

CIVIL ENGINEERING PLANS FOR

RETAIL CENTER

1654 W. VILLA MARIA ROAD
BRYAN, TX 77807



LOCATION MAP
NTS

PREPARED BY:



OWNER:

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PRELIMINARY NOT
FOR CONSTRUCTION

STATE OF TEXAS
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05/03/23

GENERAL NOTES:

- PRIOR TO CONSTRUCTION, THE CONTRACTOR MUST PROVIDE SUBMITTALS OF PROPOSED CONSTRUCTION MATERIALS FOR REVIEW BY THE DESIGN ENGINEER, A MINIMUM OF 14 DAYS PRIOR TO REQUIRED USE.
- A PRE-CONSTRUCTION MEETING WILL BE HELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. TIME AND LOCATION TO BE DETERMINED BY THE OWNER.
- ALL BOUNDARY, TOPOGRAPHIC INFORMATION, AND SURVEY CONTROL WAS COMPLETED IN 2022 BY SURVEYOR ALPHA INFRASTRUCTURE. CHANGES IN SITE OR FIELD CONDITIONS MAY HAVE OCCURRED.
- THE CONTRACTOR SHALL PROTECT ALL SURVEY MONUMENTATION, BENCHMARKS, AND MARKERS DURING CONSTRUCTION.
- THE CONTRACTOR MUST PROVIDE CONSTRUCTION STAKING SERVICES BASED ON THE INFORMATION PROVIDED IN THE PLANS.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH FACILITY/PROPERTY OWNERS. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DONE TO EXISTING FACILITIES, PAVEMENT, ETC. AS A RESULT OF CONSTRUCTION ACTIVITIES.
- ALL ITEMS SHOWN ON THESE PLANS ARE ASSUMED NEW/PROPOSED UNLESS DESIGNATED OR SHOWN AS EXISTING AND SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR INCLUSIVE OF ANY MATERIALS, LABOR, EQUIPMENT, AND OTHER REQUIREMENTS FOR A COMPLETE AND FUNCTIONING SITE ELEMENT. ALL ITEMS NECESSARY FOR PROPER COMPLETION OF THE WORK NOT SPECIFICALLY CALLED FOR OR SPECIFIED ON THE PLANS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND CONSIDERED SUBSIDIARY TO THE WORK.
- ALL UTILITIES AND SERVICE LINES SHOWN ARE TAKEN FROM RECORD INFORMATION SUPPLIED BY THE UTILITY OWNER OR HORIZONTALLY LOCATED BY INDEPENDENT LOCATORS. CONTRACTOR IS RESPONSIBLE TO REPORT ANY CONFLICTS BETWEEN PLAN AND ACTUAL CONDITIONS PRIOR TO CONSTRUCTION. OWNER, SURVEYOR, AND ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF INFORMATION OR DATA RELIED ON TO DEPICT UNDERGROUND FACILITIES. CONTRACTOR IS TO VERIFY THE EXACT LOCATION AND VERTICAL POSITIONING OF ALL PIPELINES, COMMUNICATION LINES, ELECTRICAL LINES, EXISTING UTILITIES, AND SERVICE LINES WITHIN THE PROJECT AREA, WHETHER SHOWN ON THE PLANS OR NOT, AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. CONTRACTOR IS TO CONTACT OWNERS OF ALL UTILITIES AND SERVICE LINES WITHIN THE PROJECT AREA AND NOTIFY OF INTEREST AT LEAST 1 WEEK PRIOR TO CONSTRUCTION.
- CONTRACTOR IS TO MAINTAIN STRUCTURAL INTEGRITY OF ALL PIPELINES, ELECTRIC TRANSMISSION POLES AND LINES, PERMANENT AND TEMPORARY UTILITIES, AND UTILITY SERVICES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES OR SERVICE LINES DURING THE CONSTRUCTION PROCESS. WHERE EXISTING UTILITIES OR SERVICE LINES ARE DAMAGED, THE CONTRACTOR SHALL REPAIR OR REPLACE THE UTILITY OR SERVICE LINE WITH THE SAME TYPE OF MATERIAL AND CONSTRUCTION, OR BETTER. ALL MATERIAL AND LABOR SHALL BE AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY TEXAS811 AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION ACTIVITY AT 811 OR HTTP://WWW.TEXAS811.ORG. THE CONTRACTOR SHALL ALSO NOTIFY APPLICABLE UTILITY COMPANIES THAT HAVE UTILITY LINES ON OR IN THE GENERAL VICINITY OF THIS PROJECT SITE AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL STANDARDS, SPECIFICATIONS, AND REGULATIONS. WHERE CONSTRUCTION DOCUMENTS CONFLICT WITH THOSE GUIDELINES, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.
- CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THESE PLANS AND ONSITE FIELD CONDITIONS OR SPECIFICATIONS OF OTHER DISCIPLINES. CONTRACTOR IS RESPONSIBLE TO REPORT ANY CONFLICTS WITHIN PLANS OR SPECIFICATIONS AND AWAIT WRITTEN INSTRUCTION FROM ENGINEER OR ARCHITECT PRIOR TO STARTING CONSTRUCTION.
- THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS, AS WELL AS INSPECTION APPROVALS.
- A COPY OF APPROVED CONSTRUCTION PLANS SHALL BE KEPT ON SITE AT ALL TIMES THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN A SET OF REDLINE DRAWINGS TO RECORD AS-BUILT CONDITIONS.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN AN ORDERLY PROJECT SITE. THE CONTRACTOR SHALL CLEAN, REMOVE, AND PROPERLY DISPOSE OF ANY SURPLUS OR DISCARDED MATERIALS, TEMPORARY STRUCTURES, AND DEBRIS FROM THE PROJECT SITE.
- THE CONTRACTOR IS RESPONSIBLE FOR STORAGE AND SAFE-GUARDING OF ALL MATERIALS AND EQUIPMENT AT THE PROJECT SITE TO PREVENT A SAFE AND SECURE PROJECT.
- THE CONTRACTOR SHALL COORDINATE SITE STORAGE WITH THE PROPERTY OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTAINMENT AND PROPER DISPOSAL OF ALL LIQUID AND SOLID WASTE ASSOCIATED WITH THIS PROJECT. THE CONTRACTOR SHALL USE ALL MEANS NECESSARY TO PREVENT THE OCCURRENCE OF WIND BLOWN LITTER FROM THE PROJECT SITE. THE SITE IS REQUIRED TO PROVIDE CONTAINMENT FOR WASTE PRIOR TO AND DURING DEMOLITION. SOLID WASTE ROLL OFF BOXES AND/OR METAL DUMPSTER SHALL BE SUPPLIED BY THE CONTRACTOR.
- CONTRACTOR IS TO CONFINE ALL WORK TO OWNER'S PROPERTY. NO CONSTRUCTION ACTIVITY IS ALLOWED ON OR THROUGH PRIVATE PROPERTY UNLESS COVERED BY A PUBLIC UTILITY EASEMENT OR OTHER DOCUMENTED AGREEMENT. ANY ADJACENT RIGHT-OF-WAY (R.O.W.) OR PROPERTY AFFECTED DURING CONSTRUCTION SHALL BE RETURNED TO PRE-CONSTRUCTION CONDITION AT THE CONTRACTOR'S EXPENSE.
- ALL EXISTING UTILITY APPURTENANCES (VALVE BOXES, FIRE HYDRANTS, MANHOLE RING AND COVER, JUNCTION BOX RING AND COVER, ETC) SHALL BE ADJUSTED TO FINAL GRADES.
- ALL CONSTRUCTION OPERATIONS FOR THIS PROJECT SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE UNITED STATES OCCUPATIONAL AND HEALTH ADMINISTRATION (OSHA).
- THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL STATE AND FEDERAL REGULATIONS REGARDING CONSTRUCTION ACTIVITIES NEAR ENERGIZED OVERHEAD ELECTRIC LINES.
- THESE PLANS, PREPARED BY GESSNER ENGINEERING, DO NOT EXTEND TO OR INCLUDE DESIGNS OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONTRACTOR OR HIS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR BE HEREINAFTER INCORPORATED IN THE WORK.
- CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR ALL JOB SITE SAFETY, FOR MANAGEMENT OF JOB SITE PERSONNEL, FOR SUPERVISION OF THE USE OF JOB SITE EQUIPMENT AND FOR DIRECTION OF ALL CONSTRUCTION PROCEDURES, METHODS, AND ELEMENTS REQUIRED TO COMPLETE THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.

TRAFFIC CONTROL NOTES:

- CIVIL ENGINEER SHALL PROVIDE A TRAFFIC CONTROL PLAN FOR REVIEW IN THE SUBMITTAL PROCESS OR AS THE NEED ARISES.
- ALL TRAFFIC CONTROL DEVICES AND TRAFFIC MANAGEMENT SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF TMUTCD PART VI.
- ALL CONSTRUCTION BARRICADES, SIGNS, MARKINGS, CHANNELIZING DEVICES, AND SPACING SHALL BE IN ACCORDANCE TO THE LATEST VERSION OF TxDOT BARRICADE AND CONSTRUCTION STANDARDS BC (1-12).
- ALL EXISTING TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS SHALL BE MAINTAINED ON VISIBLE LOCATIONS DURING CONSTRUCTION UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER. THE CONTRACTOR SHALL RESTORE OR REPLACE (AT THE DISCRETION OF THE ENGINEER) SIGNS AND PAVEMENT MARKING OR SIGNALS DAMAGED DURING CONSTRUCTION OPERATIONS, INCLUDING RAISED PAVEMENT MARKERS (RPMs) AND CHIP SEAL MARKERS.
- ACCESS TO DRIVEWAYS ADJACENT TO THE CONSTRUCTION WORK ZONE SHALL BE MAINTAINED AT ALL TIMES AS MUCH AS POSSIBLE. ADDITIONAL DELINEATORS MAY BE REQUIRED TO DELINEATE THE DRIVEWAY ACCESS ROUTE THROUGH THE CONSTRUCTION WORK ZONE. A MINIMUM OF ONE TRAVEL LANE SHALL BE MAINTAINED ACROSS THE DRIVEWAYS, UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM ENGINEER.
- AT THE END OF EACH WORK DAY, DURING NON-ACTIVE CONSTRUCTION PERIODS, AND AT ANY TIME A FLAGGER IS NOT PRESENT, TCP DEVICES SHALL BE REMOVED.
- CONTRACTOR TO COORDINATE ANY NECESSARY ROAD CLOSURES WITH LOCAL RESIDENTS, BUSINESSES, AND EMERGENCY SERVICES.

DEMOLITION NOTES:

- AREAS BENEATH REMOVED PAVEMENT SHALL BE CLEARED OF ALL LOOSE OR DISTURBED MATERIAL AND WATER. THE AREA SHALL BE PROOF-ROLLED AND MANUALLY COMPACTED OR REPLACED WITH SIMILAR MATERIALS PRIOR TO NEW PAVEMENT PLACEMENT PER SPECIFICATIONS.
- UNDER ALL IMPROVEMENTS, ALL ITEMS ARE TO BE REMOVED UNLESS OTHERWISE INDICATED. REMOVE NOT ONLY THE ABOVE GROUND ELEMENTS BUT ALL UNDERGROUND ELEMENTS FOR UTILITIES UNLESS OTHERWISE INDICATED. DURING CLEARING AND GRUBBING ACTIVITIES WHERE TREES AND BRUSH ARE TO BE REMOVED, REMOVE THE TOTAL EXTENT OF THEIR ROOT SYSTEMS, UNLESS OTHERWISE DIRECTED BY THE OWNER. ALL MATERIALS AND DEBRIS DEMOLISHED AND/OR REMOVED SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A MANNER SATISFACTORY TO THE OWNER, ARCHITECT, & ENGINEER. ON-SITE BURNING WILL NOT BE PERMITTED.
- ALL EXCESS TOPSOIL AND CUT MATERIAL IS TO BE HAULLED OFF AND DISPOSED OF OFF-SITE.
- CONTRACTOR SHALL PREVENT TRANSPORT OF SEDIMENT TO ADJACENT PROPERTIES AND PUBLIC OR PRIVATE RIGHT OF WAYS AND IS RESPONSIBLE FOR CLEANUP IF SUCH OCCURS. CONTRACTOR IS TO ENSURE NO CONSTRUCTION DEBRIS OR MUD IS TRACKED OR DISCARDED ON TO ANY PUBLIC OR PRIVATE STREETS OR LAND AND IS RESPONSIBLE FOR SITE CLEANUP AFTER EACH DAYS WORK. CONTRACTOR IS TO MAKE USE OF BEST MANAGEMENT PRACTICES TO PREVENT SEDIMENT FROM LEAVING THE SITE OR ENTERING EXISTING STORM SEWER OR DOWNSTREAM CHANNEL AREAS. CONTRACTOR SHALL MAINTAIN EROSION CONTROL THROUGHOUT CONSTRUCTION PERIOD AND UNTIL GRASS IS ESTABLISHED.
- CONTRACTOR TO PROTECT EXISTING TREES TO REMAIN DURING DEMOLITION AND CONSTRUCTION ACTIVITIES.

DIMENSION CONTROL NOTES:

- THE CONTRACTOR MAY OBTAIN AN ELECTRONIC COPY OF PROJECT PLANS FOR CONSTRUCTION PURPOSES, WITH THE PERMISSION OF THE OWNER. THE ELECTRONIC FILE AND INFORMATION GENERATED, BY GESSNER ENGINEERING, FOR THIS PROJECT IS CONSIDERED BY GESSNER ENGINEERING, TO BE CONFIDENTIAL. WHEN ISSUED, ITS USE IS INTENDED SOLELY FOR THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED. THE MATERIAL IS INTENDED FOR USE BY THE RECIPIENT NAMED, ONLY, AND PERMISSION IS NOT GRANTED TO THE RECIPIENT FOR DISTRIBUTION OF THIS DOCUMENTS IN ANY FORM OR FASHION. THE RECIPIENT UNDERSTANDS THAT THIS DATA IS AUTHORIZED "AS IS" WITHOUT ANY WARRANTY AS TO ITS PERFORMANCE, ACCURACY, FREEDOM FROM ERROR, OR AS TO ANY RESULTS GENERATED THROUGHOUT ITS USE. THE RECIPIENT ALSO UNDERSTANDS AND AGREES THAT GESSNER ENGINEERING, UPON RELEASE OF SUCH DATA, IS NOT LONGER RESPONSIBLE FOR THEIR USE OR MODIFICATION. THE USER AND RECIPIENT OF THE ELECTRONIC DATA ACCEPTS FULL RESPONSIBILITY AND LIABILITY

- FOR ANY CONSEQUENCES ARISING OUT OF THEIR USE.
- ALL DIMENSIONS SHOWN ARE TO BE USED IN CONJUNCTION WITH THE PLANS FOR LOCATING ALL IMPROVEMENTS AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR FOR WORKABILITY PRIOR TO CONSTRUCTION OF THE IMPROVEMENTS.
- UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE TO BACK OF CURB. REFER TO ARCHITECTURAL PLANS FOR DETAILED BUILDING DIMENSIONS.

GRADING NOTES:

- ALL UNPAVED AREAS SHALL BE ADEQUATELY GRADED TO DRAIN AT A MINIMUM OF 2.0% SLOPE, UNLESS OTHERWISE NOTED, SO THAT NO PONDING OCCURS.
- WHEN TOP OF CURB ELEVATIONS ARE SHOWN, THE CURB IS A STANDARD 6" CURB, UNLESS OTHERWISE NOTED.
- ALL SPOTS ARE TOP OF CURB ELEVATIONS, UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL FOLLOW THE GENERAL INTENT OF THE GRADING PLANS. MINOR ADJUSTMENTS TO THE ACTUAL ELEVATIONS SHOWN ON THE GRADING PLAN MAY BE REQUIRED TO MATCH EXISTING GROUND ELEVATIONS AND STRUCTURES. CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO ANY MODIFICATIONS.
- ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER.
- THE APPROVAL OF THE PLANS IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM AFFECTED PROPERTY OWNER(S). ANY ADJACENT PROPERTY OR RIGHT-OF-WAY DISTURBED DURING CONSTRUCTION SHALL BE RETURNED TO EXISTING CONDITIONS OR BETTER.
- FILL MATERIAL FOR NON-STRUCTURAL AREAS SHALL BE PER THE GEOTECHNICAL REPORT BY BURGE ENGINEERING & ASSOCIATES, DATED 8/10/2022.
- COMPACTION AND MOISTURE CONTROL SHALL BE VERIFIED BY IN-PLACE DENSITY TEST FOR EACH LIFT, 1 TEST PER 4,000 SF OF FILL PLACED, WITH A MINIMUM OF 1 TEST PER LIFT.
- PRIOR TO REVEGETATION OPERATIONS, CONTRACTOR TO SPREAD/REPLACE AND CONSOLIDATE TOPSOIL TO A DEPTH OF 6" MINIMUM.
- ALL DISRUPTED AREAS ARE TO HAVE ESTABLISHMENT OF GRASS AS OUTLINED PER THE LANDSCAPE PLAN.
- ALL DISTURBED AREAS NOT TO BE PAVED OR LANDSCAPED ARE TO BE PREPARED AND HYDROMULCH OR SEEDED OR SOD INSTALLED FOR PERMANENT ESTABLISHMENT OF VEGETATION. REVEGETATE PER B/C/S UNIFIED TECHNICAL SPECIFICATIONS - SPEC #32-92-19 SEEDING FOR EROSION CONTROL.
- CONTRACTOR SHALL MAINTAIN EROSION CONTROL UNTIL ALL LANDSCAPE AREAS ARE ESTABLISHED. TENANT/END USER OR OWNER OR CONTRACTOR IS RESPONSIBLE FOR CLEANUP FROM LANDSCAPING MATERIALS, MULCH OR LANDSCAPE SEDIMENT TRANSPORT THAT MAY OCCUR AFTER LANDSCAPE INSTALLATION INCLUDING MAINTENANCE OF GRATES AND TRENCH DRAINS.
- CONTRACTOR IS RESPONSIBLE FOR SUBMITTING N.O.I./N.O.T. (IF NECESSARY) TO T.C.E.Q & PROVIDING DOCUMENTATION OF SUBMISSION TO THE CITY OF BRYAN.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC. WITHIN THE AREA OF CONSTRUCTION. THEY MUST BE ADJUSTED TO PROPER GRADE BY THE CONTRACTOR PRIOR TO AND AFTER THE PLACING OF PAVEMENT AND GRADING.
- SIDEWALKS SHALL HAVE A SLOPE NO GREATER THAN 5% AND A CROSS SLOPE NOT GREATER THAN 2%, UNLESS OTHERWISE NOTED.
- HANDICAP ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS.
- CONTRACTOR SHALL CONTACT GESSNER ENGINEERING IF DISCREPANCIES EXIST AT EXISTING GRADE TIE-INS.

PAVEMENT NOTES:

- SUBGRADE:
 - EXISTING VEGETATION, TREES, STUMPS, AND ROOTS SHALL BE GRUBBED AND REMOVED. THE TOP 6" OF TOPSOIL AND SUBGRADE STRIPPED FROM THE AREAS TO BE COVERED BY PAVEMENT.
 - PAVING AREAS SHALL BE PROOF ROLLED WITH A 20 TON COMPACTOR AND, IF REQUIRED AT THE TIME OF CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE WEAK AREAS BY OVER EXCAVATING AND BACKFILLING WITH SPECIFIED MATERIALS.
 - FILL MATERIAL FOR STRUCTURAL AREAS (EXTENDING 5 FOOT BEYOND EDGE OF PAVEMENT OR BACK OF CURB) SHALL MEET THE SPECIFIED MATERIALS OR MATERIALS AS OUTLINED IN THE GEOTECH REPORT.
- SUBGRADE PREPARATION/STABILIZATION SHALL BE PER THE GEOTECHNICAL REPORT.
- CRUSHED LIMESTONE BASE:
 - CRUSHED LIMESTONE BASE SHALL CONFORM TO STANDARDS SPECIFIED IN TxDOT ITEM 247, TYPE A/B AND GRADE 1/2.
 - CRUSHED LIMESTONE BASE SHALL BE COMPACTED TO A UNIFORM DENSITY OF AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557, METHOD C, WITH A MOISTURE CONTENT OF +/- 2% OF OPTIMUM.
 - COMPACTION AND MOISTURE CONTROL SHALL BE VERIFIED BY IN-PLACE DENSITY TEST FOR EVERY 4,000 SF OF CRUSHED LIMESTONE BASE MATERIAL WITH A MINIMUM OF THREE (3) TESTS BEING PERFORMED.
 - THE BASE SHALL BE BLADED SMOOTH, TO THE SATISFACTION OF THE ENGINEER, BEFORE PRIMING.
- HOT-MIX ASPHALTIC CONCRETE:
 - HMAC SHALL CONFORM TO STANDARDS SPECIFIED IN TxDOT ITEM 340, TYPE D AND ASPHALT CEMENT SHALL BE PER THE GEOTECHNICAL REPORT.
 - ASPHALT SHALL BE APPLIED ONLY WHEN THE TEMPERATURE IS ABOVE 55° F AND RISING.
 - COMPACTION SHALL BE TESTED IN ACCORDANCE WITH TxDOT TEST METHOD TEX-227-F FOR DENSITY AND TEX-208-F FOR STABILITY. THE HMAC SHALL HAVE A LABORATORY DENSITY BETWEEN 94% AND 98% AND A STABILITY RANGE BETWEEN 35-56 AND 42-56 FOR THE BASE/ BINDER COURSE AND SURFACE COURSE RESPECTIVELY.
 - THE THICKNESS AND COMPACTION TEST FOR HMAC SHALL BE VERIFIED BY CORING AND IN-PLACE DENSITY TEST FOR EACH LIFT (1 TEST PER 5,000 SF OF AREA) WITH A MINIMUM OF THREE (3) TESTS BEING MADE.
- CONCRETE PAVEMENT:
 - CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
 - ALL CONCRETE SHALL BE VIBRATED WHEN PLACED.
 - PAVEMENT CONTRACTION JOINTS SHALL BE INSTALLED PER PLAN AND DETAIL SHEET, WITH A MAXIMUM SPACING OF 24 TIMES THE THICKNESS OF THE PAVEMENT (12' FOR 6" PAVEMENT). CONTRACTION JOINTS SHALL BE INSTALLED AS SOON AS CONCRETE CURING ALLOWS AND SHALL BE CUT 1/4 OF THE THICKNESS OF THE PAVEMENT. AN EARLY ENTRY SAW IS PREFERRED. TOOLED OR FORMED JOINTS ARE NOT ALLOWED.
 - PAVEMENT EXPANSION JOINTS SHALL BE SPACED AS SHOWN ON THE PLANS AND INSTALLED PER DETAIL SHEET. CONSTRUCTION SHALL BE STOPPED AT EXPANSION JOINTS. IF CONDITIONS REQUIRE, CONSTRUCTION TO BE STOPPED AT OTHER LOCATIONS, A COLD JOINT SHALL BE CONSTRUCTED.
 - ISOLATION JOINTS SHALL BE PLACED AT ALL IN-PAVEMENT OBJECTS INCLUDING INLETS, LIGHT POLE FOOTINGS, CLEANOUTS, ETC.
 - ALL JOINTS SHALL BE SEALED. PROVIDE EXPANSION JOINT WATER STOP CAPS AT NEW CONCRETE. PROVIDE EXPANSION JOINT SEALANT AT NEW TO EXISTING PAVEMENT.
 - REFERENCE DETAIL SHEET FOR PAVEMENT AND SIDEWALK CONSTRUCTION DETAILS.
 - TRANSPORTATION AND PLACEMENT OF THE CONCRETE SHALL BE IN ACCORDANCE WITH ACI 301. A TEST SET CONSISTING OF 4 CYLINDERS SHALL BE TAKEN FOR EVERY 75 CUBIC YARDS OF CONCRETE.
- REINFORCING STEEL:
 - ALL REINFORCEMENT SHALL BE ASTM A-615, GRADE 60. THE PAVEMENT REINFORCEMENT SHALL BE PER DETAILS.
 - LAPS AND SPLICES IN REINFORCING BARS SHALL BE A MINIMUM OF 30 BAR DIAMETERS IN LENGTH. BARS SHALL BE SECURED AT EVERY OTHER INTERSECTION.
- CURB AND GUTTER SECTION:
 - EXPANSION JOINTS SHALL BE SPACED AT A MAXIMUM DISTANCE OF 40' AND AT ALL RADIUS POINTS, PT'S AND PC'S AND SHALL BE SEALED.
 - CONTRACTION JOINTS SHALL BE SPACED AT A MAXIMUM OF 10' AND SHALL BE SEALED. TOOLED OR FORMED JOINTS ARE NOT ALLOWED.
- PAINTING AND STRIPING:
 - CONTRACTOR SHALL PAINT STRIPING FOR THE PARKING AREA AS INDICATED ON THE PLAN. THE SOLID LINE REPRESENTS A 4" WIDE SOLID WHITE LINE TO BE PAINTED, CONTRACTOR IS RESPONSIBLE TO PAINT HANDICAP MARKINGS AND LOCAL JURISDICTION STANDARDS AND ALL FIRE LANE MARKINGS IN ACCORDANCE WITH CITY OF BRYAN REQUIREMENTS. DECELERATION LANE STRIPING SAHLL BE PER TxDOT REQUIREMENTS.
 - MATERIAL AND METHODS FOR PAVEMENT MARKINGS SHALL CONFORM TO ITEM 666 OF THE TxDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND BRIDGES.

GENERAL UTILITY NOTES:

- THE CONTRACTOR SHALL NOTIFY TEXAS 811 AND THE APPROPRIATE UTILITY COMPANY 48 HOURS PRIOR TO EXCAVATION, AND SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS.
- THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL STATE AND FEDERAL REGULATIONS REGARDING CONSTRUCTION ACTIVITIES NEAR ENERGIZED OVERHEAD ELECTRIC LINES.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION OF ALL FRANCHISE & PRIVATE UTILITIES WITH EARTHWORK & PAVEMENT CONSTRUCTION.
- GENERAL CONTRACTOR IS RESPONSIBLE FOR FURNISHING & INSTALLING ANY NECESSARY UTILITY CONDUIT PRIOR TO SUBGRADE PREPARATION & PAVING OPERATION.
- GENERAL CONTRACTOR IS RESPONSIBLE FOR DETERMINATION OF UTILITY INSTALLATION ORDER.
- ALL PIPES AND APPURTENANCES SHALL BE KEPT FREE OF DIRT AND OTHER DEBRIS. STORE ALL MATERIALS PER MANUFACTURER'S RECOMMENDATIONS. ANY DAMAGED MATERIALS SHALL BE REMOVED FROM THE SITE AND REPLACED.
- TRENCH BACKFILL FOR ALL UTILITIES SHALL MEET THE DETAILS, SPECIFIED MATERIALS, AND BE FREE OF DEBRIS, TRASH, VEGETATION, AND ROCKS LARGER THAN 2" IN DIAMETER OR MATERIAL AS OUTLINED IN THE GEOTECHNICAL REPORT. UNDER AREAS TO BE PAVED & WITHIN 5' OF EDGE OF PAVING, THE BACKFILL SHALL BE PLACED IN 8" MAXIMUM LOOSE LIFTS AND COMPACTED TO A UNIFORM DENSITY OF AT LEAST 98% OF THE MAXIMUM DRY DENSITY

AS DETERMINED BY THE STANDARD PROCTOR(D698) OR BE CEMENT STABILIZED SAND COMPACTED TO A UNIFORM DENSITY OF AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D558 WITH A MOISTURE CONTENT OF +/- 2% OF OPTIMUM. ALL OTHER AREAS SHALL BE COMPACTED TO A UNIFORM DENSITY OF AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR(D698).

- COMPACTION AND MOISTURE CONTROL SHALL BE VERIFIED BY IN-PLACE DENSITY TEST FOR EACH LIFT FOR EVERY 100 LINEAR FEET OF TRENCH PLACED, WITH A MINIMUM OF ONE TEST PER LIFT.
- WHERE ELECTRIC FACILITIES ARE INSTALLED, BTU HAS THE RIGHT TO INSTALL, OPERATE, RELOCATE, CONSTRUCT, RECONSTRUCT, ADD TO, MAINTAIN, INSPECT, PATROL, ENLARGE, REPAIR, REMOVE AND REPLACE SAID FACILITIES UPON, OVER, UNDER AND ACROSS THE PROPERTY INCLUDED IN THE PUE, AND THE RIGHT OF INGRESS AND EGRESS ON PROPERTY ADJACENT TO THE PUE TO ACCESS ELECTRIC FACILITIES.

STORM NOTES:

- ALL STORM SEWER IS PROPOSED, UNLESS OTHERWISE NOTED.
- ALL STORM LINES TO BE REINFORCED CONCRETE PIPE (RCP), C443 ASTM C76, CLASS III AND CLASS IV.
- TRENCH BACKFILL SHALL BE PER DETAILS.
- STORM SEWER MATERIAL SHALL BE AS FOLLOWS FOR THE FOLLOWING INSTALLATIONS:
 - POLYVINYL CHLORIDE (PVC), ASTM D3034, SDR 26, TYPE PSM SEWER PIPE WITH BELL AND SPIGOT END FOR RUBBER GASKETED JOINTS MEETING ASTM F477
 - REINFORCED CONCRETE PIPE (RCP), ASTM C76, WALL B, CLASS III AND/OR CLASS IV, RUBBER GASKETED JOINT MEETING ASTM C443
 - HIGH DENSITY POLYETHYLENE CORRUGATED PIPE (HDPE), AASHTO M252 (4"-10"), AASHTO M294 (12"-60"), AND ASTM F2306 (12"-60"), TYPE 5, WITH A WATER TIGHT REINFORCED INTEGRAL BELL AND SPIGOT FOR RUBBER GASKETED JOINTS MEETING ASTM D2322 (ADS N-42 WT WATER TIGHT)
 - REINFORCED CONCRETE BOX CULVERT (RCBC) PRECAST, ASTM C1577
 - REINFORCED CONCRETE BOX CULVERT (RCBC) CAST-IN-PLACE, MEETING TxDOT DETAIL, 4,000 PSI CONCRETE
 - CONCRETE FOR STRUCTURES (INLETS, CATCH BASINS, JUNCTIONS, ETC.)
 - MIN 4000 PSI-28 DAY STRENGTH FOR ITEMS UP TO 10' DIMENSION
 - MIN 5000 PSI-28 DAY STRENGTH FOR ITEMS WITH GREATER THAN 10' DIMENSION
- CONTRACTOR IS TO USE SILT FENCING AROUND INLET AND JUNCTION BOXES AND GRAVEL FILLED PERMEABLE BAGS AROUND INLET BOXES (AS NECESSARY) TO PREVENT SEDIMENT FROM ENTERING STORM SEWER SYSTEM. PRIOR TO ACCEPTANCE OF PROJECT FOR SUBSTANTIAL COMPLETION, CONTRACTOR IS TO CLEAN ALL STORM SEWER FACILITIES OF SEDIMENT. CONTRACTOR TO USE EROSION CONTROL LOGS AROUND CULVERT INLETS AND OUTLETS TO PREVENT SEDIMENT FROM ENTERING THE CULVERTS. PRIOR TO ACCEPTANCE OF PROJECT FOR SUBSTANTIAL COMPLETION, CONTRACTOR IS TO CLEAN ALL CULVERTS AND STORM FACILITIES OF SEDIMENT.
- CONTRACTOR SHALL PROVIDE A MINIMUM OF 12 INCH CLEARANCE AT STORM SEWER AND WATER LINE CROSSINGS AND A MINIMUM OF 6 INCH CLEARANCE AT STORM AND SANITARY SEWER CROSSINGS.
- ALL PERMANENT ROCK RIP-RAP TO BE LIMESTONE USING GENERALLY 200LB - 250LB PIECES WITH SMALLER ROCK FILLING VOIDS. ROCK TO BE INSTALLED TO 1.5 TIMES AVERAGE ROCK DIAMETER MIN. THICKNESS. INSTALL SOIL RETENTION FILTER FABRIC BENEATH ROCK PER TxDOT MATERIAL SPEC. DMS-6200, TYPE 2 (SUCH AS 205W NON-WOVEN FILTER FABRIC AS MFD. BY US FABRICS). RIP-RAP TO BE HAND PLACED PROVIDING A NEAT, UNIFORM, TIGHT SURFACE IN ACCORDANCE WITH TxDOT SPECIFICATIONS ITEM #432, STONE RIP-RAP (TYPE R), BROKEN CONCRETE MAY NOT BE USED FOR PERMANENT INSTALLATIONS. NO SOIL SHOULD BE VISIBLE THROUGH RIP-RAP.

SANITARY SEWER NOTES:

- ALL SANITARY SEWER LINES TO BE POLYVINYL CHLORIDE (PVC), ASTM D3034, SDR 26, TYPE PSM SEWER PIPE WITH BELL AND SPIGOT END FOR RUBBER GASKETED JOINTS MEETING ASTM F477SDR-26 PVC UNLESS OTHERWISE NOTED ON THE PLANS
- SANITARY SEWER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT TCEQ REGULATIONS, CHAPTER 217, LOCAL JURISDICTIONAL REGULATIONS, AND IN ACCORDANCE WITH THE 2012 INTERNATIONAL PLUMBING CODE.
- ALL SECTIONS OF THE SANITARY COLLECTION SYSTEM SHALL BE INSTALLED NO CLOSER THAN NINE FEET IN ALL DIRECTIONS TO THE POTABLE WATER DISTRIBUTION FACILITIES. ALL SEPARATION DISTANCES SHALL BE MEASURED FROM THE OUTSIDE SURFACE OF EACH OF THE RESPECTIVE PIECES. IF NINE FEET OF SEPARATION CANNOT BE MET, FOLLOW CURRENT TCEQ CHAPTER 217.53 (D) AND 290.44(E) REGULATIONS. IF CONFLICTS OCCUR, CONTACT ENGINEER.
- ALL SANITARY SEWER LINES SHALL BE THOROUGHLY CLEANED, TESTED, AND APPROVED PRIOR TO ANY CONNECTIONS BEING MADE TO THE EXISTING SANITARY SEWER SYSTEM.
- ALL SANITARY SEWER LINE AND MANHOLE TESTING SHALL BE IN ACCORDANCE WITH CURRENT TCEQ REGULATIONS AND SPECIFICATIONS. A LOW PRESSURE AIR TEST OR AN INFILTRATION/EXFILTRATION TEST SHALL BE COMPLETED IN ACCORDANCE WITH 217.57 (A). DEFLECTION TESTING BY MANDREL SHALL BE COMPLETED ON ALL FLEXIBLE PIPES. MANDREL SIZING AND TESTING PROCEDURES SHALL BE IN ACCORDANCE WITH 217.57 (B). A VACUUM TEST SHALL BE PERFORMED ON ALL MANHOLES IN ACCORDANCE WITH 217.59 (B)(2).
- ALL ASPECTS OF THE SEWER LINE, INCLUDING PIPE, JOINTS AND MANHOLES, SHALL HAVE A DESIGN LIFE CYCLE OF NO LESS THAN FIFTY YEARS. IF A PIPE OR AN INTEGRAL STRUCTURAL COMPONENT OF A PIPE WILL DETERIORATE WHEN SUBJECTED TO CORROSIVE INTERNAL CONDITIONS OR IF A PIPE OR COMPONENT DOES NOT HAVE A CORROSIVE RESISTANT LINER INSTALLED BY THE MANUFACTURER, THE CONTRACTOR MUST DEMONSTRATE THE STRUCTURAL INTEGRITY OF THE PIPE DURING THE MINIMUM 50-YEAR DESIGN LIFE CYCLE.
- CLEAN-OUT INSTALLATIONS MUST PASS ALL APPLICABLE TESTING REQUIREMENTS OUTLINED FOR GRAVITY COLLECTION PIPES IN 217.57 (RELATING TO TESTING REQUIREMENTS FOR INSTALLATION OF GRAVITY COLLECTION SYSTEM PIPES).
- A MANHOLE MUST BE MADE OF MONOLITHIC, CAST-IN-PLACE CONCRETE, FIBERGLASS, PRE-CAST CONCRETE MEETING ASTM C478; HIGH DENSITY POLYETHYLENE, OR EQUIVALENT MATERIAL THAT PROVIDES ADEQUATE STRUCTURAL INTEGRITY. THE USE OF BRICKS TO ADJUST A MANHOLE COVER TO GRADE OR CONSTRUCT A MANHOLE IS PROHIBITED.
- THE INSIDE DIAMETER OF A MANHOLE MUST BE NO LESS THAN 48 INCHES.
- THE BOTTOM OF A MANHOLE MUST CONTAIN A U-SHAPED CHANNEL THAT IS A SMOOTH CONTINUATION OF THE INLET AND OUTLET PIPES.
- A MANHOLE CONNECTION MUST USE WATERTIGHT, SIZE-ON-SIZE RESILIENT CONNECTORS THAT ALLOW FOR DIFFERENTIAL SETTLEMENT AND MUST CONFORM TO ASTM C923.

WATER NOTES:

- ALL WATER LINES TO BE POLYVINYL CHLORIDE (PVC), AWWA C-900, DR 14.
- POTABLE WATER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT TCEQ REGULATIONS, CHAPTER 290, LOCAL JURISDICTIONAL REGULATIONS, AND IN ACCORDANCE WITH THE 2012 INTERNATIONAL PLUMBING CODE.
- SEPARATION OF PUBLIC WATER AND WASTEWATER MAINS SHALL BE CONSISTENT WITH THE CURRENT RULES & REGULATIONS FOR PUBLIC WATER SYSTEMS OF THE TCEQ.
- WATER SERVICE LINES SHALL MAINTAIN A MINIMUM COVER OF FOUR (4) FEET AND A MAXIMUM COVER OF FIVE (5) FEET UNLESS OTHERWISE SPECIFIED ON PLANS AND/ OR REQUIRED FOR UTILITY CROSSINGS.
- METERS TO BE IN A VAULT AND TOUCH-READ. ALL METERS TO BE LOCATED WITHIN THE P.U.E.
- FIRE SUPPLY MAIN VALVES SHALL HAVE A LOCKING LID TO BE AMP OR USA L562 LOCKING LID OR ALTERNATE LOCKING LIDS SHALL BE APPROVED BY BRYAN UTILITIES DIRECTOR.
- ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE/NATIONAL SANITATION FOUNDATION (ANSI/NSF) STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI.
- ALL PLASTIC PIPE FOR USE IN PUBLIC WATER SYSTEMS MUST ALSO BEAR THE NATIONAL SANITATION FOUNDATION SEAL OF APPROVAL (NSF-PW) AND HAVE AN ASTM DESIGN PRESSURE RATING OF AT LEAST 150 PSI OR A STANDARD DIMENSION RATING OF 26 OR LESS.
- NO PIPE WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF DRINKING WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY.
- LEAD BAN SHALL BE FOLLOWED PER CURRENT TCEQ 290.44 (B) REGULATIONS.
- POTABLE WATER DISTRIBUTION LINES AND WASTEWATER MAINS OR LATERALS THAT FORM PARALLEL UTILITY LINES SHALL BE INSTALLED IN SEPARATE TRENCHES.
- NO PHYSICAL CONNECTION SHALL BE MADE BETWEEN A DRINKING WATER SUPPLY AND A SEWER LINE. ANY APPURTENANCES SHALL BE DESIGNED AND CONSTRUCTED SO AS TO PREVENT ANY POSSIBILITY OF SEWAGE ENTERING THE DRINKING WATER SYSTEM.
- ALL SECTIONS OF THE POTABLE WATER DISTRIBUTION SYSTEM SHALL BE INSTALLED NO CLOSER THAN NINE FEET ON ALL DIRECTIONS TO THE SANITARY SEWER COLLECTION FACILITIES. ALL SEPARATION DISTANCES SHALL BE MEASURED FROM THE OUTSIDE SURFACE OF EACH OF THE RESPECTIVE PIECES. IF THE NINE FOOT SEPARATION CANNOT BE MET, FOLLOW CURRENT TCEQ CHAPTER 217.53 (D) AND 290.44 (E) REGULATIONS. IF CONFLICTS OCCUR, CONTACT ENGINEER.
- WATERLINES SHALL NOT BE INSTALLED CLOSER THAN TEN FEET TO A SEPTIC TANK OR DRAIN FIELD.
- FIRE HYDRANTS SHALL NOT BE INSTALLED WITHIN NINE FEET VERTICALLY OR HORIZONTALLY OF ANY WASTEWATER MAIN, LATERAL, OR SERVICE.
- SANITARY PRECAUTIONS, FLUSHING, DISINFECTION PROCEDURES, AND MICROBIAL SAMPLING SHALL BE AS PRESCRIBED IN AWWA STANDARDS OR LOCAL JURISDICTIONAL REQUIREMENTS. ALL TEST AND FLUSHING WATER SHALL BE POTABLE AND OF A KNOWN SOURCE.
- AFTER THE PIPE HAS BEEN LAID AND BACKFILLED, BUT PRIOR TO THE REPLACEMENT OF PAVEMENT, EACH VALVED SECTION OF NEWLY LAID PIPE SHALL BE SUBJECTED TO A HYDROSTATIC PRESSURE TEST. TESTING PROCEDURES SHALL BE PER SPECIFICATION OR LOCAL JURISDICTION WITH A MINIMUM PRESSURE OF 150 PSI, WHICHEVER IS MORE STRINGENT. ADJUSTMENT SHALL BE MADE FOR DIFFERENTIAL IN ELEVATION BETWEEN THE LOW POINT OF THE SECTION BEING TESTED AND THE CENTERLINE OF THE PRESSURE TEST GAUGE.
- EACH VALVED SECTION OF PIPE SHALL BE SLOWLY FILLED WITH WATER TO THE SPECIFIED TEST PRESSURE, MEASURED TO THE POINT OF LOWEST ELEVATION. WATER SHALL BE SUPPLIED BY MEANS OF A PUMP CONNECTED TO THE PIPE IN A SATISFACTORY AND SANITARY MANNER. PRESSURE SHALL BE HELD FOR A MINIMUM OF 2 HOURS WITHOUT PRESSURE LOSS OR PER LOCAL JURISDICTION. THE PUMP, PIPE CONNECTION, AND ALL NECESSARY APPARATUS, INCLUDING GAUGES AND METERS SHALL BE FURNISHED BY THE CONTRACTOR.
- NO PIPE INSTALLATION WILL BE ACCEPTED UNTIL THE LEAKAGE OR PRESSURE LOSS IS LESS THAN REQUIRED.
- THE WATER LINES SHALL BE FLUSHED AND THOROUGHLY STERILIZED. STERILIZATION SHALL FOLLOW THE PROCEDURES AS OUTLINED IN CURRENT AWWA C651, OR PER LOCAL JURISDICTION, WHICHEVER IS MORE STRINGENT. A MINIMUM OF ONE SAMPLE FOR MICROBIAL TESTING SHALL BE COMPLETED PER 1,000 FEET OF COMPLETE WATERLINE.

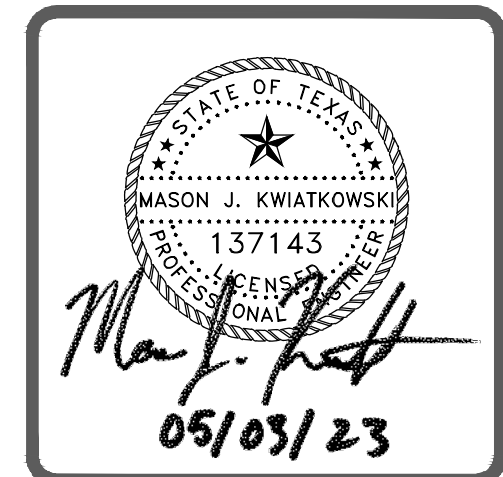
DRAINAGE AREA MAP NOTES:

- THIS SHEET IS FOR SITE PLANNING PURPOSES ONLY. IT IS NOT TO BE USED AS A DOCUMENT FOR CONSTRUCTION.
- DRAINAGE CALCULATIONS WERE PERFORMED UTILIZING NRCS AND RATIONAL METHODOLOGIES.



