









PLOTTED BY: BOBBY KUBIN 05 AM  
 PLOT DATE: 5/17/2018 10:05 AM  
 LOCATION: Z:\PROJECTS\2017-114 LEGACY CAPITAL LUCAS\CADD\SHEETS\SP-1 SITE PLAN.DWG  
 LAST SAVED: 5/17/2018 9:56 AM

NORTH BETHANY LAKES ESTATES  
 BLOCK H, LOT 15  
 RICHARD J. AND REBECCA CROOKSTON  
 ZONED: R-5  
 ALLEN CITY LIMITS

NORTH BETHANY LAKES ESTATES  
 BLOCK G, LOT 1  
 DAVID AND VICKIE LYNN COE  
 ZONED: R-5  
 ALLEN CITY LIMITS

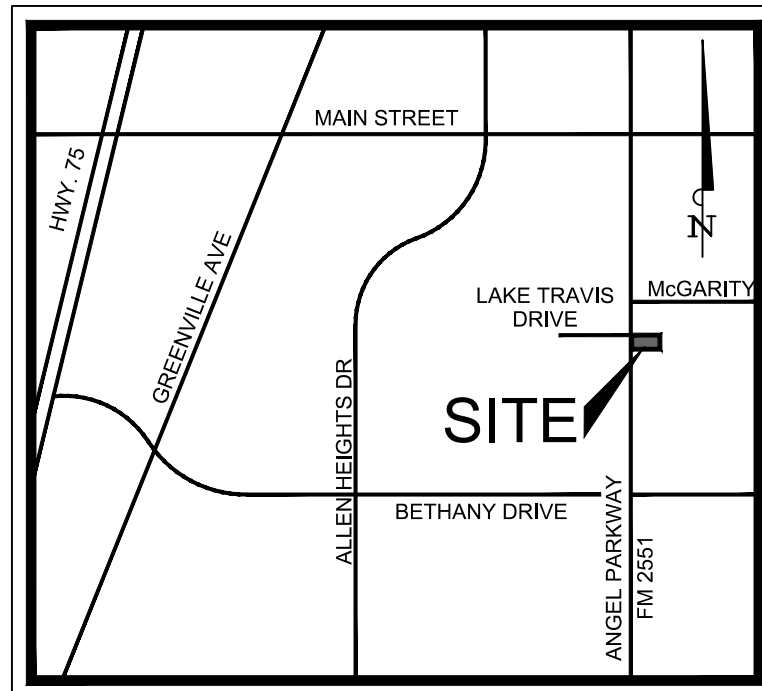
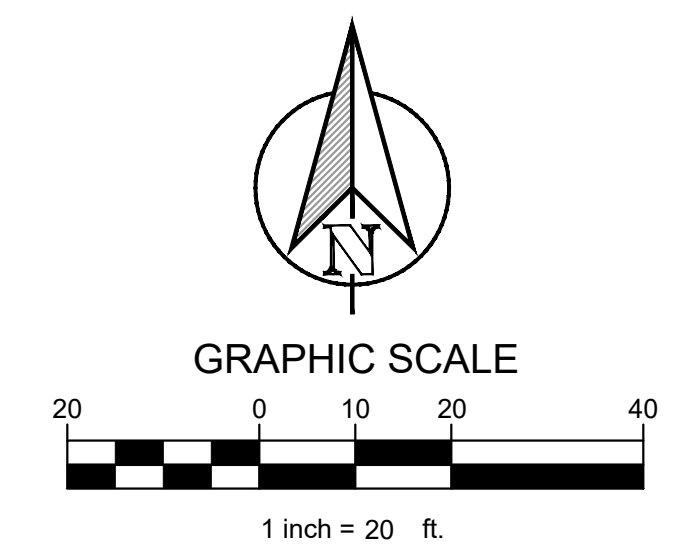
NORTH BETHANY LAKES ESTATES  
 BLOCK G, LOT 24  
 AMH 2014-3  
 BORROWER, LLC.  
 ZONED: R-5  
 ALLEN CITY LIMITS

WATER METER SCHEDULE				
ID	TYP.	SIZE	NO.	SAN. SEWER
△	DOM.	2"	1	6"
△	IRR.	1"	1	N/A

**GENERAL NOTES:**  
 1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS NOTED OTHERWISE.  
 2. ALL PARKING ISLAND RADII SHALL BE 3' UNLESS NOTED OTHERWISE.  
 3. REFER TO ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS AND EXACT DOOR LOCATIONS.

PROPERTY TABLE	
GROSS LOT AREA	1.32 ACRES (57,660 SF)
ROW DEDICATION	0.06 ACRES (2,790 SF)
NET LOT AREA	1.26 ACRES (54,870 SF)
ZONING	C - COMMERCIAL
BUILDING HEIGHT	35' - MAX
BUILDING AREA	8,218 SF
LOT COVERAGE	15%
PERVIOUS AREA	0.62 ACRES (27,077 SF)
IMPERVIOUS AREA	0.64 ACRES (27,793 SF)
PERCENT IMPERVIOUS	50.7%

PARKING INFORMATION	
REQUIRED PARKING	
OFFICE (1 SPACE PER 300 SF) 5,000 SF PROVIDED	17 SPACES
RETAIL (1 SPACE PER 200 SF) 3,218 SF PROVIDED	17 SPACES
	34 SPACES TOTAL
HANDICAP PARKING REQUIRED	2 SPACES
STANDARD PARKING PROVIDED	28 SPACES
HANDICAP PARKING PROVIDED	2 SPACES
TOTAL PARKING PROVIDED	30 SPACES



VICINITY MAP  
N.T.S.

TEXAS REGISTRATION #14199  
**CLAYMOORE ENGINEERING**  
 1903 CENTRAL DRIVE, SUITE #400  
 BEDFORD, TX 76021  
 WWW.CLAYMOORE.COM  
 PHONE: 817.281.0572

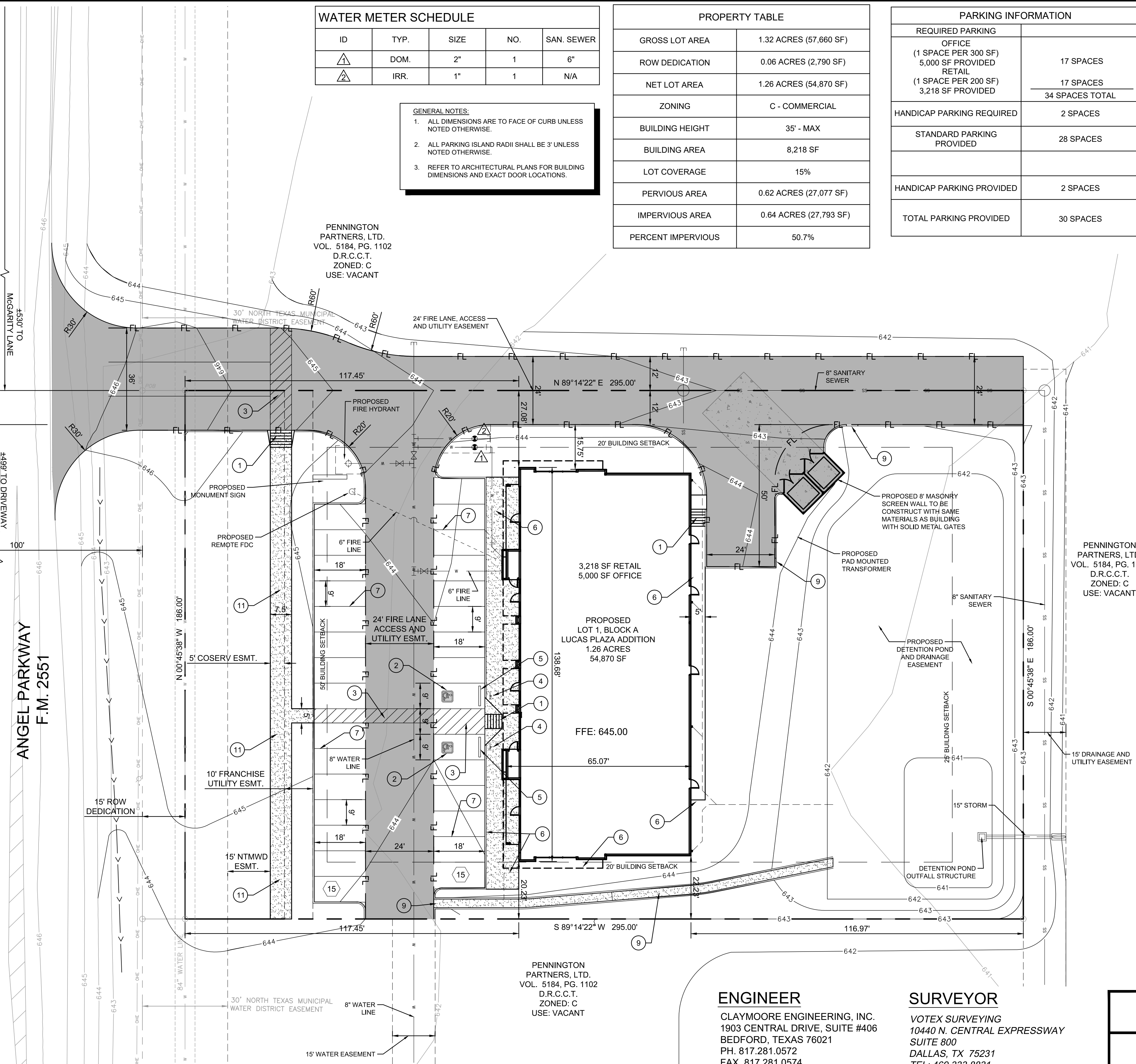
STATE OF TEXAS  
 MATT MOORE  
 95813  
 LICENSED PROFESSIONAL ENGINEER  
 08/01/2018

**LUCAS PLAZA RETAIL**  
**ANGEL PARKWAY**  
**LUCAS, TX**

NO.	DATE	REVISION	BY
1	08/01/2018	REV. GAS SERVICE	MAM
2	12/05/17	REV. PER CITY COMMENTS	MAM
1		UTILITY WATER CONNECTION	MAM

**SITE PLAN**

DESIGN: BJK  
 DRAWN: BJK  
 CHECKED: MAM  
 DATE: 08/01/2018  
 SHEET  
**SP-1**  
 File No. 2017-114



PENNINGTON PARTNERS, LTD.  
 VOL. 5184, PG. 1102  
 D.R.C.C.T.  
 ZONED: C  
 USE: VACANT

PENNINGTON PARTNERS, LTD.  
 VOL. 5184, PG. 1102  
 D.R.C.C.T.  
 ZONED: C  
 USE: VACANT

**FLOOPLAIN NOTE**

ACCORDING TO MAP NO. 48085C0405J, DATED JUNE 2, 2009 OF THE NATIONAL FLOOD INSURANCE PROGRAM MAP, FLOOD INSURANCE RATE MAP OF COLLIN COUNTY, TEXAS, FEDERAL EMERGENCY MANAGEMENT AGENCY, FEDERAL INSURANCE ADMINISTRATION, THIS PROPERTY IS WITHIN ZONE "X" (SHADED) AND IS NOT WITHIN A SPECIAL FLOOD HAZARD AREA. IF THIS SITE IS NOT WITHIN AN IDENTIFIED SPECIAL FLOOD HAZARD AREA, THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY AND/OR THE STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE, ON RARE OCCASIONS, GREATER FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.

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: *Matt Moore* Date: 08/01/2018

**ENGINEER**  
 CLAYMOORE ENGINEERING, INC.  
 1903 CENTRAL DRIVE, SUITE #400  
 BEDFORD, TEXAS 76021  
 PH. 817.281.0572  
 FAX. 817.281.0574  
 CONTACT: MATT MOORE, PE  
 EMAIL: MATT@CLAYMOOREENG.COM  
 TEXAS REGISTRATION #14199

**ARCHITECT**  
 JEPSSEN / GUERIN ARCHITECTS  
 P.O. BOX 141151  
 DALLAS, TX 75214  
 PH. 214.673-1111  
 CONTACT: TOM GUERIN  
 EMAIL: tguerin@swbell.net

**SURVEYOR**  
 VOTEX SURVEYING  
 10440 N. CENTRAL EXPRESSWAY  
 SUITE 800  
 DALLAS, TX 75231  
 TEL: 469.333.8831  
 CONTACT: CANDY HONE, RPLS  
 EMAIL: CANDY@VOTEXSURVEYING.COM  
 TBPLS FIRM NO. 10013600

**OWNER**  
 PENNINGTON PARTNERS, LTD.  
 3445 SHENANDOAH ST.  
 DALLAS, TX 75205  
 TEL:  
 CONTACT:  
 EMAIL:

SITE PLAN			
LUCAS PLAZA			
LEGAL DESCRIPTION: A PORTION OF A LARGER TRACT DEEDED TO PENNINGTON PARTNERS, LTD. RECORDED IN VOL. 5184, PG. 1102 D.R.C.C.T.			
CITY:	STATE:	SITE AREA:	ZONING:
LUCAS	TEXAS	1.26 ACRES - 54,870 SF	C
COUNTY:	SURVEY:	ABSTRACT NO.:	
COLLIN	W. M. SNIDER	821	
SUBMITTAL LOG:			
JULY 14, 2017	FIRST CITY SUBMITTAL		
JULY 31, 2017	SECOND CITY SUBMITTAL		
SEPTEMBER 28, 2017	THIRD CITY SUBMITTAL		



GENERAL NOTES

- 1. ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE CITY'S DESIGN STANDARDS. IF NO CITY STANDARD IS APPLICABLE, MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE "NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION"
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, CLEANOUTS, VALVE BOXES, POWER POLES, SIGNS, FIRE HYDRANTS, ETC., MUST BE ADJUSTED TO PROPER GRADE BY THE CONTRACTOR PRIOR TO AND AFTER PLACING OF PERMANENT PAVING. 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 CONTRACTOR (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 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 AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
20. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE CIVIL ENGINEER A COPY OF RECORD DRAWINGS IDENTIFYING ALL DEVIATIONS OR VARIATIONS FROM THE ORIGINAL PLANS.
21. CONTRACTOR SHALL GIVE NOTICE TO ALL AFFECTED PARTIES AND ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS, OR PERSONS IN CHARGE OF PRIVATE AND PUBLIC UTILITIES OR RAILROADS AFFECTED BY HIS OPERATIONS, AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
22. ALL "RECORD" DIMENSIONS SHALL CONFORM TO THE DESIGN DIMENSIONS PLUS OR MINUS 0.02 FEET. ALL "RECORD" SLOPES SHALL CONFORM TO THE DESIGNED SLOPES PLUS OR MINUS 0.005 FOOT/FOOT.
23. CONTRACTOR SHALL CONTACT CITY 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.

PAVING AND STRIPING NOTES

- 1. THE REINFORCED PORTLAND CEMENT CONCRETE SHOULD HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS FOR STANDARD DUTY CONCRETE AND 4,000 PSI FOR HEAVY DUTY CONCRETE AND DUMPSTER AREAS, AND A MINIMUM REINFORCING OF #4 BARS @ 18" 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 CONSTRUCTED 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.

STORM SEWER NOTES

- 1. CONTRACTOR SHALL FIELD VERIFY THE VERTICAL AND HORIZONTAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND CONSTRUCTION MANAGER IMMEDIATELY IF A CONFLICT IS DISCOVERED.
2. CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS SHOWN, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF CURB INLETS, 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 OR APPROVED EQUAL.

