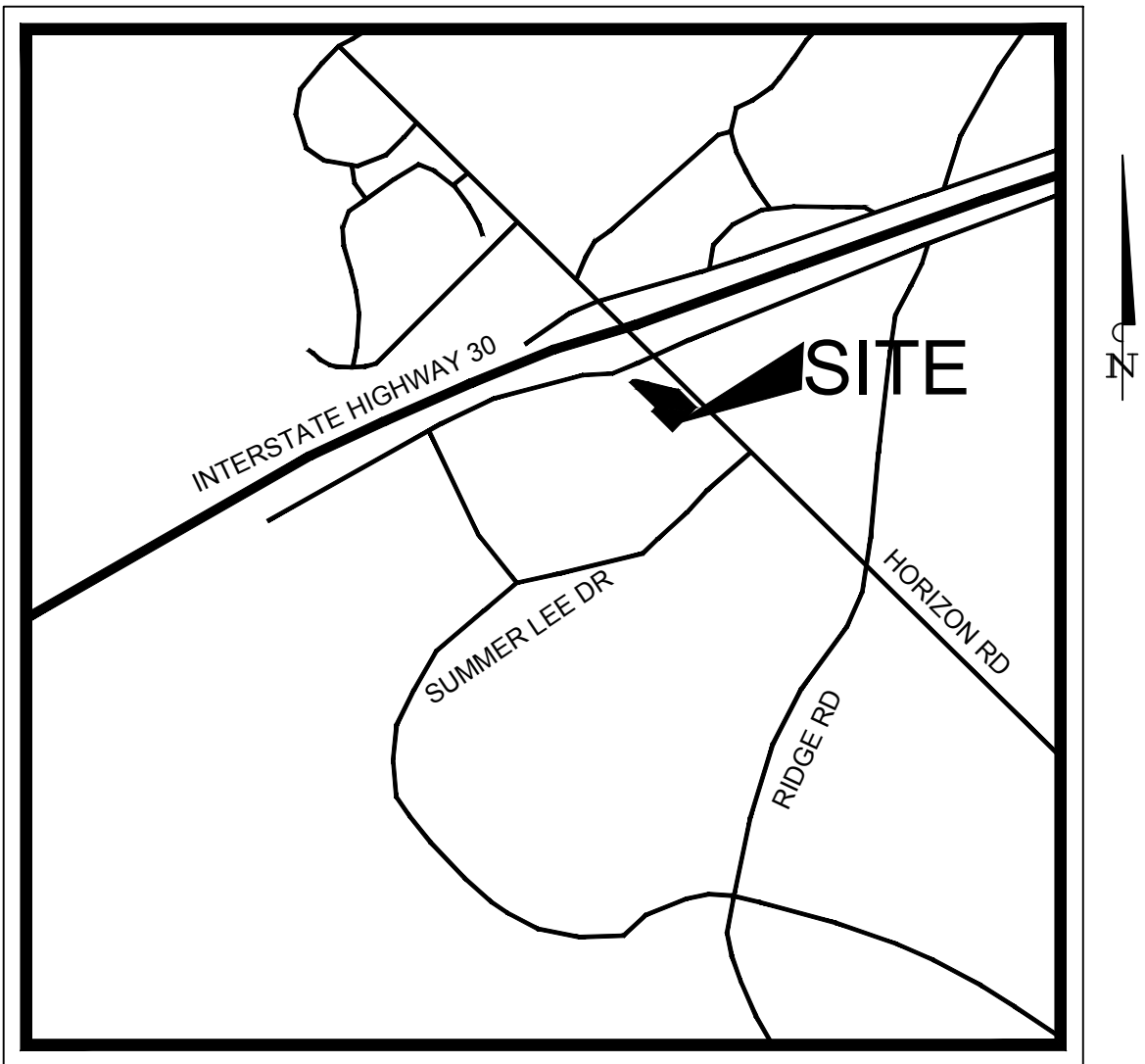


CIVIL PLANS

CARENOW ROCKWALL

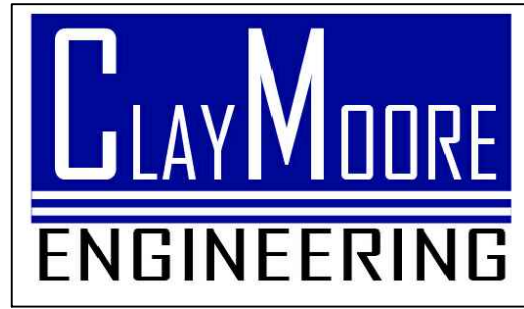
LOT2, BLOCK A
BRISCOE/HILLCREST ADDITION
ROCKWALL, TEXAS



VICINITY MAP
N.T.S.

MARCH 2017

ENGINEER



TEXAS REGISTRATION #14199
1903 CENTRAL DR.
SUITE #406
BEDFORD, TX 76021
PH. 817.281.0572
FAX 817.281.0574
CONTACT: CLAY CRISTY, PE
EMAIL: CLAY@CLAYMOOREENG.COM



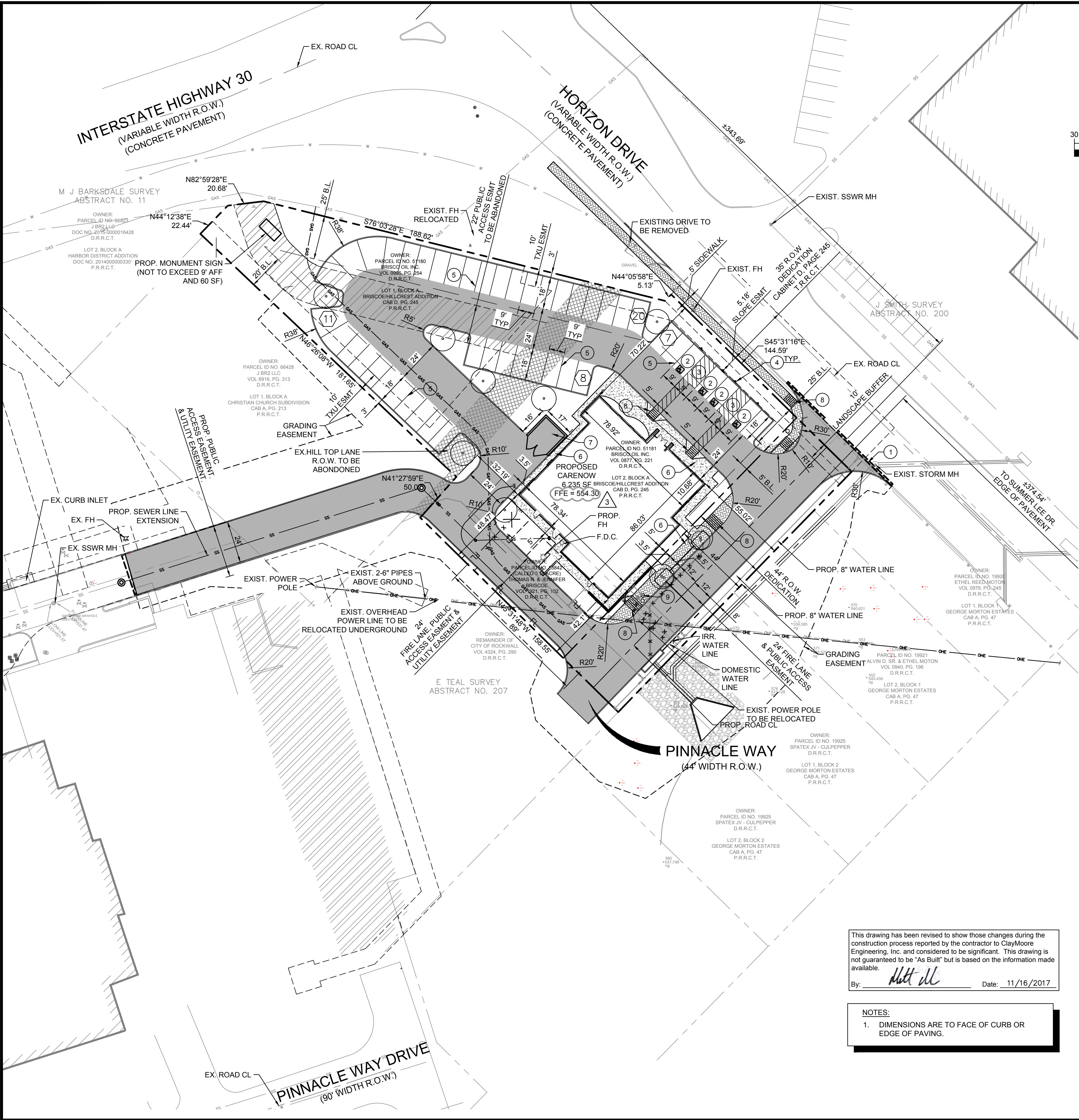
SHEET LIST TABLE		
SHEET NUMBER	SHEET TITLE	REVISION DATE
C-0	COVER	3/3/2017
	REPLAT	
SP-1	CITY SITE PLAN	3/3/2017
C-1	GENERAL NOTES	3/3/2017
C-2	EROSION CONTROL PLAN	3/3/2017
C-3	EROSION CONTROL DETAILS	3/3/2017
C-4	DEMOLITION PLAN	3/3/2017
C-5	DIMENSION CONTROL & PAVING PLAN	3/3/2017
C-6	GRADING PLAN	3/3/2017
C-7	PINNACLE WAY PAVING PLAN & PROFILE	3/3/2017
C-8	PINNACLE WAY STREET LIGHT PLAN & SIGN PLAN	3/3/2017
C-9	EXISTING DRAINAGE AREA MAP	3/3/2017
C-10	PROPOSED DRAINAGE AREA MAP	3/3/2017
C-11	STORM DRAIN PLAN	3/3/2017
C-12	STORM DRAIN PROFILE & STORM DRAINAGE CALCULATIONS	3/3/2017
C-13	UTILITY PLAN	3/3/2017
C-14	SANITARY SEWER PROFILE	3/3/2017
C-15	CONSTRUCTION DETAILS (1 OF 2)	3/3/2017
C-16	CONSTRUCTION DETAILS (2 OF 2)	3/3/2017
L1.01	TREE PRESERVATION PLAN	8/23/2016
L2.01	LANDSCAPE PLAN	8/23/2016
L2.02	LANDSCAPE SPECIFICATIONS & DETAILS	8/23/2016
L3.01	IRRIGATION PLAN	8/23/2016
L3.02	IRRIGATION SPECIFICATIONS & DETAILS	8/23/2016
SHEET 1 OF 6	CARENOW MASONRY WALL, ROCKWALL TEXAS (COVER)	10/11/2017
SHEET 2 OF 6	CARENOW MASONRY WALL, ROCKWALL TEXAS (WALL LAYOUT)	10/11/2017
SHEET 3 OF 6	CARENOW MASONRY WALL, ROCKWALL TEXAS (WALL PROFILE)	10/11/2017
SHEET 4 OF 6	CARENOW MASONRY WALL, ROCKWALL TEXAS (WALL DETAILS)	10/11/2017
SHEET 5 OF 6	CARENOW MASONRY WALL, ROCKWALL TEXAS (WALL DETAILS)	10/11/2017
SHEET 6 OF 6	CARENOW MASONRY WALL, ROCKWALL TEXAS (WALL NOTES)	10/11/2017

PLAN SUBMITTAL LOG	
DESCRIPTION	SUBMITTAL DATE
1ST SUBMITTAL	8/24/2016
2ND SUBMITTAL	10/19/2016
3RD SUBMITTAL	12/13/2016
4TH SUBMITTAL	1/4/2017
ISSUE FOR CONSTRUCTION	2/10/2017
SUBMITTAL	3/3/2017
AS-BUILT SET	11/16/2017

This drawing has been revised to show those changes during the construction process reported by the contractor to ClayMoore Engineering, Inc. and considered to be significant. This drawing is not guaranteed to be "As Built" but is based on the information made available.
By: *mtc* Date: 11/16/2017

STOP!
CALL BEFORE YOU DIG
DIG TESS
1-800-DIG-TESS
(@ least 72 hours prior to digging)

PLOTTED BY: JVALDEZ
 11/16/2017 10:21 AM
 PLOT DATE: C:\EGNITE\SHARED\PROJECTS\2016-029 CRESTVIEW ROCKWALL\CADD\SHEETS\SP-1 SITE PLANDWG
 LOCATION: 11/16/2017 10:21 AM
 LAST SAVED:



CONSTRUCTION SCHEDULE	
①	SAW CUT FULL DEPTH EXISTING PAVEMENT
②	HANDICAP SYMBOL
③	PAVEMENT STRIPING
④	HANDICAP SIGN
⑤	4" PARKING STALL
⑥	SIDEWALK
⑦	PROPOSED 8' HIGH DUMPSTER AREA ENCLOSURE. MATERIALS TO MATCH TO MATCH PRIMARY STRUCTURE W/ OPAQUE GATE AND SELF LATCHING MECHANISM.
⑧	HANDICAP RAMPS
⑨	LIGHT POLE

SITE DATA TABLE	
SITE AREA	1.11 ACRES (48,281 SF) GROSS 0.92 ACRES (39,856 SF) AFTER R.O.W.
ZONING	PD-32
PROPOSED USE	MEDICAL OFFICE
BUILDING SIZE	6,235 SF
LOT COVERAGE	11.5%
FLOOR TO AREA RATIO	0.11 : 1
BUILDING HEIGHT	1 STORY

PARKING TABLE	
PARKING REQUIREMENTS	1 PER 200 SQ. FT.
PARKING REQUIRED	28 SPACES (2 ADA)
PARKING PROVIDED	46 SPACES (4 ADA)

FLOODPLAIN NOTE

ACCORDING TO MAP NO. 48397C0040L, DATED SEPTEMBER 26, 2008 OF THE NATIONAL FLOOD INSURANCE PROGRAM MAP, FLOOD INSURANCE RATE MAP OF ROCKWALL COUNTY, TEXAS, FEDERAL EMERGENCY MANAGEMENT AGENCY, FEDERAL INSURANCE ADMINISTRATION, THIS PROPERTY IS WITHIN ZONE "X" (UNSHADED) AND IS NOT WITHIN A SPECIAL FLOOD HAZARD AREA.

BENCH MARKS

BENCH MARK NO. 6-1
CONCRETE MONUMENT WITH BRASS CAP AT THE SOUTHWEST CORNER OF MARINA AND VILLAGE ROAD
ELEV: 506.05

BENCH MARK NO. RESET 1
AT THE WEST END OF SUMMER LEE AND WEST OF FM 740.
ELEV: 567.70

LEGEND	
	PROPOSED 5' LIGHT DUTY CONCRETE PAVEMENT
	PROPOSED 6' HEAVY DUTY CONCRETE PAVEMENT
	PROPOSED SIDEWALK
	PROPOSED CONCRETE CURB AND GUTTER
	PARKING COUNT
	PROPOSED FIRE LANE
	HILL TOP LANE R.O.W. TO BE ABANDONED
	PUBLIC SIDEWALK
	3-INCH CALIPER 65 GALLON CANOPY TREE

CASE NO. SP2016-013
CARENOW I-30 & HILLTOP DRIVE
 LEGAL DESCRIPTION:
 LOT 1, LOT 2 & LOT 3, BLOCK A
 BRISCOE / HILLCREST ADDITION
 CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

OWNER:
 TOM R BRISCOE AND BRISCOE OIL, INC.
 2323 STEVENS ROAD,
 HEALTH, TX, 75032
 CONTACT: DAVID ENGLISH
 PH: 972.961.8532

DEVELOPER:
 CRESTVIEW REAL ESTATE, LLC
 12720 HILLCREST RD., SUITE #650
 DALLAS, TX 75230
 CONTACT: GRAY STOGNER
 PH: 214.343.4477

APPLICANT:
 CLAYMOORE ENGINEERING, INC.
 1903 CENTRAL DR., SUITE #406
 BEDFORD, TX 76021
 PH: 817.281.0572

CITY CASE #:

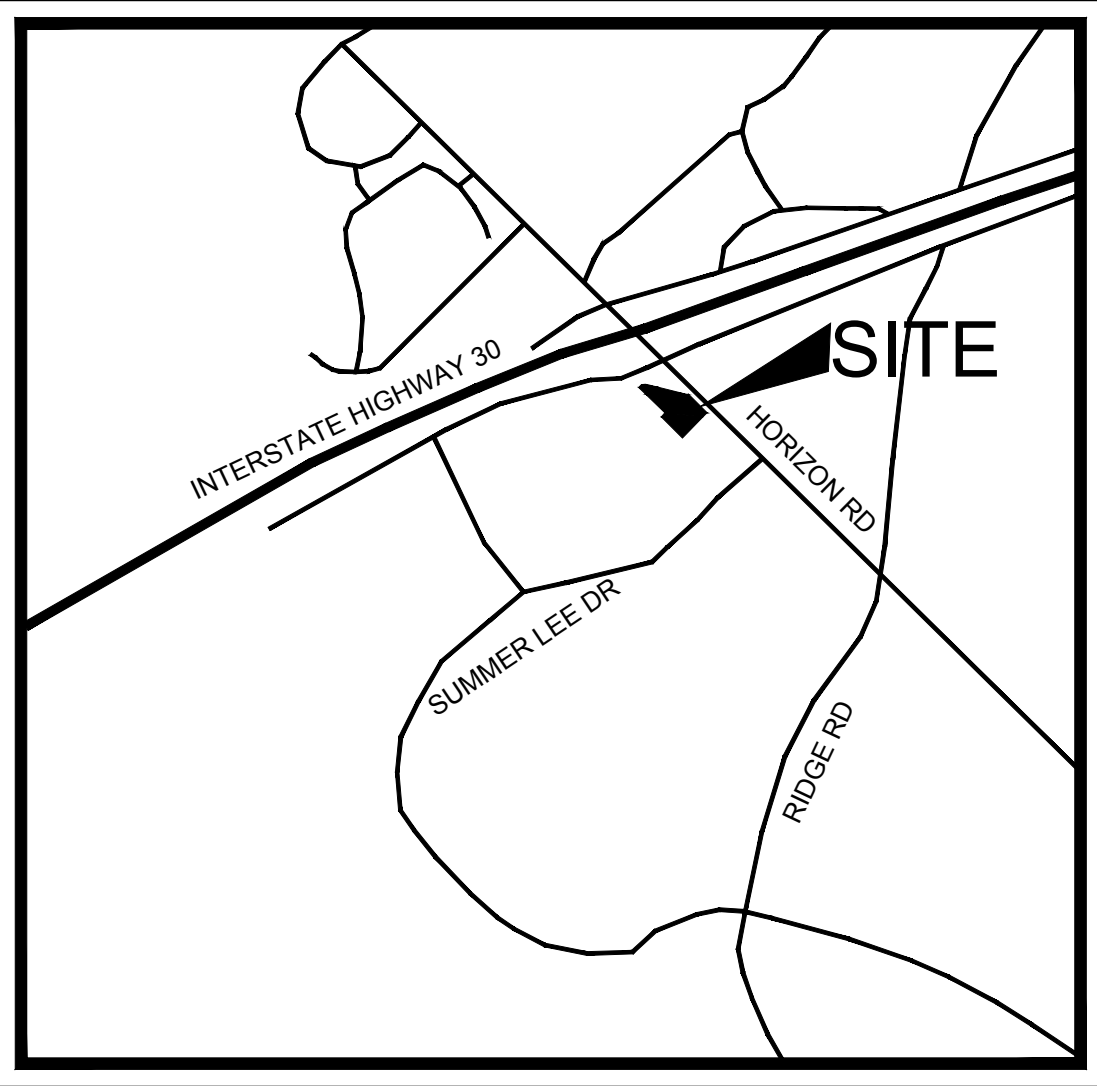
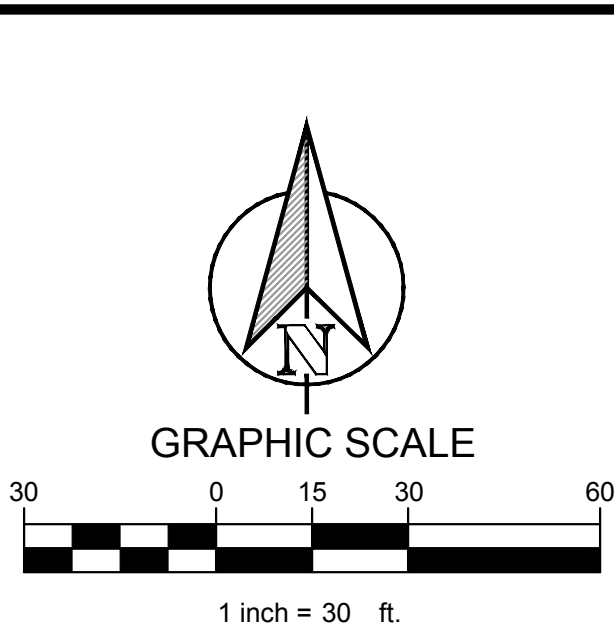
SUBMITTED: 5/13/16

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

By: *[Signature]* Date: 11/16/2017

NOTES:

1. DIMENSIONS ARE TO FACE OF CURB OR EDGE OF PAVING.



TEXAS REGISTRATION #141199
CLAYMOORE ENGINEERING
 1903 CENTRAL DR., SUITE #406
 BEDFORD, TX 76021
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STATE OF TEXAS
 CLAY MOORE
 109800
 04/03/2017

CARENOW
 LOT 1 & 2, BLOCK A
 BRISCOE/HILLCREST ADDITION
 ROCKWALL, TX

CITY SITE PLAN
 SHEET
SP-1
 File No. 2016-029

NO.	DATE	REVISION	BY
1	3/22/17	FIRE LINE RELOCATION	JV
2	3/22/17	REF. FINISHED FLOOR	JV
3	4/26/17		

1. ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE CITY'S DESIGN STANDARDS AND THE MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE "NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" 3RD EDITION, AS AMENDED BY THE CITY OF ROCKWALL.
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 PROJECT.
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, EJECTOR PUMPS, 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. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING CONSTRUCTION OF THE PAVING FOR THIS PROJECT.
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 ITEM.
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 PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS. COPIES OF ANY REQUIRED CONSTRUCTION PERMITS, EROSION CONTROL PLANS, SWPPP, AND INSPECTION REPORTS.
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 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 CONSTRUCTION OF THE AFFECTED ITEM.
12. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS SHALL BE SENT TO THE ARCHITECT, CIVIL ENGINEER, CONTRACTOR, CITY INSPECTOR, AND OWNER DIRECTLY FROM THE TESTING AGENCY.
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 3:1 OR FLATTER UNLESS OTHERWISE SHOWN.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE ADJURING 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 BUILDING OFFICIAL 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.

1. THE REINFORCED PORTLAND CEMENT CONCRETE SHOULD HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,600 PSI (6.5 SACK MIX) AT 28 DAYS FOR STANDARD DUTY CONCRETE AND 3,600 PSI (6.5 SACK MIX) FOR HEAVY DUTY CONCRETE AND DUMPSTER AREAS, AND A MINIMUM REINFORCING OF #3 BARS @ 24" O.C.E.W. AND SHALL STRICTLY ADHERE TO DETAILS INCLUDED IN THIS SET. A BASE SUB-GRADE PER THE GEOTECHNICAL REPORT IS REQUIRED BENEATH ALL PAVING.
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 DEVICES".
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. 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 JOINED WITH ISOLATION JOINTS AROUND THE PERIMETER OF ANY BLOCK OUT IN PAVEMENT AND SAWED DUMMY JOINTS EVERY 12' IN BOTH DIRECTIONS.
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 COMPOUND.

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, GRATE 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 SEWER.
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.

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.

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 'C' BACKFILL MATERIALS. WHEN TYPE 'C' 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 SHEEPS FOOT ROLLER OR TAMPING IN TRENCH AREA 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 48" 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.
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 "COR-BLUE" BOLTS AND SHALL BE CLASS 250.
11. CONTRACTOR TO INSTALL BLUE EMS DISKS ON THE WATER LINE AT EVERY CHANGE IN DIRECTION, VALVE, FIRE HYDRANT, SERVICE CONNECTION AT MAIN, AND 250'

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 "C" BACKFILL MATERIAL. WHEN TYPE "C" 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 SHEEPS FOOT ROLLER OR TAMPING IN TRENCH AREA 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 SANITARY SEWER SERVICES SHALL BE CONSTRUCTED OF SDR-35 PIPE FOR 10' OR LESS, SDR-26 FOR 10' AND GREATER.
9. CONTRACTOR TO INSTALL GREEN SMS DISKS ON THE SANITARY SEWER AT EVERY CHANGE IN DIRECTION, MANHOLE, CLEANOUT, AND SERVICE CONNECTION AT MAIN.

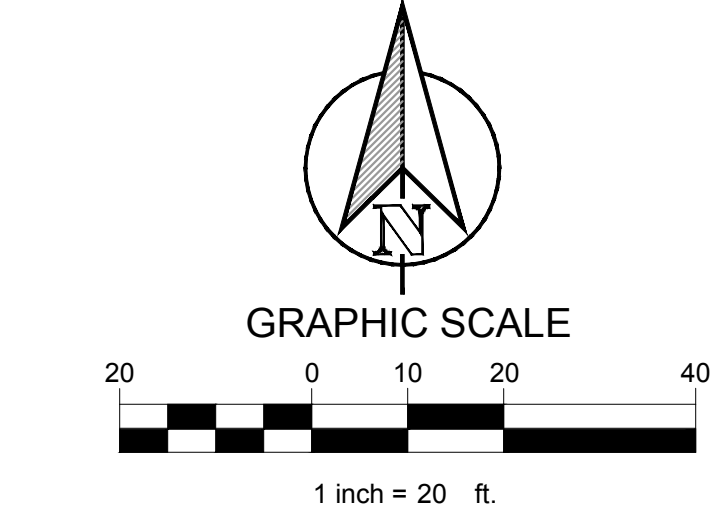
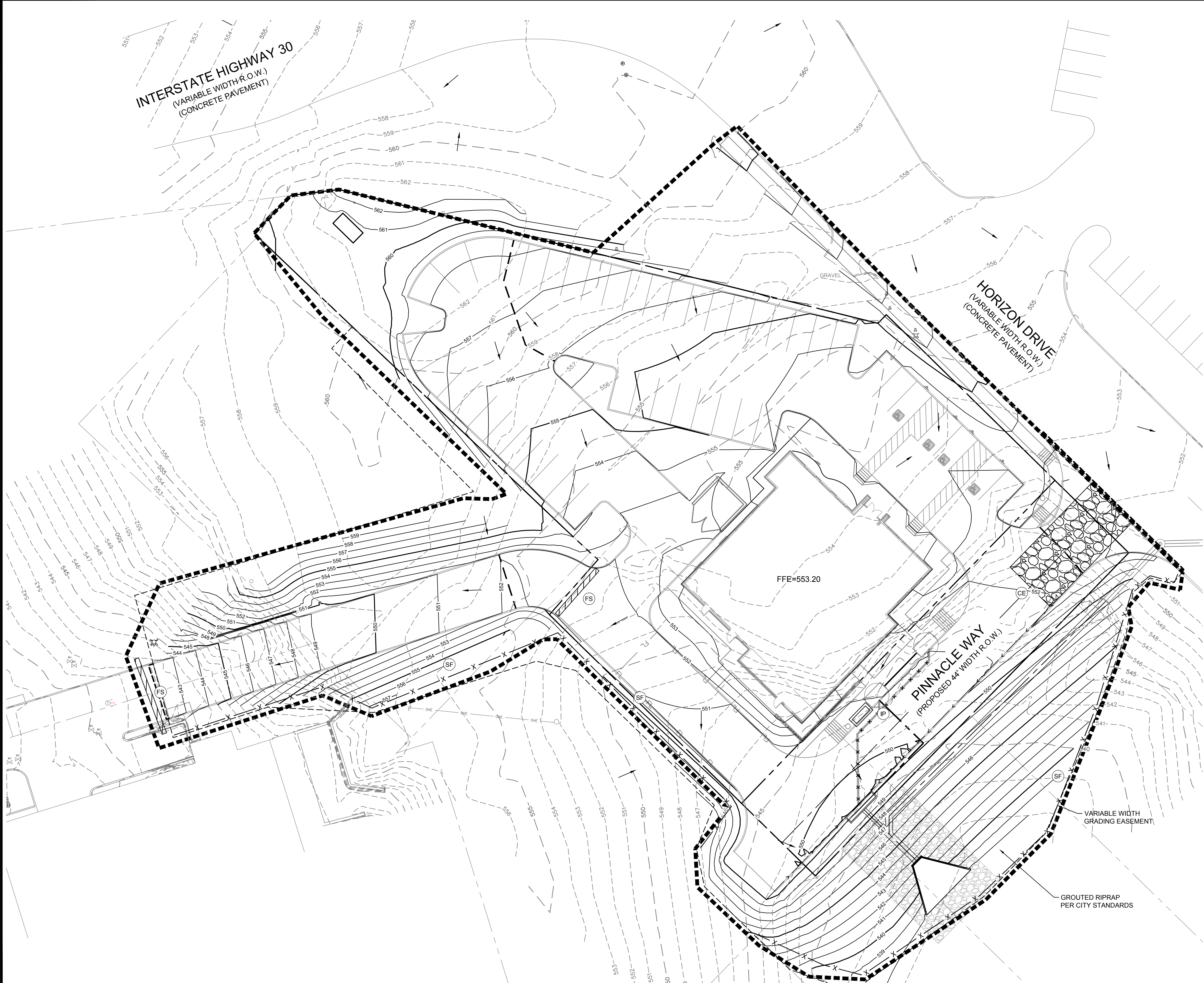
1. CONTRACTOR SHALL PROVIDE A SIGNED AND SEALED TRAFFIC CONTROL PLANS TO THE OWNER, AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY.
2. ALL TRAFFIC CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD), LATEST VERSION.
3. THE CONTRACTOR SHALL COVER EXISTING SIGNS AND OBLITERATE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLANS TO AVOID CONFLICT TO THE TRAVELING PUBLIC.
4. THE CONTRACTOR SHALL COVER EXISTING SIGNS AND REPLACE PAVEMENT MARKINGS IN KIND, ORIGINALLY CONFIGURED AT THE END OF CONSTRUCTION OPERATIONS AND PRIOR TO FINAL ACCEPTANCE BY THE OWNER.
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.

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 75% 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. NO CITY ACCEPTANCE OF THE PROJECT UNTIL 75%-80% OF ALL DISTURBED AREAS TO HAVE A MINIMUM OF 1" STAND OF GRASS (NOT WINTER RYE)
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: 6"-4" INCHES DIAMETER. NO CRUSHED CONCRETE ALLOWED
 - THICKNESS: NOT LESS THAN 12"-INCHES
 - LENGTH: AS SHOWN ON PLAN 50' MIN
 - WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS AND EGRESS 20' MIN.
 - MAINTENANCE REQUIREMENTS: AS NECESSARY TO PREVENT TRACKING OR FLOWING MUD INTO PUBLIC RIGHT-OF-WAY OR PARKING AREAS.

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.
6. ALL EXISTING CONCRETE PAVING, CHANNEL IMPROVEMENTS, SIDEWALK, STRUCTURES AND CURB DEMOLITION SHALL BE REMOVED IN THEIR ENTIRETY AND DISPOSED OF BY THE CONTRACTOR, OFFSITE UNLESS OTHERWISE DIRECTED BY THE OWNER OR ENGINEER.
7. ALL CLEARING, GRADING, 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.
11. ALL FILL IS TO BE COMPACTED TO 95% STD. DENSITY USING A SHEEP'S FOOT ROLLER.

PLOTTED BY: JVALDEZ
 PLOT DATE: 11/16/2017 10:41 AM
 LOCATION: C:\EGNITE\SHARED\PROJECTS\2016-029 CRESTVIEW ROCKWALL\CADD\SHEETS\C-2 EROSION CONTROL PLAN.DWG
 LAST SAVED: 11/16/2017 10:34 AM



LEGEND	
	DIRECTION OF FLOW
	EXISTING CONTOUR
	PROPOSED CONTOUR
	LIMITS OF CONSTRUCTION
	SILT FENCE
	CONSTRUCTION ENTRANCE
	FILTER SOCK
	INLET PROTECTION

ACREAGE SUMMARY	
ONSITE DISTURBED AREA	1.11 AC
OFFSITE DISTURBED AREA	0.63 AC
TOTAL DISTURBED AREA	1.74

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

By: *[Signature]* Date: 11/16/2017

BENCH MARKS
 BENCH MARK NO. 6-1
 CONCRETE MONUMENT WITH BRASS CAP AT THE SOUTHWEST CORNER OF MARINA AND VILLAGE ROAD
 ELEV: 506.05
 BENCH MARK NO. RESET 1
 AT THE WEST END OF SUMMER LEE AND WEST OF FM 740.
 ELEV: 567.70

TEXAS REGISTRATION #14199

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 WWW.CLAYMOOREENG.COM

CARENOW
 LOT 1 & 2, BLOCK A
 BRISCOE/HILCREST ADDITION
 ROCKWALL, TX

No.	DATE	REVISION	BY

EROSION CONTROL PLAN
 SHEET
C-2
 File No. 2016-029

DESIGN: JEV
 DRAWN: JEV
 CHECKED: CLC
 DATE: 04/03/2017

PLOTTED BY: JVALDEZ
 PLOT DATE: 11/16/2017 10:47 AM
 LOCATION: C:\EGNITE\SHARED\PROJECTS\2016-029 CRESTVIEW ROCKWALL\CADD\SHEETS\C-3 EROSION CONTROL DETAILS.DWG
 LAST SAVED: 11/16/2017 10:47 AM

EROSION CONTROL DEVICES AS SHOWN ON THE EROSION CONTROL PLAN FOR THE PROJECT SHALL BE INSTALLED PRIOR TO THE START OF LAND DISTURBING ACTIVITIES ON THE PROJECT.

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.

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 SHALL NOT BE ALLOWED TO DRAIN DIRECTLY OFF SITE WITHOUT FIRST FLOWING THROUGH ANOTHER BMP TO CONTROL OFF SITE SEDIMENTATION. PERIODIC RE-GRADE OR THE ADDITION OF NEW STONE MAY BE REQUIRED TO MAINTAIN THE EFFICIENCY OF THE INSTALLATION.

6. CONTRACTOR SHALL HAVE A COPY THE SWPPP ON SITE AT ALL TIMES.
 7. 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 E.P.A. STORM WATER POLLUTION PREVENTION REQUIREMENTS.

