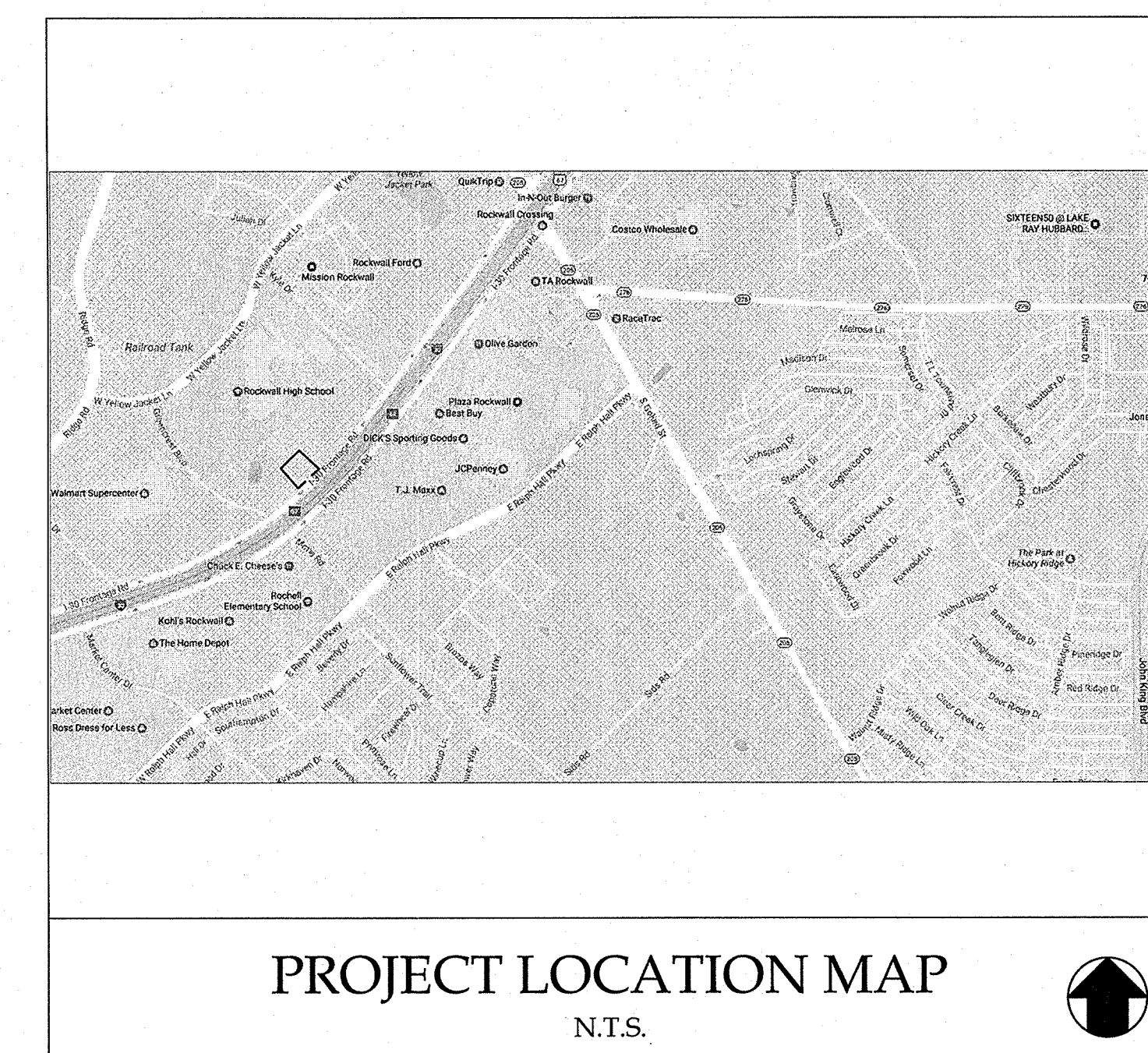


912 I-30 FRONTAGE ROAD  
ROCKWALL COUNTY  
ROCKWALL, TEXAS 75087  
ZONING: C  
COMMERCIAL

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DISCLAIMER  
TO THE BEST OF OUR KNOWLEDGE, GREENBERGFARROW, HEREBY STATES  
THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON  
SURVEYING THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.



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PROJECT NO. 16-156

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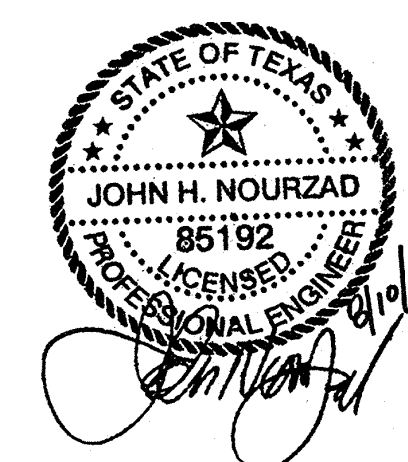
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	ALTA/ACSM LAND TITLE SURVEY
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JOB NO. 20151291.0

DATE: 8-7-2018



GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY AND ALL WAYS, MEANS AND METHODS OF CONSTRUCTION.
2. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL AGENCY CODES, STANDARDS AND SPECIFICATIONS.
3. CONTRACTOR SHALL OBTAIN ALL NECESSARY SITE PERMITS AND LICENSES FROM THE APPLICABLE GOVERNING AUTHORITIES.
4. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST STATE AND LOCAL GOVERNMENT CONSTRUCTION STANDARDS AND SPECIFICATIONS.
5. UNLESS OTHERWISE NOTED ON THE PLANS, CONTRACTOR SHALL NOTIFY THE LOCAL ENGINEERING OR PUBLIC WORKS DEPARTMENT AND/OR OTHER PROJECT GOVERNING AUTHORITY(S) A MINIMUM OF FORTY-EIGHT (48) HOURS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS AND TO SCHEDULE ANY REQUIRED SITE INSPECTIONS.
6. CONTRACTOR SHALL SCHEDULE A UTILITY LOCATING SERVICE AND/OR NOTIFY ALL UTILITY COMPANIES (GAS, ELECTRIC, TELEPHONE, CABLE, ETC.) AND THE LOCAL MUNICIPALITY TO DETERMINE THE LOCATION OF UNDERGROUND UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION IN ORDER TO AVOID POTENTIAL CONFLICTS. IT IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER INDICATED ON THE PLANS OR NOT AND TO HAVE THESE UTILITIES STAKED PRIOR TO CONSTRUCTION. ANY NECESSARY RELOCATIONS OR REMOVALS OF EXISTING UTILITY LINES SHALL BE PERFORMED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL PRIVATE AND PUBLIC UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE UTILITY OWNER. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING EXISTING AND PROPOSED UTILITIES TO FINISHED GRADE.
8. ALL EASEMENTS FOR EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS PREPARED BY THE SURVEYOR ACCORDING TO INFORMATION AVAILABLE FROM PUBLIC RECORDS OR VISIBLE FIELD MARKINGS. THE CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND FOR THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SO THE CONFLICT MAY BE RESOLVED.
9. ALL UTILITY CONNECTIONS TO EXISTING LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RULES AND REGULATIONS AND TO THE SATISFACTION OF THE APPLICABLE UTILITY OWNER(S).
10. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, COORDINATES AND ELEVATIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES SO THE CONFLICT MAY BE RESOLVED.
11. ALL PROPERTY MARKERS AND SURVEY REFERENCE MARKERS SHALL BE CAREFULLY PRESERVED DURING CONSTRUCTION UNTIL THEIR LOCATION HAS BEEN WITNESSED OR OTHERWISE TIED IN BY AN AUTHORIZED AGENT OR PROFESSIONALLY LICENSED SURVEYOR.
12. THE SAFE AND ORDERLY PASSAGE OF TRAFFIC AND PEDESTRIANS SHALL BE PROVIDED WHERE CONSTRUCTION OPERATIONS ABUT PUBLIC THROUGH-FARES AND ADJACENT PROPERTY.
13. ALL AREAS DISTURBED BY THE GENERAL CONTRACTOR OR SUB-CONTRACTORS SHALL BE RETURNED TO THE ORIGINAL CONDITION OR BETTER, EXCEPT WHERE PROPOSED CONSTRUCTION IS INDICATED ON THE PLANS.
14. PRIOR TO INITIAL ACCEPTANCE BY THE OWNER(S) AND/OR GOVERNING AUTHORITY, ALL WORK SHALL BE INSPECTED AND APPROVED BY THE OWNER AND MUNICIPALITY ENGINEER OR HIS REPRESENTATIVE(S). THE CONTRACTOR SHALL GUARANTEE HIS WORK FOR A PERIOD OF 2 (TWO) YEARS FROM THE DATE OF ACCEPTANCE OF THE CITY AND SHALL BE HELD RESPONSIBLE FOR ANY DEFECTS IN MATERIAL OR WORKMANSHIP OF THIS WORK DURING THAT PERIOD AND UNTIL FINAL ACCEPTANCE IS MADE.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE AND ADEQUATE WORKING CONDITIONS THROUGHOUT THE DURATION OF CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
16. CONTRACTOR SHALL KEEP THE PUBLIC STREET PAVEMENTS CLEAN OF DIRT AND DEBRIS AND, WHEN NECESSARY, CLEAN PAVEMENTS AT THE END OF EACH WORKING DAY.
17. ALL CONSTRUCTION STAKING, SCHEDULING AND PAYMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.
18. AFTER COMPLETION OF THE PROPOSED IMPROVEMENTS AND WHEN REQUIRED BY THE GOVERNING AUTHORITY(S), CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH AS-BUILT AND/OR RECORD DRAWINGS, SIGNED AND SEALED BY A PROFESSIONALLY LICENSED ENGINEER OR SURVEYOR AND SHALL INCLUDE AT A MINIMUM (WHERE APPLICABLE TO THE SCOPE OF WORK) THE FOLLOWING ITEMS:
  - 18.1. TOPOGRAPHY AND SPOT GRADE ELEVATIONS OF ALL PROPOSED PERMANENT SITE FEATURES INCLUDING ANY STORM WATER FACILITIES OR MODIFICATIONS TO EXISTING STORM WATER FACILITIES.
  - 18.2. HORIZONTAL AND VERTICAL LOCATION AND ALIGNMENT OF ALL PROPOSED ROADWAYS, PARKING LOTS, UTILITIES, BUILDINGS OR OTHER PERMANENT SITE FEATURES.
  - 18.3. RIM AND INVERT AND/OR TOP OF PIPE ELEVATIONS FOR ALL PROPOSED UTILITIES.
  - 18.4. AS-BUILT AND/OR RECORD DRAWING INFORMATION SHALL BE SHOWN ON THE APPROVED ENGINEERING PLANS ISSUED FOR CONSTRUCTION. ANY AND ALL DEVIATIONS FROM THESE APPROVED PLANS SHALL BE SHOWN BY MEANS OF STRIKING THROUGH THE PROPOSED INFORMATION AND CLEARLY INDICATING THE AS-BUILT LOCATIONS AND ELEVATIONS ON THE APPLICABLE PLAN SHEET.
  - 18.5. SIGNED/SEALED LETTER OF DRAINAGE COMPLETION THAT INCLUDES THE VERIFICATION OF THE DETENTION FACILITIES.
  - 18.6. SIGNED/SEALED LETTER OF CONCURRENCE FOR ANY RETAINING WALL 3' OR TALLER.

SITE GRADING AND PAVING NOTES:

1. ALL SITE WORK, GRADING, AND PAVING OPERATIONS WITHIN THE LIMITS OF THE PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE NOTES IN THE PLANS AND THE STANDARDS, SPECIFICATIONS, CODES AND ORDINANCES OF THE LOCAL GOVERNING AUTHORITIES. IN CASE OF CONFLICT, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE.
2. EARTH EXCAVATION SHALL INCLUDE CLEARING, STRIPPING AND STOCKPILING TOPSOIL, REMOVING UNSUITABLE MATERIALS, CONSTRUCTION OF EMBANKMENTS, NON-STRUCTURAL FILLS, FINAL SHAPING AND TRIMMING TO THE LINES, GRADES AND CROSS SECTIONS SHOWN ON THE PLANS. ALL UNSUITABLE OR EXCESS MATERIAL SHALL BE DISPOSED OF LEGALLY OFFSITE OR AS DIRECTED BY THE PROJECT REPRESENTATIVE IN THE FIELD.
3. EXCAVATED TOPSOIL SHALL BE STOCKPILED ON THE SITE IN AREAS DESIGNATED BY THE PROJECT ENGINEER UNTIL SUCH TIME THAT THIS TOPSOIL CAN BE USED FOR FINAL GRADING. UNLESS OTHERWISE NOTED ON THE PLANS, A MINIMUM OF 6" TOPSOIL RE-SPREAD AND SEEDING FOR ALL DISTURBED AREAS IS REQUIRED.
4. THE GEOTECHNICAL INVESTIGATION REPORT FOR THE SITE AND ALL ADDENDA THERETO ARE SUPPORTING DOCUMENTS FOR THIS PROJECT. THE RECOMMENDATIONS AS STATED IN SAID REPORT ARE HEREBY INCORPORATED INTO THESE CONSTRUCTION NOTES BY REFERENCE AND SHALL BE FOLLOWED BY ALL CONTRACTORS. THE GRADING OPERATIONS ARE TO BE CLOSELY SUPERVISED AND INSPECTED, PARTICULARLY DURING THE REMOVAL OF UNSUITABLE MATERIAL AND THE CONSTRUCTION OF EMBANKMENTS OR BUILDING PADS, BY A SOILS ENGINEER OR HIS REPRESENTATIVE. FURTHER CONSTRUCTION OPERATIONS WILL NOT BE PERMITTED UNTIL THE SOILS ENGINEER ISSUES A WRITTEN STATEMENT THAT THE AREA IN QUESTION HAS BEEN SATISFACTORILY PREPARED AND IS READY FOR CONSTRUCTION. ALL FILL TO BE COMPACTED TO A MINIMUM OF 95% USING A SHEEP'S FOOT ROLLER.
5. ALL TESTING, INSPECTION AND SUPERVISION OF SOIL QUALITY, UNSUITABLE SOIL REMOVAL AND ITS REPLACEMENT AND OTHER SOILS RELATED OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE COORDINATED WITH AND PERFORMED AT THE DIRECTION OF THE OWNER'S GEOTECHNICAL ENGINEER.
6. THE CONTRACTOR SHALL USE CARE IN GRADING NEAR TREES, SHRUBS, AND BUSHES WHICH ARE NOT NOTED TO BE REMOVED SO AS NOT TO CAUSE INJURY TO ROOTS OR TRUNKS.
7. THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS WHICH ARE NOT INDICATED TO BE REMOVED. ANY DAMAGE DONE TO THESE EXISTING ITEMS BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT HIS OWN EXPENSE.
8. REMOVED PAVEMENTS, SIDEWALKS, CURBS, TREES AND STUMPS SHALL BE DISPOSED OF LEGALLY OFFSITE AT LOCATIONS DETERMINED BY THE CONTRACTOR.
9. ON AND OFFSITE PAVING AND CURBS TO REMAIN SHALL BE PROTECTED FROM DAMAGE, AND, IF DAMAGED, SHALL BE REPLACED PROMPTLY TO MEET STATE AND LOCAL STANDARD SPECIFICATIONS IN MATERIALS AND WORKMANSHIP.
10. PROPOSED ELEVATIONS INDICATE FINISHED GRADE CONDITIONS. FOR ROUGH GRADING ELEVATIONS ALLOW FOR THE THICKNESS OF THE PROPOSED PAVEMENT SECTION (ROADS, WALKS, DRIVE, ETC.) OR TOPSOIL AS INDICATED ON THE PLANS.
11. CONTRACTOR SHALL PROVIDE SMOOTH VERTICAL CURVES THROUGH THE HIGH AND LOW POINTS INDICATED BY SPOT ELEVATIONS ON THE PLANS. CONTRACTOR SHALL PROVIDE UNIFORM SLOPES BETWEEN NEW AND EXISTING GRADES AND AVOID ANY RIDGES AND/OR DEPRESSIONS.
12. ALL PROPOSED GRADING, PAVEMENT, APRONS, CURBS, WALKS, ETC. SHALL MATCH EXISTING GRADES FLUSH.
13. ALL EXISTING AND PROPOSED TOP OF FRAME ELEVATIONS FOR STORM, SANITARY, WATER AND OTHER UTILITY STRUCTURES SHALL BE ADJUSTED TO MEET FINISHED GRADE WITHIN THE PROJECT LIMITS.
14. SITE GRADING AND CONSTRUCTION OF THE PROPOSED SITE IMPROVEMENTS SHALL NOT CAUSE PONDING OF STORM WATER. ALL AREAS ADJACENT TO THESE IMPROVEMENTS SHALL BE GRADED TO ALLOW POSITIVE DRAINAGE AND MATCH EXISTING GRADES FLUSH.
15. CONTRACTOR SHALL ENSURE POSITIVE SITE DRAINAGE AT THE END OF EACH WORKING DAY DURING CONSTRUCTION OPERATIONS. FAILURE TO PROVIDE ADEQUATE DRAINAGE WILL PRECLUDE THE CONTRACTOR FROM ANY POSSIBLE COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT.
16. DRIVEWAYS SHALL BE CONSTRUCTED SO AS NOT TO IMPEDE THE SURFACE DRAINAGE SYSTEM.
17. TRAFFIC CONTROL DEVICES SHALL BE IN CONFORMANCE WITH THE APPLICABLE STATE DEPARTMENT OF TRANSPORTATION STANDARDS AND SHALL BE INSTALLED AND PROVIDED WHENEVER CONSTRUCTION FOR UTILITIES ARE WITHIN STREET AREAS. APPLICABLE ORDINANCES OF THE MUNICIPALITY, COUNTY OR STATE SHALL ALSO GOVERN THE TRAFFIC CONTROL REQUIREMENTS.
18. 75%-80% OF ALL DISTURBED AREA TO HAVE A MINIMUM 1" STAND OF GRASS PRIOR TO CITY ACCEPTANCE

STORM SEWER NOTES:

1. ALL STORM SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE NOTES IN THE PLANS AND THE STANDARDS, SPECIFICATIONS, CODES AND ORDINANCES OF THE LOCAL GOVERNING AUTHORITIES. IN CASE OF CONFLICT, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE.
  2. STORM SEWER PIPE AND STRUCTURES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH LOCAL REQUIREMENTS AND SPECIFICATIONS.
  3. HDPE STORM SEWER PIPE SHALL BE HIGH DENSITY POLYETHYLENE PIPE PER ASTM F2306 WITH WATERTIGHT JOINTS CONFORMING TO ASTM D3212.
  4. STORM SEWER TRENCH EXCAVATIONS AND PIPE FOUNDATION, BEDDING AND HAUNCHING SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL REQUIREMENTS AND SPECIFICATIONS.
    - 4.1. PRIVATE STORM SEWERS MUST BE PLACED ON PROPERLY COMPACTED STONE BEDDING. PIPE BEDDING MATERIAL SHALL BE A MINIMUM OF FOUR (4) INCHES THICK UNDER THE BARREL OF THE PIPE AND FOR PVC PIPE, MATERIAL SHALL BE EXTENDED A MINIMUM OF 12" OVER THE TOP OF THE PIPE PER ASTM D2321. PIPE BEDDING MATERIAL SHALL BE CRUSHED GRAVEL OR STONE MEETING LOCAL STANDARD GRADATIONS.
    - 4.2. TRENCH BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR MAXIMUM DRY DENSITY, PER ASTM D698, OVER ALL STORM SEWERS WHICH ARE CONSTRUCTED UNDER, OR WITHIN TWO (2) FEET OF, ANY PROPOSED OR EXISTING PAVEMENT, PARKING LOTS OR SIDEWALKS.
  5. REQUIRED STORM STRUCTURE RIM ADJUSTMENTS SHALL BE MADE WITH PRECAST CONCRETE ADJUSTING RINGS NOT TO EXCEED A MAXIMUM OF EIGHT (8) INCHES IN OVERALL HEIGHT. A MAXIMUM OF TWO (2) ADJUSTING RINGS ARE ALLOWED. BUTYROPE JOINT SEALANT SHALL BE USED ON ALL JOINTS BETWEEN THE PRECAST ELEMENTS.
  6. FIELD TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM OR EXTENDED TO OUTLET INTO A PROPOSED DRAINAGE WAY. IF THIS CANNOT BE ACCOMPLISHED, THEN IT SHALL BE REPAIRED WITH NEW PIPE OF SIMILAR SIZE AND MATERIAL TO THE ORIGINAL LINE AND PUT IN ACCEPTABLE OPERATING CONDITION. A RECORD OF THE LOCATION OF ALL FIELD TILE OR DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE CONTRACTOR AND TURNED OVER TO THE OWNER AND/OR ENGINEER UPON COMPLETION OF THE PROJECT AND ACCURATELY SHOWN ON THE RECORD DRAWINGS.
  7. DETENTION SYSTEMS SHALL BE FULLY INSTALLED AND FUNCTIONING PER APPROVED PLAN PRIOR TO ANY PAVING INCLUDING SLAB BEING INSTALLED.
- SANITARY SEWER NOTES:
1. ALL SANITARY SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE NOTES IN THE PLANS AND THE STANDARDS, SPECIFICATIONS, CODES AND ORDINANCES OF THE LOCAL GOVERNING AUTHORITIES. IN CASE OF CONFLICT, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE.
  2. ALL SANITARY SEWER PIPE AND STRUCTURES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH LOCAL REQUIREMENTS AND SPECIFICATIONS.
  3. ALL SANITARY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) SDR 35 PIPE PER ASTM D3034 WITH WATERTIGHT JOINTS CONFORMING TO ASTM D3212, UNLESS OTHERWISE NOTED.
    - 3.1. WHERE SANITARY SEWER PIPE IS NOTED AS PVC C900, THE PIPE SHALL BE IN ACCORDANCE WITH AMERICAN WATER WORKS ASSOCIATION (AWWA) C900 WITH WATERTIGHT, PRESSURE RATED JOINTS CONFORMING TO ASTM D3139.
  4. SANITARY SEWER CONSTRUCTION SHALL COMMENCE AT THE EXISTING MANHOLE(S) AND/OR CONNECTION POINT(S) INDICATED ON THE PLANS.
    - 4.1. A WATERTIGHT PLUG SHALL BE INSTALLED AND LEFT IN PLACE AT THE POINT OF COMMENCEMENT UNTIL THE REMAINDER OF THE PROPOSED SEWERS HAVE BEEN CONSTRUCTED, PROPERLY TESTED AND DEEMED READY FOR FINAL ACCEPTANCE.
  5. ALL SANITARY SEWER TRENCH EXCAVATIONS AND PIPE FOUNDATION, BEDDING AND HAUNCHING SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL REQUIREMENTS AND SPECIFICATIONS.
    - 5.1. ALL SANITARY SEWERS MUST BE PLACED ON PROPERLY COMPACTED STONE BEDDING. PIPE BEDDING MATERIAL SHALL BE A MINIMUM OF FOUR (4) INCHES THICK UNDER THE BARREL OF THE PIPE AND FOR PVC PIPE, MATERIAL SHALL BE EXTENDED A MINIMUM OF 12" OVER THE TOP OF THE PIPE PER ASTM D2321. PIPE BEDDING MATERIAL SHALL BE CRUSHED GRAVEL OR STONE MEETING LOCAL STANDARD GRADATIONS.
    - 5.2. TRENCH BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR MAXIMUM DRY DENSITY, PER ASTM D698, OVER ALL SANITARY SEWERS WHICH ARE CONSTRUCTED UNDER, OR WITHIN TWO (2) FEET OF, ANY PROPOSED OR EXISTING PAVEMENT, PARKING LOTS OR SIDEWALKS.
  6. THE CONTRACTOR IS REQUIRED TO RECORD THE LOCATION OF ALL SEWERS AND FURNISH THE INFORMATION TO THE PROJECT ENGINEER AND/OR OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL LOCATE ALL SEWERS BY MEASUREMENTS TO LOT CORNERS OR OTHER PERMANENT SITE FEATURE AND SHALL FURNISH A COPY OF SUCH LOCATIONS TO THE PROJECT ENGINEER AND/OR OWNER'S REPRESENTATIVE UPON PROJECT COMPLETION. THIS INFORMATION SHALL ALSO INCLUDE THE DEPTH OF EACH SEWER. IF THE CONTRACTOR FAILS TO PROPERLY LOCATE ANY SEWER, HE SHALL BE RESPONSIBLE FOR ALL COSTS WHICH ARE INCURRED AS A RESULT OF THE IMPROPERLY LOCATED UTILITIES.
  7. SANITARY SEWER MANHOLES SHALL BE PRECAST CONCRETE AND SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE DETAILS IN THE PLANS.
    - 7.1. A FLEXIBLE TYPE JOINT SHALL BE FURNISHED AT POINTS OF ENTRY INTO AND EXITING FROM MANHOLE STRUCTURES AND SHALL BE OF A DESIGN APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. THIS FLEXIBLE JOINT MAY CONSIST OF A SLEEVE OF HIGH QUALITY SYNTHETIC RUBBER WITH A SUBSTANTIAL SERRATED FLANGE WHICH IS CAST DIRECTLY INTO THE WALL OF THE MANHOLE BASE TO FORM A WATERTIGHT SEAL AND PROTRUDES OUTSIDE OF THE MANHOLE WALL TO CONNECT WITH THE PIPE ENTERING/EXITING THE MANHOLE. WHEN THIS TYPE OF FLEXIBLE JOINT IS USED, THE SLEEVE SHALL SLIP OVER THE END OF THE PIPE ADJACENT TO THE MANHOLE BASE AND SHALL BE SECURED BY MEANS OF A STAINLESS STEEL STRAP CLAMP EQUIPPED WITH A DRAW BOLT AND NUT.
  8. REQUIRED MANHOLE RIM ADJUSTMENTS SHALL BE MADE WITH PRECAST CONCRETE ADJUSTING RINGS NOT TO EXCEED A MAXIMUM OF EIGHT (8) INCHES IN OVERALL HEIGHT. A MAXIMUM OF TWO (2) ADJUSTING RINGS ARE ALLOWED. BUTYROPE JOINT SEALANT SHALL BE USED ON ALL JOINTS BETWEEN THE PRECAST ELEMENTS.

SANITARY SEWER NOTES (continued):

9. AFTER FINAL ADJUSTMENTS HAVE BEEN MADE, ALL JOINTS IN PRECAST STRUCTURES SHALL BE MORTARED. THE MORTAR SHALL BE COMPOSED OF ONE (1) PART CEMENT TO THREE (3) PARTS SAND, BY VOLUME, BASED ON DRY MATERIALS, AND SHALL BE THOROUGHLY WETTED BEFORE LAYING.
  10. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR MANHOLE, THE FOLLOWING METHOD SHALL BE USED:
    - 10.1. CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ('SEWER-TAP' MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUB-WYE SADDLE OR HUB-TEE SADDLE.
  11. UPON COMPLETION OF THE SANITARY SEWER CONSTRUCTION, INCLUDING THE SERVICE LINES, ALL SEWERS SHALL BE TESTED IN ACCORDANCE WITH SECTIONS LOCAL REQUIREMENTS AND SPECIFICATIONS AND SHALL BE WITNESSED BY THE LOCAL GOVERNING AUTHORITY OR AUTHORIZED REPRESENTATIVE.
  12. CONTRACTOR TO INSTALL GREEN EMS DISK ON THE SEWER LINES AT EVERY CHANGE IN DIRECTION, MANHOLE, SERVICE CONNECTION, AND CLEANOUTS.
- WATER MAIN AND WATER SERVICE NOTES:
1. ALL WATER MAIN CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE NOTES IN THE PLANS AND THE STANDARDS, SPECIFICATIONS, CODES AND ORDINANCES OF THE LOCAL GOVERNING AUTHORITIES. IN CASE OF CONFLICT, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE.
  2. WATER MAIN PIPE AND STRUCTURES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH LOCAL REQUIREMENTS AND SPECIFICATIONS.
  3. WATER MAIN SHALL BE POLYVINYL CHLORIDE (PVC) PIPE IN ACCORDANCE WITH AMERICAN WATER WORKS ASSOCIATION (AWWA) PRE CLASS 200 C900 DR14 WITH PRESSURE RATED FLEXIBLE (O-RING) SLIP ON JOINTS CONFORMING TO ASTM D3139, UNLESS OTHERWISE NOTED.
  4. UNLESS OTHERWISE NOTED ON THE PLANS, ALL WATER MAIN PIPE SHALL BE LAID WITH A MINIMUM COVER OF FIVE (5) FEET FROM THE PROPOSED FINISH GRADE INDICATED ON THE PLANS OR TO THE SPECIFIC TOP OF PIPE ELEVATION INDICATED ON THE PLANS FOR THE WATER MAIN. NO BERMS ARE ALLOWED OVER WATER MAINS EXCLUSIVELY FOR THE PURPOSE OF OBTAINING ADEQUATE GROUND COVER.
  5. WATER MAIN TRENCH EXCAVATIONS AND PIPE FOUNDATION, BEDDING AND HAUNCHING SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL REQUIREMENTS AND SPECIFICATIONS.
    - 5.1. B3 FOR WATER COMPACTED TO 95% SAND.
    - 5.2. TRENCH BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR MAXIMUM DRY DENSITY, PER ASTM D698, OVER ALL WATER MAINS WHICH ARE CONSTRUCTED UNDER, OR WITHIN TWO (2) FEET OF, ANY PROPOSED OR EXISTING PAVEMENT, PARKING LOTS OR SIDEWALKS.
  6. A WATERTIGHT PLUG SHALL BE PLACED IN THE END OF THE WATER MAIN PIPE AT THE END OF EACH CONSTRUCTION DAY.
  7. UPON COMPLETION OF THE WATERMAIN CONSTRUCTION, ALL WATER MAIN SHALL BE TESTED IN ACCORDANCE WITH THE FOLLOWING MINIMUM STANDARDS:
    - 7.1. HYDROSTATIC PRESSURE AND LEAKAGE TESTS IN ACCORDANCE WITH LOCAL REQUIREMENTS AND SPECIFICATIONS AND SHALL BE WITNESSED BY THE LOCAL GOVERNING AUTHORITY.
    - 7.2. DISINFECTION IN ACCORDANCE WITH LOCAL REQUIREMENTS AND THE METHODS STATED IN AWWA STANDARD C651 AND WITNESSED BY THE LOCAL GOVERNING AUTHORITY.
  8. WATER SERVICE PIPING AND STRUCTURES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH LOCAL REQUIREMENTS AND SPECIFICATIONS.
  9. WATER SERVICE LINES 2" IN DIAMETER OR SMALLER SHALL BE TYPE "K" COPPER TUBING CONFORMING TO ASTM B88-14. NO COUPLINGS SHALL BE PERMITTED BETWEEN THE CORPORATION AND CURB STOPS OR BETWEEN THE CURB STOP AND THE BUILDING.
  10. WATER SERVICE FITTINGS INCLUDING CORPORATION STOPS, SERVICE BOXES AND BUFFALO BOXES SHALL BE FURNISHED IN ACCORDANCE WITH LOCAL REQUIREMENTS AND SPECIFICATIONS.
  11. SERVICE BOXES SHALL BE OF SUFFICIENT LENGTH TO PERMIT THE TOP TO BE INSTALLED FLUSH WITH THE FINISHED GRADE. EACH SERVICE BOX SHALL BE PROVIDED WITH A CAP WITH THE WORD "WATER" CAST IN THE TOP.
  12. VALVES, VALVE BOXES OR VAULTS SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH LOCAL REQUIREMENTS.
  13. PRESSURE CONNECTIONS TO THE EXISTING WATER MAIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL REQUIREMENTS AND SPECIFICATIONS AND SHALL INCLUDE THE INSTALLATION OF A FULL STAINLESS STEEL TAPPING SADDLE.
  14. VALVE VAULTS SHALL HAVE A MINIMUM DIAMETER OF FIVE (5) FEET BELOW THE PRECAST CONCRETE CONE SECTION. THE VAULTS SHALL BE CONSTRUCTED OF PRECAST CONCRETE SECTIONS AND SHALL CONFORM TO THE DETAILS SPECIFIED ON THE PLANS. ALL VALVE VAULTS SHALL BE LEAK PROOF.
  15. TEMPORARY CONNECTIONS FOR CONSTRUCTION PURPOSES TO NEWLY INSTALLED OR EXISTING WATER MAINS SHALL BE MADE AND METERED IN ACCORDANCE WITH LOCAL REQUIREMENTS.
  16. REQUIRED RIM ADJUSTMENTS SHALL BE MADE WITH PRECAST CONCRETE ADJUSTING RINGS NOT TO EXCEED A MAXIMUM OF EIGHT (8) INCHES IN OVERALL HEIGHT. A MAXIMUM OF TWO (2) ADJUSTING RINGS ARE ALLOWED. BUTYROPE JOINT SEALANT SHALL BE USED ON ALL JOINTS BETWEEN THE PRECAST ELEMENTS.
  17. BENDS ON 4" AND GREATER WATER LINES SHALL BE PROVIDED WITH RESTRAINED JOINTS. (MEGALUG SERIES 2000 OR APPROVED EQUAL)
  18. CONTRACTOR TO INSTALL BLUE EMS DISKS ON THE WATER LINE, EVERY FIRE HYDRANT, 250', VALVE, SERVICE CONNECTION, AND BEND.

WATER AND SEWER SEPARATION NOTES:

1. WATER MAINS SHALL BE LOCATED AT LEAST TEN (10) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER, COMBINED SEWER, OR SEWER SERVICE CONNECTION.
2. WATER MAINS MAY BE LOCATED CLOSER THAN TEN (10) FEET TO A SEWER LINE WHEN:
  - 2.1. LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF TEN (10) FEET; AND
  - 2.2. THE WATER MAIN INVERT IS AT LEAST EIGHTEEN (18) INCHES ABOVE THE CROWN OF THE SEWER; AND
  - 2.3. THE WATER MAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER.
3. WHEN IT IS IMPOSSIBLE TO MEET 1) OR 2) ABOVE, BOTH THE WATER MAIN AND DRAIN OR SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, PRE-STRESSED CONCRETE PIPE, OR PVC PIPE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION. THE DRAIN OR SEWER SHALL BE PRESSURE TESTED FOR THE MAXIMUM EXPECTED SURCHARGE HEAD PRIOR TO BACKFILLING.
  - 3.1. PUBLIC WATER AND SEWERS TO BE CONCRETE ENCASED (10' EITHER SIDE OF CROSSING) IF 2' OF CLEARANCE IS NOT ACHIEVED.
4. WATER MAINS SHALL BE SEPARATED FROM A SEWER SO THAT ITS INVERT IS A MINIMUM OF EIGHTEEN (18) INCHES ABOVE THE CROWN OF THE DRAIN OR SEWER WHENEVER WATER MAINS CROSS STORM SEWERS, SANITARY SEWERS, OR SEWER SERVICE CONNECTIONS. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATER MAIN LOCATED WITHIN TEN (10) FEET HORIZONTALLY OF ANY SEWER OR DRAIN CROSSED. A LENGTH OF WATER MAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER OR DRAIN.
5. BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, PRE-STRESSED CONCRETE PIPE, OR PVC PIPE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION WHEN:
  - 5.1. IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN 4) ABOVE; OR THE WATER MAIN PASSES UNDER A SEWER OR DRAIN
6. A VERTICAL SEPARATION OF EIGHTEEN (18) INCHES BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATER MAIN SHALL BE MAINTAINED WHERE A WATER MAIN CROSSES UNDER A SEWER. THE SEWER OR DRAIN LINES SHALL BE SUPPORTED TO PREVENT SETTLING AND BREAKING OF THE WATER MAIN, AS SHOWN ON THE PLANS OR AS APPROVED BY THE ENGINEER.
7. CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE PERPENDICULAR DISTANCE FROM THE WATER MAIN TO THE SEWER OR DRAIN LINE IS AT LEAST TEN (10) FEET.

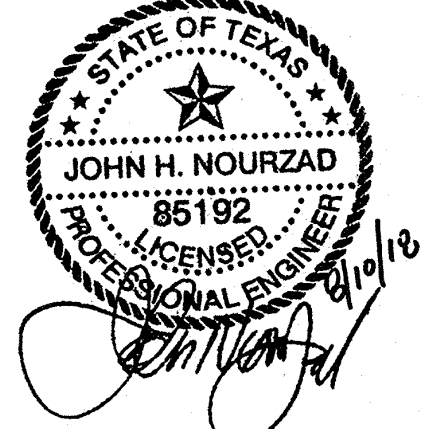
PROJECT TEAM

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2.1. LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF TEN (10) FEET; AND
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2.3. THE WATER MAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER.
3. WHEN IT IS IMPOSSIBLE TO MEET 1) OR 2) ABOVE, BOTH THE WATER MAIN AND DRAIN OR SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, PRE-STRESSED CONCRETE PIPE, OR PVC PIPE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION. THE DRAIN OR SEWER SHALL BE PRESSURE TESTED FOR THE MAXIMUM EXPECTED SURCHARGE HEAD PRIOR TO BACKFILLING.
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7. CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE PERPENDICULAR DISTANCE FROM THE WATER MAIN TO THE SEWER OR DRAIN LINE IS AT LEAST TEN (10) FEET.