STORM SEWER DISCHARGE AUTHORIZATION

- 1. IF THE TOTAL DISTURBED AREA EXCEEDS ONE (1) ACRE A NOTICE OF INTENT (N.O.I.) SHALL BE SUBMITTED BY THE CONTRACTOR TO THE TCEQ NO LESS THAN 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
2. ALL CONTRACTORS AND SUBCONTRACTORS PROVIDING SERVICES RELATED TO THE SWPPP SHALL SIGN A CONTRACTOR CERTIFICATION STATEMENT ACKNOWLEDGING THEIR RESPONSIBILITIES AS SPECIFIED IN THE SWPPP.
3. A COPY OF THE SWPPP, INCLUDING CONTRACTOR CERTIFICATIONS AND ANY REVISIONS, SHALL BE SUBMITTED TO THE CITY AND FILED WITH THE CONSTRUCTION PLANS, AND SHALL BE RETAINED ON-SITE DURING CONSTRUCTION.
4. A NOTICE OF TERMINATION (N.O.T.) SHALL BE SUBMITTED TO THE TCEQ BY THE CONTRACTOR WHEN THE SITE HAS 100% OF THE DISTURBED AREAS STABILIZED AND THE SITE NO LONGER HAS STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES (CONSTRUCTION), OR THE N.O.T. PERMITTEE OR CO-PERMITTEE NO LONGER HOLDS OPERATIONAL CONTROL OF THE CONSTRUCTION.

WATER NOTES

- 1. EXISTING UTILITY DATA IS PROVIDED FOR INFORMATION ONLY. ALTHOUGH THIS DATA IS SHOWN AS ACCURATELY AS POSSIBLE, THE CONTRACTOR IS CAUTIONED THAT THE DEVELOPER AND THE ENGINEER NEITHER ASSUMES NOR IMPLIES ANY RESPONSIBILITY FOR THE ACCURACY OF THIS DATA.
2. THE CONTRACTOR IS TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. HORIZONTAL AND VERTICAL BLOCKING FOR WATER LINES HAS BEEN OMITTED FOR CLARITY. HOWEVER, BLOCKING SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS.
4. TRENCHES WHICH LAY OUTSIDE EXISTING OR FUTURE PAVEMENTS SHALL BE BACK FILLED ABOVE THE TOP OF THE EMBEDMENT WITH TYPE '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 90% PROCTOR DENSITY BY MEANS OF TAMPING ONLY. TRENCHES WHICH CROSS UNDER EXISTING OR FUTURE PAVEMENT SHALL BE BACK FILLED PER FIGURE 'A' WITH 95% PROCTOR STANDARD DENSITY OF -2, +4 OF OPTIMUM MOISTURE CONTENT.
5. TOP OF WATER LINES SHALL BE A MINIMUM OF 42" BELOW TOP OF GRADE 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.
10. FITTINGS SHALL BE DUCTILE IRON AND MECHANICAL JOINT TYPE, WITH "COR-BLUE" BOLTS AND SHALL BE CLASS 250.

SANITARY SEWER NOTES

- 1. EXISTING UTILITY DATA IS PROVIDED FOR INFORMATION ONLY. ALTHOUGH THIS DATA IS SHOWN AS ACCURATELY AS POSSIBLE, THE CONTRACTOR IS CAUTIONED THAT THE DEVELOPER AND THE ENGINEER NEITHER ASSUMES NOR IMPLIES ANY RESPONSIBILITY FOR THE ACCURACY OF THIS DATA.
2. THE CONTRACTOR IS TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. TRENCHES WHICH LIE OUTSIDE EXISTING PAVEMENTS SHALL BE BACKFILLED ABOVE THE TOP OF THE EMBEDMENT WITH TYPE "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 90% OF THE MAXIMUM DRY DENSITY BY MEANS OF TAMPING ONLY. TRENCHES THAT CROSS UNDER EXISTING OR FUTURE PAVEMENT SHALL BE BACKFILLED AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY WITH MOISTURE CONTENT -2 AND +4% OF OPTIMUM MOISTURE CONTENT.
4. TYPICAL LOCATION OF SANITARY SEWER PIPE SHALL BE A MINIMUM OF 4'-0" BELOW TOP OF CURB EXCEPT WHERE SHOWN OTHERWISE IN THESE PLANS.
5. ALL SANITARY SEWER LINES SHALL BE CAPPED WITH AN APPROPRIATE CAP AT THE END OF EACH WORKDAY.
6. 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.
7. ALL SEWER SERVICES SHALL BE CONSTRUCTED OF SDR-26 PIPE (GREEN).

TRAFFIC CONTROL NOTES

- 1. CONTRACTOR SHALL PROVIDE 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 INTENT OF THESE TRAFFIC CONTROL PLANS TO AVOID CONFUSION TO THE TRAVELING PUBLIC.
4. THE CONTRACTOR SHALL UNCOVER EXISTING SIGNS AND REPLACE PAVEMENT MARKINGS IN-KIND AS ORIGINALLY CONFIGURED AT THE END OF CONSTRUCTION OPERATIONS AND PRIOR TO FINAL ACCEPTANCE BY THE 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.

EROSION CONTROL NOTES

- 1. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES. THE CONTRACTOR SHALL USE SEDIMENT FILTERS OR OTHER MEASURES APPROVED BY THE ENGINEER AND CONSTRUCTION MANAGER TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM CLOGGING STORM SEWER PIPES OR PROPOSED OR EXISTING INLETS, OR FROM BEING TRANSPORTED TO ADJACENT PROPERTIES AND STREET RIGHT-OF-WAYS. ALL EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO SITE DISTURBANCE AND SHALL REMAIN IN PLACE UNTIL FINAL GRADING AND PAVING IS COMPLETE AND PERMANENT SOIL STABILIZATION IS ACHIEVED.
2. CONSTRUCTION OPERATIONS SHALL BE MANAGED SO THAT AS MUCH OF THE SITE AS POSSIBLE IS LEFT COVERED WITH EXISTING TOPSOIL AND VEGETATION.
3. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH. THE AREAS SHALL THEN BE SEEDED (OR SODDED), IRRIGATED, AND MAINTAINED UNTIL PERMANENT STAND OF GRASS IS ACHIEVED WITH A MINIMUM OF 70% COVERAGE, UNLESS OTHERWISE NOTED. PRIVATE LAWN AREAS AND PARKWAYS IN FRONT OF PRIVATE LAWN AREAS DISTURBED BY CONSTRUCTION SHALL BE REPLACED WITH BLOCK SOD SIMILAR TO THAT EXISTING.
4. CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION ENTRANCE AT ALL PRIMARY POINTS OF ACCESS. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION TRAFFIC UTILIZES THE STABILIZED ENTRANCE AT ALL TIMES FOR INGRESS/EGRESS TO THE SITE.
5. CONSTRUCTION ENTRANCE:
- MINIMUM SIZE STONE: 5-INCHES DIAMETER
- THICKNESS: NOT LESS THAN 8-INCHES
- LENGTH: AS SHOWN ON PLAN
- WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS AND EGRESS.
- MAINTENANCE REQUIREMENTS: AS NECESSARY TO PREVENT TRACKING OR FLOWING MUD INTO PUBLIC RIGHT-OF-WAY OR PARKING AREAS.

- 6. SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON A PUBLIC ROADWAY SHALL BE REMOVED IMMEDIATELY. WHEN WASHING IS REQUIRED TO REMOVE SEDIMENT PRIOR TO ENTRANCE TO A PUBLIC ROADWAY, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. ALL FINES IMPOSED FOR TRACKING ONTO PUBLIC ROADS SHALL BE PAID BY THE CONTRACTOR.
7. CONTRACTOR IS RESPONSIBLE FOR PROPER MAINTENANCE OF THE REQUIRED EROSION CONTROL DEVICES THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS. EROSION CONTROLS SHALL BE REPAIRED OR REPLACED AS INSPECTION DEEMS NECESSARY, OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ACCUMULATED SILT IN ANY EROSION CONTROL DEVICE SHALL BE REMOVED AND SHALL BE DISTRIBUTED ON SITE IN A MANNER NOT CONTRIBUTING TO ADDITIONAL SILTATION. THE CONTRACTOR IS RESPONSIBLE FOR RE-ESTABLISHING ANY EROSION CONTROL DEVICE WHICH IS DISTURBED.
8. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL USE FILTER BARRIER (OR OTHER METHOD APPROVED BY THE ENGINEER AND CITY) AS REQUIRED TO PREVENT ADVERSE OFF SITE IMPACTS OR STORM WATER QUALITY FROM SILT AND CONSTRUCTION DEBRIS FLOWING ONTO ADJACENT PROPERTIES AS REQUIRED BY THE CITY.
9. BEFORE ANY EARTHWORK IS DONE, THE CONTRACTOR SHALL STAKE OUT AND MARK THE LIMITS OF CONSTRUCTION AND OTHER ITEMS ESTABLISHED BY THE PLANS. THE CONTRACTOR SHALL PROTECT AND PRESERVE CONTROL POINTS AT ALL TIMES DURING THE COURSE OF THE PROJECT. THE GRADING CONTRACTOR SHALL PROVIDE ALL NECESSARY ENGINEERING AND SURVEYING FOR LINE AND GRADE CONTROL POINTS RELATED TO EARTHWORK.
10. CONTRACTOR STAGING AREA TO BE AGREED UPON BY OWNER PRIOR TO BEGINNING CONSTRUCTION.
11. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY THE T.C.E.Q. OR THE GOVERNING CITY.

GRADING NOTES

- 1. IF A GRADING PERMIT IS REQUIRED FROM THE CITY PRIOR TO STARTING CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMIT AND PAYING ALL ASSOCIATED FEES.
2. CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES (SHOWN OR NOT SHOWN) WITHIN SCOPE OF CONSTRUCTION. IF ANY EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM AT HIS OWN EXPENSE.
3. ALL SPOT ELEVATIONS SHOWN ARE TO TOP OF PAVING SURFACE OR FINISHED EARTH GRADE UNLESS NOTED OTHERWISE.
4. CONTRACTOR TO ENSURE POSITIVE DRAINAGE FROM THE EXISTING AND PROPOSED BUILDINGS AND NO PONDING IN PAVED AREAS. CONTRACTOR ADJUSTMENTS TO SPOT GRADES TO MAINTAIN POSITIVE DRAINAGE IS ALLOWED WITH THE PRIOR APPROVAL OF THE ENGINEER. CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO PAVING IF ANY AREAS OF POOR DRAINAGE ARE ENCOUNTERED.
5. THE CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, POWER POLES, GUY WIRES, AND TELEPHONE BOXES WHICH ARE TO REMAIN IN PLACE AND UNDISTURBED DURING CONSTRUCTION.
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.

BOBBY KUBIN 8/7/2018 10:05 AM
PLOT DATE: 8/7/2018 10:05 AM
PLOT LOCATION: Z:\PROJECTS\PROJECTS\2017-114 LEGACY CAPITAL LUCAS\CADD\SHEETS\C-1 GENERAL NOTES.DWG
LAST SAVED: 8/7/2018 9:45 AM



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: 08/01/2018



LUCAS PLAZA RETAIL
ANGEL PARKWAY
LUCAS, TX

Table with columns: No., DATE, REVISION, BY. Contains revision history entries.

