40	303.04	2.0	306.40	305.04	1.24	308.66	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M										
-	17	18	0.00	7.42	29.23	1.00	0.55	4.19	0.00	0.00	17.12	0.00	71	24	1.24%	0.013	25.17	8.0	5.4	0.97	0.00	303.04	302.17	2.0	305.04	304.17	1.2																						

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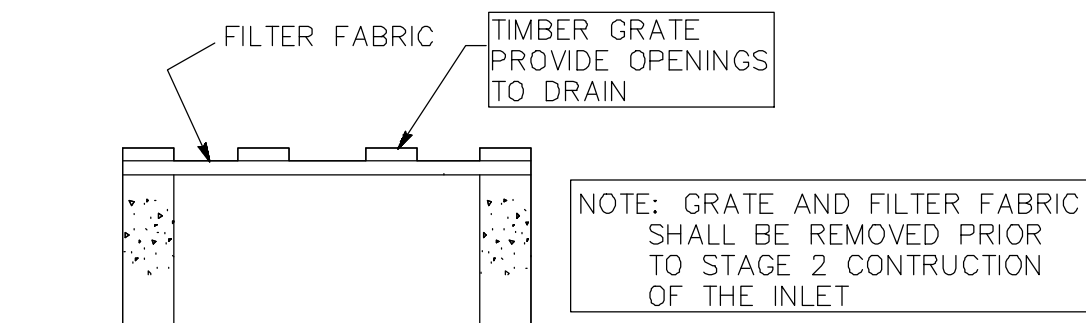
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100 YEAR FREQUENCY SYSTEM A																																							
Area	MANHOLES/INLETS from	MANHOLES/INLETS to	Area ac.	Total Area ac.	tc min.	Frequency Factor f	C	Intensity I in./hr.	Q c.f.s.	Additional Q c.f.s.	Total Q c.f.s.	Q Pass c.f.s.	Reach ft.	LINE		DESIGN		Actual V f.p.s.	Friction Loss ft.	Minor Loss ft.	FLOWLINES		Line Size ft.	HYDR. GRAD.		TC/NG	Pipe Size	BOX CULVERT SIZE		AREA	WETTED PERIMETER	HYDRAULIC RADIUS	HYDRAULIC DIAMETER	X-Coord	Y-Coord	Junction			
														size in.	slope %	n	Q c.f.s.	V f.p.s.				upstrm. elev.	dnstrm. elev.		upstrm. elev.	dnstrm. elev.	slope %												
A-100	100	101	0.43	0.43	23.62	1.25	0.55	8.04	2.38	0.00	2.38	0.00	30	24	0.66%	0.013	18.38	5.9	0.8	0.20	0.07	313.35	313.15	2.0	318.01	317.81	0.66	318.91	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
A-101	101	1	1.26	1.69	25.97	1.25	0.55	7.67	6.64	0.00	8.91	0.00	8	24	1.21%	0.013	24.88	7.9	2.8	0.10	0.00	313.15	313.05	2.0	317.81	317.71	1.25	318.91	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
-	-	2	0.00	1.69	25.97	1.25	0.55	7.67	0.00	0.00	8.91	0.00	138	24	0.45%	0.013	15.18	4.8	2.8	0.62	0.00	313.15	312.53	2.0	317.71	317.09	0.45	318.91	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
-	-	3	0.00	1.69	25.97	1.25	0.55	7.67	0.00	0.00	8.91	0.00	59	24	0.45%	0.013	15.20	4.8	2.8	0.26	0.00	311.91	311.64	2.0	316.48	316.21	0.45	317.85	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
-	-	4	0.00	1.69	25.97	1.25	0.55	7.67	0.00	0.00	8.91	0.00	59	24	0.45%	0.013	15.13	4.8	2.8	0.26	0.46	311.64	311.38	2.0	316.21	315.95	0.44	317.24	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
-	-	5	6.00	5.14	28.34	1.25	0.55	7.34	0.00	0.00	25.93	0.00	273	24	0.45%	0.013	15.17	4.8	8.3	3.57	0.00	310.83	309.70	2.0	315.95	312.38	1.31	316.64	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
-	-	6	7.00	7.88	29.38	1.25	0.55	7.20	0.00	0.00	39.03	0.00	140	24	0.95%	0.013	22.04	7.0	12.4	4.15	0.00	307.56	306.23	2.0	312.38	308.23	2.96	316.42	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
-	-	7	8.00	9.52	29.87	1.25	0.55	7.14	0.00	0.00	46.76	0.00	80	30	0.95%	0.013	39.66	8.1	9.5	1.04	0.00	303.52	302.76	2.5	306.30	305.26	1.29	316.20	30		X		4.91	7.85	0.63	2.50	3500636.055	255485.154	M
-	-	8	9.00	9.52	29.87	1.25	0.55	7.14	0.00	0.00	46.76	0.00	141	30	0.95%	0.013	39.92	8.1	9.5	1.82	0.00	300.99	299.66	2.5	303.98	302.16	1.29	314.95	30		X		4.91	7.85	0.63	2.50	3500636.055	255485.154	M
-	-	9	34.00	21.15	32.12	1.25	0.55	6.88	0.00	0.00	100.10	0.00	135	42	0.26%	0.013	51.24	5.3	10.4	1.33	0.00	294.60	294.25	3.5	299.79	298.47	0.98	311.38	42		X		9.62	11.00	0.88	3.50	3500636.055	255485.154	M
-	-	34	1000.00	21.15	32.12	1.25	0.55	6.88	0.00	0.00	100.10	0.00	98	42	0.26%	0.013	50.81	5.3	10.4	0.97	0.00	294.25	294.00	3.5	298.47	297.50	0.98	306.84	42		X		9.62	11.00	0.88	3.50	3500636.055	255485.154	M
A-102	102	103	1.25	1.25	25.40	1.25	0.55	7.75	8.66	0.00	8.66	0.00	24	24	0.83%	0.013	20.65	6.6	2.1	0.20	0.03	311.65	311.45	2.0	316.25	316.05	0.83	317.85	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
A-103	103	5	2.20	3.45	27.44	1.25	0.55	7.46	11.28	0.00	17.69	0.00	8	24	1.19%	0.013	24.67	7.9	5.6	0.10	0.00	311.45	311.35	2.0	316.05	315.95	1.18	317.85	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
A-104	104	105	1.63	1.63	25.90	1.25	0.55	7.68	8.60	0.00	8.60	0.00	36	24	0.55%	0.013	16.84	5.4	2.7	0.20	0.00	310.54	310.34	2.0	312.68	312.48	0.55	316.20	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
A-105	105	6	1.11	2.74	26.94	1.25	0.55	7.53	5.74	0.00	14.18	0.00	8	24	1.25%	0.013	25.29	8.1	4.5	0.10	0.00	310.34	310.24	2.0	312.48	312.38	1.24	316.20	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
A-106	106	7	1.64	1.64	25.91	1.25	0.55	7.68	8.66	0.00	8.66	0.00	33	24	0.61%	0.013	17.61	5.6	2.8	0.20	0.00	306.50	306.30	2.0	306.50	306.30	0.61	311.57	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
A-117	117	118	1.32	1.32	25.50	1.25	0.55	7.74	7.02	0.00	7.02	0.00	28	24	0.71%	0.013	19.08	6.1	2.2	0.20	0.00	300.12	299.92	2.0	302.12	301.92	0.71	314.96	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
A-118	118	10	1.10	2.42	26.68	1.25	0.55	7.56	5.72	0.00	12.58	0.00	6	24	1.67%	0.013	29.21	9.3	4.0	0.10	0.00	299.92	299.82	2.0	301.92	301.82	1.67	314.96	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
-	-	9	0.00	2.42	26.68	1.25	0.55	7.56	0.00	0.00	12.58	0.00	21	24	1.24%	0.013	25.20	8.0	4.0	0.26	0.00	296.74	296.48	2.0	300.05	299.79	1.23	314.96	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
A-107	107	108	1.90	1.90	26.20	1.25	0.55	7.63	9.97	0.00	9.97	0.00	28	24	0.70%	0.013	16.99	6.0	3.2	0.20	0.00	314.43	314.23	2.0	317.05	316.86	0.70	318.34	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
A-108	108	11	0.84	2.74	26.94	1.25	0.55	7.53	4.35	0.00	14.18	0.00	6	24	1.67%	0.013	29.21	9.3	4.5	0.10	0.00	314.23	314.13	2.0	316.86	316.76	1.25	318.34	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
-	-	11	12.00	2.74	26.94	1.25	0.55	7.53	0.00	0.00	14.18	0.00	188	24	0.30%	0.013	12.35	3.9	4.5	0.73	0.00	314.11	313.55	2.0	316.76	316.02	0.39	318.34	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
-	-	12	13.00	4.16	27.85	1.25	0.55	7.40	0.00	0.00	21.17	0.00	83	24	0.30%	0.013	12.42	4.0	6.7	0.72	0.00	313.55	313.30	2.0	316.02	315.30	0.87	317.91	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
-	-	13	14.00	4.16	27.85	1.25	0.55	7.40	0.00	0.00	21.17	0.00	167	24	1.24%	0.013	25.22	8.0	6.7	2.07	0.00	313.30	311.22	2.0	315.30	313.22	1.24	315.94	24		X		3.14	6.28	0.50	2.00	3500636.055	255485.154	M
-	-	14	15.00	4.16	27.85	1.25	0.55	7.40	0.00	0.00	21.17	0.00																											



ITEM	APPROX. QNTY.
①	20' RFB
②	20' RFB

1. CONTRACTOR SHALL ALSO INSTALL & MAINTAIN SILT BARRIER FOR INLETS AS DETAILED ON DRAINAGE DETAILS.



A CONTINUOUS SILT BARRIER FENCE SHALL BE CONSTRUCTED AROUND ALL FIRST STAGE INLETS BY THE UTILITY CONTRACTOR, AND MAINTAINED BY THE PAVING CONTRACTOR.

INLET PROTECTION BARRIER (STAGE 1)
(BY UTILITY CONTRACTOR)
(NO SEPARATE PAY)

FILTER DAM NOTES:

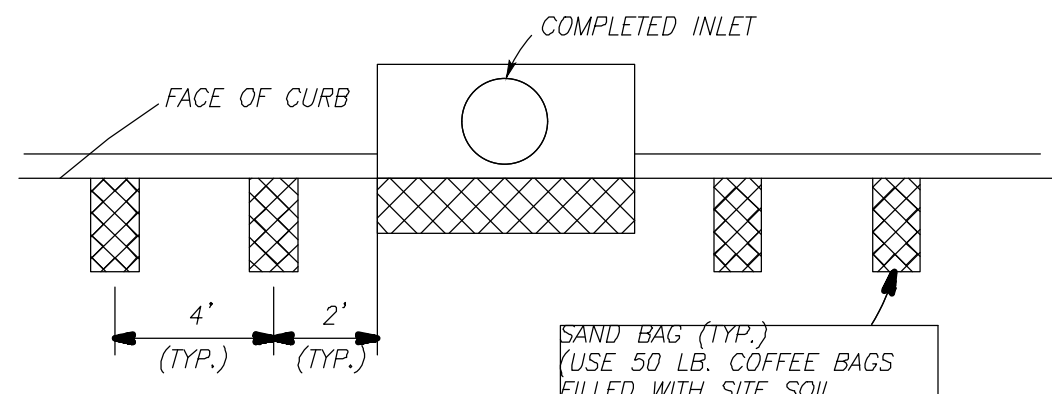
A. TYPES OF FILTER DAMS

- TYPE 1 (NON-REINFORCED)
A. HEIGHT - 18-24 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP FILTER DAM
B. TOP WIDTH - 2 FEET (MINIMUM)
C. SLOPES - 2:1 (MAXIMUM)
- TYPE 2 (REINFORCED)
A. HEIGHT - 18-36 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
B. TOP WIDTH - 2 FEET (MINIMUM)
C. SLOPES - 2:1 (MAXIMUM)
- TYPE 3 (REINFORCED)
A. HEIGHT - 36-48 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
B. TOP WIDTH - 2 FEET (MINIMUM)
C. SLOPES - 3:1 (MAXIMUM)
- TYPE 4 (GABION)
A. HEIGHT - 30 INCHES (MINIMUM). MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
B. TOP WIDTH - 2 FEET (MINIMUM)
- TYPE 5 (AS SHOWN ON THE PLANS)

B. CONSTRUCT FILTER DAMS ACCORDING TO THE FOLLOWING CRITERIA UNLESS SHOWN OTHERWISE ON THE PLANS.

- TYPE 2 AND 3 FILTER DAMS; SECURE WITH 20 GAUGE GALVANIZED WOVEN WIRE MESH WITH 1 INCH DIAMETER HEXAGON OPENINGS.
- GRANULAR FILL:
A. PLACE ON MESH TO HEIGHT AND SLOPES SHOWN ON PLANS OR AS SPECIFIED BY THE ENGINEER.
B. 3-5 INCHES FOR ROCK FILTER DAM TYPES 1, 2 AND 4 AND 4-8 INCHES FOR 4-8 INCHES FOR ROCK
- WIRE MESH: FOLD AT UPSTREAM SIDE OVER GRANULAR FILL AND TIGHTLY SECURED TO ITSELF ON THE DOWNSTREAM SIDE USING WIRE TIES OR HOG RINGS.
- IN STREAMS: SECURES OR STAKE MESH TO STREAM BED PRIOR TO AGGREGATE PLACEMENT.
- SEE SPECIFICATION SECTION NO. 02364 - FILTER DAMS.
- EMBED ONE FOOT MINIMUM INTO SLOPE AND RAISE ONE FOOT THAN CENTER OF DEPRESSED AREA AT SLOPE.

CONTRACTOR SHALL INSTALL INLET PROTECTION BARRIERS PER DETAIL. (TYP. ALL PROPOSED INLETS)



INLET PROTECTION BARRIER (STAGE 2)
(BY UTILITY CONTRACTOR)

CONSTRUCTION SPECIFICATIONS FOR SILT BARRIER FENCE

A. MATERIALS:

- SYNTHETIC FILTER FABRIC SHALL BE A PEROUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING REQUIREMENT (PER ASTM METHODS):

PHYSICAL PROPERTY	REQUIREMENTS
FILTER EFFICIENCY	75% (MIN.)
TENSILE STRENGTH @ 20%	EXT. STRENGTH = 50 LBS./LIN. IN.(MIN.)
MAX ELONGATION	STD. STRENGTH = 30 LBS./LIN. IN.(MIN.)
FLOW RATE	0.3 GAL./SQ. FT./MIN. (MIN.)

- SYNTHETIC FILTER FABRIC SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0' TO 120'.

B. INSTALLATION:

- THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 15" AND A MAXIMUM OF 18" ABOVE FINAL GRADE.
 - STANDARD STRENGTH SYNTHETIC FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL AND CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS (AND THUS IMPROVE THE BARRIER'S STRENGTH AND EFFICIENCY).
 - STAKES FOR THE SILT FENCE SHALL BE 2" x 2" WOOD WITH A MINIMUM LENGTH OF 3 FEET.
 - THE STAKES SHALL BE SPACED A MAXIMUM OF 3' APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (18" MIN.)
 - A TRENCH SHALL BE EXCAVATED APPROX. 4" WIDE AND 4" DEEP ALONG THE LINE OF STAKES AND UPSLOPE FROM THE BARRIER.
 - THE SILT FENCE SHALL BE STAPLED TO THE STAKES, WITH 8" (MIN.) OF FABRIC EXTENDED INTO THE TRENCH. HEAVY DUTY WIRE STAPLES AT LEAST ONE-HALF INCH LONG SHALL BE USED. THE FENCE SHALL NOT BE STAPLED TO EXISTING TREES.
 - THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FENCE MATERIAL.
 - IF A SILT FENCE IS TO BE CONSTRUCTED ACROSS A DITCH LINE OR SWALE, THE BARRIER SHALL BE OF SUFFICIENT LENGTH TO ELIMINATE END FLOW, AND THE PLAN CONFIGURATION SHALL RESEMBLE AN ARC OR HORSESHOE WITH THE ENDS ORIENTED UPSLOPE.
 - SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
- C. MAINTENANCE:**
- SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
 - SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE SILT FENCE IS STILL NECESSARY, IT SHALL BE REPLACED IMMEDIATELY.
 - SEDIMENT DEPOSITS SHALL BE REMOVED WHEN DEPOSITS REACH APPROX. 1/3 THE HEIGHT OF THE FENCE.
 - ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.
 - THERE SHOULD BE NO GAPS OR SAGS IN THE SILT FENCE.

GENERAL NOTES TO CONTRACTOR

- LOCATE FUEL/MATERIAL STORAGE AREAS AWAY FROM STORM WATER CONVEYANCE SYSTEMS. USE A LINER UNDER ABOVE GROUND STORAGE TANKS. USE SILT FENCING, HAY BALES, OR BERMS AROUND FUEL STORAGE AREAS. (NO SEPARATE PAY)
- CONTRACTOR WILL ADVISE OWNER IMMEDIATELY, VERBALLY, AND IN WRITING, OF ANY FUEL SPILLS ONTO THE PROJECT/CONSTRUCTION AREA AND THE ACTIONS TAKEN TO REMEDY THE PROBLEM.
- CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL ENVIRONMENTAL LAWS.
- CONTRACTOR IS RESPONSIBLE FOR DISPOSING OF FUELS, MATERIALS, AND EXCAVATIONS IN A LEGALLY APPROVED MANNER.
- CONTRACTOR IS TO INSPECT ALL STRUCTURAL CONTROLS SPECIFIED HEREIN, AT A MINIMUM, ONCE EVERY 7 CALENDAR DAYS OR WITHIN 24 HOURS AFTER ANY STORM EVENT THAT MEETS OR EXCEEDS 0.5 INCHES/24 HOUR PERIOD.
- CONTRACTOR WILL PROVIDE PROTECTED STORAGE AREAS FOR CHEMICALS, PAINTS SOLVENTS, FERTILIZERS, AND OTHER POTENTIALLY TOXIC MATERIALS.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATELY MAINTAINED SANITARY FACILITIES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION, IDENTIFICATION, AND REMOVAL OF ALL DEBRIS FOR DESIGNATED CONCRETE WASH-OUT SITE.
- ALL UNSATISFACTORY AND/OR WASTE MATERIALS INCLUDING VEGETATION, ROOTS, CONCRETE AND DEBRIS SHALL BE DISPOSED OF OFF SITE BY THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR CLEANING MUD AND/OR DIRT TRACKED ONTO EXISTING STREETS BY HIS WORKMAN'S, SUPPLIER OR SUBCONTRACTORS VEHICLES. STREET MUST BE CLEANED WITHIN 24 HOURS OF WHEN THE TRACKING OCCURS.
- ALL DISTURBED AREAS, BOTH ON-SITE AND OFF, NOT COVERED BY PAVEMENT OR PERMANENT STRUCTURES SHALL BE SEEDED.
- 16" WIDE STRIP OF SOD SHALL BE INSTALLED BEHIND THE ENTIRE LENGTH OF CURB BY PAVING CONTRACTOR. SEEDING WILL BE INSTALLED BETWEEN SOD AND STREET R.O.W.
- EACH SUBSEQUENT CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER MAINTENANCE OF EXISTING STRUCTURAL CONTROLS DURING THE DURATION OF HIS CONSTRUCTION ACTIVITIES. ANY DAMAGE TO STRUCTURAL CONTROL CAUSED BY THE CONTRACTOR SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AT NO COST TO OWNER.

BENCHMARK:

ALL ELEVATIONS SET TO NGS. NAVD 88.
MONUMENT 1 DESIGNATION ELEV. 239.00
BRASS DISC SET IN CONCRETE LOCATED BY COORDINATES X = 376,481.91322 Y = 10,135,441.47530
MONUMENT 2 DESIGNATION ELEV. 301.880
BRASS DISC SET IN CONCRETE LOCATED BY COORDINATES X = 3,757,800.73970 Y = 10,131,535.69490
100YR. W.S.E. = 298.83' AT OUTFALL #1000
100YR. W.S.E. = 298.83' AT OUTFALL #2000
FIRM PANEL NO.48339C0200G & 48339C0350G
EFFECTIVE DATE: AUGUST 18, 2014
THIS AREA LIES IN ZONE "X".

NOTES:

- ALL UTILITIES ARE PROPOSED UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- PAVING CONTRACTOR SHALL TAKE EXTREME CAUTION IN SUBGRADE MANIPULATION IN THIS AREA. STORM SEWER PIPE IS IN OR WITHIN 6" OF SUBGRADE.
- CONTRACTOR TO PROVIDE SURVEYED "AS BUILT" DATA ON THE FLOWLINE AND CROSS SECTIONAL AREA OF ALL OVERFLOW SWALES MINIMUM EVERY 50'.
- CEMENT STABILIZED SAND FOR BACKFILL CROSSING ALL PAVEMENT SHALL BE INCIDENTAL.
- ALL STORM SEWER TO BE MAINTAINED BY MUNICIPAL UTILITY DISTRICT NO. 215.
- ALL MANHOLE RIM ELEVATIONS WILL NEED TO BE FLUSH WITH PAVEMENT/SIDEWALK OR 3"-6" ABOVE NATURAL GROUND.
- IF ELECTRICAL UTILITY PROVIDER STANDARDS CONFLICT WITH THE APPROVED LAYOUT BY THE CITY AND/OR CITY STANDARDS A VARIANCE REQUEST MUST BE REQUESTED FROM CITY COUNCIL.
- ALL LIGHT POLES MUST BE A MINIMUM OF 3' OFF BACK OF CURB.
- SIDEWALKS TO BE LOCATED A MINIMUM OF 3' FROM THE BACK OF CURB.
- SIDEWALKS TO BE LOCATED A MINIMUM OF 5' FROM THE BACK OF CURB WHERE LIGHT POLES ARE PRESENT.
- CONSTRUCT SIDEWALKS AND CURB RAMPS IN CONFORMANCE WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND THE AMERICAN WITH DISABILITIES ACT (ADA).
- DO NOT PLACE SIDEWALK OVER PARALLEL UTILITY LINES.
- AT DRIVEWAYS, ALIGN A MINIMUM 5 FOOT WIDE SIDEWALK SECTION MEETING TAS AND ADA AS THE SIDEWALK CROSSES THE DRIVEWAY.
- IF AS-BUILT ELECTRICAL PLANS TO BE SUBMITTED WITH THE AS-BUILT DRAWINGS FOR THE SUBDIVISION.
- CONTRACTOR SHALL CLEAR, GRUB, ROOT RAKE, BACK DRAG, CHIP AND DISPOSE OFFSITE OF ALL CLEARED AND GRUBBED MATERIAL.
- SIDEWALK RAMPS AND SIDEWALKS WITHIN COMMON AREAS TO BE CONSTRUCTED WITH W8x8. SIDEWALKS IN FRONT OF HOMES TO BE CONSTRUCTED BY HOMEBUILDERS. ALL SIDEWALKS TO BE INSTALLED BY END OF 1 YEAR WARRANTY PERIOD.
- CONTRACTOR TO STAMP THE FACE OF THE CURB WITH AN "S" AT THE LOCATION OF EACH SANITARY SEWER LEAD AND "W" AT THE LOCATION OF EACH WATER LEAD.

DATE	REVISION	BY

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY, CITY ENGINEER SIGNATURE VALID FOR ONE (1) YEAR

MONTGOMERY COUNTY MUNICIPAL UTILITY DISTRICT NO. 215

BRIARLEY PHASE 1B

STORM WATER POLLUTION PREVENTION PLAN

LJA Engineering, Inc.
3600 W Sam Houston Parkway S Suite 600
Houston, Texas 77042
Phone 713.953.5200 Fax 713.953.5026
FRN - F-1386
LJA PROJECT NO.: 2980-0104

DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025

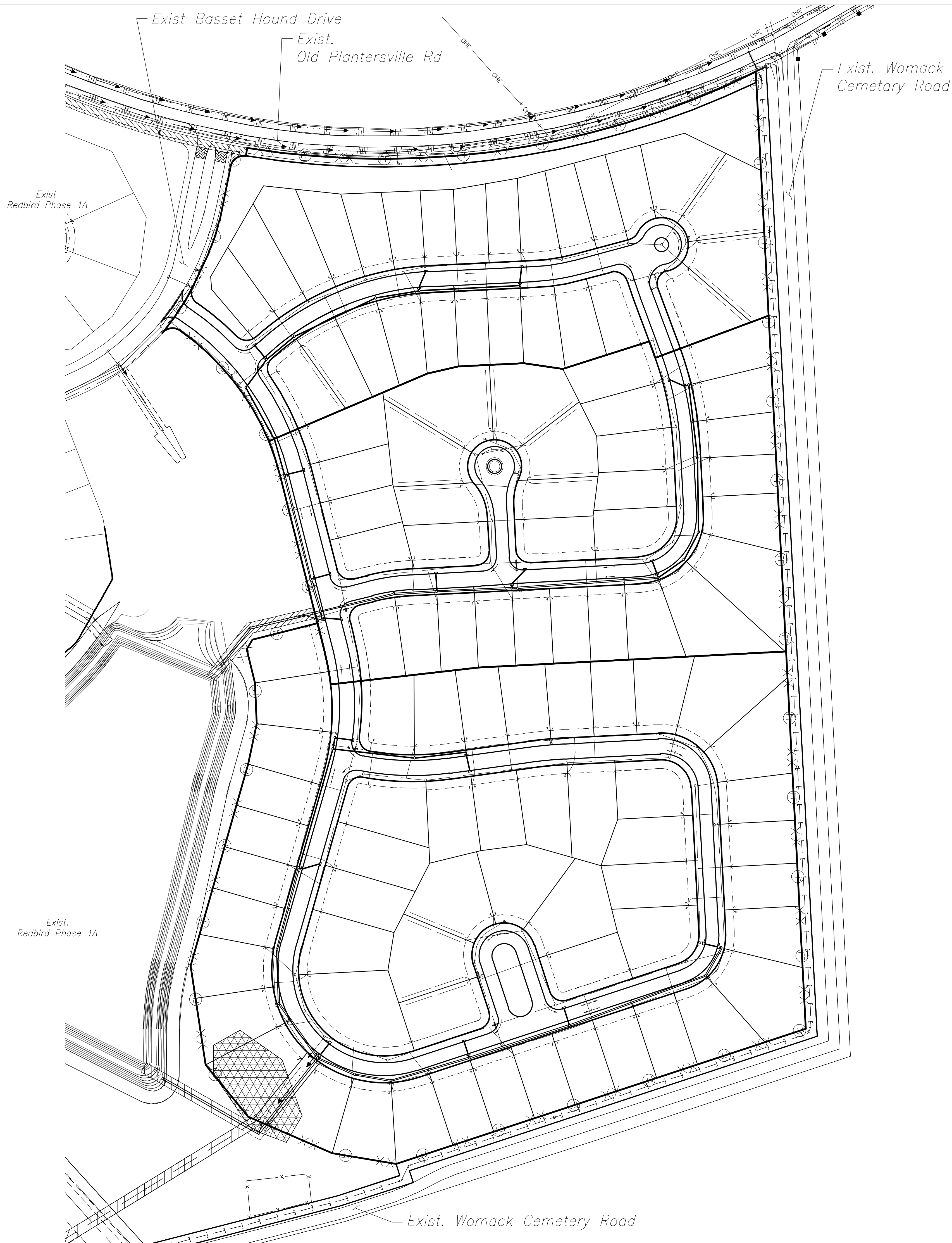
SCALE: 1" = 100'

SHEET NO. 9 OF 30

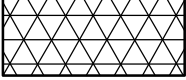

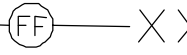
Date/Time : Wed, 23 Apr 2025 - 4:01pm
Path Name : I:\Projects\2980\0104\Sheets\9 storm water pollution prevention plan.dwg



Date/Time : Wed, 23 Apr, 2025 - 4:02pm
Path Name : I:\Projects\2980\0104\Sheets\10 CLEARING PLAN.dwg



AREA TO BE CLEARED

-  INDICATES LOTS TO BE CLEARED (0.48 AC)
-  INDICATES WET UTILITY EASEMENTS TO BE CLEARED (0.28 AC)
-  INDICATES FILTER FABRIC FENCE

BENCHMARK:
ALL ELEVATIONS SET TO NGS. NAVD 88.
MONUMENT 1 DESIGNATION ELEV. 239.00
BRASS DISC SET IN CONCRETE LOCATED BY
COORDINATES X = 376,481.91322 Y = 10,135,441.47530
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BRASS DISC SET IN CONCRETE LOCATED BY
COORDINATES X = 3,757,800.73970 Y = 10,131,535.69490
100YR. W.S.E. = 298.83' AT OUTFALL #1000
100YR. W.S.E. = 298.83' AT OUTFALL #2000
FIRM PANEL NO.48339C0200G & 48339C0350G
EFFECTIVE DATE: AUGUST 18, 2014
THIS AREA LIES IN ZONE "X".

- NOTES:**
- 1) ALL UTILITIES ARE PROPOSED UNLESS OTHERWISE NOTED.
 - 2) THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - 3) PAVING CONTRACTOR SHALL TAKE EXTREME CAUTION IN SUBGRADE MANIPULATION IN THIS AREA. STORM SEWER PIPE IS IN OR WITHIN 6" OF SUBGRADE.
 - 4) CONTRACTOR TO PROVIDE SURVEYED "AS BUILT" DATA ON THE FLOWLINE AND CROSS SECTIONAL AREA OF ALL OVERFLOW SWALES MINIMUM EVERY 50'.
 - 5) CEMENT STABILIZED SAND FOR BACKFILL CROSSING ALL PAVEMENT SHALL BE INCIDENTAL.
 - 6) ALL STORM SEWER TO BE MAINTAINED BY MUNICIPAL UTILITY DISTRICT NO. 215.
 - 7) ALL MANHOLE RIM ELEVATIONS WILL NEED TO BE FLUSH WITH PAVEMENT/SIDEWALK OR 3"-6" ABOVE NATURAL GROUND.
 - 8) IF ELECTRICAL UTILITY PROVIDER STANDARDS CONFLICT WITH THE APPROVED LAYOUT BY THE CITY AND/OR CITY STANDARDS A VARIANCE REQUEST MUST BE REQUESTED FROM CITY COUNCIL.
 - 9) ALL LIGHT POLES MUST BE A MINIMUM OF 3' OFF BACK OF CURB.
 - 10) SIDEWALKS TO BE LOCATED A MINIMUM OF 3' FROM THE BACK OF CURB.
 - 10a) SIDEWALKS TO BE LOCATED A MINIMUM OF 5' FROM THE BACK OF CURB WHERE LIGHT POLES ARE PRESENT.
 - 10b) CONSTRUCT SIDEWALKS AND CURB RAMPS IN CONFORMANCE WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND THE AMERICAN WITH DISABILITIES ACT (ADA).
 - 10c) DO NOT PLACE SIDEWALK OVER PARALLEL UTILITY LINES.
 - 10d) AT DRIVEWAYS, ALIGN A MINIMUM 5 FOOT WIDE SIDEWALK SECTION MEETING TAS AND ADA AS THE SIDEWALK CROSSES THE DRIVEWAY.
 - 11) AS-BUILT ELECTRICAL PLANS TO BE SUBMITTED WITH THE AS-BUILT DRAWINGS FOR THE SUBDIVISION.
 - 12) CONTRACTOR SHALL CLEAR, GRUB, ROOT RAKE, BACK DRAG, CHIP AND DISPOSE OFFSITE OF ALL CLEARED AND GRUBBED MATERIAL.
 - 13) SIDEWALK RAMPS AND SIDEWALKS WITHIN COMMON AREAS TO BE CONSTRUCTED WITH WS&D. SIDEWALKS IN FRONT OF HOMES TO BE CONSTRUCTED BY HOMEBUILDERS. ALL SIDEWALKS TO BE INSTALLED BY END OF 1 YEAR WARRANTY PERIOD.
 - 14) CONTRACTOR TO STAMP THE FACE OF THE CURB WITH AN "S" AT THE LOCATION OF EACH SANITARY SEWER LEAD AND "W" AT THE LOCATION OF EACH WATER LEAD.