EROSION CONTROL SCHEDULE AND PHASING

THE PROJECT SHALL GENERALLY CONFORM TO THE FOLLOWING:

- PHASE 1 – DEMOLITION/GRADING
 A. 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.
 B. BEGIN CLEARING AND GRADING OF SITE.
 C. SEED AND REVEGETATE SLOPES WHERE SHOWN.
 PHASE 2 – UTILITIES
 A. KEEP ALL STORM WATER POLLUTION PREVENTION MEASURES IN PLACE.
 B. INSTALL STORM DRAINS AS SPECIFIED ON PLAN SHEETS.
 C. INSTALL INLET PROTECTION.
 PHASE 3 – PAVING
 A. KEEP ALL STORM WATER POLLUTION PREVENTION MEASURES IN PLACE. REMOVE AS NEEDED TO PAVE.
 B. STABILIZE SUBGRADE.
 C. PAVE PARKING LOT AND SIDEWALKS AS SPECIFIED ON PLAN SHEETS.
 D. REMOVE TEMPORARY CONSTRUCTION ENTRANCE.
 E. 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.
 C. REMOVE EROSION CONTROL DEVICES WHEN GROUND COVER ESTABLISHED.

B.M.P. MAINTENANCE SCHEDULE
 TEMPORARY STONE CONSTRUCTION ENTRANCE/EXIT:

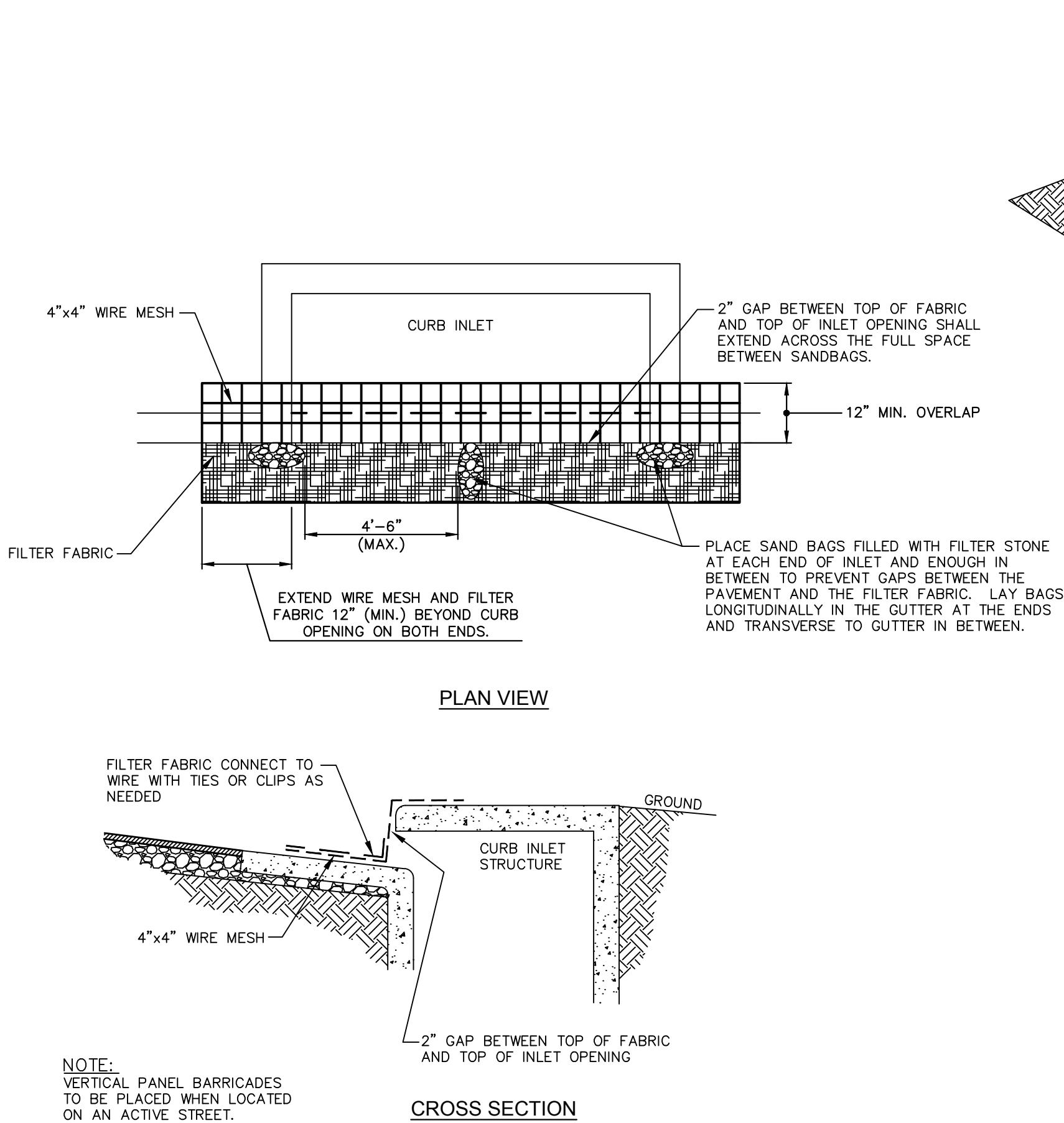
INSPECTIONS SHALL BE MADE WEEKLY AND AFTER RAIN STORM EVENTS TO ENSURE THAT THE FACILITY IS FUNCTIONING PROPERLY. AGGREGATE PAD SHALL BE WASHED DOWN OR REPLACED WHEN SEDIMENT OR MUD HAS CLOGGED THE VOID SPACES BETWEEN THE STONES OR MUD IS BEING TRACKED ONTO THE PUBLIC ROADWAY. RUNOFF FROM WASH DOWN OPERATION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

SILT FENCE:

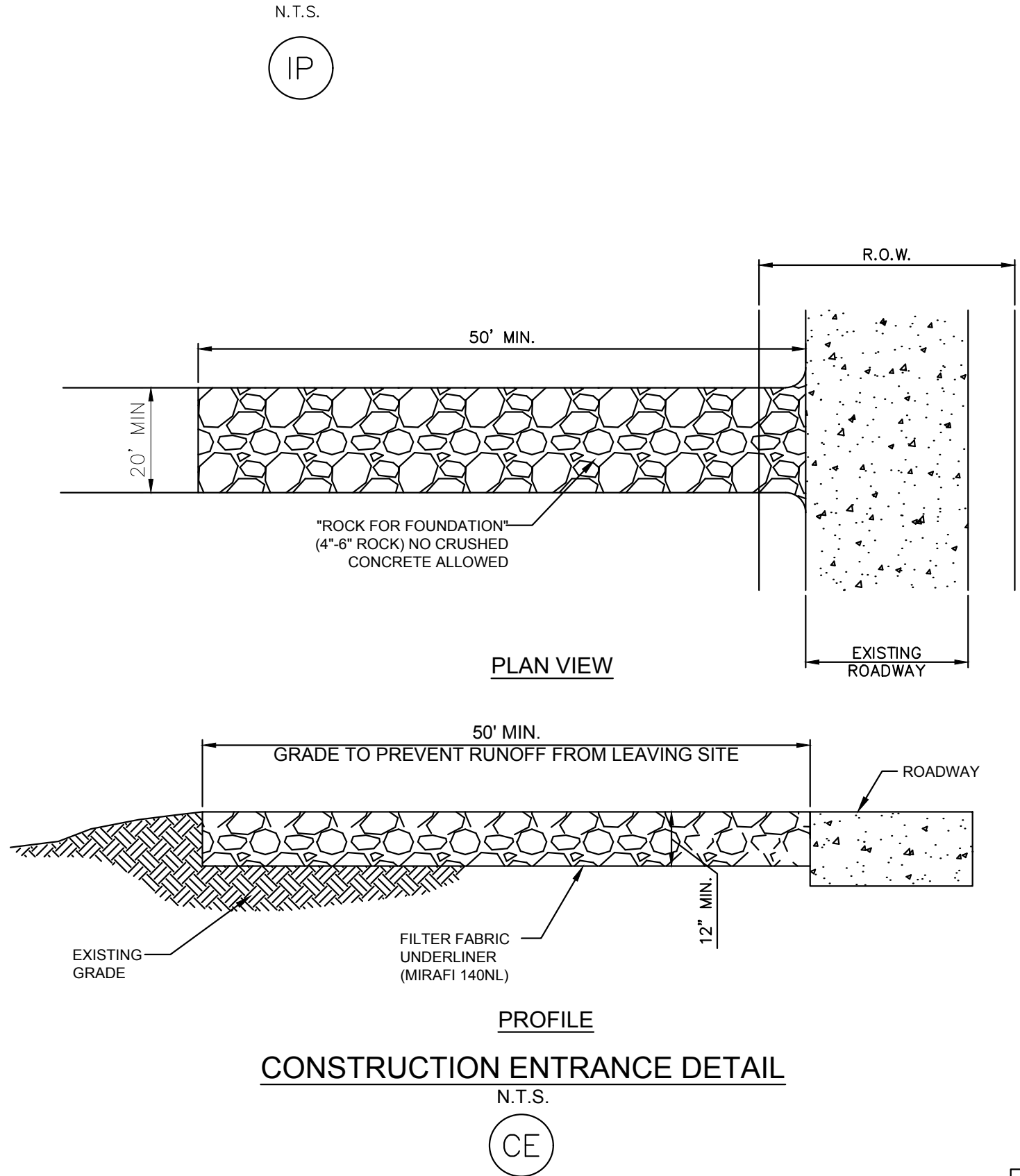
INSPECTIONS SHALL BE MADE WEEKLY AND AFTER RAIN STORM EVENTS. SEDIMENT SHALL BE REMOVED FROM BEHIND THE FENCE WHEN THE DEPTH OF SEDIMENT HAS BUILT UP TO ONE-THIRD THE HEIGHT OF THE FENCE ABOVE GRADE. FENCE SHALL BE INSPECTED FOR GAPS AT BASE. INSPECT SUPPORTING POSTS AND FILTER FABRIC. REPLACE IF REQUIRED.

INLET PROTECTION:

INSPECTIONS 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. IF 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.

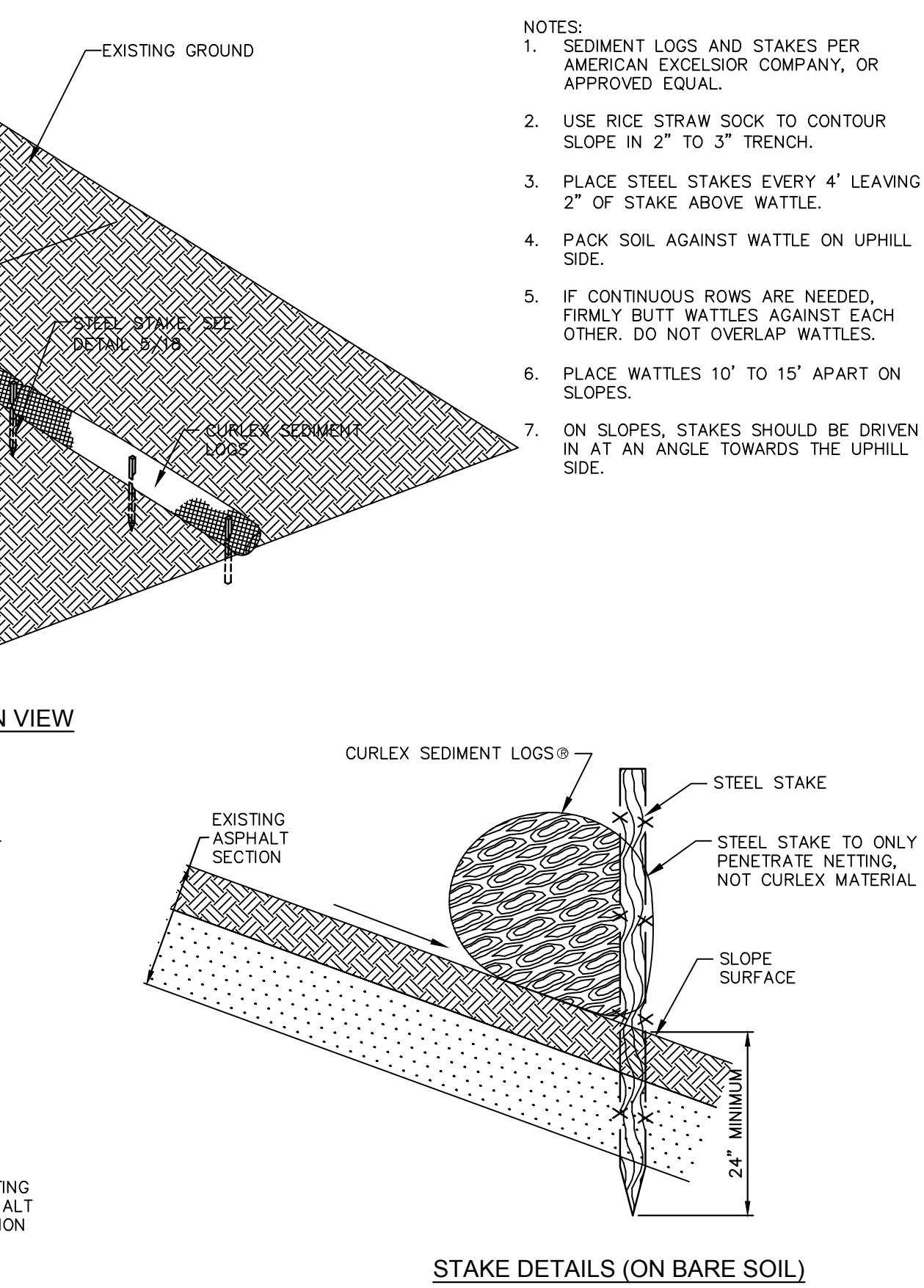


CURB INLET PROTECTION DETAIL

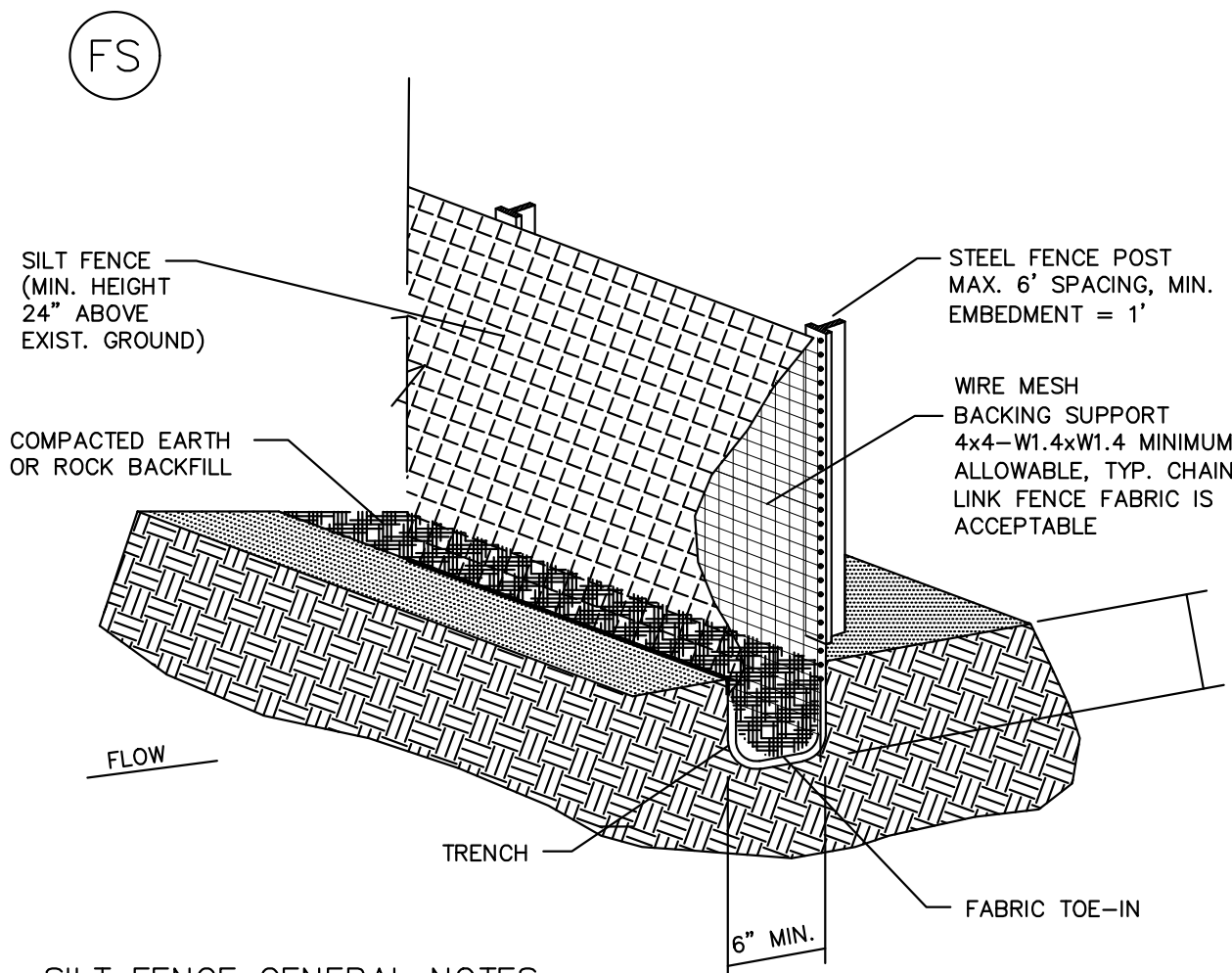


This drawing has been revised to show those changes during the construction process reported by the contractor to ClayMoore Engineering, Inc. and considered to be significant. This drawing is not guaranteed to be "As Built" but is based on the information made available.

By: *[Signature]* Date: 11/16/2017



FILTER SOCK DETAIL



SILT FENCE GENERAL NOTES

1. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
 2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (e.g. PAVEMENT), WEIGHT FABRIC FLAP WITH ROCK ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
 3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
 4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IN TURN IS ATTACHED TO THE STEEL FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
 5. INSPECTION SHALL BE MADE EVERY WEEK AND AFTER EACH 1/2" RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
 6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
 7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF HALF THE HEIGHT OF THE FENCE. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.
 8. NO STEEL POSTS SHALL BE SET WITHIN THE RIGHT-OF-WAY.

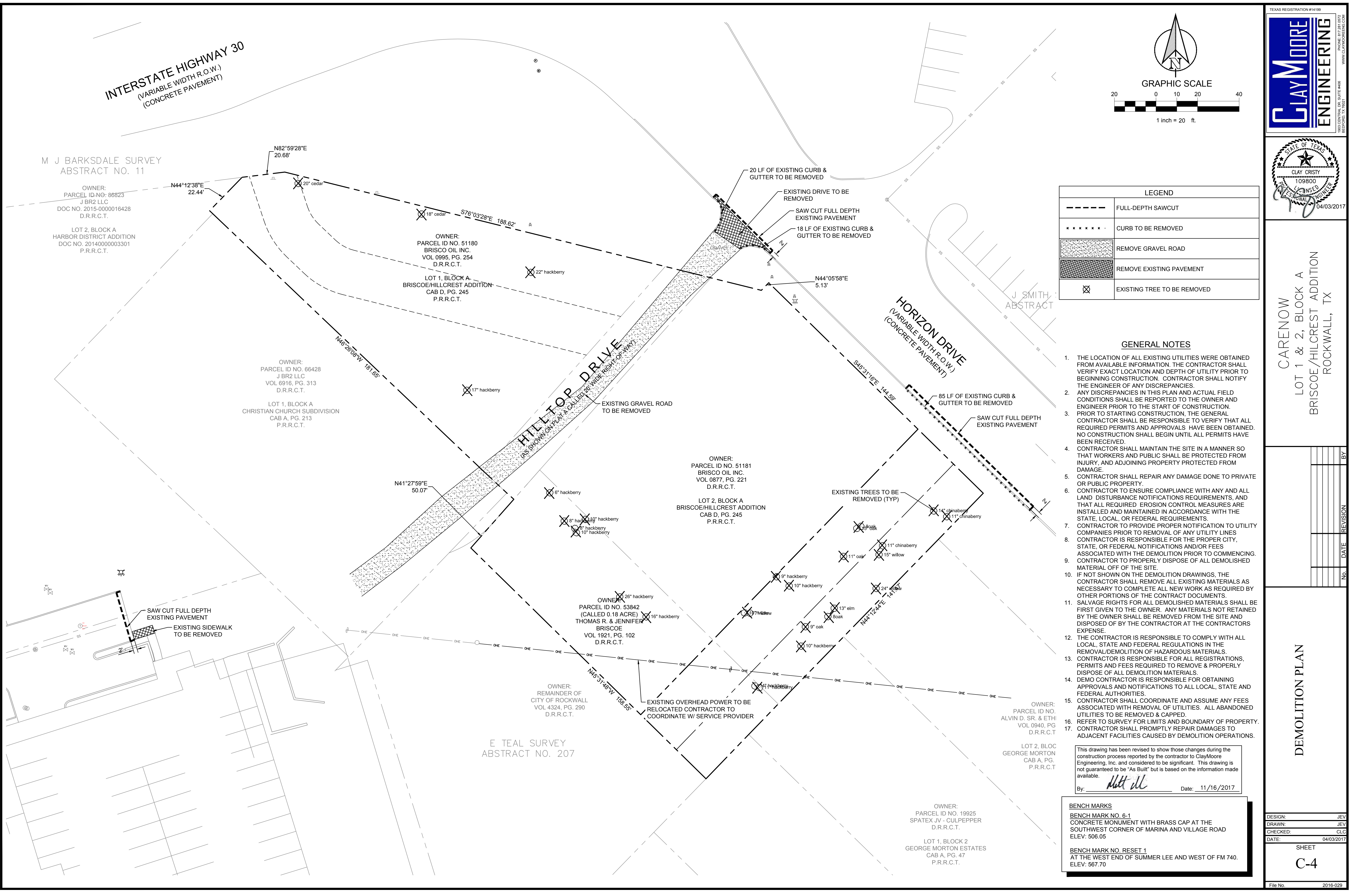
CONSTRUCTION OF A FILTER BARRIER

SF

NO.	DATE	REVISION	BY

EROSION CONTROL DETAILS

PLOTTED BY: JVALDEZ
 PLOT DATE: 11/16/2017 10:51 AM
 LOCATION: C:\EGNITE\SHARED\PROJECTS\2016-029 CRESTVIEW ROCKWALL\CADD\SHEETS\C-4 DEMOLITION PLAN.DWG
 LAST SAVED: 11/17/2017 8:48 PM



TEXAS REGISTRATION #14199

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STATE OF TEXAS
CLAY CRISTY
109800
04/03/2017

CARENOW
LOT 1 & 2, BLOCK A
BRISCOE/HILCREST ADDITION
ROCKWALL, TX

NO.	DATE	REVISION	BY

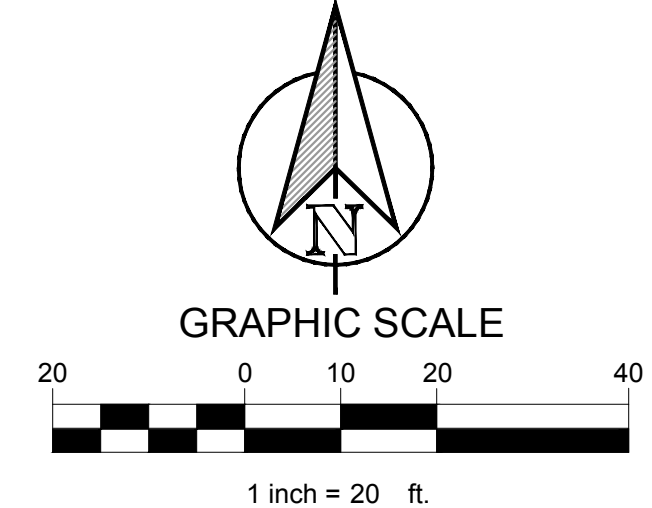
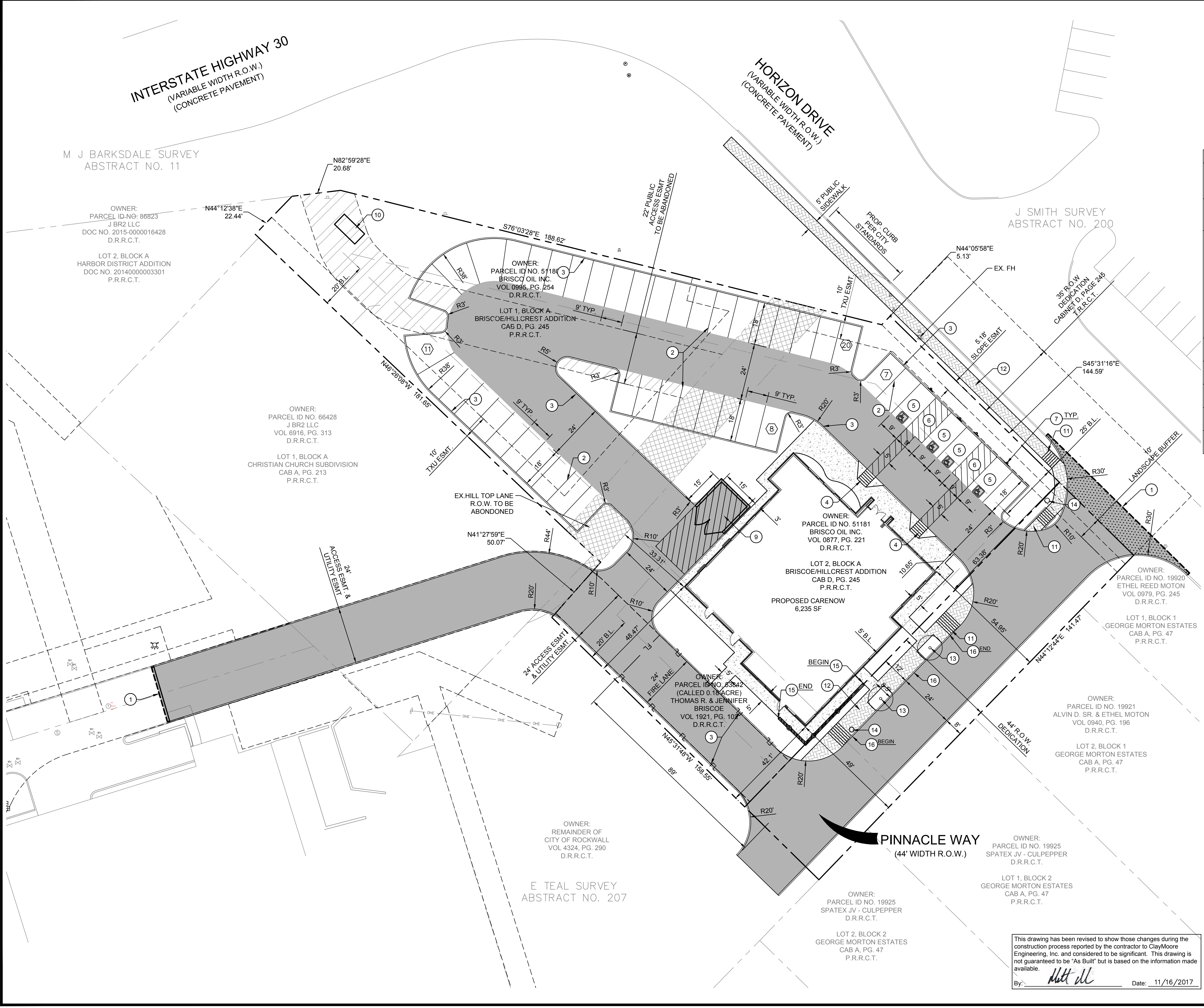
DEMOLITION PLAN

DESIGN: JEV
DRAWN: JEV
CHECKED: CLC
DATE: 04/03/2017

SHEET
C-4

File No. 2016-029

PLOTTED BY: JVALDEZ
 PLOT DATE: 11/16/2017 10:55 AM
 LOCATION: C:\EGNITE\SHARED\PROJECTS\2016-029 CRESTVIEW ROCKWALL\CADD\SHEETS\C-5 DIMENSION CONTROL AND PAVING PLANDWG
 LAST SAVED: 11/16/2017 10:54 AM



LEGEND	
	PROPOSED 5' LIGHT DUTY CONCRETE PAVEMENT PER DETAIL SHEET C-15
	PROPOSED 6' HEAVY DUTY CONCRETE PAVEMENT PER DETAIL SHEET C-15
	PROPOSED 7' DUMPSTER DUTY CONCRETE PAVEMENT PER DETAIL SHEET C-15
	PROPOSED 8' CONCRETE PAVEMENT PER CITY STANDARDS. #3 BARS 24" OCEW. 3,600 PSI (6.5 SACK/CY)
	PROPOSED SIDEWALK PER DETAIL SHEET C-15
	PROPOSED CONCRETE CURB AND GUTTER
	PARKING COUNT
	PROPOSED FIRE LANE
	HILL TOP LANE R.O.W. TO BE ABANDONED
	PUBLIC SIDEWALK

CONSTRUCTION SCHEDULE	
1	SAW CUT FULL DEPTH EXISTING PAVEMENT. INSTALL LONGITUDINAL BUTT JOINT PER DETAIL SHEET C-15
2	4" PARKING STALL STRIPING COLOR: WHITE (TYP)
3	CURB & GUTTER PER DETAILS SHEET C-15
4	PROPOSED CURB RAMP, 12:1 MAX. SLOPE PER DETAIL SHEET C-15
5	HANDICAP SYMBOL PER DETAILS SHEET C-15
6	PAVEMENT STRIPING PER DETAILS SHEET C-15
7	HANDICAP SIGN PER DETAILS SHEET C-15
8	PROPOSED PRIVATE SIDEWALK PER DETAIL SHEET C-15
9	PROPOSED DUMPSTER ENCLOSURE REFER TO ARCH PLANS FOR DETAILS
10	PROPOSED MONUMENT SIGN REFER TO ARCH PLANS FOR DETAILS
11	PROPOSED PUBLIC BARRIER FREE RAMP PER CITY STANDARDS. B.F.R. TO HAVE TRUNCATED DOMES - COLOR: BRICK RED
12	PROPOSED PUBLIC SIDEWALK PER CITY STANDARDS
13	3-INCH CALIPER 65 GALLON CANOPY TREE PER PD-32
14	PROPOSED LIGHT POLE PER PD-32
15	PROPOSED DROP WALL WITH HANDRAIL. REFER TO DETAILS SHEET C-15
16	PROPOSED STREET AND SIDEWALK CONNECTION. SEE DETAIL SHEET C-16

- NOTES:**
- ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
 - REFER TO ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS AND EXACT DOOR LOCATIONS.
 - REFER TO ARCHITECTURAL PLANS FOR FENCE AND GATE DETAILS.