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CORPORATE OFFICE
401 W 25TH STREET
BRYAN, TEXAS 77803
1-877-GESSNER (437-7637)
www.gessnerengineering.com
FIRM REGISTRATION NUMBERS:
TBPE F-7451, TBPLS F-10193910



FOR
CONSTRUCTION



RETAIL CENTER
1654 W. VILLA MARIA RD.
BRYAN, TX. 77807

NOTES

ISSUE DATE: 04-24-2023
DRAWN BY: CS
CHECKED BY: MK
PROJECT #: 21-1472

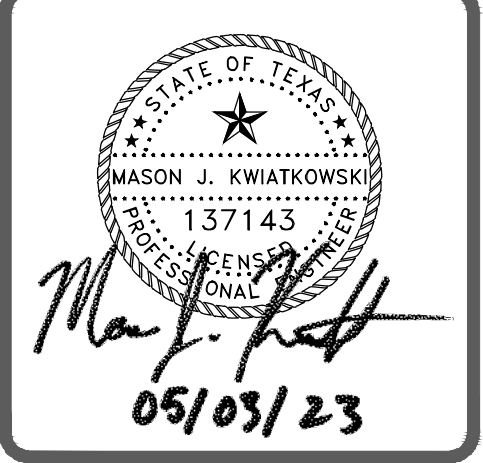
REVISIONS		
REV.	DATE	DESCRIPTION

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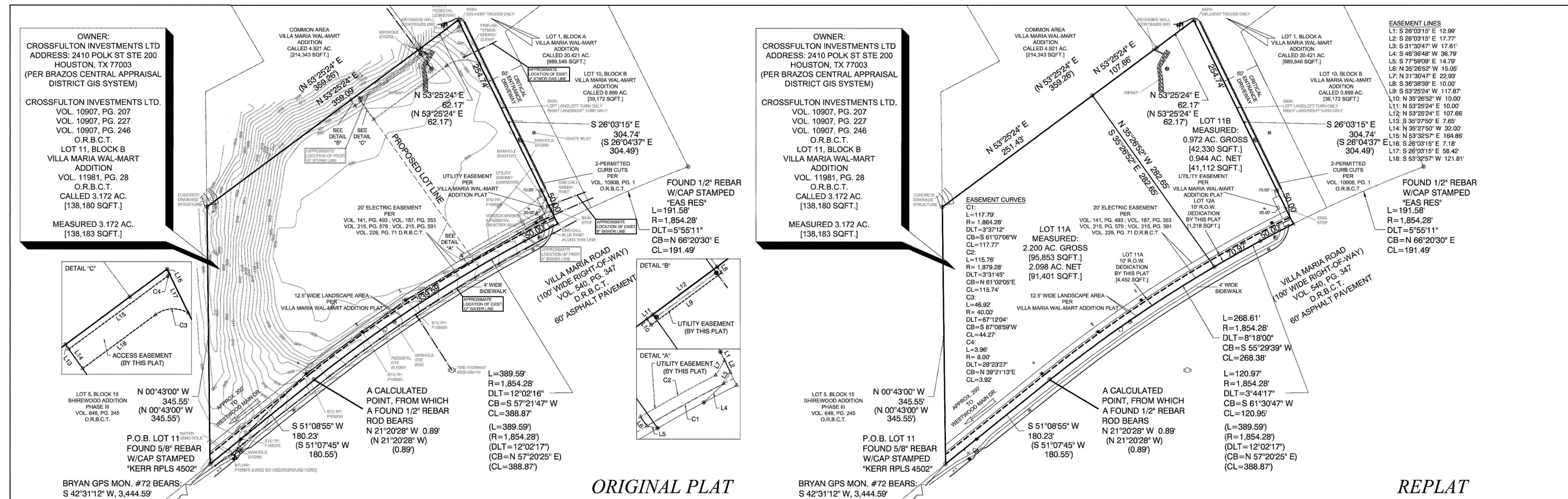


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FOR CONSTRUCTION



CERTIFICATE OF OWNERSHIP AND DEDICATION

STATE OF TEXAS
COUNTY OF BRAZOS

WE, THE OWNERS AND DEVELOPERS OF THE LAND SHOWN ON THIS PLAT, AND DESIGNATED HEREIN AS LOTS 11A AND 11B, BLOCK B OF THE VILLA MARIA WAL-MART ADDITION, BRAZOS COUNTY, TEXAS, AND WHOSE NAMES ARE SUBSCRIBED HERETO, HEREBY DEDICATE TO THE USE OF THE PUBLIC FOREVER, ALL STREETS, ALLEYS, PARKS, WATERCOURSES, DRAINS, EASEMENTS, AND PUBLIC PLACES, SHOWN HEREON FOR THE PURPOSES IDENTIFIED.

OWNERS:

STATE OF TEXAS
COUNTY OF BRAZOS

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED _____ (KNOWN TO ME TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE/THEY EXECUTED THE SAME FOR THE PURPOSE STATED.
GIVEN UNDER MY HAND AND SEAL ON THIS _____ DAY OF _____, 20____.

NOTARY PUBLIC, BRAZOS COUNTY, TEXAS

CERTIFICATE OF SURVEYOR

STATE OF TEXAS
COUNTY OF BRAZOS

I, JEFFREY A. BARRON, A REGISTERED PROFESSIONAL LAND SURVEYOR, NO. 6916, IN THE STATE OF TEXAS, HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECT AND WAS PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY AND THAT PROPERTY MARKERS AND MONUMENTS WERE PLACED UNDER MY SUPERVISION ON THE GROUND, AND THAT THE METES AND BOUNDS DESCRIBING SAID SUBDIVISION WILL DESCRIBE A CLOSED GEOMETRIC FORM.

JEFFREY A. BARRON
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NO. 6916
TBPELS Survey Firm: 10194741

COUNTY CLERK
BRAZOS COUNTY, TEXAS

CERTIFICATE OF APPROVAL

THIS SUBDIVISION PLAT WAS DULY APPROVED BY THE COMMISSIONERS COURT OF BRAZOS COUNTY, TEXAS, AS THE FINAL PLAT OF SUCH SUBDIVISION ON THE _____ DAY OF _____, 20____.
SIGNED THIS DAY OF _____, 20____.

COUNTY JUDGE, BRAZOS COUNTY, TEXAS

APPROVAL OF THE PLANNING AND ZONING COMMISSION

I, _____ CHAIRMAN OF THE PLANNING AND ZONING COMMISSION OF THE CITY OF BRYAN, STATE OF TEXAS, HEREBY CERTIFY THAT THE ATTACHED PLAT WAS DULY FILED FOR APPROVAL WITH THE PLANNING AND ZONING COMMISSION OF THE CITY OF BRYAN ON THE _____ DAY OF _____, 20____, AND THE SAME WAS DULY APPROVED ON THE _____ DAY OF _____, 20____.

CHAIRMAN

CERTIFICATION OF THE CITY PLANNERS

I, THE UNDERSIGNED, CITY PLANNER AND/OR DESIGNATED SECRETARY OF THE PLANNING AND ZONING COMMISSION OF THE CITY OF BRYAN, HEREBY CERTIFY THAT THIS PLAT IS IN COMPLIANCE WITH THE APPROPRIATE CODES AND ORDINANCES OF THE CITY OF BRYAN AND WAS APPROVED ON THE _____ DAY OF _____, 20____.

CITY PLANNER, CITY OF BRYAN

APPROVAL OF THE CITY ENGINEER

I, THE UNDERSIGNED, CITY ENGINEER OF THE CITY OF BRYAN, HEREBY CERTIFY THAT THIS PLAT IS IN COMPLIANCE WITH THE APPROPRIATE CODES AND ORDINANCES OF THE CITY OF BRYAN AND WAS APPROVED ON THE _____ DAY OF _____, 20____.

CITY ENGINEER, CITY OF BRYAN

CERTIFICATE OF THE COUNTY CLERK

STATE OF TEXAS
COUNTY OF BRAZOS

I, _____ COUNTY CLERK, IN AND FOR SAID COUNTY, DO HEREBY CERTIFY THAT THIS PLAT TOGETHER WITH ITS CERTIFICATES OF AUTHENTICATION WAS FILED FOR RECORD IN MY OFFICE ON THE _____ DAY OF _____, 20____, IN THE OFFICIAL PUBLIC RECORDS OF BRAZOS COUNTY, TEXAS, IN VOLUME _____ PAGE _____.

COUNTY CLERK
BRAZOS COUNTY, TEXAS

GENERAL NOTES:

- COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON THE TEXAS STATE PLANE COORDINATE SYSTEM, NAD 83, (2011 ADJUSTED) CENTRAL ZONE. ALL DISTANCES AND COORDINATES SHOWN ARE GROUND/SURFACE.
- ACCORDING TO MAP NO. 48041C0195E OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR BRAZOS COUNTY, TEXAS, DATED MAY 16, 2012, THE SUBJECT TRACT IS SITUATED WITHIN X ZONE, DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
- THE BUILDING SETBACK REQUIREMENTS SHALL BE STANDARD C-2 SETBACKS, WHICH ARE 25' FROM THE FRONT AND 5' FROM THE SIDES AND REAR.
- ZONING OF LOTS 11A AND 11B IS PD-9 PER ORDINANCE NO. 1985.
- SANITARY SEWER: SANITARY SEWER SERVICE FOR THIS SUBDIVISION SHALL BE PROVIDED BY THE EXTENSION OF THE OF THE EXISTING CITY OF BRYAN SANITARY SEWER INFRASTRUCTURE ALONG W. VILLA MARIA ROAD.
- DOMESTIC WATER SERVICE: THE DOMESTIC WATER SERVICE FOR THIS SUBDIVISION SHALL BE PROVIDED BY THE CITY OF BRYAN.
- ELECTRIC SERVICE: BRYAN TEXAS UTILITIES (BTU) SHALL PROVIDE ELECTRIC SERVICE TO THIS SUBDIVISION.
- ALL PUBLIC UTILITY EASEMENTS (PUE) SHOWN HEREON SHALL BE DEDICATED WITH THE PLATTING OF THIS SUBDIVISION.
- WHERE ELECTRICAL FACILITIES ARE INSTALLED, BTU HAS THE RIGHT TO INSTALL, OPERATE, RELOCATE, CONSTRUCT, RECONSTRUCT, ADD TO, MAINTAIN, INSPECT, PATROL, ENLARGE, REPAIR, REMOVE, AND REPLACE SAID FACILITIES UPON, OVER, UNDER, AND ACROSS THE PROPERTY INCLUDED IN THE PUE, AND THE RIGHT OF INGRESS AND EGRESS ON THE PROPERTY ADJACENT TO THE PUE TO ACCESS FACILITIES.
- DRIVEWAYS WILL BE LOCATED AND CONSTRUCTED IN ACCORDANCE WITH BOS GUIDELINES.
- ALL DEVELOPMENT AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF BRYAN STANDARDS, ORDINANCES, AND REGULATIONS.
- THE CITY OF BRYAN IS RESPONSIBLE FOR THE FOR THE MAINTENANCE OF FACILITIES WITHIN THE R.O.W. AND WITHIN THE PUBLIC UTILITY AND DRAINAGE EASEMENTS.

LOT 11
METES & BOUNDS DESCRIPTION
OF 3.172 ACRES
(138,183 SQ.FT.)

BEING 3.172 ACRES (138,183 SQUARE FEET) OF LAND AND BEING LOT 11, BLOCK B OF THE VILLA MARIA WAL-MART ADDITION, ACCORDING TO THE PLAT RECORDED IN VOLUME 11981, PAGE 28 OF THE OFFICIAL RECORDS OF BRAZOS COUNTY, TEXAS (O.R.B.C.T.) AND BEING PART THE LAND CONVEYED TO FULTON INVESTMENTS LTD. BY THE DEEDS RECORDED IN VOLUME 10907, PAGE 207, VOLUME 10907, PAGE 227, AND VOLUME 10907, PAGE 246 OF THE O.R.B.C.T. AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT A 5/8-INCH DIAMETER REBAR ROD WITH YELLOW PLASTIC CAP STAMPED "KERR RPLS 4502" FOUND AT THE SOUTHWEST CORNER OF SAID LOT 11, SAME BEING THE SOUTHWEST CORNER OF SAID LOT 11, SAME BEING THE MOST WESTERLY SOUTHWEST CORNER OF LOT 1, BLOCK A OF SAID WAL-MART ADDITION;

THENCE N00°43'00"W, WITH THE COMMON LINE OF SAID LOT 11 AND SAID LOT 5 A DISTANCE OF 345.55 FEET TO A 5/8-INCH DIAMETER REBAR ROD WITH ORANGE PLASTIC CAP STAMPED "A.I. FIRM 10194741" SET AT THE NORTHWEST CORNER OF SAID LOT 11, SAME BEING THE SOUTHWEST CORNER OF THE COMMON AREA ACCORDING TO SAID WAL-MART ADDITION PLAT AND ALSO BEING IN THE EAST LINE OF SAID LOT 5;

THENCE N53°25'24"E A DISTANCE OF 62.17 FEET TO A 5/8-INCH DIAMETER REBAR ROD WITH ORANGE PLASTIC CAP STAMPED "A.I. FIRM 10194741" SET IN THE NORTH LINE OF SAID LOT 11, SAME BEING THE MOST WESTERLY SOUTHWEST CORNER OF SAID LOT 1, BLOCK A OF SAID WAL-MART ADDITION;

THENCE N53°25'24"E A DISTANCE OF 62.17 FEET TO A 5/8-INCH DIAMETER REBAR ROD WITH ORANGE PLASTIC CAP STAMPED "A.I. FIRM 10194741" SET AT THE NORTHEAST CORNER OF SAID LOT 11, SAME BEING THE MOST NORTHERLY SOUTHWEST CORNER OF SAID LOT 1;

THENCE S26°03'15"E, WITH THE EAST LINE OF SAID LOT 11 A DISTANCE OF 254.74 FEET TO A 5/8-INCH DIAMETER REBAR ROD WITH ORANGE PLASTIC CAP STAMPED "A.I. FIRM 10194741" SET AND CONTINUING A TOTAL DISTANCE OF 304.74 FEET TO A CALCULATED POINT FOR CORNER, AT THE SOUTHWEST CORNER OF SAID LOT 11, SAME BEING IN SAID RIGHT-OF-WAY LINE, SAID CALCULATED POINT BEING IN A CURVE TO THE LEFT HAVING A RADIUS OF 1,854.28 FEET AND A CENTRAL ANGLE OF 12°02'16";

THENCE CONTINUING WITH SAID CURVE TO THE LEFT, PASSING A 5/8-INCH DIAMETER REBAR ROD WITH ORANGE PLASTIC CAP STAMPED "A.I. FIRM 10194741" SET, AT AN ARC DISTANCE OF 30.00 FEET, CONTINUING A TOTAL ARC DISTANCE OF 389.58 FEET AND A LONG CHORD THAT BEARS S57°14'17"W AT A DISTANCE OF 388.87 FEET TO A CALCULATED POINT, FROM WHICH A FOUND 1/2-INCH DIAMETER REBAR ROD BEARS N21°20'28"W A DISTANCE OF 0.89 FEET;

THENCE S51°08'55"W, CONTINUING WITH SAID RIGHT-OF-WAY LINE A DISTANCE OF 180.23 FEET TO THE POINT OF BEGINNING, AND CONTAINING 3.172 ACRES (138,183 SQ.FT.) OF LAND, MORE OR LESS.

PREPARED BY:
ALPHA Infrastructure LLC.
4360 Decatur Dr., #2114
College Station, TX 77845
Phone: (979) 450-0062
Email: jelt.stanton@alpha-surveyors.com

PREPARED FOR:
Samantha Cogg
DT Retail Properties, LLC
500 Volvo Pkwy
Chesapeake, VA 23320
Phone: (757) 521-5388
Email: scogg@dtretail.com

Scale: 1"=60' ft

1642 W. Villa Maria Rd.
Bryan, TX 77807

Project No: TX01-P2200163A
Date: December 7, 2022

Surveyor: JAB
Checked By: JAB

Sheet Number: 01 of 01

TBPELS Survey Firm: 10194741

RETAIL CENTER
1654 W. VILLA MARIA RD.
BRYAN, TX. 77807

SURVEY CONTROL

ISSUE DATE: 04-24-2023
DRAWN BY: CS
CHECKED BY: MK
PROJECT #: 21-1472

REVISIONS

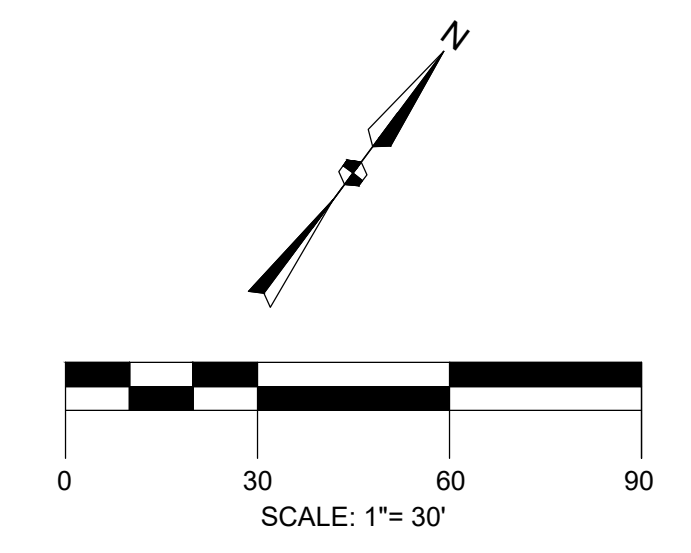
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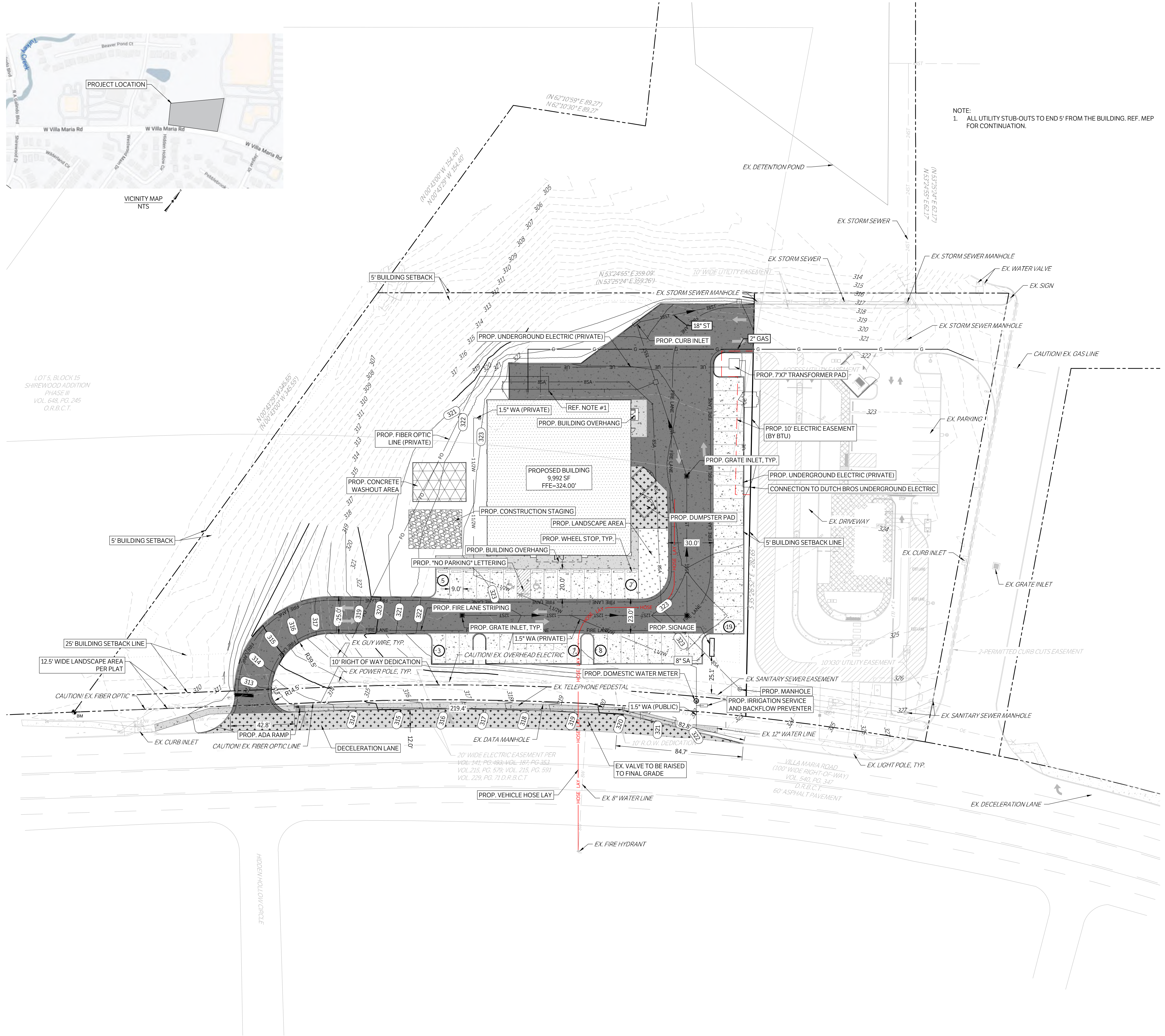
VICINITY MAP
NTS

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.



PROJECT BENCHMARK: \bullet BM
5/8" REBAR W/ CAP STAMPED "KERR RPLS 4502" ELEVATION = 311.08'

NOTE:
1. ALL UTILITY STUB-OUTS TO END 5' FROM THE BUILDING. REF. MEP FOR CONTINUATION.



SITE DATA SUMMARY	
EXISTING USE:	OPEN SPACE
PROPOSED USE:	RETAIL
ZONING:	PLANNED DEVELOPMENT ORD. 1963
ADDRESS:	1654 W. VILLA MARIA ROAD, BRYAN, TEXAS 77807
LEGAL DESCRIPTION:	VILLA MARA WAL-MART ADDN. BLOCK B, LOT 11A
OWNER:	CROSSFULTON INVESTMENTS LTD. 2410 POLK ST STE 200, HOUSTON, TX 77003
SITE AREA:	94580.9 SF
NO. OF STORIES:	1
PROPOSED:	TOTAL SF HEIGHT (FT) TYPE
BUILDING:	9,992 28 II-B
BUILDING SPRINKLER SYSTEM:	NO
FIRM MAP NO.:	48041C0195E

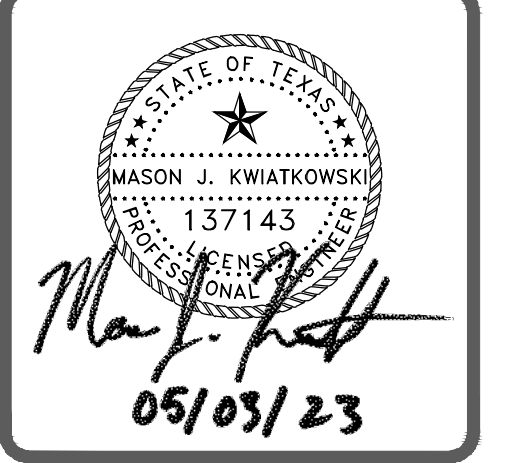
PARKING TABULATION	
PARKING REQUIREMENT:	1 SPACE PER 250 CSF = BUILDING SF (9,992 SF) / 250 CSF/SPACE = 40 SPACES
TOTAL PARKING REQUIRED:	40 SPACES
TOTAL PARKING PROVIDED:	51 SPACES (49 STD, 2 ADA)

LEGEND	
	PROPOSED 4" CONCRETE SIDEWALK
	PROPOSED 6" CONCRETE PAVEMENT
	PROPOSED 7" CONCRETE PAVEMENT
	PROPOSED BUILDING
	PROPOSED STRUCTURAL CONCRETE, REF. STRUCTURAL
	EXISTING 4" CONCRETE SIDEWALK
	EXISTING PAVEMENT EDGE
	PROPERTY LINE
	EXISTING EASEMENT
	PROPOSED EASEMENT
	EXISTING CONTOURS
	PROPOSED CONTOURS
	EX. PROP. STORM LINE
	EX. PROP. WATER LINE
	EX. PROP. SANITARY SEWER LINE
	EXISTING THERMALS
	PROPOSED THERMALS
	EX. PROP. GAS LINE
	EX. PROP. DATA/TELECOM
	EX. PROP. UNDERGROUND ELECTRIC
	EX. PROP. FIBER OPTIC
	EX. PROP. OVERHEAD ELECTRIC
	EX. PROP. FIRE HYDRANT
	EX. PROP. WATER METER
	EX. PROP. GATE VALVE
	EX. IRRIGATION CONTROL VALVE
	PROP. FIRE DEPARTMENT CONNECTION
	PROP. POST INDICATOR VALVE
	PROP. HOSE LAY
	EX. PROP. SANITARY SEWER MANHOLE
	EX. PROP. SANITARY SEWER CLEANOUT
	EX. STORM SEWER MANHOLE
	PROP. STORM SEWER CURB INLET
	EX. PROP. LIGHT POLE
	PROPOSED PUBLIC ACCESS EASEMENT
	PROPOSED UTILITY EASEMENT



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FOR CONSTRUCTION

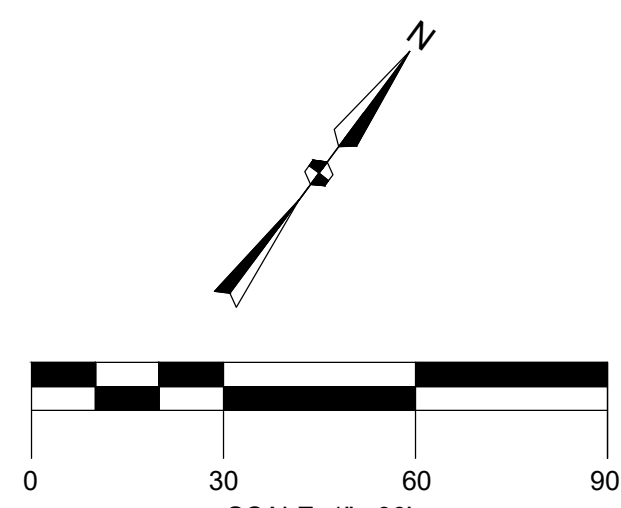
RETAIL CENTER
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SITE PLAN
ISSUE DATE: 04-24-2023
DRAWN BY: CS
CHECKED BY: MK
PROJECT #: 21-1472

REVISIONS	
REV.	DATE DESCRIPTION

C100

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
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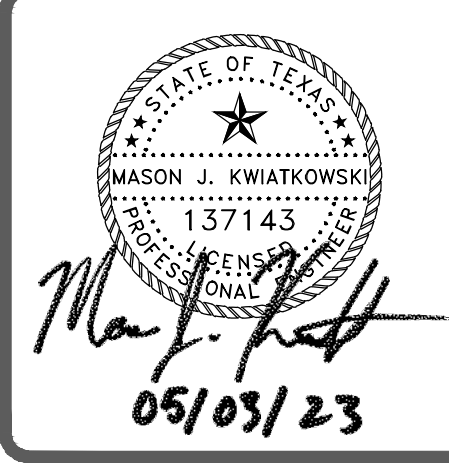


PROJECT BENCHMARK: \bullet BM
5/8" REBAR W/ CAP
STAMPED "KERR RPLS 4502"
ELEVATION = -311.08'



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FIRM REGISTRATION NUMBERS:
TBPE F-7451, TBPLS F-10193910



FOR CONSTRUCTION

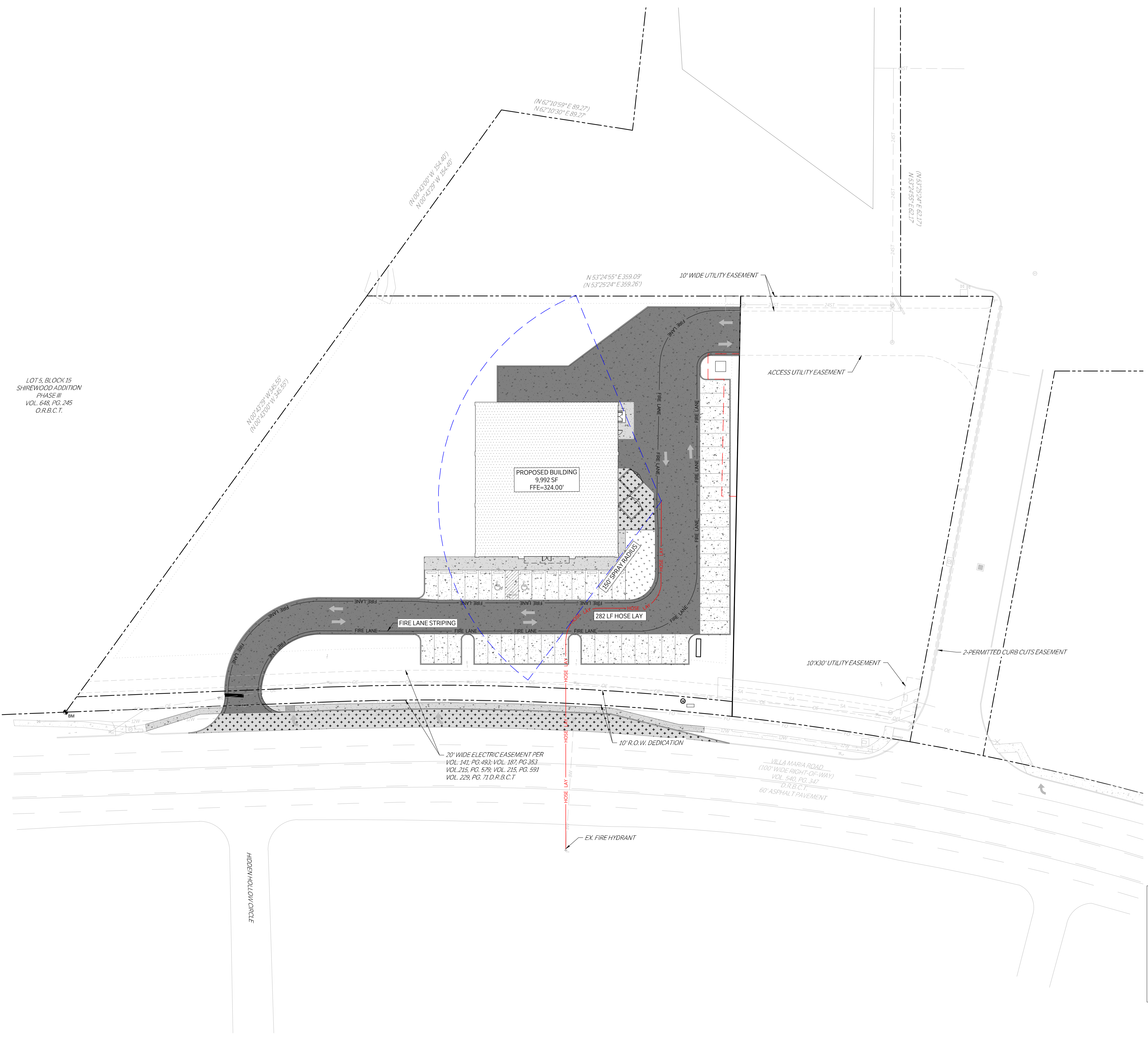
RETAIL CENTER
1654 W. VILLA MARIA RD.
BRYAN, TX. 77807

SITE FIRE PLAN

ISSUE DATE: 04-24-2023
DRAWN BY: CS
CHECKED BY: MK
PROJECT #: 21-1472

REV.	DATE	DESCRIPTION

C101



LOT 5, BLOCK 15
SHIREWOOD ADDITION
PHASE III
VOL. 648, PG. 245
O.R.B.C.T.

N 00° 43' 29" W 134.458'
N 00° 43' 29" W 134.458'

(N 62° 10' 59" E 89.27')
(N 62° 10' 30" E 89.27')

(N 53° 24' 55" E 359.09')
(N 53° 25' 24" E 359.26')

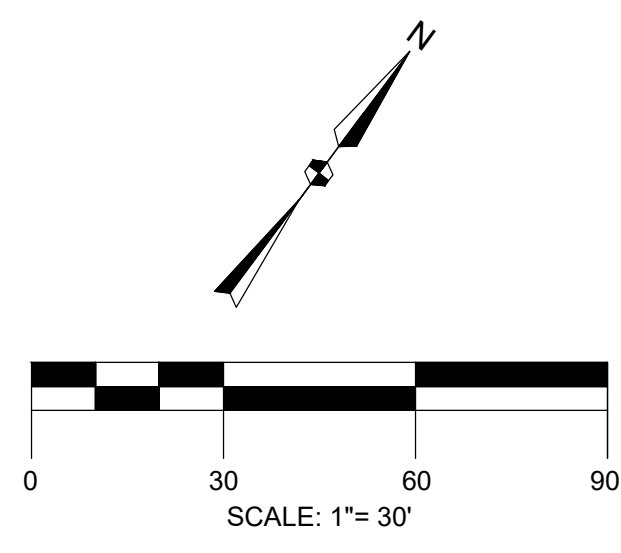
(N 53° 25' 24" E 62.17')
(N 53° 24' 59" E 62.17')

20' WIDE ELECTRIC EASEMENT PER
VOL. 141, PG. 493; VOL. 187, PG. 363
VOL. 215, PG. 579; VOL. 215, PG. 591
VOL. 229, PG. 71 D.R.B.C.T.

VILLA MARIA ROAD
(100' WIDE RIGHT-OF-WAY)
VOL. 540, PG. 347
D.R.B.C.T.
60' ASPHALT PAVEMENT

LEGEND	
	FIRE LANE WITH RED STRIPES CONTAINING THE WORDING "FIRE LANE - NO PARKING - TOW AWAY", PAINTED IN 4" WHITE LETTERS
	PROPOSED BUILDING
	HOSE LAY PATH
	150' SPRAY RADIUS

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

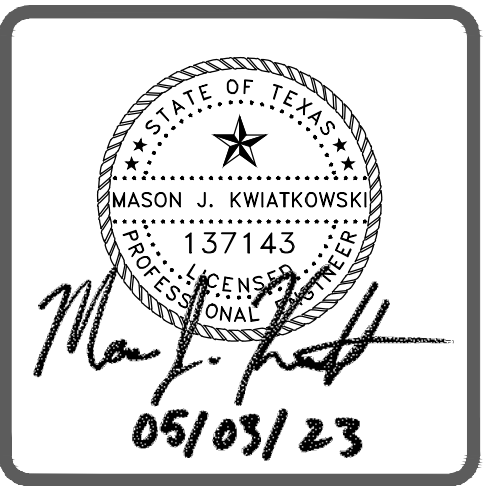


PROJECT BENCHMARK: \blacklozenge BM
5/8" REBAR W/ CAP
STAMPED "KERR RPLS 4502"
ELEVATION = 311.08'



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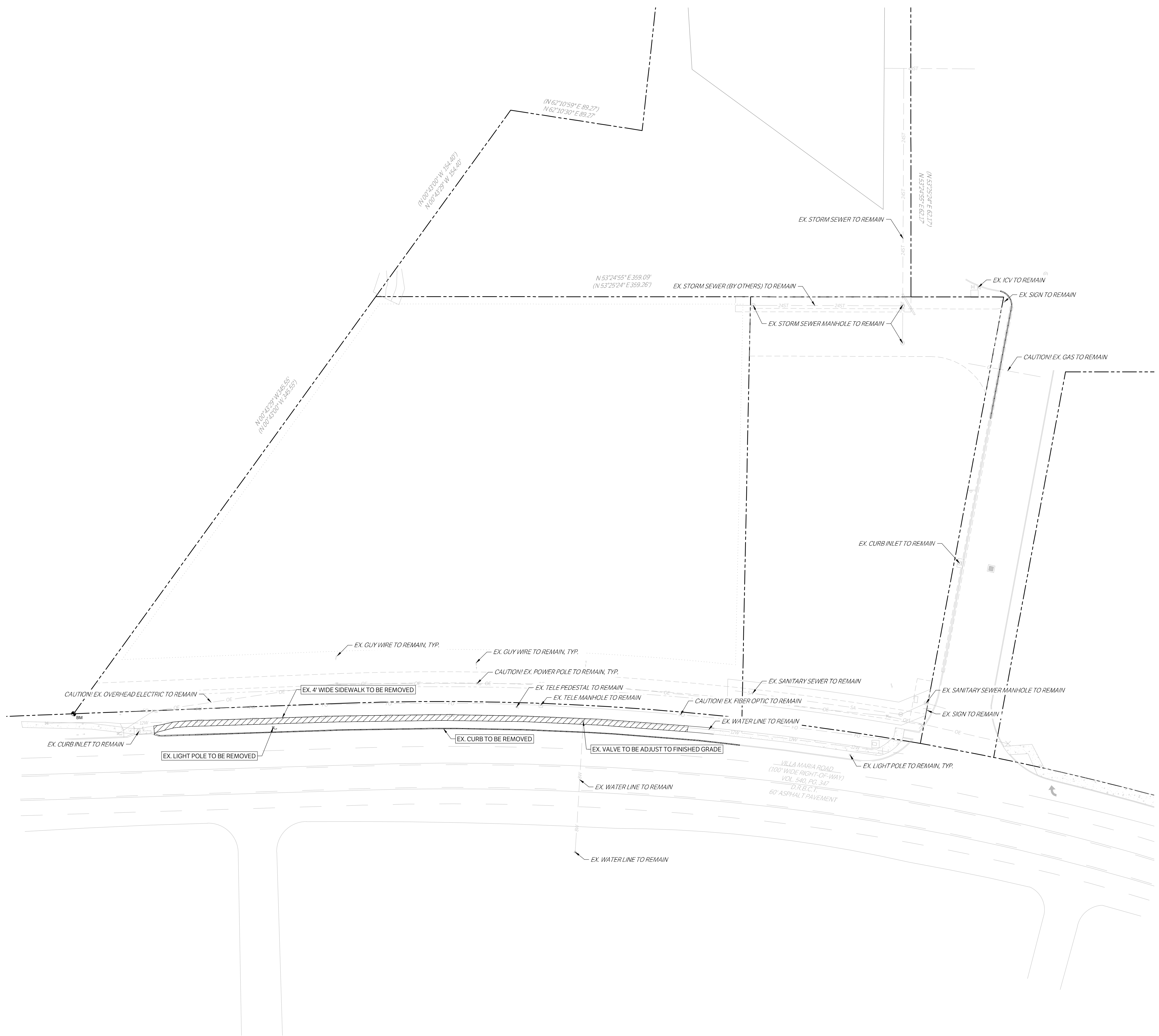
RETAIL CENTER
1654 W. VILLA MARIA RD.
BRYAN, TX. 77807

DEMOLITION PLAN

ISSUE DATE: 04-24-2023
DRAWN BY: CS
CHECKED BY: MK
PROJECT #: 21-1472

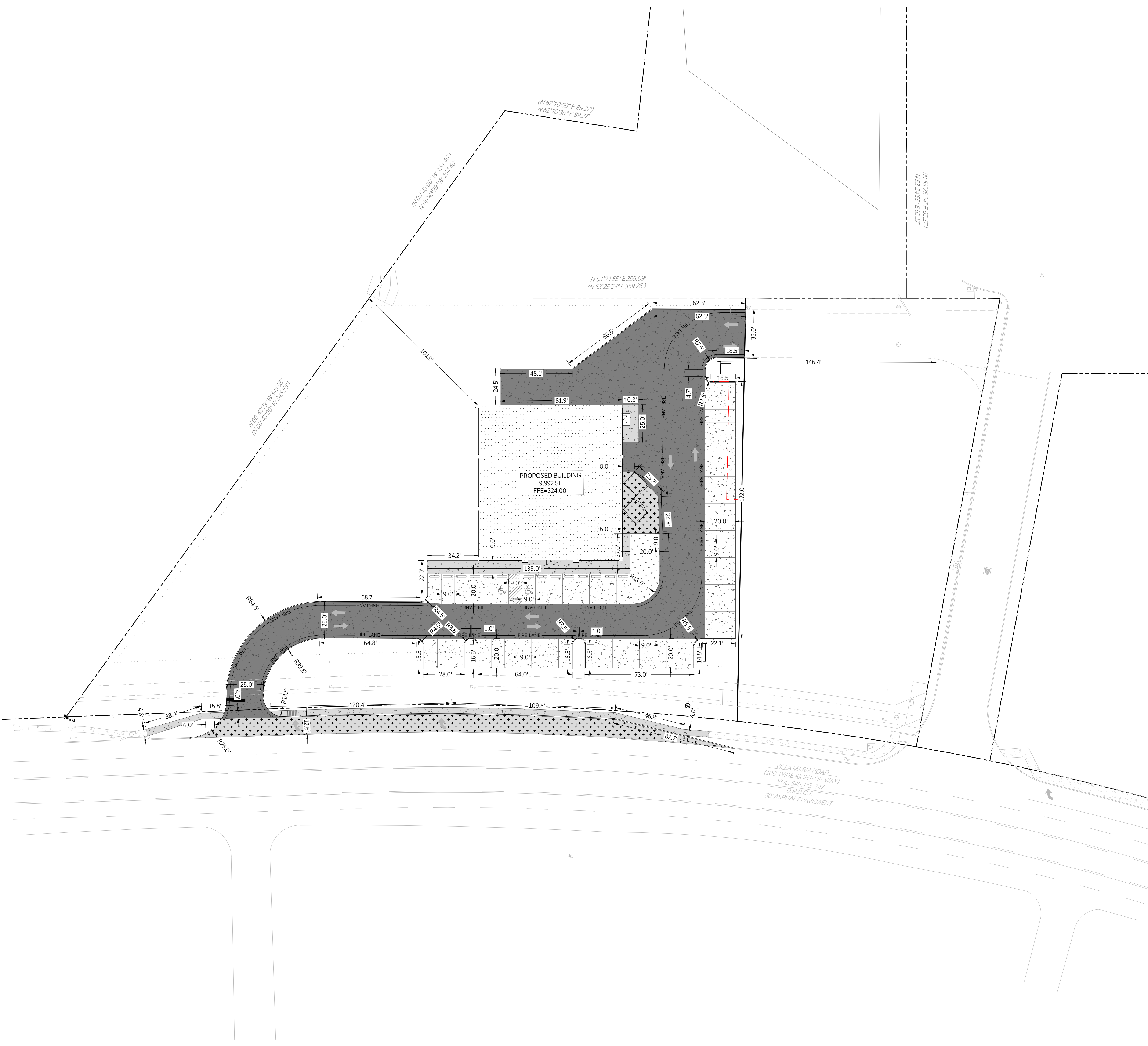
REV.	DATE	DESCRIPTION

C200

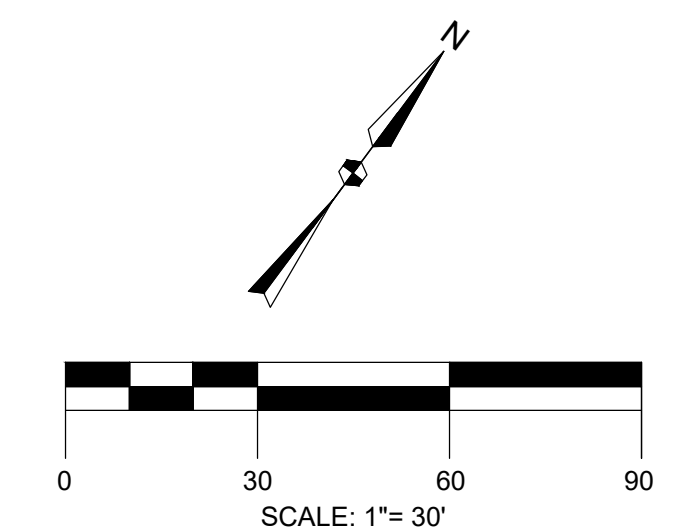


LEGEND	
	PROP. TREE PROTECTION FENCE (REMOVE IF LANDSCAPE ARCHITECT IS HANDLING THIS)
	EX. TREE TO BE REMOVED
	EX. TREE TO REMAIN
	DEMOLITION AREA

VILLA MARIA ROAD
(100' WIDE RIGHT-OF-WAY)
VOL. 540, PG. 347
D.R.B.C.T.
60' ASPHALT PAVEMENT



CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.