DATE	REVISION	BY

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY, CITY ENGINEER
SIGNATURE VALID FOR ONE (1) YEAR

DATE

MONTGOMERY COUNTY
MUNICIPAL UTILITY
DISTRICT NO. 215

BRIARLEY PHASE 1B

CLEARING PLAN

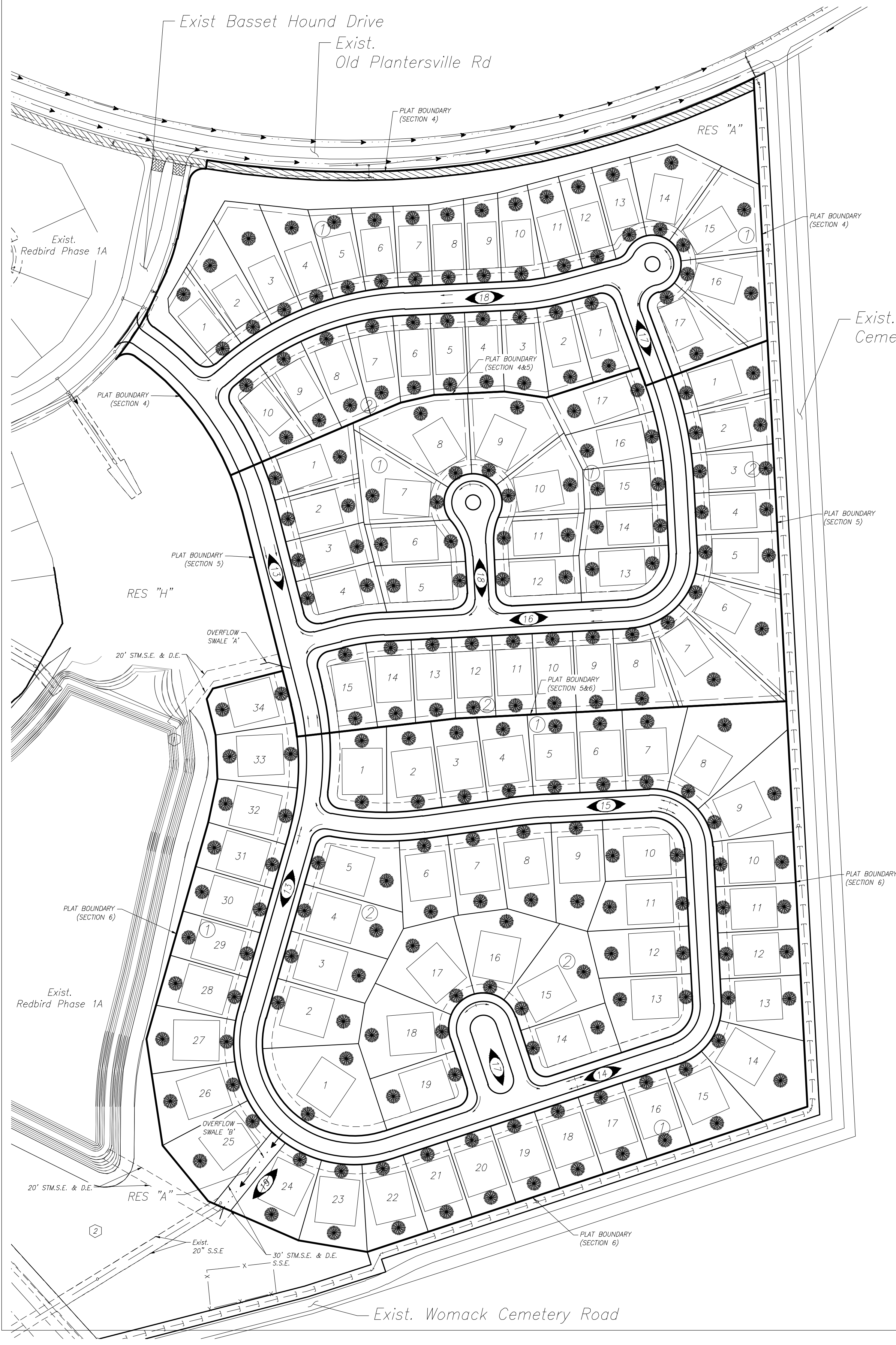
LJA Engineering, Inc.
3600 W Sam Houston Parkway S Phone 713.953.5200
Suite 600 Fax 713.953.5026
Houston, Texas 77042 FRN - F-1386
LJA PROJECT NO.: 2980-0104

DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025

SCALE: 1" = 100'



Date: Time : Wed, 23 Apr 2025 - 4:02pm
Path Name : I:\Projects\2980\0104\Sheets\11 LANDSCAPE PLAN.dwg



LEGEND



INDICATES TREE POSITION

0 100' 200'

N

BENCHMARK:

ALL ELEVATIONS SET TO NGS, NAVD 88.
MONUMENT 1 DESIGNATION ELEV. 239.00
BRASS DISC SET IN CONCRETE LOCATED BY
COORDINATES X = 376,481.91322 Y = 10,135,441.47530
MONUMENT 2 DESIGNATION ELEV. 301.880
BRASS DISC SET IN CONCRETE LOCATED BY
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100YR. W.S.E.= 298.83' AT OUTFALL #1000
100YR. W.S.E.= 298.83' AT OUTFALL #2000
FIRM PANEL NO.48339C0200G & 48339C0350G
EFFECTIVE DATE: AUGUST 18, 2014
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CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY, CITY ENGINEER
SIGNATURE VALID FOR ONE (1) YEAR

MONTGOMERY COUNTY
MUNICIPAL UTILITY
DISTRICT NO. 215

BRIARLEY PHASE 1B

LANDSCAPE PLAN

LJA Engineering, Inc.
3600 W Sam Houston Parkway S Phone 713.953.5200
Suite 600 Fax 713.953.5026
Houston, Texas 77042 FRN - F-1386
LJA PROJECT NO.: 2980-0104

DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025

SCALE: 1" = 100'

SHEET NO. 11 of 30

LANDSCAPING FOR RESERVES WILL BE PROVIDED IN A SEPARATE PLAN SET

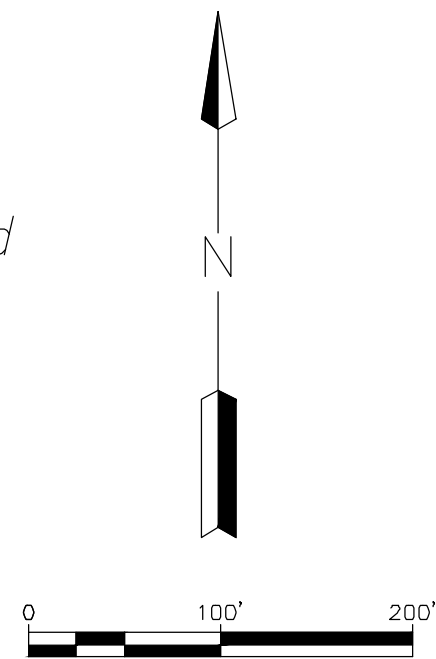
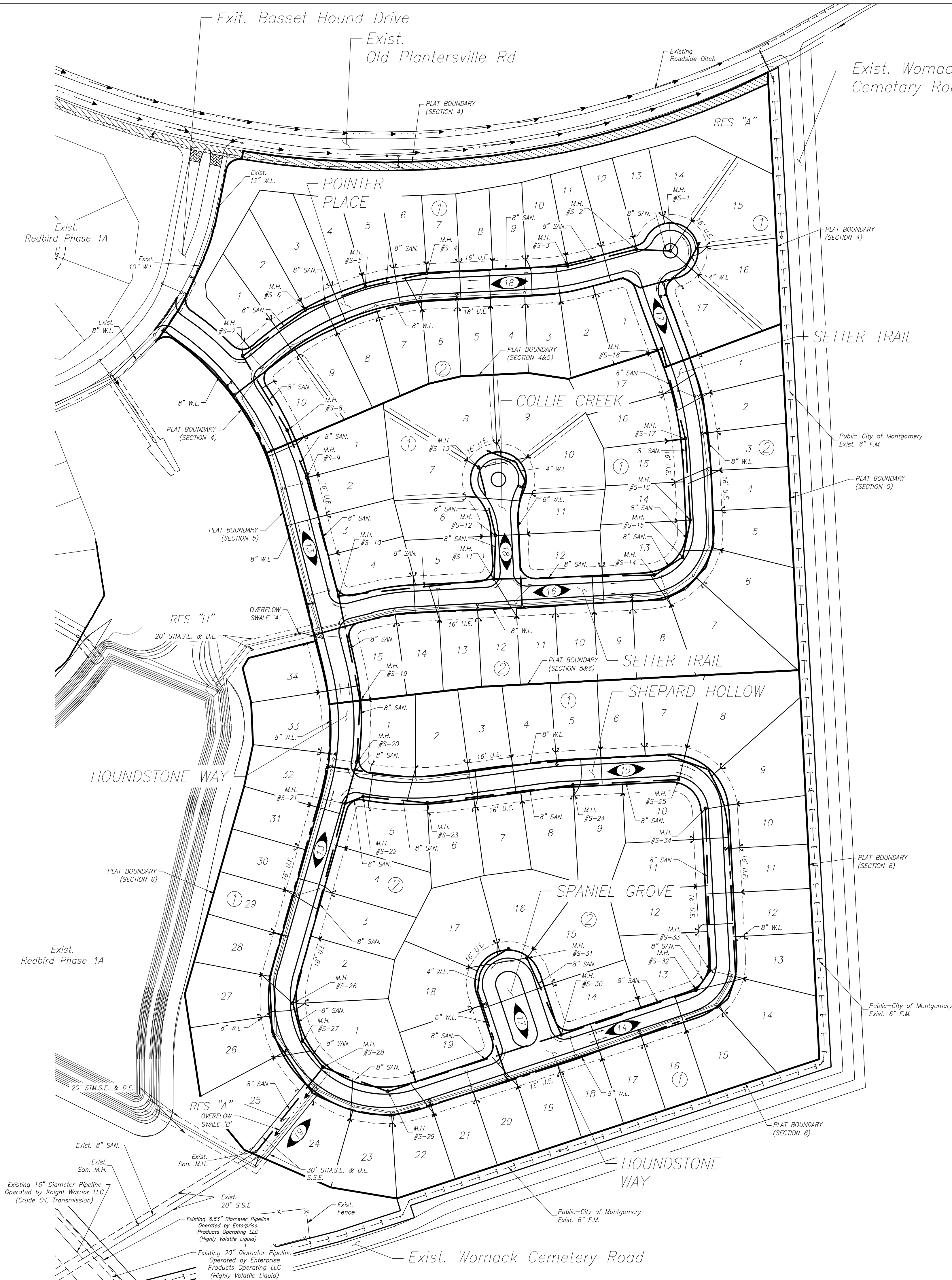
WARNING! HIGH PRESSURE PIPELINE EXCAVATION AND/OR CONSTRUCTION PROHIBITED WITHOUT PRIOR WRITTEN PERMISSION FROM ENTERPRISE PRODUCTS OPERATING LLC.



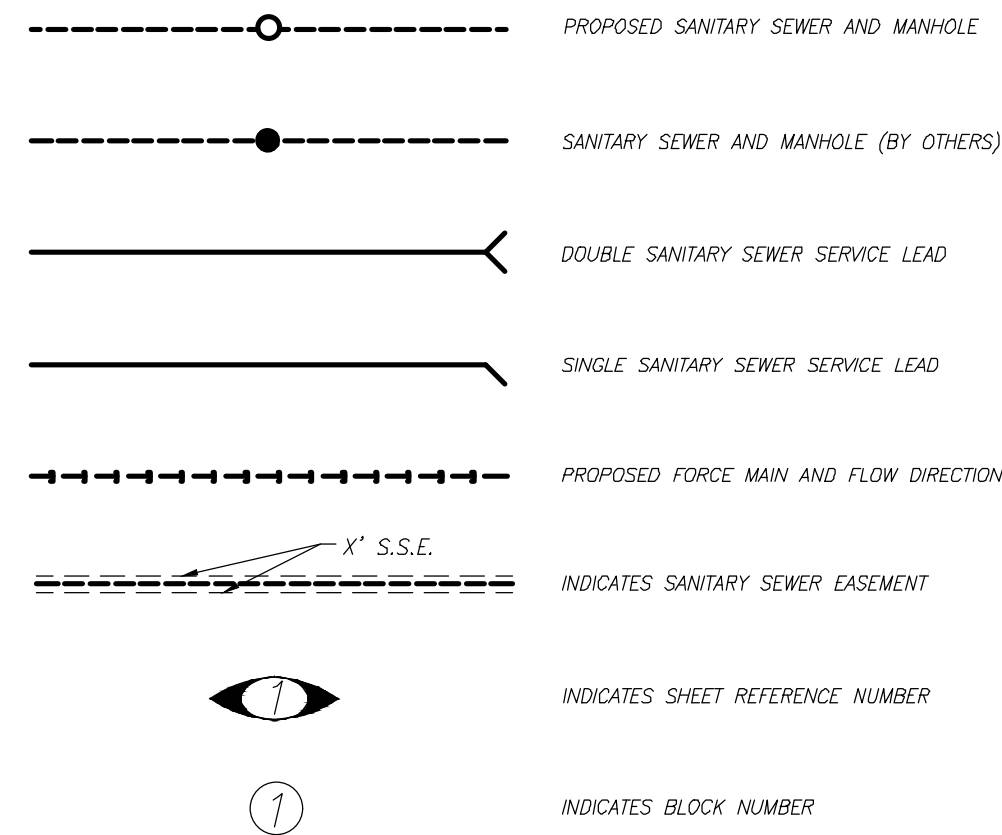
04/24/2025

BRIARLEY PHASE 1B - 2980-0104

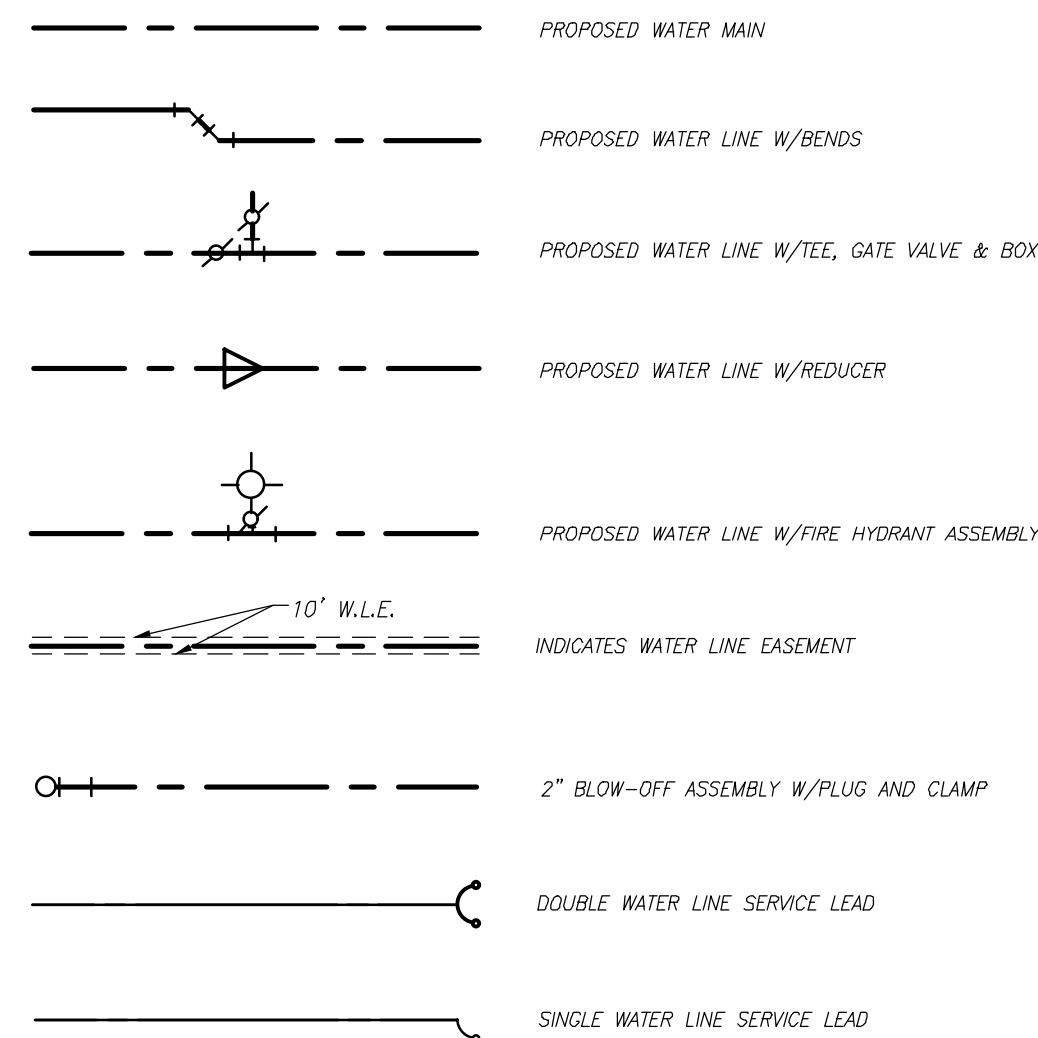
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Path Name : I:\Projects\2980\0104\Sheets\12 SANITARY SEWER AND WATER LAYOUT.dwg



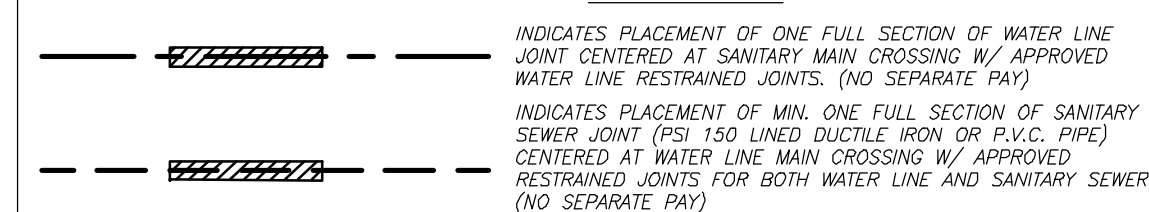
SANITARY SEWER LEGEND



WATERLINE LEGEND



LEGEND



BENCHMARK:
ALL ELEVATIONS SET TO NGS. NAVD 88.
MONUMENT 1 DESIGNATION ELEV. 239.00
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COORDINATES X = 376,481.91322 Y = 10,135,441.47530
MONUMENT 2 DESIGNATION ELEV. 301.880
BRASS DISC SET IN CONCRETE LOCATED BY
COORDINATES X = 3,757,800.73970 Y = 10,131,535.69490
100YR. W.S.E. = 298.83' AT OUTFALL #1000
100YR. W.S.E. = 298.83' AT OUTFALL #2000
FIRM PANEL NO.48339C0200G & 48339C0350G
EFFECTIVE DATE: AUGUST 18, 2014
THIS AREA LIES IN ZONE "X".

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DATE	REVISION	BY

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY, CITY ENGINEER
SIGNATURE VALID FOR ONE (1) YEAR

MONTGOMERY COUNTY
MUNICIPAL UTILITY
DISTRICT NO. 215

BRIARLEY PHASE 1B

SANITARY SEWER AND
WATER LAYOUT

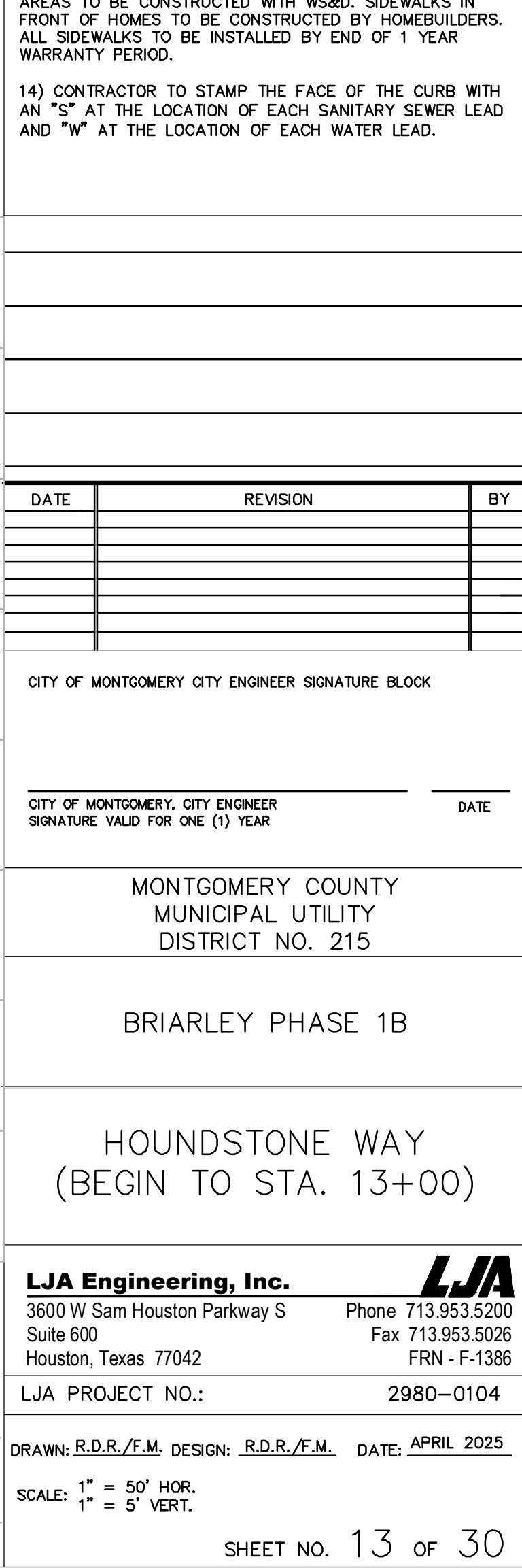
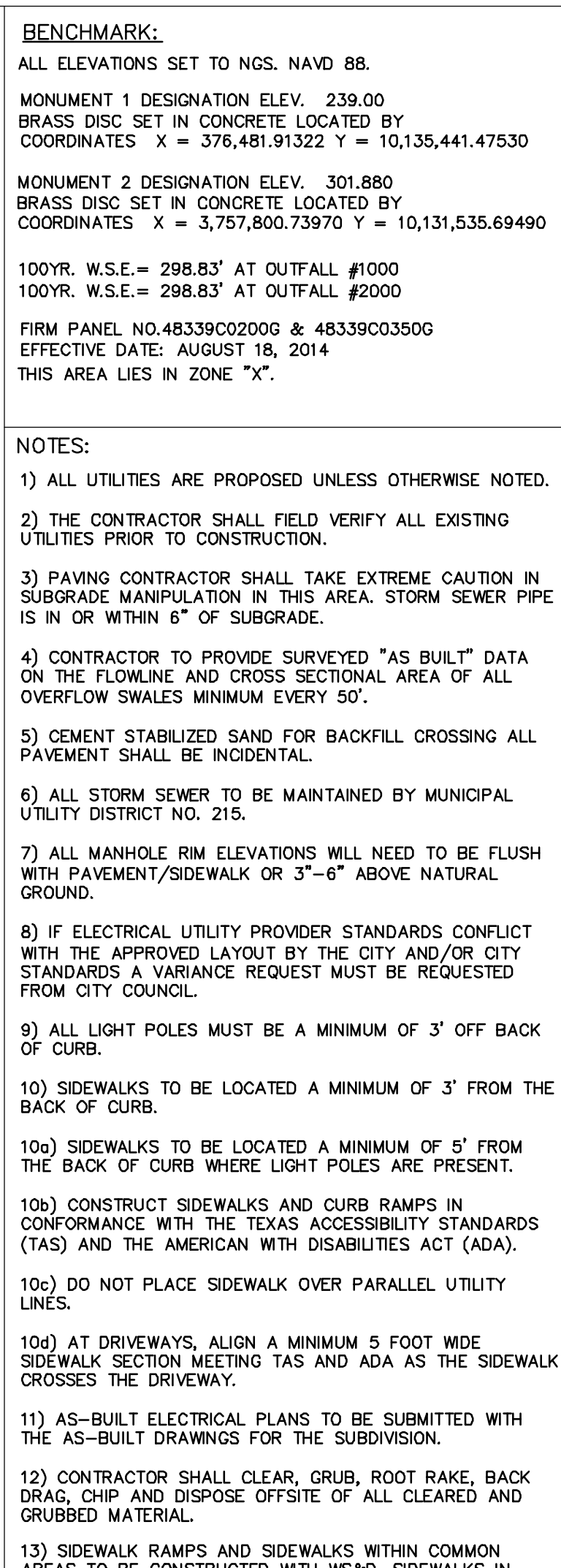
LJA Engineering, Inc.
3600 W Sam Houston Parkway S Suite 600
Houston, Texas 77042
Phone 713.953.5200 Fax 713.953.5026
FRN - F-1386
LJA PROJECT NO.: 2980-0104

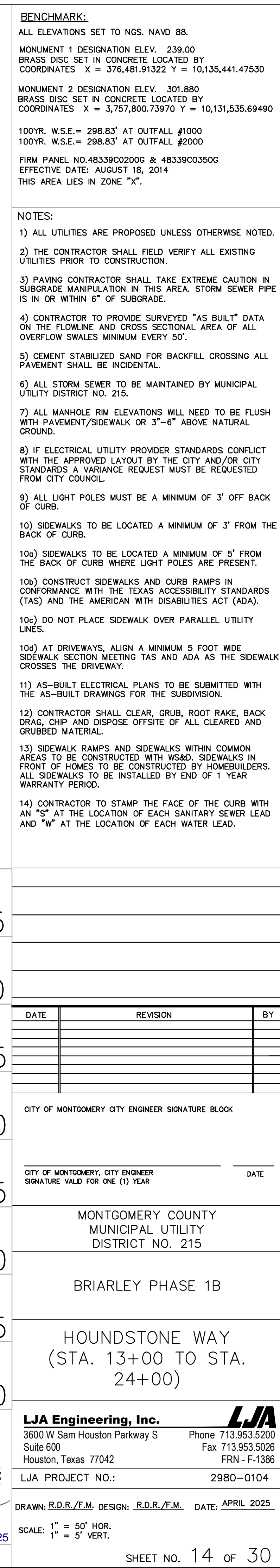
DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025

SCALE: 1" = 100'

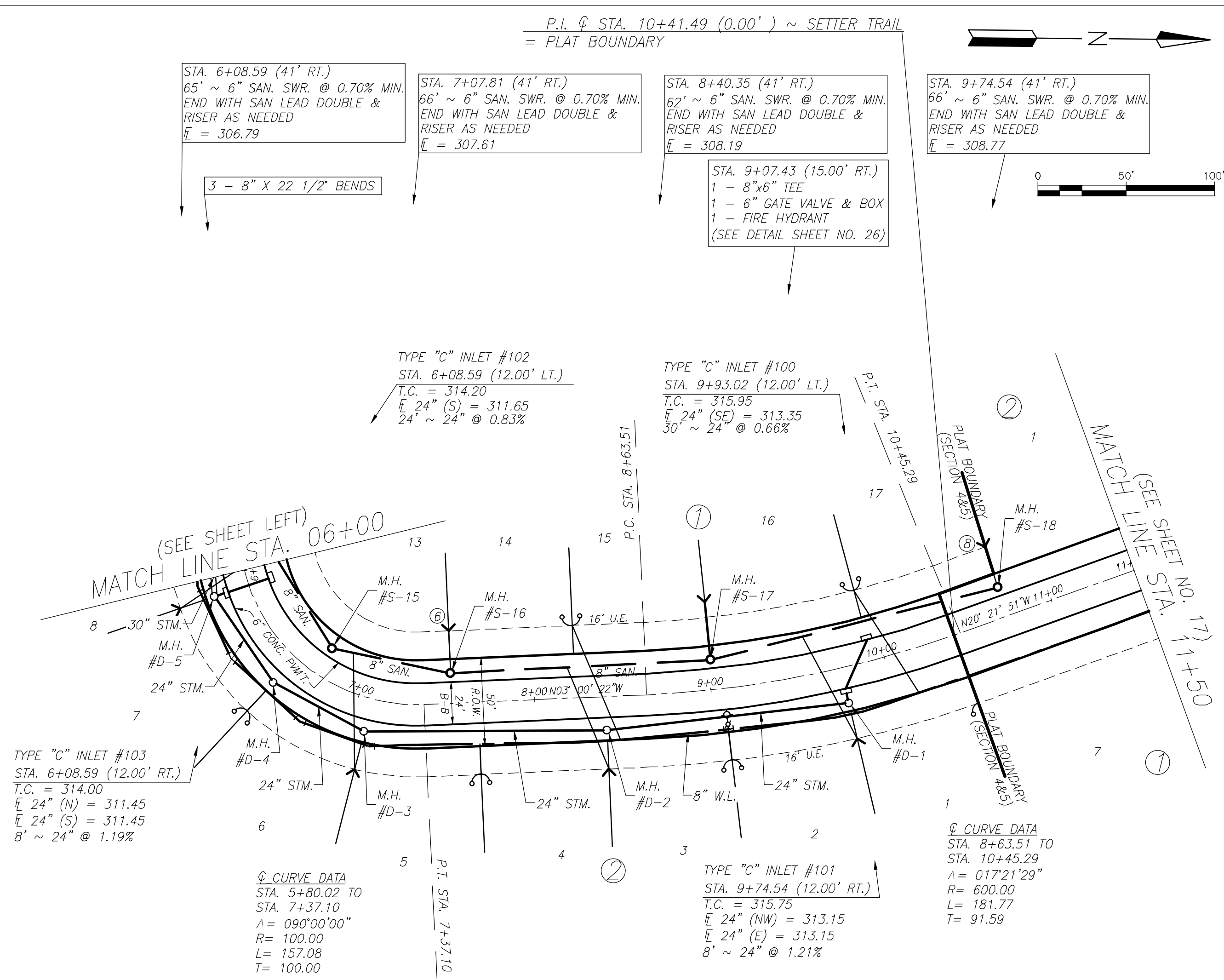
SHEET NO. 12 OF 30











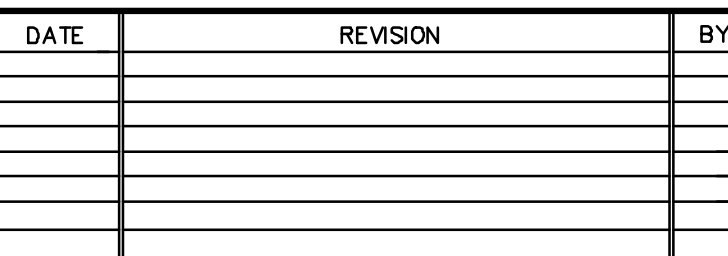


VC-4	
2+55.37	312.74
2+65.37	313.12
2+75.37	313.47
2+85.37	313.79
2+95.37	314.06
3+05.37	314.31
3+15.37	314.51
3+25.37	314.68
3+35.37	314.82
3+45.37	314.92
3+55.37	314.98

BENCHMARK:
ALL ELEVATIONS SET TO NGS. NAVD. 88.
MONUMENT 1 DESIGNATION ELEV. 239.00
BRASS DISC SET IN CONCRETE. LOCATED BY
COORDINATES X = 376,481.91322 Y = 10,135,441.47530
MONUMENT 2 DESIGNATION ELEV. 301.880
BRASS DISC SET IN CONCRETE LOCATED BY
COORDINATES X = 4,757,800.73790 Y = 10,131,535.69490
100YR. W.S.E. = 298.83° 07390 Y = #1000
100YR. W.S.E. = 298.83° 07390 Y = #2000
FIRM PANEL NO.48339C0200G & 48339C0350G
EFFECTIVE DATE: AUGUST 18, 2014
THIS AREA LIES IN ZONE "X".

LEGEND

	<p>INDICATES PLACEMENT OF ONE FULL SECTION OF WATER LINE JOINT CENTERED AT SANITARY MAIN CROSSING W/ APPROVED WATER LINE RESTRAINED JOINTS. (NO SEPARATE PAY)</p>
	<p>INDICATES PLACEMENT OF ONE FULL SECTION OF SEWER SEWER JOINT (PSI 150 DUCTILE IRON OR P.V.C. PIPE) CENTERED AT WATER LINE MAIN CROSSING W/ APPROVED RESTRAINED JOINTS FOR BOTH WATER LINE AND SANITARY SEWER. (NO SEPARATE PAY)</p>



CITY OF MONTGOMERY, CITY ENGINEER
SIGNATURE VALID FOR ONE (1) YEAR

DATE

BRIARLEY PHASE 1B

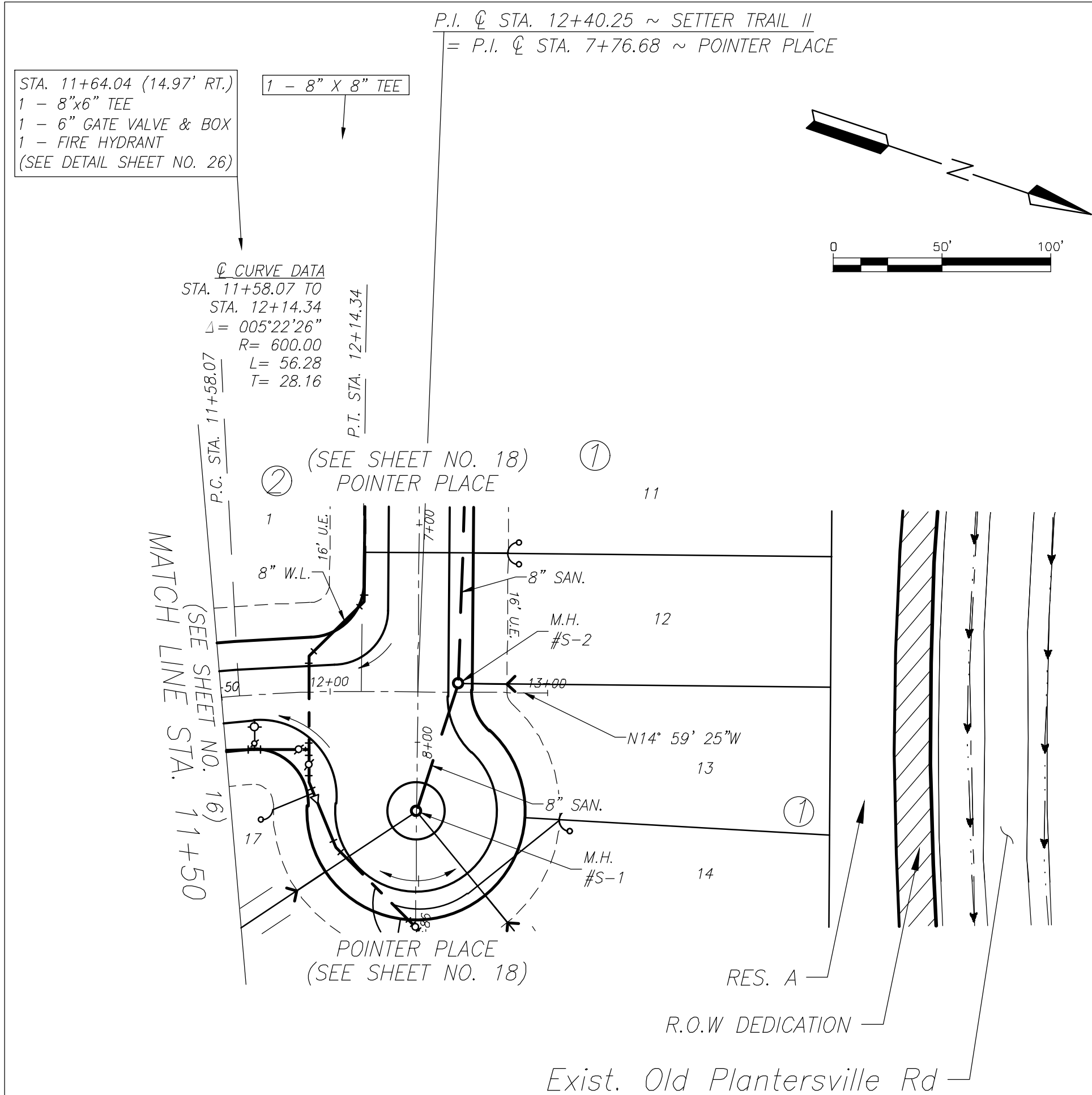
LJA Engineering, Inc.
3600 W Sam Houston Parkway S
Suite 600
Houston, Texas 77042

Phone 713.953.5200
Fax 713.953.5026
FRN - F-1386

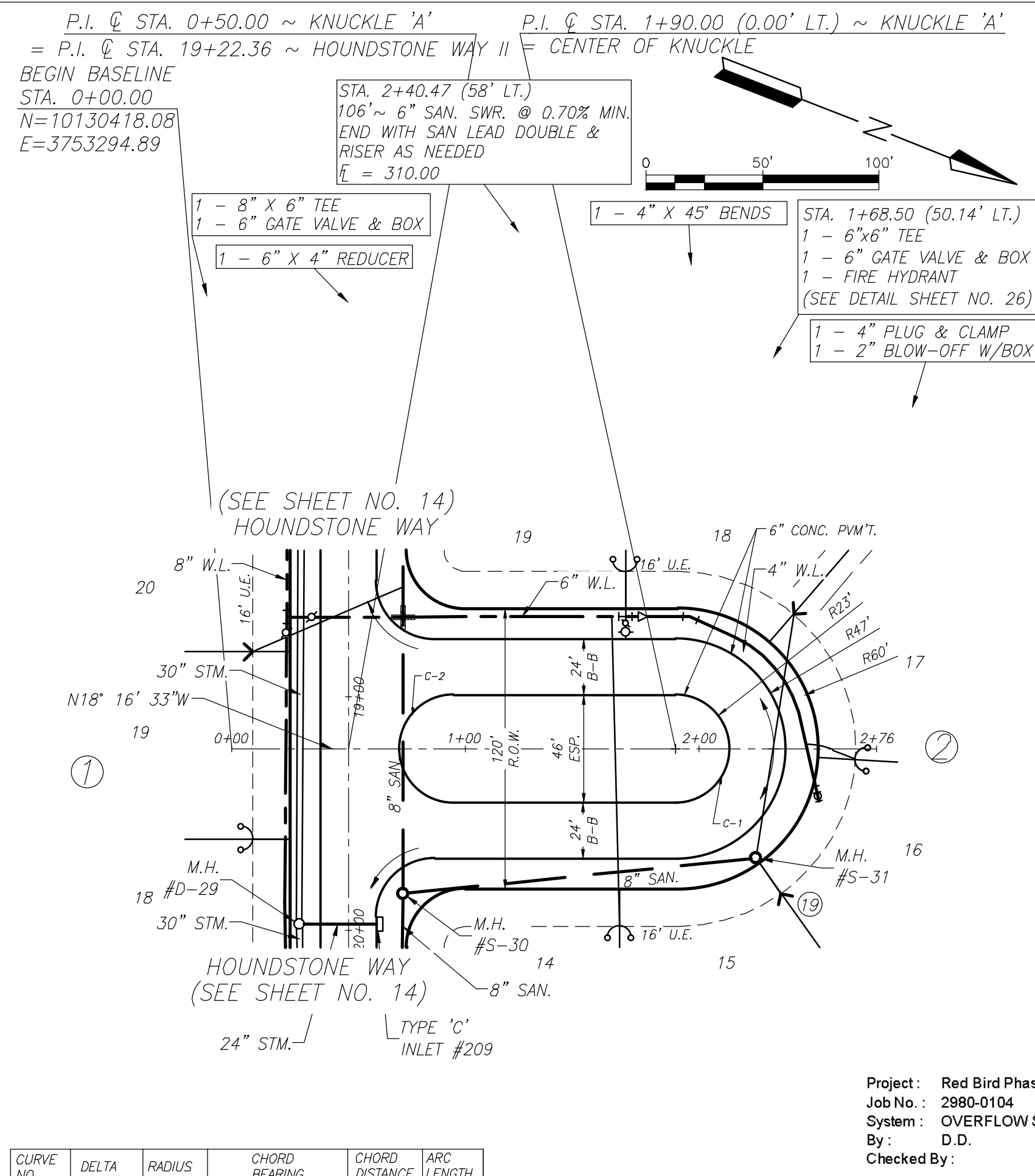
DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025

SCALE: 1" = 50' HOR.
1" = 5' VERT.