BENCH MARKS	
BENCH MARK NO. 6-1	CONCRETE MONUMENT WITH BRASS CAP AT THE SOUTHWEST CORNER OF MARINA AND VILLAGE ROAD ELEV: 506.05
BENCH MARK NO. RESET 1	AT THE WEST END OF SUMMER LEE AND WEST OF FM 740. ELEV: 567.70

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

By: *[Signature]* Date: 11/16/2017

TEXAS REGISTRATION #141199

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CARENOW
 LOT 1 & 2, BLOCK A
 BRISCOE/HILLCREST ADDITION
 ROCKWALL, TX

NO.	DATE	REVISION	BY

DIMENSION CONTROL & PAVING PLAN

DESIGN: JEV
 DRAWN: JEV
 CHECKED: CLC
 DATE: 04/03/2017

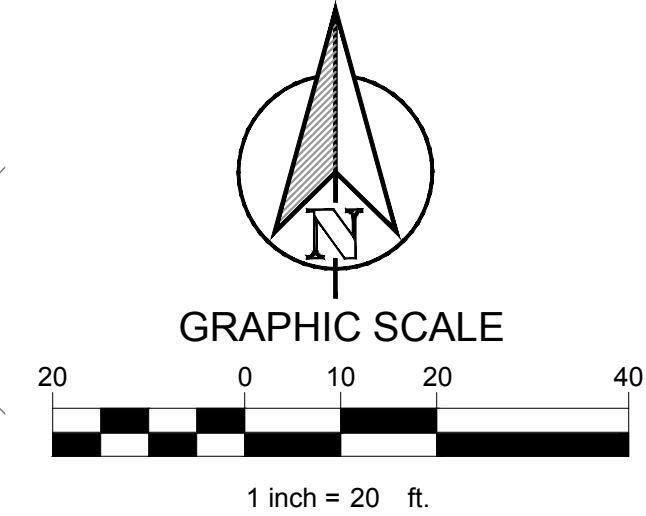
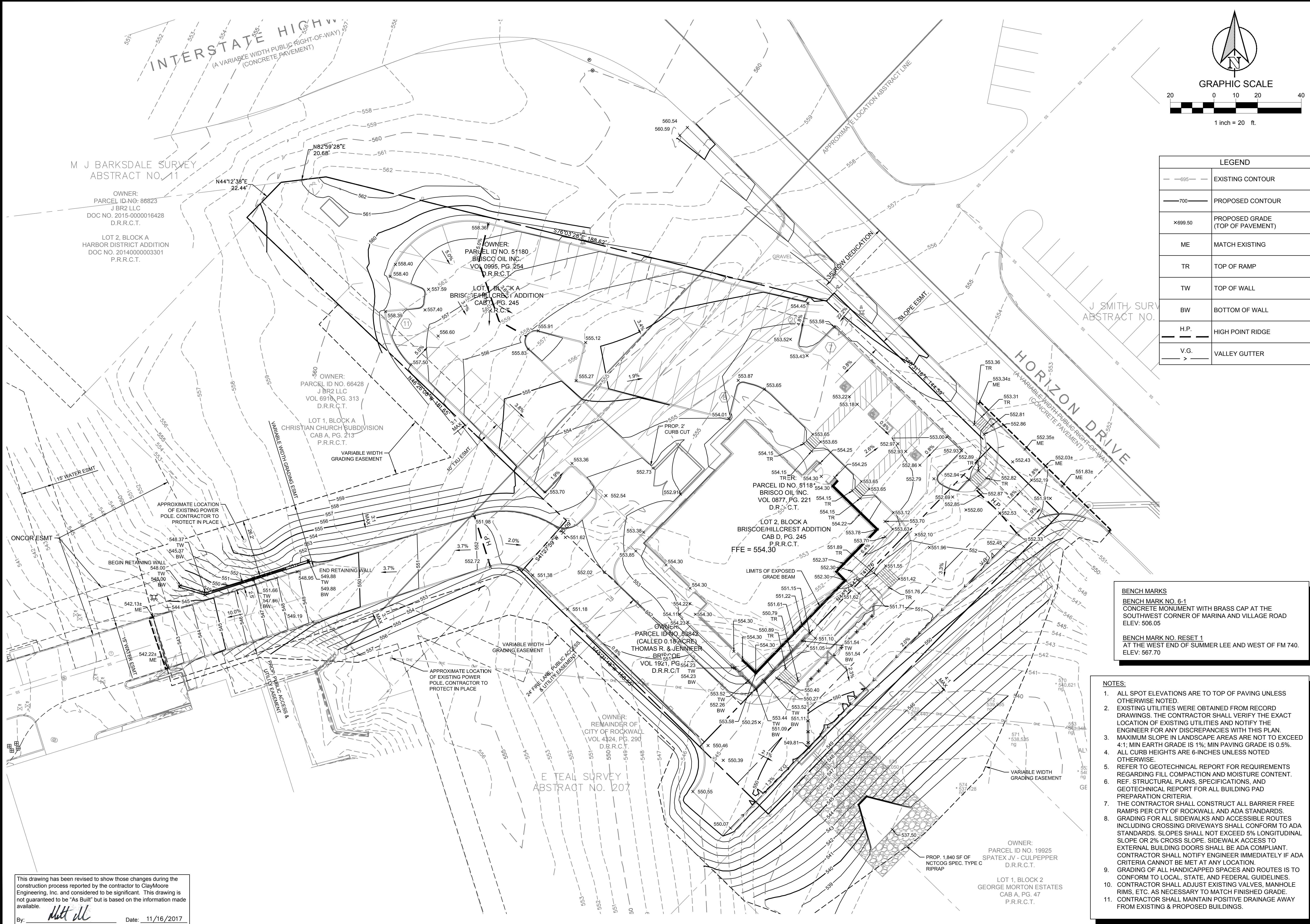
SHEET
C-5

File No. 2016-029

PLOTTED BY: JVALDEZ
 PLOT DATE: 11/16/2017 11:03 AM
 LOCATION: C:\EGNITE\SHARED\PROJECTS\2016-029 CRESTVIEW ROCKWALL\CADD\SHEETS\C-6 GRADING PLAN.DWG
 LAST SAVED: 11/18/2017 1:32 PM

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

By: *[Signature]* Date: 11/16/2017



LEGEND	
---	EXISTING CONTOUR
---	PROPOSED CONTOUR
x699.50	PROPOSED GRADE (TOP OF PAVEMENT)
ME	MATCH EXISTING
TR	TOP OF RAMP
TW	TOP OF WALL
BW	BOTTOM OF WALL
H.P.	HIGH POINT RIDGE
V.G.	VALLEY GUTTER

BENCH MARKS
 BENCH MARK NO. 6-1
 CONCRETE MONUMENT WITH BRASS CAP AT THE SOUTHWEST CORNER OF MARINA AND VILLAGE ROAD
 ELEV: 506.05
 BENCH MARK NO. RESET 1
 AT THE WEST END OF SUMMER LEE AND WEST OF FM 740.
 ELEV: 567.70

- NOTES:**
- ALL SPOT ELEVATIONS ARE TO TOP OF PAVING UNLESS OTHERWISE NOTED.
 - EXISTING UTILITIES WERE OBTAINED FROM RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING UTILITIES AND NOTIFY THE ENGINEER FOR ANY DISCREPANCIES WITH THIS PLAN.
 - MAXIMUM SLOPE IN LANDSCAPE AREAS ARE NOT TO EXCEED 4:1; MIN EARTH GRADE IS 1%; MIN PAVING GRADE IS 0.5%.
 - ALL CURB HEIGHTS ARE 6-INCHES UNLESS NOTED OTHERWISE.
 - REFER TO GEOTECHNICAL REPORT FOR REQUIREMENTS REGARDING FILL COMPACTION AND MOISTURE CONTENT.
 - REF. STRUCTURAL PLANS, SPECIFICATIONS, AND GEOTECHNICAL REPORT FOR ALL BUILDING PAD PREPARATION CRITERIA.
 - THE CONTRACTOR SHALL CONSTRUCT ALL BARRIER FREE RAMPS PER CITY OF ROCKWALL AND ADA STANDARDS.
 - GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO ADA STANDARDS. SLOPES SHALL NOT EXCEED 5% LONGITUDINAL SLOPE OR 2% CROSS SLOPE. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET AT ANY LOCATION.
 - GRADING OF ALL HANDICAPPED SPACES AND ROUTES IS TO CONFORM TO LOCAL, STATE, AND FEDERAL GUIDELINES.
 - CONTRACTOR SHALL ADJUST EXISTING VALVES, MANHOLE RIMS, ETC. AS NECESSARY TO MATCH FINISHED GRADE.
 - CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM EXISTING & PROPOSED BUILDINGS.

TEXAS REGISTRATION #141199

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STATE OF TEXAS
 109800
 CLAY CRISTY
 PROFESSIONAL ENGINEER
 04/03/2017

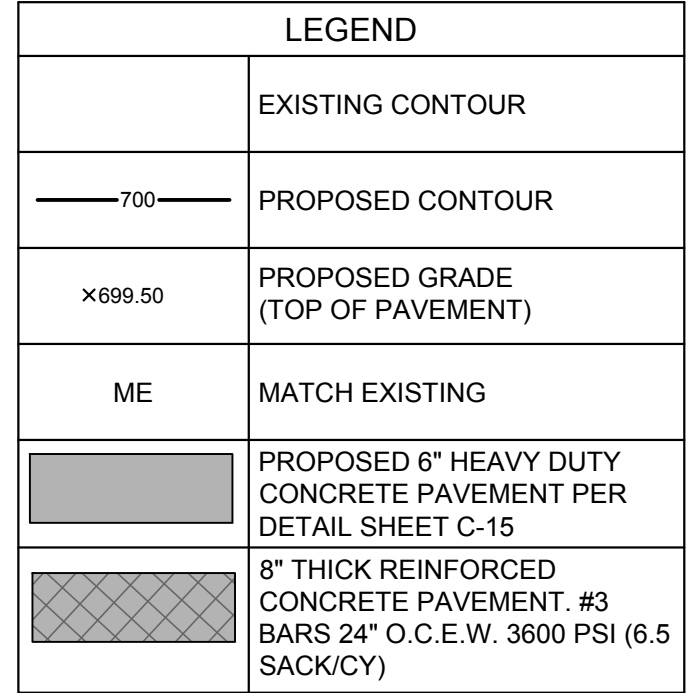
CARENOW
 LOT 1 & 2, BLOCK A
 BRISCOE/HILCREST ADDITION
 ROCKWALL, TX

NO.	DATE	REVISION	BY

GRADING PLAN
 SHEET
 C-6
 File No. 2016-029

DESIGN: JEV
 DRAWN: JEV
 CHECKED: CLC
 DATE: 04/03/2017

By: Matt All Date: 11/16/2017

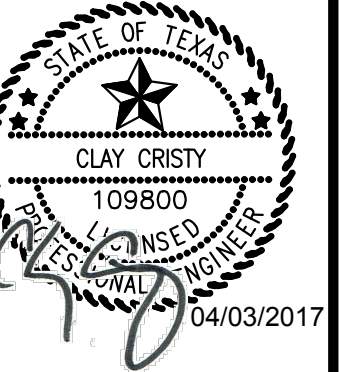


HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'

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CARENOW
LOT 1 & 2, BLOCK A
BRISCOE/HILCREST ADDITION
ROCKWALL, TX

[illegible]

PINNACLE WAY PAVING PLAN & PROFILE

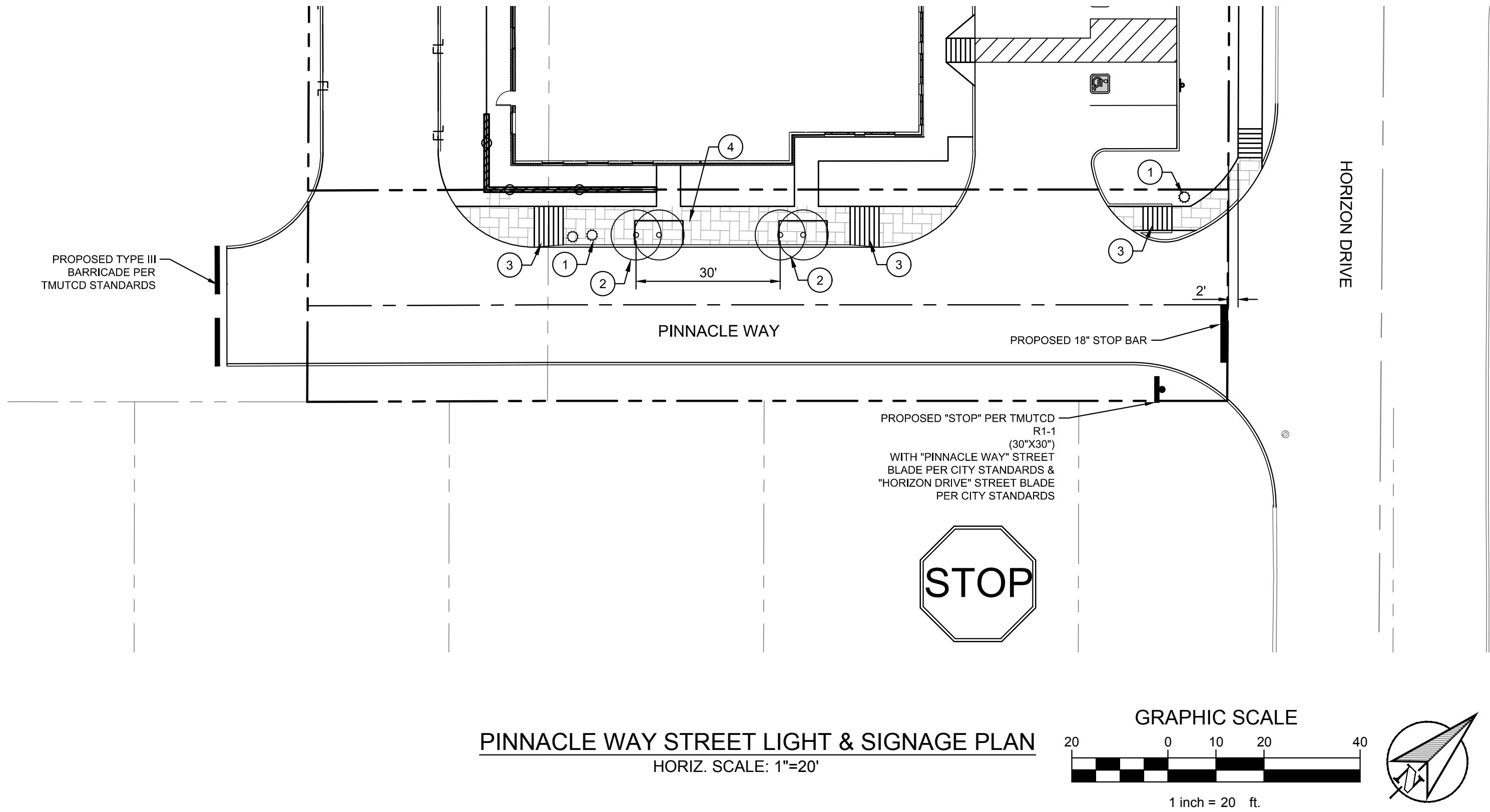
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MEET

-7

e No.	2016-029
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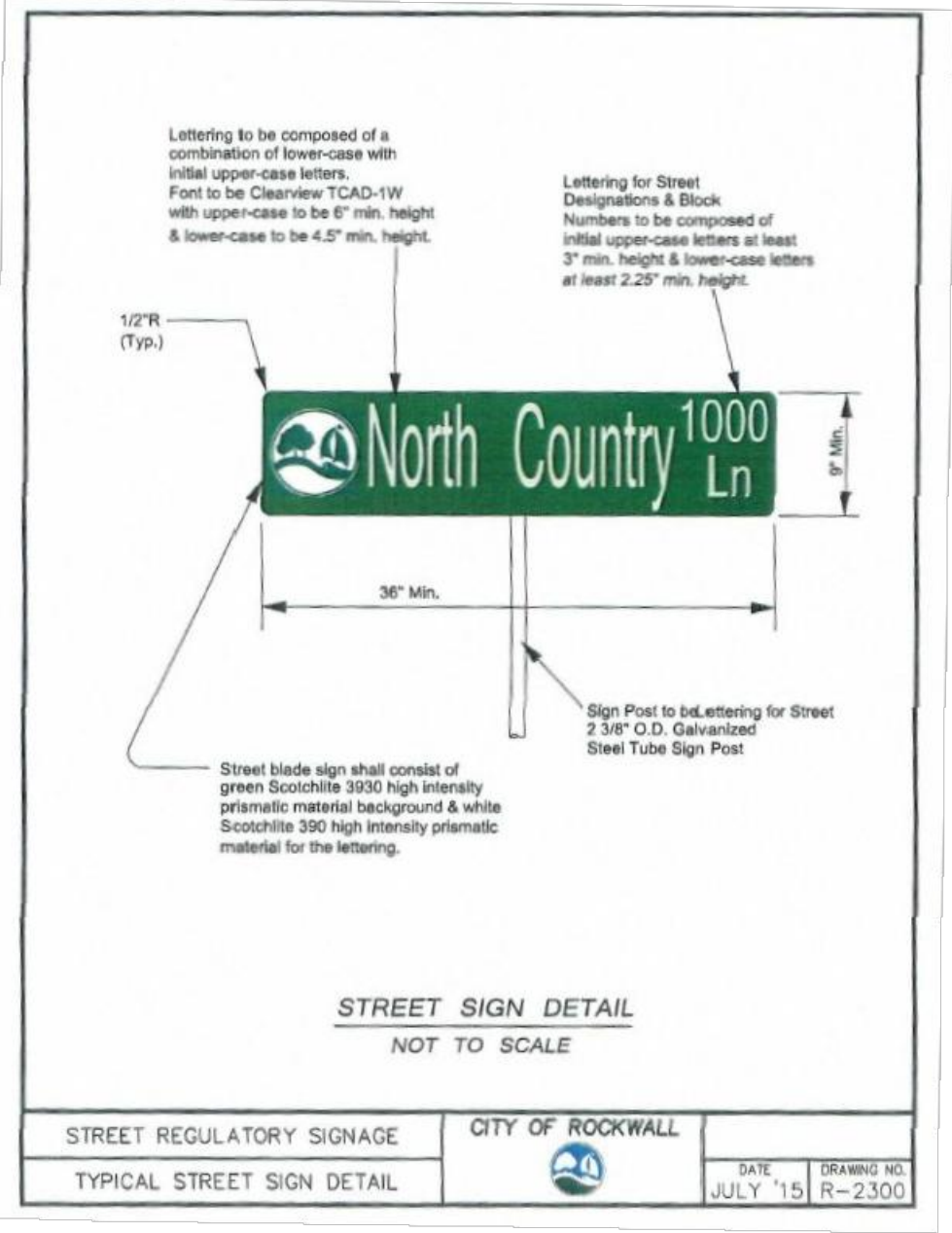
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 PLOT DATE: 11/16/2017 1:23 PM
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 LAST SAVED: 11/16/2017 1:23 PM



CONSTRUCTION SCHEDULE	
①	PEDESTRIAN SCALE STREET LIGHT. BEGA 9701 MH 100W METAL HALIDE FIXTURE ON BEGA 1108 HR 11'-8" TAPERED ROUND POLE WITH INTEGRAL BANNER ARMS. POWDER COAT COLOR RAL#7003 MOSS GREY. TO BE PLACED 60' O.C. (PER PED-032)
②	PROPOSED STREET TREES. PAVING LEAV-OUTS FOR STREET TREES SHALL BE 5'X10' ADJACENT TO BACK OF STREET CURB. (PER PED-032) SEE LANDSCAPE PLANS FOR DETAILS
③	BARRIER FREE RAMP PER CITY OF ROCKWALL DETAILS
④	ALL CONCRETE PEDESTRIAN WALKWAYS SHALL BE UPGRADED PEDESTRIAN CONCRETE PAVING WITH INTEGRAL COLOR (SCOFIELD CHROMIX C-24 CHARCOAL OR C-15 COACHELLA SAND) LIGHT SAND FINISH, AND SAWCUT CONTROL JOINTS. (PER PED-032)

NOTES:

- ALL SIGNAGE INSTALLED SHALL COMPLY WITH THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND THE "STATE HIGHWAY SIGN DESIGNS FOR TEXAS."



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

By: *[Signature]* Date: 11/16/2017

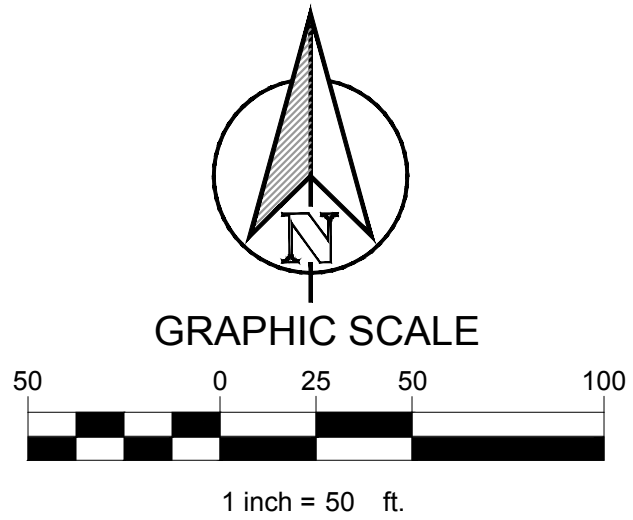
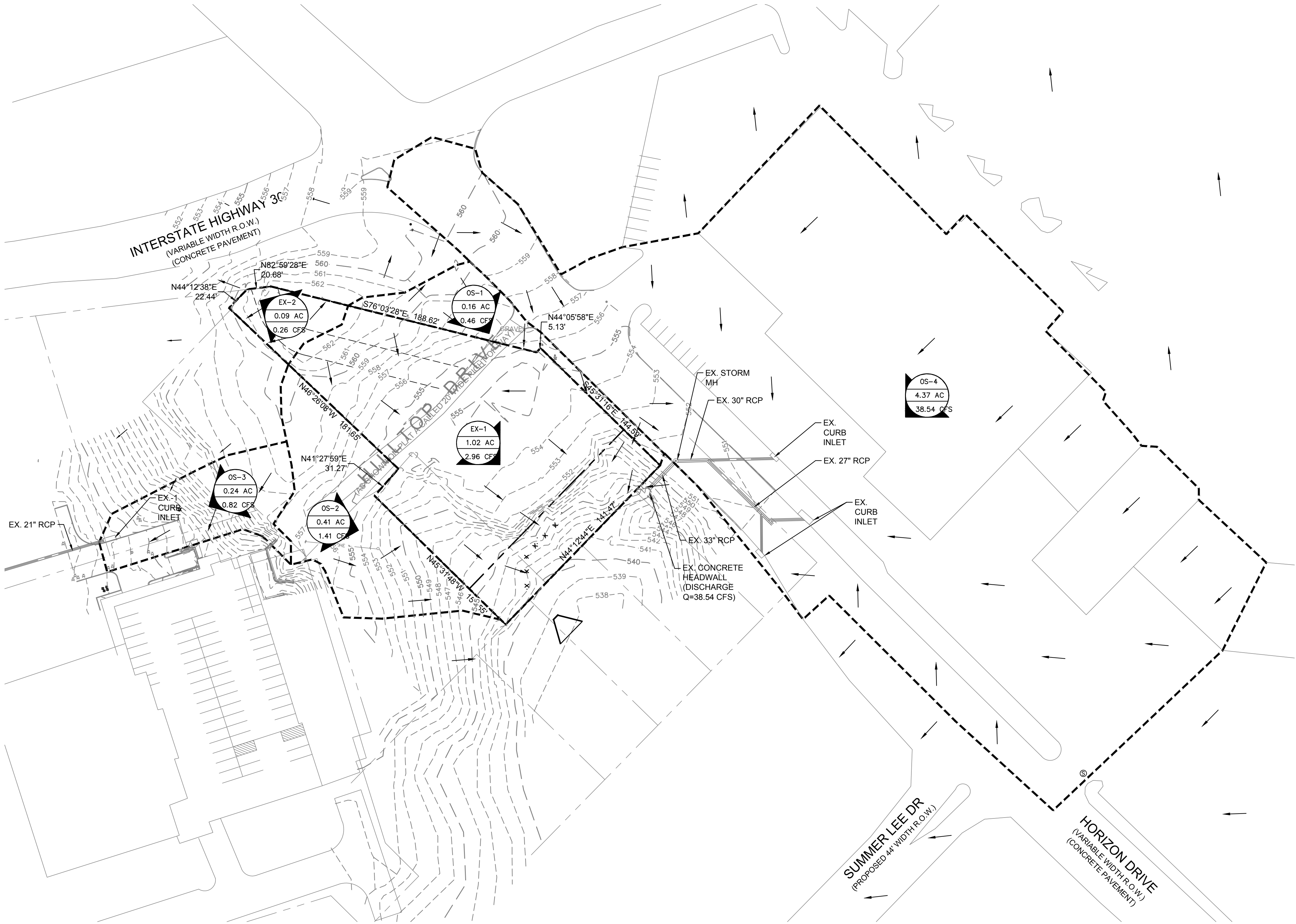


CARENOW
 LOT 1 & 2, BLOCK A
 BRISCOE/HILCREST ADDITION
 ROCKWALL, TX

No.	DATE	REVISION	BY

PINNACLE WAY STREET LIGHT PLAN
 & SIGN PLAN

PLOTTED BY: JVALDEZ
 11/16/2017 1:30 PM
 C:\EGNITE\SHARED\PROJECTS\2016-029 CRESTVIEW ROCKWALL\CADD\SHEETS\C-7 EXISTING DRAINAGE AREA MAP.DWG
 LOCATION:
 11/16/2017 1:29 PM
 LAST SAVED:



LEGEND	
	- DRAINAGE AREA - DRAINAGE AREA IN ACRES - FLOW FOR DRAINAGE AREA IN CFS
	DIRECTION OF FLOW
	DRAINAGE AREA BOUNDARY

HYDROLOGIC CALCULATIONS - PRE DEVELOPMENT						
DRAINAGE AREA	AREA (AC.)	TC (MIN)	C	I ₁₀₀ (IN/HR)	Q ₁₀₀ (CFS)	COLLECTION POINT
EX-1	1.02	20	0.35	9.80	3.50	DRAINS SOUTH EAST OFF-SITE
EX-2	0.09	20	0.35	9.80	0.31	DRAINS TOWARDS IH 30
OS-1	0.16	20	0.35	9.80	0.55	DRAINS SOUTH EAST OFF-SITE
OS-2	0.41	20	0.35	9.80	1.41	DRAINS SOUTH EAST OFF-SITE
OS-3	0.24	20	0.35	9.80	0.82	DRAINS EXISTING CURB INLET
OS-4*	4.37	10	0.90	9.80	38.54	DRAINS TO EX CURB INLET
TOTAL DRAINAGE	6.29				45.13	

*OS-4 Area based off of asbuilt drawings by Harold Evan Consulting Engineers dated 8/16/1984 and existing contour data from city. Drainage areas are approximate.

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By: *[Signature]* Date: 11/16/2017

BENCH MARKS
 BENCH MARK NO. 6-1
 CONCRETE MONUMENT WITH BRASS CAP AT THE SOUTHWEST CORNER OF MARINA AND VILLAGE ROAD
 ELEV: 506.05
 BENCH MARK NO. RESET 1
 AT THE WEST END OF SUMMER LEE AND WEST OF FM 740.
 ELEV: 567.70



CARENOW
 LOT 1 & 2, BLOCK A
 BRISCOE/HILCREST ADDITION
 ROCKWALL, TX

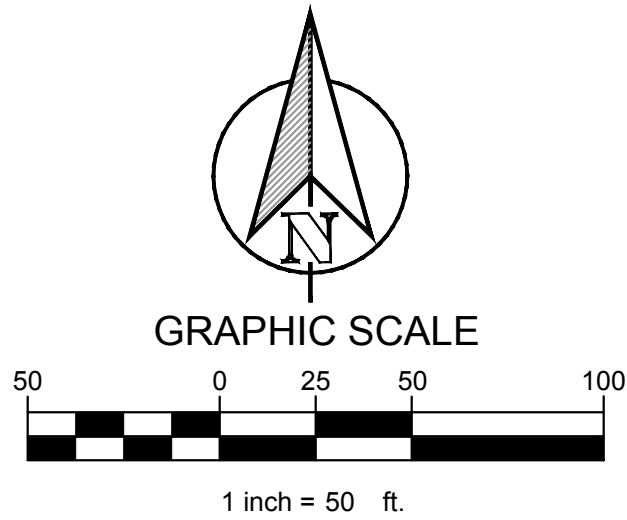
NO.	DATE	REVISION	BY

EXISTING DRAINAGE AREA MAP

DESIGN:	JEV
DRAWN:	JEV
CHECKED:	CLC
DATE:	04/03/2017

SHEET
 C-9

PLOTTED BY: JVALDEZ
 PLOT DATE: 11/16/2017 1:37 PM
 LOCATION: C:\EGNITE\SHARED\PROJECTS\2016-029 CRESTVIEW ROCKWALL\CADD\SHEETS\C-8 PROPOSED DRAINAGE AREA MAP.DWG
 LAST SAVED: 11/16/2017 1:37 PM



LEGEND	
	- DRAINAGE AREA - DRAINAGE AREA IN ACRES - FLOW FOR DRAINAGE AREA IN CFS
	DIRECTION OF FLOW
	DRAINAGE AREA BOUNDARY

HYDROLOGIC CALCULATIONS - POST DEVELOPMENT						
DRAINAGE AREA	AREA (AC.)	TC (MIN)	C	I ₁₀₀ (IN/HR)	Q ₁₀₀ (CFS)	COLLECTION POINT
A-1	0.04	10	0.90	9.80	0.35	DRAINS OFF SITE TOWARDS EAST
A-2	1.10	10	0.90	9.80	9.70	DRAINS TO PROPOSED CURB INLET
B-1	0.02	10	0.90	9.80	0.18	DRAINS TOWARDS IH 30
OS-1	0.07	10	0.90	9.80	0.62	DRAINS TO HORIZON DRIVE
OS-2	0.15	10	0.90	9.80	1.32	DRAINS TO PROPOSED CURB INLET
OS-3	0.28	10	0.90	9.80	2.47	DRAINS OFF SITE TOWARDS EAST
OS-4	0.29	10	0.90	9.80	2.56	DRAINS EX. CURB INLET
OS-5*	4.37	10	0.90	9.80	38.54	DRAINS EX. CURB INLET
TOTAL DRAINAGE	6.32				55.74	

*OS-1 Area based off of asbuilt drawings by Harold Evan Consulting Engineers dated 8/16/1984 and existing contour data from city. Drainage areas are approximate.

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 By: *[Signature]* Date: 11/16/2017

BENCH MARKS
 BENCH MARK NO. 6-1
 CONCRETE MONUMENT WITH BRASS CAP AT THE SOUTHWEST CORNER OF MARINA AND VILLAGE ROAD
 ELEV: 506.05
 BENCH MARK NO. RESET 1
 AT THE WEST END OF SUMMER LEE AND WEST OF FM 740.
 ELEV: 567.70

TEXAS REGISTRATION #14199

 1983 CENTRAL DR. SUITE 408
 BECKFORD, TX 76022
 PHONE: 817.281.0972
 WWW.CLAYMOOREENG.COM

STATE OF TEXAS

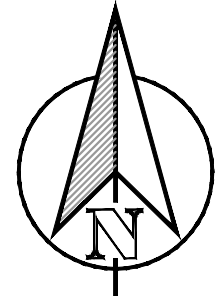
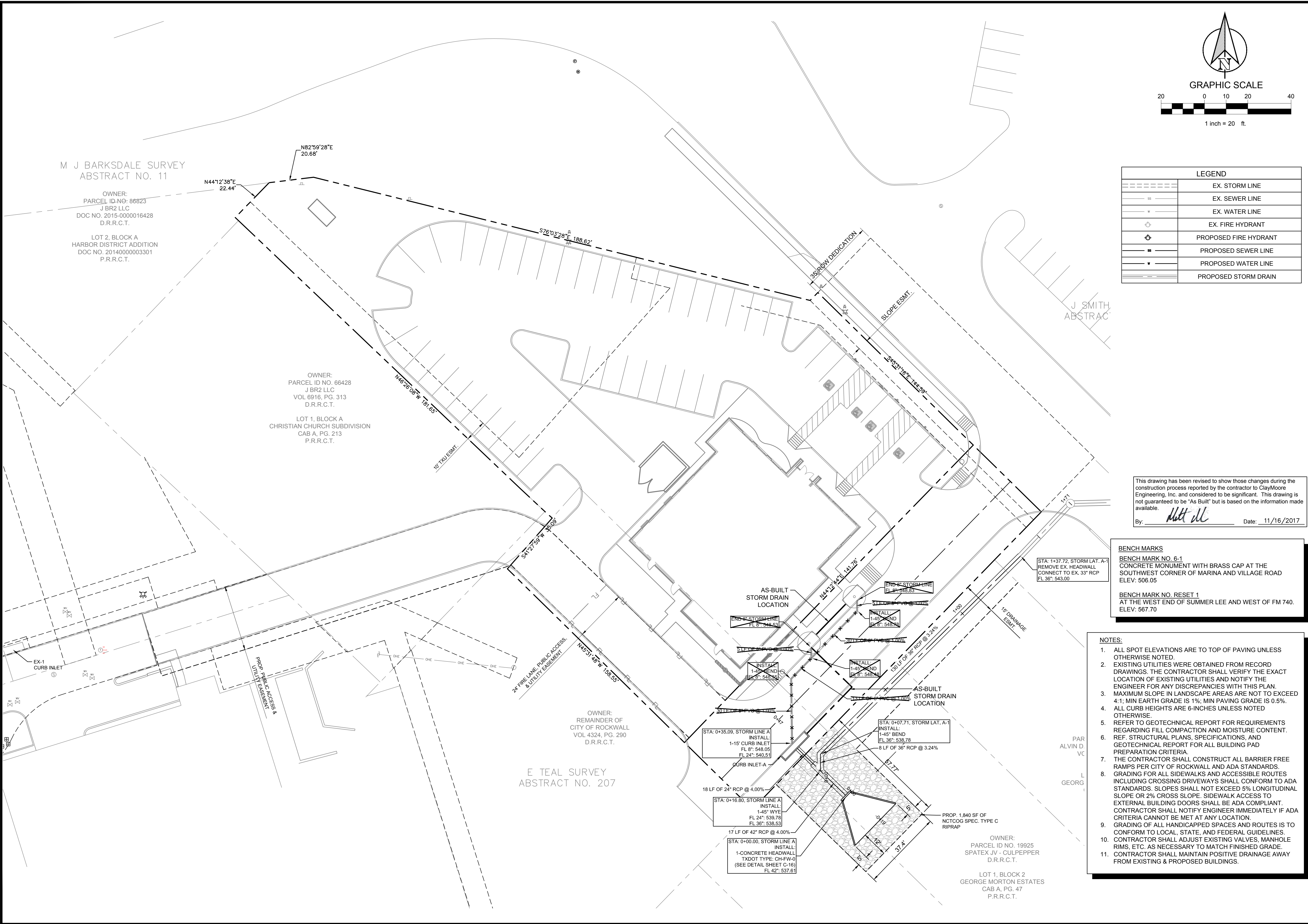
 CLAY CRISTY
 CIVIL ENGINEER

CARENOW
 LOT 1 & 2, BLOCK A
 BRISCOE/HILCREST ADDITION
 ROCKWALL, TX

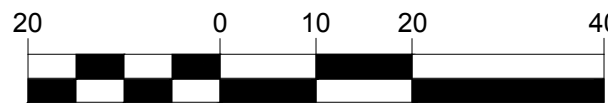
No.	DATE	REVISION	BY

PROPOSED DRAINAGE AREA MAP
 DESIGN: JEV
 DRAWN: JEV
 CHECKED: CLC
 DATE: 04/03/2017
 SHEET
 C-10
 File No. 2016-029

PLOTTED BY: JVALDEZ 11/16/2017 1:45 PM
PLOT DATE: 11/16/2017 1:45 PM
LOCATION: C:\EGNITE\SHARED\PROJECTS\2016-029 CRESTVIEW ROCKWALL\CADD\SHEETS\C-10 STORM DRAIN PLAN.DWG
LAST SAVED: 11/16/2017 1:45 PM



GRAPHIC SCALE



1 inch = 20 ft.

LEGEND	
	EX. STORM LINE
	EX. SEWER LINE
	EX. WATER LINE
	EX. FIRE HYDRANT
	PROPOSED FIRE HYDRANT
	PROPOSED SEWER LINE
	PROPOSED WATER LINE
	PROPOSED STORM DRAIN

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

By: *[Signature]* Date: 11/16/2017

BENCH MARKS	
BENCH MARK NO. 6-1	CONCRETE MONUMENT WITH BRASS CAP AT THE SOUTHWEST CORNER OF MARINA AND VILLAGE ROAD ELEV: 506.05
BENCH MARK NO. RESET 1	AT THE WEST END OF SUMMER LEE AND WEST OF FM 740. ELEV: 567.70

- NOTES:
- ALL SPOT ELEVATIONS ARE TO TOP OF PAVING UNLESS OTHERWISE NOTED.
 - EXISTING UTILITIES WERE OBTAINED FROM RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING UTILITIES AND NOTIFY THE ENGINEER FOR ANY DISCREPANCIES WITH THIS PLAN.
 - MAXIMUM SLOPE IN LANDSCAPE AREAS ARE NOT TO EXCEED 4:1; MIN EARTH GRADE IS 1%; MIN PAVING GRADE IS 0.5%.
 - ALL CURB HEIGHTS ARE 6-INCHES UNLESS NOTED OTHERWISE.
 - REFER TO GEOTECHNICAL REPORT FOR REQUIREMENTS REGARDING FILL COMPACTION AND MOISTURE CONTENT.
 - REF. STRUCTURAL PLANS, SPECIFICATIONS, AND GEOTECHNICAL REPORT FOR ALL BUILDING PAD PREPARATION CRITERIA.
 - THE CONTRACTOR SHALL CONSTRUCT ALL BARRIER FREE RAMPS PER CITY OF ROCKWALL AND ADA STANDARDS. GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO ADA STANDARDS. SLOPES SHALL NOT EXCEED 5% LONGITUDINAL SLOPE OR 2% CROSS SLOPE. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET AT ANY LOCATION.
 - GRADING OF ALL HANDICAPPED SPACES AND ROUTES IS TO CONFORM TO LOCAL, STATE, AND FEDERAL GUIDELINES.
 - CONTRACTOR SHALL ADJUST EXISTING VALVES, MANHOLE RIMS, ETC. AS NECESSARY TO MATCH FINISHED GRADE.
 - CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM EXISTING & PROPOSED BUILDINGS.