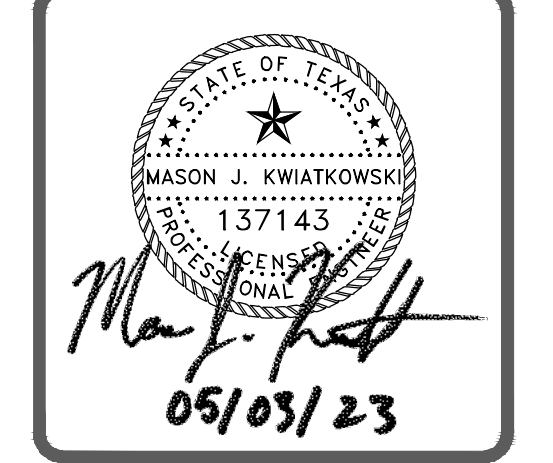
PROJECT BENCHMARK: \blacklozenge BM
 5/8" REBAR W/ CAP
 STAMPED "KERR RPLS 4502"
 ELEVATION = -311.08'

LEGEND	
	PROPOSED 4" CONCRETE SIDEWALK
	PROPOSED 6" CONCRETE PAVEMENT
	PROPOSED 7" CONCRETE PAVEMENT
	PROPOSED BUILDING
	PROPOSED STRUCTURAL CONCRETE, REF. STRUCTURAL
	EXISTING 4" CONCRETE SIDEWALK
	EXISTING PAVEMENT EDGE
	PROPERTY LINE
	EXISTING EASEMENT
	PROPOSED EASEMENT
	EXISTING CONTOURS
	PROPOSED CONTOURS
	EX. PROP. STORM LINE
	EX. PROP. WATER LINE
	EX. PROP. SANITARY SEWER LINE
	EXISTING THERMALS
	PROPOSED THERMALS
	EX. PROP. GAS LINE
	EX. PROP. DATA/TELECOM
	EX. PROP. UNDERGROUND ELECTRIC
	EX. PROP. OVERHEAD ELECTRIC
	EX. PROP. FIRE HYDRANT
	EX. PROP. WATER METER
	EX. PROP. GATE VALVE
	EX. IRRIGATION CONTROL VALVE
	PROP. FIRE DEPARTMENT CONNECTION
	PROP. POST INDICATOR VALVE
	PROP. HOSE LAY
	EX. PROP. SANITARY SEWER MANHOLE
	EX. PROP. SANITARY SEWER CLEANOUT
	EX. STORM SEWER MANHOLE
	PROP. STORM SEWER CURB INLET
	EX. PROP. LIGHT POLE
	PROPOSED PUBLIC ACCESS EASEMENT
	PROPOSED UTILITY EASEMENT



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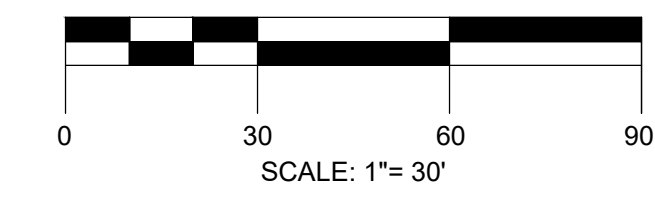
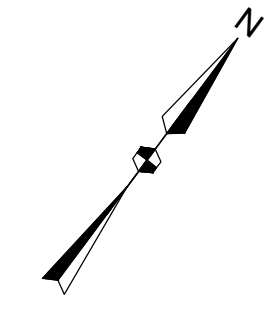
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DIMENSION CONTROL PLAN
 ISSUE DATE: 04-24-2023
 DRAWN BY: CS
 CHECKED BY: MK
 PROJECT #: 21-1472

REVISIONS	
▲	
▲	
▲	
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▲	
REV.	DATE DESCRIPTION

C300

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
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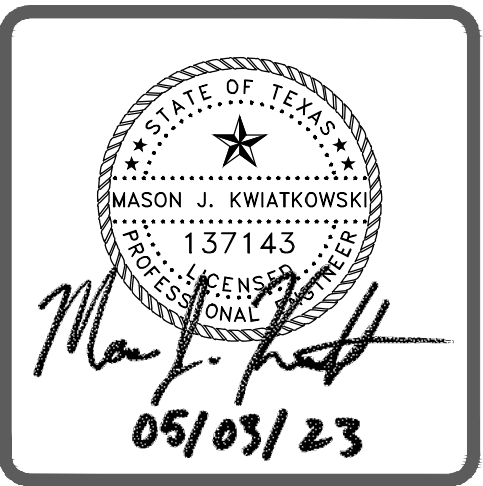


PROJECT BENCHMARK: BM
5/8" REBAR W/ CAP
STAMPED "KERR RPLS 4502"
ELEVATION = -311.08'



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CONSTRUCTION

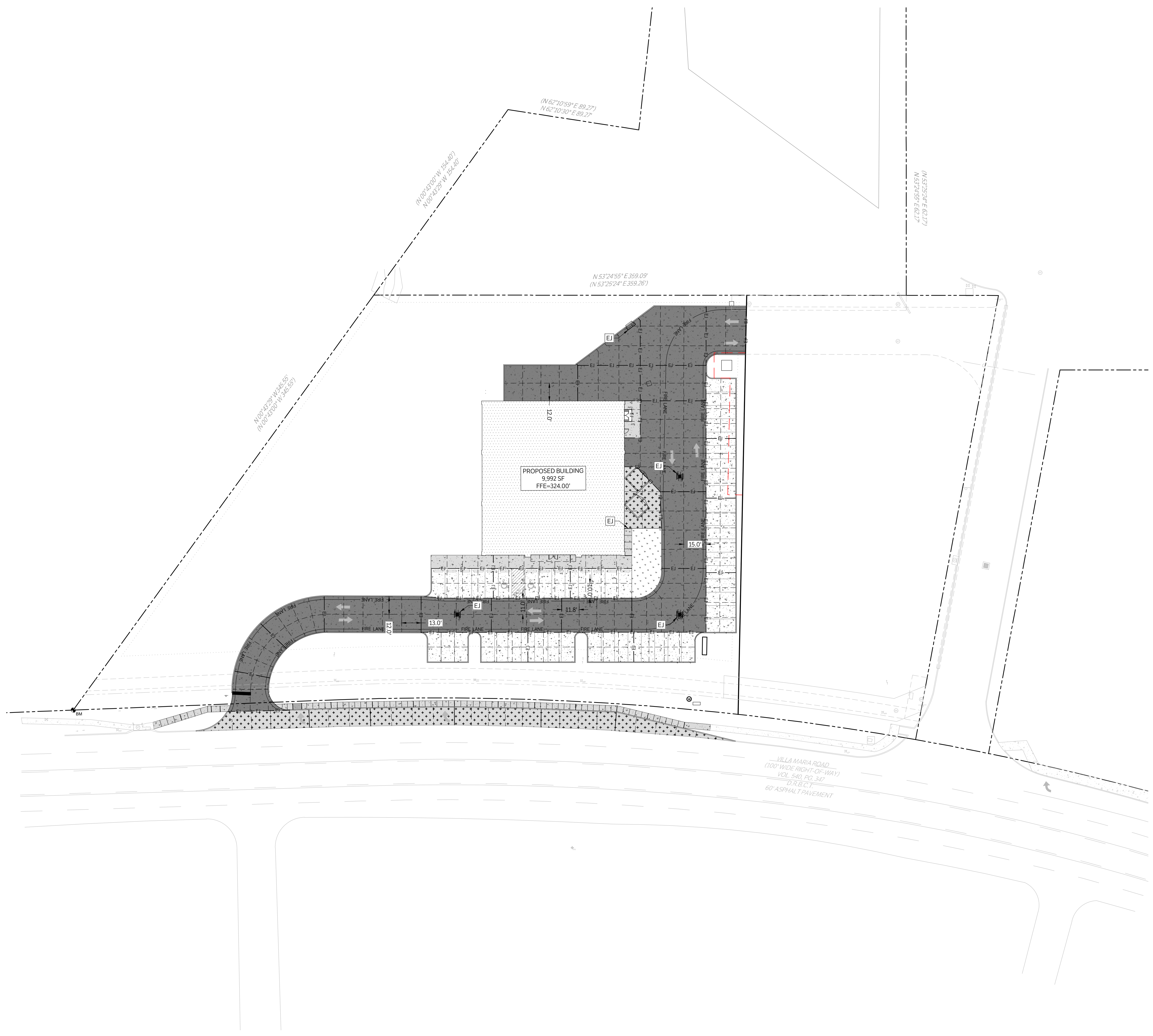
RETAIL CENTER
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PAVING & JOINT PLAN

ISSUE DATE: 04-24-2023
DRAWN BY: CS
CHECKED BY: MK
PROJECT #: 21-1472

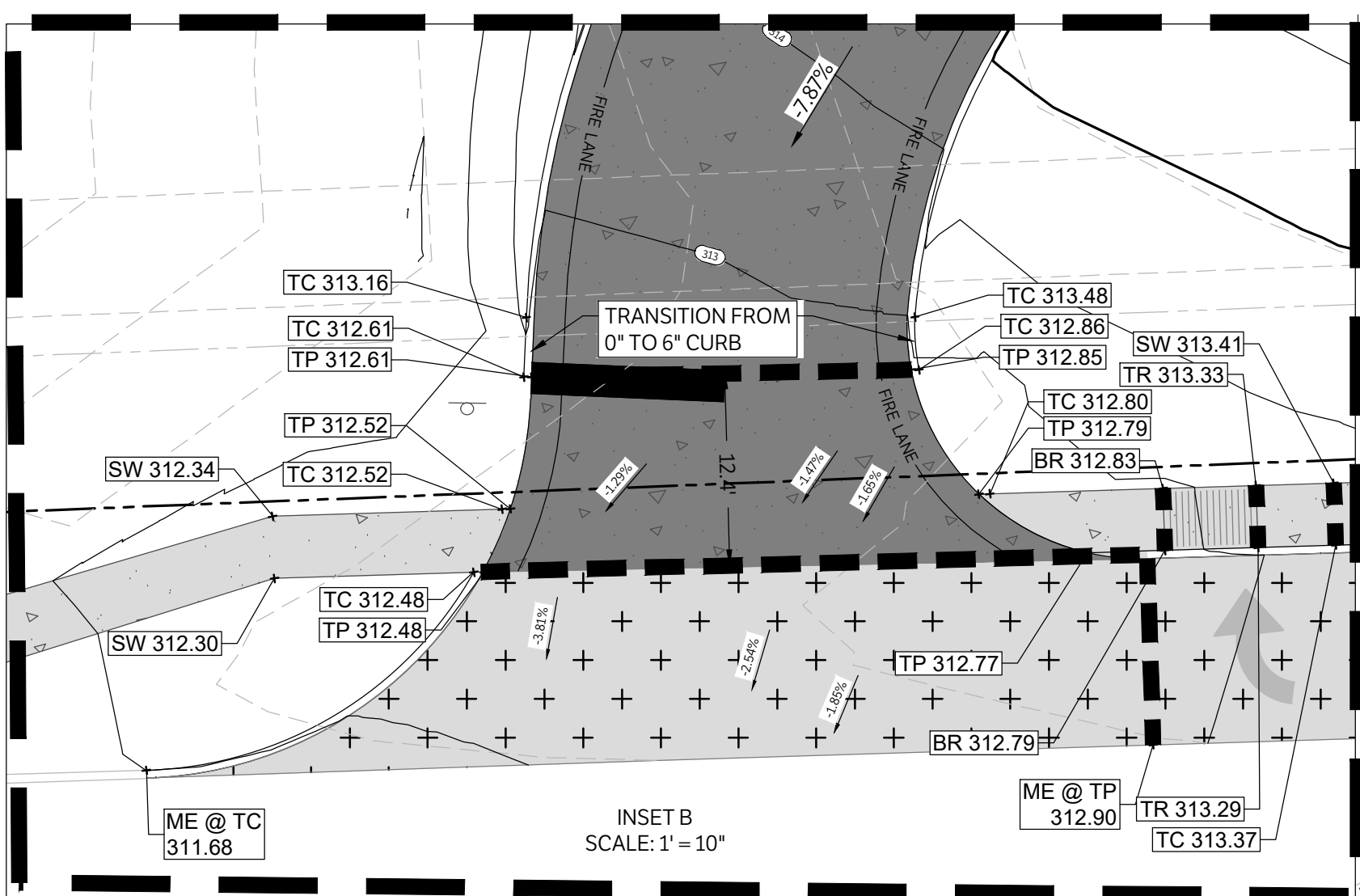
REVISIONS	
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REV.	DATE DESCRIPTION

C400

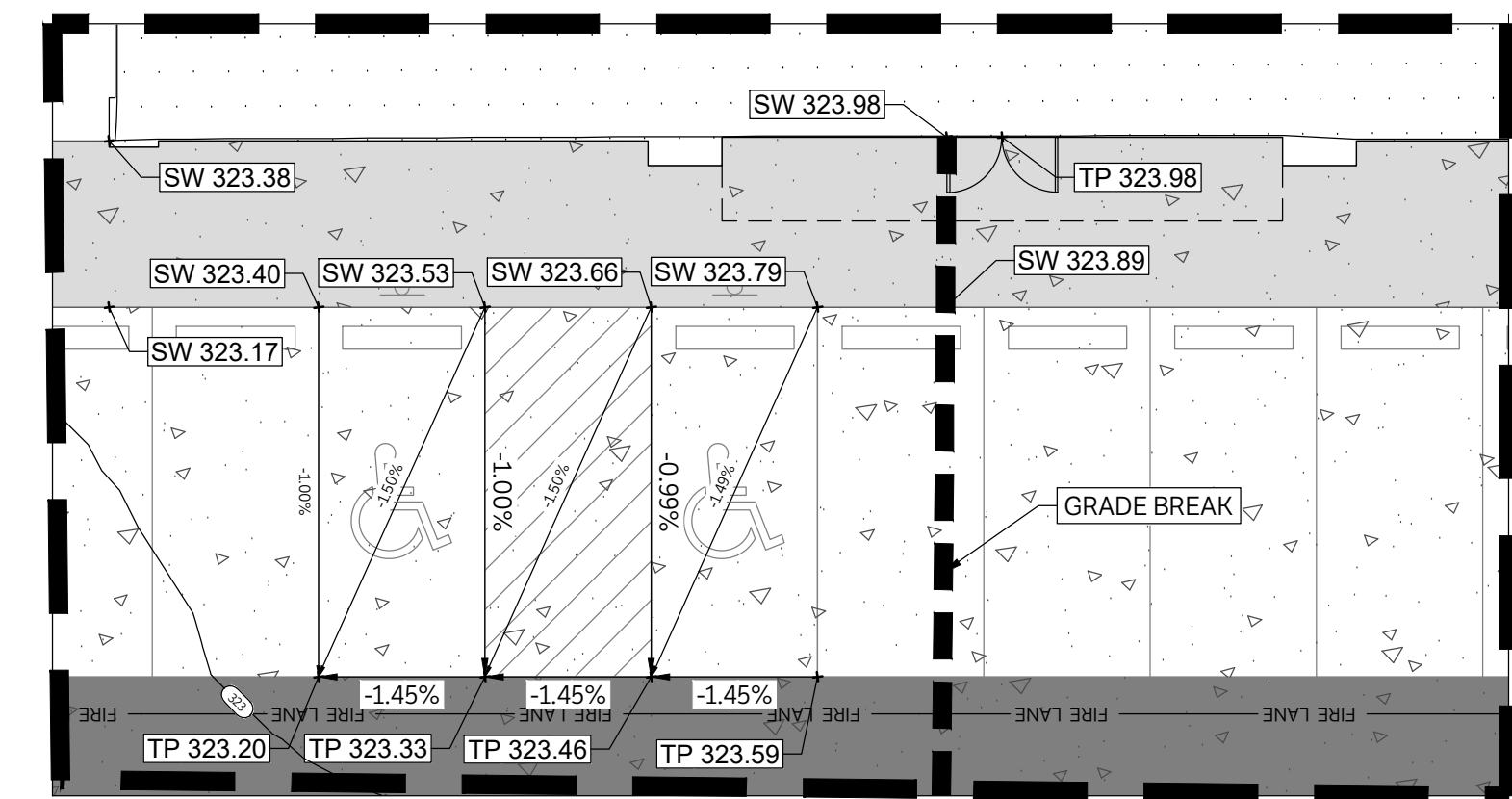


LEGEND	
	EXISTING PAVEMENT EDGE
	CONTROL JOINT
	EXPANSION JOINT
	FIRE LANE WITH RED STRIPES CONTAINING THE WORDING "FIRE LANE - NO PARKING -TOW AWAY", PAINTED IN 4" WHITE LETTERS
	PROPOSED 4" CONCRETE SIDEWALK
	PROPOSED 6" CONCRETE PAVEMENT
	PROPOSED 7" CONCRETE PAVEMENT
	PROPOSED BUILDING
	PROPOSED STRUCTURAL CONCRETE, REF. STRUCTURAL
	EXISTING 4" CONCRETE SIDEWALK

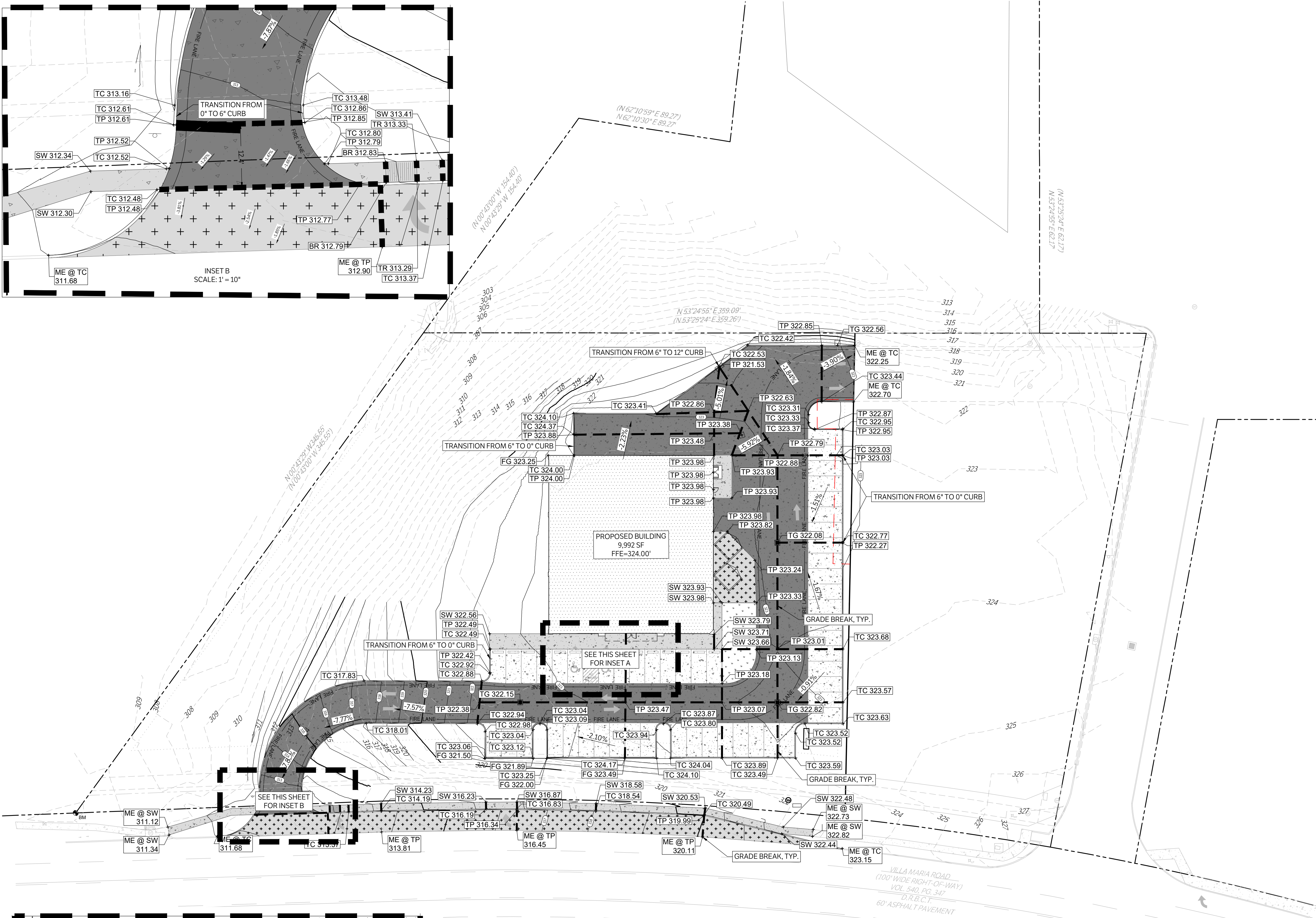
VILLA MARIA ROAD
(100' WIDE RIGHT-OF-WAY)
VOL. 540, PG. 347
D.R.B.C.T.
60' ASPHALT PAVEMENT



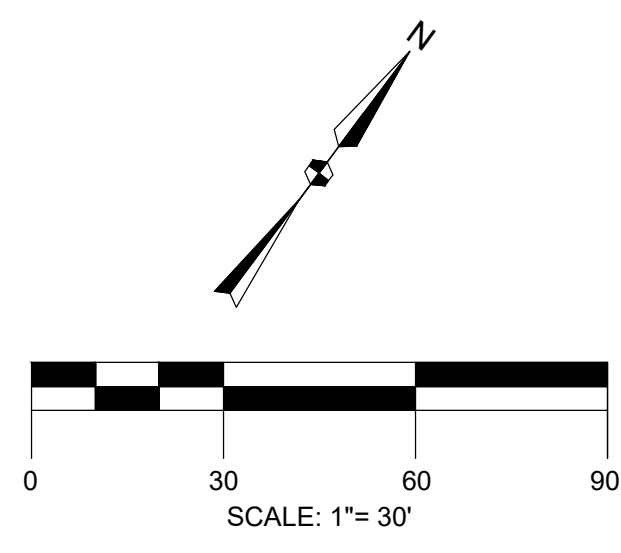
INSET B
SCALE: 1" = 10'



INSET A
SCALE: 1" = 10'



CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.



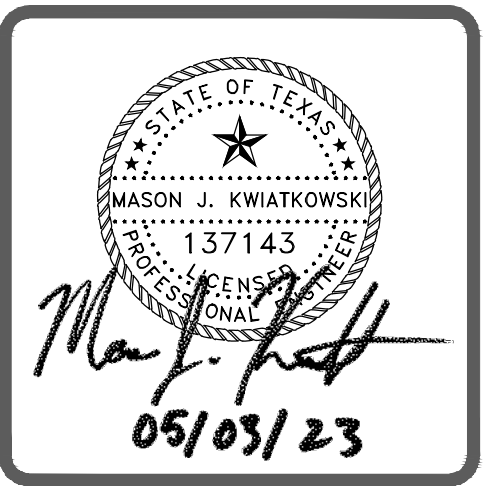
PROJECT BENCHMARK: \blacklozenge BM

5/8" REBAR W/ CAP STAMPED "KERR RPLS 4502" ELEVATION = 311.08'



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FOR CONSTRUCTION

LEGEND	
	EXISTING CONTOURS
	PROPOSED CONTOURS
	PROPERTY LINE
	PROPOSED SWALE WITH DIRECTION OF FLOW ARROWS
	PROPOSED GRADE BREAK
BR	PROPOSED FINISHED GRADE AT BOTTOM OF RAMP
BS	PROPOSED FINISHED GRADE AT BOTTOM OF STAIR
BW	PROPOSED FINISHED GRADE AT BASE OF WALL
FG	PROPOSED FINISHED GRADE ELEVATION
FL	PROPOSED FLOWLINE ELEVATION
GUT	PROPOSED GUTTER FLOWLINE ELEVATION
GB	PROPOSED GRADE BREAK
JB	PROPOSED TOP OF JUNCTION BOX ELEVATION
ME @ SW	MATCH EXISTING SIDEWALK ELEVATION***
ME @ TC	MATCH EXISTING TOP OF CURB ELEVATION***
ME @ TP	MATCH EXISTING AT TOP OF PAVEMENT ELEVATION***
SW	PROPOSED TOP OF PAVEMENT AT SIDEWALK ELEVATION
TC	PROPOSED TOP OF CURB ELEVATION
TG	PROPOSED TOP OF GRATE ELEVATION
TP	PROPOSED TOP OF PAVEMENT ELEVATION
TR	PROPOSED TOP OF RAMP ELEVATION
TW	PROPOSED TOP OF WALL ELEVATION
TMS	PROPOSED TOP OF MUD SLAB

***CONTACT GESSNER ENGINEERING WITH ANY DISCREPANCIES BETWEEN THE ME ELEVATION CALLED OUT ON THE PLANS AND FIELD CONDITIONS

RETAIL CENTER
1654 W. VILLA MARIA RD.
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GRADING PLAN

ISSUE DATE: 04-24-2023
DRAWN BY: CS
CHECKED BY: MK
PROJECT #: 21-1472

REVISIONS		
▲	REV.	DESCRIPTION

C500

Area #	COVER TYPE	HYDROLOGIC CONDITION	SOIL TYPE	C	AREA (SF)	AREA (AC)	C x AREA	TOTAL AREA (AC)	TOTAL C
A	Grass Cover	Undeveloped	D	0.42	74245.8	1.70	0.72	1.70	0.42
B	Grass Cover	Undeveloped	D	0.42	21608.3	0.50	0.21	0.50	0.42

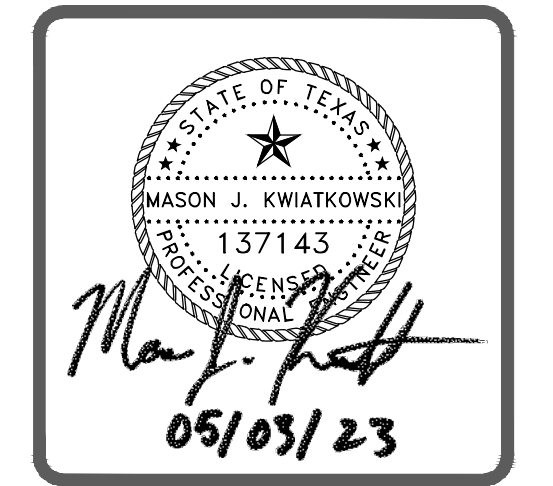
Area #	COVER TYPE	HYDROLOGIC CONDITION	SOIL TYPE	C	AREA (SF)	AREA (AC)	C x AREA	TOTAL AREA (AC)	TOTAL C
A	Grass Cover	Undeveloped	D	0.42	40652.1	0.93	0.39	0.93	0.42
	Concrete	Commercial	D	0.98	0.0	0.00	0.00		
B	Grass Cover	Undeveloped	D	0.42	10409.4	0.24	0.10	0.33	0.57
	Concrete	Commercial	D	0.98	3878.0	0.09	0.09		
C	Grass Cover	Undeveloped	D	0.42	2637.4	0.06	0.03	0.94	0.94
	Concrete	Commercial	D	0.98	38277.3	0.88	0.86		

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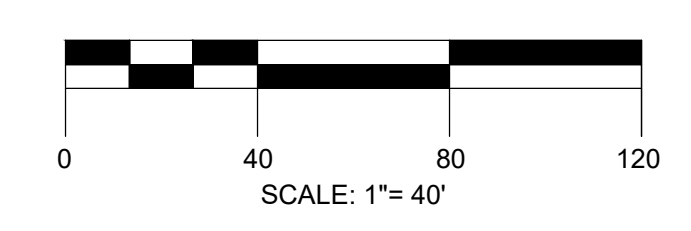
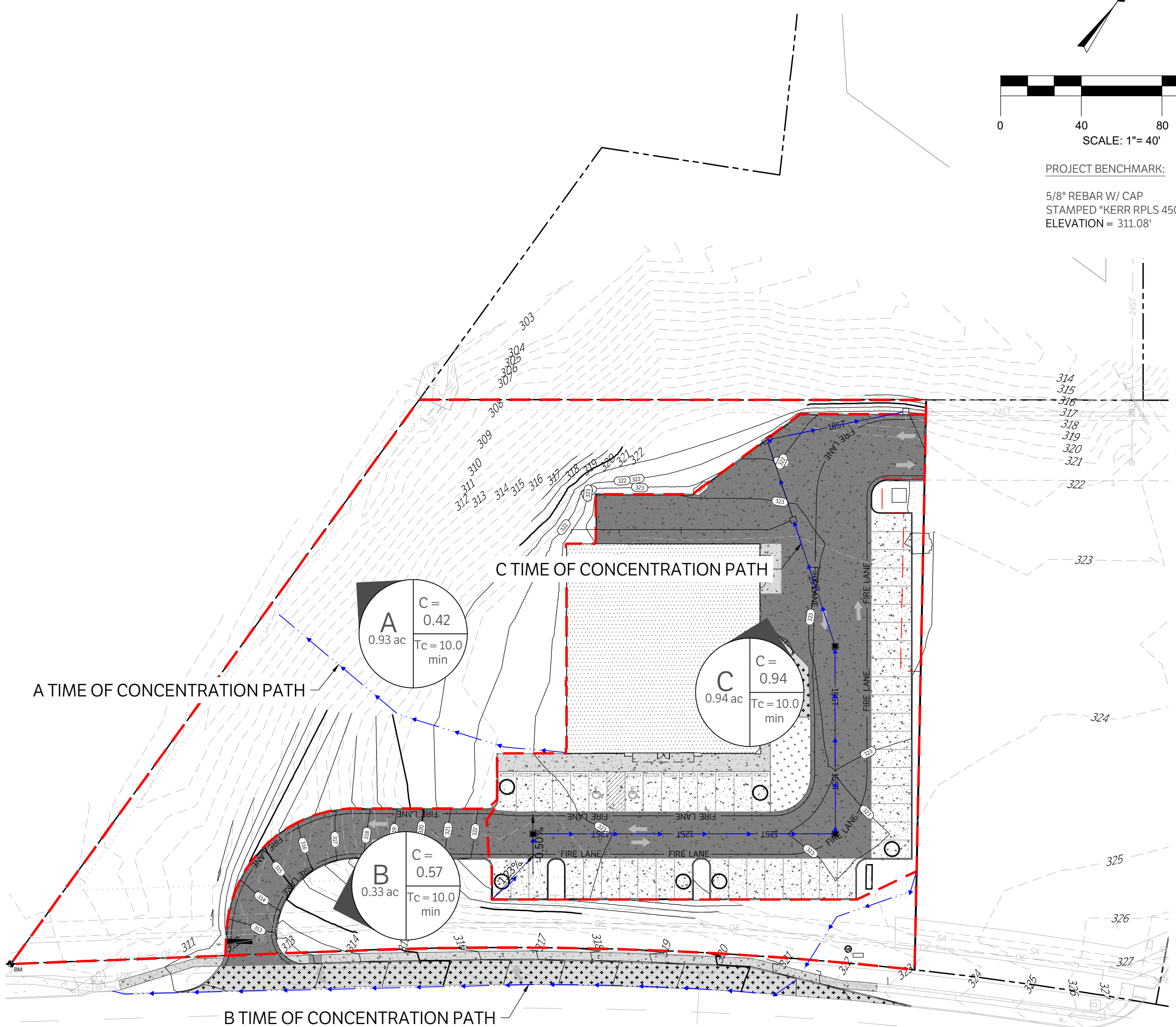
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DRAINAGE AREA MAPS

ISSUE DATE: 04-24-2023
DRAWN BY: CS
CHECKED BY: MK
PROJECT #: 21-1472

REV.	DATE	DESCRIPTION

C600



PROJECT BENCHMARK: \blacktriangle BM
5/8" REBAR W/ CAP
STAMPED "KERR RPLS 4502"
ELEVATION = 311.08'

PRE-DRAINAGE AREA MAP

POST-DRAINAGE AREA MAP

Area A		Area B	
C	0.42	C	0.42
Area (ac)	1.70	Area (ac)	0.50
Flow Length (ft)	249.88	Flow Length (ft)	338.78
SCS Sheet Flow (ft)	100.00	SCS Sheet Flow (ft)	41.63
Slope (%)	0.89	Slope (%)	1.80
Manning's Roughness	0.24	Manning's Roughness	0.24
Flow Time (min)	16.66	Flow Time (min)	6.23
SCS Shallow Concentrated Flow (ft)	132.00	SCS Sheet Flow (ft)	18.07
Short Grass		Slope (%)	11.00
Slope (%)	0.96	Manning's Roughness	0.24
Velocity (ft/s)	1.58	Flow Time (min)	1.55
Flow Time (min)	1.39	SCS Shallow Concentrated Flow (ft)	279.08
SCS Shallow Concentrated Flow (ft)	17.88	Short Grass	
Short Grass		Slope (%)	3.26
Slope (%)	20.45	Velocity (ft/s)	2.91
Velocity (ft/s)	7.30	Flow Time (min)	1.60
Flow Time (min)	0.04	Time of Concentration (min)	10.00*
Time of Concentration (min)	18.09		

AREA	SIZE (AC)	C	TC (MIN)	2 YR (CFS)	10 YR (CFS)	25 YR (CFS)	50 YR (CFS)	100 YR (CFS)
A	1.70	0.42	18.09	3.36	4.69	5.37	6.09	6.35
B	0.50	0.42	10.00	1.32	1.80	2.05	2.32	2.43

AREA	SIZE (AC)	C	TC (MIN)	2 YR (CFS)	10 YR (CFS)	25 YR (CFS)	50 YR (CFS)	100 YR (CFS)
A	0.93	0.42	10.00	2.48	3.38	3.87	4.37	4.56
B	0.33	0.57	10.00	1.19	1.62	1.85	2.09	2.18
C	0.94	0.94	10.00	5.58	7.62	8.70	9.84	10.27

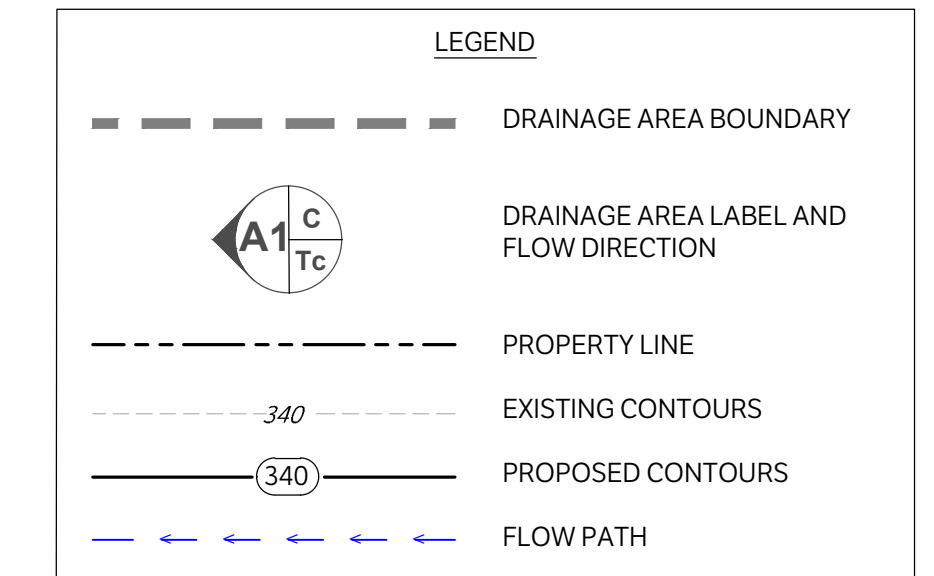
Area A		Area B		Area C	
C	0.42	C	0.57	C	0.94
Area (ac)	0.93	Area (ac)	0.33	Area (ac)	0.94
Flow Length (ft)	162.05	Flow Length (ft)	428.17	Flow Length (ft)	459.22
SCS Sheet Flow (ft)	100.00	SCS Sheet Flow (ft)	44.03	SCS Sheet Flow (ft)	40.90
Slope (%)	5.75	Slope (%)	2.80	Slope (%)	1.25
Manning's Roughness	0.24	Manning's Roughness	0.24	Manning's Roughness	0.013
Flow Time (min)	7.89	Flow Time (min)	5.46	Flow Time (min)	0.69
SCS Shallow Concentrated Flow (ft)	62.05	SCS Sheet Flow (ft)	41.53	SCS Channel Flow (ft)	416.46
Short Grass		Slope (%)	15.00	Short Grass	
Slope (%)	20.70	Manning's Roughness	0.24	Slope (%)	0.50
Velocity (ft/s)	7.34	Flow Time (min)	2.66	Velocity (ft/s)	3.73
Flow Time (min)	0.14	SCS Shallow Concentrated Flow (ft)	342.61	Flow Time (min)	1.86
Time of Concentration (min)	10.00*	Paved		Time of Concentration (min)	10.00*
		Slope (%)	3.19		
		Velocity (ft/s)	3.63		
		Flow Time (min)	1.57		
		Time of Concentration (min)	10.00*		

STORM EVENT	PRE-DEVELOPED (CFS)	POST-DEVELOPED (CFS)	Δ RUNOFF (CFS)
2-YEAR	3.36	2.48	-0.88
10-YEAR	4.69	3.38	-1.30
25-YEAR	5.37	3.87	-1.50
50-YEAR	6.09	4.37	-1.72
100-YEAR	6.35	4.56	-1.79

STORM EVENT	PRE-DEVELOPED (CFS)	POST-DEVELOPED (CFS)	Δ RUNOFF (CFS)
2-YEAR	1.32	1.19	-0.13
10-YEAR	1.80	1.62	-0.18
25-YEAR	2.05	1.85	-0.20
50-YEAR	2.32	2.09	-0.23
100-YEAR	2.43	2.18	-0.24

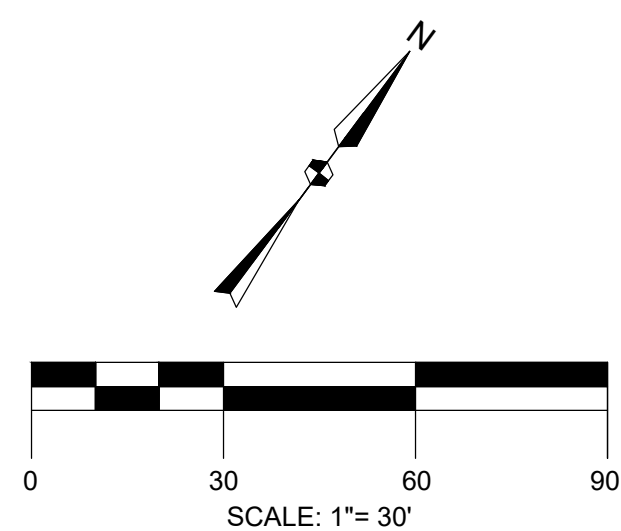
STORM EVENT	ALLOWABLE FLOW (CFS)	POST-DEVELOPED (CFS)	Δ RUNOFF (CFS)
2-YEAR	5.86	5.58	-0.28
10-YEAR	8.00	7.62	-0.39
25-YEAR	9.14	8.70	-0.44
50-YEAR	10.33	9.84	-0.50
100-YEAR	10.79	10.27	-0.52

NOTE: PROPOSED IMPROVEMENTS TO NOT EXCEED THE DISCHARGE ALLOTTED TO THE SITE PER 2013 DRAINAGE STUDY SUPPLEMENT FOR BRYAN MARKETPLACE, AREA A12.

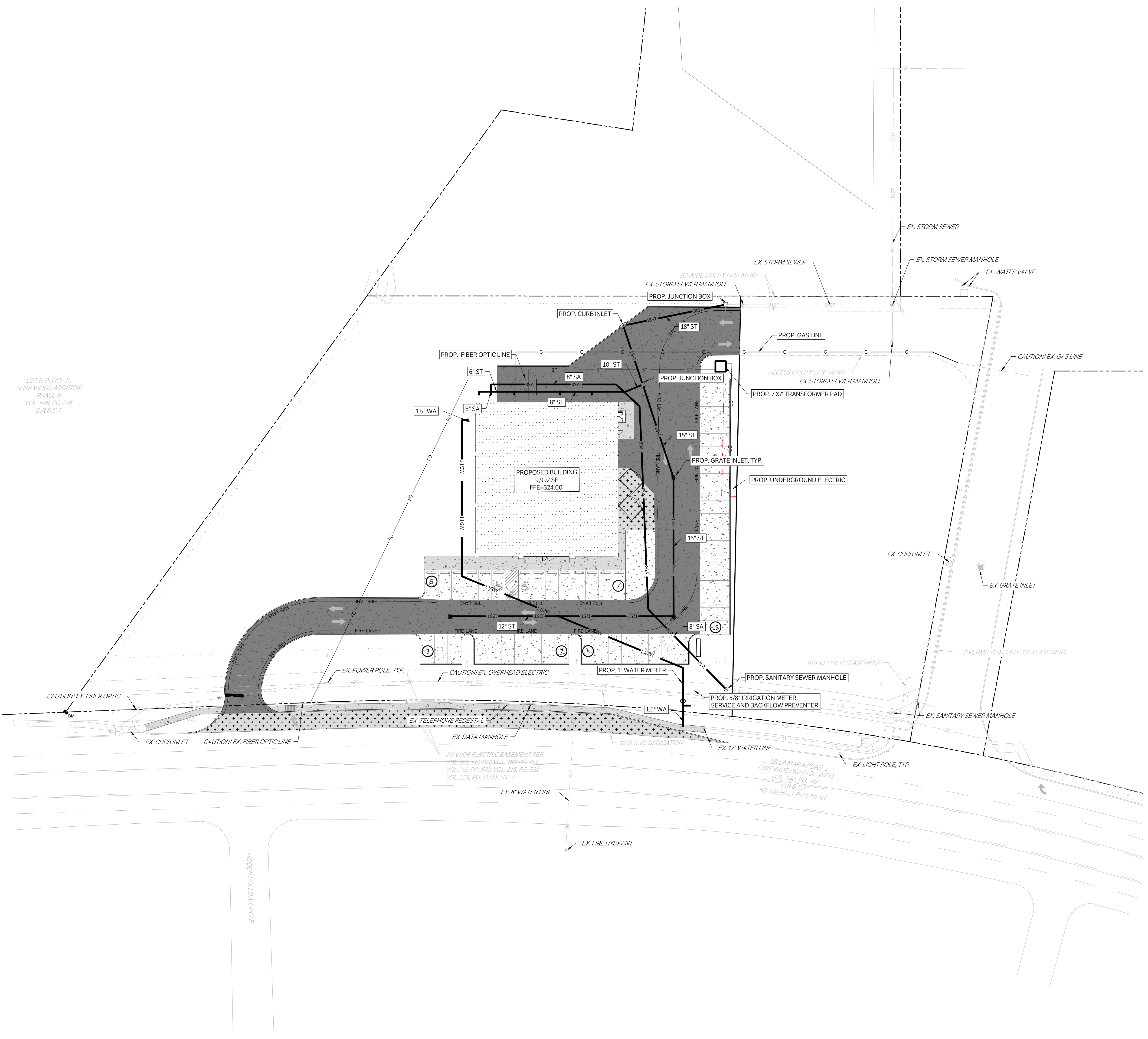


LOT 5, BLOCK 15
SHIREWOOD ADDITION
PHASE II
VOL. 648, PG. 245
O.R.B.C.T.

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.