Date/Time : Wed, 23 Apr 2025 - 4:11pm
Path Name : I:\Projects\2980\0104\Sheets\17 SETTER TRAIL.dwg

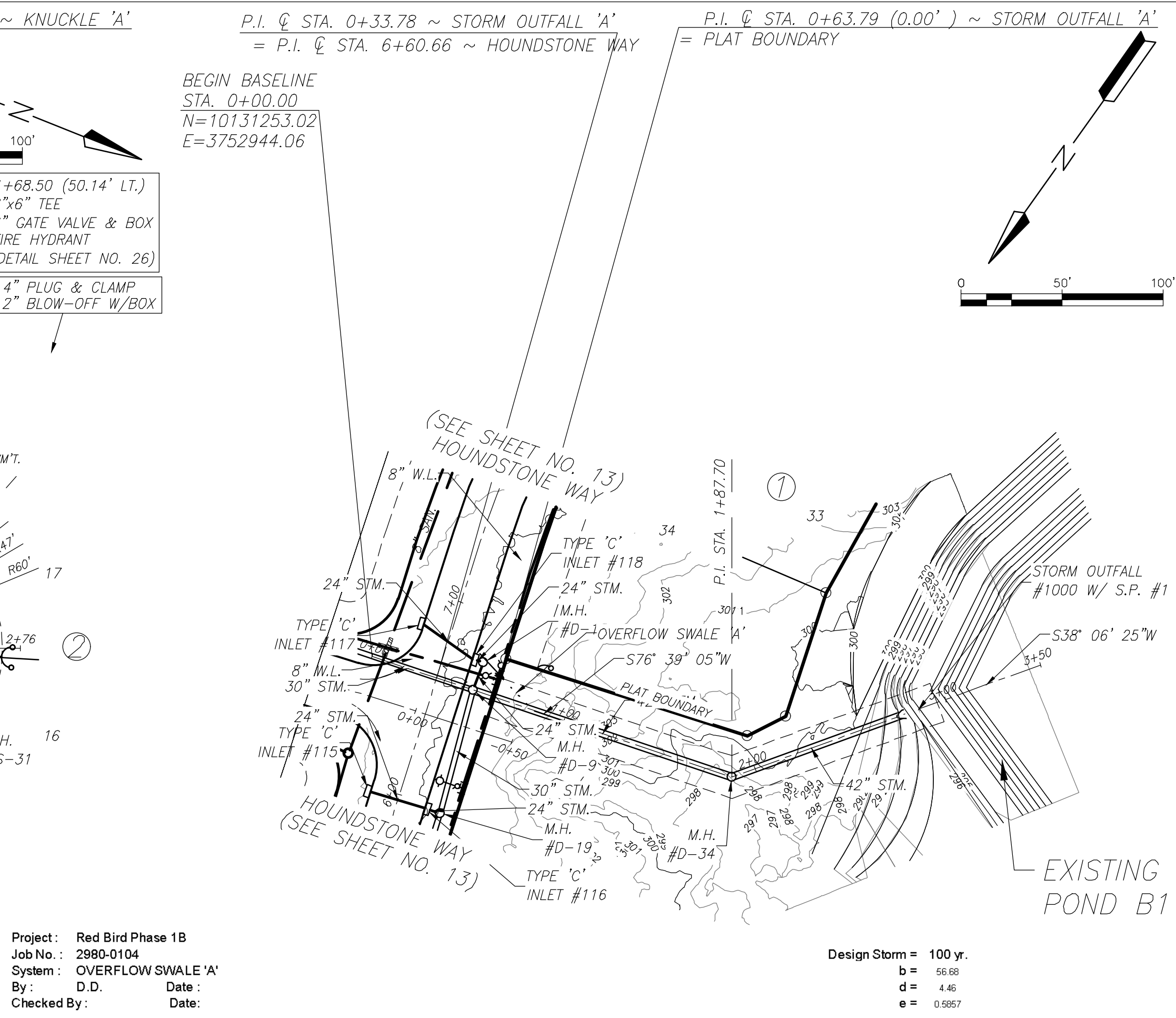


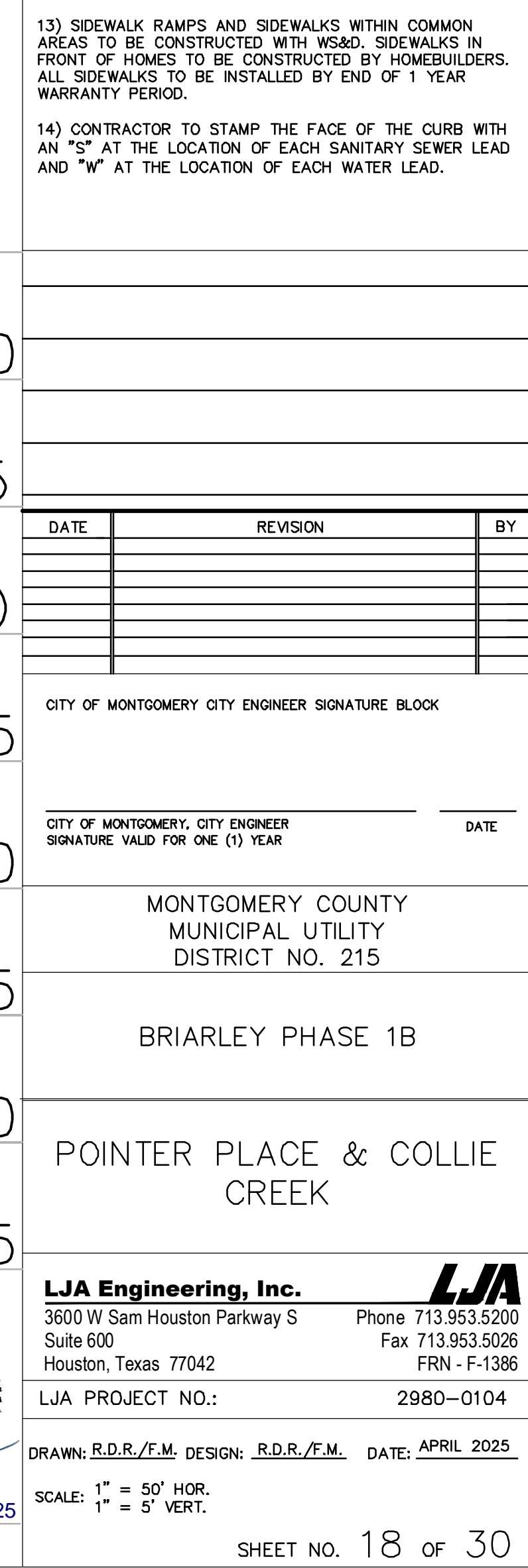
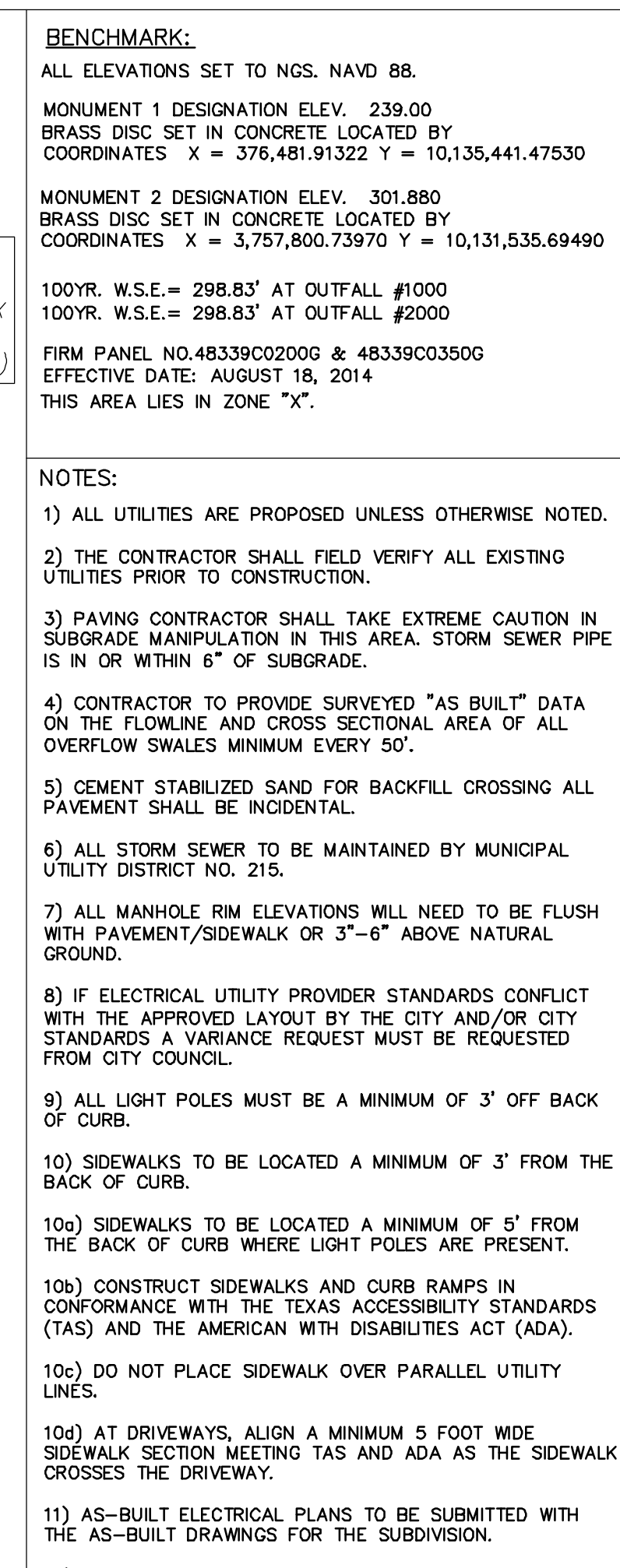
SETTER TRAIL (STA. 11+50 TO END)
(50' R.O.W.)



CURVE NO.	DELTA	RADIUS	CHORD BEARING	CHORD DISTANCE	ARC LENGTH
C-1	P.C. STA. 1+90.88 (23.00 RT.) TO P.T. STA. 1+90.00 (23.00 LT.) 180°00'00" 23.00' S 71° 43' 28.18" W 46.00' 72.26'				
C-2	P.C. STA. 0+95.00 (23.00 LT.) TO P.T. STA. 0+95.00 (23.00 RT.) 180°00'00" 23.00' N 71° 43' 27.14" E 46.00' 72.26'				

SPANIEL GROVE (50' R.O.W.)



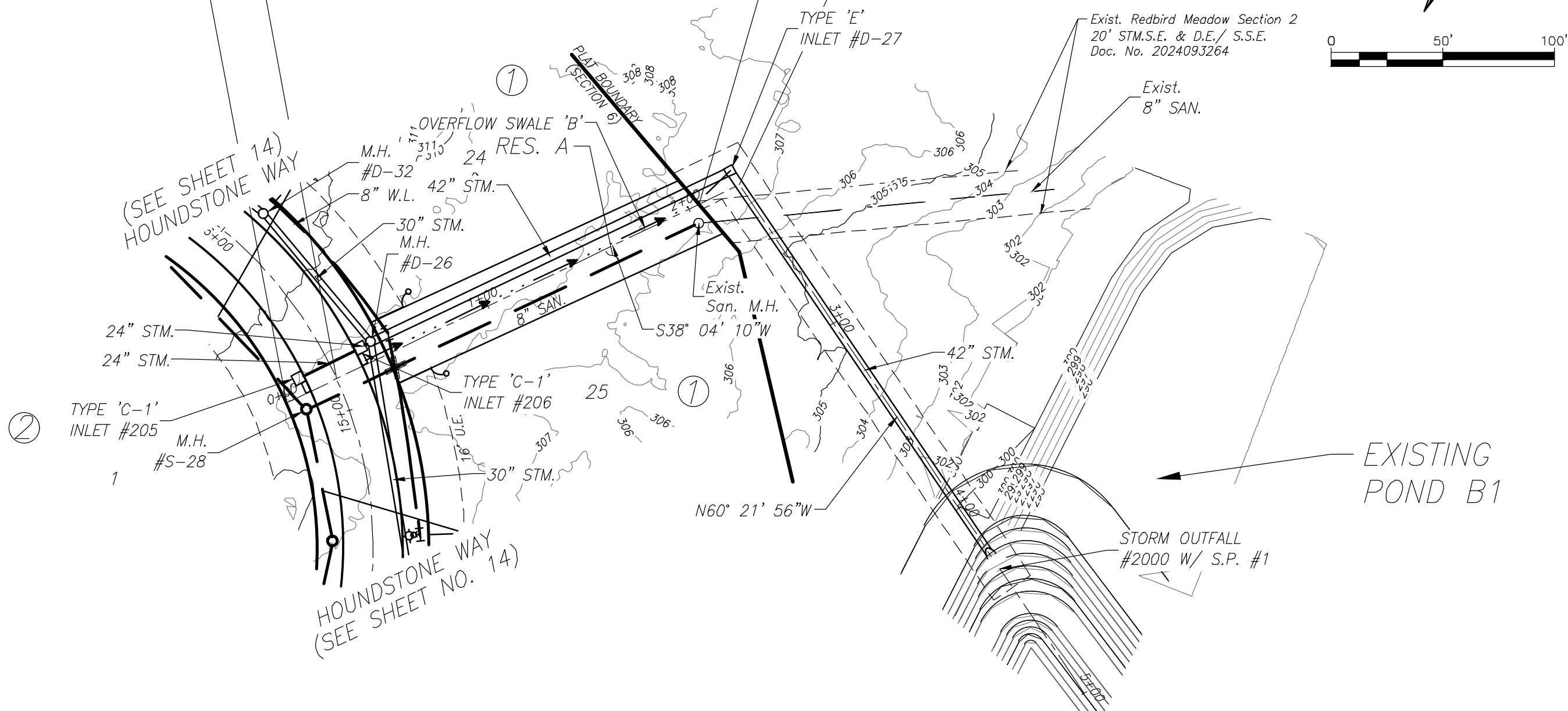


BEGIN BASELINE
STA. 0+00.00
N=10130449.04
E=3752909.50

P.I. @ STA. 0+25.01 ~ STORM OUTFALL 'B'
= P.I. @ STA. 15+15.23 ~ HOUNDSTONE WAY II

P.I. @ STA. 2+04.94 (0.00') ~ STORM OUTFALL 'B'
= PLAT BOUNDARY

P.I. @ STA. 2+25.03 ~ STORM OUTFALL 'B'
= P.I. @ STA. 2+25.03 ~ STORM OUTFALL 'B'



THE PROPOSED CONNECTION OF THE SANITARY SEWER LINE TO THE SANITARY SEWER MANHOLE SHALL BE BY MEANS OF CORE AND BOOT AT SPECIFIED FLOWLINE. THE OPENING IN THE SIDE OF THE MANHOLE SHALL NOT BE MORE THAN 3-INCHES NOR LESS THAN 1-INCH IN DIAMETER THAN THE OUTSIDE DIAMETER FOR THE PROPOSED PIPE. THE PROPOSED PIPE SHALL NOT PROTRUDE MORE THAN 3-INCHES PAST THE INSIDE FACE OF THE MANHOLE WALL. FILL THE ENTIRE VOID AROUND THE PROPOSED PIPE WITH NON-SHRINK WATERPROOF GROUT. SLOPE AT INVERT OF MANHOLE SHALL BE CONSTRUCTED UNDER POINT OF SANITARY SEWER CONNECTION. BACKFILL THE EXCAVATION AROUND THE EXISTING MANHOLE WITH CEMENT-SAND. CONNECTION TO EXISTING PUBLIC SANITARY SEWER MANHOLE SHALL BE COMPLETED BY THE CITY OF MONTGOMERY AT THE OWNER'S EXPENSE.

Project: Red Bird Phase 1B
Job No.: 2980-0104
System: OVERFLOW SWALE 'B'
By: D.D. Date:
Checked By: Date:

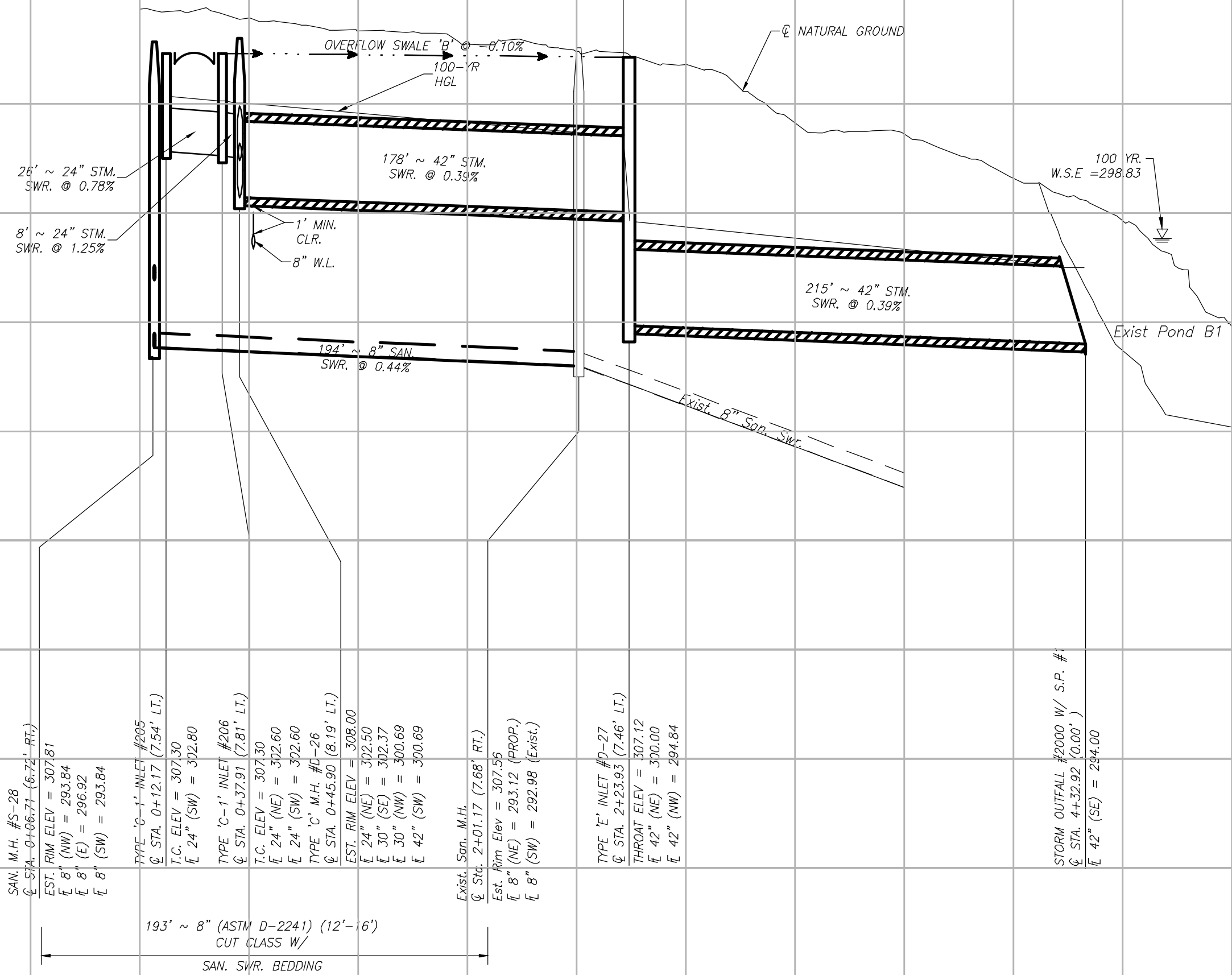
Design Storm = 100 yr.
b = 56.68
d = 4.46
e = 0.5857

Overflow Swale "OVERFLOW SWALE "B"
MoCo - 100 YEAR FREQUENCY

		Side	Slope	Drainage	Total	"C"	"CF"	Tc	I	Q 100 YR	Q 5 YR	Q DELTA	Ditch Section				Design	Velocity	Ditch Lining	
x	y		%	Area	Area			(minutes)	Inches/Hr	(CFS)	(CFS)	(CFS)	FS	BW	BS	"n"	"d"	(c.f.s.)	(fps)	
0+39.71	2+21.18	Overflow	0.10	19.67	19.67	0.55	1.25	31.90	6.91	23.36	10.87	12.49	4	2	4	0.04	1.50	12.54	1.04	grass

CONTRACTOR SHALL CORE INTO EXIST. SAN. M.H. #78 AND CONNECT PROPOSED 8" SAN. SWR.

STORM OUTFALL 'B' (50' R.O.W.)



BENCHMARK:
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MONUMENT 1 DESIGNATION ELEV. 239.00
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DATE	REVISION	BY

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SIGNATURE VALID FOR ONE (1) YEAR

DATE

MONTGOMERY COUNTY
MUNICIPAL UTILITY
DISTRICT NO. 215

BRIARLEY PHASE 1B

STORM OUTFALL 'B'

LJA Engineering, Inc.
3600 W Sam Houston Parkway S
Suite 600
Houston, Texas 77042
Phone 713.953.5200
Fax 713.953.5026
FRN - F-1386

LJA PROJECT NO.: 2980-0104

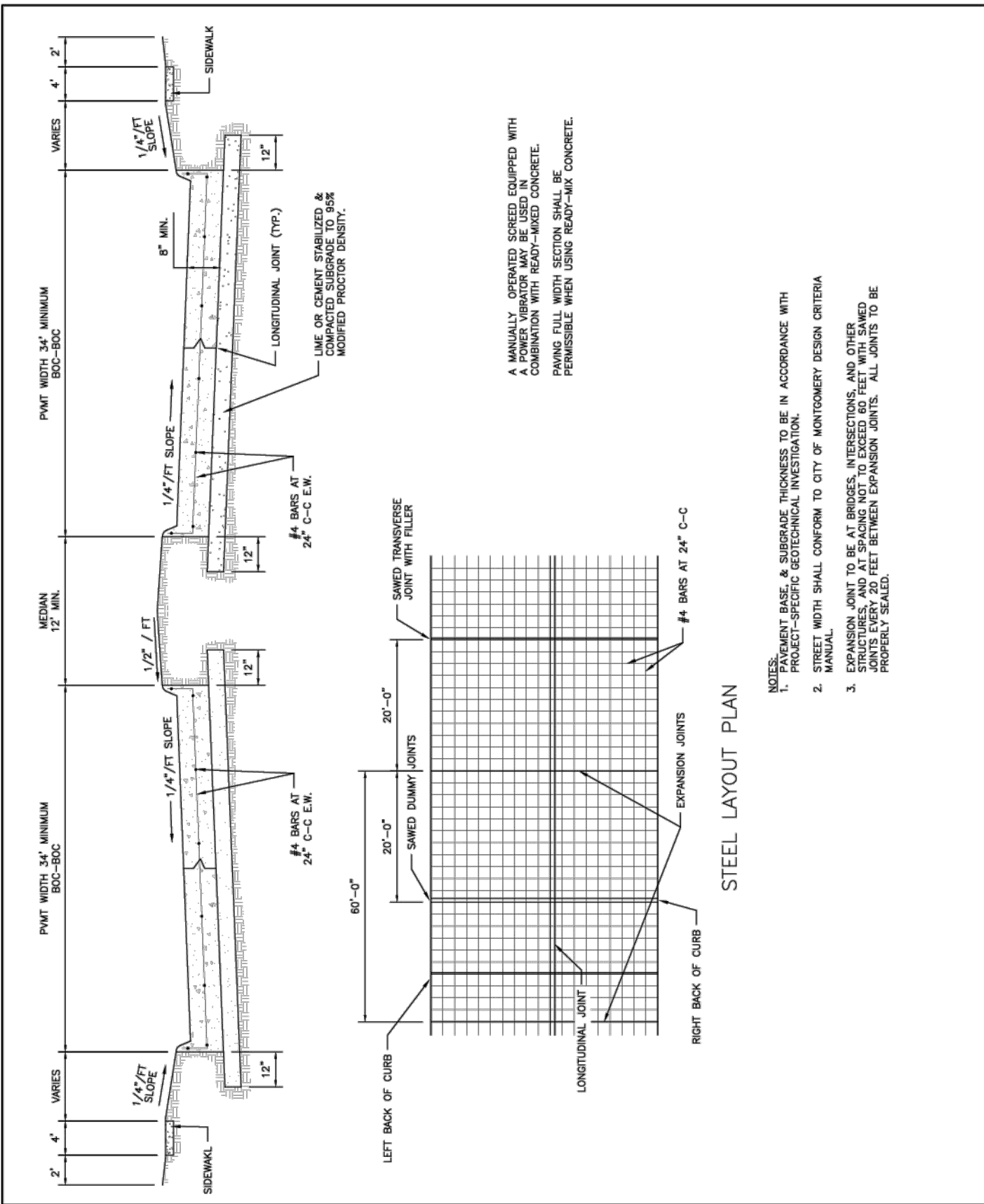
DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025

SCALE: 1" = 50' HOR.
1" = 5' VERT.

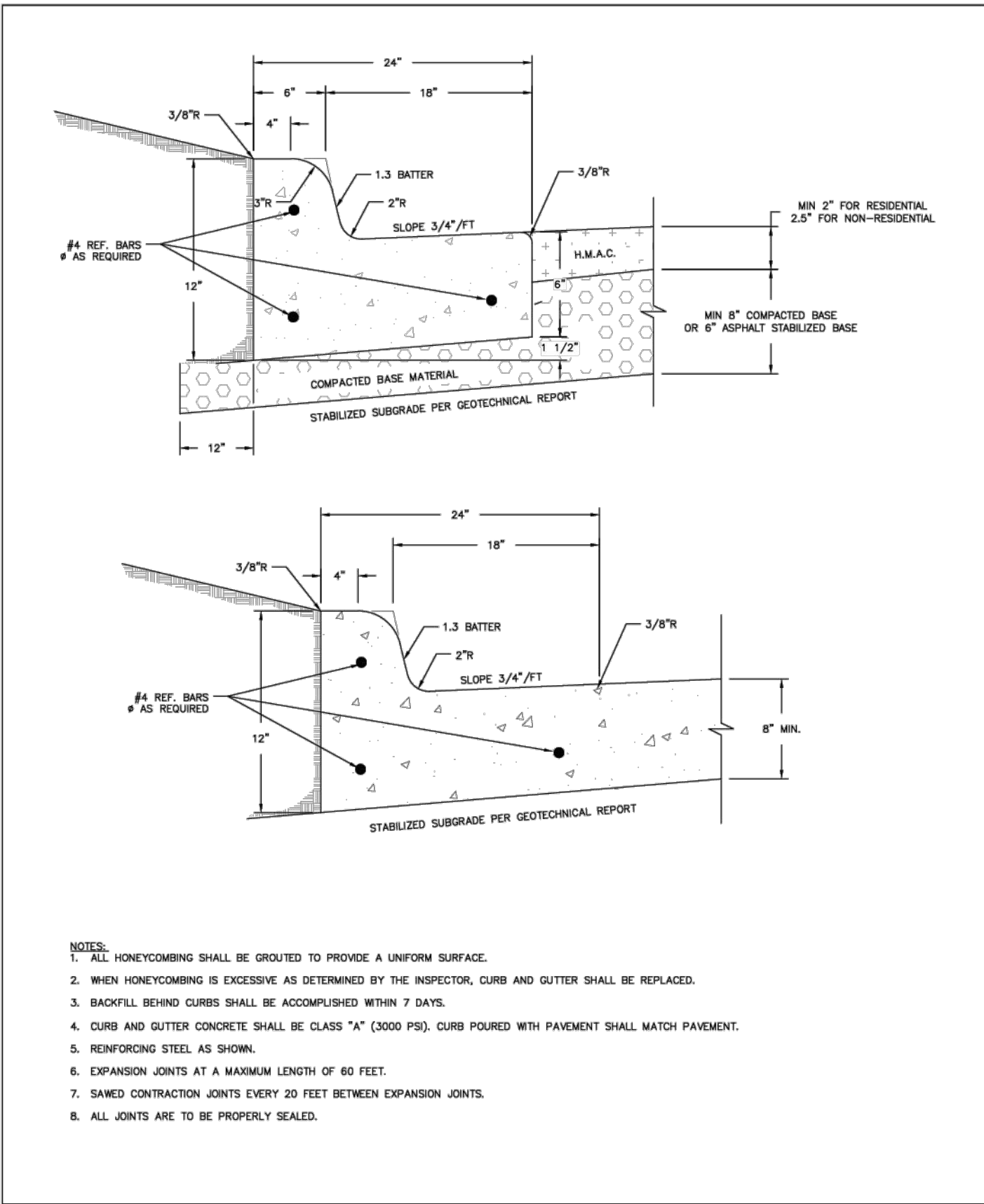


04/24/2025

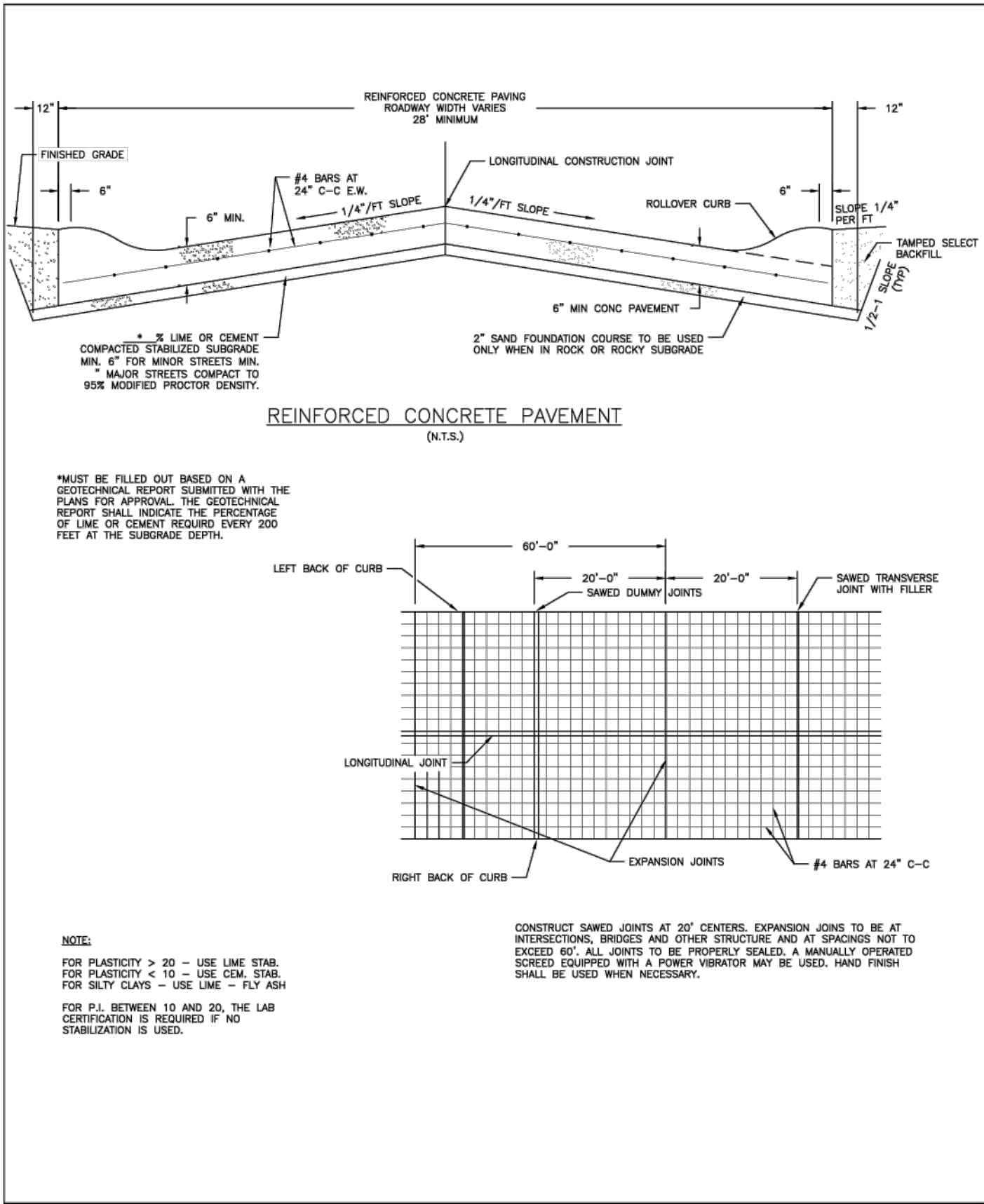
SHEET NO. 19 of 30



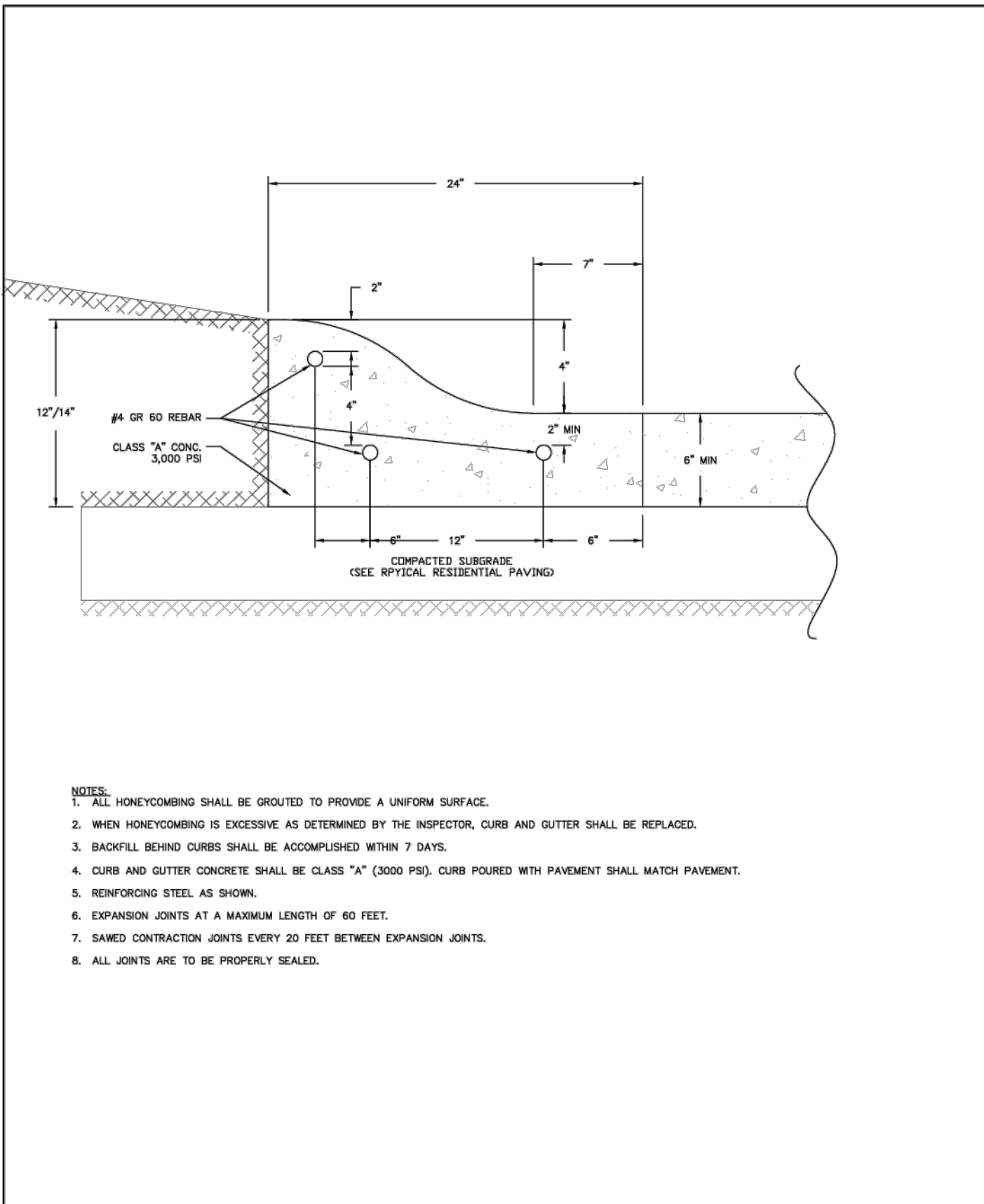
REVISIONS 10-2013 REVISED NOTES	CITY OF MONTGOMERY DIVIDED ROADWAY CROSS SECTION	PAVING P-1
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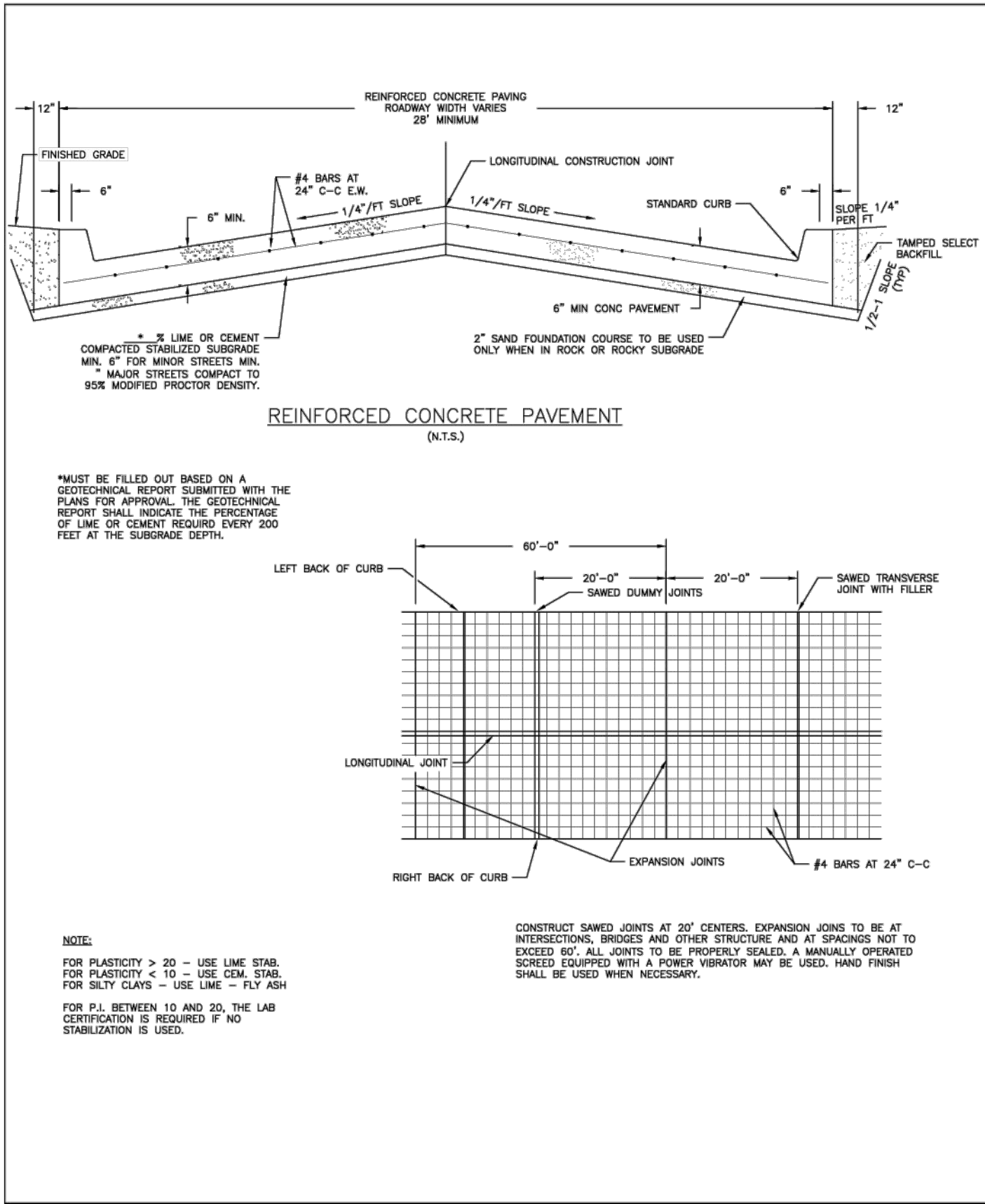
REVISIONS 10-2013 REVISED NOTES	CITY OF MONTGOMERY STANDARD CURB & GUTTER	PAVING P-4
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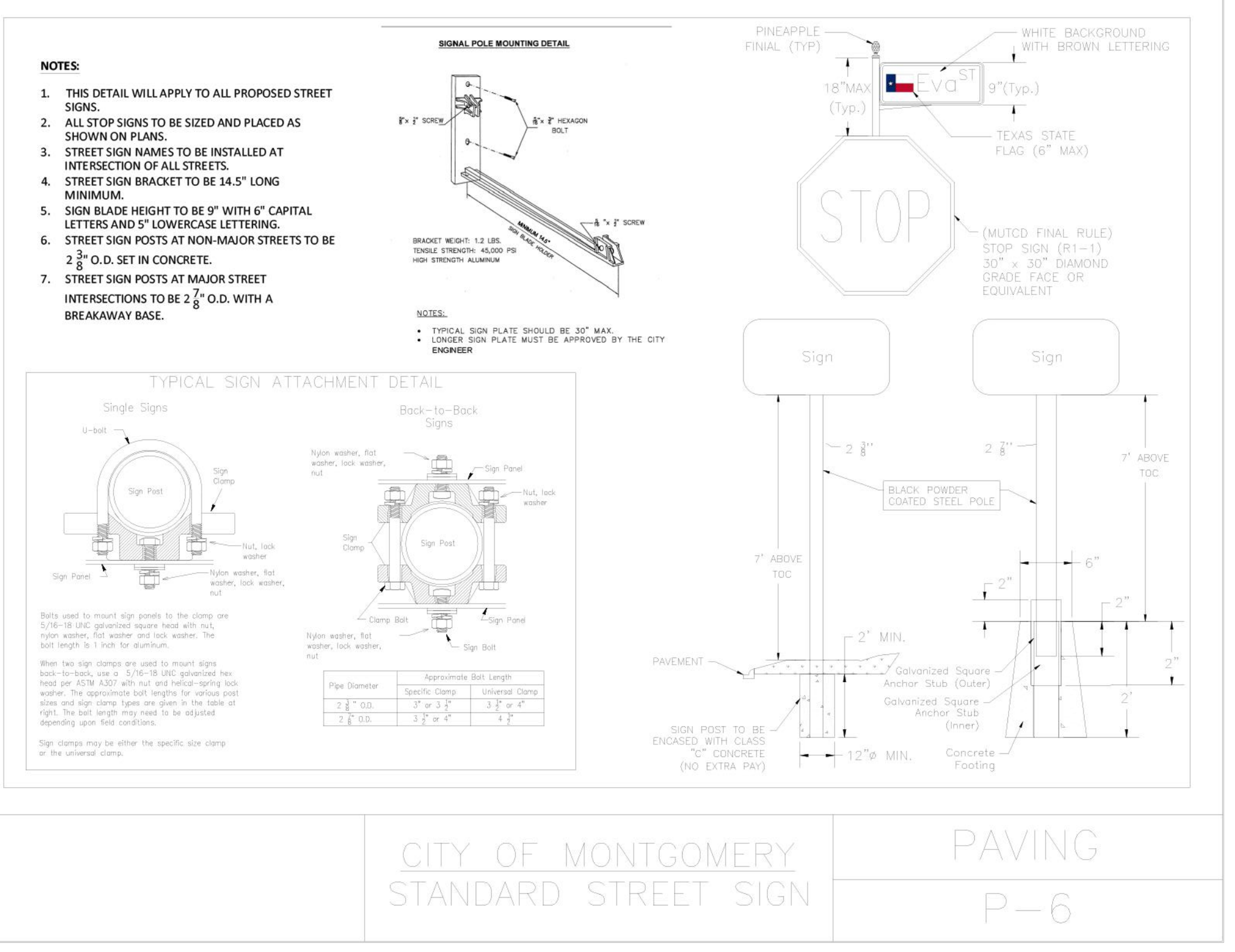
REVISIONS 10-2013 REVISED NOTES	CITY OF MONTGOMERY TYPICAL RESIDENTIAL CONCRETE PAVING WITH ROLLOVER CURB	PAVING P-2
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REVISIONS 10-2013 REVISED NOTES	CITY OF MONTGOMERY ROLLOVER CURB & GUTTER	PAVING P-5
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REVISIONS 10-2013 REVISED NOTES	CITY OF MONTGOMERY TYPICAL NON-RESIDENTIAL CONCRETE PAVING WITH STANDARD CURB	PAVING P-3
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CITY OF MONTGOMERY STANDARD STREET SIGN	PAVING P-6
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BENCHMARK:
ALL ELEVATIONS SET TO NGS. NAVD 88.
MONUMENT 1 DESIGNATION ELEV. 239.00
BRASS DISC SET IN CONCRETE LOCATED BY
COORDINATES X = 376,481.91322 Y = 10,135,441.47530
MONUMENT 2 DESIGNATION ELEV. 301.880
BRASS DISC SET IN CONCRETE LOCATED BY
COORDINATES X = 3,757,800.73970 Y = 10,131,535.69490
100YR. W.S.E. = 298.83' AT OUTFALL #1000
100YR. W.S.E. = 298.83' AT OUTFALL #2000
FIRM PANEL NO.48339C0200G & 48339C0350G
EFFECTIVE DATE: AUGUST 18, 2014
THIS AREA LIES IN ZONE "X".

