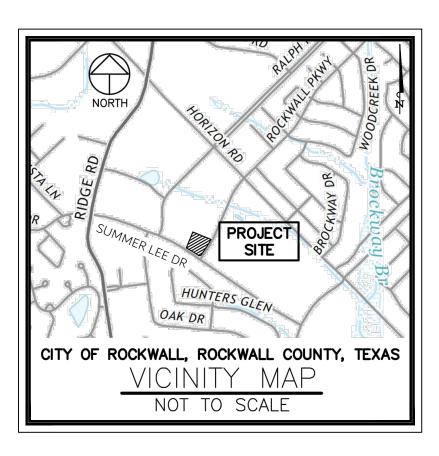
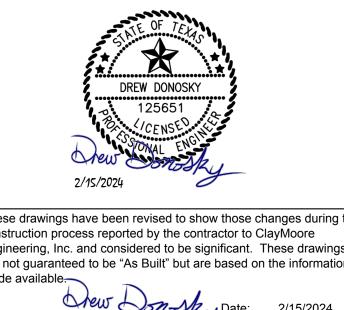
# CIVIL PLANS FOR CAPPS, HODGES, & MORGAN

LOT 5, BLOCK B HORIZON RIDGE ADDITION ROCKWALL, TX

CITY FILE NO.: E2022-021



FEBRUARY 2024



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These drawings have been revised to show those changes during the construction process reported by the contractor to ClayMoore Engineering, Inc. and considered to be significant. These drawings

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4TH SUBMITTA	AL	9/26/202	2	
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SHEET TITLE

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STOP! CALL BEFORE YOU DIG

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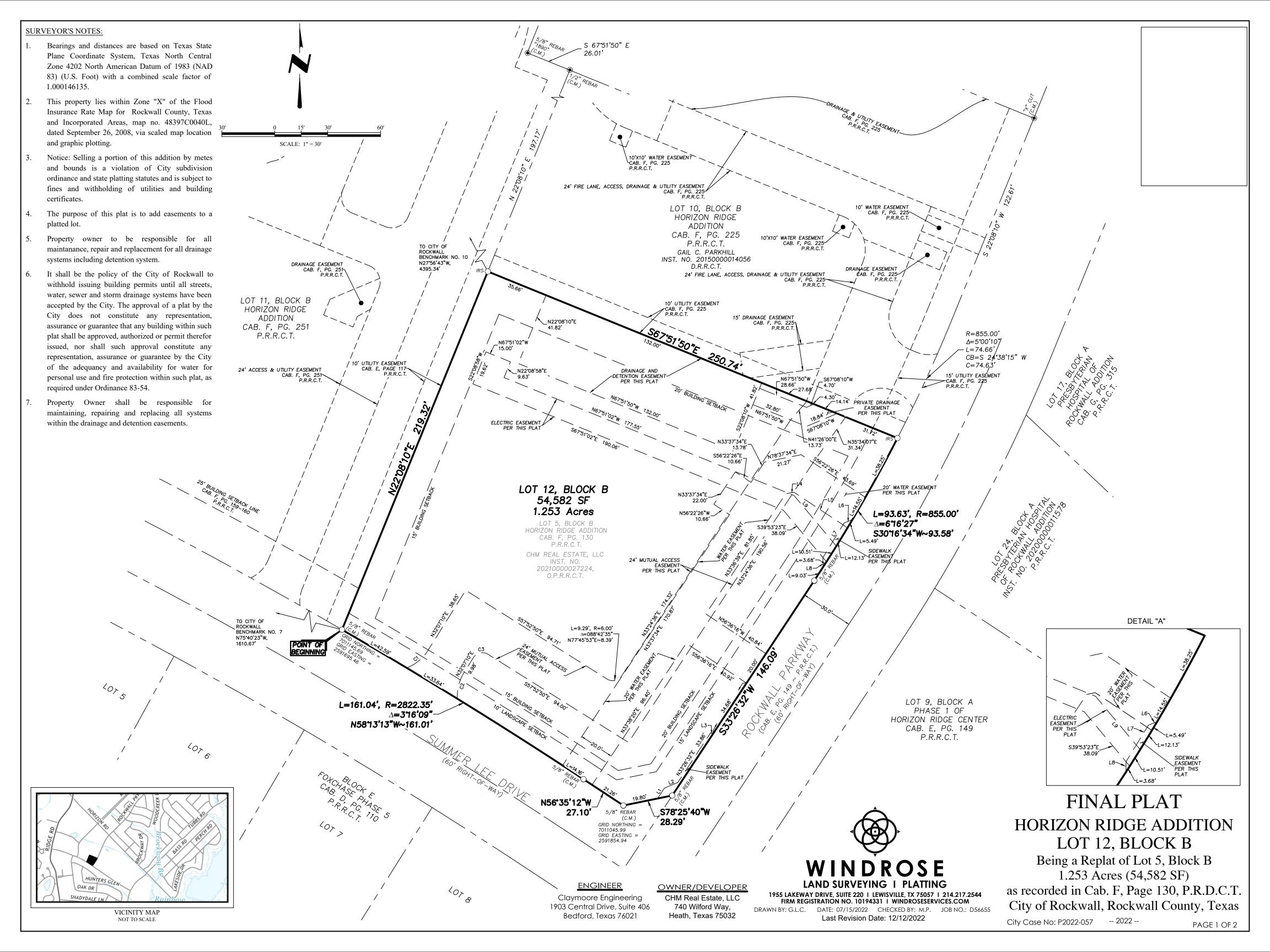


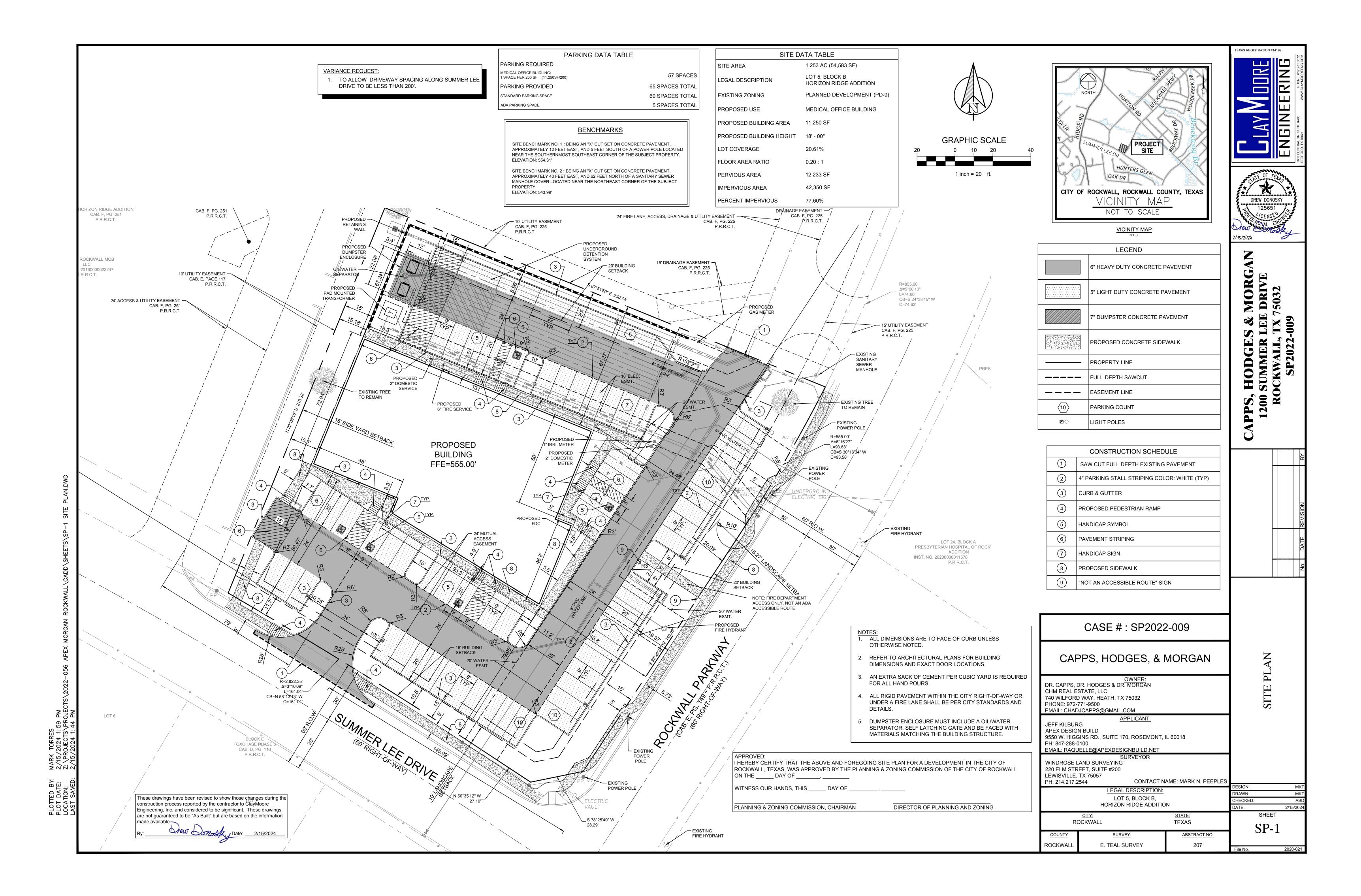
1-800-344-8377

# TEXAS REGISTRATION #14199 1903 CENTRAL DRIVE SUITE #406

BEDFORD, TX 76092 PH. 817.281.0572 FAX 817.281.0574 CONTACT: DREW DONOSKY, PE EMAIL: DREW@CLAYMOOREENG.COM

**ENGINEER** 





2. THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH ALL MATERIALS AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS. ALL WORK REQUIRED BY THESE PLANS SHALL BE CONDUCTED IN CONFORMANCE WITH CURRENT SAFETY CODES AND STANDARDS WITH JURISDICTION OVER THIS

3. THE CONTRACTOR SHALL CONTACT ALL FRANCHISE UTILITY COMPANIES TO HAVE THEM LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION AND DEPTH OF ALL FRANCHISE UTILITY SERVICES AND ANY REQUIRED RELOCATION AND/OR EXTENSIONS. SERVICES SHOWN ON THE PLANS, IF ANY, ARE CONCEPTUAL.

4. THE CONTRACTOR SHALL PROTECT ALL PUBLIC AND PRIVATE UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. ALL MANHOLES, CLEANOUTS, VALVE BOXES, POWER POLES, SIGNS, FIRE HYDRANTS, ETC., MUST BE ADJUSTED TO PROPER GRADE BY THE CONTRACTOR PRIOR TO AND AFTER PLACING OF PERMANENT PAVING AND GRADES. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING CONSTRUCTION OF THE PAVING AND GRADING FOR

5. BRACING OF UTILITY POLES MAY BE REQUIRED BY UTILITY COMPANIES WHEN TRENCHING OR EXCAVATION IS IN CLOSE PROXIMITY TO THE POLES. THE COST OF BRACING POLES WILL BE BORNE BY THE CONTRACTOR. THERE IS NO SEPARATE PAY ITEM FOR THIS WORK. THE COST IS INCIDENTAL TO THE VARIOUS PAY ITEMS FOR INSTALLATION OF PIPE

6. THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE RECORDS AND ARE CONSIDERED APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ADJACENT AND/OR CONFLICTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION IN ORDER THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCES. THE CONTRACTOR SHALL PRESERVE AND PROTECT PUBLIC UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES RESULTING FROM CONTRACTOR'S OPERATIONS SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE. THE ENGINEER SHALL BE NOTIFIED WHEN

PROPOSED FACILITY GRADES CONFLICT WITH EXISTING UTILITY GRADES. 7. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY PHYSICAL DAMAGE TO PRIVATE PROPERTY, INCLUDING, BUT NOT LIMITED TO FENCES, WALLS, PAVEMENT, GRASS, TREES, AND LAWN SPRINKLER AND IRRIGATION SYSTEMS AT NO COST TO THE OWNER. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT (UNLESS OTHERWISE NOTED) AND IS NOT A SEPARATE PAY

8. THE CONTRACTOR SHALL REMOVE SURPLUS MATERIAL FROM THE PROJECT AREA. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT AND IS NOT A

SEPARATE PAY ITEM. 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY

PERMITS PRIOR TO CONSTRUCTION. 10. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES A

COPY OF THE CONTRACT DOCUMENTS INCLUDING ORIGINALLY SIGNED PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS, COPIES OF ANY REQUIRED CONSTRUCTION PERMITS, EROSION CONTROL PLANS, SWPPP AND INSPECTION 11. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO

THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE CITY AND OWNER AND NOTIFICATION TO THE ENGINEER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE OWNER AND ENGINEER WERE NOT CONTACTED PRIOR TO

12. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS SHALL BE SENT TO THE ARCHITECT, CIVIL ENGINEER, CONTRACTOR, CITY ENGINEERING INSPECTION AND OWNER DIRECTLY FROM THE TESTING

13. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, JURISDICTIONAL AGENCIES AND/OR UTILITY SERVICE COMPANIES SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.

14. CONTRACTOR SHALL VERIFY BENCHMARKS AND DATUM PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF IMPROVEMENTS.

15. CONTRACTOR SHALL THOROUGHLY CHECK COORDINATION OF CIVIL, LANDSCAPE, MEP, ARCHITECTURAL, AND OTHER PLANS PRIOR TO COMMENCING CONSTRUCTION. OWNER AND ENGINEER SHALL BE NOTIFIED OF

ANY DISCREPANCY PRIOR TO COMMENCING WITH CONSTRUCTION. 16. ALL HORIZONTAL DIMENSIONS GIVEN ARE TO FACE OF CURB AND TO PIPE

CENTERLINES UNLESS OTHERWISE NOTED ON PLANS. 17. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RELOCATION AND INSTALLATION OF FRANCHISE UTILITIES NECESSARY FOR ON AND OFF SITE CONSTRUCTION. PAYMENT FOR RELOCATION AND INSTALLATION WILL BE

NEGOTIATED ONCE IDENTIFIED. 18. ALL CUT OR FILL SLOPES SHALL BE 4:1 OR FLATTER UNLESS OTHERWISE

19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.

20.UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE CIVIL ENGINEER A COPY OF RECORD DRAWINGS IDENTIFYING ALL DEVIATIONS OR VARIATIONS FROM THE ORIGINAL PLANS.

21.CONTRACTOR SHALL GIVE NOTICE TO ALL AFFECTED PARTIES AND ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS, OR PERSONS IN CHARGE OF PRIVATE AND PUBLIC UTILITIES OR RAILROADS AFFECTED BY HIS OPERATIONS, AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF WORK.

22.ALL "RECORD" DIMENSIONS SHALL CONFORM TO THE DESIGN DIMENSIONS PLUS OR MINUS 0.02 FEET. ALL "RECORD" SLOPES SHALL CONFORM TO THE

DESIGNED SLOPES PLUS OR MINUS 0.005 FOOT/FOOT. 23.CONTRACTOR SHALL CONTACT CITY ENGINEERING DEPARTMENT TO LEARN OF ANY UNUSUAL CONSTRUCTION SEQUENCING REQUIREMENTS THAT THE CITY

MAY REQUIRE. THE CONTRACTOR IS CAUTIONED THAT THIS AND PERHAPS OTHER SUCH REQUIREMENTS MAY EXIST AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE AND COMPLY WITH THEM.

PAVING AND STRIPING NOTES

1. THE REINFORCED PORTLAND CEMENT CONCRETE SHOULD HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,600 PSI (MIN. 6.5 SACK MIX) AT 28 DAYS FOR STANDARD DUTY CONCRETE AND 3,600 PSI (MIN. 6.5 SACK MIX) FOR MEDIUM DUTY CONCRETE AND DUMPSTER AREAS, AND A MINIMUM REINFORCING OF #3 BARS @ 18" O.C.E.W. AND SHALL STRICTLY ADHERE TO DETAILS INCLUDED IN THIS SET. A BASE SUB-GRADE PER SHEET C-16.

2. TESTING OF MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE PAVING IMPROVEMENTS SHALL BE PERFORMED BY AN AGENCY, APPROVED BY THE OWNER, FOR TESTING MATERIALS. PROCUREMENT OF THE TESTING LABORATORY AND THE PAYMENT OF SUCH TESTING SERVICES SHALL BE MADE BY THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE, BY THE STANDARD TESTING PROCEDURES, THAT THE WORK CONSTRUCTED MEETS THE REQUIREMENTS OF THE CITY AND PROJECT SPECIFICATIONS.

3. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL

4. THE CONTRACTOR SHALL REVIEW LOCATION OF ALL TRAFFIC CONTROL DEVICES WITH THE OWNER PRIOR TO INSTALLATION.

5. SEE M.E.P. PLANS FOR LOCATION OF PROPOSED SLEEVING AND CONDUITS. 6. ALL HANDICAP RAMPING, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO THE MOST RECENT VERSION OF THE AMERICANS WITH DISABILITIES ACT OF 1994 AND THE TEXAS ARCHITECTURAL BARRIERS ACT OF 1994, AND ALL ADDENDUMS OR UPDATES.

7. CONTRACTOR SHALL SUBMIT A PAVEMENT JOINTING PLAN TO THE ENGINEER AND OWNER PRIOR TO THE BEGINNING OF ANY CONCRETE PAVING WORK.

8. ANY EXISTING CONCRETE OR ASPHALT SHOWN TO BE REMOVED SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR OFF SITE AND OUTSIDE THE CITY LIMITS THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT AND IS NOT A SEPARATE PAY ITEM.

9. CONSTRUCTION JOINTS SHALL BE REQUIRED AT INTERRUPTIONS OF PAVING OPERATIONS SUCH AS THOSE OCCURRING AT THE END OF THE DAY OR DUE TO WEATHER OR EQUIPMENT BREAKDOWN. PLACE AT LONGITUDINAL CONSTRUCTION OR ISOLATION JOINT LOCATIONS.

10. CONTRACTOR TO INSTALL CONSTRUCTION JOINTS IN CONCRETE PAVEMENT AT ALL PC'S AND AS CONVENIENT TO PHASING OF POURS. CONCRETE PAVEMENT TO BE CONSTRUCTED WITH ISOLATION JOINTS AROUND THE PERIMETER OF ANY BLOCK OUT IN PAVEMENT AND SAWED DUMMY JOINTS EVERY 12' IN BOTH

11. ALL JOINTS ARE TO CONTINUE THROUGH THE CURB. 12. RADIAL JOINTS SHALL BE NO SHORTER THAN 24".

13. ALL CONSTRUCTION JOINTS SHALL BE SAWED, CLEANED OF DEBRIS, BLOWN DRY AND IMMEDIATELY SEALED WITH HOT POURED RUBBER JOINT SEALING

14.NO SAND ALLOWED UNDERNEATH PAVING.

STORM SEWER NOTES

1. CONTRACTOR SHALL FIELD VERIFY THE VERTICAL AND HORIZONTAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND CONSTRUCTION MANAGER IMMEDIATELY IF A CONFLICT IS DISCOVERED.

2. CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS SHOWN, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF CURB INLETS, AND ALL UTILITIES CROSSING THE STORM SEWER. FLOW LINES AND RIMS OF PROPOSED INLETS SHALL BE VERIFIED WITH THE PROPOSED GRADE PRIOR TO CONSTRUCTION

3. THE END OF ALL STORM SEWER LATERALS THAT CONNECT TO WORK BY PLUMBER SHALL BE TIGHTLY PLUGGED OR CAPPED AND MARKED 5.0 FEET OUTSIDE THE BUILDING UNTIL FINAL CONNECTIONS ARE MADE BY PLUMBING CONTRACTOR.

4. THE SITE UTILITY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE STORM

5. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS. 6. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING

GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES. 7. EXISTING MANHOLE TOPS AND ALL OTHER DRAINAGE FACILITIES SHALL BE ADJUSTED AS REQUIRED TO MATCH FINAL GRADES AS SHOWN ON GRADING

PLAN. NO SEPARATE PAY ITEM. 8. ALL RCP SHALL BE CLASS 3 OR APPROVED EQUAL.

STORM SEWER DISCHARGE AUTHORIZATION

1. IF THE TOTAL DISTURBED AREA EXCEEDS ONE (1) ACRE A NOTICE OF INTENT (N.O.I.) SHALL BE SUBMITTED BY THE CONTRACTOR TO THE TCEQ NO LESS THAN 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

2. ALL CONTRACTORS AND SUBCONTRACTORS PROVIDING SERVICES RELATED TO THE SWPPP SHALL SIGN A CONTRACTOR CERTIFICATION STATEMENT ACKNOWLEDGING THEIR RESPONSIBILITIES AS SPECIFIED IN THE SWPPP.

3. A COPY OF THE SWPPP, INCLUDING CONTRACTOR CERTIFICATIONS AND ANY REVISIONS, SHALL BE SUBMITTED TO THE CITY AND FILED WITH THE CONSTRUCTION PLANS, AND SHALL BE RETAINED ON-SITE DURING CONSTRUCTION.

4. A NOTICE OF TERMINATION (N.O.T.) SHALL BE SUBMITTED TO THE TCEQ BY THE CONTRACTOR WHEN THE SITE HAS 100% OF THE DISTURBED AREAS

STABILIZED AND THE SITE NO LONGER HAS STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES (CONSTRUCTION), OR THE N.O.T. PERMITTEE OR CO-PERMITTEE NO LONGER HOLDS OPERATIONAL CONTROL OF THE CONSTRUCTION.

WATER NOTES

1. EXISTING UTILITY DATA IS PROVIDED FOR INFORMATION ONLY. ALTHOUGH THIS DATA IS SHOWN AS ACCURATELY AS POSSIBLE, THE CONTRACTOR IS CAUTIONED THAT THE DEVELOPER AND THE ENGINEER NEITHER ASSUMES NOR IMPLIES ANY RESPONSIBILITY FOR THE ACCURACY OF THIS DATA.

2. THE CONTRACTOR IS TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.

3. HORIZONTAL AND VERTICAL BLOCKING FOR WATER LINES HAS BEEN OMITTED FOR CLARITY. HOWEVER, BLOCKING SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS.

4. TRENCHES WHICH LAY OUTSIDE EXISTING OR FUTURE PAVEMENTS SHALL BE BACK FILLED ABOVE THE TOP OF THE EMBEDMENT WITH TYPE 'B-3' (PER CITY DETAILS) BACKFILL MATERIALS. WHEN TYPE 'B-3' BACKFILL MATERIAL IS NOT SUITABLE AND AT THE DIRECTION OF THE ENGINEER TYPE 'B' MATERIAL SHALL BE USED. ALL BACKFILL MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 95% PROCTOR DENSITY BY MEANS OF TAMPING ONLY. TRENCHES WHICH CROSS UNDER EXISTING OR FUTURE PAVEMENT SHALL BE BACK FILLED PER FIGURE 'A' WITH 95% PROCTOR STANDARD DENSITY OF -2, +4 OF OPTIMUM MOISTURE CONTENT.

5. TOP OF WATER LINES SHALL BE A MINIMUM OF 42" BELOW TOP OF CURB EXCEPT WHERE SHOWN OTHERWISE IN THESE PLANS.

6. FIRE HYDRANTS SHALL BE A MINIMUM 3' BEHIND THE FACE OF THE CURB UNLESS OTHERWISE DIRECTED BY THE CITY. FIRE HYDRANTS AND VALVES AS SHOWN ON THESE PLANS ARE SYMBOLIC ONLY.

7. CORPORATION STOPS SHALL BE TESTED FOR FULL FLOW WHEN THE SYSTEM IS PRESSURE TESTED.

8. ALL NEW WATER MAINS SHALL BE FULLY PURGED.

"COR-BLUE" BOLTS AND SHALL BE CLASS 250.

9. ALL 6", 8", 10" & 12" WATER MAINS SHALL BE PVC AWWA C900, DR-14. ALL WATER MAINS USING POLY-WRAPPED DUCTILE IRON PIPE SHALL BE CLASS 51. 10. FITTINGS SHALL BE DUCTILE IRON AND MECHANICAL JOINT TYPE, WITH

**SANITARY SEWER NOTES** 

1. EXISTING UTILITY DATA IS PROVIDED FOR INFORMATION ONLY. ALTHOUGH THIS DATA IS SHOWN AS ACCURATELY AS POSSIBLE, THE CONTRACTOR IS CAUTIONED THAT THE DEVELOPER AND THE ENGINEER NEITHER ASSUMES NOR IMPLIES ANY RESPONSIBILITY FOR THE ACCURACY OF THIS DATA.

2. THE CONTRACTOR IS TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.

3. TRENCHES WHICH LIE OUTSIDE EXISTING PAVEMENTS SHALL BE BACKFILLED ABOVE THE TOP OF THE EMBEDMENT WITH TYPE "H" BACKFILL MATERIAL. WHEN TYPE "C" (PER CITY DETAILS) BACKFILL MATERIAL IS NOT SUITABLE AND AT THE DIRECTION OF THE ENGINEER, TYPE "B" MATERIAL SHALL BE USED. ALL BACKFILL MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY BY MEANS OF TAMPING ONLY. TRENCHES THAT CROSS UNDER EXISTING OR FUTURE PAVEMENT SHALL BE BACKFILLED AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY WITH MOISTURE CONTENT-2 AND +4% OF OPTIMUM MOISTURE CONTENT.

4. TYPICAL LOCATION OF SANITARY SEWER PIPE SHALL BE A MINIMUM OF 4'-0"

BELOW TOP OF CURB EXCEPT WHERE SHOWN OTHERWISE IN THESE PLANS 5. ALL FLEXIBLE SANITARY SEWER MAINS SHALL BE TESTED WITH STANDARD 5% **DEFLECTION MANDREL.** 

6. ALL SANITARY SEWER LINES SHALL BE CAPPED WITH AN APPROPRIATE CAP AT THE END OF EACH WORKDAY.

7. WHEN EXISTING GRADES ARE LOWER THAN PROPOSED MAINS, THE FILL AREA OVER THE PIPE SHALL BE FILLED AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY TO THE PROPOSED FINISHED GRADE PRIOR TO INSTALLING ANY MAIN.

8. ALL SEWER SERVICES SHALL BE CONSTRUCTED OF SDR-35 PIPE.

TRAFFIC CONTROL NOTES

1. CONTRACTOR SHALL PROVIDE SIGNED & SEALED TRAFFIC CONTROL PLANS TO THE OWNER AND CITY (MUST BE APPROVED BY THE CITY), AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY.

2. ALL TRAFFIC CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD), LATEST VERSION.

3. THE CONTRACTOR SHALL COVER EXISTING SIGNS AND OBLITERATE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE INTENT OF THESE TRAFFIC CONTROL PLANS TO AVOID CONFUSION TO THE TRAVELING PUBLIC.

4. THE CONTRACTOR SHALL UNCOVER EXISTING SIGNS AND REPLACE PAVEMENT MARKINGS IN-KIND AS ORIGINALLY CONFIGURED AT THE END OF CONSTRUCTION OPERATIONS AND PRIOR TO FINAL ACCEPTANCE BY THE

5. ALL TEMPORARY SIGNS, BARRICADES, WARNING LIGHTS AND OTHER MISCELLANEOUS TRAFFIC CONTROL MEASURES SHALL BE REMOVED AND ORIGINAL TRAFFIC CONTROL MEASURES REPLACED AT THE END OF THE CONTRACTOR'S CONSTRUCTION OPERATIONS.

**EROSION CONTROL NOTES** 

1. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES. THE CONTRACTOR SHALL USE SEDIMENT FILTERS OR OTHER MEASURES APPROVED BY THE ENGINEER AND CONSTRUCTION MANAGER TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM CLOGGING STORM SEWER PIPES OR PROPOSED OR EXISTING INLETS, OR FROM BEING TRANSPORTED TO ADJACENT PROPERTIES AND STREET RIGHT-OF-WAYS. ALL EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO SITE DISTURBANCE AND SHALL REMAIN IN PLACE UNTIL FINAL GRADING AND PAVING IS COMPLETE AND PERMANENT SOIL STABILIZATION IS ACHIEVED.

2. CONSTRUCTION OPERATIONS SHALL BE MANAGED SO THAT AS MUCH OF THE SITE AS POSSIBLE IS LEFT COVERED WITH EXISTING TOPSOIL AND VEGETATION.

3. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH. THE AREAS SHALL THEN BE SEEDED (OR SODDED), IRRIGATED, AND MAINTAINED UNTIL PERMANENT STAND OF GRASS IS ACHIEVED WITH A MINIMUM OF 70% COVERAGE. UNLESS OTHERWISE NOTED, PRIVATE LAWN AREAS AND PARKWAYS IN FRONT OF PRIVATE LAWN AREAS DISTURBED BY CONSTRUCTION SHALL BE REPLACED WITH BLOCK SOD SIMILAR TO THAT EXISTING.

4. CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION ENTRANCE AT ALL PRIMARY POINTS OF ACCESS. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION TRAFFIC UTILIZES THE STABILIZED ENTRANCE AT ALL TIMES FOR INGRESS/EGRESS TO THE SITE.

5. CONSTRUCTION ENTRANCE:

MINIMUM SIZE STONE: 4-6 INCHES DIAMETER

LENGTH: 50-FEET MINIMUM

• WIDTH: NOT LESS THAN 20-FEET MINIMUM OF ALL POINTS OF INGRESS

 MAINTENANCE REQUIREMENTS: AS NECESSARY TO PREVENT TRACKING OR FLOWING MUD INTO PUBLIC RIGHT-OF-WAY OR PARKING

6. SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS AND FIRE LANES. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON A PUBLIC ROADWAY SHALL BE REMOVED IMMEDIATELY. WHEN WASHING IS REQUIRED TO REMOVE SEDIMENT PRIOR TO ENTRANCE TO A PUBLIC ROADWAY, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. ALL FINES IMPOSED FOR TRACKING ONTO PUBLIC ROADS SHALL BE PAID BY THE CONTRACTOR.

7. CONTRACTOR IS RESPONSIBLE FOR PROPER MAINTENANCE OF THE REQUIRED EROSION CONTROL DEVICES THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS. EROSION CONTROLS SHALL BE REPAIRED OR REPLACED AS INSPECTION DEEMS NECESSARY, OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ACCUMULATED SILT IN ANY EROSION CONTROL DEVICE SHALL BE REMOVED AND SHALL BE DISTRIBUTED ON SITE IN A MANNER NOT CONTRIBUTING TO ADDITIONAL SILTATION. THE CONTRACTOR IS RESPONSIBLE FOR RE-ESTABLISHING ANY EROSION CONTROL DEVICE WHICH IS DISTURBED.

8. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL USE FILTER BARRIER (OR OTHER METHOD APPROVED BY THE ENGINEER AND CITY) AS REQUIRED TO PREVENT ADVERSE OFF SITE IMPACTS OR STORM WATER QUALITY FROM SILT AND CONSTRUCTION DEBRIS FLOWING ONTO ADJACENT PROPERTIES AS REQUIRED BY THE CITY.

9. BEFORE ANY EARTHWORK IS DONE, THE CONTRACTOR SHALL STAKE OUT AND MARK THE LIMITS OF CONSTRUCTION AND OTHER ITEMS ESTABLISHED BY THE PLANS. THE CONTRACTOR SHALL PROTECT AND PRESERVE CONTROL POINTS AT ALL TIMES DURING THE COURSE OF THE PROJECT. THE GRADING CONTRACTOR SHALL PROVIDE ALL NECESSARY ENGINEERING AND SURVEYING FOR LINE AND GRADE CONTROL POINTS RELATED TO EARTHWORK.