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PROFESSIONAL IN CHARGE  
**JOHN NOURZAD**  
PROFESSIONAL ENGINEER  
LICENSE NO. 85192

PROJECT MANAGER  
JEFF RATH

QUALITY CONTROL  
LARRY DIEHL  
DRAWN BY  
MITCH HEFFERNAN

PROJECT NAME  
**TEXAS ROADHOUSE**

ROCKWALL TEXAS  
912 I-30 FRONTAGE ROAD

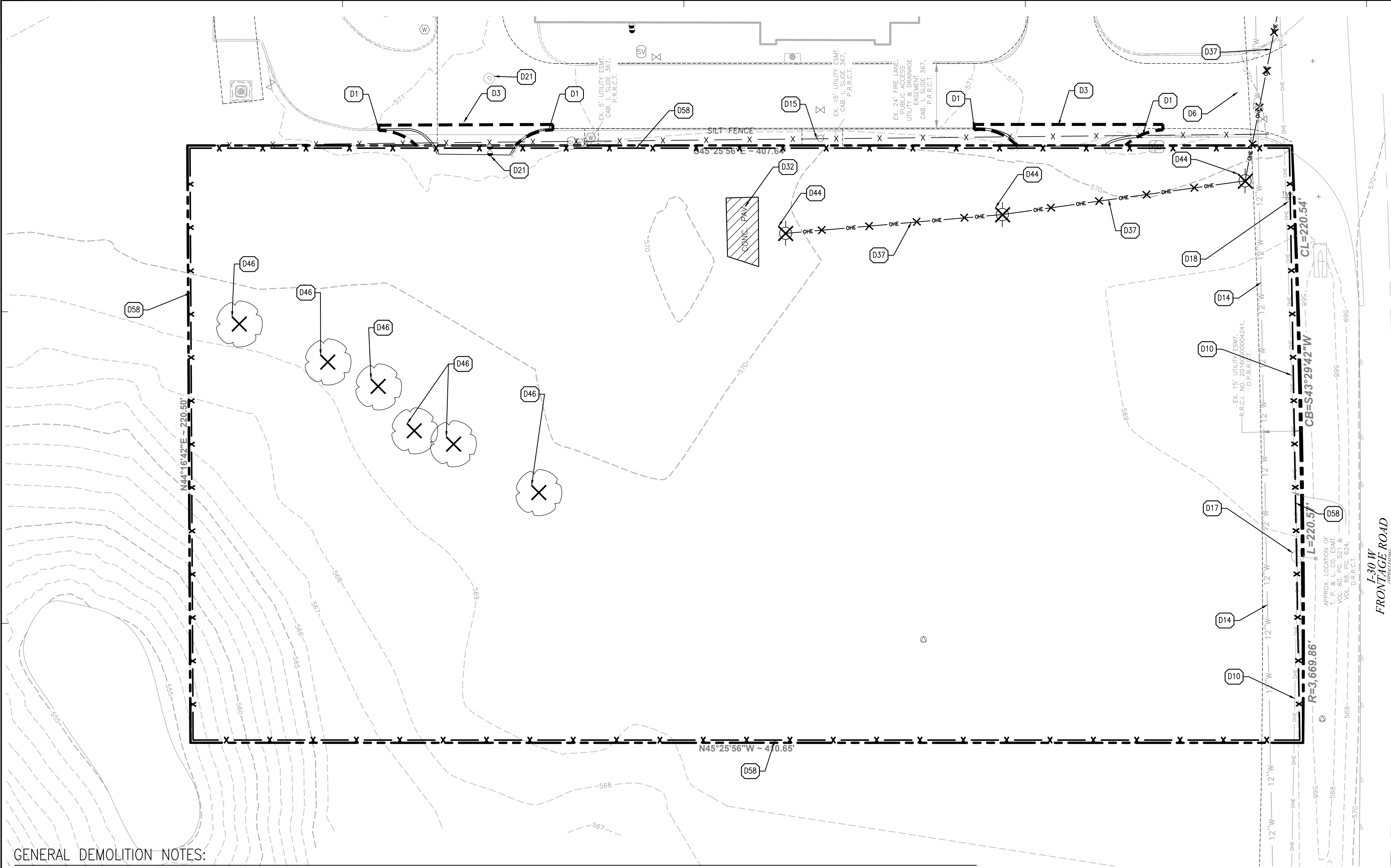


PROJECT NUMBER  
201512910

SHEET TITLE  
**GENERAL NOTES**

SHEET NUMBER  
**C1.0**





GENERAL DEMOLITION NOTES:

- CONTRACTOR SHALL CONTACT STATE ONE CALL SYSTEM (811) AND/OR PRIVATE LOCATING SERVICE TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO STARTING ANY DEMOLITION AND/OR EXCAVATION. EXACT LOCATIONS OF ANY EXISTING ELECTRIC, GAS, TELEPHONE, ETC. LINES ARE UNKNOWN.
- CONTRACTOR SHALL PERFORM ALL DEMOLITION WORK IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY DEMOLITION PERMITS AND COORDINATE ALL DEMOLITION WORK WITH THE MUNICIPALITY AND OWNERS REPRESENTATIVE TO ENSURE PROTECTION AND MAINTENANCE OF EXISTING SITE FEATURES NOT NOTED FOR REMOVAL.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES AND DEVICES SHALL BE INSTALLED AND FUNCTIONAL BEFORE THE SITE IS OTHERWISE DISTURBED. THEY SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SITE STABILIZATION HAS BEEN ACHIEVED (SEE STORMWATER POLLUTION PREVENTION PLAN FOR ADDITIONAL INFORMATION AND DETAILS).
- THE PURPOSE OF THIS DRAWING IS TO CONVEY THE OVERALL SCOPE OF DEMOLITION WORK AND IT IS NOT INTENDED TO COVER ALL DETAILS OR SPECIFICATIONS REQUIRED TO COMPLY WITH GENERALLY ACCEPTED DEMOLITION PRACTICES. CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE SITE, SCOPE OF WORK, AND ALL EXISTING CONDITIONS AT THE JOB SITE PRIOR TO BIDDING AND COMMENCING THE WORK. THE DEMOLITION CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, OR PROCEDURES USED TO COMPLETE THE WORK IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND IS LIABLE FOR THE SAFETY OF THE PUBLIC AND CONTRACTOR'S EMPLOYEES DURING THE COURSE OF THE PROJECT.
- THE DEMOLITION PLAN IS INTENDED TO SHOW REMOVAL OF KNOWN SITE FEATURES AND UTILITIES AS SHOWN ON THE SURVEY PROVIDED TO THE ENGINEER FOR DESIGN. THERE MAY BE OTHER SITE FEATURES, UTILITIES, STRUCTURES, AND MISCELLANEOUS ITEMS BOTH BURIED AND ABOVE GROUND THAT ARE WITHIN THE LIMITS OF WORK THAT MAY REQUIRE REMOVAL FOR THE PROPOSED SITE IMPROVEMENTS BUT THAT ARE NOT SHOWN HEREON. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF SUCH ITEMS AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES PRIOR TO COMMENCING ANY SITE DEMOLITION OPERATIONS TO COORDINATE DISCONNECTION AND REMOVAL OF EXISTING UTILITIES WITHIN THE PROPOSED AREA OF WORK. CONTRACTOR SHALL ALSO CONTACT CATLIN DAWSON WITH TEXAS ROADHOUSE (502-855-5556 OR CATLIN.DAWSON@TEXASROADHOUSE.COM) TO COORDINATE

- DISCONNECTION OF THE EXISTING BUILDING TELEPHONE SERVICE.
- CONTRACTOR SHALL COORDINATE ANY SHUT DOWNS OF EXISTING ROADWAYS AND UTILITIES WITH THE NECESSARY GOVERNING AUTHORITIES.
- ALL EXISTING BUILDINGS, FOUNDATIONS, CONCRETE OR ASPHALT PAVEMENT OR WALKS, CURB AND GUTTER AND MISCELLANEOUS STRUCTURES (INCLUDING, BUT NOT LIMITED TO FENCES, POLES, YARD LIGHTS, ELECTRICAL PANELS, WHEEL STOPS AND MISCELLANEOUS DEBRIS) NOTED TO BE REMOVED SHALL BE DEMOLISHED, REMOVED FROM THE SITE AND LEGALLY DISPOSED OF BY THE CONTRACTOR.
- VOIDS LEFT BY ANY ITEM REMOVED UNDER ANY PROPOSED BUILDINGS, PAVEMENTS, OR WALKS OR WITHIN 24" THEREOF SHALL BE BACKFILLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND GEOTECHNICAL REPORT.
- AS SOON AS DEMOLITION WORK HAS BEEN COMPLETED, FINAL GRADE OF BACKFILL IN DEMOLITION AREAS SHALL BE COMPACTED PER THE GEOTECHNICAL REPORT TO PRESENT A NEAT, WELL DRAINED APPEARANCE, AND TO PREVENT WATER FROM DRAINING UNNECESSARILY ONTO ADJACENT PROPERTIES. CONTRACTOR SHALL PROVIDE TEMPORARY DIVERSION SWALES OR OTHER MEANS OF MAINTAINING ADEQUATE SITE DRAINAGE.
- ALL EXISTING TREES SHOWN ARE TO REMAIN UNLESS OTHERWISE NOTED (REFER TO LANDSCAPE PLANS FOR ALL LANDSCAPING REMOVAL REQUIREMENTS).
- ALL EXISTING TREES, BRUSH AND MISCELLANEOUS VEGETATION NOTED TO BE REMOVED SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR (REFER TO LANDSCAPE PLANS FOR ALL LANDSCAPING REMOVAL REQUIREMENTS).
- CONTRACTOR SHALL UTILIZE CARE WHEN WORKING NEAR EXISTING UTILITIES TO REMAIN. ANY DAMAGE TO EXISTING UTILITIES NOT NOTED TO BE REMOVED SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
- CONTRACTOR SHALL REPAIR AT HIS EXPENSE ANY DAMAGE TO EXISTING ASPHALT, CONCRETE, CURBS, SIDEWALKS, ETC. RESULTING FROM CONSTRUCTION TRAFFIC AND/OR OPERATIONS. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
- ALL FIRE ACCESS LANES WITHIN THE PROJECT AREA SHALL REMAIN IN SERVICE, CLEAN OF DEBRIS, AND ACCESSIBLE FOR USE BY EMERGENCY VEHICLES.
- ALL EXISTING SANITARY SEWERS, STORM SEWERS, WATER MAINS OR IRRIGATION LINES AND APPURTENANCES NOTED FOR REMOVAL WITHIN THE AREA OF THE PROPOSED CONSTRUCTION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR. ALL ABANDONED SEWER LINES SHALL BE PLUGGED AT BOTH ENDS WITH A MINIMUM OF TWO

- (2) FEET LONG NON-SHRINK CONCRETE MORTAR PLUGS UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL MAKE NECESSARY ARRANGEMENTS TO HAVE RECYCLABLE MATERIALS REMOVED FROM THE SITE AND RECYCLED.
- SEE GENERAL NOTES SHEET FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

DEMOLITION PLAN LEGEND:

- PROPERTY LINE
- PROPOSED SAW CUT LINE
- EXISTING ELECTRIC LINE TO BE REMOVED
- PROPOSED CONSTRUCTION FENCE
- EXISTING TREE TO BE REMOVED

NOTE: SEE SHEET C1.0 FOR EXISTING LEGEND

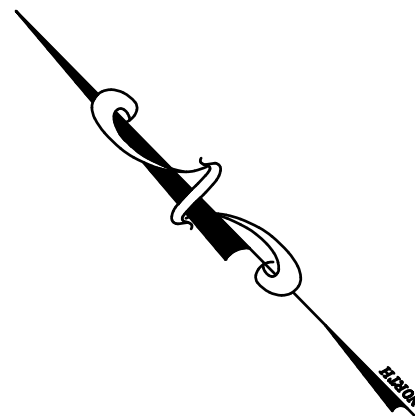
DEMOLITION HATCH LEGEND:

- EXISTING ASPHALT PAVEMENT TO BE REMOVED
- EXISTING CONCRETE PAVEMENT TO BE REMOVED

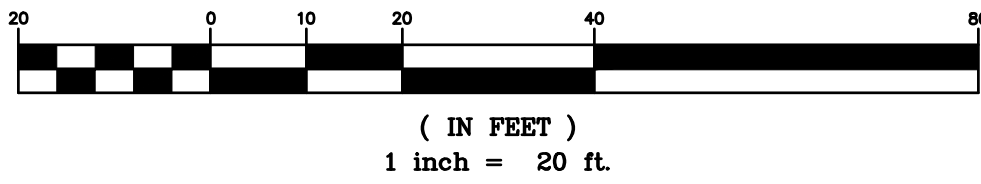
DEMOLITION KEY NOTES:

- D1 SAW CUT EXISTING CONCRETE CURB
- D3 SAW CUT EXISTING CONCRETE PAVEMENT
- D6 EXISTING CONCRETE PAVEMENT TO REMAIN
- D10 APPROXIMATE LOCATION OF EXISTING OVERHEAD ELECTRICAL LINE TO REMAIN
- D15 EXISTING FIRE HYDRANT TO REMAIN
- D14 APPROXIMATE LOCATION OF EXISTING WATER LINE TO REMAIN
- D18 EXISTING POWER POLE TO REMAIN
- D18 EXISTING SIGN TO REMAIN
- D21 EXISTING SANITARY STRUCTURE TO REMAIN
- D32 EXISTING CONCRETE PAVEMENT TO BE REMOVED
- D37 APPROXIMATE LOCATION OF EXISTING OVERHEAD ELECTRICAL LINE TO BE REMOVED
- D44 EXISTING POWER POLE TO BE REMOVED
- D46 EXISTING TREE TO BE REMOVED
- D58 PROPOSED CONSTRUCTION FENCE

I-30 W  
FRONTAGE ROAD  
(CONSTRUCTION)



GRAPHIC SCALE

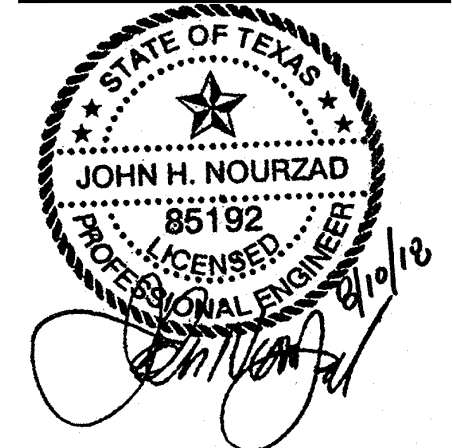


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PROFESSIONAL IN CHARGE  
JOHN NOURZAD  
PROFESSIONAL ENGINEER  
LICENSE NO. 85192

PROJECT MANAGER  
JEFF RATH

QUALITY CONTROL  
LARRY DIEHL

DRAWN BY  
MITCH HEFFERNAN

PROJECT NAME  
TEXAS  
ROADHOUSE

ROCKWALL  
TEXAS  
912 I-30 FRONTAGE ROAD



PROJECT NUMBER  
201512910

SHEET TITLE  
DEMOLITION  
PLAN

SHEET NUMBER  
C2.0

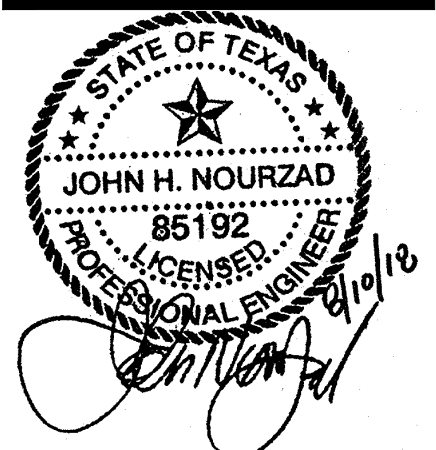


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## PROFESSIONAL IN CHARGE

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PROFESSIONAL ENGINEER  
LICENSE NO. 85192

## PROJECT MANAGER

JEFF RATH

## QUALITY CONTROL

LARRY DIEHL

## DRAWN BY

MITCH HEFFERNAN

## PROJECT NAME

TEXAS  
ROADHOUSE

## ROCKWALL

## TEXAS

912 I-30 FRONTAGE ROAD



## PROJECT NUMBER

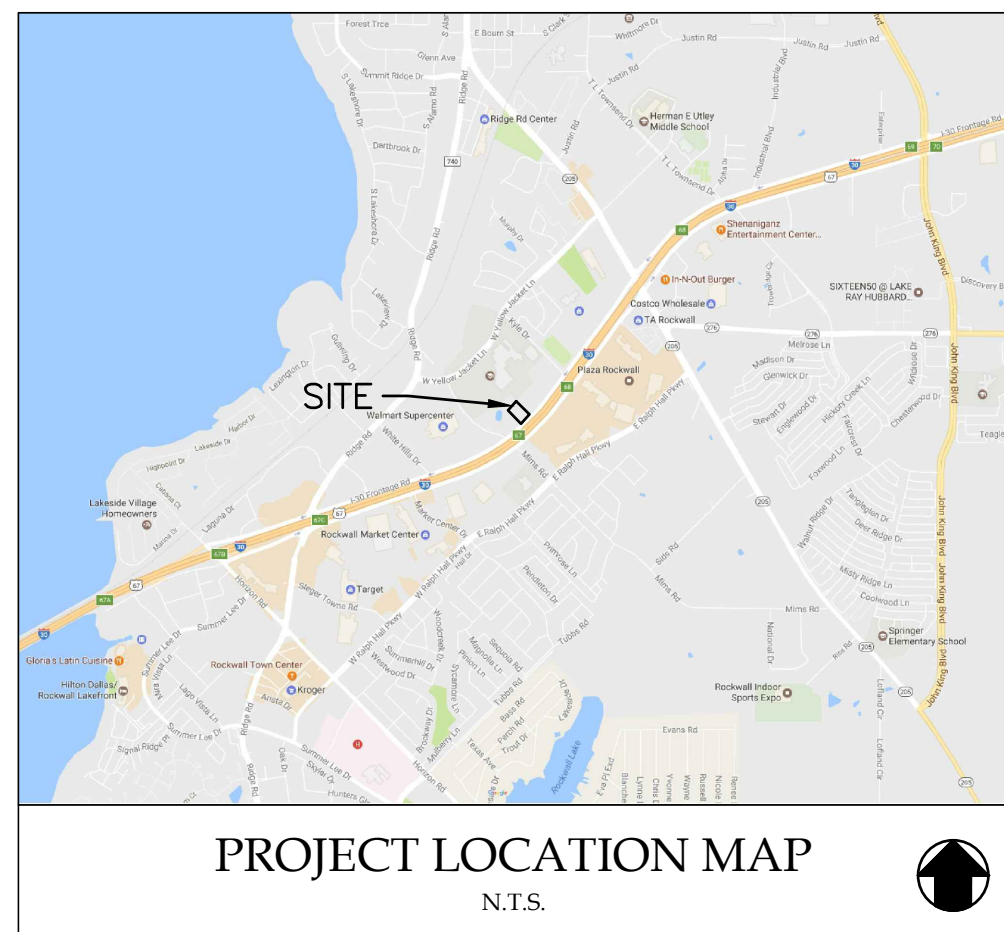
201512910

## SHEET TITLE

SITE AND  
DIMENSIONAL  
PLAN

## SHEET NUMBER

C3.0



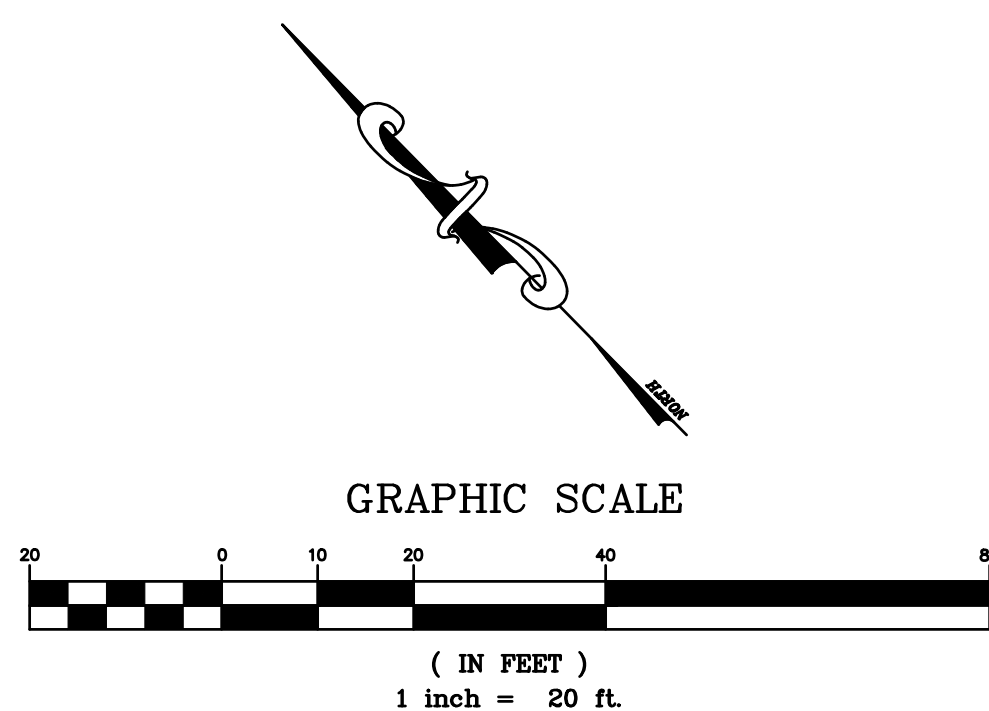
## PROPOSED LEGEND:

	PROPERTY LINE
	PROPOSED CONCRETE CURB AND GUTTER
	PROPOSED REVERSE PITCH CURB AND GUTTER
	PROPOSED PARKING STALL COUNT
	PROPOSED CONCRETE WHEEL STOP
	PROPOSED SIGN
	PROPOSED POLE SIGN
	PROPOSED LIGHT POLE
	PROPOSED STORM SEWER STRUCTURES
	PROPOSED SANITARY SEWER STRUCTURES
	PROPOSED SANITARY SEWER GREASE INTERCEPTOR
	PROPOSED FIRE HYDRANT
	PROPOSED FIRE DEPARTMENT CONNECTION (FDC)
	PROPOSED WATER METER AND VAULT
	PROPOSED GATE VALVE AND VALVE BOX
	PROPOSED WATER SERVICE TAP
	PROPOSED BACK FLOW PREVENTOR
	PROPOSED TRANSFORMER PAD AND STEEL BOLLARDS
	PROPOSED GAS METER
	PROPOSED ELECTRIC METER, CT CABINET AND DISCONNECT

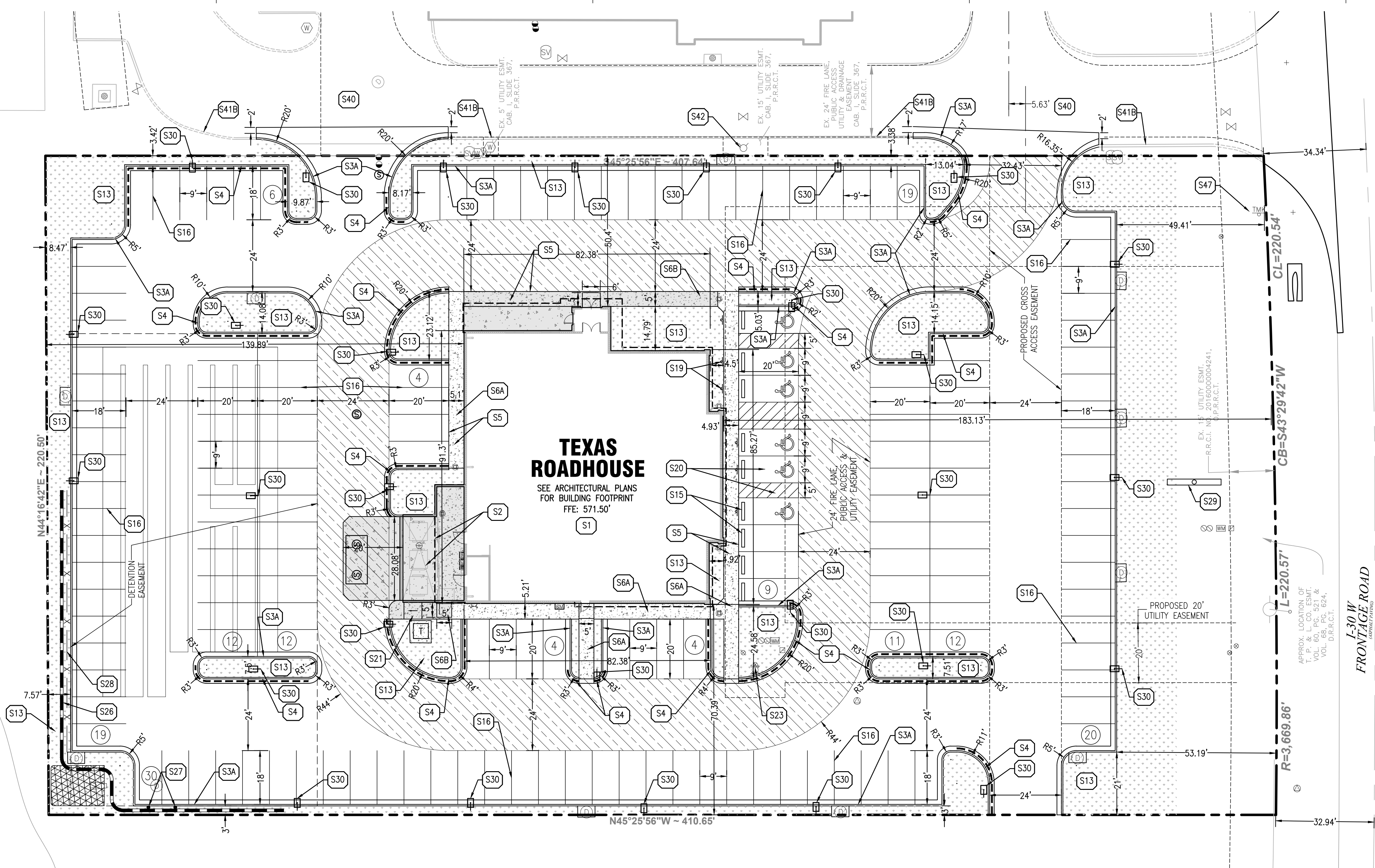
NOTE: SEE SHEET C1.0 FOR EXISTING LEGEND

## PAVEMENT HATCH LEGEND:

	PROPOSED CONCRETE SIDEWALK 3,000 PSI, MIN 5.5 SACK MIN 5" PORTLAND CEMENT CONCRETE 6" MOISTURE CONDITIONED SUBGRADE
	PROPOSED INTEGRAL BLACK CONCRETE SIDEWALK 3,000 PSI, MIN 5.5 SACK MIN 5" PORTLAND CEMENT CONCRETE 6" MOISTURE CONDITIONED SUBGRADE



CASE NO. SP2017-012



## SITE KEY NOTES:

- S1 PROPOSED TEXAS ROADHOUSE BUILDING (SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR ADDITIONAL INFORMATION AND DETAILS)
- S2 PROPOSED TRASH ENCLOSURE WITH SELF-LATCHING MECHANISM (SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR ADDITIONAL INFORMATION AND DETAILS)
- S3A PROPOSED CONCRETE CURB AND GUTTER
- S4 PROPOSED REVERSE PITCH CONCRETE CURB AND GUTTER
- S5 PROPOSED MONOLITHIC CONCRETE CURB AND SIDEWALK
- S6A PROPOSED 5" CONCRETE SIDEWALK
- S6B PROPOSED INTEGRAL BLACK CONCRETE SIDEWALK
- S13 PROPOSED LANDSCAPE AREA (SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION AND DETAILS)
- S15 PROPOSED PRECAST CONCRETE WHEEL STOP (TYP. OF 8)
- S16 PROPOSED 4" PAVEMENT STRIPING PER LOCAL CODE
- S19 PROPOSED HANDICAP ACCESSIBLE PARKING SIGN PER LOCAL CODE (TYP. OF 6)
- S20 PROPOSED HANDICAP ACCESSIBLE PARKING STALL STRIPING AND SYMBOL PER LOCAL CODE (TYP.)
- S21 PROPOSED HANDICAP ACCESSIBLE CURB RAMP AT 12:1 MAXIMUM SLOPE PER LOCAL CODES
- S22 PROPOSED CONCRETE TRANSFORMER PAD WITH STEEL BOLLARD PROTECTION (CONTRACTOR SHALL COORDINATE CONCRETE TRANSFORMER PAD LOCATION, SIZE AND THICKNESS WITH ELECTRIC COMPANY PRIOR TO INSTALLATION)
- S23 PROPOSED FIRE HYDRANT
- S26 PROPOSED BLOCK RETAINING WALL
- S27 PROPOSED BOLLARD
- S28 PROPOSED TxDOT GUARD RAIL
- S29 PROPOSED POLE SIGN
- S30 PROPOSED LIGHT POLE, MUST BE 2' BEHIND CURB.
- S40 EXISTING CONCRETE PAVEMENT TO REMAIN
- S41B EXISTING CONCRETE CURB TO REMAIN
- S42 EXISTING FIRE HYDRANT TO REMAIN
- S47 EXISTING SIGN TO REMAIN

## GENERAL SITE NOTES:

- CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE AND ADEQUATE WORKING CONDITIONS THROUGHOUT THE DURATION OF CONSTRUCTION OF THE PROPOSED SITE IMPROVEMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SITE SETBACKS, EASEMENTS AND DIMENSIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST STATE AND LOCAL GOVERNMENT CONSTRUCTION STANDARDS AND SPECIFICATIONS.
- ALL HANDICAP ACCESSIBLE SITE IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL CODES AND REQUIREMENTS.
- IF DURING THE COURSE OF CONSTRUCTION THE CONTRACTOR FINDS ANY DISCREPANCIES OR CONFLICTS BETWEEN THE PROPOSED SITE IMPROVEMENTS INDICATED ON THE PLANS AND THE PHYSICAL CONDITIONS OF THE SITE, OR ANY ERRORS OR OMISSIONS WITHIN THE PLANS OR IN THE SITE LAYOUT AS PROVIDED BY THE ENGINEER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IMMEDIATELY NOTIFY THE ENGINEER, UNTIL AUTHORIZED TO PROCEED, ANY WORK PERFORMED BY THE CONTRACTOR AFTER SUCH A DISCOVERY WILL BE AT THE CONTRACTOR'S SOLE RISK AND EXPENSE.
- CONTRACTOR SHALL COORDINATE ALL SITE IMPROVEMENTS WITH ARCHITECTURAL PLANS. ARCHITECTURAL PLANS SHALL BE USED FOR BUILDING STAKEOUT.

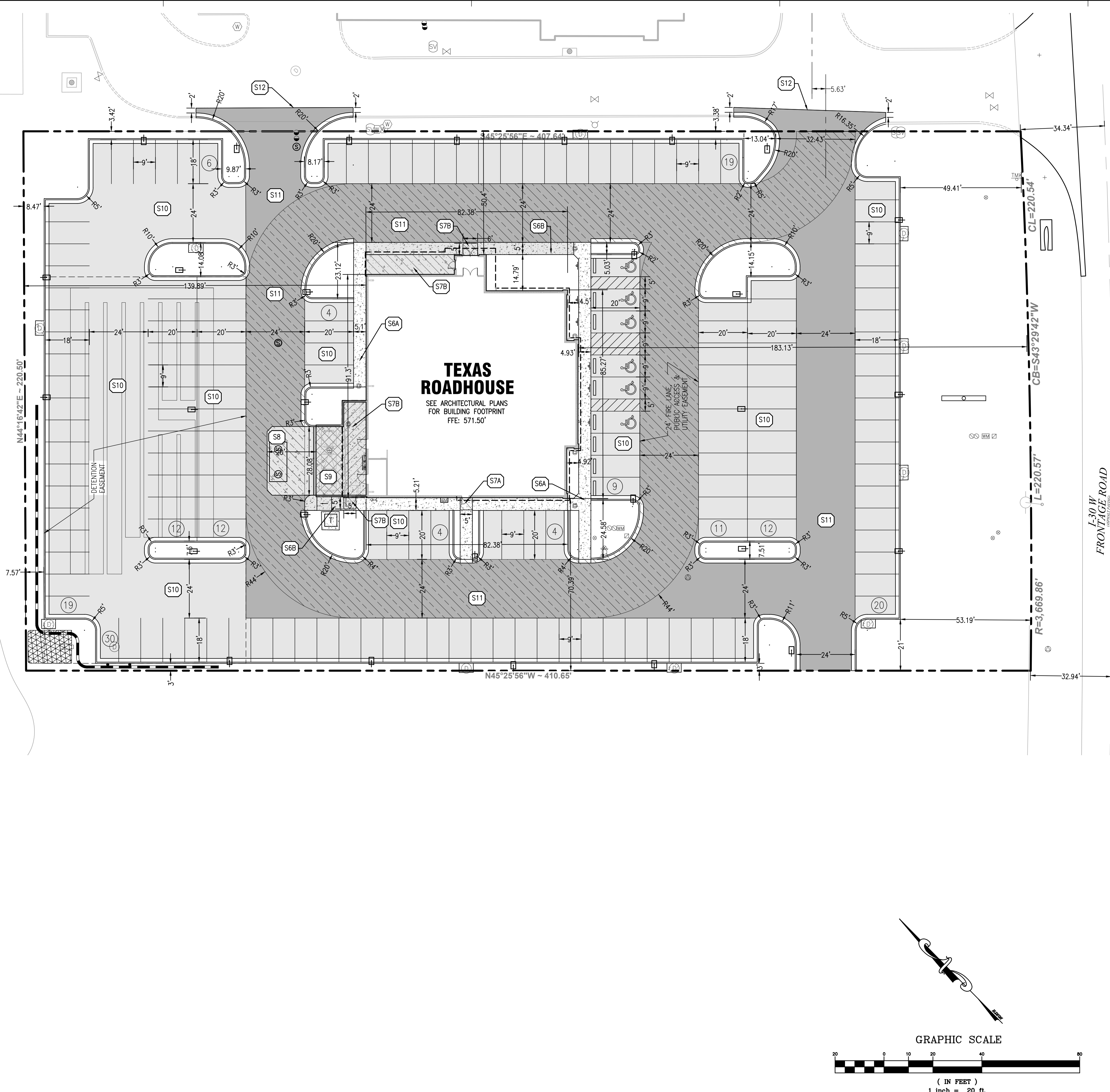
## SITE PLAN NOTES:

- REFER TO THE GEOTECHNICAL ENGINEERING REPORT PREPARED BY TERRACON CONSULTANTS, INC. AND DATED OCTOBER 18TH, 2016 FOR ADDITIONAL INFORMATION REGARDING THE EXISTING SOIL CONDITIONS AND SUBGRADE PREPARATION REQUIREMENTS AND PROPOSED PAVEMENT RECOMMENDATIONS (TERRACON PROJECT NO. 94165431).

