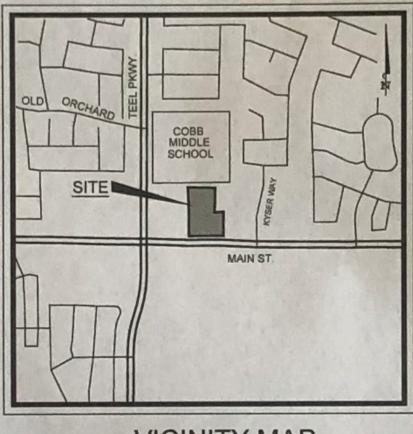
# CIVIL PLANS **TEEL CROSSING PHASE 2** LOT 4, BLOCK A, TEEL CROSSING SHOPPING CENTER I MAIN STREET FRISCO, TEXAS CITY PROJECT #SP17-0094

ENGINEER



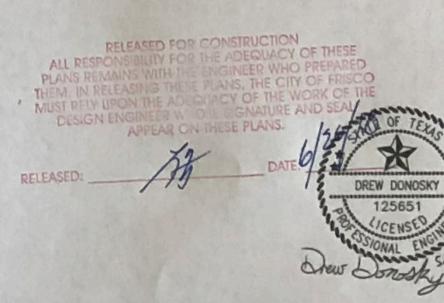
TEXAS REGISTRATION #14199 1903 CENTRAL DR SUITE #406 BEDFORD, TX 76021 PH 817 281 0572 FAX 817 281 0574 CONTACT MATT MOORE, PE EMAIL MATT@CLAYMOOREENG.COM ARCHITECT DUANE MEYERS ARCHITECT

560 PR 2422 UNCERTAIN, TX 75661 TEL 903.484 4040 CONTACT: DUANE MEYERS EMAIL: DRMEYERS@MAC.COM



VICINITY MAP

# MAY 2018



	SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE	REVISION DATE
C-0	COVER	5/23/2018
	SURVEY	10/12/2017
EXH-1	EASEMENT LAYOUT EXHIBIT	5/23/2018
SP-1	SITE PLAN	4/11/2018
SP-2	OPEN SPACE PLAN	4/11/2018
C-1	GENERAL NOTES	5/23/2018
C-1.1	DEMOLITION PLAN	5/23/2018
C-2	EROSION CONTROL PLAN	5/23/2018
C-3	EROSION CONTROL DETAILS	5/23/2018
C-4	DIMENSION CONTROL AND PAVING PLAN	5/23/2018
C-4.1	DIMENSION CONTROL AND PAVING PLAN, GRADING PLAN	5/23/2018
C-5	GRADING PLAN	5/23/2018
C-6	EXISTING DRAINAGE AREA MAP	5/23/2018
C-7	PROPOSED DRAINAGE AREA MAP	5/23/2018
C-8	DRAINAGE PLAN	5/23/2018
C-9	UTILITY PLAN	5/23/2018
C-10	CONSTRUCTION DETAILS	5/23/2018
C-11	CITY STANDARD DETAILS	5/23/2018
S-1	TREE SURVEY	5/23/2018
L-1	LANDSCAPE PLAN	5/23/2018
L-2	LANDSCAPE DETAILS	5/23/2018
L-3	EXISTING TREE PLAN	5/23/2018
IR-1	IRRIGATION PLAN	5/23/2018
IR-2	IRRIGATION DETAILS	5/23/2018
		The Standards
	**FOR REFERENCE ONLY	A LAND MAR. 10
C-8	DRAINAGE AREA MAP - PROPOSED CONDITION	5/19/2016
C-9	DRAINAGE PLAN	5/19/2016
C-10	DRAINAGE PROFILE	5/19/2016
C-11	DRAINAGE CALCULATION	4/11/2018
C-12	UTILITY PLAN	5/19/2016

PLAN SUBMITTAL LOG					
DESCRIPTION	SUBMITTAL DATE				
1ST SUBMITTAL	11/6/2017				
2ND SUBMITTAL	3/7/2018				
3RD SUBMITTAL	4/11/2018				
4TH SUBMITTAL	5/7/2018				
5TH SUBMITTAL	5/23/2018				

**CROSSING PHASE 2 - FRISCO, TEXAS** 

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CALL BEFORE YOU DIG DIG TESS 1-800-DIG-TESS

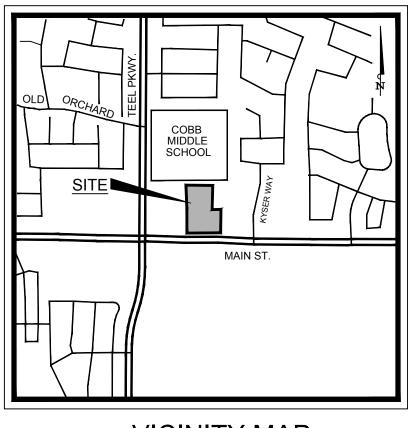
STOP!

1-800-DIG-TESS (@ least 72 hours prior to digging)

C-0

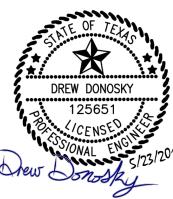


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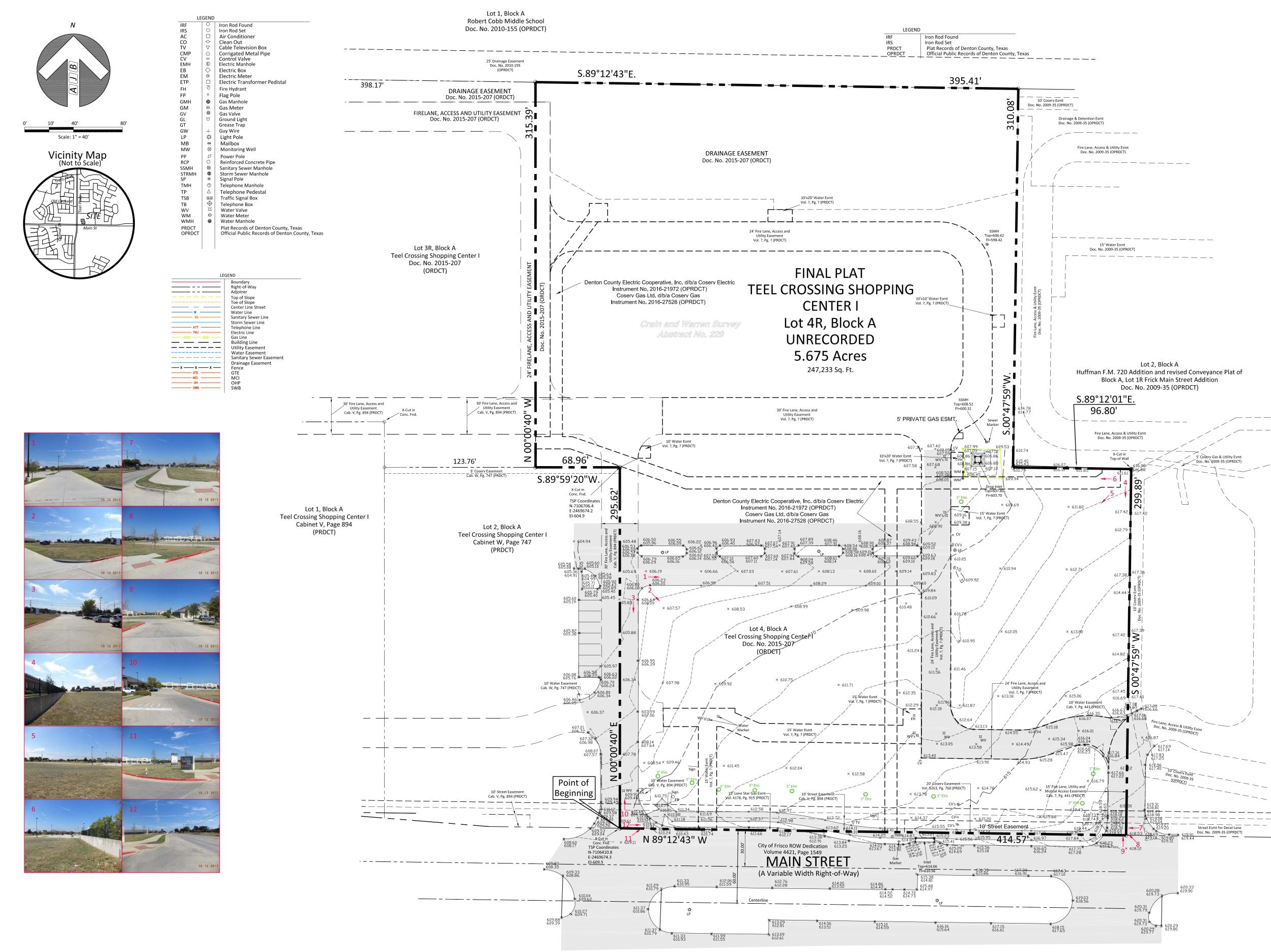
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# STOP! CALL BEFORE YOU DIG

DIG TESS 1-800-DIG-TESS (@ least 72 hours prior to digging) CROSSING PHASE 2 - FRISCO, TEXAS

C-0

18



FLOOD STATEMENT: According to Community Panel No. 48121C0440G, dated April 18, 2011 of the Federal Emergency Management Agency, National Flood Insurance Program map this property is within Flood Zone "X", which is not 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 statement shall not create liability on the part of the Surveyor

### **TOPOGRAPHIC SURVEY TEEL CROSSING SHOPPING CENTER I** PROPOSED LOT 4R, BLOCK A CRAIN AND WARREN SURVEY ABSTRACT NO. 229 CITY OF FRISCO DENTON COUNTY, TEXAS Client: ClayMoore Engineering 1903 Central Drive, Suite 406 Bedford, Texas 76021

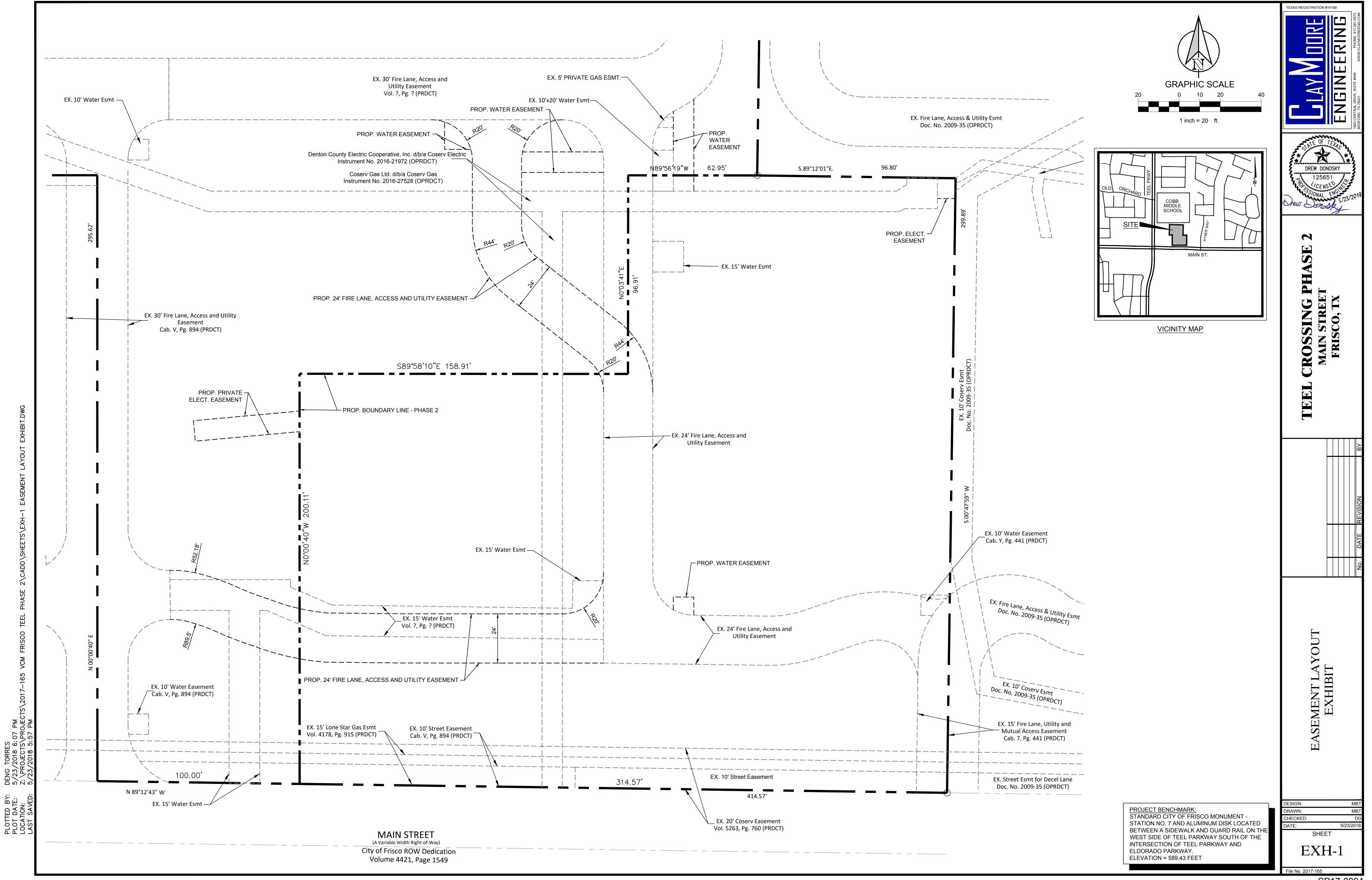
THE USE OF THE WORD "CERTIFY" OR "CERTIFICATE" USED HEREON CONSTITUTES AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THOSE