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DATE	REVISION	BY

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY, CITY ENGINEER
SIGNATURE VALID FOR ONE (1) YEAR

DATE

MONTGOMERY COUNTY
MUNICIPAL UTILITY
DISTRICT NO. 215

BRIARLEY PHASE 1B

PAVING DETAILS

LJA Engineering, Inc.
3600 W Sam Houston Parkway S Phone 713.953.5200
Suite 600 Fax 713.953.5026
Houston, Texas 77042 FRN - F-1386
LJA PROJECT NO.: 2980-0104

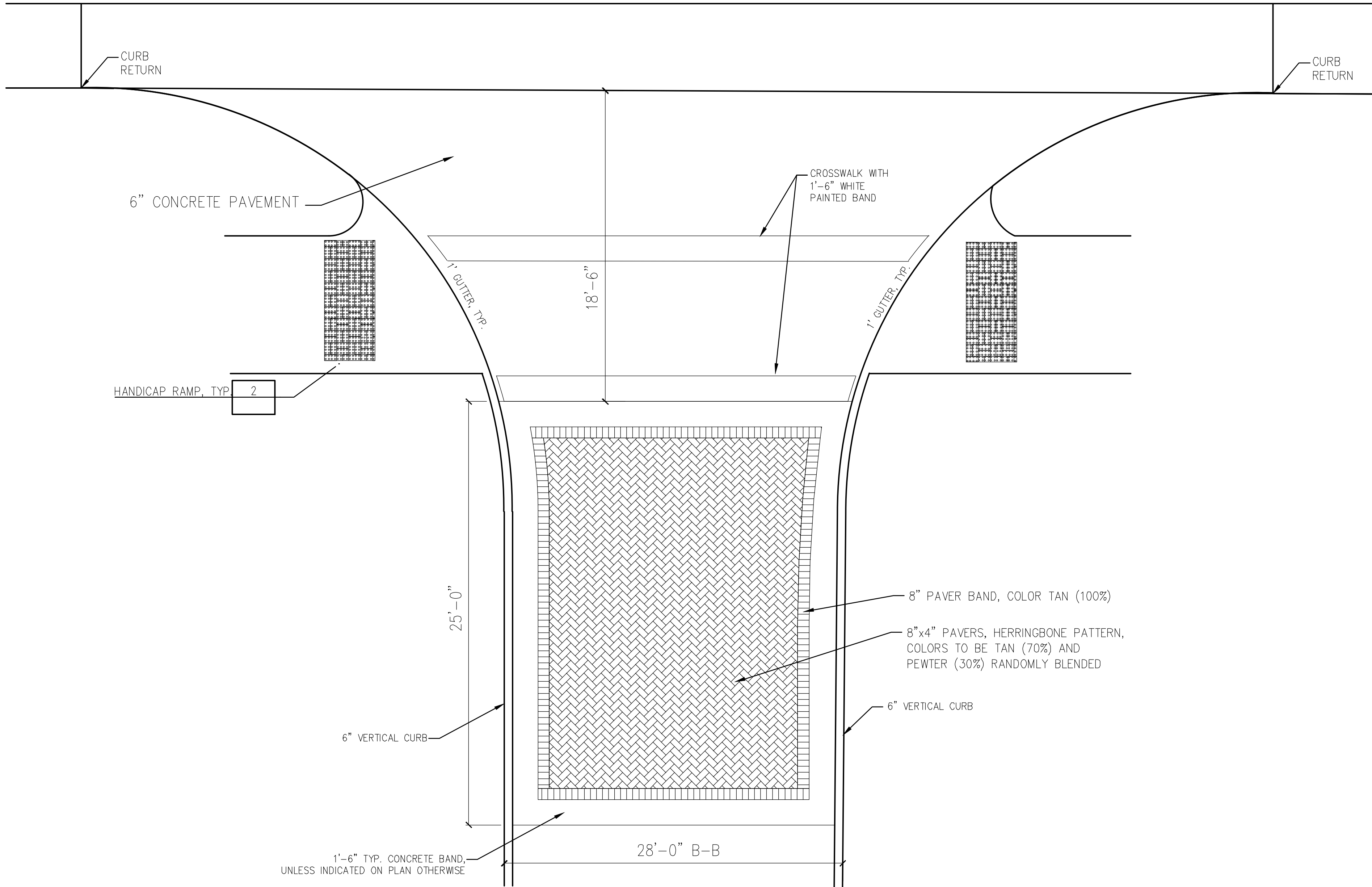
DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025

SCALE: N.T.S.

SHEET NO. 20 of 30



Date/Time : Wed, 23 Apr, 2025 - 4:14pm
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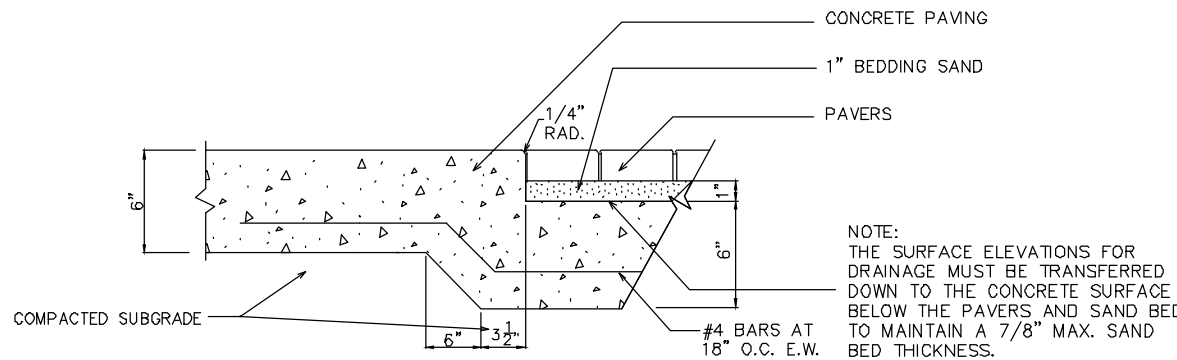


1 ENTRANCE DETAIL
PLAN N.T.S.

NOTE 1:
ALL PAVERS TO BE SET FLUSH WITH ADJACENT PAVER OR ADJACENT PAVEMENT.

NOTE 2:
ALL PAVERS ARE TO BE INSTALLED PER MANUFACTURERS DIRECTIONS.

NOTE 3:
PAVERS SHALL BE PAVESTONE HOLLAND STONE PARKWAY SERIES, 4"x8"x80mm



2 TYPICAL PAVERS
Section SCALE: N.T.S.

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DATE	REVISION	BY

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CITY OF MONTGOMERY, CITY ENGINEER SIGNATURE VALID FOR ONE (1) YEAR DATE

MONTGOMERY COUNTY
MUNICIPAL UTILITY
DISTRICT NO. 215

BRIARLEY PHASE 1B

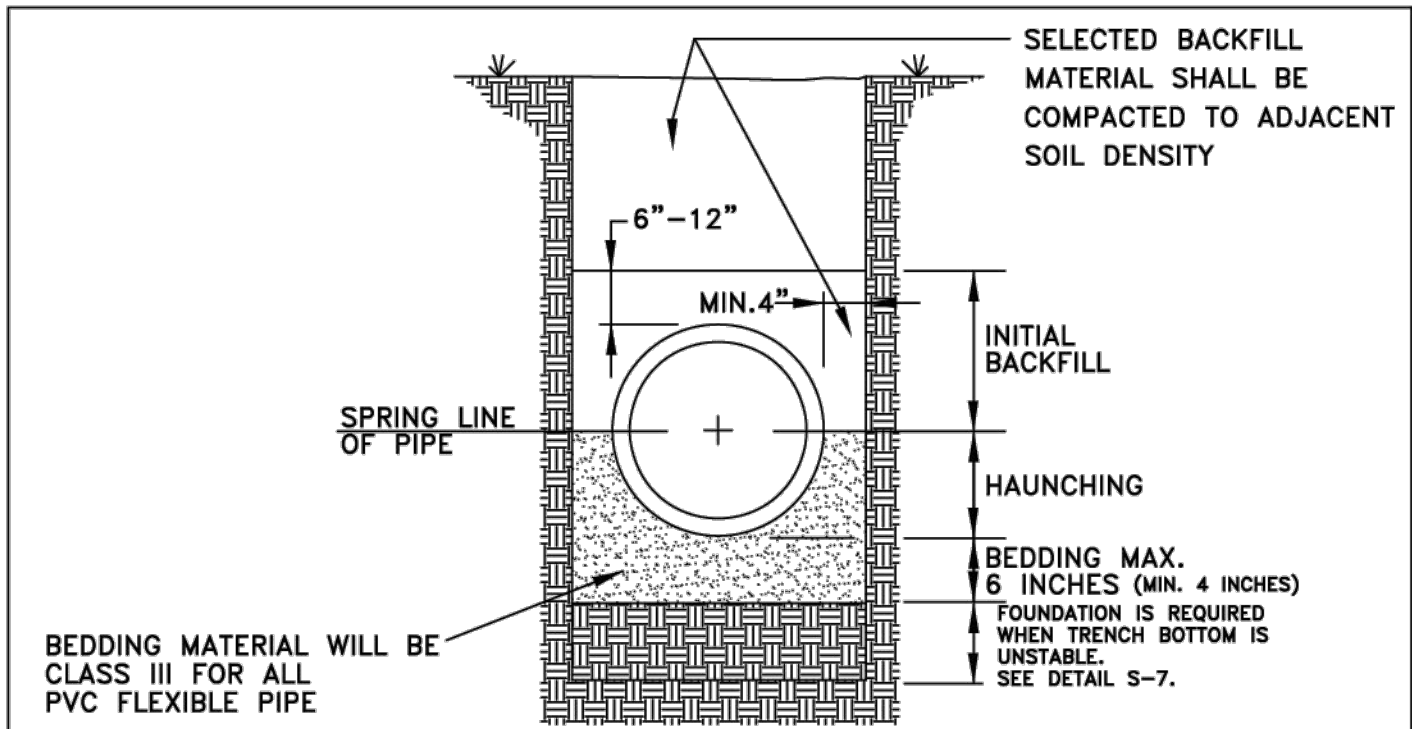
PAVING DETAILS II

LJA Engineering, Inc.
3600 W Sam Houston Parkway S Phone 713.953.5200
Suite 600 Fax 713.953.5026
Houston, Texas 77042 FRN - F-1386
LJA PROJECT NO.: 2980-0104

DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025

SCALE: N.T.S.





BEDDING DETAIL

NOTE: BACKFILL AND BEDDING MUST MEET ALL MINIMUM ASPECTS OF ASTM D-2321

Foundation
A foundation is required when the trench bottom is unstable. Any foundation that will support a rigid pipe without causing loss of grade or flexural breaking will be more than adequate for PVC pipes.

Bedding
The bedding directly underneath the pipe is required only to bring the trench bottom up to grade. It should not be so thick or soft that the pipe will settle and lose grade. The purpose of the bedding is to provide a firm, stable and uniform support of the pipe. A layer of material sufficient to establish line, grade, and support should be placed. Bell holes should be excavated to insure uniform bearing.

Haunching
The haunching area is the most important in terms of limiting the deflection of a flexible pipe. This is the area that should be compacted to the required or specified density.

ASTM D-2321
DESCRIPTION OF EMBEDMENT MATERIALS

Class I
Angular, 1/4" to 1-1/2" graded stone, including a number of fill materials that have regional significance, such as coral, slag, cinders, crushed stone and crushed shells.

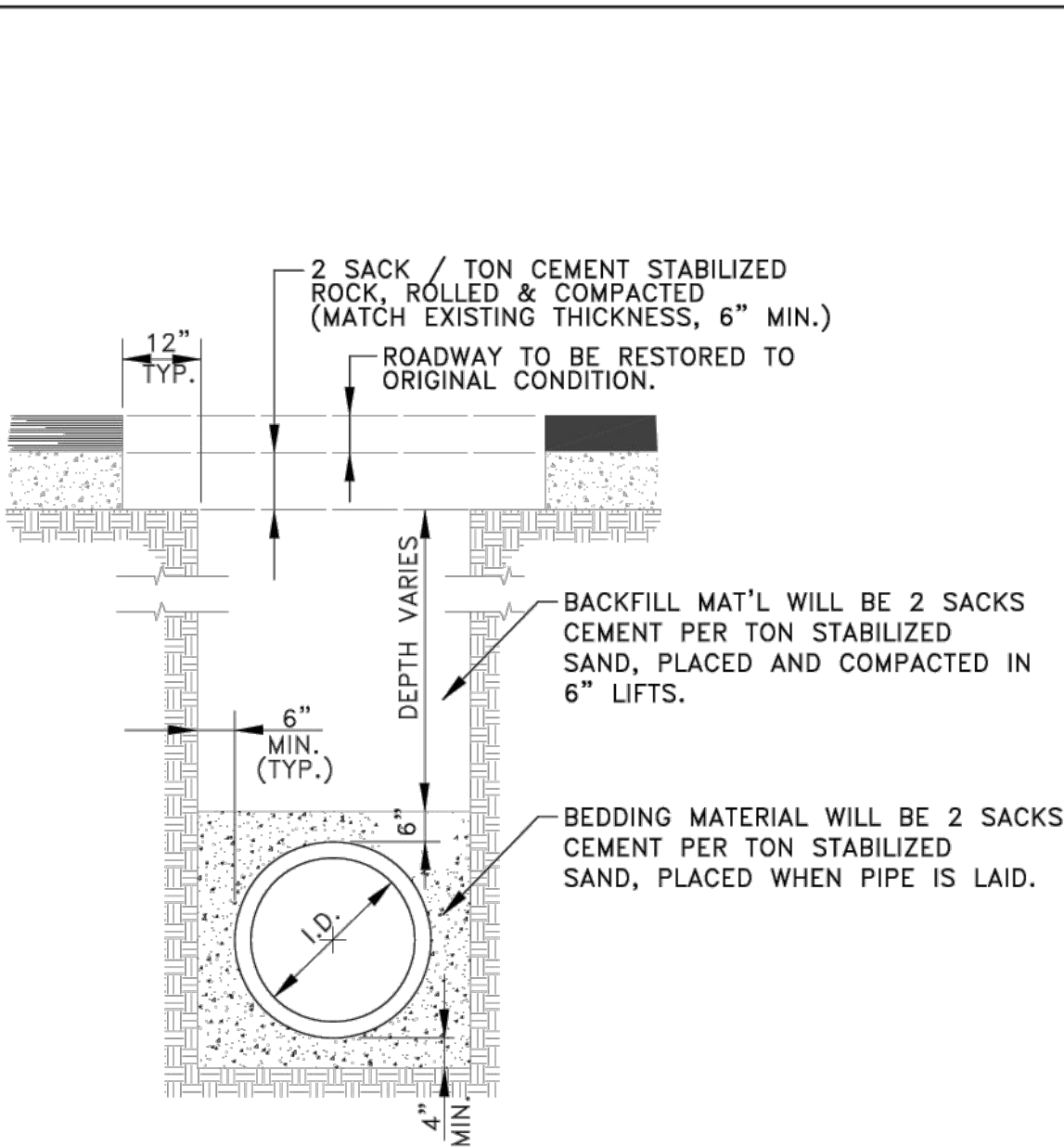
Class II
Coarse sands and gravels with maximum particle size of 1-1/2", including variously graded sands, and gravels containing small percentages of fines, generally granular and noncohesive, either wet or dry. Soil types GW, GP, SW, and SP are included in this class.

Class III
Fine sand and clayey gravels, including fine sands and sand-clay mixtures, and gravel clay mixtures. Soil types GM, GC, SM and SC are included in this class.

Class IV
Silt, silty clays, and clays, including inorganic clays and silts of medium to high plasticity and liquid limits. Soil types MH, ML, CH, and CL are included in this class.

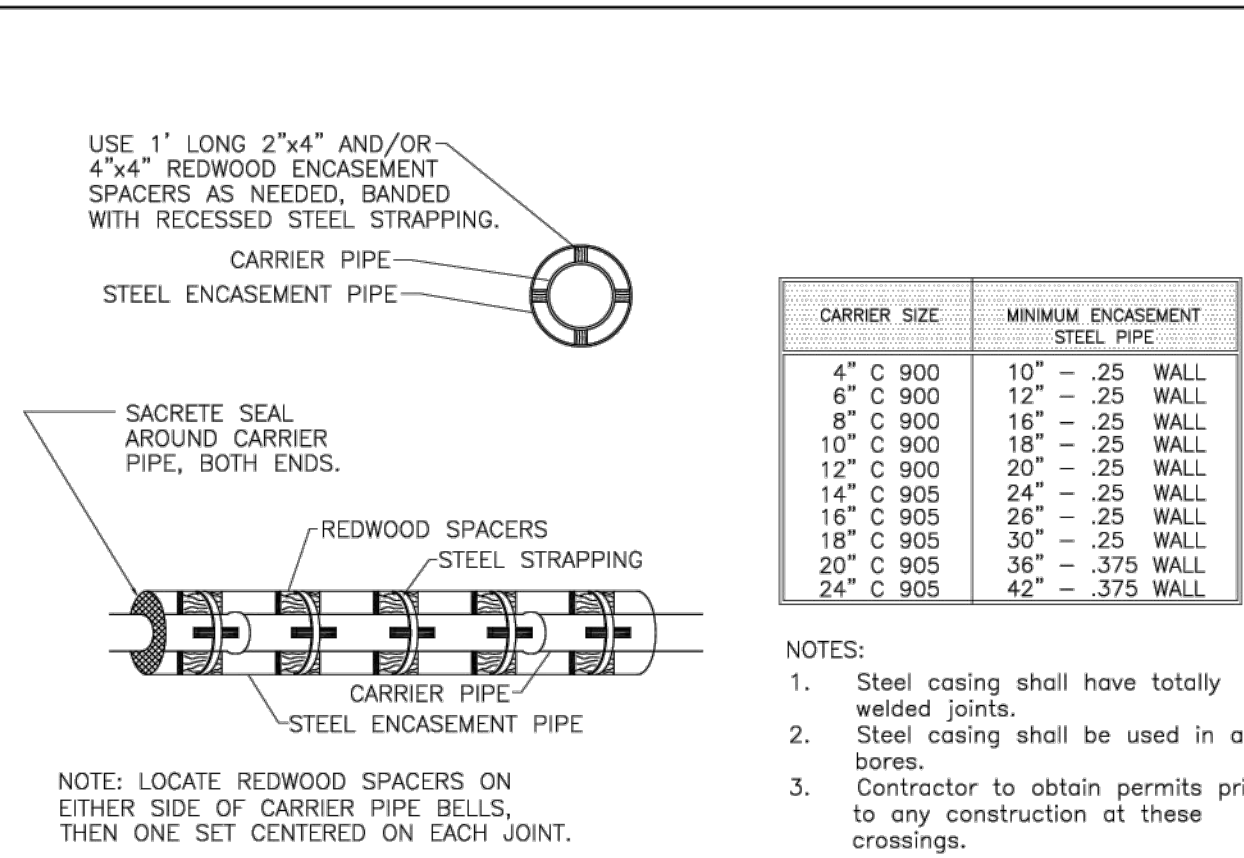
Class V
This class includes the organic soils OL, OH, and PT as well as soils containing frozen earth, debris, rocks larger than 1-1/2" in diameter, and other foreign materials. These materials are not recommended for bedding, haunching, or initial backfill.

REVISIONS	CITY OF MONTGOMERY TYPICAL SANITARY SEWER BEDDING AND TRENCH DETAIL	SEWER
		S-1

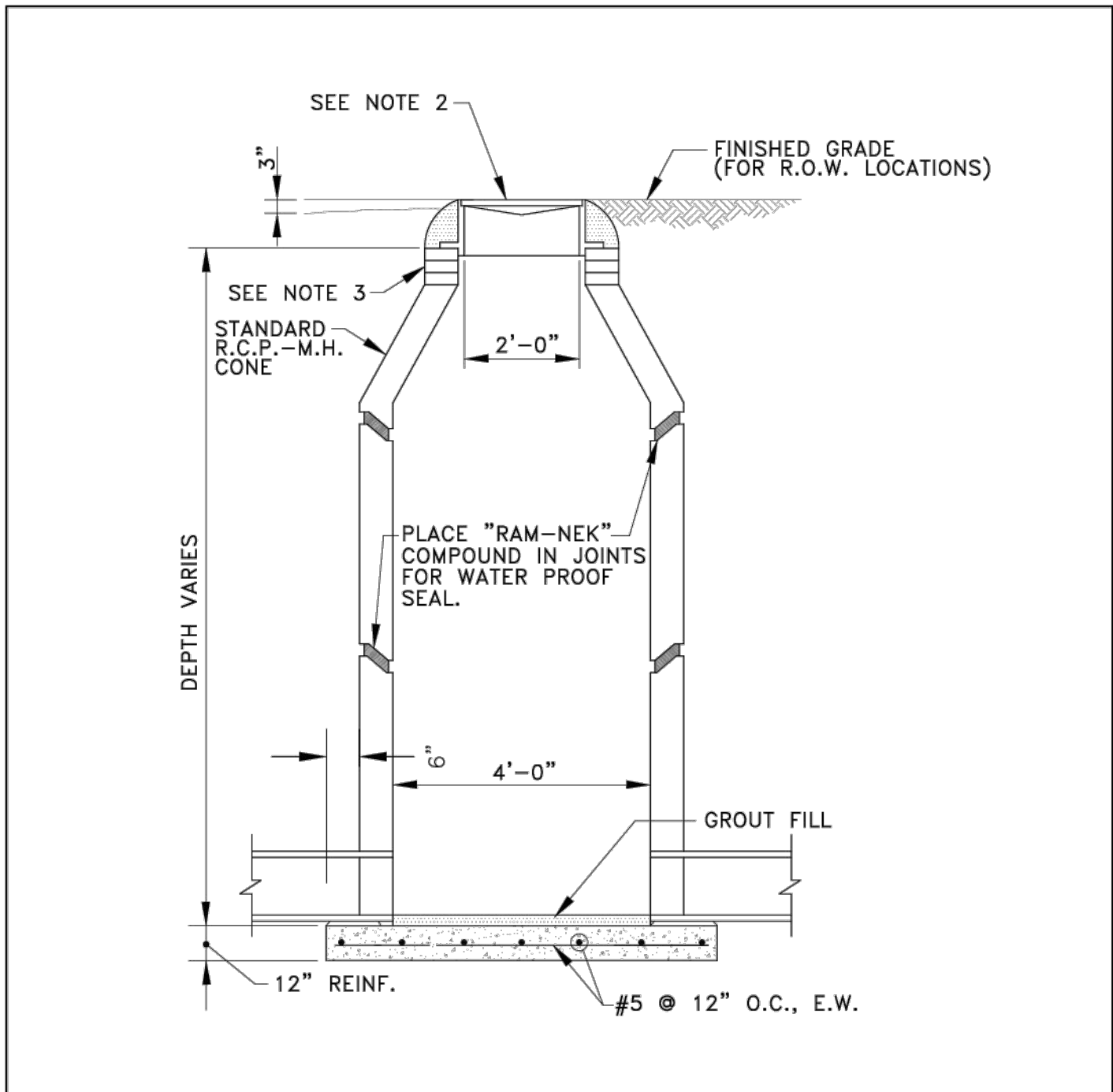


NOTE: BACKFILL AND BEDDING MUST MEET ALL MINIMUM ASPECTS OF ASTM D-2321

REVISIONS	CITY OF MONTGOMERY TYPICAL ROADWAY TRENCH BEDDING AND BACKFILL DETAIL	SEWER
		S-2

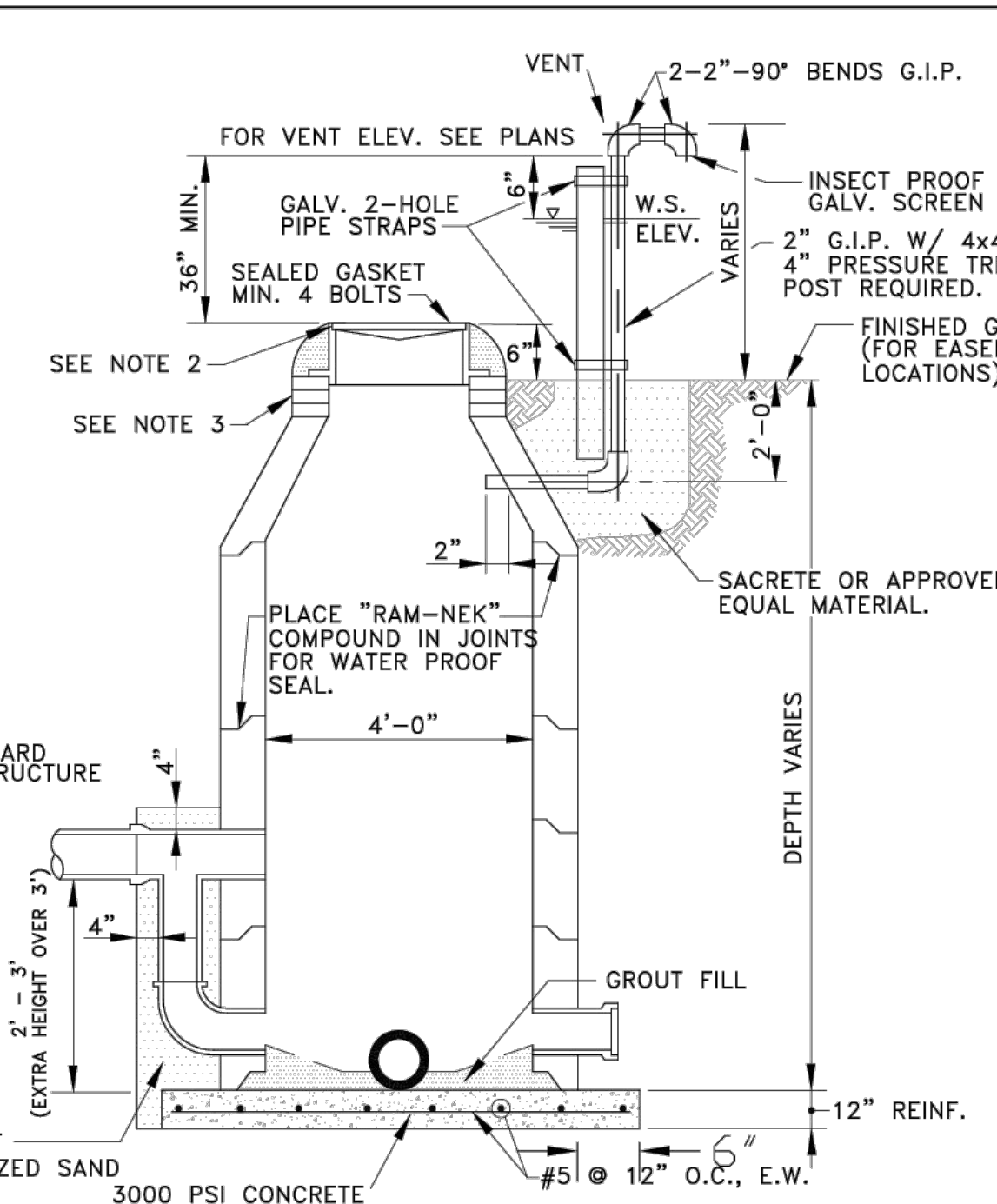


REVISIONS	CITY OF MONTGOMERY STANDARD BORED CROSSING WITH STEEL CASING FOR SEWER LINES (OR WATERLINES)	SEWER
		S-3



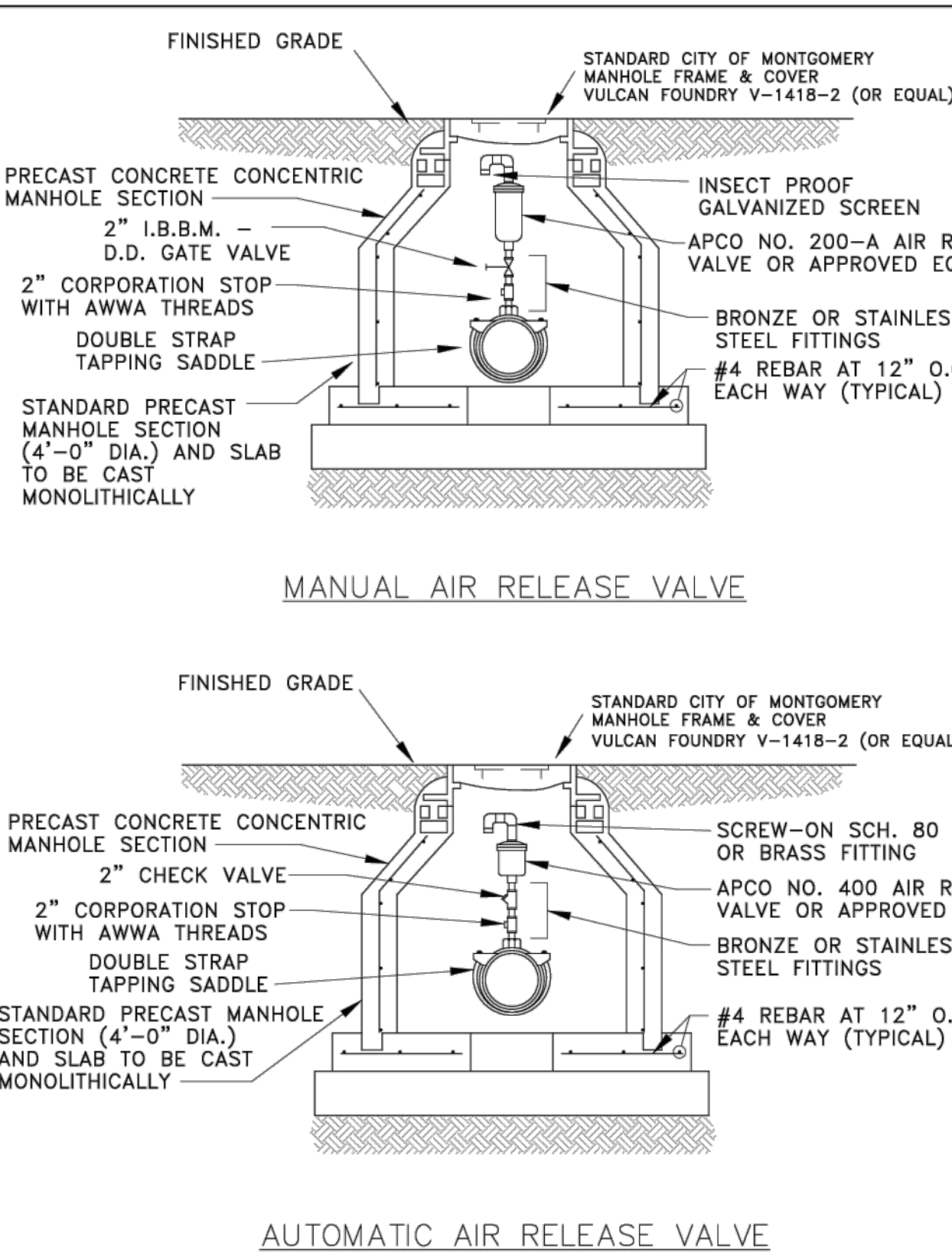
NOTE:
1.All R.C.P. Manholes shall be in accordance A.S.T.M. C-478.
2.Vulcan Foundry V-1418-2 Frame and Cover (or equal) with the City of Montgomery logo embedded in lid.
3.For adjustment of Manhole Lid use standard concrete rings. No brick adjustment allowed.
4.Precast bottom section of manhole to be securely attached to reinforced concrete slab with waterproof sealer.