## PROJECT INFORMATION:

SITE AREA:	±2.075 ACRES
ZONED:	COMMERCIAL
PROPOSED BUILDING AREA:	7,420 SQ. FT.
PROPOSED USE:	RESTAURANT
BUILDING HEIGHT:	28'-10"
PARKING REQUIRED:	75 STALLS (1 STALL PER 4 SEATS AND 281 SEATS TOTAL OR 1 STALL PER 100 SF FLOOR AREA, WHICHEVER IS GREAT)
PARKING PROVIDED:	182 STALLS (INCLUDING 6 ADA STALLS)





PROPOSED LEGEND:

- PROPERTY LINE
- PROPOSED CONCRETE CURB AND GUTTER
- PROPOSED REVERSE PITCH CURB AND GUTTER
- PROPOSED PARKING STALL COUNT
- PROPOSED CONCRETE WHEEL STOP
- PROPOSED SIGN
- PROPOSED LIGHT POLE
- PROPOSED STORM SEWER STRUCTURES
- PROPOSED SANITARY SEWER STRUCTURES
- PROPOSED SANITARY SEWER GREASE INTERCEPTOR
- PROPOSED FIRE HYDRANT
- PROPOSED FIRE DEPARTMENT CONNECTION (FDC)
- PROPOSED WATER METER AND VAULT
- PROPOSED GATE VALVE AND VALVE BOX
- PROPOSED WATER SERVICE TAP
- PROPOSED BACK FLOW PREVENTOR
- PROPOSED TRANSFORMER PAD AND STEEL BOLLARDS
- PROPOSED GAS METER
- PROPOSED ELECTRIC METER, CT CABINET AND DISCONNECT

NOTE: SEE SHEET C1.0 FOR EXISTING LEGEND

SITE KEY NOTES:

- S6A PROPOSED 5" CONCRETE SIDEWALK
- S6B PROPOSED INTEGRAL BLACK CONCRETE SIDEWALK
- S7A PROPOSED CONCRETE LANDING (SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION AND DETAILS)
- S7B PROPOSED INTEGRAL BLACK COLORED CONCRETE LANDING (SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION AND DETAILS)
- S8 PROPOSED HEAVY DUTY INTEGRAL BLACK COLORED CONCRETE
- S9 PROPOSED HEAVY DUTY INTEGRAL BLACK COLORED CONCRETE SLAB
- S10 PROPOSED CONCRETE PAVEMENT
- S11 PROPOSED HEAVY DUTY CONCRETE PAVEMENT
- S12 PROPOSED LONGITUDINAL BUTT JOINT

PAVEMENT HATCH LEGEND:

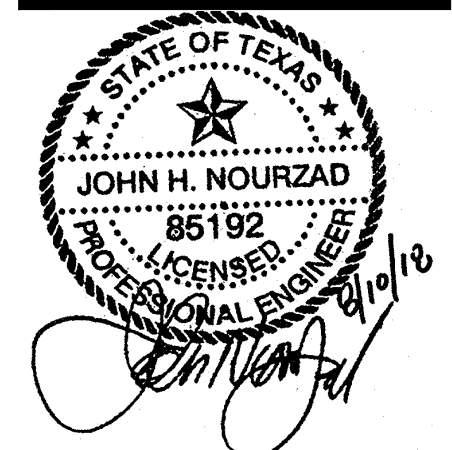
- S6A PROPOSED CONCRETE SIDEWALK  
3,000 PSI, MIN 5.5 SACK MIN  
5" PORTLAND CEMENT CONCRETE  
6" MOISTURE CONDITIONED SUBGRADE
- S6B PROPOSED INTEGRAL BLACK CONCRETE SIDEWALK  
3,000 PSI, MIN 5.5 SACK MIN  
5" PORTLAND CEMENT CONCRETE  
6" MOISTURE CONDITIONED SUBGRADE
- S7A PROPOSED CONCRETE  
3,000 PSI, MIN 5.5 SACK MIN  
6" PORTLAND CEMENT CONCRETE  
WITH NO. 4 BARS AT 12" O.C. EACH WAY  
6" MOISTURE CONDITIONED SUBGRADE
- S7B PROPOSED INTEGRAL BLACK COLORED CONCRETE  
3,000 PSI, MIN 5.5 SACK MIN  
6" PORTLAND CEMENT CONCRETE  
WITH NO. 4 BARS AT 12" O.C. EACH WAY  
6" MOISTURE CONDITIONED SUBGRADE
- S8 PROPOSED HEAVY DUTY INTEGRAL BLACK COLORED CONCRETE  
3,600 PSI, MIN 6.5 SACK MIN  
7" PORTLAND CEMENT CONCRETE  
WITH NO. 3 BARS AT 18" O.C. EACH WAY  
6" MOISTURE CONDITIONED SUBGRADE
- S9 PROPOSED HEAVY DUTY INTEGRAL BLACK COLORED CONCRETE SLAB  
3,600 PSI, MIN 6.5 SACK MIN  
7" PORTLAND CEMENT CONCRETE  
WITH NO. 3 BARS AT 12" O.C. EACH WAY  
6" MOISTURE CONDITIONED SUBGRADE
- S10 PROPOSED CONCRETE PAVEMENT  
3,000 PSI, MIN 5.5 SACK MIN  
5" REINFORCED CONCRETE  
WITH NO. 3 BARS AT 18" O.C. EACH WAY  
6" MOISTURE CONDITIONED SUBGRADE
- S11 PROPOSED HEAVY DUTY CONCRETE PAVEMENT  
3,600 PSI, MIN 6.5 SACK MIN  
6" REINFORCED CONCRETE  
WITH NO. 3 BARS AT 18" O.C. EACH WAY  
6" MOISTURE CONDITIONED SUBGRADE

PROJECT TEAM

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11/20/17	CONSTRUCTION SET
12/13/17	GRADING REVISIONS
01/05/18	OWNER REVISIONS
08/07/18	AS-BUILT



PROFESSIONAL IN CHARGE  
JOHN NOURZAD  
PROFESSIONAL ENGINEER  
LICENSE NO. 85192

PROJECT MANAGER  
JEFF RATH

QUALITY CONTROL  
LARRY DIEHL

DRAWN BY  
MITCH HEFFERNAN

PROJECT NAME  
TEXAS  
ROADHOUSE

ROCKWALL  
TEXAS  
912 I-30 FRONTAGE ROAD



PROJECT NUMBER  
201512910

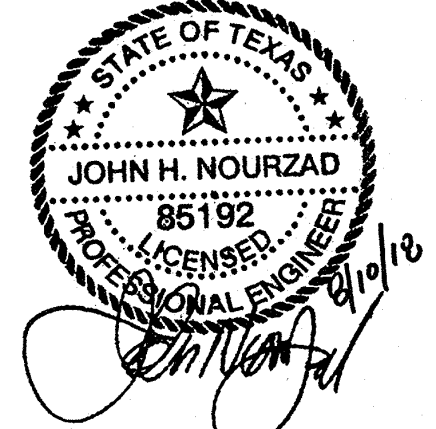
SHEET TITLE  
PAVING PLAN

SHEET NUMBER  
C3.1

CASE NO. SP2017-012



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ROCKWALL  
TEXAS  
912 I-30 FRONTAGE ROAD



PROJECT NUMBER  
201512910

SHEET TITLE  
**GRADING AND DRAINAGE PLAN**

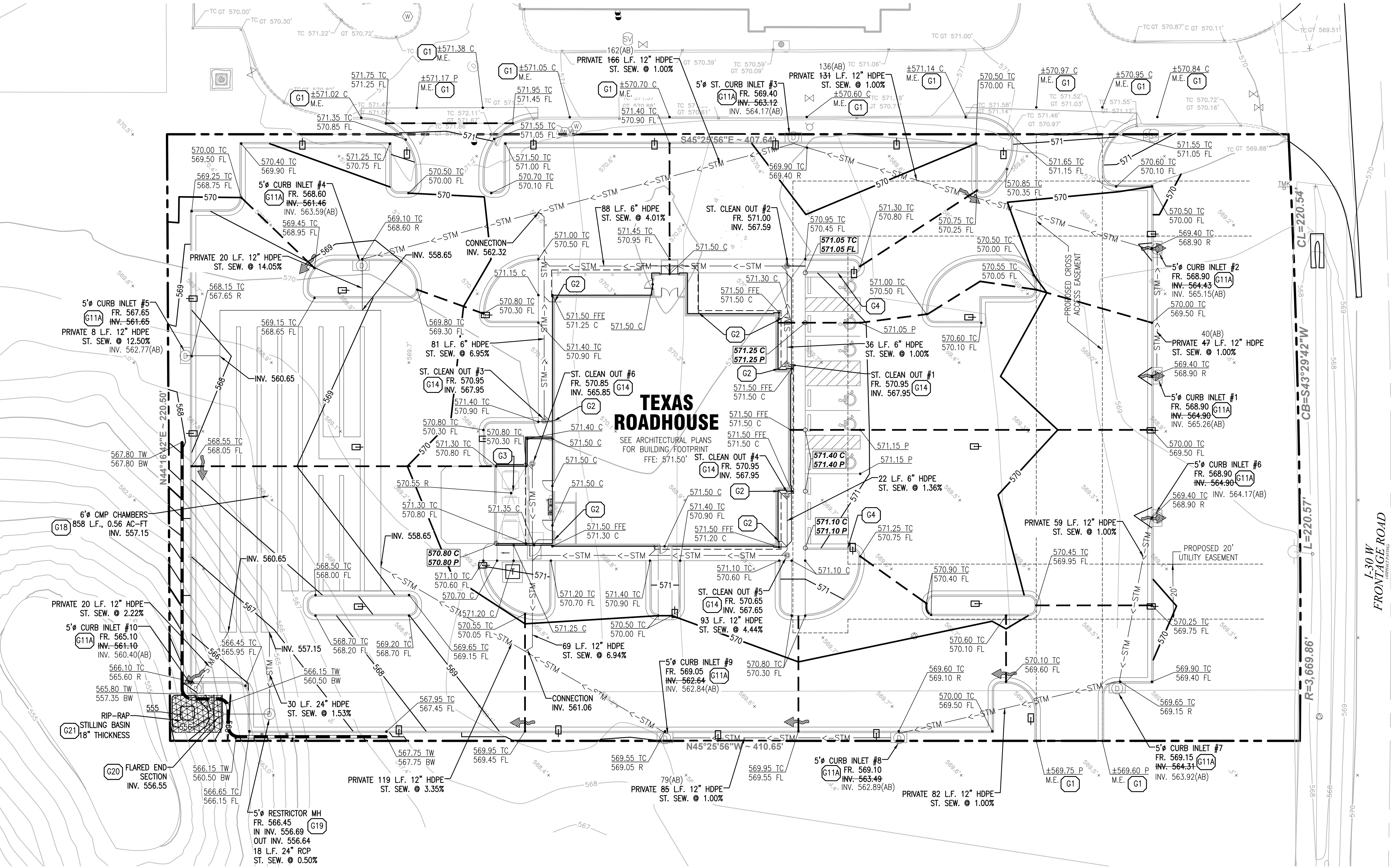
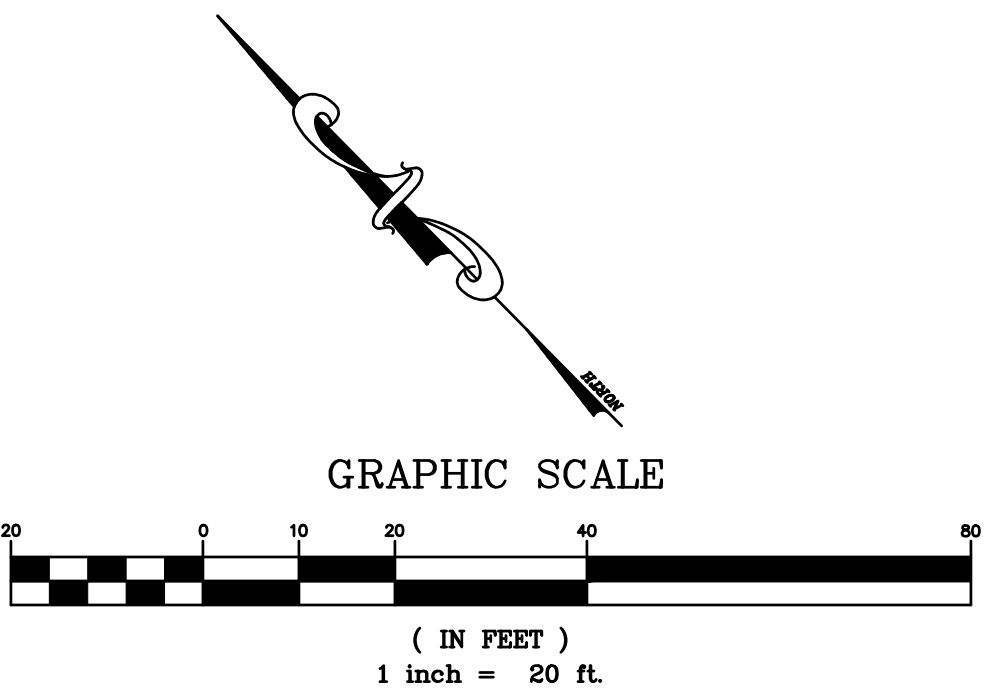
SHEET NUMBER  
**C4.0**

PROPOSED LEGEND:

- PROPERTY LINE
- PROPOSED CONCRETE CURB AND GUTTER
- PROPOSED REVERSE PITCH CONCRETE CURB AND GUTTER
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- FFE: FINISHED FLOOR ELEVATION
- TC: TOP OF CURB ELEVATION
- FL: CURB FLOWLINE ELEVATION
- C: TOP OF CONCRETE ELEVATION
- P: TOP OF PAVEMENT ELEVATION
- FG: FINISHED GRADE ELEVATION
- ME: MATCH EXISTING ELEVATION
- R: RIM ELEVATION
- PROPOSED SPOT ELEVATION
- EXPOSED CURB FACE VARIES
- PROPOSED GRADING RIDGE LINE
- PROPOSED DRAINAGE FLOW DIRECTION
- PROPOSED OVERLAND FLOOD ROUTE
- PROPOSED STORM SEWER STRUCTURE
- PROPOSED STORM SEWER STRUCTURE WITH CLOSED LID
- PROPOSED STORM SEWER CLEAN OUT
- PROPOSED HEAVY DUTY AREA DRAIN
- PROPOSED STORM SEWER

GRADING & DRAINAGE KEY NOTES:

- G1 FIELD VERIFY AND MATCH EXISTING ELEVATION AT PROJECT SCOPE OF WORK LIMITS (TYP.)
- G2 PROPOSED ROOF DRAIN LOCATION (SEE UTILITY PLAN FOR MORE INFORMATION)
- G3 PROPOSED ZURN Z505 AREA DRAIN (SEE UTILITY AND PLUMBING PLANS)
- G4 CURB TRANSITION FOR 0" TO 6" IN HEIGHT
- G11A PROPOSED 5" PRECAST CONCRETE CURB INLET WITH NEENAH R-3065-A CURB BOX PER NCTCOG 4TH EDITION STANDARD AND CITY OF ROCKWALL STANDARDS
- G12 PROPOSED 4" PRECAST CONCRETE MANHOLE WITH NEENAH R-1772 FRAME AND LID PER NCTCOG 4TH EDITION STANDARD AND CITY OF ROCKWALL STANDARDS
- G14 PROPOSED STORM SEWER CLEAN OUT
- G18 PROPOSED UNDERGROUND DETENTION SYSTEM
- G19 PROPOSED 5" RESTRICTOR MANHOLE STRUCTURE (SEE C7.1 FOR DETAIL)
- G20 PROPOSED PRE-CAST CONCRETE FLARED END SECTION
- G21 PROPOSED GROUTED RIP-RAP STILLING BASIN (SEE C7.2 FOR DETAILS AND CALCULATIONS)



GENERAL GRADING NOTES:

- ALL GRADING AND SITE PREPARATION WORK SHALL CONFORM WITH THE RECOMMENDATIONS AND SPECIFICATIONS CONTAINED IN THE GEOTECHNICAL REPORT.
- CONTRACTOR SHALL CAREFULLY PRESERVE ALL SITE BENCHMARKS AND REFERENCE POINTS DURING CONSTRUCTION OPERATIONS.
- CONTRACTOR SHALL PROVIDE A MINIMUM OF 95% STANDARD DENSITY COMPACTION USING A SHEEP'S FOOT ROLLER.
- CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST FORTY-EIGHT (48) HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED SITE IMPROVEMENTS SHOWN ON THE PLANS.
- CONTRACTOR SHALL INSTALL APPROPRIATE TREE PROTECTION MEASURES PRIOR TO COMMENCEMENT OF SITE GRADING OPERATIONS.
- ALL PROPOSED GRADING, PAVEMENT, APRONS, CURBS, WALKS, ETC. SHALL MATCH EXISTING GRADES FLUSH.
- CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TO ALL STORM DRAINAGE STRUCTURES. AREAS OF SURFACE PONDING SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
- ALL EXISTING AND PROPOSED TOP OF FRAME ELEVATIONS FOR STORM, SANITARY, WATER AND OTHER UTILITY STRUCTURES SHALL BE ADJUSTED TO MEET FINISHED GRADE WITHIN THE PROJECT LIMITS.
- CONTRACTOR SHALL UTILIZE CARE WHEN WORKING NEAR EXISTING UTILITIES TO REMAIN. ANY DAMAGE TO EXISTING UTILITIES NOT NOTED TO BE REMOVED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
- CONTRACTOR SHALL REPAIR AT HIS EXPENSE ANY DAMAGE TO EXISTING ASPHALT, CONCRETE, CURBS, SIDEWALKS, ETC. RESULTING FROM CONSTRUCTION TRAFFIC AND/OR OPERATIONS. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.

- CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS TO ORIGINAL CONDITION OR BETTER.
- MAXIMUM CROSS SLOPES AND LONGITUDINAL SLOPES FOR ALL CONCRETE SIDEWALKS AND HANDICAP ACCESSIBLE ROUTES SHALL NOT EXCEED 2% AND 5%, RESPECTIVELY.
- MAXIMUM SLOPES WITHIN THE HANDICAP ACCESSIBLE PARKING AREAS SHALL NOT EXCEED 2% IN ANY DIRECTION.
- MAXIMUM GRADE DIFFERENCE BETWEEN PAVEMENT SURFACES AND ADJACENT CONCRETE SIDEWALKS FOR THE ACCESSIBLE ROUTE TO THE BUILDING SHALL NOT EXCEED 1/4" VERTICAL OR 1/2" WHEN BEVELED.
- ALL HANDICAP ACCESSIBLE EXTERIOR DOORWAY LOCATIONS REQUIRE AN EXTERIOR LANDING THAT IS A MINIMUM OF FIVE (5) FEET IN LENGTH WITH A SLOPE NOT EXCEEDING 2% IN ANY DIRECTION.
- EXCAVATION SHORING SHALL BE DONE AS NECESSARY FOR THE PROTECTION OF THE WORK AND FOR THE SAFETY OF PERSONNEL. SHORING SHALL BE IN ACCORDANCE WITH ALL O.S.H.A AND LOCAL REGULATIONS.
- ALL STRUCTURE BENCH WALLS SHALL BE SHAPED AND FORMED FOR A CLEAN TRANSITION WITH PROPER HYDRAULICS TO ALLOW THE SMOOTH CONVEYANCE OF FLOWS THROUGH THE MANHOLE OR BOX INLET. THE BENCH WALL SHALL FORM A DEFINED CHANNEL, TO A MINIMUM HEIGHT OF 80-PERCENT OF THE INSIDE DIAMETER OF THE INLET AND OUTLET PIPES TO FORM A 'U' SHAPED CHANNEL, CONSTRUCTED AT A MINIMUM 1/4-INCH PER FOOT SLOPE TO THE MANHOLE WALL.
- ALL STORM WATER INLETS AND CATCH BASIN CASTINGS SHALL HAVE THE WORDS 'NO DUMPING, DRAINS TO STREAM', OR SIMILARLY APPROVED MESSAGE, CAST IN RAISED OR RECESSED LETTERS AT A MINIMUM OF 1" IN HEIGHT. IN ADDITION, A SYMBOL OF A FISH SHALL ALSO BE CAST WITH THE LETTERS.
- SEE GENERAL NOTES SHEET FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- REFER TO SHEET C4.7 - INITIAL GRADING PLAN. WORK SHOWN ON SHEET C4.7 SHALL BE CONDUCTED BEFORE WORK SHOWN ON THIS SHEET. "PROPOSED" CONTOURS SHOWN ON SHEET C4.7 ARE "EXISTING" CONTOURS SHOWN ON THIS SHEET.

FLOOD NOTE:

PROJECT SITE DOES NOT LIE WITHIN A 100 YEAR FLOOD HAZARD AREA AND IS LOCATED IN ZONE "X" AS SHOWN ON THE ABOVE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP NUMBER 48397C0040L WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

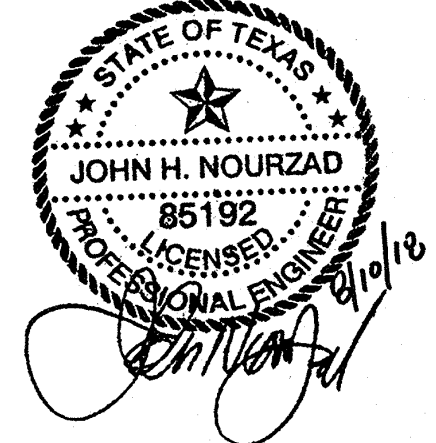




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LARRY DIEHL

DRAWN BY  
MITCH HEFFERNAN

PROJECT NAME  
**TEXAS ROADHOUSE**

ROCKWALL  
TEXAS  
912 I-30 FRONTAGE ROAD



PROJECT NUMBER  
201512910

SHEET TITLE  
**EXISTING DRAINAGE AREAS**

SHEET NUMBER  
**C4.1**

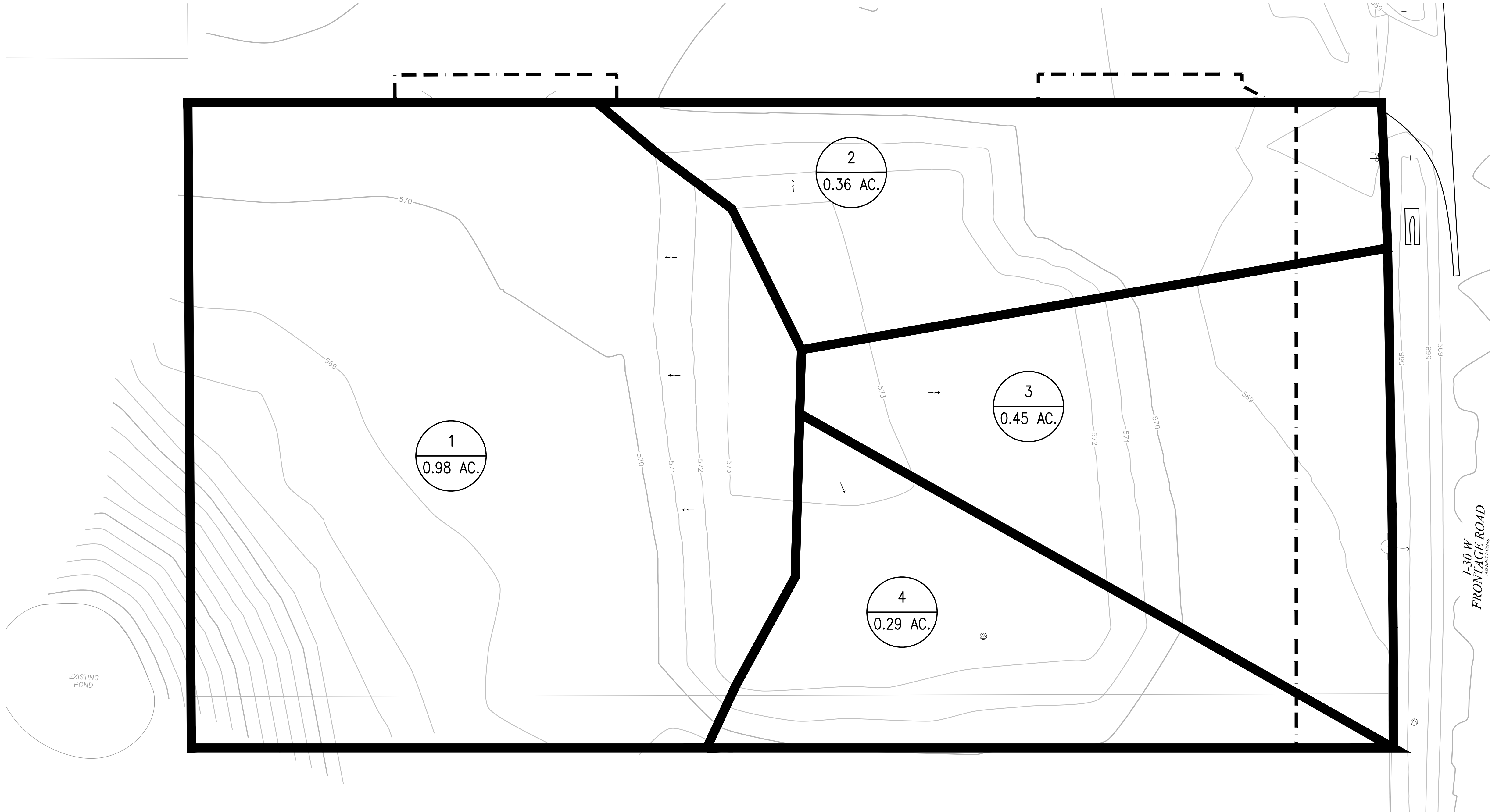


EXHIBIT LEGEND:

- PROPERTY LINE
- - - LAND DISTURBANCE LIMITS
- STORM SEWER TRIBUTARY AREA LIMITS
- 1  
0.10 AC. STORM SEWER STRUCTURE NUMBER
- 1  
0.10 AC. TRIBUTARY DRAINAGE AREA
- EXISTING DRAINAGE FLOW DIRECTION

TRIBUTARY AREA TABLE:

TOTAL STORM SEWER TRIBUTARY AREA: 2.08 ACRES  
'C' VALUE (PARKS OR OPEN AREAS): 0.35

NOTE:

STORMWATER RUNOFF COEFFICIENTS ARE TAKEN FROM THE CITY OF ROCKWALL, TX STANDARDS OF DESIGN AND CONSTRUCTION.

MAXIMUM RELEASE RATE CALCULATIONS:

AREA 1:  
 $Q = CIA$   
 $C = 0.35$  (PARKS OR OPEN AREAS)  
 $T_c = 20$  MIN  
 $I_{100} = 8.3$  IN/HR  
 $Q_{100} = (0.35)(8.3)(0.98) = 2.85$  CFS

AREA 2:  
 $Q_{100} = (0.35)(8.3)(0.36) = 1.05$  CFS

AREA 3:  
 $Q_{100} = (0.35)(8.3)(0.45) = 1.31$  CFS

AREA 4:  
 $Q_{100} = (0.35)(8.3)(0.29) = 0.84$  CFS

5-YEAR, 10-YEAR, 25-YEAR RELEASE RATES

$Q = CIA$   
 $C = 0.35$  (PARKS OR OPEN AREAS)  
 $T_c = 20$  MIN  
 $I_5 = 4.9$  IN/HR

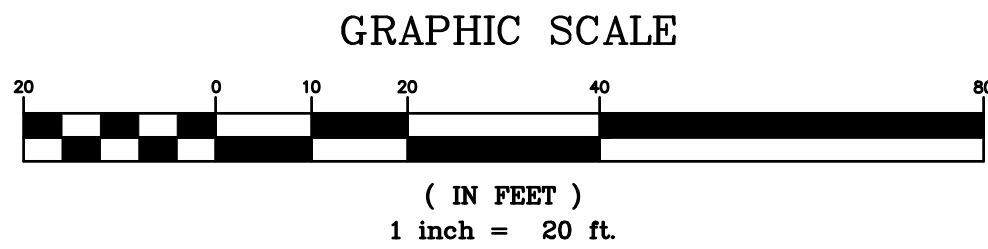
$Q_5$  (AREA 1) =  $(0.35)(4.9)(0.98) = 1.68$  CFS  
 $Q_5$  (AREA 2) =  $(0.35)(4.9)(0.36) = 0.62$  CFS  
 $Q_5$  (AREA 3) =  $(0.35)(4.9)(0.45) = 0.77$  CFS  
 $Q_5$  (AREA 4) =  $(0.35)(4.9)(0.29) = 0.50$  CFS

$I_{10} = 5.9$  IN/HR

$Q_{10}$  (AREA 1) =  $(0.35)(5.9)(0.98) = 2.02$  CFS  
 $Q_{10}$  (AREA 2) =  $(0.35)(5.9)(0.36) = 0.74$  CFS  
 $Q_{10}$  (AREA 3) =  $(0.35)(5.9)(0.45) = 0.93$  CFS  
 $Q_{10}$  (AREA 4) =  $(0.35)(5.9)(0.29) = 0.60$  CFS

$I_{25} = 6.6$  IN/HR

$Q_{25}$  (AREA 1) =  $(0.35)(6.6)(0.98) = 2.26$  CFS  
 $Q_{25}$  (AREA 2) =  $(0.35)(6.6)(0.36) = 0.83$  CFS  
 $Q_{25}$  (AREA 3) =  $(0.35)(6.6)(0.45) = 1.04$  CFS  
 $Q_{25}$  (AREA 4) =  $(0.35)(6.6)(0.29) = 0.67$  CFS









DRAINAGE AREA CALCULATION TABLE

Drainage Area Calculation Table								
Area ID	Drainage Area	Runoff Coeff. C	C*A	Time of Concentration Tc	Design Storm Frequency	Intensity I	Storm Runoff Q	Drains To/ Remarks
	(acres)			(min)	(yrs)	(in/hr)	(cfs)	
1	0.14	0.90	0.126	10	100	9.8	1.23	Drains to CI#1 and ultimately the underground detention
2	0.12	0.90	0.108	10	100	9.8	1.06	Drains to CI#2 and ultimately the underground detention
3	0.13	0.90	0.117	10	100	9.8	1.15	Drains to CI#3 and ultimately the underground detention
4	0.20	0.90	0.180	10	100	9.8	1.76	Drains to CI#4 and ultimately the underground detention
5	0.24	0.90	0.216	10	100	9.8	2.12	Drains to CI#5 and ultimately the underground detention
6	0.18	0.90	0.162	10	100	9.8	1.59	Drains to CI#6 and ultimately the underground detention
7	0.06	0.90	0.054	10	100	9.8	0.53	Drains to CI#7 and ultimately the underground detention
8	0.10	0.90	0.090	10	100	9.8	0.88	Drains to CI#8 and ultimately the underground detention
9	0.15	0.90	0.135	10	100	9.8	1.32	Drains to CI#9 and ultimately the underground detention
10	0.25	0.90	0.225	10	100	9.8	2.21	Drains to CI#10 and ultimately the underground detention
11	0.05	0.90	0.045	10	100	9.8	0.44	Drains to the existing pond to the west of the site.
12	0.10	0.90	0.090	10	100	9.8	0.88	Drains to Storm Sewer #2 (Curb Inlet #9 - Detention)
13	0.09	0.90	0.081	10	100	9.8	0.79	Drains to Storm Sewer #1 (Curb Inlet #3- Curb Inlet #4)
14	0.27	0.90	0.243	10	100	9.8	2.38	Drains to R.O.W.

STORM SEWER TABLE FOR CURB INLET #1–UNDERGROUND DETENTION

Line ID	Line Length	Incr. Area	Total Area	Runoff Coeff.	Incr C x A	Total C x A	Adnl Flow	Total Flow	Capac Full	Veloc	Pipe Size	Pipe Slope	Inv Elev Dn	Inv Elev Up	HGL Dn	HGL Up	Grnd/Rim Dn	Grnd/Rim Up
	(ft)	(ac)	(ac)	(C)			(cfs)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
CI4-Det	20.080	0.20	0.68	0.90	0.18	0.61	1.76	5.99	13.32	11.50	12	13.99	558.65	561.46	559.15	562.41	567.00	568.60
CI3-CI4	166.182	0.22	0.48	0.90	0.20	0.43	1.94	4.23	3.56	5.39	12	1.00	561.46	563.12	562.46	564.81	568.60	569.40
CI2-CI3	129.133	0.12	0.26	0.90	0.11	0.23	1.06	2.29	0.00	3.85	12	1.01	563.12	564.43	563.91	565.08	569.40	568.90
CI1-CI2	46.000	0.14	0.14	0.90	0.13	0.13	1.23	1.23	0.00	2.85	12	1.02	564.43	564.90	565.08	565.37	568.90	568.90

STORM SEWER TABLE FOR CURB INLET #6–UNDERGROUND DETENTION

Line ID	Line Length	Incr. Area	Total Area	Runoff Coeff.	Incr C x A	Total C x A	Adnl Flow	Total Flow	Capac Full	Veloc	Pipe Size	Pipe Slope	Inv Elev Dn	Inv Elev Up	HGL Dn	HGL Up	Grnd/Rim Dn	Grnd/Rim Up
	(ft)	(ac)	(ac)	(C)			(cfs)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
CI9-Det	118.550	0.25	0.59	0.90	0.23	0.53	2.20	5.20	6.53	8.04	12	3.37	558.65	562.64	559.32	563.57	569.30	569.05
CI8-CI9	84.856	0.10	0.34	0.90	0.09	0.31	0.88	3.00	3.56	4.38	12	1.00	562.64	563.49	563.57	564.23	569.05	569.10
CI7-CI8	82.415	0.06	0.24	0.90	0.05	0.22	0.53	2.12	3.55	3.76	12	0.99	563.49	564.31	564.23	564.93	569.10	569.15
CI6-CI7	58.618	0.18	0.18	0.90	0.16	0.16	1.59	1.59	3.57	3.41	12	1.01	564.31	564.90	564.93	565.43	569.15	568.90

STORM SEWER TABLE FOR UNDERGROUND DETENTION TO OUTFALL

Line ID	Line Length	Incr. Area	Total Area	Runoff Coeff.	Incr C x A	Total C x A	Adnl Flow	Total Flow	Capac Full	Veloc	Pipe Size	Pipe Slope	Inv Elev Dn	Inv Elev Up	HGL Dn	HGL Up	Grnd/Rim Dn	Grnd/Rim Up
	(ft)	(ac)	(ac)	(C)			(cfs)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
Restrict MH-Outfall	18.000	0.00	0.00	0.90	0.00	0.00	2.51	2.51	16.00	3.57	24	0.50	556.55	556.64	557.10	557.19	555.50	566.45
Det-Restrict MH	29.750	0.00	0.00	0.90	0.00	0.00	14.65	14.65	28.13	5.51	24	1.55	556.69	557.15	558.66	558.53	566.45	566.95

100–YEAR INLET CAPACITY

i= 9.81 in/hr (100-YEAR, 10 MIN)											
Casting Information											
1		Neenah R-3065-A		Area (ft^2) = 0.9		Perimeter (ft) = 4.5		Allowable % Capacity 100%			
TEXAS ROADHOUSE											
Structure ID	Area ID	Area	C-value <sup>5</sup>	Q	Casting	Ponding Depth (H)	# OF INLETS	Q(Orifice) <sup>3</sup>	Q(weir) <sup>4</sup>	Q(Control)	Result
		(ac)		(cfs)		(ft)		(cfs)	(cfs)	(cfs)	
CI1	1	0.140	0.90	1.24	1	0.50	1	3.06	5.25	3.06	OK
CI2	2	0.120	0.90	1.06	1	0.50	1	3.06	5.25	3.06	OK
CI3	3	0.130	0.90	1.15	1	0.85	1	4.00	11.64	4.00	OK
CI4	4	0.290	0.90	2.56	1	0.35	1	2.56	3.07	2.56	OK
CI5	5	0.240	0.90	2.12	1	0.40	1	2.74	3.76	2.74	OK
CI6	6	0.180	0.90	1.59	1	0.50	1	3.06	5.25	3.06	OK
CI7	7	0.060	0.90	0.53	1	0.45	1	2.91	4.48	2.91	OK
CI8	8	0.100	0.90	0.88	1	0.45	1	2.91	4.48	2.91	OK
CI9	9	0.150	0.90	1.32	1	0.40	1	2.74	3.76	2.74	OK
CI10	10	0.250	0.90	2.21	1	0.50	1	3.06	5.25	3.06	OK

STORM SEWER TABLE FOR CURB INLET #5–UNDERGROUND DETENTION

Line ID	Line Length	Incr. Area	Total Area	Runoff Coeff.	Incr C x A	Total C x A	Adnl Flow	Total Flow	Capac Full	Veloc	Pipe Size	Pipe Slope	Inv Elev Dn	Inv Elev Up	HGL Dn	HGL Up	Grnd/Rim Dn	Grnd/Rim Up
	(ft)	(ac)	(ac)	(C)			(cfs)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
CI5-Det	8.250	0.24	0.24	0.90	0.22	0.22	2.12	2.12	12.40	4.14	12	12.12	560.65	561.65	561.27	562.27	567.85	567.65

STORM SEWER TABLE FOR CURB INLET #10–UNDERGROUND DETENTION

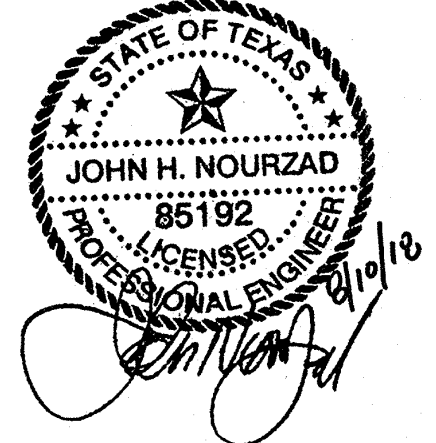
Line ID	Line Length	Incr. Area	Total Area	Runoff Coeff.	Incr C x A	Total C x A	Adnl Flow	Total Flow	Capac Full	Veloc	Pipe Size	Pipe Slope	Inv Elev Dn	Inv Elev Up	HGL Dn	HGL Up	Grnd/Rim Dn	Grnd/Rim Up
	(ft)	(ac)	(ac)	(C)			(cfs)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
CI10-Det	20.260	0.25	0.25	0.90	0.23	0.23	2.21	2.21	5.31	4.18	12	2.22	560.65	561.10	561.29	561.74	566.74	565.10