PROJECT BENCHMARK: \blacklozenge BM
5/8" REBAR W/ CAP
STAMPED "KERR RPLS 4502"
ELEVATION = -311.08'

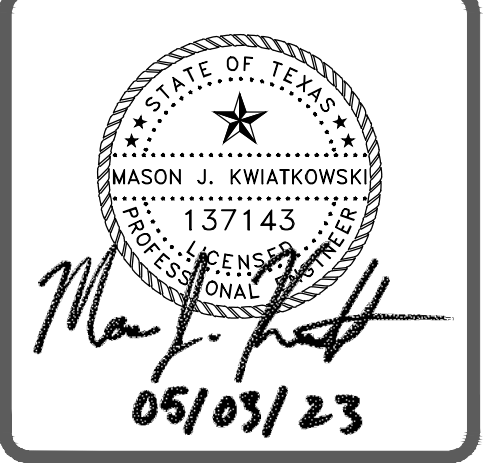


LEGEND	
	PROPOSED 4" CONCRETE SIDEWALK
	PROPOSED 6" CONCRETE PAVEMENT
	PROPOSED 7" CONCRETE PAVEMENT
	PROPOSED BUILDING
	PROPOSED STRUCTURAL CONCRETE, REF. STRUCTURAL
	EXISTING 4" CONCRETE SIDEWALK
	EXISTING PAVEMENT EDGE
	PROPERTY LINE
	EXISTING EASEMENT
	PROPOSED EASEMENT
	EXISTING CONTOURS
	PROPOSED CONTOURS
	EX. PROP. STORM LINE
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	PROP. HOSE LAY
	EX. PROP. SANITARY SEWER MANHOLE
	EX. PROP. SANITARY SEWER CLEANOUT
	EX. STORM SEWER MANHOLE
	PROP. STORM SEWER CURB INLET
	EX. PROP. LIGHT POLE
	PAE
	PUE



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FOR CONSTRUCTION

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1654 W. VILLA MARIA RD.
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OVERALL UTILITY PLAN

ISSUE DATE: 04-24-2023
DRAWN BY: CS
CHECKED BY: MK
PROJECT #: 21-1472

REVISIONS	
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REV. DATE DESCRIPTION

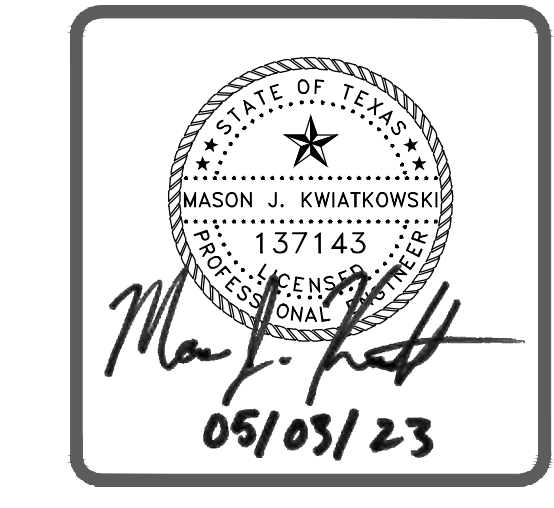
C700

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

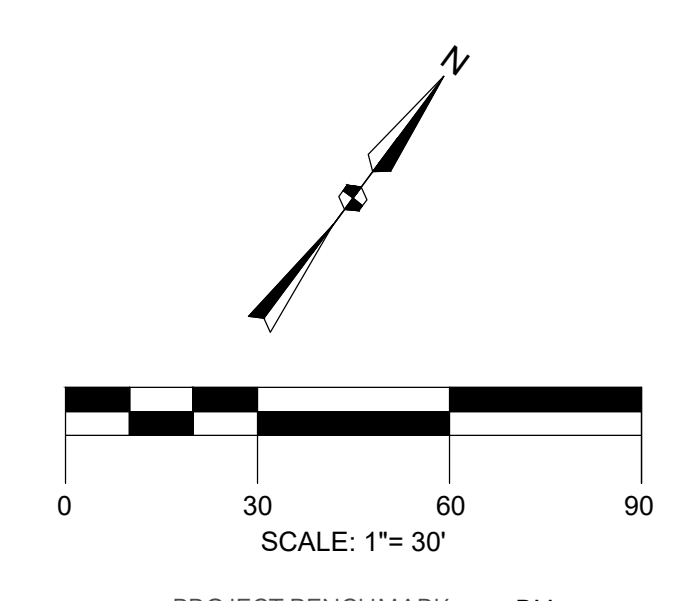


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FIRM REGISTRATION NUMBERS:
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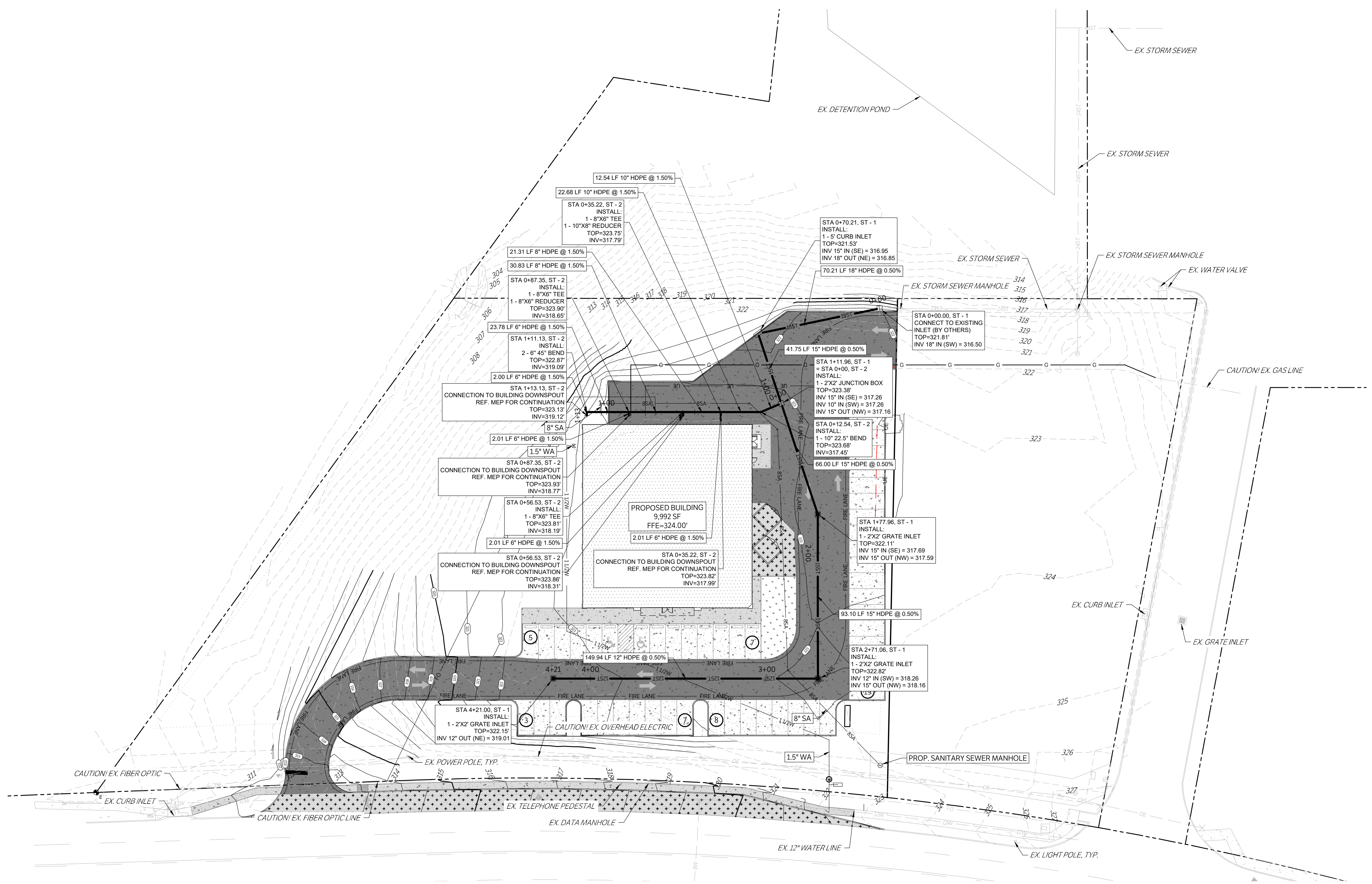


FOR CONSTRUCTION

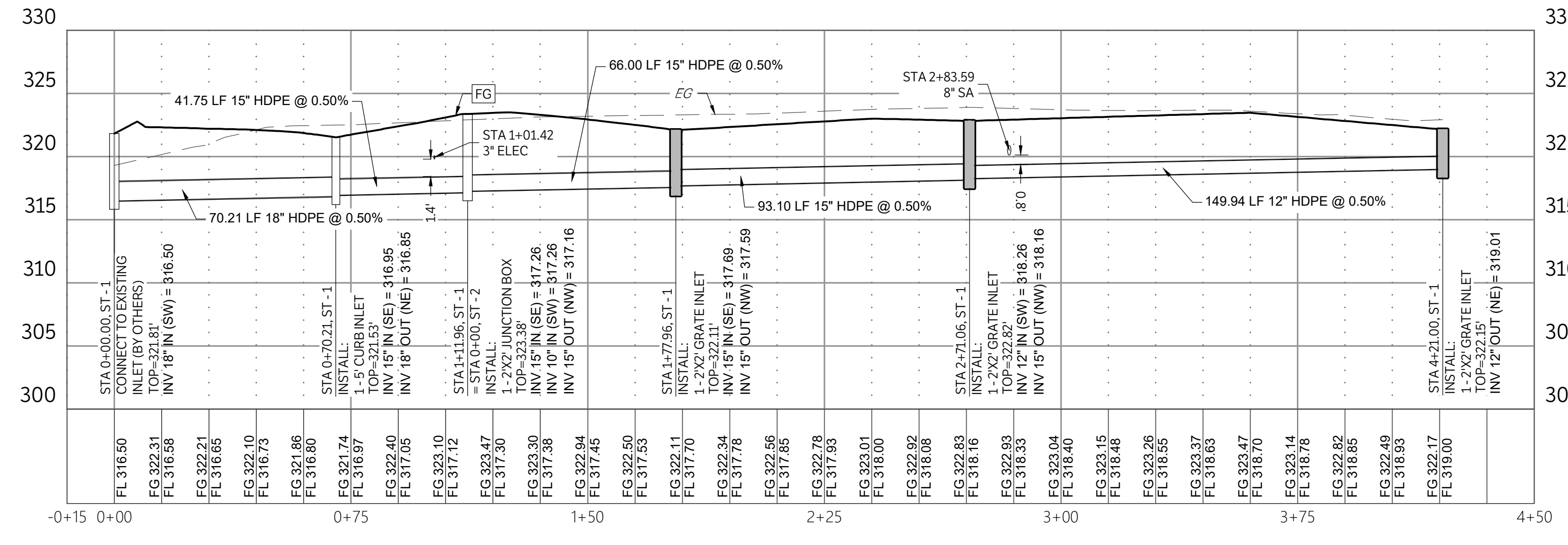


PROJECT BENCHMARK: BM
ELEVATION = 311.08'

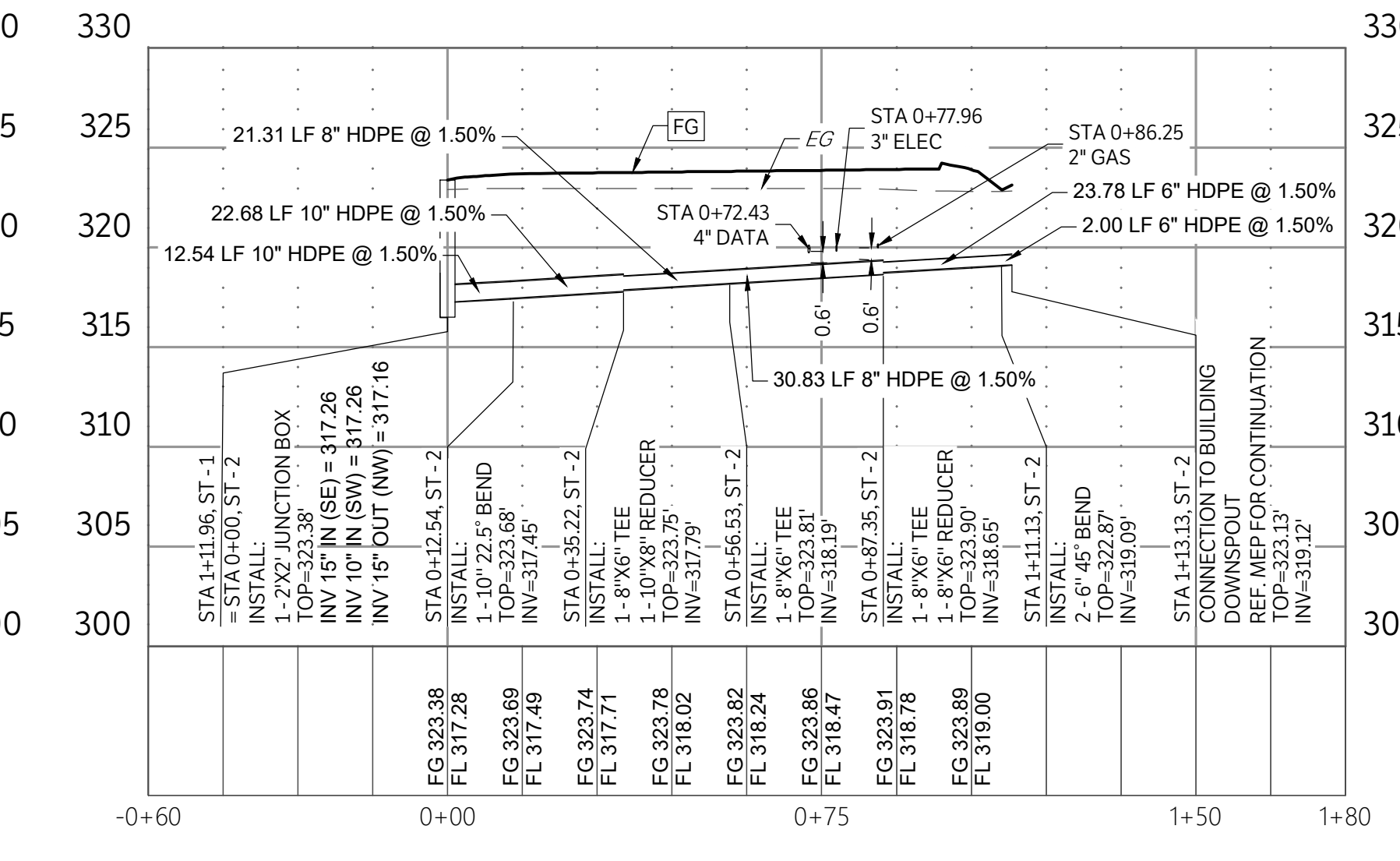
5/8" REBAR W/ CAP
STAMPED "KERR RPLS 4502"
ELEVATION = 311.08'



LEGEND	
[Pattern]	PROPOSED 4" CONCRETE SIDEWALK
[Pattern]	PROPOSED 6" CONCRETE PAVEMENT
[Pattern]	PROPOSED 7" CONCRETE PAVEMENT
[Pattern]	PROPOSED BUILDING
[Pattern]	PROPOSED STRUCTURAL CONCRETE, REF. STRUCTURAL
[Pattern]	EXISTING 4" CONCRETE SIDEWALK
[Line]	EXISTING PAVEMENT EDGE
[Line]	PROPERTY LINE
[Line]	EXISTING EASEMENT
[Line]	PROPOSED EASEMENT
[Line]	EXISTING CONTOURS
[Line]	PROPOSED CONTOURS
[Line]	EX. PROP. STORM LINE
[Line]	EX. PROP. WATER LINE
[Line]	EX. PROP. SANITARY SEWER LINE
[Line]	EXISTING THERMALS
[Line]	PROPOSED THERMALS
[Line]	EX. PROP. GAS LINE
[Line]	EX. PROP. DATA/TELECOM
[Line]	EX. PROP. UNDERGROUND ELECTRIC
[Line]	EX. PROP. FIBER OPTIC
[Line]	EX. PROP. OVERHEAD ELECTRIC
[Line]	EX. PROP. FIRE HYDRANT
[Line]	EX. PROP. WATER METER
[Line]	EX. PROP. GATE VALVE
[Line]	EX. IRRIGATION CONTROL VALVE
[Line]	PROP. FIRE DEPARTMENT CONNECTION
[Line]	PROP. POST INDICATOR VALVE
[Line]	PROP. HOSE LAY
[Line]	EX. PROP. SANITARY SEWER MANHOLE
[Line]	EX. PROP. SANITARY SEWER CLEANOUT
[Line]	EX. STORM SEWER MANHOLE
[Line]	PROP. STORM SEWER CURB INLET
[Line]	EX. PROP. LIGHT POLE
[Line]	PROPOSED PUBLIC ACCESS EASEMENT
[Line]	PROPOSED UTILITY EASEMENT



ST-1
SCALE: 1"=30' H, 1"=8' V



ST-2
SCALE: 1"=30' H, 1"=8' V

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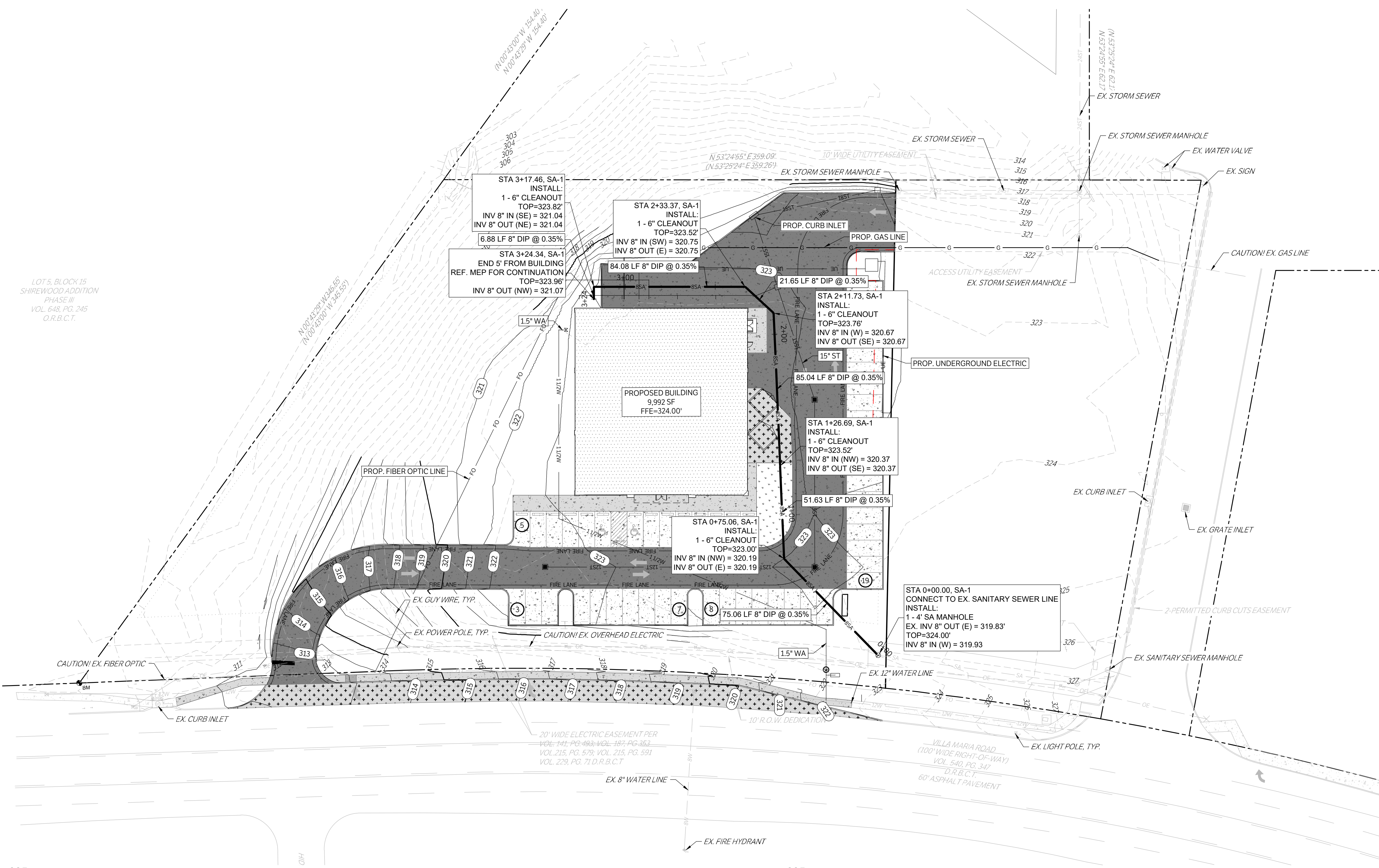
STORM PLAN & PROFILES

ISSUE DATE: 04-24-2023
DRAWN BY: CS
CHECKED BY: MK
PROJECT #: 21-1472

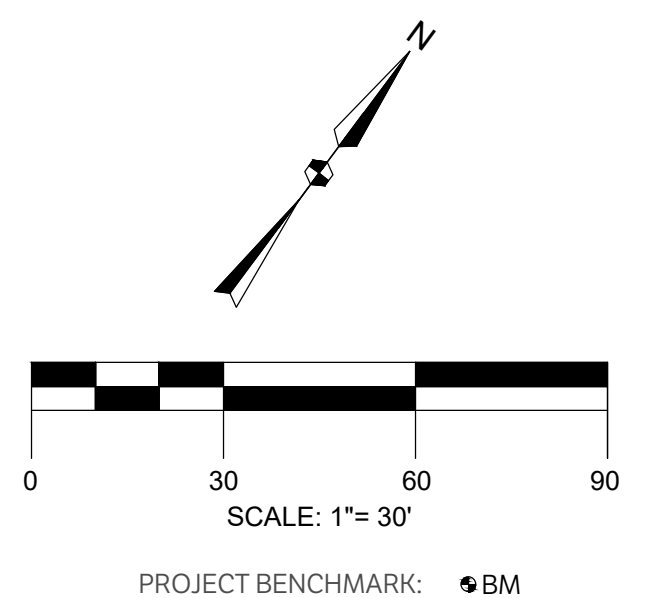
REVISIONS		
REV.	DATE	DESCRIPTION

C800

LOT 5, BLOCK 15
SHIREWOOD ADDITION
PHASE III
VOL. 648, PG. 245
O.R.B.C.T.

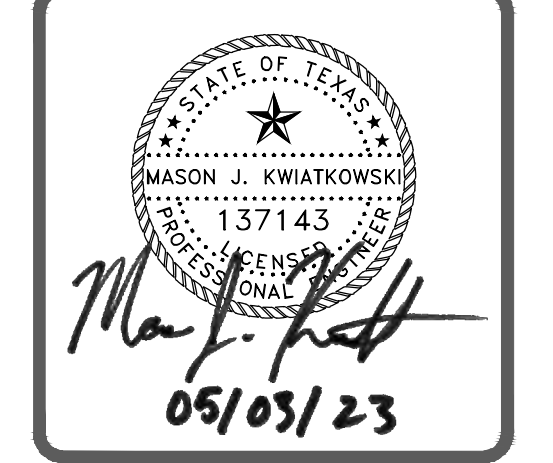


CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

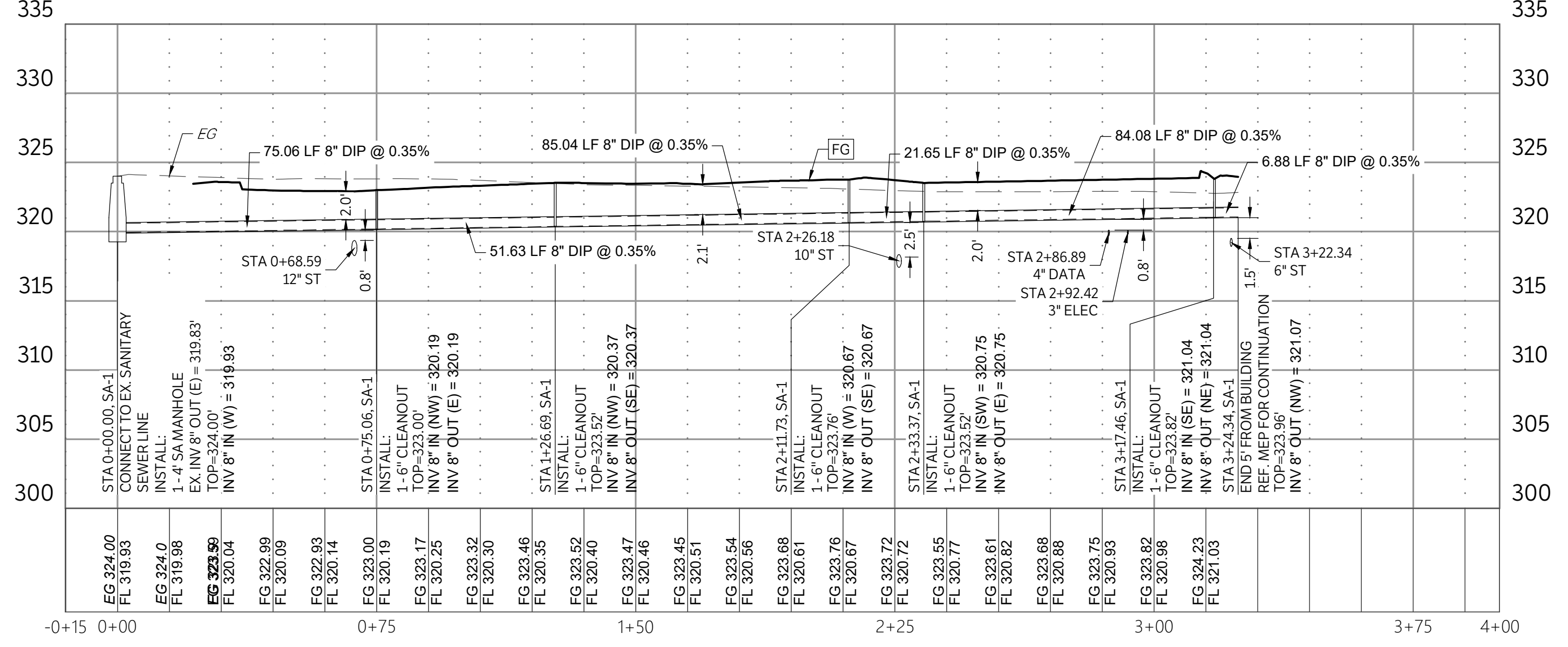


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FOR CONSTRUCTION



SA-1
SCALE: 1"=30' H, 1"=8' V

LEGEND	
	PROPOSED 4" CONCRETE SIDEWALK
	PROPOSED 6" CONCRETE PAVEMENT
	PROPOSED 7" CONCRETE PAVEMENT
	PROPOSED BUILDING
	PROPOSED STRUCTURAL CONCRETE, REF. STRUCTURAL
	EXISTING 4" CONCRETE SIDEWALK
	EXISTING PAVEMENT EDGE
	PROPERTY LINE
	EXISTING EASEMENT
	PROPOSED EASEMENT
	EXISTING CONTOURS
	PROPOSED CONTOURS
	EX. PROP. STORM LINE
	EX. PROP. WATER LINE
	EX. PROP. SANITARY SEWER LINE
	EXISTING THERMALS
	PROPOSED THERMALS
	EX. PROP. GAS LINE
	EX. PROP. DATA/TELECOM
	EX. PROP. UNDERGROUND ELECTRIC
	EX. PROP. OVERHEAD ELECTRIC
	EX. PROP. FIRE HYDRANT
	EX. PROP. WATER METER
	EX. PROP. GATE VALVE
	EX. PROP. IRRIGATION CONTROL VALVE
	PROP. FIRE DEPARTMENT CONNECTION
	PROP. POST INDICATOR VALVE
	PROP. HOSE LAY
	EX. PROP. SANITARY SEWER MANHOLE
	EX. PROP. SANITARY SEWER CLEANOUT
	EX. PROP. STORM SEWER MANHOLE
	PROP. STORM SEWER CURB INLET
	EX. PROP. LIGHT POLE
	PROPOSED PUBLIC ACCESS EASEMENT
	PROPOSED UTILITY EASEMENT

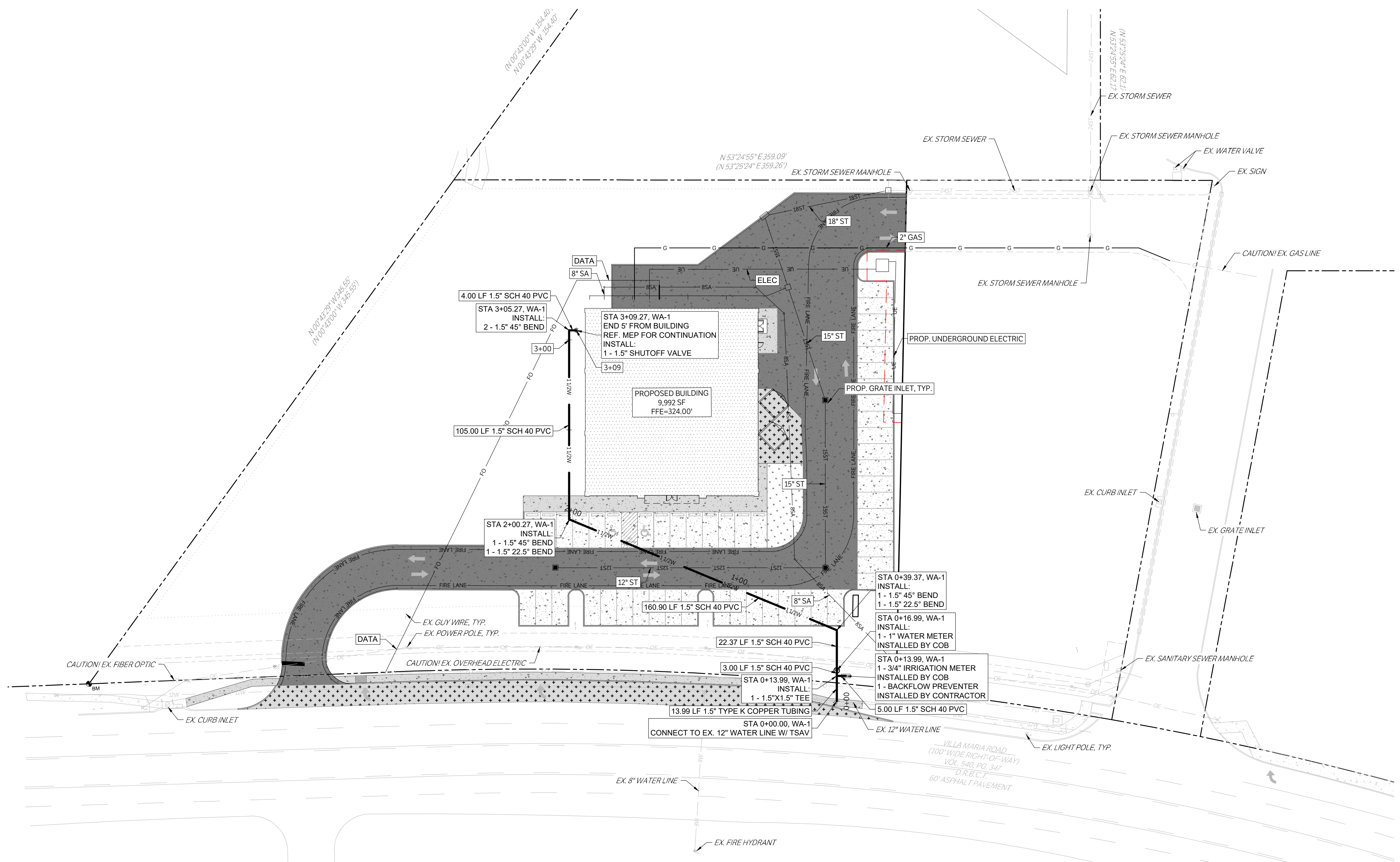
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SANITARY PLAN & PROFILES

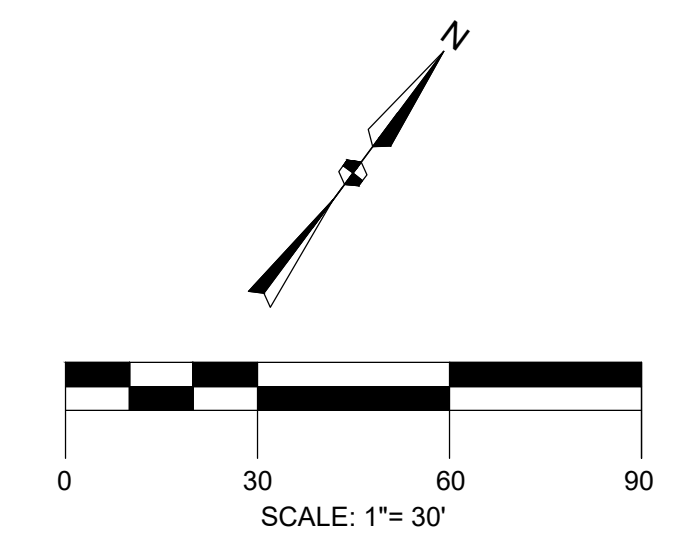
ISSUE DATE: 04-24-2023
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PROJECT #: 21-1472

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REV.	DATE	DESCRIPTION

C900



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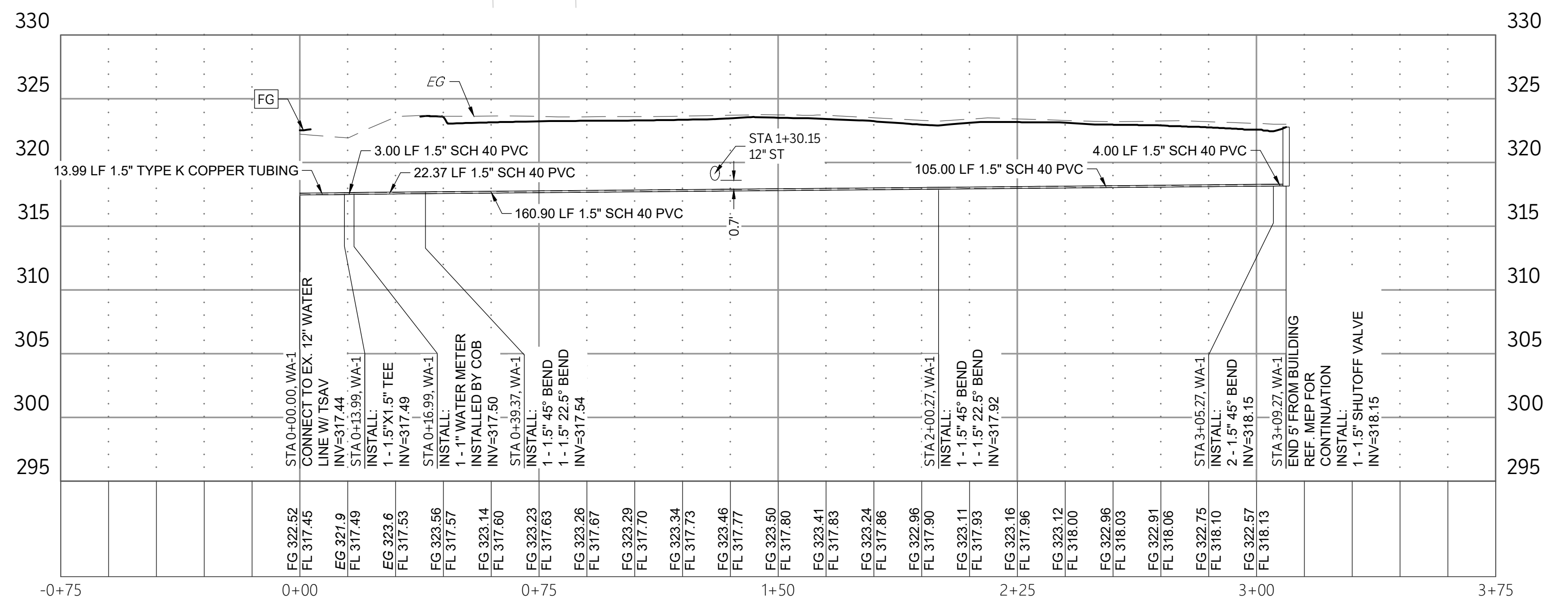
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FOR CONSTRUCTION

LEGEND	
	PROPOSED 4" CONCRETE SIDEWALK
	PROPOSED 6" CONCRETE PAVEMENT
	PROPOSED 7" CONCRETE PAVEMENT
	PROPOSED BUILDING
	PROPOSED STRUCTURAL CONCRETE, REF. STRUCTURAL
	EXISTING 4" CONCRETE SIDEWALK
	EXISTING PAVEMENT EDGE
	PROPERTY LINE
	EXISTING EASEMENT
	PROPOSED EASEMENT
	EXISTING CONTOURS
	PROPOSED CONTOURS
	EX. PROP. STORM LINE
	EX. PROP. WATER LINE
	EX. PROP. SANITARY SEWER LINE
	EXISTING THERMALS
	PROPOSED THERMALS
	EX. PROP. GAS LINE
	EX. PROP. DATA/TELECOM
	EX. PROP. UNDERGROUND ELECTRIC
	EX. PROP. OVERHEAD ELECTRIC
	EX. PROP. FIRE HYDRANT
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	PROP. FIRE DEPARTMENT CONNECTION
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	PROP. HOSE LAY
	EX. PROP. SANITARY SEWER MANHOLE
	EX. PROP. SANITARY SEWER CLEANOUT
	EX. STORM SEWER MANHOLE
	PROP. STORM SEWER CURB INLET
	EX. PROP. LIGHT POLE
	PROP. PUBLIC ACCESS EASEMENT
	PROP. UTILITY EASEMENT



WA-1
SCALE: 1"=30' H, 1"=8' V

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WATER PLAN & PROFILES

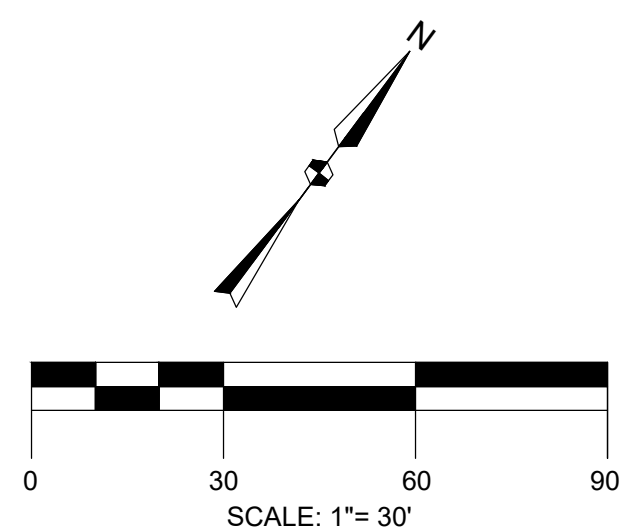
ISSUE DATE: 04-24-2023
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PROJECT #: 21-1472

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REV. DATE DESCRIPTION

C1000

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

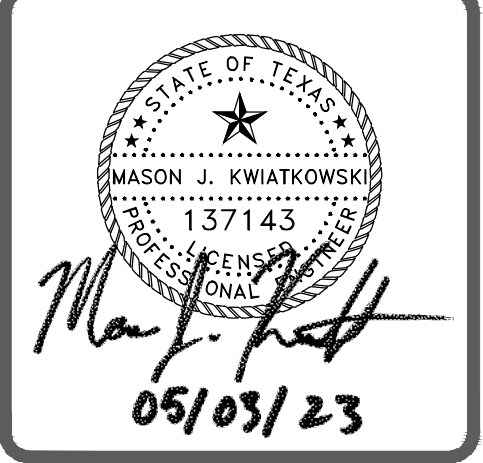


PROJECT BENCHMARK: BM
5/8" REBAR W/ CAP
STAMPED "KERR RPLS 4502"
ELEVATION = 311.08'



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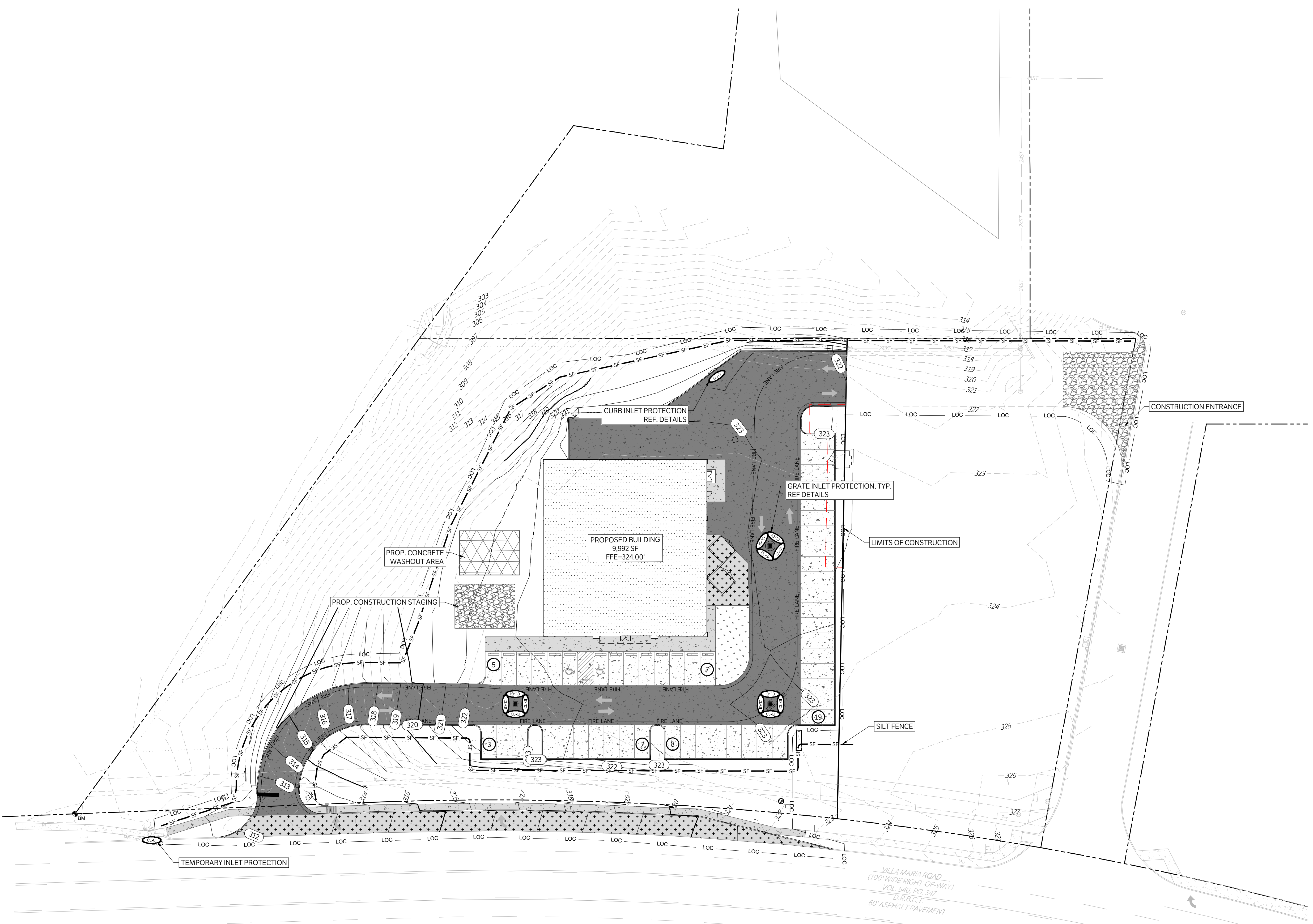
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EROSION CONTROL PLAN

ISSUE DATE: 04-24-2023
DRAWN BY: CS
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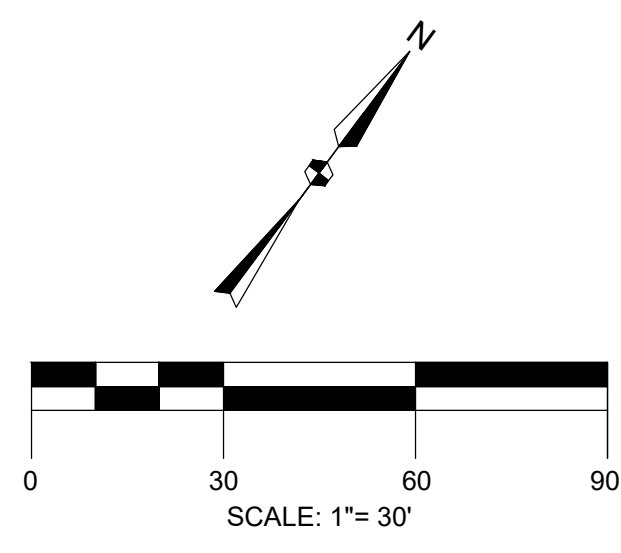
REVISIONS	
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REV.	DATE DESCRIPTION

C1100



LEGEND	
	CONSTRUCTION ENTRANCE, INSTALLED PER DETAIL
	PROPERTY LINE
	EXISTING CONTOURS
	PROPOSED CONTOURS
	EXISTING FLOW PATH
	PROPOSED FLOW PATH
	SILT FENCE, INSTALLED PER DETAIL
	PROPOSED DAM EROSION CONTROL, LOG-18"
	PROPOSED ROCK FILTER DAM TYPE 3

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
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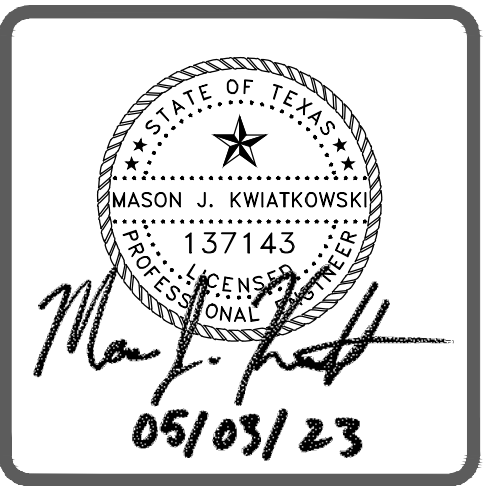


PROJECT BENCHMARK: \blacklozenge BM
5/8" REBAR W/ CAP
STAMPED "KERR RPLS 4502"
ELEVATION = -311.08'



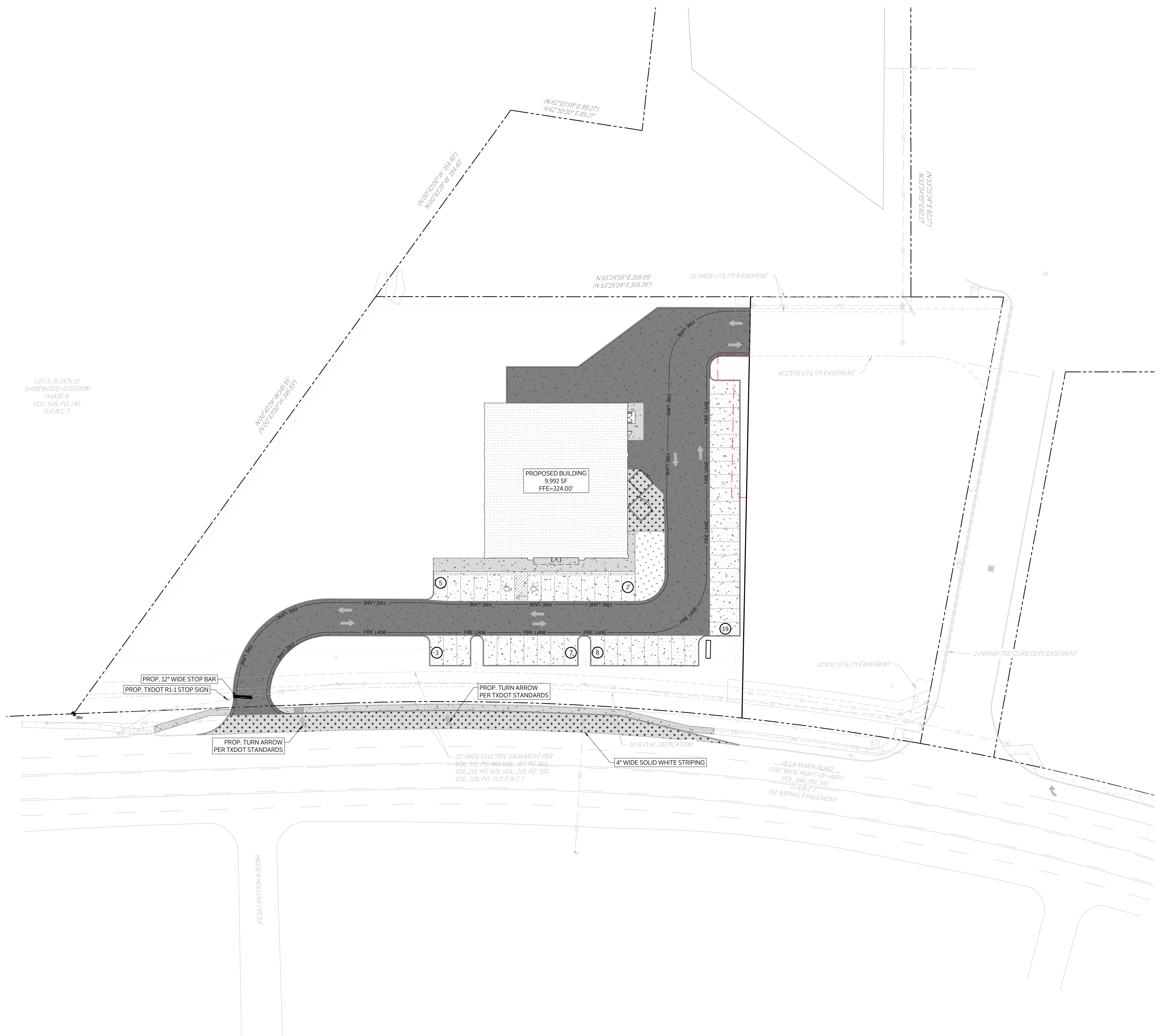
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LOT 5, BLOCK 15
SHIREWOOD ADDITION
PHASE III
VOL. 648, PG. 245
O.R.B.C.T.