TEXAS REGISTRATION #14199

CLAYMOORE
ENGINEERING

CLAY CRISTY
REGISTERED PROFESSIONAL ENGINEER
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ROCKWALL, TX 75087

PHONE: 972.281.0972
WWW.CLAYMOOREENG.COM



CARENOW
LOT 1 & 2, BLOCK A
BRISCOE/HILCREST ADDITION
ROCKWALL, TX

NO.	DATE	REVISION	BY

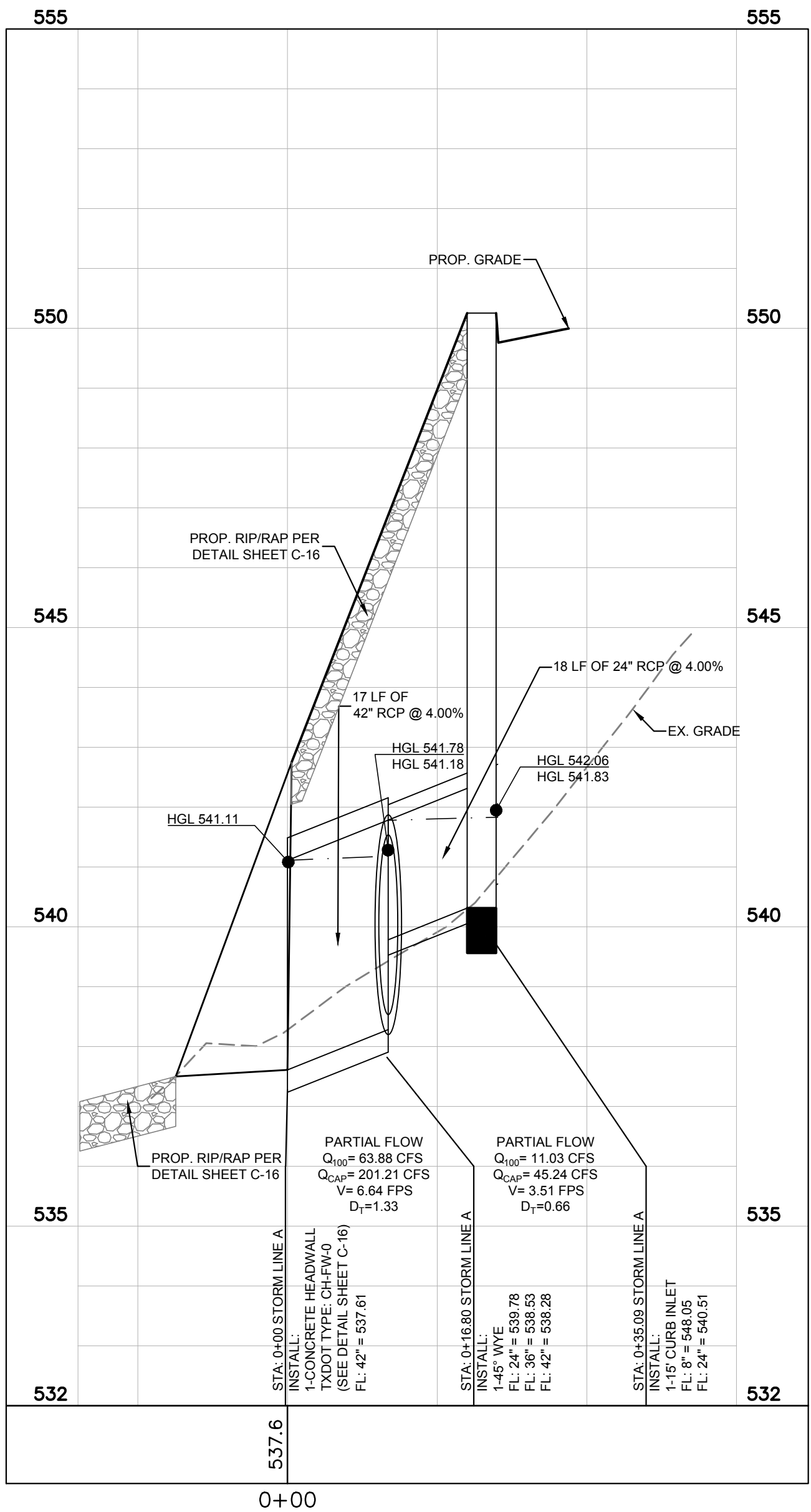
STORM DRAIN PLAN

DESIGN: JEV
DRAWN: JEV
CHECKED: CLC
DATE: 04/03/2017

SHEET
C-11

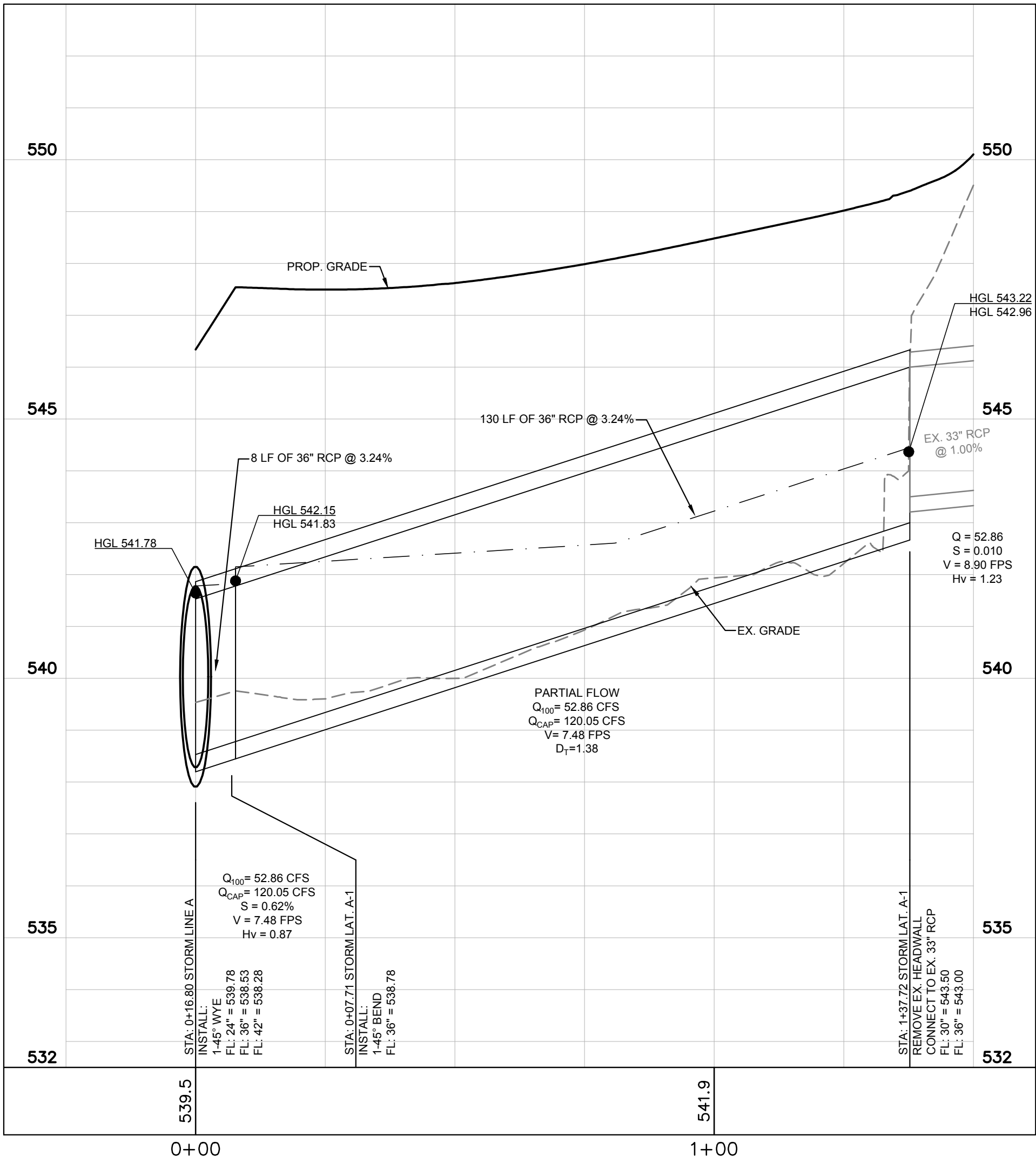
File No. 2016-029

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 LAST SAVED: 11/16/2017 1:51 PM



STORM LINE A

HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'



STORM LAT. A-1

HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'

LINE	STA.		INCREMENTAL AREA	CUMULATIVE AREA	RUNOFF COEFFICIENT	INCREMENTAL CA	CUMULATIVE CA	INLET TIME	FLOW TIME IN PIPE	TIME OF CONCENTRATION	INTENSITY	DIST	100 YR STORM DRAIN CALCULATIONS										ROUGH- NESS n	PIPE SLOPE So	PIPE CAPACITY Q ₃₄₀ CFS	V _{design} Q _{design} /A	V _{full} FPS	Q/Q _{full}	V/V _{full}	d/D	Flow Depth FT	V _{partial} FPS	FRICTION SLOPE S _f FT/FT	H _v V _{design} ² /2g	K _i	H _i (MIN 0.1) FT.	HGL		INVERT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
													TOTAL FLOW Q ₁₀₀ CFS	DIA. IN	SPAN FT	RISE FT	NUMBER	A Sq FT	R	SLOPE %	INCOMING PIPE	OUTGOING PIPE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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**TOTAL FLOWS FOR LAT. A-1 ARE FROM ASBUILT PLAN BY CITY OF ROCKWALL DATED 6-9-95

Curb Inlet Capacity for Recessed Curbs in Sump Condition												
Per Figure 3.7 of City of Rockwall Standard Design and Construction Manual												
INLET		Design Storm Freq. (years)	AREA RUNOFF: Q=CIA					Min curb Inlet Length	Proposed Inlet Length	Inlet Capacity (cfs)		
No.	Location		Tc (min.)	Intensity i (in/hr)	Runoff Coef. "c"	Area "A" (acres)	Q (cfs)				Area ID	Y _o
A	0+58.86	100	10	9.80	0.9	1.25	11.03	A-2 & OS-3	0.5	5.6'	15'	15.13

Curb Inlet Capacity for Recessed Curbs on Grade												
Per Figure 3.5a of City of Rockwall Standard Design and Construction Manual												
INLET		Design Storm Freq. (years)	AREA RUNOFF: Q=CIA					Min curb Inlet Length	Ex. Curb Inlet Length	Inlet Capacity (cfs)		
No.	Location		Tc (min.)	Intensity i (in/hr)	Runoff Coef. "c"	Area "A" (acres)	Q (cfs)				Area ID	Gutter Slope
EX-1	OFF SITE	100	10	9.80	0.9	0.29	2.56	OS-4	7%	5.20	10'	2.6

Additional flow to existing 10' curb inlet will not have negative impact on existing storm line. 10' curb inlets have capacity for 5.40 cfs

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By: *Matt Hill* Date: 11/16/2017



CARENOW
 LOT 1 & 2, BLOCK A
 BRISCOE/HILCREST ADDITION
 ROCKWALL, TX

No.	DATE	REVISION	BY

STORM DRAIN PROFILES

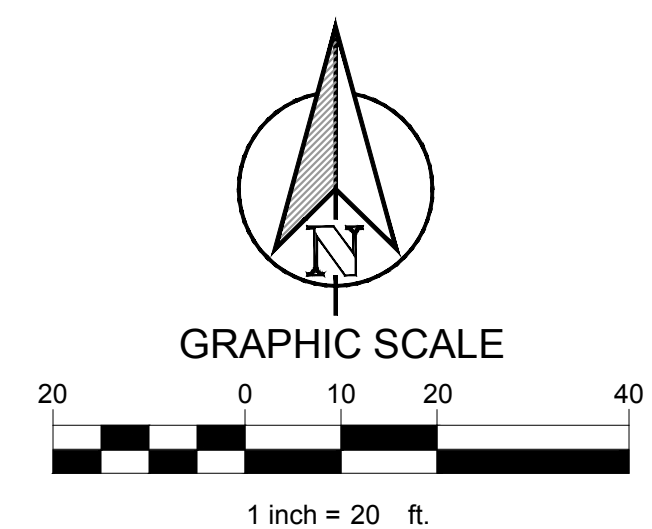
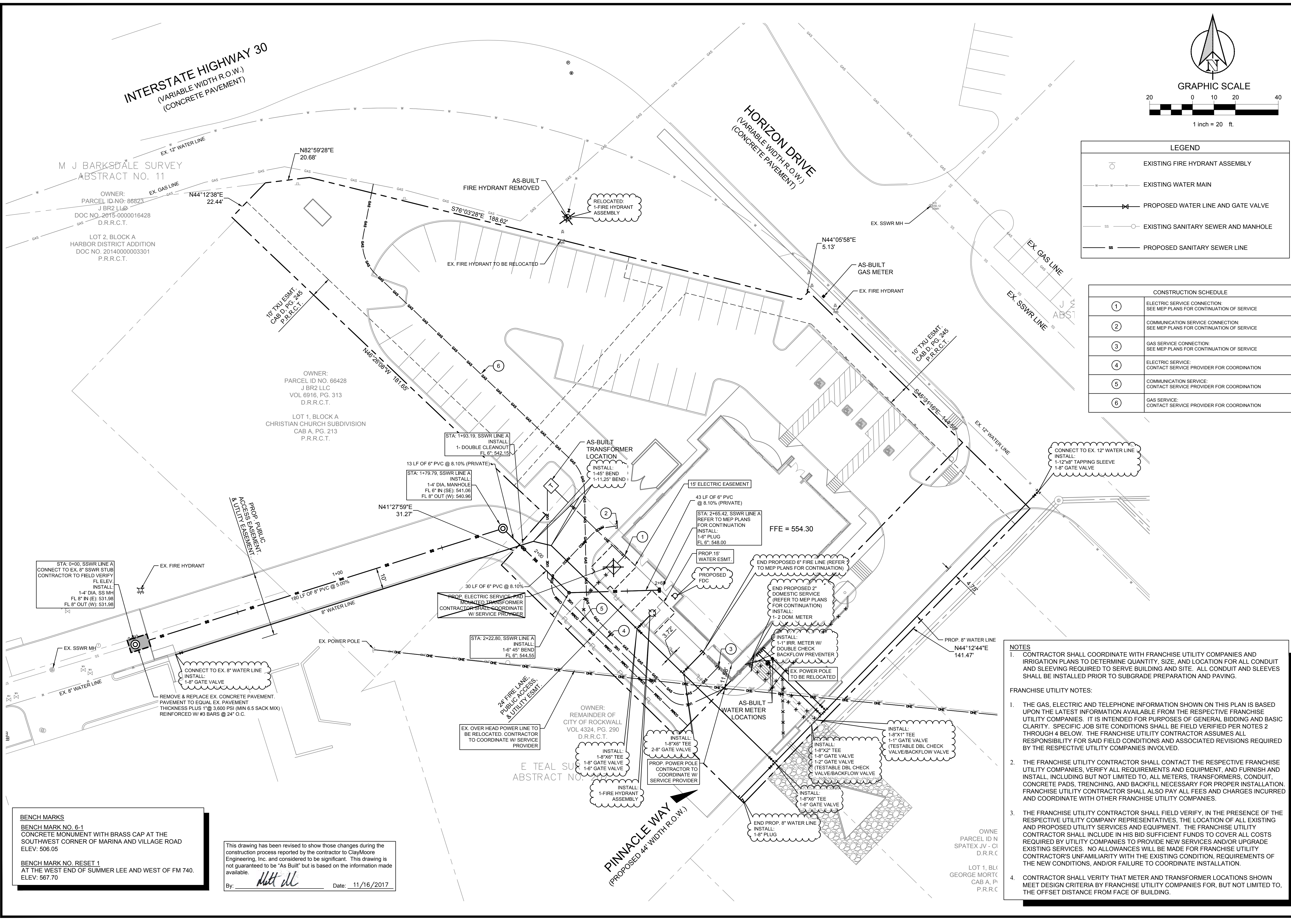
DESIGN:	JEV
DRAWN:	JEV
CHECKED:	CLC
DATE:	04/03/2017

SHEET

C-12

File No. 2016-029

PLOTTED BY: JVALDEZ 11/16/2017 1:57 PM
PLOT DATE: 11/16/2017 1:57 PM
LOCATION: C:\VEGATTE\SHARED\PROJECTS\2016-029 CRESTVIEW ROCKWALL\CADD\SHEETS\C-9 UTILITY PLAN.DWG
LAST SAVED: 11/16/2017 1:57 PM



LEGEND	
	EXISTING FIRE HYDRANT ASSEMBLY
	EXISTING WATER MAIN
	PROPOSED WATER LINE AND GATE VALVE
	EXISTING SANITARY SEWER AND MANHOLE
	PROPOSED SANITARY SEWER LINE

CONSTRUCTION SCHEDULE	
①	ELECTRIC SERVICE CONNECTION: SEE MEP PLANS FOR CONTINUATION OF SERVICE
②	COMMUNICATION SERVICE CONNECTION: SEE MEP PLANS FOR CONTINUATION OF SERVICE
③	GAS SERVICE CONNECTION: SEE MEP PLANS FOR CONTINUATION OF SERVICE
④	ELECTRIC SERVICE: CONTACT SERVICE PROVIDER FOR COORDINATION
⑤	COMMUNICATION SERVICE: CONTACT SERVICE PROVIDER FOR COORDINATION
⑥	GAS SERVICE: CONTACT SERVICE PROVIDER FOR COORDINATION

NOTES

- CONTRACTOR SHALL COORDINATE WITH FRANCHISE UTILITY COMPANIES AND IRRIGATION PLANS TO DETERMINE QUANTITY, SIZE, AND LOCATION FOR ALL CONDUIT AND SLEEVING REQUIRED TO SERVE BUILDING AND SITE. ALL CONDUIT AND SLEEVES SHALL BE INSTALLED PRIOR TO SUBGRADE PREPARATION AND PAVING.

FRANCHISE UTILITY NOTES:

- THE GAS, ELECTRIC AND TELEPHONE INFORMATION SHOWN ON THIS PLAN IS BASED UPON THE LATEST INFORMATION AVAILABLE FROM THE RESPECTIVE FRANCHISE UTILITY COMPANIES. IT IS INTENDED FOR PURPOSES OF GENERAL BIDDING AND BASIC CLARITY. SPECIFIC JOB SITE CONDITIONS SHALL BE FIELD VERIFIED PER NOTES 2 THROUGH 4 BELOW. THE FRANCHISE UTILITY CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR SAID FIELD CONDITIONS AND ASSOCIATED REVISIONS REQUIRED BY THE RESPECTIVE UTILITY COMPANIES INVOLVED.
- THE FRANCHISE UTILITY CONTRACTOR SHALL CONTACT THE RESPECTIVE FRANCHISE UTILITY COMPANIES, VERIFY ALL REQUIREMENTS AND EQUIPMENT, AND FURNISH AND INSTALL, INCLUDING BUT NOT LIMITED TO, ALL METERS, TRANSFORMERS, CONDUIT, CONCRETE PADS, TRENCHING, AND BACKFILL NECESSARY FOR PROPER INSTALLATION. FRANCHISE UTILITY CONTRACTOR SHALL ALSO PAY ALL FEES AND CHARGES INCURRED AND COORDINATE WITH OTHER FRANCHISE UTILITY COMPANIES.
- THE FRANCHISE UTILITY CONTRACTOR SHALL FIELD VERIFY, IN THE PRESENCE OF THE RESPECTIVE UTILITY COMPANY REPRESENTATIVES, THE LOCATION OF ALL EXISTING AND PROPOSED UTILITY SERVICES AND EQUIPMENT. THE FRANCHISE UTILITY CONTRACTOR SHALL INCLUDE IN HIS BID SUFFICIENT FUNDS TO COVER ALL COSTS REQUIRED BY UTILITY COMPANIES TO PROVIDE NEW SERVICES AND/OR UPGRADE EXISTING SERVICES. NO ALLOWANCES WILL BE MADE FOR FRANCHISE UTILITY CONTRACTOR'S UNFAMILIARITY WITH THE EXISTING CONDITION, REQUIREMENTS OF THE NEW CONDITIONS, AND/OR FAILURE TO COORDINATE INSTALLATION.
- CONTRACTOR SHALL VERIFY THAT METER AND TRANSFORMER LOCATIONS SHOWN MEET DESIGN CRITERIA BY FRANCHISE UTILITY COMPANIES FOR, BUT NOT LIMITED TO, THE OFFSET DISTANCE FROM FACE OF BUILDING.

BENCH MARKS

BENCH MARK NO. 6-1
CONCRETE MONUMENT WITH BRASS CAP AT THE SOUTHWEST CORNER OF MARINA AND VILLAGE ROAD
ELEV: 506.05

BENCH MARK NO. RESET 1
AT THE WEST END OF SUMMER LEE AND WEST OF FM 740.
ELEV: 567.70

This drawing has been revised to show those changes during the construction process reported by the contractor to Clay Moore Engineering, Inc. and considered to be significant. This drawing is not guaranteed to be "As Built" but is based on the information made available.

By: *[Signature]* Date: 11/16/2017

TEXAS REGISTRATION #14199

CLAY MOORE ENGINEERING

1980 CENTRAL DR. SUITE #408
BEAUFORT, TX 77705

PHONE: 409.281.0972
WWW.CLAYMOOREENG.COM

STATE OF TEXAS
CLAY CRISTY
109800
REGISTERED PROFESSIONAL ENGINEER
04/03/2017

CARENOW
LOT 1 & 2, BLOCK A
BRISCOE/HILCREST ADDITION
ROCKWALL, TX

No.	DATE	REVISION	BY
1	3/29/17	FIRE LINE RELOCATION	JV
2	3/29/17	REF. FINISHED FLOOR	JV
3	4/29/17		

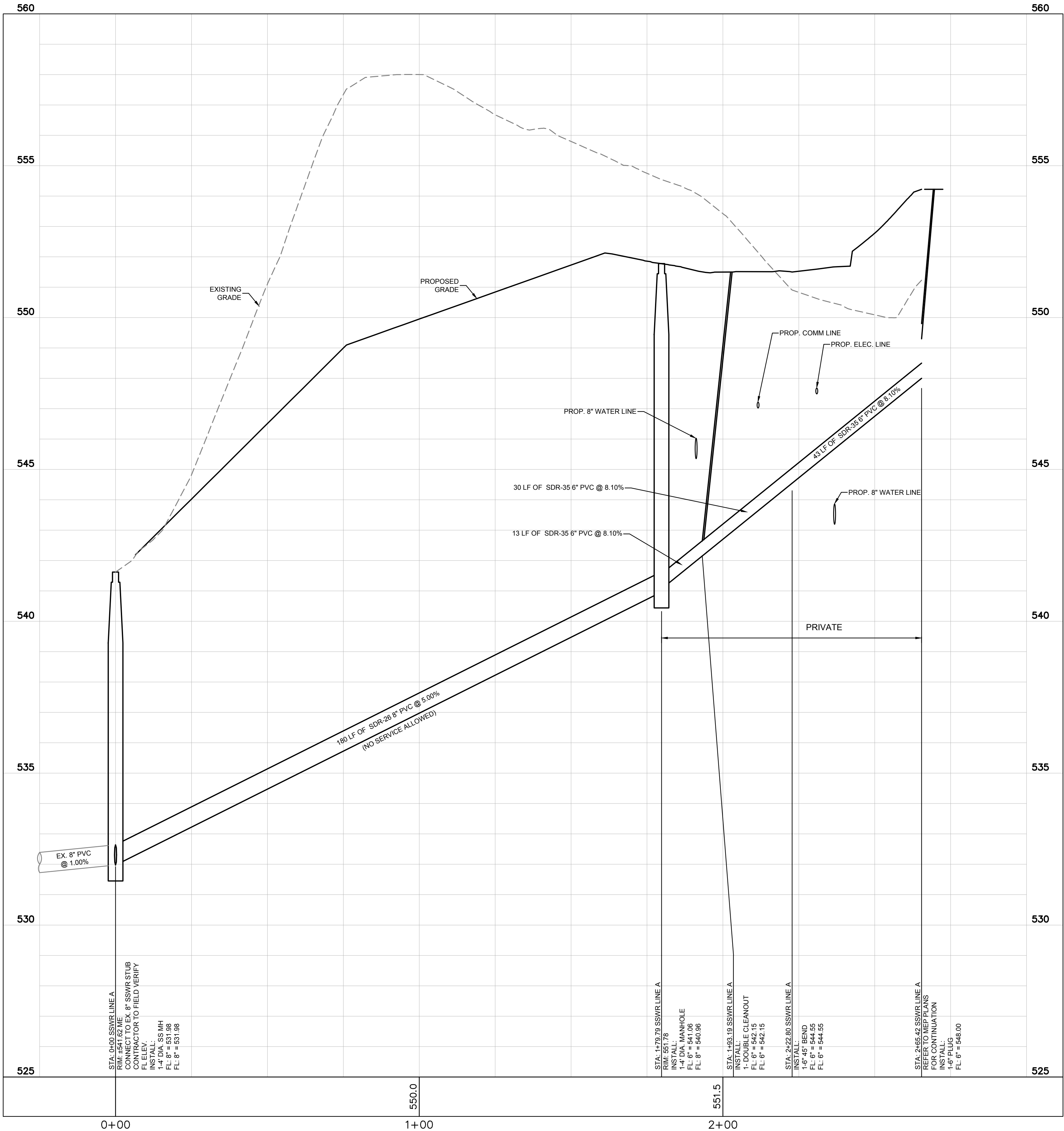
UTILITY PLAN

DESIGN: JEV
DRAWN: JEV
CHECKED: CLC
DATE: 04/03/2017

SHEET
C-13

File No. 2016-029

PLOTTED BY: JVALDEZ
 PLOT DATE: 11/16/2017 2:04 PM
 LOCATION: C:\EGNITE\SHARED\PROJECTS\2016-029 CRESTVIEW ROCKWALL\CADD\SHEETS\C-11 SANITARY SEWER PROFILES.DWG
 LAST SAVED: 11/16/2017 2:03 PM



SEWER LINE A
 HORIZ. SCALE: 1"=20'
 VERT. SCALE: 1"=2'

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

By: *[Signature]* Date: 11/16/2017

TEXAS REGISTRATION #141199

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STATE OF TEXAS
CLAY CRISTY
109800
Professional Engineer
04/03/2017

CARENOW
LOT 1 & 2, BLOCK A
BRISCOE/HILCREST ADDITION
ROCKWALL, TX

No.	DATE	REVISION	BY
1	3/2/2017	PRELIMINARY	JV
2	3/22/2017	PRELIMINARY	JV
3	4/2/2017	PRELIMINARY	JV

SANITARY SEWER PROFILES

DESIGN: JEV
DRAWN: JEV
CHECKED: CLC
DATE: 04/03/2017

SHEET
C-14

File No. 2016-029

DISCLAIMER: This drawing is prepared by the Texas Engineering Practice Act. In witness whereof, the Engineer has signed this drawing and the State of Texas has approved it. The Engineer assumes no responsibility for the construction of the work shown on this drawing.

SLOPE DIA. OF PIPE, O	TABLE OF VARIABLE DIMENSIONS AND QUANTITIES FOR ONE HEADWALL				Values to be added for each additional Pipe	
	W	X	Y	L	Reinf. Conc. (Lbs.)	Reinf. Conc. (Lbs.)
12"	4'-7 1/2"	2'-6"	2'-10"	3'-3 1/4"	84	0.6
15"	5'-5 3/4"	2'-9 1/2"	3'-4"	3'-10 1/4"	99	0.7
18"	6'-1 1/4"	3'-1"	3'-10"	4'-5"	120	0.9
21"	7'-2 1/4"	3'-4 1/2"	4'-4"	5'-0"	137	1.1
24"	8'-2 1/2"	3'-9 1/2"	4'-10"	5'-7"	158	1.3
27"	9'-1"	4'-1"	5'-4"	6'-2"	173	1.5
30"	9'-11 1/2"	4'-4 1/2"	5'-10"	6'-8 3/4"	197	1.7
33"	10'-10"	4'-8"	6'-4"	7'-3 3/4"	216	2.0
36"	11'-8 1/4"	4'-11 1/2"	6'-10"	7'-10 3/4"	241	2.2
42"	13'-5 1/4"	5'-6 1/2"	7'-10"	9'-0 1/2"	290	2.8
48"	15'-9"	6'-1 1/2"	9'-4"	10'-9 1/4"	350	3.8
54"	17'-5 3/4"	6'-8 1/2"	10'-4"	11'-11 1/4"	415	4.5
60"	19'-2 3/4"	7'-3 1/2"	11'-4"	13'-1"	469	5.3
66"	20'-11 1/2"	7'-10 1/2"	12'-4"	14'-3"	530	6.2
72"	22'-8 1/2"	8'-5 1/2"	13'-4"	15'-4 3/4"	587	7.1
12"	6'-3"	2'-6"	4'-3"	4'-11"	114	0.8
15"	7'-5"	2'-9 1/2"	5'-0"	5'-9 3/4"	133	1.1
18"	8'-6 3/4"	3'-1"	5'-9"	6'-7 3/4"	166	1.3
21"	9'-8 3/4"	3'-4 1/2"	6'-6"	7'-6"	189	1.6
24"	11'-0"	3'-9 1/2"	7'-3"	8'-4 1/2"	221	2.0
27"	12'-2"	4'-1"	8'-0"	9'-2 3/4"	245	2.3
30"	13'-4"	4'-4 1/2"	8'-9"	10'-1 1/4"	287	2.7
33"	14'-5 3/4"	4'-8"	9'-6"	10'-11 3/4"	310	3.1
36"	15'-7 3/4"	4'-11 1/2"	10'-3"	11'-10"	343	3.5
42"	17'-11 1/2"	5'-6 1/2"	11'-9"	13'-6 3/4"	424	4.5
48"	21'-1 3/4"	6'-1 1/2"	14'-0"	16'-2"	527	6.1
54"	23'-5 1/2"	6'-8 1/2"	15'-6"	17'-10 3/4"	618	7.3
60"	25'-9 1/4"	7'-3 1/2"	17'-0"	19'-7 1/2"	707	8.7
66"	28'-1"	7'-10 1/2"	18'-6"	21'-4 1/4"	797	10.1
72"	30'-4 3/4"	8'-5 1/2"	20'-0"	23'-1 1/4"	910	11.7
12"	7'-10 3/4"	2'-6"	5'-8"	6'-6 1/2"	144	1.1
15"	9'-4"	2'-9 1/2"	6'-8"	7'-8 1/2"	177	1.5
18"	10'-9 1/2"	3'-1"	7'-8"	8'-10 1/4"	217	1.9
21"	12'-2 3/4"	3'-4 1/2"	8'-8"	10'-0"	254	2.3
24"	13'-9 1/2"	3'-9 1/2"	9'-8"	11'-2"	295	2.8
27"	15'-3"	4'-1"	10'-8"	12'-3 3/4"	328	3.3
30"	16'-8 1/4"	4'-4 1/2"	11'-8"	13'-5 3/4"	379	3.8
33"	18'-1 3/4"	4'-8"	12'-8"	14'-7 1/2"	417	4.5
36"	19'-7"	4'-11 1/2"	13'-8"	15'-9 1/4"	464	5.1
42"	22'-5 3/4"	5'-6 1/2"	15'-8"	18'-1"	575	6.5
48"	26'-6 1/4"	6'-1 1/2"	18'-6"	21'-6 3/4"	720	8.9
54"	29'-5"	6'-8 1/2"	20'-8"	23'-10 1/4"	863	10.7
60"	32'-3 3/4"	7'-3 1/2"	22'-8"	26'-2"	984	12.7
66"	35'-2 1/2"	7'-10 1/2"	24'-8"	28'-5 3/4"	1126	14.9
72"	38'-1 1/4"	8'-5 1/2"	26'-8"	30'-9 1/2"	1283	17.3
12"	11'-2"	2'-6"	8'-6"	9'-9 3/4"	220	1.9
15"	13'-2 1/4"	2'-9 1/2"	10'-0"	11'-6 1/2"	264	2.5
18"	15'-2 1/2"	3'-1"	11'-6"	13'-3 1/4"	326	3.2
21"	17'-2 3/4"	3'-4 1/2"	13'-0"	15'-0 1/4"	381	3.9
24"	19'-4 1/2"	3'-9 1/2"	14'-6"	16'-9"	447	4.8
27"	21'-4 3/4"	4'-1"	16'-0"	18'-5 3/4"	506	5.7
30"	23'-5 1/4"	4'-4 1/2"	17'-6"	20'-2 1/2"	587	6.7
33"	25'-5 1/2"	4'-8"	19'-0"	21'-11 1/4"	667	7.8
36"	27'-5 3/4"	4'-11 1/2"	20'-6"	23'-8"	727	9.0
42"	31'-6 1/4"	5'-6 1/2"	23'-6"	27'-1 1/2"	914	11.5
48"	37'-3 1/2"	6'-1 1/2"	28'-0"	32'-4"	1181	15.9
54"	41'-4 1/4"	6'-8 1/2"	31'-0"	35'-9 1/2"	1412	19.2
60"	45'-4 3/4"	7'-3 1/2"	34'-0"	39'-3"	1619	22.9

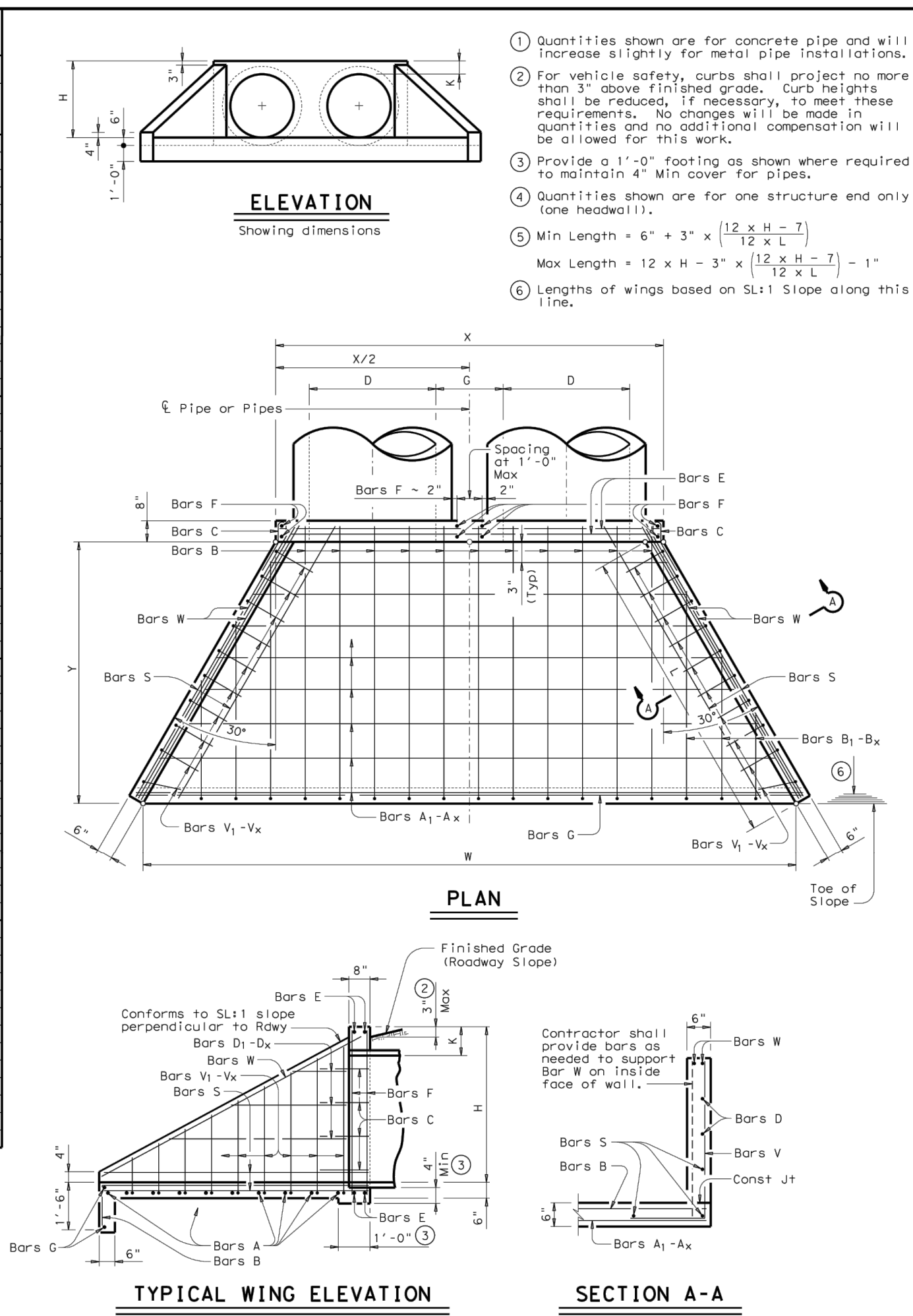


TABLE OF REINFORCING STEEL				TABLE OF CONSTANT DIMENSIONS		
Bar	Size	Spa	No.	G O.A.S.F.G.	K	H
A	# 4	1'-0"	~	12"	9"	1'-0"
B	# 3	1'-6"	~	15"	11"	1'-0"
C	# 4	1'-0"	~	12"	9"	1'-0"
D	# 3	1'-0"	~	15"	11"	1'-0"
E	# 5	~	4	18"	1'-2"	1'-0"
F	# 5	~	~	21"	1'-4"	1'-0"
G	# 3	~	2	24"	1'-7"	1'-0"
H	# 4	~	6	27"	1'-8"	1'-0"
V	# 4	1'-0"	~	30"	1'-10"	1'-0"
W	# 5	~	4	33"	1'-11"	1'-0"
				36"	2'-1"	1'-0"
				42"	2'-4"	1'-0"
				48"	2'-7"	1'-0"
				54"	3'-0"	1'-0"
				60"	3'-3"	1'-0"
				66"	3'-6"	1'-0"
				72"	3'-9"	1'-0"

GENERAL NOTES:

Designed according to AASHTO LRFD Specifications.