PROJECT TEAM

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05/01/17	SITE PLAN SUBMITTAL
05/19/17	ENGINEERING REVIEW
06/27/17	PERMIT SET
07/19/17	PERMIT/BID SET
07/20/17	ENGINEERING REVIEW
08/04/17	ENGINEERING REVIEW
10/11/17	STORMWATER REVISIONS
11/07/17	STORMWATER REVISIONS
11/29/17	CONSTRUCTION SET
12/13/17	GRADING REVISIONS
01/05/18	OWNER REVISIONS
08/07/18	AS–BUILT



PROFESSIONAL IN CHARGE  
**JOHN NOURZAD**  
PROFESSIONAL ENGINEER  
LICENSE NO. 85192

PROJECT MANAGER  
JEFF RATH

QUALITY CONTROL  
LARRY DIEHL  
DRAWN BY  
MITCH HEFFERNAN

PROJECT NAME

TEXAS ROADHOUSE

ROCKWALL

TEXAS

912 I-30 FRONTAGE ROAD



PROJECT NUMBER  
201512910

SHEET TITLE  
**STORMWATER MANAGEMENT PLAN**

SHEET NUMBER

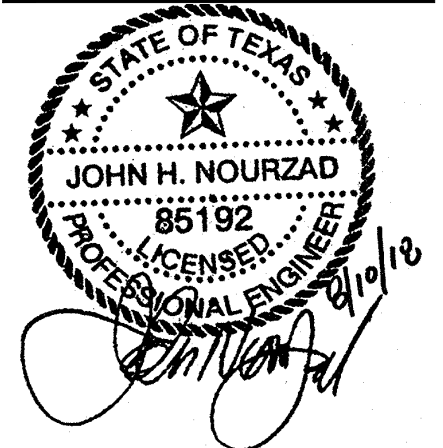
C4.3



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07/19/17	PERMIT/BID SET
07/20/17	ENGINEERING REVIEW
08/04/17	ENGINEERING REVIEW
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01/05/18	OWNER REVISIONS
08/07/18	AS-BUILT



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PROFESSIONAL ENGINEER  
LICENSE NO. 85192

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JEFF RATH

QUALITY CONTROL  
LARRY DIEHL

DRAWN BY  
MITCH HEFFERNAN

PROJECT NAME  
**TEXAS ROADHOUSE**

ROCKWALL  
TEXAS  
912 I-30 FRONTAGE ROAD

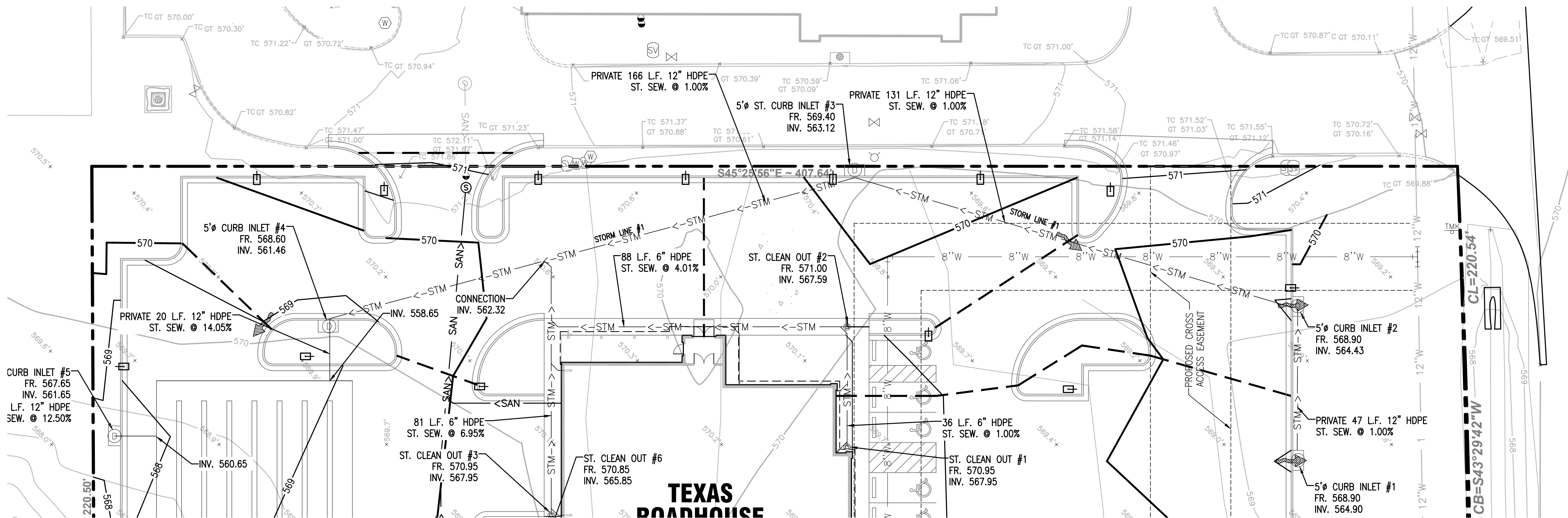


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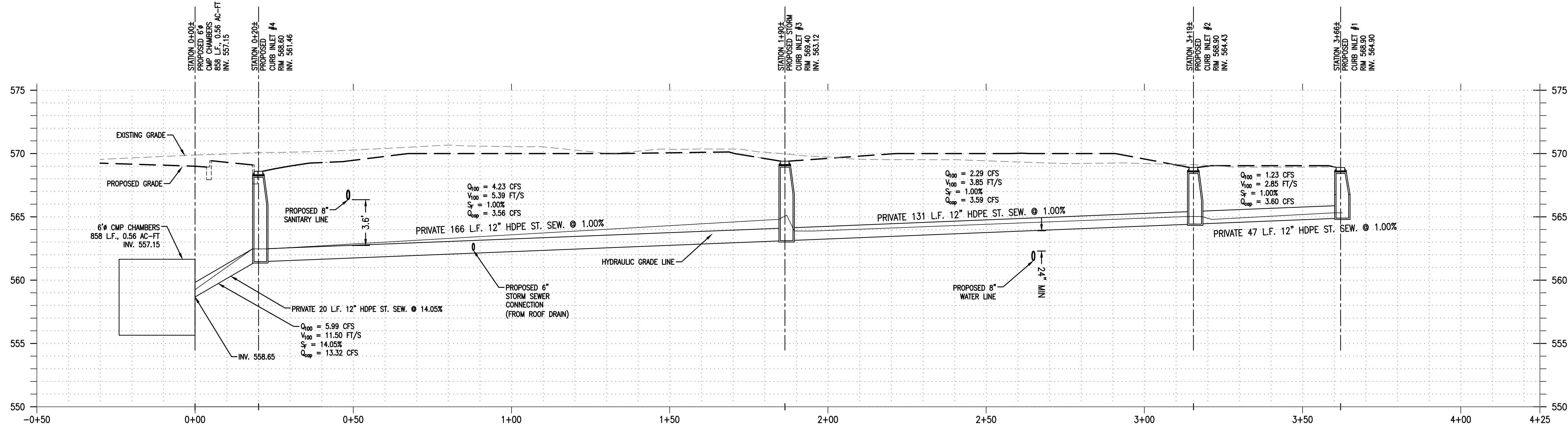
SHEET TITLE  
**STORM SEWER PROFILES**

SHEET NUMBER

C4.4



PLAN VIEW  
1" = 20'



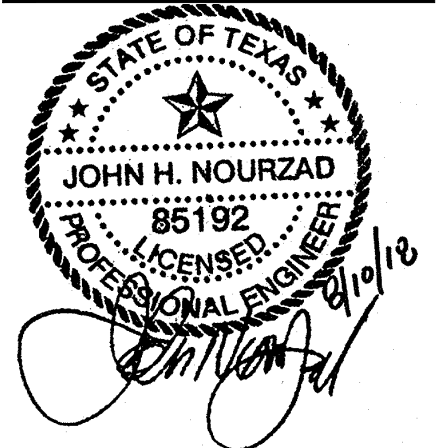
PROPOSED STORM  
SEWER PROFILE # 1

PROFILE VIEW

H: 1" = 10'  
V: 1" = 2'



DATE	DESCRIPTION
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07/19/17	PERMIT/BD SET
07/20/17	ENGINEERING REVIEW
08/04/17	ENGINEERING REVIEW
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11/20/17	CONSTRUCTION SET
12/13/17	GRADING REVISIONS
01/05/18	OWNER REVISIONS
08/07/18	AS-BUILT



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**JOHN NOURZAD**  
PROFESSIONAL ENGINEER  
LICENSE NO. 85192

**PROJECT MANAGER**  
JEFF RATH

**QUALITY CONTROL**  
LARRY DIEHL

**DRAWN BY**  
MITCH HEFFERNAN

**PROJECT NAME**  
**TEXAS ROADHOUSE**

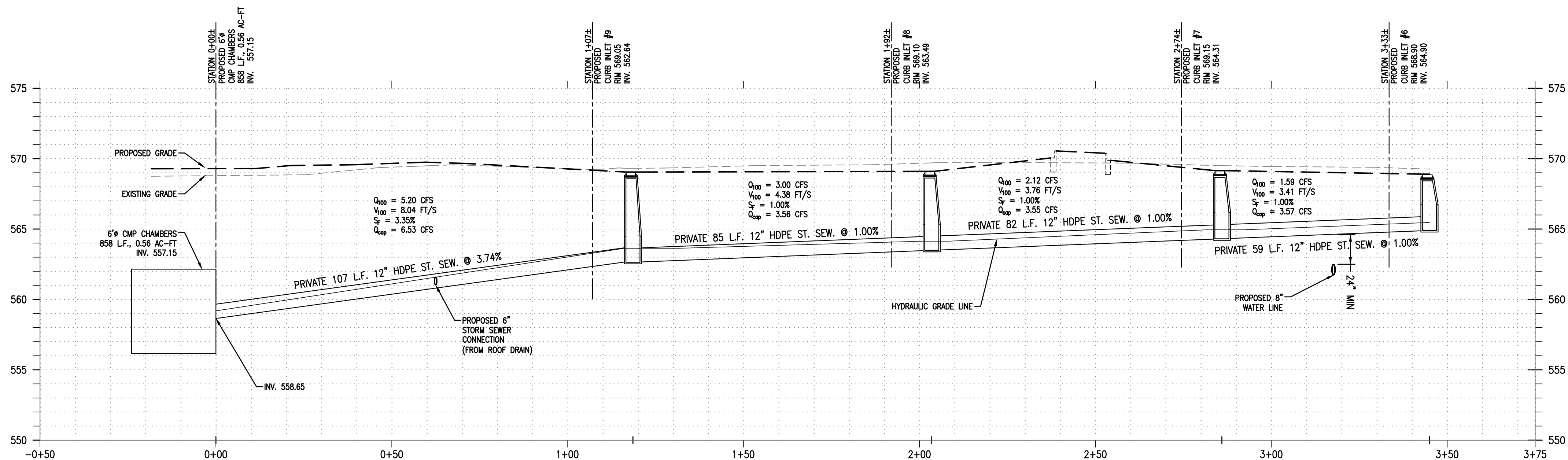
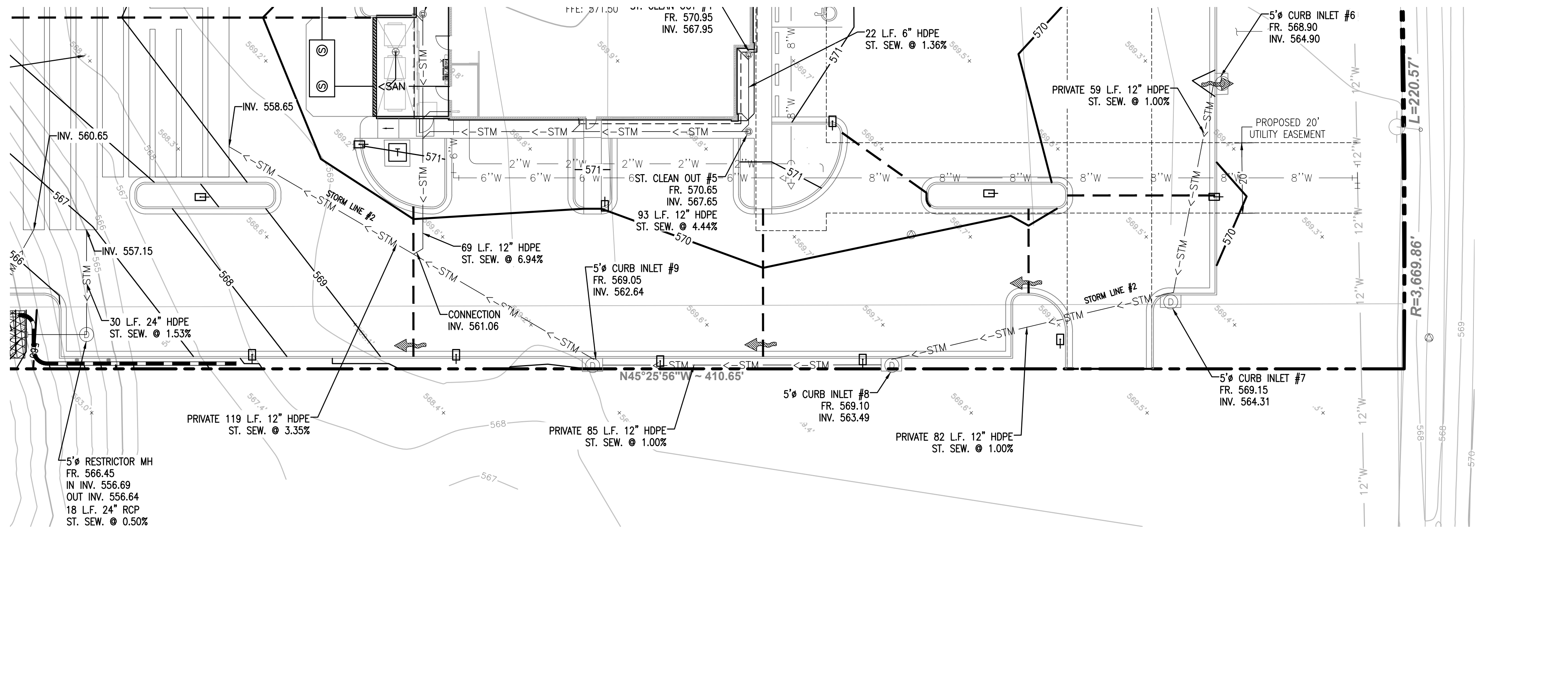
**ROCKWALL TEXAS**  
**912 I-30 FRONTAGE ROAD**



**PROJECT NUMBER**  
201512910

**SHEET TITLE**  
**STORM SEWER PROFILES**

**SHEET NUMBER**  
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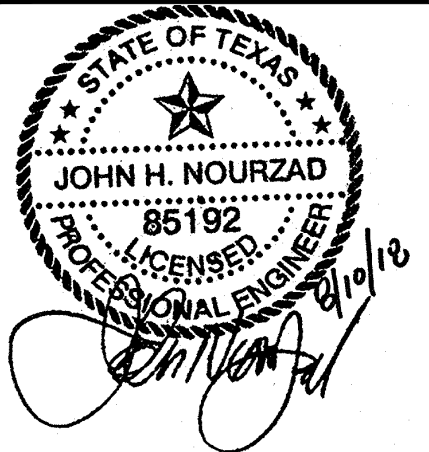




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PROFESSIONAL IN CHARGE  
**JOHN NOURZAD**  
PROFESSIONAL ENGINEER  
LICENSE NO. 85192

PROJECT MANAGER  
JEFF RATH

QUALITY CONTROL  
LARRY DIEHL

DRAWN BY  
MITCH HEFFERNAN

PROJECT NAME  
**TEXAS ROADHOUSE**

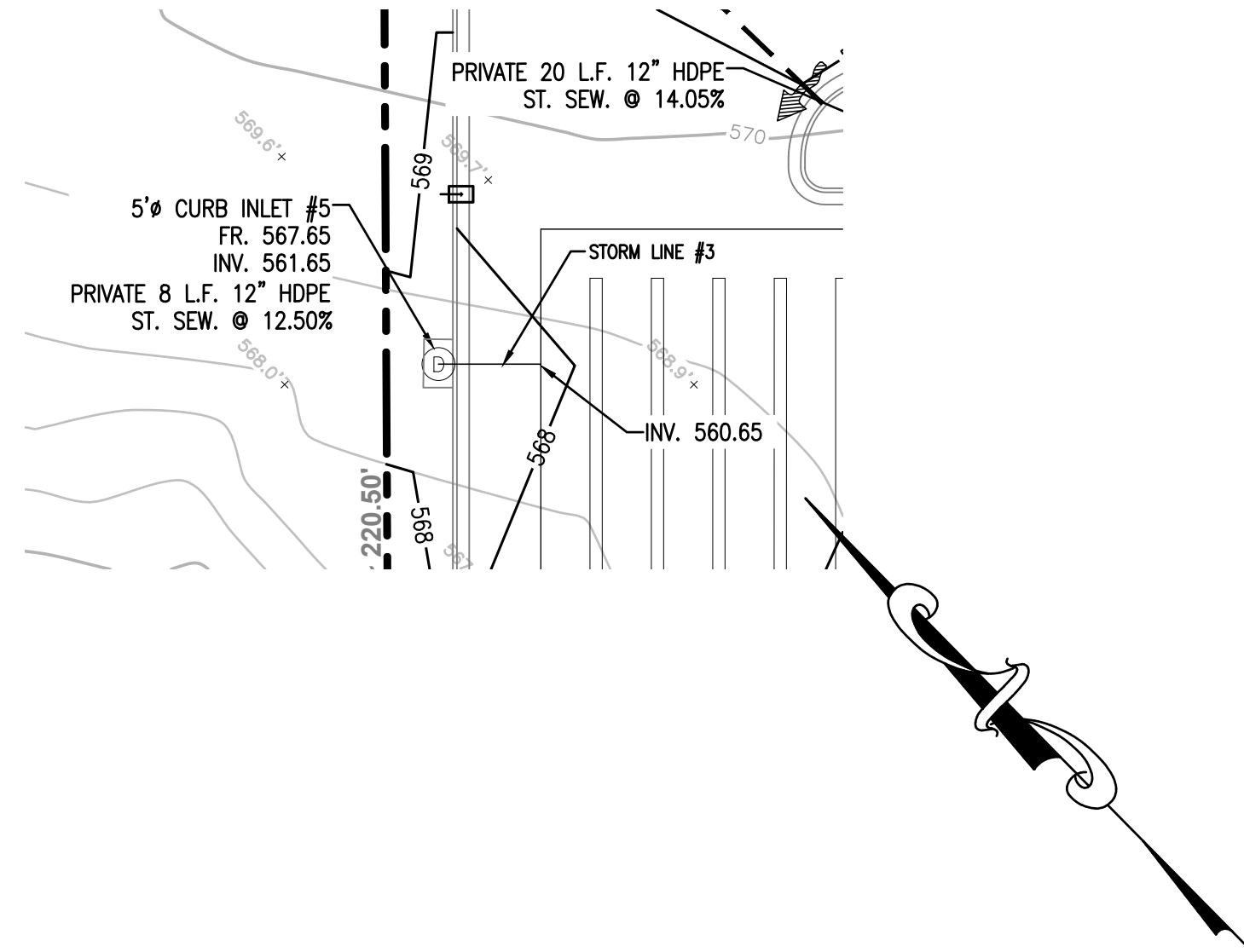
ROCKWALL  
TEXAS  
912 I-30 FRONTAGE ROAD



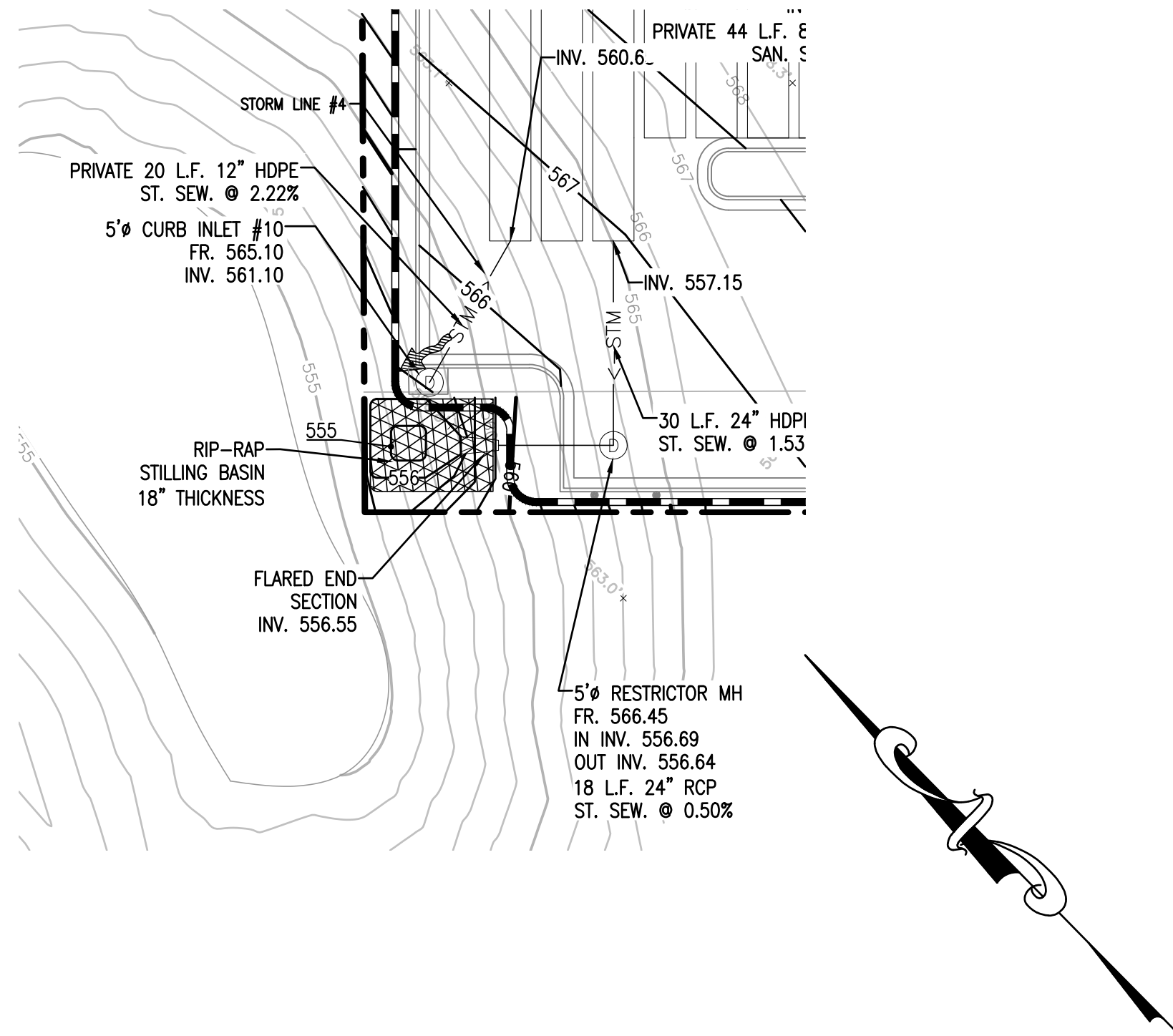
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SHEET TITLE  
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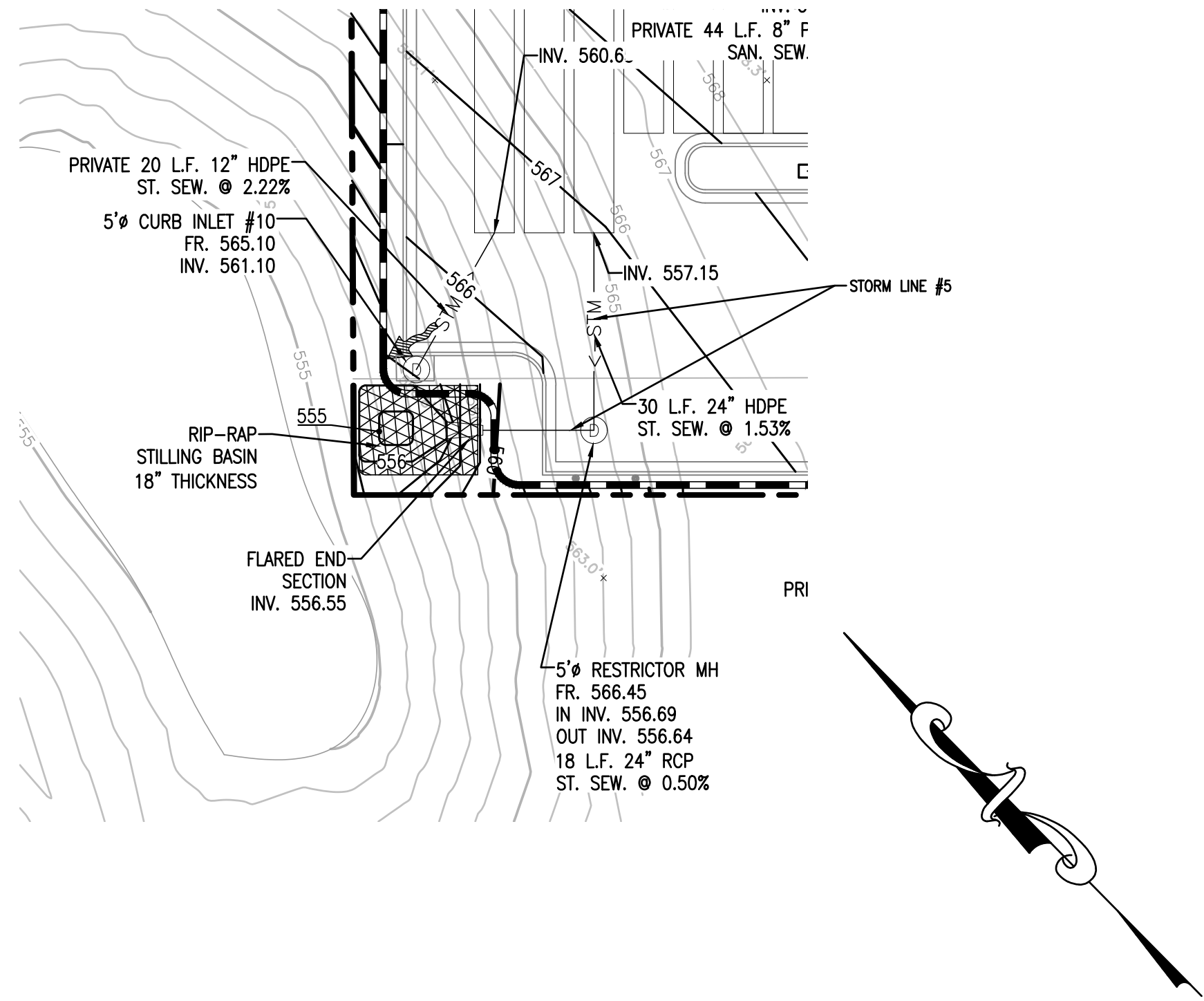
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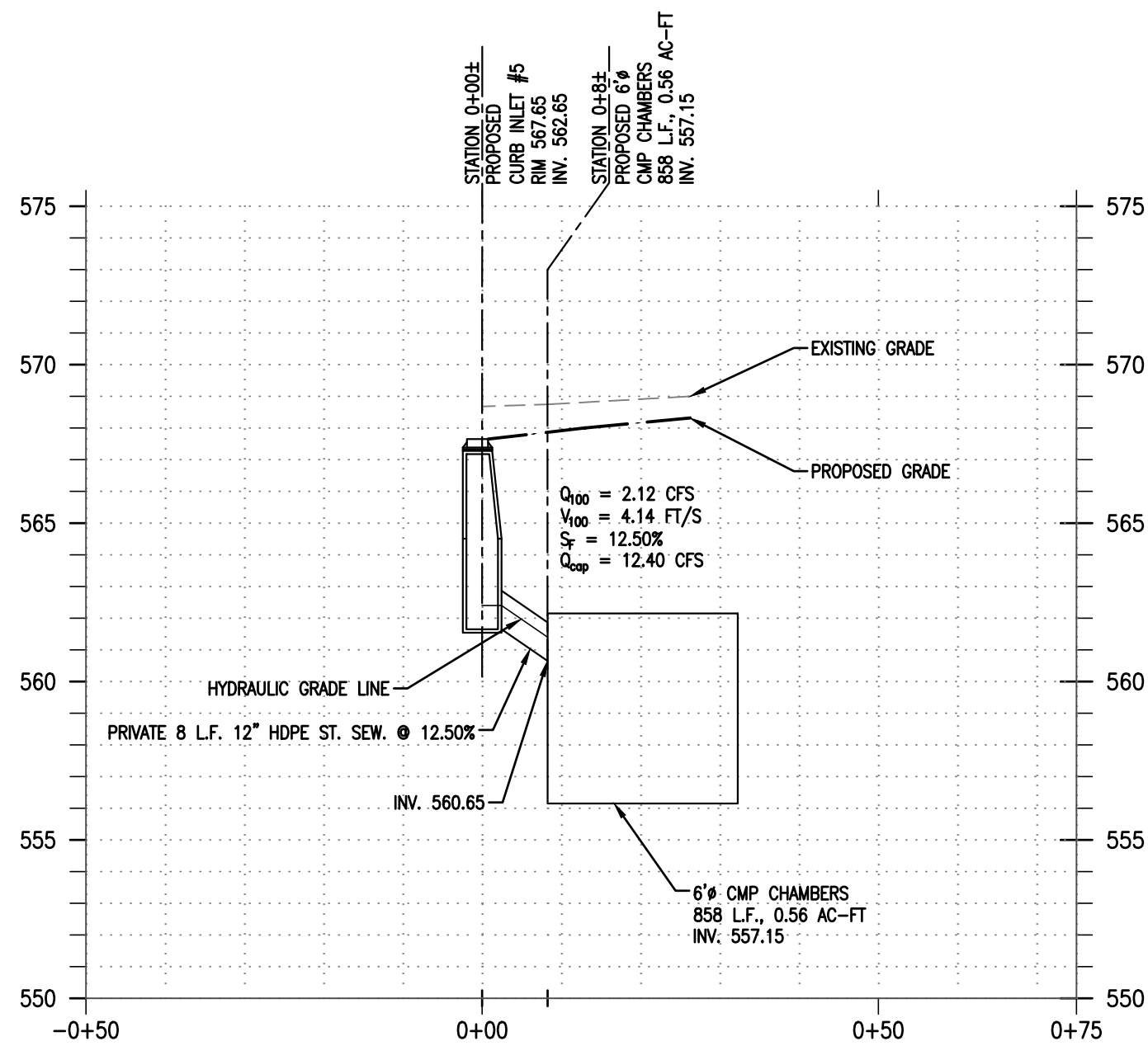
PLAN VIEW  
1" = 20'



PLAN VIEW  
1" = 20'



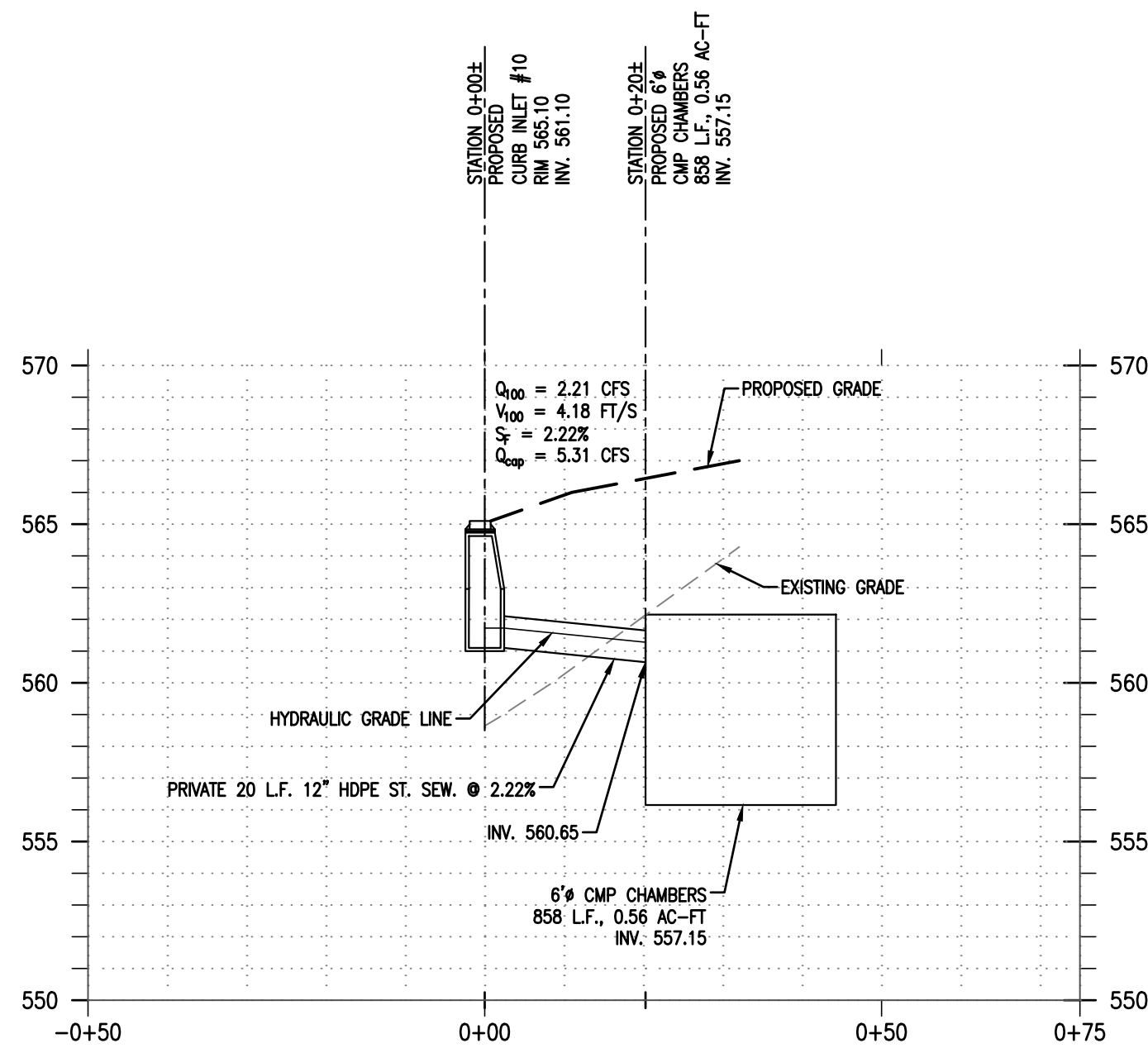
PLAN VIEW  
1" = 20'



PROPOSED STORM  
SEWER PROFILE # 3

PROFILE VIEW

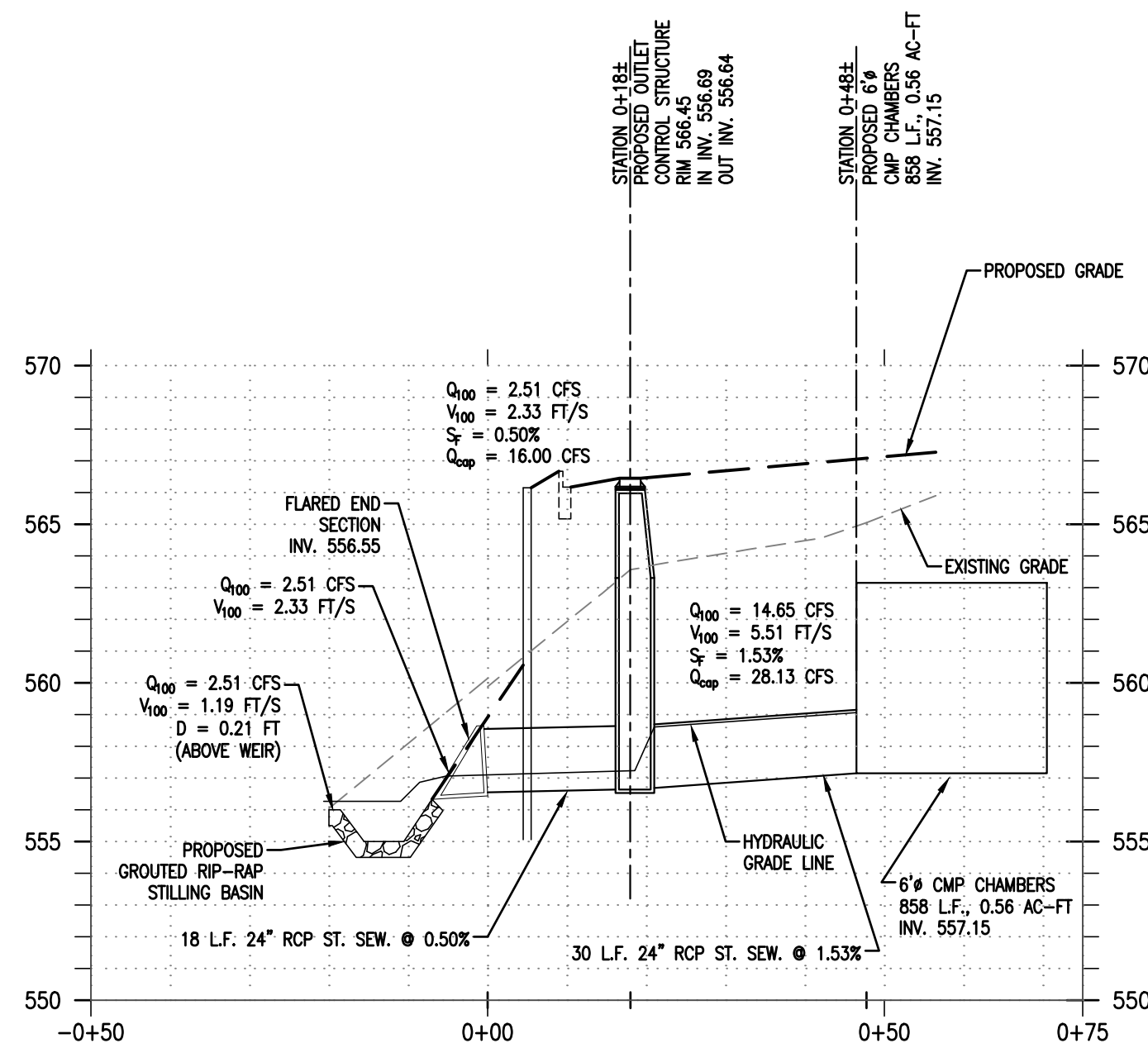
H: 1" = 10'  
V: 1" = 2'