REVISIONS	CITY OF MONTGOMERY STANDARD PRECAST MANHOLE	SEWER
		S-4



NOTE:
1.All R.C.P. Manholes shall be in accordance with A.S.T.M. C-478.
2.Vulcan Foundry V-2418-2 watertight manhole ring & cover (or equal) with the City of Montgomery logo embedded in lid.
3.For adjustment of Manhole Lid use standard concrete rings. No brick adjustment allowed.
4.Precast bottom section of manhole to be securely attached to reinforced concrete slab with waterproof sealer.

REVISIONS	CITY OF MONTGOMERY STANDARD PRECAST MANHOLE W/ DROP CONNECTION & VENT	SEWER
		S-5



REVISIONS	CITY OF MONTGOMERY AIR RELEASE VALVES	SEWER
		S-6

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CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY, CITY ENGINEER SIGNATURE VALID FOR ONE (1) YEAR	DATE
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MONTGOMERY COUNTY
MUNICIPAL UTILITY
DISTRICT NO. 215

BRIARLEY PHASE 1B

SANITARY DETAILS I

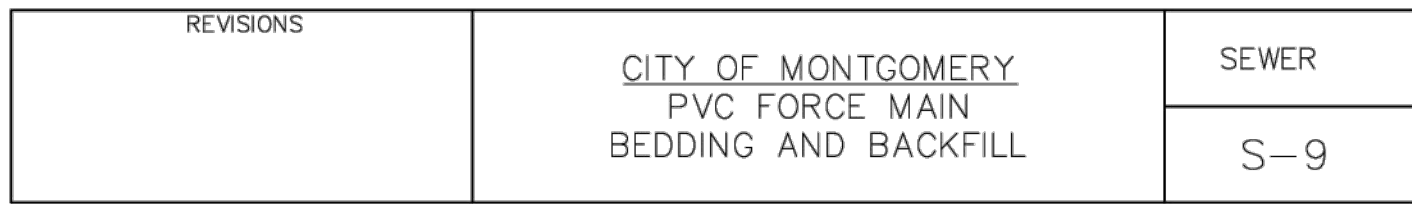
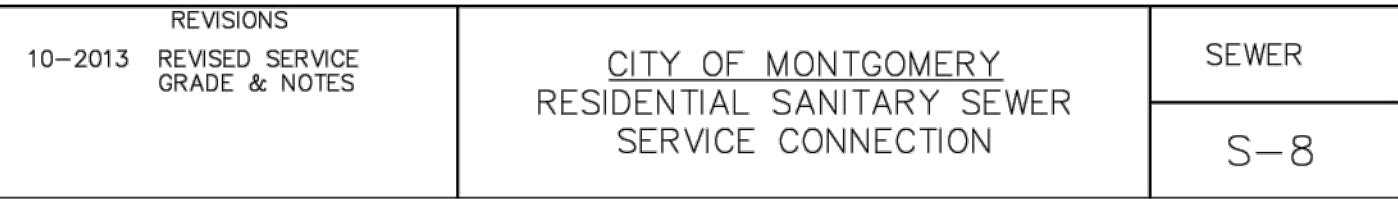
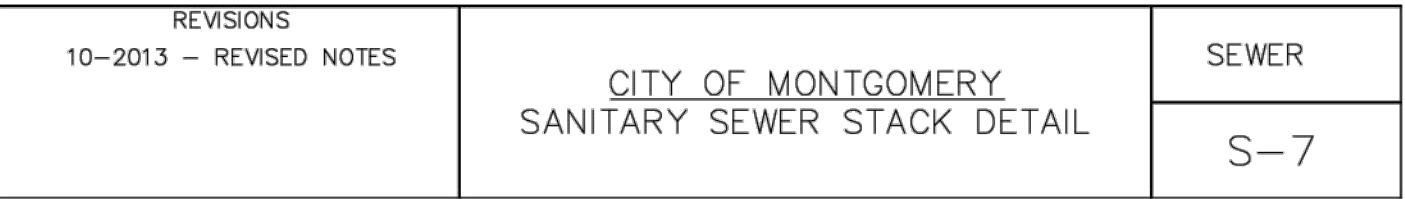
LJA Engineering, Inc.

3600 W Sam Houston Parkway S Suite 600 Houston, Texas 77042
Phone 713.953.5200 Fax 713.953.5026 FRN - F-1386
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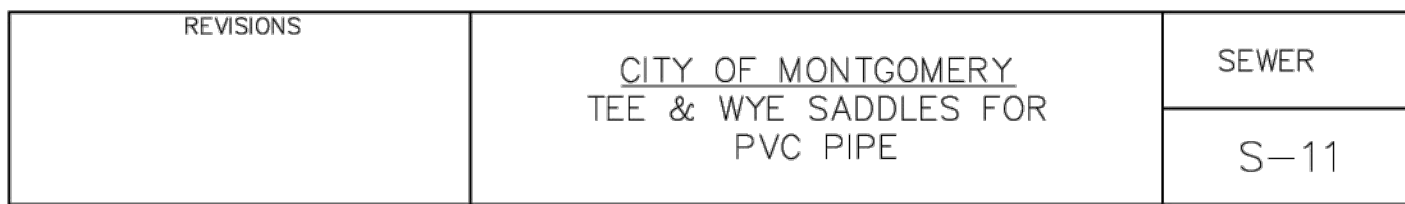
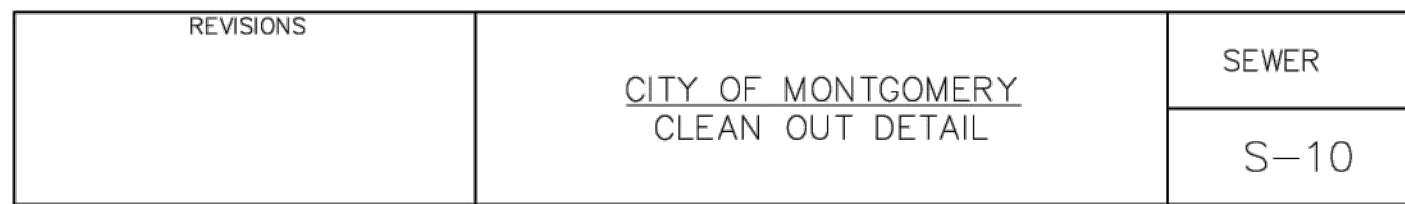
DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025

SCALE: N.T.S.

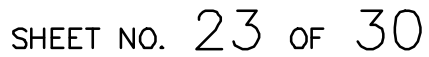


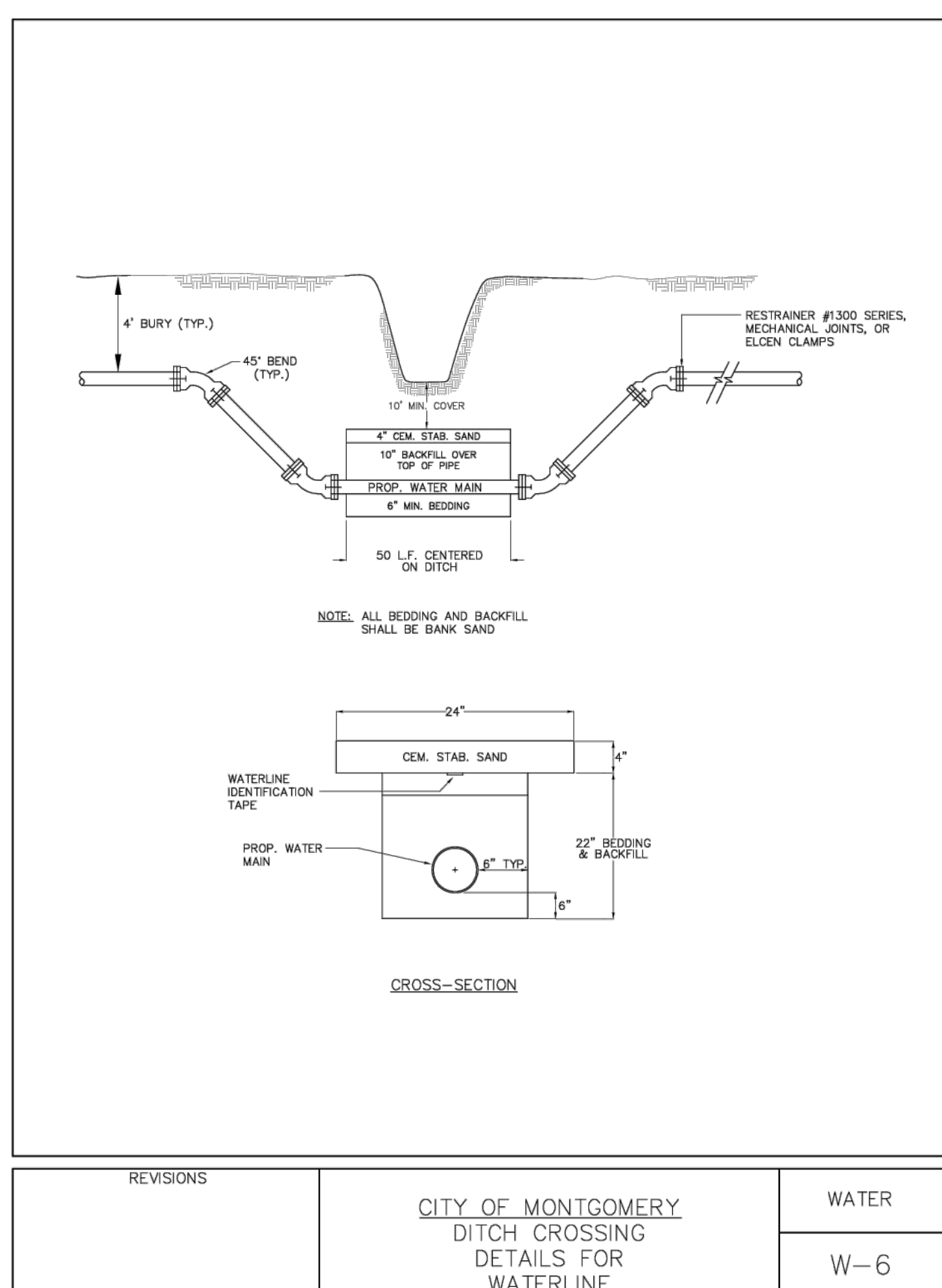
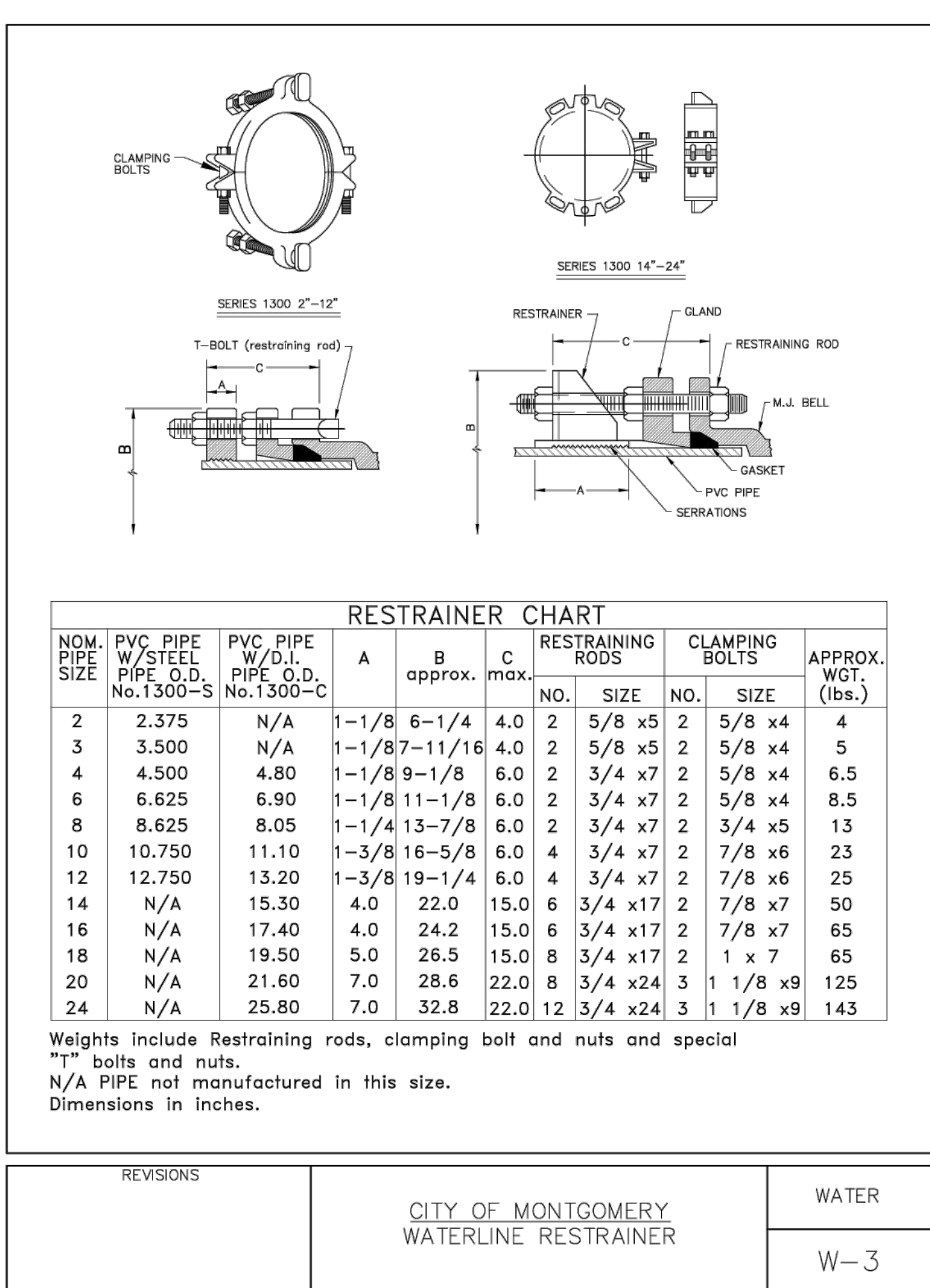
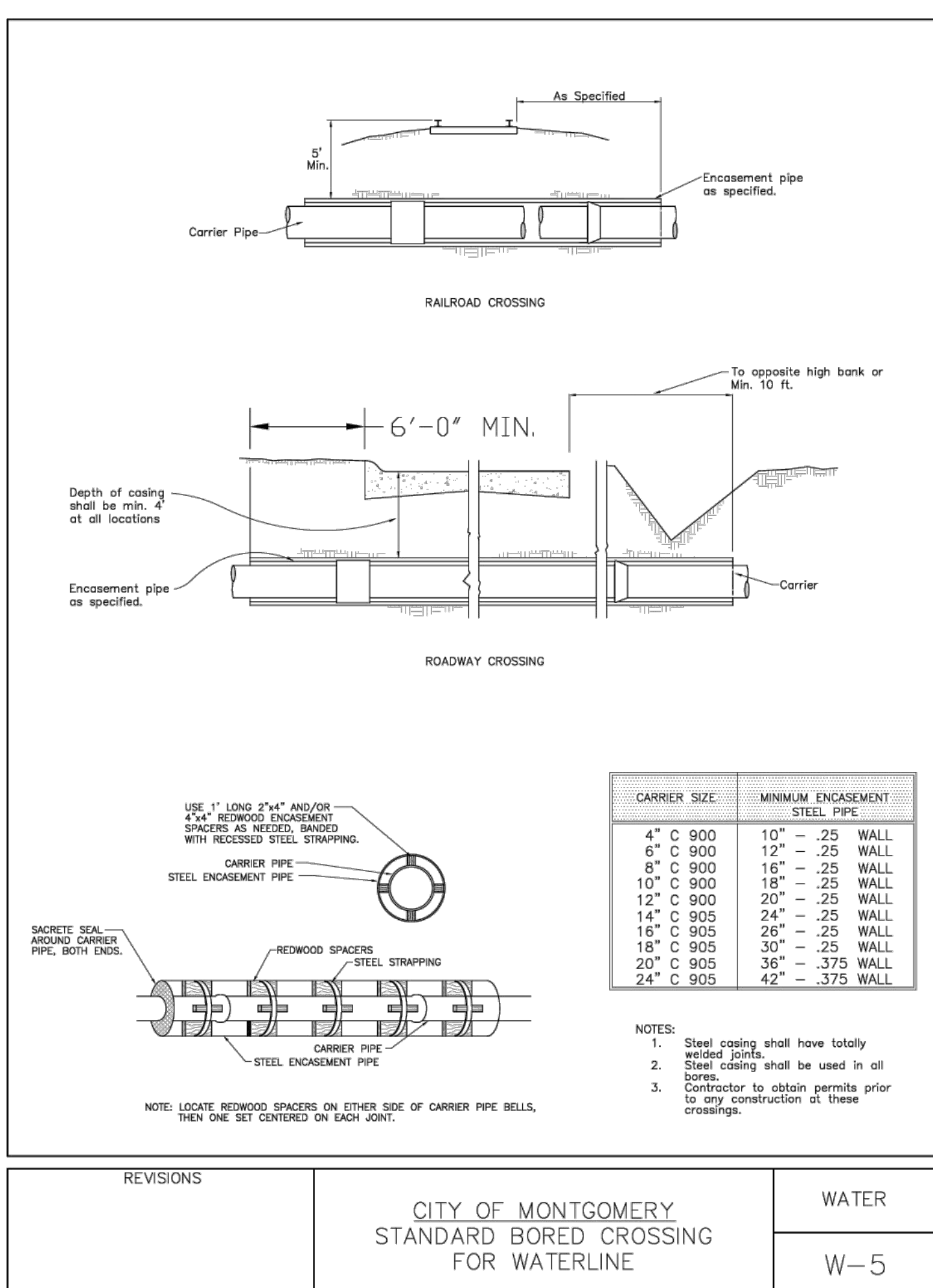
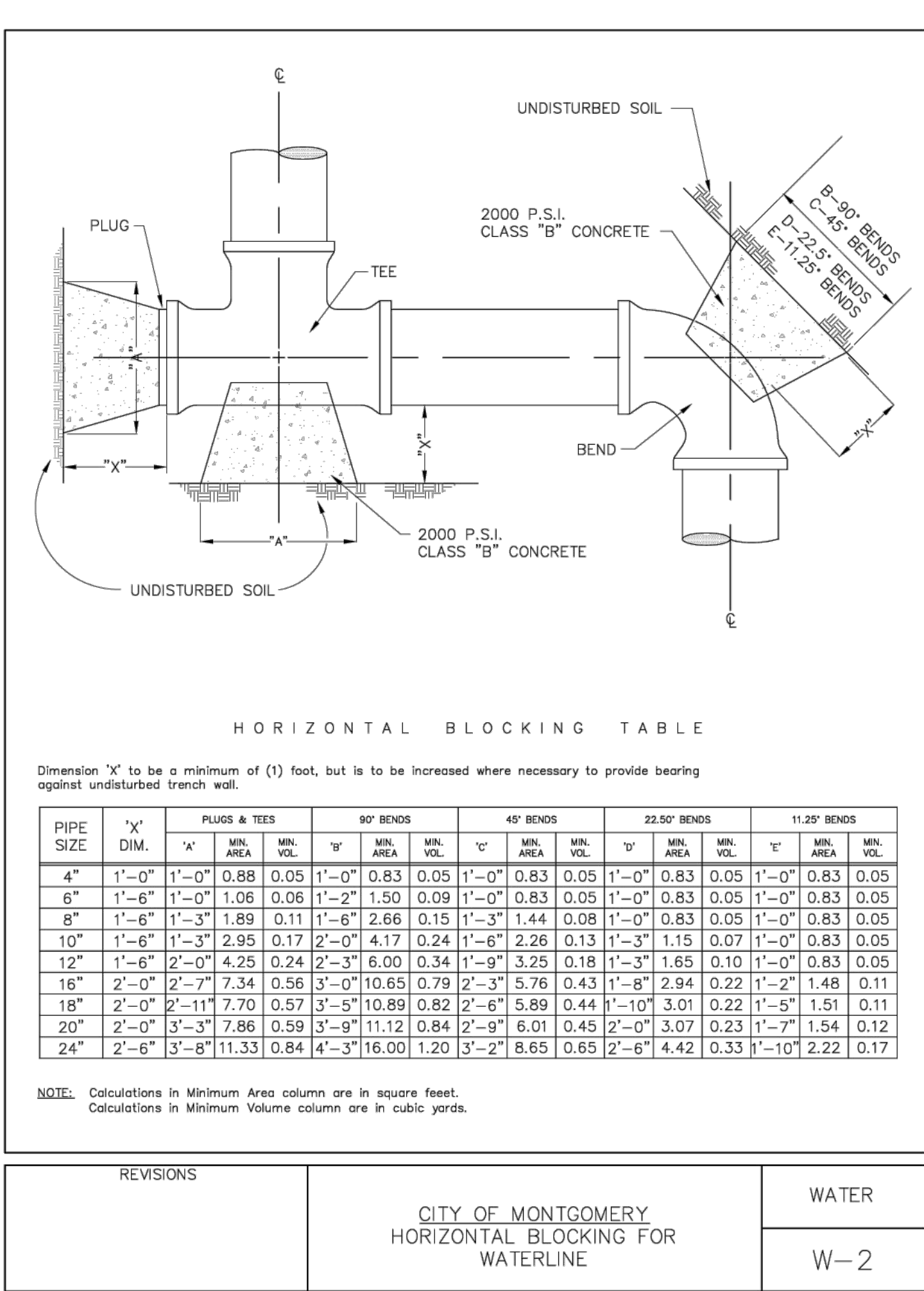
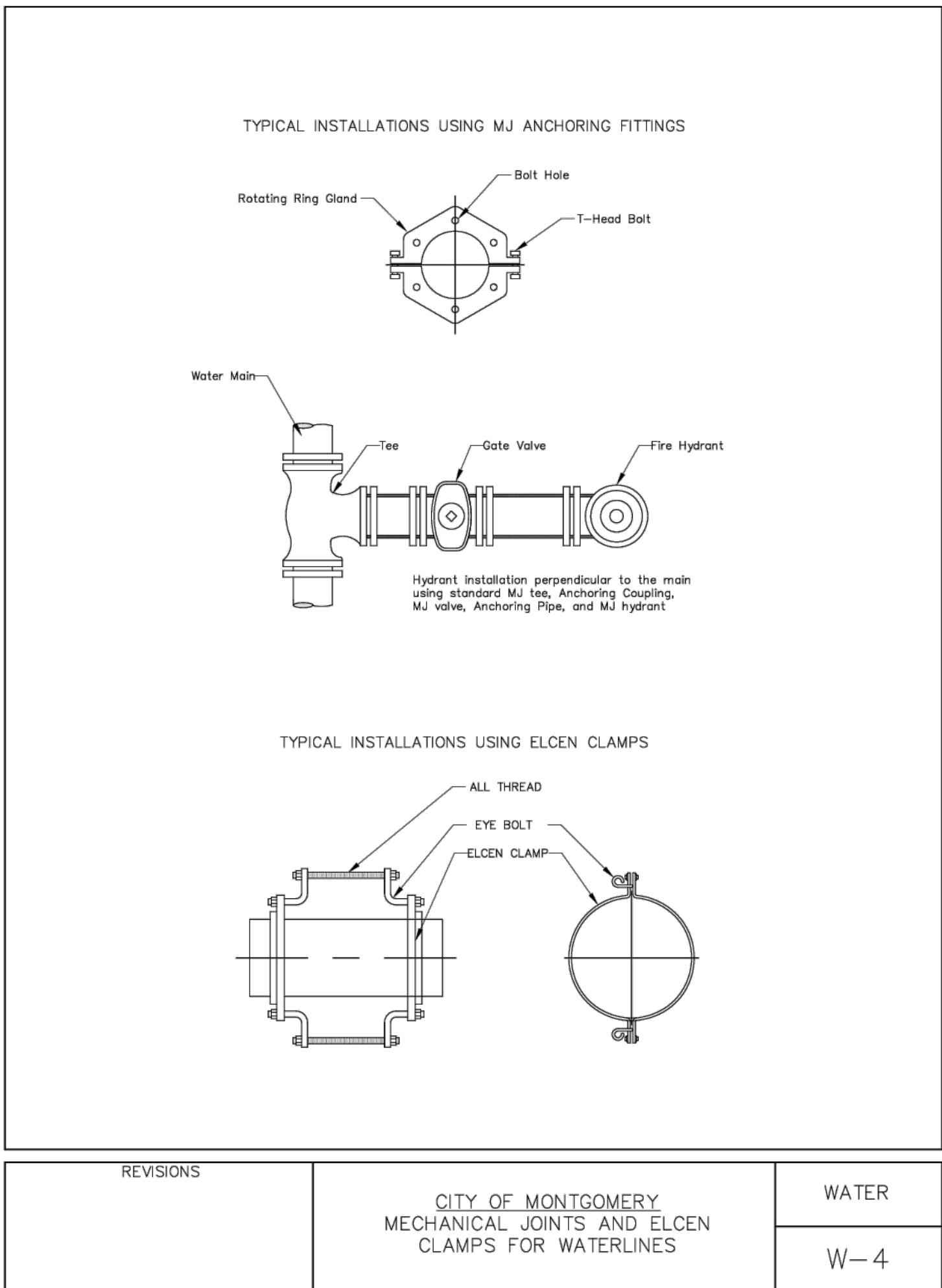
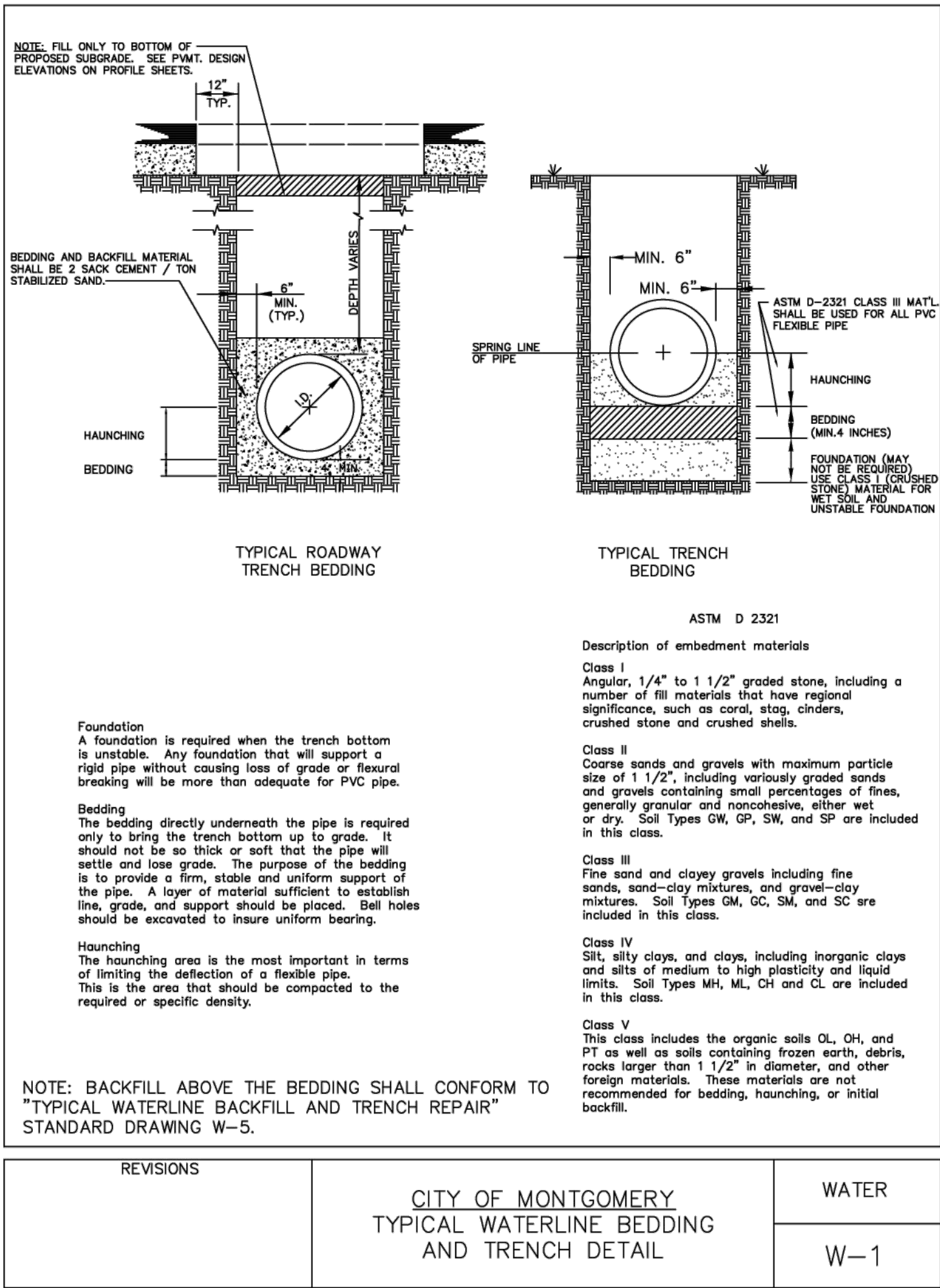


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 - 10a) SIDEWALKS TO BE LOCATED A MINIMUM OF 5' FROM THE BACK OF CURB WHERE LIGHT POLES ARE PRESENT.
 - 10b) CONSTRUCT SIDEWALKS AND CURB RAMPS IN CONFORMANCE WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND THE AMERICAN WITH DISABILITIES ACT (ADA).
 - 10c) DO NOT PLACE SIDEWALK OVER PARALLEL UTILITY LINES.
 - 10d) AT DRIVEWAYS, ALIGN A MINIMUM 5 FOOT WIDE SIDEWALK SECTION MEETING TAS AND ADA AS THE SIDEWALK CROSSES THE DRIVEWAY.
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 - 14) CONTRACTOR TO STAMP THE FACE OF THE CURB WITH AN "S" AT THE LOCATION OF EACH SANITARY SEWER LEAD AND "W" AT THE LOCATION OF EACH WATER LEAD.

DATE	REVISION	BY

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY, CITY ENGINEER
SIGNATURE VALID FOR ONE (1) YEAR

DATE

MONTGOMERY COUNTY
MUNICIPAL UTILITY
DISTRICT NO. 215

BRIARLEY PHASE 1B

WATER DETAILS I

LJA Engineering, Inc.

3600 W Sam Houston Parkway S Suite 600
Houston, Texas 77042

Phone 713.953.5200
Fax 713.953.5026
FRN - F-1386

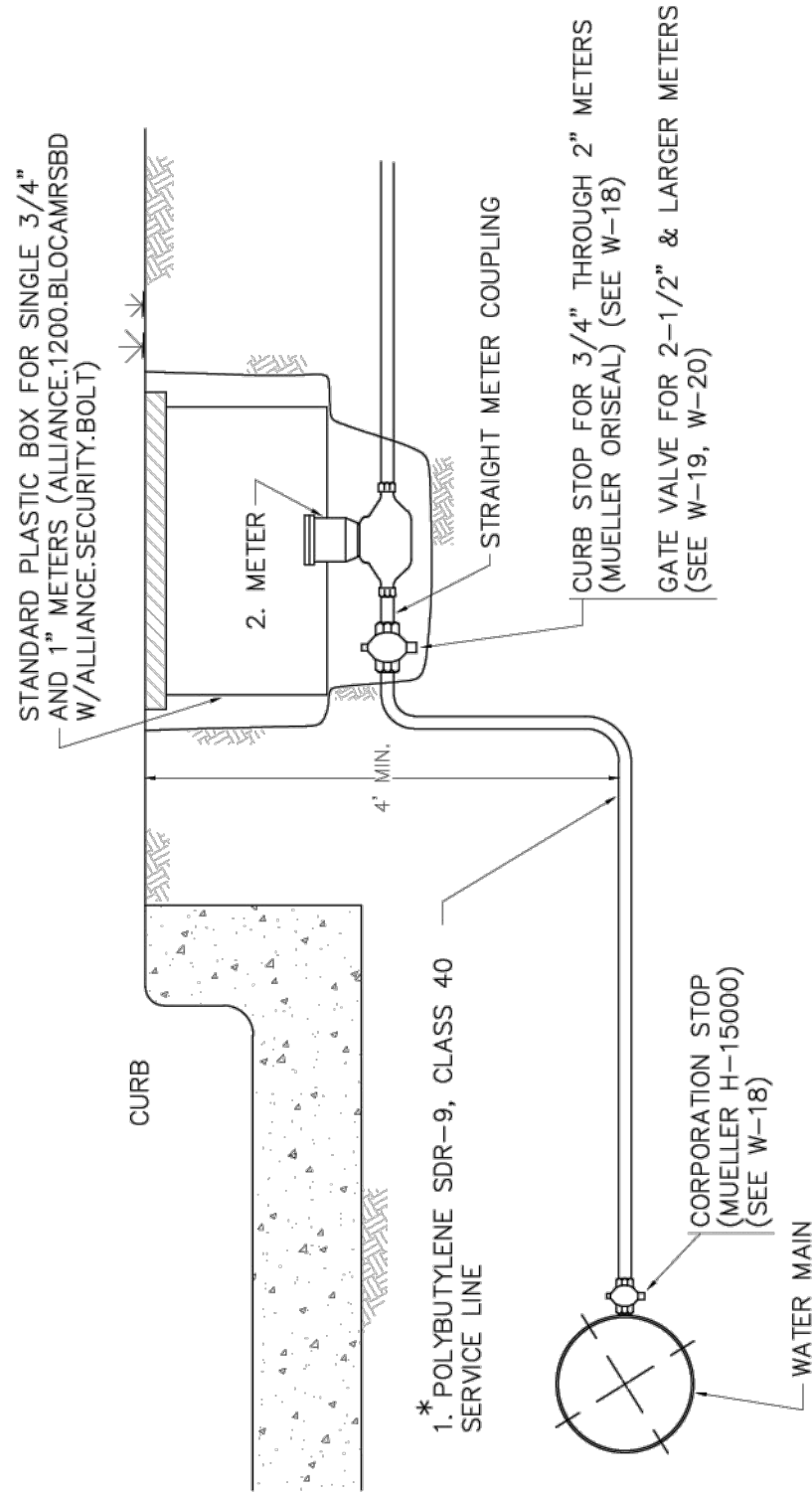
LJA PROJECT NO.: 2980-0104

DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025

SCALE: N.T.S.

REVISIONS	CITY OF MONTGOMERY CULVERT CROSSING DETAIL FOR WATERLINE	WATER
		W-7

- SDR-9 service lead by contractor, with standard plastic meter box.
- Meter installed by the City of Montgomery.



* 3/4" POLY TUBING FOR 3/4" X 5/8" METER INSTALLATION FOR SINGLE SERVICE TAP.
* 1" POLY TUBING FOR 1" METER INSTALLATION FOR DOUBLE SERVICE TAP.