10.CONTRACTOR STAGING AREA TO BE AGREED UPON BY OWNER PRIOR TO BEGINNING CONSTRUCTION.

11. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY THE T.C.E.Q. OR THE GOVERNING CITY.

**GRADING NOTES** 

1. IF A GRADING PERMIT IS REQUIRED FROM THE CITY PRIOR TO STARTING CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMIT AND PAYING ALL ASSOCIATED FEES.

2. CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES (SHOWN OR NOT SHOWN) WITHIN SCOPE OF CONSTRUCTION. IF ANY EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM AT HIS OWN EXPENSE.

3. ALL SPOT ELEVATIONS SHOWN ARE TO TOP OF PAVING SURFACE OR FINISHED EARTH GRADE UNLESS NOTED OTHERWISE.

4. CONTRACTOR TO ENSURE POSITIVE DRAINAGE FROM THE EXISTING AND PROPOSED BUILDINGS AND NO PONDING IN PAVED AREAS. CONTRACTOR ADJUSTMENTS TO SPOT GRADES TO MAINTAIN POSITIVE DRAINAGE IS ALLOWED WITH THE PRIOR APPROVAL OF THE ENGINEER. CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO PAVING IF ANY AREAS OF POOR DRAINAGE ARE ENCOUNTERED.

5. THE CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, POWER POLES, GUY WIRES, AND TELEPHONE BOXES WHICH ARE TO REMAIN IN PLACE AND UNDISTURBED DURING CONSTRUCTION.

ALL EXISTING CONCRETE PAVING, CHANNEL IMPROVEMENTS, SIDEWALK, STRUCTURES AND CURB DEMOLITION SHALL BE REMOVED IN THEIR ENTIRETY AND DISPOSED OF BY THE CONTRACTOR, OFFSITE AND OUTSIDE THE CITY LIMITS UNLESS OTHERWISE DIRECTED BY THE OWNER OR ENGINEER. 7. ALL CLEARING, GRADING, 95% COMPACTION AND SUBGRADE PREPARATION

SHALL BE IN ACCORDANCE TO THE GEOTECHNICAL REPORT. 8. GRADING CONTRACTOR TO COORDINATE WITH THE FRANCHISE UTILITY COMPANIES FOR ANY REQUIRED UTILITY ADJUSTMENTS AND/OR RELOCATIONS.

9. THE CONTRACTOR SHALL CALCULATE HIS OWN EARTHWORK QUANTITIES AND USE TO DETERMINE HIS BID ACCORDINGLY.

10.BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE HANDICAPPED ROUTES (PER A.D.A. & T.A.S) EXIST TO AND FROM EVERY DOOR. IN NO CASE SHALL HANDICAP RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5.0 PERCENT. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A. AND T.A.S. COMPLIANCE ISSUES.

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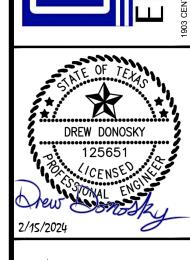
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RING 

TEXAS REGISTRATION #14199



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THICKNESS: NOT LESS THAN 12-INCHES

# MARK TORRES 2/15/2024 1: 2:\PROJECTS\ 2/15/2024 1:

# GENERAL ITEMS

- All construction shall conform to the requirements set forth in the City of Rockwall's Engineering Department's "Standards of Design and Construction" and the "Standard Specifications for Public Works Construction" by the North Texas Central Council of Governments, 5th edition amended by the City of Rockwall. The CONTRACTOR shall reference the latest City of Rockwall standard details provided in the Rockwall Engineering Departments "Standards of Design and Construction" manual for details not provided in these plans. The CONTRACTOR shall possess one set of the NCTCOG Standard Specifications and Details and the City of Rockwall's "Standards of Design and Construction" manual on the project site at all times
- Where any conflicting notes, details or specifications occur in the plans the City of Rockwall General Construction Notes, Standards, Details and Specifications shall govern unless detail or specification is more
- The City of Rockwall Engineering Departments "Standards of Design and Construction" can be found online at: <a href="http://www.rockwall.com/engr.asp">http://www.rockwall.com/engr.asp</a>
- All communication between the City and the CONTRACTOR shall be through the Engineering Construction Inspector and City Engineer or designated representative only. It is the responsibility of the CONTRACTOR to contact the appropriate department for inspections that do not fall under this approved engineering plan set.
- Prior to construction, CONTRACTOR shall have in their possession all necessary permits, plans, licenses,
- The CONTRACTOR shall have at least one original stamped and signed set of approved engineering plans and specifications on-site and in their possession at all times. A stop work order will be issued if items are not on-site. Copies of the approved plans will not be substituted for the required original "approved plans to
- All material submittals, concrete batch designs and shop drawings required for City review and approval shall be submitted by the CONTRACTOR to the City sufficiently in advance of scheduled construction to allow no less than 10 business days for review and response by the City.
- All site dimensions are referenced to the face of curb or edge of pavement unless otherwise noted.
- The City requires ten (10%) percent-two (2) year maintenance bond for paving, paving improvements, water systems, wastewater systems, storm sewer systems including detention systems, and associated fixtures and structures which are located within the right-of-ways or defined easements. The two (2) year maintenance bond is to state "from date of City acceptance" as the starting time.
- 10. A review of the site shall be conducted at twenty (20) months into the two (2) year maintenance period. The design engineer or their designated representative and the CONTRACTOR shall be present to walk the site with the City of Rockwall Engineering Inspection personnel.

# EROSION CONTROL & VEGETATION

- . The CONTRACTOR or developer shall be responsible, as the entity exercising operational control, for all permitting as required by the Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ). This includes, but is not limited to, preparation of the Storm Water Pollution Prevention Plan (SWPPP), the Construction Site Notice (CSN), the Notice of Intent (NOI), the Notice of Termination (NOT) and any Notice of Change (NOC) and is required to pay all associated fees
- Erosion control devices as shown on the erosion control plan for the project shall be installed prior to the start of land disturbing activities.
- All erosion control devices are to be installed in accordance with the approved plans, specifications and Storm Water Pollution Prevention Plan (SWPPP) for the project. Erosion control devices shall be placed and in working order prior to start of construction. Changes are to be reviewed and approved by the design engineer and the City of Rockwall prior to implementation.
- If the Erosion Control Plans and Storm Water Pollution Prevention Plan (SWPPP) as approved cannot appropriately control erosion and off-site sedimentation from the project, the erosion control plan and/or the SWPPP is required to be revised and any changes reported to the Texas Commission on Environmental Quality (TCEQ), when applicable.
- All erosion control devices shall be inspected weekly by the CONTRACTOR and after all major rain events, or more frequently as dictated in the project Storm Water Pollution Prevention Plan (SWPPP). CONTRACTOR shall provide copies of inspection's reports to the engineering inspection after each
- The CONTRACTOR shall not dispose of waste and any materials into streams, waterways or floodplains. The CONTRACTOR shall secure all excavation at the end of each day and dispose of all excess materials.
- CONTRACTOR shall take all available precautions to control dust. CONTRACTOR shall control dust by sprinkling water or other means as approved by the City Engineer.
- CONTRACTOR shall establish grass and maintain the seeded area, including watering, until a "Permanent Stand of Grass" is obtained at which time the project will be accepted by the City. A "Stand of Grass" (not winter rye or weeds) shall consist of 75% to 80% coverage of all disturbed areas and a minimum of one-inch (1") in height as determined by the City. No bare spots will be allowed. Re-seeding will be required in all washed areas and areas that don't grow.
- All City right-of-ways shall be sodded if disturbed. No artificial grass is allowed in any City right-of-way and/or easements.
- 10. All adjacent streets/alleys shall be kept clean at all times
- 11. CONTRACTOR shall keep construction site clean at all times, immediately contain all debris and trash, all debris and trash shall be removed at the end of each work day, and all vegetation on the construction site 10inches or taller in height must be cut immediately.
- 12. Suspension of all construction activities for the project will be enforced by the City if any erosion control requirements are not meet. Work may commence after deficiency has been rectified.
- 13. During construction of the project, all soil stockpiles and borrow areas shall be stabilized or protected with sediment trapping measures. The CONTRACTOR is responsible for the temporary protection and permanent stabilization of all soil stockpiles on-site as well as borrow areas and soil intentionally transported from the
- 14. Where construction vehicles access routes intersect paved or public roads/alleys, construction entrances shall be installed to minimize the transport of sediment by vehicular tracking onto paved surfaces. Where sediment is transferred onto paved or public surfaces, the surface shall be immediately cleaned. Sediment shall be

- removed from the surface by shoveling or sweeping and transported to a sediment disposal area. Pavement washing shall be allowed only after sediment is removed in this manner.
- 15. All drainage inlets shall be protected from siltation, ineffective or unmaintained protection devices shall be immediately replaced and the inlet and storm system cleaned. Flushing is not an acceptable method of
- 16. During all dewatering operations, water shall be pumped into an approved filtering device prior to discharge into a receiving outlet.

# TRAFFIC CONTROL

- 1. All new Detouring or Traffic Control Plans are required to be submitted to the City for review and approval a minimum of 21 calendar days prior to planned day of implementation.
- When the normal function of the roadway is suspended through closure of any portion of the right-of-way, temporary construction work zone traffic control devices shall be installed to effectively guide the motoring public through the area. Consideration for road user safety, worker safety, and the efficiency of road user flow is an integral element of every traffic control zone.
- All traffic control plans shall be prepared and submitted to the Engineering Department in accordance with the standards identified in Part VI of the most recent edition of the TMUTCD. Lane closures will not occur on roadways without an approval from the Rockwall Engineering Department and an approved traffic control plan. Traffic control plans shall be required on all roadways as determined by the City Engineer or the designated representative.
- All traffic control plans must be prepared, signed, and sealed by an individual that is licensed as a professional engineer in the State of Texas. All traffic control plans and copies of work zone certification must be submitted for review and approval a minimum of three (3) weeks prior to the anticipated temporary traffic control.
- The CONTRACTOR executing the traffic control plan shall notify all affected property owners two (2) weeks prior to any the closures in writing and verbally.
- 6. Any deviation from an approved traffic control plan must be reviewed by the City Engineer or the designated representative. If an approved traffic control plan is not adhered to, the CONTRACTOR will first receive a verbal warning and be required to correct the problem immediately. If the deviation is not corrected, all construction work will be suspended, the lane closure will be removed, and the roadway opened to traffic.
- All temporary traffic control devices shall be removed as soon as practical when they are no longer needed. When work is suspended for short periods of time at the end of the workday, all temporary traffic control devices that are no longer appropriate shall be removed or covered. The first violation of this provision will result in a verbal warning to the construction foreman. Subsequent violations will result in suspension of all work at the job site for a minimum of 48 hours. All contractors working on City funded projects will be charged one working day for each 24 hour closure.
- Lane closures on any major or minor arterial will not be permitted between the hours of 6:00 am to 9:00 am and 3:30 pm to 7:00 pm. Where lane closures are needed in a school area, they will not be permitted during peak hours of 7:00 am – 9:00 am and 3:00 pm to 5:00 pm. Closures may be adjusted according to the actual start-finish times of the actual school with approval by the City Engineer. The first violation of this provision will result in a verbal warning to the construction foreman. Subsequent violations will result in suspension of all work at the job site for a minimum of 48 hours. All contractors working on City funded projects will be charged one working day for each 24 hour closure of a roadway whether they are working or not.
- 9. No traffic signs shall be taken down without permission from the City.
- 10. No street/roadway will be allowed to be fully closed.

# **UTILITY LINE LOCATES**

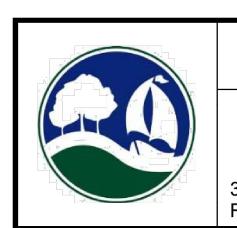
- It is the CONTRACTOR's responsibility to notify utility companies to arrange for utility locates at least 48 hours prior to beginning construction. The completeness and accuracy of the utility data shown on the plans is not guaranteed by the design engineer or the City. The CONTRACTOR is responsible for verifying the depth and location of existing underground utilities proper to excavating, trenching, or drilling and shall be required to take any precautionary measures to protect all lines shown and .or any other underground utilities not on record or not shown on the plans.
- 2. The CONTRACTOR shall be responsible for damages to utilities
- 3. CONTRACTOR shall adjust all City of Rockwall utilities to the final grades.
- 4. All utilities shall be placed underground.
- 5. CONTRACTOR shall be responsible for the protection of all existing main lines and service lines crossed or exposed by construction operations. Where existing mains or service lines are cut, broken or damaged, the CONTRACTOR shall immediately make repairs to or replace the entire service line with same type of original construction or better. The City of Rockwall can and will intervene to restore service if deemed necessary and charge the CONTRACTOR for labor, equipment, material and loss of water if repairs aren't made in a timely manner by the CONTRACTOR.
- 6. The City of Rockwall (City utilities) is not part of the Dig Tess or Texas one Call 811 line locate system. All City of Rockwall utility line locates are to be scheduled with the City of Rockwall Service Center. 972-771-7730. A 48-hour advance notice is required for all non-emergency line locates.
- Underground utility lines shall be installed in accordance with the following standards in addition to other applicable criteria:
  - a. No more than 500 linear feet of trench may be opened at one time.
  - b. Material used for backfilling trenches shall be properly compacted to 95% standard density in order to minimize erosion, settlement, and promote stabilization that the geotechnical engineer recommends.
- c. Applicable safety regulations shall be complied with. 11. This plan details pipes up to 5 feet from the building. Refer to the building plans for building connections. CONTRACTOR shall supply and install pipe adapters as necessary.
- 12. All underground lines shall be installed, inspected, and approved prior to backfilling.
- 13. All concrete encasement shall have a minimum of 28 days compressive strength at 3,000 psi (min. 5.5 sack mix).

# WATER LINE NOTES

- 1. The CONTRACTOR shall maintain existing water service at all times during construction.
- 2. Proposed water lines shall be AWWA C900-16 PVC Pipe (blue in color) for all sizes, DR 14 (PC 305) for pipeline sizes 12-inch and smaller, and DR 18 (PC 235) for 14-inch and larger water pipelines unless otherwise shown on water plan and profiles sheets. Proposed water lines shall be constructed with minimum cover of 4 feet for 6-inch through 8-inch, 5 feet for 12-inch through 18-inch and 6 feet for 20-inch and larger.
- Proposed water line embedment shall be NCTCOG Class 'B-3' as amended by the City of Rockwall's engineering standards of design and construction manual.
- CONTRACTOR shall coordinate the shutting down of all water lines with the City of Rockwall Engineering Inspector and Water Department. The City shall operate all water valves. Allow 5 business days from the date of notice to allow City personnel time to schedule a shut down. Two additional days are required for the CONTRACTOR to notify residents in writing of the shut down after the impacted area has been identified. Water shut downs impacting businesses during their normal operation hours is not allowed. CONTRACTOR is required to coordinate with the Rockwall Fire Department regarding any fire watch requirements as well as any costs incurred when the loss of fire protection to a structure occurs.
- CONTRACTOR shall furnish and install gaskets on water lines between all dissimilar metals and at valves (both existing and proposed).
- 6. All fire hydrants and valves removed and salvaged shall be returned to the City of Rockwall Municipal
- Blue EMS pads shall be installed at every change in direction, valve, curb stop and service tap on the proposed water line and every 250'.
- 8. All water valve hardware and valve extensions, bolts, nuts and washers shall be 316 stainless steel.
- 9. All fire hydrants bolts, nuts and washers that are buried shall be 316 stainless steel.
- 10. Abandoned water lines to remain in place shall be cut and plugged and all void spaces within the abandoned line shall be filled with grout, flowable fill or an expandable permanent foam product. Valves to be abandoned in place shall have any extensions and the valve box removed and shall be capped in concrete.
- 11. All fire hydrants will have a minimum of 5 feet of clearance around the appurtenance including but not limited to parking spaces and landscaping.
- 12. All joints are to be megalug joints with thrust blocking.
- 13. Water and sewer mains shall be kept 10 feet apart (parallel) or when crossing 2 feet vertical clearance.
- 14. CONTRACTOR shall maintain a minimum of 4 feet of cover on all water lines.
- 15. All domestic and irrigation services are required to have a testable backflow device with a double check valve installed per the City of Rockwall regulations at the property line and shown on plans.

# WASTEWATER LINE NOTES

- The CONTRACTOR shall maintain existing wastewater service at all times during construction.
- Wastewater line for 4-inch through 15-inch shall be Green PVC SDR 35 (ASTM D3034) [less 10 ft cover] and SDR 26 (ASTM D3034) [10 ft or more cover]. For 18-inch and lager wastewater line shall be Green PVC – PS 46 (ASTM F679) [less 10 ft cover] and PS 115 (ASTM F679) [10 ft or more cover]. No services will be allowed on a sanitary sewer line deeper than 10 feet.
- Proposed wastewater line embedment shall be NCTCOG Class 'H' as amended by the City of Rockwall's public works standard design and construction manual. 4. Green EMS pads shall be installed at every 250', manhole, clean out and service lateral on proposed
- wastewater lines. CONTRACTOR shall CCTV all existing wastewater lines that are to be abandoned to ensure that all laterals
- are accounted for and transferred to proposed wastewater lines prior to abandonment.
- All abandoned wastewater and force main lines shall be cut and plugged and all void spaces within the abandoned line shall be filled with grout, flowable fill or an expandable permanent foam product.
- Existing manholes and cleanouts not specifically called to be relocated shall be adjusted to match final grades
- All wastewater pipes and public services shall be inspected by photographic means (television and DVD) prior to final acceptance and after franchise utilities are installed. The CONTRACTOR shall furnish a DVD to the Engineering Construction Inspector for review. Pipes shall be cleaned prior to TV inspection of the pipes. Any sags, open joints, cracked pipes, etc. shall be repaired or removed by the CONTRACTOR at the CONTRACTOR's expense. A television survey will be performed as part of the final testing in the twentieth (20<sup>th</sup>) month of the maintenance period.
- All manholes (public or private) shall be fitted with inflow prevention. The inflow prevention shall conform to the measures called out in standard detail R-5031.
- 0. All new or existing manholes being modified shall have corrosion protection being Raven Liner 405 epoxy coating, ConShield, or approved equal.. Consheild must have terracotta color dye mixed in the precast and cast-in-place concrete. Where connections to existing manholes are made the CONTRACTOR shall rehab manhole as necessary and install a 125 mil thick coating of Raven Liner 405 or approved equal.
- 1. All new or existing manholes that are to be placed in pavement shall be fitted with a sealed (gasketed) rim and cover to prevent inflow.
- 12. If an existing wastewater main or trunk line is called out to be replaced in place a wastewater bypassing pump plan shall be required and submitted to the Engineering Construction Inspector and City Engineer for approva prior to implementation. Bypass pump shall be fitted with an auto dialer and conform to the City's Noise Ordinance. Plan shall be to the City sufficiently in advance of scheduled construction to allow no less than 10 business days for review and response by the City.
- 13. CONTRACTOR shall maintain a minimum of 4 feet of cover on all wastewater lines.



GENERAL CONSTRUCTION NOTES Sheet 1 of 2

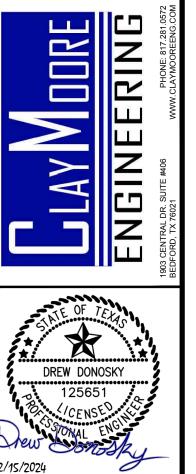
CITY OF ROCKWALL **ENGINEERING DEPARTMENT** 

October 2020

385 S. Goliad Rockwall, Texas 75087

P (972) 771-7746 F (972) 771-7748

These drawings have been revised to show those changes during the construction process reported by the contractor to ClayMoore Engineering, Inc. and considered to be significant. These drawings are not guaranteed to be "As Built" but are based on the information Shew Donosky Date: 2/15/2024



XAS REGISTRATION #14199

MORGA DRIVE 75032 CAPPS, HODGES & N 1200 SUMMER LEE I ROCKWALL, TX 75 SP2022-009

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# DEMOLITION, REMOVAL, DISPOSAL AND EXCAVATION NOTES

- 1. All pavements to be removed and replaced shall be saw cut to full depth along neat squared lines shown in
- Proposed concrete pavement shall be constructed with longitudinal butt construction joints at all connections to existing concrete pavement.
- All public concrete pavement to be removed and replaced shall be full panel replacement, 1-inch thicker and on top of 6-inch thick compacted flexbase.
- No excess excavated material shall be deposited in low areas or along natural drainage ways without written permission from the affected property owner and the City of Rockwall. No excess excavation shall be deposited in the City Limits without a permit from the City of Rockwall. If the CONTRACTOR places excess materials in these areas without written permission, the CONTRACTOR will be responsible for all damages resulting from such fill and shall remove the material at their own cost.

# PAVING AND GRADING

- All detention systems are to be installed and verified for design compliance along with the associated storm sewer and outflow structures, prior to the start of any paving operations (including building foundations). Erosion protection shall be placed at the pond outflow structures, silt fence along the perimeter of the pond along with any of the associated erosion BMPs noted on the erosion control plan, and the sides and bottom of the detention system shall have either sod or anchored seeded curlex installed prior to any concrete placement.
- All paving roadway, driveways, fire lanes, drive-isles, parking, dumpster pads, etc. sections shall have a minimum thickness, strength, reinforcement, joint type, joint spacing and subgrade treatment shall at a minimum conform to the City standards of Design and Construction and table below.

	Minimum	Streng th 28-	Minimum (sacks /	Cement		einforcement
Street/Pavement Type	Thickness (inches)	Day (psi)	Machine placed	Hand Placed	Bar#	Spacing (O.C.E.W.)
Arterial	10"	3,600	6.0	6.5	#4 bars	18"
Collector	8"	3,600	6.0	6.5	#4 bars	18"
Residential	6"	3,600	6.0	6.5	#3 bars	24"
Alley	7"-5"-7"	3,600	6.0	6.5	#3 bars	24"
Fire Lane	6"	3,600	6.0	6.5	#3 bars	24"
Driveways	6"	3,600	6.0	6.5	#3 bars	24"
Barrier Free Ramps	6"	3,600	N/A	6.5	#3 bars	24"
Sidewalks	4"	3,000	N/A	5.5	#3 bars	24"
Parking Lot/Drive Aisles	5"	3,000	5.0	5.5	#3 bars	24"
Dumpster Pads	7"	3,600	6.0	6.5	#3 bars	24"

- Reinforcing steel shall be tied (100%). Reinforcing steel shall be set on plastic chairs. Bar laps shall be minimum 30 diameters. Sawed transverse dummy joints shall be spaced every 15 feet or 1.25 time longitudinal butt joint spacing whichever is less. Sawing shall occur within 5 to 12 hours after the pour, including sealing. Otherwise, the section shall be removed and longitudinal butt joint constructed.
- No sand shall be allowed under any paving.
- All concrete mix design shall be submitted to the City for review and approval prior to placement.
- Fly ash may be used in concrete pavement locations provided that the maximum cement reduction does not exceed 20% by weight per C.Y. of concrete. The fly ash replacement shall be 1.25 lbs. per 1.0 lb. cement
- All curb and gutter shall be integral (monolithic) with the pavement.
- All fill shall be compacted by sheep's foot roller to a minimum 95% standard proctor. Maximum loose lift for compaction shall be 8 inches. All lifts shall be tested for density by an independent laboratory. All laboratory compaction reports shall be submitted to the City Engineering Construction Inspector once results are received. All reports will be required prior to final acceptance.
- All concrete compression tests and soil compaction/density tests are required to be submitted to the City's Engineering Inspector immediately upon results.
- 10. All proposed sidewalks shall include barrier free ramps at intersecting streets, alleys, etc. Barrier free ramps (truncated dome plate in Colonial or brick red color) shall meet current City and ADA requirements and be approved by the Texas Department of Licensing and Regulation (TDLR).
- 11. All public sidewalks shall be doweled into pavement where it abuts curbs and driveways. Expansion joint material shall be used at these locations.
- 12. All connection of proposed concrete pavement to existing concrete pavement shall include a longitudinal butt joint as the load transfer device. All longitudinal butt joints shall be clean, straight and smooth (not jagged in appearance)
- 13. Cracks formed in concrete pavement shall be repaired or removed by the CONTRACTOR at the City's discretion. CONTRACTOR shall replace existing concrete curbs, sidewalk, paving, a gutters as indicated on the plans and as necessary to connect to the existing infrastructure, including any damage caused by the CONTRACTOR.
- 14. All residential lots will require individual grading plans submitted during the building permit process that correspond with the engineered grading and drainage area plans.
- 15. Approval of this plan is not an authorization to grade adjacent properties when the plans or field conditions warrant off-site grading. Written permission must be obtained and signed from the affected property owner(s) and temporary construction easements may be required. The written permission shall be provided to the City as verification of approval by the adjacent property owner(s). Violation of this requirement will result in suspension of all work at the job site until issue has been rectified.
- 16. All cut or fill slopes of non-paved areas shall be a maximum of 4:1 and minimum of 1%.
- 17. CONTRACTOR agrees to repair any damage to property and the public right-of-way in accordance with the City Standards of Design and Construction.
- 18. CONTRACTOR shall protect all monuments, iron pins/rods, and property corners during construction.
- 19. CONTRACTOR shall ensure positive drainage so that runoff will drain by gravity flow to new or existing drainage inlets or sheet flow per these approved plans.

# DRAINAGE / STORM SEWER NOTES

- 1. The CONTRACTOR shall maintain drainage at all times during construction. Ponding of water in streets, drives, trenches, etc. will not be allowed. Existing drainage ways shall not be blocked or removed unless explicitly stated in the plans or written approval is given by the City.
- All structural concrete shall be 4200 psi compressive strength at 28 days minimum 7.0 sack mix, air entrained, unless noted otherwise. Fly ash shall not be allowed in any structural concrete.
- Proposed storm sewer embedment shall be NCTCOG Class 'B' as amended by the City of Rockwall's Engineering Department Standards of Design and Construction Manual.
- 4. All public storm pipe shall be a minimum of 18-inch reinforced concrete pipe (RCP), Class III, unless otherwise noted.
- 5. All storm pipe entering structures shall be grouted to assure connection at the structure is watertight.
- 6. All storm structures shall have a smooth uniform poured mortar invert from invert in to invert out.
- 7. All storm sewer manholes in paved areas shall be flush with the paving grade, and shall have traffic bearing ring and covers.
- 8. All storm sewer pipes and laterals shall be inspected by photographic means (television and DVD) prior to final acceptance and after franchise utilities are installed. The CONTRACTOR shall furnish a DVD to the Engineering Construction Inspector for review. Pipes shall be cleaned prior to TV inspection of the pipes. Any sags, open joints, cracked pipes, etc. shall be repaired or removed by the CONTRACTOR at the CONTRACTOR's expense. A television survey will be performed as part of the final testing in the twentieth (20<sup>th</sup>) month of the maintenance period.

# RETAINING WALLS

- 1. All retaining walls, regardless of height, will be reviewed and approved by the City Engineering Department 2. All retaining walls (including foundation stem walls), regardless of height, will be constructed of rock/stone/brick or rock/stone/brick faced. No smooth concrete walls are allowed. Wall materials shall be the same for all walls on the project.
- 3. All portions, including footings, tie-backs, and drainage backfill, of the wall shall be on-site and not encroach into any public easements or right-of-way. The entire wall shall be in one lot and shall not be installed along a lot line.
- 4. All walls 3 feet and taller will be designed and signed/sealed by a registered professional engineer in the State of Texas. The wall design engineer is required to inspect the wall construction and supply a signed/sealed letter of wall construction compliance to the City of Rockwall along with wall as-builts prior to City Engineering acceptance.
- No walls are allowed in detention easements. A variance to allow retaining walls in a detention easement will require approval by the Planning and Zoning Commission with appeals being heard by the City Council.

# FINAL ACCEPTANCE AND RECORD DRWINGS/AS-BUILTS

- . Final Acceptance shall occur when all the items on the Checklist for Final Acceptance have been completed and signed-off by the City. An example of the checklist for final acceptance has been included in the Appendix of the Standards of Design and Construction. Items on the checklist for final acceptance will vary per project and additional items not shown on the check list may be required.
- After improvements have been constructed, the developer shall be responsible for providing to the City "As Built" or "Record Drawings". The Design Engineer shall furnish all digital files of the project formatted in Auto Cad 14, or 2000 format or newer and Adobe Acrobat (.pdf) format with a CD-ROM disk or flash drive. The disk or drive shall include a full set of plans along with any landscaping, wall plans, and details sheets.
- Submit 1-set of printed drawings of the "Record Drawings" containing copies of all sheets to the Engineering Construction Inspector for the project. The printed sheets will be reviewed by the inspector PRIOR to producing the "Record Drawing" digital files on disk or flash drive. This will allow any revisions to be addressed prior to producing the digital files.
- Record Drawing Disk drawings shall have the Design Engineers seal, signature and must be stamped and dated as "Record Drawings" or "As Built Drawings" on all sheets.
- 5. The City of Rockwall will not accept any Record Drawing disk drawings which include a disclaimer. A disclaimer shall not directly or indirectly state or indicate that the design engineer or the design engineer's surveyor/surveyors did not verify grades after construction, or that the Record Drawings were based solely on information provided by the construction contractor/contractors. Any Record Drawings which include like or similar disclaimer verbiage will not be accepted by the City of Rockwall.
- Example of Acceptable Disclaimer: "To the best of our knowledge ABC Engineering, Inc., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor."



**GENERAL CONSTRUCTION NOTES** Sheet 2 of 2

October 2020

CITY OF ROCKWALL **ENGINEERING DEPARTMENT** 

385 S. Goliad Rockwall, Texas 75087

P (972) 771-7746 F (972) 771-7748

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TEXAS REGISTRATION #14199



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No.

- 2. ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS FOR THE PROJECT. CHANGES ARE TO BE APPROVED BEFORE CONSTRUCTION BY THE DESIGN ENGINEER AND THE CITY OF ROCKWALL.
- IF THE EROSION CONTROL PLAN AS APPROVED CANNOT CONTROL EROSION AND OFF-SITE SEDIMENTATION FROM THE PROJECT THE EROSION CONTROL PLAN WILL BE REQUIRED TO BE REVISED AND/OR ADDITIONAL EROSION CONTROL DEVICES WILL BE REQUIRED ON SITE.
- 4. IF OFF-SITE BORROW OR SPOILS SITES ARE USED IN CONJUNCTION WITH THIS PROJECT, THIS INFORMATION SHALL BE DISCLOSED AND SHOWN ON THE EROSION CONTROL PLAN. OFF-SITE BORROW AND SPOILS AREAS ARE CONSIDERED PART OF EROSION CONTROL REQUIREMENTS. THESE AREAS SHALL BE STABILIZED WITH GROUND COVER PRIOR TO FINAL APPROVAL OF THE PROJECT.
- INSPECTIONS SHALL BE MADE WEEKLY AND AFTER RAIN STORM EVENTS TO INSURE THAT THE DEVICES ARE FUNCTIONING PROPERLY. WHEN SEDIMENT OR MUD HAS CLOGGED THE VOID SPACES BETWEEN STONES OR MUD IS BEING TRACKED ONTO A PUBLIC ROADWAY THE AGGREGATE PAD MUST BE WASHED DOWN OR REPLACED. RUNOFF FROM THE WASH DOWN OPERATION HALL SHALL NOT BE ALLOWED TO DRAIN DIRECTLY OFF SITE WITHOUT FIRST FLOWING THROUGH ANOTHER BMP TO CONTROL OFF SITE SEDIMENTATION. PERIODIC RE-GRADING OR THE ADDITION OF NEW STONE MAY BE REQUIRED TO MAINTAIN THE EFFICIENCY OF THE INSTALLATION.
- 6. CONTRACTOR SHALL HAVE A COPY OF THE SWPPP ON SITE AT ALL TIMES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTAL OF N.O.I., N.O.T. AND ANY ADDITIONAL INFORMATION REQUIRED BY THE E.P.A. CONTRACTOR SHALL COMPLY WITH ALL T.C.E.Q. STORM WATER POLLUTION PREVENTION REQUIREMENTS.