FACTS OF FINDINGS WHICH ARE THE SUBJECT OF THE CERTIFICATION, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER

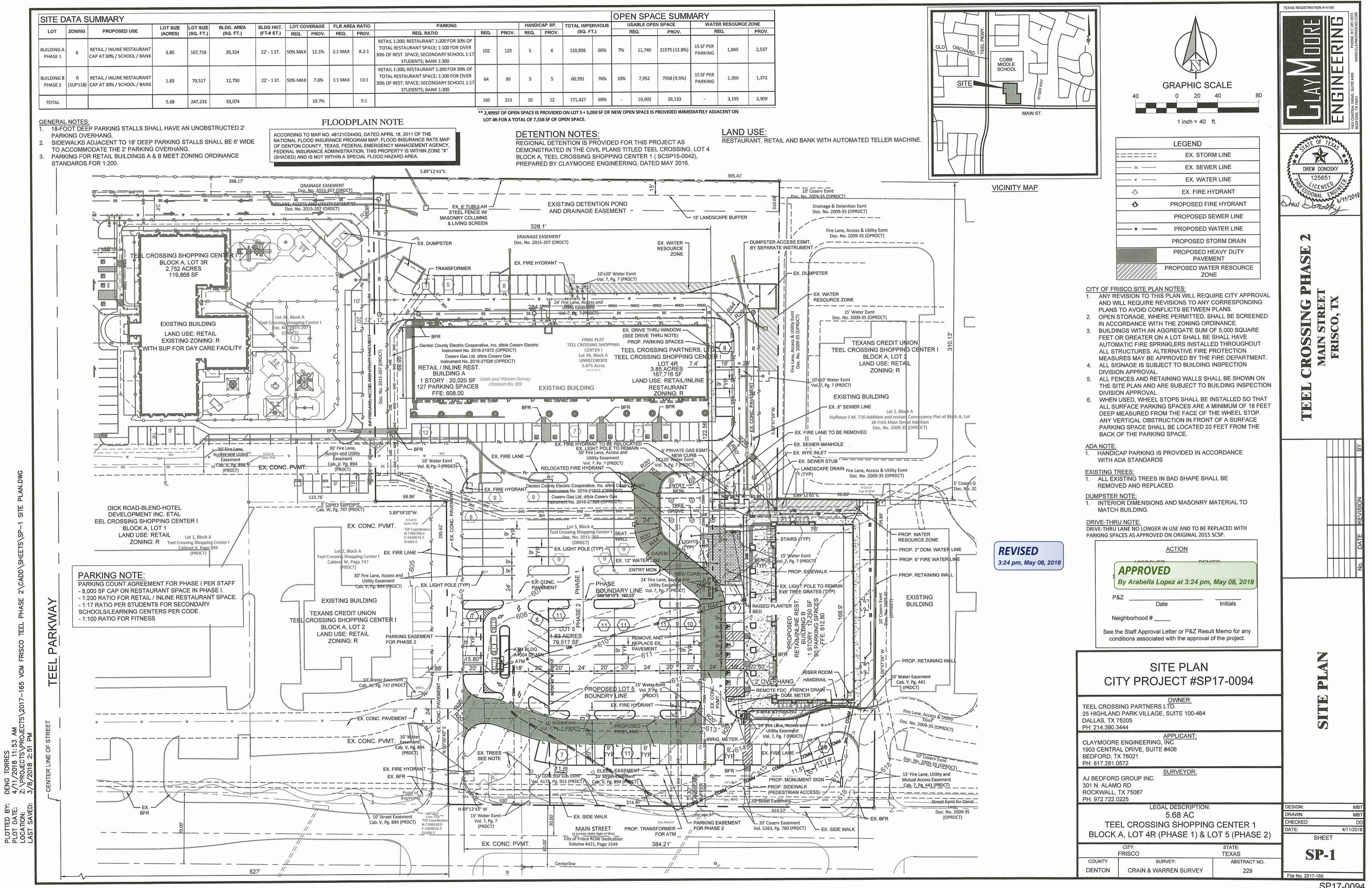
GENERAL NOTE:

EXPRESSED OR IMPLIED.



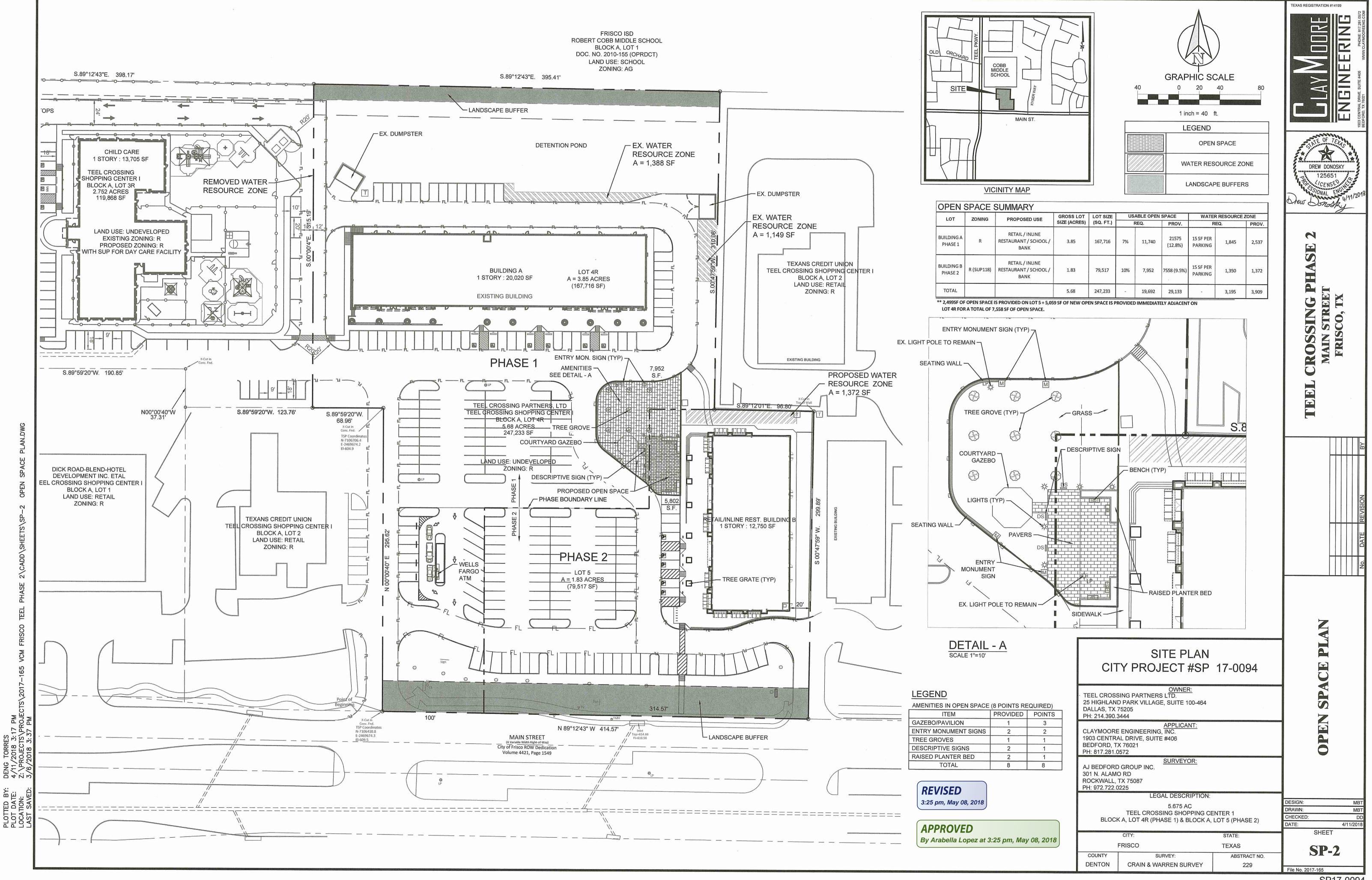


SP17-0094



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0.THE CONTRACTOR SHALL NOT PLACE PEDESTRIAN CROSSWALK AND STOP BAR PAVEMENT MARKINGS UNTIL SIGNAL IS OPERATIONAL.

- 11.ALL LIGHTING POLES, FIXTURES, AND ARMS WHICH ARE REMOVED SHALL BE DELIVERED TO THE CITY PUBLIC WORKS FACILITY (11300 RESEARCH ROAD, FRISCO, TEXAS 75034) BY THE CONTRACTOR AND WILL REMAIN THE PROPERTY OF THE CITY. CONTACT THE TRAFFIC DEPARTMENT AT LEAST 24 HOURS IN ADVANCE
- ALL TROUBLE CALLS WITH QUALIFIED PERSONNEL WITHIN A REASONABLE TRAVEL TIME FROM A DALLAS ADDRESS, BUT NOT MORE THAN TWO (2) HOURS MAXIMUM. CONTRACTOR SHALL REPAIR ANY MALFUNCTIONS OF SIGNAL EQUIPMENT SUPPLIED BY CONTRACTOR ON THE PROJECT. A LOCAL TELEPHONE NUMBER (NOT SUBJECT TO FREQUENT CHANGES) WHERE TROUBLE CALLS ARE TO BE RECEIVED ON A 24-HOUR BASIS SHALL BE PROVIDED TO THE CITY BY THE CONTRACTOR. APPROPRIATE REPAIRS SHALL BE MADE WITHIN 24 HOURS. THE CONTRACTOR SHALL KEEP A RECORD OF EACH TROUBLE CALL REPORTED IN THE LOGBOOK PROVIDED BY MANAGEMENT UNIT (MMU) SHALL NOT BE CLEARED DURING THE 30-DAY TEST PERIOD WITHOUT THE APPROVAL OF THE CITY.
- 10-FEET OF ANY OVERHEAD ELECTRICAL LINES UNLESS DANGER AGAINST CONTACT WITH HIGH VOLTAGE OVERHEAD LINES HAS BEEN EFFECTIVELY GUARDED AGAINST PURSUANT TO THE PROVISIONS OF THIS ARTICLE. WHEN CONSTRUCTION OPERATIONS REQUIRE WORKING NEAR AN OVERHEAD ELECTRICAL LINE, THE CONTRACTOR SHALL CONTACT THE OWNER/OPERATOR OF THE OVERHEAD ELECTRICAL LINE TO MAKE ADEQUATE ARRANGEMENTS AND TO TAKE NECESSARY SAFETY PRECAUTIONS TO ENSURE THAT ALL LAWS, ELECTRICAL LINE OWNER/OPERATOR REQUIREMENTS AND STANDARD SAFETY PRACTICES ARE MET.

### GENERAL NOTES FOR STORM DRAIN

- 1. ALL STORM DRAIN CONSTRUCTION, TESTING, AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY'S CURRENT STANDARDS, DETAILS, AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
- 2. CONTRACTOR SHALL SUBMIT A TRENCH SAFETY PLAN PRIOR TO THE PRE-CONSTRUCTION MEETING
- THE EXISTING LINE AND CONTACT THE STORMWATER INSPECTOR SHOULD THE LINE NEED TO BE CLEANED.
- 4. CONTRACTOR SHOULD INSPECT ALL STORM DRAIN OUTFALLS NO EARLIER THAN TWO WEEKS PRIOR TO FINAL INSPECTION AND REMOVE ALL SILT AND DEBRIS.