Reinforcing steel shall be placed with the center of the outside layer of bars 2" from the surface of the concrete.

All reinforcing steel shall be Grade 60.

All concrete shall be Class "C" and shall have a minimum compressive strength of 4200 psi.

No bridge rails of any type may be mounted directly to these culvert headwalls.

Bridge Division Standard

CONCRETE HEADWALLS
WITH FLARED WINGS FOR
0° SKEW PIPE CULVERTS

CH-FW-0

FILE: chfw000e.pdf	REV: 1/2007	REV: 1/2007	REV: 1/2007	REV: 1/2007	REV: 1/2007
DATE: February 10, 2007	CHW	SAFETY	JOB	DESIGN	REVISION
REVISIONS		DESIGN	COUNTRY	SHEET NO.	

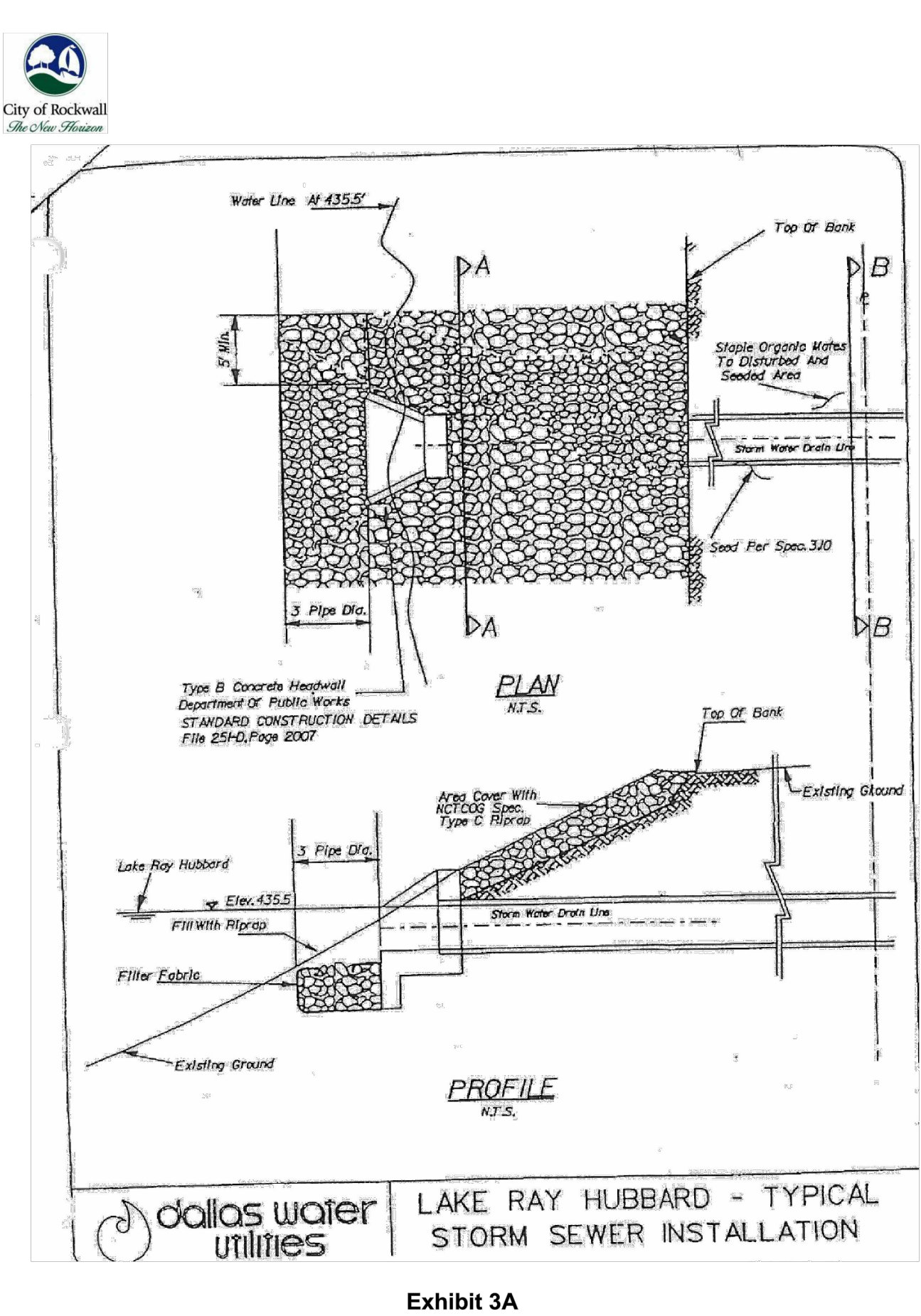
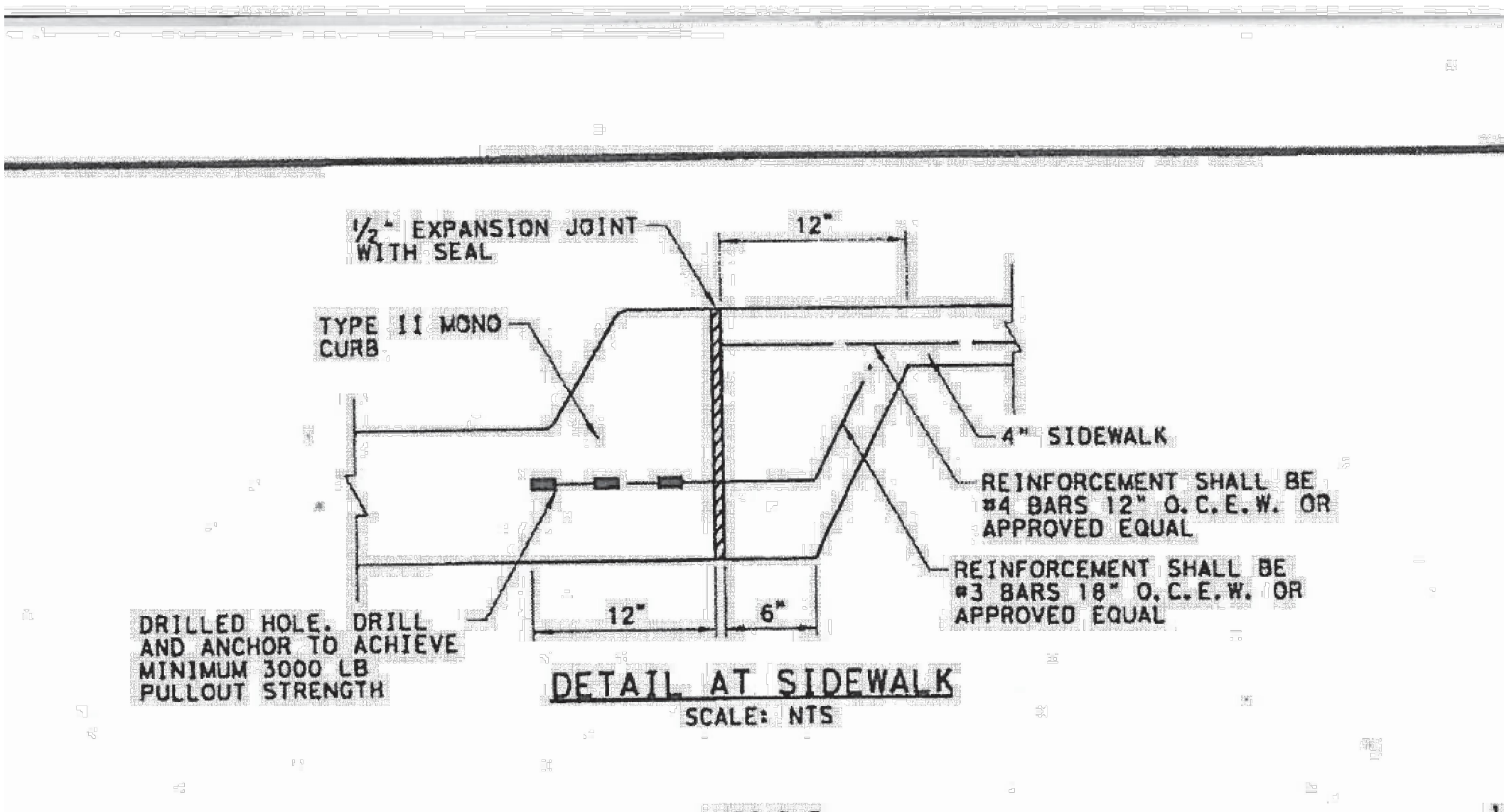


Exhibit 3A



No.	DATE	REVISION	BY

This drawing has been revised to show those changes during the construction process reported by the contractor to ClayMoore Engineering, Inc. and considered to be significant. This drawing is not guaranteed to be "As Built" but is based on the information made available.
 By: *Mitt*
 Date: 11/16/2017

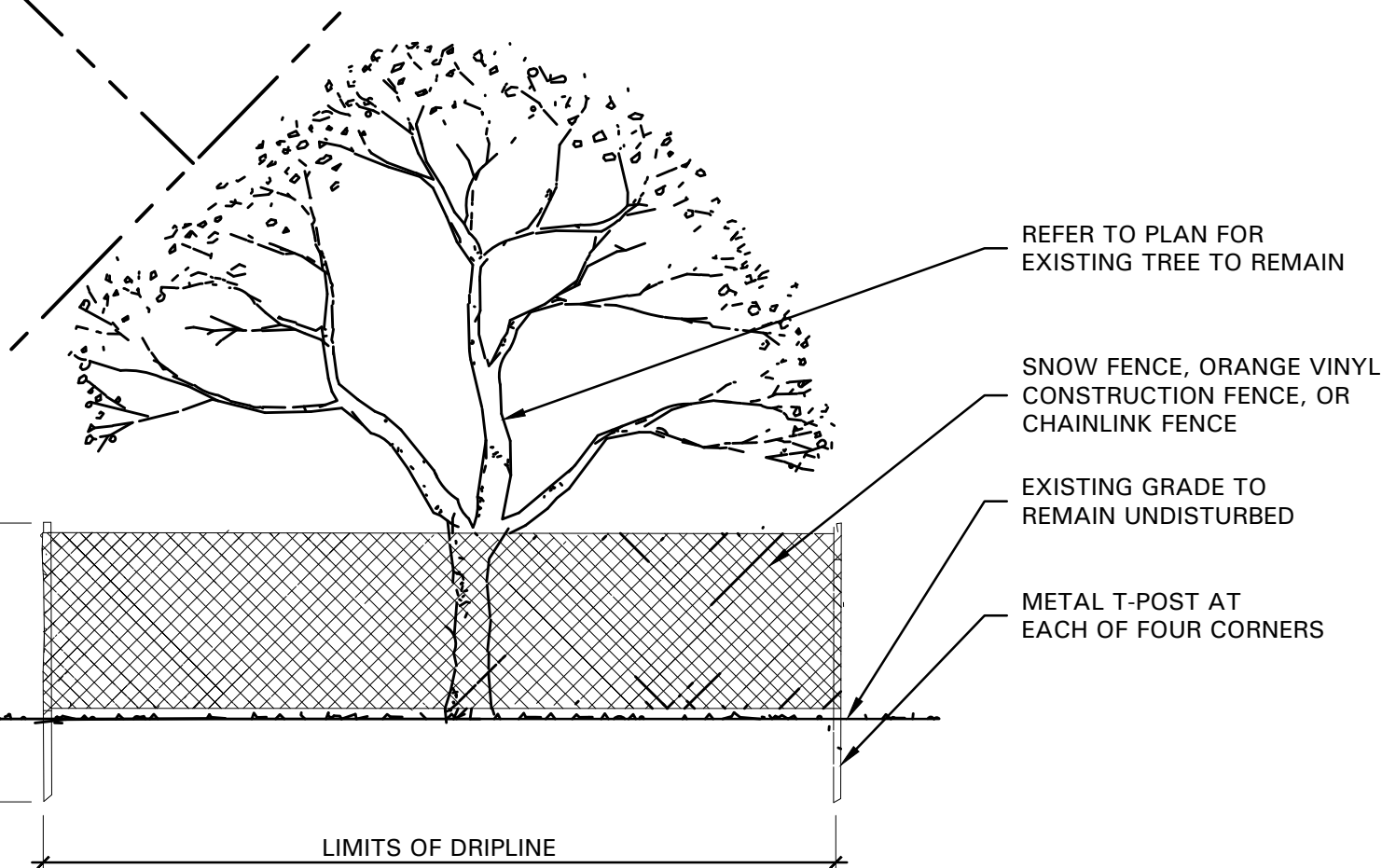
TREE PRESERVATION NOTES

- EXISTING TREES TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION FROM TREE STRUCTURE DAMAGE AND COMPACTION OF SOIL UNDER AND AROUND DRIP LINE (CANOPY) OF TREE.
- IF ANY ROOT STRUCTURE IS DAMAGED DURING ADJACENT EXCAVATION / CONSTRUCTION, NOTIFY OWNER'S AUTHORIZED REPRESENTATIVE IMMEDIATELY. IT IS RECOMMENDED THAT A LICENSED ARBORIST BE SECURED FOR THE TREATMENT OF ANY POSSIBLE TREE WOUNDS.
- NO DISTURBANCE OF THE SOIL GREATER THAN 4" SHALL BE LOCATED CLOSER TO THE TREE TRUNK THAN 1/2 THE DISTANCE OF THE DRIP LINE TO THE TREE TRUNK. A MINIMUM OF 75% OF THE DRIP LINE AND ROOT ZONE SHALL BE PRESERVED AT NATURAL GRADE.
- ANY FINE GRADING DONE WITHIN THE CRITICAL ROOT ZONES OF THE PROTECTED TREES MUST BE DONE WITH LIGHT MACHINERY SUCH AS A BOBCAT OR LIGHT TRACTOR. NO EARTH MOVING EQUIPMENT WITH TRACKS IS ALLOWED WITHIN THE CRITICAL ROOT ZONE OF THE TREES.
- NO MATERIALS INTENDED FOR USE IN CONSTRUCTION OR WASTE MATERIALS ACCUMULATED DUE TO EXCAVATION OR DEMOLITION SHALL BE PLACED WITHIN THE LIMITS OF THE DRIP LINE OF ANY TREE.
- NO EQUIPMENT MAY BE CLEANED OR TOXIC SOLUTIONS, OR OTHER LIQUID CHEMICALS, SHALL BE DEPOSITED WITHIN THE LIMITS OF THE DRIP LINE OF A TREE, INCLUDING BUT NOT LIMITED TO: PAINT, OIL, SOLVENTS, ASPHALT, CONCRETE, MORTAR, PRIMERS, ETC.
- NO SIGNS, WIRES OR OTHER ATTACHMENTS, OTHER THAN THOSE OF A PROTECTIVE NATURE, SHALL BE ATTACHED TO ANY TREE.
- NO VEHICULAR / CONSTRUCTION EQUIPMENT TRAFFIC OR PARKING IS ALLOWED WITHIN THE LIMITS OF THE DRIP LINE OF TREES.
- BORING OF UTILITIES MAY BE PERMITTED UNDER PROTECTED TREES IN CERTAIN CIRCUMSTANCES. THE MINIMUM LENGTH OF THE BORE SHALL BE THE WIDTH OF THE TREE'S CANOPY AND SHALL BE A MINIMUM DEPTH OF FORTY-EIGHT (48") INCHES.
- IRRIGATION TRENCHING WHICH MUST BE DONE WITHIN THE CRITICAL ROOT ZONE OF A TREE SHALL BE DUG BY HAND AND ENTER THE AREA IN A RADIAL MANNER.
- ALL TREES TO BE REMOVED FROM THE SITE SHALL BE FLAGGED BY THE CONTRACTOR WITH BRIGHT RED VINYL TAPE (3" WIDTH) WRAPPED AROUND THE MAIN TRUNK AT A HEIGHT OF FOUR (4') FEET ABOVE GRADE. FLAGGING SHALL BE APPROVED BY OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO ANY TREE REMOVAL. CONTRACTOR SHALL CONTACT OWNER'S AUTHORIZED REPRESENTATIVE WITH 72 HOURS NOTICE TO SCHEDULE ON-SITE MEETING.
- ALL TREES TO REMAIN, AS NOTED ON DRAWINGS, SHALL HAVE PROTECTIVE FENCING LOCATED AT THE TREE'S DRIP LINE. THE PROTECTIVE FENCING MAY BE COMPRISED OF SNOW FENCING, ORANGE VINYL CONSTRUCTION FENCING, CHAIN LINK FENCE OR OTHER SIMILAR FENCING WITH A FOUR (4') FOOT APPROXIMATE HEIGHT. THE PROTECTIVE FENCING SHALL BE LOCATED AS INDICATED ON THE TREE PROTECTION DETAIL.
- WHEN A LOW HANGING LIMB IS BROKEN DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE IMMEDIATELY. UNDER NO CIRCUMSTANCE SHALL THE CONTRACTOR PRUNE ANY PORTION OF THE DAMAGED TREE WITHOUT THE PRIOR APPROVAL BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

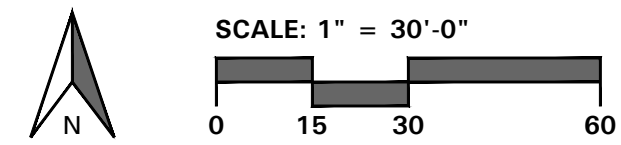
TREE SURVEY FIELD DATA				
No.	Dia. (inches)	Species (common name)	Status	Remarks
1	20	CEDAR	TO REMAIN	
2	18	CEDAR	TO BE REMOVED	
3	22	HACKBERRY	TO BE REMOVED	
4	17	HACKBERRY	TO BE REMOVED	
5	6	HACKBERRY	TO BE REMOVED	NOT PROTECTED
6	8	HACKBERRY	TO BE REMOVED	NOT PROTECTED
7	8	HACKBERRY	TO BE REMOVED	NOT PROTECTED
8	10	HACKBERRY	TO BE REMOVED	NOT PROTECTED
9	26	HACKBERRY	TO BE REMOVED	
10	16	HACKBERRY	TO BE REMOVED	
11	14	HACKBERRY	TO BE REMOVED	
12	11	HACKBERRY	TO BE REMOVED	
13	10	WILLOW	TO BE REMOVED	NOT PROTECTED
14	7	WILLOW	TO BE REMOVED	NOT PROTECTED
15	10	HACKBERRY	TO BE REMOVED	NOT PROTECTED
16	9	OAK	TO BE REMOVED	
17	8	OAK	TO BE REMOVED	
18	13	ELM	TO BE REMOVED	
19	24	WILLOW	TO BE REMOVED	NOT PROTECTED
20	10	HACKBERRY	TO BE REMOVED	NOT PROTECTED
21	9	HACKBERRY	TO BE REMOVED	NOT PROTECTED
22	11	OAK	TO BE REMOVED	
23	15	WILLOW	TO BE REMOVED	NOT PROTECTED
24	11	CHINABERRY	TO BE REMOVED	NOT PROTECTED
25	15	OAK	TO BE REMOVED	
26	8	OAK	TO BE REMOVED	
27	14	CHINABERRY	TO BE REMOVED	NOT PROTECTED
28	11	CHINABERRY	TO BE REMOVED	NOT PROTECTED
29	10	HACKBERRY	TO BE REMOVED	NOT PROTECTED
Total Caliper Inches on Site				371
Total Caliper Inches Removed				351
Total Mitigation Inches Required				126
Total Mitigation Inches Provided				42
Mitigation Trees Paid into Tree Fund				\$3,750
ROW Trees Paid into Tree Fund				\$6,750
Total Amount Paid into Tree Fund				\$10,500

EXISTING TREE LEGEND

- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- TREE PROTECTION FENCING TO REMAIN DURING CONSTRUCTION REFER TO 01/L1.01



01 TREE PROTECTIVE FENCING
NOT TO SCALE



4245 North Central Expy
Suite 501
Dallas, Texas 75205
214.865.7192 office

SUBMITTED: 5/13/16

CASE NO. SP2016-013

CARENOW I-30 & HILLTOP DRIVE

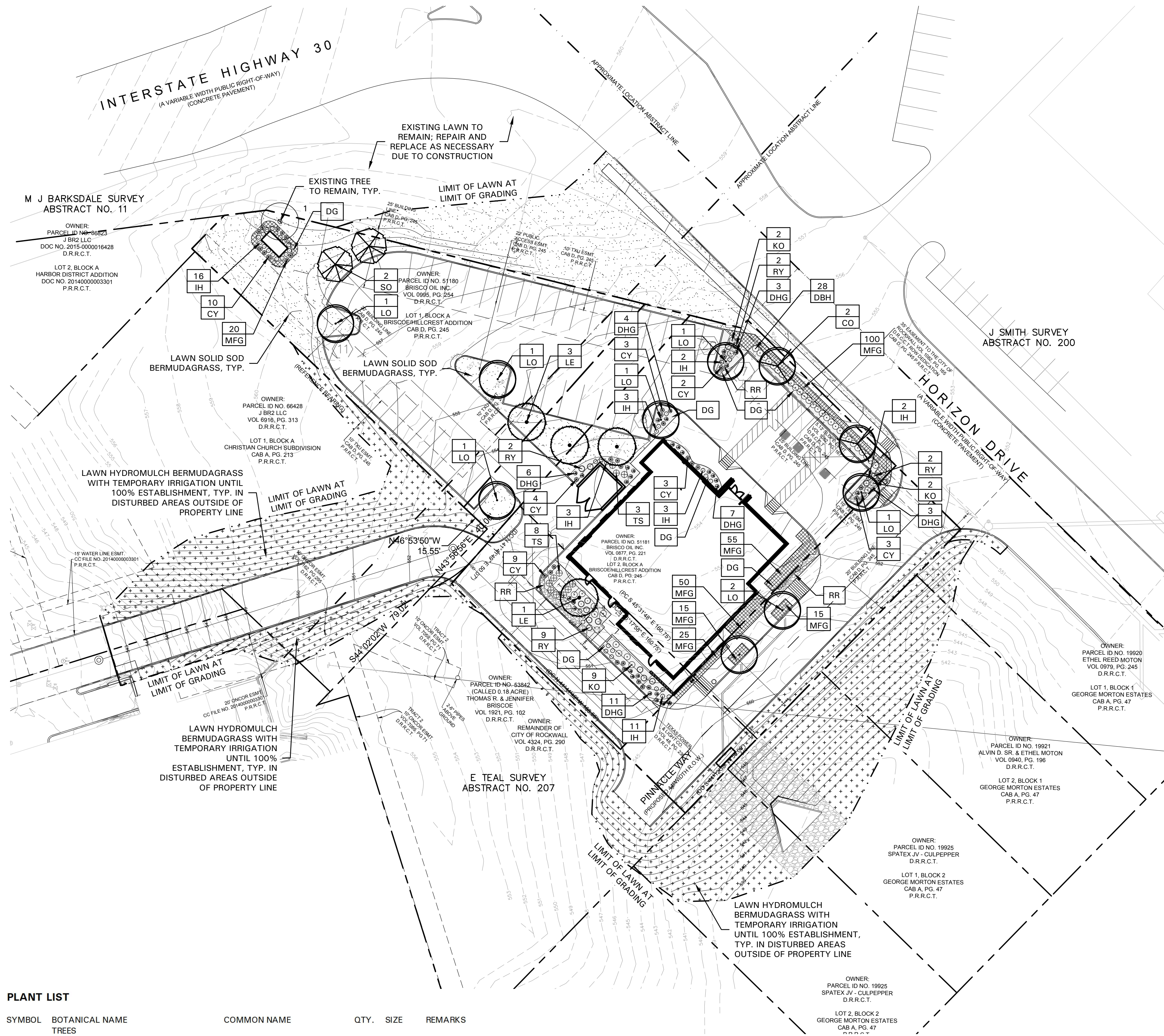
LEGAL DESCRIPTION:
LOT 1, LOT 2 & LOT 3, BLOCK A
BRISCOE / HILLCREST ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

OWNER:
TOM R BRISCOE AND BRISCOE OIL, INC.
2323 STEVENS ROAD,
HEALTH, TX, 75032
CONTACT: DAVID ENGLISH
PH: 972.961.8532

DEVELOPER:
CRESTVIEW REAL ESTATE, LLC.
12720 HILLCREST RD., SUITE #650
DALLAS, TX 75230
CONTACT: GRAY STOGNER
PH: 214.343.4477

APPLICANT:
CLAYMOORE ENGINEERING, INC.
1903 CENTRAL DR., SUITE #406
BEDFORD, TX 76021
PH: 817.281.0572

CITY CASE #:



PLANT LIST

SYMBOL	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	REMARKS
TREES					
CO	<i>Quercus muehlenbergii</i>	Chinkapin Oak	2	3" cal.	container grown, 12' ht., 4' spread, 4' branching ht., matching
LE	<i>Ulmus parvifolia</i> 'Sempervirens'	Lacebark Elm	4	3" cal.	container grown, 12' ht., 4' spread, 4' branching ht., matching
LO	<i>Quercus virginiana</i>	Live Oak	8	3" cal.	container grown, 12' ht., 4' spread, 4' branching ht., matching
SO	<i>Quercus shumardii</i>	Shumard Red Oak	2	3" cal.	container grown, 12' ht., 4' spread, 4' branching ht., matching
SHRUBS/GROUND COVER					
CY	<i>Yucca filamentosa</i> 'Color Guard'	Color Guard Yucca	34	5 gal.	container full, 36" o.c.
DBH	<i>Ilex cornuta</i> 'Burfordii Nana'	Dwarf Burford Holly	28	5 gal.	container full, 24" spread, 36" o.c.
DHG	<i>Pennisetum alopecuroides</i> 'Hameln'	Dwarf Hameln Grass	34	3 gal.	container full, 24" o.c.
IH	<i>Raphiolepis indica</i> 'Clara'	Indian Hawthorne 'Clara'	40	5 gal.	container full, 20" spread, 24" o.c.
KO	<i>Rosa hybrida</i> 'Radtke'	Double Knock Out Rose	13	5 gal.	container full, 20" spread, 36" o.c.
MFG	<i>Nassella tenuissima</i>	Mexican Feathergrass	280	1 gal.	container full, 24" o.c.
RY	<i>Hesperaloe parvifolia</i>	Red Yucca	15	5 gal.	container full, 36" o.c.
TS	<i>Leucophyllum frutescens</i> 'Green Cloud'	Texas Sage 'Green Cloud'	11	5 gal.	container full, 20" spread, 24" o.c.
DG		Decomposed Granite			4" depth, compacted in 1" lifts
RR		Colorado River Rock			1"-3" dia., 4" depth
	<i>Cynodon dactylon</i>	Common Bermudagrass			refer to notes

NOTE: ALL TREES SHALL HAVE STRAIGHT TRUNKS AND BE MATCHING WITHIN VARIETIES.
PLANT LIST IS AN AID TO BIDDERS ONLY. CONTRACTOR SHALL VERIFY ALL QUANTITIES ON PLAN.
ALL HEIGHTS AND SPREADS ARE MINIMUMS. ALL PLANT MATERIAL SHALL MEET OR EXCEED REMARKS AS INDICATED.

LANDSCAPE NOTES

- CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED SITE ELEMENTS AND NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES. SURVEY DATA OF EXISTING CONDITIONS WAS SUPPLIED BY OTHERS.
- CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES AND NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICTS. CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN THE VICINITY OF UNDERGROUND UTILITIES.
- CONTRACTOR SHALL PROVIDE A MINIMUM 2% SLOPE AWAY FROM ALL STRUCTURES.
- CONTRACTOR SHALL FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS AS INDICATED. LEAVE AREAS TO RECEIVE TOPSOIL 3" BELOW FINAL FINISHED GRADE IN PLANTING AREAS AND 1" BELOW FINAL FINISHED GRADE IN LAWN AREAS.
- ALL PLANTING BEDS AND LAWN AREAS SHALL BE SEPARATED BY STEEL EDGING. NO STEEL EDGING SHALL BE INSTALLED ADJACENT TO BUILDINGS, WALKS, OR CURBS. CUT STEEL EDGING AT 45 DEGREE ANGLE WHERE IT INTERSECTS WALKS AND CURBS.
- TOP OF MULCH SHALL BE 1/2" MINIMUM BELOW THE TOP OF WALKS AND CURBS.
- ALL LAWN AREAS SHALL BE SOLID SOD BERMUDAGRASS, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL REQUIRED LANDSCAPE AREAS SHALL BE PROVIDED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM WITH RAIN AND FREEZE SENSORS AND EVAPOTRANSPIRATION (ET) WEATHER-BASED CONTROLLERS AND SAID IRRIGATION SYSTEM SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL AND INSTALLED BY A LICENSED IRRIGATOR.
- CONTRACTOR SHALL PROVIDE BID PROPOSAL LISTING UNIT PRICES FOR ALL MATERIAL PROVIDED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED LANDSCAPE AND IRRIGATION PERMITS.

MAINTENANCE NOTES

- THE OWNER, TENANT AND THEIR AGENT, IF ANY, SHALL BE JOINTLY AND SEVERALLY RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE.
- ALL LANDSCAPE SHALL BE MAINTAINED IN A NEAT AND ORDERLY MANNER AT ALL TIMES. THIS SHALL INCLUDE MOWING, EDGING, PRUNING, FERTILIZING, WATERING, WEEDING AND OTHER SUCH ACTIVITIES COMMON TO LANDSCAPE MAINTENANCE.
- ALL LANDSCAPE AREAS SHALL BE KEPT FREE OF TRASH, LITTER, WEEDS AND OTHER SUCH MATERIAL OR PLANTS NOT PART OF THIS PLAN.
- ALL PLANT MATERIAL SHALL BE MAINTAINED IN A HEALTHY AND GROWING CONDITION AS IS APPROPRIATE FOR THE SEASON OF THE YEAR.
- ALL PLANT MATERIAL WHICH DIES SHALL BE REPLACED WITH PLANT MATERIAL OF EQUAL OR BETTER VALUE.
- CONTRACTOR SHALL PROVIDE SEPARATE BID PROPOSAL FOR ONE YEAR'S MAINTENANCE TO BEGIN AFTER FINAL ACCEPTANCE.