# EROSION CONTROL SCHEDULE AND PHASING

THE PROJECT SHALL GENERALLY CONFORM TO THE FOLLOWING:

PHASE 1 - DEMOLITION/GRADING

- CONSTRUCT TEMPORARY CONSTRUCTION ENTRANCE, SILT FENCE, AND TREE PROTECTION FENCE ACCORDING TO THE APPROXIMATE LOCATION SHOWN ON GRADING AND EROSION CONTROL PLAN, NOTES, AND DETAIL SHEETS.
- BEGIN CLEARING AND GRADING OF SITE. SEED AND REVEGETATE SLOPES WHERE SHOWN.

PHASE 2 - UTILITIES

- A. KEEP ALL STORM WATER POLLUTION PREVENTION MEASURES IN
- INSTALL STORM DRAINS AS SPECIFIED ON PLAN SHEETS. INSTALL INLET PROTECTION.

PHASE 3 - PAVING

- A. KEEP ALL STORM WATER POLLUTION PREVENTION MEASURES IN PLACE. REMOVE AS NEEDED TO PAVE. STABILIZE SUBGRADE.
- PAVE PARKING LOT AND SIDEWALKS AS SPECIFIED ON PLAN
- REMOVE TEMPORARY CONSTRUCTION ENTRANCE. MAINTAIN INLET PROTECTION.

PHASE 4 - LANDSCAPING AND SOIL STABILIZATION

- A. REVEGETATE LOT AND PARKWAYS B. LANDSCAPE CONTRACTOR SHALL REVEGETATE ALL AREAS
- RESERVED FOR LANDSCAPE VEGETATIVE COVERS.
- REMOVE EROSION CONTROL DEVICES WHEN GROUND COVER ESTABLISHED.

# B.M.P. MAINTENANCE SCHEDULE

TEMPORARY STONE CONSTRUCTION ENTRANCE/EXIT:

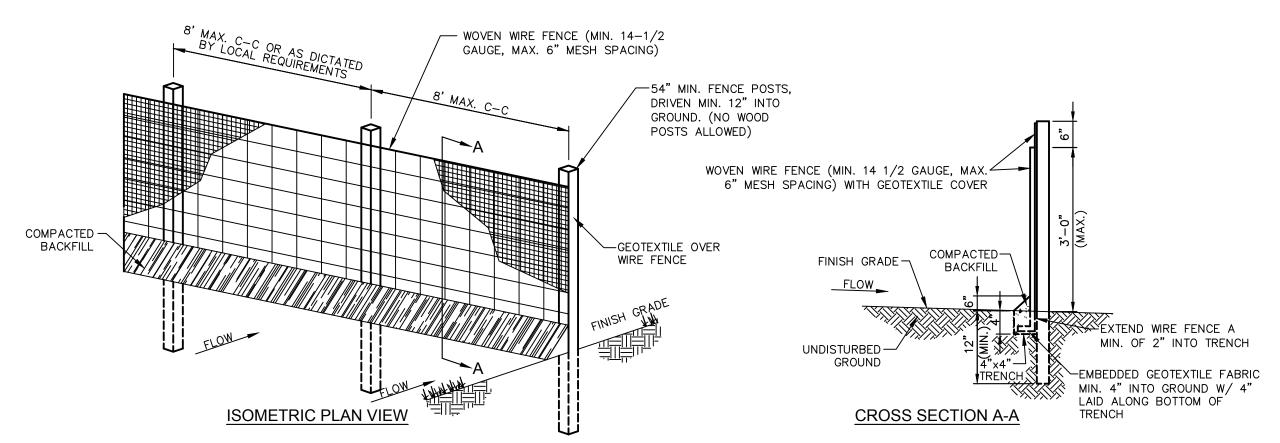
INSPECTIONS SHALL BE MADE WEEKLY AND AFTER RAIN STORM EVENTS TO ENSURE THAT THE FACILITY IS FUNCTIONING PROPERLY AGGREGATE PAD SHALL BE WASHED DOWN OR REPLACED WHEN SEDIMENT OR MUD HAS CLOGGED THE VOID SPACES BETWEEN THE STONES OR MUD IS BEING TRACKED ONTO THE PUBLIC ROADWAY. RUNOFF FROM WASH DOWN OPERATION SHALL BE FILTERED THROUGH ANOTHER B.M.P. PRIOR TO DRAINING OFF-SITE.

SILT FENCE:

INSPECTIONS SHALL BE MADE WEEKLY AND AFTER RAIN STORM EVENTS. SEDIMENT SHALL BE REMOVED FROM BEHIND THE FENCE WHEN THE DEPTH OF SEDIMENT HAS BUILT UP TO ONE-THIRD THE HEIGHT OF THE FENCE ABOVE GRADE. FENCE SHALL BE INSPECTED FOR GAPS AT BASE. INSPECT SUPPORTING POSTS AND FILTER FABRIC. REPLACE IF REQUIRED.

# INLET PROTECTION:

NSPECTIONS SHALL BE MADE WEEKLY AND AFTER RAIN STORM EVENTS TO ENSURE THAT THE DEVICE IS FUNCTIONING PROPERLY. SEDIMENT SHALL BE REMOVED FROM THE STORAGE AREA WHEN SEDIMENT DEPTH HAS BUILT UP TO ONE-HALF THE DESIGN DEPTH. II DE-WATERING OF THE STORAGE VOLUME IS NOT OCCURRING, CLEAN OR REPLACE THE FILTER STONE SURROUNDING THE INLET. CLEAN THE STONE SURFACE THE FIRST FEW TIMES BY RAKING. REPEATED SEDIMENT BUILD-UP WILL REQUIRE FILTER STONE REPLACEMENT.

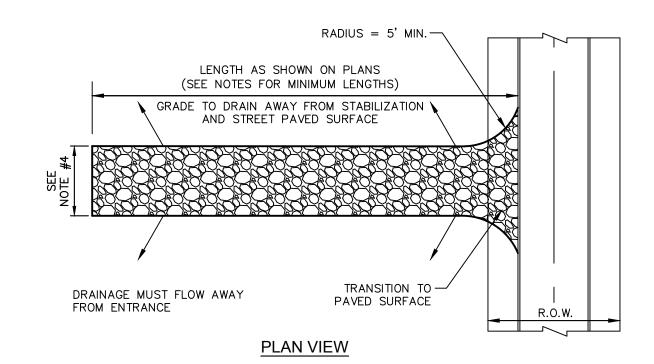


1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE

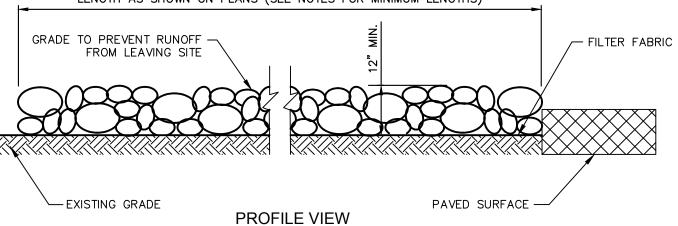
- 2. GEOTEXTILE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- 3. WHEN TWO SECTIONS OF GEOTEXTILE ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
- 4. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE EROSION CONTROL PLAN.
- 5. COLLECTED MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT

6. ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT UNLESS INDICATED OTHERWISE





LENGTH AS SHOWN ON PLANS (SEE NOTES FOR MINIMUM LENGTHS)



1. STONE SHALL BE 4 TO 6 INCH DIAMETER CRUSHED ROCK, NO CRUSHED PORTLAND CEMENT CONCRETE ALLOWED.

2. LENGTH SHALL BE SHOWN ON PLANS, WITH A MINIMUM LENGTH OF 30 FEET FOR LOTS WHICH ARE LESS THAN 150 FEET FROM EDGE OF PAVEMENT. THE MINIMUM DEPTH IN ALL OTHER CASES SHALL BE 50 FEET.

POSTS: STEEL EITHER T OR U TYPE.

6" MAX. MESH OPENING

FENCE: WOVEN WIRE, 14-1/2 GA.

2. BELTECH 810

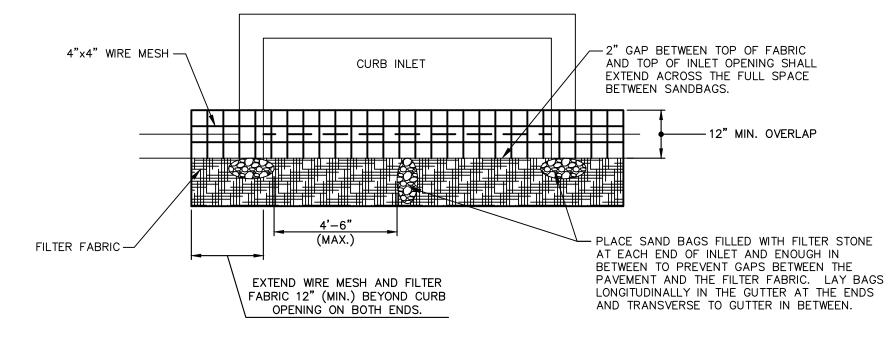
4. LING GTF 190

MIRAFI 130X

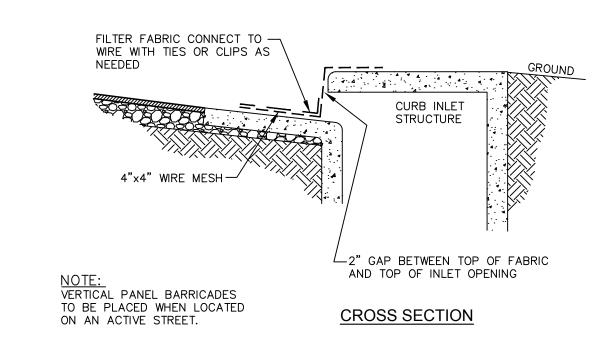
5. SI 915 SC

FABRIC:1. AMOCO 1198

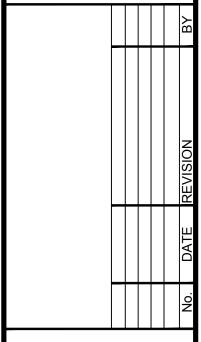
- 3. STONE LAYER THICKNESS SHALL NOT BE LESS THAN 12"
- 4. THE WIDTH SHALL BE NO LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS. INCHES.
- 5. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
- 6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES MUST BE REMOVED IMMEDIATELY.
- 7. THE ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.







**CURB INLET PROTECTION DETAIL** N.T.S.



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TEXAS REGISTRATION #14199

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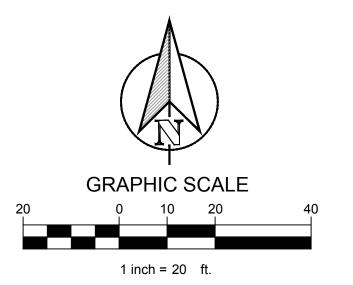
CHECKED:

SHEET C-5

STABILIZED CONSTRUCTION ENTRANCE DETAIL (CE)

These drawings have been revised to show those changes during the construction process reported by the contractor to ClayMoore Engineering, Inc. and considered to be significant. These drawings are not guaranteed to be "As Built" but are based on the information made available.





LEGEND			
	6" HEAVY DUTY CONCRETE PAVEMENT		
	5" LIGHT DUTY CONCRETE PAVEMENT		
	7" DUMPSTER CONCRETE PAVEMENT		
	PROPOSED CONCRETE SIDEWALK		
	PROPERTY LINE		
	FULL-DEPTH SAWCUT		
	EASEMENT LINE		
(10)	PARKING COUNT		
₹-0	LIGHT POLES		

	CONSTRUCTION SCHEDULE
1	SAW CUT FULL DEPTH EXISTING PAVEMENT
2	4" PARKING STALL STRIPING COLOR: WHITE (TYP)
3	CURB & GUTTER
4	PROPOSED PEDESTRIAN RAMP
5	HANDICAP SYMBOL
6	PAVEMENT STRIPING
7	HANDICAP SIGN
8	PROPOSED SIDEWALK
9	"NOT AN ACCESSIBLE ROUTE" SIGN

NOTES:
1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

- 2. REFER TO ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS AND EXACT DOOR LOCATIONS.
- 3. AN EXTRA SACK OF CEMENT PER CUBIC YARD IS REQUIRED FOR ALL HAND POURS.
- 4. ALL RIGID PAVEMENT WITHIN THE CITY RIGHT-OF-WAY OR UNDER A FIRE LANE SHALL BE PER CITY STANDARDS AND DETAILS.
- 5. DUMPSTER ENCLOSURE MUST INCLUDE A OIL/WATER SEPARATOR, SELF LATCHING GATE AND BE FACED WITH MATERIALS MATCHING THE BUILDING STRUCTURE.

# **BENCHMARKS**

SITE BENCHMARK NO. 1: BEING AN "X" CUT SET ON CONCRETE PAVEMENT, APPROXIMATELY 12 FEET EAST, AND 5 FEET SOUTH OF A POWER POLE LOCATED NEAR THE SOUTHERNMOST SOUTHEAST CORNER OF THE SUBJECT PROPERTY. ELEVATION: 554.31'

SITE BENCHMARK NO. 2: BEING AN "X" CUT SET ON CONCRETE PAVEMENT, APPROXIMATELY 40 FEET EAST, AND 62 FEET NORTH OF A SANITARY SEWER MANHOLE COVER LOCATED NEAR THE NORTHEAST CORNER OF THE SUBJECT PROPERTY. ELEVATION: 543.99'

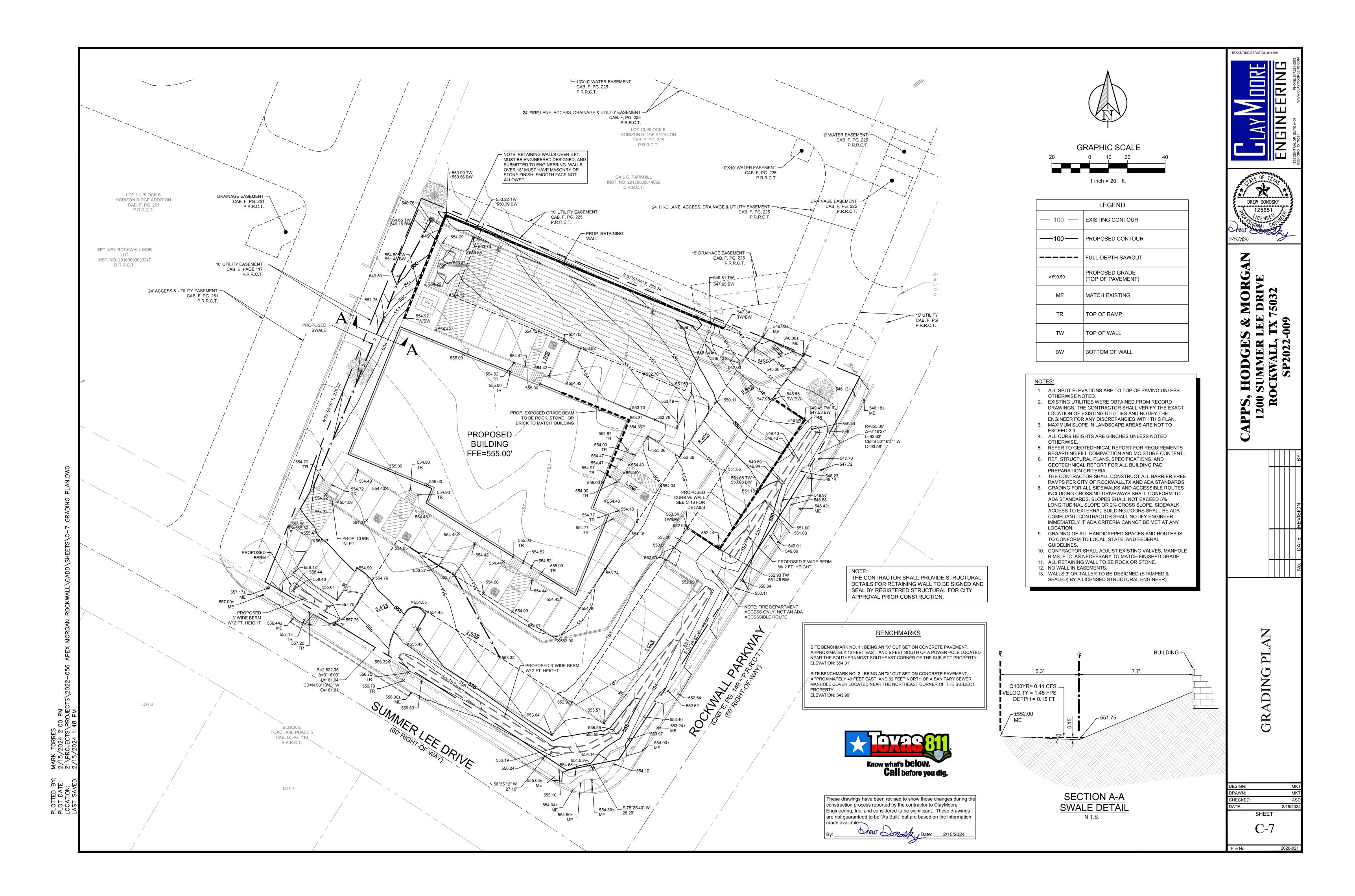
These drawings have been revised to show those changes during the construction process reported by the contractor to ClayMoore Engineering, Inc. and considered to be significant. These drawings are not guaranteed to be "As Built" but are based on the information

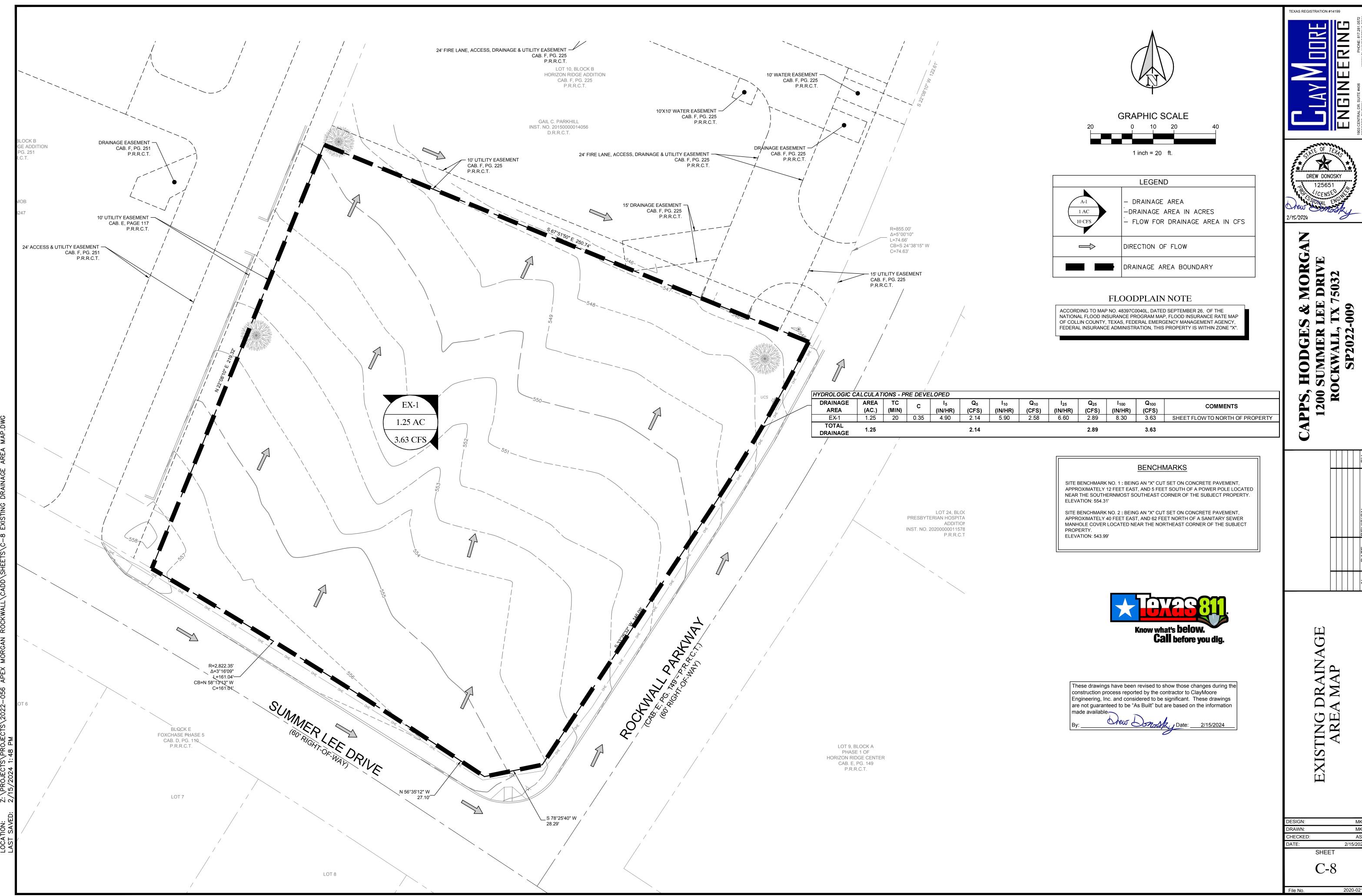
TEXAS REGISTRATION #14199 LLAY WOORE ENGINEERING DREW DONOSKY

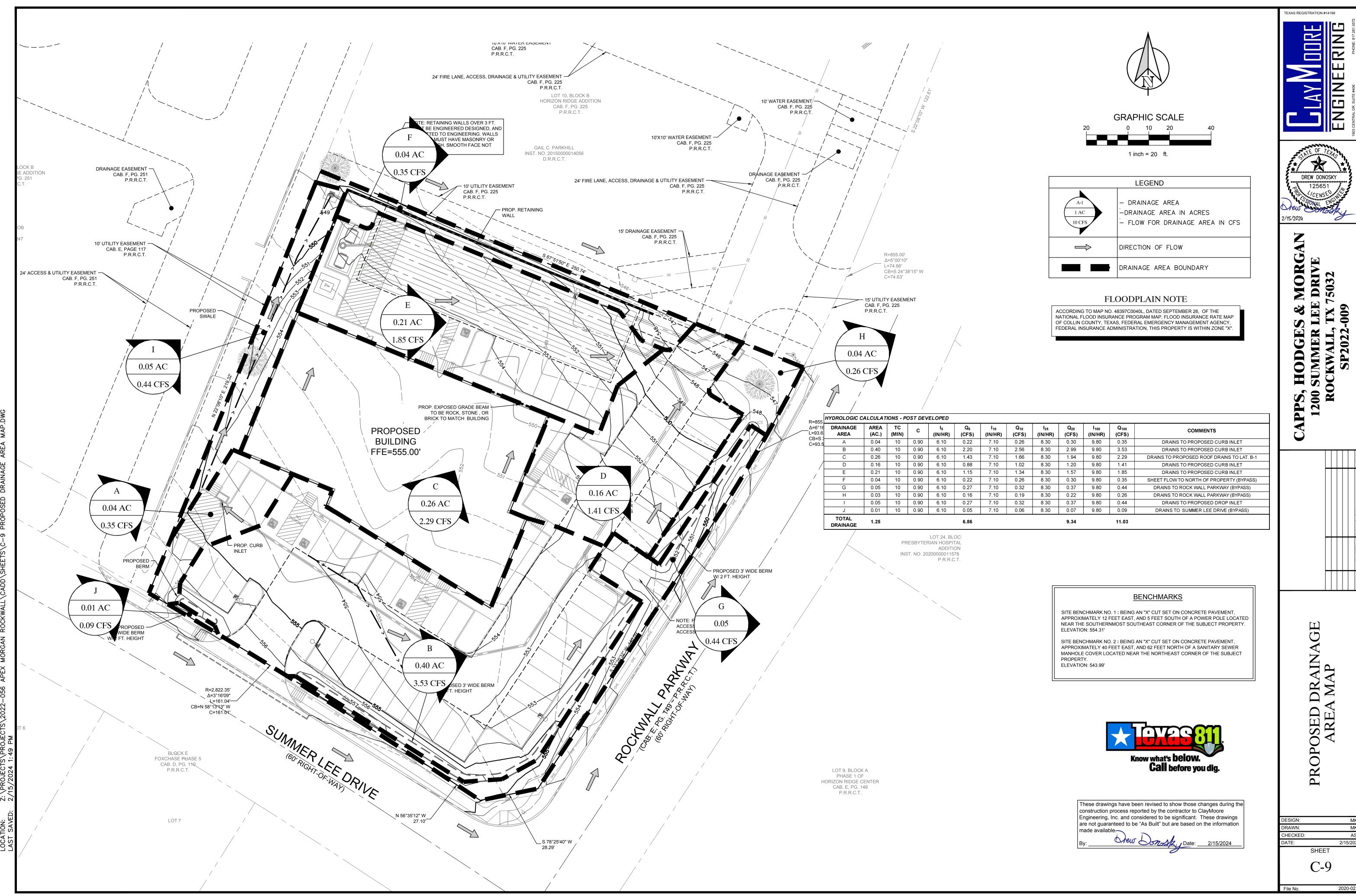
DIMENSIONAL CONTROI PAVING PLAN

CHECKED: SHEET

C-6









Required Storage Volume	12,375 cubic-feet
	0.284 acre-feet
Provided Storage Volume	12,375 cubic-feet
	0.284 acre-feet

Onsite Existing	Conditions	
Area	1.25 acres	
Time (Tc)	20 minutes	
C value	0.35	
I-100yr	8.30 in/hr	
Q100yr	3.63 cfs	Existing Runoff
Q100yr	1.15 cfs	Area Bypassing Pond (Areas F,G,H, & J
Q100yr	2.48 cfs	Allowable Release Rate
Q100yr	2.48 cfs	Proposed Release Rate

Onsite Prop Co	nditions Pond	
Area	1.12 acres	Total Drainage On-Site Area
Time (Tc)	10 minutes	
C value	0.90	
I-100yr	9.80 in/hr	
Q100yr	9.88 cfs	Developed Runoff

Runoff per Storm Event - Developed				
				D ((())
Time (min.)	I-100yr	C value	Area (ac)	Runoff (cfs)
10	9.80	0.90	1.12	9.88
15	9.00	0.90	1.12	9.07
20	8.30	0.90	1.12	8.37
30	6.90	0.90	1.12	6.96
35	6.40	0.90	1.12	6.45
40	5.80	0.90	1.12	5.85
50	5.00	0.90	1.12	5.04
60	4.50	0.90	1.12	4.54
70	4.00	0.90	1.12	4.03
80	3.70	0.90	1.12	3.73
90	3.50	0.90	1.12	3.53
100	3.40	0.90	1.12	3.43
110	3.20	0.90	1.12	3.23

Inflow per Sto	rm Event	
Storm Event	Runoff	Inflow (ft^3)
10	9.88	5,927
15	9.07	8,165
20	8.37	10,040
30	6.96	12,519
35	6.45	13,548
40	5.85	14,031
50	5.04	15,120
60	4.54	16,330
70	4.03	16,934
80	3.73	17,902
90	3.53	19,051
100	3.43	20,563
110	3.23	21,289

			Outflow
Storm	Time	Release	(ft^3)
10	20	2.48	1,489
15	25	2.48	1,861
20	30	2.48	2,233
30	40	2.48	2,978
35	45	2.48	3,350
40	50	2.48	3,722
50	60	2.48	4,466
60	70	2.48	5,211
70	80	2.48	5,955
80	90	2.48	6,699
90	100	2.48	7,444
100	110	2.48	8,188
110	120	2.48	8,933

			Storage	Storage
Storm	Inflow	Outflow	(ft^3)	(acre-ft)
10	5,927	1,489	4,438	0.102
15	8,165	1,861	6,304	0.145
20	10,040	2,233	7,807	0.179
30	12,519	2,978	9,542	0.219
35	13,548	3,350	10,198	0.234
40	14,031	3,722	10,309	0.237
50	15,120	4,466	10,654	0.245
60	16,330	5,211	11,119	0.255
70	16,934	5,955	10,979	0.252
80	17,902	6,699	11,203	0.257
90	19,051	7,444	11,607	0.266
100	20,563	8,188	12,375	0.284
110	21,289	8,933	12,356	0.284

Pond -Drainage / Detention Calculations (25 YEAR EVENT) Modified Rational Method

Required Storage Volume	10,033 cubic-feet
	0.230 acre-feet
Provided Storage Volume	10,033 cubic-feet
	0.230 acre-feet

Q25yr	8.37 cfs	Developed Runoff
l-25yr	8.30 in/hr	
C value	0.90	
Time (Tc)	10 minutes	
Area	1.12 acres	Total Drainage On-Site Area
Onsite Prop Co	nditions Pond	
Q25yr	1.92 cfs	Proposed Release Rate
Q25yr	1.92 cfs	Allowable Release Rate
Q25yr	0.97 cfs	Area Bypassing Pond (Areas F,G,H, & J
Q25yr	2.89 cfs	Existing Runoff
l-25yr	6.60 in/hr	
C value	0.35	
Time (Tc)	20 minutes	
Area	1.25 acres	
Onsite Existing	Conditions	

Runoff per Storm Event - Developed				
Time (min.)	l-25yr	C value	Area (ac)	Runoff (cfs)
10	8.30	0.90	1.12	8.37
15	7.40	0.90	1.12	7.46
20	6.70	0.90	1.12	6.75
30	5.50	0.90	1.12	5.54
35	5.00	0.90	1.12	5.04
40	4.70	0.90	1.12	4.74
50	4.00	0.90	1.12	4.03
60	3.50	0.90	1.12	3.53
70	3.30	0.90	1.12	3.33
80	3.10	0.90	1.12	3.12
90	2.90	0.90	1.12	2.92
100	2.70	0.90	1.12	2.72
110	2.50	0.90	1.12	2.52

Inflow per Sto		
Storm Event	Runoff	Inflow (ft^3)
10	8.37	5,020
15	7.46	6,713
20	6.75	8,104
30	5.54	9,979
35	5.04	10,584
40	4.74	11,370
50	4.03	12,096
60	3.53	12,701
70	3.33	13,971
80	3.12	14,999
90	2.92	15,785
100	2.72	16,330
110	2.52	16,632

			Outflow
Storm	Time	Release	(ft^3)
10	20	1.92	1,15
15	25	1.92	1,43
20	30	1.92	1,72
30	40	1.92	2,30
35	45	1.92	2,58
40	50	1.92	2,87
50	60	1.92	3,45
60	70	1.92	4,02
70	80	1.92	4,60
80	90	1.92	5,17
90	100	1.92	5,75
100	110	1.92	6,32
110	120	1.92	6,90

tention vo	lume Require	ŧu		
			Storage	Storage
Storm	Inflow	Outflow	(ft^3)	(acre-ft)
10	5,020	1,151	3,869	0.089
15	6,713	1,438	5,275	0.121
20	8,104	1,726	6,379	0.146
30	9,979	2,301	7,678	0.176
35	10,584	2,589	7,995	0.184
40	11,370	2,876	8,494	0.195
50	12,096	3,452	8,645	0.198
60	12,701	4,027	8,674	0.199
70	13,971	4,602	9,369	0.215
80	14,999	5,177	9,822	0.225
90	15,785	5,753	10,033	0.230
100	16,330	6,328	10,002	0.230
110	16,632	6,903	9,729	0.223