REVISIONS 10-2013 REVISED NOTES SERVICE SIZE	CITY OF MONTGOMERY WATER SERVICE CONNECTION	WATER
		W-8

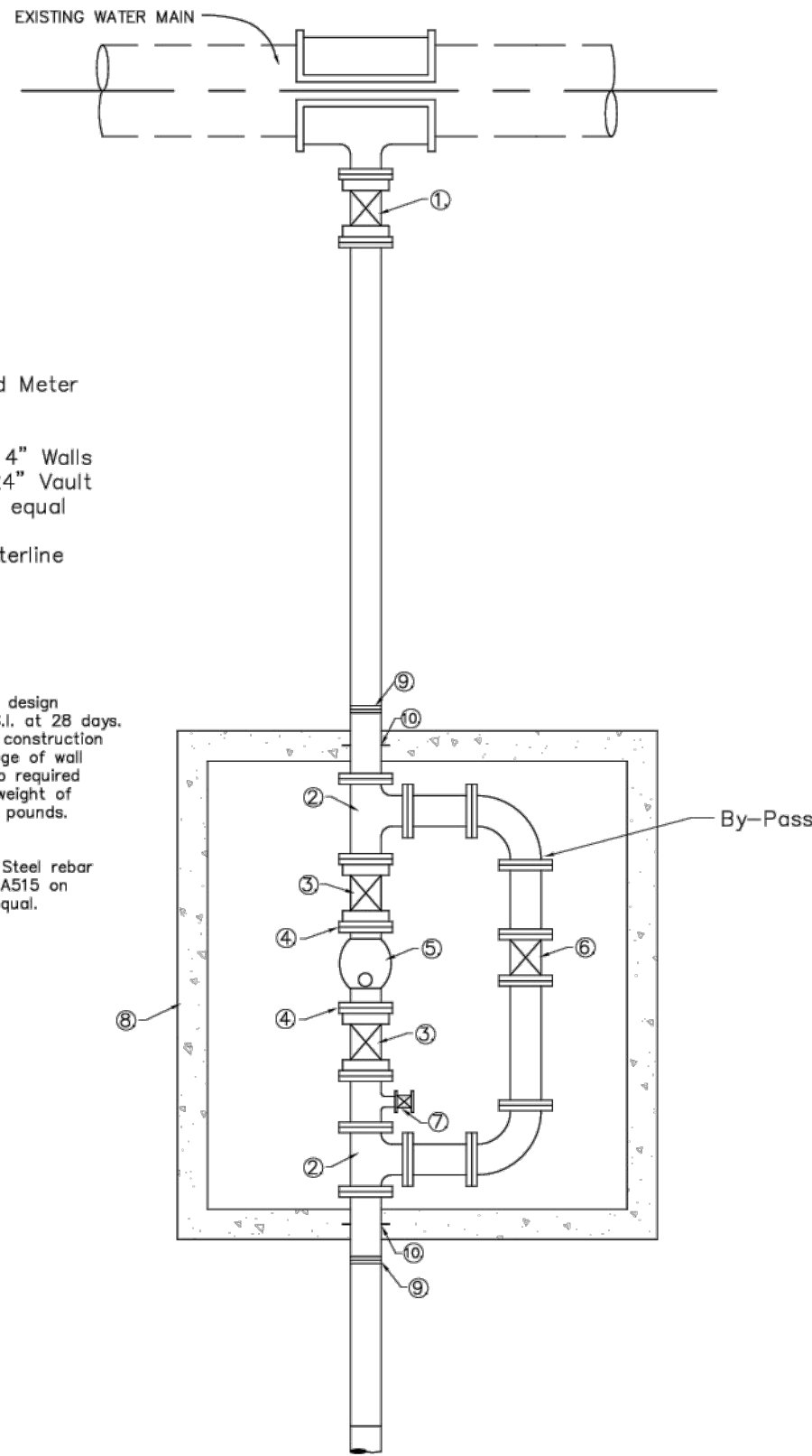
REVISIONS	CITY OF MONTGOMERY 2" & LARGER WATER SERVICE CONNECTION	WATER
		W-9

- ⑥ Tapping Tee & Gate Valve
Two Tee
Two Gate Valves
Two Flg. Coup. Adapt's.
2" to 10" Turbine Compound Meter
One 2" Gate Valve
2" Test Tee (Corp. Stop)
Reinforced Conc. Vault with 4" Walls
and 4" Top Slab with 24"x24" Vault
Frame & Cover or approved equal
Flex Coupling as Required
Water Tight Seal Around Waterline
Entering and Exiting Vault

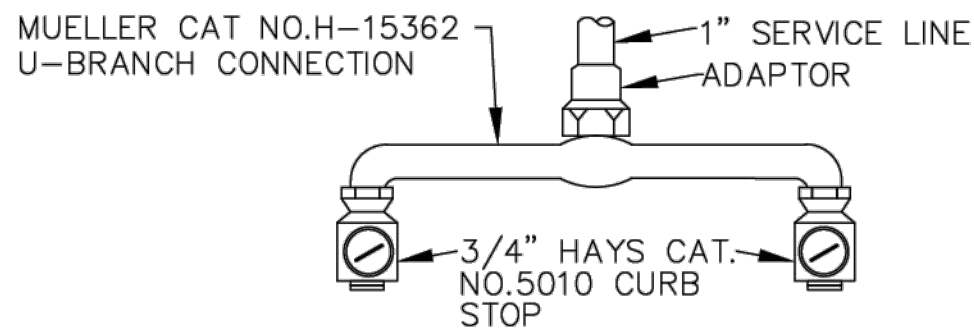
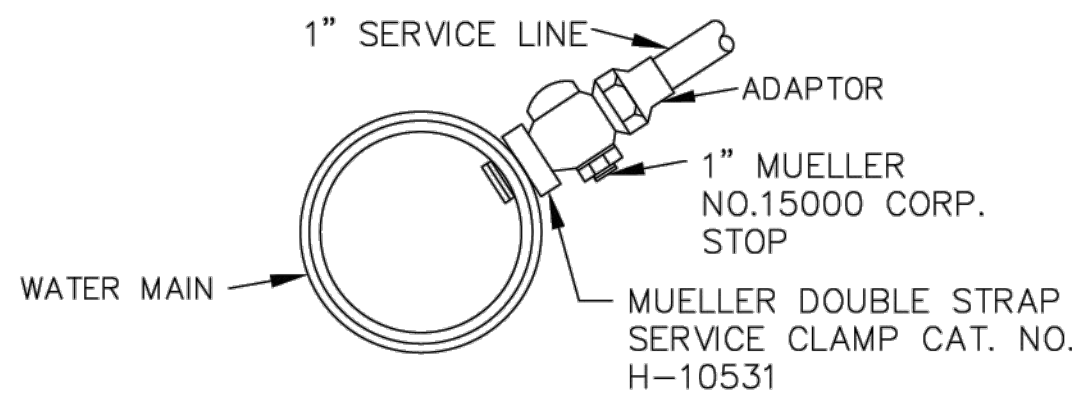
SPECIFICATIONS:
CONCRETE: Class I concrete with design strength of 4500 P.S.I. at 28 days. Unit is of monolithic construction at floor and first slope of wall with sectional riser to required depth. Gross empty weight of approximately 12,000 pounds.

REINFORCEMENT: Grade 60 reinforced Steel rebar conforming to ASTM A515 on required centers or equal.

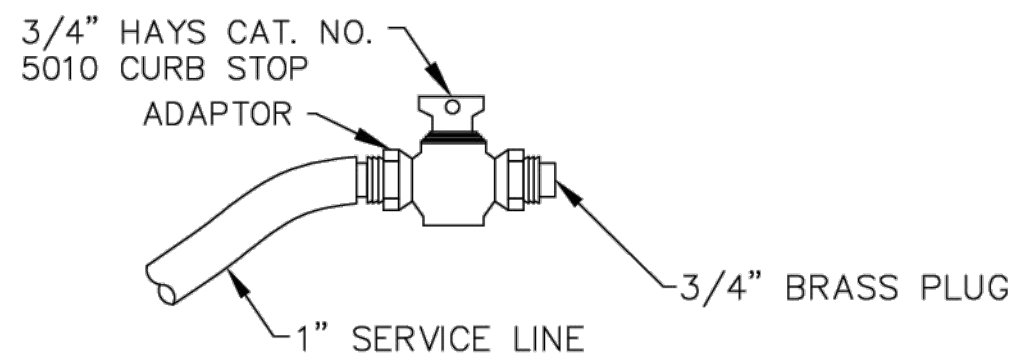
Typical water meter service. 2" or larger meter installation will require concrete vault and a by-pass assembly.



REVISIONS	CITY OF MONTGOMERY 2" & LARGER WATER SERVICE CONNECTION	WATER
		W-9



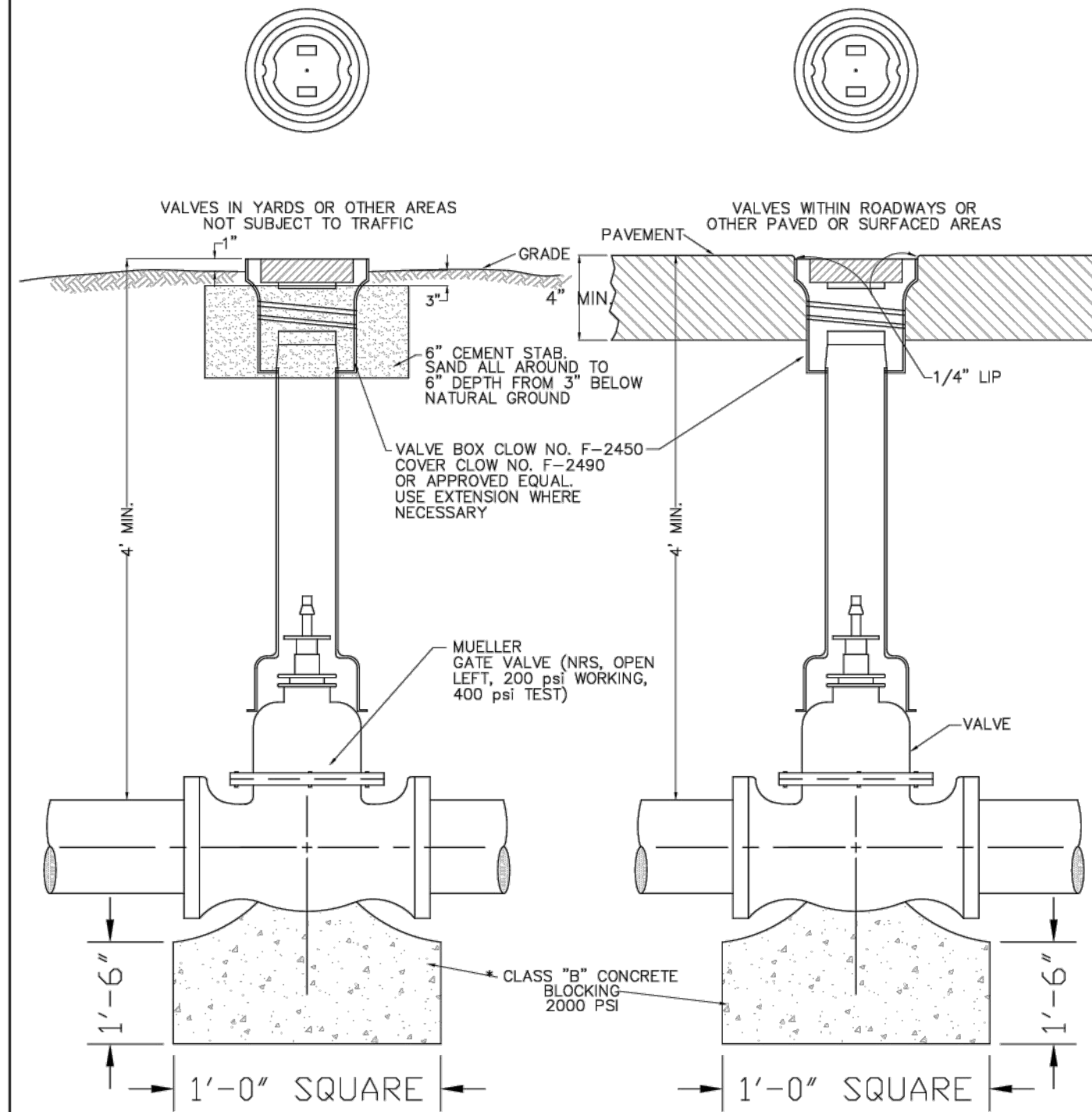
DOUBLE SERVICE LINE CURB STOP DETAIL



SINGLE SERVICE LINE
CURB STOP DETAIL

REVISIONS 02-2025 REVISED SERVICE LINE SIZE	CITY OF MONTGOMERY CURB STOP & TAP FOR WATERLINE	WATER
		W-10

REVISIONS	CITY OF MONTGOMERY GATE VALVE & BOX INSTALLATION 14" AND SMALLER WATERLINE	WATER
		W-11



* BLOCK GATE VALVES WITH COMPRESSION JOINT FITTINGS ON 8" & LARGER LINES

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100YR. W.S.E. = 298.83' AT OUTFALL #1000
100YR. W.S.E. = 298.83' AT OUTFALL #2000
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EFFECTIVE DATE: AUGUST 18, 2014
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- NOTES:**
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MUNICIPAL UTILITY
DISTRICT NO. 215

BRIARLEY PHASE 1B

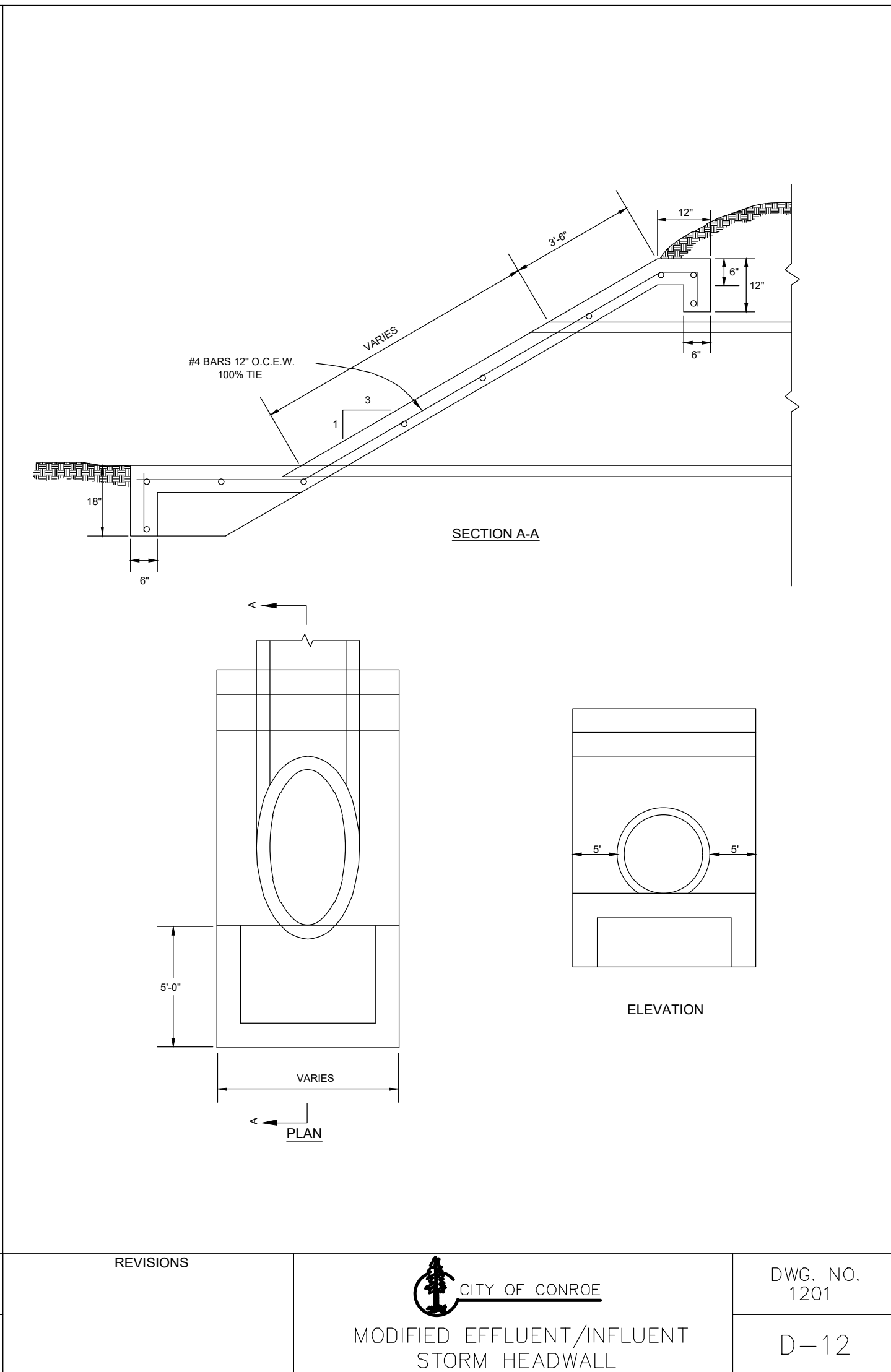
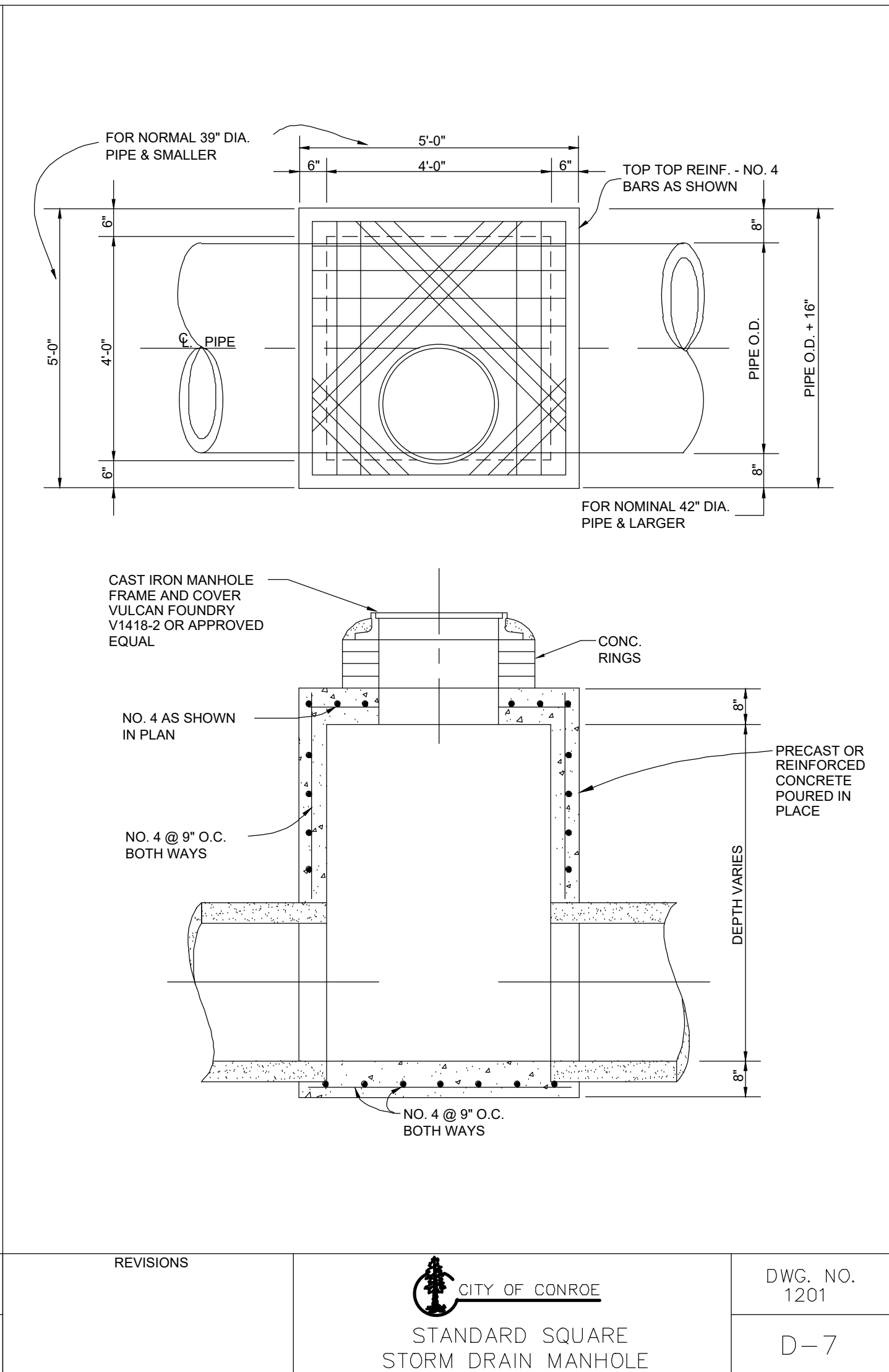
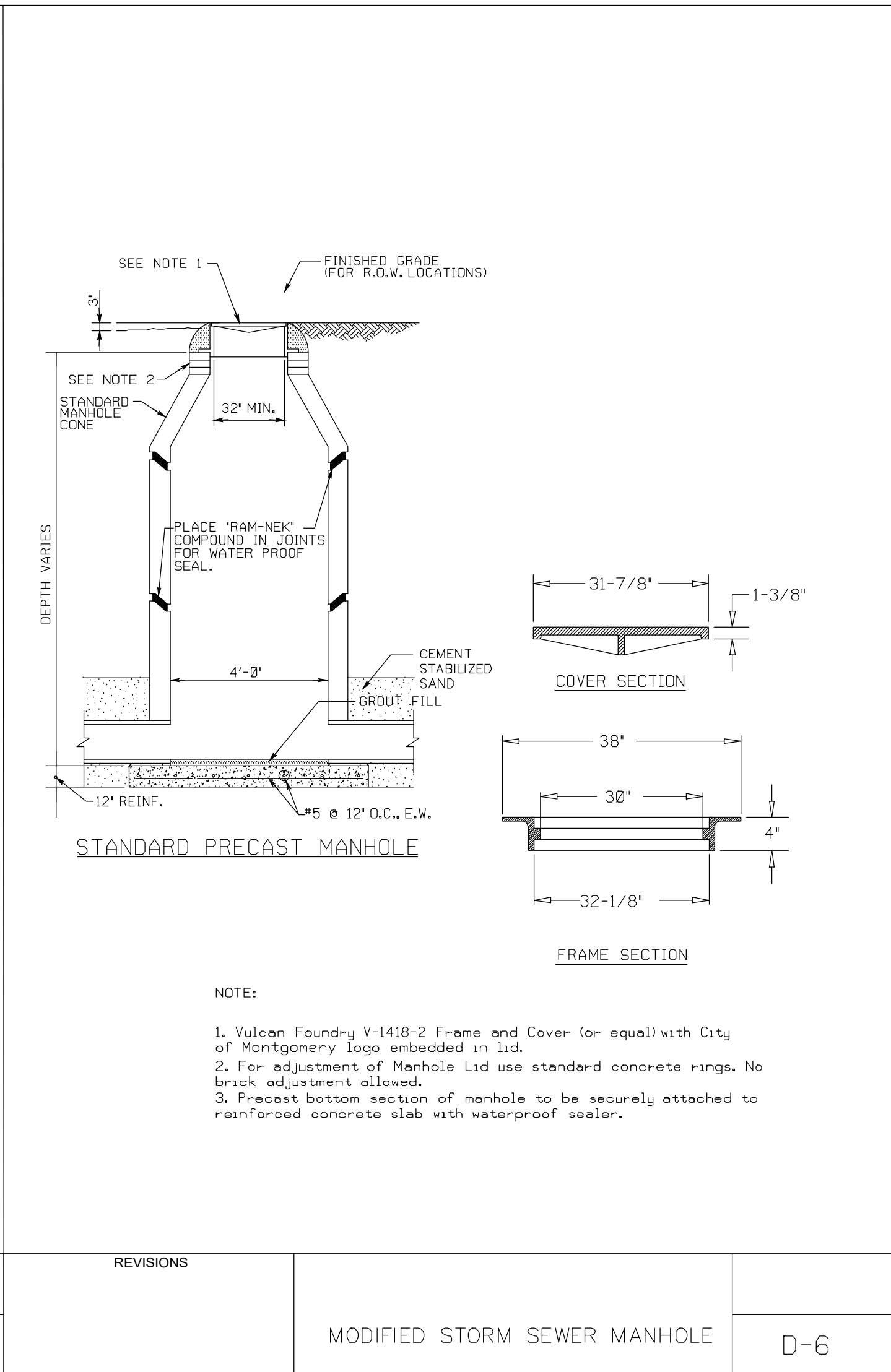
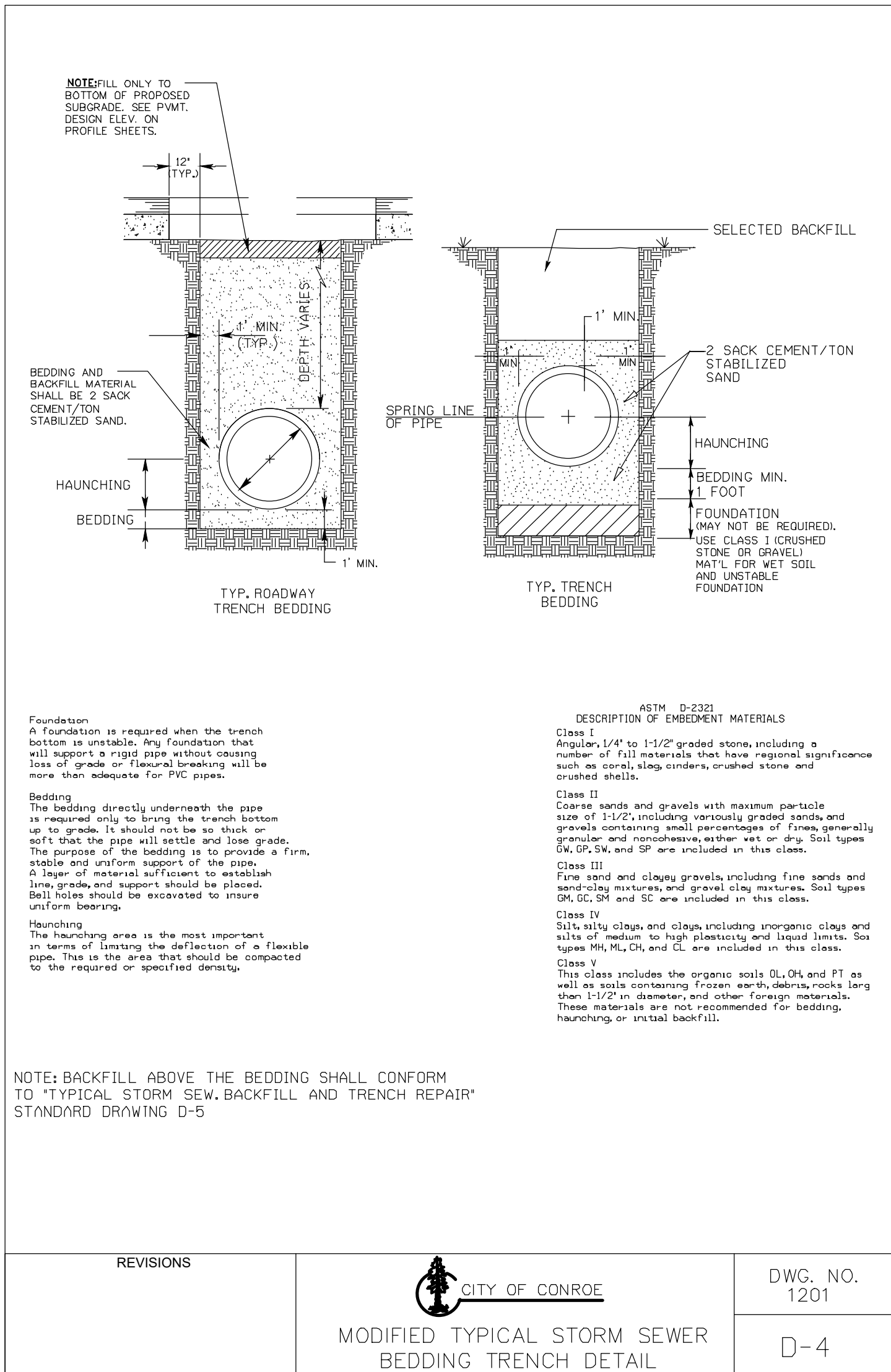
WATER DETAILS II

LJA Engineering, Inc.
3600 W Sam Houston Parkway S Phone 713.953.5200
Suite 600 Fax 713.953.5026
Houston, Texas 77042 FRN - F-1386
LJA PROJECT NO.: 2980-0104

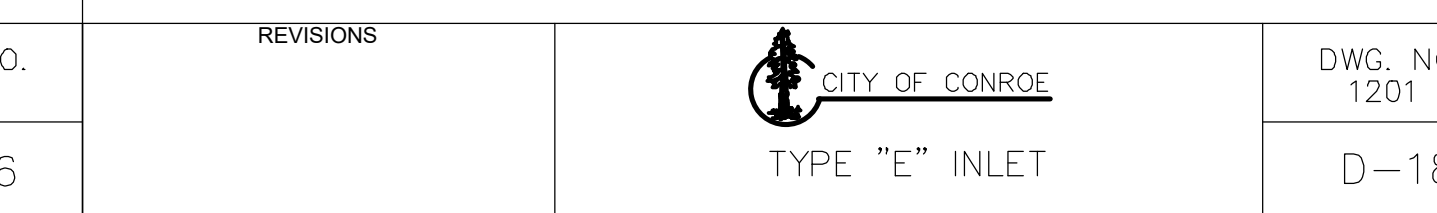
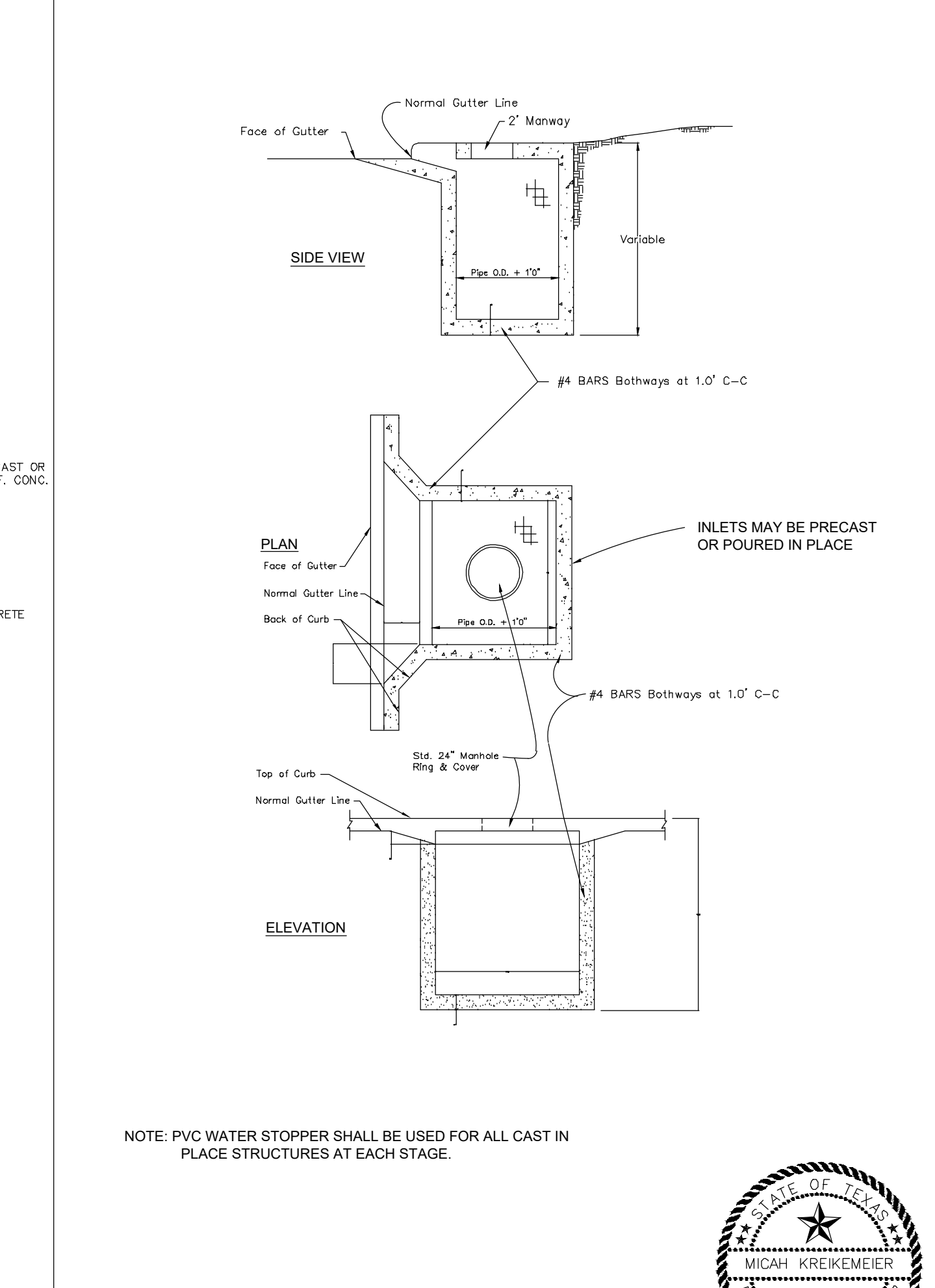
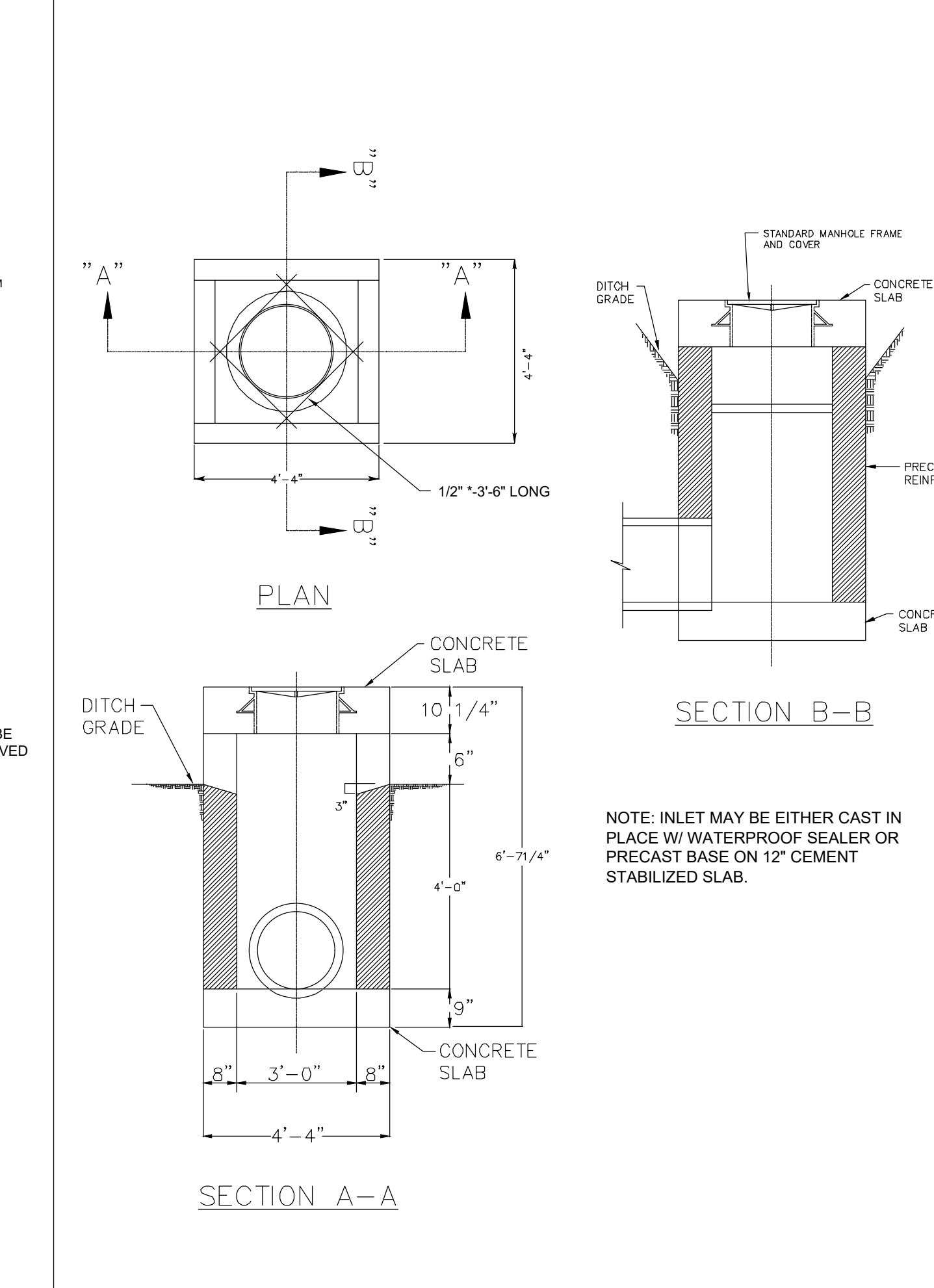
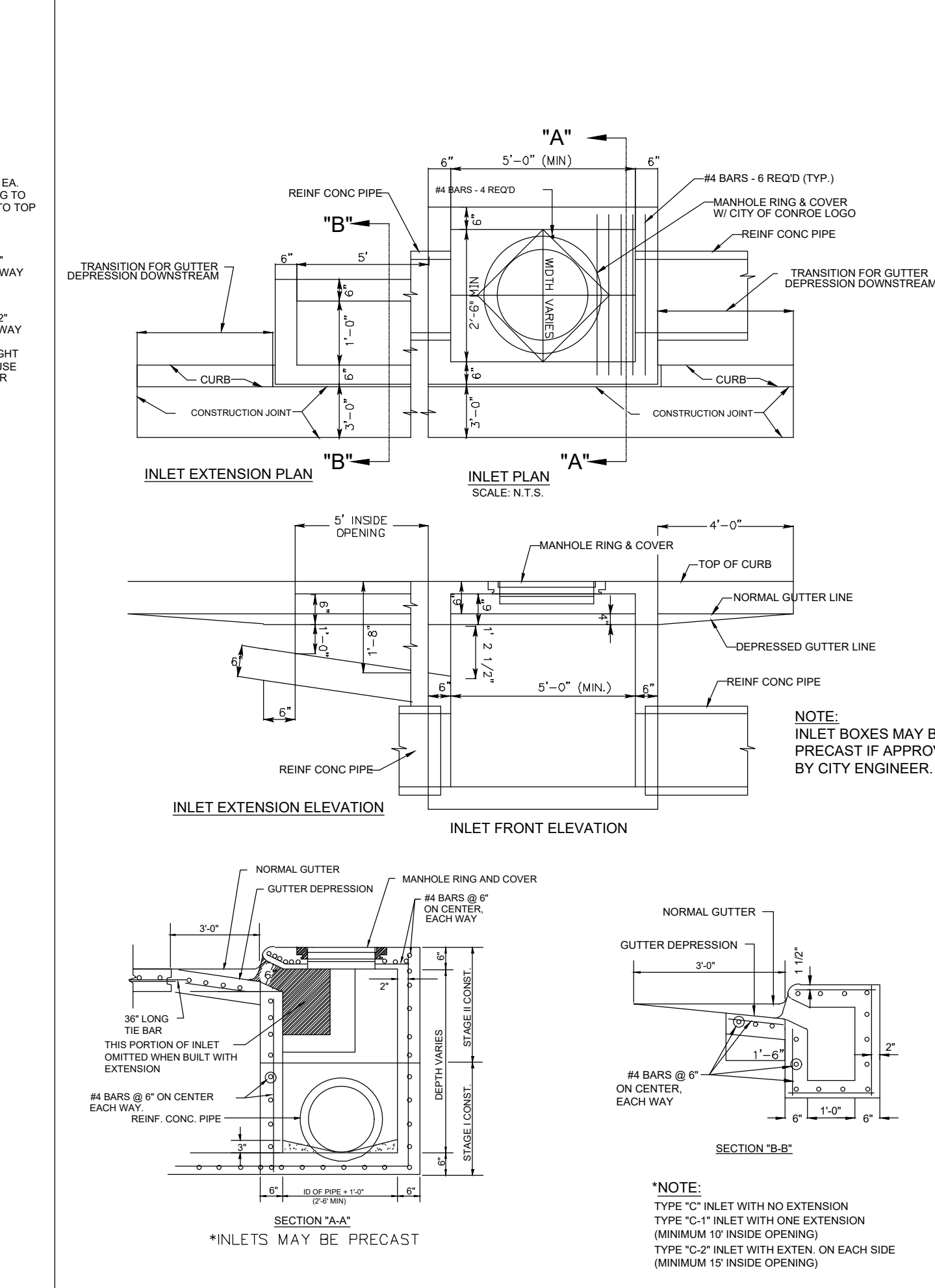
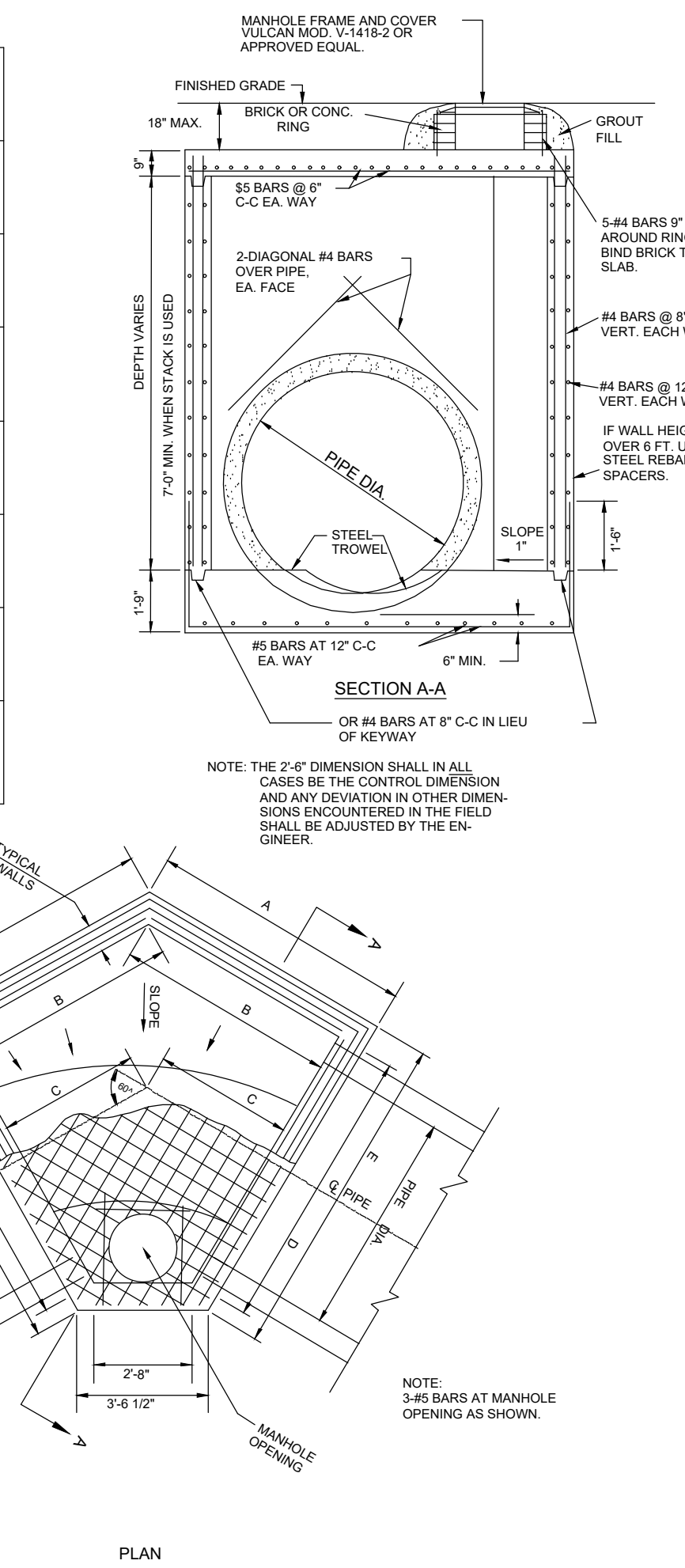
DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025