LEGEND	
	PROPOSED 4" CONCRETE SIDEWALK
	PROPOSED 6" CONCRETE PAVEMENT
	PROPOSED 7" CONCRETE PAVEMENT
	PROPOSED BUILDING
	PROPOSED STRUCTURAL CONCRETE, REF. STRUCTURAL
	EXISTING 4" CONCRETE SIDEWALK
	EXISTING PAVEMENT EDGE
	PROPERTY LINE
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	PROP. STORM SEWER CURB INLET
	EX. PROP. LIGHT POLE
	PROPOSED PUBLIC ACCESS EASEMENT
	PROPOSED UTILITY EASEMENT

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SIGNAGE & STRIPING PLAN

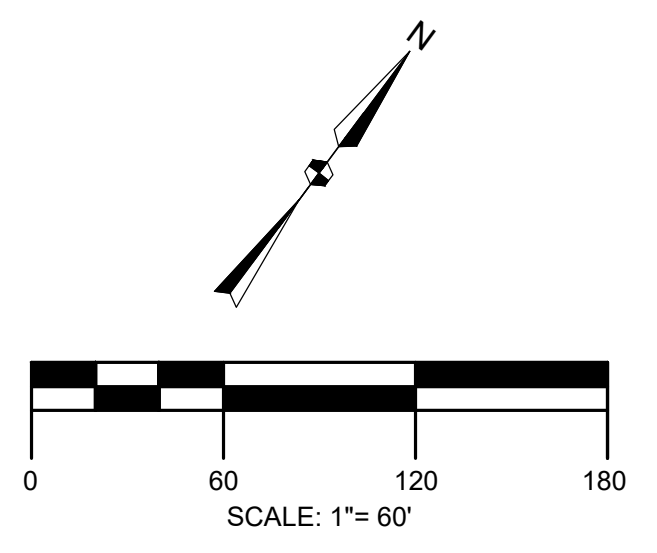
ISSUE DATE: 04-24-2023
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PROJECT #: 21-1472

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C1200



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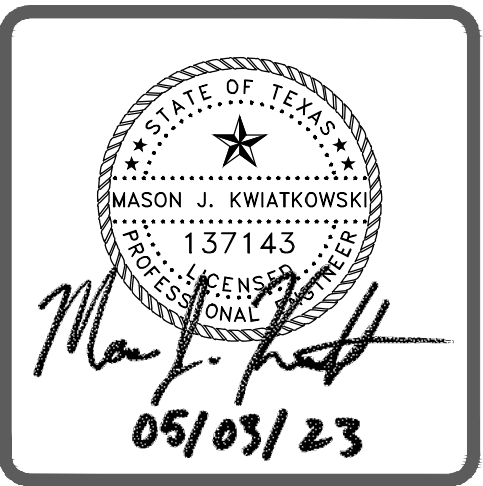


PROJECT BENCHMARK: BM
5/8" REBAR W/ CAP
STAMPED "KERR RPLS 4502"
ELEVATION = 311.08'



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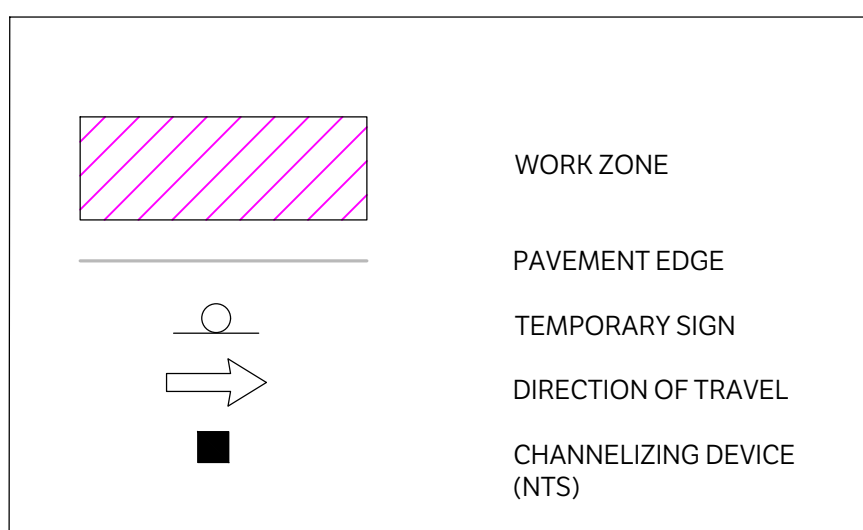
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TRAFFIC CONTROL PLAN

ISSUE DATE: 04-24-2023
DRAWN BY: CS
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PROJECT #: 21-1472

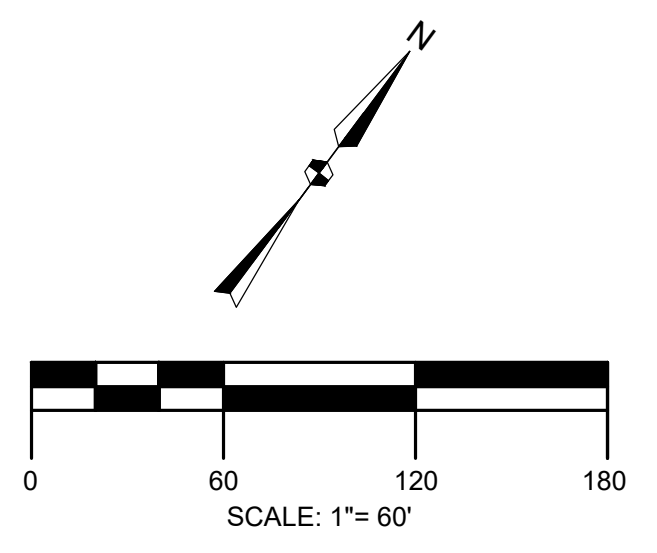
REVISIONS	
REV.	DESCRIPTION



C1300



CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
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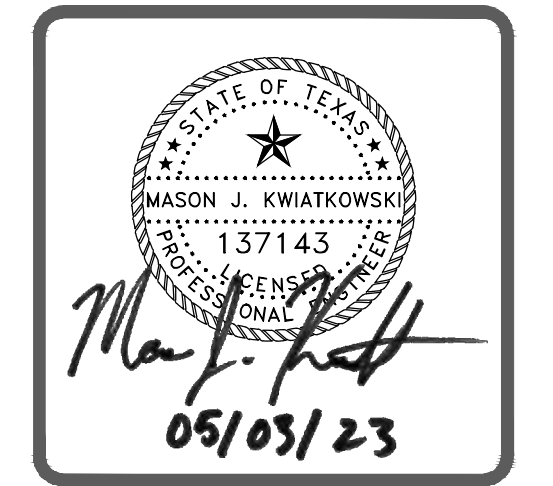


PROJECT BENCHMARK: BM
5/8" REBAR W/ CAP
STAMPED "KERR RPLS 4502"
ELEVATION = 311.08'



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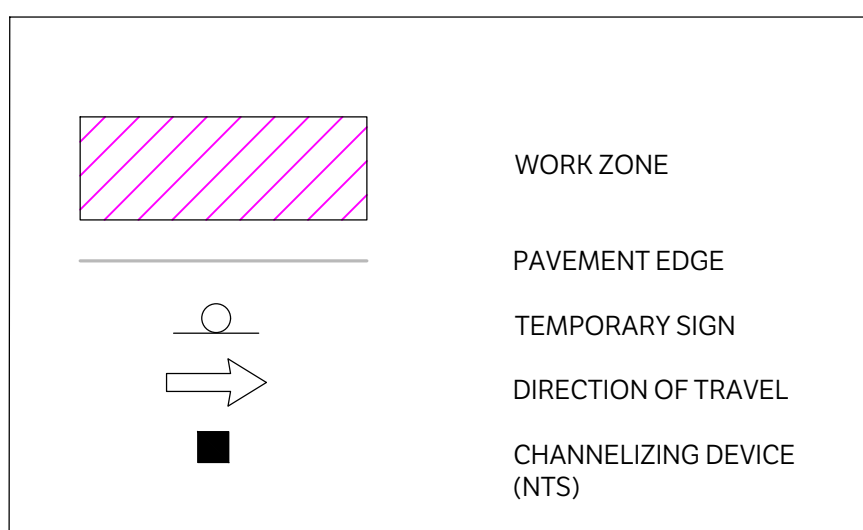
FOR
CONSTRUCTION

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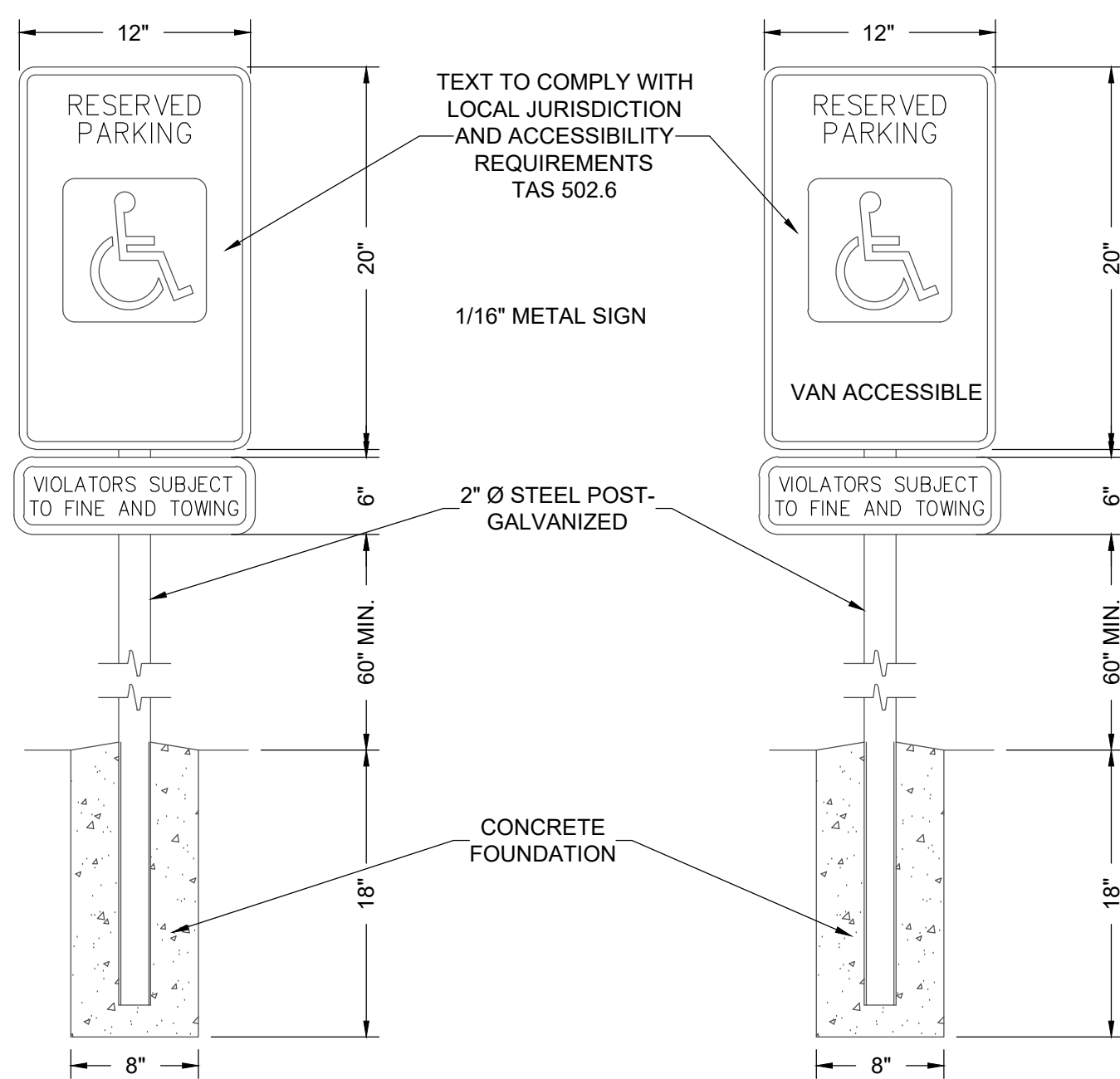
TRAFFIC CONTROL PLAN

ISSUE DATE: 04-24-2023
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PROJECT #: 21-1472

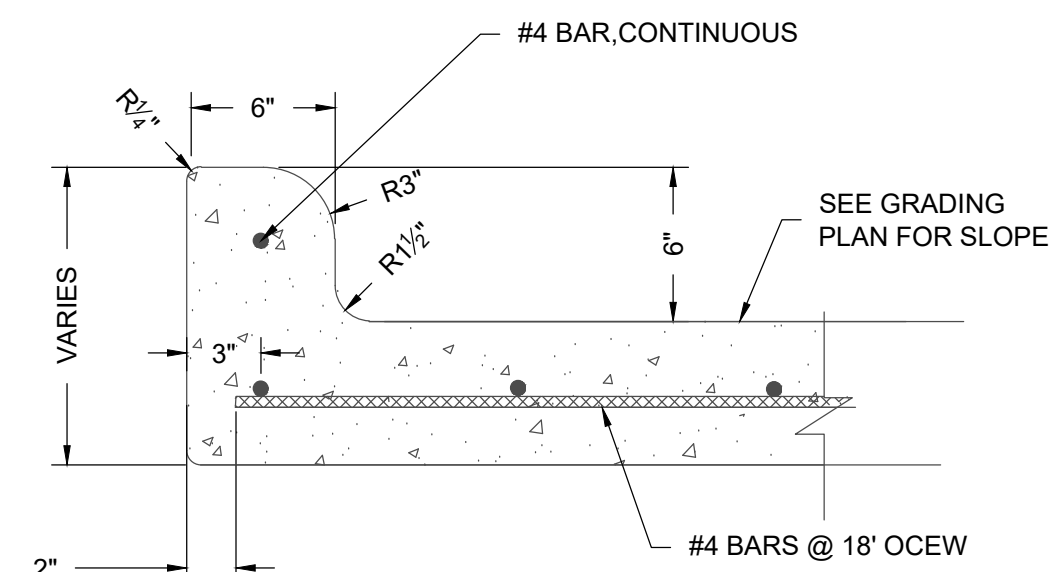
REVISIONS		
REV.	DATE	DESCRIPTION



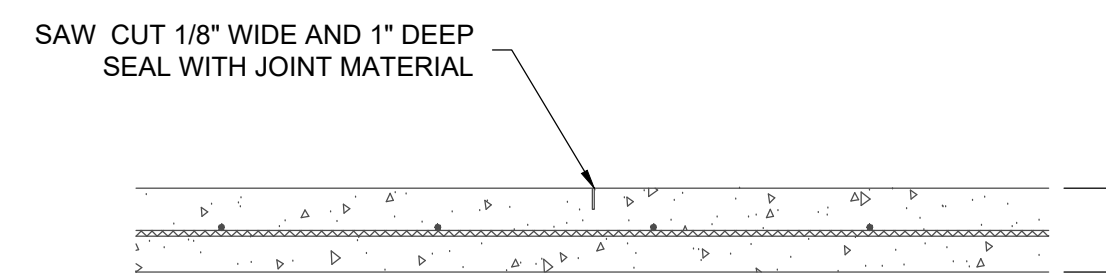
C1301



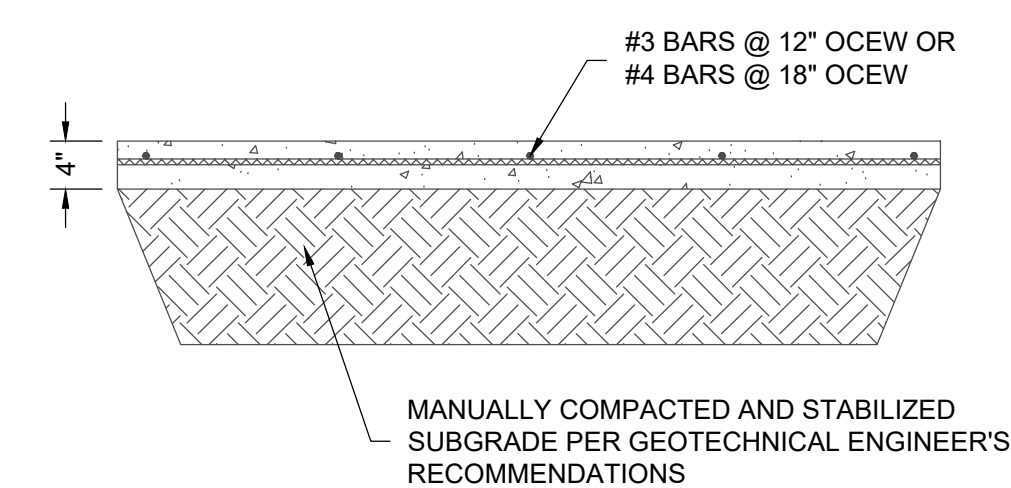
ADA PARKING SIGN
NTS



INTEGRAL CURB & GUTTER
NTS

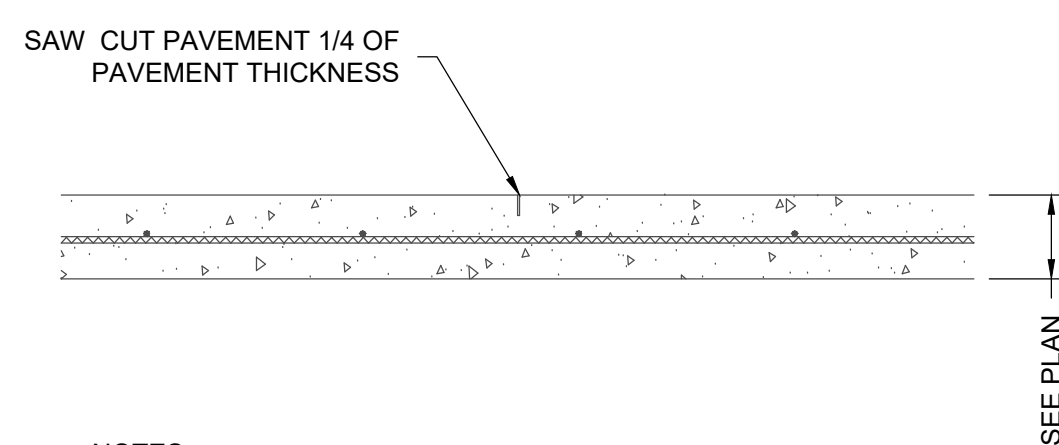


SIDEWALK CONTRACTION JOINT
NTS



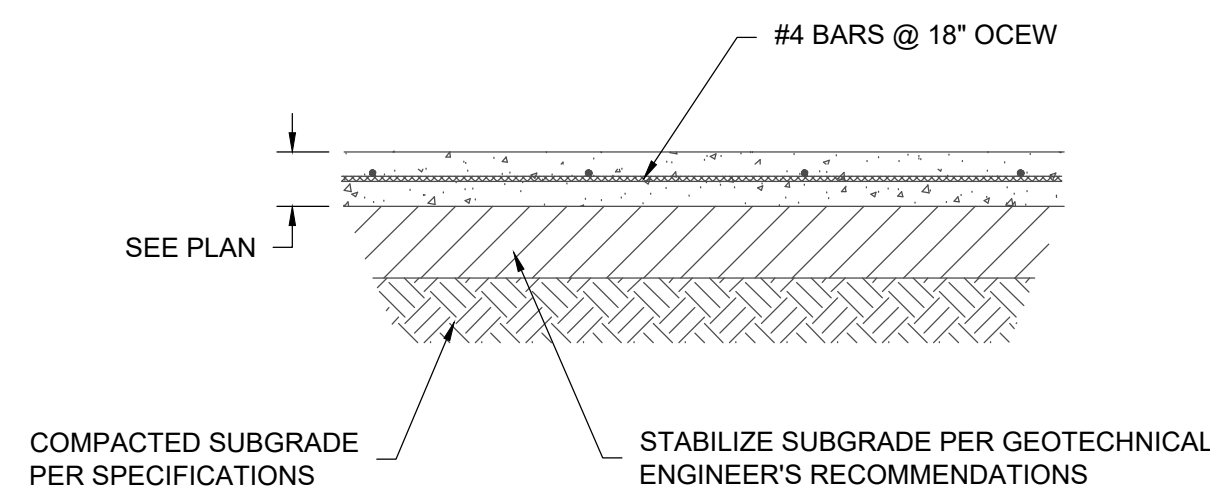
SIDEWALK SECTION
NTS

NOTES:
1. DEPTH OF STABILIZATION SHALL BE PER NOTES AND SPECIFICATIONS.
2. SUBGRADE STABILIZATION SHALL BE PER GEOTECHNICAL RECOMMENDATIONS AND LIME/CEMENT SERIES BASED ON ACTUAL SUBGRADE CONDITIONS.
3. SAW CUT OPERATIONS SHALL BEGIN AS SOON AS POSSIBLE AFTER CONCRETE PLACEMENT.
4. SEAL ALL EXPANSION JOINTS WITH SEAL CAP AND CONTROL JOINTS WITH SELF LEVELING JOINT SEALANT MATERIAL PER SPECIFICATIONS. USE SELF LEVELING JOINT SEALANT ADJACENT TO EXISTING PAVEMENT.



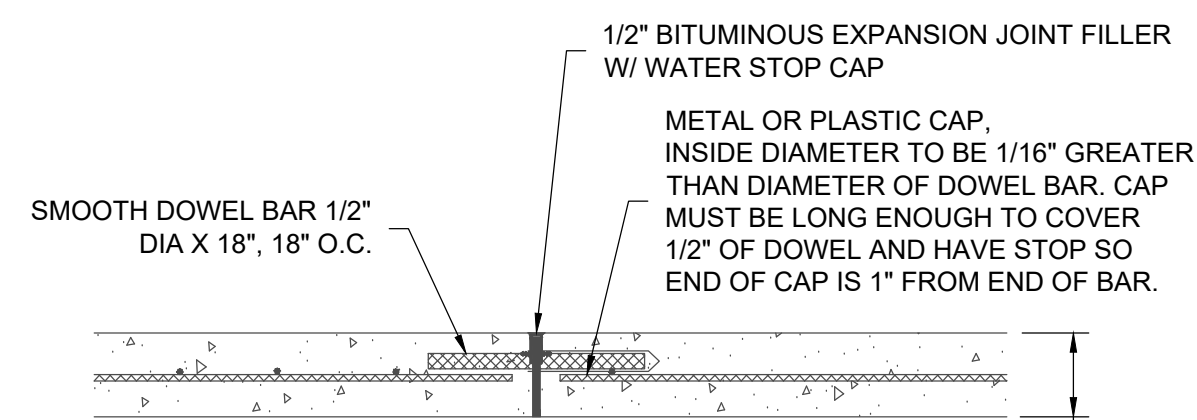
CONTROL JOINT
NTS

NOTES:
1. SEE PLANS FOR JOINT SPACING, COMPRESSIVE STRENGTH, PAVEMENT THICKNESS, AND REINFORCING.
2. SAW CUT OPERATIONS SHALL BEGIN AS SOON AS POSSIBLE AFTER CONCRETE PLACEMENT.
3. SEAL ALL JOINTS WITH SELF LEVELING JOINT SEALANT MATERIAL PER SPECIFICATIONS.



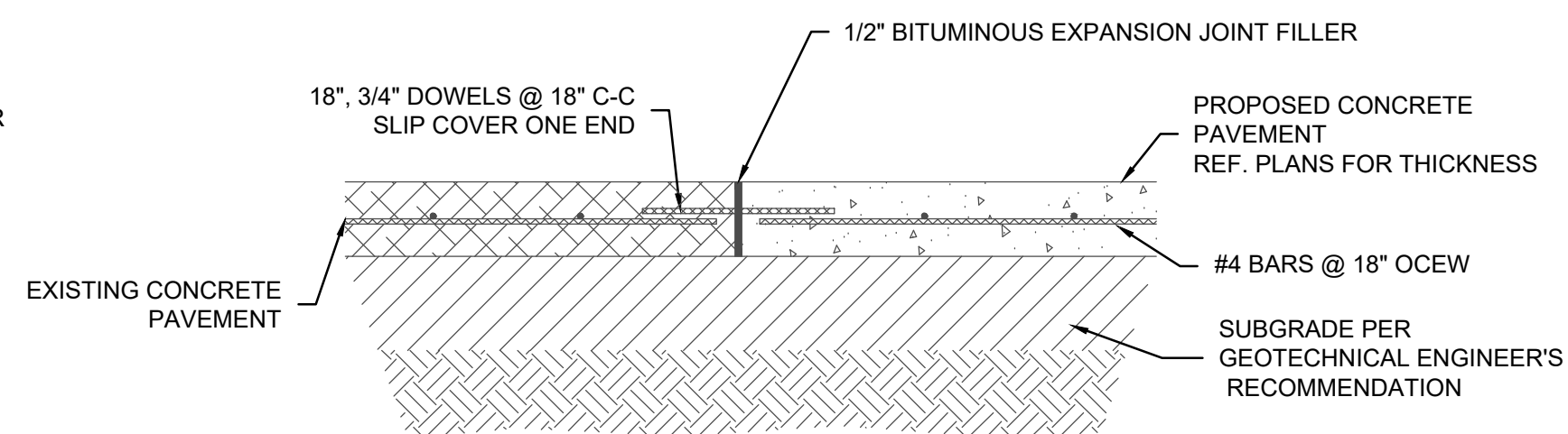
CONCRETE PAVEMENT
NTS

NOTES:
1. SEE PLAN FOR JOINT SPACING, COMPRESSIVE STRENGTH, PAVEMENT THICKNESS, AND REINFORCING.
2. DEPTH OF STABILIZATION SHALL BE A MINIMUM OF 6 INCHES OR BASED ON GEOTECHNICAL RECOMMENDATIONS SUBGRADE CONDITIONS.
3. SUBGRADE STABILIZATION SHALL BE PER GEOTECHNICAL RECOMMENDATIONS AND LIME/CEMENT SERIES BASED ON ACTUAL SUBGRADE CONDITIONS.



EXPANSION JOINT
NTS

NOTE:
EXPANSION JOINTS SHALL BE INSTALLED AS SHOWN ON PLANS



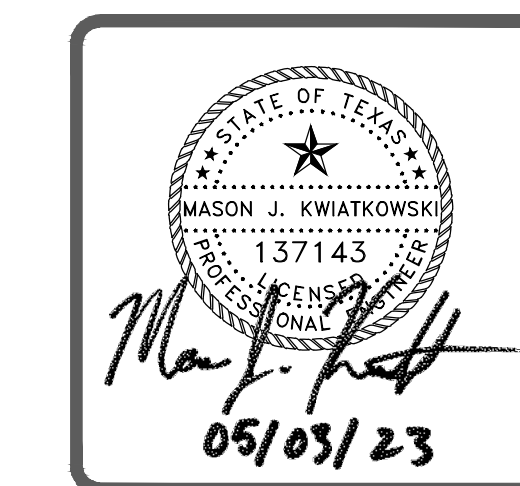
EXISTING CONCRETE TIE-IN
NTS

NOTE:
1. SEE PLANS FOR THICKNESS OF EXISTING AND PROPOSED CONCRETE PAVEMENT
2. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI



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BRYAN, TX. 77807

DETAILS

ISSUE DATE: 04-24-2023
DRAWN BY: CS
CHECKED BY: MK
PROJECT #: 21-1472

REVISIONS

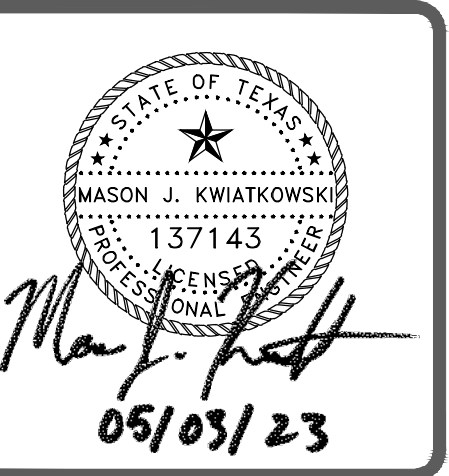
REV.	DATE	DESCRIPTION

C1400



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CONSTRUCTION

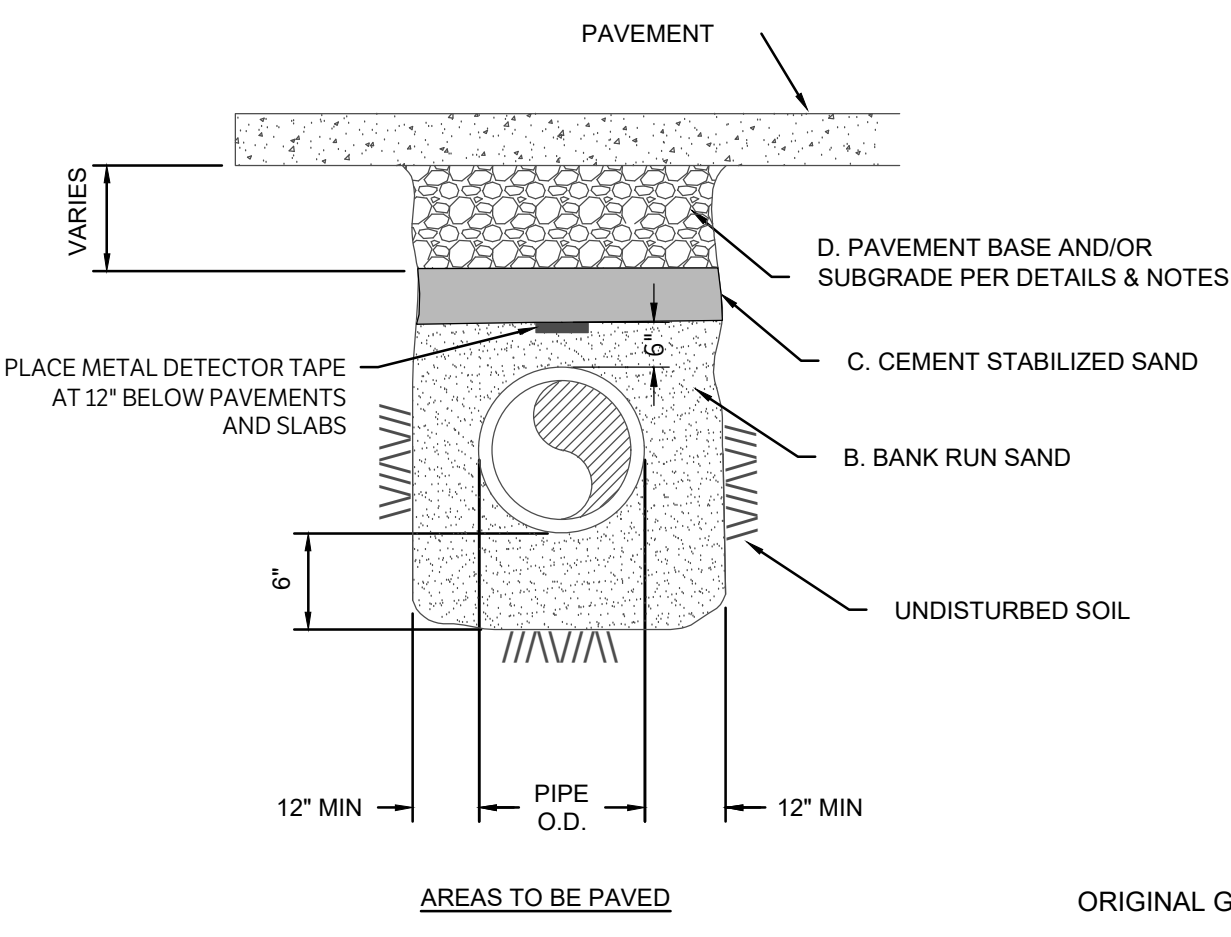
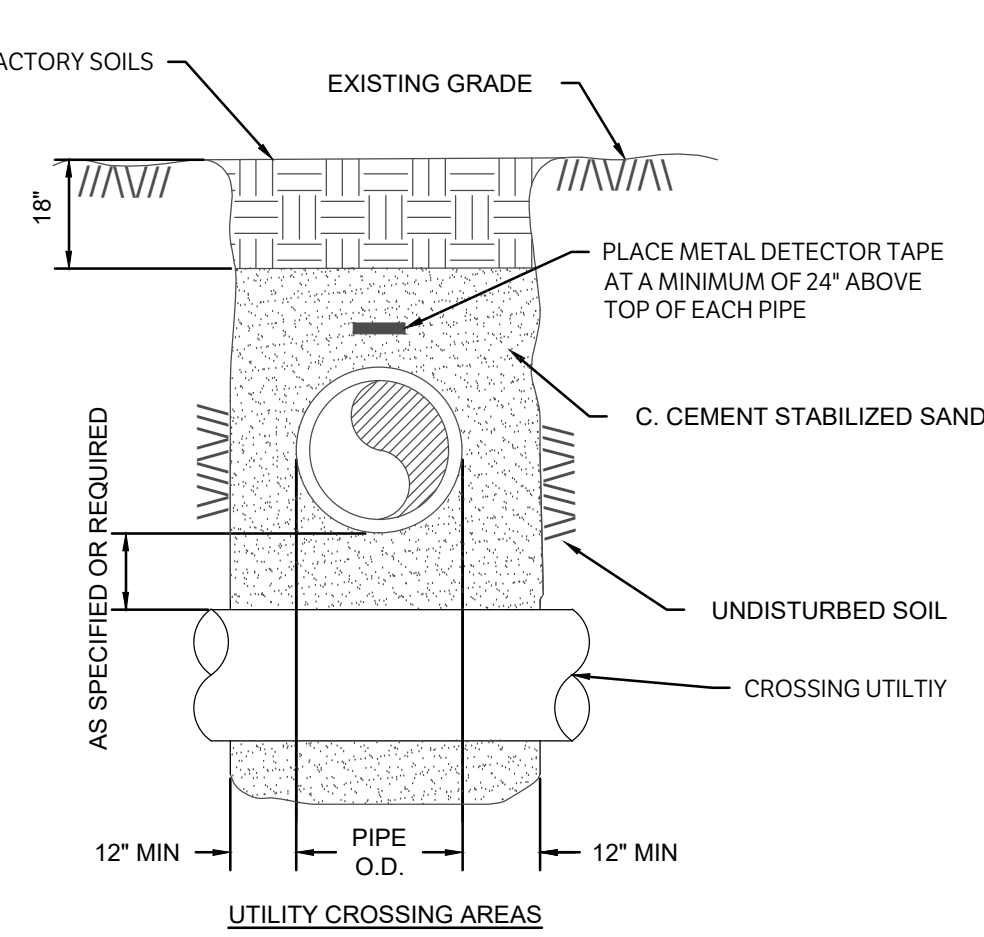
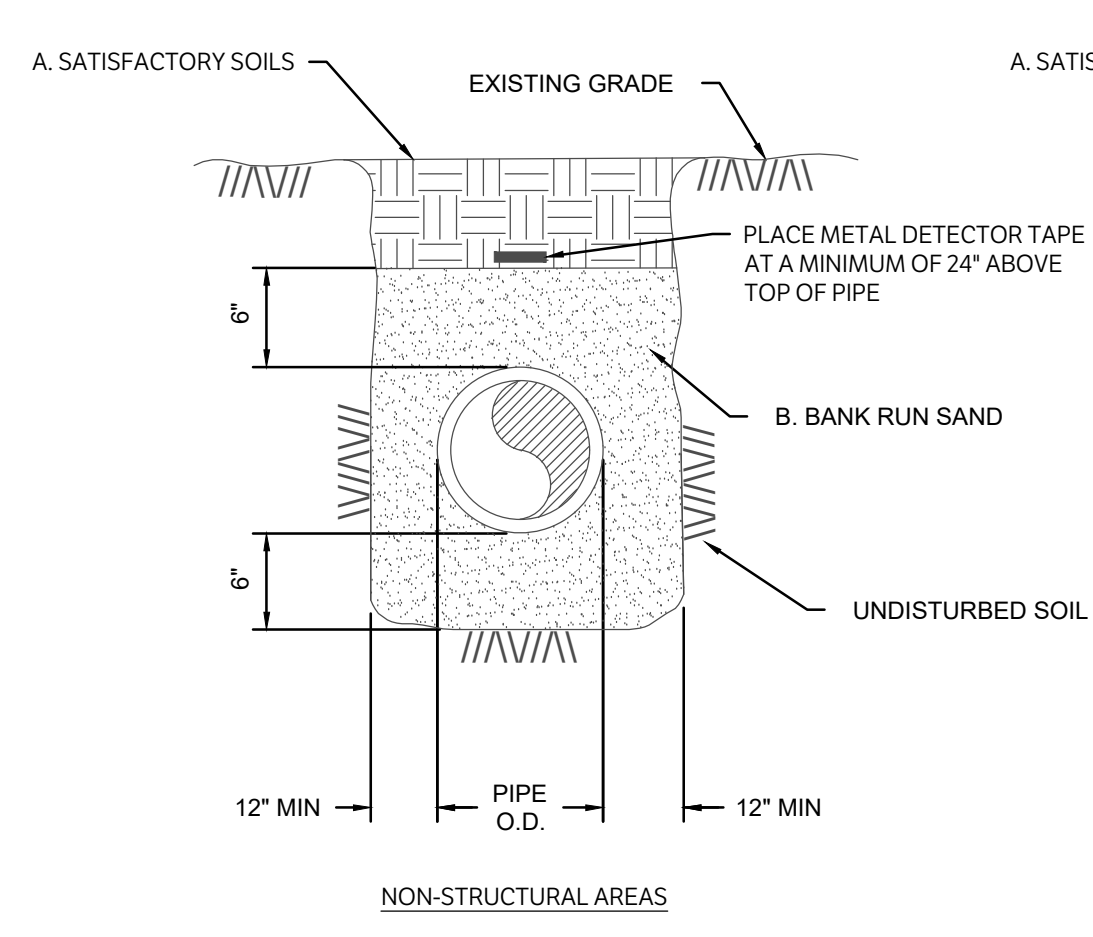
RETAIL CENTER
1654 W. VILLA MARIA RD.
BRYAN, TX. 77807

DETAILS

ISSUE DATE: 04-24-2023
DRAWN BY: CS
CHECKED BY: MK
PROJECT #: 21-1472

REV.	DATE	DESCRIPTION

C1401



PLACE METAL DETECTOR TAPE AT A MINIMUM OF 24" ABOVE TOP OF PIPE

PLACE METAL DETECTOR TAPE AT A MINIMUM OF 24" ABOVE TOP OF PIPE

- A. SATISFACTORY SOILS**
MATERIAL EXCAVATED FROM THE DITCH, (WHICH IS FREE OF ROCKS, LUMPS, CLODS, OR DEBRIS LARGER THAN TWO (2) INCHES IN THE LARGEST DIMENSION), COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 (STANDARD) AT MOISTURE CONTENT WITHIN OPTIMUM TO 2% OF OPTIMUM UNDER NON-STRUCTURAL AREAS (IE...YARDS, PASTURES, EASEMENTS) AND TO A MINIMUM OF 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 (STANDARD) AT A MOISTURE CONTENT WITHIN OPTIMUM TO 2% OF OPTIMUM UNDER NEW STREET AND PAVEMENT AREAS.
- B. BANK RUN SAND**
GRANULAR MATERIAL FREE OF DETRIMENTAL QUANTITIES OF CLAY, DEBRIS, OR ORGANIC MATERIAL. REFERENCE SPECIFICATION FOR REQUIREMENTS.
- C. CEMENT STABILIZED SAND**
MATERIALS SHALL BE TYPE I PORTLAND CEMENT CONFORMING TO ASTM C150 AND CLEAN DURABLE SAND MEETING GRADING REQUIREMENTS FOR FINE AGGREGATES OF ASTM C33. THE CEMENT STABILIZED SAND SHALL HAVE A MINIMUM OF 10% CEMENT PER CUBIC YARD OF CEMENT STABILIZED SAND MIXTURE, BASED ON LOOSE DRY WEIGHT VOLUME (AT LEAST 2.5 SACKS OF CEMENT PER CUBIC YARD OF MIXTURE). COMPACT MIX TO 95% OF ASTM D558 WITH A MOISTURE CONTENT BETWEEN .2% TO 2% ABOVE OPTIMUM.
- D. PAVEMENT SUBGRADE**
REFERENCE PAVEMENT SECTION DETAIL AND SPECIFICATION FOR MATERIALS AND DEPTHS.

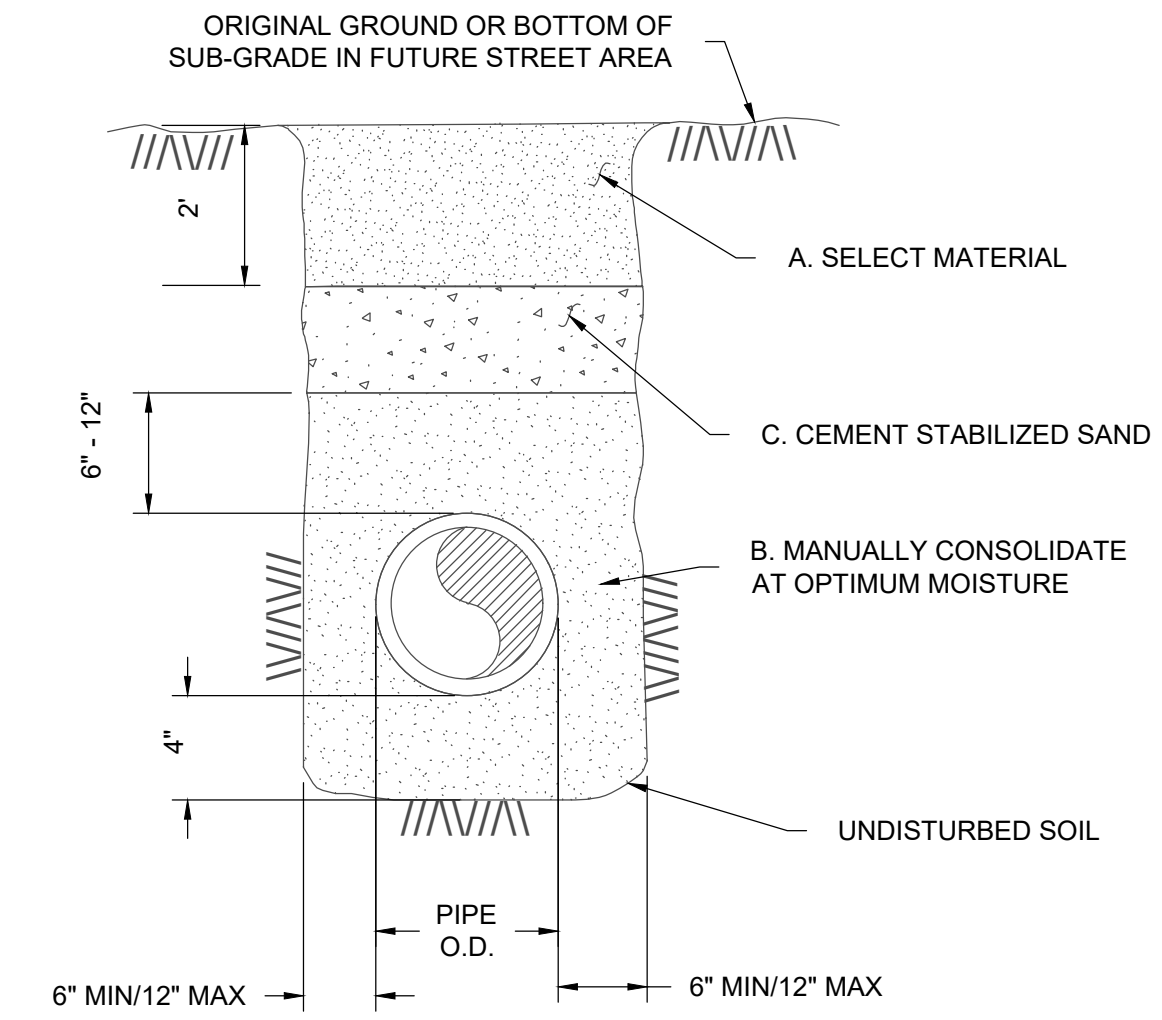
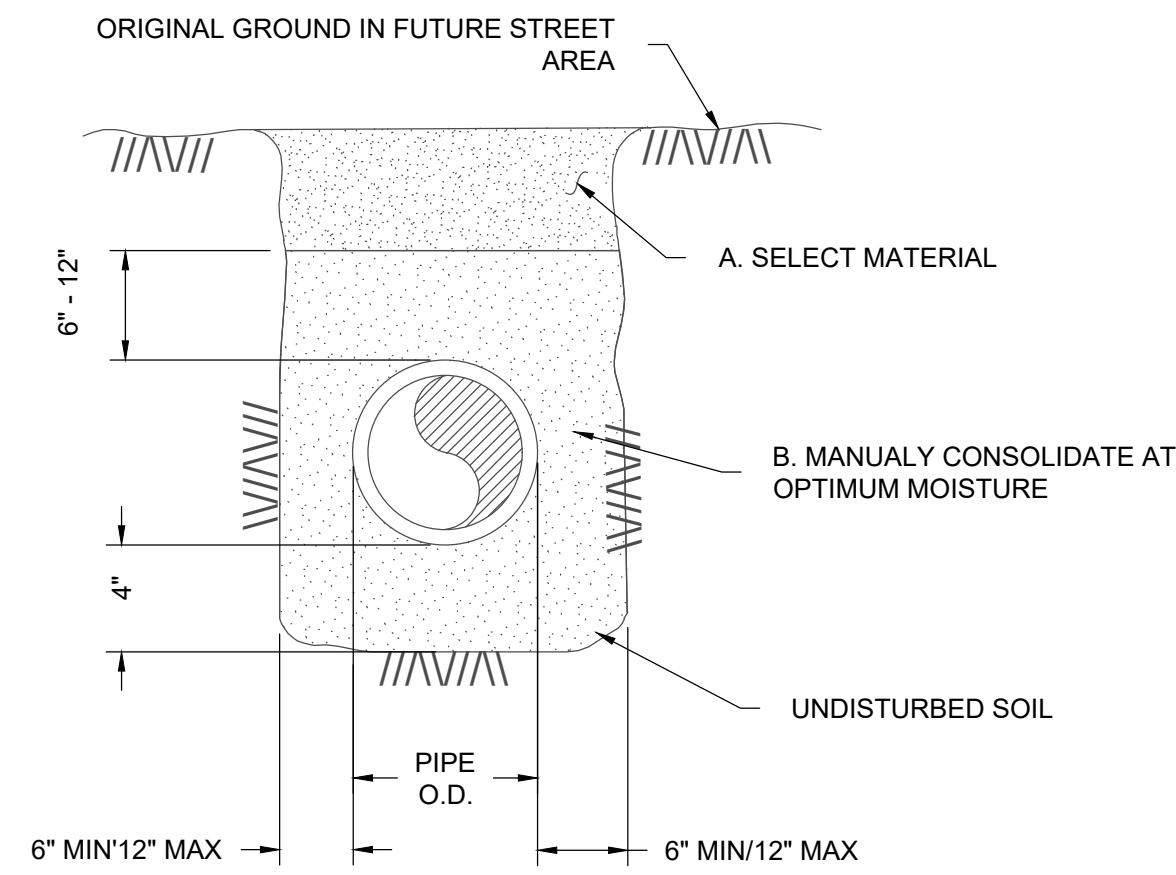
GENERAL NOTES:
ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE ADEQUATELY BLOCK SODDED OR HYDROMULCHED AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK SOD WILL BE REQUIRED. BARED AREAS SHALL BE SEEDED OR SODDED WITHIN 14 CALENDAR DAYS OF LAST DISTURBANCE.

APPROVED EROSION CONTROL MEASURES MUST BE INSTALLED DURING THE ENTIRE TIME THAT EARTH HAS BEEN BARED BY CONSTRUCTION AND SHALL STAY IN PLACE UNTIL ACCEPTABLE VEGETATIVE GROWTH IS ESTABLISHED AFTER CONSTRUCTION IS COMPLETE AND THEN REMOVED BY CONTRACTOR.

ALL EROSION CONTROL MEASURES SHOULD BE CLEANED OF SILT AFTER EVERY RAIN.