Pond - Drainage / Detention Calculations (10 YEAR EVENT) Modified Rational Method

Required Storage Volume	8,997 cubic-feet
	0.207 acre-feet
Provided Storage Volume	8,997 cubic-feet
	0.207 acre-feet

		_
Onsite Existing	Conditions	
Area	1.25 acres	
Time (Tc)	20 minutes	
C value	0.35	
I-100yr	5.90 in/hr	
Q10yr	2.58 cfs	Existing Runoff
Q10yr	0.83 cfs	Area Bypassing Pond (Areas F,G,H, & J
Q10yr	1.75 cfs	Allowable Release Rate
Q10yr	1.75 cfs	Proposed Release Rate
Onsite Prop Co	onditions Pond	
Area	1.12 acres	Total Drainage On-Site Area
Time (Tc)	10 minutes	
C value	0.90	
I-10vr	7 10 in/hr	

Runoff per Storm Event - Developed				
Time (min.)	l-10yr	C value	Area (ac)	Runoff (cfs)
10	7.20	0.90	1.12	7.26
15	6.50	0.90	1.12	6.55
20	5.80	0.90	1.12	5.85
30	4.75	0.90	1.12	4.79
35	4.50	0.90	1.12	4.54
40	4.00	0.90	1.12	4.03
50	3.45	0.90	1.12	3.48
60	3.00	0.90	1.12	3.02
70	2.80	0.90	1.12	2.82
80	2.60	0.90	1.12	2.62
90	2.50	0.90	1.12	2.52
100	2.40	0.90	1.12	2.42
110	2.30	0.90	1.12	2.32
120	1.62	0.90	1.12	1.63

7.16 cfs

Inflow per Sto		
Storm Event	Runoff	Inflow (ft^3)
10	7.26	4,355
15	6.55	5,897
20	5.85	7,016
30	4.79	8,618
35	4.54	9,526
40	4.03	9,677
50	3.48	10,433
60	3.02	10,886
70	2.82	11,854
80	2.62	12,580
90	2.52	13,608
100	2.42	14,515
110	2.32	15,301
120	1.63	11,757

			Outflow
Storm	Time	Release	(ft^3)
10	20	1.75	1,051
15	25	1.75	1,313
20	30	1.75	1,576
30	40	1.75	2,102
35	45	1.75	2,364
40	50	1.75	2,627
50	60	1.75	3,152
60	70	1.75	3,678
70	80	1.75	4,203
80	90	1.75	4,728
90	100	1.75	5,254
100	110	1.75	5,779
110	120	1.75	6,305
120	130	1.75	6,830

		_		
Detention Vo	lume Require			
			Storage	Storage
Storm	Inflow	Outflow	(ft^3)	(acre-ft)
10	4,355	1,051	3,304	0.076
15	5,897	1,313	4,583	0.105
20	7,016	1,576	5,440	0.125
30	8,618	2,102	6,517	0.150
35	9,526	2,364	7,161	0.164
40	9,677	2,627	7,050	0.162
50	10,433	3,152	7,281	0.167
60	10,886	3,678	7,209	0.165
70	11,854	4,203	7,651	0.176
80	12,580	4,728	7,851	0.180
90	13,608	5,254	8,354	0.192
100	14,515	5,779	8,736	0.201
110	15,301	6,305	8,997	0.207

Pond -Drainage / Detention Calculations (5 YEAR EVENT) Modified Rational Method

Required Storage Volume	7,257 cubic-feet
	0.167 acre-feet
Provided Storage Volume	7,257 cubic-feet
	0.167 acre-feet

Onsite Existing	Conditions	
Area	1.25 acres	
Time (Tc)	20 minutes	
C value	0.35	
l-5yr	4.90 in/hr	
Q5yr	2.14 cfs	Existing Runoff
Q5yr	0.71 cfs	Area Bypassing Pond (Areas F,G,H, & J
Q5yr	1.43 cfs	Allowable Release Rate
Q5yr	1.43 cfs	Proposed Release Rate

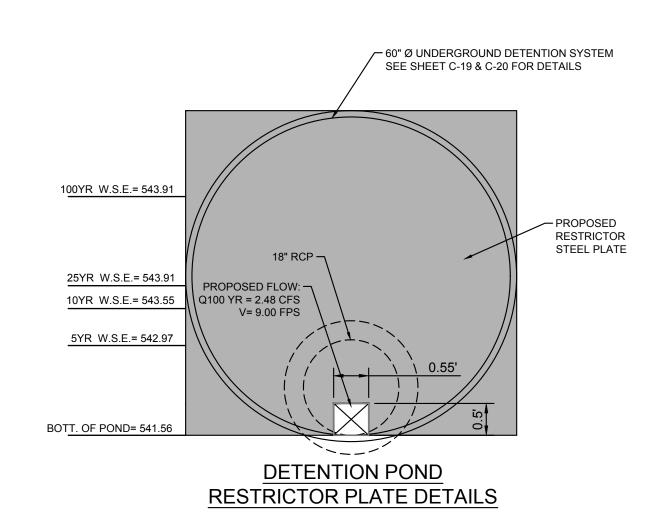
Onsite Prop Co	nditions Pond	
Area	1.12 acres	Total Drainage On-Site Area
Time (Tc)	10 minutes	
C value	0.90	
l-5yr	6.10 in/hr	
Q5vr	6.15 cfs	Developed Runoff

Runoff per St	orm Event -			
Time (min.)	l-5yr	C value	Area (ac)	Runoff (cfs)
10	6.10	0.90	1.12	6.15
15	5.50	0.90	1.12	5.54
20	4.90	0.90	1.12	4.94
30	4.00	0.90	1.12	4.03
35	3.75	0.90	1.12	3.78
40	3.40	0.90	1.12	3.43
50	2.90	0.90	1.12	2.92
60	2.60	0.90	1.12	2.62
70	2.40	0.90	1.12	2.42
80	2.30	0.90	1.12	2.32
90	2.10	0.90	1.12	2.12
100	1.90	0.90	1.12	1.92
110	1.80	0.90	1.12	1.81
120	1.40	0.90	1.12	1.41

Inflow per Sto	rm Event	
Storm Event	Runoff	Inflow (ft^3)
10	6.15	3,689
15	5.54	4,990
20	4.94	5,927
30	4.03	7,258
35	3.78	7,938
40	3.43	8,225
50	2.92	8,770
60	2.62	9,435
70	2.42	10,161
80	2.32	11,128
90	2.12	11,431
100	1.92	11,491
110	1.81	11,975
120	1.41	10,161

ax Allowab	le Outflow p	er Storm Ev	ent
			Outflow
Storm	Time	Release	(ft^3)
10	20	1.43	860
15	25	1.43	1,075
20	30	1.43	1,290
30	40	1.43	1,721
35	45	1.43	1,936
40	50	1.43	2,151
50	60	1.43	2,581
60	70	1.43	3,011
70	80	1.43	3,441
80	90	1.43	3,871
90	100	1.43	4,301
100	110	1.43	4,731
110	120	1.43	5,162
120	130	1.43	5,592

etention Vo	2 14 15 15 15 15 15 15 15 15 15 15 15 15 15		Storage	Storage
Storm	Inflow	Outflow	(ft^3)	(acre-ft)
10	3,689	860	2,829	0.06
15	4,990	1,075	3,914	0.090
20	5,927	1,290	4,637	0.10
30	7,258	1,721	5,537	0.12
35	7,938	1,936	6,002	0.13
40	8,225	2,151	6,075	0.139
50	8,770	2,581	6,189	0.14
60	9,435	3,011	6,424	0.14
70	10,161	3,441	6,720	0.15
80	11,128	3,871	7,257	0.16
90	11,431	4,301	7,129	0.16
100	11,491	4,731	6,760	0.15
110	11,975	5,162	6,814	0.15
120	10,161	5,592	4,569	0.10



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Engineering, Inc. and considered to be significant. These drawings
are not guaranteed to be "As Built" but are based on the information
made available.



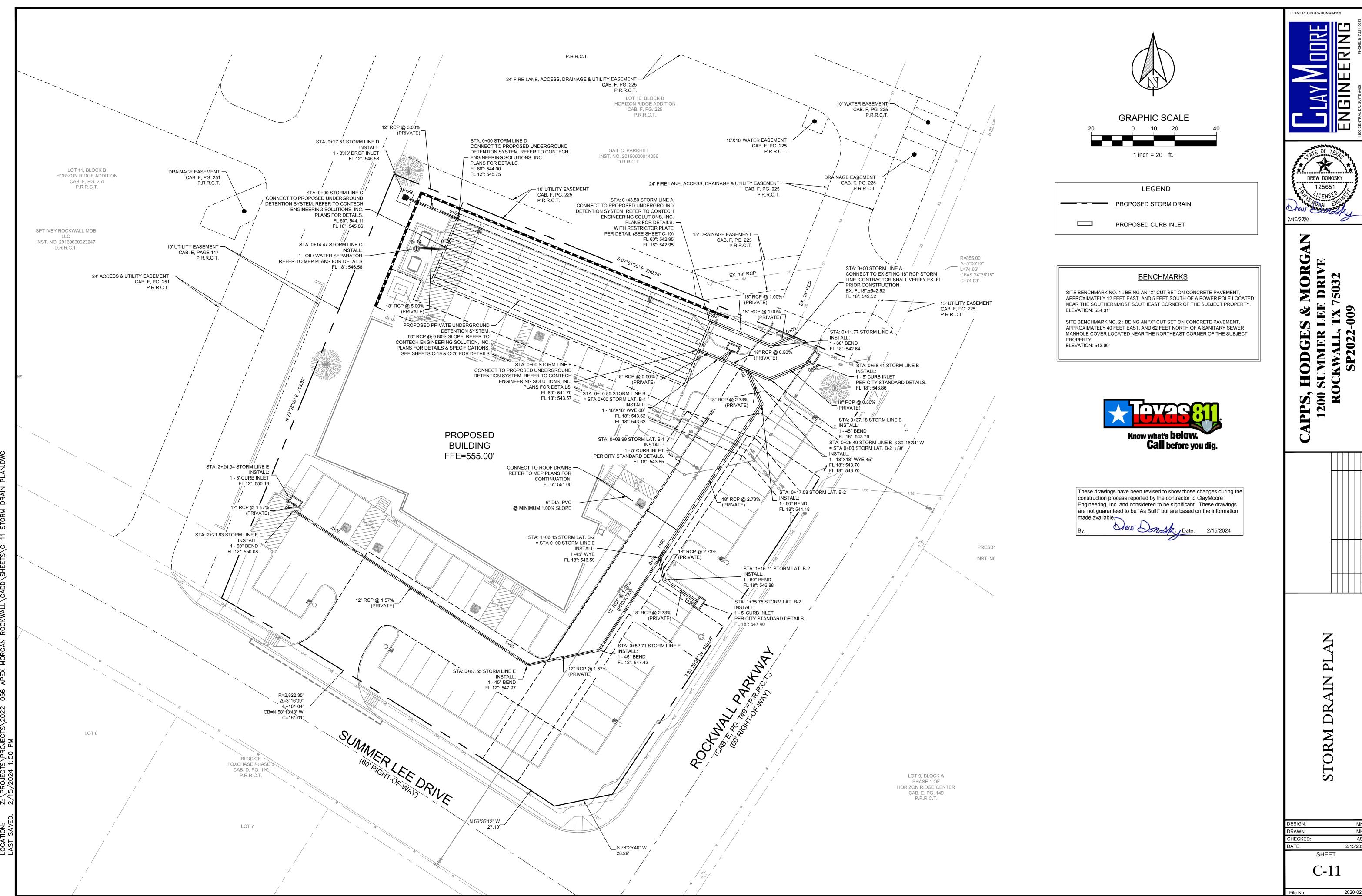
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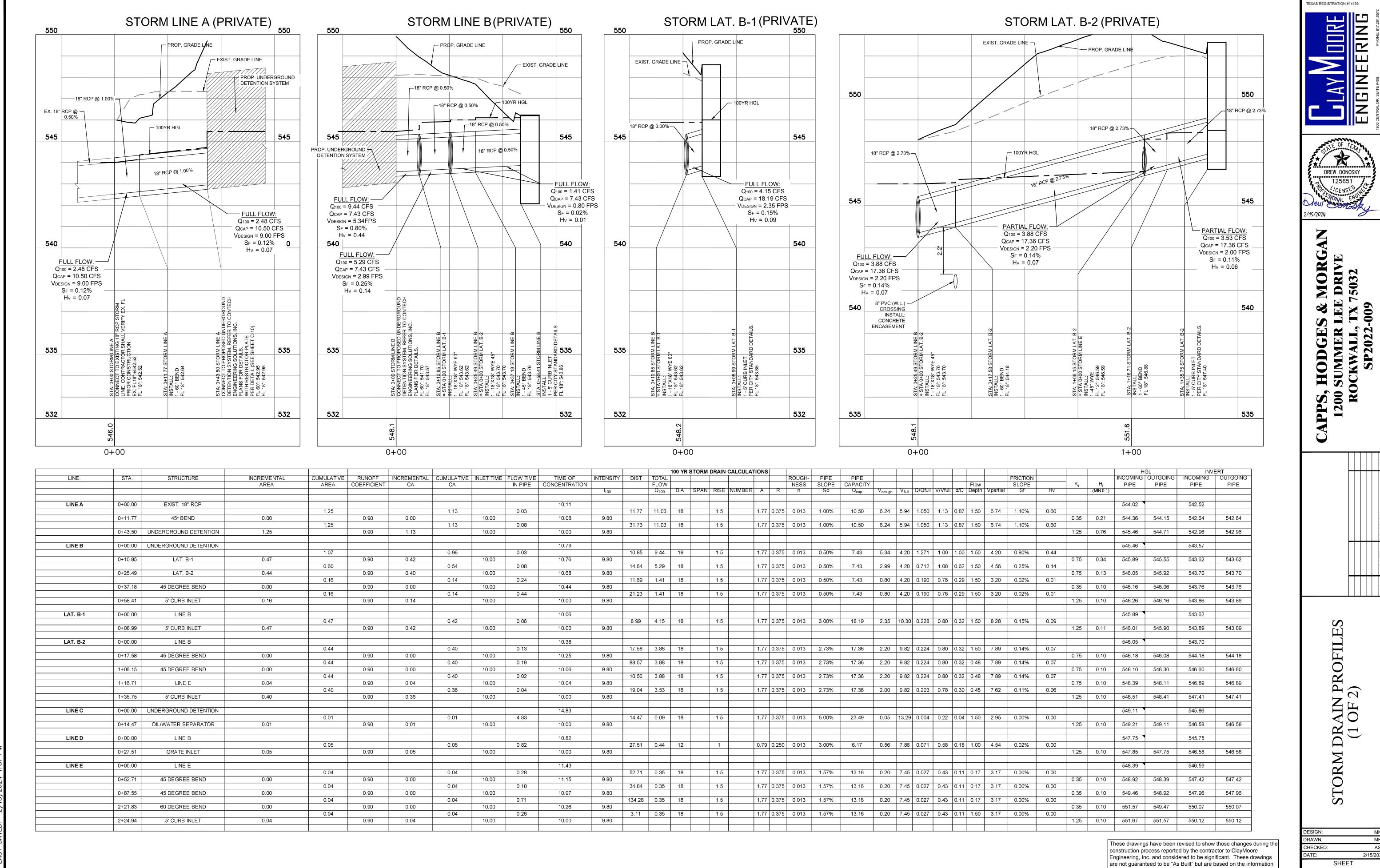
J. LAY MODRE ENGINEERING

DREW DONOSKY

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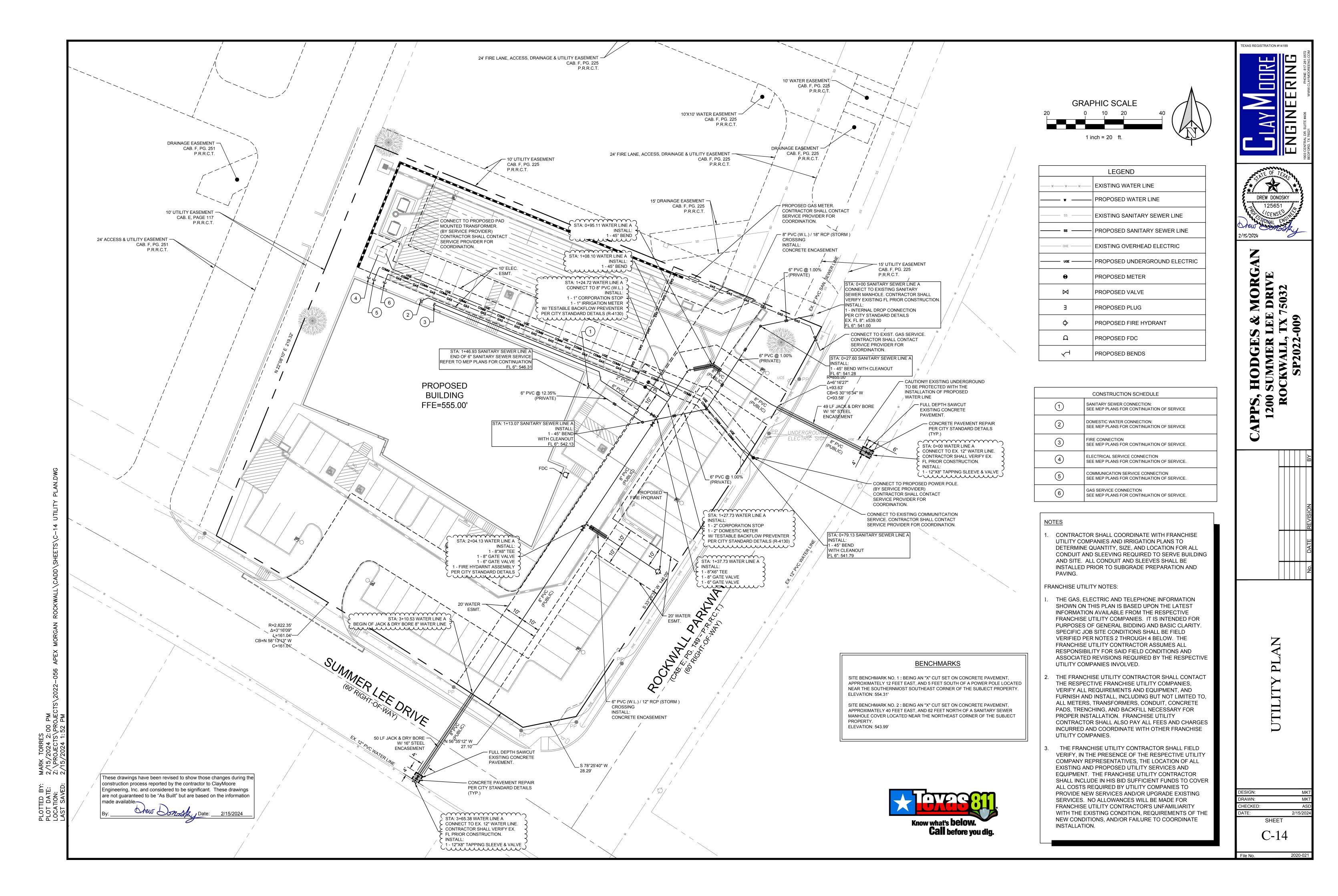
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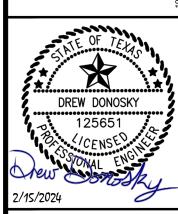
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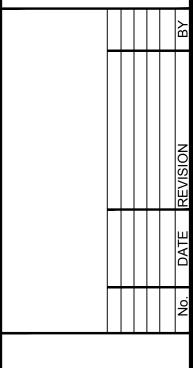
Z/15/2024 Z:00 PM Z:\PROJECTS\PROJECTS\2022-056 APEX MORGAN ROCKWALL\CADD\SHEETS\C-13 STORM DRAIN PROFILES (2 OF . 2/15/2024 1:51 PM

PLOTTED BY: MARK TORRES
PLOT DATE: 2/15/2024 2:0<sup>1</sup>
LOCATION: Z:\PROJECTS\P
LAST SAVED: 2/15/2024 1:51



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These drawings have been revised to show those changes during the construction process reported by the contractor to ClayMoore Engineering, Inc. and considered to be significant. These drawings are not guaranteed to be "As Built" but are based on the information

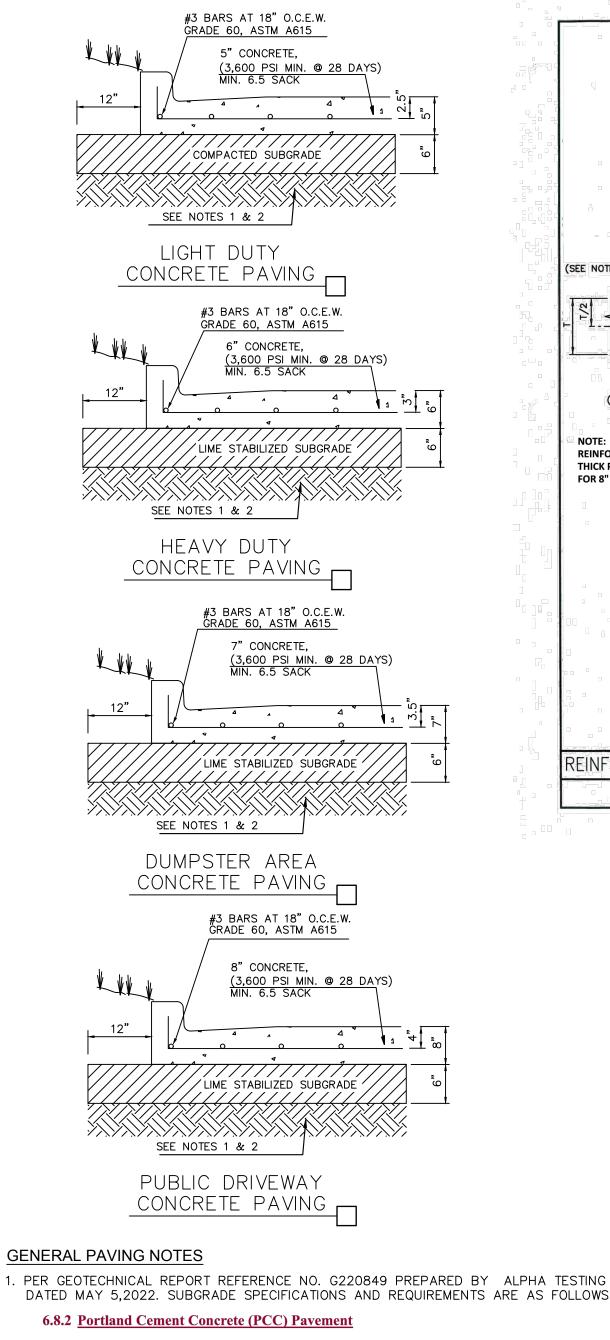
**BENCHMARKS** 

SITE BENCHMARK NO. 1: BEING AN "X" CUT SET ON CONCRETE PAVEMENT, APPROXIMATELY 12 FEET EAST, AND 5 FEET SOUTH OF A POWER POLE LOCATED NEAR THE SOUTHERNMOST SOUTHEAST CORNER OF THE SUBJECT PROPERTY. ELEVATION: 554.31'

SITE BENCHMARK NO. 2 : BEING AN "X" CUT SET ON CONCRETE PAVEMENT, APPROXIMATELY 40 FEET EAST, AND 62 FEET NORTH OF A SANITARY SEWER

MANHOLE COVER LOCATED NEAR THE NORTHEAST CORNER OF THE SUBJECT PROPERTY.

ELEVATION: 543.99'



# **GENERAL PAVING NOTES**

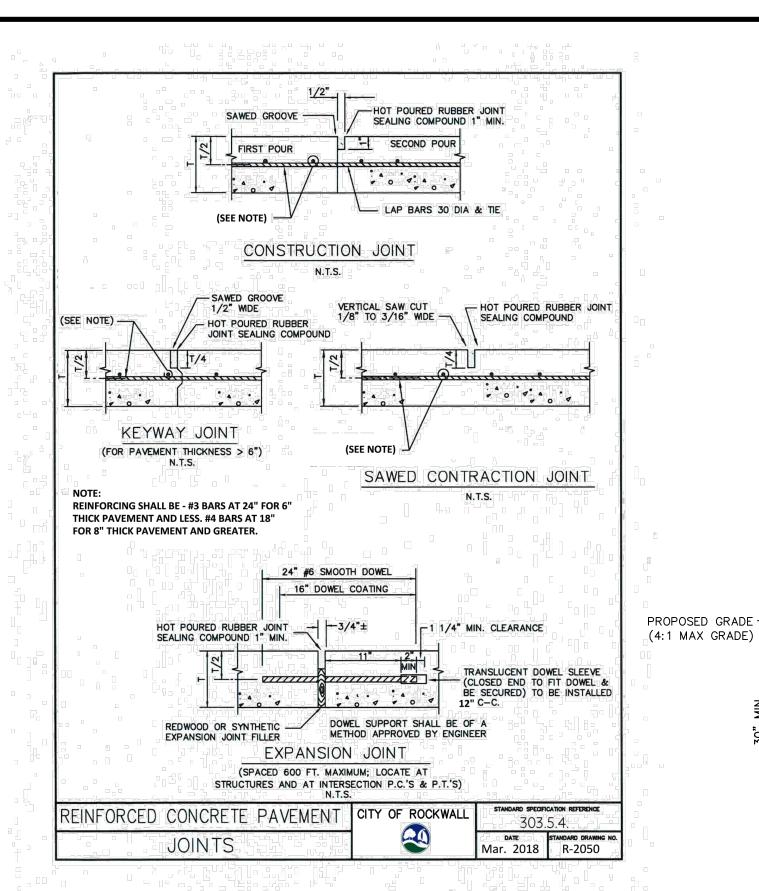
DATED MAY 5,2022. SUBGRADE SPECIFICATIONS AND REQUIREMENTS ARE AS FOLLOWS.

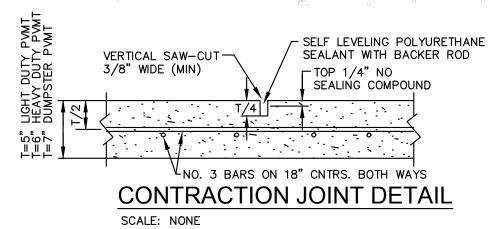
Following subgrade preparation as recommended in Section 6.8.1, the following PCC (reinforced) pavement sections are recommended in Table B.

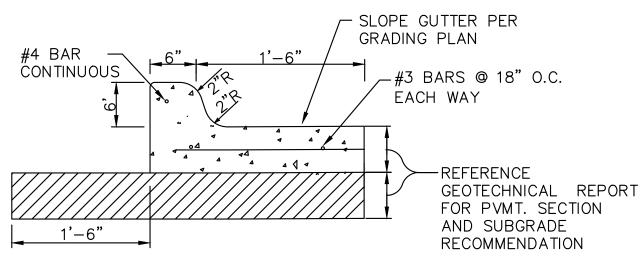
TABLE B Recommended PCC Pavement Sections					
Paving Areas and/or Type Subgrade Thickness, Inches Inches					
Parking Areas Subjected Exclusively to Passenger Vehicle Traffic	Scarified and Compacted, 6	5			
Drive Lanes, Fire Lanes, Areas Subject to Light Volume Truck Traffic	Lime Modified, 6	6			
Dumpster Traffic Areas, Areas Subject to Moderate Volume Truck Traffic	Lime Modified, 6	7			

ALTERNATIVELY, LIME TREATMENT OF THE PAVEMENT SUBGRADE COULD BE ELIMINATED BY INCREASING THE PCC THICKNESS IN THE PAVEMENT SECTIONS PRESENTED TABLE B BY 1 INCH. PRIOR TO CONSTRUCTION OF PAVEMENT ON UNTREATED CLAY SUBGRADE SOIL, THE EXPOSED SUBGRADE SHOULD BE SCARIFIED TO A DEPTH OF AT LEAST 6 INCHES AND COMPACTED TO AT LEAST 95 PERCENT OF STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698) AND WITHIN THE RANGE OF -1 TO +3 PERCENTAGE POINTS OF THE MATERIAL'S OPTIMUM MOISTURE CONTENT.

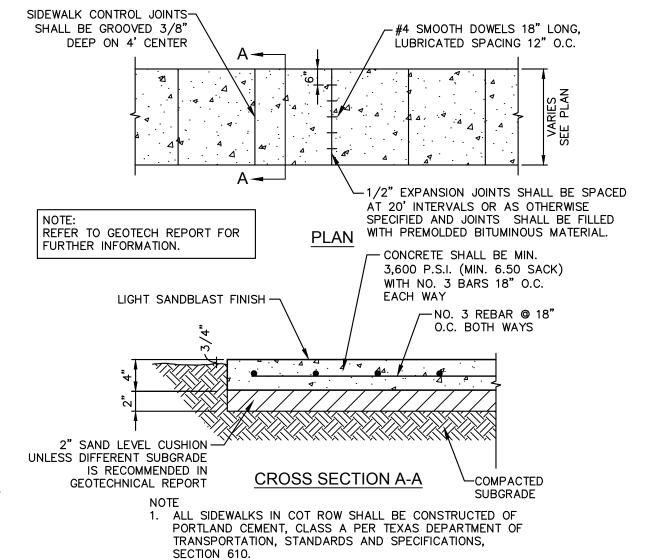
- 2. FOR PREPARATION OF PAVEMENT SUBGRADE, FILL PLACED BELOW FINISHED SUBGRADE ELEVATION IN FILL AREAS IN ALL AREAS TO BE PAVED SHALL BE COMPACTED TO THE RANGE OF 95 TO 98 PERCENT OF ASTM D698 (STANDARD PROCTOR) MAXIMUM DENSITY AT A MOISTURE CONTENT AT LEAST 3% ABOVE OPTIMUM.
- 3. CONCRETE SHALL HAVE A MINIMUM 3,600 PSI (MIN. 6.5 SACK) COMPRESSIVE STRENGTH FOR HEAVY DUTY AND DUMPSTER AREA AND 3,600 PSI (MIN. 6.5 SACK) FOR STANDARD DUTY AT 28 DAYS. JOINTS IN CONCRETE PAVING SHALL BE FORMED AT A MAXIMUM OF 15 FEET. CONCRETE SHALL INCLUDE AIR ENTRAINMENT OF 5.0±1.0 PERCENT. ALL OTHER JOINT SPACING SHALL BE INSTALLED PER PROJECT SPECIFICATIONS.
- 4. ALTERNATIVELY, LIME TREATMENT OF THE PAVEMENT SUBGRADE COULD BE ELIMINATED BY INCREASING THE PCC THICKNESS IN THE PAVEMENT SECTIONS PRESENTED TABLE B BY 1 INCH. PRIOR TO CONSTRUCTION OF PAVEMENT ON UNTREATED CLAY SUBGRADE SOIL. THE EXPOSED SUBGRADE SHOULD BE SCARIFIED TO A DEPTH OF AT LEAST 6 INCHES AND COMPACTED TO AT LEAST 95 PERCENT OF STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698) AND WITHIN THE RANGE OF -1 TO +3 PERCENTAGE POINTS OF THE MATERIAL'S OPTIMUM MOISTURE CONTENT.
- 5. JOINTS IN CONCRETE PAVEMENT SHALL NOT EXCEED 15 FOOT SPACING.