PROPOSED STORM  
SEWER PROFILE # 4

PROFILE VIEW

H: 1" = 10'  
V: 1" = 2'



PROPOSED STORM  
SEWER PROFILE # 5

PROFILE VIEW

H: 1" = 10'  
V: 1" = 2'





GENERAL GRADING NOTES:

- ALL GRADING AND SITE PREPARATION WORK SHALL CONFORM WITH THE RECOMMENDATIONS AND SPECIFICATIONS CONTAINED IN THE GEOTECHNICAL REPORT.
- CONTRACTOR SHALL CAREFULLY PRESERVE ALL SITE BENCHMARKS AND REFERENCE POINTS DURING CONSTRUCTION OPERATIONS.
- CONTRACTOR SHALL PROVIDE A MINIMUM OF 95% STANDARD DENSITY COMPACTION USING A SHEEP'S FOOT ROLLER.
- CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST FORTY-EIGHT (48) HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED SITE IMPROVEMENTS SHOWN ON THE PLANS.
- CONTRACTOR SHALL INSTALL APPROPRIATE TREE PROTECTION MEASURES PRIOR TO COMMENCEMENT OF SITE GRADING OPERATIONS.
- CONTRACTOR SHALL ENSURE POSITIVE SURFACE DRAINAGE. AREAS OF SURFACE PONDING SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

- CONTRACTOR SHALL UTILIZE CARE WHEN WORKING NEAR EXISTING UTILITIES TO REMAIN. ANY DAMAGE TO EXISTING UTILITIES NOT NOTED TO BE REMOVED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
- CONTRACTOR SHALL REPAIR AT HIS EXPENSE ANY DAMAGE TO EXISTING ASPHALT, CONCRETE, CURBS, SIDEWALKS, ETC. RESULTING FROM CONSTRUCTION TRAFFIC AND/OR OPERATIONS. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
- CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS TO ORIGINAL CONDITION OR BETTER.
- EXCAVATION SHORING SHALL BE DONE AS NECESSARY FOR THE PROTECTION OF THE WORK AND FOR THE SAFETY OF PERSONNEL. SHORING SHALL BE IN ACCORDANCE WITH ALL O.S.H.A AND LOCAL REGULATIONS.
- ALL STRUCTURE BENCH WALLS SHALL BE SHAPED AND FORMED FOR A CLEAN TRANSITION WITH PROPER HYDRAULICS TO ALLOW THE SMOOTH CONVEYANCE OF FLOWS THROUGH THE MANHOLE OR BOX INLET. THE BENCH WALL SHALL FORM A DEFINED CHANNEL, TO A MINIMUM HEIGHT OF 80-PERCENT OF THE INSIDE DIAMETER OF THE INLET AND OUTLET PIPES TO FORM A 'U' SHAPED CHANNEL, CONSTRUCTED AT A MINIMUM 1/4-INCH PER FOOT SLOPE TO THE MANHOLE WALL.
- SEE GENERAL NOTES SHEET FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

FLOOD NOTE:

PROJECT SITE DOES NOT LIE WITHIN A 100 YEAR FLOOD HAZARD AREA AND IS LOCATED IN ZONE "X" AS SHOWN ON THE ABOVE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP NUMBER 48397C0040L WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

PROPOSED LEGEND:

- PROPERTY LINE
- PROPOSED CONTOUR (TO BE STRIPPED TO DURING INITIAL GRADING PHASE)
- EXISTING CONTOUR (PRIOR TO INITIAL GRADING PHASE)
- PROPOSED SPOT GRADE
- PROPOSED DRAINAGE FLOW DIRECTION

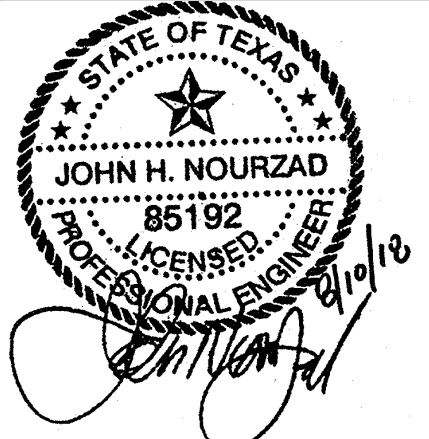
GreenbergFarrow

1430 W. Peachtree St. NW  
Suite 200  
Atlanta, GA 30309  
t: 404 601 4000 f: 404 601 3970  
PROJECT TEAM

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08/07/18	AS-BUILT



PROFESSIONAL IN CHARGE

JOHN NOURZAD  
PROFESSIONAL ENGINEER  
LICENSE NO. 85192

PROJECT MANAGER

JEFF RATH

QUALITY CONTROL

LARRY DIEHL

DRAWN BY

MITCH HEFFERNAN

PROJECT NAME

TEXAS  
ROADHOUSE

ROCKWALL  
TEXAS

912 I-30 FRONTAGE ROAD



PROJECT NUMBER

201512910

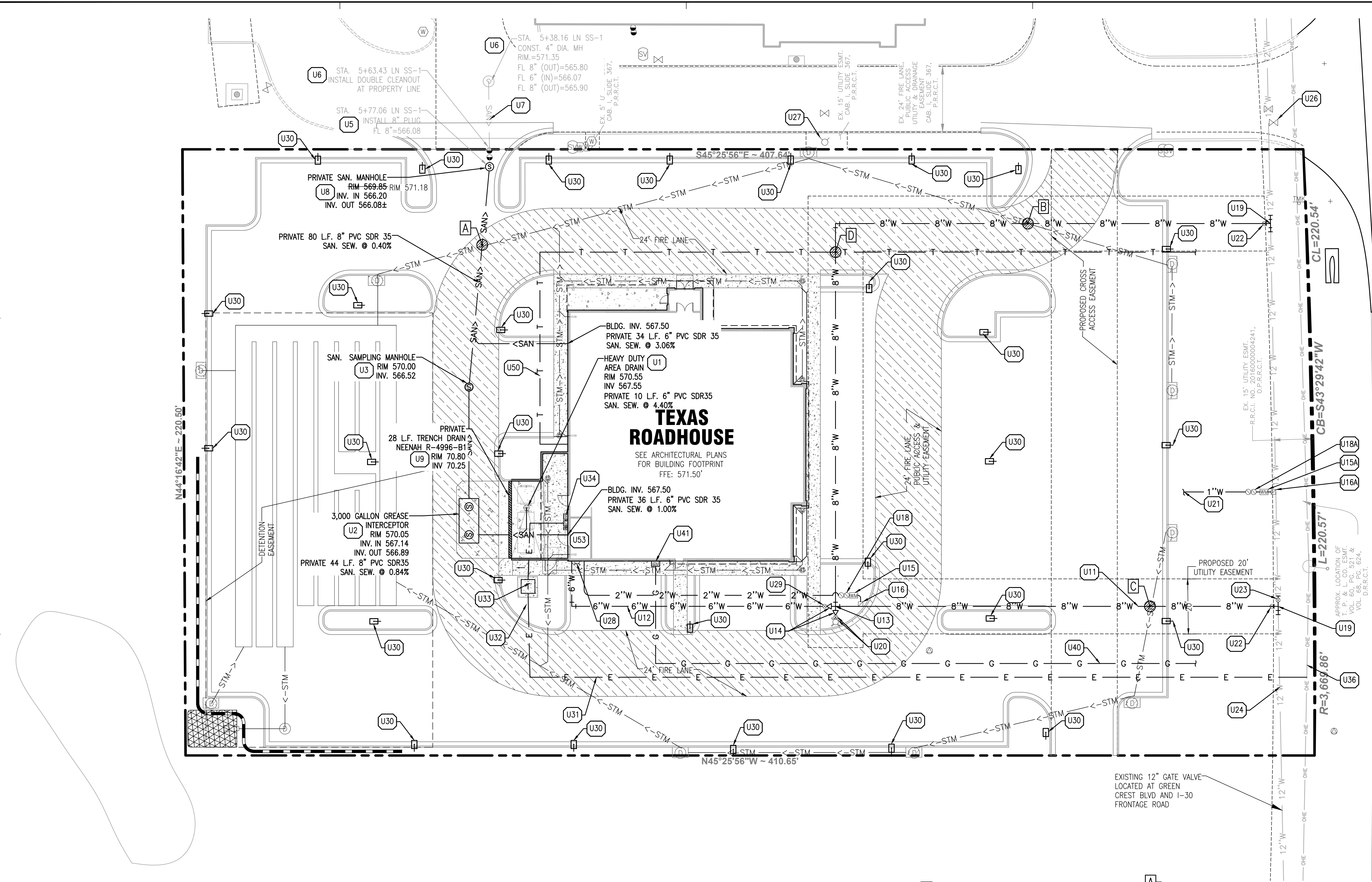
SHEET TITLE

INITIAL  
GRADING  
PLAN

SHEET NUMBER

C4.7





GENERAL UTILITY NOTES:

- CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST FORTY-EIGHT (48) HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED SITE IMPROVEMENTS SHOWN ON THE PLANS.
- CONTRACTOR SHALL UTILIZE CARE WHEN WORKING NEAR EXISTING UTILITIES TO REMAIN. ANY DAMAGE TO EXISTING UTILITIES NOT NOTED TO BE REMOVED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
- CONTRACTOR SHALL EXCAVATE AND VERIFY IN FIELD ALL EXISTING UTILITY LOCATIONS, SIZES, CONDITIONS AND ELEVATIONS AT PROPOSED POINTS OF CONNECTION PRIOR TO COMMENCING ANY UNDERGROUND CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO PROCEEDING WITH CONSTRUCTION.
- ALL PROPOSED CONNECTIONS TO EXISTING UTILITY STRUCTURES OR PIPING SHALL BE IN ACCORDANCE WITH THE APPLICABLE GOVERNING AUTHORITY REQUIREMENTS AND SPECIFICATIONS.
- CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ALL EXISTING SEWER SYSTEMS DURING CONSTRUCTION OPERATIONS AS NECESSARY TO PREVENT SILT OR DEBRIS ACCUMULATION.
- SEE THE GENERAL NOTES SHEET FOR ADDITIONAL INFORMATION AND REQUIREMENTS INCLUDING ALL PIPE MATERIAL AND JOINT SPECIFICATIONS.

UTILITY KEY NOTES:

- U1 PROPOSED ZURN Z505 HEAVY DUTY AREA DRAIN WITH REMOVABLE SOLID COVER OPTION-SC TO CONNECT TO SANITARY SEWER SYSTEM (COORDINATE WITH ARCHITECTURAL AND PLUMBING PLANS)
- U2 PROPOSED 3,000 GALLON SANITARY SEWER GREASE INTERCEPTOR (SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION AND DETAIL)
- U3 PROPOSED SANITARY SEWER SAMPLING WELL (SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION AND DETAIL)
- U5 CONNECT PROPOSED 8" SANITARY SEWER TO EXISTING 8" SANITARY SEWER PER LOCAL CODES (CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION AND ELEVATION OF EXISTING SANITARY INVERT PRIOR TO INSTALLING PROPOSED SANITARY SEWER LINES)
- U6 EXISTING SANITARY SEWER STRUCTURE TO REMAIN
- U7 EXISTING SANITARY SEWER LINE TO REMAIN
- U8 PROPOSED SANITARY SEWER MANHOLE PER NCTCOG 4TH EDITION STANDARDS AND CITY OF ROCKWALL STANDARDS
- U9 PROPOSED NEENAH R-4996-A1 TRENCH DRAIN WITH CLOSED LID AND BOTTOM CONNECTION (CONTRACTOR TO CONNECT BOTTOM CONNECTION TO PROPOSED SANITARY LINE)
- U11 PROPOSED 8" D.I.P. CLASS 53 FIRE PROTECTION WATER SERVICE LINE
- U12 PROPOSED 6" D.I.P. CLASS 53 FIRE PROTECTION WATER SERVICE LINE
- U13 PROPOSED 8"x8"x6" D.I. CROSS
- U14 PROPOSED 8"x6" D.I. REDUCER
- U15 PROPOSED 2" WATER METER AND METER VAULT PER LOCAL CODES
- U15A PROPOSED 1" WATER METER AND METER VAULT PER LOCAL CODES
- U16 PROPOSED 2" DOMESTIC WATER SERVICE CONNECTION PER LOCAL CODES
- U16A PROPOSED 1" DOMESTIC WATER SERVICE CONNECTION PER LOCAL CODES
- U18 PROPOSED 2" DOMESTIC BACKFLOW PREVENTION DEVICE WITH DOUBLE CHECK PER LOCAL CODES
- U18A PROPOSED 1" DOMESTIC BACKFLOW PREVENTION DEVICE WITH DOUBLE CHECK PER LOCAL CODES
- U19 PROPOSED PRESSURE 12"x8" CUT IN TEE WITH SOLID SLEEVE CONNECTIONS PER LOCAL CODES
- U20 PROPOSED FIRE HYDRANT AND AUXILIARY VALVE PER LOCAL CODES
- U21 PROPOSED 1" TYPE K COPPER IRRIGATION WATER LINE STUB
- U22 PROPOSED 8" VALVE

- U23 PROPOSED 12" VALVE
- U24 EXISTING WATER MAIN TO REMAIN
- U26 EXISTING WATER VALVE TO REMAIN
- U27 EXISTING FIRE HYDRANT TO REMAIN
- U28 PROPOSED FIRE DEPARTMENT CONNECTION (FDC) PER LOCAL CODE
- U29 PROPOSED 6" VALVE
- U30 PROPOSED LIGHT POLE (SEE PHOTOMETRIC PLAN AND BUILDING ELECTRICAL PLANS FOR ADDITIONAL INFORMATION AND DETAIL)
- U31 PROPOSED PRIMARY ELECTRIC SERVICE LINE. LINE MUST BE UNDERGROUND. (CONTRACTOR SHALL COORDINATE NEW BUILDING ELECTRIC SERVICE ROUTING AND INSTALLATION REQUIREMENTS WITH POWER COMPANY PRIOR TO ANY EXCAVATION OR INSTALLATION OF CONDUITS. SEE BUILDING ELECTRICAL PLANS FOR ADDITIONAL INFORMATION AND DETAILS)
- U32 PROPOSED ELECTRIC TRANSFORMER LOCATION (CONTRACTOR SHALL COORDINATE TRANSFORMER LOCATION, SIZE AND DESIGN WITH POWER COMPANY)
- U33 SECONDARY POWER - SEE SHEET E3, DETAIL 1 FOR SECONDARY ELECTRICAL POWER REQUIREMENTS - CONDUIT AND WIRE QUANTITY AND SIZE TO BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR
- U34 PROPOSED ELECTRIC SERVICE METER, CT CABINET AND DISCONNECT LOCATION (SEE BUILDING ELECTRICAL PLANS FOR ADDITIONAL INFORMATION AND DETAIL)
- U36 EXISTING ELECTRIC SERVICE LINE TO REMAIN
- U40 PROPOSED GAS SERVICE LINE (CONTRACTOR SHALL COORDINATE ROUTING AND INSTALLATION REQUIREMENTS WITH GAS COMPANY. SEE BUILDING MECHANICAL PLANS FOR ADDITIONAL INFORMATION AND DETAIL)
- U41 PROPOSED GAS SERVICE METER (CONTRACTOR SHALL COORDINATE METER LOCATION WITH GAS COMPANY AND BUILDING MECHANICAL PLANS FOR ADDITIONAL INFORMATION AND DETAIL)
- U50 PROPOSED (2) 2" PVC SCHEDULE 80 CONDUITS WITH PULL WIRE FOR NEW TELEPHONE AND CABLE TELEVISION SERVICE LINES (CONTRACTOR SHALL COORDINATE ROUTING AND INSTALLATION REQUIREMENTS WITH TELEPHONE AND CABLE COMPANIES. SEE BUILDING ELECTRICAL PLANS FOR ADDITIONAL INFORMATION AND DETAIL)
- U53 PROPOSED BUILDING MECHANICAL ROOM (SHOWN FOR REFERENCE ONLY)

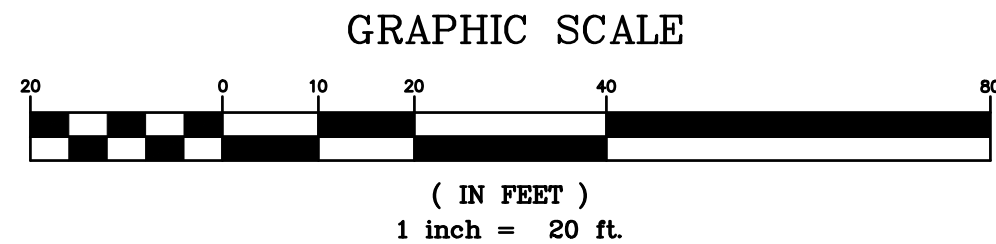
UTILITY CROSSINGS:

- A BOTTOM OF PROPOSED 8" SANITARY SEWER =566.2' ±  
TOP OF PROPOSED 12" STORM SEWER =563.0' ±  
VERTICAL SEPARATION = 3.2'
- B BOTTOM OF PROPOSED 12" STORM SEWER =564.3' ±  
TOP OF PROPOSED 8" WATER LINE =562.3' ±  
VERTICAL SEPARATION = 2.0'
- C BOTTOM OF PROPOSED 12" STORM SEWER =564.5' ±  
TOP OF PROPOSED 8" WATER LINE =562.5' ±  
VERTICAL SEPARATION = 2.0'
- D BOTTOM OF PROPOSED TELEPHONE LINE =567.2' ±  
TOP OF PROPOSED 8" WATER LINE =566.2' ±  
VERTICAL SEPARATION = 1.0'

PROPOSED LEGEND:

- PROPERTY LINE
- STM--- PROPOSED STORM SEWER
- SAN>--- PROPOSED SANITARY SEWER
- 6"W--- PROPOSED 6" FIRE PROTECTION WATER LINE
- 8"W--- PROPOSED 8" FIRE PROTECTION WATER LINE
- 2"W--- PROPOSED 2" DOMESTIC WATER SERVICE
- 1"W--- PROPOSED 1" IRRIGATION WATER SERVICE
- E--- PROPOSED ELECTRIC SERVICE LINE
- G--- PROPOSED GAS SERVICE LINE
- T--- PROPOSED TELEPHONE SERVICE LINE
- [Symbol] PROPOSED STORM SEWER STRUCTURE
- [Symbol] PROPOSED STORM SEWER STRUCTURE WITH CLOSED LID
- [Symbol] PROPOSED STORM SEWER CLEAN OUT
- [Symbol] HEAVY DUTY AREA DRAIN
- [Symbol] PROPOSED SANITARY SEWER CLEAN OUT
- [Symbol] PROPOSED SANITARY SEWER GREASE INTERCEPTOR
- [Symbol] PROPOSED SANITARY SEWER SAMPLING WELL
- [Symbol] PROPOSED TRENCH DRAIN
- [Symbol] PROPOSED WATER SERVICE, VALVE AND VALVE BOX
- [Symbol] PROPOSED GATE VALVE AND VALVE BOX
- [Symbol] PROPOSED WATER METER AND VAULT
- [Symbol] PROPOSED FIRE HYDRANT
- [Symbol] PROPOSED FIRE DEPARTMENT CONNECTION (FDC)
- [Symbol] PROPOSED BACKFLOW PREVENTOR
- [Symbol] PROPOSED LIGHT POLE
- [Symbol] PROPOSED GAS METER
- [Symbol] PROPOSED ELECTRIC METER, CT CABINET AND DISCONNECT
- [Symbol] PROPOSED TRANSFORMER

NOTE: SEE SHEET C1.0 FOR EXISTING LEGEND

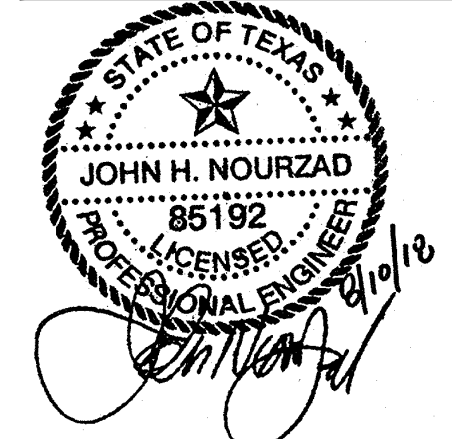


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JOHN NOURZAD  
PROFESSIONAL ENGINEER  
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QUALITY CONTROL

LARRY DIEHL

DRAWN BY

MITCH HEFFERNAN

PROJECT NAME

TEXAS  
ROADHOUSE

ROCKWALL  
TEXAS

912 I-30 FRONTAGE ROAD



PROJECT NUMBER

201512910

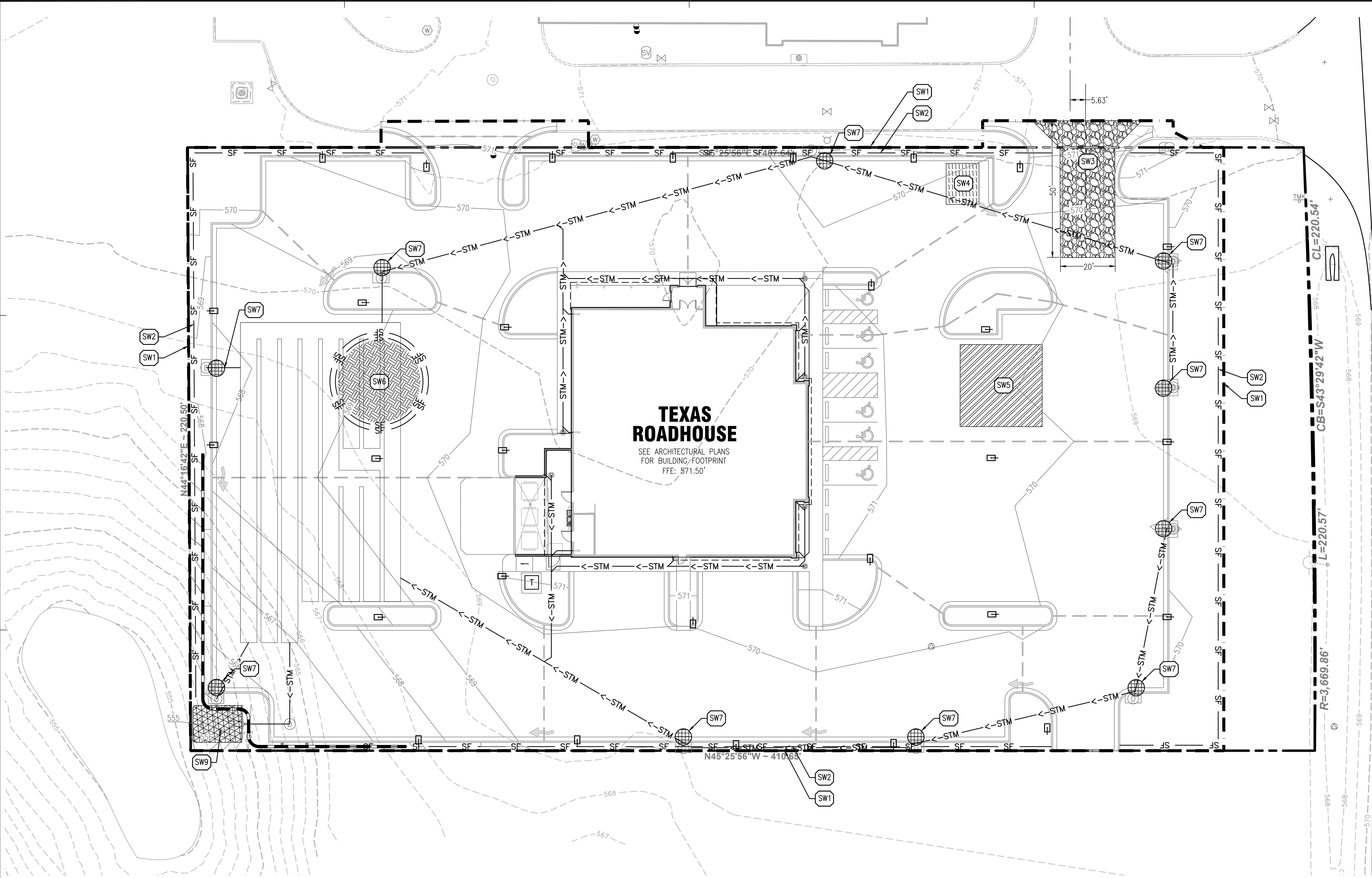
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UTILITY  
PLAN

SHEET NUMBER

C5.0

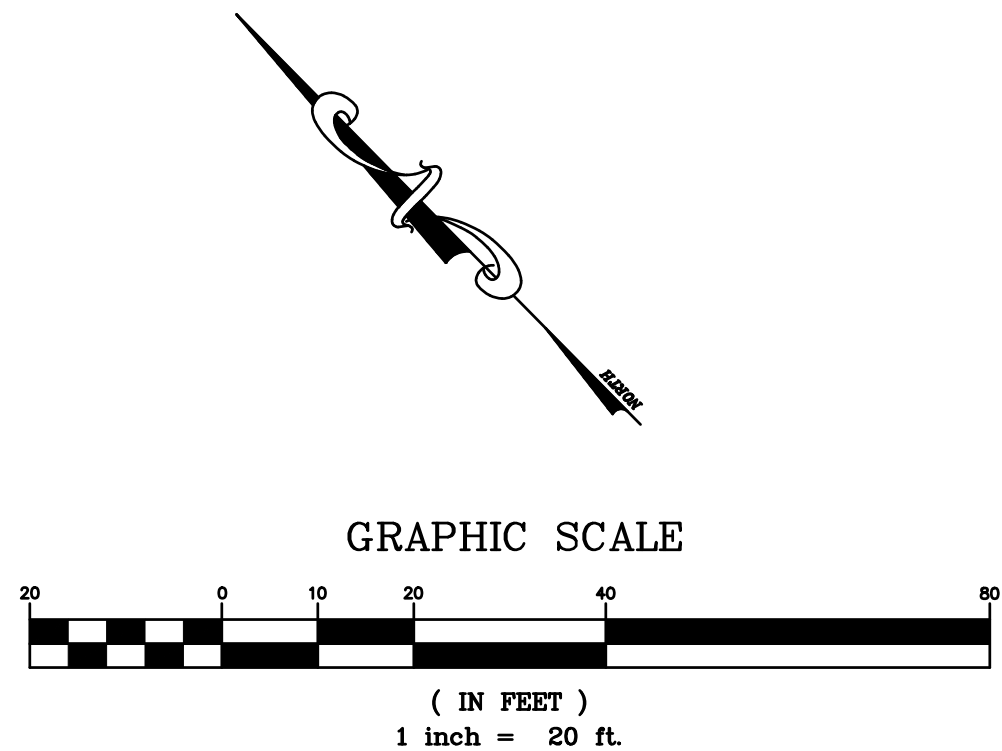




SWPPP / SESC NOTES:

- COPIES OF THE APPROVED SOIL EROSION AND SEDIMENT CONTROL (SESC) PLANS OR STORMWATER POLLUTION PREVENTION PLANS (SWPPP) SHALL BE MAINTAINED ON THE SITE AT ALL TIMES ALONG WITH ANY NECESSARY PERMITS AND INSPECTION FORMS.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES AND DEVICES SHALL BE INSTALLED AND FUNCTIONAL BEFORE THE SITE IS OTHERWISE DISTURBED. THEY SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SITE STABILIZATION HAS BEEN ACHIEVED.
- CONTRACTOR SHALL IMPLEMENT SITE SPECIFIC BEST MANAGEMENT PRACTICES (BMPs) AS SHOWN AND REQUIRED BY THE SWPPP/SESC. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED BY THE CONTRACTOR AS DICTATED BY SITE CONDITIONS OR THE PROJECT GOVERNING AUTHORITIES AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- ALL BEST MANAGEMENT PRACTICES AND CONTROLS SHALL CONFORM TO THE APPLICABLE FEDERAL, STATE, OR LOCAL REQUIREMENTS, STANDARDS, AND SPECIFICATIONS OR MANUAL OF PRACTICE.
- IF AFTER REPEATED FAILURE ON THE PART OF THE CONTRACTOR TO PROPERLY CONTROL SOIL EROSION, SEDIMENT AND/OR POLLUTION FROM THE PROJECT SITE, THE GOVERNING AUTHORITIES RESERVE THE RIGHT TO EFFECT NECESSARY CORRECTIVE MEASURES AND CHARGE ANY COSTS TO THE CONTRACTOR.
- INLET PROTECTION SHALL BE INSTALLED AROUND EACH INLET OR CATCH BASIN WITHIN THE VICINITY OF THE DISTURBED AREA LIMITS AS SHOWN ON THE PLANS. THESE SHALL BE MAINTAINED UNTIL THE TRIBUTARY DRAINAGE AREAS HAVE ADEQUATE GRASS COVER AND/OR APPROPRIATE GROUND STABILIZATION.
- ALL STREETS ADJACENT TO THE PROJECT SITE SHALL BE KEPT FREE OF DIRT, MUD AND DEBRIS. CONTRACTOR SHALL CLEAN ADJACENT PAVEMENTS AT THE END OF EACH WORKING DAY WHEN NECESSARY.
- CONTRACTORS SHALL MINIMIZE BARE EARTH SURFACES DURING CONSTRUCTION TO THE EXTENT PRACTICABLE.
- ALL DISTURBED AREAS SHALL BE SEEDED OR SODDED AS SOON AS IS PRACTICABLE.
- IF DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIALS ARE DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, OR DITCHES SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THIS LOOSE MATERIAL SHALL BE REMOVED.
- ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY EXISTING STORM DRAINAGE SYSTEMS BY THE USE OF INLET PROTECTION OR OTHER APPROVED FUNCTIONAL METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT RESULTING FROM CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT.
- CONSTRUCTION ACCESS POINTS TO THE SITE SHALL BE PROTECTED IN SUCH A WAY AS TO PREVENT TRACKING OF MUD OR SOIL ONTO PUBLIC THOROUGHFARES. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
- SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- DUST SHALL BE ADEQUATELY CONTROLLED ON THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
- RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED TRASH CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- DURING DEWATERING OPERATIONS, WATER SHALL BE PUMPED OR OTHERWISE DISCHARGED FROM THE SITE INTO SEDIMENT BASINS, SILT TRAPS, DEWATERING BAGS OR POLYMER MIXING SWALES. DEWATERING DIRECTLY INTO FIELD TILES OR STORMWATER SYSTEMS IS PROHIBITED.
- ALL DISTURBED AREAS SHALL BE SEEDED OR SODDED WITHIN THREE (3) DAYS OF FINAL DISTURBANCE.
- ALL SOIL STOCKPILES SHALL BE STABILIZED WITHIN THREE (3) DAYS OF FORMING THE STOCKPILE.
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER THE

- CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED AS FOLLOWS:
- WHEN THE INITIATION OF STABILIZATION MEASURES BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
  - WHEN CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 14 DAYS FROM WHEN ACTIVITIES CEASED (I.E. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 14 DAYS), THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASES.
  - PRE-QUALIFIED PERSONNEL (PROVIDED BY THE CONTRACTOR) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A RAINFALL EVENT THAT IS 0.5 INCH OR GREATER (OR EQUIVALENT SNOWFALL). REQUIRED REPAIRS SHOULD BE COMPLETED WITHIN FORTY-EIGHT (48) HOURS OF THE INSPECTION.
  - EROSION CONTROL BLANKETS SHALL BE USED IN AREAS OF 4:1 SLOPE OR STEEPER.
  - ALL TEMPORARY EROSION CONTROL AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE PROPERLY STABILIZED OR DISPOSED OF OFF SITE BY THE CONTRACTOR.
  - PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN THOSE INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY STORM WATER POLLUTION PREVENTION PLAN SHALL BE SUBMITTED TO THE OWNER AND ENGINEER FOR REVIEW.
  - ALL CONSTRUCTION VEHICLE TRAFFIC MUST REMAIN WITHIN THE LIMITS OF CONSTRUCTION.



PROPOSED LEGEND:

- PROPERTY LINE
- 50 PROPOSED CONTOUR
- LAND DISTURBANCE LIMITS (SEE DISTURBED AREA TABLE)
- SF PROPOSED SILT FENCE
- PROPOSED INLET PROTECTION INSERT
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED CONCRETE WASHOUT (SUGGESTED LOCATION)
- PROPOSED CONTRACTOR STAGING AREA (SUGGESTED LOCATION)
- PROPOSED TEMPORARY TOPSOIL STOCKPILE (SUGGESTED LOCATION)
- PROPOSED EROSION CONTROL BLANKET
- PROPOSED RIP-RAP
- PROPOSED GRADING RIDGE LINE
- PROPOSED DRAINAGE FLOW DIRECTION
- PROPOSED OVERLAND FLOOD ROUTE
- PROPOSED STORM SEWER STRUCTURES
- STM> PROPOSED STORM SEWER
- PROPOSED LIGHT POLE

SWPPP KEY NOTES:

- SW1 PROPOSED PROJECT LAND DISTURBANCE LIMITS  
SW2 PROPOSED SILT FENCE  
SW3 PROPOSED STABILIZED CONSTRUCTION ENTRANCE  
SW4 PROPOSED CONCRETE WASHOUT WITH MINIMUM 30-MIL POLYETHYLENE LINING AND LOCATION SIGNAGE  
SW5 PROPOSED CONTRACTOR STAGING AREA INCLUDING MATERIALS STORAGE, COVERED TRASH DUMPSTER, AND PORTABLE TOILET FACILITIES  
SW6 PROPOSED TEMPORARY TOPSOIL STOCKPILE WITH DOUBLE SILT FENCE PROTECTION  
SW7 PROPOSED INLET PROTECTION  
SW8 PROPOSED EROSION CONTROL BLANKET (NORTH AMERICAN GREEN SC150)  
SW9 PROPOSED GROUTED RIP-RAP STILLING BASIN (SEE C7.2 FOR DETAILS)

SWPPP/SESC CONSTRUCTION SCHEDULE:

- OBTAIN ALL APPLICABLE SITE PERMITS AND THOROUGHLY REVIEW PROJECT'S SOIL EROSION AND SEDIMENT CONTROL PLAN (SESC) OR STORMWATER POLLUTION PREVENTION PLANS (SWPPP) PRIOR TO COMMENCEMENT OF CONSTRUCTION OPERATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND UPDATING THE SWPPP/SESC THROUGHOUT THE DURATION OF CONSTRUCTION AS NECESSARY UNTIL FINAL SITE STABILIZATION IS ACHIEVED.
- INSTALL PERIMETER SEDIMENT CONTROL MEASURES (I.E. SILT FENCE AND STABILIZED CONSTRUCTION ENTRANCE).
- INSTALL INLET PROTECTION DEVICES FOR EXISTING STORM SEWER INLETS AND DRAINAGE STRUCTURES.
- PERFORM SITE INSPECTIONS ON A WEEKLY BASIS AND WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A RAINFALL EVENT THAT IS 0.5 INCH OR GREATER (OR EQUIVALENT SNOWFALL). AT A MINIMUM, THE INSPECTIONS SHALL INCLUDE THE DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, ALL STRUCTURAL CONTROL MEASURES, LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND ANY ADDITIONAL BEST MANAGEMENT PRACTICES IDENTIFIED IN THE SWPPP/SESC.
  - ALL SITE EROSION AND SEDIMENT CONTROL MEASURES AND BEST MANAGEMENT PRACTICES SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SHALL BE CONTINUOUSLY MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION. CONTRACTOR SHALL MAKE AND COMPLETE THE REQUIRED REPAIRS WITHIN FORTY-EIGHT (48) HOURS OF THE INSPECTION.
  - CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL STRUCTURAL CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE SITE INSPECTIONS.
- INSTALL NEW STORM SEWERS AND OTHER SITE UTILITIES AS INDICATED ON THE PLANS. INSTALLATION OF STORM SEWERS INCLUDING ALL DETENTION SYSTEMS MUST BE DONE PRIOR TO ANY PAVING INCLUDING SLAB.
- PROVIDE TEMPORARY SEEDING AND/OR MULCHING FOR ALL DISTURBED SITE AREAS THAT WILL NOT BE WORKED ON FOR MORE THAN FOURTEEN (14) DAYS.
- INSTALL TEMPORARY CONCRETE WASHOUT FACILITY PRIOR TO COMMENCEMENT OF ANY CONCRETE WORK ON SITE.
- INSTALL CURBS AND BEGIN SITE PAVING OPERATIONS (I.E. DRIVEWAYS, SIDEWALKS, ETC.)
- PERFORM STREET CLEANING OPERATIONS AND OTHER BEST MANAGEMENT PRACTICES AS NEEDED FOR AREAS ADJACENT TO THE PROJECT SITE.
- INSTALL BUILDING FOUNDATION AND COMPLETE BUILDING CONSTRUCTION AND REMAINING SITE IMPROVEMENTS.
- REMOVE ALL TEMPORARY SITE EROSION AND SEDIMENT CONTROL MEASURES WITHIN THIRTY (30) DAYS OF FINAL SITE STABILIZATION ONCE PERMANENT STABILIZATION OF THE ENTIRE SITE HAS BEEN COMPLETED AND ALL GROUND COVER IS ESTABLISHED.