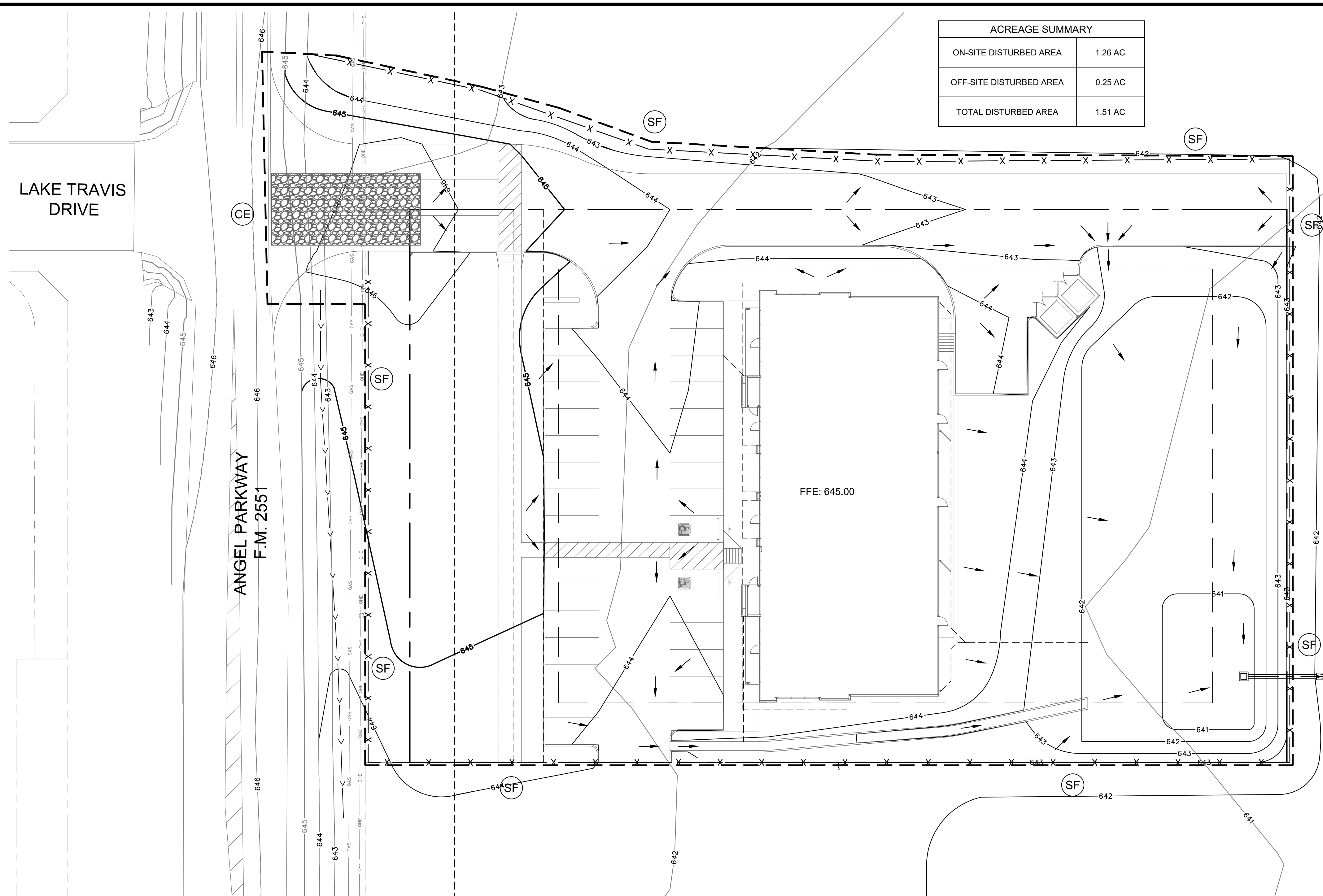
GENERAL NOTES

DESIGN: BJR
DRAWN: BJR
CHECKED: MAM
DATE: 08/01/2018

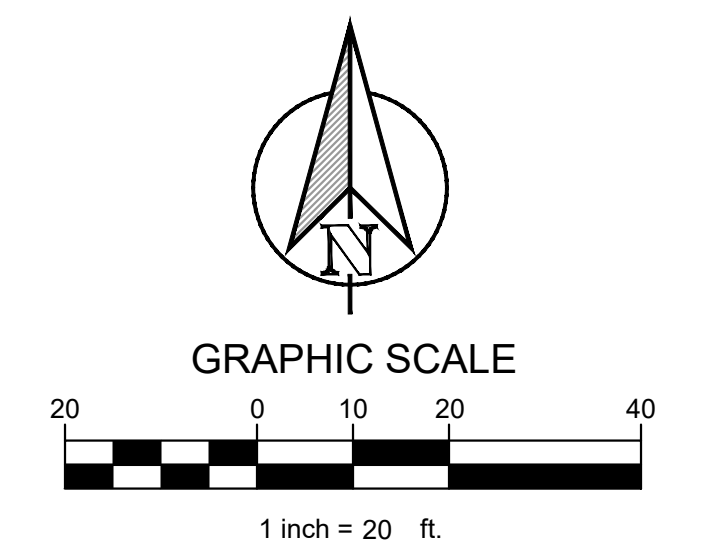
SHEET
C-1
File No. 2017-114



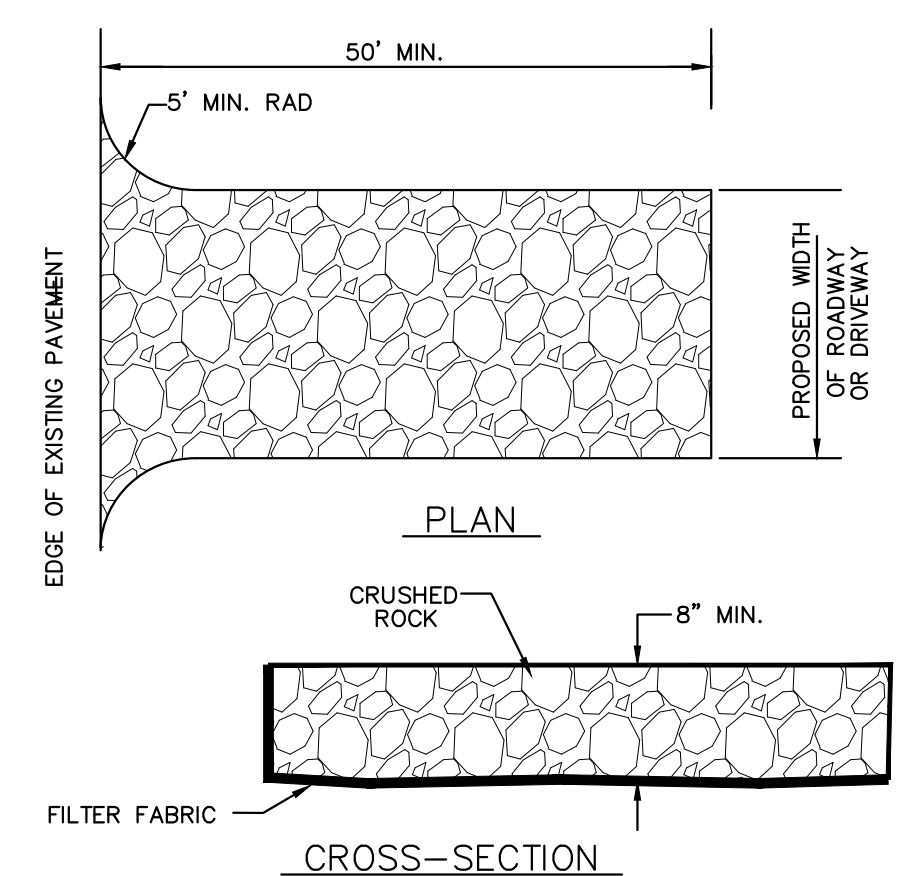
PLOTTED BY: BOBBY KUBIN  
 PLOT DATE: 8/7/2018 10:05 AM  
 LOCATION: Z:\PROJECTS\PROJECTS\2017-114 LEGACY CAPITAL LUCAS\CADD\SHEETS\C-2 EROSION CONTROL PLAN.DWG  
 LAST SAVED: 8/7/2018 9:46 AM



ACREAGE SUMMARY	
ON-SITE DISTURBED AREA	1.26 AC
OFF-SITE DISTURBED AREA	0.25 AC
TOTAL DISTURBED AREA	1.51 AC



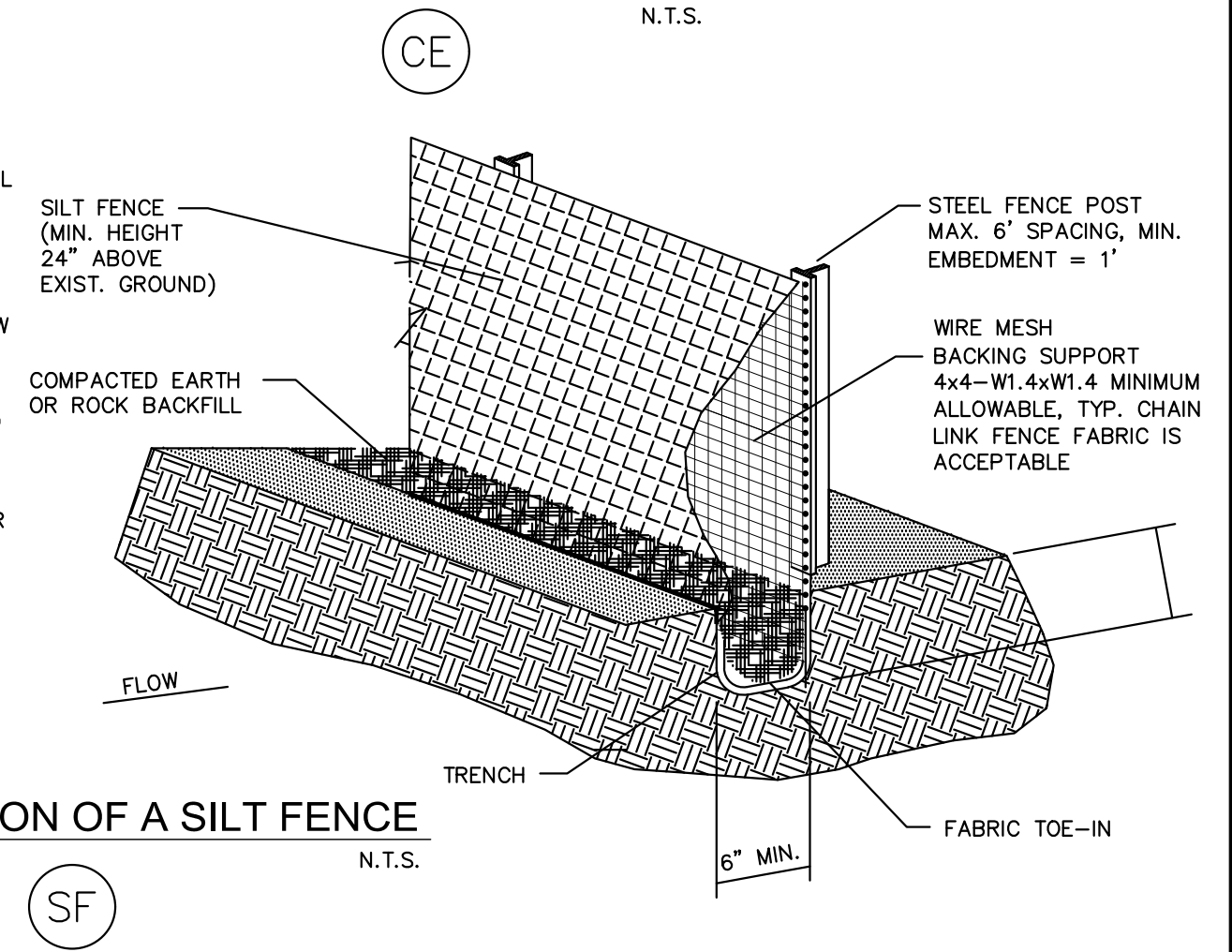
LEGEND	
→	DIRECTION OF FLOW
---100---	EXISTING CONTOUR
—100—	PROPOSED CONTOUR
- - - - -	LIMITS OF CONSTRUCTION
X	SILT FENCE
⊙	CONSTRUCTION ENTRANCE



**CONSTRUCTION ENTRANCE NOTES:**

- STONE SIZE - 5 INCHES (MIN) ROCK.
- LENGTH - AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.
- THICKNESS - NOT LESS THAN 8 INCHES.
- WIDTH - NOT LESS THAN 25 FEET OF ALL POINTS OF INGRESS OR EGRESS.
- WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY, MUST BE REMOVED IMMEDIATELY.
- DRAINAGE - ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
- CONTRACTOR TO COORDINATE EXACT LOCATION OF THIS DETAIL.

**CONSTRUCTION ENTRANCE**



**CONSTRUCTION OF A SILT FENCE**  
N.T.S.

**SILT FENCE GENERAL NOTES**

- 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.
- 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.
- THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 8 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
- 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.
- INSPECTION SHALL BE MADE EVERY WEEK AND AFTER EACH 1/2" RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
- 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.

**STANDARD EROSION CONTROL GENERAL NOTES**

- 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 LUCAS.
- 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-GRADING OR THE ADDITION OF NEW STONE MAY BE REQUIRED TO MAINTAIN THE EFFICIENCY OF THE INSTALLATION.
- CONTRACTOR SHALL HAVE A COPY THE SWPPP ON SITE AT ALL TIMES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTAL OF N.O.I., N.O.T. AND ANY ADDITIONAL INFORMATION REQUIRED BY THE E.P.A. CONTRACTOR SHALL COMPLY WITH ALL 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.

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 By: *Matt Moore* Date: 08/01/2018



**LUCAS PLAZA RETAIL**  
**ANGEL PARKWAY**  
**LUCAS, TX**

NO.	DATE	REVISION	BY
1		REV. GAS SERVICE	MAM
2		REV. PEEL CITY COMMENTS	MAM
3		WATER CONNECTION	MAM

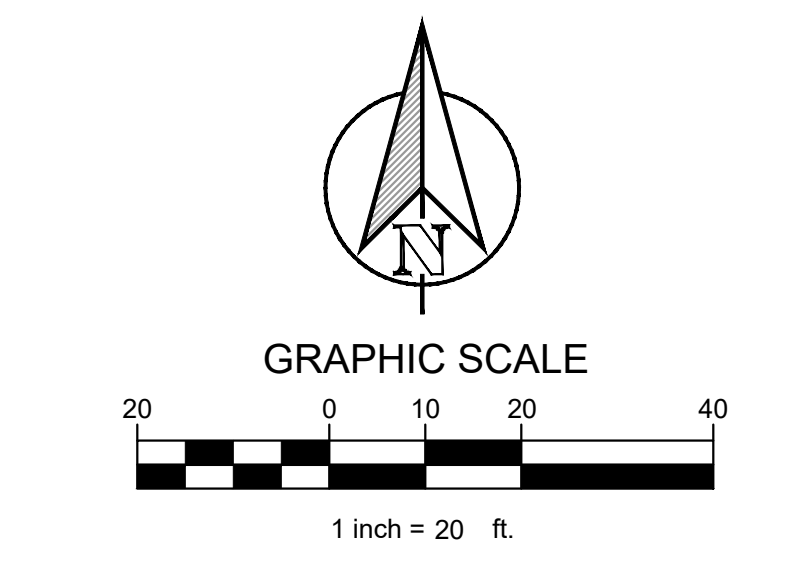
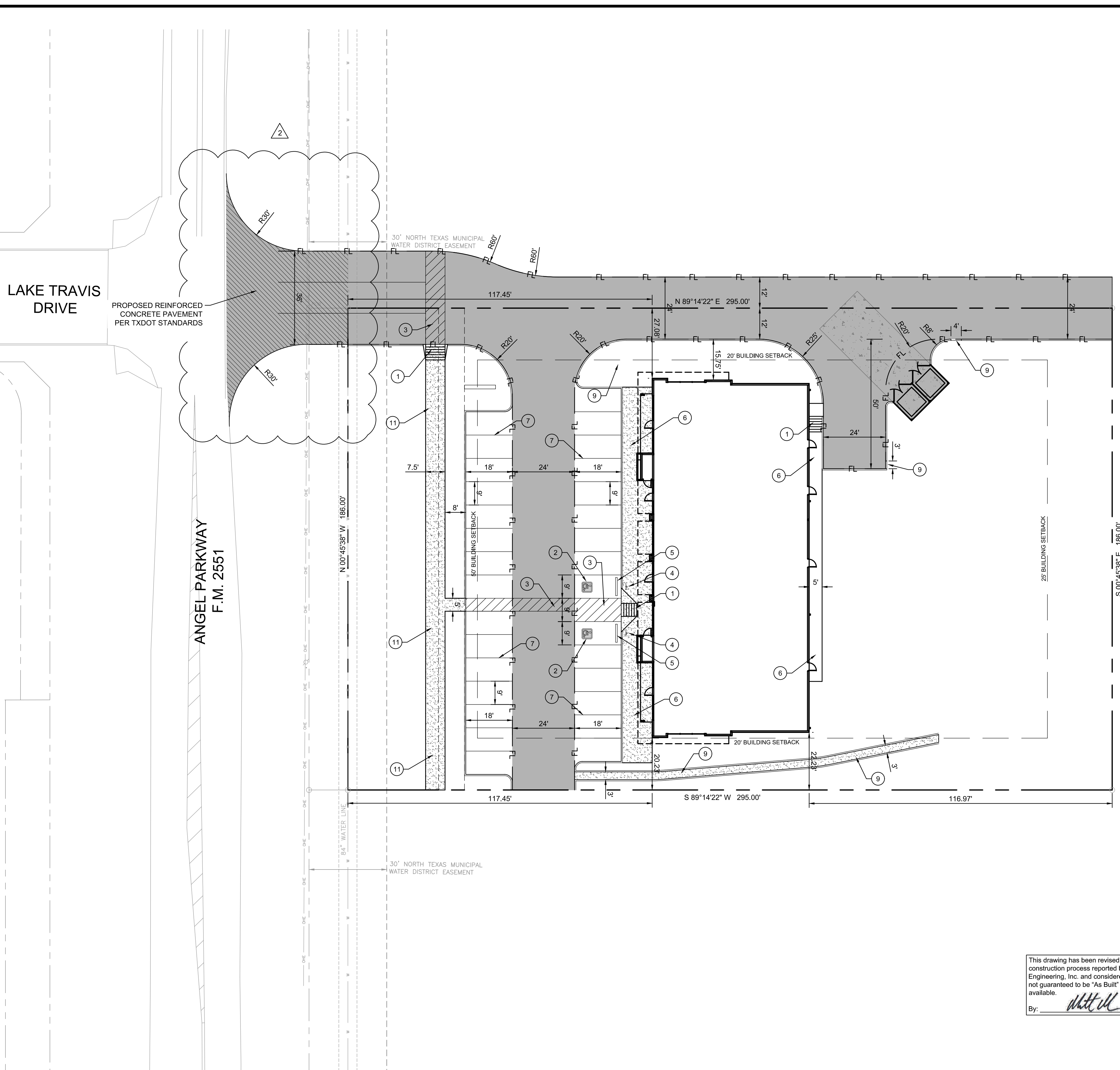
**EROSION CONTROL PLAN**

DESIGN: BJK  
 DRAWN: BJK  
 CHECKED: MAM  
 DATE: 08/01/2018

SHEET  
**C-2**



PLOTTED BY: BOBBY KUBIN 05:45 AM  
 PLOT DATE: 5/17/2018 10:00 AM  
 LOCATION: Z:\PROJECTS\PROJECTS\2017-114 LEGACY CAPITAL LUCAS\CADD\SHEETS\C-3 DIMENSIONAL CONTROL AND PAVING PLAN.DWG  
 LAST SAVED: 5/17/2018 9:48 AM



LEGEND	
[Pattern]	DUMPSTER AREA CONCRETE PAVEMENT PER DETAIL SHEET C-10
[Pattern]	HEAVY DUTY CONCRETE PAVEMENT PER DETAIL SHEET C-10
[Pattern]	LIGHT DUTY CONCRETE PAVEMENT PER DETAIL SHEET C-10
[Pattern]	CONCRETE SIDEWALK PER DETAIL SHEET C-10
[Symbol]	PROPOSED CONCRETE CURB AND GUTTER
[Symbol]	PROPOSED FIRE LANE STRIPING PER CITY STANDARDS
[Symbol]	CONNECT TO EXISTING PAVEMENT WITH LONGITUDINAL BUTT JOINT
[Symbol]	PARKING COUNT

CONSTRUCTION SCHEDULE	
1	HANDICAP RAMP PER DETAIL SHEET C-10
2	HANDICAP SYMBOL PER DETAIL SHEET C-10
3	PAVEMENT STRIPING PER DETAIL SHEET C-10 CROSS SLOPE SHALL NOT EXCEED 2%
4	HANDICAP SIGN PER DETAIL SHEET C-10
5	CONCRETE WHEEL STOP PER DETAIL SHEET C-10
6	CONCRETE SIDEWALK PER DETAIL SHEET C-10
7	4" WHITE TRAFFIC STRIPING PER MUTCD STANDARDS
8	PROPOSED TRASH ENCLOSURE. REFER TO ARCH PLANS FOR DETAILS.
9	CURB CUT FLUME PER DETAIL SHEET C-10
10	PROPOSED 6" WHITE TRAFFIC BUTTONS 6' ON CENTER
11	PUBLIC CONCRETE SIDEWALK PER CITY STANDARDS

**GENERAL NOTES:**

- ALL DIMENSIONS ARE TO FACE OF CURB UNLESS NOTED OTHERWISE.
- ALL PARKING ISLAND RADII SHALL BE 3' UNLESS NOTED OTHERWISE.
- REFER TO ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS AND EXACT DOOR LOCATIONS.