# CONCRETE CURB AND GUTTER DETAIL



PRIVATE CONCRETE SIDEWALK DETAIL

N.T.S.

BOLT SIGN TO POST (TYP.) SIGN COLORS 2" BLACK LETTERS VAN SPACE WHITE BACKGROUND SIGN VĂN ACCESSIBLE (DELETE VAN SIGN AT STD. HANDICAP 1'-0" STALLS) REQUIRED SIGN IDENTIFYING THE CONSEQUENCES OF PARKING ILLEGALLY IN A PAVED ACCESSIBLE PARKING SPACE 2" X 2" X .188 STEEL TUBE. EXTEND INTO CONCRETE. PROVIDE WELDED, WATERTIGHT CAP, PAINT EXPOSED TUBE BLACK. TROWELED CONC. CROWN — PAINT TRAFFIC YELLOW. 6" DIA. STEEL PIPE BOLLARD --PROPOSED CURB FILLED W/ CONC. PAINT TRAFFIC YELLOW. -PROPOSED PAVEMENT PAVEMENT -#3 BARS @ 18" ON CENTERS (IN HORIZONTAL PAVEMENT) #6- 14" LONG BARS-EACH WAY THRU PIPE. 1'-6" CONCRETE-DIAMETER BASE -COMPACTED SUBGRADE PER PLAN

-#4 BARS @ 12" ON CENTERS

(IN VERTICAL STEM)

REFER TO GEOTECH REPORT FOR

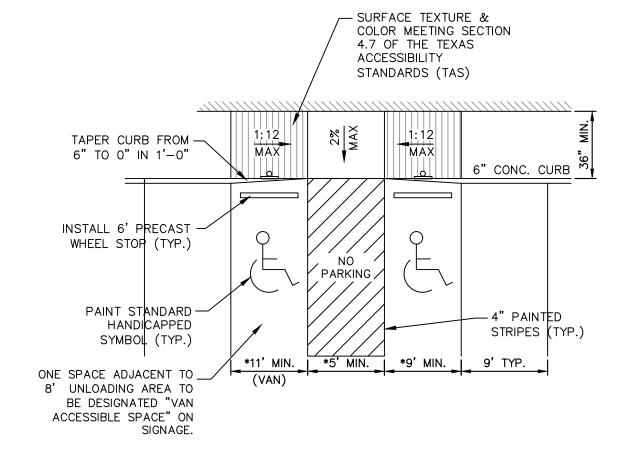
FURTHER INFORMATION.

**CURB WITH WALL DETAILS** 

1. SIGN COLORS 1.1. BACKGROUND: WHITE 1.2. SYMBOL:

- 2. PROVIDE SIGNAGE AT END OF STALL AT LOCATIONS W/ ACCESSIBLE DESIGNATION TO ACT AS BUMPER STOP.
- 3. 1'-0"x1'-6"x .080" ALUM. HANDICAPPED PARKING SIGN. SIGN TO READ "RESERVED PARKING" W/ IDENTIFICATION SYMBOL, BOLT TO STEEL TUBE W/ 3/8" CADMIUM PLATED BOLTS, NUTS & WASHERS.
- 4. HANDICAP SIGNAGE TO BE IN ACCORDANCE WITH TEXAS DEPARTMENT OF LICENSING AND REGULATION TEXAS ACCESSIBILITY STANDARDS (TAS) PER

# "HANDICAPPED PARKING" SIGN POST DETAIL



1. \* DIMENSIONS MAY VARY REFER TO DIMENSIONAL CONTROL PLAN

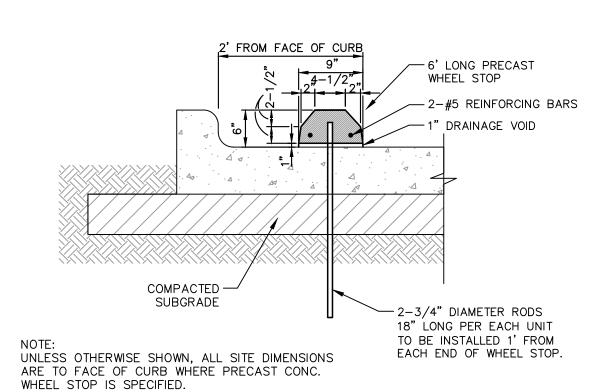
- 2. SIGNAGE AND MARKINGS TO BE IN ACCORDANCE WITH FEDERAL STATE AND LOCAL REGULATIONS.
- 3. MAXIMUM SLOPE FOR HANDICAPPED ACCESSIBLE PATHS ARE 5% WITH A MAXIMUM CROSS FALL SLOPE OF 2%. THE FIRST FIVE FEET FROM THE DOOR IS NOT TO EXCEED 2% IN ANY DIRECTION.

4. HANDICAPPED SIGNS, INSTALL 2' FROM BACK OF CURB (TYP. EACH SPACE).

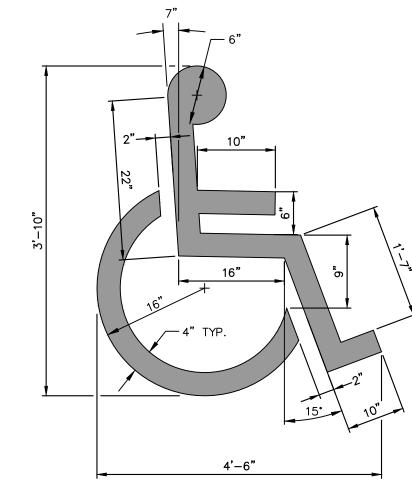
- SIGNAGE TO BE IN ACCORDANCE WITH TEXAS DEPARTMENT OF LICENSING AND REGULATION TEXAS ACCESSIBILITY STANDARDS (TAS) PER 4.6.4
- 5. THE WORDS "NO PARKING" ARE REQUIRED TO BE PAINTED ON ANY ACCESSIBLE AISLES ADJACENT TO THE PARKING SPACE. MINIMUM LETTER HEIGHT OF 12" AND MINIMUM STROKE WIDTH IS 2". CENTERED IN AISLES.

# HANDICAPPED PARKING DETAIL

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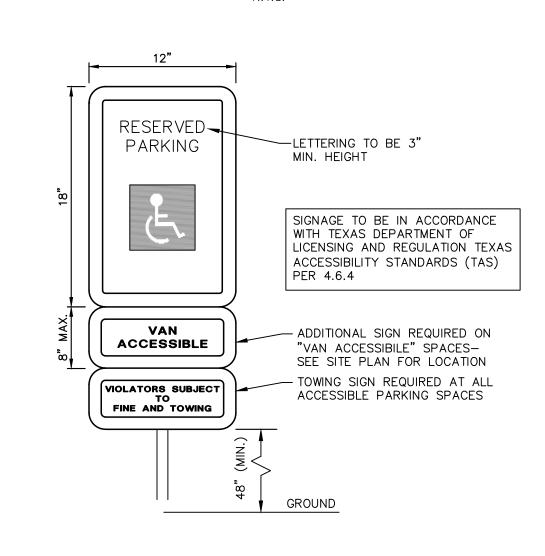


# PRECAST CONCRETE WHEEL STOP DETAIL



1. ALL TRAFFIC MARKINGS TO BE THERMOPLASTIC AS PER DIMENSIONS SHOWN.

# HANDICAPPED PARKING SYMBOL DETAIL

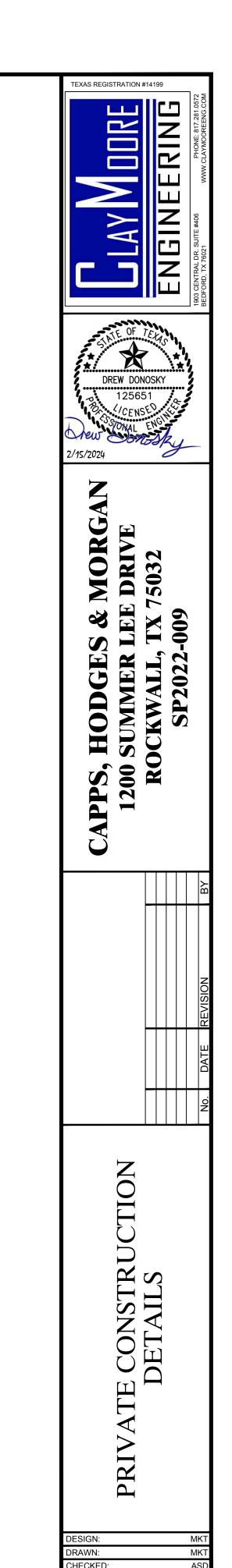


1. A SIGN IDENTIFYING THE CONSEQUENCES OF PARKING ILLEGALLY IN A PAVED ACCESSIBLE PARKING SPACE MUST AT A MINIMUM:

- 1.1. STATE "VIOLATORS SUBJECT TO FINE AND TOWING" IN A LETTER HEIGHT OF AT LEAST 1 INCH;
- 1.2. BE MOUNTED ON A POLE, POST, WALL OR FREESTANDING BOARD;
- 1.3. BE NO MORE THAN EIGHT (8) INCHES BELOW A SIGN REQUIRED BY TEXAS ACCESSIBILITY STANDARDS, 506.6;
- 1.4. AND BE INSTALLED SO THAT THE BOTTOM EDGE OF THE SIGN IS NO LOWER THAN 48 INCHES AND NO HIGHER THAN 80 INCHES ABOVE GROUND LEVEL.

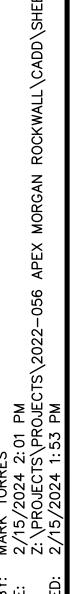
DISABLED SIGN DETAIL

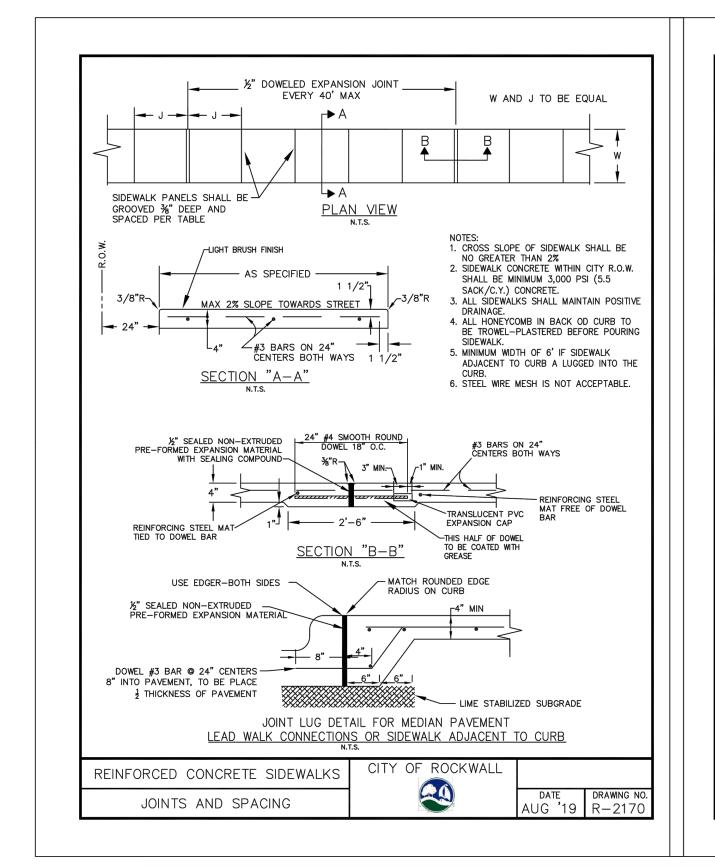
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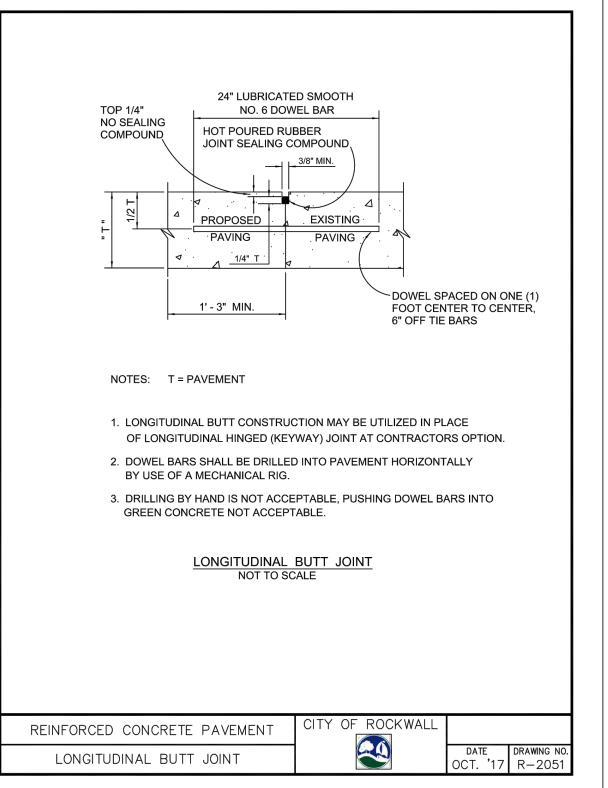
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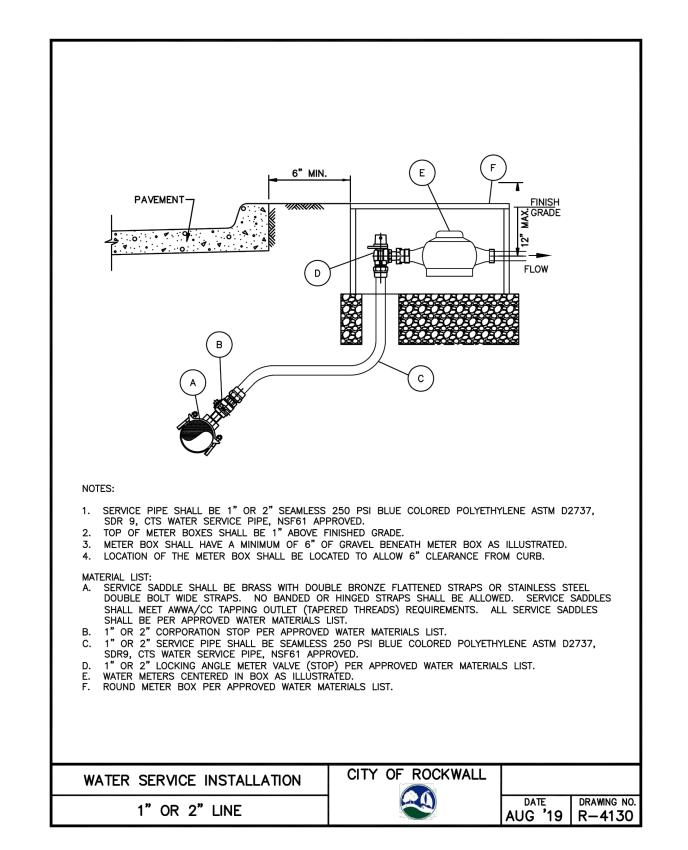
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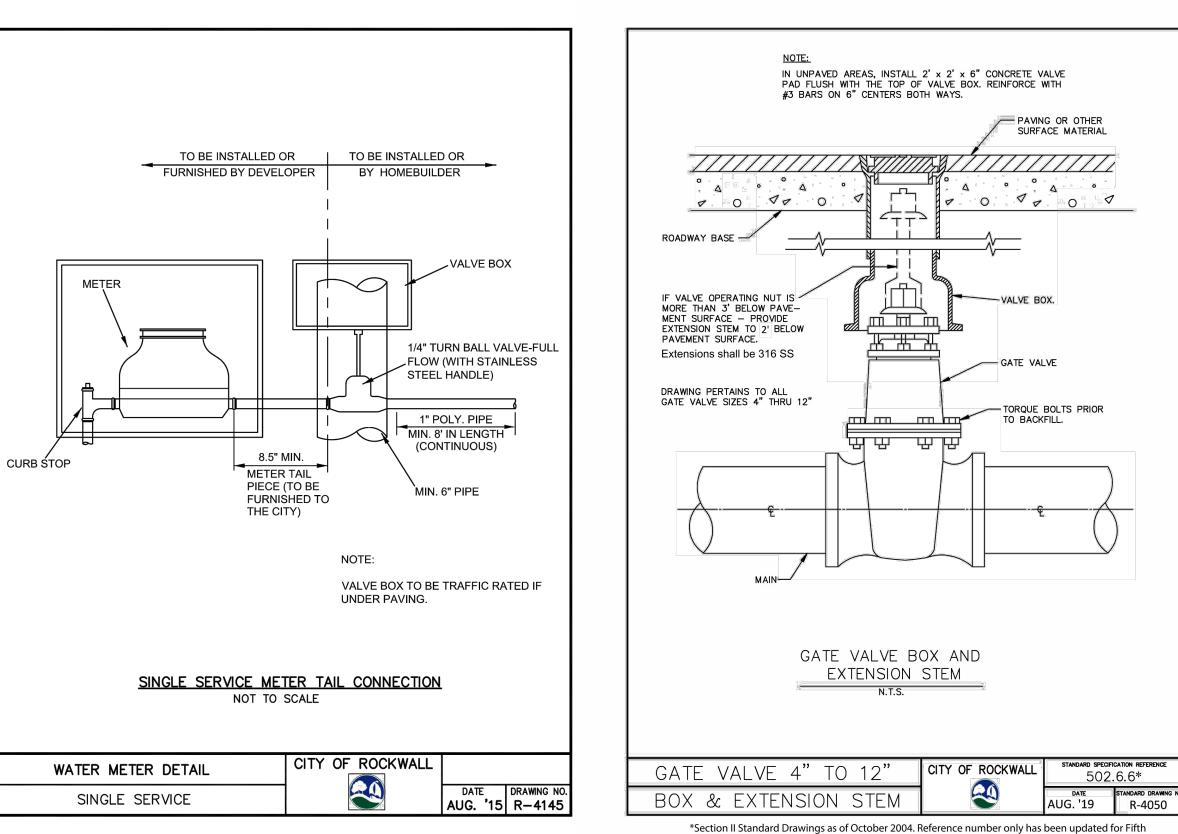


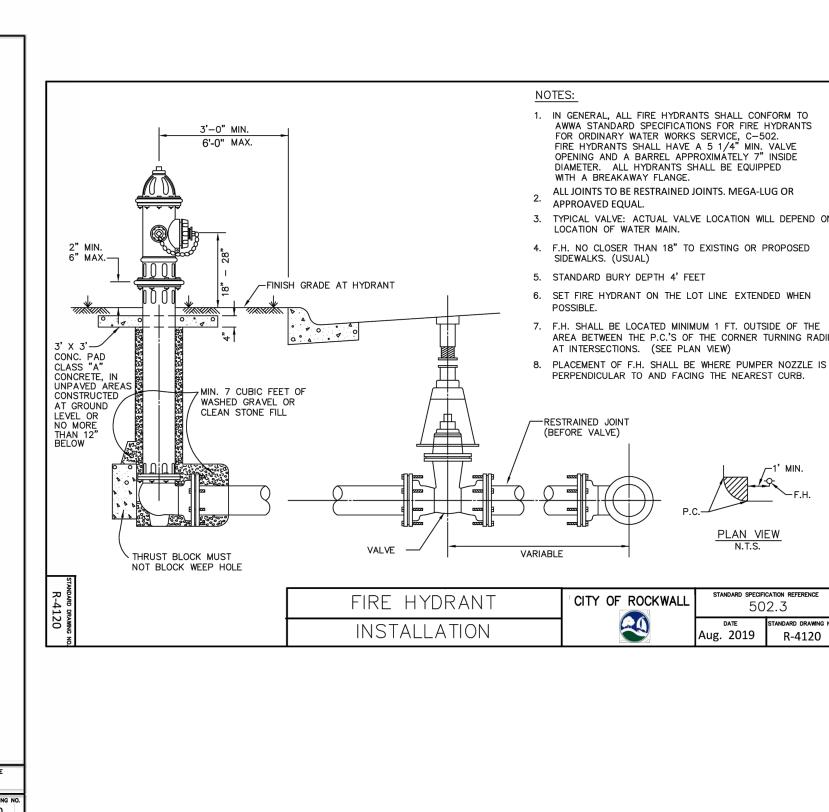
Edition Specifications. Public Works Construction Standards North Central Texas, Fifth Edition.

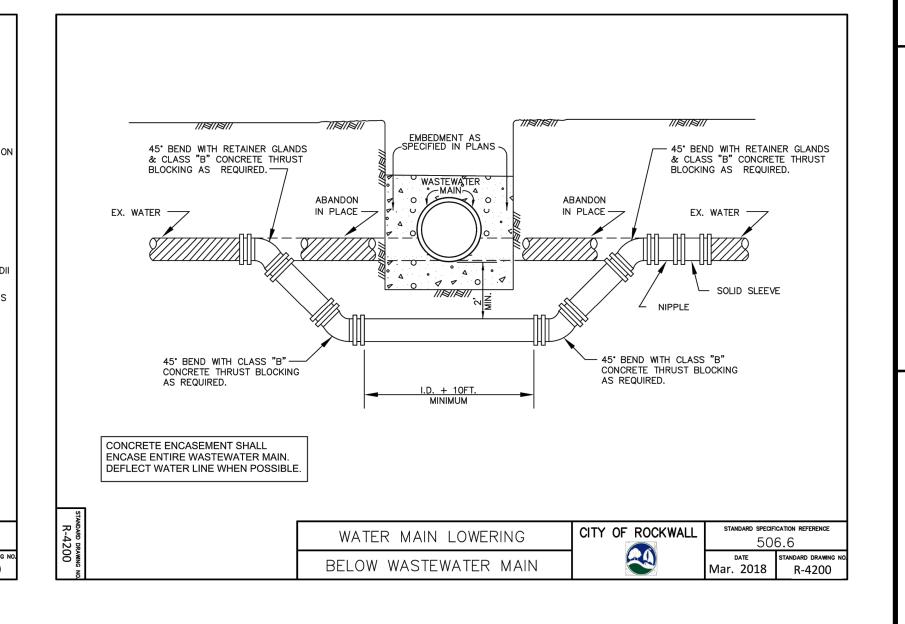


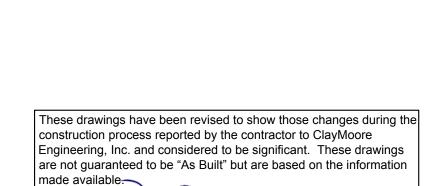


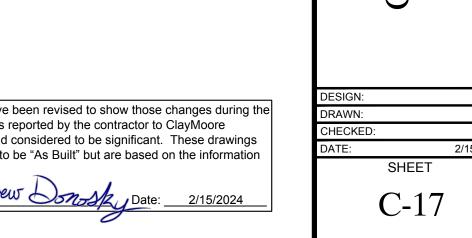
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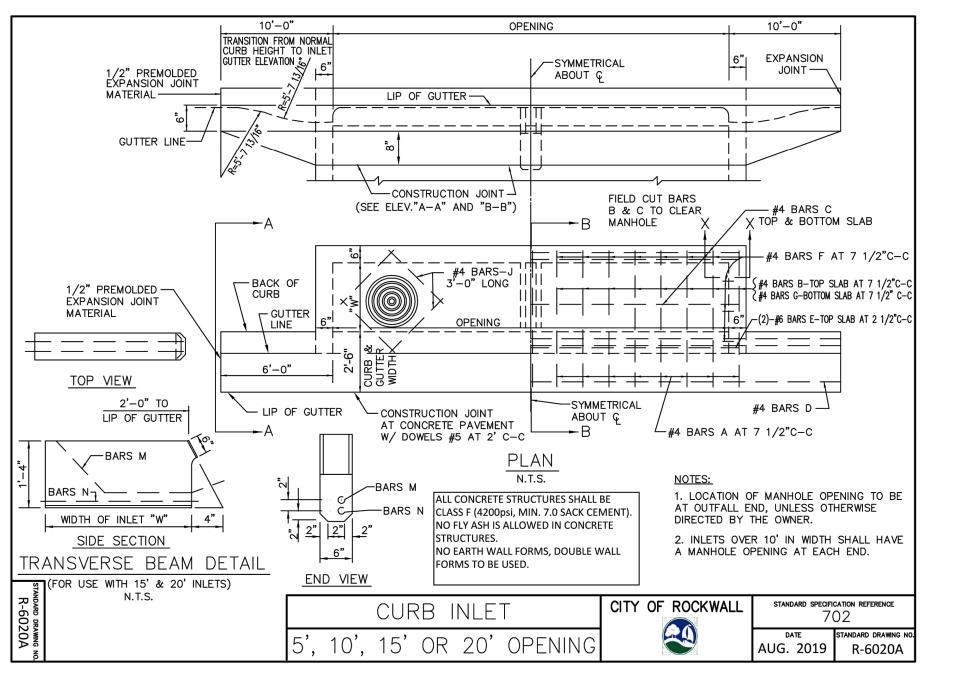
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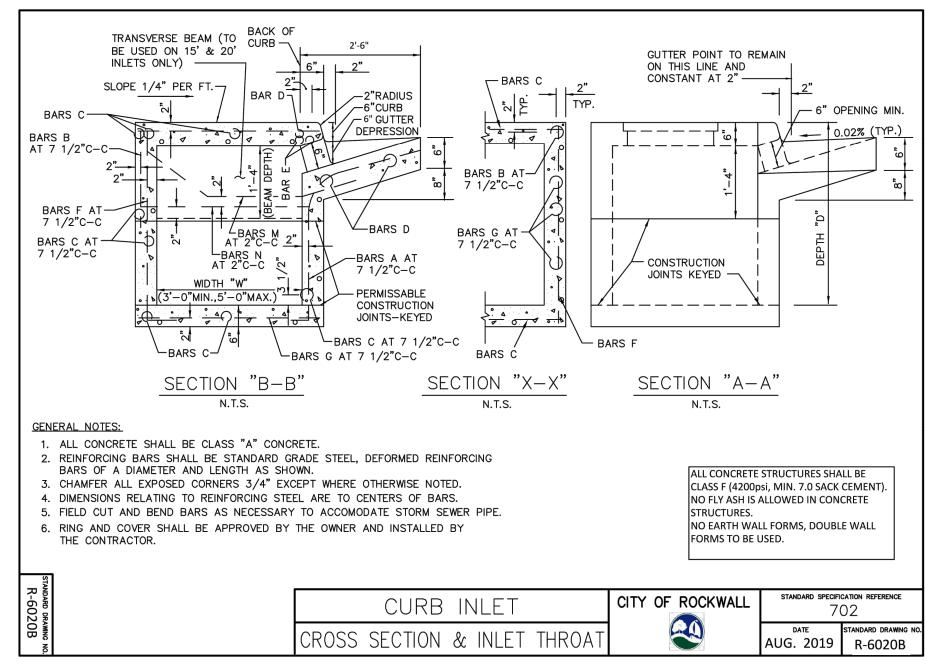
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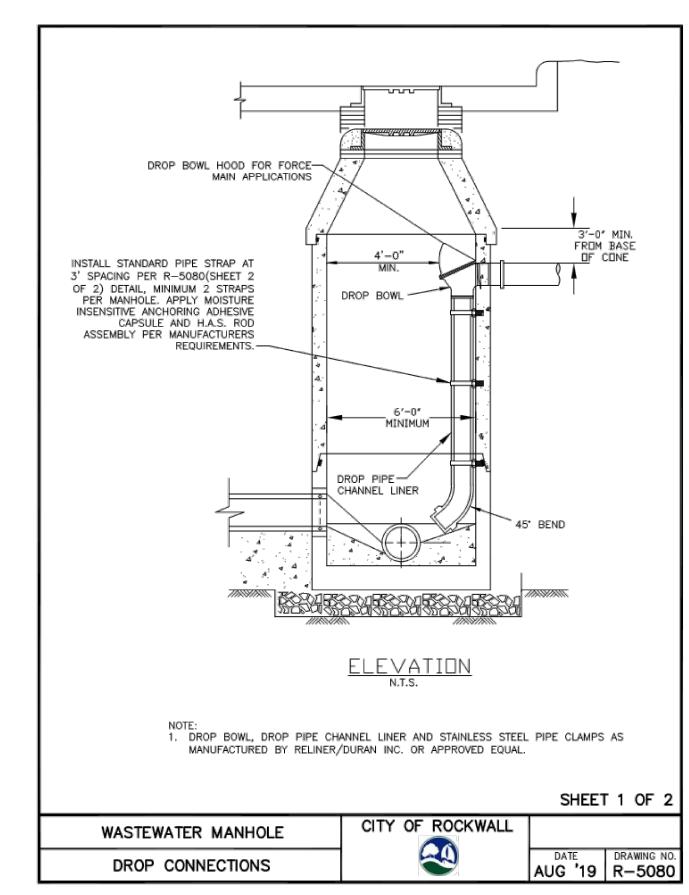
CONSTRUCTION DETAILS

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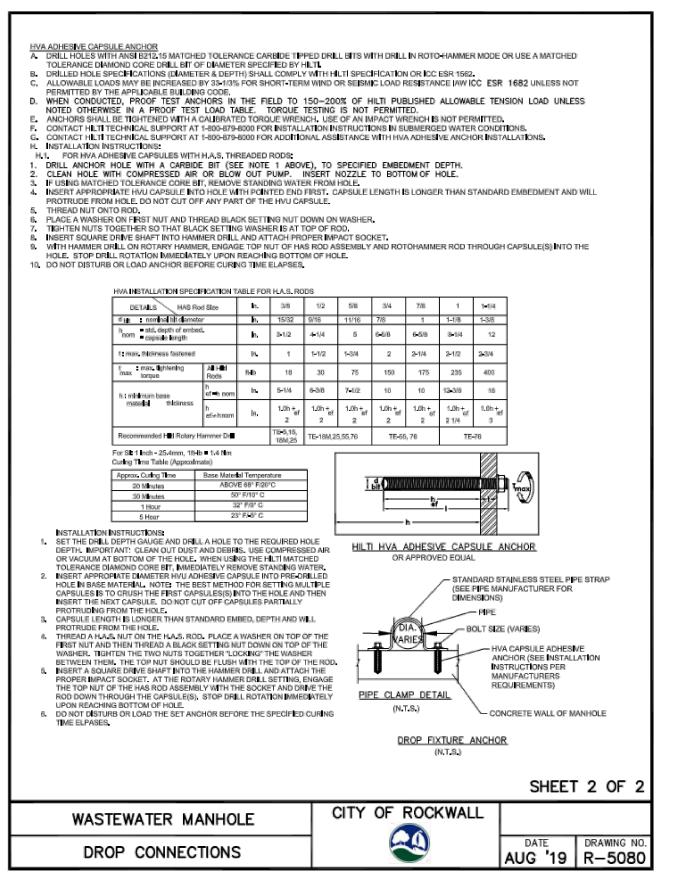