- 1. ALL WATER AND WASTEWATER CONSTRUCTION, TESTING, AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY'S CURRENT STANDARDS, DETAILS, AND SPECIFICATIONS UNLESS OTHERWISE NOTED. 2. CONTRACTOR SHALL SUBMIT A TRENCH SAFETY PLAN PRIOR TO THE PRE-CONSTRUCTION MEETING
- I. ALL LANDSCAPING CONSTRUCTION, INSTALLATION, TESTING, AND MATERIALS SHALL BE IN ACCORDANCE WITH
- THE CITY'S CURRENT STANDARDS, DETAILS, AND SPECIFICATIONS UNLESS OTHERWISE NOTED
- 2. CONTRACTOR SHALL AVOID DAMAGE TO EXISTING TREES. WHEN NECESSARY, TREES AND SHRUB TRIMMING REGISTERED LANDSCAPE ARCHITECT OR CERTIFIED ARBORIST
- 3. CONTRACTOR SHALL LOCATE AND PROTECT ALL EXISTING LANDSCAPE IRRIGATION SYSTEMS. DAMAGE TO EXISTING IRRIGATION SYSTEMS AND LANDSCAPE MATERIALS SHALL BE RESTORED TO EQUAL OR BETTER CONDITION AT NO COST TO CITY.
- 4. PRIOR TO OBTAINING A GRADING PERMIT OR SCHEDULING A PRE-CONSTRUCTION MEETING: A. WHERE TRANSPLANTING OR TREE REMOVAL IS REQUIRED. CONTRACTOR MUST APPLY FOR A TREE PERMIT. CONTACT DEVELOPMENT SERVICES LANDSCAPE ARCHITECT FOR TREE PERMIT
- B. ALL TREE MARKINGS AND PROTECTIVE FENCING MUST BE INSTALLED BY THE CONTRACTOR AND BE INSPECTED BY THE CITY'S LANDSCAPE ARCHITECT.
- 5. ALL TREES WHICH ARE TO REMAIN ON SITE SHALL BE PROTECTED WITH A 4' TALL BRIGHTLY COLORED PLASTIC FENCE PLACED AT THE DRIP LINE OF THE TREES.
- 6. TREES TO BE REMOVED MAY BE CHIPPED AND USED FOR MULCH ON SITE OR HAULED OFF-SITE. BURNING OF
- 7. PLANT MATERIALS SHALL NOT IMPEDE OR OBSTRUCT VISION OR ROUTE OF TRAVEL FOR VEHICULAR. PEDESTRIAN, OR BICYCLE TRAFFIC ALONG CITY RIGHT-OF-WAY, VISIBILITY EASEMENTS, SIDEWALKS OR OTHER
- GENERAL NOTES FOR IRRIGATION
- THE CITY'S CURRENT STANDARDS, DETAILS, AND SPECIFICATIONS UNLESS OTHERWISE NOTED.

### 4. CONTRACTOR SHALL CONTACT THE PARKS DEPARTMENT TO COORDINATE WORK PRIOR TO COMMENCING

- 5. CONTRACTOR SHALL LOCATE AND PROTECT ALL EXISTING LANDSCAPE IRRIGATION SYSTEMS. DAMAGE TO EXISTING IRRIGATION SYSTEMS AND LANDSCAPE MATERIALS SHALL BE RESTORED TO EQUAL OR BETTER CONDITION AT NO COST TO CITY.
- 6. CONTRACTOR SHALL PROGRAM EACH CONTROLLER ZONE BASED ON SPRINKLER TYPE, PLANT VARIETY, SOIL
- 7. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH FRANCHISE UTILITY PROVIDER TO PROVIDE POWER TO EACH IRRIGATION CONTROLLER. CONTRACTOR SHALL HAVE UNDERGROUND POWER LINES INSTALLED FROM POWER SOURCE UP TO THE CONTROLLER. CONTRACTOR SHALL MEET CONTROLLER SPECIFICATIONS FOR POWER REQUIREMENTS.
- 8. CONTRACTOR SHALL SET A TEMPORARY CONTROLLER TO ESTABLISH LANDSCAPE. ONCE LANDSCAPE IS ESTABLISHED, CONTRACTOR SHALL CONTACT THE CITY'S PARKS AND RECREATION DEPARTMENT FOR ASSISTANCE ON INSTALLATION OF A MOTOROLA CONTROLLER.
- GENERAL NOTES FOR EROSION CONTROL & STORMWATER
- 1. EROSION CONTROL DEVICES SHALL BE INSTALLED ON ALL PROJECTS PRIOR TO BEGINNING CONSTRUCTION AND SHALL BE MAINTAINED THROUGHOUT THE PROJECT IN A CONDITION ACCEPTABLE TO THE CITY.
- 3. WIRE REINFORCEMENT SHALL BE USED ON ALL SILT FENCE USED FOR EROSION CONTROL
- 5. GEOTEXTILE FABRIC SHALL BE PLACED ON SUBGRADE PRIOR TO STONE PLACEMENT FOR CONSTRUCTION ENTRANCES.
- 6. NO EQUIPMENT SHALL BE CLEANED ON-SITE, OR OTHER LIQUIDS DEPOSITED AND ALLOWED TO FLOW OVERLAND OR SUBTERRANEAN WITHIN THE LIMITS OF THE CRITICAL ROOT ZONE OF TREES THAT REMAIN ON SITE. THIS INCLUDES PAINT, OIL, SOLVENTS, ASPHALT, CONCRETE, CONCRETE EQUIPMENT WASH WATER, MORTAR OF SIMILAR MATERIALS.

12.DURING THE 30-DAY TRAFFIC SIGNAL TEST PERIOD, CONTRACTOR SHALL RESPOND TO AND DIAGNOSE

3. TWO WEEKS PRIOR TO CONNECTING TO EXISTING STORM DRAIN LINES, THE CONTRACTOR SHOULD INSPECT

REMOVED TREES, STUMPS, OR FOLIAGE REQUIRES WRITTEN APPROVAL BY THE FIRE DEPARTMENT.

WORK ON ANY EXISTING IRRIGATION AND PRIOR TO ANY INSTALLATION OF NEW IRRIGATION.

COORDINATE WITH THE CITY PARKS DEPARTMENT FOR APPROVAL OF THE CONTROLLER SETTINGS.

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 4. A NOTICE OF TERMINATION (N.O.T.) SHALL BE SUBMITTED TO THE TO 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 1. EXISTING UTILITY DATA IS PROVIDED FOR INFORMATION ONLY. ALTHO EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE THE EXACT ACCURATELY AS POSSIBLE, THE CONTRACTOR IS CAUTIONED THAT 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 2. THE CONTRACTOR IS TO VERIFY LOCATION AND ELEVATION OF EXIST THIS PROJECT. ALL MANHOLES, CLEANOUTS, VALVE BOXES, POWER POLES, SIGNS, FIRE HYDRANTS, CONSTRUCTION. ETC., MUST BE ADJUSTED TO PROPER GRADE BY THE CONTRACTOR PRIOR TO AND AFTER PLACING 3. HORIZONTAL AND VERTICAL BLOCKING FOR WATER LINES HAS BEEN 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 THE TOP OF THE EMBEDMENT WITH TYPE 'C' BACKFILL MATERIALS. BY THE CONTRACTOR. THERE IS NO SEPARATE PAY ITEM FOR THIS WORK. THE COST IS INCIDENTAL MATERIAL IS NOT SUITABLE AND AT THE DIRECTION OF THE ENGINE 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 6. FIRE HYDRANTS SHALL BE A MINIMUM 3' BEHIND THE FACE OF THE C BE RESTORED AT THE CONTRACTOR'S EXPENSE. THE ENGINEER SHALL BE NOTIFIED WHEN PROPOSED FACILITY GRADES CONFLICT WITH EXISTING UTILITY GRADES.
- THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY PHYSICAL DAMAGE TO PRIVATE 7. CORPORATION STOPS SHALL BE TESTED FOR FULL FLOW WHEN THE 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 8. ALL NEW WATER MAINS SHALL BE FULLY PURGED. SUBSIDIARY TO THE CONTRACT (UNLESS OTHERWISE NOTED) AND IS NOT A SEPARATE PAY ITEM. 9. ALL 6", 8", 10" & 12" WATER MAINS SHALL BE PVC AWWA C900, DR-14. 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 SANITARY SEWER NOTES OF ANY REQUIRED CONSTRUCTION PERMITS, EROSION CONTROL PLANS, SWPPP AND INSPECTION 1. EXISTING UTILITY DATA IS PROVIDED FOR INFORMATION ONLY. ALTH REPORTS. 11. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF ENGINEER NEITHER ASSUMES NOR IMPLIES ANY RESPONSIBILITY FO THE ARCHITECT AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS DATA.
- FROM DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO 2. THE CONTRACTOR IS TO VERIFY LOCATION AND ELEVATION OF EXIST THE ENGINEER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE OWNER CONSTRUCTION. 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 EMBEDMENT WITH TYPE "C" BACKFILL MATERIAL. WHEN TYPE "C 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 4:1 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<sup>1</sup>. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLANS TO THE OW REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION 20. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE CIVIL ENGINEER A 2. ALL TRAFFIC CONTROL MEASURES SHALL BE INSTALLED AND MAINT/ COPY OF RECORD DRAWINGS IDENTIFYING ALL DEVIATIONS OR VARIATIONS FROM THE ORIGINAL
- 21.CONTRACTOR SHALL GIVE NOTICE TO ALL AFFECTED PARTIES AND ALL AUTHORIZED INSPECTORS, MARKINGS THAT CONFLICT WITH THE INTENT OF THESE TRAFFIC CC 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 AT THE END OF THE CONTRACTOR'S CONSTRUCTION OPERATIONS. 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. TESTING OF MATERIALS REQUIRED BENEATH ALL PAVING. IMPROVEMENTS SHALL BE PERFORMED BY AN AGENCY APPROVED BY THE OWNER FOR TESTING MATERIALS PROCUREMENT OF THE TESTING LABORATORY AND THE PAVEMENT OF SUCH TESTING SERVICES SHALL BE MADE BY THE OWNER. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE, BY THE STANDARD TESTING EXISTING INLETS, OR FROM BEING TRANSPORTED TO ADJACENT PRO PROCEDURES. THAT THE WORK CONSTRUCTED MEETS THE REQUIREMENTS OF THE CITY AND PROJECTS SPECIFICATIONS
- 2. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" TO THE "TEXUNIONTROL DEVICES". 2. CONSTRUCTION OPERATIONS SHALL BE MANAGED SO THAT AS MUC CHARACTERISTIC, SLOPE AND SOLAR ORIENTATION AS DESIGNATED ON THE PLANS. THE CONTRACTOR SHALL 3. THE CONTRACTOR SHALL REVIEW LOCATION OF ALL TRAFFIC CONTROL DEVICES WITH THE OWNER PRIOR TO INSTALLATION.
  - 4. SEE M.E.P. PLANS FOR LOCATION OF PROPOSED SLEEVING AND CONDUITS. 5. 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.
  - 6. CONTRACTOR SHALL SUBMIT A PAVEMENT JOINTING PLAN TO THE ENGINEER AND OWNER PRIOR TO THE BEGINNING OF ANY CONCRETE PAVING WORK. 7. 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. 8. 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. 9. 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. 10. ALL JOINTS ARE TO CONTINUE THROUGH THE CURB.
  - 11. RADIAL JOINTS SHALL BE NO SHORTER THAN 24". 12. ALL CONSTRUCTION JOINTS SHALL BE SAWED, CLEANED OF DEBRIS, BLOWN DRY AND IMMEDIATELY IS REQUIRED TO REMOVE SEDIMENT PRIOR TO ENTRANCE TO A PUBL 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 AS REQUIRED BY THE CITY. 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 CONSTRUCTION. 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 UBMITTED TO THE CITY AND FILED WITH THE CONSTRUCTION PLAN
- ON-SITE DURING CONSTRUCTION. WHEN THE SITE HAS 100% OF THE DISTURBED AREAS STABILIZED AN STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVI N.O.T. PERMITTEE OR CO-PERMITTEE NO LONGER HOLDS OPERATIO CONSTRUCTION.