NO TREES WITHIN 5'-0" OF ANY UTILITIES

GENERAL LAWN NOTES

- CONTRACTOR SHALL COORDINATE OPERATIONS AND AVAILABILITY OF EXISTING TOPSOIL WITH ON-SITE CONSTRUCTION MANAGER.
- CONTRACTOR SHALL LEAVE LAWN AREAS 1" BELOW FINAL FINISHED GRADE PRIOR TO TOPSOIL INSTALLATION.
- CONTRACTOR SHALL FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS AS INDICATED ON CIVIL PLANS. ADJUST CONTOURS TO ACHIEVE POSITIVE DRAINAGE AWAY FROM BUILDINGS. PROVIDE UNIFORM ROUNDING AT TOP AND BOTTOM OF SLOPES AND OTHER BREAKS IN GRADE. CORRECT IRREGULARITIES AND AREAS WHERE WATER MAY STAND.
- ALL LAWN AREAS SHALL BE FINE GRADED, IRRIGATION TRENCHES COMPLETELY SETTLED AND FINISH GRADE APPROVED BY THE OWNER'S CONSTRUCTION MANAGER OR LANDSCAPE ARCHITECT PRIOR TO LAWN INSTALLATION.
- CONTRACTOR SHALL REMOVE ALL ROCKS 3/4" DIAMETER AND LARGER, DIRT CLOUDS, STICKS, CONCRETE SPOILS, ETC. PRIOR TO PLACING TOPSOIL AND LAWN INSTALLATION.
- CONTRACTOR SHALL MAINTAIN ALL LAWN AREAS UNTIL FINAL ACCEPTANCE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: MOWING, WATERING, WEEDING, CULTIVATING, CLEANING AND REPLACING DEAD OR BARE AREAS TO KEEP PLANTS IN A VIGOROUS, HEALTHY CONDITION.
- CONTRACTOR SHALL GUARANTEE ESTABLISHMENT OF ACCEPTABLE TURF AREA AND SHALL PROVIDE REPLACEMENT FROM LOCAL SUPPLY IF NECESSARY.

SOLID SOD NOTES

- PLANT SOD BY HAND TO COVER INDICATED AREAS COMPLETELY. ENSURE EDGES OF SOD ARE TOUCHING. TOP DRESS JOINTS BY HAND WITH TOPSOIL TO FILL VOIDS.
- ROLL GRASS AREAS TO ACHIEVE A SMOOTH, EVEN SURFACE, FREE FROM UNNATURAL UNDULATIONS.
- WATER SOD THOROUGHLY AS SOD OPERATION PROGRESSES.
- IF INSTALLATION OCCURS BETWEEN SEPTEMBER 1 AND MARCH 1, OVER-SEED BERMUDAGRASS SOD WITH WINTER RYEGRASS, AT A RATE OF FOUR (4) POUNDS PER ONE THOUSAND (1000) SQUARE FEET.

LANDSCAPE TABULATIONS

THE CITY OF ROCKWALL, TEXAS

STREET LANDSCAPING

- 10' wide landscape buffer with one tree per 50 l.f.

HORIZON DR.: 144 l.f.	
Required	Provided
(3) trees, 3" cal.	(3) trees, 3" cal.

PARKING LOT LANDSCAPING

- 5% of the interior parking lot shall be landscape.

Total interior parking lot area: 16,283 s.f.
Total parking spaces: 47 spaces

Required	Provided
814 s.f. (5%)	1,369 s.f. (8%)

SITE LANDSCAPING

- 15% of the total site shall be landscaped for COMMERCIAL.
- 50% of the total requirements shall be located in the front of and along side buildings for COMMERCIAL.

Total site: 0.92 AC; 39,870 s.f.

Required	Provided
5,961 s.f. (15%)	9,361 s.f. (23%)
2,991 s.f. (50%)	8,415 s.f.

CASE NO. SP2016-013

CARENOW I-30 & HILLTOP DRIVE

LEGAL DESCRIPTION:

LOT 1, LOT 2 & LOT 3, BLOCK A
BRISCOE / HILLCREST ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

OWNER:

TOM R BRISCOE AND BRISCOE OIL, INC.
2323 STEVENS ROAD,
HEALTH, TX, 75032
CONTACT: DAVID ENGLISH
PH: 972.961.8532

DEVELOPER:

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12720 HILLCREST RD., SUITE #650
DALLAS, TX 75230
CONTACT: GRAY STOGNER
PH: 214.343.4477

APPLICANT:

CLAYMOORE ENGINEERING, INC.
1903 CENTRAL DR., SUITE #406
BEDFORD, TX 76021
PH: 817.281.0572

CITY CASE #:



4245 North Central Expy
Suite 501
Dallas, Texas 75205
214.865.7192 office

SUBMITTED: 5/13/16



CARENOW
LOT 1 & 2, BLOCK A
BRISCOE/HILLCREST ADDITION
ROCKWALL, TX

NO.	DATE	REVISION	BY
4	01/04/17	COORDINATION	MGC
3	12/19/16	COORDINATION	MGC
2	10/06/16	COORDINATION	MGC
1	8/29/16	COORDINATION	MGC

LANDSCAPE PLAN

DESIGN:	MGC
DRAWN:	MGC
CHECKED:	KAH
DATE:	06/08/2016

SHEET

L2.01

SECTION 32 9300 - LANDSCAPE

PART 1 - GENERAL

1.1 REFERENCED DOCUMENTS

- A. Refer to Landscape Plans, notes, details, bidding requirements, special provisions, and schedules for additional requirements.

1.2 DESCRIPTION OF WORK

- A. Work included: Furnish all supervision, labor, materials, services, equipment and appliances required to complete the work covered in conjunction with the landscaping covered in these specifications and landscaping plans, including:

- Planting (trees, shrubs and grasses)
- Bed preparation and fertilization
- Notification of sources
- Water and maintenance until final acceptance
- Guarantee

1.3 REFERENCE STANDARDS

- A. American Standard for Nursery Stock published by American Association of Nurserymen; 27 October 1980. Edition; by American National Standards Institute, Inc. (Z60.1) - plant material
- B. American Joint Committee on Horticultural Nomenclature: 1942 Edition of Standardized Plant Names.
- C. Texas Association of Nurserymen, Grades and Standards
- D. Hortis Third, 1976 - Cornell University

1.4 NOTIFICATION OF SOURCES AND SUBMITTALS

- A. Samples: Provide representative quantities of sandy loam soil, mulch, bed mix material, gravel and crushed stone. Samples shall be approved by Owner's Authorized Representative before use on the project.

1.5 JOB CONDITIONS

- A. General Contractor to complete the following punch list: Prior to Landscape Contractor initiating any portion of landscape installation, General Contractor shall leave planting bed areas three (3") inches below final finish grade of sidewalks, drives and curbs as shown on the drawings. All lawn areas to receive solid sod shall be left one (1") inch below the final finish grade of sidewalks, drives and curbs. All construction debris shall be removed prior to Landscape Contractor beginning any work.
- B. Storage of materials and equipment at the job site will be at the risk of the Landscape Contractor. The Owner cannot be held responsible for theft or damage.

1.6 MAINTENANCE AND GUARANTEE

- A. Maintenance:
- The Landscape Contractor shall be held responsible for the maintenance of all work from the time of planting until final acceptance by the Owner. No trees, shrubs, groundcover or grass will be accepted unless they show healthy growth and satisfactory foliage conditions.
 - Maintenance shall include watering of trees and plants, cultivation, weeding spraying, edging, pruning of trees, mowing of grass, cleaning up and all other work necessary of maintenance.
 - A written notice requesting final inspection and acceptance should be submitted to the Owner at least seven (7) days prior to completion. An on-site inspection by the Owner's Authorized Representative will be completed prior to written acceptance.
- B. Guarantee:

- Trees, shrubs and groundcover shall be guaranteed for a twelve (12) month period after final acceptance. The Contractor shall replace all dead materials as soon as weather permits and upon notification of the Owner. Plants, including trees, which have partially died so that shape, size, or symmetry have been damaged, shall be considered subject to replacement. In such cases, the opinion of the Owner shall be final.

- a. Plants used for replacement shall be of the same size and kind as those originally planted and shall be planted as originally specified. All work, including materials, labor and equipment used in replacements, shall carry a twelve (12) month guarantee. Any damage, including ruts in lawn or bed areas, incurred as a result of making replacements shall be immediately repaired.

- b. At the direction of the Owner, plants may be replaced at the start of the next year's planting season. In such cases, dead plants shall be removed from the premises immediately.

- c. When plant replacements are made, plants, soil mix, fertilizer and mulch are to be utilized as originally specified and re-inspected for full compliance with the contract requirements. All replacements are to be included under "Work" of this section.

- The Owner agrees that for the guarantee to be effective, he will water plants at least twice a week during dry periods and cultivate beds once a month after final acceptance.

- The above guarantee shall not apply where plants die after acceptance because of injury from storms, hail, freeze, insects, diseases, injury by humans, machines or theft.

- Acceptance for all landscape work shall be given after final inspection by the Owner provided the job is in a complete, undamaged condition and there is a stand of grass in all lawn areas. At that time, the Owner will assume maintenance on the accepted work.

- C. Repairs: Any necessary repairs under the Guarantee must be made within ten (10) days after receiving notice, weather permitting. In the event the Landscape Contractor does not make repairs accordingly, the Owner, without further notice to Contractor, may provide materials and men to make such repairs at the expense to the Landscape Contractor.

1.7 QUALITY ASSURANCE

- A. General: Comply with applicable federal, state, county and local regulations governing landscape materials and work.
- B. Personnel: Employ only experienced personnel who are familiar with the required work. Provide full time supervision by a qualified foreman acceptable to Landscape Architect.

- C. Selection of Plant Material:
- Make contact with suppliers immediately upon obtaining notice of contract acceptance to select and book materials. Develop a program of maintenance (pruning and fertilization) which will ensure the purchased materials will meet and / or exceed project specifications.

- Substitutions: Do not make plant material substitutions. If the specified landscape material is not obtainable, submit proof of non-availability to Landscape Architect, together with proposal for use of equivalent material. At the time bids are submitted, the Contractor is assumed to have located the materials necessary to complete the job as specified.

- Landscape Architect will provide a key identifying each tree location on site. Written verification will be required to document material selection, source and delivery schedules to site.

- Measurements: Measure trees with branches and trunks or canes in their normal position. Do not prune to obtain required sizes. Take caliper measurements six inches above ground for trees up to and including 4" caliper size, and twelve inches above ground for larger sizes. Measure main body of all plant material of height and spread dimensions,

do not measure from branch or root tip-to-tip.

- Owner's Authorized Representative shall inspect all plant material with requirements for genus, species, cultivar / variety size and quality.

- Owner's Authorized Representative retains the right to further inspect all plant material upon arrival to the site and during installation for size and condition of root balls and root systems, limbs, branching habit, insects, injuries and latent defects.

- Owner's Authorized Representative may reject unsatisfactory or defective material at any time during the process work. Remove rejected materials immediately from the site and replace with acceptable material at no additional cost to the Owner. Plants damaged in transit or at job site shall be rejected.

1.8 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Preparation:

- Balled and Burlapped (B&B) Plants: Dig and prepare shipment in a manner that will not damage roots, branches, shape and future development.

- Container Grown Plants: Deliver plants in rigid container to hold ball shape and protect root mass.

B. Delivery:

- Deliver packaged materials in sealed containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery and while stored on site.

- Deliver only plant materials that can be planted in one day unless adequate storage and watering facilities are available on job site.

- Protect root balls by heeling in with sawdust or other approved moisture retaining material if not planted within 24 hours of delivery.

- Protect plants during delivery to prevent damage to root balls or desiccation of leaves. Keep plants moist at all times. Cover all materials during transport.

- Notify Owner's Authorized Representative of delivery schedule 72 hours in advance job site.

- Remove rejected plant material immediately from job site.

- To avoid damage or stress, do not lift, move, adjust to plumb, or otherwise manipulate plants by trunk or stems.

PART 2 - PRODUCTS

2.1 PLANTS

- A. General: Well-formed No. 1 grade or better nursery grown stock. Listed plant heights are from tops of root balls to nominal tops of plants. Plant spread refers to nominal outer width of the plant, not to the outer leaf tips. Plants will be individually approved by the Owner's Authorized Representative and his decision as to their acceptability shall be final.

- B. Quantities: The drawings and specifications are complimentary. Anything called for on one and not the other is as binding as if shown and called for on both. The plant schedule is an aid to bidders only. Confirm all quantities on plan.

- C. Quality and size: Plant materials shall conform to the size given on the plan, and shall be healthy, symmetrical, well-shaped, full branched and well rooted. The plants shall be free from injurious insects, diseases, injuries to the bark or roots, broken branches, objectionable disfigurements, insect eggs and larvae, and are to be of specimen quality.

- D. Approval: All plants which are found unsuitable in growth, or are in any unhealthy, badly shaped or undersized condition will be rejected by the Owner's Authorized Representative either before or after planting and shall be removed at the expense of the Landscape Contractor and replaced with acceptable plant as

specified at no additional cost to the Owner.

- Trees shall be healthy, full-branched, well-shaped, and shall meet the minimum trunk and diameter requirements of the plant schedule. Balls shall be firm, neat, slightly tapered and well composed in burlap. Any tree loose in the ball or with a broken root ball at time of planting will be rejected. Balls shall be ten (10") inches in diameter for each one (1") inch of trunk diameter, measured six (6") inches above ball. (Nomenclature confirms to the customary nursery usage. For clarification, the term "multi-trunk" defines a plant having three (3) or more trunks of nearly equal diameter.)

- Pruning: All pruning of trees and shrubs, as directed by the Landscape Architect prior to final acceptance, shall be executed by the Landscape Contractor at no additional cost to the Owner.

2.2 SOIL PREPARATION MATERIALS

A. Sandy Loam:

- Friable, fertile, dark, loamy soil, free of clay lumps, subsoil, stones and other extraneous material and reasonably free of weeds and foreign grasses. Loam containing Dallasgrass or Nutgrass shall be rejected.

- Physical properties as follows:
 - Clay - between 7-27 percent
 - Silt - between 15-25 percent
 - Sand - less than 52 percent

- Organic matter shall be 3%-10% of total dry weight.

- If requested, Landscape Contractor shall provide a certified soil analysis conducted by an approved soil testing laboratory verifying that sandy loam meets the above requirements.

- B. Organic Material: Compost with a mixture of 80% vegetative matter and 20% animal waste. Ingredients should be a mix of course and fine textured material.

- C. Premixed Bedding Soil as supplied by Vital Earth Resources, Gladewater, Texas; Professional Bedding Soil as supplied by Living Earth Technology, Dallas, Texas or Acid Gro Municipal Mix as supplied by Soil Building Systems, Dallas, Texas or approved equal.

- D. Sharp Sand: Sharp sand must be free of seeds, soil particles and weeds.

- E. Mulch: Double Shredded Hardwood Mulch, partially decomposed, dark brown. Living Earth Technologies or approved equal.

- F. Organic Fertilizer: FertiLaid, Sustane, or Green Sense or equal as recommended for required applications. Fertilizer shall be delivered to the site in original unopened containers, each bearing the manufacturer's guaranteed statement of analysis.

- G. Commercial Fertilizer: 10-20-10 or similar analysis. Nitrogen source to be a minimum 50% slow release organic Nitrogen (SCU or UF) with a minimum 8% sulfur and 4% iron, plus iron nutrients.

- H. Peat: Commercial sphagnum peat moss or partially decomposed shredded pine bark or other approved organic material.

2.3 MISCELLANEOUS MATERIALS

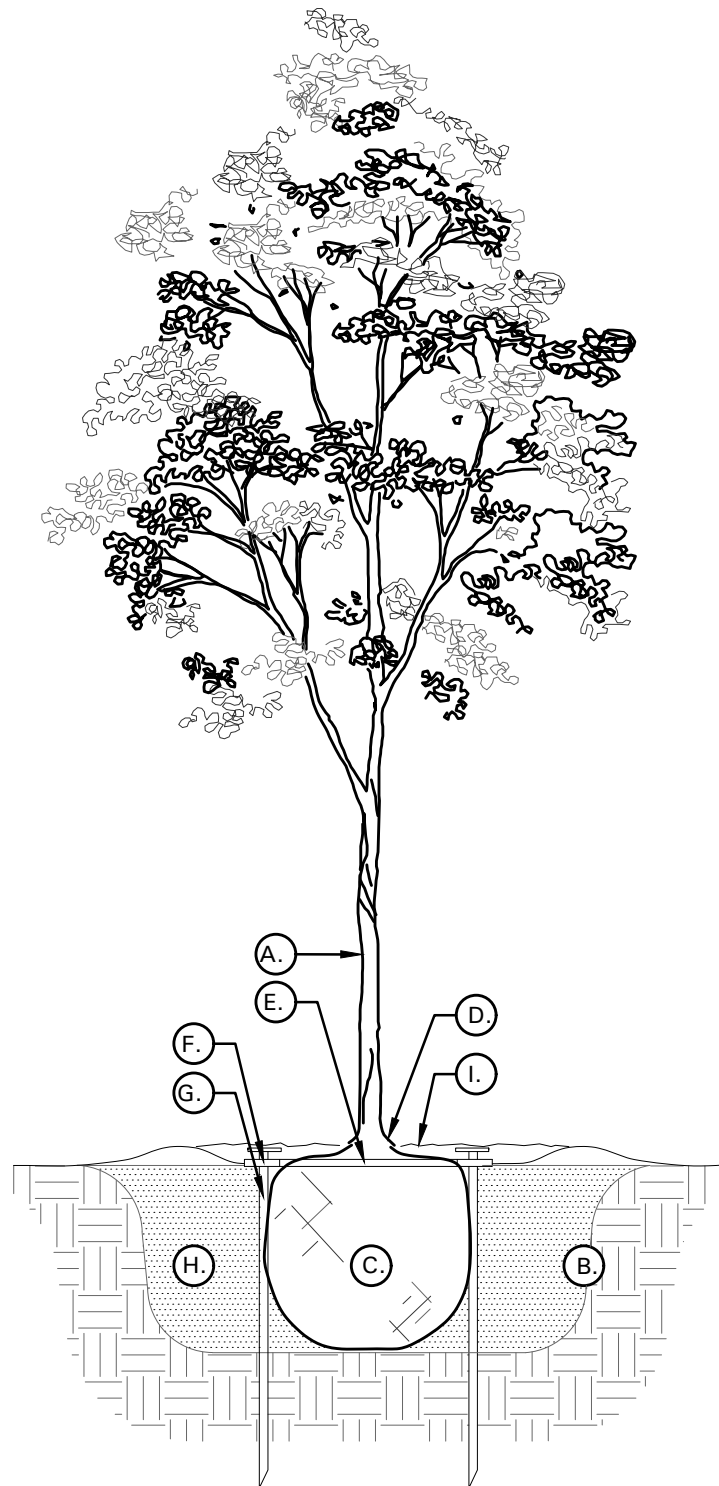
- A. Steel Edging: All steel edging shall be 3/16" thick x 4" deep x 16' long with 6 stakes per section, painted black at the factory as manufactured by The J.D. Russell Company and under its trade name DURAEDEGE Heavy Duty Steel.

- B. Staking Material for Shade Trees: refer to details.

- C. Gravel: Washed native pea gravel, graded 1 inch to 1-1/2 inches.

- D. Filter Fabric: 'Mirafit Mirascape' by Mirafit Construction Products available at Lone Star Products, Inc., (469) 523-0444 or approved equal.

- E. River Rock: 'Colorado', 1" - 3" dia.



01 TREE PLANTING DETAIL
NOT TO SCALE

TREE PLANTING DETAIL LEGEND
AND NOTES

- A. TREE: TREES SHALL CONFORM WITH LATEST AMERICAN STANDARD FOR NURSERY STOCK. www.anla.org

- B. TREE PIT: WIDTH TO BE AT LEAST TWO (2) TIMES THE DIAMETER OF THE ROOT BALL CENTER TREE IN HOLE & REST ROOT BALL ON UNDISTURBED NATIVE SOIL.

- C. ROOT BALL: REMOVE TOP 1/2 BURLAP AND ANY OTHER FOREIGN OBJECT; CONTAINER GROWN STOCK TO BE INSPECTED FOR GIRDLING ROOTS.

- D. ROOT FLARE: ENSURE THAT ROOT FLARE IS EXPOSED, FREE FROM MULCH, AND AT LEAST TWO INCHES ABOVE GRADE. TREES SHALL BE REJECTED WHEN GIRDLING ROOTS ARE PRESENT & ROOT FLARE IS NOT APPARENT.

- E. ROOTBALL ANCHOR RING: REFER TO MANUFACTURER'S GUIDELINES FOR SIZING. PLACE ROOTBALL ANCHOR RING ON BASE OF ROOTBALL. TRUNK SHOULD BE IN THE CENTER OF THE RING.

- F. 'U' BRACKET.

- G. NAIL STAKE: REFER TO MANUFACTURER'S GUIDELINES FOR SIZING. INSTALL NAIL STAKES WITH HAMMER OR Mallet FIRMLY INTO UNDISTURBED GROUND. DRIVE NAIL STAKES FLUSH WITH 'U' BRACKET ADJACENT TO ROOTBALL (DO NOT DISTURB ROOTBALL).

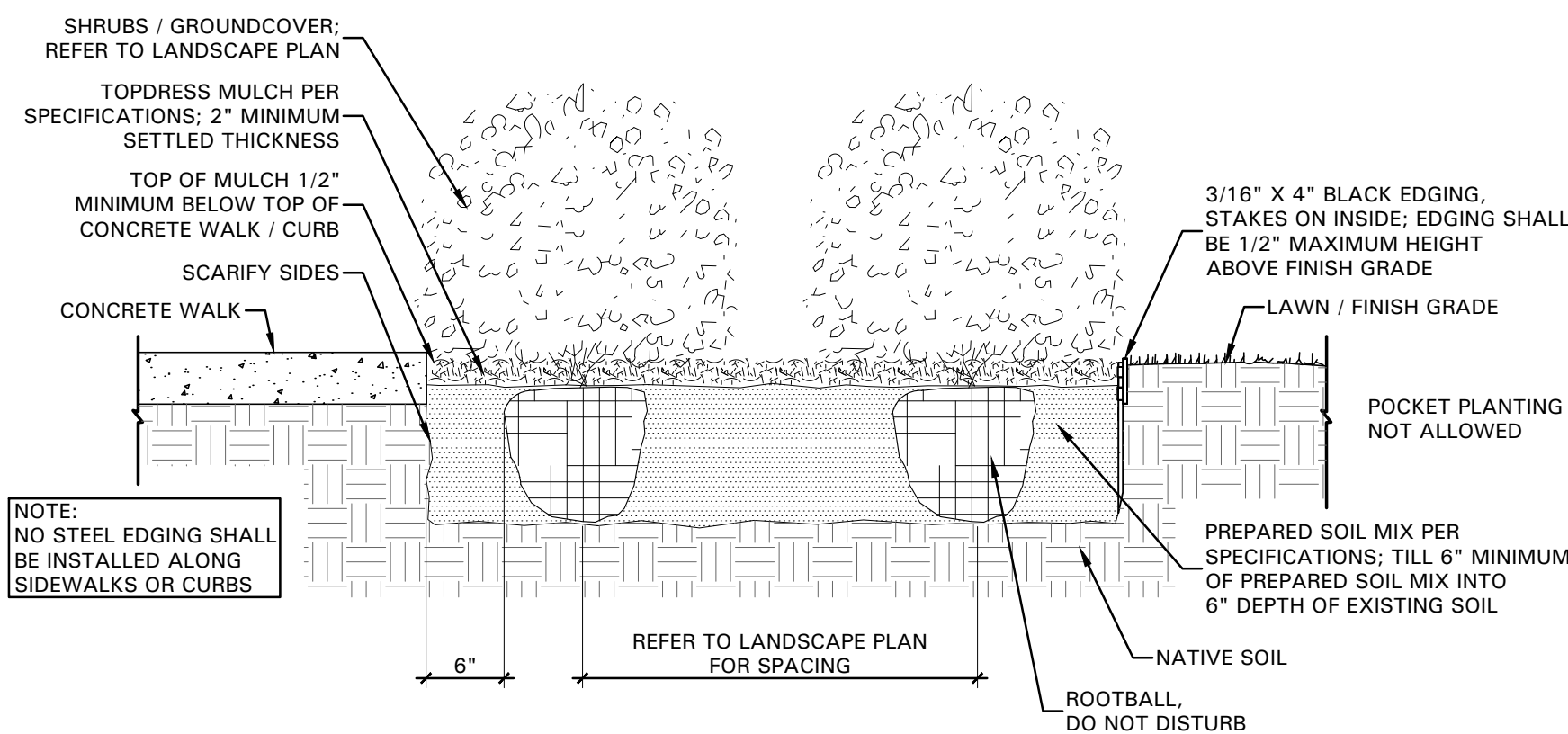
- H. BACKFILL: USE EXISTING NATIVE SOIL (no amendments) WATER THOROUGHLY TO ELIMINATE AIR POCKETS.

- I. MULCH: DOUBLE SHREDDED HARDWOOD MULCH 2" INCH SETTLED THICKNESS. WITH 2" HT. WATERING RING; ENSURE THAT ROOT FLARE IS EXPOSED. BELOW GROUND STAKE SHOULD NOT BE VISIBLE.

- J. TREE STAKES: TREE STAKE SOLUTIONS 'SAFETY STAKE' BELOW GROUND MODEL AVAILABLE FROM: Tree Stake Solutions ATTN: Jeff Tuley (903) 676-6143 jeth@treestakesolutions.com www.treestakesolutions.com

- OR APPROVED EQUAL. TREES SHALL BE STAKED BELOW GROUND WHERE NECESSARY; ABOVE GROUND STAKING IS EXPRESSLY PROHIBITED.

- K. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN A COPY OF THE MANUFACTURER'S SPECIFICATIONS PRIOR TO INSTALLATION OF TREE STAKES. CONTRACTOR SHALL ADHERE TO MANUFACTURER'S INSTALLATION GUIDELINES, SPECIFICATIONS, AND OTHER REQUIREMENTS FOR TREE STAKE INSTALLATION.



02 SHRUB / GROUNDCOVER DETAIL
NOT TO SCALE



- 4245 North Central Expy
- Suite 501
- Dallas, Texas 75205
- 214.865.7192 office

SUBMITTED: 5/13/16

tree planting detail as approved by the Landscape Architect if the percolation test fails.

- Backfill only with 5 parts existing soil or sandy loam and 1 part bed preparation. When the hole is dug in solid rock, topsoil from the same area should not be used. Carefully settle by watering to prevent air pockets. Remove the burlap from the top 1/2 of the ball, as well as all nylon, plastic string and wire. Container trees will usually be root bound, if so follow standard nursery practice of 'root scoring'.

- J. Do not wrap trees.

- K. Do not over prune.

- Mulch the top of the ball. Do not plant grass all the way to the trunk of the tree. Leave the area above the top of the ball and mulch with at least two (2") inches of specified mulch.

- All plant beds and trees to be mulched with a minimum settled thickness of two (2") inches over the entire bed or pit.

- Obstruction below ground: In the event that rock, or underground construction work or obstructions are encountered in any plant pit excavation work to be done under this section, alternate locations may be selected by the Owner. Where locations cannot be changed, the obstructions shall be removed to a depth of not less than three (3') feet below grade and no less than six (6") inches below the bottom of ball when plant is properly set at the required grade. The work of this section shall include the removal from the site of such rock or underground obstructions encountered at the cost of the Landscape Contractor.

- Trees and large shrubs shall be staked as site conditions require. Position stakes to secure trees against seasonal prevailing winds.

- Pruning and Mulching: Pruning shall be directed by the Landscape Architect and shall be pruned in accordance with standard horticultural practice following Fine Pruning, Class I pruning standards provided by the National Arborist Association.

- Dead wood, suckers, broken and badly bruised branches shall be removed. General tipping of the branches is not permitted. Do not cut terminal branches.

- Pruning shall be done with clean, sharp tools.
- Immediately after planting operations are completed, all tree pits shall be covered with a layer of organic material two (2") inches in depth. This limit of the organic material for trees shall be the diameter of the plant pit.

- Q. Steel Curbing Installation:

- Curbing shall be aligned as indicated on plans. Stake out limits of steel curbing and obtain Owners approval prior to installation.
- All steel curbing shall be free of kinks and abrupt bends.
- Top of curbing shall be 1/2" maximum height above final finished grade.
- Stakes are to be installed on the planting bed side of the curbing, as opposed to the grass side.
- Do not install steel edging along sidewalks or curbs.

3.3 CLEANUP AND ACCEPTANCE

- A. Cleanup: During the work, the premises shall be kept neat and orderly at all times. Storage areas for all materials shall be so organized so that they, too, are neat and orderly. All trash and debris shall be removed from the site as work progresses. Keep paved areas clean by sweeping or hosing them at end of each work day.

END OF SECTION

CASE NO. SP2016-013

CARENOW I-30 & HILLTOP DRIVE

LEGAL DESCRIPTION:

LOT 1, LOT 2 & LOT 3, BLOCK A
BRISCOE / HILLCREST ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

OWNER:

TOM R BRISCOE AND BRISCOE OIL, INC.
2323 STEVENS ROAD,
HEALTH, TX, 75032
CONTACT: DAVID ENGLISH
PH: 972.961.8532

DEVELOPER:

CRESTVIEW REAL ESTATE, LLC.
12720 HILLCREST RD., SUITE #650
DALLAS, TX 75230
CONTACT: GRAY STOGNER
PH: 214.343.4477

APPLICANT:

CLAYMOORE ENGINEERING, INC.
1903 CENTRAL DR., SUITE #406
BEDFORD, TX 76021
PH: 817.281.0572

CITY CASE #:

TEXAS REGISTRATION #14199



CARENOW
LOT 1 & 2, BLOCK A
BRISCOE/HILLCREST ADDITION
ROCKWALL, TX

NO.	DATE	REVISION	BY
4	01/04/17	COORDINATION	MGC
3	12/19/16	COORDINATION	MGC
2	10/06/16	COORDINATION	MGC
1	8/29/16	COORDINATION	MGC

LANDSCAPE SPECIFICATIONS
AND DETAILS

DESIGN:	MGC
DRAWN:	MGC
CHECKED:	KAH
DATE:	06/08/2016

SHEET

L2.02

File No. 2016-029

NO.	DATE	REVISION	BY
4	01/04/17	COORDINATION	MSC
3	12/19/16	COORDINATION	MSC
2	10/06/16	COORDINATION	MSC
1	8/29/16	COORDINATION	MSC

DESIGN:	JJW
DRAWN:	JJW
CHECKED:	JJW
DATE:	08/08/2016

CASE NO. SP2016-013

CARENOW I-30 & HILLTOP DRIVE

LEGAL DESCRIPTION:

LOT 1, LOT 2 & LOT 3, BLOCK A
BRISCOE / HILLCREST ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

OWNER:

TOM R BRISCOE AND BRISCOE OIL, INC.
2323 STEVENS ROAD,
HEALTH, TX, 75032
CONTACT: DAVID ENGLISH
PH: 972.961.8532

DEVELOPER:

CRESTVIEW REAL ESTATE, LLC
12720 HILLCREST RD., SUITE #650
DALLAS, TX 75230
CONTACT: GRAY STOGNER
PH: 214.343.4477

APPLICANT:

CLAYMOORE ENGINEERING, INC.
1903 CENTRAL DR., SUITE #406
BEDFORD, TX 76021
PH: 817.281.0572

CITY CASE #:

IRRIGATION LEGEND

- WEATHERMATIC LX-4 POP-UP LAWN HEAD
- MP HUNTER MP ROTATOR NOZZLE
- WEATHERMATIC TURBO ROTARY FC
- WEATHERMATIC TURBO ROTARY PC
- ⊠ WEATHERMATIC 106.5 BUBBLER (2 PER TREE, TYP.)
- ⊕ WEATHERMATIC 11000 SERIES ELECTRIC VALVE
- ▲ WEATHERMATIC QV75 QUICK COUPLER
- CONTROLLER, SIZE AS INDICATED
- WATER METER, SIZE AS INDICATED WITH D.C.A., SIZE AS INDICATED
- PVC SCHEDULE 40 SLEEVING
- PVC CLASS 200 MAINLINE
- PVC CLASS 200 LATERAL LINE
- XXX VALVE SIZE
- XXX GPM
- NETAFIM TECHLINE#TDL6-1210 (18" LATERAL SPACING, 12" EMITTER SPACING) PVC LATERAL PIPING SIZED AS REQUIRED INSTALL ALL EQUIPMENT ACCORDING TO MANUFACTURERS SPECIFICATIONS
- NETAFIM TECHLINE#TDL6-1210 (18" LATERAL SPACING, 12" EMITTER SPACING) PVC LATERAL PIPING SIZED AS REQUIRED INSTALL ALL EQUIPMENT ACCORDING TO MANUFACTURERS SPECIFICATIONS
- XXX NETAFIM DISC FILTER #DF100-080 NETAFIM PRESSURE REGULATOR #PRV15025 INSTALL ALL EQUIPMENT ACCORDING TO MANUFACTURERS SPECIFICATIONS

BUBBLER PIPING CHART

NUMBER OF BUBBLERS	SIZE OF PIPE
1 - 5	1/2"
6 - 10	3/4"
11 - 20	1"
21 - 30	1 1/2"
31 - 40	1 1/2"

SMARTLINE CERTIFIED DESIGN

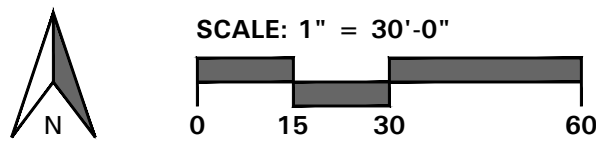
- THIS IRRIGATION DESIGN FEATURES SMARTLINE CONTROLLER AND WEATHER MONITOR TECHNOLOGY AND UTILIZES 'ET' BASED WATER CONSERVATION AUTO ADJUSTING SCHEDULING.
- THE IRRIGATION CONTRACTOR MUST PROGRAM THE CONTROLLER BY SELECTING THE PROPER SPRINKLER TYPE, PLANT TYPE, SOIL TYPE, SLOPE AND SUN / SHADE EXPOSURE FOR EACH ZONE.
- THE IRRIGATION CONTRACTOR MUST CONTACT THE IRRIGATION DESIGNER FOR APPROVAL OF CONTROLLER SETTINGS.
- THE IRRIGATION DESIGNER IS JOHN WINGFIELD (972) 513-3859.
- ALL EQUIPMENT MUST BE INSTALLED AS SPECIFIED. NO EQUIPMENT SUBSTITUTIONS WILL BE PERMITTED.