ESTABLISHMENT OF VEGETATION MAY BE A WARRANTY ITEM

- NOTES:**
- FOR BEDDING AND TRENCHING WITHIN ALL PAVED AREAS SEE DETAILS FOR OPEN CUT STREETS.
 - ALL BEDDING & INSTALLATION OF HDPE PIPE SHALL BE IN ACCORDANCE WITH ANSIIAWWA STANDARDS FOR HDPE PIPE
 - COMPACTION SHALL BE ATTAINED BY MECHANICAL TAMPING
 - RELATIVE COMPACTION SHALL BE TESTING IN THE PRESENCE OF THE ENGINEER
 - DUST RESULTING FROM THE CONTRACTOR'S PERFORMANCE OF THE WORK, EITHER INSIDE OR OUTSIDE THE RIGHT-OF-WAY, SHALL BE CONTROLLED BY THE CONTRACTOR
 - ALL TRENCHES SHALL BE BACK FILLED AND TEMPORARY PAVING OR PLATING PLACED AT THE END OF EACH WORKING DAY IN AREAS TO BE PAVED. PROTECT ALL OPEN TRENCHES AT THE END OF EACH WORKING DAY.
 - HDPE LINES WITH WELDED JOINTS MAY BE BACKFILLED PRIOR TO TESTING AT CONTRACTOR'S RISK.
 - INSTALL 6" OF CEMENT STABILIZED SAND BEDDING UNDER HDPE SANITARY SEWER PIPE.



- A. SELECT MATERIAL**
MATERIAL EXCAVATED FROM THE DITCH, (WHICH IS FREE OF ROCKS, LUMPS, CLODS, OR DEBRIS LARGER THAN TWO (2) INCHES IN THE LARGEST DIMENSION), COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 (STANDARD) AT MOISTURE CONTENT WITHIN OPTIMUM TO +4% OF OPTIMUM UNDER NON-STRUCTURAL AREAS (IE...YARDS, PASTURES, EASEMENTS) AND TO A MINIMUM OF 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 (STANDARD) AT A MOISTURE CONTENT WITHIN OPTIMUM TO +4% OF OPTIMUM UNDER NEW STREET AND PAVEMENT AREAS.

GENERAL NOTES:
ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE ADEQUATELY BLOCK SODDED OR HYDROMULCHED AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK SOD WILL BE REQUIRED. BARED AREAS SHALL BE SEEDED OR SODDED WITHIN 14 CALENDAR DAYS OF LAST DISTURBANCE.

APPROVED EROSION CONTROL MEASURES MUST BE INSTALLED DURING THE ENTIRE TIME THAT EARTH HAS BEEN BARED BY CONSTRUCTION AND SHALL STAY IN PLACE UNTIL ACCEPTABLE VEGETATIVE GROWTH IS ESTABLISHED AFTER CONSTRUCTION IS COMPLETE AND THEN REMOVED BY CONTRACTOR.

ALL EROSION CONTROL MEASURES SHOULD BE CLEANED OF SILT AFTER EVERY RAIN.

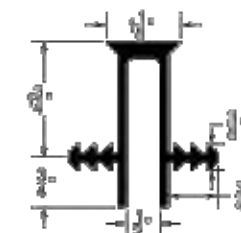
ESTABLISHMENT OF VEGETATION MAY BE A WARRANTY ITEM

- NOTES:**
- FOR BEDDING AND TRENCHING WITHIN ALL PAVED AREAS SEE DETAILS FOR OPEN CUT STREETS.
 - ALL BEDDING & INSTALLATION OF PVC PIPE SHALL BE IN ACCORDANCE WITH ANSIIAWWA STANDARDS FOR PVC PIPE
 - ALL BEDDING & INSTALLATION OF DUCTILE IRON PIPE SHALL BE IN ACCORDANCE WITH ANSIIAWWA C150/A21.50
 - COMPACTION SHALL BE ATTAINED BY MECHANICAL TAMPING
 - RELATIVE COMPACTION SHALL BE TESTING IN THE PRESENCE OF THE CITY ENGINEER
 - DUST RESULTING FROM THE CONTRACTOR'S PERFORMANCE OF THE WORK, EITHER INSIDE OR OUTSIDE THE RIGHT-OF-WAY, SHALL BE CONTROLLED BY THE CONTRACTOR
 - ALL TRENCHES SHALL BE BACK FILLED AND TEMPORARY PAVING OR PLATING PLACED AT THE END OF EACH WORKING DAY
 - SEE "OPEN CUT DETAILS" ST4-01 & ST4-02
 - EVERY 100 FEET PROVIDE A WATER STOP BLOCK COMPOSED OF CEMENT SAND OR NATIVE MATERIAL DEPENDING ON EMBEDMENT. BLOCK SHALL BE 6 FEET IN LENGTH. NO BEDDING SAND IN THIS AREA

- B. GRANULAR MATERIAL**
MATERIAL SHALL BE BANK RUN RIVER SAND WITH IS FREE OF DETRIMENTAL QUANTITIES OF CLAY, DEBRIS, OR ORGANIC MATERIAL AND WHICH, WHEN TESTED BY STANDARD LABORATORY METHODS, MEET THE FOLLOWING REQUIREMENTS:
- | | |
|--------------------------------------|-----|
| MAXIMUM LIQUID LIMIT | 45 |
| MAXIMUM PLASTICITY INDEX | 15 |
| MAXIMUM PERCENT PASSING NO 200 SIEVE | 35 |
| MINIMUM PERCENT PASSING 3/4" SIEVE | 100 |
- THE MATERIAL SHALL BE FREE FLOWING AND WHEN WET, SHALL NOT ADHERE TO FORM A BALL WHEN PRESSED IN THE HAND.

- C. CEMENT STABILIZED SAND**

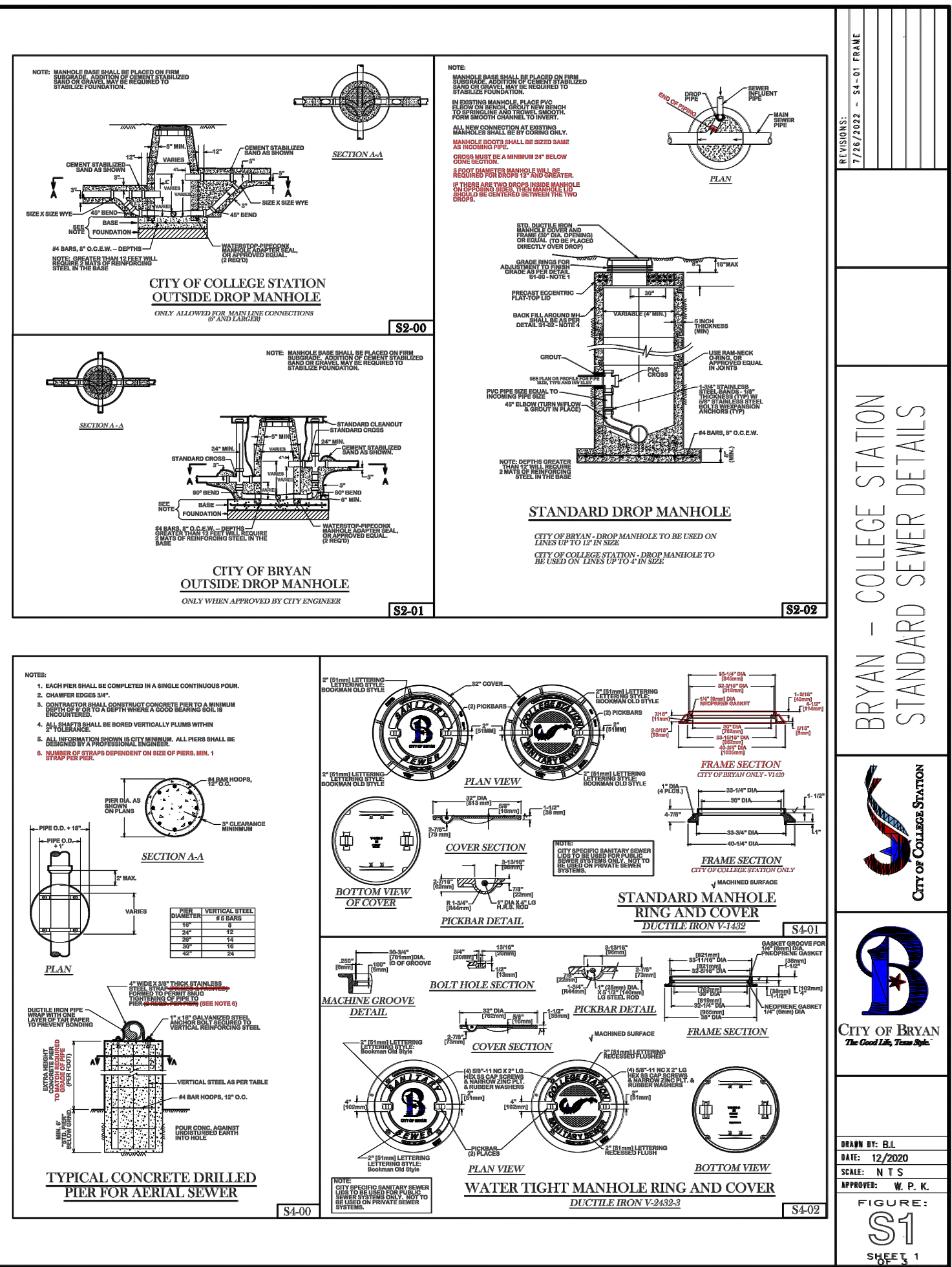
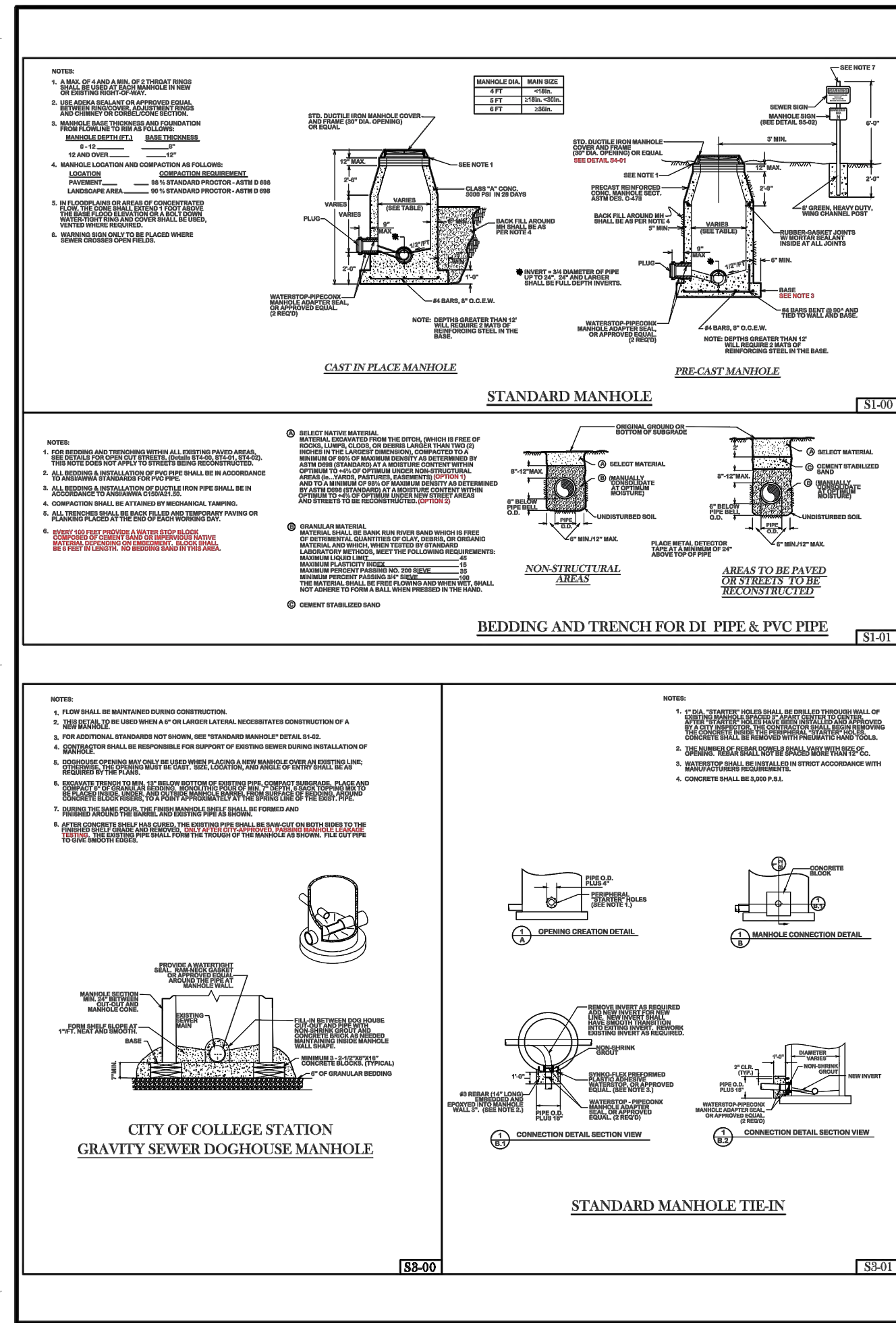
BEDDING AND TRENCH FOR DI PIPE & PVC PIPE WITH NON-STRUCTURAL OR NEW PAVED AREAS
NTS



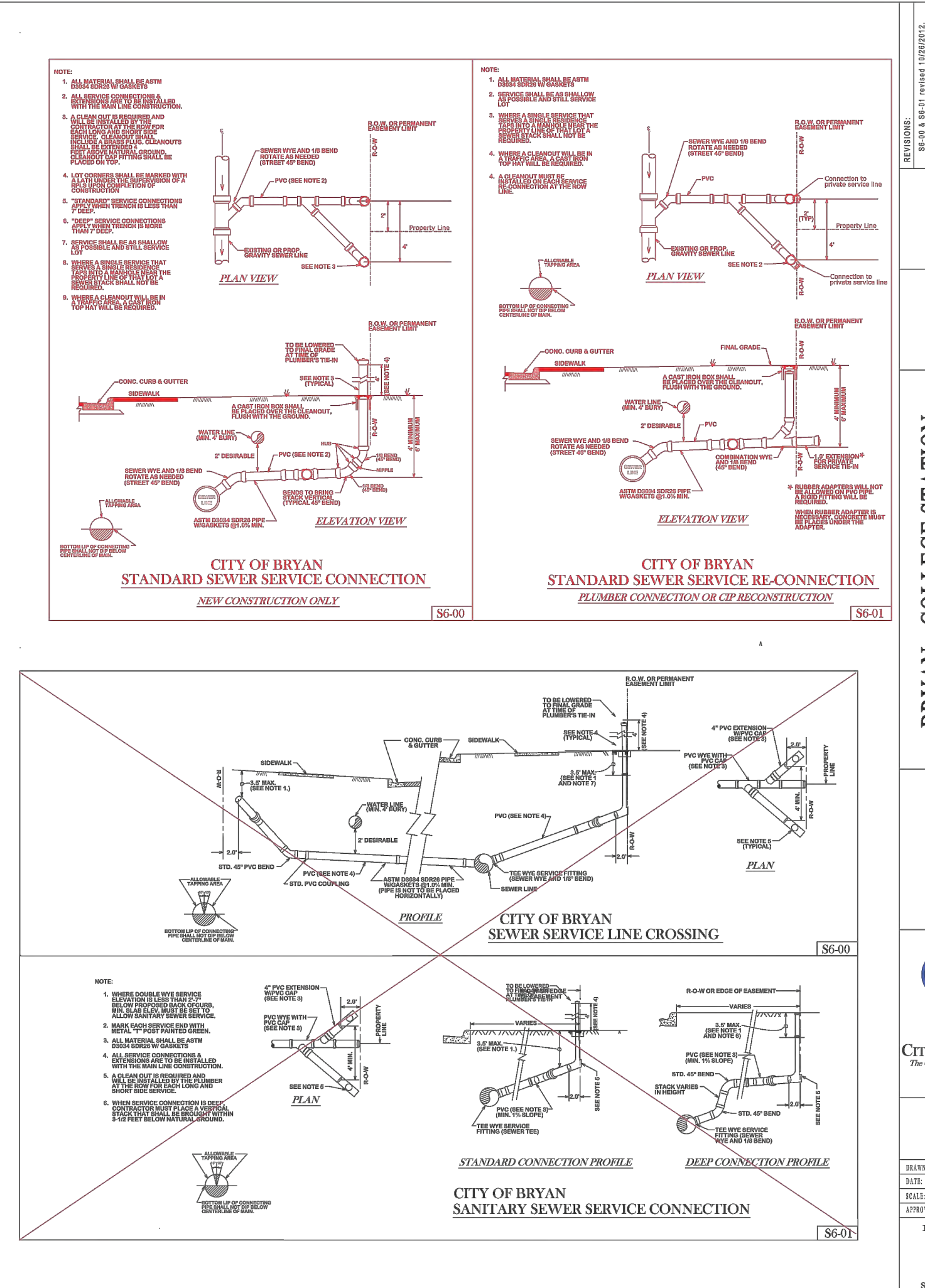
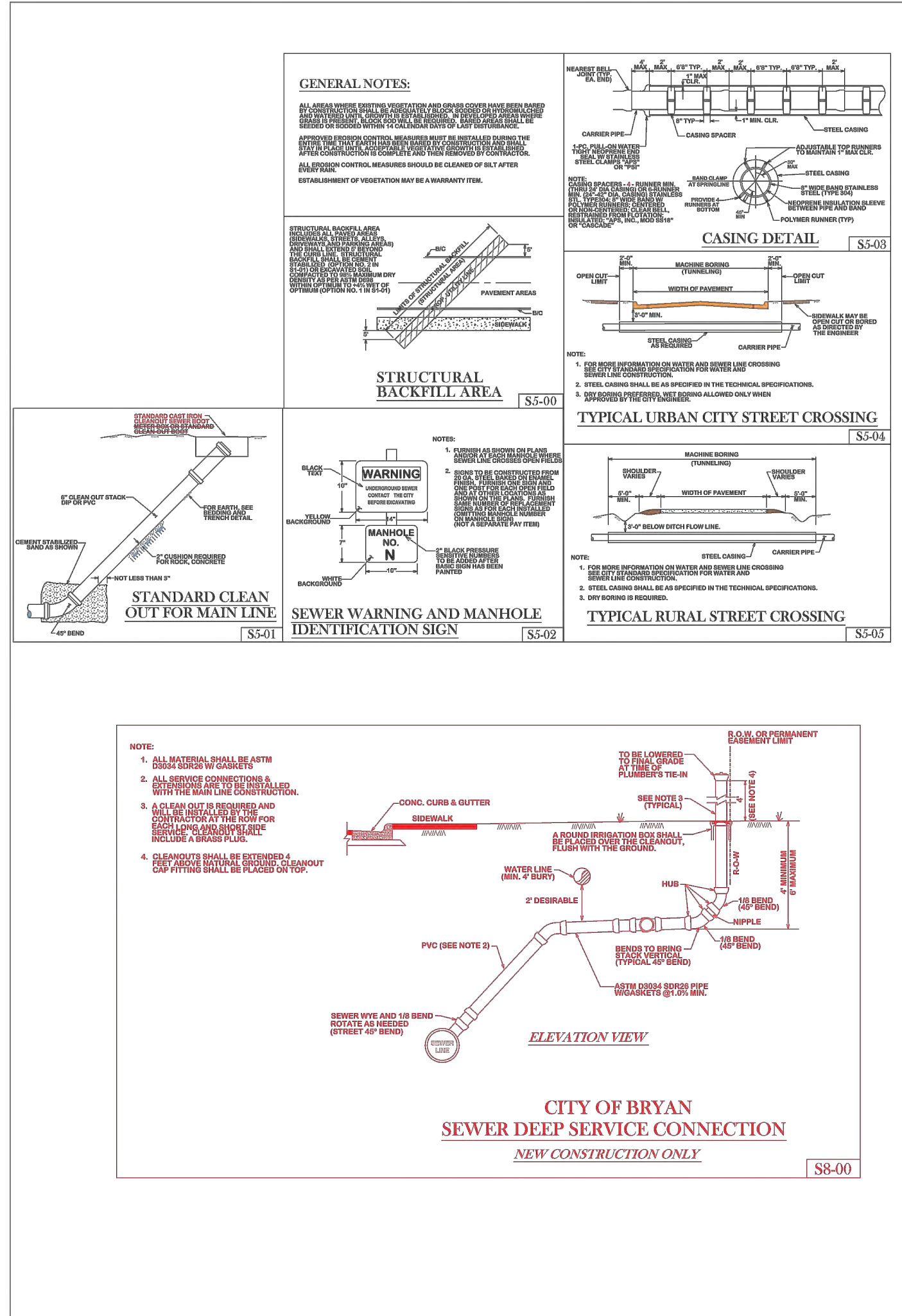
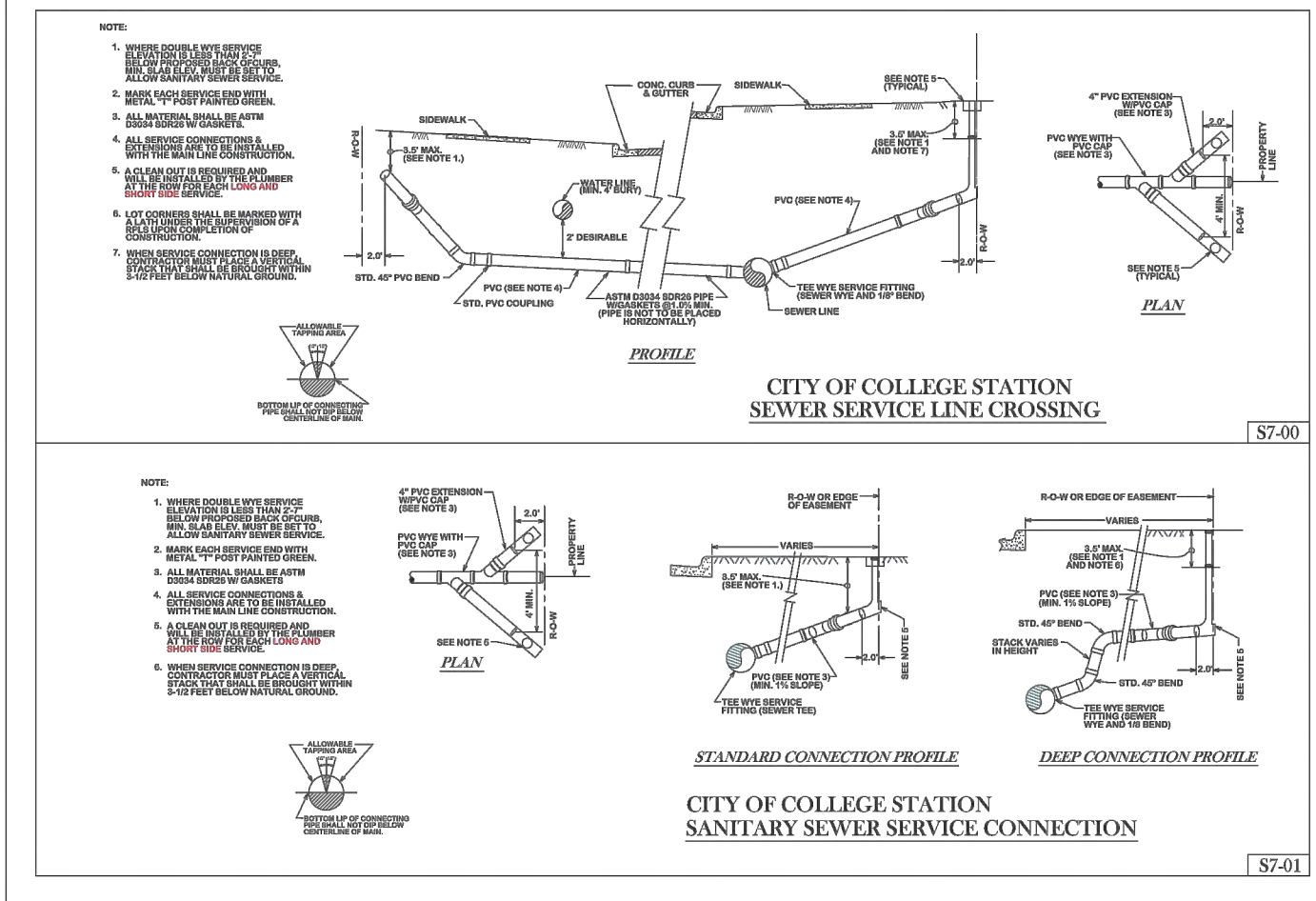
NOTE:
WATERSTOP SHALL BE G-SEAL BY GREENSTREAK, INC. EARTHSHIELD BY JP SPECIALTIES, INC. EB-CAP WATERSTOP BY WESTEC, OR APPROVED EQUAL

EXPANSION JOINT WATER STOP CAP (2 SIDED)
NTS

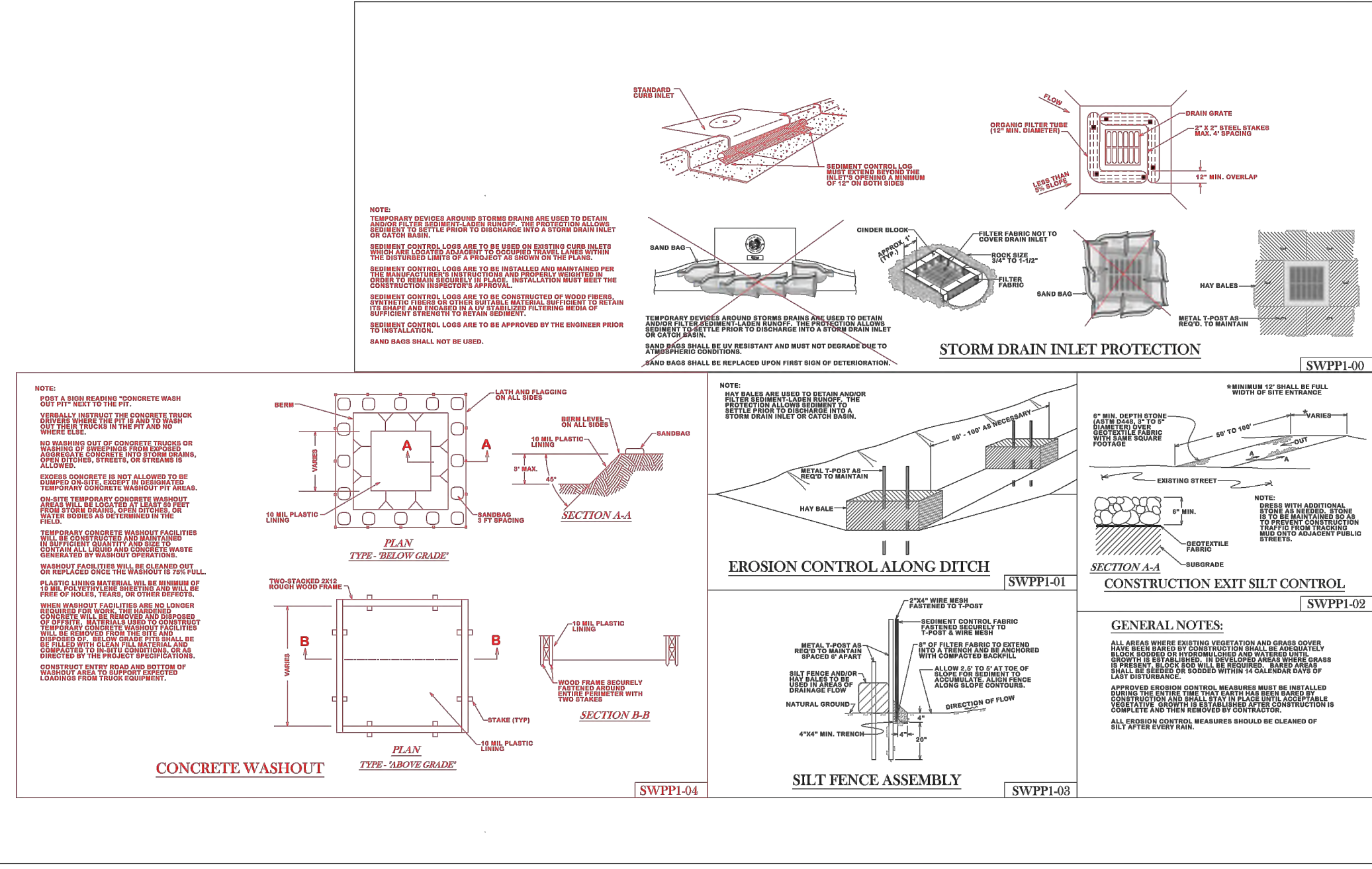
BEDDING AND TRENCH FOR HDPE PIPE
NTS



BRYAN - COLLEGE STATION STANDARD SEWER DETAILS
 CITY OF COLLEGE STATION
 CITY OF BRYAN
 SHEET 1 OF 1



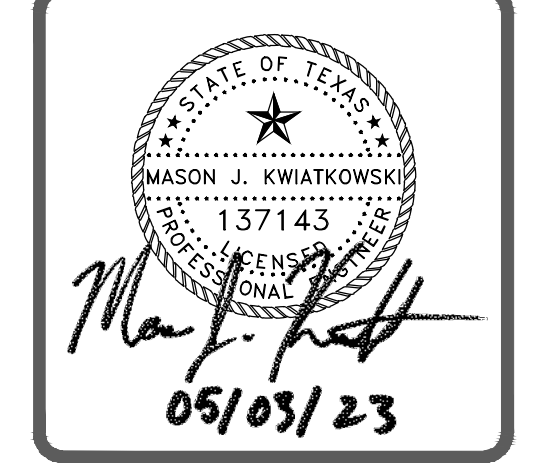
BRYAN - COLLEGE STATION STANDARD SEWER DETAILS
 CITY OF COLLEGE STATION
 CITY OF BRYAN
 SHEET 2 OF 3



BRYAN - COLLEGE STATION STANDARD SEWER DETAILS
 CITY OF COLLEGE STATION
 CITY OF BRYAN
 SHEET 3 OF 3



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FOR CONSTRUCTION

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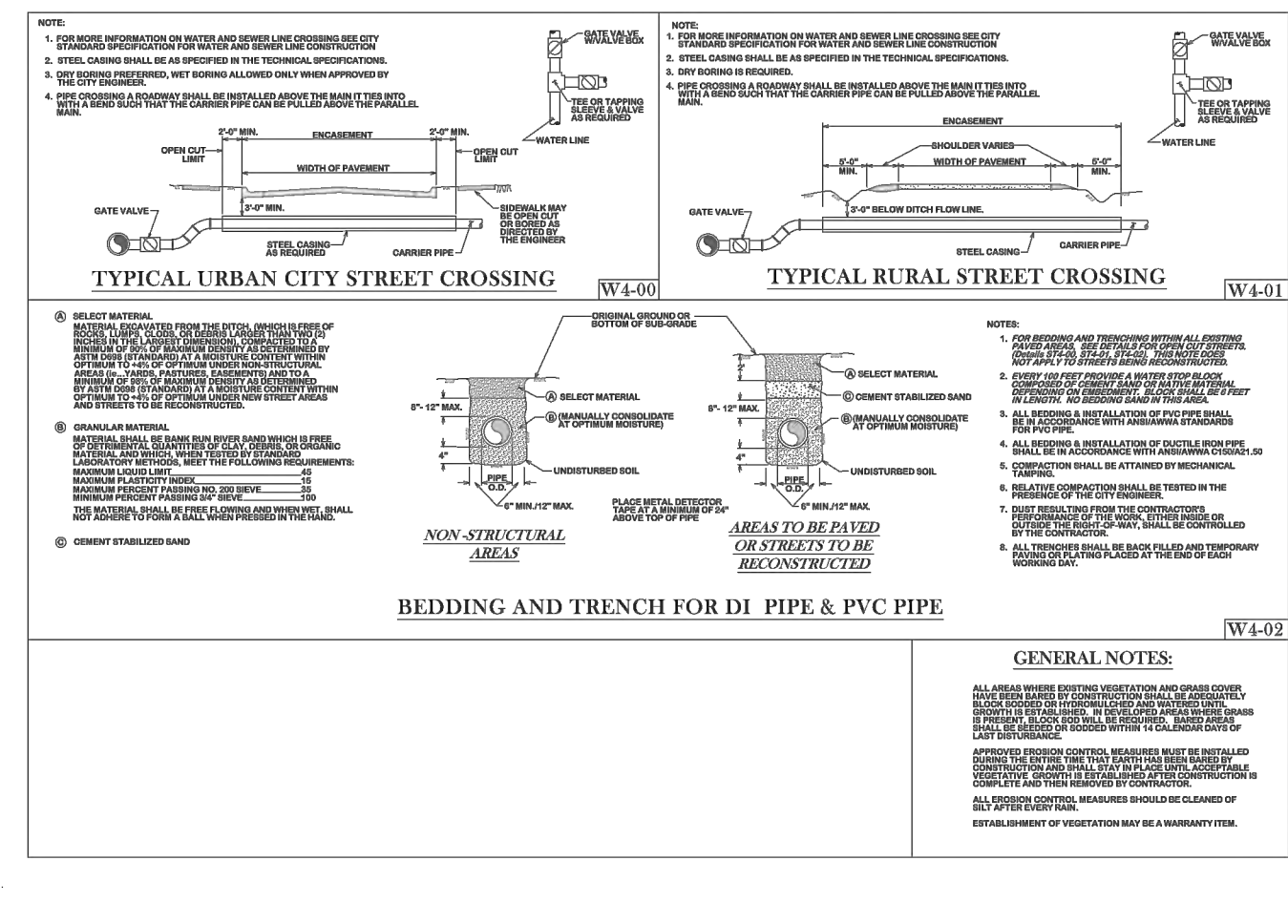
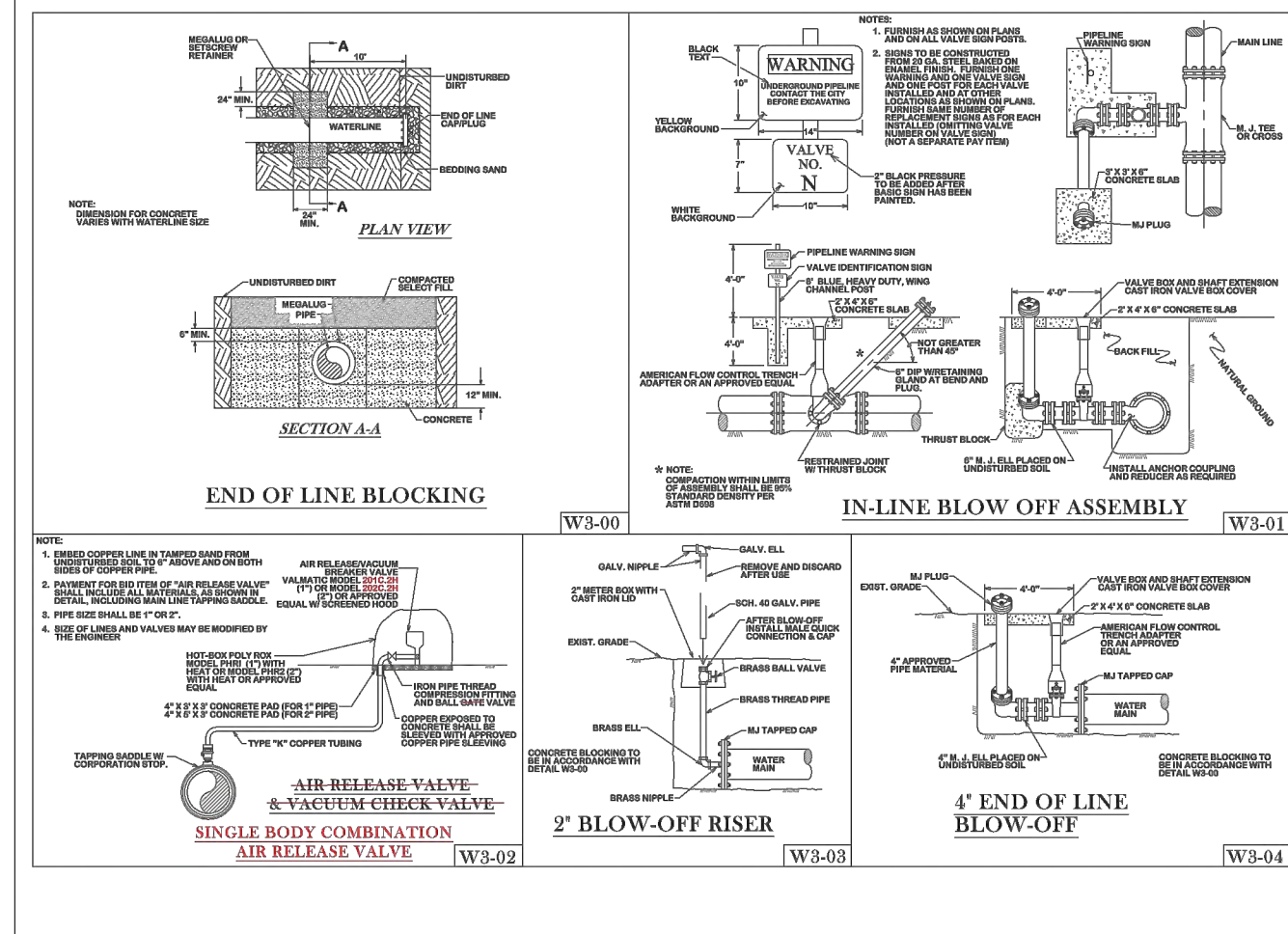
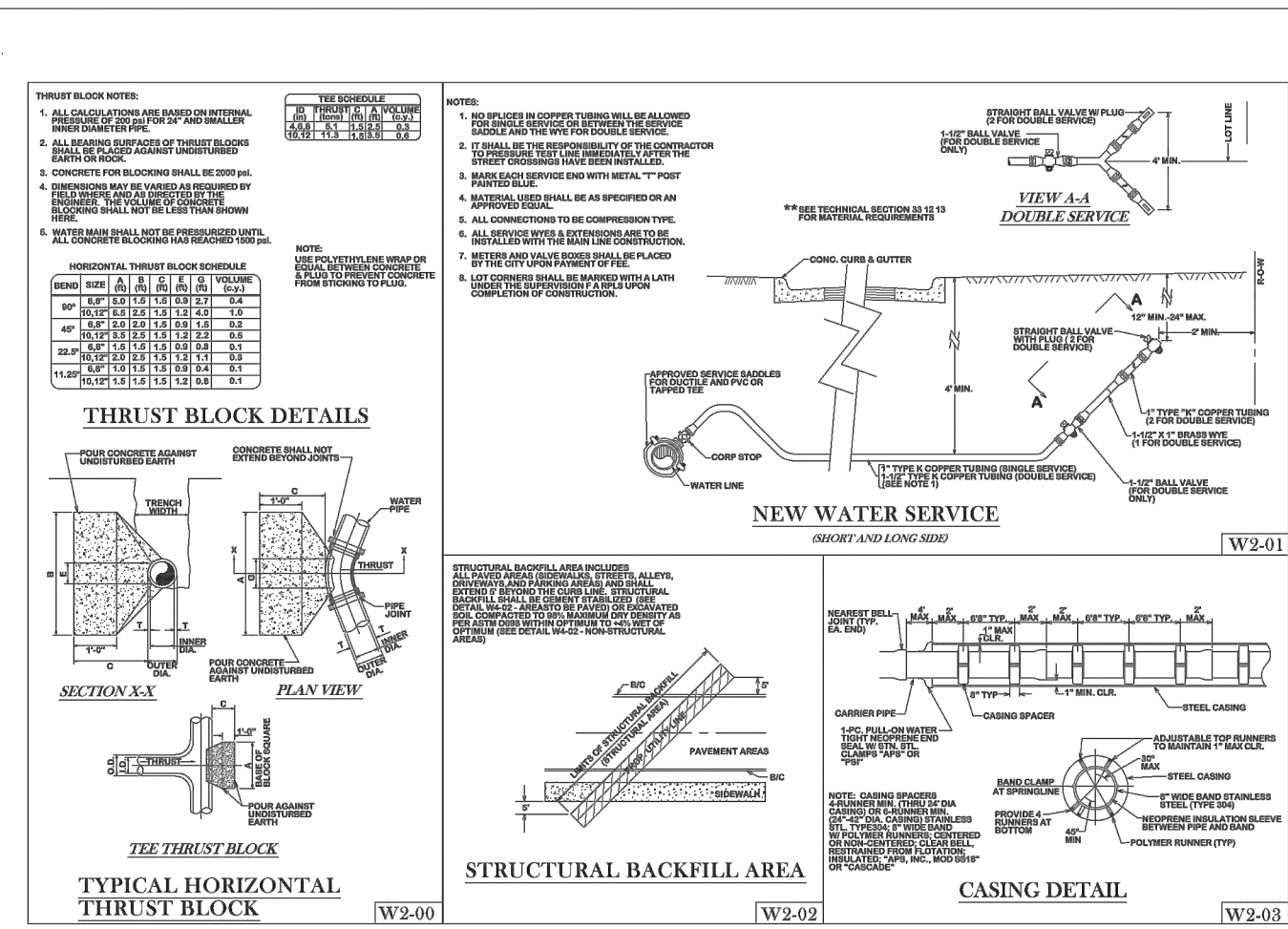
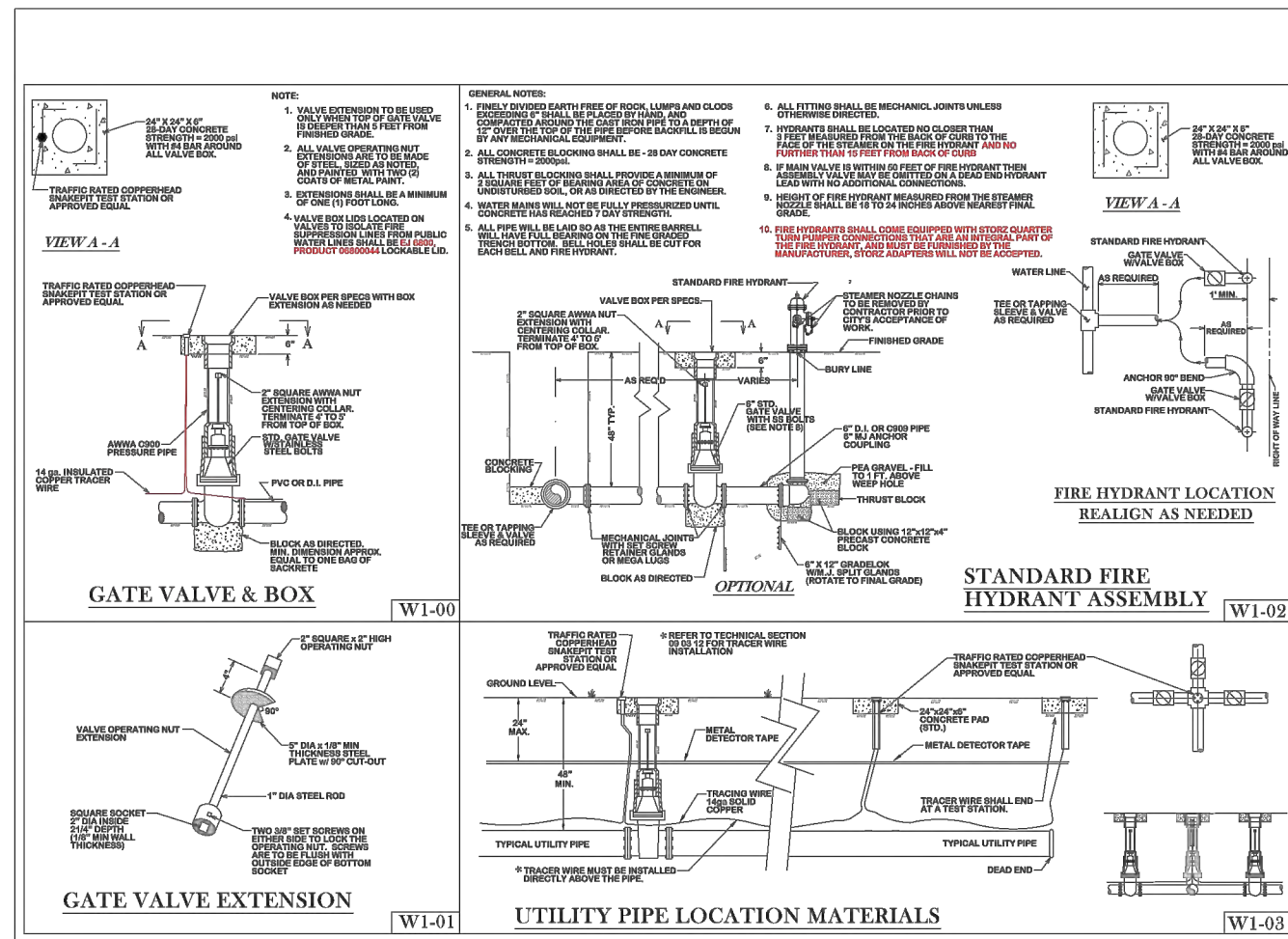
BRYAN - COLLEGE STATION STANDARD STORM WATER POLLUTION PREVENTION DETAILS
 CITY OF COLLEGE STATION
 CITY OF BRYAN
 SHEET 1 OF 1