WATER NOTES

- ENGINEER NEITHER ASSUMES NOR IMPLIES ANY RESPONSIBILITY FO ΠΑΤΑ
- HOWEVER, BLOCKING SHALL BE CONSTRUCTED IN ACCORDANCE WI SPECIFICATIONS 4. TRENCHES WHICH LAY OUTSIDE EXISTING OR FUTURE PAVEMENTS USED. ALL BACKFILL MATERIAL SHALL BE COMPACTED TO A MINIMU
- BY MEANS OF TAMPING ONLY. TRENCHES WHICH CROSS UNDER EX SHALL BE BACK FILLED PER FIGURE 'A' WITH 95% PROCTOR STANDAI **OPTIMUM MOISTURE CONTENT** 5. TOP OF WATER LINES SHALL BE A MINIMUM OF 42" BELOW TOP OF C OTHERWISE IN THESE PLANS.
- DIRECTED BY THE CITY. FIRE HYDRANTS AND VALVES AS SHOWN OF
- TESTED.
- POLY-WRAPPED DUCTILE IRON PIPE SHALL BE CLASS 51. 10. FITTINGS SHALL BE DUCTILE IRON AND MECHANICAL JOINT TYPE, WIT SHALL BE CLASS 250.

- ACCURATELY AS POSSIBLE. THE CONTRACTOR IS CAUTIONED THAT
- 3. TRENCHES WHICH LIE OUTSIDE EXISTING PAVEMENTS SHALL BE BAG
- SUITABLE AND AT THE DIRECTION OF THE ENGINEER. TYPE "B" MATE BACKFILL MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 90% C BY MEANS OF TAMPING ONLY. TRENCHES THAT CROSS UNDER EXIS SHALL BE BACKFILLED AND COMPACTED TO A MINIMUM OF 95% OF 1 WITH MOISTURE CONTENT-2 AND +4% OF OPTIMUM MOISTURE CONT
- 4. TYPICAL LOCATION OF SANITARY SEWER PIPE SHALL BE A MINIMUM EXCEPT WHERE SHOWN OTHERWISE IN THESE PLANS. 5. ALL FLEXIBLE SANITARY SEWER MAINS SHALL BE TESTED WITH STAN MANDREI
- 6. ALL SANITARY SEWER LINES SHALL BE CAPPED WITH AN APPROPRIA WORKDAY.
- . WHEN EXISTING GRADES ARE LOWER THAN PROPOSED MAINS, THE SHALL BE FILLED AND COMPACTED TO A MINIMUM OF 95% OF THE MA PROPOSED FINISHED GRADE PRIOR TO INSTALLING ANY MAIN.
- 8. ALL SEWER SERVICES SHALL BE CONSTRUCTED OF SDR-35 PIPE.

TRAFFIC CONTROL NOTES

- PRIOR TO CONSTRUCTION ACTIVITY. THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMU 3. THE CONTRACTOR SHALL COVER EXISTING SIGNS AND OBLITERATE
- CONFUSION TO THE TRAVELING PUBLIC 4. THE CONTRACTOR SHALL UNCOVER EXISTING SIGNS AND REPLACE AS ORIGINALLY CONFIGURED AT THE END OF CONSTRUCTION OPER ACCEPTANCE BY THE OWNER
- 5. ALL TEMPORARY SIGNS, BARRICADES, WARNING LIGHTS AND OTHER CONTROL MEASURES SHALL BE REMOVED AND ORIGINAL TRAFFIC C

EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND CONSERVATION, AND SILTATION ORDINANCES. THE CONTRACTOR SI OR OTHER MEASURES APPROVED BY THE ENGINEER AND CONSTRU SILT AND CONSTRUCTION DEBRIS FROM CLOGGING STORM SEWER RIGHT-OF-WAYS. ALL EROSION CONTROL DEVICES SHALL BE INSTAL

DISTURBANCE AND SHALL REMAIN IN PLACE UNTIL FINAL GRADING AI PERMANENT SOIL STABILIZATION IS ACHIEVED.

3 ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE ( SHALL THEN BE SEEDED (OR SODDED), IRRIGATED, AND MAINTAINE GRASS IS ACHIEVED WITH A MINIMUM OF 70% COVERAGE. UNLESS C LAWN AREAS AND PARKWAYS IN FRONT OF PRIVATE LAWN AREAS D SHALL BE REPLACED WITH BLOCK SOD SIMILAR TO THAT EXISTING. 4 CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION EN

POINTS OF ACCESS. CONTRACTOR IS RESPONSIBLE FOR ENSURING TRAFFIC UTILIZES THE STABILIZED ENTRANCE AT ALL TIMES FOR INC 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 INGE MAINTENANCE REQUIREMENTS: AS NECESSARY TO PREVEN INTO PUBLIC RIGHT-OF-WAY OR PARKING AREAS.

6. SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A COND TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. AI WASHED OR TRACKED ON A PUBLIC ROADWAY SHALL BE REMOVED DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAIN SEDIMENT BASIN. ALL FINES IMPOSED FOR TRACKING ONTO PUBLIC CONTRACTOR.

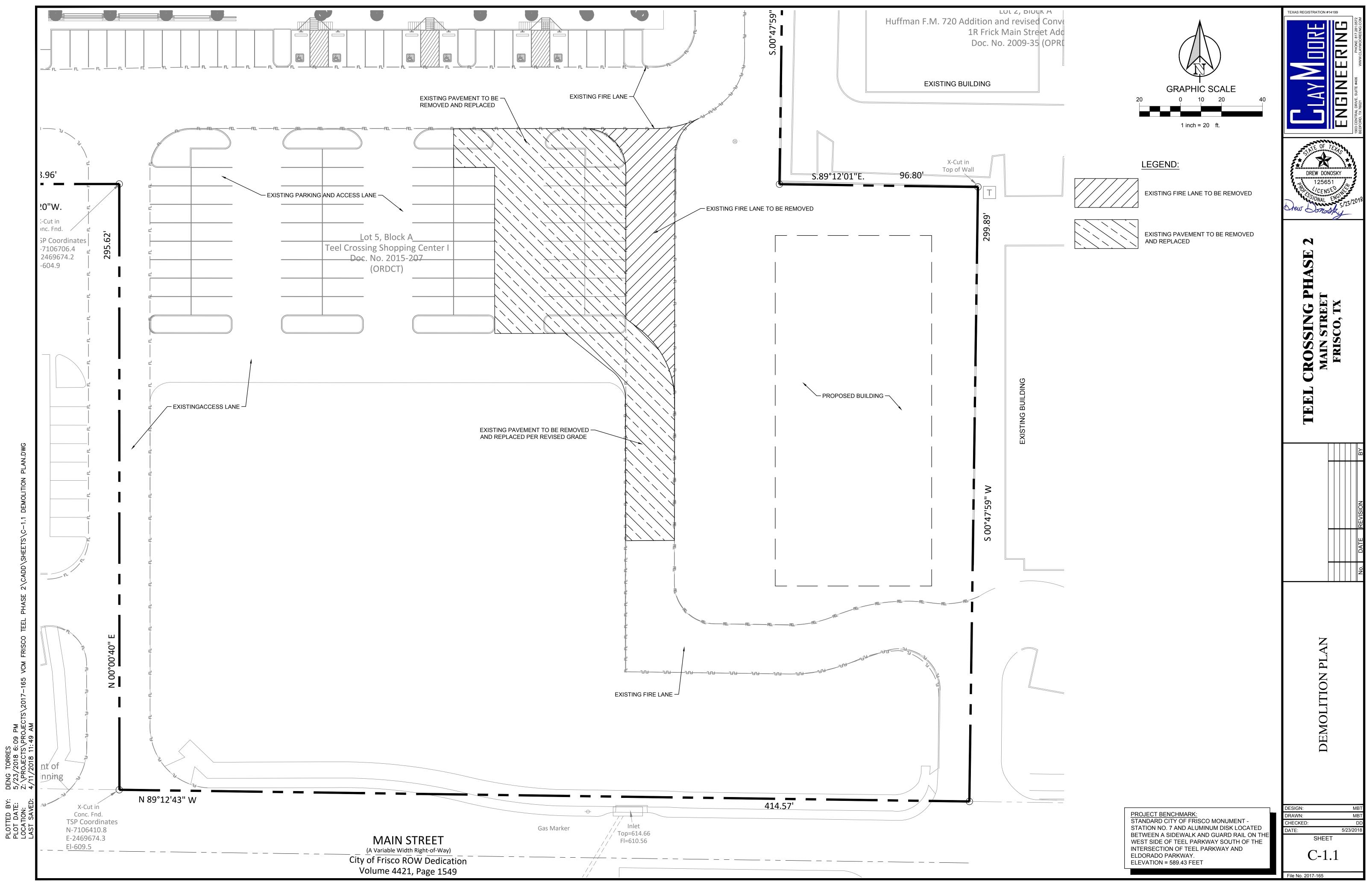
7. CONTRACTOR IS RESPONSIBLE FOR PROPER MAINTENANCE OF THE DEVICES THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS. ERC REPAIRED OR REPLACED AS INSPECTION DEEMS NECESSARY. OR A REPRESENTATIVE. ACCUMULATED SILT IN ANY EROSION CONTROL D SHALL BE DISTRIBUTED ON SITE IN A MANNER NOT CONTRIBUTING T CONTRACTOR IS RESPONSIBLE FOR RE-ESTABLISHING ANY EROSION DISTURBED.

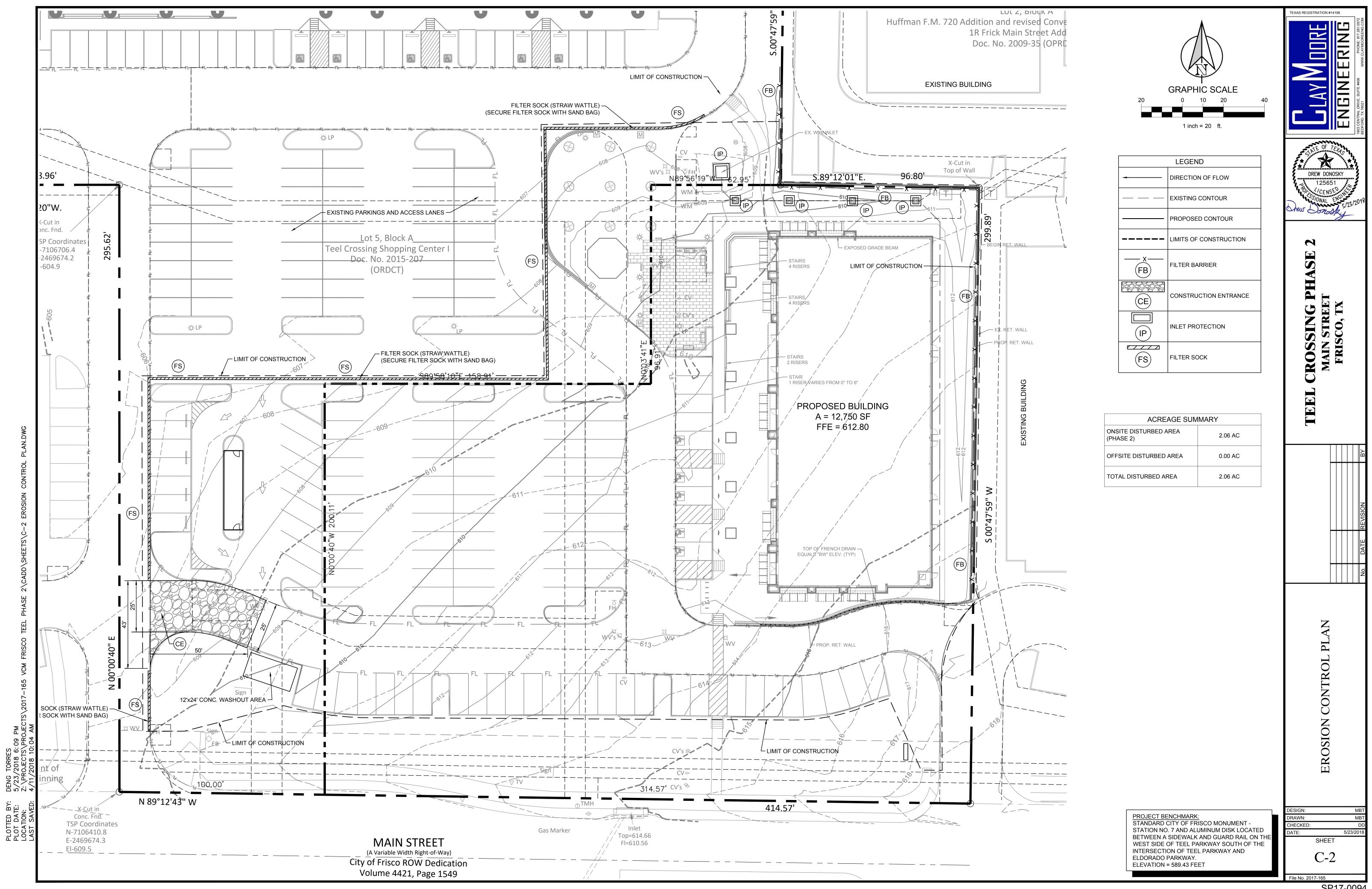
8. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURI CONSTRUCTION. THE CONTRACTOR SHALL USE FILTER BARRIER (OF BY THE ENGINEER AND CITY) AS REQUIRED TO PREVENT ADVERSE C WATER QUALITY FROM SILT AND CONSTRUCTION DEBRIS FLOWING