SCALE: N.T.S.





MANHOLE TYPE	1	2	3	4	5	6	7
PIPE DIA.	18" to 24"	27" to 33"	36" to 42"	48" to 54"	60" to 66"	72" to 78"	84" to 96"
A	4'-5 1/2"	4'-11 5/8"	5'-5 5/8"	6'-1 5/8"	6'-5 7/8"	7'-4"	8'-6 1/8"
B	3'-3 5/16"	3'-9 3/8"	4'-3 7/16"	4'-11 1/2"	5'-7 5/8"	6'-3 3/4"	7'-3 7/8"
C	2'-5"	2'-9"	2'-11"	3'-3"	3'-7"	3'-11"	4'-5 1/8"
D	3'-0"	3'-10 1/2"	4'-6"	5'-11"	7'-1"	8'-3"	10'-0"
E	4'-2"	5'-1"	5'-11 1/4"	7'-1 1/4"	8'-3 1/4"	9'-5 1/4"	11'-2 1/4"



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100YR. W.S.E. = 298.83' AT OUTFALL #2000
FIRM PANEL NO.4839C0200G & 48339C0350G
EFFECTIVE DATE: AUGUST 18, 2014
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CITY OF MONTGOMERY, CITY ENGINEER SIGNATURE VALID FOR ONE (1) YEAR

DATE

MONTGOMERY COUNTY MUNICIPAL UTILITY DISTRICT NO. 215

BRIARLEY PHASE 1B

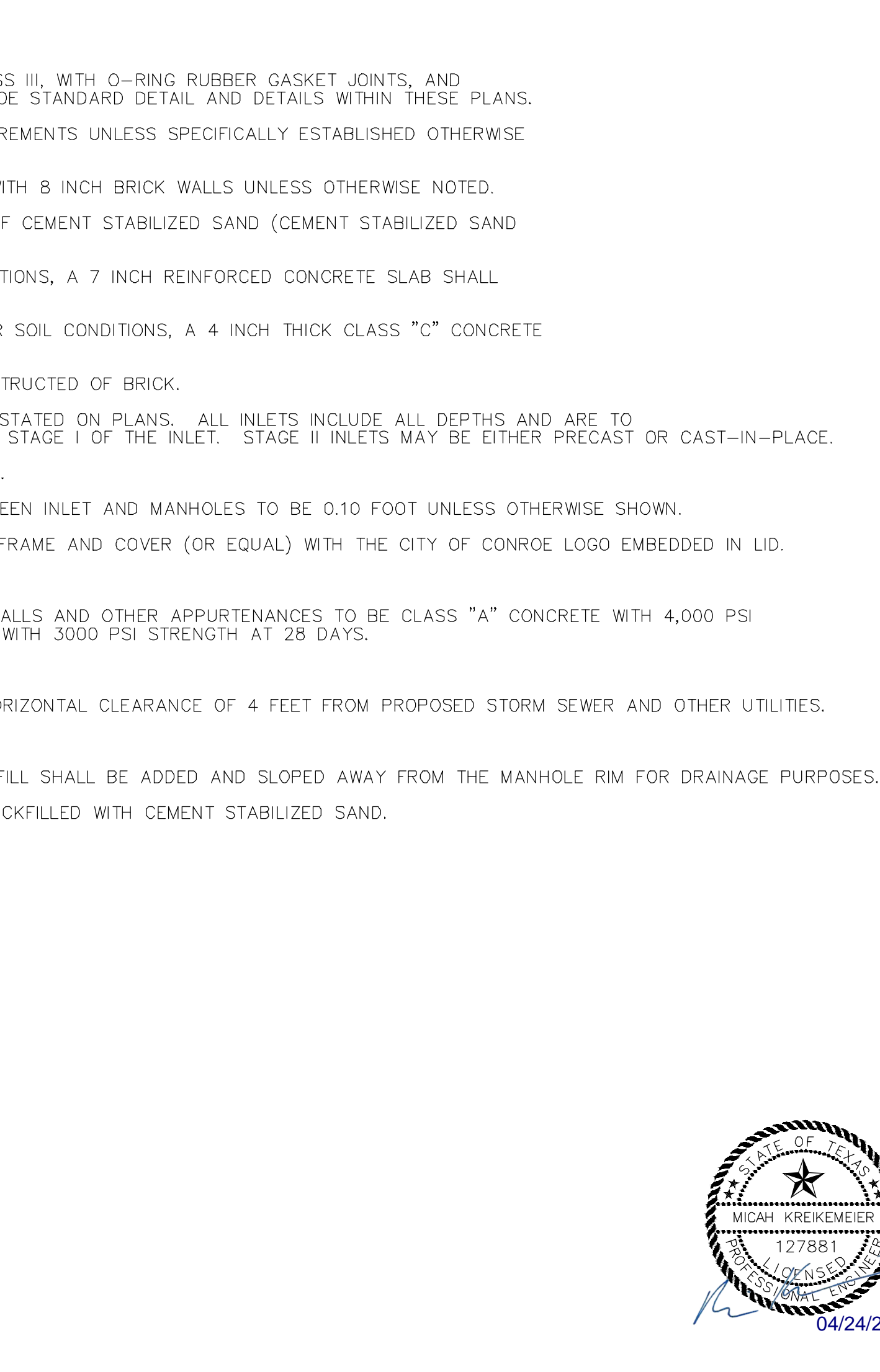
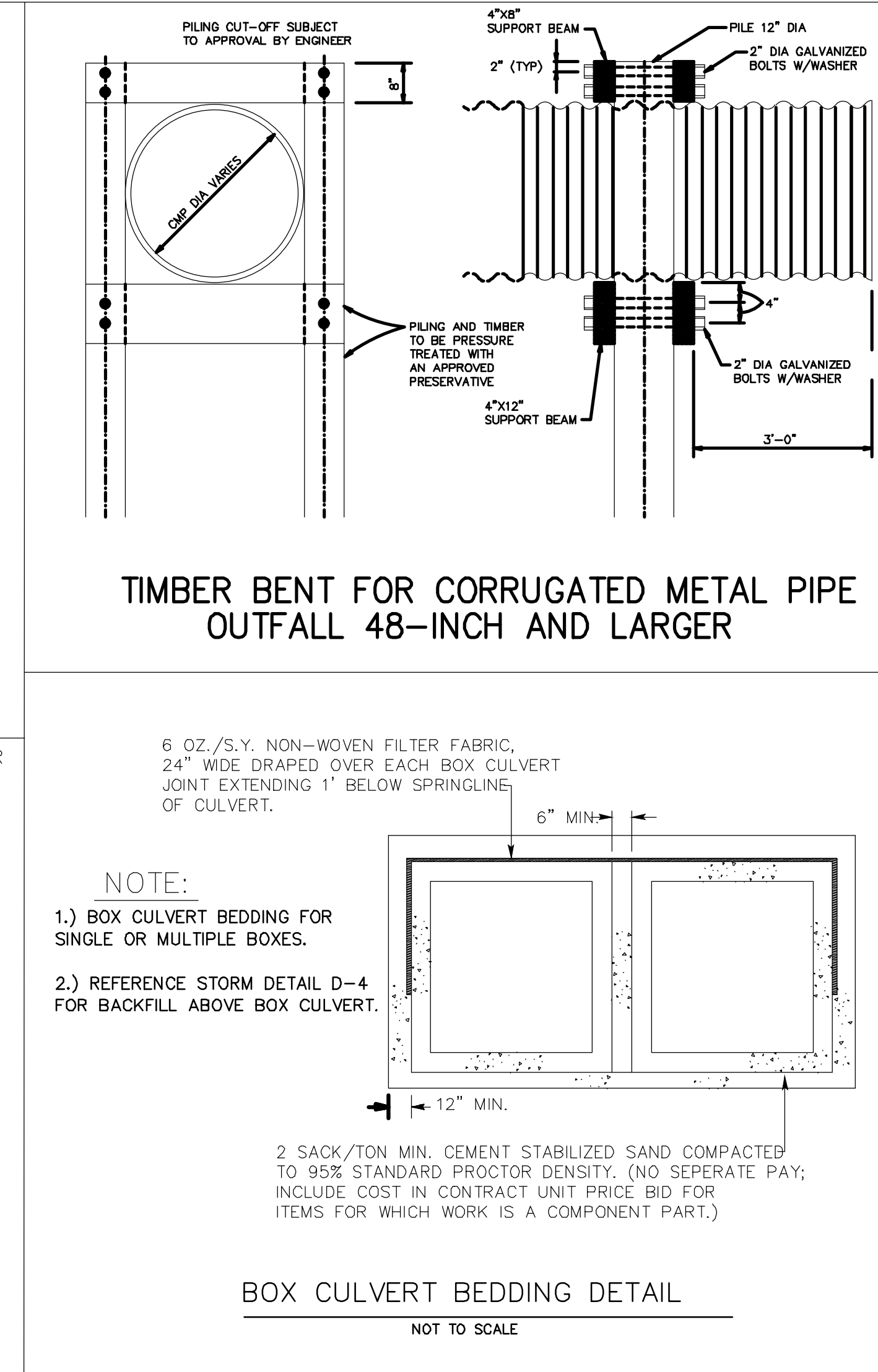
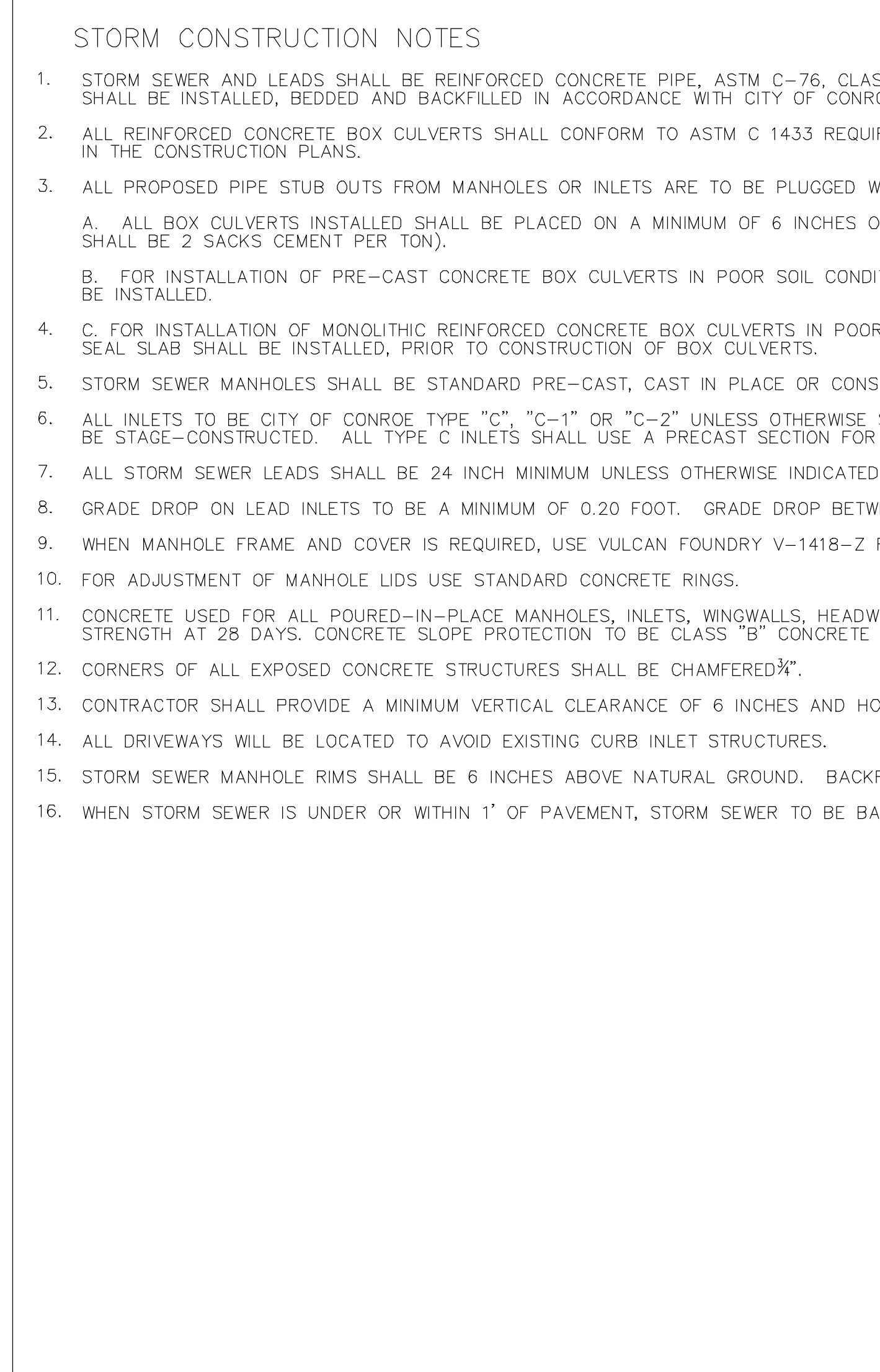
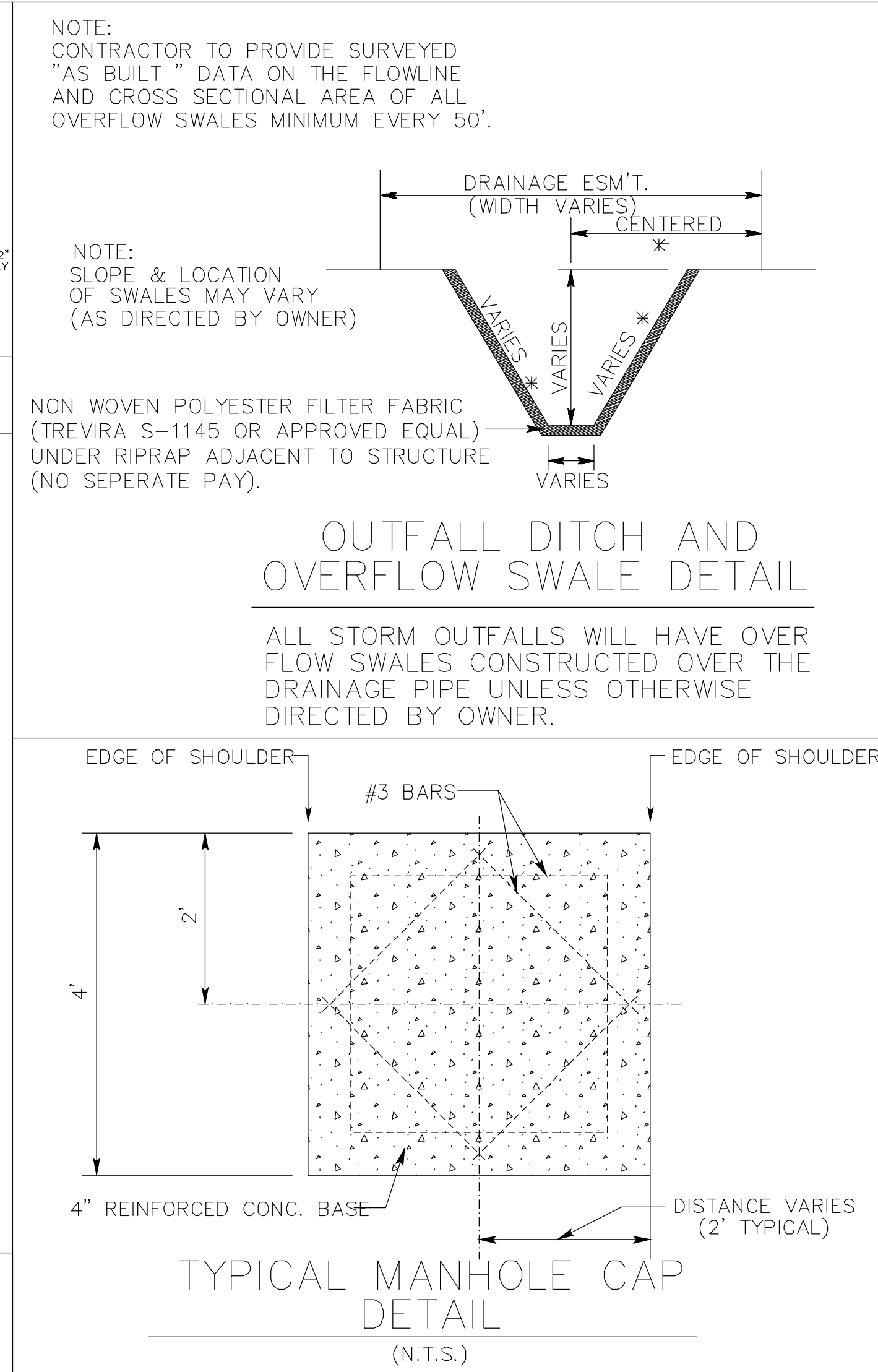
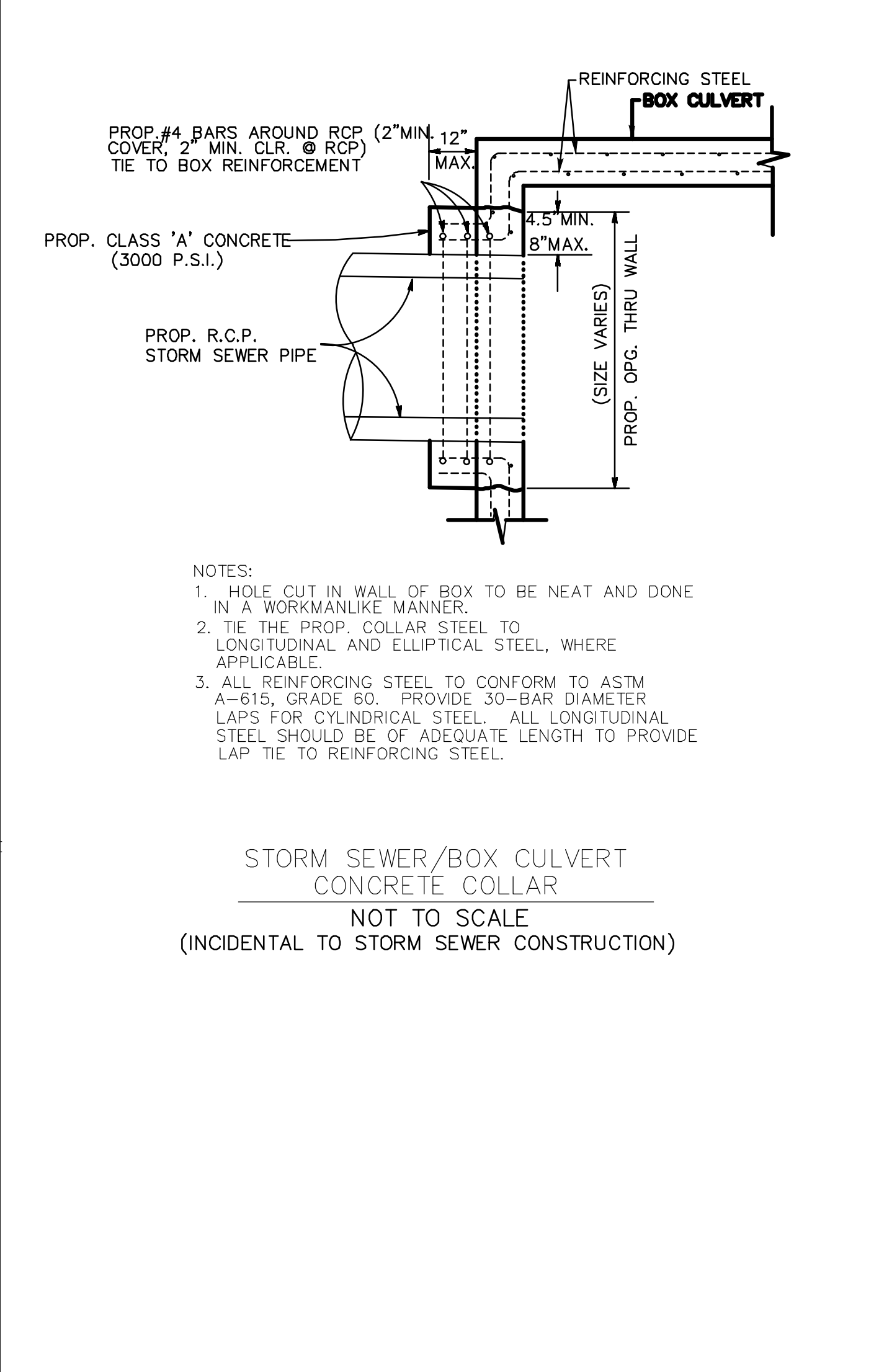
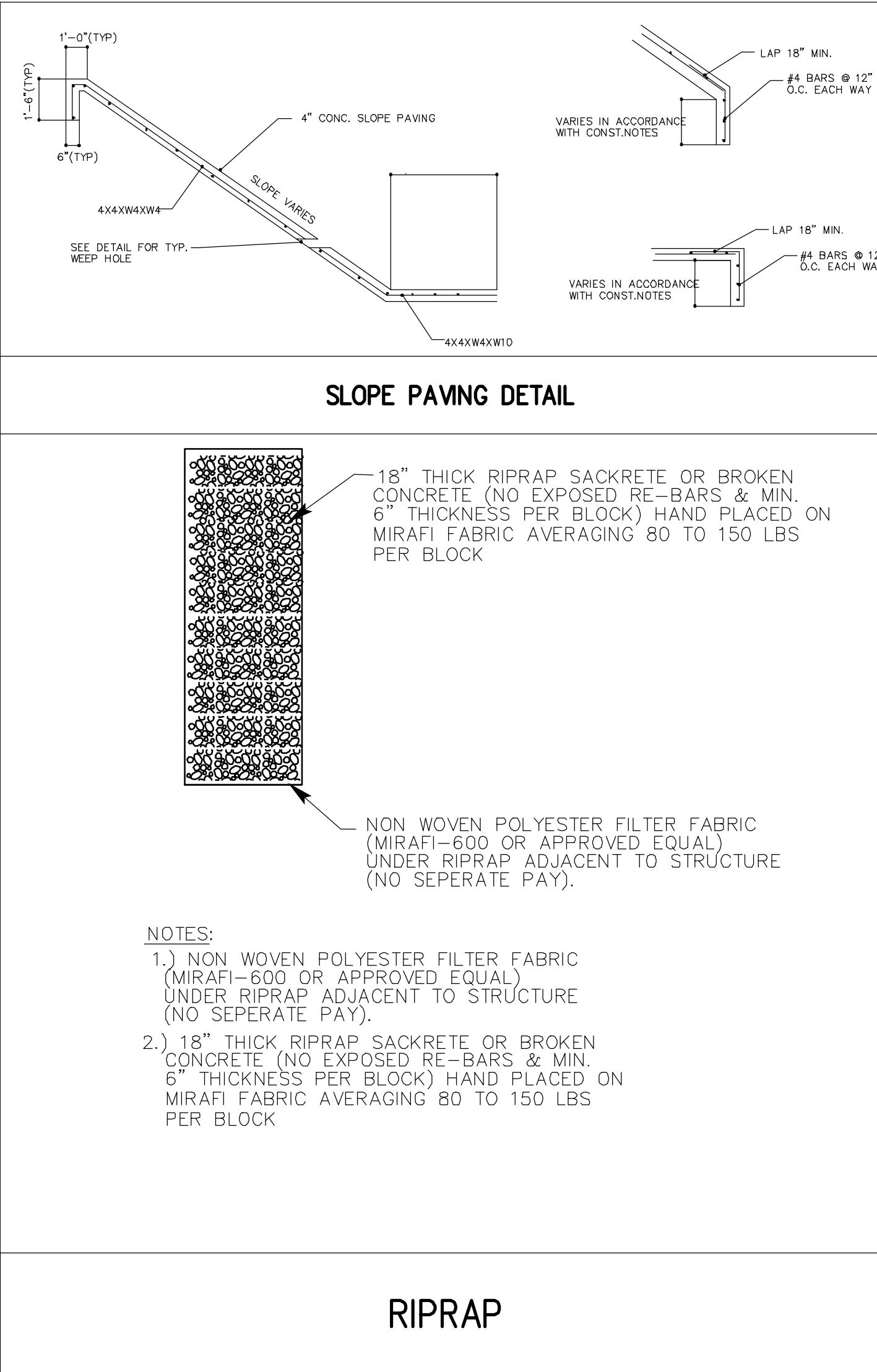
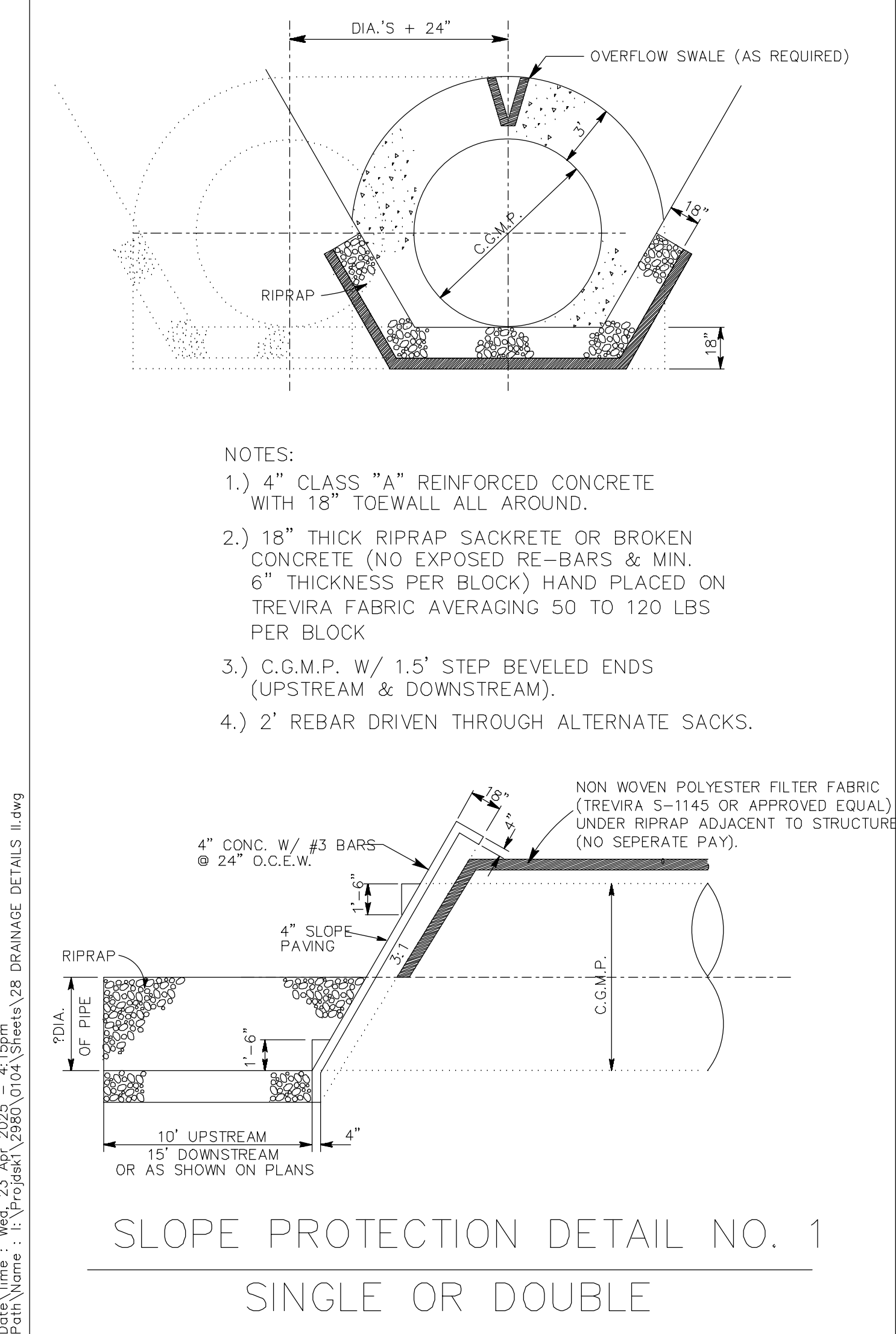
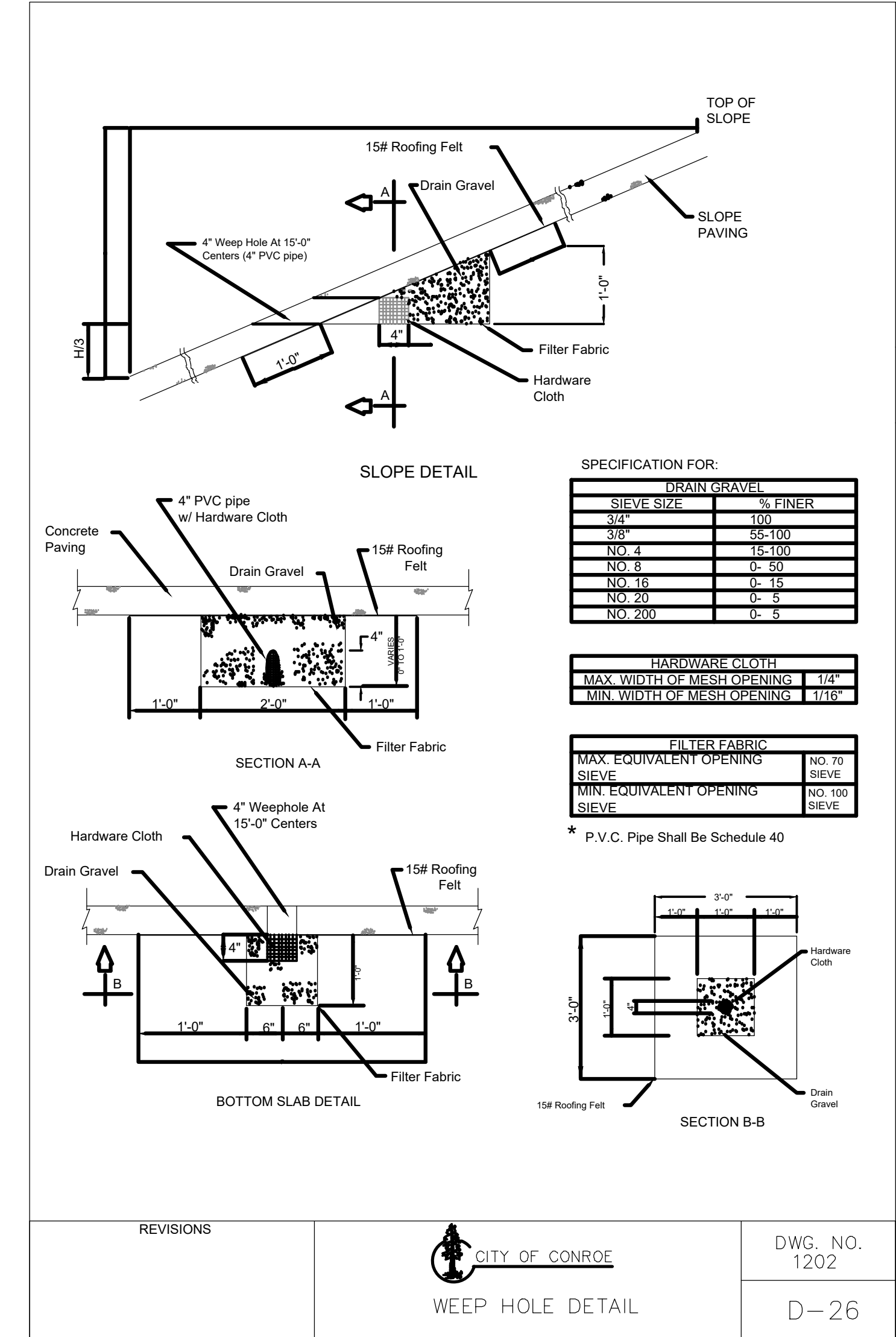
DRAINAGE DETAILS I

LJA Engineering, Inc.
3600 W Sam Houston Parkway S Suite 600 Houston, Texas 77042
Phone 713.953.5200 Fax 713.953.5026 FRN - F-1386
LJA PROJECT NO.: 2980-0104
DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025
SCALE: N.T.S.