REVISIONS

REV.	DATE	DESCRIPTION

ISSUE DATE: 04-24-2023
 DRAWN BY: CS
 CHECKED BY: MK
 PROJECT #: 21-1472

C1402

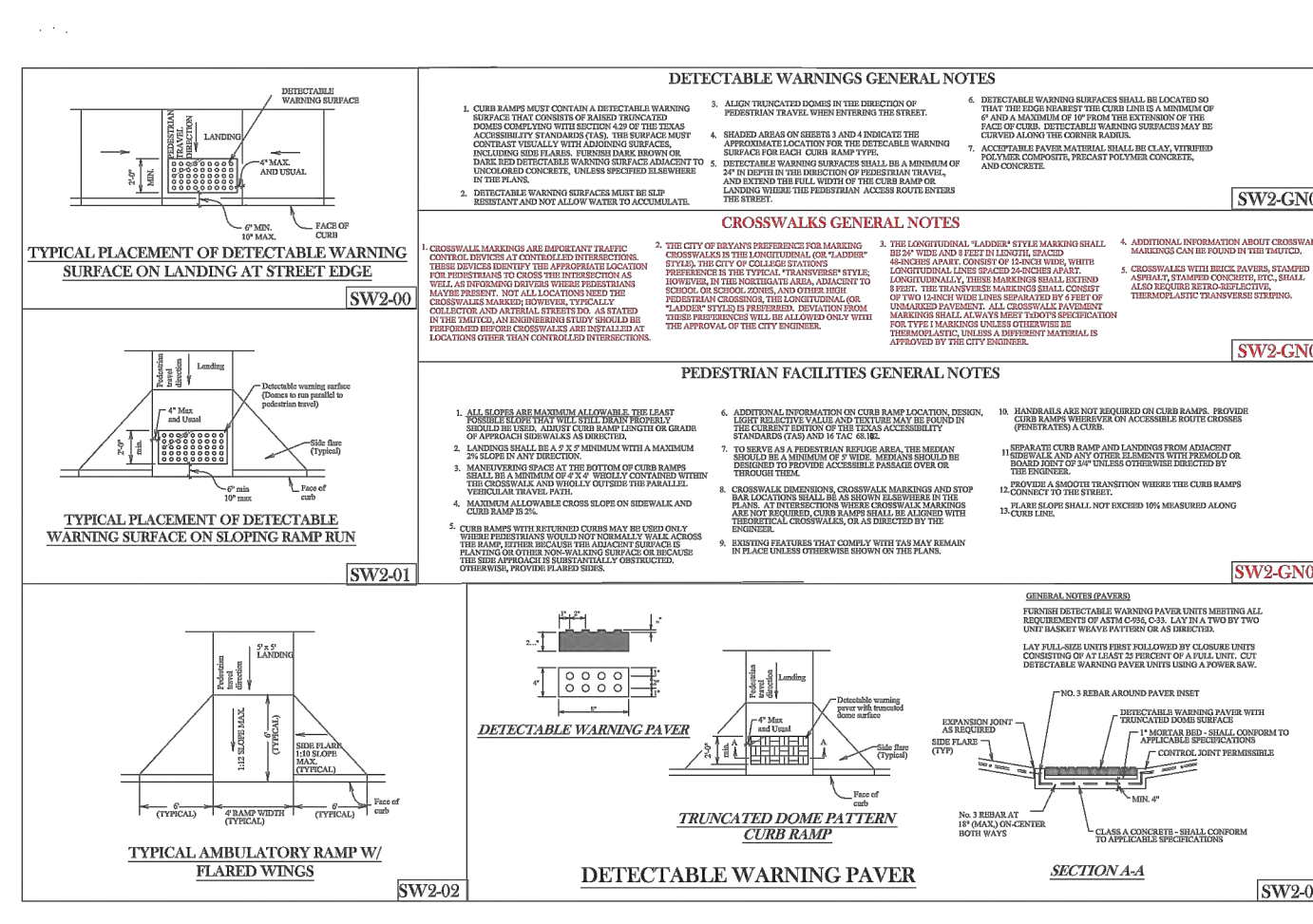
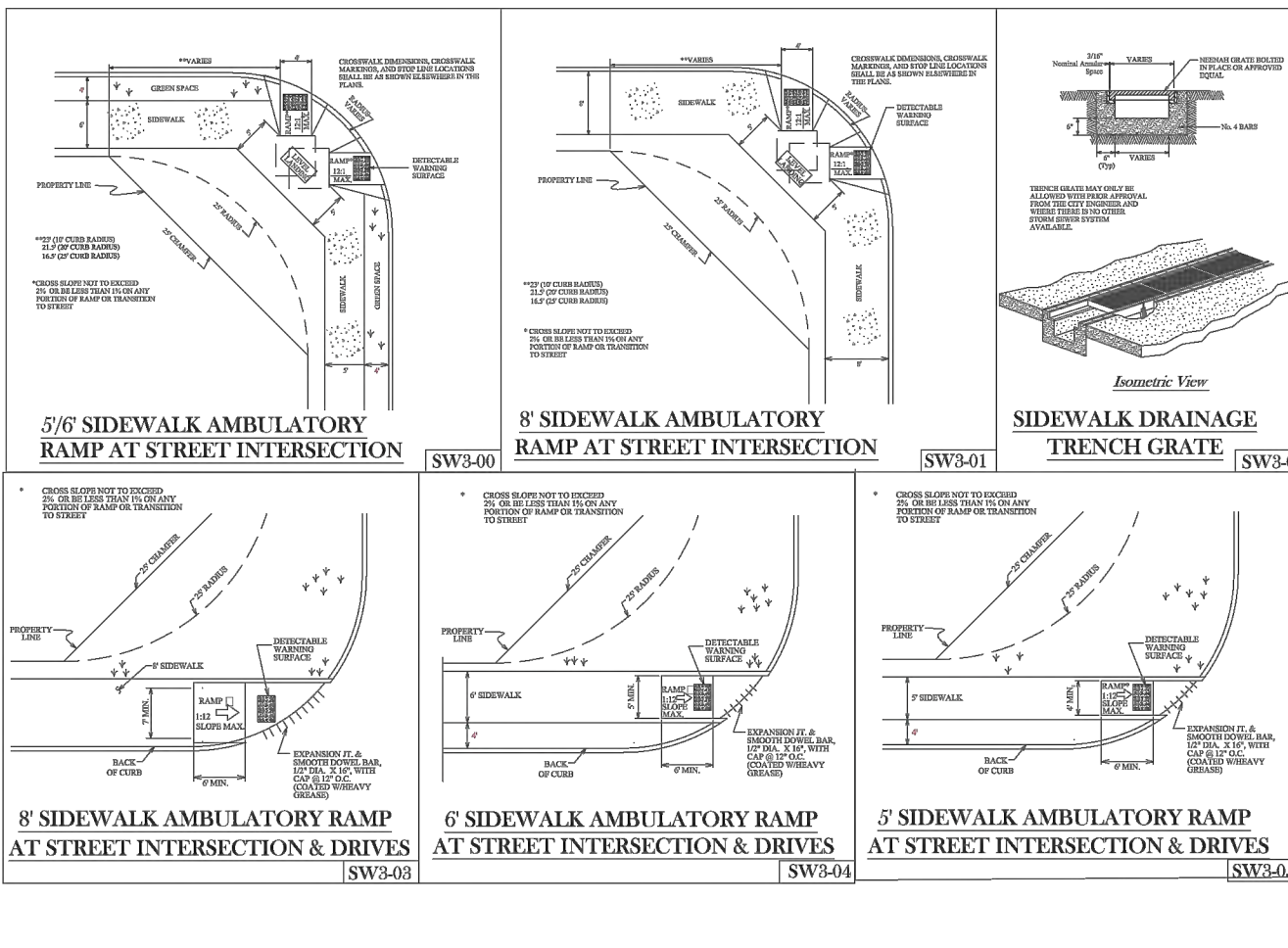
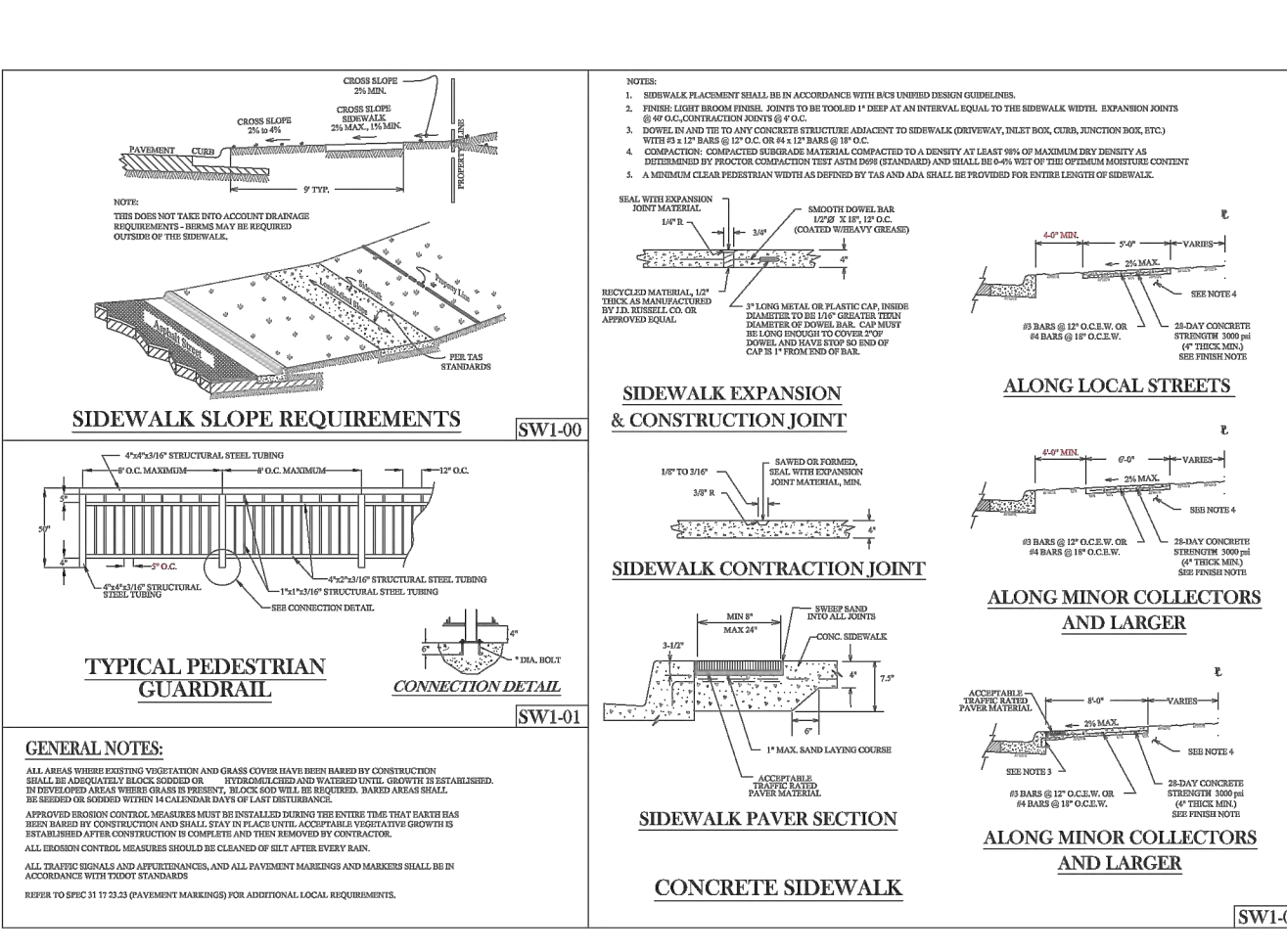


BRYAN - COLLEGE STATION STANDARD WATER DETAILS

CITY OF COLLEGE STATION

CITY OF BRYAN

DATE: 01/11/2023
 DRAWN BY: NTS
 CHECKED BY: W.F.E.
 PROJECT: W.P.E.
 FIGURE: W1
 SHEET 1 OF 2

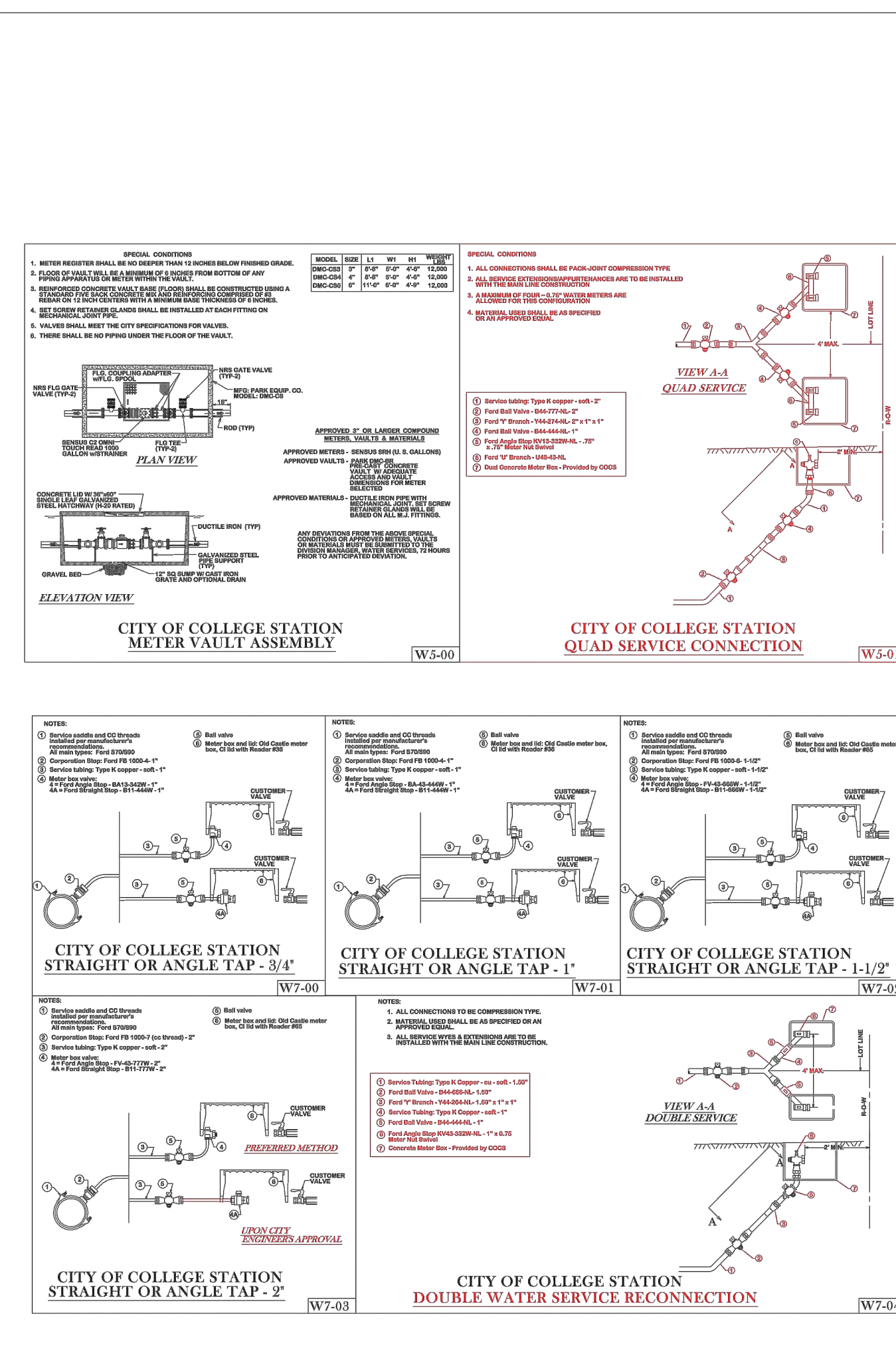
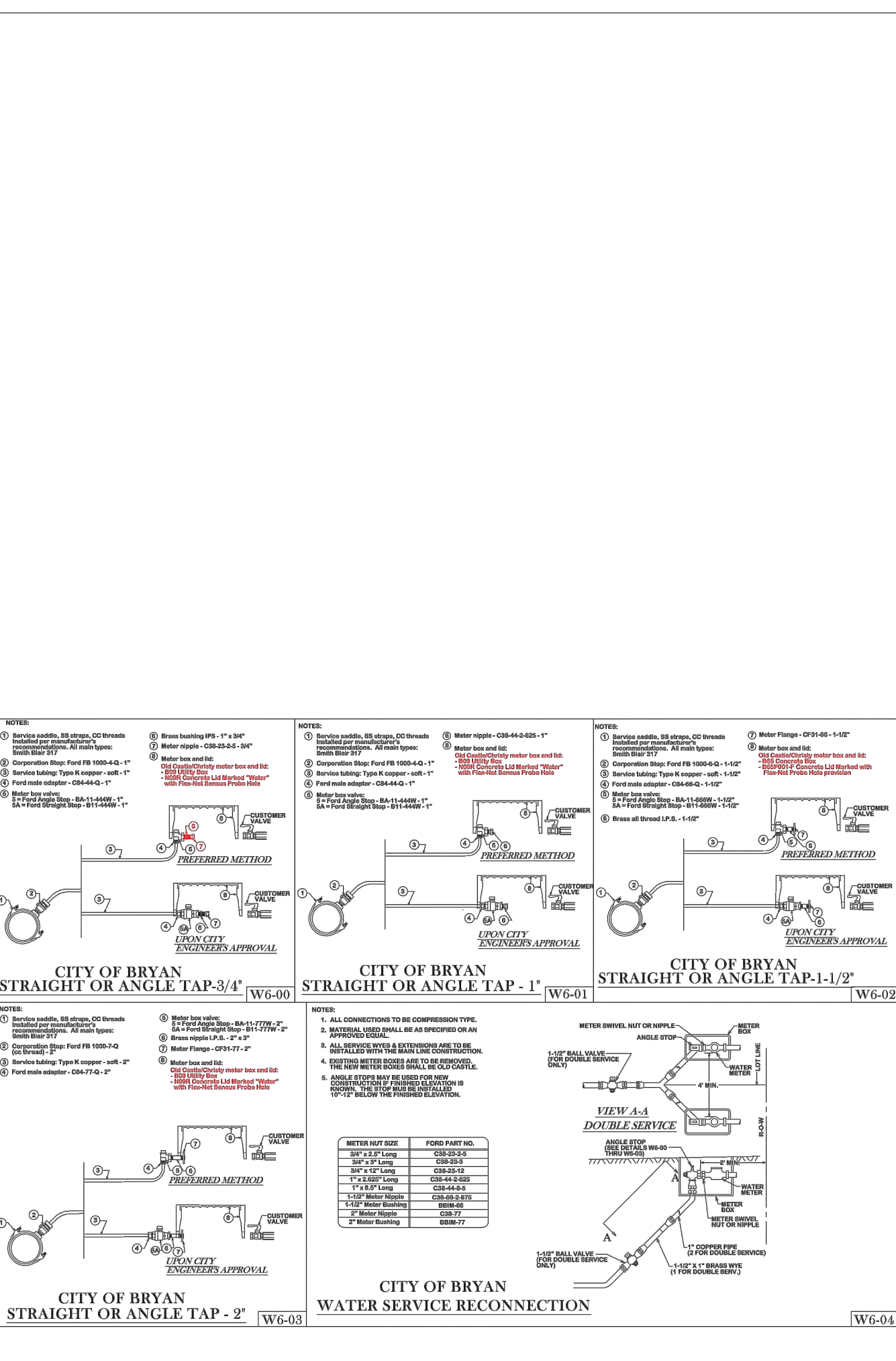


BRYAN - COLLEGE STATION STANDARD SIDEWALK DETAILS

CITY OF COLLEGE STATION

CITY OF BRYAN

DATE: 01/11/2023
 DRAWN BY: NTS
 CHECKED BY: W.F.E.
 PROJECT: W.P.E.
 FIGURE: SW1
 SHEET 1 OF 1

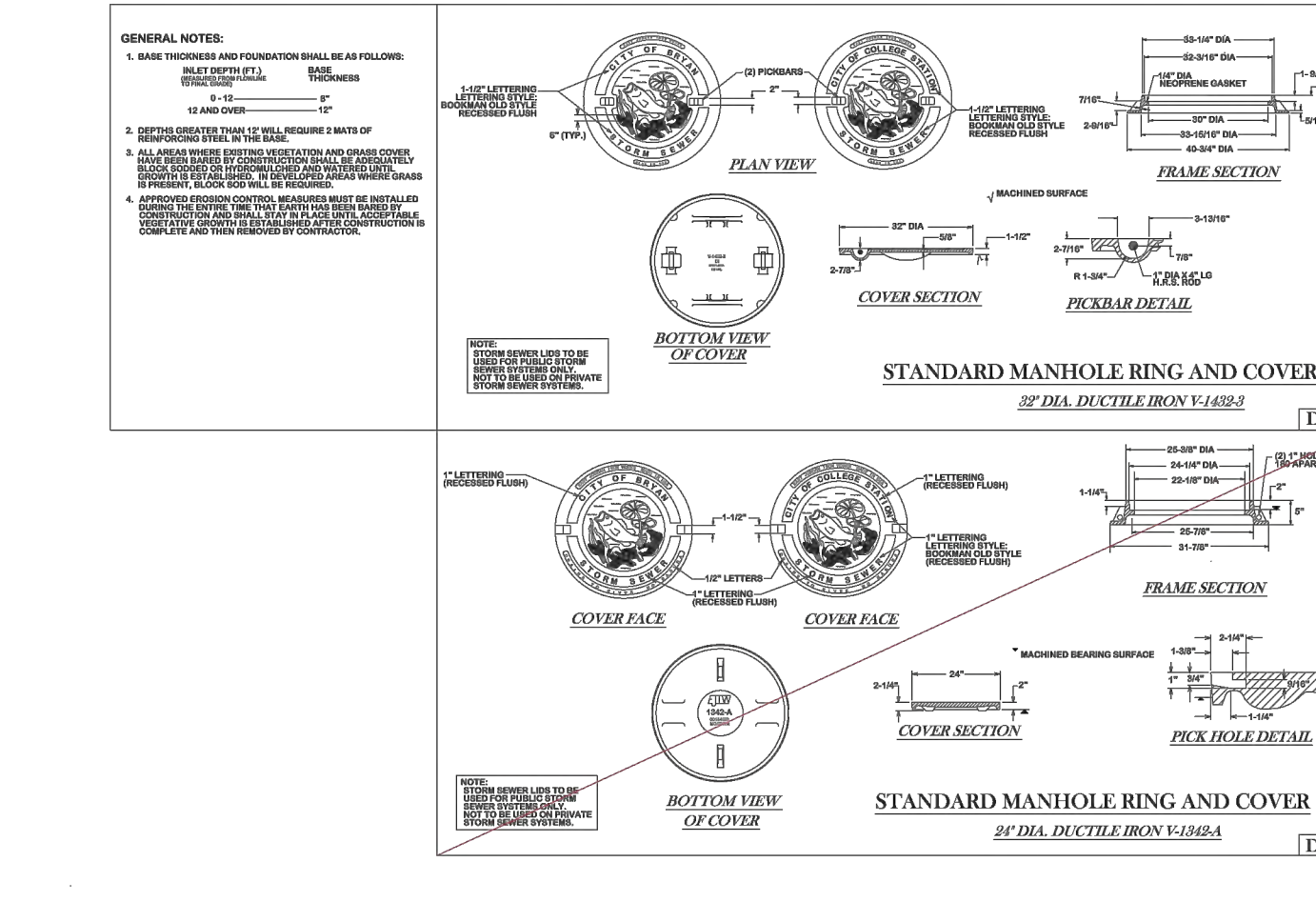
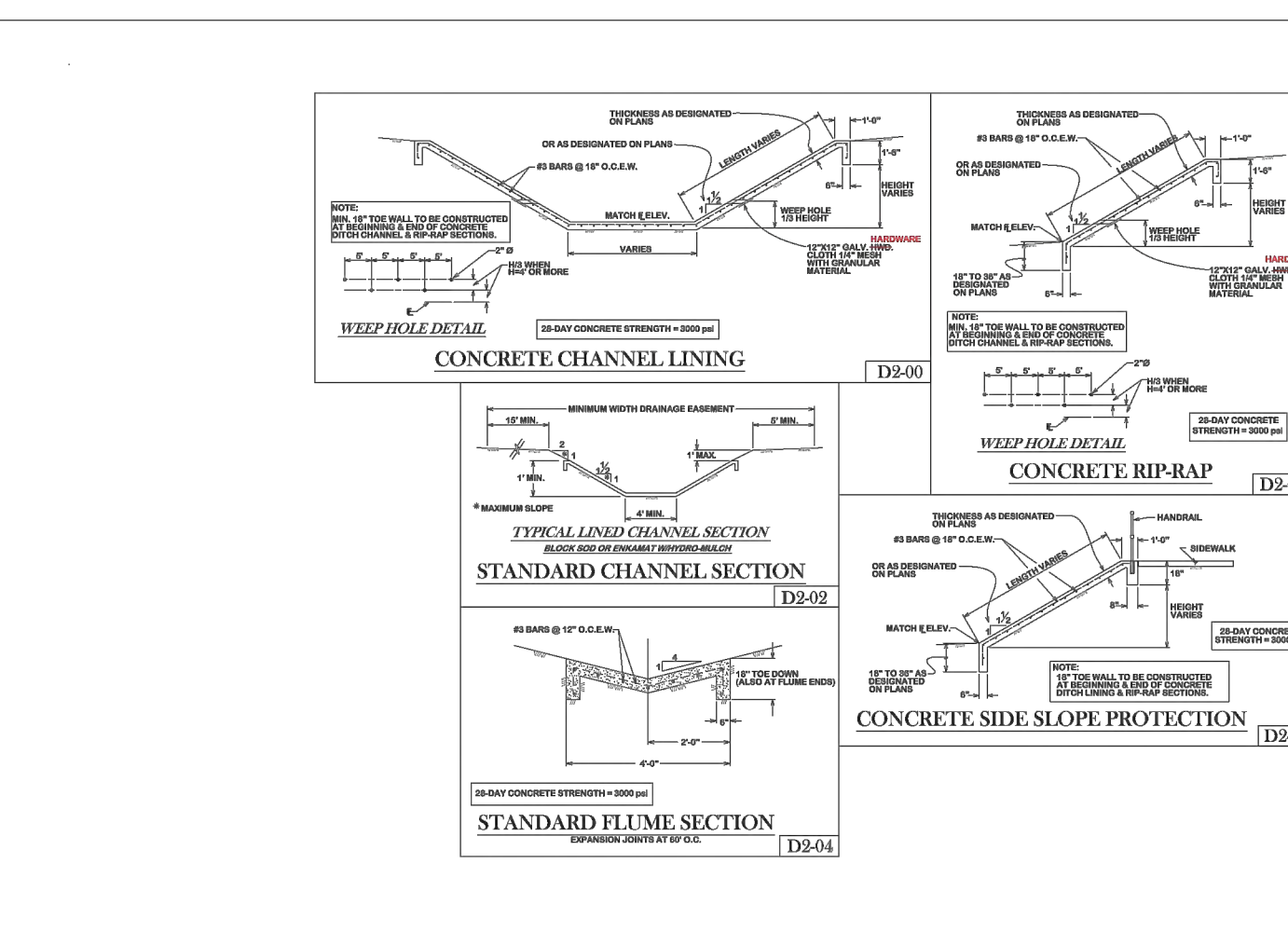
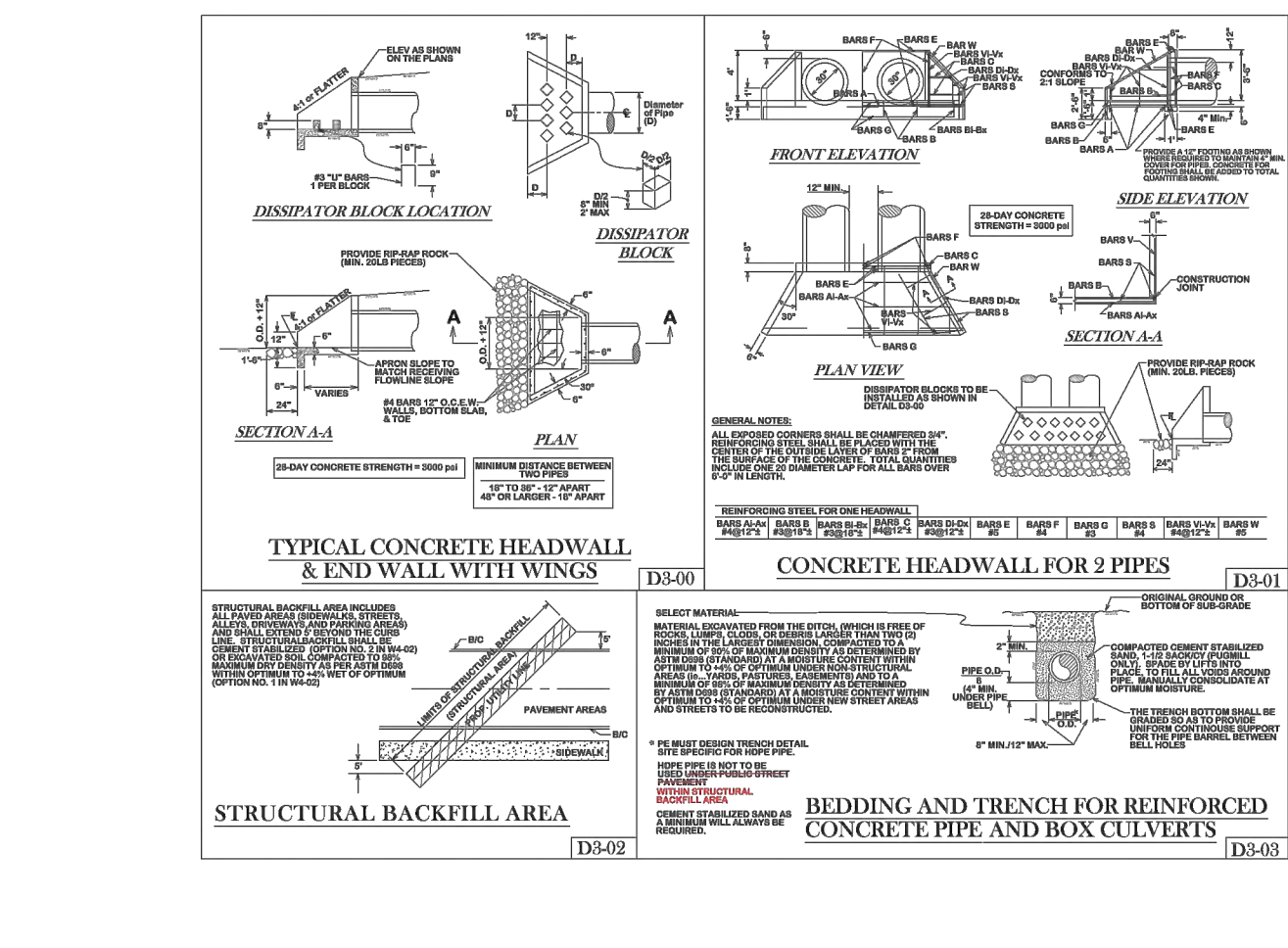
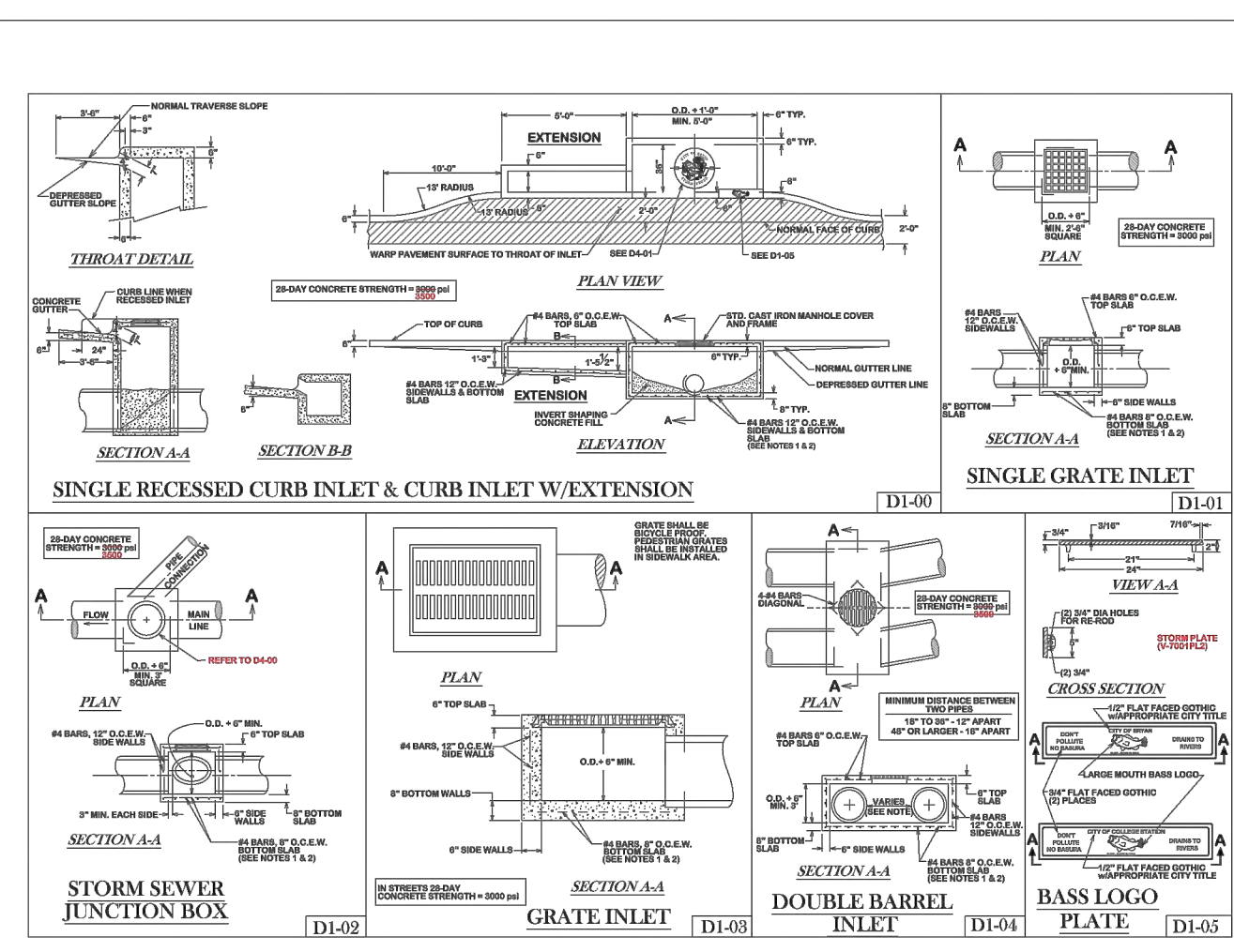


BRYAN - COLLEGE STATION STANDARD WATER DETAILS

CITY OF COLLEGE STATION

CITY OF BRYAN

DATE: 01/11/2023
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 CHECKED BY: W.F.E.
 PROJECT: W.P.E.
 FIGURE: W2
 SHEET 2 OF 2



BRYAN - COLLEGE STATION STANDARD DRAINAGE DETAILS

CITY OF COLLEGE STATION

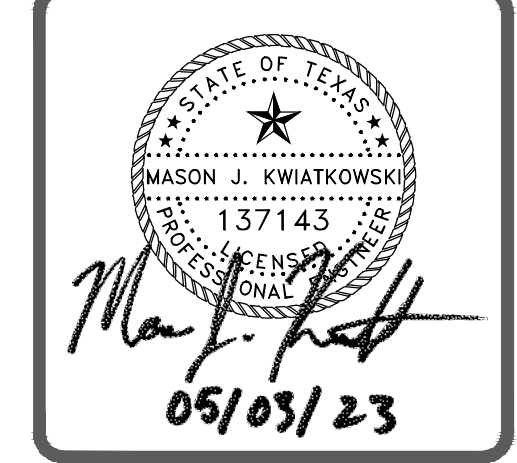
CITY OF BRYAN

DATE: 01/11/2023
 DRAWN BY: NTS
 CHECKED BY: W.F.E.
 PROJECT: W.P.E.
 FIGURE: D
 SHEET 1 OF 1



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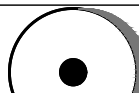






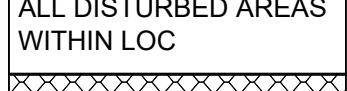

PROJECT #: 21-1472

REVISIONS

REV.	DATE	DESCRIPTION

C1403

PLANT SCHEDULE

TREES	QTY	COMMON / BOTANICAL NAME	CONT	CAL	DESCRIPTION	SF VALUE	TOTAL
	13	MONTEREY OAK QUERCUS POLYMORPHA 'MONTEREY'	65 GAL	3.5" CAL	10'-12" H, 6" CLEAR TRUNK	250 SF	3,250 SF
	6	SHUMARD RED OAK QUERCUS SHUMARDII	65 GAL	3.5" CAL	10'-12" HT X 5'-6" W, 6" TRUNK HT	250 SF	1,500 SF
	10	SOUTHERN LIVE OAK QUERCUS VIRGINIANA	65 GAL	3.5" CAL	10'-12" H X 5'-6" W	250 SF	2,500 SF
ORNAMENTAL TREES	QTY	COMMON / BOTANICAL NAME	CONT	CAL	DESCRIPTION		
	6	TEXAS MOUNTAIN LAUREL DERMATOPHYLLUM SECUNDIFLORUM	15 GAL	2" CAL	8'-10" H, MULTI-TRUNK	100 SF	600 SF
SHRUBS	QTY	COMMON / BOTANICAL NAME	SIZE	DESCRIPTION	SPACING		
	137	DWARF BURFORD HOLLY ILEX CORNUTA 'DWARF BURFORD'	5 GAL	MINIMUM 3' HEIGHT AT TIME OF PLANTING	AS SHOWN	10 SF	1,370 SF
	21	TWISTLEAF YUCCA YUCCA RUPICOLA	5 GAL	MINIMUM 3' HEIGHT AT TIME OF PLANTING	AS SHOWN	10 SF	210 SF
	134	TEXAS SAGE, GREEN CLOUD LEUCOPHYLLUM FRUTESCENS 'GREEN CLOUD'	5 GAL	MINIMUM 3' HEIGHT AT TIME OF PLANTING	AS SHOWN	10 SF	1,140SF
GROUND COVERS	QTY	COMMON / BOTANICAL NAME	CONT	DESCRIPTION			
	29,712 SF 15% MAX	BERMUDA GRASS CYNODON DACTYLON	HYDROSEED	PER TNLA STANDARDS & SPECS	ALL DISTURBED AREAS WITHIN LOC		100 1,568 SF
	384 SF	SILVER PONYFOOT DICHONDRA ARGENTEA	1 GAL	PER TNLA STANDARDS & SPECS	24" O.C.		

LANDSCAPE CALCULATIONS:

- 1) 17% OF DEVELOPED AREA 1.41 ACRES (61,504 SQ FT) = 10,456 SF LANDSCAPING
- 2) NOT LESS THAN 50% OF REQUIRED AREA SHALL BE TREES; 5,228 SF REQ'D; 7,850 PROVIDED
- 3) NOT LESS THAN 50% OF TREE PLANTED SHALL BE CANOPY; 2,614 SF REQ'D; 7,250 PROVIDED
- 4) ALL PARKING ISLANDS MUST HAVE A CANOPY TREE. (1 ISLAND W UTILITY CONFLICT)

TOTAL AREA REQUIRED: 10,456 SF
 LANDSCAPED AREA PROVIDED: 12,138 SF

** PERMANENT IRRIGATION ON ALL TREE AND SHRUBS IS REQUIRED FOR THIS PROJECT**

TEMPORARY IRRIGATION WILL BE PROVIDED FOR ALL TURF GRASS AREAS

LANDSCAPE NOTES:

1. COMPLETE ALL LANDSCAPE PLANTING AND RELATED EARTHWORK INCLUDING ALL PRODUCTS, EQUIPMENT AND LABOR, FOR THE LANDSCAPE AREAS SHOWN ON THE DRAWING AND DESCRIBED IN THE SPECIFICATIONS.
2. ALL QUESTIONS SHOULD BE REFERRED TO THE PROJECT LANDSCAPE ARCHITECT.
3. INFORMATION PROVIDED ON THIS PLAN IS GENERAL IN NATURE. DIMENSIONS, LOCATIONS, AND AREAS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO BIDDING & INSTALLATION.
4. QUANTITIES SHOWN FOR PLANT MATERIALS ARE APPROXIMATE. ACTUAL INSTALLED QUANTITIES OF PLANT MATERIALS MAY VARY FROM THE PLAN AND SHOULD BE FIELD DETERMINED ACCORDING TO THE GIVEN SPACING AND FIELD CONDITIONS. DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE PLAN WHICH LIMIT THE CONTRACTOR SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
5. BY BIDDING, THE CONTRACTOR ACKNOWLEDGES THAT HE/SHE HAS SATISFIED HIMSELF/HERSELF AS TO THE NATURE AND LOCATION OF THE WORK AND TO THE QUALITY OF SURFACE AND SUBSURFACE MATERIALS OR OBSTACLES INSOFAR AS THIS DATA IS REASONABLY ASCERTAINABLE FROM AN INSPECTION OF THE SITE. ANY FAILURE BY THE CONTRACTOR TO ACQUAINT HIMSELF/ HERSELF WITH THE AVAILABLE INFORMATION WILL NOT RELIEVE HIM/HER FROM RESPONSIBILITY FOR ESTIMATING PROPERLY THE DIFFICULTY OR COST OF SUCCESSFULLY PERFORMING THE WORK AS DESCRIBED.
6. INSTALLATION OF ALL LANDSCAPING MUST BE COORDINATED WITH THE INSTALLATION OF RELATED IRRIGATION, SITE WORK, AND GRADING.
7. UNLESS SPECIFICALLY NOTED, INSTALL ALL MASED PLANTING UTILIZING EQUILATERAL TRIANGULAR SPACING.
8. EVENLY APPLY 3" OF MULCH TO ALL CONTINUOUS PLANTING BEDS. MULCH TO BE TRANSPORTED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR TO ENSURE ALL SUBSURFACE IRRIGATION IS COMPLETELY COVERED BY MULCH.
9. SUBSTITUTIONS OF PLANT SPECIES, SIZES, OR OTHER SPECIFIED MATERIALS WILL NOT BE ALLOWED WITHOUT PRIOR APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT.
10. PLANT MATERIAL AND LAYOUT MUST BE APPROVED BY THE PROJECT LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
11. ALL IDENTIFICATION TAGS PROVIDED BY GROWERS AND PLACED ON TREES AND SHRUBS ARE TO REMAIN ON THE PLANTS THROUGH THE PUNCH-LIST INSPECTION. TAGS ARE TO BE REMOVED PRIOR TO FINAL ACCEPTANCE, OR UPON REQUEST OF THE PROJECT LANDSCAPE ARCHITECT.
12. SEED MIX/SOLID SOD WILL BE APPLIED TO ALL CONSTRUCTION-DAMAGED GROUND SURFACES NOT OTHERWISE PLANTED. CONTRACTOR SHALL REVIEW RELATED CONSTRUCTION DRAWINGS FOR LIMITS OF CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR COORDINATING WITH OTHER SITE CONTRACTORS TO DETERMINE ACTUAL AREAS OF SEEDING REQUIRED, INCLUDING AREAS DISTURBED BY UTILITY EXTENSIONS.
13. THE LANDSCAPE CONTRACTOR SHALL EXCAVATE FULLY PREPARED PLANT BEDS AS REQUIRED TO ACCOMMODATE A FULL 8" OF PREPARED SOIL AND 3" MULCH LAYER. CLEAN, NATIVE TOPSOIL REMOVED FROM THESE BEDS MAY BE SPREAD ON NEARBY AREAS TO BE SODDED OR SEEDED. STONES LARGER THAN 1" DIAMETER SHALL BE REMOVED AND DISPOSED OF OFF SITE. FOLLOWING EXCAVATION, PLACE PREPARED SOIL IN THESE PLANT BEDS. PREPARED SOIL SHALL CONSIST OF 5" IMPORTED "CHOCOLATE" LOAM TOPSOIL AND 3" ORGANIC COMPOST SOIL CONDITIONER (SUCH AS "LIVING EARTH TECHNOLOGIES", "BACK-TO-EARTH" OR OTHER APPROVED MANUFACTURER), THOROUGHLY BLENDED TOGETHER TO 20% MINIMUM ORGANIC CONTENT. THIS MIX SHALL ALSO BE USED TO BACKFILL PLANTING PITS OF ALL TREES. **CONTRACTOR SHALL SUBMIT PLANTING SOIL MATERIAL TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO PURCHASE.**
14. ALL PLANTING BEDS INDICATED WILL BE IRRIGATED WITH UNDERGROUND AUTOMATIC IRRIGATION. IRRIGATION CONTRACTOR IS TO BE A STATE OF TEXAS LICENSED IRRIGATOR, AND SHALL FOLLOW ALL TCEQ CODES AND REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS AND SPECIFICATIONS FOR IRRIGATION SYSTEM INCLUDING PIPE SIZES AND LOCATIONS.
15. ALL SEEDING AREAS DISTURBED BY CONSTRUCTION SHALL BE TEMPORARILY IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF SIX INCHES. THE IRRIGATION SHALL OCCUR AT TEN-DAY INTERVALS DURING THE FIRST TWO MONTHS. RAINFALL OCCURENCES OF 1/2 INCH OR MORE SHALL POSTPONE THE WATERING SCHEDULE FOR ONE WEEK. RESTORATION SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1-1/2 INCHES HIGH WITH 95% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 16 SQUARE FEET EXIST.
16. REGULAR MAINTENANCE IS REQUIRED OF ALL LANDSCAPE AREAS AND PLANT MATERIALS IN A VIGOROUS AND HEALTHY CONDITION, FREE FROM DISEASES, PEST WEEDS, AND LITTER. THIS MAINTENANCE SHALL INCLUDE WEEDING, WATERING, FERTILIZATION, PRUNING, MOWING, EDGING, MULCHING OR OTHER NEEDED MAINTENANCE, IN ACCORDANCE WITH GENERALLY ACCEPTED HORTICULTURAL PRACTICES UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE PROJECT LANDSCAPE ARCHITECT.
17. THE OWNERS OF THE LANDSCAPED PROPERTY, OR THE MANAGER OR AGENT OF THE OWNER, SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE AREAS. SAID AREAS SHALL BE MAINTAINED SO AS TO PRESENT A HEALTHY, NEAT AND ORDERLY APPERARANCE AT ALL TIMES AND SHALL BE KEPT FREE OF REFUSE AND DEBRIS. ALL PLANTING BEDS SHALL BE PROVIDED WITH A READILY AVAILABLE WATER SUPPLY AND WATERED AS NECESSARY TO ENSURE CONTINUOUS HEALTHY GROWTH AND DEVELOPMENT. MAINTENANCE SHALL INCLUDE THE REPLACEMENT OF ALL DEAD PLANT MATERIAL IF THAT MATERIAL WAS USED TO MEET THE REQUIREMENTS OF THE ORDINANCE.
18. NO TOPSOIL SHALL BE PLACED UNTIL SUBGRADE IS APPROVED BY LANDSCAPE ARCHITECT. CONTRACTOR TO FURNISH AND SPREAD TOPSOIL ON LAWN AREAS TO A DEPTH OF FOUR INCHES. WORK TOPSOIL TO A SMOOTH UNIFORM SURFACE AND COMPACT FIRMLY. FEATHER TOPSOIL INTO UNDISTURBED AREAS CREATING A SMOOTH, EVEN TRANSITION. SPREAD ADDITIONAL TOPSOIL IN UNDISTURBED AREAS TO ELIMINATE WATER PONDING. STONES LARGER THAN 1" DIAMETER SHALL BE REMOVED FROM TURF AREAS AND DISPOSED OF OFF SITE.
19. NO CUTTING, FILLING, TRENCHING, ROOT DISTURBANCE, SOIL DISTURBANCE, OR CONSTRUCTION IMPACTS SHALL OCCUR TO THE TRUNK WITHIN THE CRITICAL ROOT ZONE UNLESS DONE BY HAND.
20. FROM APRIL 1 TO SEPTEMBER 30, ONLY CONTAINER GROWN TREES MAY BE PLANTED. FROM OCTOBER 1 TO MARCH 31, EITHER CONTAINER GROWN OR BALL AND BURLAPPED TREES MAY BE PLANTED.