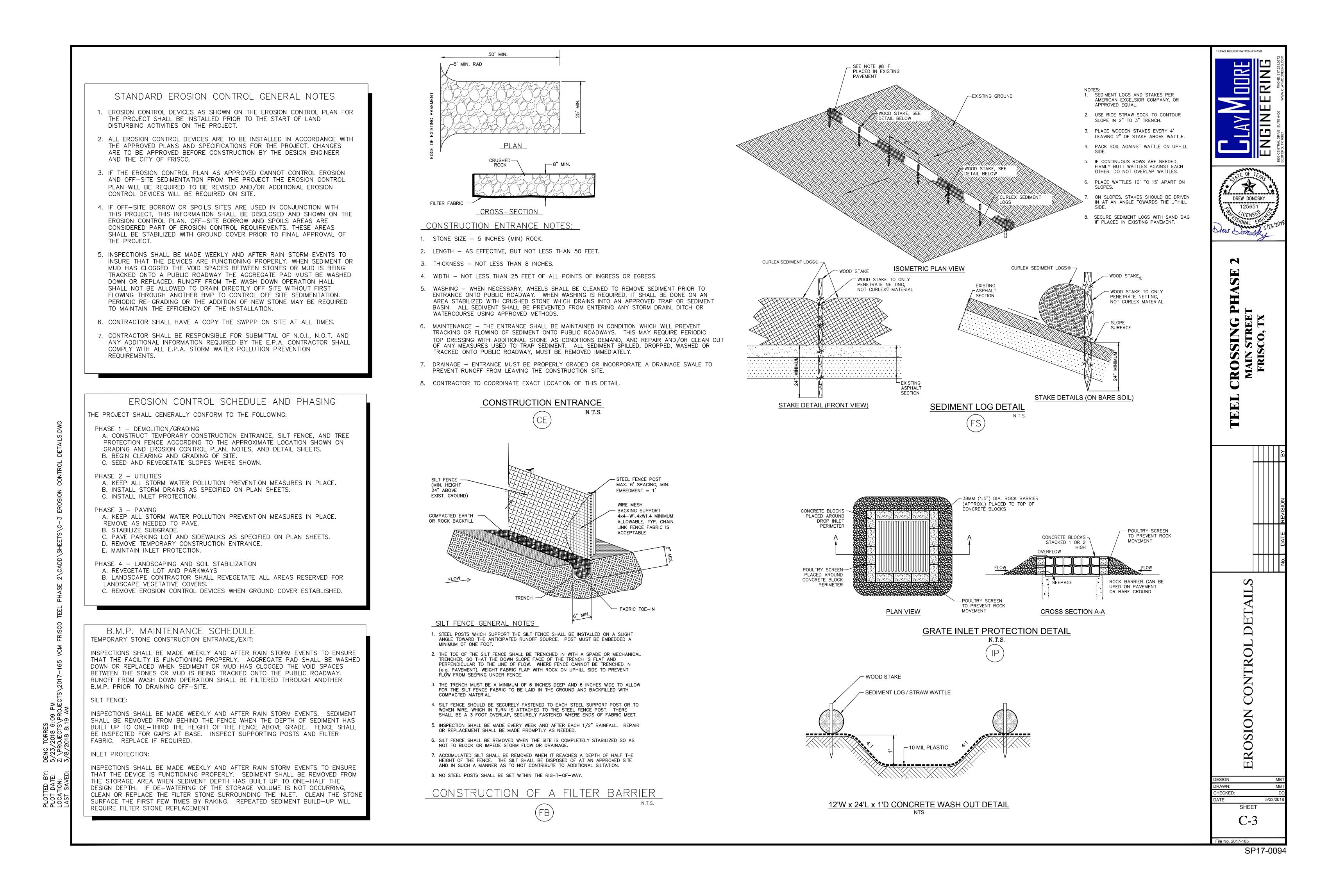
9. BEFORE ANY EARTHWORK IS DONE, THE CONTRACTOR SHALL STAK CONSTRUCTION AND OTHER ITEMS ESTABLISHED BY THE PLANS. TH PROTECT AND PRESERVE CONTROL POINTS AT ALL TIMES DURING T THE GRADING CONTRACTOR SHALL PROVIDE ALL NECESSARY ENGIN LINE AND GRADE CONTROL POINTS RELATED TO EARTHWORK. 10. CONTRACTOR STAGING AREA TO BE AGREED UPON BY OWNER PRIC

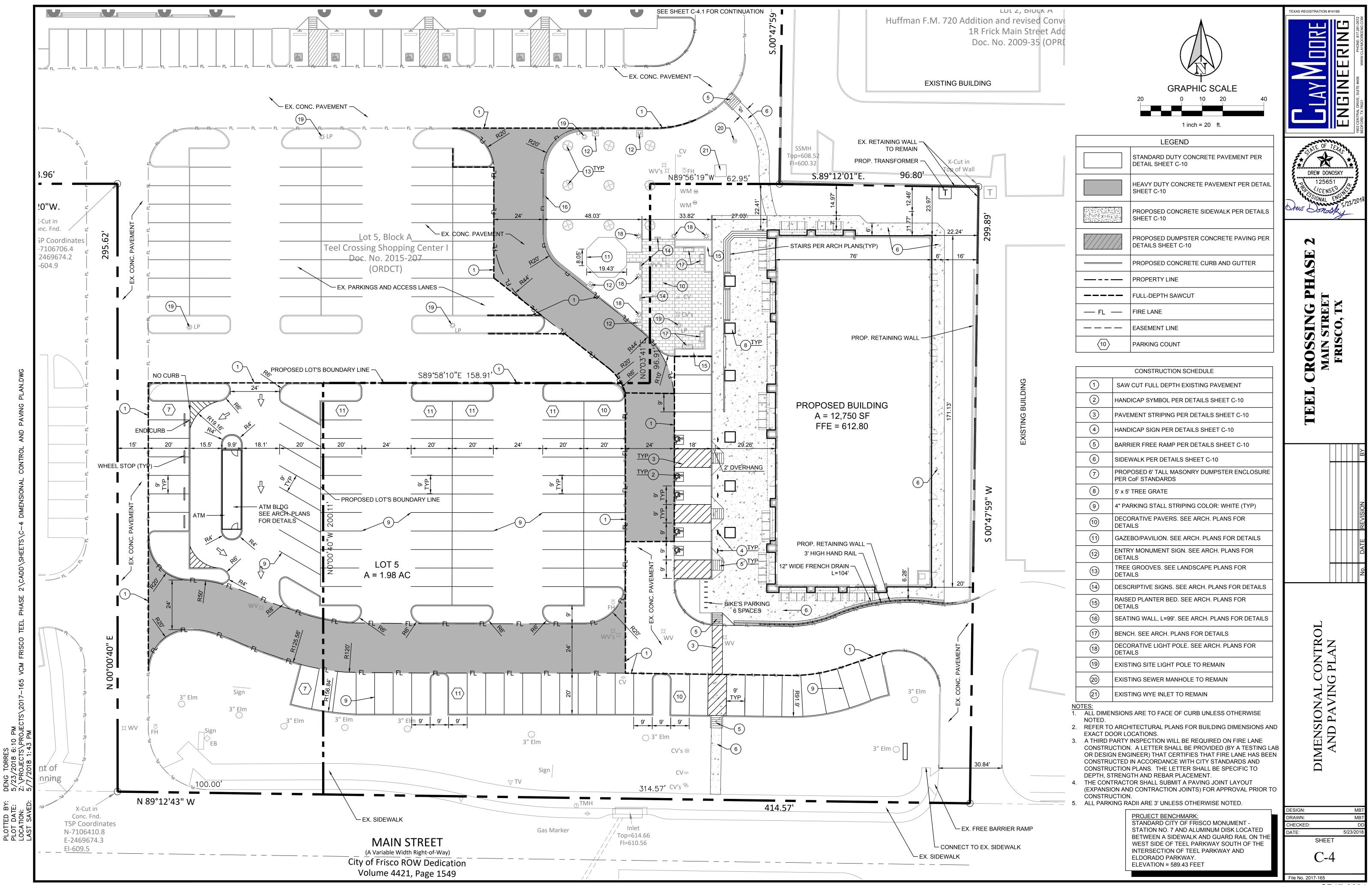
11. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE STO PREVENTION PLAN WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE F REVIEW UPON REQUEST BY THE T.C.E.Q. OR THE GOVERNING CITY.