DISTURBED SITE AREA TABLE:

TOTAL DISTURBED AREA:	84,797 SQ. FT. / 1.95 ACRES
IMPERVIOUS AREA:	70,272 SQ. FT. / 1.61 ACRES
PERVIOUS AREA:	14,525 SQ. FT. / 0.33 ACRES

GreenbergFarrow

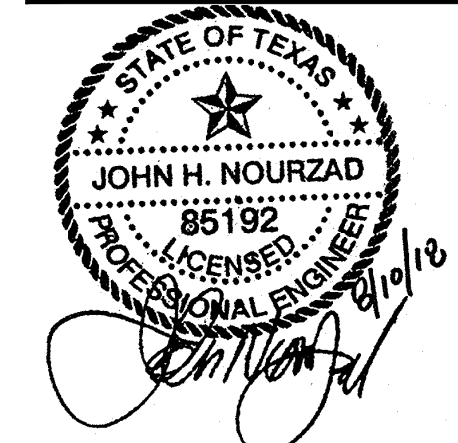
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PROFESSIONAL ENGINEER  
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PROJECT MANAGER

JEFF RATH

QUALITY CONTROL

LARRY DIEHL

DRAWN BY

MITCH HEFFERNAN

PROJECT NAME

TEXAS  
ROADHOUSE

ROCKWALL

TEXAS

912 I-30 FRONTAGE ROAD



PROJECT NUMBER

201512910

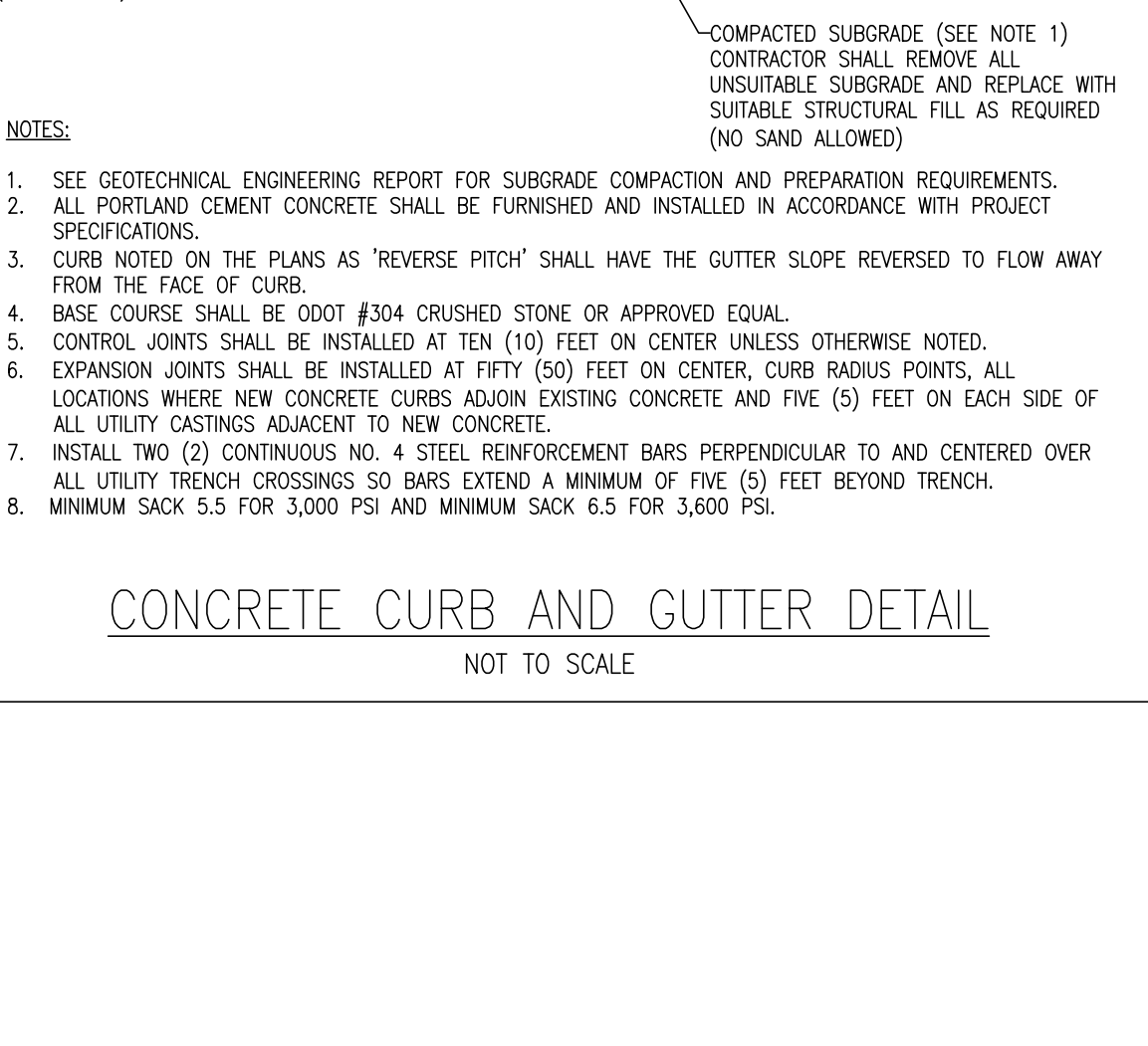
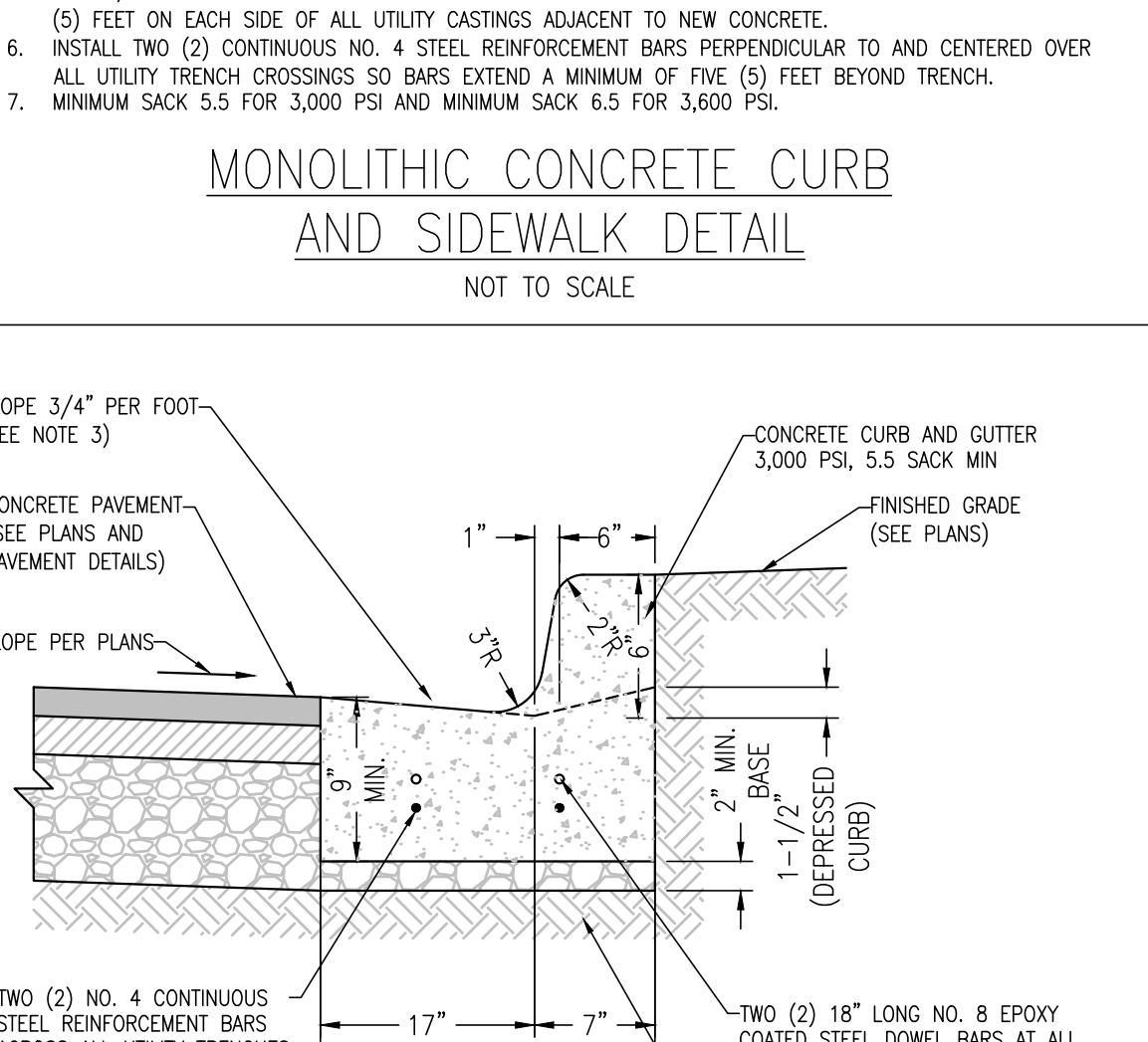
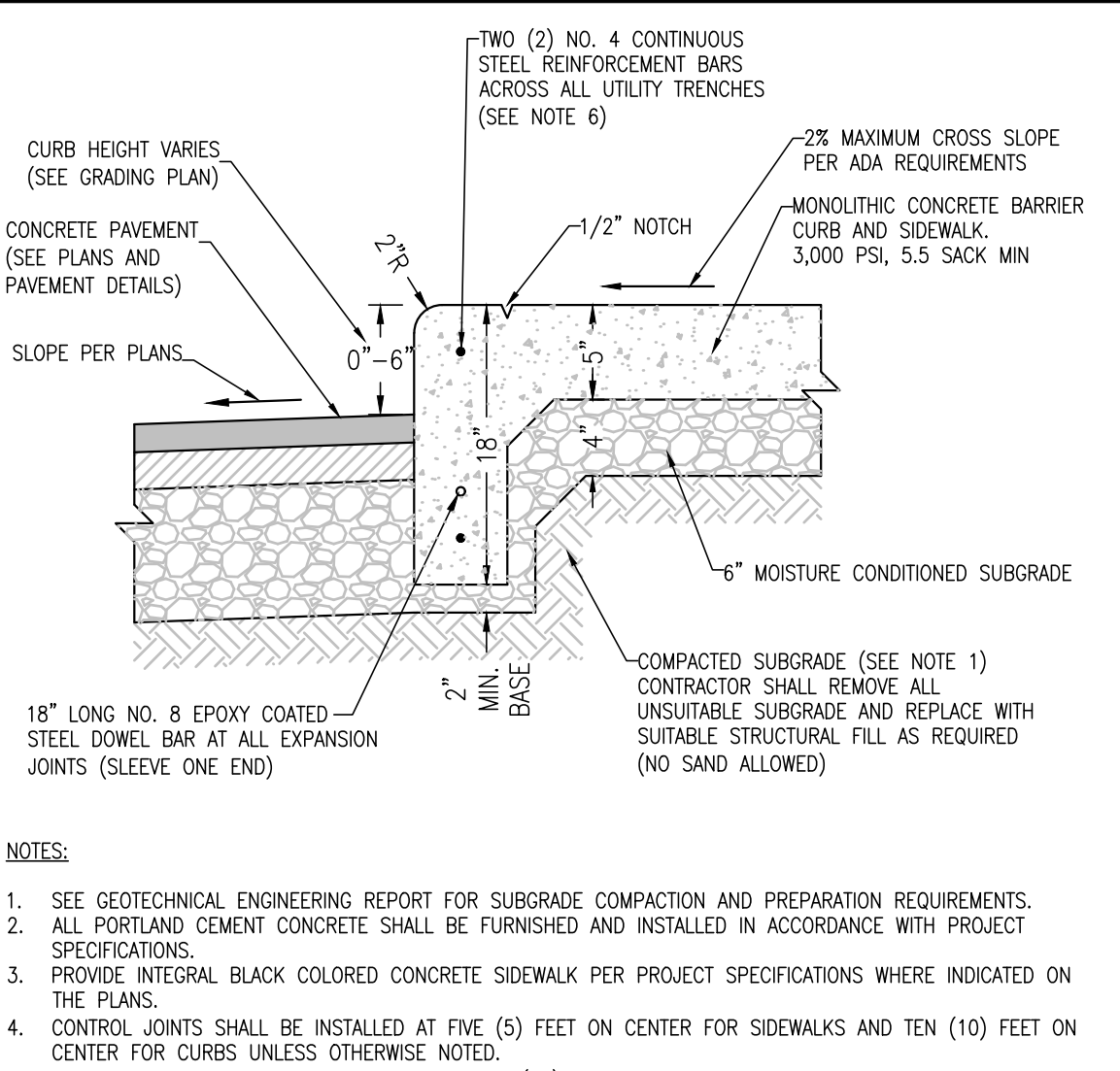
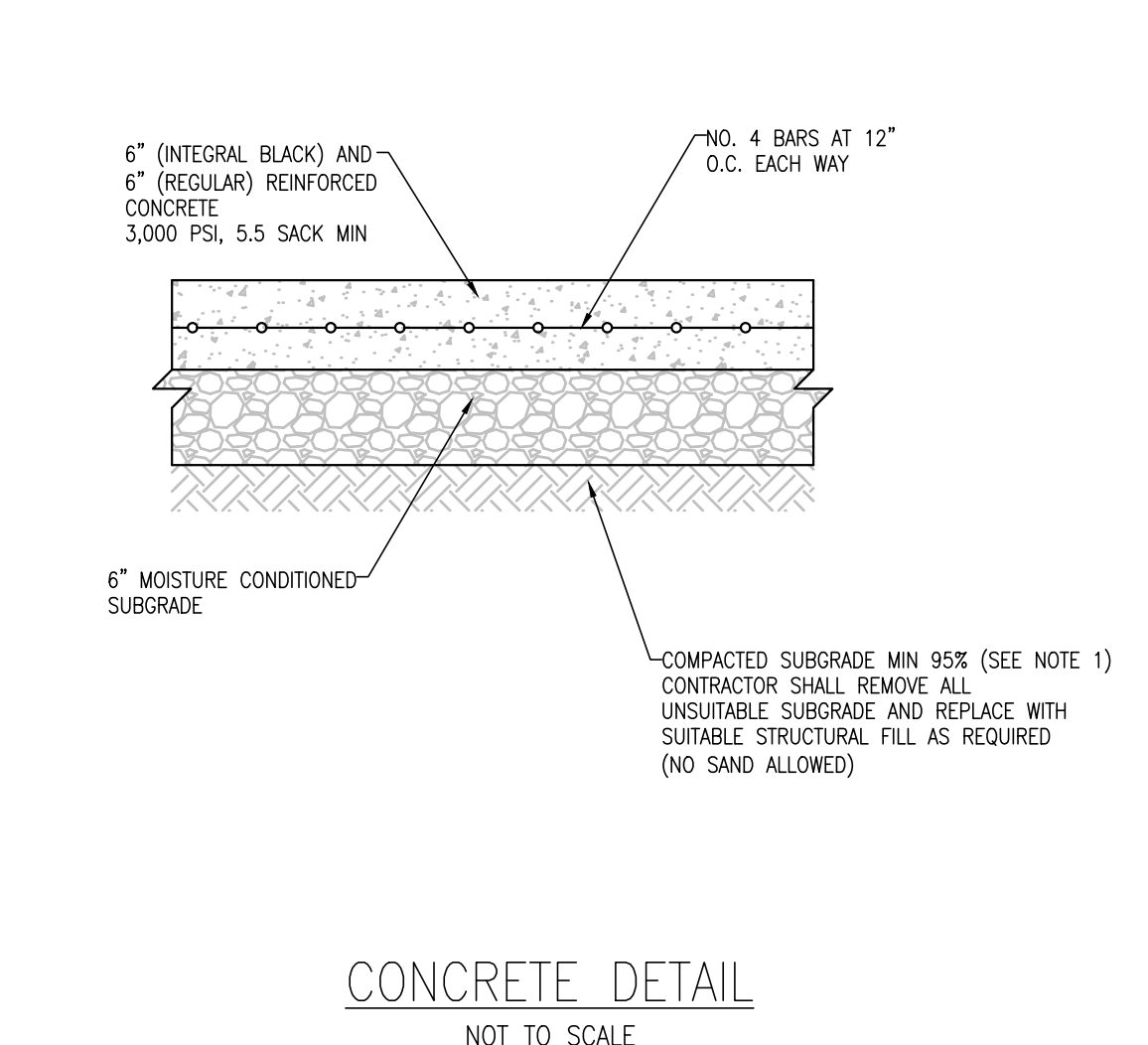
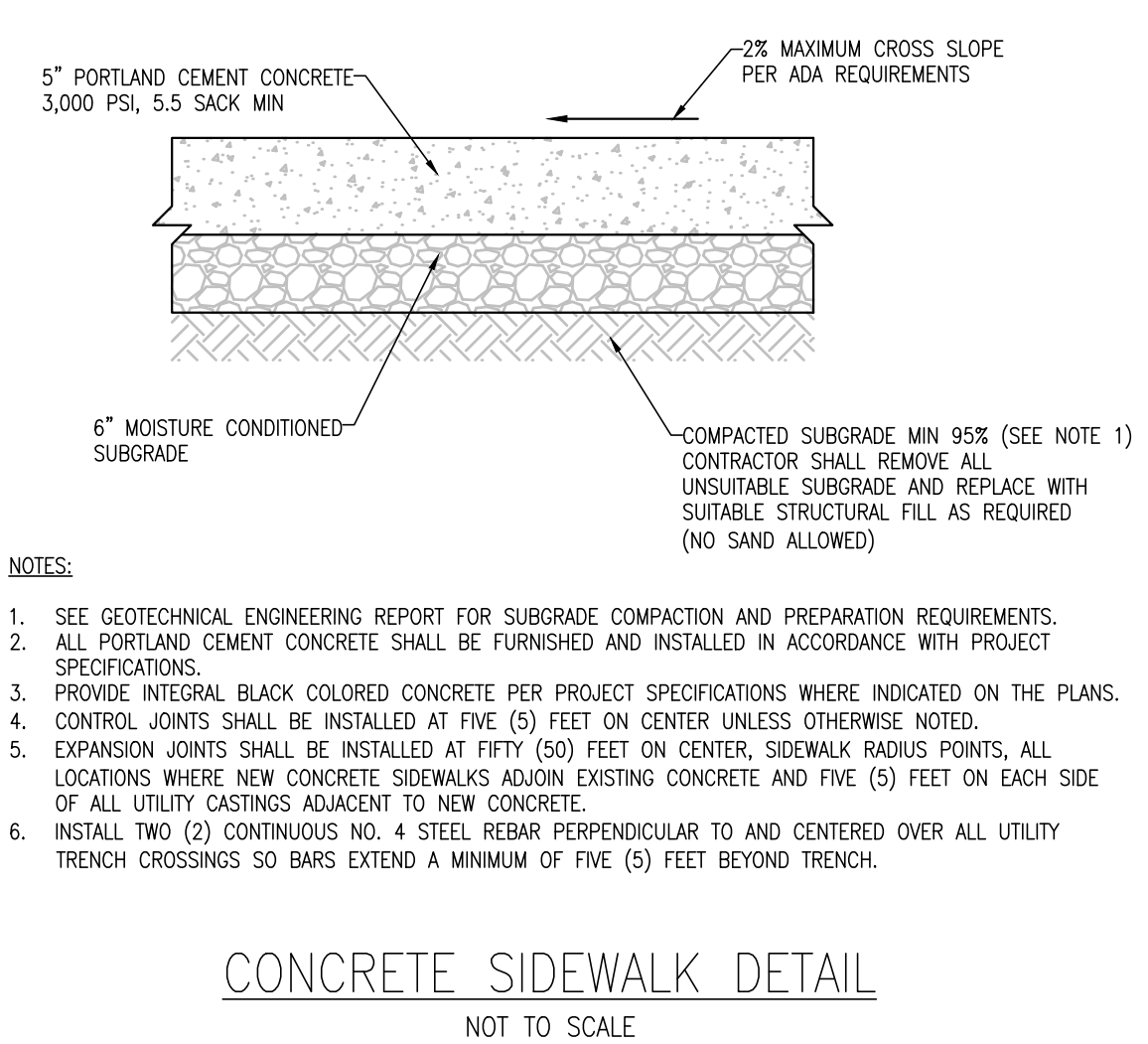
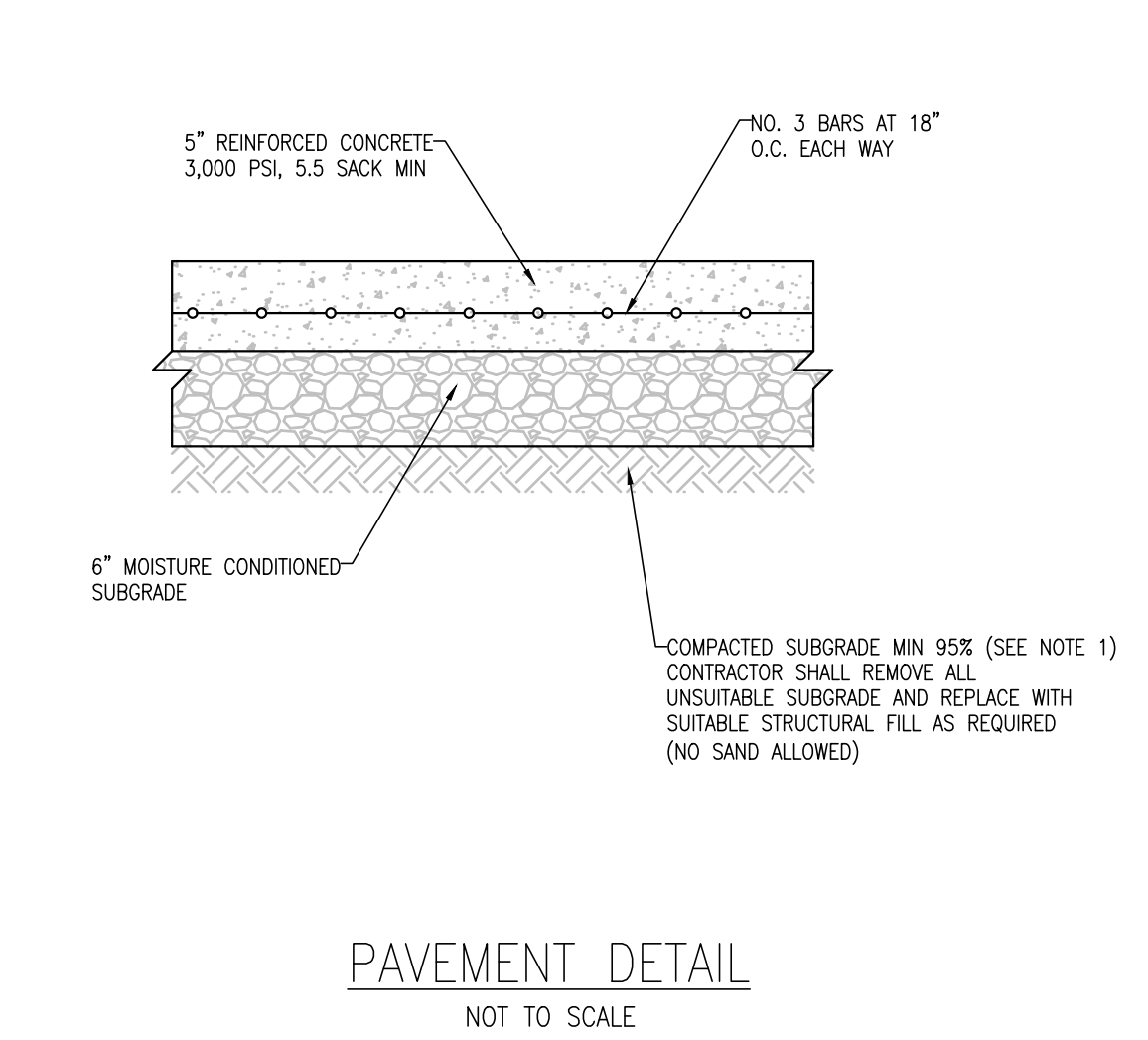
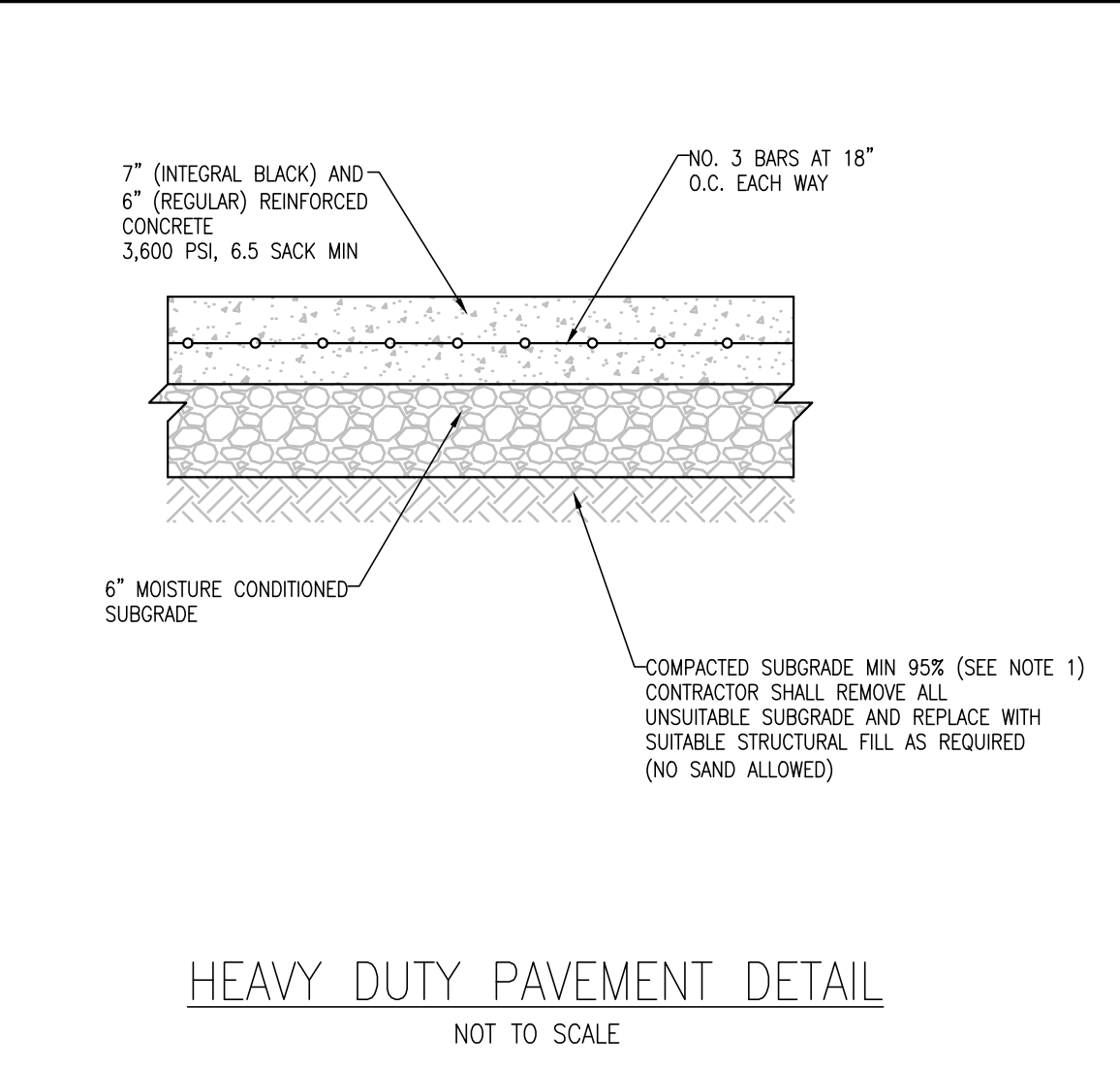
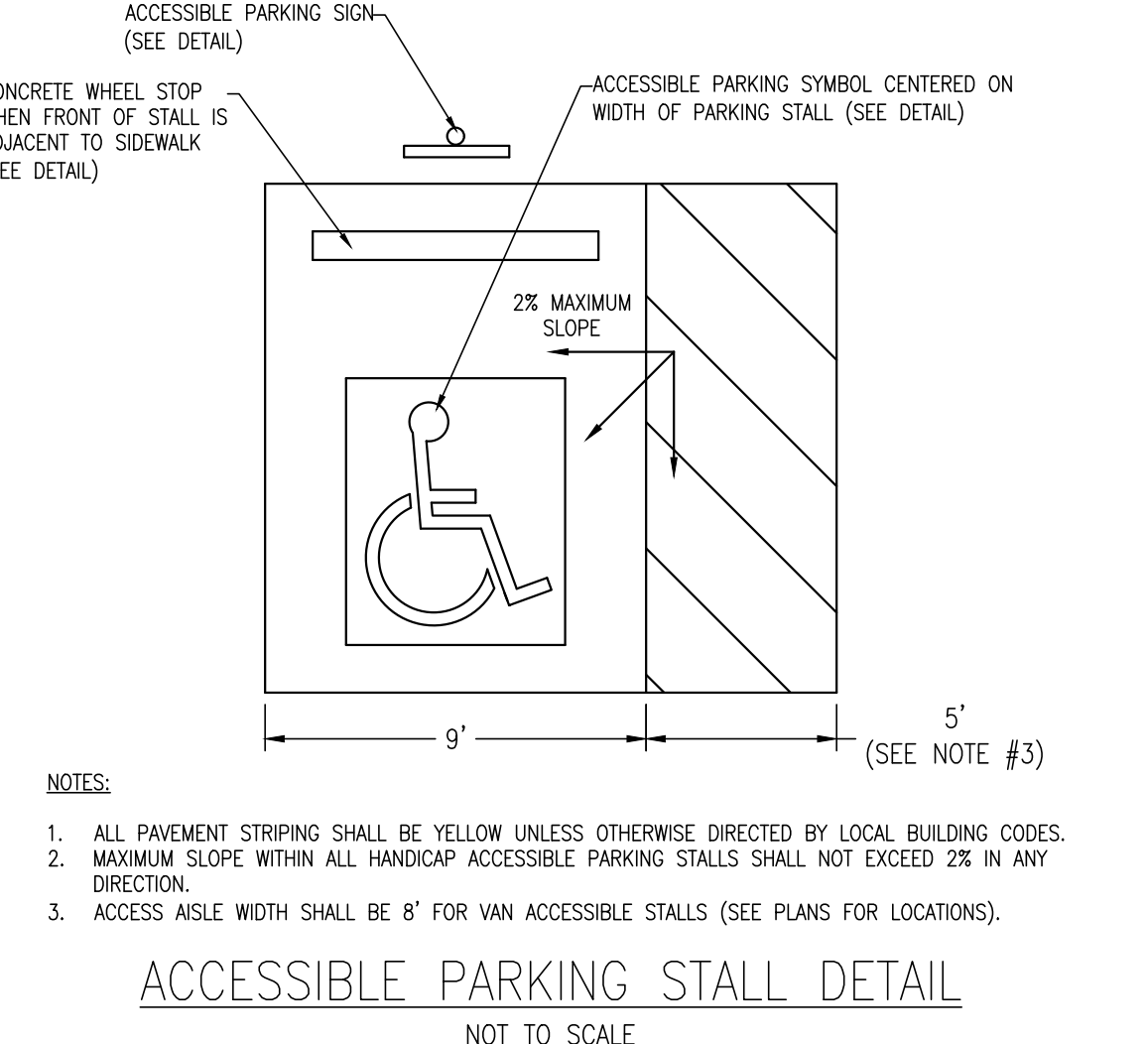
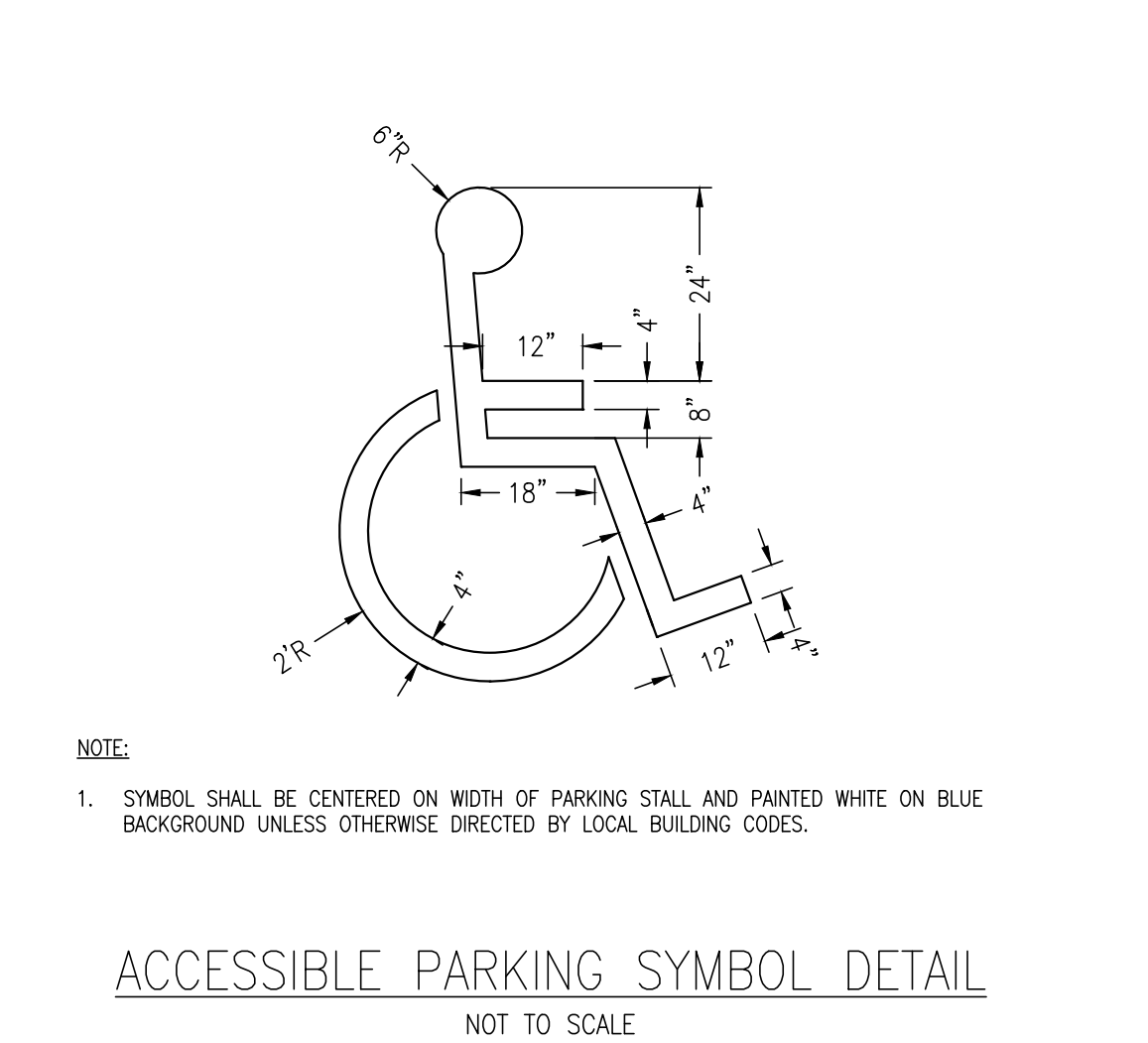
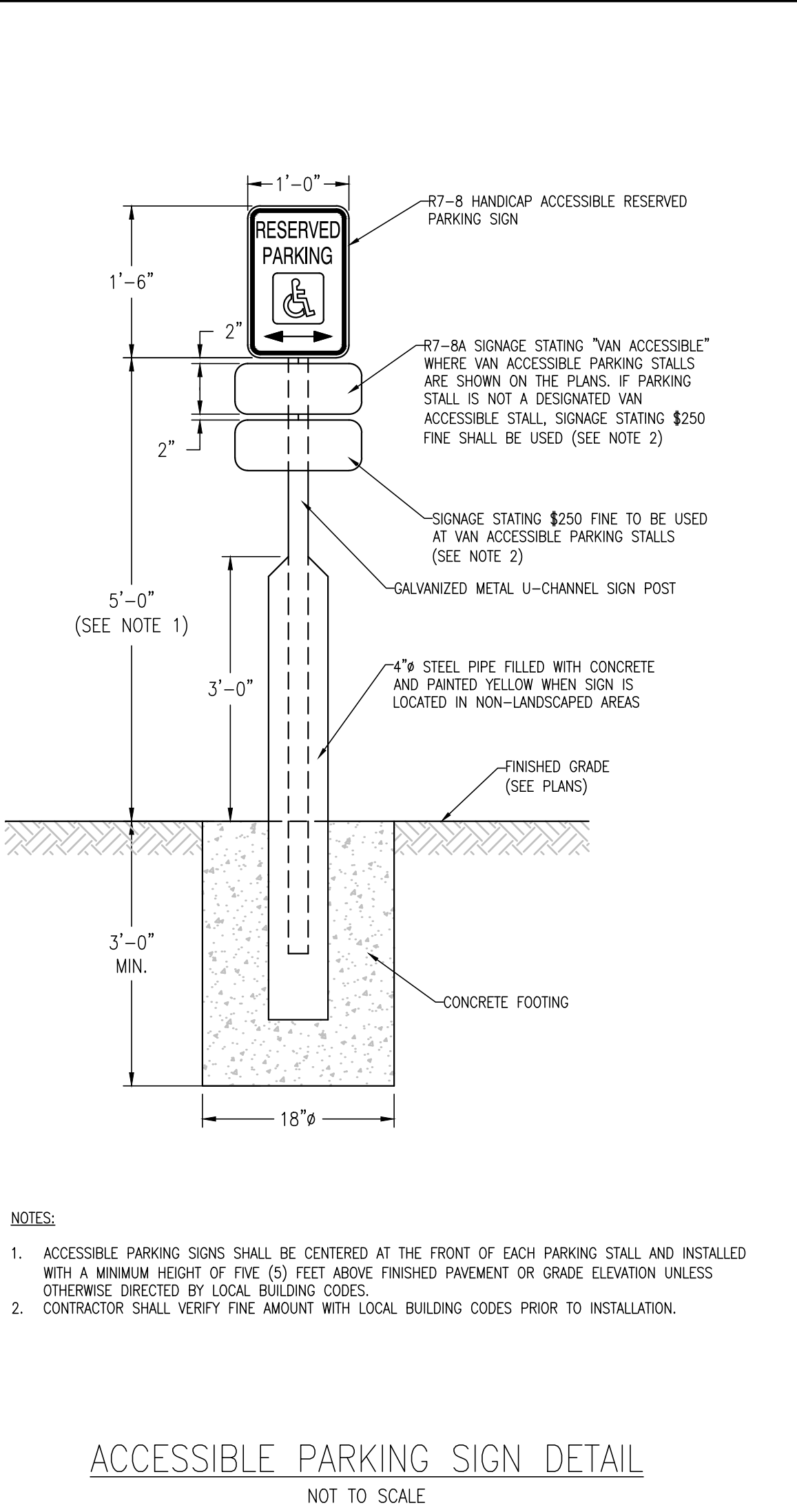
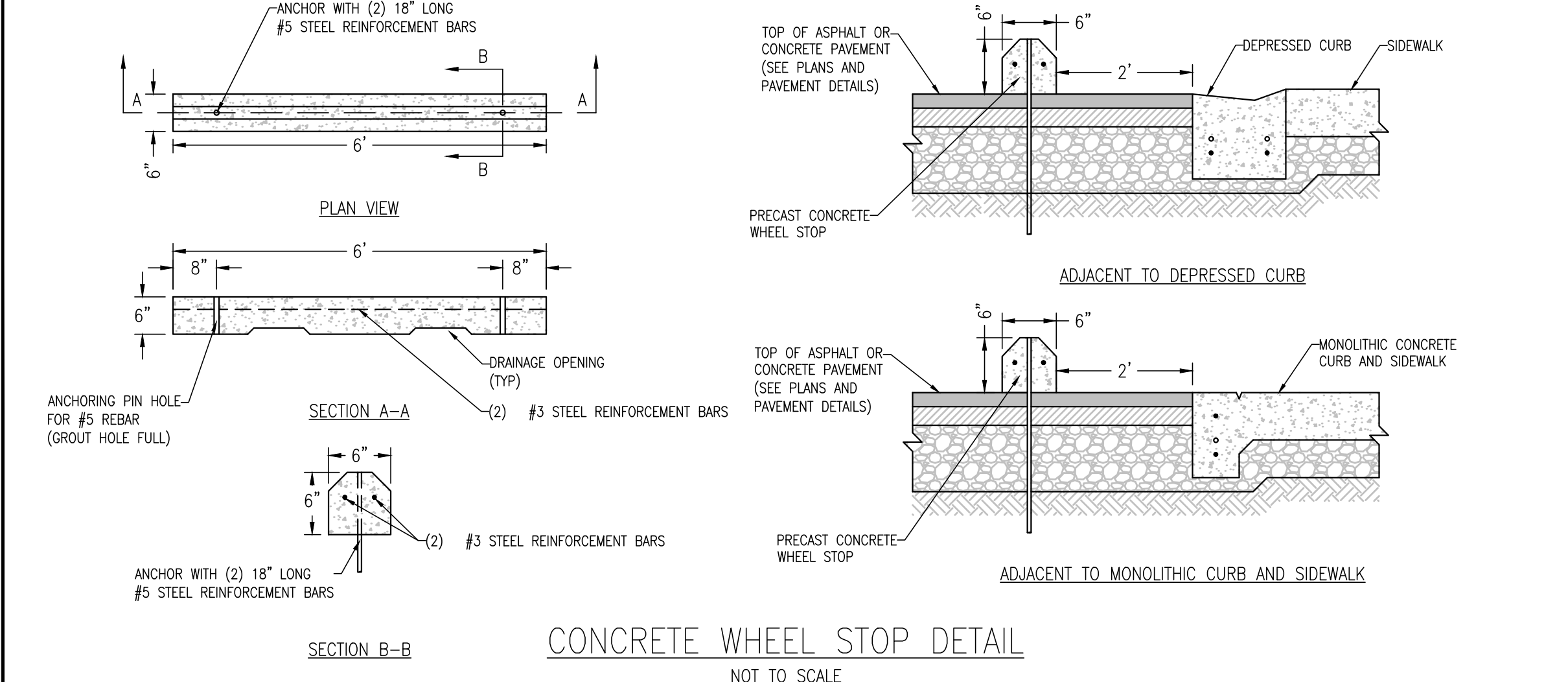
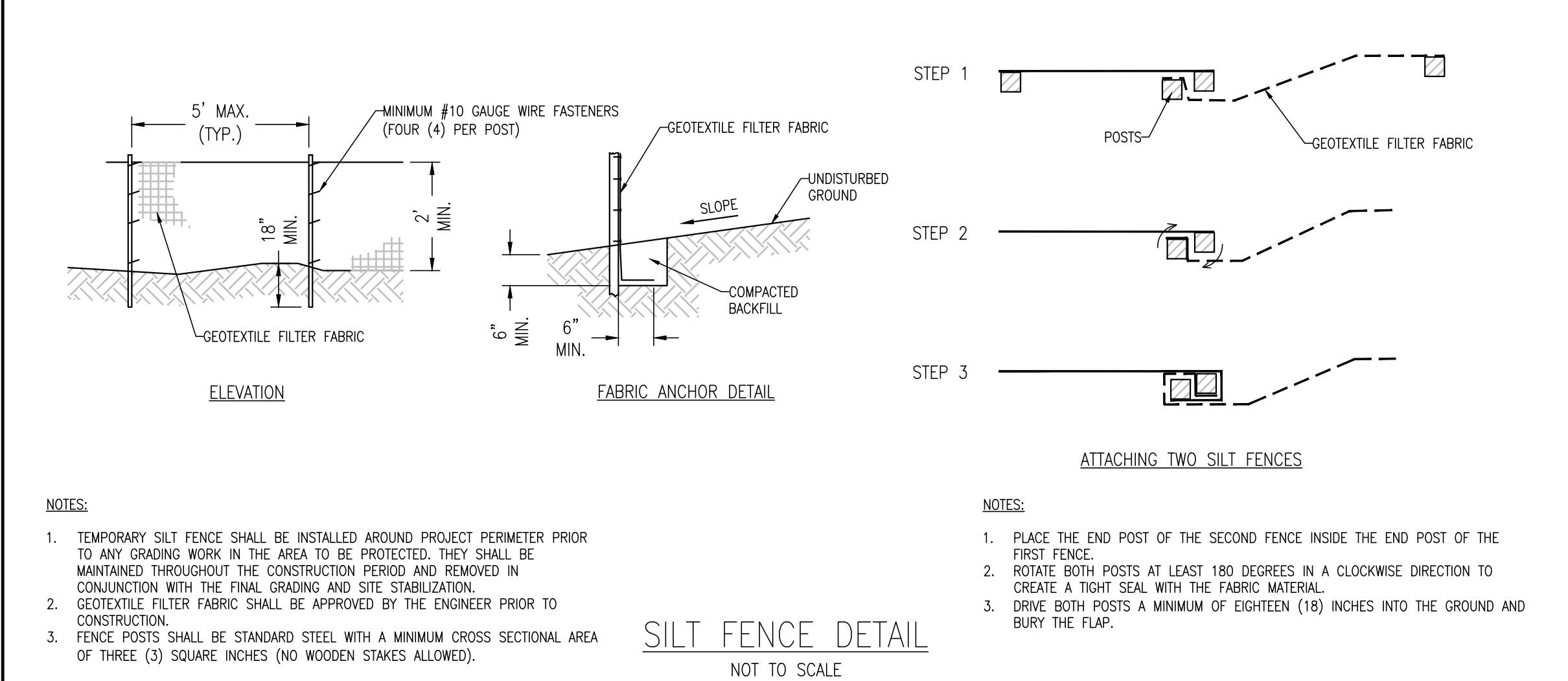
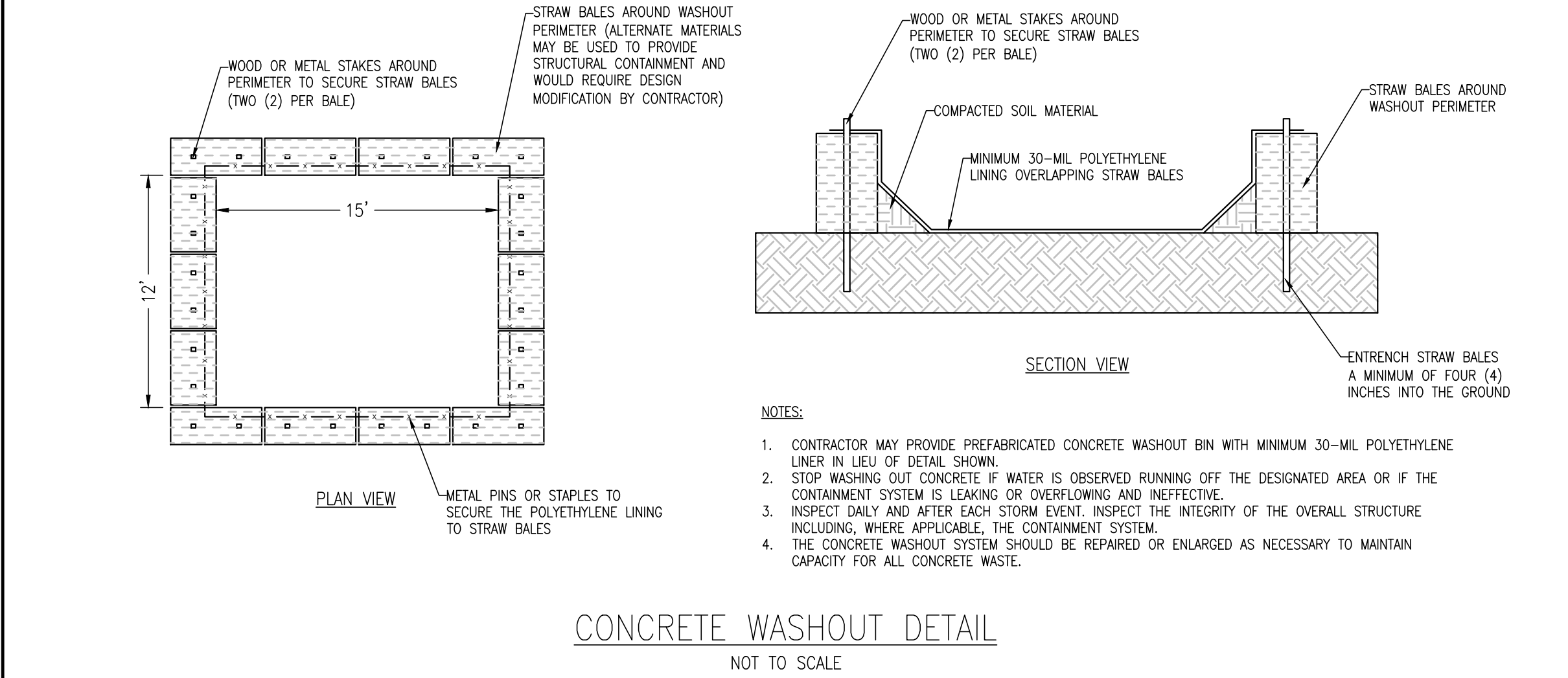
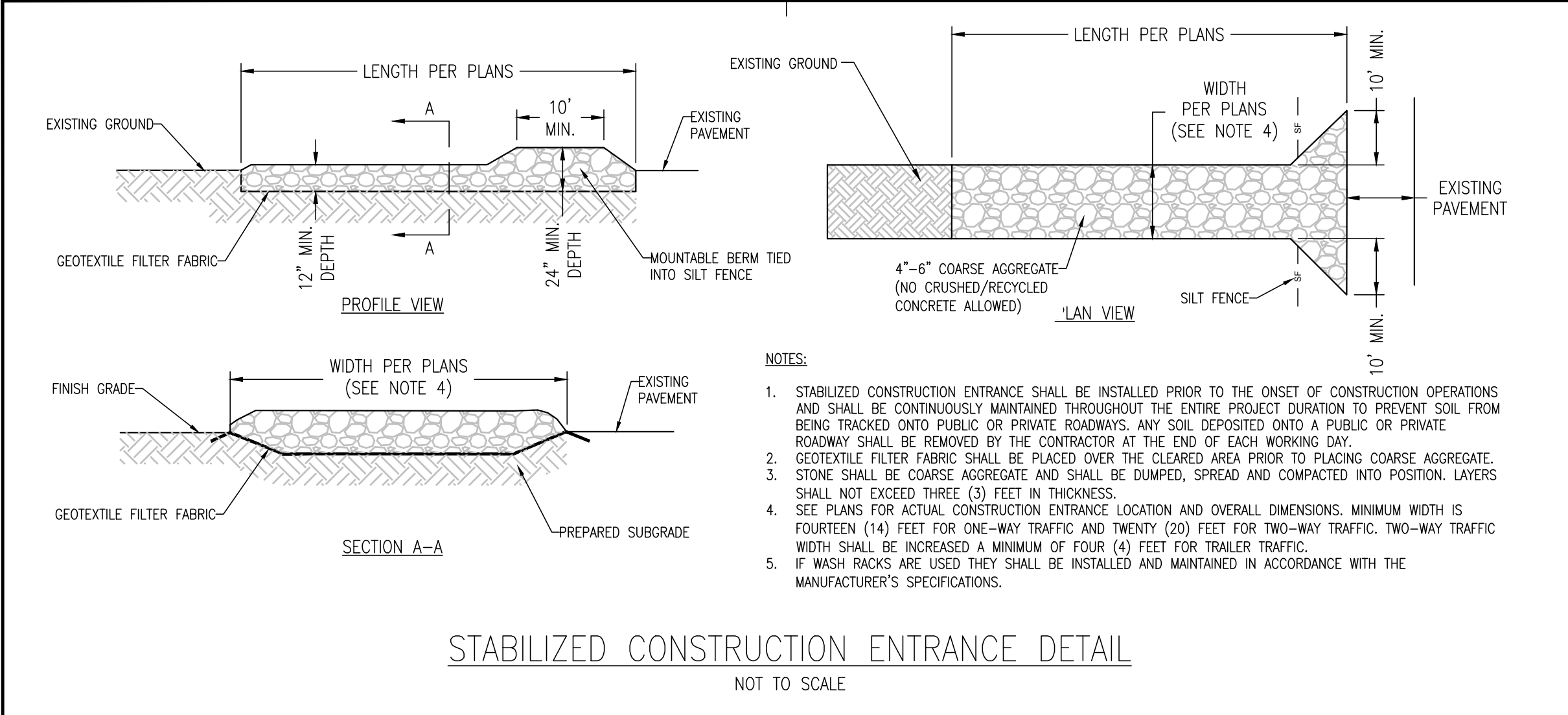
SHEET TITLE