STATE OF TEXAS
MICAH KREIKEMEIER
127381
04/24/2025

SHEET NO. 27 OF 30

Date/Time : Wed, 23 Apr, 2025 - 4:15pm
Path Name : I:\Projects\2980\0104\Sheets\28 Drainage Details.dwg



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MONTGOMERY COUNTY MUNICIPAL UTILITY DISTRICT NO. 215

BRIARLEY PHASE 1B

DRAINAGE DETAILS II

LJA Engineering, Inc.

3600 W Sam Houston Parkway S Suite 600 Houston, Texas 77042
Phone 713.953.5200 Fax 713.953.5026 FRN - F-1386

LJA PROJECT NO.: 2980-0104

DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025

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04/24/2025

SHEET NO. 28 of 30

- NOTES:
- 1.) 4" CLASS "A" REINFORCED CONCRETE WITH 18" TOEWALL ALL AROUND.
 - 2.) 18" THICK RIPRAP SAKRETTE OR BROKEN CONCRETE (NO EXPOSED RE-BARS & MIN. 6" THICKNESS PER BLOCK) HAND PLACED ON TREVIRA FABRIC AVERAGING 50 TO 120 LBS PER BLOCK
 - 3.) C.G.M.P. W/ 1.5' STEP BEVELED ENDS (UPSTREAM & DOWNSTREAM).
 - 4.) 2' REBAR DRIVEN THROUGH ALTERNATE SACKS.

Technical drawings of a curb and gutter assembly, showing three views: Side View, Front View, and Top View.

Side View: Shows a cross-section of the curb and gutter. The curb height is 2'-0". The gutter depth is 4". The slope is 3:1. The top width of the curb is 1'-6". The bottom width is 3'-0". The reinforcement is shown as a grid of bars.

Front View: Shows the top-down view of the curb and gutter. The width is 1'-0" and the depth is 2'-0". The reinforcement is shown as a grid of bars.

Top View: Shows the plan view of the curb and gutter. The width is 1'-0" and the depth is 2'-0". The reinforcement is shown as a grid of bars.

Reinforcement Details:

- # 4 BARS FOR 18"-30"
- # 5 BARS FOR 36"-48"
- # 6 BARS FOR 54"-72"

Notes:

- * ADJUST FOOTING TO AVOID CONFLICT WITH R.C.P.
- NOTE:
 - 1.) 4" CLASS "A" REINFORCED CONCRETE WITH 2' TOEWALLS ALL AROUND.
 - 2.) 6 X 6 X W2.9 X 2.9 WELDED WIRE FABRIC OR EQUIVALENT.
- NOTE: BARS SHALL BE INSTALLED HORIZONTAL.

NOTE: BARS SHALL BE INSTALLED
HORIZONTAL.

ELEVATION

BACKSLOPE INLET & OUTFALL
N.T.S.

SECTION A-A

PLAN

SECTION B-B

PIPE DIA. SLOPE

PIPE DIA.	SLOPE
24 IN.	0.6%
36 IN.	0.4%
48 IN.	0.2%
60 IN.	0.1%

CITY OF MONTGOMERY
STORM SEWER
MANHOLE COVER

DRAINAGE

D-5

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 - 9) ALL LIGHT POLES MUST BE A MINIMUM OF 3' OFF BACK OF CURB.
 - 10) SIDEWALKS TO BE LOCATED A MINIMUM OF 3' FROM THE BACK OF CURB.
 - 10a) SIDEWALKS TO BE LOCATED A MINIMUM OF 5' FROM THE BACK OF CURB WHERE LIGHT POLES ARE PRESENT.
 - 10b) CONSTRUCT SIDEWALKS AND CURB RUMPS IN CONFORMANCE WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND THE AMERICAN WITH DISABILITIES ACT (ADA).
 - 10c) DO NOT PLACE SIDEWALK OVER PARALLEL UTILITY LINES.
 - 10d) AT DRIVEWAYS, ALIGN A MINIMUM 5 FOOT WIDE SIDEWALK SECTION MEETING TAS AND ADA AS THE SIDEWALK CROSSES THE DRIVEWAY.
 - 11) AS-BUILT ELECTRICAL PLANS TO BE SUBMITTED WITH THE AS-BUILT DRAWINGS FOR THE SUBDIVISION.
 - 12) CONTRACTOR SHALL CLEAR, GRUB, ROOT, RAKE, BACK DRAG, CHIP AND DISPOSE OFFSITE OF ALL CLEARED AND GRUBBED MATERIAL.
 - 13) SIDEWALK RUMPS AND SIDEWALKS WITHIN COMMON AREAS TO BE CONSTRUCTED WITH WS&D. SIDEWALKS IN FRONT OF HOMES TO BE CONSTRUCTED BY HOMEOWNERS. ALL SIDEWALKS TO BE INSTALLED BY END OF 1 YEAR WARRANTY PERIOD.
 - 14) CONTRACTOR TO STAMP THE FACE OF THE CURB WITH AN "S" AT THE LOCATION OF EACH SANITARY SEWER LEAD AND "W" AT THE LOCATION OF EACH WATER LEADER.

[illegible]

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY, CITY ENGINEER SIGNATURE VALID FOR ONE (1) YEAR	DATE
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MONTGOMERY COUNTY
MUNICIPAL UTILITY
DISTRICT NO. 215

BRIARLEY PHASE 1B

DRAINAGE DETAILS III

LJA Engineering, Inc. 
3600 W Sam Houston Parkway S Phone 713.953.5200
Suite 600 Fax 713.953.5026
Houston, Texas 77042 FRN - F-1386

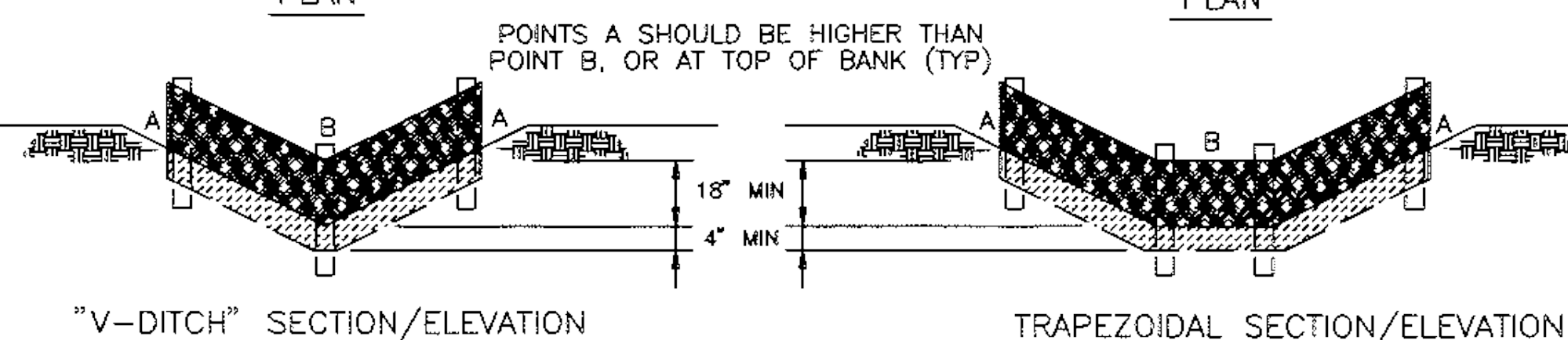
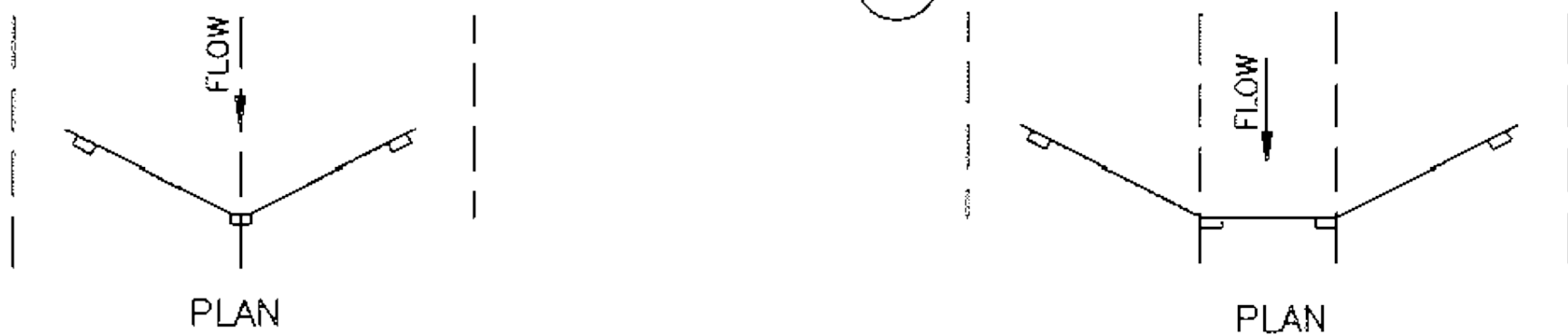
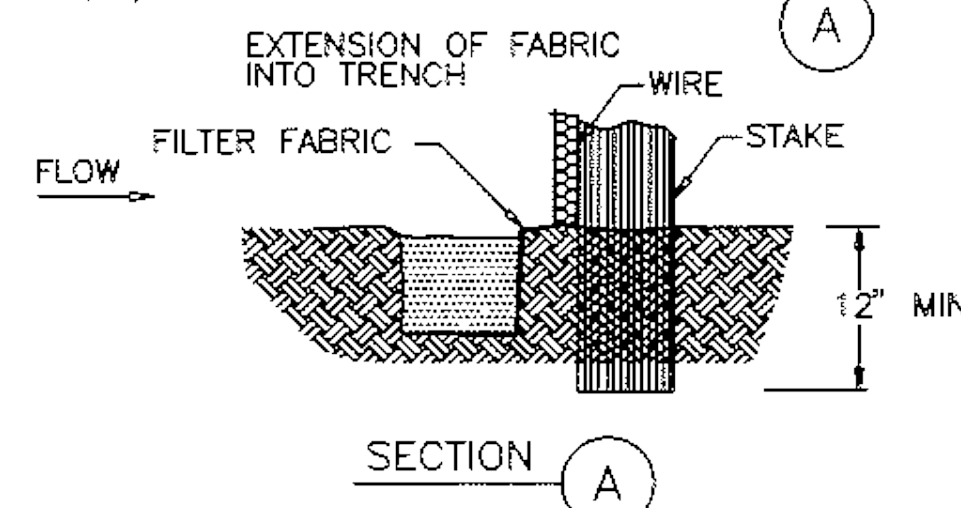
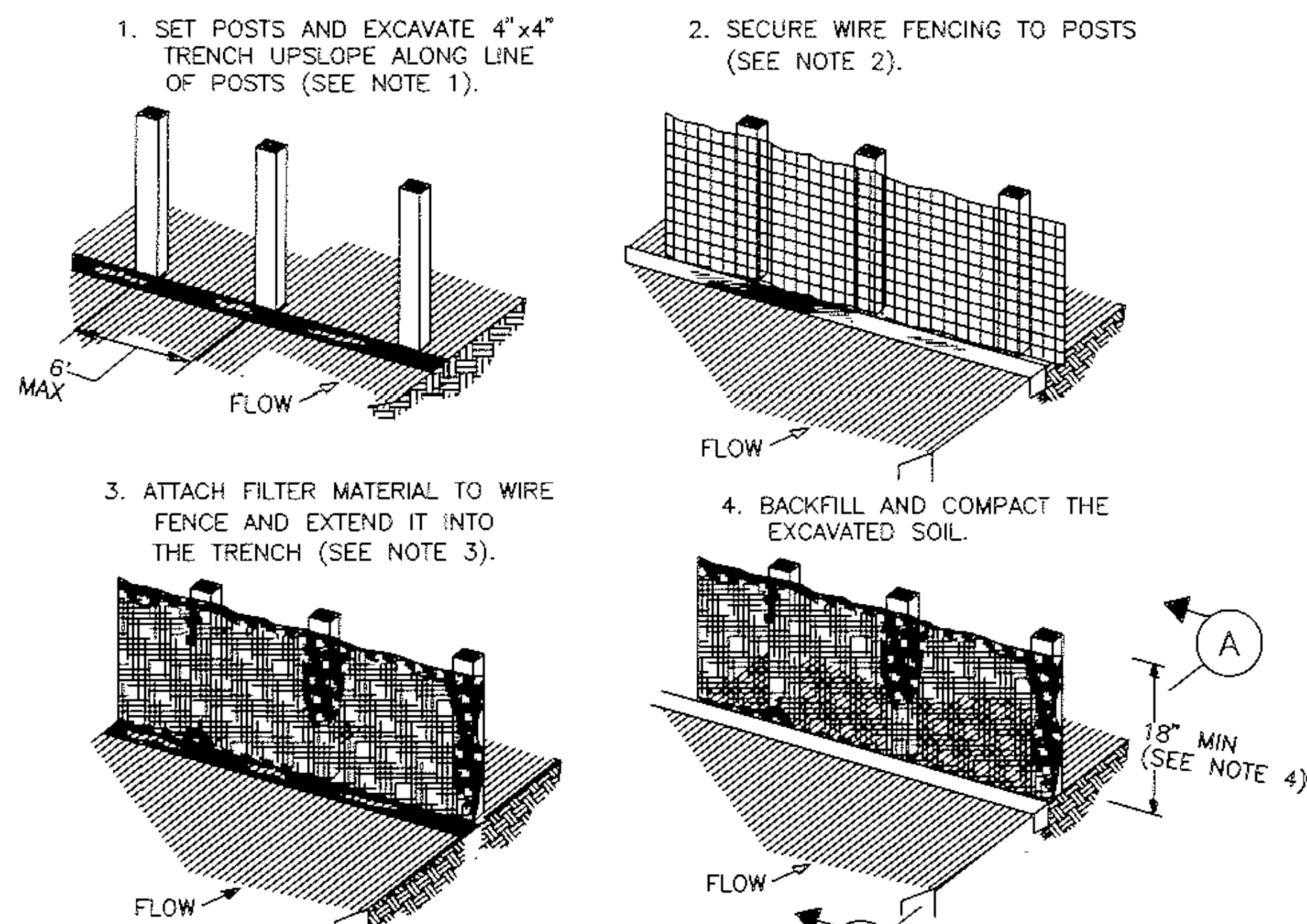
LJA PROJECT NO.:	2980-0104
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DRAWN: R.D.R./F.M. DESIGN: R.D.R./F.M. DATE: APRIL 2025

SCALE: N.T.S.

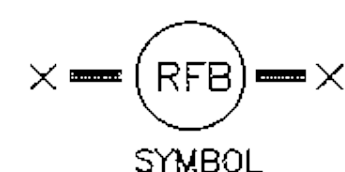
SHEET NO. 29 OF 30



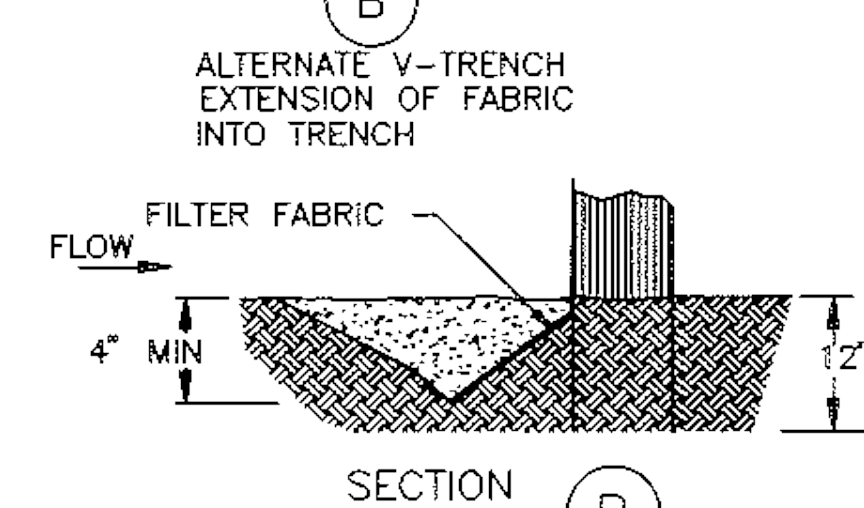
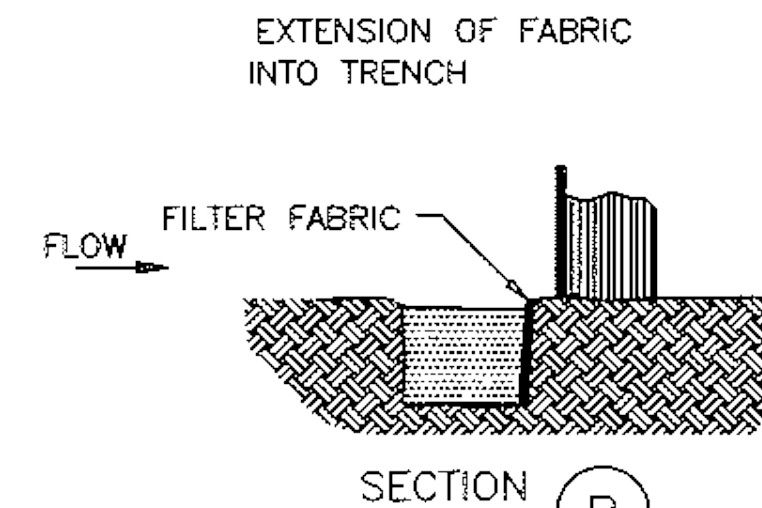
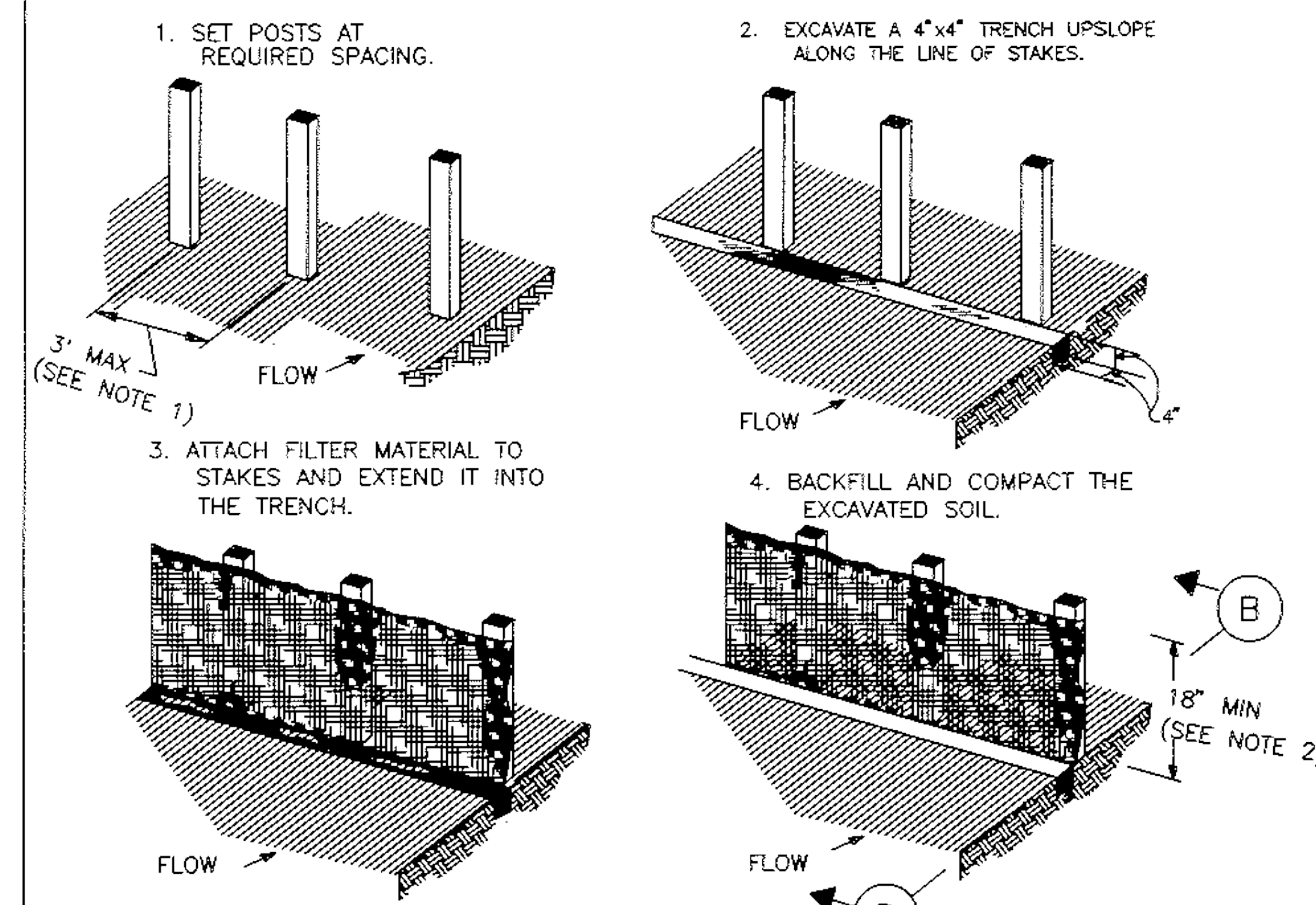


CONSTRUCTION NOTES:

1. SET 2 INCH BY 2 INCH WOODEN STAKES SPACED A MAX OF 6 FEET APART AND EMBEDDED A MIN OF 12 INCHES.
2. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH STAPLES.
3. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE, WITH TIES SPACED EVERY 24 INCHES AT TOP AND MIDSECTION.
4. MINIMUM HEIGHT OF FILTER SHOULD BE 18 INCHES AND A MAXIMUM OF 36 INCHES ABOVE NATURAL GROUND.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED 6 INCHES AT THE POSTS, AND FOLDED.
6. SEE COH STANDARD SPECIFICATION FOR FILTER FABRIC BARRIER.



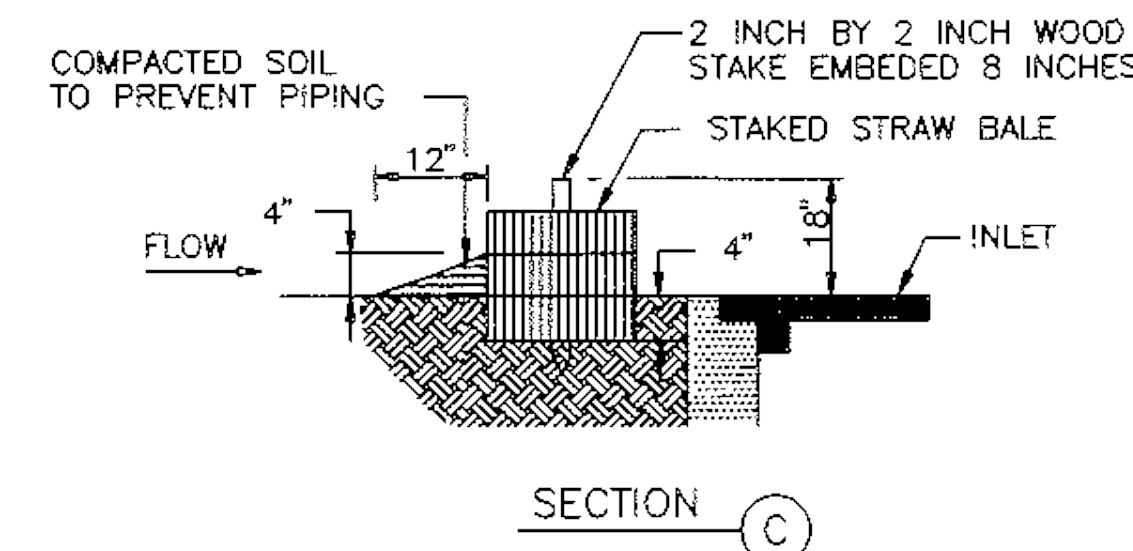
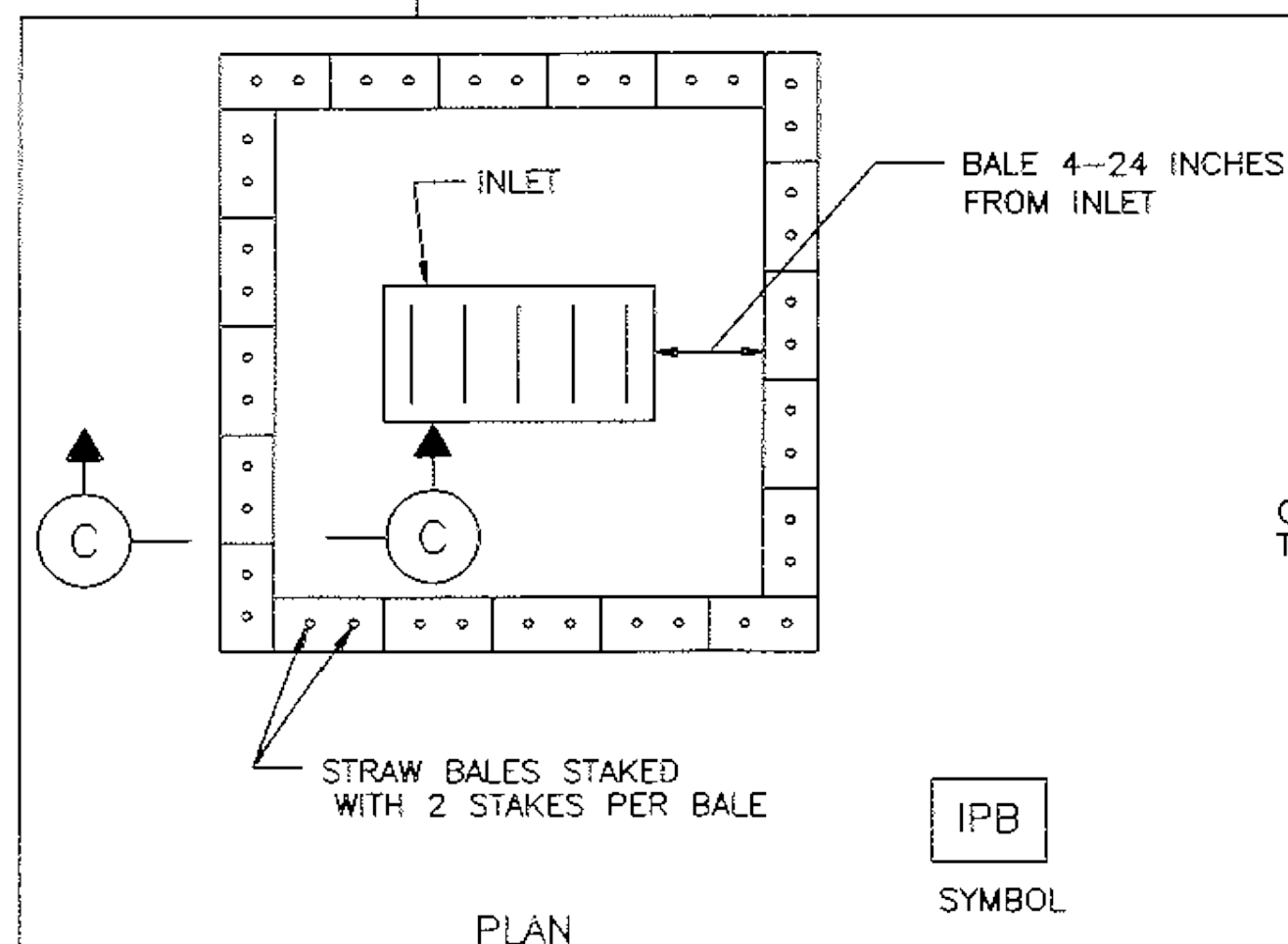
REINFORCED FILTER FABRIC BARRIER



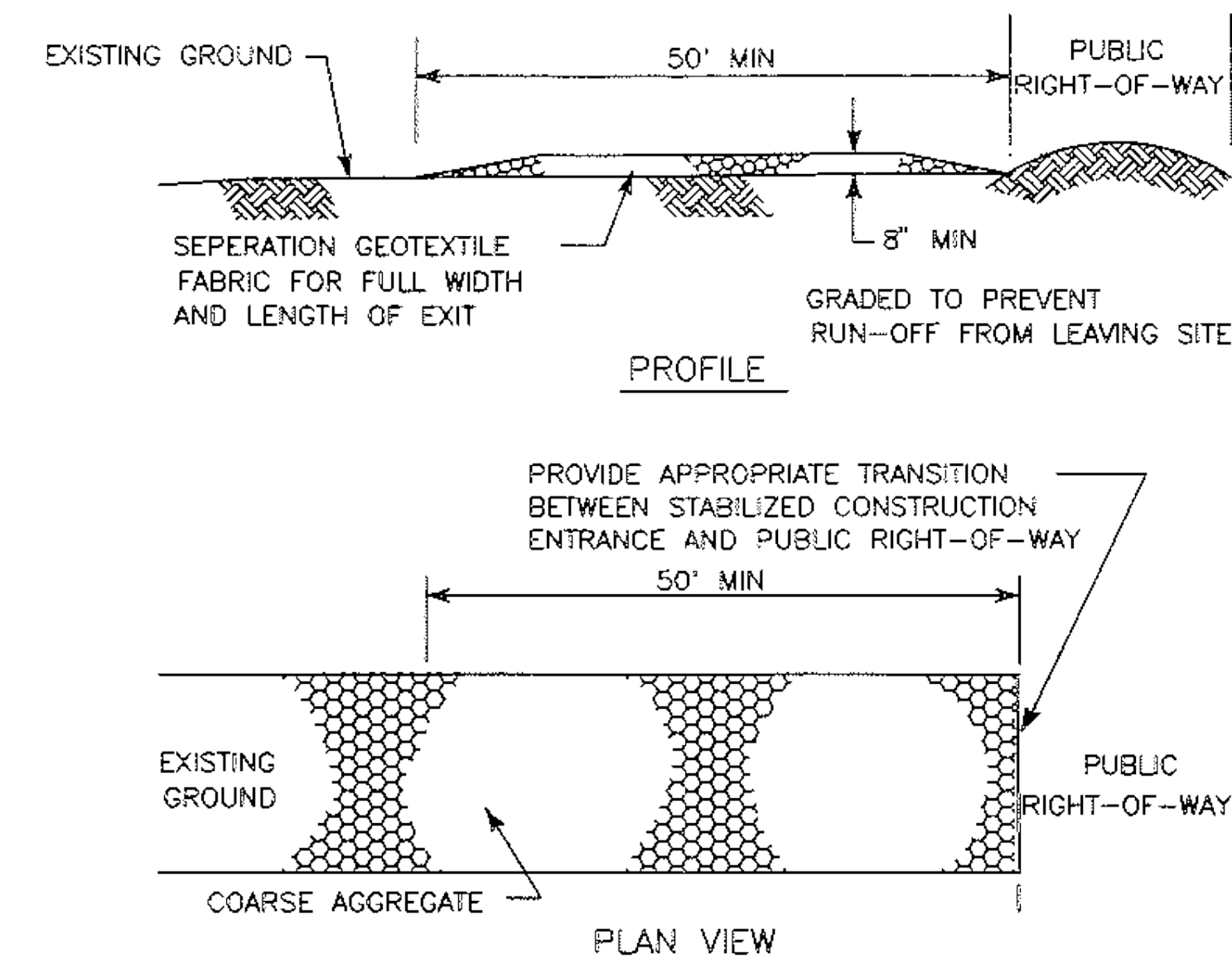
CONSTRUCTION NOTES:

1. 2 INCH THICK BY 2 INCH WOODEN STAKES TO BE SET AT MAX SPACING OF 3 FEET AND EMBEDDED A MIN OF 8 INCHES. IF PREASSEMBLED FENCE WITH SUPPORT NETTING IS USED, SPACING OF POST MAY BE INCREASED TO 8 FEET MAX.
2. ATTACH FILTER FABRIC TO WOODEN STAKES. FILTER FABRIC FENCE SHALL HAVE A MIN HEIGHT OF 18 INCHES AND MAX HEIGHT OF 36 INCHES ABOVE NATURAL GROUND.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHOULD BE OVERLAPPED 6 INCHES AT THE POSTS, AND FOLDED.
4. SEE COH STANDARD SPECIFICATION FOR FILTER FABRIC FENCE.

FILTER FABRIC FENCE

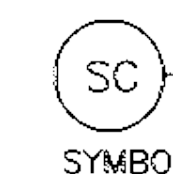


STRAW BALE DROP INLET PROTECTION BARRIER

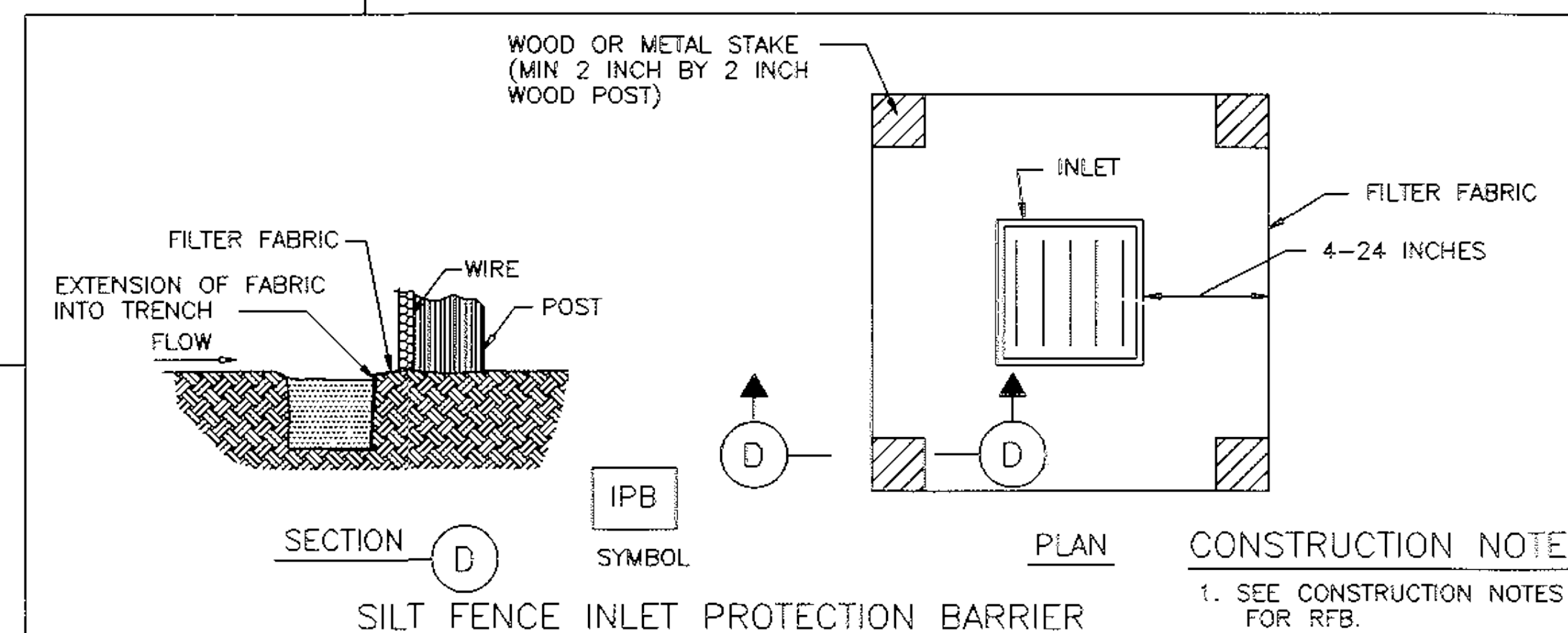


CONSTRUCTION NOTES:

1. LENGTH SHALL BE AS SHOWN ON THE 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 THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION EXIT, UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION DRAWINGS.
5. STABILIZED AREA MAY BE WIDENED OR LENGTHENED TO ACCOMMODATE A TRUCK WASHING AREA. AN OUTLET SEDIMENT TRAP MUST BE PROVIDED FOR THE TRUCK WASHING AREA.
6. SEE COH STANDARD SPECIFICATION FOR STABILIZED CONSTRUCTION EXIT.
7. STABILIZED CONSTRUCTION EXIT SHALL BE MAINTAINED FREE OF SEDIMENT FOR THE DURATION OF THE PROJECT.



STABILIZED CONSTRUCTION EXIT



SILT FENCE INLET PROTECTION BARRIER

CONSTRUCTION NOTE:

1. SEE CONSTRUCTION NOTES FOR RFB.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

STORM WATER POLLUTION PREVENTION PLAN DETAILS

(NOT TO SCALE)

APPROVED BY:
Shoudafin
CITY ENGINEER

APPROVED BY:
J. W. B.
DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: OCT-01-2002

DWG NO: 01571-01