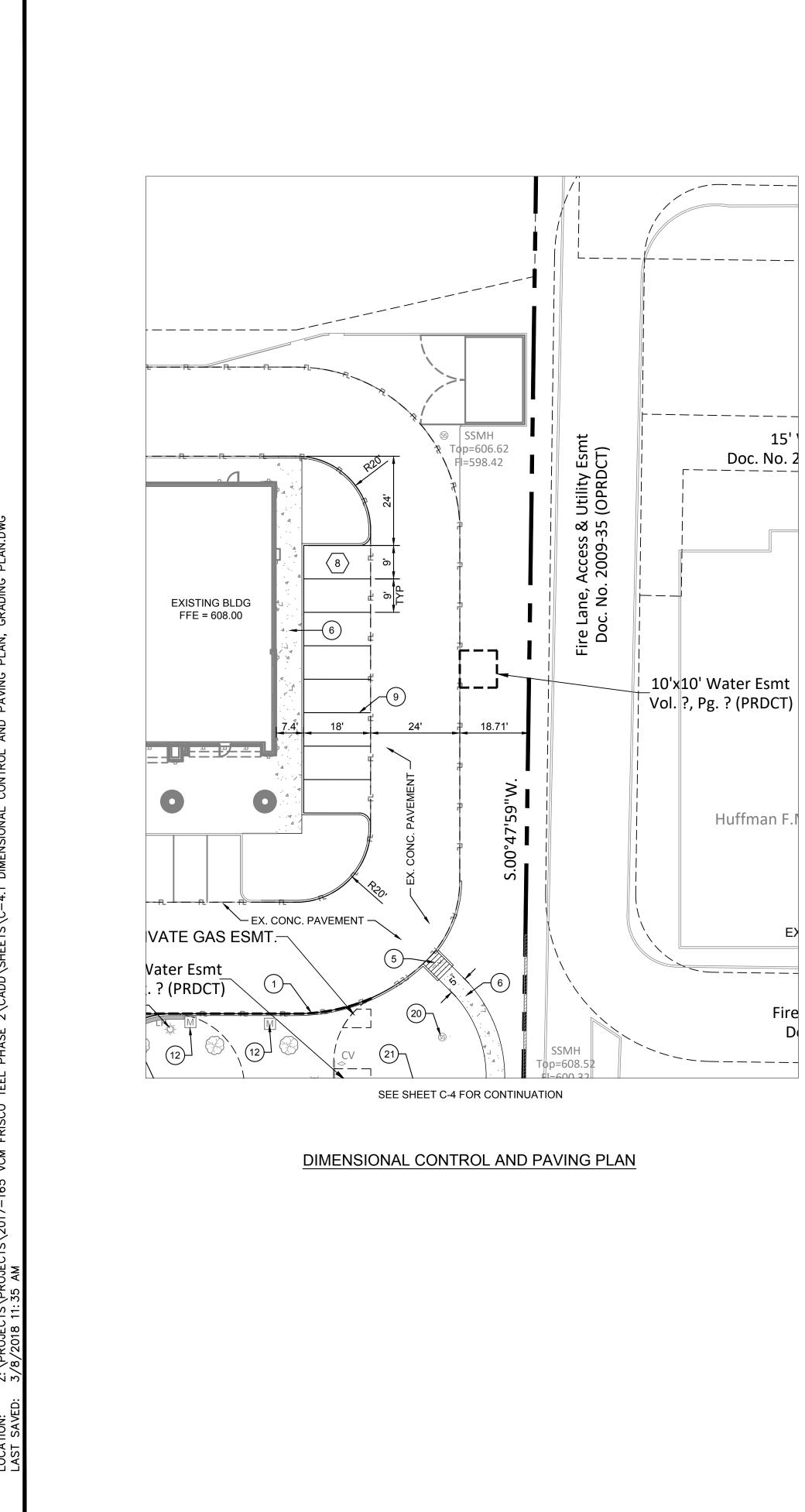
S AND ANY REVISIONS, SHALL BE		
-	<u>GRADING NOTES</u> 1. IF A GRADING PERMIT IS REQUIRED FROM THE CITY PRIOR TO STARTING CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMIT AND PAYING ALL ASSOCIATED FEES.	
AND THE SITE NO LONGER HAS /ITIES (CONSTRUCTION), OR THE ONAL CONTROL OF THE	2. CONTRACTOR 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.	EER
	<ol> <li>ALL SPOT ELEVATIONS SHOWN ARE TO TOP OF PAVING SURFACE OR FINISHED EARTH GRADE UNLESS NOTED OTHERWISE.</li> <li>CONTRACTOR TO ENSURE POSITIVE DRAINAGE FROM THE EXISTING AND PROPOSED BUILDINGS</li> </ol>	
T THE DEVELOPER AND THE FOR THE ACCURACY OF THIS	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	T DRIVE, SL
ISTING UTILITIES PRIOR TO	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	
NITH CITY STANDARDS AND	AND UNDISTURBED DURING CONSTRUCTION. 5. ALL EXISTING CONCRETE PAVING, CHANNEL IMPROVEMENTS, SIDEWALK, STRUCTURES AND CURB DEMOLITION SHALL BE REMOVED IN THEIR ENTIRETY AND DISPOSED OF BY THE CONTRACTOR,	1900
. WHEN TYPE 'C' BACKFILL EER TYPE 'B' MATERIAL SHALL BE <sup>-</sup> IUM OF 90% PROCTOR DENSITY	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.	STATE OF TELAS
ARD DENSITY OF -2, +4 OF	<ul> <li>B. GRADING CONTRACTOR TO COORDINATE WITH THE FRANCHISE UTILITY COMPANIES FOR ANY REQUIRED UTILITY ADJUSTMENTS AND/OR RELOCATIONS.</li> <li>THE CONTRACTOR SHALL CALCULATE HIS OWN EARTHWORK QUANTITIES AND USE TO DETERMINE</li> </ul>	DREW DONOSKY
CURB UNLESS OTHERWISE	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	125651
ON THESE PLANS ARE SYMBOLIC HE SYSTEM IS PRESSURE	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.	Drew Donosky
4. ALL WATER MAINS USING		
VITH "COR-BLUE" BOLTS AND		<b>7</b>
THOUGH THIS DATA IS SHOWN AS T THE DEVELOPER AND THE		S
FOR THE ACCURACY OF THIS		H.
ACKFILLED ABOVE THE TOP OF "C" BACKFILL MATERIAL IS NOT		<b>G P</b> TX
TERIAL SHALL BE USED. ALL OF THE MAXIMUM DRY DENSITY STING OR FUTURE PAVEMENT THE MAXIMUM DRY DENSITY NTENT. M OF 4'-0" BELOW TOP OF CURB		O II O
ANDARD 5% DEFLECTION		<b>OSS</b> AIN S FRISC
RIATE CAP AT THE END OF EACH		M M
E FILL AREA OVER THE PIPE MAXIMUM DRY DENSITY TO THE		ELC
OWNER, AT LEAST 48 HOURS		E C
ITAINED IN ACCORDANCE WITH UTCD), LATEST VERSION. E EXISTING PAVEMENT CONTROL PLANS TO AVOID		
E PAVEMENT MARKINGS IN-KIND RATIONS AND PRIOR TO FINAL		BY
ER MISCELLANEOUS TRAFFIC CONTROL MEASURES REPLACED		
D LOCAL EROSION, SHALL USE SEDIMENT FILTERS RUCTION MANAGER TO PREVENT R PIPES OR PROPOSED OR ROPERTIES AND STREET ALLED PRIOR TO SITE AND PAVING IS COMPLETE AND		E
ICH OF THE SITE AS POSSIBLE IS		DAT
GRADED SMOOTH. THE AREAS ED UNTIL PERMANENT STAND OF OTHERWISE NOTED, PRIVATE DISTURBED BY CONSTRUCTION		No.
ENTRANCE AT ALL PRIMARY G THAT ALL CONSTRUCTION NGRESS/EGRESS TO THE SITE.		
GRESS AND EGRESS. ENT TRACKING OR FLOWING MUD		ES
DITION WHICH SHALL PREVENT ALL SEDIMENT SPILLED, DROPPED, D IMMEDIATELY. WHEN WASHING JBLIC ROADWAY, IT SHALL BE INS INTO AN APPROVED C ROADS SHALL BE PAID BY THE		NOTE
IE REQUIRED EROSION CONTROL ROSION CONTROLS SHALL BE AS DIRECTED BY THE OWNER'S DEVICE SHALL BE REMOVED AND TO ADDITIONAL SILTATION. THE ON CONTROL DEVICE WHICH IS		IERAL
JRING ALL PHASES OF DR OTHER METHOD APPROVED © OFF SITE IMPACTS OR STORM © ONTO ADJACENT PROPERTIES		GENER
KE OUT AND MARK THE LIMITS OF THE CONTRACTOR SHALL THE COURSE OF THE PROJECT. GINEERING AND SURVEYING FOR		
TORM WATER POLLUTION TS, AND PERMIT MODIFICATIONS PERMIT MUST BE AVAILABLE FOR		DESIGN: MBT DRAWN: MBT
		CHECKED:         DD           DATE:         5/23/2018
		sheet <b>C-1</b>
		<b>U-1</b>