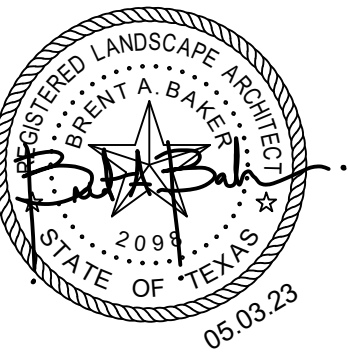
LANDSCAPE MAINTENANCE NOTES:

PROPERTY LANDSCAPING SHALL BE MAINTAINED AT ALL TIMES. THE QUALITY OF THE LANDSCAPE MAINTENANCE SHALL MEET STANDARDS OF PERFORMANCE PROVIDED BY LANDSCAPE COMPANIES IN THE REGION. LANDSCAPE AREAS WILL AT ALL TIMES HAVE A NEAT, CLEAN, HEALTHY, MANICURED APPEARANCE.

1. TURF AREAS
 - A. MOWING & EDGING OF ALL TURF AREAS SHALL BE PERFORMED AT LEAST ONCE PER WEEK.
 - B. PERENNIAL GRASS OVERSEEDING SHALL BE SEPARATE & MUST BE APPROVED BY THE OWNER PRIOR TO START. OVERSEEDING SHALL BE SPREAD AT A RATE TO INSURE A LUSH, THICK CONSISTENT WINTER TURF. TRIMMING & EDGING OF TURF AREAS TO BE PERFORMED EACH VISIT.
 - C. ALL TURF AREAS ARE TO BE FERTILIZED A MINIMUM OF FOUR TIMES PER YEAR W/ A HIGH QUALITY, SLOW RELEASE FERTILIZER FROM A REPUTABLE MANUFACTURER.
 - D. CONTRACTOR SHALL APPLY APPROPRIATE FUNGICIDES AS NECESSARY & PRE-EMERGENT HERBICIDE TWO TIMES PER YEAR & POST-EMERGENT HERBICIDE AT THE TIME DEEMED MOST EFFICIENT & FAVORABLE BY CONTRACTOR.
 - E. TURF TO BE TREATED AS NECESSARY W/ APPROPRIATE INSECTICIDE TO CONTROL SOIL PESTS.
 - F. RAKING TO BE PERFORMED AS NEEEDED TO MAINTAIN APPEARANCE. DE-THATCH & AERATE TURF ONCE DURING THE YEAR IN CONJUNCTION W/ RYE OVERSEEDING. IF OWNER OPTS TO NOT PERFORM OVERSEED, DE-THATCHING & AERATING TO BE PERFORMED IN EARLY SPRING.
 - G. BAG ALL AREAS WITHIN 45 FEET OF BUILDINGS, DRIVEWAYS, & SIDEWALKS.
2. SHRUBS, GROUND COVER, BEDS & ANNUALS
 - A. TO BE MAINTAINED WEED FREE, AS NEEDED USING APPROPRIATE HERBICIDES & MANUAL WEEDING. USE A MINIMUM OF TWO PRE-EMERGENT APPLICATIONS & MANUALLY WEED EACH VISIT.
 - B. TO BE FERTILIZED FOUR TIMES PER YEAR W/ A BALANCED HIGH QUALITY, SLOW RELEASE FERTILIZER, APPROPRIATE TO THE SHRUBS ON THE PROJECT.
 - C. SHRUBBERY TO BE HAND TRIMMED AS SPECIFIED TO MAINTAIN A MANICURED APPEARANCE OR AS OTHERWISE REQUESTED BY OWNER. USE ONLY SKILLED PERSONNEL W/ SIGNIFICANT EXPERIENCE IN CLASS A PROPERTIES. NO SHEARING, ALL TO BE DONE W/ SELECTIVE HAND PRUNING TO KEEP PLANT WITHIN BOUNDS BUT TO MAINTAIN A NATURAL SHAPE & APPEARANCE.
 - D. TO BE INSPECTED WEEKLY BY QUALIFIED SUPERVISOR, FOLLOWED BY A WRITTEN REPORT OF PROBLEMS DISCOVERED & ACTIONS TO BE TAKEN.
 - E. AREAS TO BE SPRAYED W/ APPROPRIATE INSECTICIDES & FUNGICIDES, AS NECESSARY.
 - F. ANNUALS TO BE CHANGED OUT FOUR (4) TIMES PER YEAR USING FOUR (4) INCH POTS & FERTILIZED AT EACH CHANGE. MONITOR & APPLY FUNGICIDES & INSECTICIDES TO INSURE MAXIMUM VIGOR.
 - G. APPLY SHREDDED HARDWOOD MULCH TO A DEPTH OF TWO INCHES, A MINIMUM OF THREE TIMES ANNUALLY. IF MULCH DEPTH ACCUMULATION BECOMES SO EXCESSIVE AS TO BE DETRIMENTAL TO PLANT HEALTH, RAKE OUT & DISPOSE OF EXCESS QUANTITIES OF THE OLDEST MATERIAL, OFF-SITE.
 - H. ALL TRAFFIC & DIRECTIONAL SIGNAGE TO BE KEPT FREE & CLEAR FROM ALL BUSHES/SHRUBS, ETC.
 - I. A THREE-FOOT PERIMETER AROUND ALL FIRE HYDRANTS SHALL BE MAINTAINED
3. LANDSCAPE TREES (4" CALIPER OR LESS)
 - A. TO BE LIGHTLY PRUNED AS NECESSARY (AT LEAST ONCE A MONTH DURING GROWING SEASON).
 - B. TO BE PRUNED & SHAPED ONCE DURING WINTER MONTHS. PRUNE TO CLASS I STANDARDS. NOTIFY MANAGEMENT PRIOR TO & IMMEDIATELY FOLLOWING PRUNING ACTIVITY. PRUNING TO BE DONE BY QUALIFIED TREE CARE FIRM, SUBJECT TO MANAGEMENT APPROVAL.
 - C. DEEP ROOT FERTILIZE ALL LANDSCAPE TREES ONE TIME PER YEAR. SUBMIT INFORMATION ON MATERIALS, APPLICATION METHODS & APPLICATOR QUALIFICATION ONE WEEK PRIOR TO PERFORMING WORK TO OWNER'S REPRESENTATIVE.
 - D. ALL TRAFFIC & DIRECTIONAL SIGNAGE TO BE KEPT FREE OF TREE LIMBS & BRANCHES
4. LARGE TREES (GREATER THAN 4" CALIPER)
 - A. CONTRACTOR SHALL INSPECT FOR INSECT, DISEASE INFESTATIONS & TREE DAMAGE SUCH AS LIGHTNING OR VEHICULAR DAMAGE. CONTRACTOR SHALL NOTIFY MANAGEMENT IMMEDIATELY OF SUCH DANGER OR DISEASE SO THAT CORRECTIVE ACTION CAN BE TAKEN.
 - B. WHEN PRUNING IS REQUIRED TO REMOVE DEAD OR DAMAGED LIMBS, WORK IS TO BE DONE BY QUALIFIED TREE CARE FIRM. MANAGEMENT APPROVAL IS REQUIRED PRIOR TO PRUNING.
 - C. ANY FERTILIZING RECOMMENDED BY QUALIFIED TREE CARE FIRM IS SUBJECT TO APPROVAL.
 - D. ALL TRAFFIC & DIRECTIONAL SIGNAGE TO BE KEPT FREE OF TREE LIMBS & BRANCHES
5. DEBRIS & LITTER
 - A. NORMAL TRASH & LITTER WILL BE REMOVED FROM ALL LAWN & LANDSCAPED AREAS WEEKLY.
 - B. ALL DEBRIS RESULTING FROM ANY & ALL LANDSCAPE WORK SHALL BE CLEANED UP IMMEDIATELY.
6. PAVED AREAS
 - A. AT PARKING LOT PERIMETERS & PAVING JOINTS, WEEDS & GRASSES ARE TO BE CONTROLLED W/ CONTACT HERBICIDE SPRAYS & MANUAL WEEDING AS REQUIRED.
 - B. ALL DEBRIS RESULTING FROM ANY & ALL LANDSCAPE WORK SHALL BE CLEANED UP IMMEDIATELY.
7. IRRIGATION
 - A. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING & OPERATING ALL IRRIGATION SYSTEMS AT THE PROPERTY EXCEPT AS MAY BE OTHERWISE NOTED.
 - B. IRRIGATION SYSTEMS MUST BE INSPECTED MONTHLY & A REPORT MUST BE SUBMITTED TO MANAGEMENT. MANAGEMENT MUST APPROVE REPAIRS GREATER THAN \$250.00.
 - C. CONTRACTOR WILL ENSURE THAT WATERING CYCLES ARE IN COMPLIANCE W/ ANY CITY GUIDELINES AS A RESULT OF WATER RATIONING OR WATER CONSERVATION. ANY FEES OR PENALTIES INCURRED BY VIOLATION OF ORDINANCES WILL BE BILLED TO CONTRACTOR.
 - D. ALL HEADS & NOZZLES BROKEN BY LANDSCAPE MAINTENANCE OPERATIONS WILL BE REPAIRED OR REPLACED AT CONTRACTOR EXPENSE. ALL NOZZLES WILL BE CLEANED MONTHLY IF NECESSARY, & ALL HEADS WILL BE ADJUSTED AS NEEDED.
8. GENERAL
 - A. CONTRACTOR SHALL PROVIDE ADEQUATE SUPERVISION TO ASSURE THAT ALL WORK WILL BE DONE IN ACCORDANCE W/ THIS AGREEMENT & GENERALLY ACCEPTED GOOD PRACTICE. A WEEKLY VISIT BY A QUALIFIED SUPERVISOR IS A MINIMUM REQUIREMENT. ADEQUATE TIME SHALL BE ALLOWED FOR A THOROUGH & COMPLETE EXAMINATION OF THE ENTIRE PROPERTY.
 - B. CONTRACTOR SHALL REPLACE AT CONTRACTOR'S EXPENSE ANY PLANT MATERIAL THAT DIES DUE TO DAMAGE BY LAWN MAINTENANCE, EQUIPMENT OR CONTRACTOR'S NEGLIGENCE.
 - C. ALL WORK SHALL BE PERFORMED BY CONTRACTOR'S EMPLOYEES; NO WORK SHALL BE PERFORMED BY SUBCONTRACTORS WITHOUT WRITTEN CONSENT OF MANAGEMENT.
 - D. EMPLOYEES TO WEAR UNIFORMS & PROVIDE NEAT APPEARANCE & PROFESSIONAL BEHAVIOR.
 - E. CREW MEMBERS WILL OBSERVE ALL OSHA REGULATIONS. ALL EQUIPMENT WILL BE PROPERLY MAINTAINED & KEPT IN A SAFE OPERATING CONDITION.
 - F. ALL DEBRIS RESULTING FROM ANY & ALL LANDSCAPE WORK SHALL BE IMMEDIATELY CLEANED UP & REMOVED FROM SITE. USE OF AN ON-SITE DUMPSTER IS PROHIBITED.
 - G. ADDITIONAL PROJECTS, LANDSCAPE UPGRADES, ETC. WILL BE NEGOTIATED AS NEEDED.
 - H. POTS OR SIDEWALK PLANTERS AT PROPERTY SHALL BE MAINTAINED IN ACCORDANCE W/ ALL SPECS NOTED ABOVE. IRRIGATION SHALL BE MAINTAINED OR HAND WATER AS NEEDED.

SUBMISSIONS | REVISIONS:

03.08.2023	SITE DEVELOPMENT PERMIT R2
03.29.2023	SITE DEVELOPMENT PERMIT R3
04.19.2023	SITE DEVELOPMENT PERMIT R4
05.03.2023	SITE DEVELOPMENT PERMIT R5



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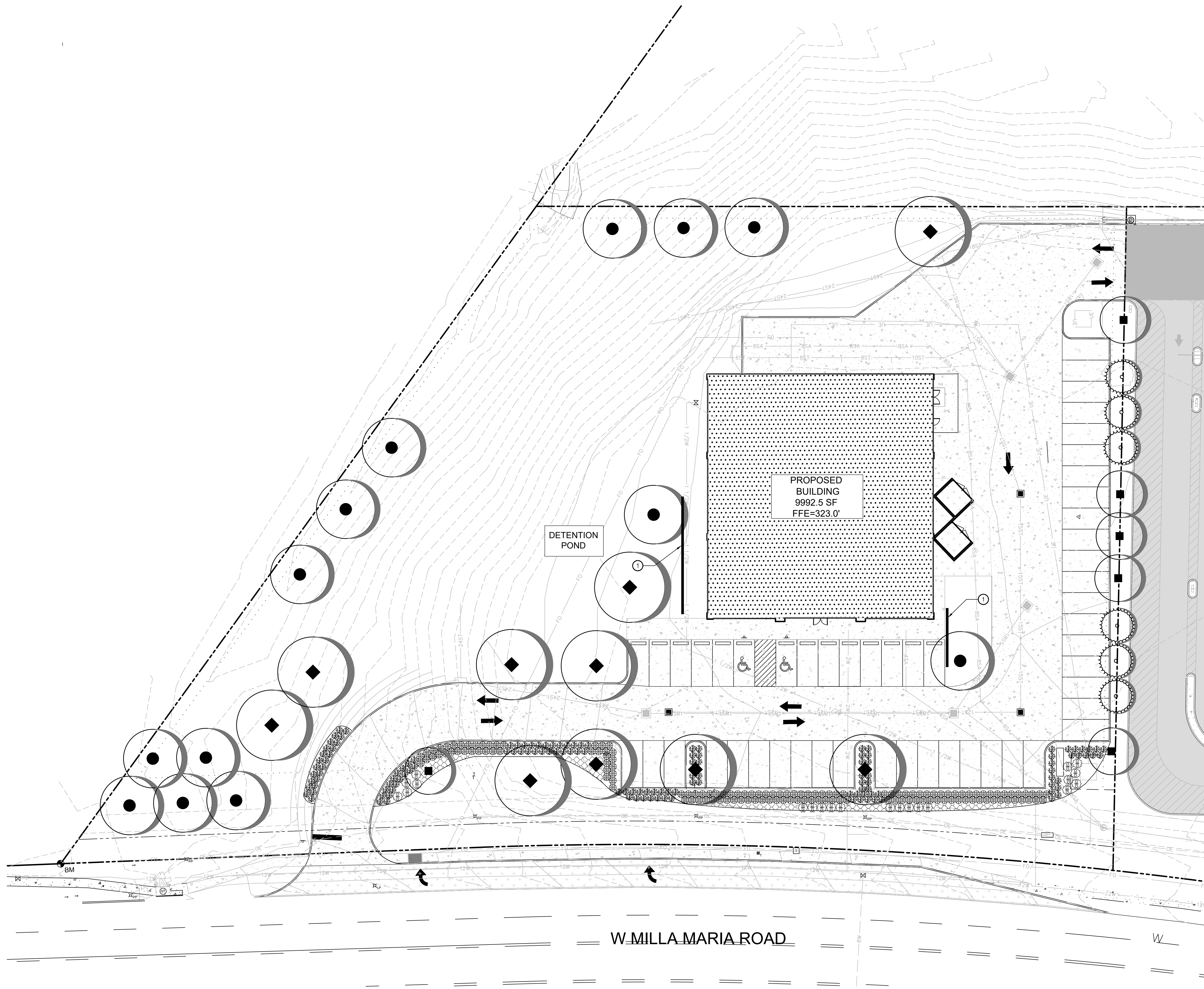
DOLLAR TREE
 1612 WEST MILLA MARIA RD.
 BRYAN, TEXAS 77807

sheet information ::

project #: 21.786
 date :: 05.03.2023
 designed :: bs
 drawn :: bs
 checked :: bab
 approved :: bab

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LANDSCAPE NOTES/
 SCHEDULE/
 CALCULATIONS

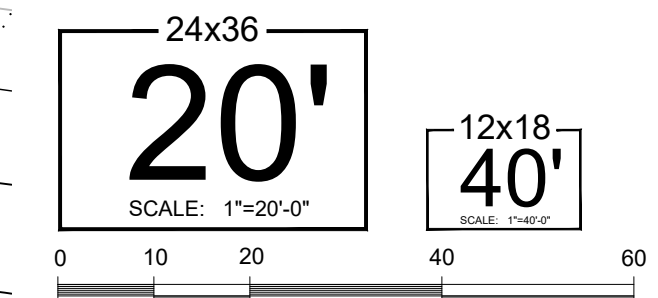


PLANT SCHEDULE		
TREES	QTY	COMMON / BOTANICAL NAME
	13	MONTEREY OAK QUERCUS POLYMORPHA 'MONTEREY'
	6	SHUMARD RED OAK QUERCUS SHUMARDII
	10	SOUTHERN LIVE OAK QUERCUS VIRGINIANA
ORNAMENTAL TREES	QTY	COMMON / BOTANICAL NAME
	6	TEXAS MOUNTAIN LAUREL DERMATOPHYLLUM SECUNDIFLORUM
SHRUBS	QTY	COMMON / BOTANICAL NAME
	137	DWARF BURFORD HOLLY ILEX CORNUTA 'DWARF BURFORD'
	21	TWISTLEAF YUCCA YUCCA RUPICOLA
	134	TEXAS SAGE, GREEN CLOUD LEUCOPHYLLUM FRUTESCENS 'GREEN CLOUD'
GROUND COVERS	QTY	COMMON / BOTANICAL NAME
	29,712 SF 15% MAX	BERMUDA GRASS CYNODON DACTYLON
	384 SF	SILVER PONYFOOT DICHONDRA ARGENTEA

KEY LEGEND

NOTE: ITEMS LISTED BELOW REFERENCE ALL SHEETS. QUANTITIES ARE INCLUDED FOR CONTRACTOR CONVENIENCE AND CONTRACTOR SHALL VERIFY ASSOCIATED QUANTITIES.

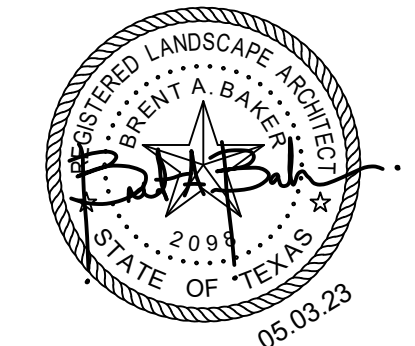
- 1 NDS EP-1250 12"x24" ROOT BARRIER PANELS. INSTALL PER MANUFACTURERS SPECIFICATIONS 75 LF



SUBMISSIONS | REVISIONS:

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03.29.2023	SITE DEVELOPMENT PERMIT R3
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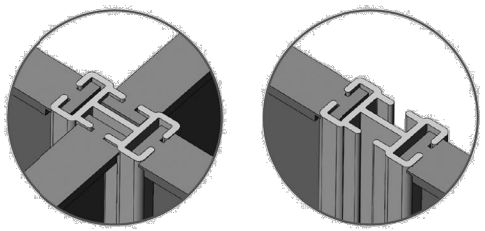
sheet information ::
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date :: 05.03.2023
designed :: bs
drawn :: bs
checked :: bab
approved :: bab

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LANDSCAPE
PLAN

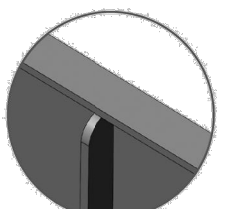

TECHNICAL SPECIFICATIONS

ROOT BARRI-

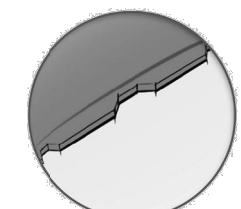
EP Series Root Barrier Panels
 Made from injection molded High Impact Polypropylene (HIPP) with a unique factory installed joiner strip that eases installation. EP Series Panels include a "T" top edge to prevent root overgrowth and an Anchor Lock™ external flange at the base to lock panels in the ground. Suitable for all planting installations. Available in 12", 18", 24", and 36" depths.



Quad Clip™ Joiner Strips



Reinforcing Ribs



Anchor Lock™

Specifications:
 EP Series Panels have a minimum thickness of 0.090 inches, and are made of 50% post consumer High Impact Polypropylene with built in U.V. inhibitors to ensure longevity. The EP Root Barrier Panels have 1/2" raised vertical ribs running perpendicular to the panel and 6" on center. All EP Series Panels feature a 3/8" wide "T" top edge and an external ground anchor base flange that is 1/8" wide.

PART NUMBER	DESCRIPTION	COLOR	PACKAGE QTY.	WT. EA (LBS)	PRODUCT CLASS
EP-1250	12" X 24" ROOT BARRIER PANEL	BLACK	25	1.56	50L.P
EP-1850	18" X 24" ROOT BARRIER PANEL	BLACK	25	1.80	50L.P
EP-2450	24" X 24" ROOT BARRIER PANEL	BLACK	25	2.12	50L.P
EP-3650	36" X 24" ROOT BARRIER PANEL	BLACK	25	3.20	50L.P


ASTM SPECIFICATIONS EP SERIES ROOT BARRIER PANELS					
PROPERTIES	TENSILE STRENGTH	YIELD ELONGATION	FLEXURAL MODULUS	NOTCHED IZOD IMPACT	ROCKWELL HARDNESS
ASTM TEST (UNITS)	D638 (PSI)	D638	D790A (PSI)	D256 (PSI)	D785
VALUES	3,600-4,200	12%	150,000	3.0 @ 73°F	R70

RECOMMENDED INSTALLATION

SURROUND APPLICATION	PANELS PLACED AROUND ROOT BALL, AT SUFFICIENT DISTANCE TO ALLOW PROPER BACKFILL OF MATERIALS.
LINEAR / ROOT PRUNING APPLICATION	PANELS PLACED DIRECTLY ADJACENT TO THE HARDSCAPE BEING PROTECTED.

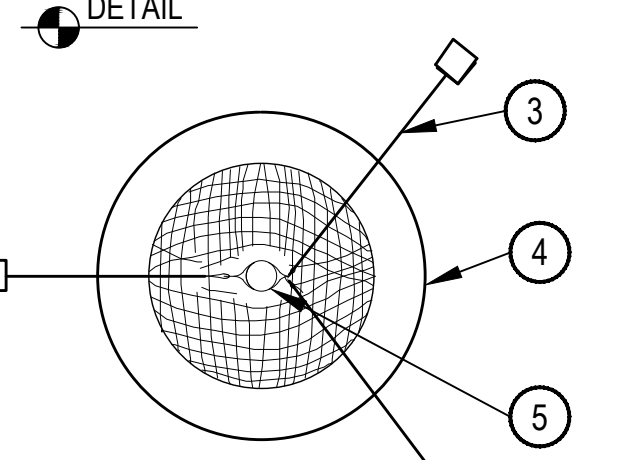
851 N. Harvard Avenue
 Lindsay, CA 93247
 800-726-1994

Visit ndspro.com for specs, detail drawings, and case studies

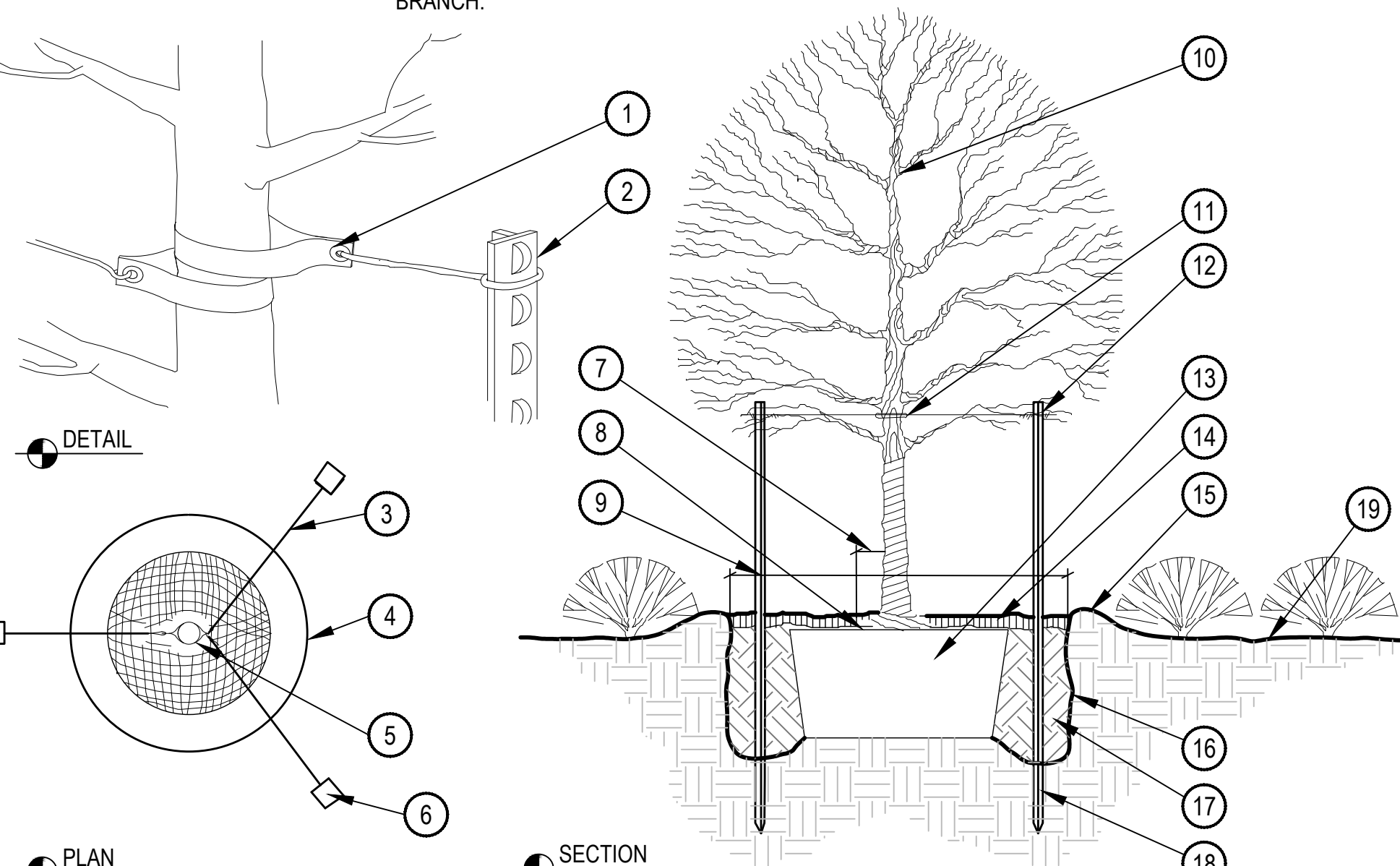


NOTES:

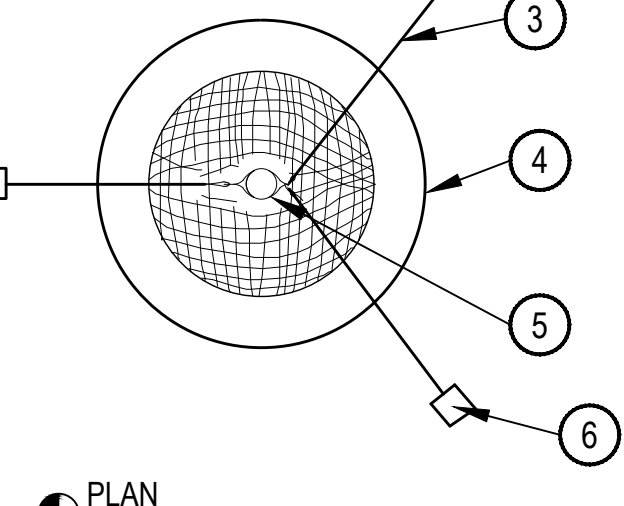
- ROOTBALL SIZE SHALL CONFORM TO THE 1995 AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS UNLESS OTHERWISE NOTED.
- USE THREE STAKES ON ALL TREES.
- APPROVED TIE SYSTEM SHALL BE LOCATED ABOVE THE BOTTOM BRANCH.



DETAIL



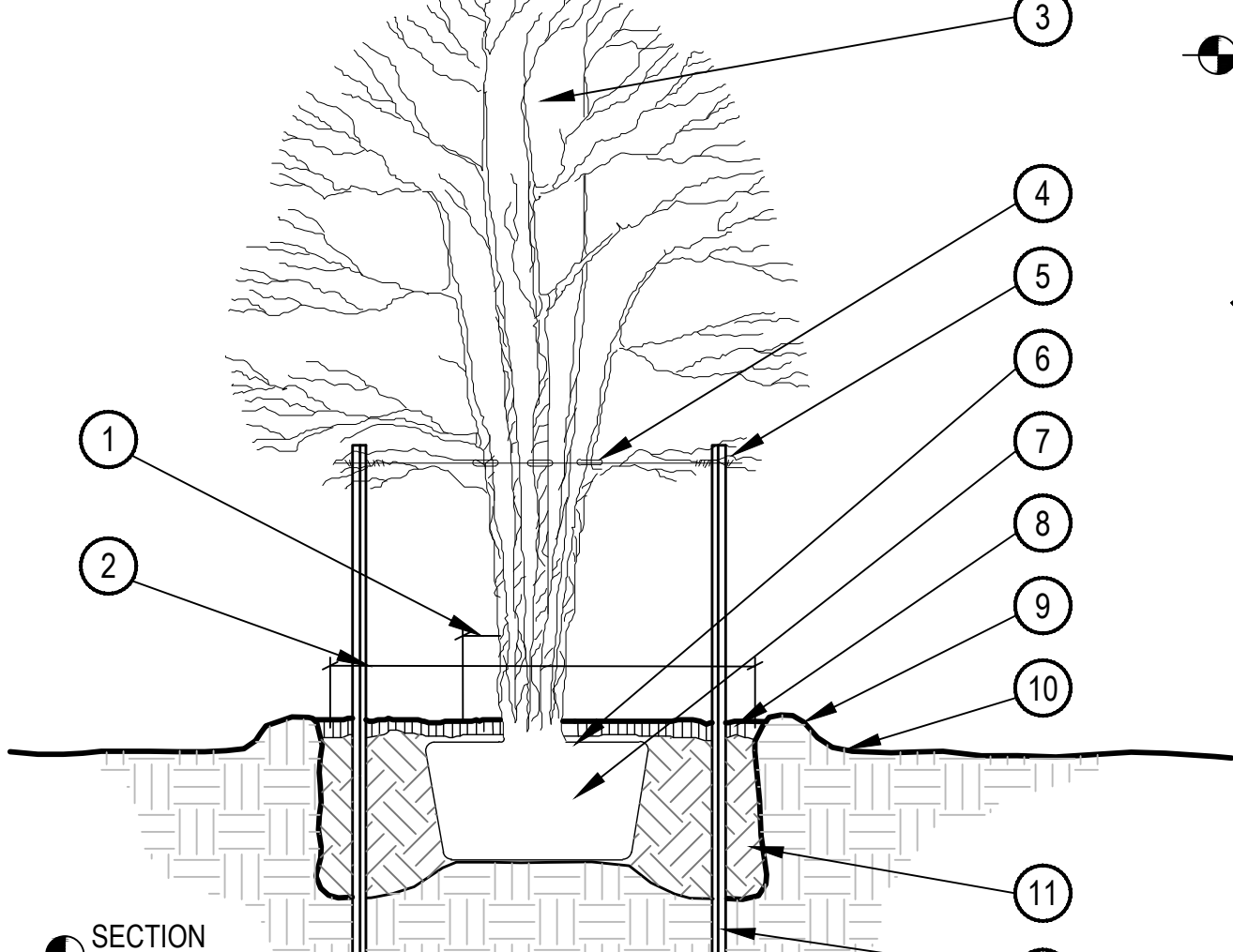
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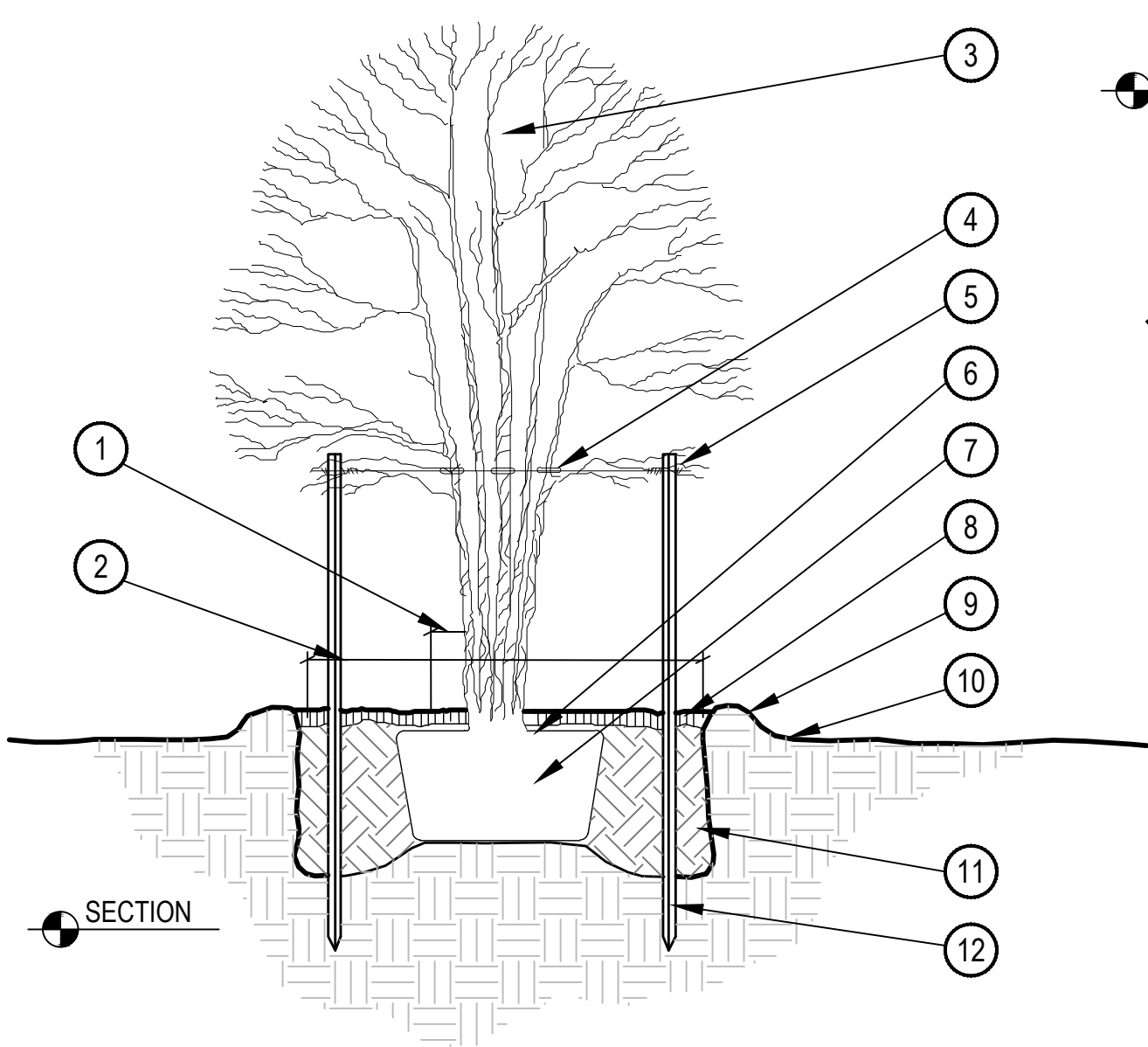
PLAN

1 SINGLE TRUNK TREE PLANTING AND STAKING SCALE: NTS

- APPROVED TREE TIE SYSTEM (SEE NOTES)
- LOOP SHALL BE 3X THE DIAMETER OF TRUNK IN ORDER TO PREVENT SCARING, CUTTING, GIRDLING, OR OTHER DAMAGE TO TREE
- STEEL STUDDED FENCE POST-STUDS MUST FACE AWAY FROM TREE
- APPROVED TREE TIE SYSTEM (SEE NOTES)
- EDGE OF TREE PIT
- TREE TRUNK
- STUDDED STEEL FENCE POST
- CONTRACTOR TO LEAVE 6" MIN. ROOT FLAIR UNCOVERED BY MULCH, SOIL, AND PLANTING MIX
- PLACE TOP OF ROOT CROWN 2" ABOVE FINISH GRADE
- EXCAVATE HOLE 2X ROOT BALL DIAMETER
- NEVER CUT LEADER-THIN UP TO 1/3 OF BRANCHES
- RETAINING NATURAL SHAPE OF TREE - DO NOT LEAVE STUBS
- APPROVED TIE SYSTEM ABOVE THE FIRST BRANCH
- STAKE ALL TREES USING METAL STAKES-3 PER TREE
- DO NOT BREAK ROOT BALL. IF ROOT BALL IS BROKEN PLANT WILL BE REJECTED. REMOVE BURLAP FROM TOP OF ROOT BALL
- 3" MULCH LAYER AS SPECIFIED
- 4" HT. SAUCER AROUND PLANTING PIT
- ROUGHEN SURFACE TO IMPROVE ROOT PENETRATION
- 50% EXCAVATED SOIL AND 50% PLANTING SOIL MIX
- MIN. 3 STAKES PER TREE PAINTED BLACK STEEL STAKE 3 LARGEST STEMS ON TREE
- FINISH GRADE



PLAN



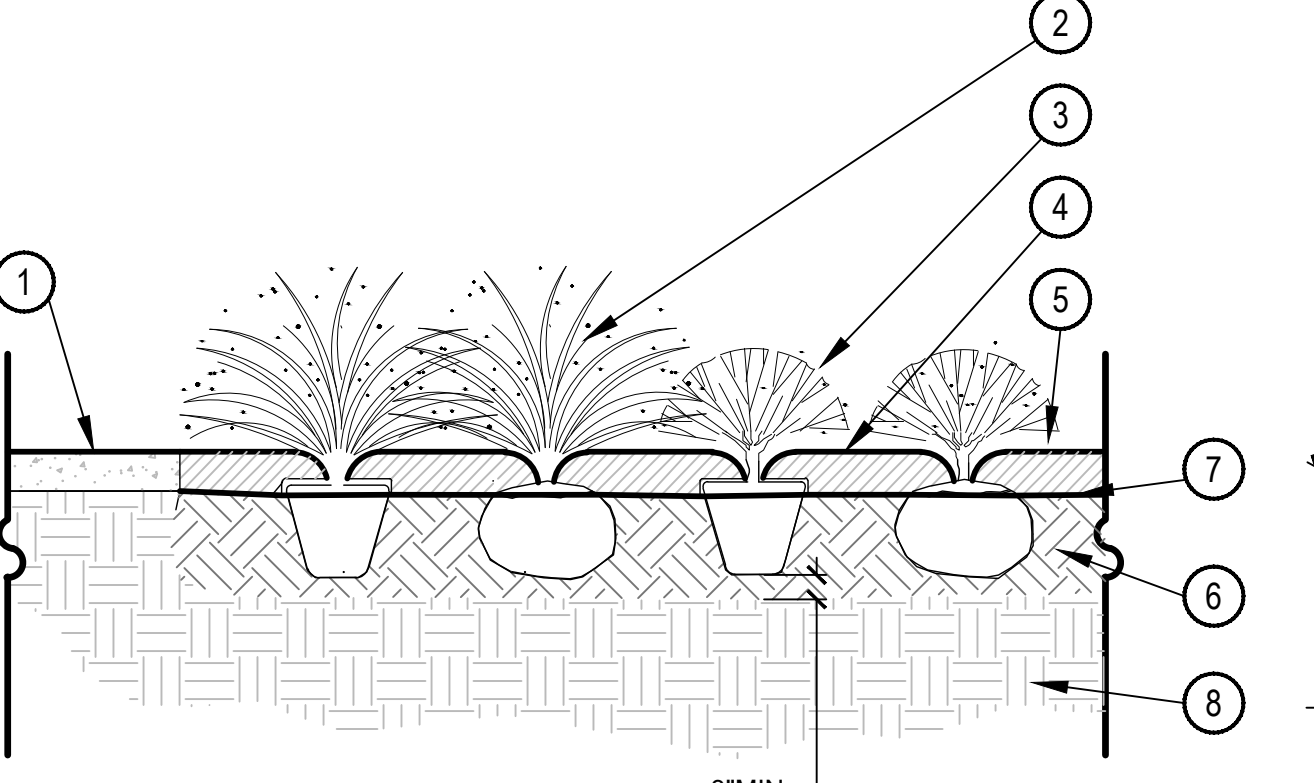
SECTION

2 MULTI-STEM TREE PLANTING AND STAKING STANDARD SCALE: NTS

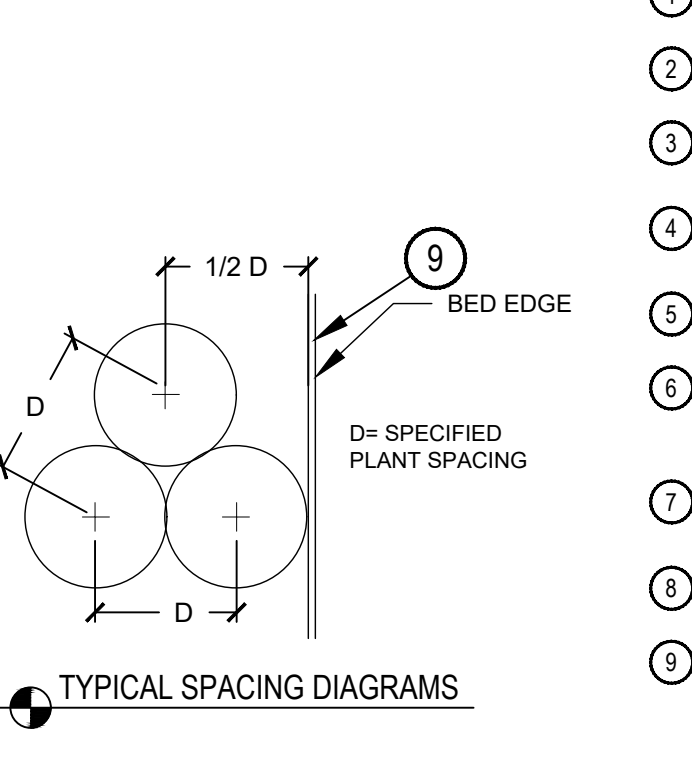
NOTES:

- TOTAL CALIPER INCHES OF A MULTIPLE TRUNK TREE IS CALCULATED AS FOLLOWS: ADD THE CALIPER INCHES OF THE LARGEST TRUNK TO HALF OF THE CALIPER INCH OF EACH OF THE SMALLER TRUNKS.
- ROOTBALL WIDTH SHOULD BE DETERMINED BY THE FOLLOWING: 8" OF ROOTBALL DIA. FOR EACH 1" CALIPER OF TREE TRUNK. ROOTBALL DEPTH IS 2/3RDS OF THE DIAMETER.

- CONTRACTOR TO LEAVE 6" MIN. ROOT FLAIR UNCOVERED BY MULCH, SOIL, AND PLANTING MIX
- EXCAVATE HOLE 2X ROOT BALL DIAMETER
- NEVER CUT LEADER - THIN UP TO 1/3 OF BRANCHES
- RETAINING NATURAL SHAPE OF TREE - DO NOT LEAVE STUBS
- ATTACH GUY WIRE & HOSE ABOVE FIRST BRANCH.
- STAKE ALL TREES USING METAL STAKES-3 PER TREE
- PLACE TOP OF ROOT CROWN 2" ABOVE FINISH GRADE
- DO NOT BREAK ROOT BALL. IF ROOT BALL IS BROKEN PLANT WILL BE REJECTED. REMOVE BURLAP FROM TOP OF ROOT BALL
- 3" MULCH LAYER AS SPECIFIED
- 4" HT. SAUCER AROUND PLANTING PIT
- FINISH GRADE
- 50% EXCAVATED SOIL AND 50% PLANTING SOIL MIX
- HEAVY DUTY, METAL STAKE TO BE MINIMUM 8'-0" LONG STAKE TO BE 18" BELOW PIT IN UNDISTURBED SUBGRADE
- LACE HOSE GUARDS TOGETHER WITH SINGLE WIRE STAY
- MIN. 3 STAKES PER TREE PAINTED BLACK STEEL STAKE 3 LARGEST STEMS ON TREE



SECTION



TYPICAL SPACING DIAGRAMS

3 SHRUB/ GRASS PLANTING SCALE: NTS

- ADJACENT HARDSCAPE
- GRASSES (AS SPECIFIED PER PLAN)
- SHRUB (AS SPECIFIED PER PLAN)
- 3" MULCH AS SPECIFIED, SUBSURFACE IRRIGATION TO BE COMPLETELY COVERED BY MULCH
- LEAVE NO ROOTS EXPOSED
- 8" DEPTH PLANTING SOIL MIX AS SPECIFIED THIS SHEET, NOTE #13
- GEOTEXTILE FABRIC TO MEET TYPAR 3301 MIN. SPECIFICATIONS OR APPROVED EQUAL
- UNDISTURBED SUBGRADE
- BED EDGE

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sheet information ::
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LANDSCAPE DETAILS