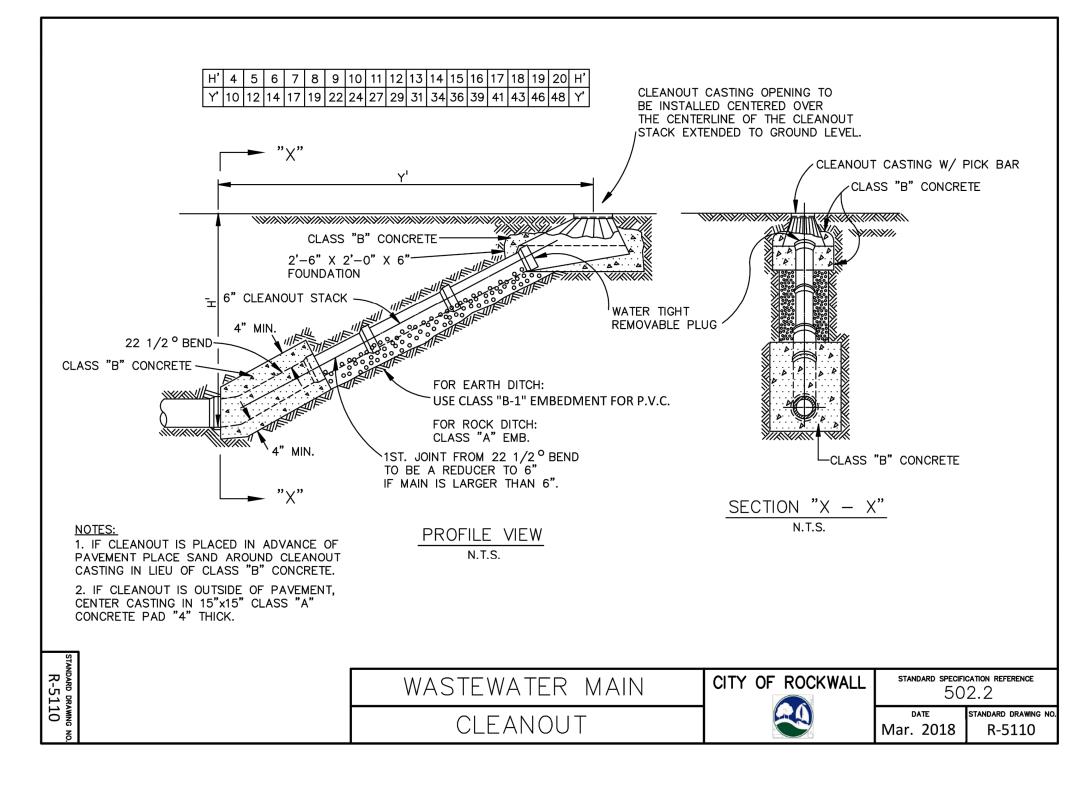
Page 332

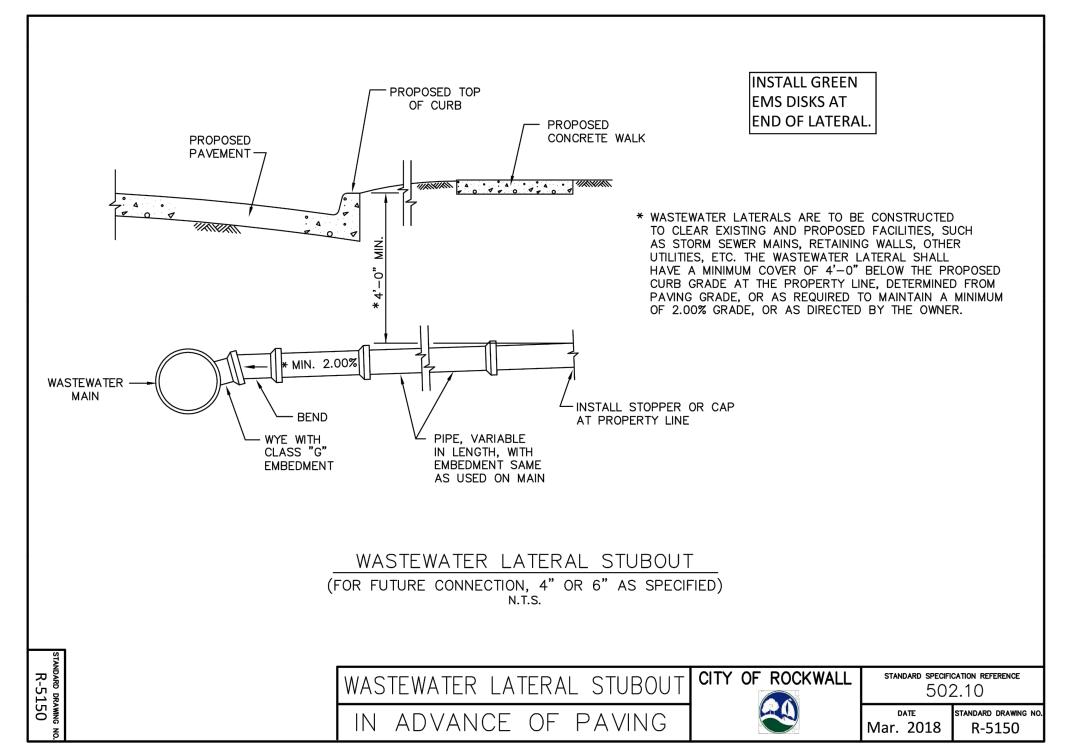




Page 331







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CONSTRUCTION DETAILS

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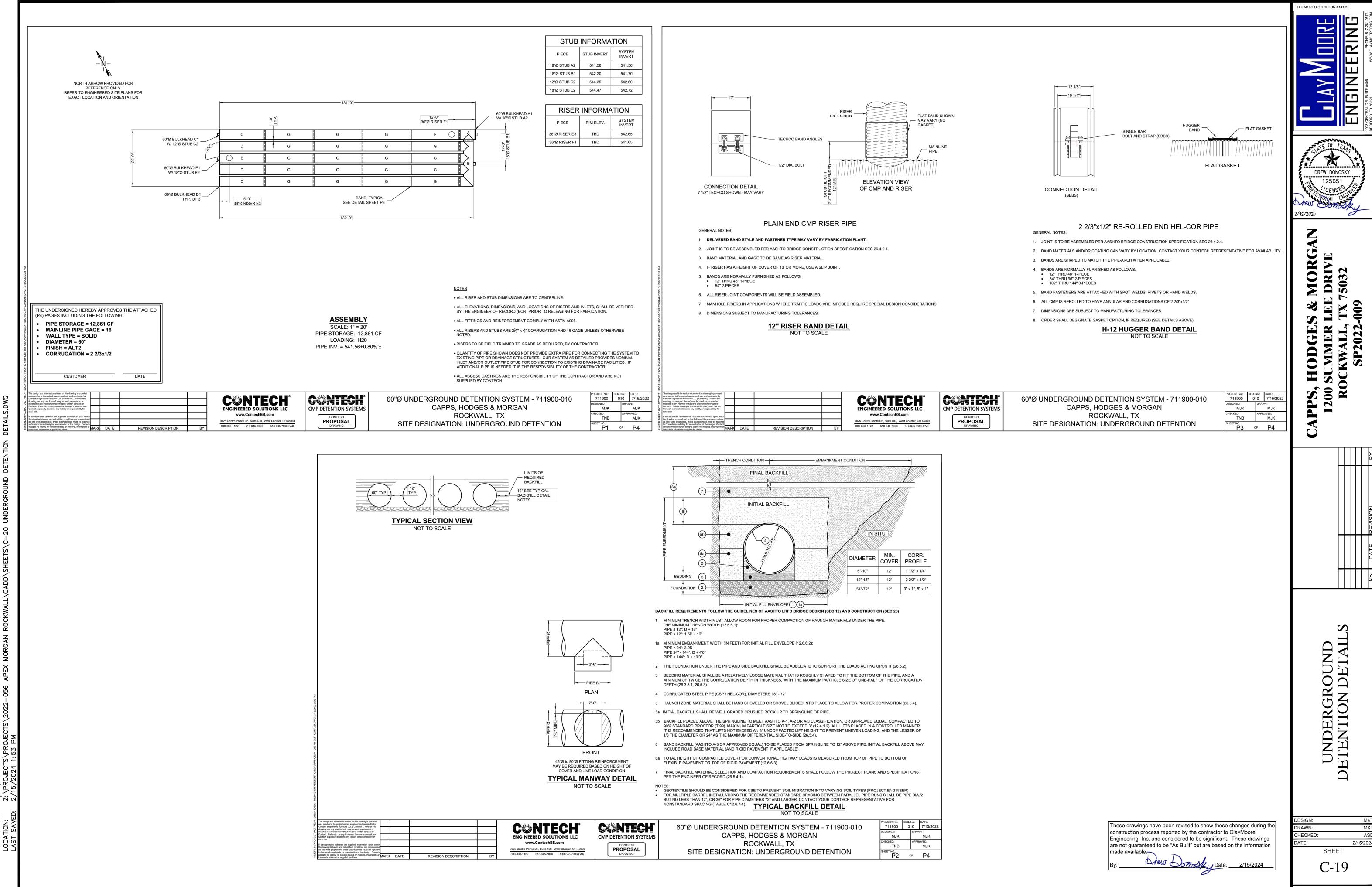
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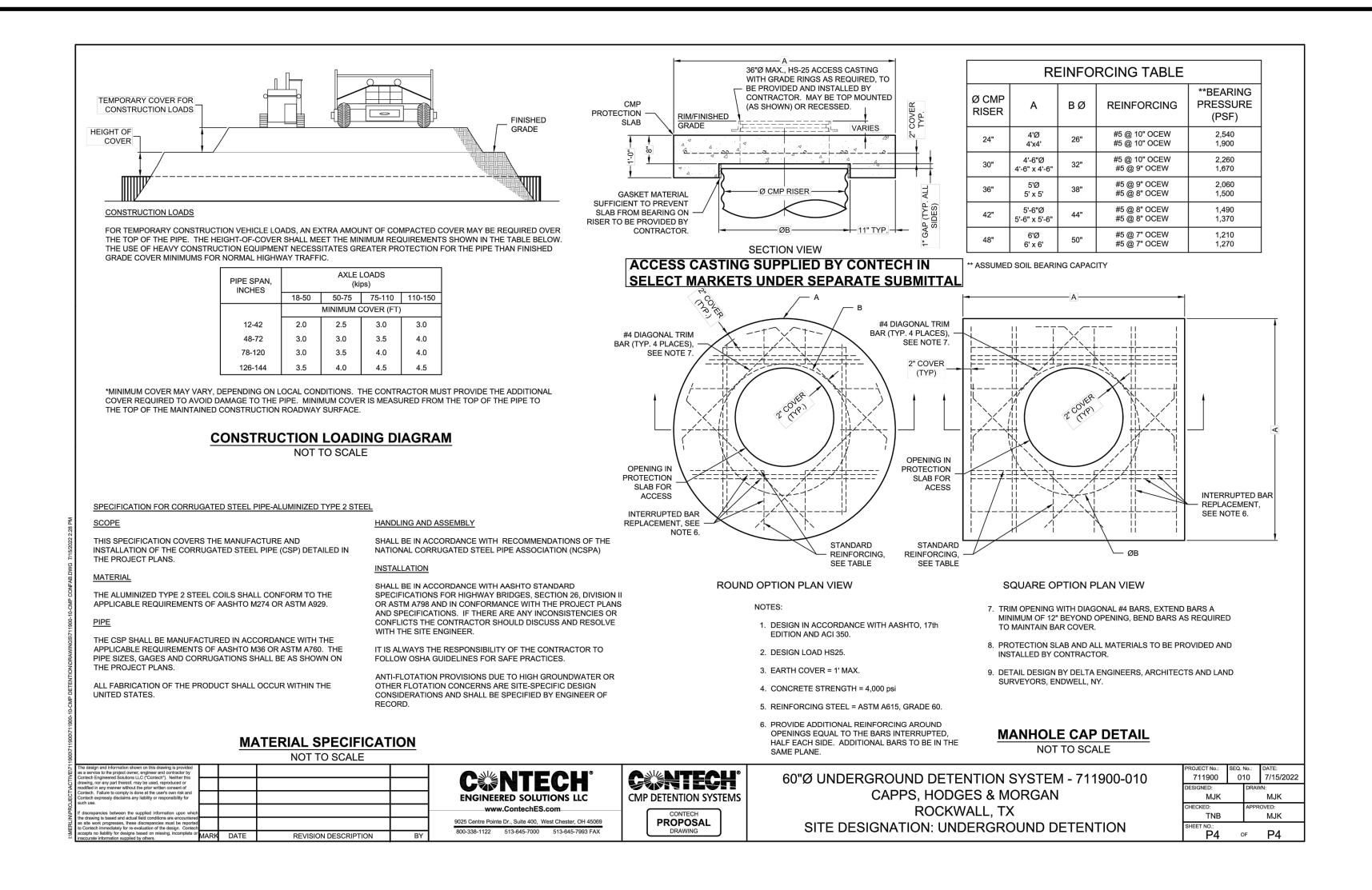
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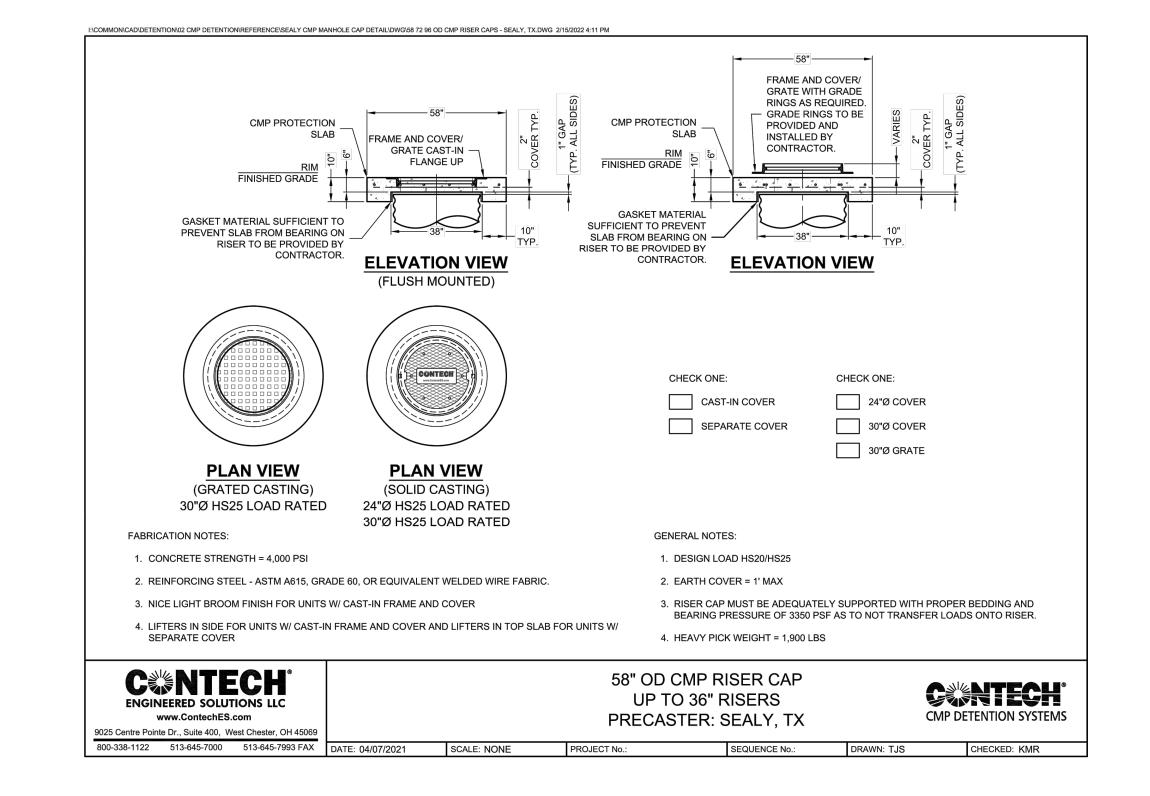
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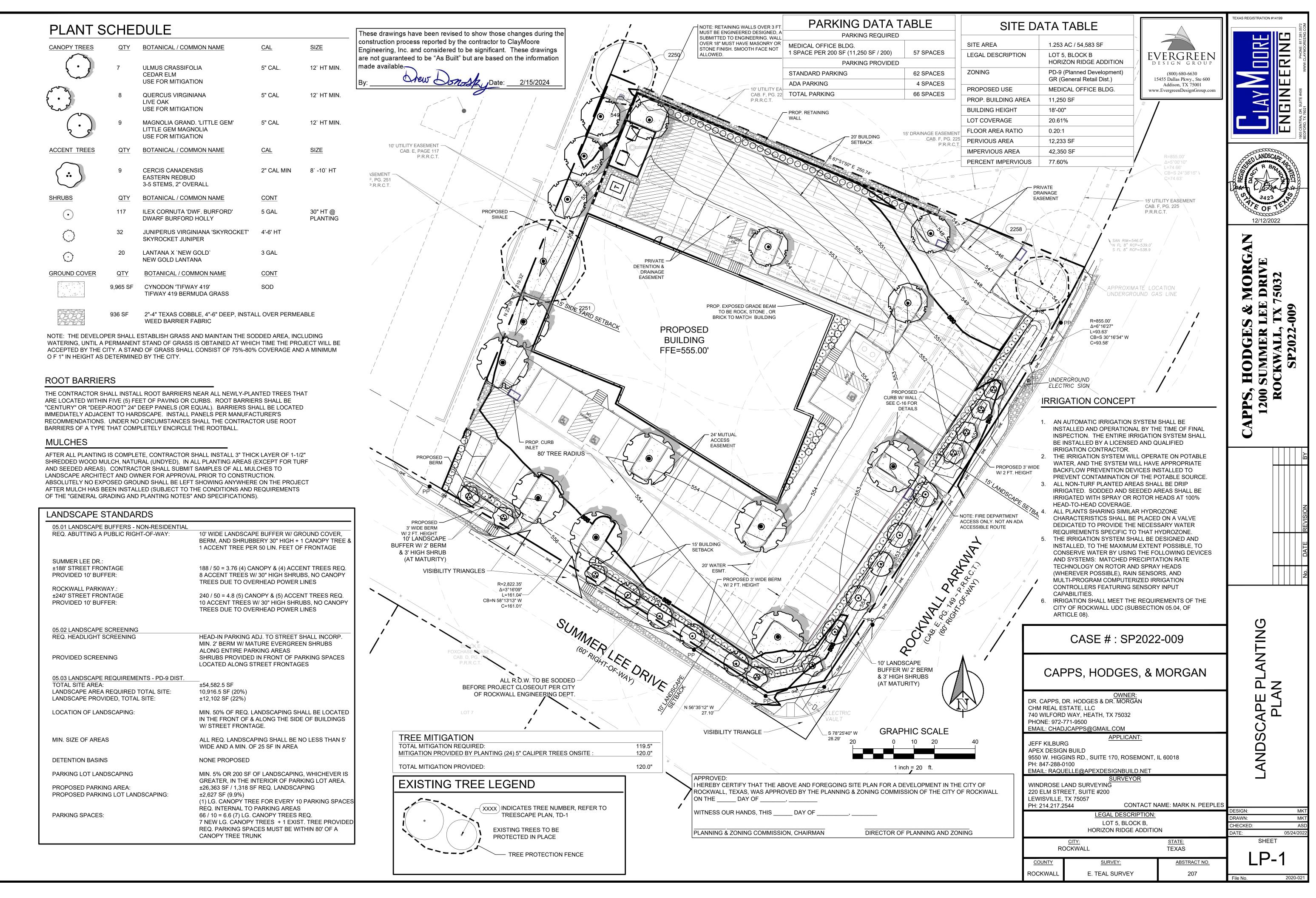
DREW DONOSKY 2/15/2024 UNDERGROUND ETENTION DETAI SHEET

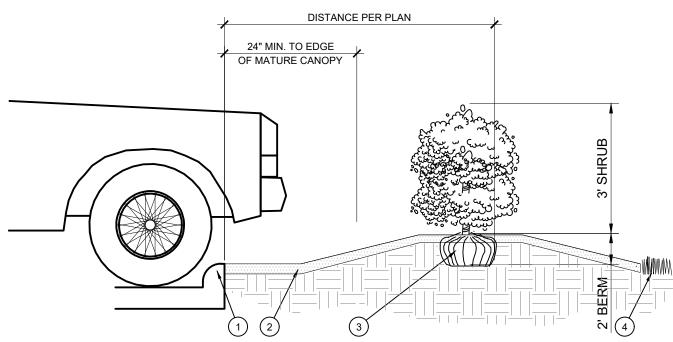
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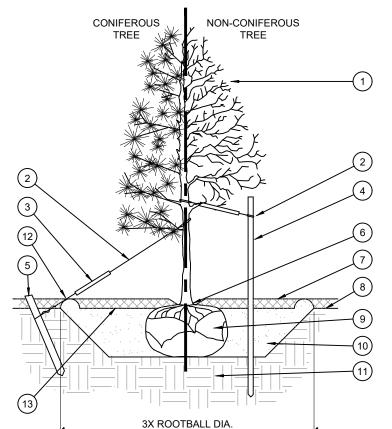




(1) CURB. (2) MULCH LAYER.

(4) TURF (WHERE SHOWN ON PLAN).

PLANTING AT PARKING AREA



STAKING EXAMPLES (PLAN VIEW)

PREVAILING

TREE PLANTING SCALE: NOT TO SCALE

PREVAILING

WINDS



(2) CINCH-TIES (24" BOX/2" CAL. TREES AND SMALLER) OR 12 GAUGE GALVANIZED WIRE WITH NYLON TREE STRAPS AT TREE AND STAKE (36" BOX/2.5" CAL. TREES AND LARGER). SECURE TIES OR STRAPS TO TRUNK JUST ABOVE LOWEST MAJOR BRANCHES.

(3) 24" X 3/4" P.V.C. MARKERS OVER WIRES.

4 GREEN STEEL T-POSTS. EXTEND POSTS 12" MIN. INTO UNDISTURBED SOIL.

(5) PRESSURE-TREATED WOOD DEADMAN, TWO PER TREE (MIN.). BURY OUTSIDE OF PLANTING PIT AND 18" MIN. INTO UNDISTURBED SOIL.

(6) TRUNK FLARE.

7) MULCH, TYPE AND DEPTH PER PLANS. DO NOT PLACE MULCH WITHIN 6" OF TRUNK.

(9) ROOT BALL.

(8) FINISH GRADE.

(10) BACKFILL. AMEND AND FERTILIZE ONLY AS RECOMMENDED IN SOIL FERTILITY ANALYSIS.

(11) UNDISTURBED NATIVE SOIL.

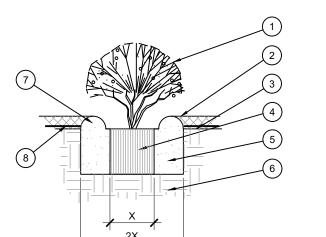
(12) 4" HIGH EARTHEN WATERING BASIN.

(13) FINISH GRADE.

SCARIFY SIDES OF PLANTING PIT PRIOR TO SETTING TREE. REMOVE EXCESS SOIL APPLIED ON TOP OF THE ROOTBALL THAT COVERS THE ROOT FLARE. THE PLANTING HOLE DEPTH SHALL BE SUCH THAT THE ROOTBALL RESTS ON UNDISTURBED SOIL, AND THE ROOT FLARE IS 2"-4" ABOVE FINISH GRADE. 3. FOR B&B TREES, CUT OFF BOTTOM 1/3 OF WIRE BASKET BEFORE PLACING TREE IN HOLE, CUT OFF AND REMOVE REMAINDER OF BASKET AFTER TREE IS SET IN HOLE, REMOVE ALL NYLON TIES, TWINE, ROPE, AND OTHER PACKING MATERIAL. REMOVE AS MUCH

BURLAP FROM AROUND ROOTBALL AS IS PRACTICAL. REMOVE ALL NURSERY STAKES AFTER PLANTING. FOR TREES 36" BOX/2.5" CAL. AND LARGER, USE THREE STAKES OR

DEADMEN (AS APPROPRIATE), SPACED EVENLY AROUND TREE. 6. STAKING SHALL BE TIGHT ENOUGH TO PREVENT TRUNK FROM BENDING, BUT LOOSE ENOUGH TO ALLOW SOME TRUNK MOVEMENT



(1) SHRUB, PERENNIAL, OR ORNAMENTAL GRASS.

(2) MULCH, TYPE AND DEPTH PER PLANS. PLACE NO MORE THAN 1" OF MULCH WITHIN 6" OF PLANT CENTER.

(3) FINISH GRADE.

(4) ROOT BALL.

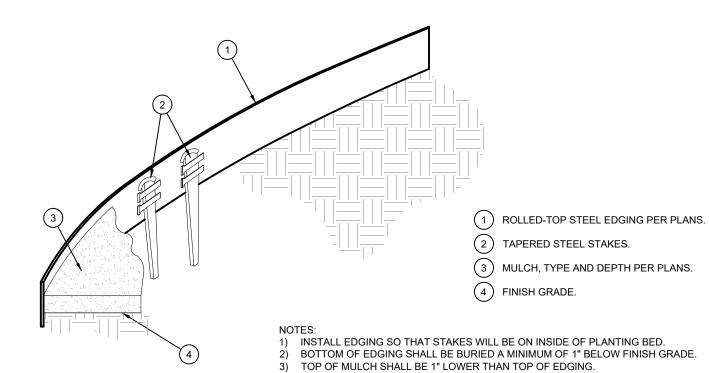
(5) BACKFILL. AMEND AND FERTILIZE ONLY AS RECOMMENDED IN SOIL FERTILITY ANALYSIS.

(6) UNDISTURBED NATIVE SOIL.

(7) 3" HIGH EARTHEN WATERING BASIN

(8) WEED FABRIC UNDER MULCH.

SHRUB AND PERENNIAL PLANTING



STEEL EDGING

I HEREBY CERTIFY THAT THE ABOVE AND FOREGOING SITE PLAN FOR A DEVELOPMENT IN THE CITY OF ROCKWALL, TEXAS, WAS APPROVED BY THE PLANNING & ZONING COMMISSION OF THE CITY OF ROCKWALL ON THE \_\_\_\_\_, \_\_\_,

WITNESS OUR HANDS, THIS \_\_\_\_\_ DAY OF \_

PLANNING & ZONING COMMISSION, CHAIRMAN

DIRECTOR OF PLANNING AND ZONING

**EVERGREEN** (800) 680-6630 15455 Dallas Pkwy., Ste 600

Addison, TX 75001

www.EvergreenDesignGroup.com

TEXAS REGISTRATION #14199

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10/06/2022

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GENERAL GRADING AND PLANTING NOTES

BY SUBMITTING A PROPOSAL FOR THE LANDSCAPE PLANTING SCOPE OF WORK, THE CONTRACTOR CONFIRMS THAT HE HAS READ, AND WILL COMPLY WITH, THE ASSOCIATED NOTES, SPECIFICATIONS, AND DETAILS WITH THIS PROJECT. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL EXISTING

VEGETATION (EXCEPT WHERE NOTED TO REMAIN).

3. IN THE CONTEXT OF THESE PLANS, NOTES, AND SPECIFICATIONS, "FINISH GRADE" REFERS TO THE FINAL ELEVATION OF THE SOIL SURFACE (NOT TOP OF MULCH) AS INDICATED ON THE GRADING PLANS. a. BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE ROUGH GRADES OF ALL LANDSCAPE AREAS ARE WITHIN +/-0.1' OF FINISH

AREA AND PLANTING BED PREPARATION. b. CONSTRUCT AND MAINTAIN FINISH GRADES AS SHOWN ON GRADING PLANS, AND CONSTRUCT AND MAINTAIN SLOPES AS RECOMMENDED BY THE GEOTECHNICAL REPORT. ALL LANDSCAPE AREAS SHALL HAVE POSITIVE DRAINAGE AWAY FROM STRUCTURES AT THE MINIMUM SLOPE SPECIFIED IN THE REPORT AND ON THE GRADING PLANS, AND AREAS OF POTENTIAL PONDING SHALL BE REGRADED TO BLEND IN WITH THE SURROUNDING GRADES AND ELIMINATE PONDING POTENTIAL.

GRADE. SEE SPECIFICATIONS FOR MORE DETAILED INSTRUCTION ON TURF

THE LANDSCAPE CONTRACTOR SHALL DETERMINE WHETHER OR NOT THE EXPORT OF ANY SOIL WILL BE NEEDED, TAKING INTO ACCOUNT THE ROUGH GRADE PROVIDED, THE AMOUNT OF SOIL AMENDMENTS TO BE ADDED (BASED ON A SOIL TEST, PER SPECIFICATIONS), AND THE FINISH GRADES TO BE **ESTABLISHED** 

ENSURE THAT THE FINISH GRADE IN SHRUB AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 3" BELOW THE ADJACENT FINISH SURFACE, IN ORDER TO ALLOW FOR PROPER MULCH DEPTH. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY ENSURE THAT THE FINISH GRADE IN TURF AREAS IMMEDIATELY ADJACENT TO

WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 1" BELOW THE FINISH SURFACE OF THE WALKS. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS. SHOULD ANY CONFLICTS AND/OR DISCREPANCIES ARISE BETWEEN THE GRADING PLANS, GEOTECHNICAL REPORT, THESE NOTES AND PLANS, AND

ACTUAL CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY BRING SUCH ITEMS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT, GENERAL CONTRACTOR, AND OWNER.

ALL PLANT LOCATIONS ARE DIAGRAMMATIC. ACTUAL LOCATIONS SHALL BE VERIFIED WITH THE LANDSCAPE ARCHITECT OR DESIGNER PRIOR TO PLANTING. THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT ALL REQUIREMENTS OF THE PERMITTING AUTHORITY ARE MET (I.E., MINIMUM PLANT QUANTITIES, PLANTING METHODS, TREE PROTECTION METHODS, ETC.).

a. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR DETERMINING PLANT QUANTITIES: PLANT QUANTITIES SHOWN ON LEGENDS AND CALLOUTS ARE FOR GENERAL INFORMATION ONLY. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLAN AND THE PLANT LEGEND, THE PLANT QUANTITY AS SHOWN ON THE PLAN (FOR INDIVIDUAL SYMBOLS) OR CALLOUT (FOR GROUNDCOVER PATTERNS) SHALL TAKE PRECEDENCE.

NO SUBSTITUTIONS OF PLANT MATERIALS SHALL BE ALLOWED WITHOUT THE WRITTEN PERMISSION OF THE LANDSCAPE ARCHITECT. IF SOME OF THE PLANTS ARE NOT AVAILABLE, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING (VIA PROPER CHANNELS).

THE CONTRACTOR SHALL, AT A MINIMUM, PROVIDE REPRESENTATIVE PHOTOS OF ALL PLANTS PROPOSED FOR THE PROJECT. THE CONTRACTOR SHALL ALLOW THE LANDSCAPE ARCHITECT AND THE OWNER/OWNER'S REPRESENTATIVE TO INSPECT, AND APPROVE OR REJECT, ALL PLANTS DELIVERED TO THE JOBSITE.

REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR SUBMITTALS. THE CONTRACTOR SHALL MAINTAIN THE LANDSCAPE IN A HEALTHY CONDITION FOR ACCEPTANCE BY THE OWNER. REFER TO SPECIFICATIONS FOR CONDITIONS OF

ACCEPTANCE FOR THE START OF THE MAINTENANCE PERIOD, AND FOR FINAL ACCEPTANCE AT THE END MAINTENANCE PERIOD.

SEE SPECIFICATIONS AND DETAILS FOR FURTHER REQUIREMENTS.