STORMWATER  
POLLUTION  
PREVENTION PLAN

SHEET NUMBER

C6.0





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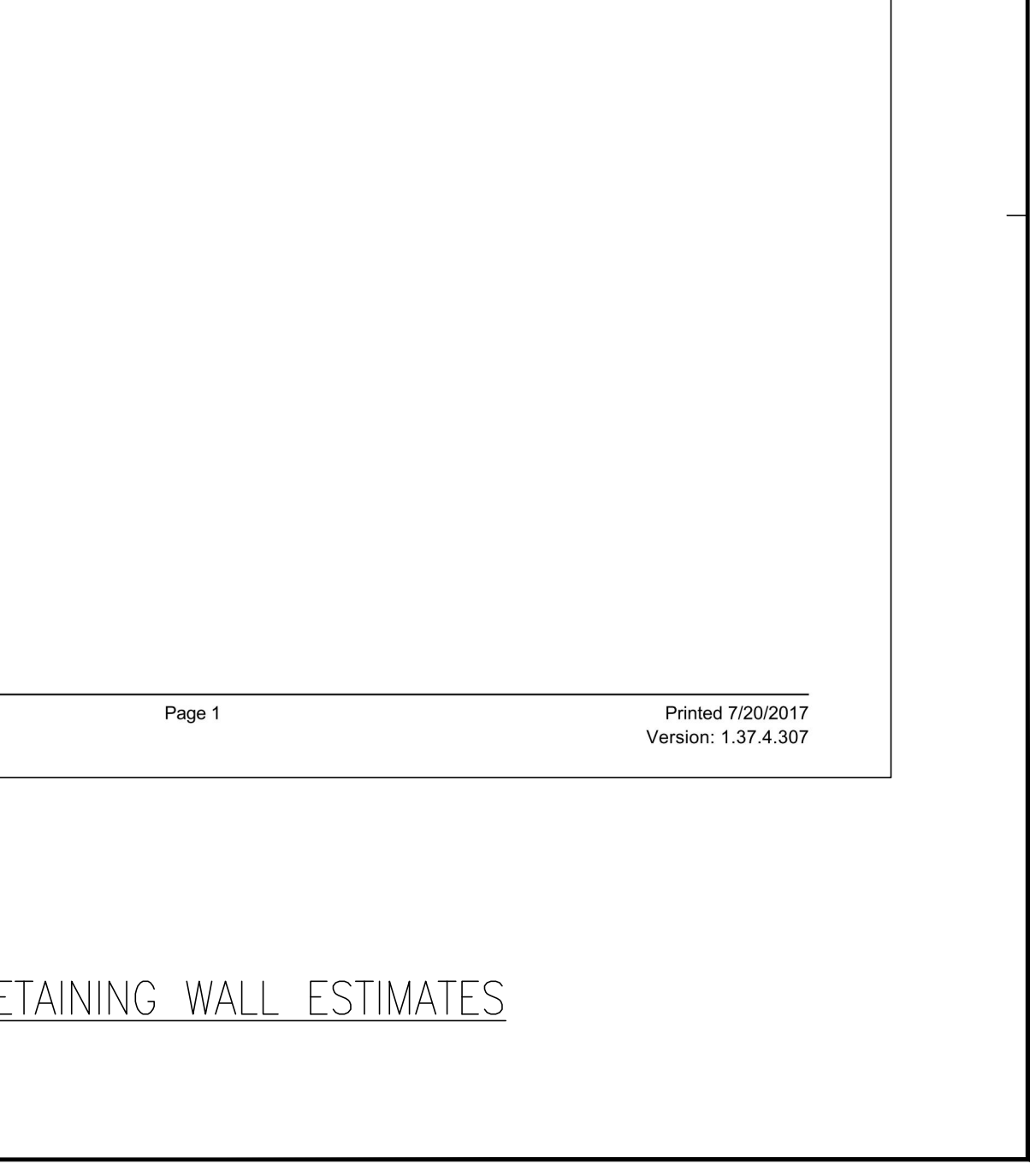
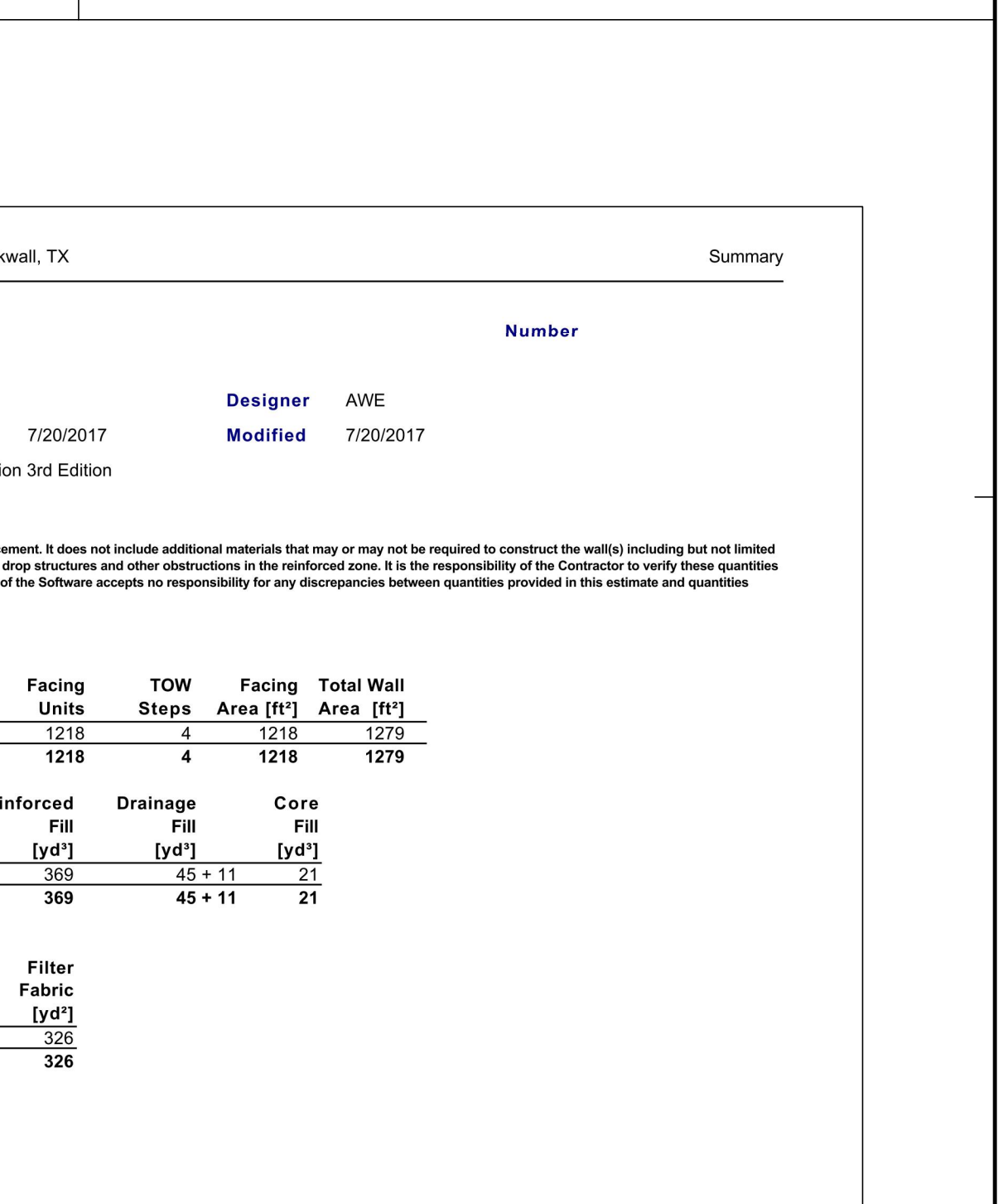
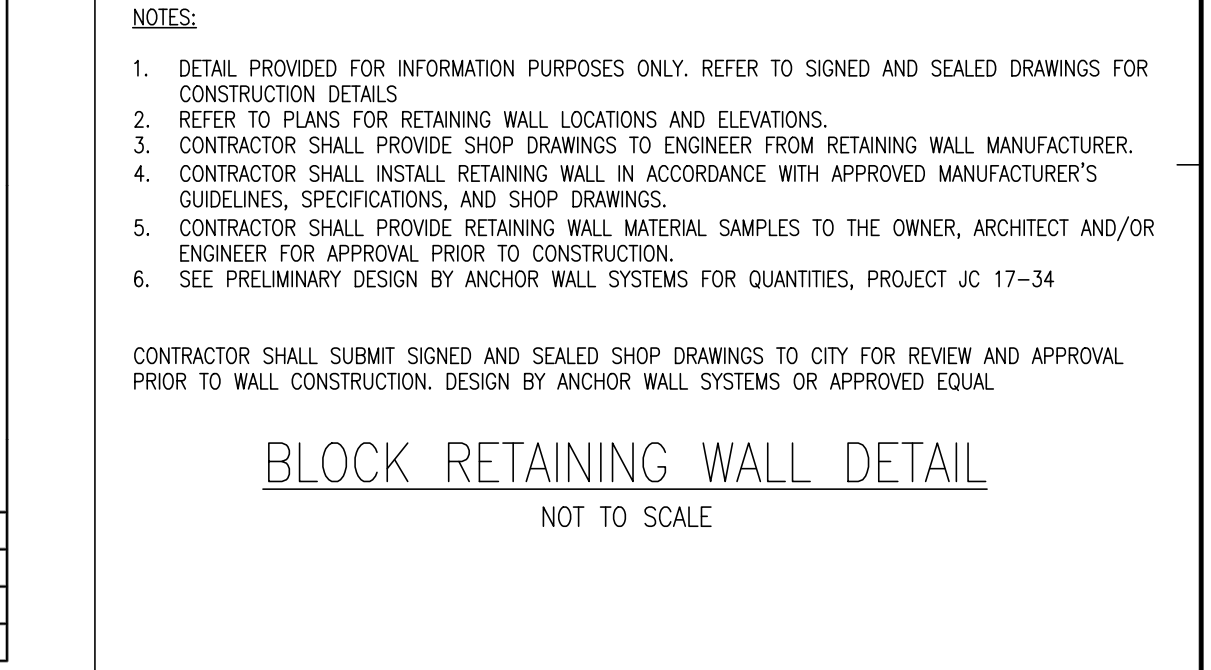
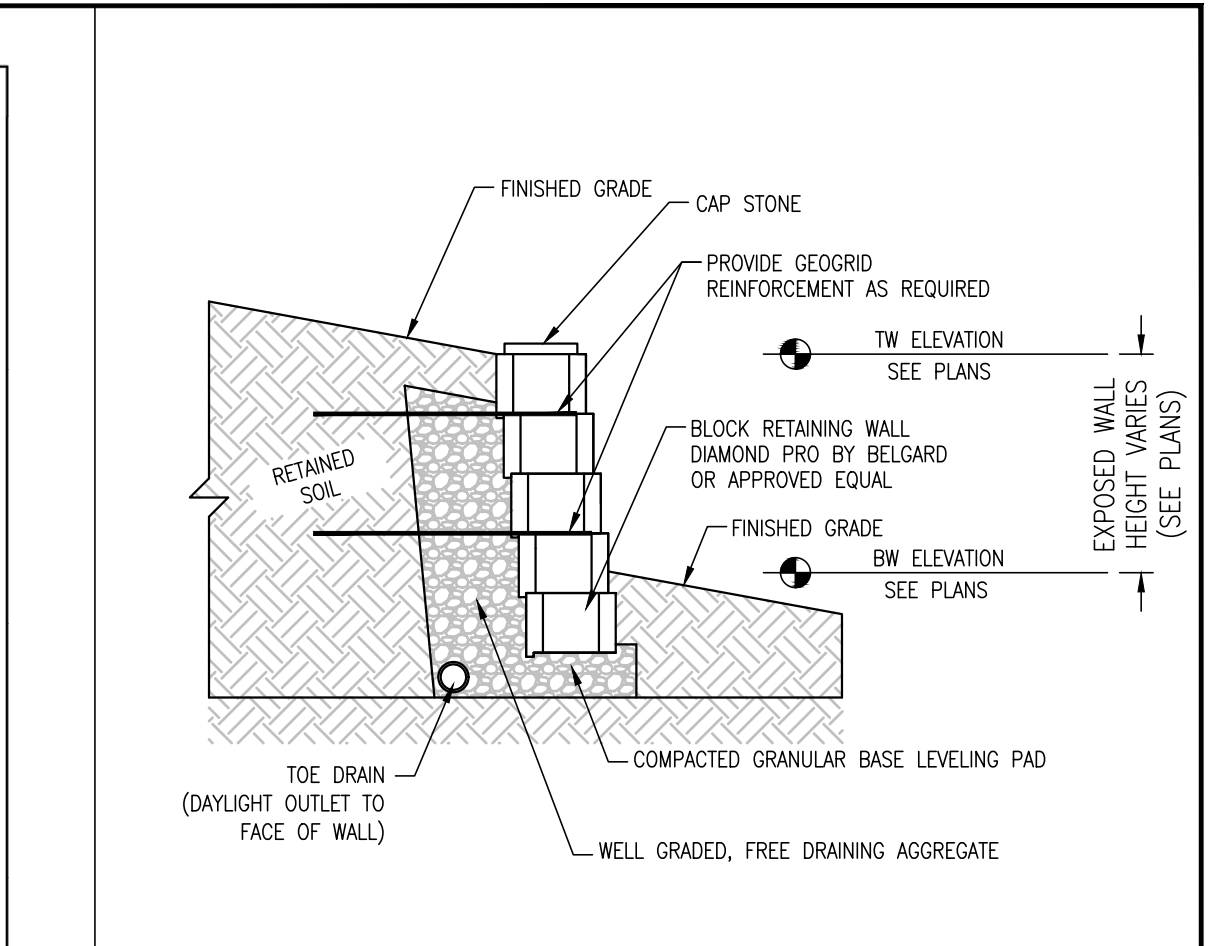
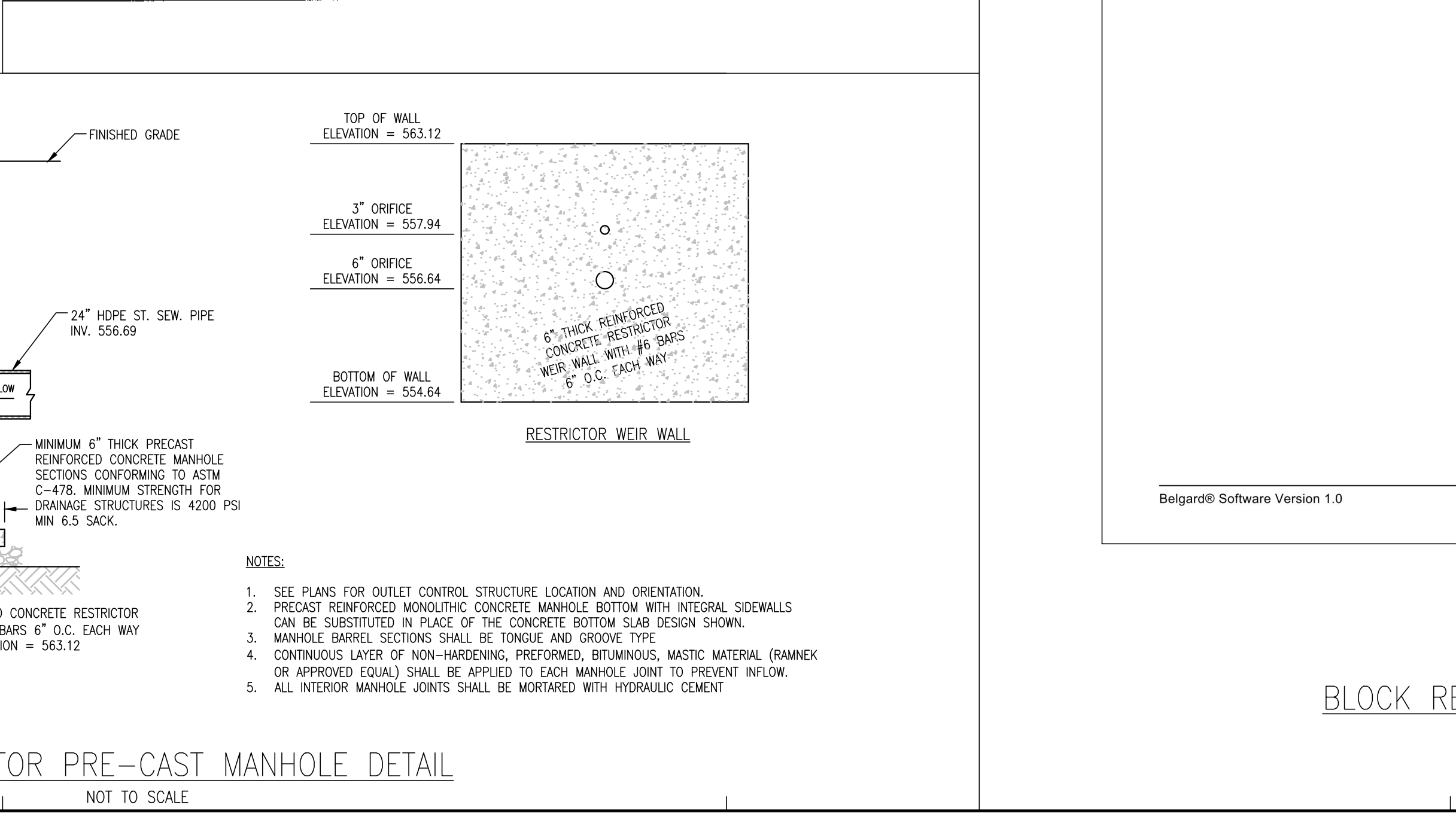
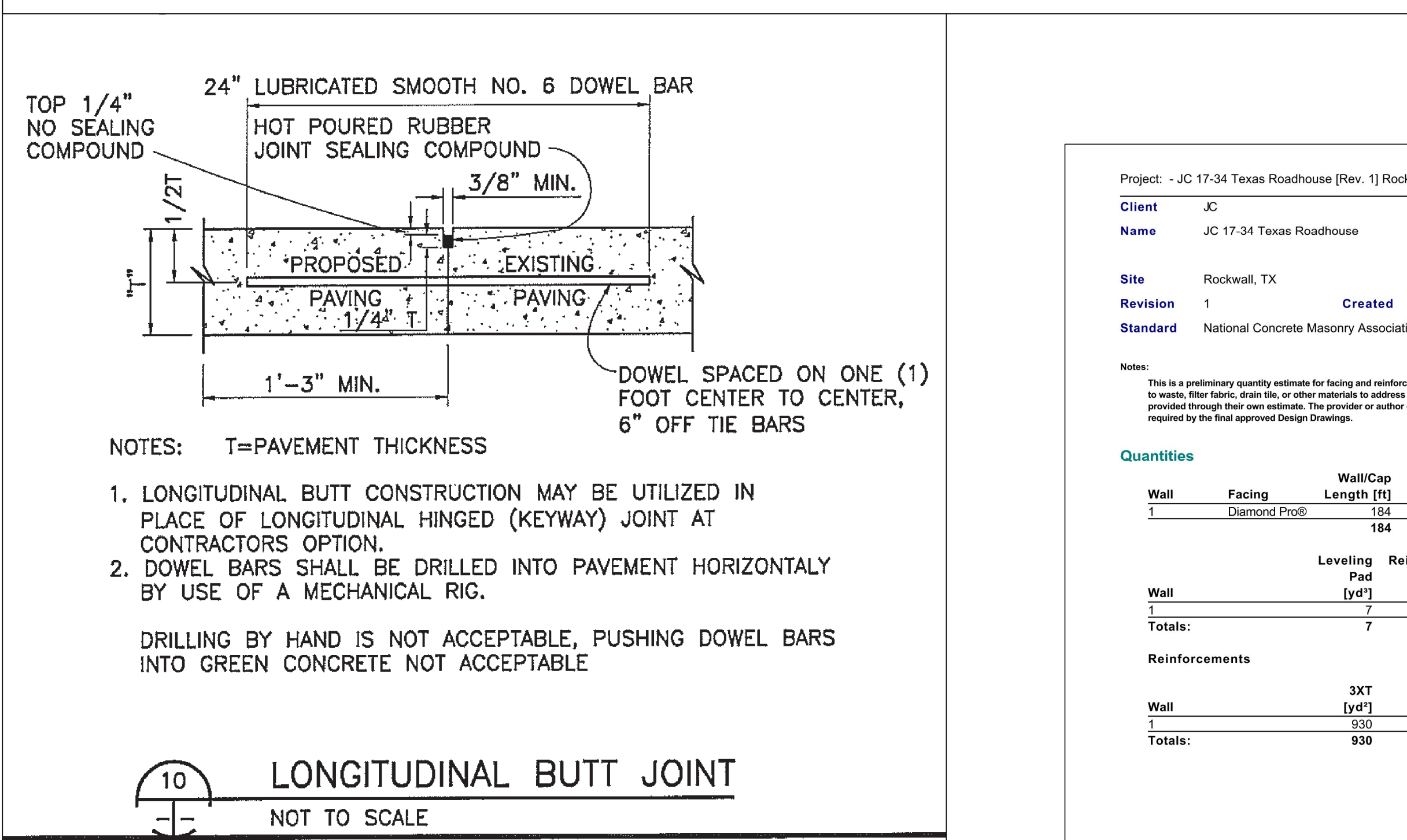
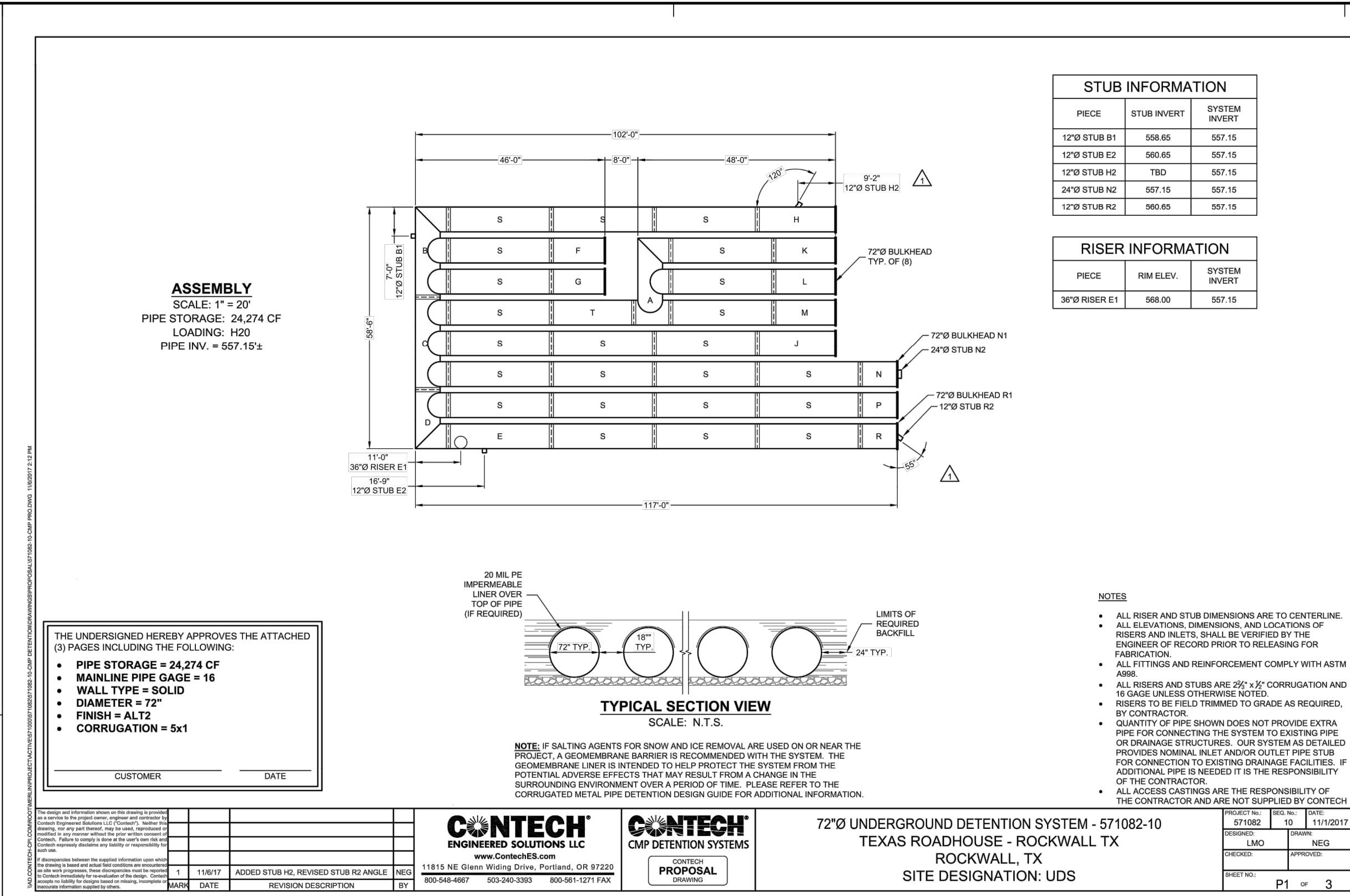
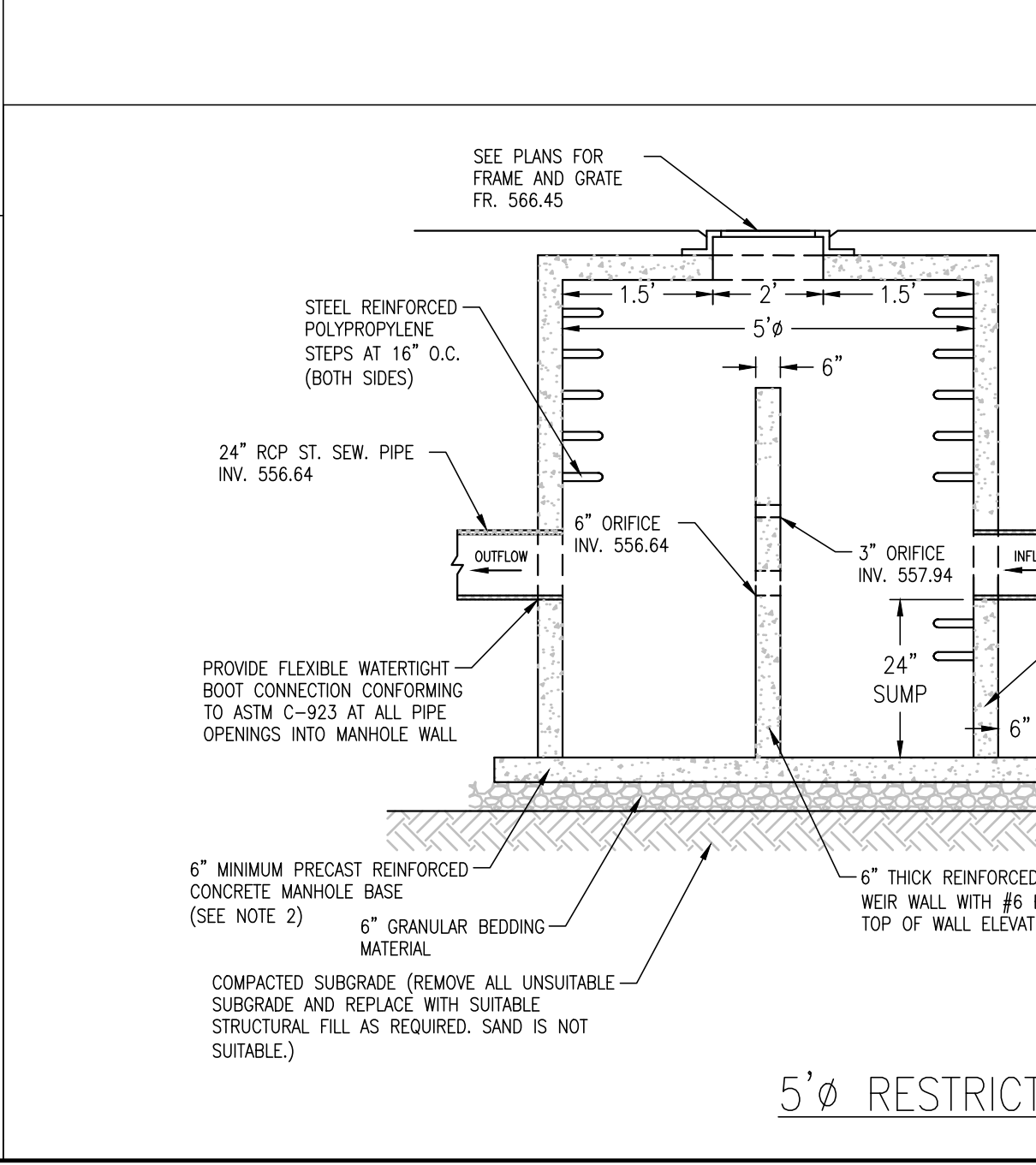
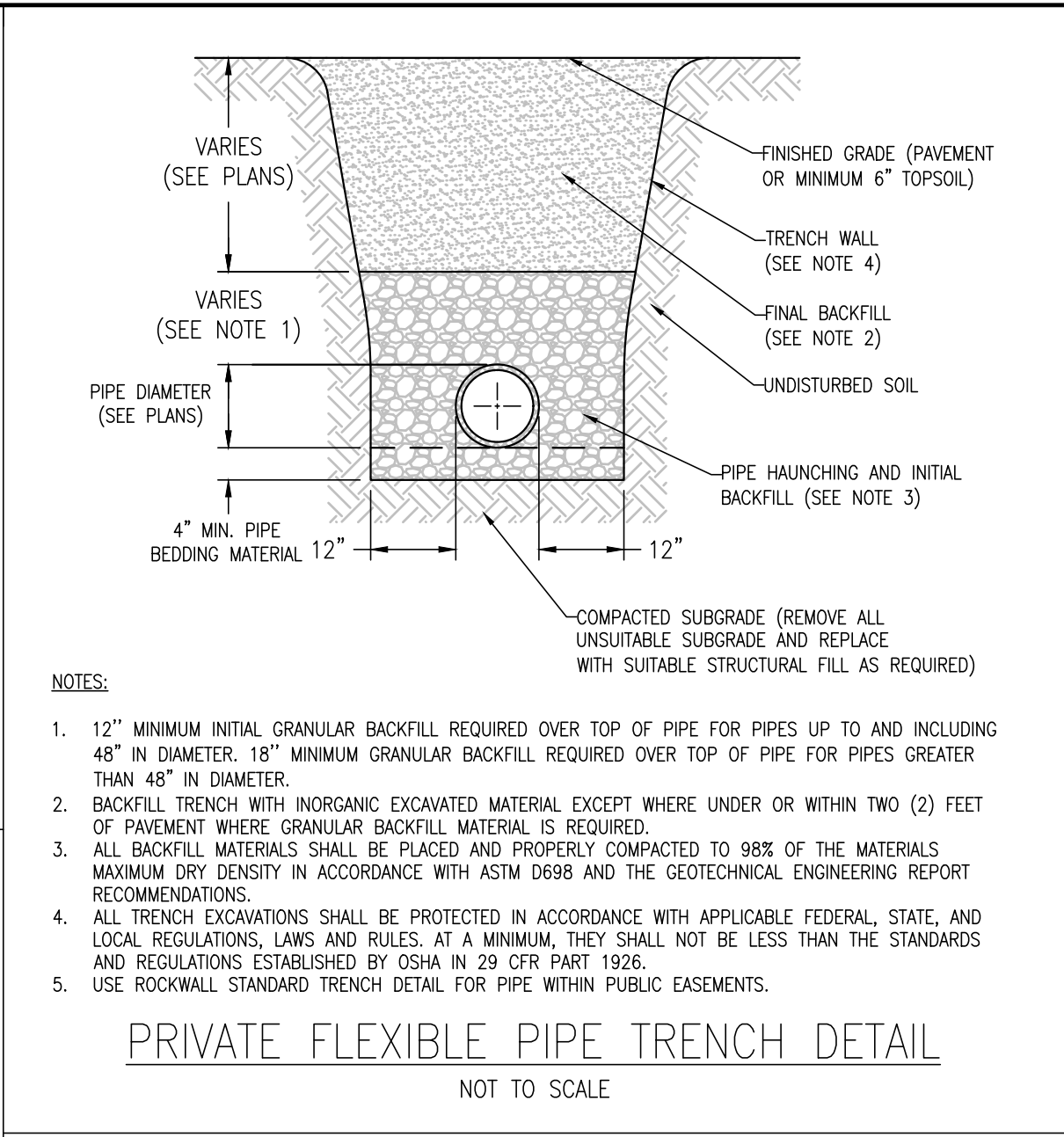
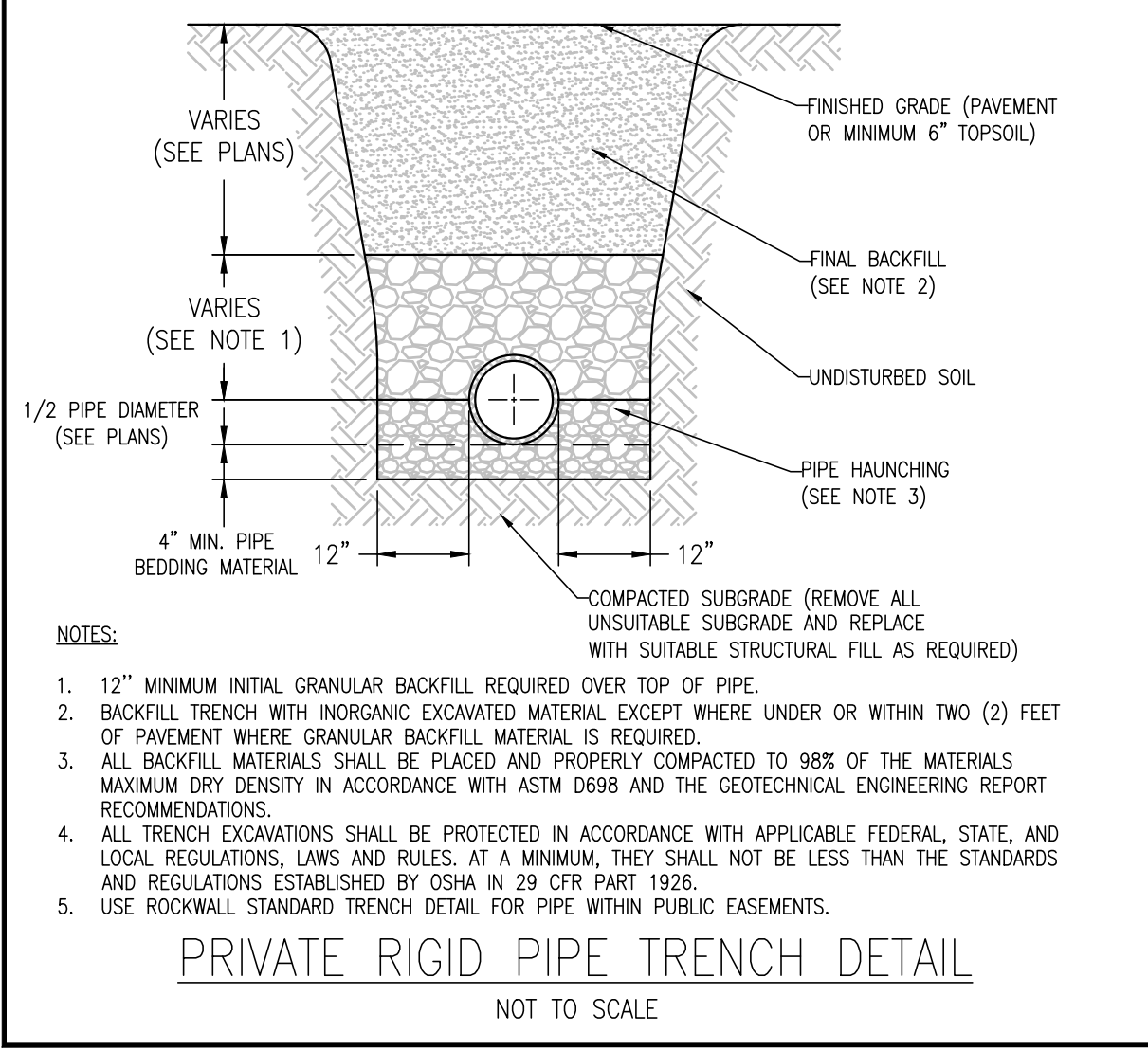
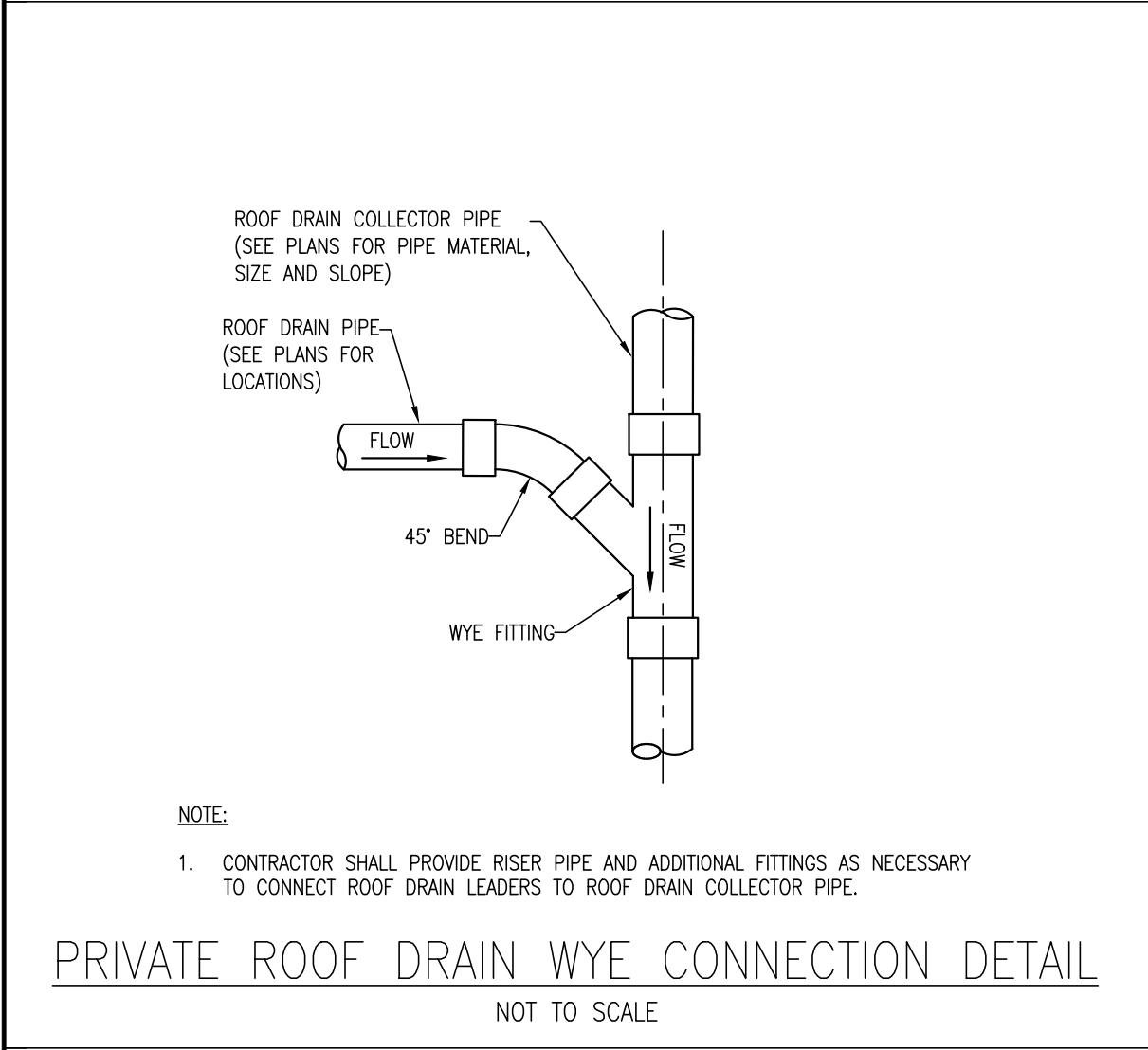
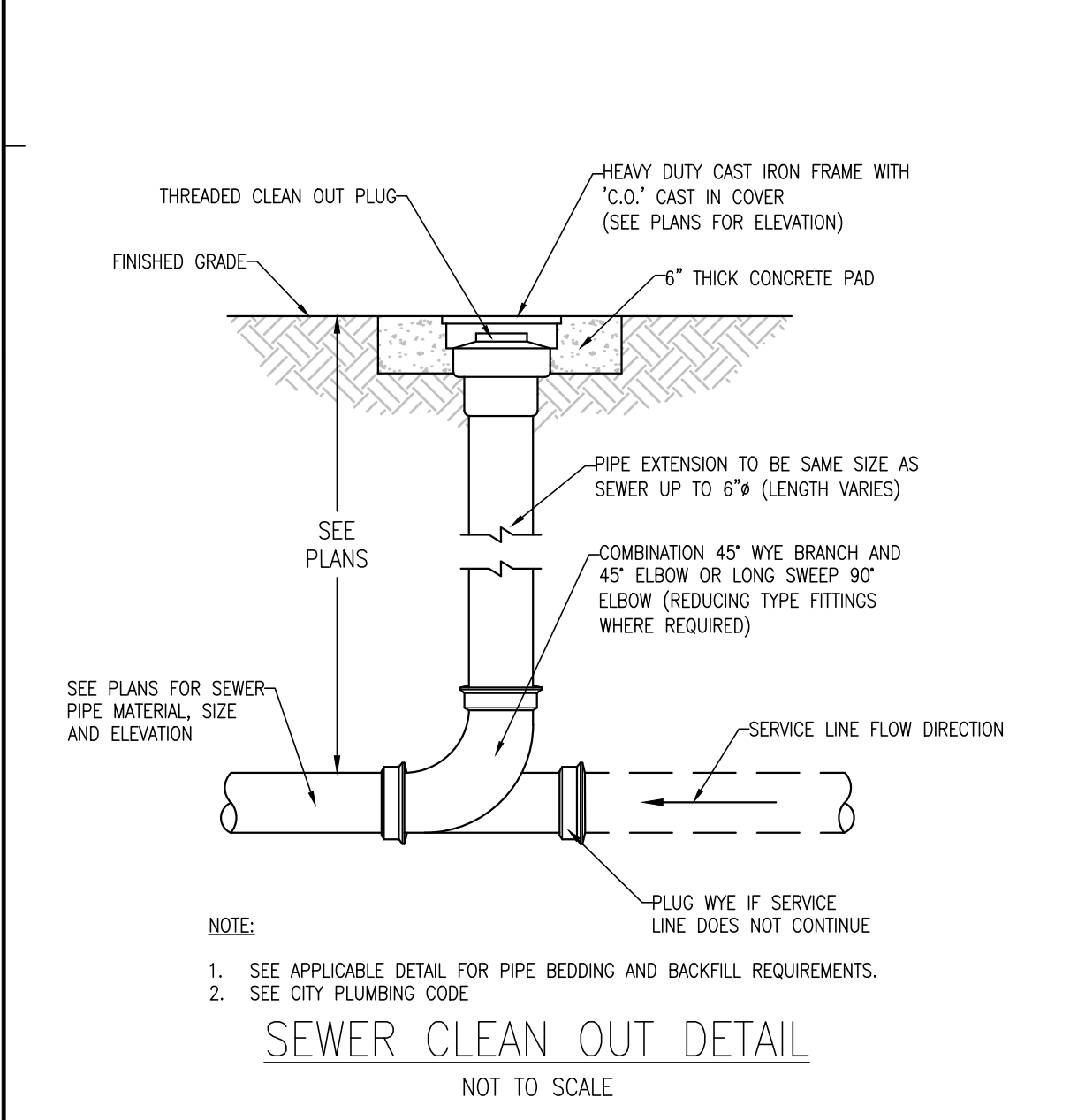
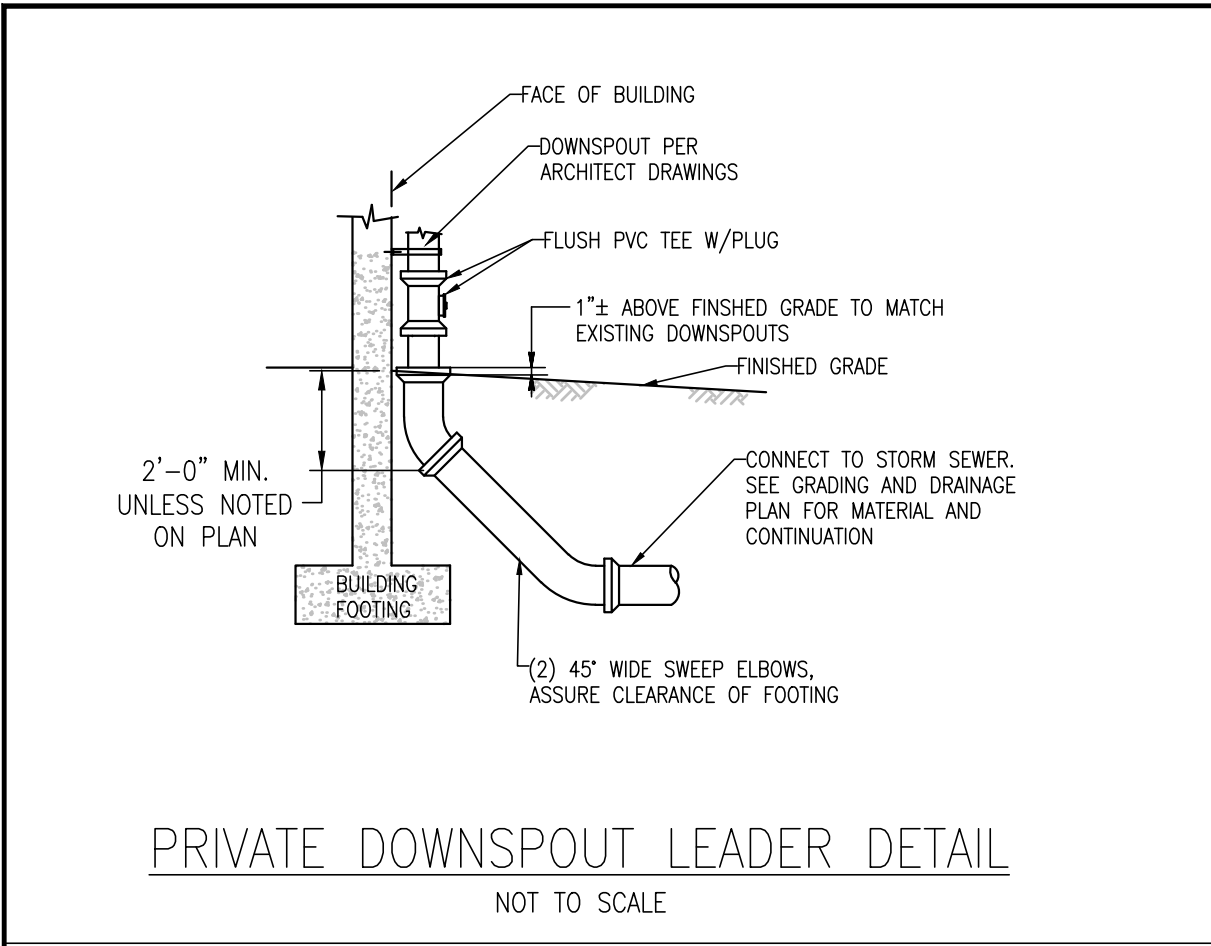
**TEXAS ROADHOUSE**

**PROJECT NUMBER**  
201512910

**SHEET TITLE**  
**CONSTRUCTION DETAILS**

**SHEET NUMBER**  
**C7.0**





**GreenbergFarrow**  
CO-OP  
1430 W. Peachtree St. NW  
Suite 200  
Atlanta, GA 30309  
t: 404 601 4000 f: 404 601 3970

**PROJECT TEAM**

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**ISSUE/REVISION RECORD**

DATE	DESCRIPTION
12/19/16	SITE PLAN
01/23/17	SITE PLAN
01/27/17	SITE PLAN SUBMITTAL
04/07/17	SITE PLAN SUBMITTAL
04/27/17	COORDINATION SET
05/01/17	SITE PLAN SUBMITTAL
05/19/17	ENGINEERING REVIEW
06/27/17	PERMIT SET
07/19/17	PERMIT/BID SET
07/20/17	ENGINEERING REVIEW
08/04/17	ENGINEERING REVIEW
10/11/17	STORMWATER REVISIONS
11/07/17	STORMWATER REVISIONS
11/20/17	CONSTRUCTION SET
12/13/17	GRADING REVISIONS
01/05/18	OWNER REVISIONS
08/07/18	AS-BUILT

**PROFESSIONAL IN CHARGE**  
**JOHN NOURZAD**  
PROFESSIONAL ENGINEER  
LICENSE NO. 85192

**PROJECT MANAGER**  
JEFF RATH

**QUALITY CONTROL**  
LARRY DIEHL

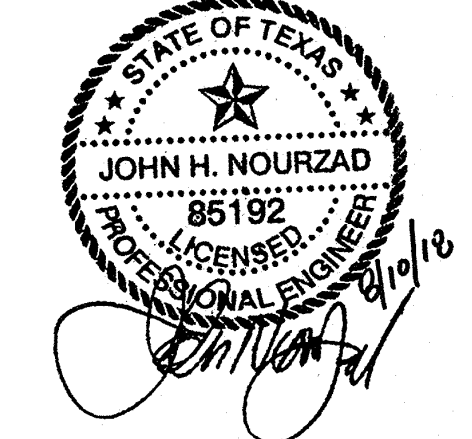
**DRAWN BY**  
MITCH HEFFERNAN

**PROJECT NAME**  
**TEXAS ROADHOUSE**

**PROJECT NUMBER**  
201512910

**SHEET TITLE**  
**CONSTRUCTION DETAILS**

**SHEET NUMBER**  
**C7.1**



**PROFESSIONAL IN CHARGE**  
**JOHN NOURZAD**  
PROFESSIONAL ENGINEER  
LICENSE NO. 85192

**PROJECT MANAGER**  
JEFF RATH

**QUALITY CONTROL**  
LARRY DIEHL

**DRAWN BY**  
MITCH HEFFERNAN

**PROJECT NAME**  
**TEXAS ROADHOUSE**

**ROCKWALL TEXAS**  
**912 I-30 FRONTAGE ROAD**



**PROJECT NUMBER**  
201512910