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 By: *Matt Moore* Date: 08/01/2018

**BENCHMARK:**  
 CITY OF ALLEN MONUMENT NO. 1, 3-1/2" ALUMINUM DISK SET IN CONCRETE, LOCATED 460' +/- WEST OF THE INTERSECTION OF WHITMAN DRIVE AND BETHANY ROAD AT THE EAST END OF BRIDGE IN GRASS MEDIAN.  
 ELEVATION 597.82



**LUCAS PLAZA RETAIL  
 ANGEL PARKWAY  
 LUCAS, TX**

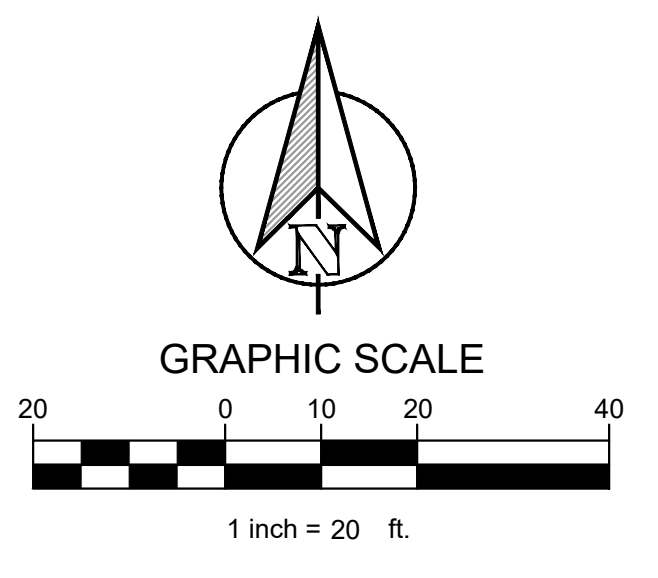
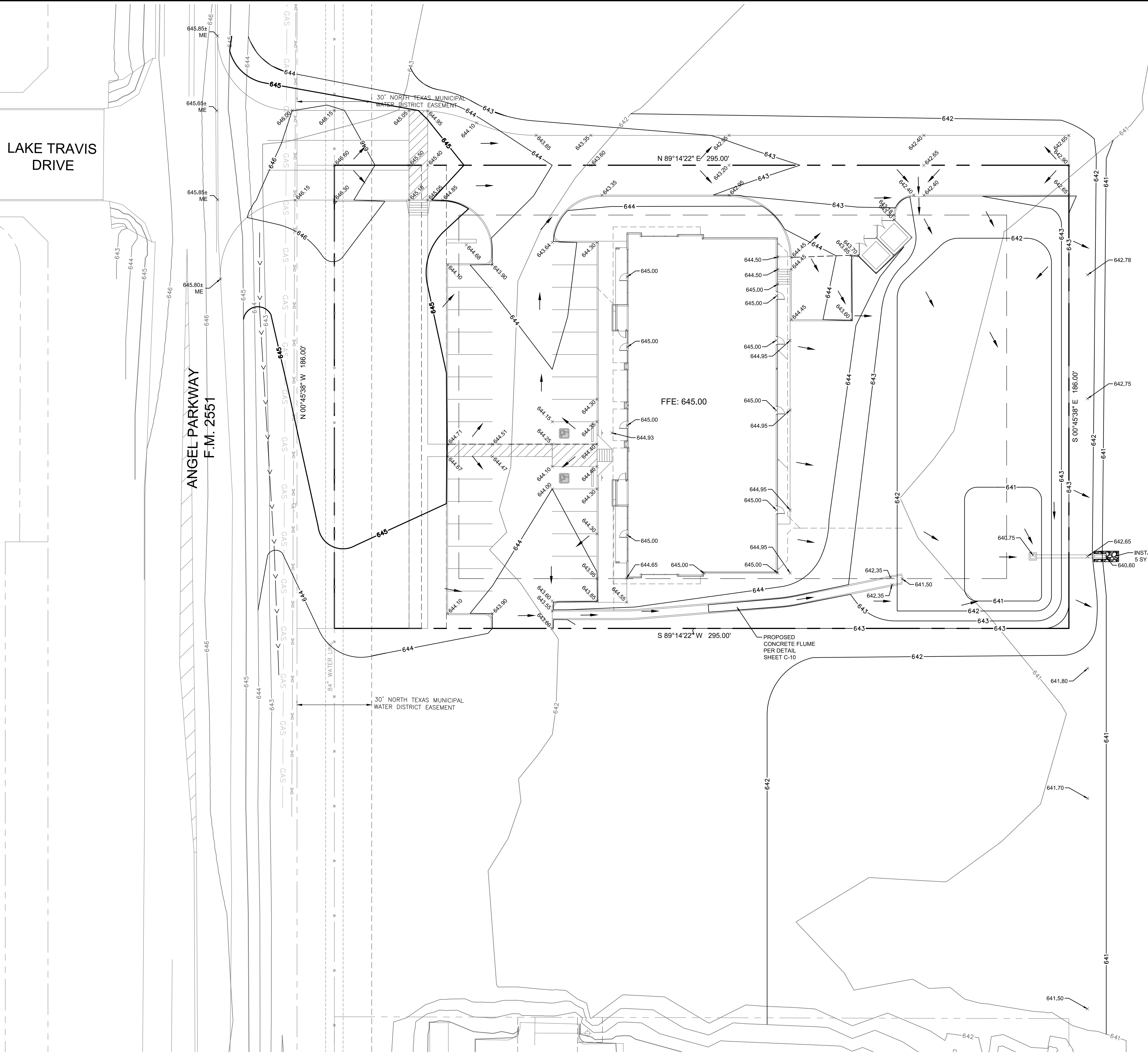
No.	DATE	REVISION	BY
3	01/24/18	REV. GAS SERVICE	MAM
2	12/05/17	REV. PER CITY COMMENTS	MAM
1	11/01/17	WATER CONNECTION	MAM

**DIMENSIONAL CONTROL  
 AND PAVING PLAN**

DESIGN: BJK  
 DRAWN: BJK  
 CHECKED: MAM  
 DATE: 08/01/2018  
 SHEET  
**C-3**  
 File No. 2017-114



PLOTTED BY: BOBBY KUBIN  
 PLOT DATE: 8/1/2018 10:06 AM  
 LOCATION: Z:\PROJECTS\PROJECTS\2017-114 LEGACY CAPITAL LUCAS\CADD\SHEETS\C-4 GRADING PLANDWG  
 LAST SAVED: 8/1/2018 9:49 AM

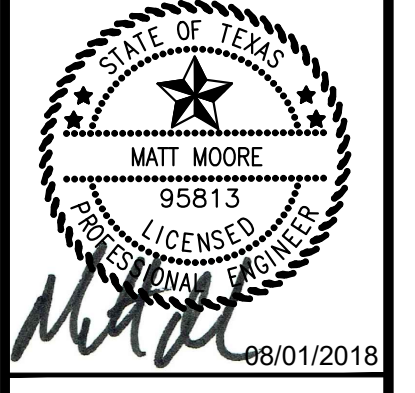


LEGEND	
---100---	EXISTING CONTOUR
—100—	PROPOSED CONTOUR
--- ---	GRADE BREAK
x98.50	PROPOSED GRADE (TOP OF PAVEMENT)
ME	MATCH EXISTING
TC	TOP OF CURB
TW	TOP OF RETAINING WALL
BW	BOTTOM OF RETAINING WALL

- GRADING 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 3:1.
  - ALL CURB HEIGHTS ARE 6-INCHES UNLESS NOTED OTHERWISE.
  - REFER TO GEOTECHNICAL REPORT FOR REQUIREMENTS REGARDING FILL COMPACTION AND MOISTURE CONTENT.
  - CONTRACTOR SHALL ADJUST EXISTING VALVES, MANHOLE RIMS, ETC. AS NECESSARY TO MATCH FINISHED GRADE.
  - CONTRACTOR SHALL MATCH EXISTING GRADES ALONG COMMON PROPERTY LINES.

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 By: *Matt Moore* Date: 08/01/2018

**BENCHMARK:**  
 CITY OF ALLEN MONUMENT NO. 1, 3-1/2" ALUMINUM DISK SET IN CONCRETE, LOCATED 460' +/- WEST OF THE INTERSECTION OF WHITMAN DRIVE AND BETHANY ROAD AT THE EAST END OF BRIDGE IN GRASS MEDIAN.  
 ELEVATION 597.82



**LUCAS PLAZA RETAIL**  
**ANGEL PARKWAY**  
**LUCAS, TX**

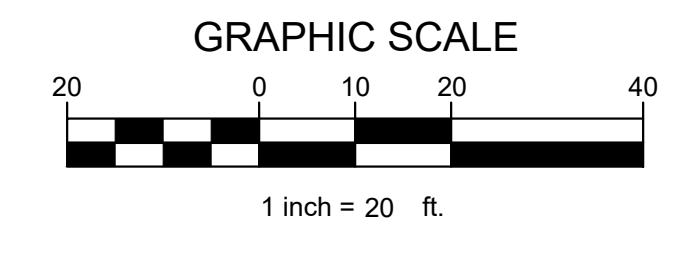
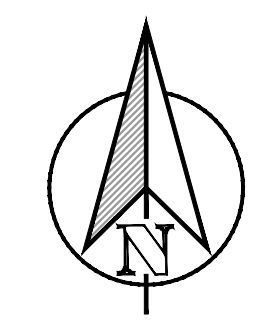
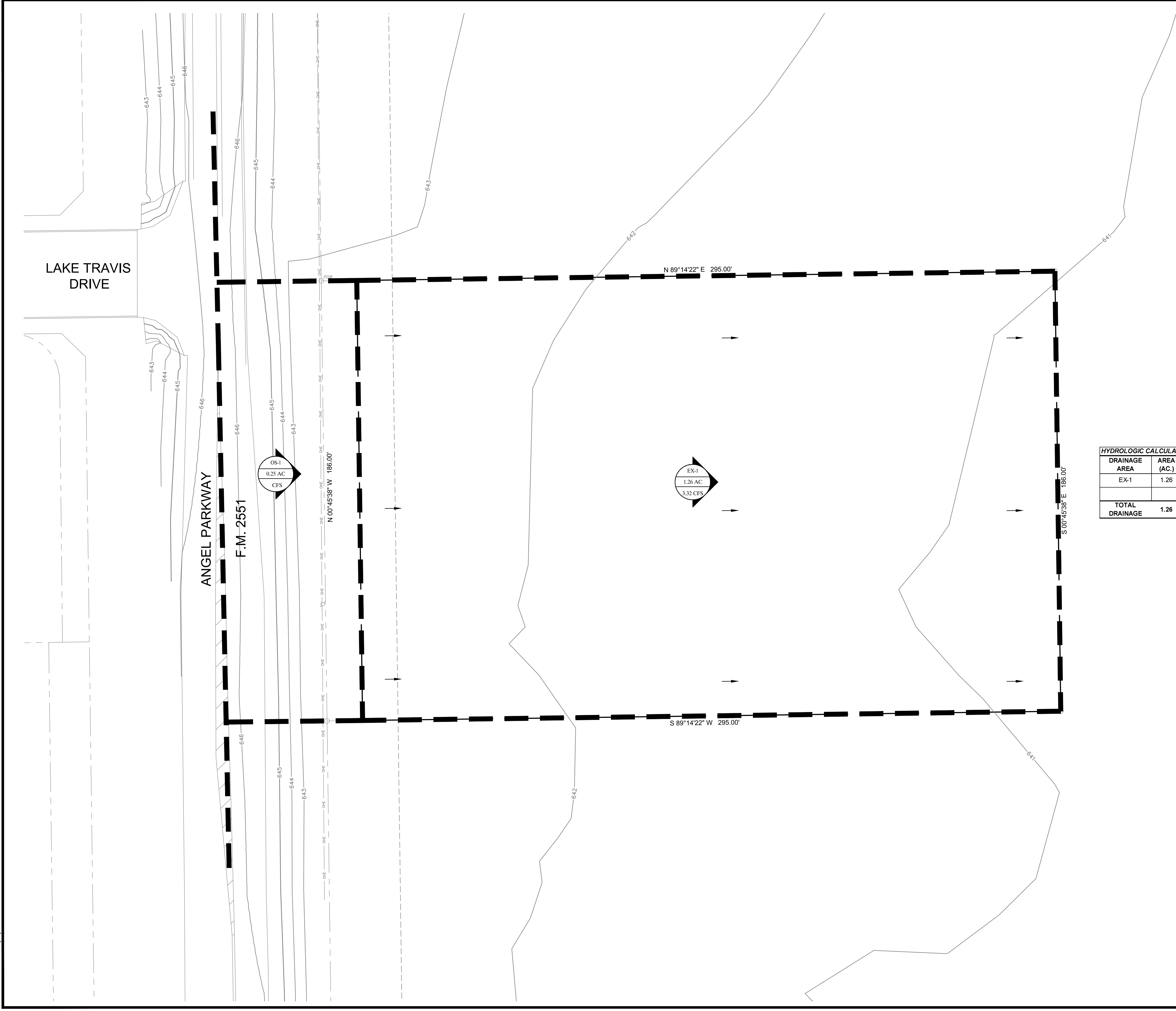
NO.	DATE	REVISION	BY
3	01/24/18	REV. GAS SERVICE	MAM
2	12/05/17	REV. PER CITY COMMENTS	MAM
1	11/17/17	UTILITY WATER CONNECTION	MAM

**GRADING PLAN**

DESIGN: BJK  
 DRAWN: BJK  
 CHECKED: MAM  
 DATE: 08/01/2018

SHEET  
**C-4**

PLOTTED BY: BOBBY KUBIN  
 PLOT DATE: 8/1/2018 10:06 AM  
 LOCATION: Z:\PROJECTS\PROJECTS\2017-114 LEGACY CAPITAL LUCAS\CADD\SHEETS\C-5 DRAINAGE AREA MAP EXISTING CONDITIONS.DWG  
 LAST SAVED: 8/1/2018 9:49 AM



LEGEND

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

**FLOODPLAIN NOTE**

ACCORDING TO MAP NO. 48085C0405J, DATED JUNE 2, 2009 OF THE NATIONAL FLOOD INSURANCE PROGRAM MAP, FLOOD INSURANCE RATE MAP OF COLLIN COUNTY, TEXAS, FEDERAL EMERGENCY MANAGEMENT AGENCY, FEDERAL INSURANCE ADMINISTRATION, THIS PROPERTY IS WITHIN ZONE "X" (SHADED) AND IS NOT WITHIN A SPECIAL FLOOD HAZARD AREA. IF THIS SITE IS NOT WITHIN AN IDENTIFIED SPECIAL FLOOD HAZARD AREA, THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY AND/OR THE STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE ON RARE OCCASIONS, GREATER FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.