These drawings have been revised to show those changes during the construction process reported by the contractor to ClayMoore Engineering, Inc. and considered to be significant. These drawings are not guaranteed to be "As Built" but are based on the information made available.-

CASE # : SP2022-009

CAPPS, HODGES, & MORGAN

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CONTACT NAME: MARK N. PEEPLES LEGAL DESCRIPTION: LOT 5, BLOCK B,

ROCKWALL **TEXAS** ABSTRACT NO. COUNTY SURVEY: **ROCKWALL** E. TEAL SURVEY 207

HORIZON RIDGE ADDITION

CHECKED: SHEET

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NDSCAF DETAIL

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# PLANTING SPECIFICATIONS

## GENERAL

- QUALIFICATIONS OF LANDSCAPE CONTRACTOR
- ALL LANDSCAPE WORK SHOWN ON THESE PLANS SHALL BE PERFORMED BY A SINGLE FIRM SPECIALIZING IN LANDSCAPE PLANTING.
- 2. A LIST OF SUCCESSFULLY COMPLETED PROJECTS OF THIS TYPE, SIZE AND NATURE MAY BE REQUESTED BY THE OWNER FOR FURTHER QUALIFICATION MEASURES.
- 3. THE LANDSCAPE CONTRACTOR SHALL HOLD A VALID NURSERY AND FLORAL CERTIFICATE ISSUED BY THE TEXAS DEPARTMENT OF AGRICULTURE, AS WELL AS OPERATE UNDER A COMMERCIAL PESTICIDE APPLICATOR LICENSE ISSUED BY EITHER THE TEXAS DEPARTMENT OF AGRICULTURE OR THE TEXAS STRUCTURAL PEST CONTROL BOARD.
- SCOPE OF WORK

  1. WORK COVERED BY THESE SECTIONS INCLUDES THE FURNISHING AND PAYMENT OF ALL MATERIALS,

  LARDER SERVICES FOLLOWERS TAKES AND ANY OTHER ITEMS THAT ARE NECESSARY FOR
- LABOR, SERVICES, EQUIPMENT, LICENSES, TAXES AND ANY OTHER ITEMS THAT ARE NECESSARY FOR THE EXECUTION, INSTALLATION AND COMPLETION OF ALL WORK, SPECIFIED HEREIN AND / OR SHOWN ON THE LANDSCAPE PLANS, NOTES, AND DETAILS.
- 2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER SUCH WORK, INCLUDING ALL INSPECTIONS AND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES IN SUPPLY, TRANSPORTATION AND INSTALLATION OF MATERIALS
- 3. THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES (WATER, SEWER, ELECTRICAL, TELEPHONE, GAS, CABLE, TELEVISION, ETC.) PRIOR TO THE START OF

# PRODUCTS

- ALL MANUFACTURED PRODUCTS SHALL BE NEW.
- CONTAINER AND BALLED-AND-BURLAPPED PLANTS:

  1. FURNISH NURSERY-GROWN PLANTS COMPLYING WITH ANSI Z60.1-2014. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT. ALL PLANTS WITHIN A
- 2. ROOT SYSTEMS SHALL BE HEALTHY, DENSELY BRANCHED ROOT SYSTEMS, NON-POT-BOUND, FREE FROM ENCIRCLING AND/OR GIRDLING ROOTS, AND FREE FROM ANY OTHER ROOT DEFECTS (SUCH AS

SPECIES SHALL HAVE SIMILAR SIZE, AND SHALL BE OF A FORM TYPICAL FOR THE SPECIES. ALL TREES

SHALL BE OBTAINED FROM SOURCES WITHIN 200 MILES OF THE PROJECT SITE, AND WITH SIMILAR

- 3. TREES MAY BE PLÂNTED FROM CONTAINERS OR BALLED-AND-BURLAPPED (B&B), UNLESS SPECIFIED ON THE PLANTING LEGEND. BARE-ROOT TREES ARE NOT ACCEPTABLE.
- 4. ANY PLANT DEEMED UNACCEPTABLE BY THE LANDSCAPE ARCHITECT OR OWNER SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND SHALL BE REPLACED WITH AN ACCEPTBLE PLANT OF LIKE TYPE AND SIZE AT THE CONTRACTOR'S OWN EXPENSE. ANY PLANTS APPEARING TO BE UNHEALTHY, EVEN IF DETERMINED TO STILL BE ALIVE, SHALL NOT BE ACCEPTED. THE LANDSCAPE ARCHITECT AND OWNER SHALL BE THE SOLE JUDGES AS TO THE ACCEPTABILITY OF PLANT MATERIAL.
- 5. ALL TREES SHALL BE STANDARD IN FORM, UNLESS OTHERWISE SPECIFIED. TREES WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED. PRUNE ALL DAMAGED TWIGS AFTER PLANTING.
- AFTER PLANTING.

  6. CALIPER MEASUREMENTS FOR STANDARD (SINGLE TRUNK) TREES SHALL BE AS FOLLOWS: SIX INCHES ABOVE THE ROOT FLARE FOR TREES UP TO AND INCLUDING FOUR INCHES IN CALIPER, AND TWELVE INCHES ABOVE THE ROOT FLARE FOR TREES EXCEPTING FOUR INCHES IN CALIPER
- MULTI-TRUNK TREES SHALL BE MEASURED BY THEIR OVERALL HEIGHT, MEASURED FROM THE TOP OF THE ROOT BALL. WHERE CALIPER MEASUREMENTS ARE USED, THE CALIPER SHALL BE CALCULATED AS ONE-HALF OF THE SUM OF THE CALIPER OF THE THREE LARGEST TRUNKS.
   ANY TREE OR SHRUB SHOWN TO HAVE EXCESS SOIL PLACED ON TOP OF THE ROOT BALL, SO THAT
- THE ROOT FLARE HAS BEEN COMPLETELY COVERED, SHALL BE REJECTED.

  C. SOD: PROVIDE WELL-ROOTED SOD OF THE VARIETY NOTED ON THE PLANS. SOD SHALL BE CUT FROM HEALTHY, MATURE TURF WITH SOIL THICKNESS OF 3/4" TO 1". EACH PALLET OF SOD SHALL BE
- ACCOMPANIED BY A CERTIFICATE FROM SUPPLIER STATING THE COMPOSITION OF THE SOD.

  D. TOPSOIL: SANDY TO CLAY LOAM TOPSOIL, FREE OF STONES LARGER THAN ½ INCH, FOREIGN MATTER,
- PLANTS, ROOTS, AND SEEDS.

  E. COMPOST: WELL-COMPOSTED, STABLE, AND WEED-FREE ORGANIC MATTER, pH RANGE OF 5.5 TO 8;
  MOISTURE CONTENT 35 TO 55 PERCENT BY WEIGHT; 100 PERCENT PASSING THROUGH 3/4-INCH SIEVE;
  SOLUBLE SALT CONTENT OF 5 TO 10 DECISIEMENS/M; NOT EXCEEDING 0.5 PERCENT INERT CONTAMINANTS
  AND FREE OF SUBSTANCES TOXIC TO PLANTINGS. NO MANURE OR ANIMAL-BASED PRODUCTS SHALL BE
- USED.

  F. FERTILIZER: GRANULAR FERTILIZER CONSISTING OF NITROGEN, PHOSPHORUS, POTASSIUM, AND OTHER NUTRIENTS IN PROPORTIONS, AMOUNTS, AND RELEASE RATES RECOMMENDED IN A SOIL REPORT FROM A
- QUALIFIED SOIL-TESTING AGENCY (SEE BELOW).

  G. MULCH: SIZE AND TYPE AS INDICATED ON PLANS, FREE FROM DELETERIOUS MATERIALS AND SUITABLE AS A TOP DRESSING OF TREES AND SHRUBS
- TOP DRESSING OF TREES AND SHRUBS.

  H. TREE STAKING AND GUYING
- STAKES: 6' LONG GREEN METAL T-POSTS.
   GUY AND TIE WIRE: ASTM A 641, CLASS 1, GALVANIZED-STEEL WIRE, 2-STRAND, TWISTED, 0.106 INCH DIAMETER
- STRAP CHAFING GUARD: REINFORCED NYLON OR CANVAS AT LEAST 1-1/2 INCH WIDE, WITH
  GROMMETS TO PROTECT TREE TRUNKS FROM DAMAGE.
- I. STEEL EDGING: PROFESSIONAL STEEL EDGING, 14 GAUGE THICK X 4 INCHES WIDE, FACTORY PAINTED DARK GREEN. ACCEPTABLE MANUFACTURERS INCLUDE COL-MET OR APPROVED EQUAL.
- J. PRE-EMERGENT HERBICIDES: ANY GRANULAR, NON-STAINING PRE-EMERGENT HERBICIDE THAT IS LABELED FOR THE SPECIFIC ORNAMENTALS OR TURF ON WHICH IT WILL BE UTILIZED. PRE-EMERGENT HERBICIDES SHALL BE APPLIED PER THE MANUFACTURER'S LABELED RATES.

# METHODS

- A. SOIL PREPARATION

  1. BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE GRADE OF ALL LANDSCAPE AREAS ARE WITHIN +/-0.1' OF FINISH GRADE. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY SHOULD ANY DISCREPANCIES EXIST.
  - 2. SOIL TESTING:

    a. AFTER FINISH GRADES HAVE BEEN ESTABLISHED, CONTRACTOR SHALL HAVE SOIL SAMPLES FROM THE PROJECT'S LANDSCAPE AREAS TESTED BY AN ESTABLISHED SOIL TESTING LABORATORY. EACH SAMPLE SUBMITTED TO THE LAB SHALL CONTAIN NO LESS THAN ONE QUART OF SOIL, TAKEN FROM BETWEEN THE SOIL SURFACE AND 6" DEPTH. IF NO SAMPLE LOCATIONS ARE INDICATED ON THE PLANS, THE CONTRACTOR SHALL TAKE A MINIMUM OF THREE SAMPLES EDOM MADICALED ON THE PLANS, THE CONTRACTOR SHALL TAKE A MINIMUM OF THREE
  - SAMPLES FROM VARIOUS REPRESENTATIVE LOCATIONS FOR TESTING.

    b. THE CONTRACTOR SHALL HAVE THE SOIL TESTING LABORATORY PROVIDE RESULTS FOR THE FOLLOWING: SOIL TEXTURAL CLASS, GENERAL SOIL FERTILITY, pH, ORGANIC MATTER CONTENT,
  - SALT (CEC), LIME, SODIUM ADSORPTION RATIO (SAR) AND BORON CONTENT.

    c. THE CONTRACTOR SHALL ALSO SUBMIT THE PROJECT'S PLANT LIST TO THE LABORATORY ALONG WITH THE SOIL SAMPLES.

    d. THE SOIL REPORT PRODUCED BY THE LABORATORY SHALL CONTAIN RECOMMENDATIONS FOR
  - d. THE SOIL REPORT PRODUCED BY THE LABORATORY SHALL CONTAIN RECOMMENDATIONS FOR THE FOLLOWING (AS APPROPRIATE): SEPARATE SOIL PREPARATION AND BACKFILL MIX RECOMMENDATIONS FOR GENERAL ORNAMENTAL PLANTS, XERIC PLANTS, TURF, AND NATIVE SEED, AS WELL AS PRE-PLANT FERTILIZER APPLICATIONS AND RECOMMENDATIONS FOR ANY OTHER SOIL RELATED ISSUES. THE REPORT SHALL ALSO PROVIDE A FERTILIZER PROGRAM FOR THE ESTABLISHMENT PERIOD AND FOR LONG-TERM MAINTENANCE.

    THE CONTRACTOR SHALL INSTALL SOIL AMENDMENTS AND FERTILIZERS PER THE SOILS REPORT
- RECOMMENDATIONS. ANY CHANGE IN COST DUE TO THE SOIL REPORT RECOMMENDATIONS, EITHER INCREASE OR DECREASE, SHALL BE SUBMITTED TO THE OWNER WITH THE REPORT.
- FOR BIDDING PURPOSES ONLY, THE SOIL PREPARATION SHALL CONSIST OF THE FOLLOWING:
   TURF: INCORPORATE THE FOLLOWING AMENDMENTS INTO THE TOP 8" OF SOIL BY MEANS OF ROTOTILLING AFTER CROSS-RIPPING:
   NITROGEN STABILIZED ORGANIC AMENDMENT 4 CU. YDS. PER 1,000 S.F.
- ii. PREPLANT TURF FERTILIZER (10-20-10 OR SIMILAR, SLOW RELEASE, ORGANIC) 15 LBS PER 1,000 S.F.
- S.F.

  iii. "CLAY BUSTER" OR EQUAL USE MANUFACTURER'S RECOMMENDED RATE
  b. TREES, SHRUBS, AND PERENNIALS: INCORPORATE THE FOLLOWING AMENDMENTS INTO THE TOP
- i. NITROGEN STABILIZED ORGANIC AMENDMENT 4 CU. YDS. PER 1,000 S.F.
   ii. 12-12-12 FERTILIZER (OR SIMILAR, ORGANIC, SLOW RELEASE) 10 LBS. PER CU. YD.
- iii. "CLAY BUSTER" OR EQUAL USE MANUFACTURER'S RECOMMENDED RATE
  iv. IRON SULPHATE 2 LBS. PER CU. YD.

8" OF SOIL BY MEANS OF ROTOTILLING AFTER CROSS-RIPPING:

- 5. IN THE CONTEXT OF THESE PLANS, NOTES, AND SPECIFICATIONS, "FINISH GRADE" REFERS TO THE FINAL ELEVATION OF THE SOIL SURFACE (NOT TOP OF MULCH) AS INDICATED ON THE GRADING PLANS.

  a. BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE ROUGH GRADES OF ALL LANDSCAPE AREAS ARE WITHIN +/-0.1' OF FINISH GRADE. SEE SPECIFICATIONS FOR MORE DETAILED INSTRUCTION ON TURF AREA AND PLANTING BED PREPARATION.
- b. CONSTRUCT AND MAINTAIN FINISH GRADES AS SHOWN ON GRADING PLANS, AND CONSTRUCT AND MAINTAIN SLOPES AS RECOMMENDED BY THE GEOTECHNICAL REPORT. ALL LANDSCAPE AREAS SHALL HAVE POSITIVE DRAINAGE AWAY FROM STRUCTURES AT THE MINIMUM SLOPE SPECIFIED IN THE REPORT AND ON THE GRADING PLANS, AND AREAS OF POTENTIAL PONDING SHALL BE REGRADED TO BLEND IN WITH THE SURROUNDING GRADES AND ELIMINATE PONDING POTENTIAL
- THE LANDSCAPE CONTRACTOR SHALL DETERMINE WHETHER OR NOT THE EXPORT OF ANY SOIL WILL BE NEEDED, TAKING INTO ACCOUNT THE ROUGH GRADE PROVIDED, THE AMOUNT OF SOIL AMENDMENTS TO BE ADDED (BASED ON A SOIL TEST, PER SPECIFICATIONS), AND THE FINISH GRADES TO BE ESTABLISHED.
   ENSURE THAT THE FINISH GRADE IN SHRUB AREAS IMMEDIATELY ADJACENT TO WALKS AND
- OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 3" BELOW THE ADJACENT FINISH SURFACE, IN ORDER TO ALLOW FOR PROPER MULCH DEPTH. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS.
- e. ENSURE THAT THE FINISH GRADE IN TURF AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 1" BELOW THE FINISH SURFACE OF THE WALKS. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS. AT APPROXIMATELY 18" AWAY FROM THE WALKS.
- f. SHOULD ANY CONFLICTS AND/OR DISCREPANCIES ARISE BETWEEN THE GRADING PLANS, GEOTECHNICAL REPORT, THESE NOTES AND PLANS, AND ACTUAL CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY BRING SUCH ITEMS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT, GENERAL CONTRACTOR, AND OWNER.
- ONCE SOIL PREPARATION IS COMPLETE, THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT THERE ARE NO DEBRIS, TRASH, OR STONES LARGER THAN 1" REMAINING IN THE TOP 6" OF SOIL.

- B SUBMITTAL
- THE CONTRACTOR SHALL PROVIDE SUBMITTALS AND SAMPLES, IF REQUIRED, TO THE LANDSCAPE
   ARCHITECT, AND RECEIVE APPROVAL IN WRITING FOR SUCH SUBMITTALS BEFORE WORK COMMENCES.
- SUBMITTALS SHALL INCLUDE PHOTOS OF PLANTS WITH A RULER OR MEASURING STICK FOR SCALE, PHOTOS OR SAMPLES OF ANY REQUIRED MULCHES, AND SOIL TEST RESULTS AND PREPARATION RECOMMENDATIONS FROM THE TESTING LAB (INCLUDING COMPOST AND FERTILIZER RATES AND TYPES, AND OTHER AMENDMENTS FOR TREE/SHRUB, TURF, AND SEED AREAS AS MAY BE APPROPRIATE).
- 3. SUBMITTALS SHALL ALSO INCLUDE MANUFACTURER CUT SHEETS FOR PLANTING ACCESSORIES SUCH
- AS TREE STAKES AND TIES, EDGING, AND LANDSCAPE FABRICS (IF ANY).

  4. WHERE MULTIPLE ITEMS ARE SHOWN ON A PAGE, THE CONTRACTOR SHALL CLEARLY INDICATE THE ITEM BEING CONSIDERED.
- . GENERAL PLANTING
  1. REMOVE ALL NURSERY TAGS AND STAKES FROM PLANTS.
- EXCEPT IN AREAS TO BE PLANTED WITH ORNAMENTAL GRASSES, APPLY PRE-EMERGENT HERBICIDES
  AT THE MANUFACTURER'S RECOMMENDED RATE.
- 3. TRENCHING NEAR EXISTING TREES:

  a. CONTRACTOR SHALL NOT DISTURB ROOTS 1-1/2" AND LARGER IN DIAMETER WITHIN THE CRITICAL ROOT ZONE (CRZ) OF EXISTING TREES, AND SHALL EXERCISE ALL POSSIBLE CARE AND PRECAUTIONS TO AVOID INJURY TO TREE ROOTS. TRUNKS. AND BRANCHES. THE CRZ IS
- PRECAUTIONS TO AVOID INJURY TO TREE ROOTS, TRUNKS, AND BRANCHES. THE CRZ IS
  DEFINED AS A CIRCULAR AREA EXTENDING OUTWARD FROM THE TREE TRUNK, WITH A RADIUS
  EQUAL TO 1' FOR EVERY 1" OF TRUNK DIAMETER-AT-BREAST-HEIGHT (4.5' ABOVE THE AVERAGE
  GRADE AT THE TRUNK)
- b. ALL EXCAVATION WITHIN THE CRZ SHALL BE PERFORMED USING HAND TOOLS. NO MACHINE EXCAVATION OR TRENCHING OF ANY KIND SHALL BE ALLOWED WITHIN THE CRZ.
- c. ALTER ALIGNMENT OF PIPE TO AVOID TREE ROOTS 1-1/2" AND LARGER IN DIAMETER. WHERE TREE ROOTS 1-1/2" AND LARGER IN DIAMETER ARE ENCOUNTERED IN THE FIELD, TUNNEL UNDER SUCH ROOTS. WRAP EXPOSED ROOTS WITH SEVERAL LAYERS OF BURLAP AND KEEP MOIST. CLOSE ALL TRENCHES WITHIN THE CANOPY DRIP LINES WITHIN 24 HOURS.
- d. ALL SEVERED ROOTS SHALL BE HAND PRUNED WITH SHARP TOOLS AND ALLOWED TO AIR-DRY.
   DO NOT USE ANY SORT OF SEALERS OR WOUND PAINTS.
   TREE PLANTING
- TREE PLANTING HOLES SHALL BE EXCAVATED TO MINIMUM WIDTH OF TWO TIMES THE WIDTH OF THE ROOTBALL, AND TO A DEPTH EQUAL TO THE DEPTH OF THE ROOTBALL LESS TWO TO FOUR INCHES.
   SCARIFY THE SIDES AND BOTTOM OF THE PLANTING HOLE PRIOR TO THE PLACEMENT OF THE TREE. REMOVE ANY GLAZING THAT MAY HAVE BEEN CAUSED DURING THE EXCAVATION OF THE HOLE.
   FOR CONTAINER AND BOX TREES, TO REMOVE ANY POTENTIALLY GIRDLING ROOTS AND OTHER ROOT DEFECTS, THE CONTRACTOR SHALL SHAVE A 1" LAYER OFF OF THE SIDES AND BOTTOM OF THE
- OUT FROM THE ROOTBALL.

  4. INSTALL THE TREE ON UNDISTURBED SUBGRADE SO THAT THE TOP OF THE ROOTBALL IS TWO TO FOUR INCHES ABOVE THE SURROUNDING GRADE.
- BACKFILL THE TREE HOLE UTILIZING THE EXISTING TOPSOIL FROM ON-SITE. ROCKS LARGER THAN 1"
  DIA. AND ALL OTHER DEBRIS SHALL BE REMOVED FROM THE SOIL PRIOR TO THE BACKFILL. SHOULD
  ADDITIONAL SOIL BE REQUIRED TO ACCOMPLISH THIS TASK, USE STORED TOPSOIL FROM ON-SITE OR
  IMPORT ADDITIONAL TOPSOIL FROM OFF-SITE AT NO ADDITIONAL COST TO THE OWNER. IMPORTED
  TOPSOIL SHALL BE OF SIMILAR TEXTURAL CLASS AND COMPOSITION IN THE ON-SITE SOIL.

ROOTBALL OF ALL TREES JUST BEFORE PLACING INTO THE PLANTING PIT. DO NOT "TEASE" ROOTS

- 6. TREES SHALL NOT BE STAKED UNLESS LOCAL CONDITIONS (SUCH AS HEAVY WINDS OR SLOPES)
  REQUIRE STAKES TO KEEP TREES UPRIGHT. SHOULD STAKING BE REQUIRED, THE TOTAL NUMBER OF
  TREE STAKES (BEYOND THE MINIMUMS LISTED BELOW) WILL BE LEFT TO THE LANDSCAPE
  CONTRACTOR'S DISCRETION. SHOULD ANY TREES FALL OR LEAN, THE LANDSCAPE CONTRACTOR
  SHALL STRAIGHTEN THE TREE, OR REPLACE IT SHOULD IT BECOME DAMAGED. TREE STAKING SHALL
  ADHERE TO THE FOLLOWING GUIDELINES:
  a. 1"-2" TREES
  TWO STAKES PER TREE
  - b. 2-1/2"-4" TREES TWO STAKES PER TREE

    THREE STAKES PER TREE
  - THREE STAKES PER TREES

    TREES OVER 4" CALIPER GUY AS NEEDED
  - d. MULTI-TRUNK TREES THREE STAKES PER TREE MINIMUM, QUANTITY AND POSITIONS AS NEEDED TO STABILIZE THE TREE

    e. MULTI-TRUNK TREES THREE STAKES PER TREE MINIMUM. QUANTITY AND POSITIONS AS
- e. MULTI-TRUNK TREES THREE STAKES PER TREE MINIMUM, QUANTITY AND POSITIONS AS NEEDED TO STABILIZE THE TREE
   UPON COMPLETION OF PLANTING, CONSTRUCT AN EARTH WATERING BASIN AROUND THE TREE.
   COVER THE INTERIOR OF THE TREE RING WITH THE WEED BARRIER CLOTH AND TOPDRESS WITH
- MULCH (TYPE AND DEPTH PER PLANS).

  E. SHRUB, PERENNIAL, AND GROUNDCOVER PLANTING

  1. DIG THE PLANTING HOLES TWICE AS WIDE AND 2" LESS DEEP THAN EACH PLANT'S ROOTBALL. INSTALL

  THE PLANT IN THE LIGHT PROVENIA ADDITIONAL WITH SOIL AMENDED DEP SOIL TEST.
- THE PLANT IN THE HOLE. BACKFILL AROUND THE PLANT WITH SOIL AMENDED PER SOIL TEST RECOMMENDATIONS.

  2. INSTALL THE WEED BARRIER CLOTH, OVERLAPPING IT AT THE ENDS. UTILIZE STEEL STAPLES TO KEEP
- THE WEED BARRIER CLOTH IN PLACE.

  3. WHEN PLANTING IS COMPLETE, INSTALL MULCH (TYPE AND DEPTH PER PLANS) OVER ALL PLANTING BEDS, COVERING THE ENTIRE PLANTING AREA.
- SOD VARIETY TO BE AS SPECIFIED ON THE LANDSCAPE PLAN.

LANDSCAPE MAINTENANCE

- LAY SOD WITHIN 24 HOURS FROM THE TIME OF STRIPPING. DO NOT LAY IF THE GROUND IS FROZEN.

  A LAY THE SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. BUTT FNDS AND SIDES OF SOD
- LAY THE SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. BUTT ENDS AND SIDES OF SOD STRIPS DO NOT OVERLAP. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES.
   ROLL THE SOD TO ENSURE GOOD CONTACT OF THE SOD'S ROOT SYSTEM WITH THE SOIL
- UNDERNEATH.

  5. WATER THE SOD THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER PLANTING TO OBTAIN AT LEAST SIX INCHES OF PENETRATION INTO THE SOIL BELOW THE SOD.
- G. MULCH

  1. INSTALL MULCH TOPDRESSING, TYPE AND DEPTH PER MULCH NOTE, IN ALL PLANTING AREAS AND TREE RINGS.
- 2. DO NOT INSTALL MULCH WITHIN 6" OF TREE ROOT FLARE AND WITHIN 24" OF HABITABLE STRUCTURES, EXCEPT AS MAY BE NOTED ON THESE PLANS. MULCH COVER WITHIN 6" OF CONCRETE WALKS AND CURBS SHALL NOT PROTRUDE ABOVE THE FINISH SURFACE OF THE WALKS AND CURBS. MULCH
- COVER WITHIN 12" OF WALLS SHALL BE AT LEAST 3" LOWER THAN THE TOP OF WALL.

  H. CLEAN UP

  1. DURING LANDSCAPE PREPARATION AND PLANTING, KEEP ALL PAVEMENT CLEAN AND ALL WORK AREAS
- IN A NEAT, ORDERLY CONDITION.
  2. DISPOSED LEGALLY OF ALL EXCAVATED MATERIALS OFF THE PROJECT SITE.
  I. INSPECTION AND ACCEPTANCE
  1. UPON COMPLETION OF THE WORK, THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE SITE CLEAN,
- FREE OF DEBRIS AND TRASH, AND SUITABLE FOR USE AS INTENDED. THE LANDSCAPE CONTRACTOR SHALL THEN REQUEST AN INSPECTION BY THE OWNER TO DETERMINE FINAL ACCEPTABILITY.

  WHEN THE INSPECTED PLANTING WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, THE LANDSCAPE CONTRACTOR SHALL REPLACE AND/OR REPAIR THE REJECTED WORK TO THE OWNER'S
- SATISFACTION WITHIN 24 HOURS.
  THE LANDSCAPE MAINTENANCE PERIOD WILL NOT COMMENCE UNTIL THE LANDSCAPE WORK HAS
  BEEN RE-INSPECTED BY THE OWNER AND FOUND TO BE ACCEPTABLE. AT THAT TIME, A WRITTEN
  NOTICE OF FINAL ACCEPTANCE WILL BE ISSUED BY THE OWNER, AND THE MAINTENANCE AND
  GUARANTEE PERIODS WILL COMMENCE.
- 1. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK SHOWN ON THESE PLANS FOR 90 DAYS BEYOND FINAL ACCEPTANCE OF ALL LANDSCAPE WORK BY THE OWNER. LANDSCAPE MAINTENANCE SHALL INCLUDE WEEKLY SITE VISITS FOR THE FOLLOWING ACTIONS (AS APPROPRIATE): PROPER PRUNING, RESTAKING OF TREES, RESETTING OF PLANTS THAT HAVE SETTLED, MOWING AND AERATION OF LAWNS, WEEDING, TREATING FOR INSECTS AND DISEASES, REPLACEMENT OF MULCH, REMOVAL OF LITTER, REPAIRS TO THE IRRIGATION SYSTEM DUE TO FAULTY PARTS AND/OR WORKMANSHIP, AND THE APPROPRIATE WATERING OF ALL PLANTINGS. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN PROPER WORKING ORDER, WITH SCHEDULING ADJUSTMENTS BY SEASON TO MAXIMIZE WATER CONSERVATION.
- 2. SHOULD SEEDED AND/OR SODDED AREAS NOT BE COVERED BY AN AUTOMATIC IRRIGATION SYSTEM,
  THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THESE AREAS AND OBTAINING
  A FULL, HEALTHY STAND OF PLANTS AT NO ADDITIONAL COST TO THE OWNER.

  TO ACHIEVE FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE REPIOD. ALL OF THE FOLLOWING.
- TO ACHIEVE FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD, ALL OF THE FOLLOWING CONDITIONS MUST OCCUR:
   a. THE LANDSCAPE SHALL SHOW ACTIVE, HEALTHY GROWTH (WITH EXCEPTIONS MADE FOR
- SEASONAL DORMANCY). ALL PLANTS NOT MEETING THIS CONDITION SHALL BE REJECTED AND REPLACED BY HEALTHY PLANT MATERIAL PRIOR TO FINAL ACCEPTANCE.

  b. ALL HARDSCAPE SHALL BE CLEANED PRIOR TO FINAL ACCEPTANCE.
- c. SODDED AREAS MUST BE ACTIVELY GROWING AND MUST REACH A MINIMUM HEIGHT OF 1 1/2
  INCHES BEFORE FIRST MOWING. BARE AREAS LARGER THAN TWELVE SQUARE INCHES MUST BE
  RESODDED (AS APPROPRIATE) PRIOR TO FINAL ACCEPTANCE. ALL SODDED TURF SHALL BE
  NEATLY MOWED.
- WARRANTY PERIOD, PLANT GUARANTEE AND REPLACEMENTS

  1. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL TREES, SHRUBS, PERENNIALS, SOD, AND IRRIGATION SYSTEMS FOR A PERIOD OF <u>ONE YEAR</u> FROM THE DATE OF THE OWNER'S FINAL ACCEPTANCE (90 DAYS FOR ANNUAL PLANTS). THE CONTRACTOR SHALL REPLACE, AT HIS OWN EXPENSE AND TO THE SATISFACTION OF THE OWNER, ANY PLANTS WHICH DIE IN THAT TIME, OR

REPAIR ANY PORTIONS OF THE IRRIGATION SYSTEM WHICH OPERATE IMPROPERLY.

- AFTER THE INITIAL MAINTENANCE PERIOD AND DURING THE GUARANTEE PERIOD, THE LANDSCAPE CONTRACTOR SHALL ONLY BE RESPONSIBLE FOR REPLACEMENT OF PLANTS WHEN PLANT DEATH CANNOT BE ATTRIBUTED DIRECTLY TO OVERWATERING OR OTHER DAMAGE BY HUMAN ACTIONS.
- CANNOT BE ATTRIBUTED DIRECTLY TO OVERWATERING OR OTHER DAMAGE BY HUMAN ACTIONS.

  PROVIDE A MINIMUM OF (2) COPIES OF RECORD DRAWINGS TO THE OWNER UPON COMPLETION OF WORK. A
  RECORD DRAWING IS A RECORD OF ALL CHANGES THAT OCCURRED IN THE FIELD AND THAT ARE
  DOCUMENTED THROUGH CHANGE ORDERS, ADDENDA, OR CONTRACTOR/CONSULTANT DRAWING MARKUPS.

APPROVED:
I HEREBY CERTIFY THAT THE ABOVE AND FOREGOING SITE PLAN FOR A DEVELOPMENT IN THE CITY OF ROCKWALL, TEXAS, WAS APPROVED BY THE PLANNING & ZONING COMMISSION OF THE CITY OF ROCKWALL

WITNESS OUR HANDS, THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, \_\_\_\_

PLANNING & ZONING COMMISSION, CHAIRMAN

ON THE \_\_\_\_\_, \_\_\_\_,

DIRECTOR OF PLANNING AND ZONING



DESIGN GROUP

(800) 680-6630

15455 Dallas Pkwy., Ste 600

Addison, TX 75001

www.EvergreenDesignGroup.com

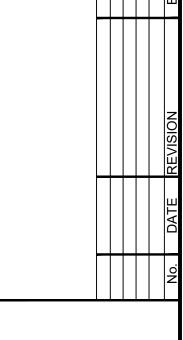


TEXAS REGISTRATION #14199



10/06/2022 032

CAPPS, HODGES & MOR 1200 SUMMER LEE DRIV ROCKWALL, TX 75032 SP2022-009



CASE # : SP2022-009

ABSTRACT NO.