**SHEET TITLE**  
**CONSTRUCTION DETAILS**

**SHEET NUMBER**  
**C7.1**

Project : - JC 17-34 Texas Roadhouse [Rev. 1] Rockwall, TX

Summary

ClientJC

NameJC 17-34 Texas Roadhouse

Number

SiteRockwall, TX

Revision1

Created7/20/2017

DesignerAWE

Modified7/20/2017

StandardNational Concrete Masonry Association 3rd Edition

Notes:

This is a preliminary quantity estimate for facing and reinforcement. It does not include additional materials that may or may not be required to construct the wall(s) including but not limited to waste, filter fabric, drain tile, or other materials to address drop structures and other obstructions in the reinforced zone. It is the responsibility of the Contractor to verify these quantities provided through their own estimate. The provider or author of the Software accepts no responsibility for any discrepancies between quantities provided in this estimate and quantities required by the final approved Design Drawings.

Quantities

Wall	Facing	Wall/Cap Length [ft]	Facing Units	TOW Steps	Facing Area [ft²]	Total Wall Area [ft²]
1	Diamond Pro®	184	1218	4	1218	1279
		184	1218	4	1218	1279

Wall	Leveling Pad [yd']	Reinforced Fill [yd']	Drainage Fill [yd']	Core Fill [yd']
1	7	369	45 + 11	21
Totals:	7	369	45 + 11	21

Reinforcements

Wall	3XT [yd²]	Filter Fabric [yd²]
1	930	326
Totals:	930	326

Belgard® Software Version 1.0

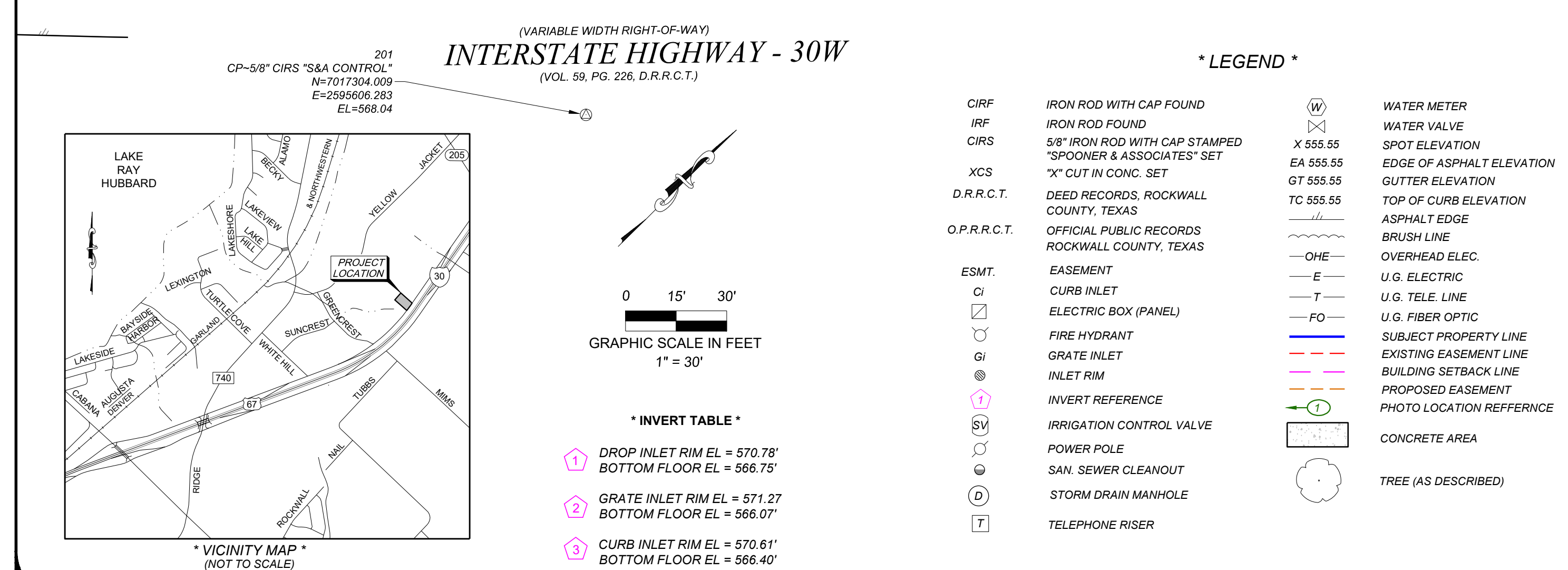
Page 1

Printed 7/20/2017  
Version: 1.37.4.307









## A wide-angle photograph of a large, open field of tall, green grass. The grass is dense and appears to be blowing in the wind. In the background, there is a line of trees and a road. A building is visible in the distance, and the sky is filled with white clouds.

Eric S. Spooner, R.P.L.S.	Date
Texas Registration No. 5922	
TBPLS Firm No. 10054900	

CONTROL TABLE				
POINT #	DESCRIPTION	NORTHING	EASTING	ELEVATION
904	5/8" CIRS "S&A CONTROL"	7017006.98	2595189.56	568.90'
905	5/8" CIRS "S&A CONTROL"	7017130.99	2595335.98	568.16'
906	5/8" CIRS "S&A CONTROL"	7017286.43	2595504.24	567.84'
907	5/8" CIRS "S&A CONTROL"	7017410.59	2595419.94	569.78'