HYDROLOGIC CALCULATIONS - PRE-DEVELOPED CONDITION

DRAINAGE AREA	AREA (AC.)	TC (MIN)	C	I <sub>100</sub> (IN/HR)	Q <sub>100</sub> (CFS)	COLLECTION POINT
EX-1	1.26	15	0.35	7.52	3.32	SHEET FLOWS OFF-SITE
<b>TOTAL DRAINAGE</b>	<b>1.26</b>				<b>3.32</b>	

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 By: *Whitt* Date: 08/01/2018

**BENCHMARK:**  
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 ELEVATION 597.82



**LUCAS PLAZA RETAIL**  
**ANGEL PARKWAY**  
**LUCAS, TX**

No.	DATE	REVISION	BY
3	01/24/18	REV. GAS SERVICE	MAM
2	12/05/17	REV. PER CITY COMMENTS	MAM
1	11/01/17	WATER CONNECTION	MAM

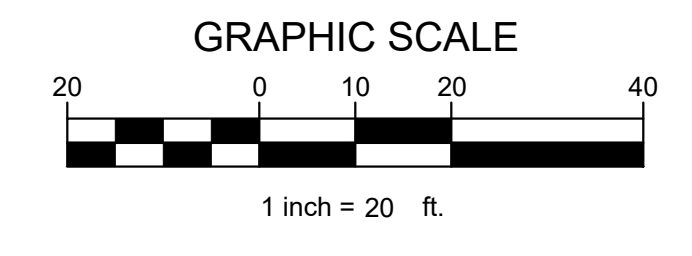
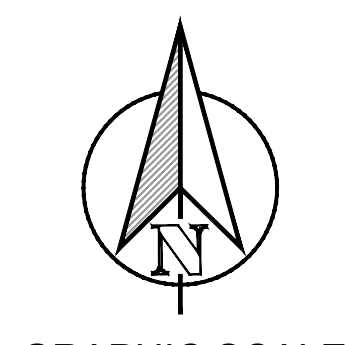
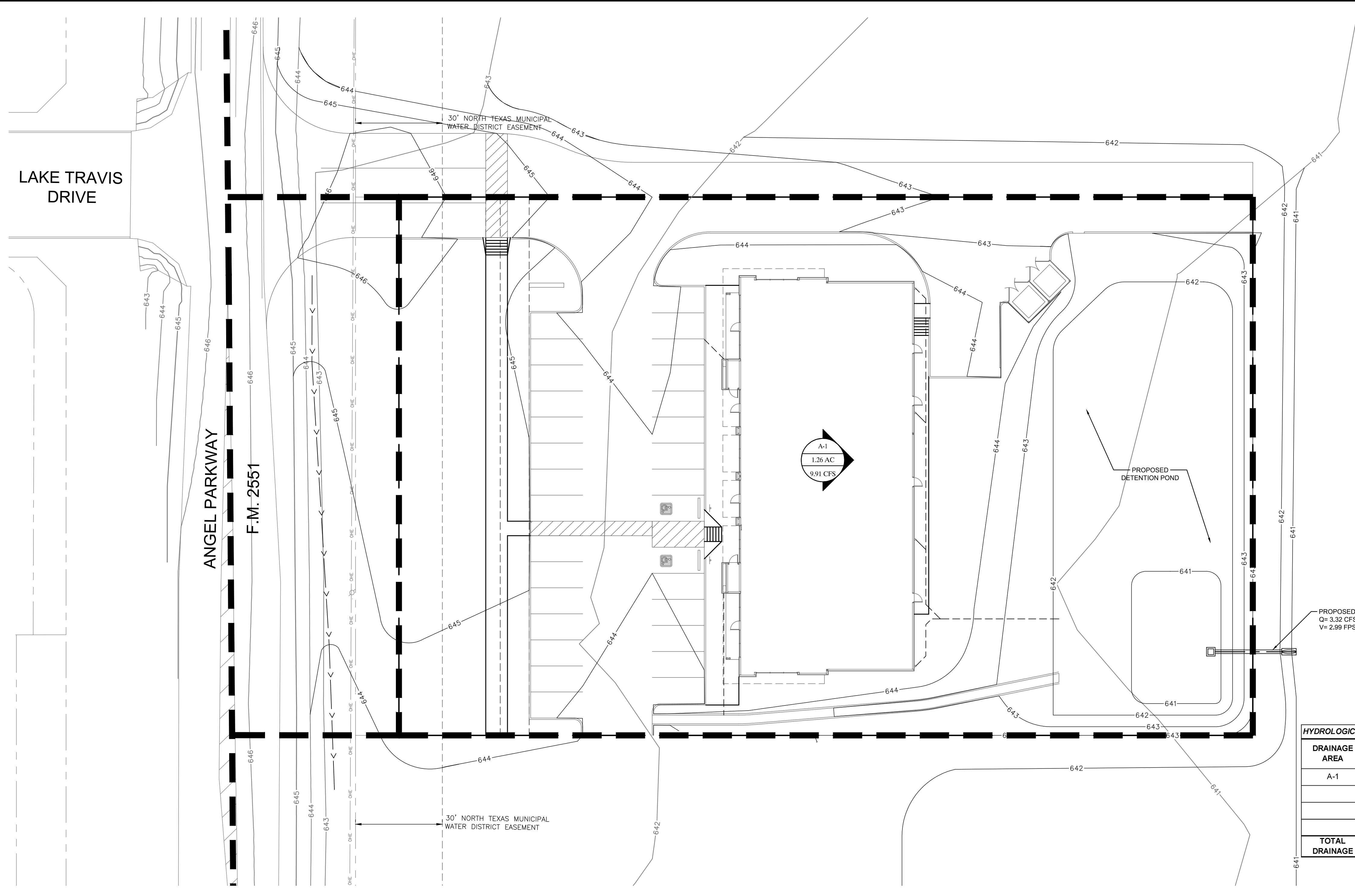
**DRAINAGE AREA MAP**  
**EXISTING CONDITIONS**

DESIGN: BJK  
 DRAWN: BJK  
 CHECKED: MAM  
 DATE: 08/01/2018

SHEET  
**C-5**



NO.	DATE	REVISION	BY
3	01/24/18	REV. GAS SERVICE	MAM
2	12/05/17	REV. PER CITY COMMENTS	MAM
1	11/01/17	WATER CONNECTION	MAM



**LEGEND**

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

**FLOODPLAIN NOTE**

ACCORDING TO MAP NO. 48085C0405J, DATED JUNE 2, 2009 OF THE NATIONAL FLOOD INSURANCE PROGRAM MAP, FLOOD INSURANCE RATE MAP OF COLLIN COUNTY, TEXAS, FEDERAL EMERGENCY MANAGEMENT AGENCY, FEDERAL INSURANCE ADMINISTRATION, THIS PROPERTY IS WITHIN ZONE "X" (SHADED) AND IS NOT WITHIN A SPECIAL FLOOD HAZARD AREA. IF THIS SITE IS NOT WITHIN AN IDENTIFIED SPECIAL FLOOD HAZARD AREA, THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY AND/OR THE STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE. ON RARE OCCASIONS, GREATER FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.

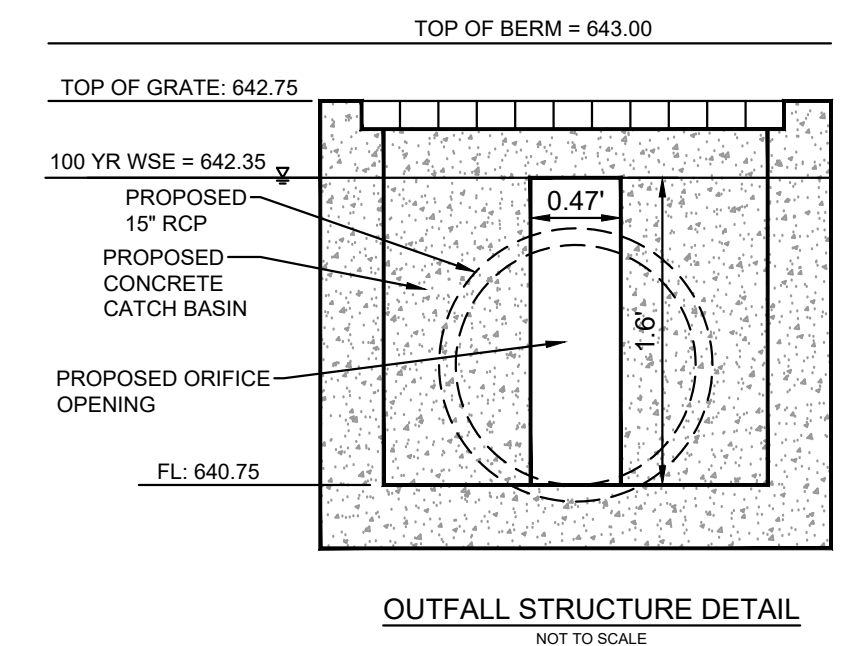
**HYDROLOGIC CALCULATIONS - DEVELOPED CONDITION**

DRAINAGE AREA	AREA (AC.)	TC (MIN)	C	I <sub>100</sub> (IN/HR)	Q <sub>100</sub> (CFS)	COLLECTION POINT
A-1	1.26	10	0.90	8.74	9.91	PROPOSED DETENTION POND
<b>TOTAL DRAINAGE</b>	<b>1.26</b>				<b>9.91</b>	

**ORIFICE CALCULATED DATA (100 YEAR EVENT)**

GIVEN INPUT DATA:  
 SOLVING FOR: AREA  
 FLOWRATE: 3.32 CFS  
 COEFFICIENT: 0.6100  
 HEADWATER: 0.80 FT  
 TAILWATER: 0.0000 FT

COMPUTED RESULTS:  
 AREA: 0.76 SF  
 VELOCITY: 4.38FPS



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: *Matt Moore* Date: 08/01/2018

**BENCHMARK:**  
 CITY OF ALLEN MONUMENT NO. 1, 3-1/2" ALUMINUM DISK SET IN CONCRETE, LOCATED 460' +/- WEST OF THE INTERSECTION OF WHITMAN DRIVE AND BETHANY ROAD AT THE EAST END OF BRIDGE IN GRASS MEDIAN.  
 ELEVATION 597.82

**Modified Rational Method**

Required Storage Volume	8,753 cubic-feet
0.201 acre-feet	
Provided Storage Volume	8,753 cubic-feet
0.201 acre-feet	

**Onsite Existing Conditions**

Area	1.26 acres	Onsite Existing Flow
Time (Tc)	15 minutes	Allowable Release Rate for On-Site Flows
C value	0.35	Off-Site
I-100yr	7.52 in/hr	Total Discharge from Pond
Q100yr	3.32 cfs	
Q100yr	3.32 cfs	
Q100yr	0.00 cfs	
Q100yr (T)	3.32 cfs	

**Onsite Proposed Conditions**

Area	1.26 acres	Total Drainage Area
Time (Tc)	10 minutes	
C value	0.90	
I-100yr	8.74 in/hr	
Q100yr	9.91 cfs	Developed Runoff

**Time (min.)**

Time (min.)	I-100yr
10	8.74
15	7.52
20	7.02
30	5.75
35	5.29
40	4.90
50	4.30
60	3.85
70	3.49
80	3.21
90	2.97
100	2.77

**Runoff per Storm Event - Developed**

Time (min.)	I-100yr	C value	Area (ac)	Runoff (cfs)
10	8.74	0.90	1.26	9.91
15	7.52	0.90	1.26	8.53
20	7.02	0.90	1.26	7.96
30	5.75	0.90	1.26	6.52
35	5.29	0.90	1.26	6.00
40	4.90	0.90	1.26	5.56
50	4.30	0.90	1.26	4.88
60	3.85	0.90	1.26	4.37
70	3.49	0.90	1.26	3.96
80	3.21	0.90	1.26	3.64
90	2.97	0.90	1.26	3.37
100	2.77	0.90	1.26	3.14

**Inflow per Storm Event**

Storm Event	Runoff	Inflow (ft <sup>3</sup> )
10	9.91	5,947
15	8.53	7,675
20	7.96	9,553
30	6.52	11,737
35	6.00	12,598
40	5.56	13,336
50	4.88	14,629
60	4.37	15,717
70	3.96	16,622
80	3.64	17,473
90	3.37	18,187
100	3.14	18,847

**Max Allowable Outflow per Storm Event**

Storm	Time	Release	Outflow (ft <sup>3</sup> )
10	20	3.32	1,990
15	25	3.32	2,487
20	30	3.32	2,985
30	40	3.32	3,980
35	45	3.32	4,477
40	50	3.32	4,974
50	60	3.32	5,969
60	70	3.32	6,964
70	80	3.32	7,959
80	90	3.32	8,954
90	100	3.32	9,949
100	110	3.32	10,944

**Detention Volume Required**

Storm	Inflow	Outflow	Storage (ft <sup>3</sup> )	Storage (acre-ft)
10	5,947	1,990	3,957	0.091
15	7,675	2,487	5,188	0.119
20	9,553	2,985	6,568	0.151
30	11,737	3,980	7,757	0.178
35	12,598	4,477	8,121	0.186
40	13,336	4,974	8,361	0.192
50	14,629	5,969	8,659	0.199
60	15,717	6,964	8,753	0.201
70	16,622	7,959	8,663	0.199
80	17,473	8,954	8,519	0.196
90	18,187	9,949	8,238	0.189
100	18,847	10,944	7,903	0.181

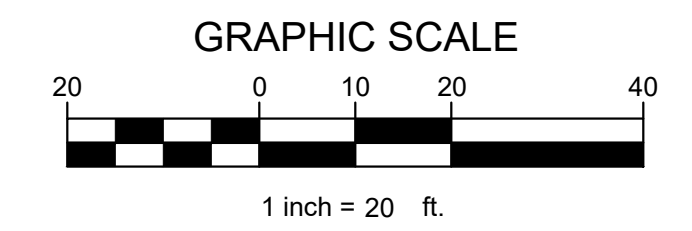
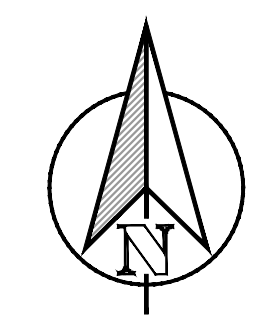
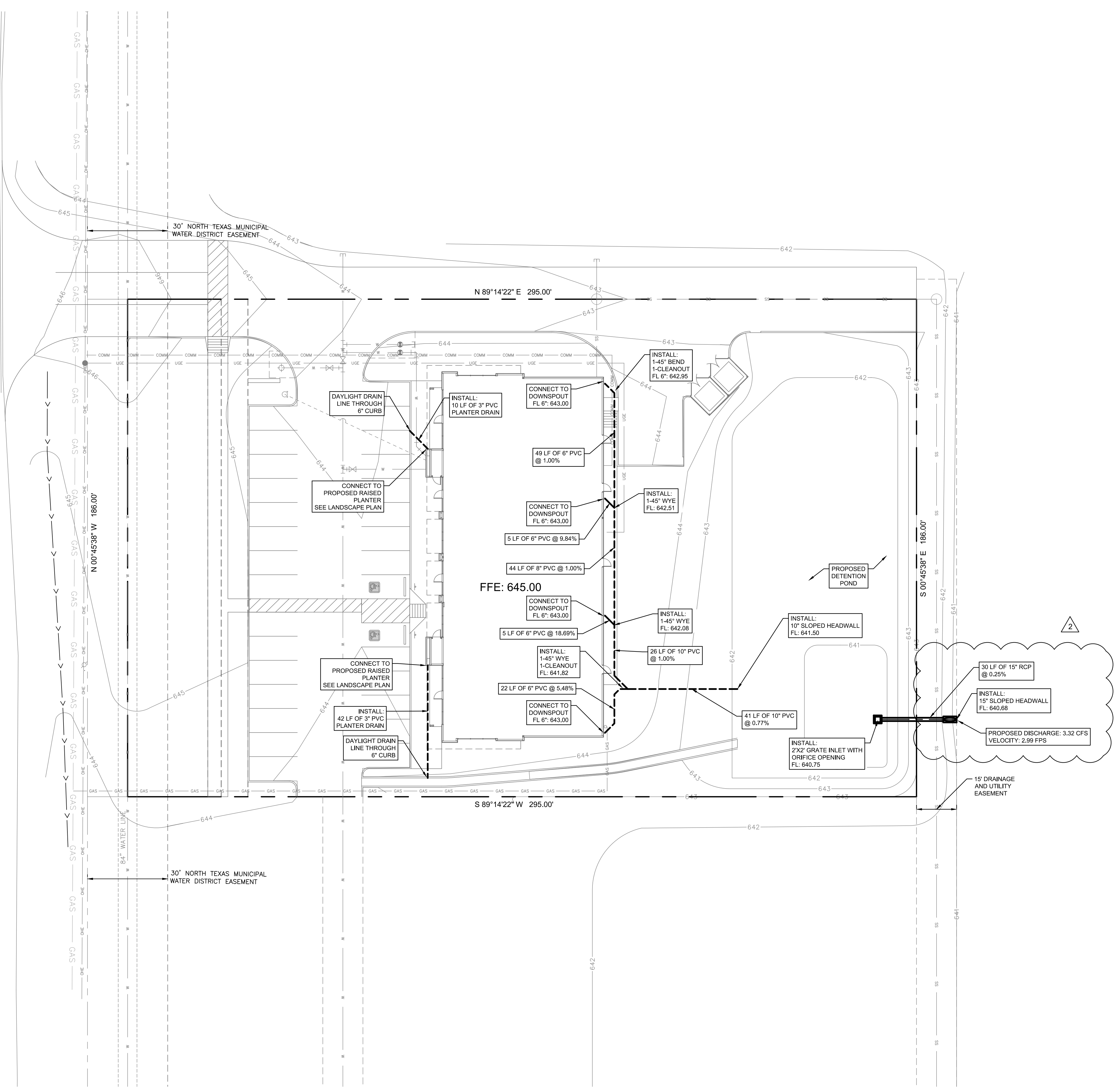
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 LAST SAVED: 5/17/2018 9:51 AM