207

CAPPS, HODGES, & MORGAN

These drawings have been revised to show those changes during the

Engineering, Inc. and considered to be significant. These drawings

are not guaranteed to be "As Built" but are based on the information

construction process reported by the contractor to ClayMoore

DR. CAPPS, DR. HODGES & DR. MORGAN
CHM REAL ESTATE, LLC
740 WILFORD WAY, HEATH, TX 75032
PHONE: 972-771-9500
EMAIL: CHADJCAPPS@GMAIL.COM
APPLICANT:

NO TREES TO BE PLANTED WITHIN 5' OF A PUBLIC WATER AND

UTILITIES 10" AND LARGER IN DIAMETER.

SANITARY SEWER LINE LESS THAN 10" IN DIAMETER AND 10' AWAY FOR

JEFF KILBURG
APEX DESIGN BUILD
9550 W. HIGGINS RD., SUITE 170, ROSEMONT, IL 60018
PH: 847-288-0100
EMAIL: RAQUELLE@APEXDESIGNBUILD.NET

WINDROSE LAND SURVEYING

COUNTY

ROCKWALL

220 ELM STREET, SUITE #200
LEWISVILLE, TX 75057
PH: 214.217.2544 CONTACT NAME: MARK N. PEEPLE

LEGAL DESCRIPTION:

HORIZON RIDGE ADDITION

CITY: STATE:
ROCKWALL TEXAS

SURVEY:

E. TEAL SURVEY

LOT 5, BLOCK B,

DESIGN:
DRAWN:
CHECKED:
DATE:
05/24/

SHEET LP-3

LP-3

TOTALS

TOTAL REMOVED

TOTAL MITIGATION

TOTAL MITIGATION FOR SITE

28.0

28.0

56.0

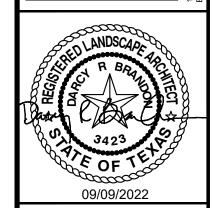
157.00

127.00

63.50

119.5

**EVERGREEN** (800) 680-6630 15455 Dallas Pkwy., Ste 600 Addison, TX 75001 www.EvergreenDesignGroup.com



**57 SPACES** 

62 SPACES

4 SPACES

66 SPACES

STATE: TEXAS

SURVEY:

E. TEAL SURVEY

ROCKWALI

ABSTRACT NO.

207

CHECKED: SHEET

ΓD-1

- 2. POSTS: POSTS SHALL BE A MINIMUM OF 72 INCHES LONG AND STEEL 'T' SHAPED WITH A MINIMUM WEIGHT OF 1.3 POUNDS PER LINEAR FOOT.
- 3. TIE WIRE: WIRE FOR ATTACHING THE FABRIC TO THE T-POSTS SHALL BE NOT LESS THAN NO. 12 GAUGE GALVANIZED WIRE,
- 4. USED MATERIALS: PREVIOUSLY-USED MATERIALS, MEETING THE ABOVE REQUIREMENTS AND WHEN APPROVED BY THE OWNER, MAY BE USED.

# **CONSTRUCTION METHODS**

- ALL TREES AND SHRUBS SHOWN TO REMAIN WITHIN THE PROXIMITY OF THE CONSTRUCTION SITE SHALL BE PROTECTED PRIOR TO BEGINNING ANY DEVELOPMENT ACTIVITY.
- 2. EMPLOY THE SERVICES OF AN ISA (INTERNATIONAL SOCIETY OF ARBORICULTURE) CERTIFIED ARBORIST AND OBTAIN ALL REQUIRED PERMITS TO PRUNE THE EXISTING TREES FOR CLEANING, RAISING AND THINNING, AS MAY BE REQUIRED.
- 3. PROTECTIVE FENCING SHALL BE ERECTED OUTSIDE THE CRITICAL ROOT ZONE (CRZ, EQUAL TO 1' FROM THE TRUNK FOR EVERY 1" OF DBH) AT LOCATIONS SHOWN IN THE PLANS OR AS DIRECTED BY THE LANDSCAPE CONSULTANT AND/OR CITY ARBORIST. AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS. FENCING SHALL BE MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION. TREES IN CLOSE PROXIMITY SHALL BE FENCED TOGETHER, RATHER THAN INDIVIDUALLY.
- 4. PROTECTIVE FENCE LOCATIONS IN CLOSE PROXIMITY TO STREET INTERSECTIONS OR DRIVES SHALL ADHERE TO THE APPLICABLE JURISDICTION'S SIGHT DISTANCE CRITERIA.
- 5. THE PROTECTIVE FENCING SHALL BE ERECTED BEFORE SITE WORK COMMENCES AND SHALL REMAIN IN PLACE DURING THE ENTIRE CONSTRUCTION PHASE.
- 6. THE INSTALLATION POSTS SHALL BE PLACED EVERY 6 FEET ON CENTER AND EMBEDDED TO 18 INCHES DEEP. MESH FABRIC SHALL BE ATTACHED TO THE INSTALLATION POSTS BY THE USE OF SUFFICIENT WIRE TIES TO SECURELY FASTEN THE FABRIC TO THE T-POSTS TO HOLD THE FABRIC IN A STABLE AND UPRIGHT POSITION.

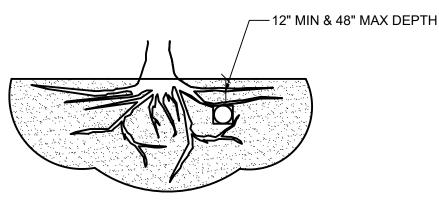
# 7. WITHIN THE CRZ:

- a. DO NOT CLEAR, FILL OR GRADE IN THE CRZ OF ANY TREE.
- b. DO NOT STORE, STOCKPILE OR DUMP ANY JOB MATERIAL, SOIL OR RUBBISH UNDER THE SPREAD OF THE TREE BRANCHES.
- c. DO NOT PARK OR STORE ANY EQUIPMENT OR SUPPLIES UNDER THE
- d. DO NOT SET UP ANY CONSTRUCTION OPERATIONS UNDER THE TREE CANOPY (SUCH AS PIPE CUTTING AND THREADING, MORTAR MIXING, PAINTING OR LUMBER CUTTING).
- e. DO NOT NAIL OR ATTACH TEMPORARY SIGNS METERS, SWITCHES, WIRES, BRACING OR ANY OTHER ITEM TO THE TREES.
- DO NOT PERMIT RUNOFF FROM WASTE MATERIALS INCLUDING SOLVENTS, CONCRETE WASHOUTS, ASPHALT TACK COATS (MC-30 OIL), ETC. TO ENTER THE CRZ. BARRIERS ARE TO BE PROVIDED TO PREVENT SUCH RUNOFF SUBSTANCES FROM ENTERING THE CRZ WHENEVER POSSIBLE, INCLUDING IN AN AREA WHERE RAIN OR SURFACE WATER COULD CARRY SUCH MATERIALS TO THE ROOT SYSTEM OF THE TREE.
- 8. ROUTE UNDERGROUND UTILITIES TO AVOID THE CRZ. IF DIGGING IS UNAVOIDABLE, BORE UNDER THE ROOTS, OR HAND DIG TO AVOID SEVERING THEM.

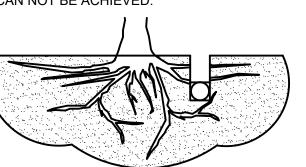
- 9. WHERE EXCAVATION IN THE VICINITY OF TREES MUST OCCUR, SUCH AS FOR IRRIGATION INSTALLATION, PROCEED WITH CAUTION, AND USING HAND TOOLS ONLY.
- 10. THE CONTRACTOR SHALL NOT CUT ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATION OCCURS NEAR EXISTING TREES. ALL ROOTS LARGER THAN ONE INCH IN DIAMETER ARE TO BE CUT CLEANLY. FOR OAKS ONLY, ALL WOUNDS SHALL BE PAINTED WITH WOUND SEALER WITHIN 30 MINUTES
- 11. REMOVE ALL TREES, SHRUBS OR BUSHES TO BE CLEARED FROM PROTECTED ROOT ZONE AREAS BY HAND.
- 12. TREES DAMAGED OR KILLED DUE TO CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED AT THE CONTRACTOR'S EXPENSE AND TO THE PROJECT OWNER'S AND LOCAL JURISDICTION'S
- 13. ANY TREE REMOVAL SHALL BE APPROVED BY THE OWNER AND LOCAL JURISDICTION PRIOR TO ITS REMOVAL, AND THE CONTRACTOR SHALL HAVE ALL REQUIRED PERMITS FOR SUCH ACTIVITIES.
- 14. COVER EXPOSED ROOTS AT THE END OF EACH DAY WITH SOIL, MULCH OR WET BURLAP.
- 15. IN CRITICAL ROOT ZONE AREAS THAT CANNOT BE PROTECTED DUING CONSTRUCTION AND WHERE HEAVY TRAFFIC IS ANTICIPATED, COVER THE SOIL WITH EIGHT INCHES OF ORGANIC MULCH TO MINIMIZE SOIL COMPACTION. THIS EIGHT INCH DEPTH OF MULCH SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
- 16. WATER ALL TREES IMPACTED BY CONSTRUCTION ACTIVITIES, DEEPLY ONCE A WEEK DURING PERIODS OF HOT DRY WEATHER. SPRAY TREE CROWNS WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.
- 17. WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, USE A PLASTIC VAPOR BARRIER BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE SOIL.
- 18. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TREE PROTECTION FENCING WHEN ALL THREATS TO THE EXISTING TREES FROM CONSTRUCTION-RELATED ACTIVITIES HAVE BEEN REMOVED.

TREES THAT ARE MARKED TO BE PRESERVED ON A SITE PLAN AND FOR WHICH UTILITIES MUST PASS TROUGH THEIR ROOT PROTECTION ZONES MAY REQUIRE TUNNELING AS OPPOSED TO OPEN TRENCHES. THE DECISION TO TUNNEL WILL BE DETERMINED ON A CASE BY CASE BASIS BY THE ENGINEER.

TUNNELS SHALL BE DUG THROUGH THE ROOT PROTECTION ZONE IN ORDER TO MINIMIZE ROOT DAMAGE.



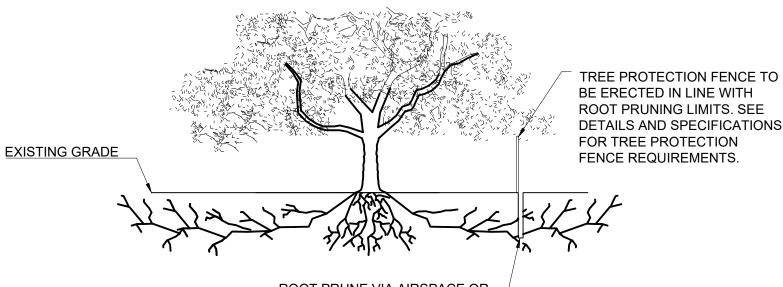
TUNNEL TO MINIMIZE ROOT DAMAGE (TOP) AS OPPOSED TO SURFACE-DUG TRENCHES IN ROOT PROTECTION ZONE WHEN THE 5' MINIMUM DISTANCE FROM TRUNK CAN NOT BE ACHIEVED.



OPEN TRENCHING MAY BE USED IF EXPOSED TREE ROOTS DO NOT EXCEED 3" OR ROOTS CAN BE BENT BACK.

BORING THROUGH ROOT PROTECTION ZONE

- RETENTION AREAS WILL BE SET AS PART OF THE REVIEW PROCESS AND PRE-CONSTRUCTION MEETING.
- BOUNDARIES OF RETENTION AREAS MUST BE STAKED AT THE PRE-CONSTRUCTION MEETING AND FLAGGED PRIOR TO ROOT PRUNING.
- EXACT LOCATION OF ROOT PRUNING SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FORESTRY INSPECTOR
- TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH EXCAVATED SOIL OR OTHER
- ORGANIC SOIL AS SPECIFIED PER PLAN OR BY THE FORESTRY INSPECTOR. ROOTS SHALL BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE EQUIPMENT. ROT PRUNING METHODS AND MEANS MUST BE IN ACCORDANCE WITH
- ANSI STANDARD A3000. ALL PRUNING MUST BE EXECUTED AT LOD SHOWN ON PLANS OR AS AUTHORIZED
- IN WRITING BY THE FORESTRY INSPECTOR. SUPPLEMENTAL WATERING MAY BE REQUIRED FOR ROOT PRUNED TREES THROUGHOUT THE GROWING SEASON DURING CONSTRUCTION AND SUBSEQUENT WARRANTY AND MAINTENANCE PERIOD.



ROOT PRUNE VIA AIRSPACE OR TRENCH (6" WIDE MAX.) 24" MIN. DEPTH OR AS DETERMINED AT PRE-CONSTRUCTION MEETING.



These drawings have been revised to show those changes during the construction process reported by the contractor to ClayMoore Engineering, Inc. and considered to be significant. These drawings are not guaranteed to be "As Built" but are based on the information made available.

I HEREBY CERTIFY THAT THE ABOVE AND FOREGOING SITE PLAN FOR A DEVELOPMENT IN THE CITY OF ROCKWALL, TEXAS, WAS APPROVED BY THE PLANNING & ZONING COMMISSION OF THE CITY OF ROCKWALL ON THE \_\_\_\_\_ DAY OF \_\_

WITNESS OUR HANDS, THIS DAY OF

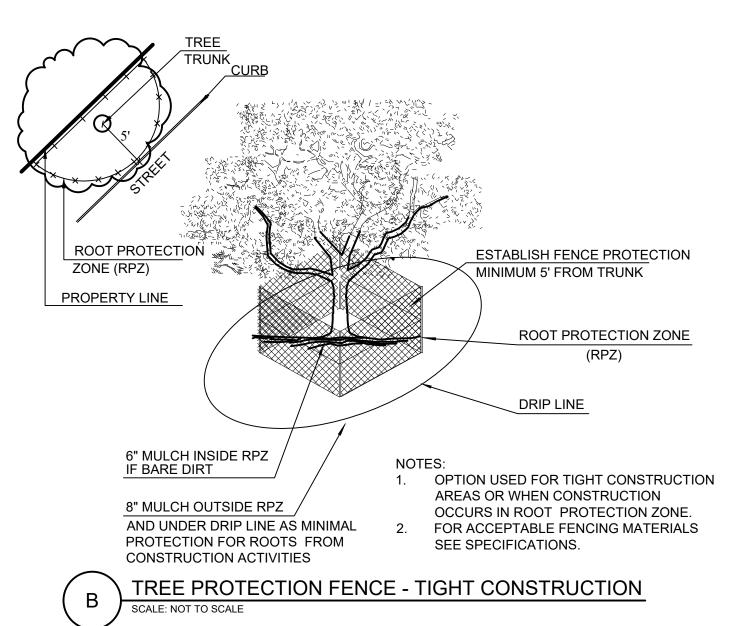
PLANNING & ZONING COMMISSION, CHAIRMAN

DIRECTOR OF PLANNING AND ZONING

EVERGREEN www.EvergreenDesignGroup.com MULCH INSIDE RPZ PROTECTION FENCE ROOT PROTECTION ZONE (RPZ) (SEE SPECS)

THE FENCING LOCATION SHOWN ABOVE IS DIAGRAMATIC ONLY AND WILL CONFORM TO THE DRIP LINE AND BE LIMITED TO PROJECT BOUNDARY. WHERE MULTIPLE ADJACENT TREES WILL BE ENCLOSED BY FENCING, THE FENCING SHALL BE CONTINUOUS AROUND ALL TREES. FOR ACCEPTABLE FENCING MATERIALS SEE SPECIFICATIONS.

TREE PROTECTION FENCE



CASE #: SP2022-009

CAPPS, HODGES, & MORGAN

DR. CAPPS, DR. HODGES & DR. MORGAN CHM REAL ESTATE, LLC 740 WILFORD WAY, HEATH, TX 75032 PHONE: 972-771-9500 EMAIL: CHADJCAPPS@GMAIL.COM

APPLICANT: JEFF KILBURG APEX DESIGN BUILD 9550 W. HIGGINS RD., SUITE 170, ROSEMONT, IL 60018 PH: 847-288-0100 EMAIL: RAQUELLE@APEXDESIGNBUILD.NET

WINDROSE LAND SURVEYING 220 ELM STREET, SUITE #200 LEWISVILLE, TX 75057 PH: 214.217.2544

CONTACT NAME: MARK N. PEEPLES **LEGAL DESCRIPTION:** LOT 5, BLOCK B, HORIZON RIDGE ADDITION

ROCKWALL **TEXAS** ABSTRACT NO. SURVEY: **ROCKWALI** E. TEAL SURVEY 207

AY

(800) 680-6630 15455 Dallas Pkwy., Ste 600

Addison, TX 75001

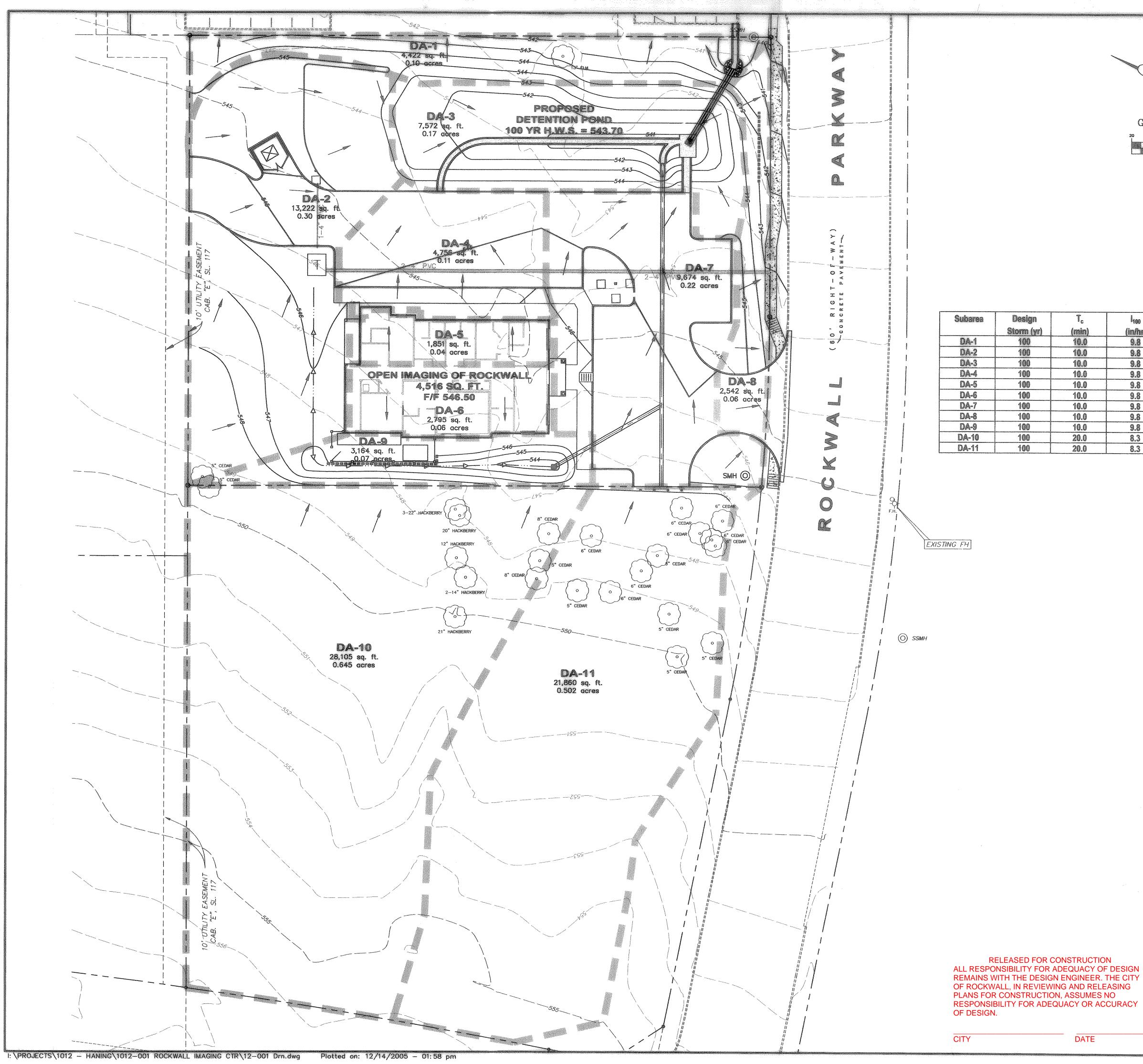
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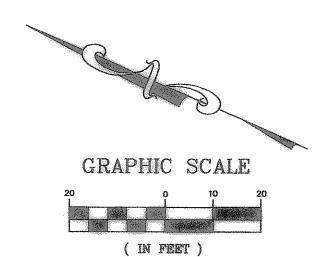
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SHEET

2020-021





1 inch = 20 ft.

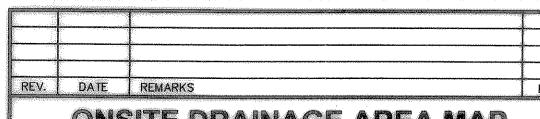
BENCHMARK: BOX CUT IN NW CURB RETURN AT THE INTERSECTION OF WESTWOOD AND ROCKWALL PARKWAY. ELEVATION = 537.56



Subarea	Design	Te	J <sub>100</sub>	C	Area	CA	Qioo	Comments
	Storm (yr)	(min)	(in/hr)		(acres)	d distributed to the state of t	(cfs)	
DA-1	100	10.0	9.8	0.90	0.10	0.091	0.90	Onsite Allowed to Bypass Detention
DA-2	100	10.0	9.8	0.90	0.30	0.273	2.68	Existing Onsite - Drains to Detention
DA-3	100	10.0	9.8	0.90	0.17	0.156	1.53	Existing Onsite - Drains to Detention
DA-4	100	10.0	9.8	0.90	0.11	0.098	0.96	Existing Onsite - Drains to Detention
DA-5	100	10.0	9.8	0.90	0.04	0.038	0.37	Existing Onsite - Drains to Detention
DA-6	100	10.0	9.8	0.90	0.06	0.058	0.57	Existing Onsite - Drains to Detention
DA-7	100	10.0	9.8	0.90	0.22	0.200	1.96	Existing Onsite - Drains to Detention
DA-8	100	10.0	9.8	0.90	0.06	0.052	0.51	Onsite Allowed to Bypass Detention
DA-9	100	10.0	9.8	0.90	0.07	0.065	0.64	Existing Onsite - Drains to Detention
<u>DA-10</u>	100	20.0	8.3	0.35	0.65	0.228	1.89	Existing Offsite - Self Detained
DA-11	100	20.0	8.3	0.35	0.50	0.175	1.45	Existing Offsite - Self Detained

TOP OF 3'x3' WYE INLET ELEV = 545.00544.15 THROAT ELEV = 544.00 -100 YEAR HWS ELEV = 543.708" $\phi$  PIPE - F/L = 542.70 (INFLOW) 3-8" PVC - OUTFALL PIPE FL 8" 540.00  $8^{\circ}$  PIPE - F/L = 541.60 (OUTFLOW) (INFLOW) 3''ø PIPE - F/L = 540.10(INFLOW) 0.50' 1.0' 1.0' 0.50' ORIFICE CONTROL DETAIL N.T.S.

> RECORD DRAWING RECORD INFORMATION PROVIDED BY HANING CONSTRUCTION COMPANY, PARIS, TEXAS ELEVATION VERIFICATION PERFORMED BY MMAC SURVEYING & MAPPING, INC, DENTON, TEXAS



# ONSITE DRAINAGE AREA MAP

OPEN IMAGING OF ROCKWALL CITY OF ROCKWALL, TEXAS

RKM Consulting Engineers, Inc. 14673 Midway Road, Ste 203 Addison, Texas 75001

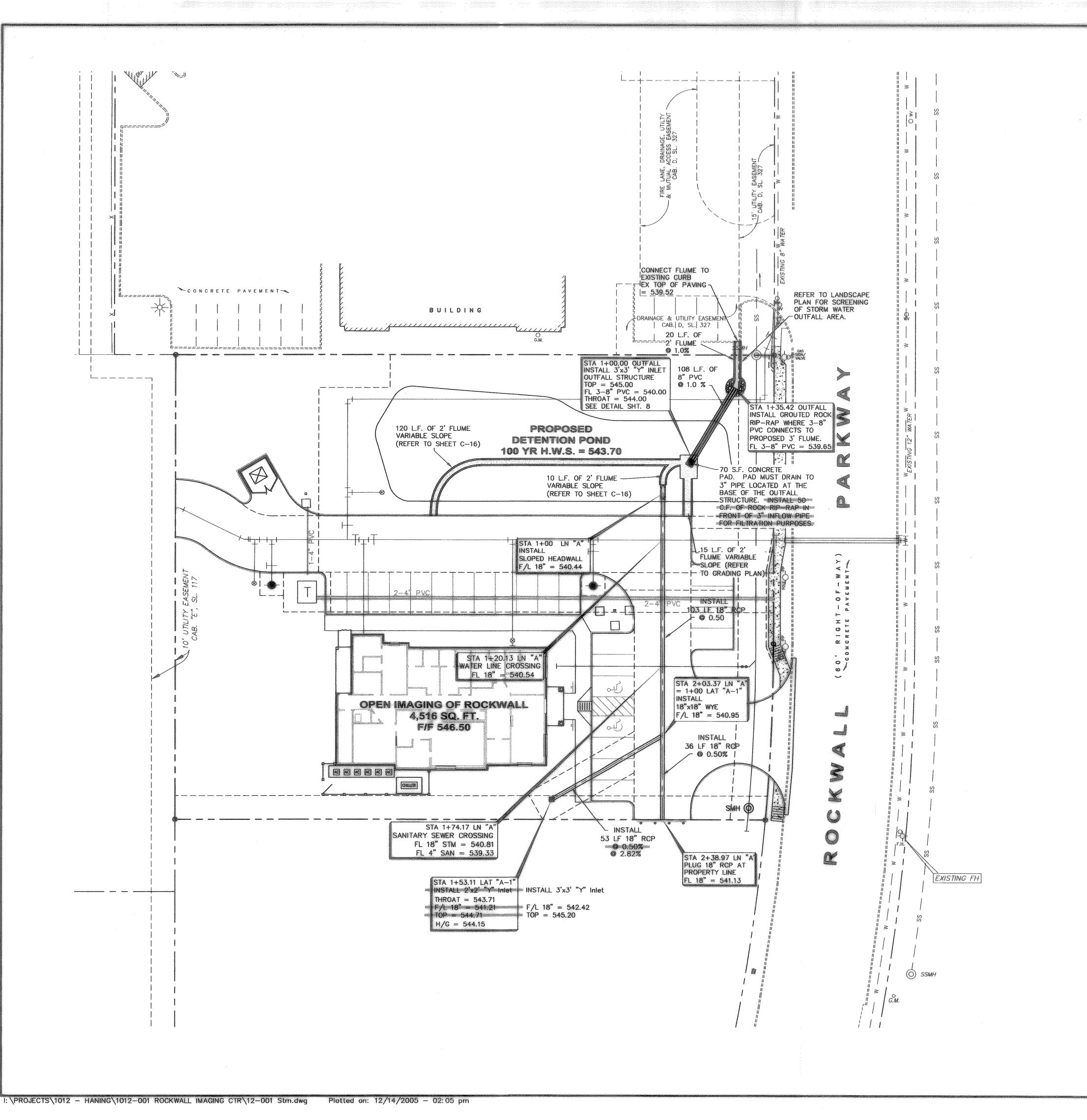
phone (214) 432-8070 fax (214) 432-8069

8

CHECKED DESIGN DRAWN RKM RKM 1012-001 12/14/05 1" = 20'

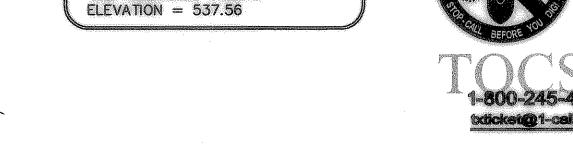
ROBERT K. MANAOIS

DATE



BENCHMARK: BOX CUT IN NW CURB RETURN AT THE INTERSECTION OF WESTWOOD AND ROCKWALL PARKWAY.





( IN FEET ) 1 inch = 20 ft.

# STORM SEWER NOTES

- 1. THE EXISTENCE AND LOCATIONS OF ALL UNDERGROUND UTILITIES SHOWN (MAIN LINES, NO LATERAL OR SERVICES SHOWN) ON THE DRAWINGS WERE OBTAINED FROM AVAILABLE RECORDS AND ARE APPROXIMATE. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY FOR UTILITIES NOT SHOWN OR NOT IN THE LOCATION SHOWN. THE CONTRACTOR SHALL DETERMINE THE DEPTH AND LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING AND SHALL BE REQUIRED TO TAKE ANY PRECAUTIONARY MEASURES TO PROTECT ALL LINES SHOWN AND / OR ANY OTHER UNDERGROUND UTILITIES NOT OF RECORD OR NOT SHOWN ON THE PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE RESPECTIVE AGENCIES AND COORDINATING THE LOCATION AND MARKING OF ALL FRANCHISE AND CITY UTILITIES PRIOR TO CONSTRUCTION.
- 2. ALL WORK, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE CITY OF ROCKWALL STANDARD SPECIFICATIONS.
- 3. THE CONTRACTOR SHALL FURNISH A MAINTENANCE BOND TO THE CITY TO RUN TWO (2) YEARS FROM THE DATE OF FINAL ACCEPTANCE OF THE WATER, STORM SEWER & SANITARY SEWER IN PUBLIC EASEMENTS.
- 4. TOP RIM ELEVATIONS OF ALL STORM SEWER MANHOLES AND INLETS SHALL BE COORDINATED WITH TOP OF PAVEMENT, TOP OF CURB OR FINISHED GRADE. THE CONTRACTOR SHALL SET ALL UTILITIES TO PROPER LINE AND GRADE PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT.
- 5. CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE STORM SEWER. THE CONTRACTOR'S BID PRICE SHALL INCLUDE ALL INSPECTION FEES. AS AN ALTERNATE, THE OWNER RESERVES THE RIGHT TO PAY THE INSPECTION FEES DIRECTLY TO THE CITY.
- 6. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.

RELEASED FOR CONSTRUCTION ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

DATE

RECORD DRAWING RECORD INFORMATION PROVIDED BY HANING CONSTRUCTION COMPANY, PARIS, TEXAS **ELEVATION VERIFICATION PERFORMED BY dMAC** SURVEYING & MAPPING, INC, DENTON, TEXAS

REV. DATE REMARKS STORM SEWER PLAN

OPEN IMAGING OF ROCKWALL

CITY OF ROCKWALL, TEXAS

RKM Consulting Engineers, Inc. 14673 Midway Road, Ste 203 Addison, Texas 75001 phone (214) 432-8070 fax (214) 432-8069

CHECKED DESIGN DRAWN DATE SCALE 1012-001 12/14/05 RKM RKM RKM

SHEET

ROBERT K. MANAOIS