SLEEVING NOTES

- SLEEVES SHALL BE FURNISHED AND INSTALLED BY GENERAL CONTRACTOR.
- SLEEVE MATERIAL SHALL BE SCHEDULE 40 PIPE, SIZE AS INDICATED ON PLAN.
- CONTRACTOR SHALL LAY SLEEVES AND CONDUITS AT TWENTY-FOUR (24") INCHES BELOW FINISH GRADE OF THE TOP OF PAVEMENT.
- CONTRACTOR SHALL EXTEND SLEEVES ONE (1') FOOT BEYOND EDGE OF ALL PAVEMENT.
- CONTRACTOR SHALL CAP PIPE ENDS USING PVC CAPS.
- CONTRACTOR SHALL FURNISH OWNER AND IRRIGATION CONTRACTOR WITH AN 'AS-BUILT' DRAWING SHOWING ALL SLEEVE LOCATIONS.

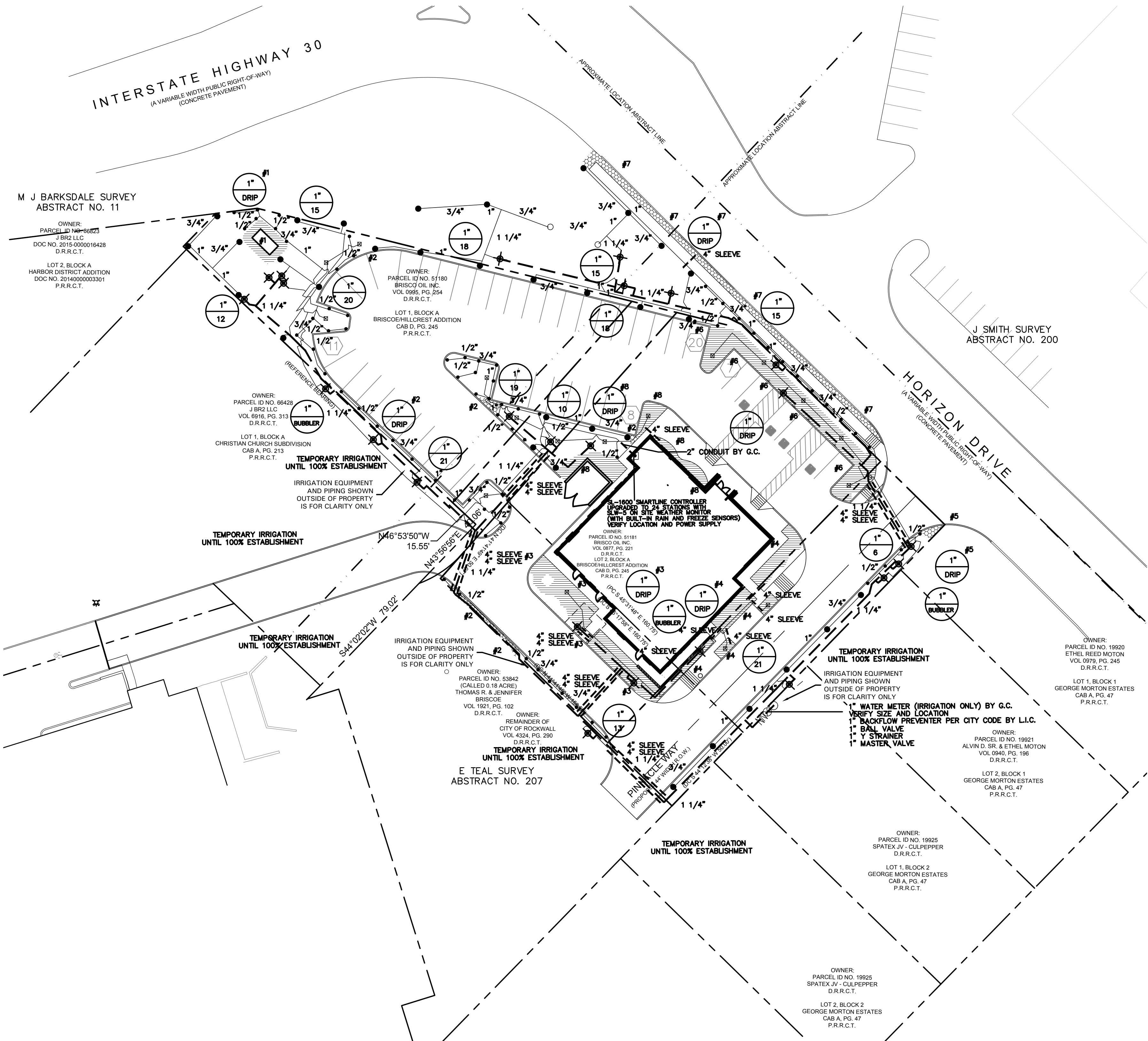
IRRIGATION NOTES

- THE IRRIGATION CONTRACTOR SHALL COORDINATE INSTALLATION OF THE IRRIGATION SYSTEM WITH THE LANDSCAPE CONTRACTOR SO THAT ALL PLANT MATERIAL WILL BE WATERED IN ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS.
- ALL SPRINKLER EQUIPMENT NUMBERS REFERENCE THE WEATHERMATIC EQUIPMENT CATALOG UNLESS OTHERWISE INDICATED.
- TEN DAYS PRIOR TO START OF CONSTRUCTION, IRRIGATION CONTRACTOR SHALL VERIFY STATIC WATER PRESSURE. IF STATIC PRESSURE IS LESS THAN 65 P.S.I., NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY. DO NOT WORK UNTIL NOTIFIED TO DO SO BY OWNER.
- SLEEVES SHALL BE FURNISHED AND INSTALLED BY GENERAL CONTRACTOR. SLEEVE MATERIAL SHALL BE SCHEDULE 40, SIZE AS INDICATED ON PLAN. REFER TO SLEEVING NOTES.
- ALL MAIN LINE AND LATERAL LINE PIPING IN PLANTING AND LAWN AREAS SHALL HAVE A MINIMUM OF 12 INCHES OF COVER. ALL PIPING UNDER PAVING SHALL HAVE A MINIMUM OF 18 INCHES OF COVER. CONTRACTOR TO VERIFY LOCAL FREEZE DEPTHS AND ADJUST DEPTH OF COVER ACCORDINGLY.
- LAWN SPRAY HEADS SHALL BE WEATHERMATIC LX-4 INSTALLED PER DETAIL SHOWN.
- ROTOR HEADS SHALL BE WEATHERMATIC TURBO INSTALLED PER DETAIL SHOWN. (WITH BUILT-IN CHECK VALVE)
- NOZZLES SHALL BE WEATHERMATIC 5500 SERIES, UNLESS OTHERWISE NOTED. IRRIGATION CONTRACTOR SHALL SELECT THE PROPER ARC AND RADIUS FOR EACH NOZZLE TO ENSURE 100% AND PROPER COVERAGE OF ALL LAWN AREAS AND PLANT MATERIAL. NO WATER SHALL SPRAY ON BUILDING.
- ALL NOZZLES IN PARKING LOT ISLANDS AND PLANTING BEDS SHALL BE LOW ANGLE NOZZLES TO MINIMIZE OVER SPRAY ON PAVEMENT SURFACES.
- ELECTRIC CONTROL VALVES SHALL BE WEATHERMATIC 11000 SERIES INSTALLED PER DETAIL SHOWN. SIZE OF VALVES AS SHOWN ON PLAN. VALVES SHALL BE INSTALLED IN VALVE BOXES LARGE ENOUGH TO PERMIT MANUAL OPERATION, REMOVAL OF SOLENOID AND / OR VALVE COVER WITHOUT ANY EARTH EXCAVATION.
- QUICK COUPLING VALVES SHALL BE WEATHERMATIC QV75 INSTALLED PER DETAIL SHOWN. SWING JOINTS SHALL BE CONSTRUCTED USING 3/4" SCHEDULE 80 ELBOWS. CONTRACTOR SHALL SUPPLY OWNER WITH THREE (3) CH75 COUPLERS AND THREE (3) #10HSL SWIVEL HOSE ELLS AS PART OF THIS CONTRACT.
- ALL 24 VOLT VALVE WIRING TO BE UF 14 GAUGE SINGLE CONDUCTOR. ALL WIRE SPLICES ARE TO BE PERMANENT AND WATERPROOF.
- AUTOMATIC CONTROLLER SHALL BE INSTALLED AT LOCATION SHOWN. POWER (120V) SHALL BE LOCATED IN A JUNCTION BOX WITHIN FIVE (5') FEET OF CONTROLLER, LOCATION BY OTHER TRADES. RAIN AND FREEZE SENSORS SHALL BE INSTALLED WITH EACH CONTROLLER.
- THE DESIGN PRESSURE IS 65 PSI.
- ELECTRICAL SPLICES AT EACH VALVE AND CONTROLLER ONLY.
- IRRIGATION IN TEXAS IS REGULATED BY: THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) MC-178 / PO BOX 13087 AUSTIN, TEXAS 78711-3087
- TCEQ'S WEBSITE IS WWW.TCEQ.STATE.TX.US.



4245 North Central Expy
Suite 501
Dallas, Texas 75205
214.865.7192 office

SUBMITTED: 5/13/16



SECTION 32 8423 - UNDERGROUND IRRIGATION SLEEVES AND UTILITY CONDUITS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Provide underground irrigation sleeves as indicated on the drawings.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 32 8424 - Irrigation System

1.3 REFERENCED STANDARDS

- A. American Society for Testing and Materials:
- ASTM - D2441 Poly (Vinyl Chloride) (PVC) Plastic Pipe (SD R-PR)
 - ASTM - D2466 Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Socket Type, Schedule 40.
 - ASTM - D2564 Solvent Cements for Poly Vinyl Chloride Plastic Pipe and Fittings.

PART 2 - MATERIALS

2.1 DEFINITIONS

- A. Sleeve - A pipe within which another pipe is placed for carrying water or other utilities to be installed.
- B. Wire Sleeves - A pipe used to carry low voltage irrigation wires for operation of the electric solenoid valves.

2.2 GENERAL

- A. Polyvinyl Chloride Pipe (PVC) - Manufactured in accordance with standards noted herein:
- Marking and Identification - Permanently marked with SDR number, ASTM standard number, and the NSF (National Sanitation Foundation) seal.
 - Solvent - As recommended by manufacturer to make solvent-welded joints. Thoroughly clean pipe and fittings before applying solvent.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Coverage - Provide twenty-four inches (24") minimum cover over top of sleeve from finish grade.
- B. Sleeve Extensions - Extend sleeves one foot (1') past edge of pavement or concrete walls. Install 90 degree elbow on each sleeve end and add additional length of same size pipe to extend above finish grade by twelve inches (12"). Cap pipe ends using duct tape.

3.2 BACKFILL

- A. Compaction - Place backfill over sleeves in six (6") inch lifts. Tamp firmly into place taking care not to damage sleeve. Complete backfill and compaction to prevent any future settlement. Compact to 85% Standard Proctor.
- B. Damage - Repair any damage resulting from improper compaction including pavement repair and replacement.

END OF SECTION

SECTION 32 8424 - IRRIGATION SYSTEM

PART 1 - GENERAL

1.1 SCOPE

- A. Provide complete sprinkler installation as detailed and specified herein, includes furnishing all labor, material, tools, equipment, and related items for the complete and proper

installation of the irrigation system as indicated by the Drawings. All costs associated with this installation, including fees for testing and inspections of the system components are the responsibility of the installer of this irrigation system.

- B. Work includes but is not limited to:

- Trenching and backfill.
- Installation of automatic controlled system.
- Upon completion of installation, supply as-built drawings showing details of construction including location of mainline piping, manual and automatic valves, electrical supply to valves, and specifically the exact location of automatic valves.

- C. All sleeves as shown on plans shall be furnished by General Contractor. Meter and power source shall be provided by General Contractor.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Refer to Irrigation Plans for controller, head, and valve locations.
- B. Section 32 8423 - Underground Irrigation Sleeves and Utility Conduits
- C. Section 32 9300 - Landscape
- D. Refer to Landscape Plans, notes, details, bidding requirements, special provisions, and schedules for additional requirements.

1.3 APPLICABLE STANDARDS

- A. America Standard for Testing and Materials (ASTM) - Latest edition.
- D2241 Poly (Vinyl Chloride) (PVC) Plastic Pipe (SDR-PR)
 - D2464 Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Thread, Schedule 80
 - D2455 Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40
 - D2467 Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Socket Type, Schedule 80
 - D2564 Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings
 - D2287 Flexible Poly Vinyl Chloride (PVC) Plastic Pipe
 - F656 Poly Vinyl Chloride (PVC) Solvent Weld Primer
 - D2855 Making Solvent - Cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings

1.4 MAINTENANCE AND GUARANTEE

- A. The Contractor shall guarantee materials and workmanship for one (1) calendar year after final acceptance by Owner.
- B. Guarantee is limited to repair and replacement of defective materials or workmanship, including repair of backfill settlement.
- C. Provide maintenance of system, including raising and lowering of heads to compensate for lawn growth, cleaning and adjustment of heads, and raising and lowering of shrub heads to compensate for shrub growth for one (1) year after completion of installation.

1.5 SUBMITTALS

- A. Procedure: Comply with Division I requirements.
- B. Product Data: The Contractor shall submit five (5) copies of equipment manufacturer's cut sheets and shop drawings for approval by Owner Authorized Representative prior to installation, including, but not limited to the following: sprinkler head, pipe, controller, valves, backflow prevention devices, valve boxes, wire, conduit, fittings, and all other types of fixtures proposed to be installed on the job. The submittal shall include the manufacturer's name, model number, equipment capacity, and manufacturer's installation recommendations, if applicable, for each proposed item.
- C. No work covered under this section may begin until the

Contractor has submitted the required information. No partial submittal shall be accepted and submittals shall be neatly bound into a brochure and logically organized. After the submittal has been approved, substitutions will not be allowed, except by written consent by the Owner Authorized Representative.

- D. Shop drawings include dimensions, elevations, construction details, arrangements, and capacity equipment, as well as manufacturer's installation recommendations.

- E. Operating and Maintenance Manuals:

- Provide three (3) individually bound manuals detailing operating and maintenance requirements for the irrigation system.
- Manuals shall be delivered to the Owner Authorized Representative no later than ten (10) days prior to completion of the irrigation system.
- Provide descriptions of all installed materials and systems in sufficient detail to permit maintenance personnel to understand, operate, and maintain the equipment.
- Provide the following in each manual:
 - Index sheet with Contractor's name, address, telephone number, and contact name.
 - Duration of guarantee period. Include warranties and guarantees extended to the Owner by the manufacturer of all equipment.
 - Equipment list providing the following for each item:
 - Manufacturer's name
 - Make and model number
 - Name and address of local part's representative
 - Spare parts list in detail
 - Details operating and maintenance instructions for major equipment.

- F. Project Record Documents:

- Comply with Division I requirements.
- Locate by written dimension, routing of mainline piping, remote control valves, and quick coupling valves. Locate mainlines by single dimensions from permanent site features provided they run parallel to these elements. Locate valves, intermediate electrical connections, and quick couplers by two dimensions from a permanent site feature at approximately 70 degrees to each other.
- When dimensioning is complete, transpose work to bond paper.
- Submit three (3) copies of the completed as-built drawings, along with a CD with PDF files of the same, to the Owner Authorized Representative prior to final acceptance of the work. Mark drawings "Record Prints Showing Significant Changes". Date and sign drawings.

- G. Quick Coupler Keys: Provide three (3) coupler keys with boiler drains attached using brass reducer.

- H. Controller Keys: Provide three (3) sets of keys to controller enclosures).

- I. Use of materials differing in quality, size, or performance from those specified shall only be allowed upon written approval of the Landscape Architect. The decision shall be based on comparative ability of material or article to perform fully all purposes of mechanics and general design considered to be possessed by item specified.

- J. Bidders desiring to make a substitution for specified sprinklers shall submit manufacturer's catalog sheet showing full specification of each type sprinkler proposed as a substitute, including discharge in GPM maximum allowable operating pressure at sprinkler.
- K. Approval of substitute sprinkler shall not relieve Irrigation Contractor of his responsibility to demonstrate that final installed sprinkler system shall operate according to intent of originally designed and specified system.

- L. It is the responsibility of the Irrigation Contractor to demonstrate that final installed sprinkler system shall operate according to intent of originally designed and specified system. If Irrigation Contractor notes any problems in head spacing or potential coverage, it is his responsibility to notify the Landscape Architect in writing, before proceeding with

work. Irrigation Contractor guarantees 100% coverage of all areas to be irrigated.

1.6 TESTING

- A. Perform testing required with other trades, including earthwork, paving, plumbing, electrical, etc., to avoid unnecessary cutting, patching, and boring.
- B. Water Pressure: This irrigation system has been designed to operate with a minimum static water pressure indicated on Drawings. The Contractor shall take a pressure reading at each water meter prior to beginning construction. Confirm findings to Owner Authorized Representative in writing. If static pressure varies from pressure stated on drawings, do not start work until notified to do so by Owner Authorized Representative.

1.7 COORDINATION

- A. Coordinate installation with other trades, including earthwork, paving, and plumbing to avoid unnecessary cutting, patching and boring.
- B. Coordinate to ensure that electrical power source is in place.
- C. Coordinate system installation with work specified in other sections and coordinate with Landscape Contractor to ensure plant material is uniformly watered in accordance with intent shown on drawings.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Mainline: Mainlines are the piping from water source to operating valves. This portion of piping is subject to surges, being a closed portion of sprinkler system. Hydrant lines are considered a part of sprinkler main.
- B. Lateral Piping: Lateral piping is that portion of piping from operating valve to sprinkler heads. This portion of piping is not subject to surges, being an "open end" portion of sprinkler system.

2.2 POLY VINYL CHLORIDE PIPE (PVC PIPE)

- A. PVC pipe shall be manufactured in accordance with commercial standards noted herein.
- B. Marking and Identification: PVC pipe shall be continuously and permanently marked with the following information: manufacturer's name, pipe size, type of pipe, and material, SDR number, product standard number, and the NSF (National Sanitation Foundation) seal.
- C. PVC Pipe Fittings: Shall be of the same material as the PVC pipe specified and shall be compatible with PVC pipe furnished.

2.3 COPPER TUBING

- A. Hard, straight lengths of domestic manufacture only. Do not use copper tube of foreign extrusion or any so-called irrigation tubing (thin wall).

2.4 COPPER TUBE FITTINGS

- A. Cast brass or wrought copper, sweat - solder type.

2.5 WIRE

- A. Type UF with 4/64" thick waterproof insulation which is Underwriter's Laboratory approved for direct underground burial when used in a National Electric Code Class II Circuit (30 volts AC or less).
- B. Wire Connectors: Waterproof splice kit connectors. Type DBY by 3M.

2.6 SCHEDULE 80 PVC NIPPLES

- A. Composed of Standard Schedule 40 PVC Fittings and PVC

meeting noted standards. No clamps or wires may be used. Nipples for heads and shrub risers to be nominal one-half inch (1/2") diameter by eight (8") inches long, where applicable.

- B. Polyethylene nipples six (6") inches long shall be used on all pop-up spray heads.

2.7 MATERIALS - SEE IRRIGATION PLAN

- A. Sprinkler heads in lawn area as specified on plan.
- B. PVC Pipe: Class 200, SDR 21
- C. Copper Tubing (City Connection): Type "M"
- D. 24V Wire: Size 14, Type UF
- E. Electric valves: Shall be all plastic construction as indicated on plans.
- F. Backflow Prevention Device: Refer to drawing requirements and flow valve. Coordinate exact location with General Contractor.

PART 3 - EXECUTION

3.1 INSTALLATION - GENERAL

- A. Staking: Before installation is started, place a stake where each sprinkler is to be located, in accordance with drawing. Staking shall be approved by Owner Authorized Representative before proceeding with work.
- B. Excavations: Excavations are unclassified and include earth, loose rock, rock or any combination thereof, in wet or dry state. Backfill trenches with material removed, provided that the earth is suitable for compaction and contains no lumps, clods rock, debris, etc. Special backfill specifications, if furnished take preference over this general specification.
- C. Backfill: Flood or hand-tamp to prevent after settling. Hand rake trenches and adjoining area to leave grade in as good or better condition than before installation.
- D. Piping Layout: Piping layout is diagrammatic. Route piping around trees and shrubs in such a manner as to avoid damage to plantings. Do not dig within ball of newly planted trees or shrubs. In areas where existing trees are present, trenches shall be adjusted on-site to provide a minimum clearance of four (4) feet between the drip line of any tree or trench. The Contractor shall notify the Owner Authorized Representative in writing of a planned change in trench routing from that shown on the drawings.

3.2 PIPE INSTALLATION

- A. Sprinkler Mains: Install a four (4") inch wide minimum trench with a minimum of eighteen (18") inches of cover.
- B. Lateral Piping: Install a four (4") inch wide minimum trench deep enough to allow for installation of sprinkler heads and valves, but in no case, with less than twelve (12") of cover.
- C. Trenching: Remove lumber, rubbish, and large rocks from trenches. Provide firm, uniform bearing for entire length of each pipe line to prevent uneven settlement. Wedging or blocking of pipe shall not be permitted. Remove foreign matter or dirt from inside of pipe before welding, and keep piping clean by approved means during and after laying of pipe.

3.3 PVC PIPE AND FITTING ASSEMBLY

- A. Solvent: Use only solvent recommended by manufacturer to make solvent-welded joints. Thoroughly clean pipe and fittings of dirt, dust and moisture before applying solvent.
- B. PVC to metal connection: Work metal connections first. Use a non-hardening pipe dope such as Permatex No. 2 on threaded PVC adapters into which pipe may be welded.

3.4 COPPER TUBING AND FITTING ASSEMBLY

- A. Clean pipe and fitting thoroughly and lightly sand pipe connections to remove residue from pipe. Attach fittings to tubing in an approved manner using 50-50 soft solid core solder.

3.5 POP-UP SPRAY HEADS

- A. Supply pop-up spray heads in accordance with materials list and plan. Attach sprinkler to lateral piping with a semi-flexible polyethylene nipple not less than three (3") inches or more than six (6") inches long.

3.6 VALVES

- A. Supply valves in accordance with materials list and sized according to drawings. Install valves in a level position in accordance with manufacturer's specifications. See plan for typical installation of electric valve and valve box.

3.7 WIRING

- A. Supply wire from the automatic sprinkler controls to the valves. No conduit will be required for UF wire unless otherwise noted on the plan. Wire shall be tucked under the piping.
- B. A separate wire is required from the control to each electric valve. A common neutral wire is also required from each control to each of the valves served by each particular control.
- C. Bundle multiple wires and tape them together at ten (10') foot intervals. Install ten (10') inch expansion coils at not more than one hundred (100') foot intervals. Make splices waterproof.

3.8 AUTOMATIC SPRINKLER CONTROLS

- A. Supply in accordance with Irrigation Plan. Install according to manufacturer's recommendations.

3.9 TESTING

- A. Sprinkler Mains: Test sprinkler main only for a period of twelve (12) to fourteen (14) hours under normal pressure. If leaks occur, replace joint or joints and repeat test.
- B. Complete tests prior to backfilling. Sufficient backfill material may be placed in trenches between fittings to ensure stability of line under pressure. In each case, leave fittings and couplings open to visual inspection for full period of test.

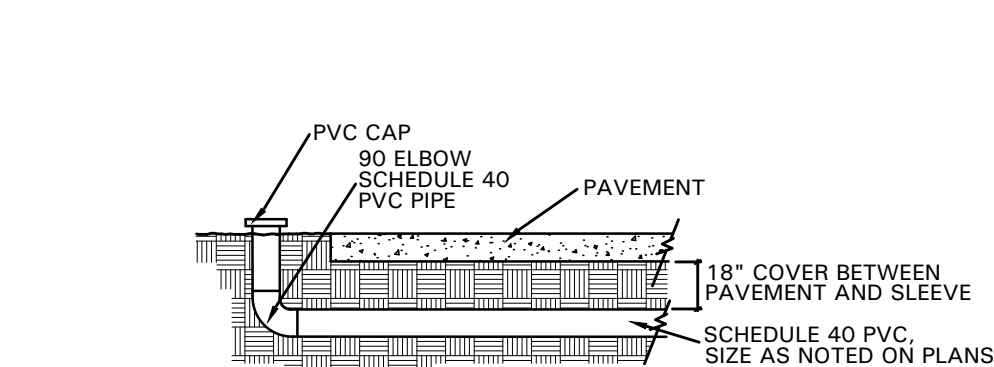
3.10 FINAL ADJUSTMENT

- A. After installation has been completed, make final adjustment of sprinkler system in preparation for Owner Authorized Representative's final inspection.
- B. Completely flush system to remove debris from lines by removing nozzle from heads on end of lines and turning on system.
- C. Check sprinklers for proper operation and proper alignment for direction of throw.
- D. Check each section of spray heads for operating pressure and balance to other sections by use of flow adjustment on top of each valve.
- E. Check nozzling for proper coverage. Prevailing wind conditions may indicate that arch of angle of spray should be other than shown on drawings. In this case, change nozzles to provide correct coverage and furnish data to Owner Authorized Representative with each change.

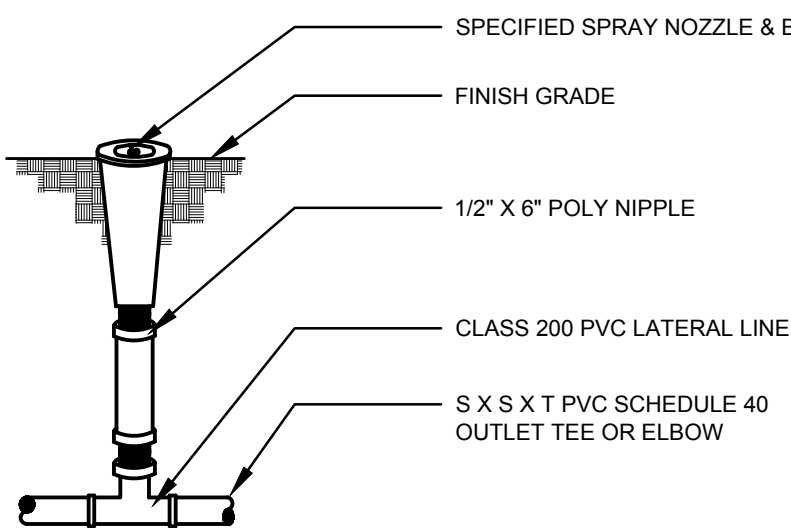
3.11 SYSTEM DEMONSTRATION

- A. Instruct Owner's personnel in operation and maintenance of system including adjusting of sprinkler heads. Use operation and maintenance manual for basis of demonstration.

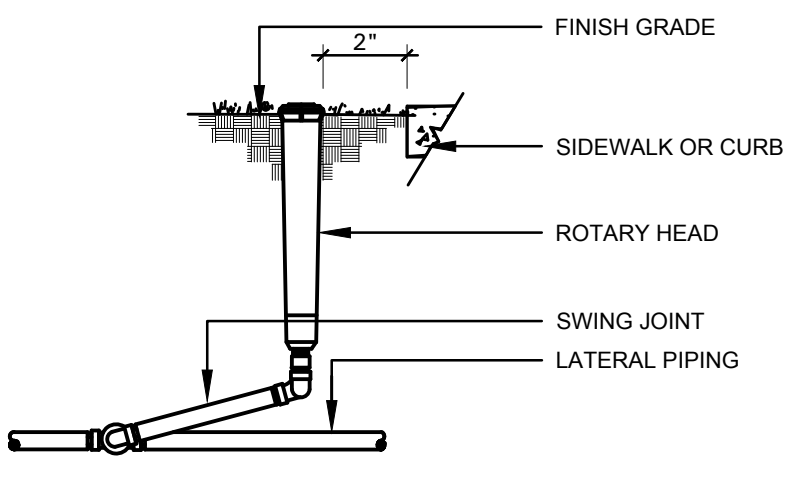
END OF SECTION



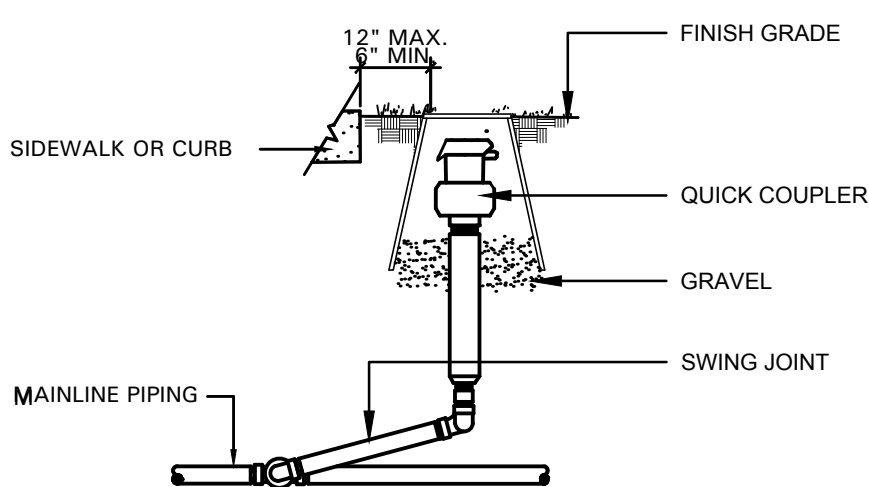
01 SLEEVE DETAIL
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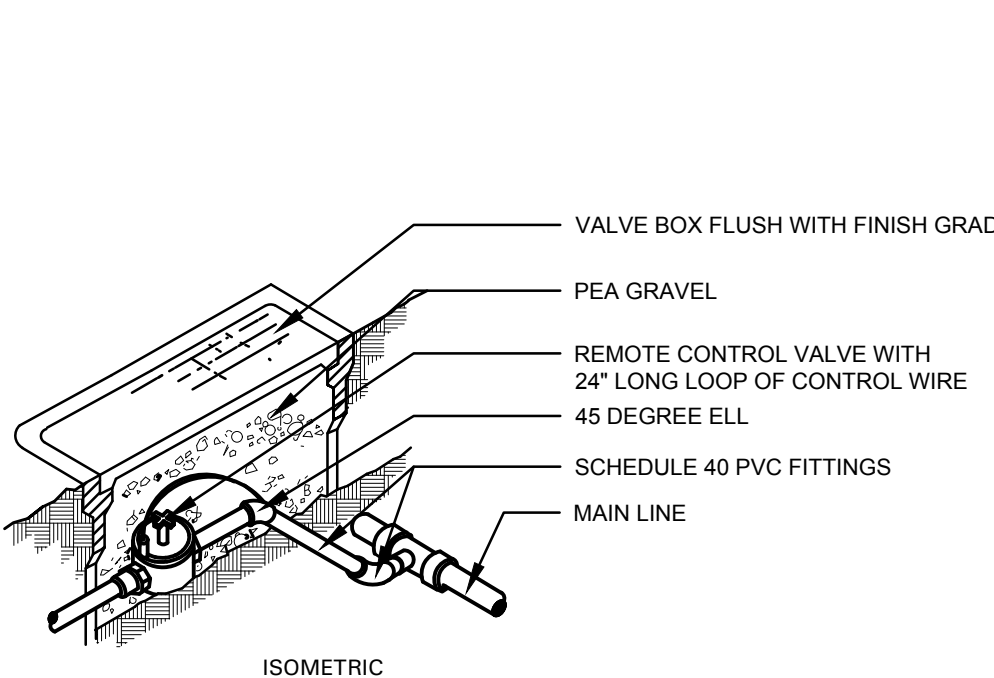
02 POP-UP LAWN SPRAY ASSEMBLY
NOT TO SCALE