LAKE TRAVIS DRIVE

ANGEL PARKWAY  
F.M. 2551



TEXAS REGISTRATION #14199  
**CLAY MOORE ENGINEERING**  
 1903 CENTRAL DRIVE, SUITE 4008  
 IRVING, TX 75038  
 PHONE 972.262.0072  
 WWW.CLAYMOORE.COM

STATE OF TEXAS  
 MATT MOORE  
 95813  
 LICENSED PROFESSIONAL ENGINEER  
 08/01/2018

**LUCAS PLAZA RETAIL**  
**ANGEL PARKWAY**  
**LUCAS, TX**

NO.	DATE	REVISION	BY
3	01/24/18	REV. GAS SERVICE	MAM
2	12/05/17	REV. PER CITY COMMENTS	MAM
1	11/01/17	WATER CONNECTION	MAM

**DRAINAGE PLAN**

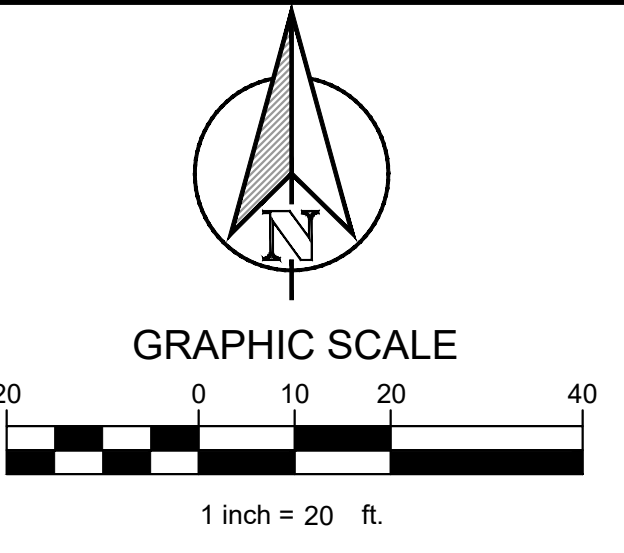
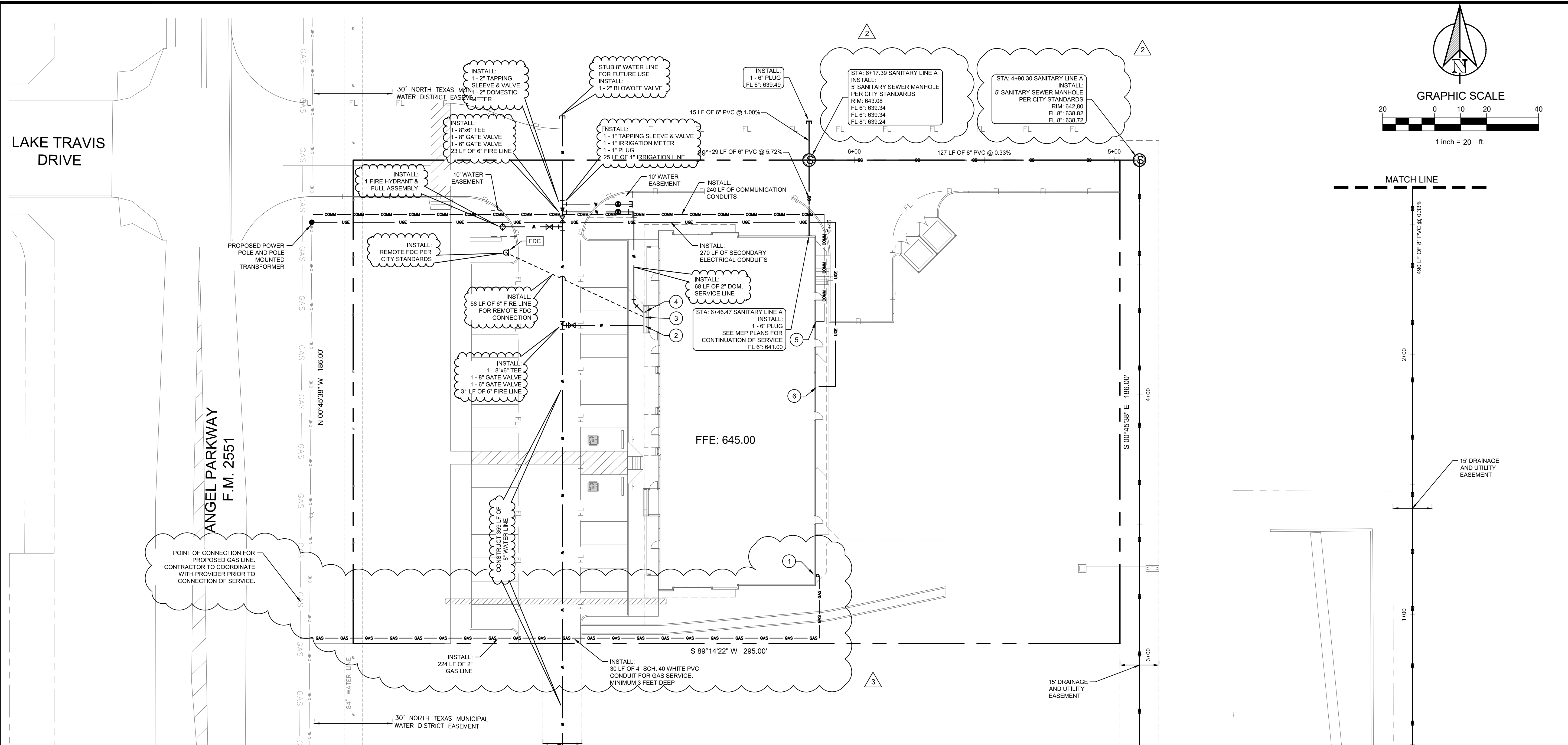
This drawing has been revised to show those changes during the construction process reported by the contractor to ClayMoore Engineering, Inc. and considered to be significant. This drawing is not guaranteed to be "As Built" but is based on the information made available.  
 By: *Matt Moore* Date: 08/01/2018

**BENCHMARK:**  
 CITY OF ALLEN MONUMENT NO. 1, 3-1/2" ALUMINUM DISK SET IN CONCRETE, LOCATED 460' +/- WEST OF THE INTERSECTION OF WHITMAN DRIVE AND BETHANY ROAD AT THE EAST END OF BRIDGE IN GRASS MEDIAN.  
 ELEVATION 597.82

DESIGN:	BJK
DRAWN:	BJK
CHECKED:	MAM
DATE:	08/01/2018

SHEET  
**C-7**





TEXAS REGISTRATION #14199  
**CLAY MOORE**  
**ENGINEERING**  
 1903 CENTRAL DRIVE, SUITE 4000  
 HOUSTON, TX 77057  
 WWW.CLAYMOORE.COM

STATE OF TEXAS  
 MATT MOORE  
 95813  
 LICENSED PROFESSIONAL ENGINEER  
 08/01/2018

**LUCAS PLAZA RETAIL**  
**ANGEL PARKWAY**  
**LUCAS, TX**

NO.	DATE	REVISION	BY
3	01/24/18	REV. GAS SERVICE	MAM
2	12/05/17	REV. PER CITY COMMENTS	MAM
1	11/01/17	WATER CONNECTION	MAM

**UTILITY PLAN**

DESIGN: BJK  
 DRAWN: BJK  
 CHECKED: MAM  
 DATE: 08/01/2018  
 SHEET  
**C-8**  
 File No. 2017-114

**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.

**LEGEND**

— W —	EXISTING WATER LINE
— W —	PROPOSED WATER LINE
— SS —	EXISTING WASTEWATER LINE
— SS —	PROPOSED WASTEWATER LINE
— OHE —	EXISTING OVERHEAD ELECTRIC
— USE —	PROPOSED UNDERGROUND ELECTRIC

**CONSTRUCTION SCHEDULE**

①	GAS CONNECTION: INSTALL GAS MANIFOLD AND METERS. SEE MEP PLANS FOR CONTINUATION OF SERVICE.
②	FIRE SERVICE CONNECTION: SEE MEP PLANS FOR CONTINUATION OF SERVICE.
③	FIRE REMOTE FDC SERVICE CONNECTION: SEE MEP PLANS FOR CONTINUATION OF SERVICE.
④	DOMESTIC WATER CONNECTION: INSTALL 2" PLUG SEE MEP PLANS FOR CONTINUATION OF SERVICE.
⑤	COMMUNICATION SERVICE CONNECTION: SEE MEP PLANS FOR CONTINUATION OF SERVICE.
⑥	ELECTRIC SERVICE CONNECTION: SEE MEP PLANS FOR CONTINUATION OF SERVICE.

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 By: *Matt Moore* Date: 08/01/2018

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 ELEVATION 597.82

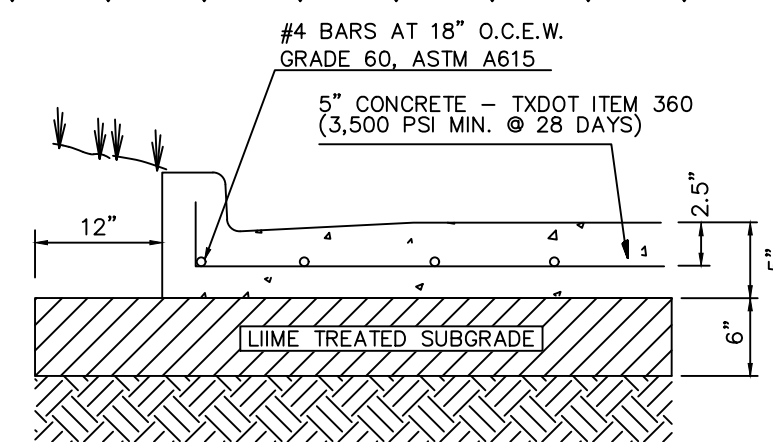
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 LAST SAVED: 8/1/2018 9:52 AM



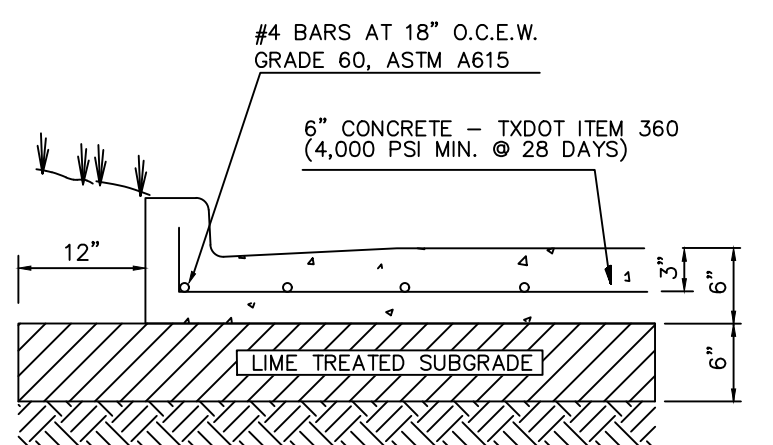




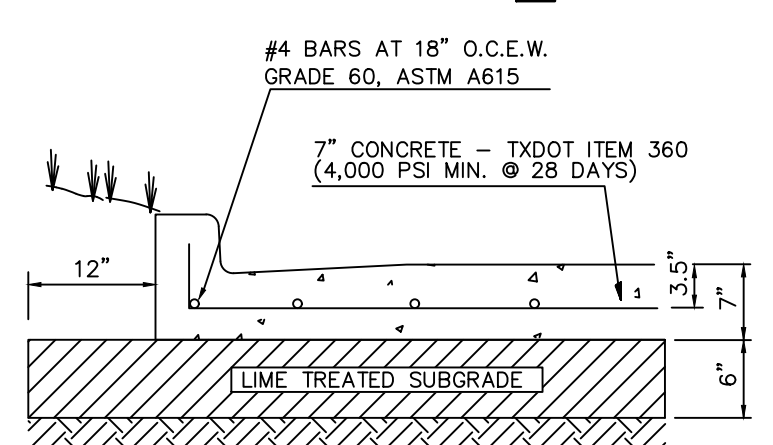
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**LIGHT DUTY CONCRETE PAVING**



**HEAVY DUTY CONCRETE PAVING**

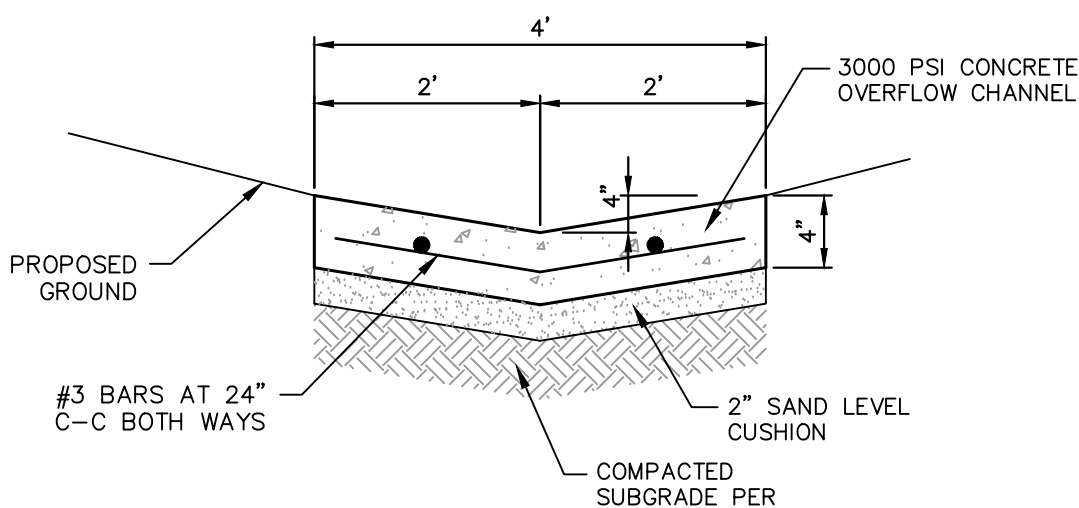


**DUMPSTER AREA CONCRETE PAVING**

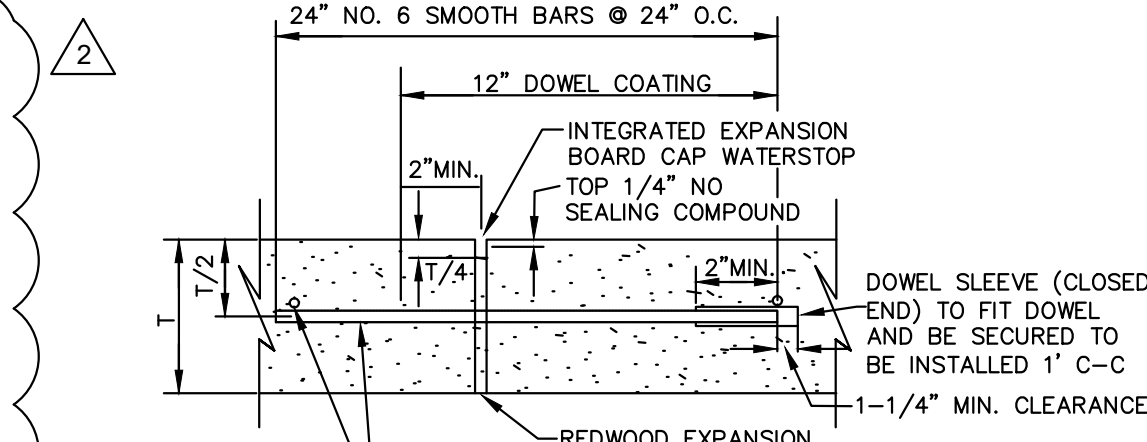
**GENERAL PAVING NOTES**

- FOR PREPARATION OF PAVEMENT SUBGRADE, SOILS SHOULD BE COMPACTED TO 95% MAXIMUM DRY DENSITY SUBGRADE DEFINED BY THE STANDARD PROCTOR (ASTM D 698) WITH A MOISTURE CONTENT RANGING FROM 0 TO PLUS 4 PERCENT ABOVE OPTIMUM DRY DENSITY.
- STANDARD DUTY CONCRETE SHALL HAVE A MINIMUM 3,500 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
- HEAVY DUTY AND DUMPSTER DUTY CONCRETE SHALL HAVE A MINIMUM 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
- CONCRETE SHALL INCLUDE AIR ENTRAINMENT PER GEOTECH REPORT.
- JOINTS IN CONCRETE PAVEMENT SHALL NOT EXCEED 15 FOOT SPACING. ALL OTHER JOINT SPACING SHALL BE INSTALLED PER PROJECT SPECIFICATIONS.
- REFER TO GEOTECHNICAL REPORT FOR ALL SUBGRADE SPECIFICATIONS AND RECOMMENDATIONS.

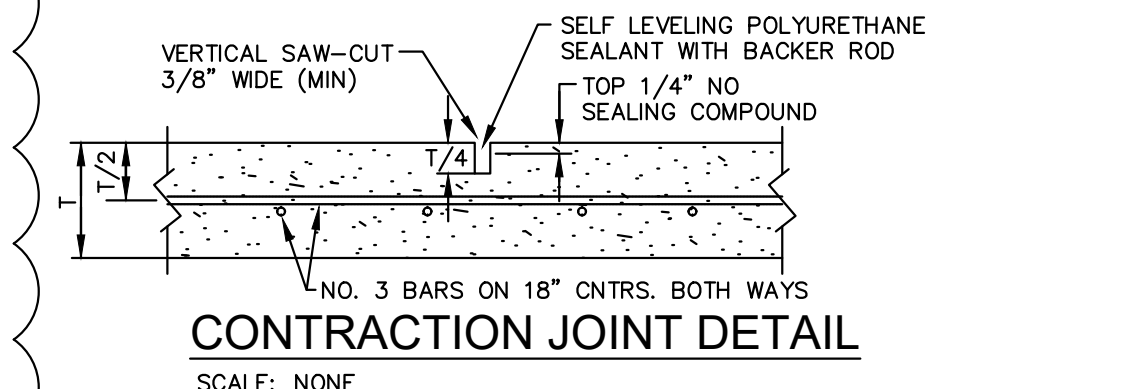
**PAVING DETAILS**  
SCALE: NONE



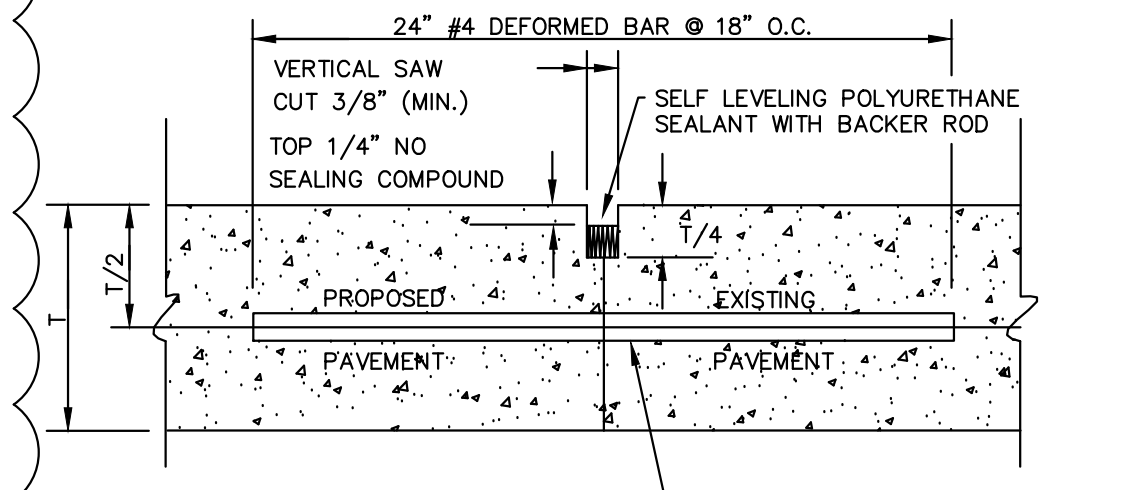
**CONCRETE PILOT CHANNEL DETAIL**  
N.T.S.



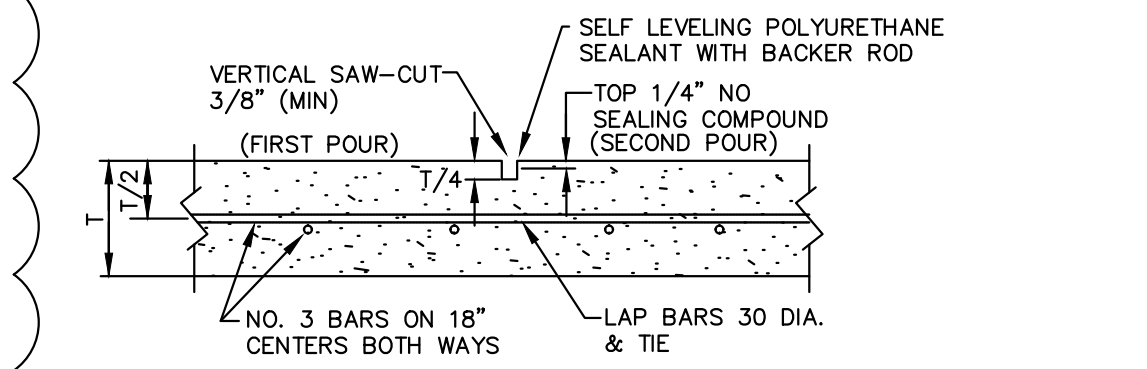
**TRANSVERSE EXPANSION/ ISOLATION JOINT DETAIL**  
SCALE: NONE



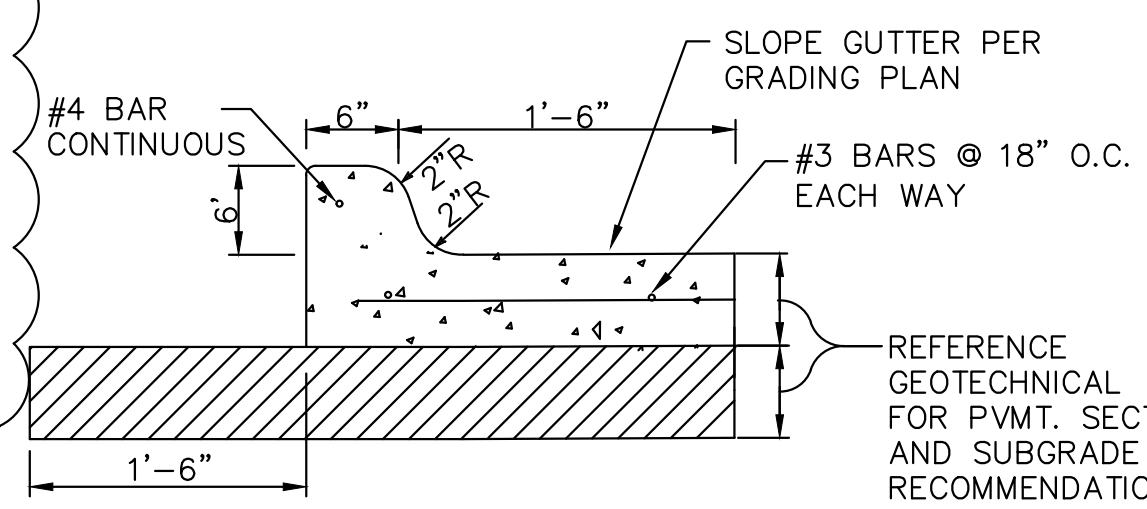
**CONTRACTION JOINT DETAIL**  
SCALE: NONE



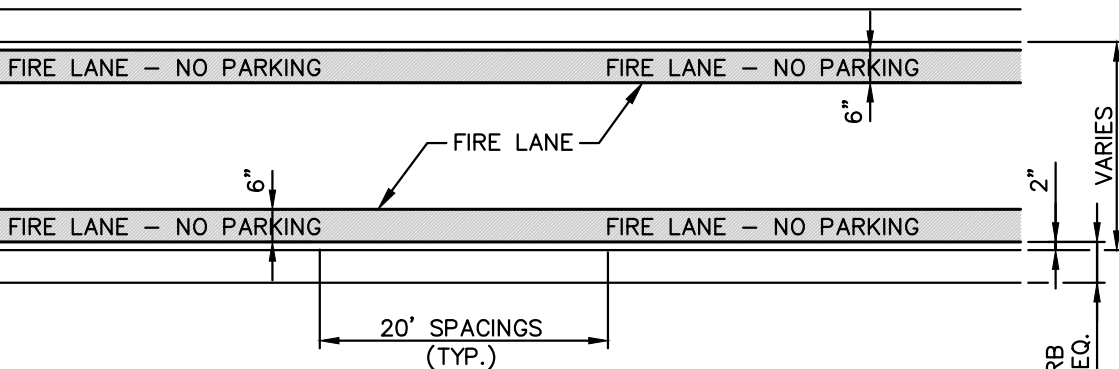
**LONGITUDINAL BUTT JOINT DETAIL**  
SCALE: NONE



**CONSTRUCTION JOINT DETAIL**  
SCALE: NONE

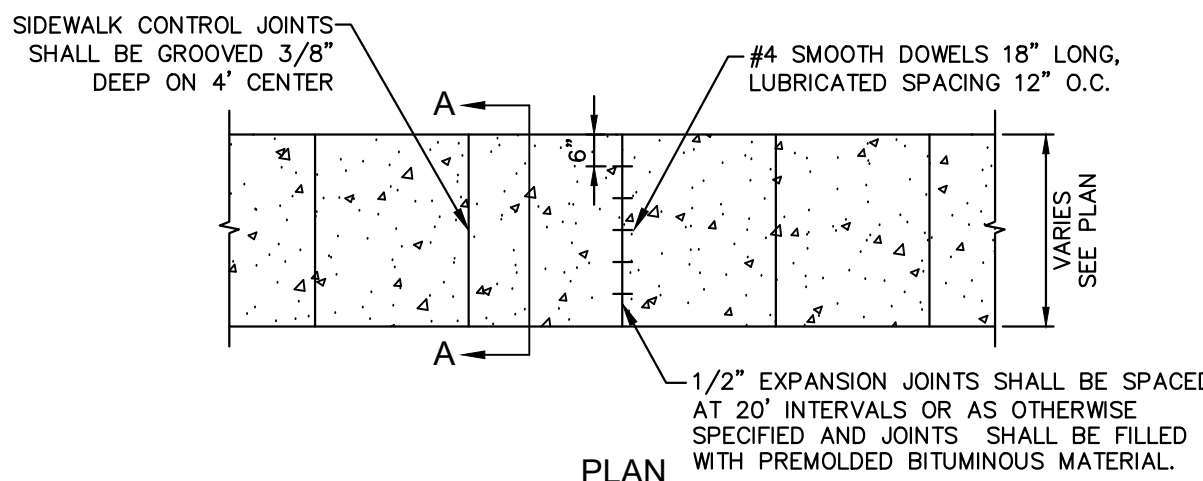


**CONCRETE CURB AND GUTTER DETAIL**  
SCALE: NONE

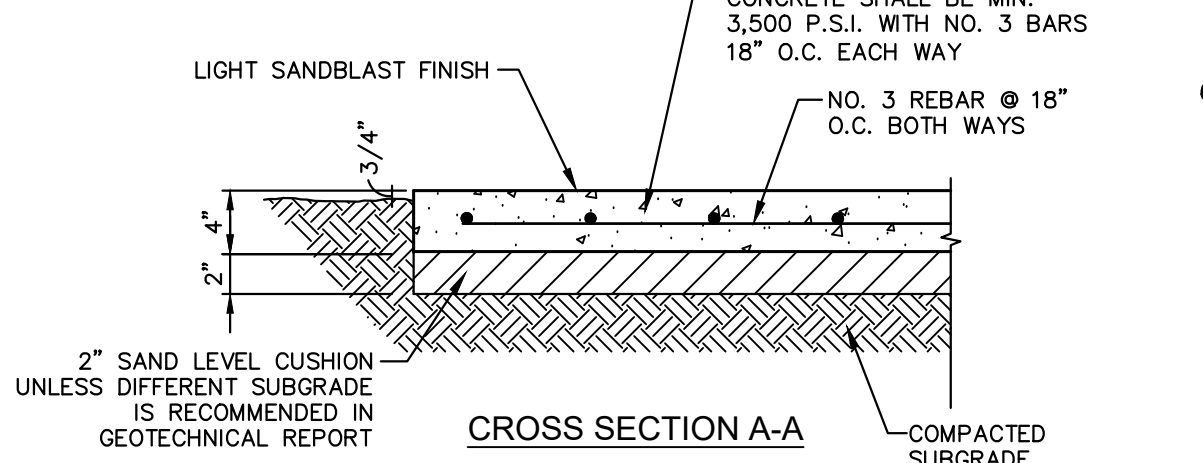


- GENERAL NOTE:**  
1. STRIPING TO BE DONE IN ACCORDANCE WITH CITY STANDARDS.
- STRIPING DETAIL NOTES:**  
1. PAINT:  
1.1. STRIPE SHALL BE SIX (6) INCHES WIDE PAINTED WITH AN EXTERIOR ACRYLIC LATEX PAINT.  
A. COLOR SHALL BE "TRAFFIC RED" GLIDDEN NO. 63251 OR EQUAL.  
1.1. LETTERS SHALL BE FOUR (4) INCHES HIGH PAINTED WITH AN EXTERIOR ACRYLIC LATEX PAINT.  
B. COLOR SHALL BE "TRAFFIC WHITE" GLIDDEN NO. 563245 OR EQUAL.  
2. APPLICATION:  
2.1. STRIPE MAY BE BRUSHED OR SPRAYED, ONE COAT TO FINISH.  
2.2. LETTERS SHALL BE STENCIL FORMED, BRUSH APPLIED AND SPACED AS DETAILED ON THIS SHEET.