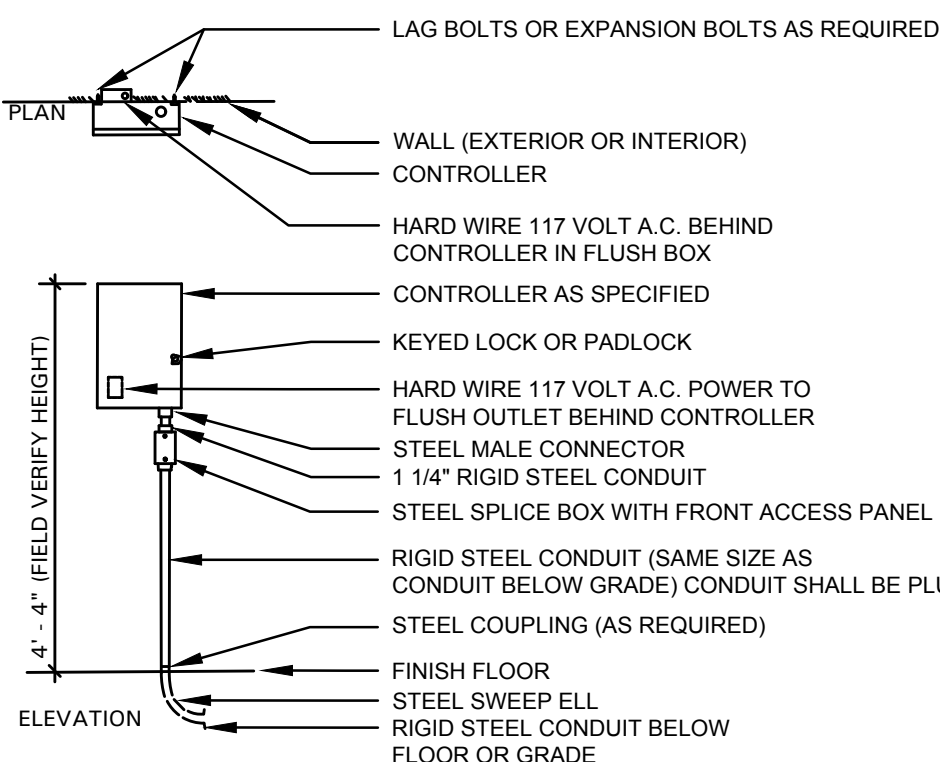
03 ROTARY HEAD
NOT TO SCALE



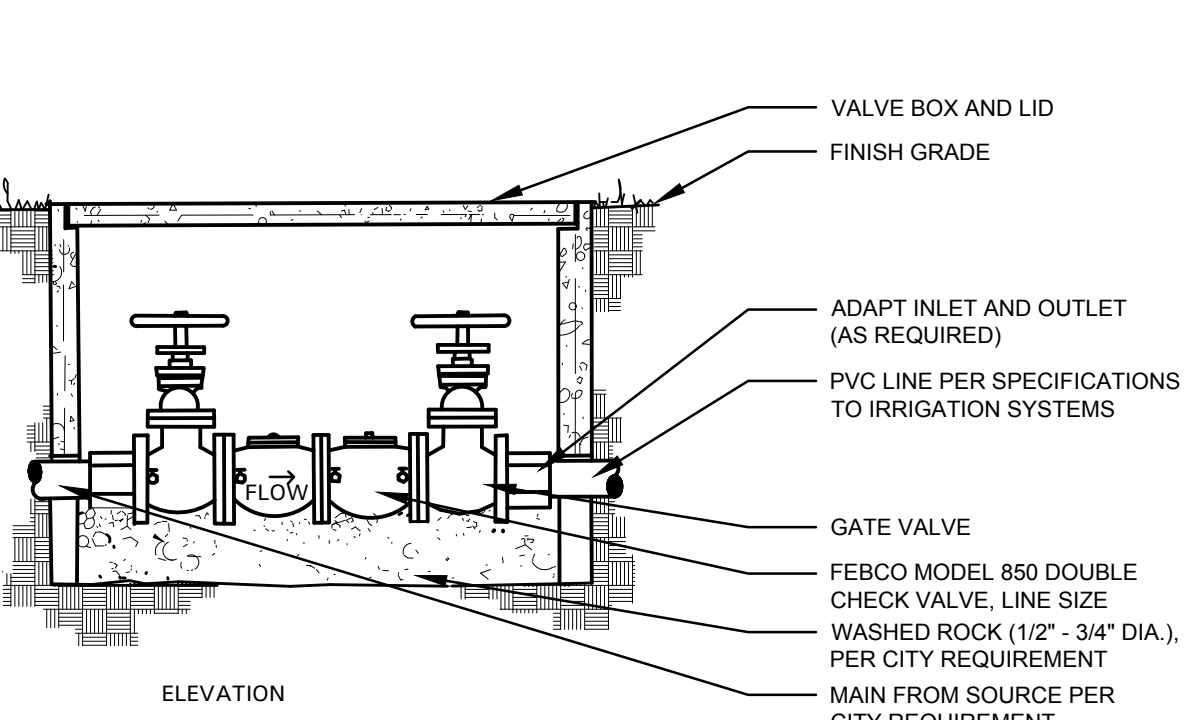
04 QUICK COUPLER
NOT TO SCALE



05 REMOTE CONTROL VALVE
NOT TO SCALE



06 WALL MOUNTED CONTROLLER
NOT TO SCALE



07 BACKFLOW PREVENTER
NOT TO SCALE



- 4245 North Central Expy
- Suite 501
- Dallas, Texas 75205
- 214.865.7192 office

SUBMITTED: 5/13/16

CASE NO. SP2016-013

CARENOW I-30 & HILLTOP DRIVE

LEGAL DESCRIPTION:

LOT 1, LOT 2 & LOT 3, BLOCK A
BRISCOE / HILLCREST ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

OWNER:

TOM R BRISCOE AND BRISCOE OIL, INC.
2323 STEVENS ROAD,
HEALTH, TX, 75032
CONTACT: DAVID ENGLISH
PH: 972.961.8532

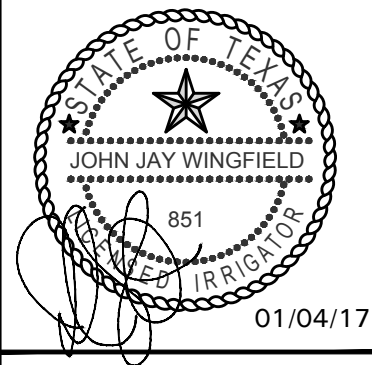
DEVELOPER:

CRESTVIEW REAL ESTATE, LLC.
12720 HILLCREST RD., SUITE #650
DALLAS, TX 75230
CONTACT: GRAY STOGNER
PH: 214.343.4477

APPLICANT:

CLAYMOORE ENGINEERING, INC.
1903 CENTRAL DR., SUITE #406
BEDFORD, TX 76021
PH: 817.281.0572

CITY CASE #:



CARENOW
LOT 1 & 2, BLOCK A
BRISCOE/HILLCREST ADDITION
ROCKWALL, TX

NO.	DATE	REVISION	BY
4	01/04/17	COORDINATION	MGC
3	12/19/16	COORDINATION	MGC
2	10/06/16	COORDINATION	MGC
1	8/29/16	COORDINATION	MGC
0			

IRRIGATION SPECIFICATIONS
AND DETAILS

DESIGN:	JWW
DRAWN:	JWW
CHECKED:	JWW
DATE:	06/08/2016

SHEET

L3.02

File No. 2016-029

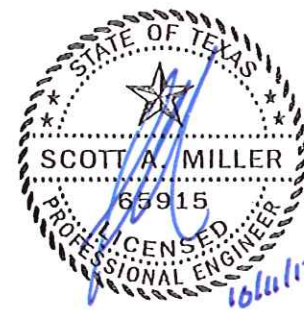
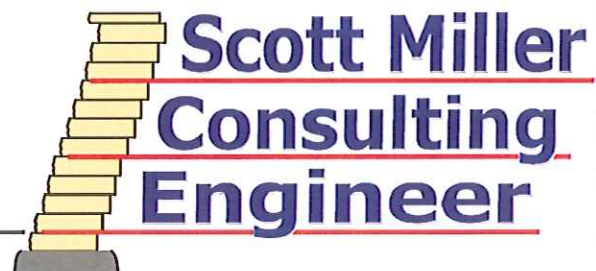
CARENOW MASONRY WALL ROCKWALL, TEXAS

JOB NO. 17326

PREPARED FOR:

BUILDER SERVICES COMPANY
1917 COPPER STREET
GARLAND, TX 75042

Scott Miller Consulting Engineer, Inc.
Texas Registered Engineering Firm
F-003643



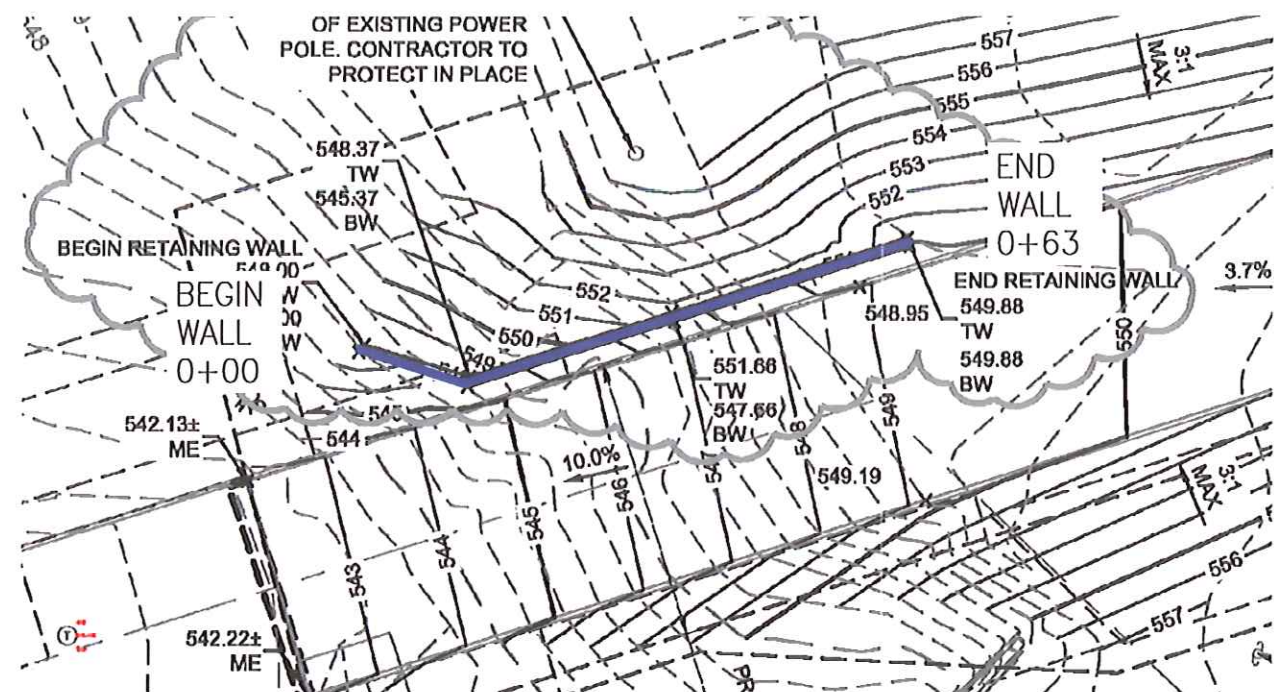
CARENOW MASONRY WALL
ROCKWALL, TEXAS

WALL DESIGN

DRAWN BY: CMM DATE: 10/11/17 SHEET: 1 OF 6

P.O. Box 94529 North Little Rock, AR 72190

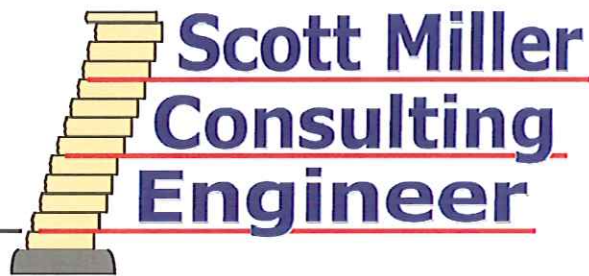
Tel: 501.374.3546 Fax: 501.374.3547 E-mail: segwalls@gmail.com



Scott Miller Consulting Engineer, Inc.
 Texas Registered Engineering Firm
 F-003643

NOT TO SCALE
 LAYOUT WALL PER CIVIL PLANS

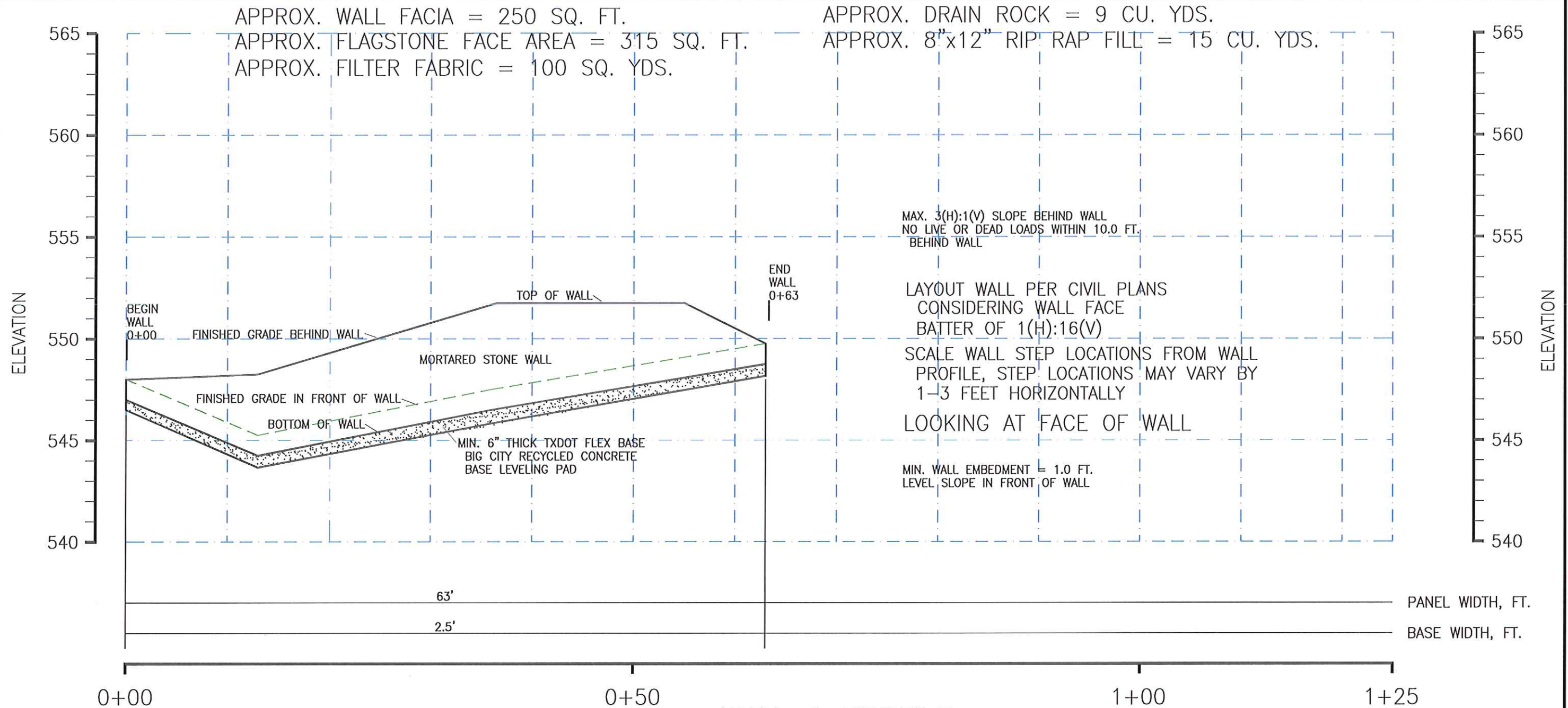
P.O. Box 94529 North Little Rock, AR 72190
 Tel: 501.374.3546 Fax: 501.374.3547 E-mail: segwalls@gmail.com



CARENOW MASONRY WALL
 ROCKWALL, TEXAS

WALL LAYOUT

DRAWN BY: CMM	DATE: 10/11/17	SHEET: 2 OF 6
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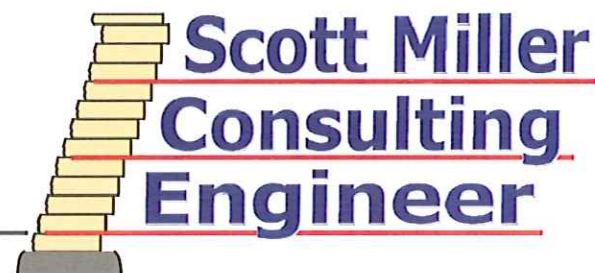


WALL 1 PROFILE

SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

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 Tel: 501.374.3546 Fax: 501.374.3547 E-mail: segwalls@gmail.com

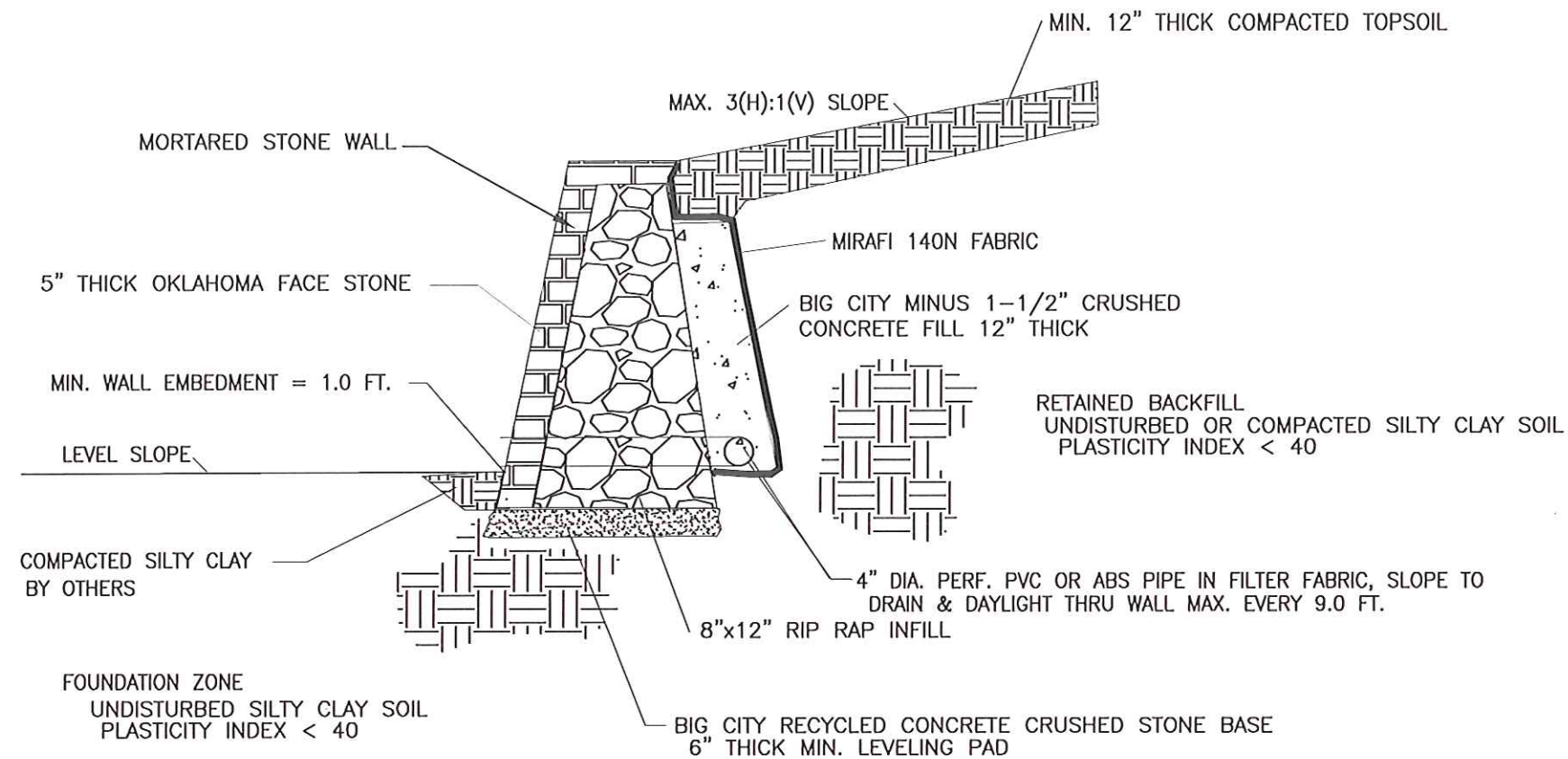


CARENOW MASONRY WALL
 ROCKWALL, TEXAS

WALL PROFILE

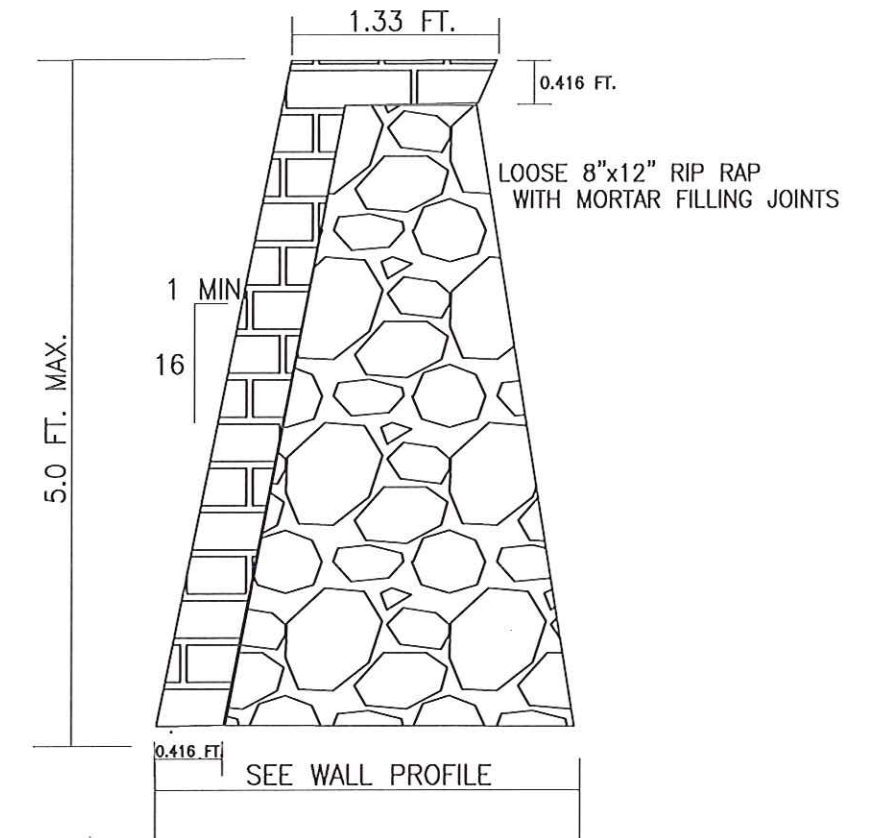
DRAWN BY: SAM DATE: 10/11/17 SHEET 3 OF 6

NO LIVE OR DEAD LOADS WITHIN 10.0 FT. BEHIND WALL
 ROUTE OR PIPE ALL ROOF DRAINS AND SURFACE WATER AROUND THE WALL



TYPICAL MORTARED STONE WALL SECTION

SCALE: NONE



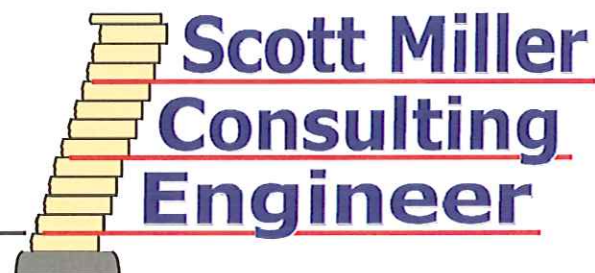
TYPICAL MORTARED WALL DIMENSIONS

SCALE: NONE

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 Texas Registered Engineering Firm
 F-003643

P.O. Box 94529 North Little Rock, AR 72190

Tel: 501.374.3546 Fax: 501.374.3547 E-mail: segwalls@gmail.com



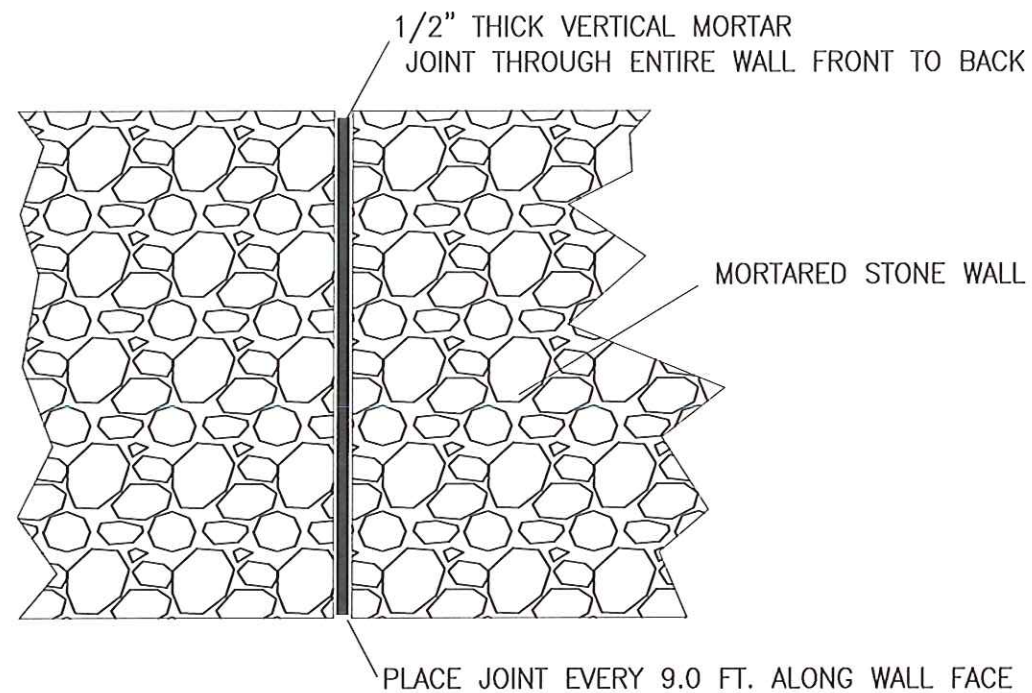
CARENOW MASONRY WALL
 ROCKWALL, TEXAS

WALL DETAILS

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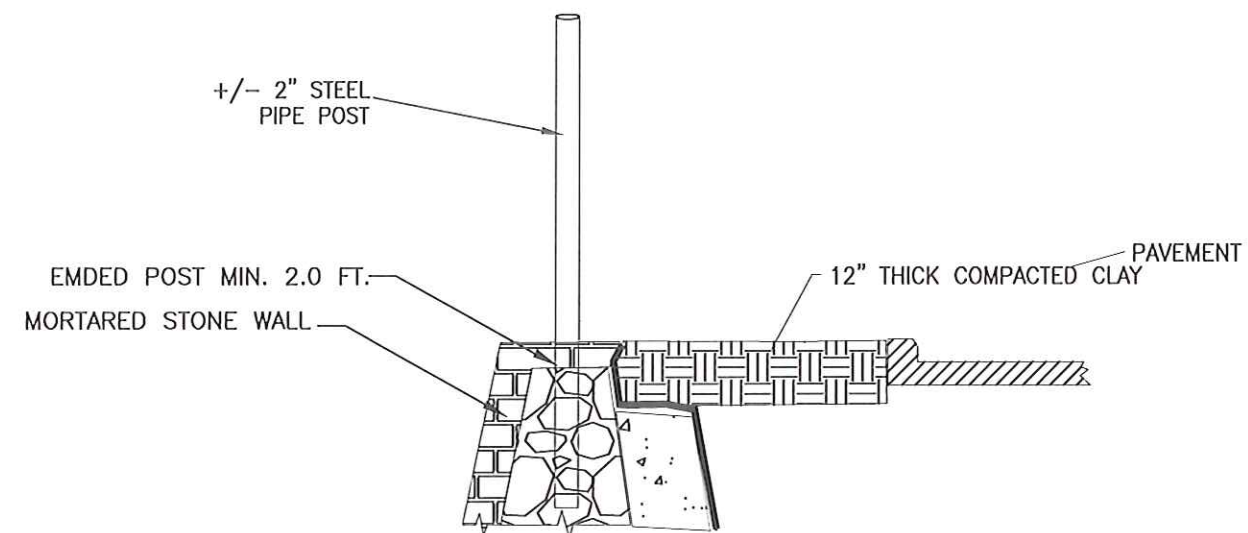
DATE: 10/11/17

SHEET: 4 OF 6



TYPICAL EXPANSION JOINT DETAIL

SCALE: NONE

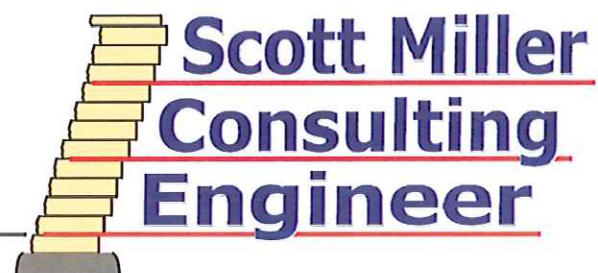


POST & RAIL DETAIL

TYPICAL HANDRAIL AND/OR RAIL POST

SCALE: NONE

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Tel: 501.374.3546 Fax: 501.374.3547 E-mail: segwalls@gmail.com



CARENOW MASONRY WALL
ROCKWALL, TEXAS

WALL DETAILS

DRAWN BY: SAM

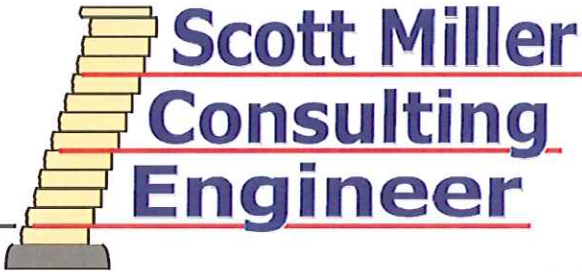
DATE: 10/11/17

SHEET: 5 OF 6

NOTES:

- 1. LEVELING PAD- MINIMUM 6" THICK COMPACTED BIG CITY RECYCLED CONCRETE CRUSHED STONE BASE COMPACTED TO A MINIMUM 95% STD. COMPACTION (ASTM D698).
- 2. FOUNDATION ZONE- UNDISTURBED SILTY CLAY SOIL WITH A PLASTICITY INDEX LESS THAN 40 WITH AN EFFECTIVE FRICTION ANGLE = 23 DEGREES, MOIST UNIT WEIGHT= 120 PCF, COHESION = 150 PSF.
- 3. RETAINED ZONE- UNDISTURBED OR COMPACTED SILTY CLAY SOIL WITH A PLASTICITY INDEX LESS THAN 40 WITH AN EFFECTIVE FRICTION ANGLE = 23 DEGREES, MOIST UNIT WEIGHT= 120 PCF, COHESION = 0 PSF.
- 4. MINIMUM WALL EMBEDMENT- 1.0 FT.
- 5. A GEOTECHNICAL REPORT WAS NOT SUPPLIED FOR THE PROJECT AND THE SOIL PROPERTIES USED WERE ASSUMED FOR THE SITE BASED ON OTHER SITES IN THE GENERAL ROCKWALL, TEXAS AREA. THE FIELD SOIL PROPERTIES MUST BE VERIFIED BY THE TESTING AGENCY OF RECORD AND THE WALL DESIGNER NOTIFIED OF SOILS DIFFERENT THAN THOSE NOTED HEREIN.
- 6. THESE PLANS ARE BASED ON THE MARKED UP SITE GRADING PLAN PROVIDED TO THE WALL DESIGNER BY THE CLIENT. THE TOP AND BOTTOM OF WALL ELEVATIONS AND SLOPES IN THE VICINITY OF THE WALL MUST BE VERIFIED BY THE WALL INSTALLER BEFORE BEGINNING WALL CONSTRUCTION. THE WALL DESIGNER MUST REVIEW ANY CHANGES TO THE WALL DIMENSIONS OR SLOPES AROUND THE WALL.
- 7. THE WALL DESIGNER ASSUMES NO LIABILITY FOR INFORMATION PROVIDED BY OTHERS OR NOT VERIFIED.
- 8. ALL SOIL FILL MUST BE PLACED IN MAXIMUM 8.0 INCH THICK LIFTS AND COMPACTED TO A MINIMUM OF 95% STANDARD COMPACTION (ASTM D698). THE COMPACTION OF EACH LIFT OF FILL MUST BE VERIFIED BY THE TESTING AGENCY OF RECORD WITH AT LEAST ONE TEST PER 2500 SQ. FT. OF FILL PLACED PER LIFT, PER DAY.
- 9. MAXIMUM WALL BEARING PRESSURE = 1000 PSF.
- 10. THE LONG-TERM STATIC GROUNDWATER LEVEL IS ASSUMED TO WELL BELOW THE BOTTOM OF THE WALL (GREATER THAN 6.0 FEET).
- 11. WALL HEIGHTS SHOWN MUST NOT BE EXCEEDED WITHOUT THE CONSULTATION AND APPROVAL OF THE WALL DESIGNER.
- 12. ALL STONE USED FOR THE WALL FACING MUST BE 5" THICK OKLAHOMA FACE STONEAS SELECTED BY THE OWNER.
- 13. THE WALL MUST BE FILLED WITH 8"x12" MORTARED RIP RAP TO THE DIMENSIONS SHOWN ON THE WALL DRAWINGS
- 14. ALL MORTAR USED IN THE WALL CONSTRUCTION SHALL BE TYPE M MORTAR WITH A MINIMUM 1800 PSI COMPRESSIVE STRENGTH.
- 15. ALL UTILITIES BEHIND, IN FRONT AND UNDER THE WALL SHOULD BE INSTALLED BEFORE COMMENCING WALL CONSTRUCTION TO LIMIT DISTURBANCE AND DAMAGE TO THE WALL AND UNDERMINING OF THE WALL. THE COMPACTION OF ALL UTILITY BACKFILL UNDER THE WALL MUST BE VERIFIED TO BE AT LEAST 95% STANDARD COMPACTION (ASTM D698).
- 16. MAXIMUM SLOPE BEHIND AND IN FRONT OF THE WALL ARE SHOWN ON THE WALL PROFILE AND SHALL NOT BE EXCEEDED WITHOUT THE CONSULTATION AND APPROVAL OF THE WALL DESIGNER.
- 17. CARE MUST BE TAKEN WHEN INSTALLING ANY UTILITIES, STRUCTURES OR LANDSCAPING BEHIND THE WALL SO AS NOT TO DAMAGE THE WALL OR WALL FACE.
- 18. ALL ROOF DRAINS AND SURFACE WATER MUST BE ROUTED AROUND OR PIPED THROUGH THE WALL FACE. NO SURFACE WATER SHALL BE ALLOWED TO FLOW OVER THE WALL FACE DURING OR AFTER WALL CONSTRUCTION.
- 19. ANY SPRINGS, SEEPS OR OTHER WATER SOURCES NOTED IN THE WALL EXCAVATION MUST BE IMMEDIATELY REPORTED TO THE WALL DESIGNER FOR REMEDIAL ACTION.
- 20. NO LIVE OR DEAD LOADS WITHIN 10.0 FT. BEHIND WALL.
- 21. ALL FILTER FABRIC MUST BE MIRAFI 140N NON-WOVEN FABRIC OR APPROVED EQUIVALENT.
- 22. MINIMUM SAFETY FACTORS USED IN THE WALL DESIGN - SLIDING = 1.5, OVERTURNING = 1.5, BEARING CAPACITY = 2.0

Scott Miller Consulting Engineer, Inc.
Texas Registered Engineering Firm
F-003643



	CARENOW MASONRY WALL ROCKWALL, TEXAS		
	WALL NOTES		
	DRAWN BY: CMM	DATE: 10/11/17	SHEET: 6 OF 6