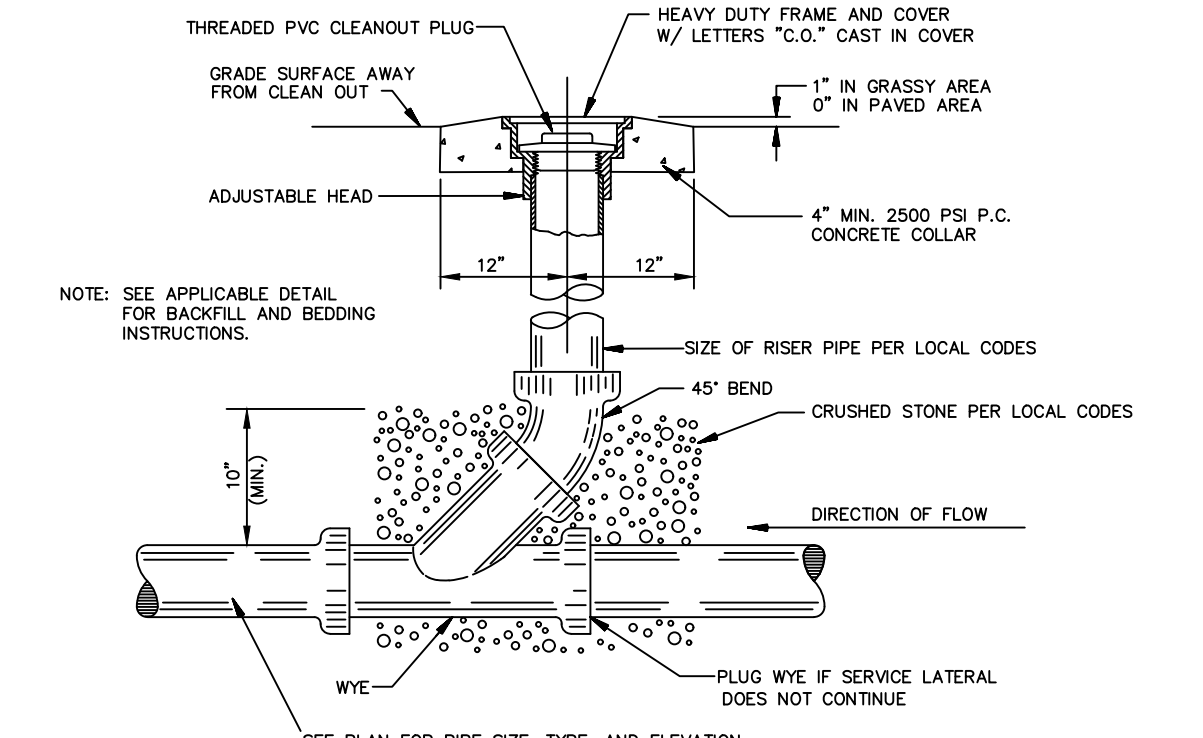
**FIRE LANE STRIPING DETAIL**  
N.T.S.



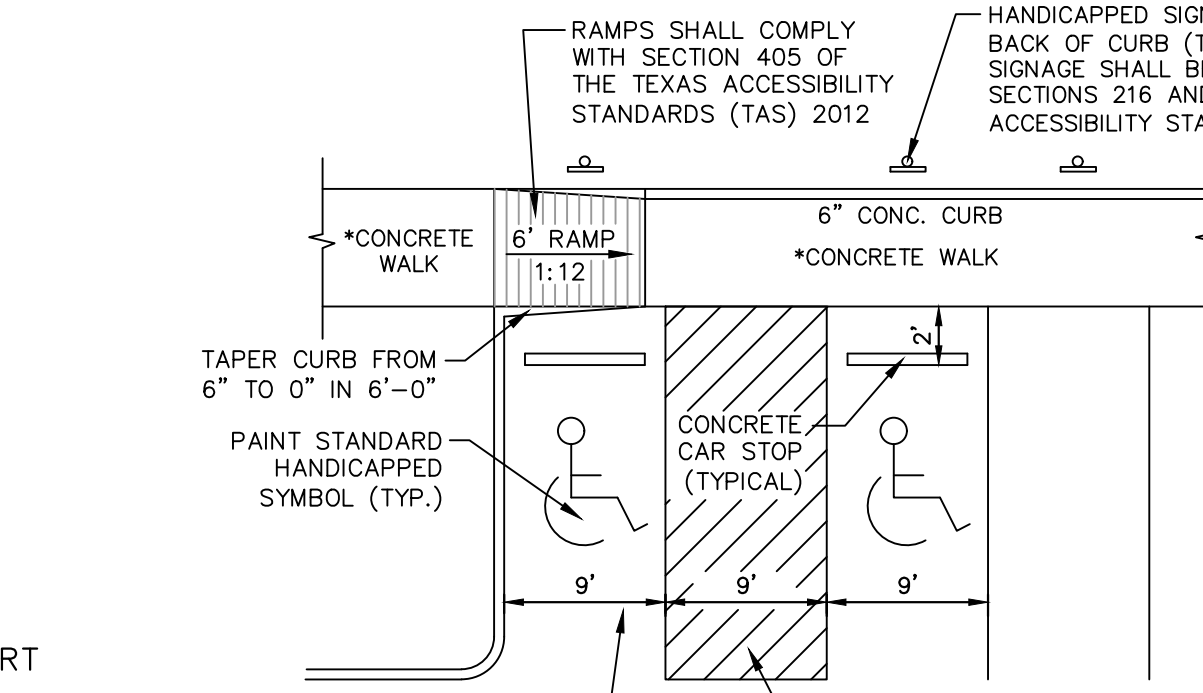
**PRIVATE CONCRETE SIDEWALK DETAIL**  
N.T.S.



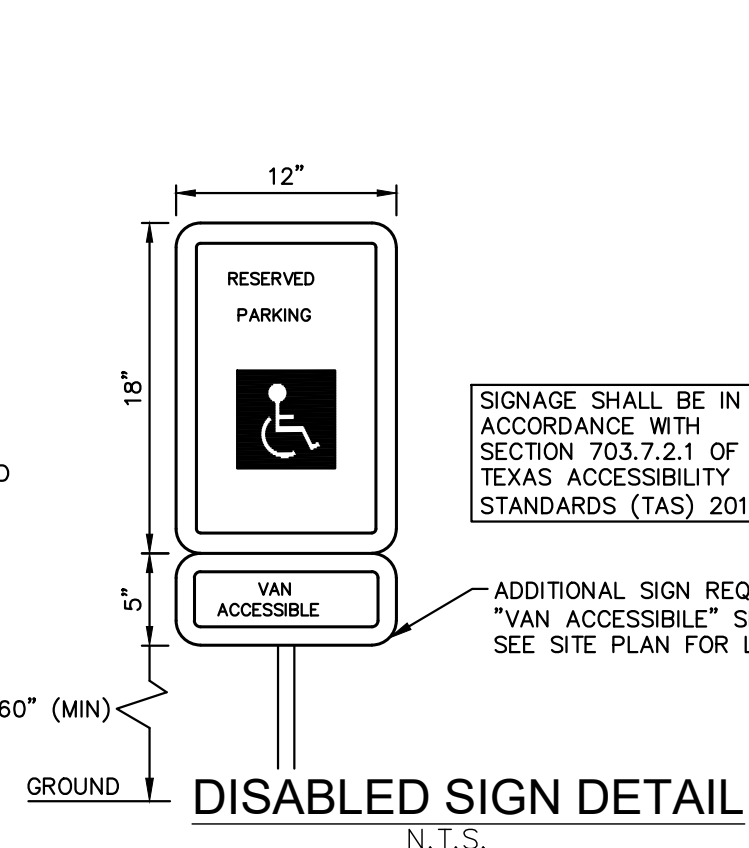
**SANITARY SEWER CLEAN-OUT**  
N.T.S.



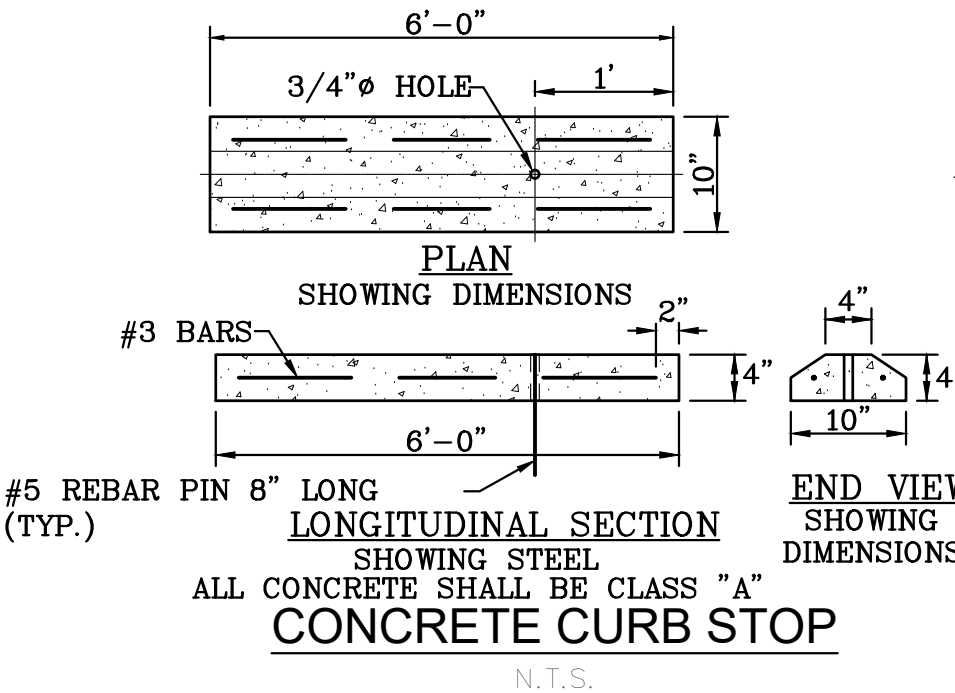
**HANDICAP PARKING & ACCESS RAMP DETAIL**  
N.T.S.



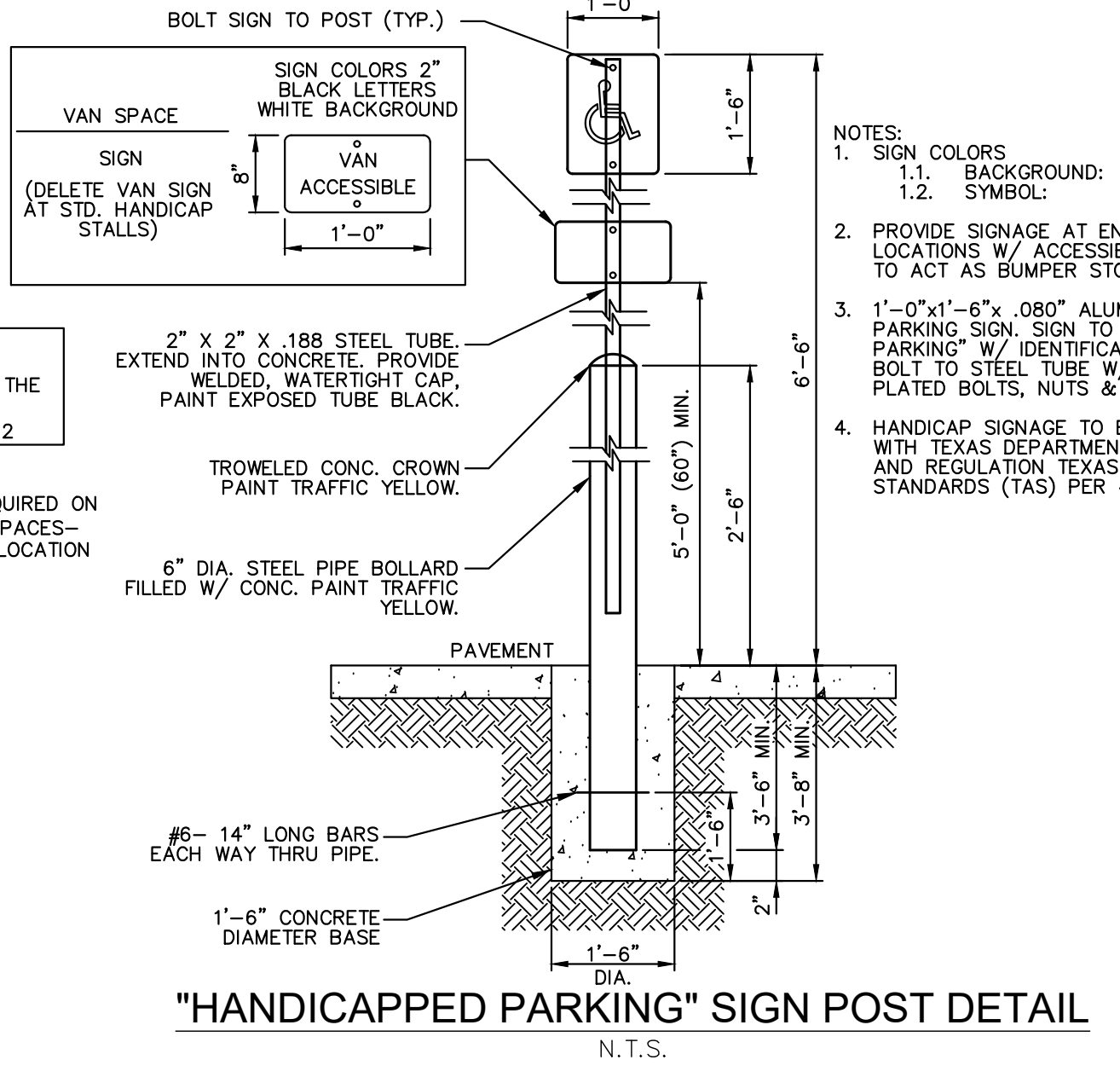
**CONCRETE FLUME DETAIL**  
N.T.S.



**DISABLED SIGN DETAIL**  
N.T.S.



**CONCRETE CURB STOP**  
N.T.S.



**"HANDICAPPED PARKING" SIGN POST DETAIL**  
N.T.S.

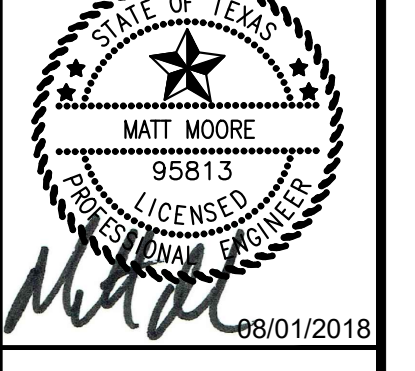
**Precast Drainage Structures**

**24" x 24" Catch Basin w/ 4" Wall**

**Materials & Features**  
 CONCRETE: 4,000 PSI in 28 days.  
 REINFORCING STEEL: per ASTM A-615, Grade 60.  
 REINFORCING TO MEET AASHTO HS 20-44 Loading.  
 PRECAST STRUCTURE TO MEET ASTM C-857-92  
 JOINT SEALANT: Ram-Nak gasket material.  
 \*6" TOP SLAB available upon request.  
 \*EXTENSIONS available upon request.  
 \*FRAME AND GRATE/COVER as required.

24" W x 24" L	Wt. /Vert. Ft.	Base Slab	Top Slab
4" Wall	428 lbs.	352 lbs.	350 lbs.

**Forterra**



**LUCAS PLAZA RETAIL**  
ANGEL PARKWAY  
LUCAS, TX

NO.	DATE	REVISION	BY
1		REV. GAS SERVICE	MAM
2		REV. PER CITY COMMENTS	MAM
3		WATER CONNECTION	MAM

**CONSTRUCTION DETAILS**

DESIGN: BJK  
 DRAWN: BJK  
 CHECKED: MAM  
 DATE: 08/01/2018

SHEET  
**C-10**