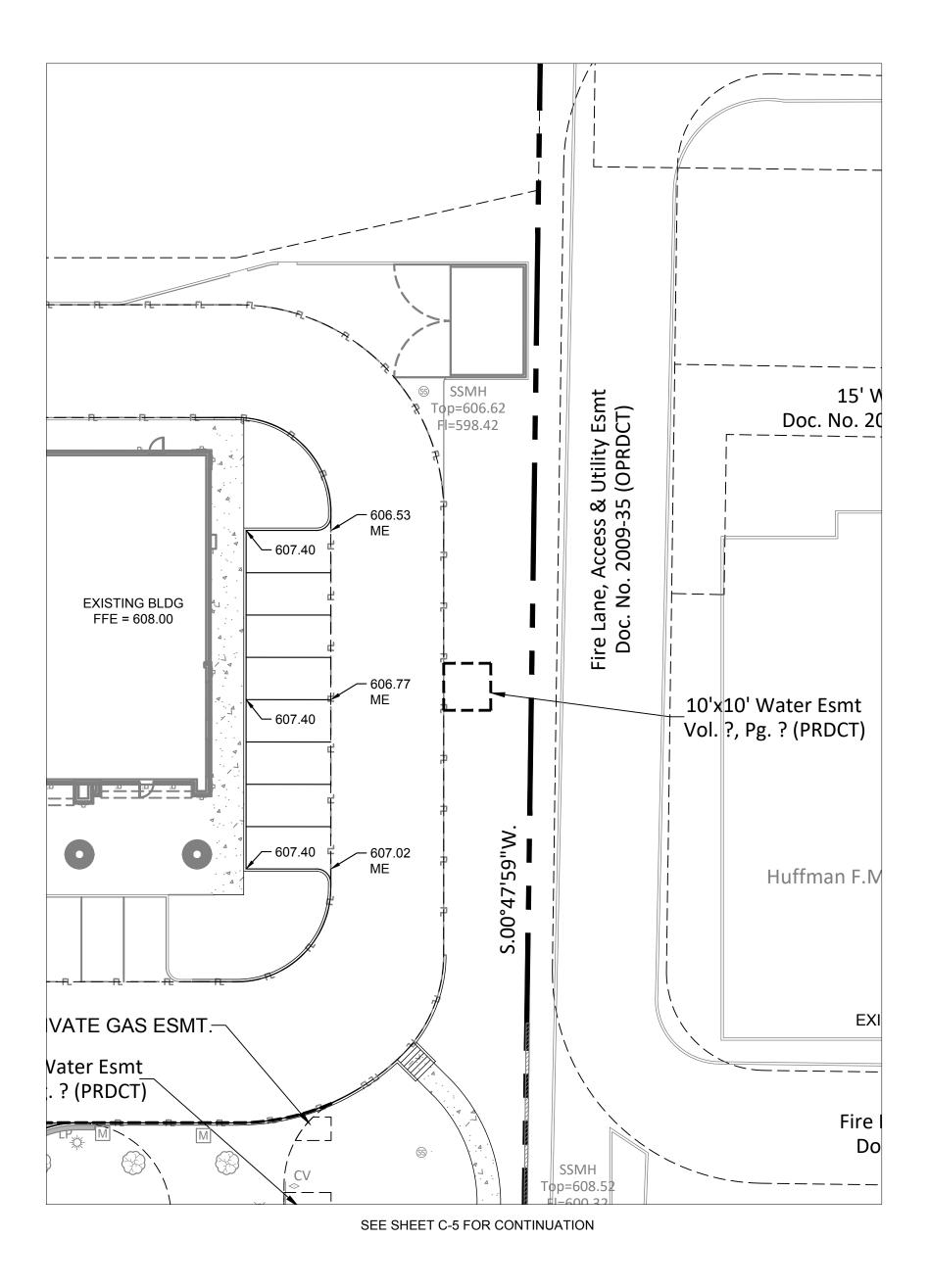




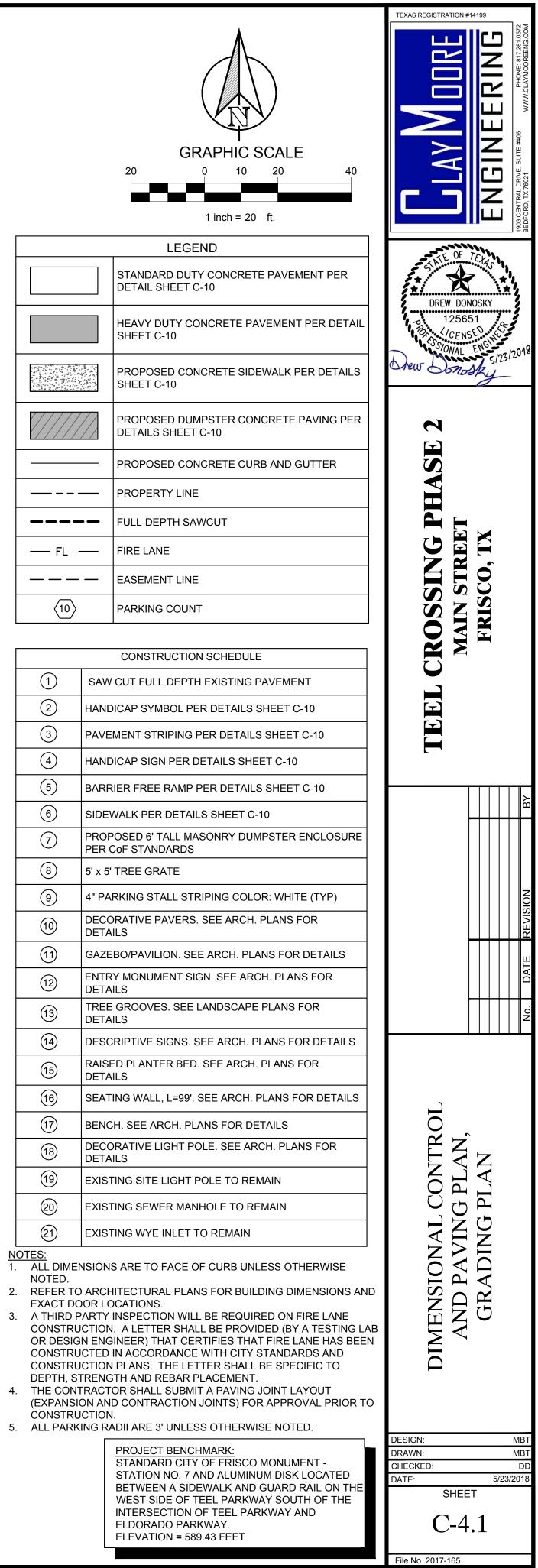


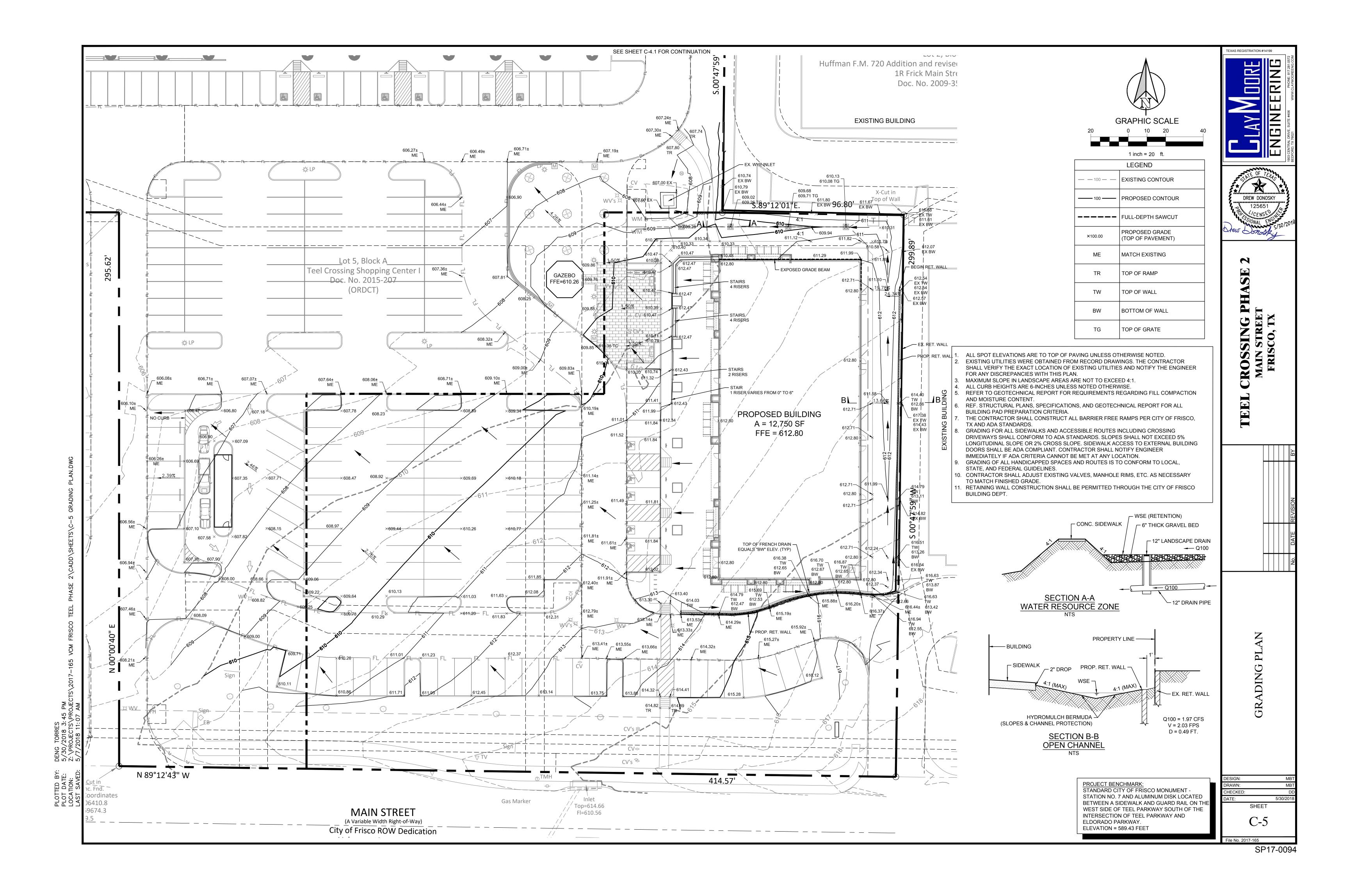


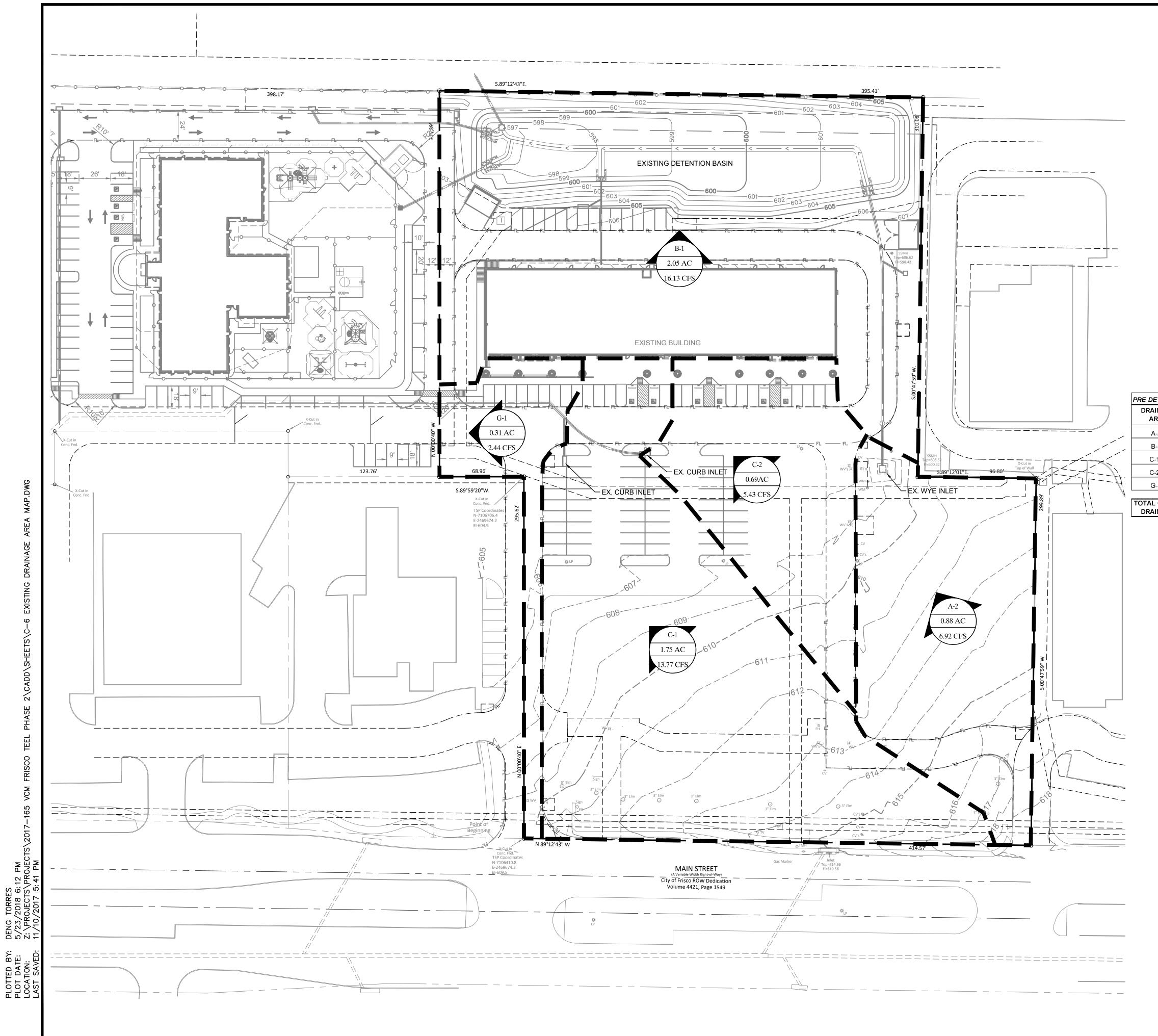
AN OUE 10 75 35 DENG 5/23, Z: \PF 3/8/; PLOTTED BY: PLOT DATE: LOCATION: LAST SAVED:

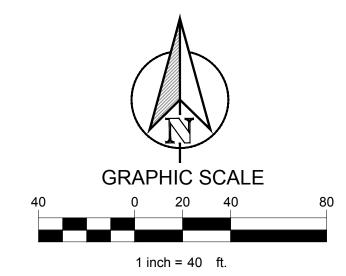


**GRADING PLAN** 







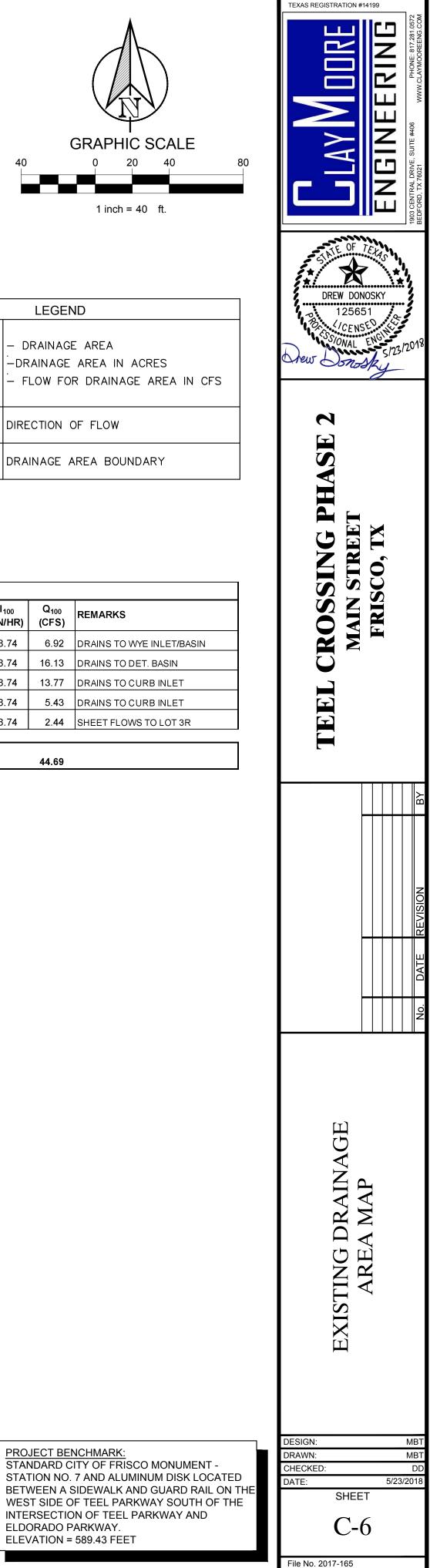


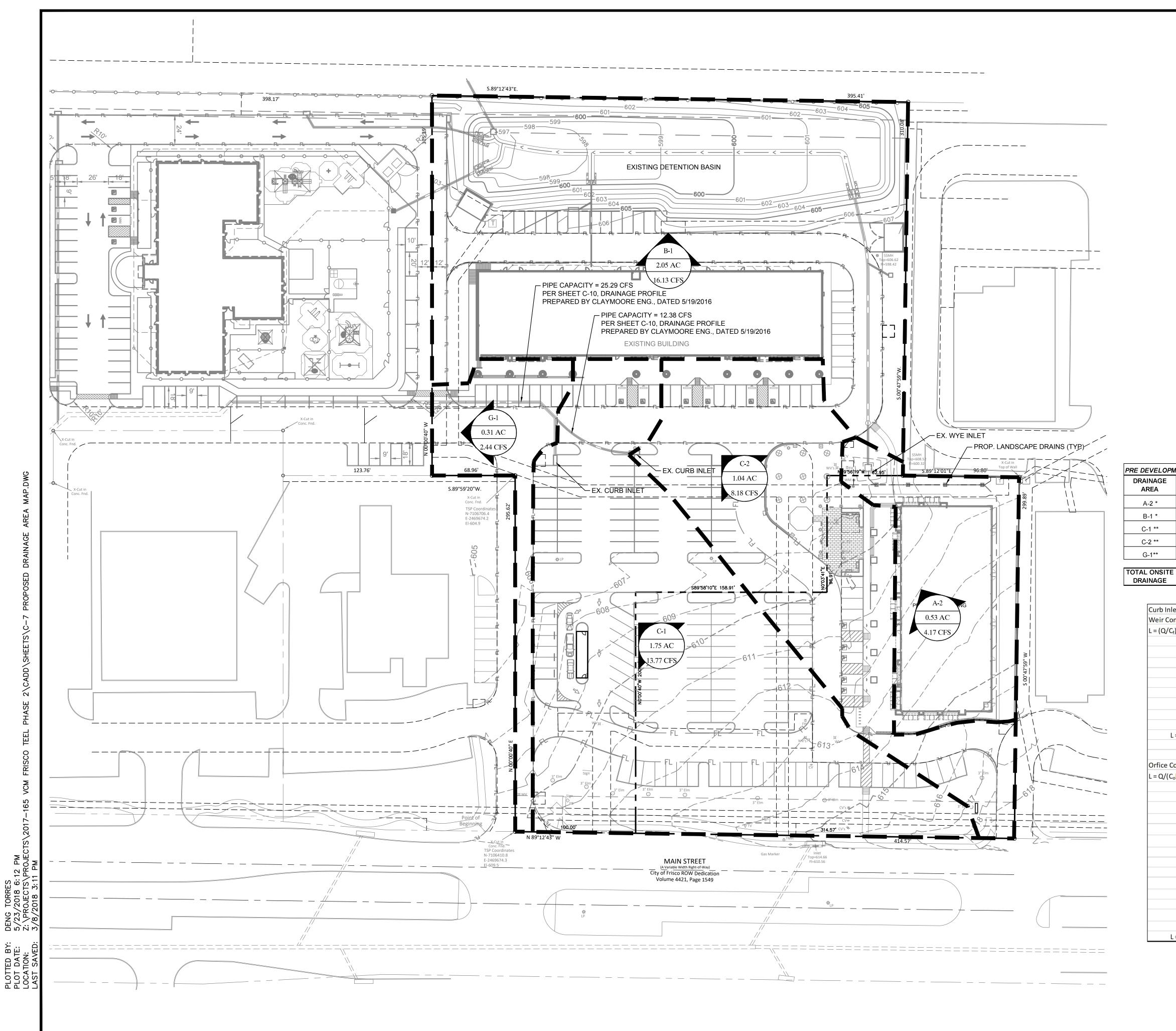
	LEGEND
A-1 1 AC 10 CFS	– DRAINAGE AREA –DRAINAGE AREA IN ACRES – FLOW FOR DRAINAGE AREA IN CFS
	DIRECTION OF FLOW
	DRAINAGE AREA BOUNDARY

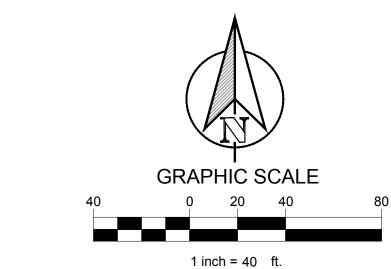
PROJECT BENCHMARK: STANDARD CITY OF FRISCO MONUMENT -

INTERSECTION OF TEEL PARKWAY AND ELDORADO PARKWAY. ELEVATION = 589.43 FEET

DEVELOPMENT RUNOFF CALCULATIONS								
RAINAGE AREA	AREA (AC.)	С	Тс	I₅ (IN/HR)	Q <sub>5</sub> (CFS)	I <sub>100</sub> (IN/HR)	Q <sub>100</sub> (CFS)	REMARKS
A-2 *	0.88	0.90	10	5.81	4.60	8.74	6.92	DRAINS TO WYE INLET/BASIN
B-1 *	2.05	0.90	10	5.81	10.72	8.74	16.13	DRAINS TO DET. BASIN
C-1 **	1.75	0.90	10	5.81	9.15	8.74	13.77	DRAINS TO CURB INLET
C-2 **	0.69	0.90	10	5.81	3.61	8.74	5.43	DRAINS TO CURB INLET
G-1**	0.31	0.90	10	5.81	1.62	8.74	2.44	SHEET FLOWS TO LOT 3R
AL ONSITE								
RAINAGE	5.68				29.70		44.69	







LEGEND						
A-1 1 AC 10 CFS	– DRAINAGE AREA –DRAINAGE AREA IN ACRES – FLOW FOR DRAINAGE AREA IN CFS					
	DIRECTION OF FLOW					
	DRAINAGE AREA BOUNDARY					

### FLOODPLAIN NOTE:

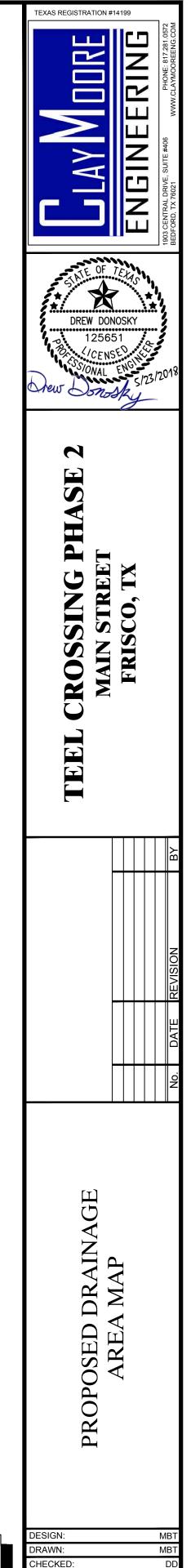
ACCORDING TO MAP NO. 48121C0440G, DATED APRIL 18, 2011 OF THE NATIONAL FLOOD INSURANCE PROGRAM MAP, FLOOD INSURANCE RATE MAP OF DENTON COUNTY, TEXAS, FEDERAL EMERGENCY MANAGEMENT AGENCY, FEDERAL INSURANCE ADMINISTRATION, THIS PROPERTY IS WITHIN ZONE "X" (SHADED) AND IS NOT WITHIN A SPECIAL FLOOD HAZARD AREA.

### **DETENTION NOTES:**

REGIONAL DETENTION IS PROVIDED FOR THIS PROJECT AS DEMONSTRATED IN THE CIVIL PLANS TITLED TEEL CROSSING, LOT 4 BLOCK A, TEEL CROSSING SHOPPING CENTER 1 (SCSP15-0042), PREPARED BY CLAYMOORE ENGINEERING, DATED MAY 2016.

PRE DEVELOPMENT RUNOFF CALCULATIONS								
DRAINAGE AREA	AREA (AC.)	С	Тс	I₅ (IN/HR)	Q <sub>5</sub> (CFS)	I <sub>100</sub> (IN/HR)	Q <sub>100</sub> (CFS)	REMARKS
A-2 *	0.53	0.90	10	5.81	2.77	8.74	4.17	DRAINS TO WYE INLET/BASIN
B-1 *	2.05	0.90	10	5.81	10.72	8.74	16.13	DRAINS TO DET. BASIN
C-1 **	1.75	0.90	10	5.81	9.15	8.74	13.77	DRAINS TO CURB INLET
C-2 **	1.04	0.90	10	5.81	5.44	8.74	8.18	DRAINS TO CURB INLET
G-1**	0.31	0.90	10	5.81	1.62	8.74	2.44	SHEET FLOWS TO LOT 3R
				•	-			*

Curb Inlet C		quations						
Weir Contro		quations						
$L = (Q/C_f)/(C_w D^{1.5})$		L=	Length of	Curb			Clogging Factor =	0.8
				reaching i	nlet (CFS)			
				ficient 2.3				
				let openin				
		1-		Solve for				
		L= Q=	8.42					
		C <sub>w</sub> =						
		d =	0.83					
			0.00					
L =	6.05	ft.						
Orfice Cont	roled							
L=Q/(C₀h√								
		L=	Length of	Curb				
				reaching i	nlet (CFS)			
		<b>C</b> <sub>0</sub> =	Orfice Coe	eficient = 0	.67			
		h =	depth of c	pening (ft	.)			
		g =	gravity = 3	2.2 (ft/s <sup>2</sup> )				
		d <sub>e</sub> =	effective	head at cer	ntroid of or	fice (ft.)		
		L=	0.40	Solve for			Clogging Factor =	0.8
		Q =		1				
		C <sub>0</sub> =						
		n = g =						
		d <sub>e</sub> =						
		чe	0.50					
L=	5.14	ft						



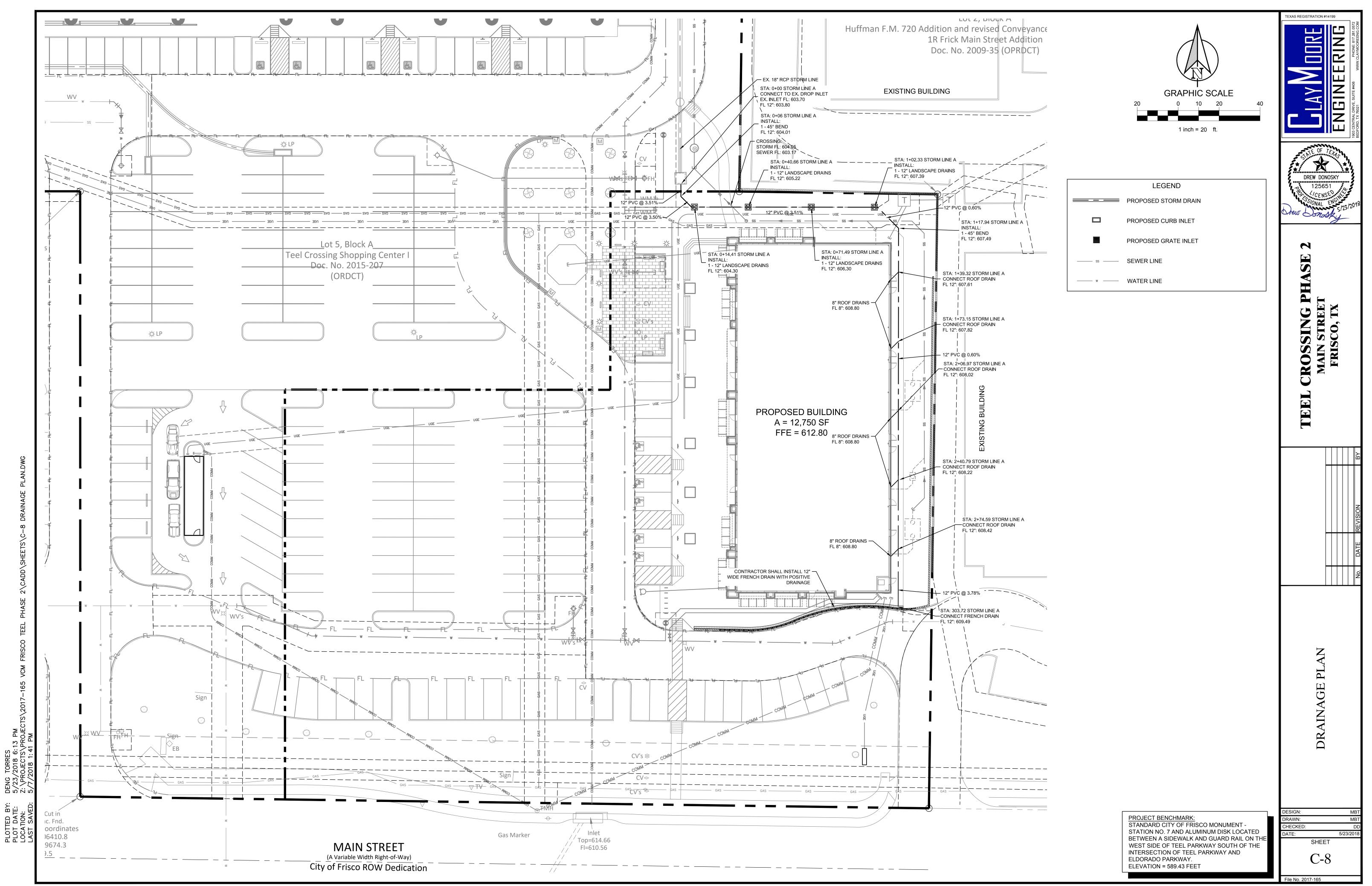
PROJECT BENCHMARK: STANDARD CITY OF FRISCO MONUMENT -STATION NO. 7 AND ALUMINUM DISK LOCATED BETWEEN A SIDEWALK AND GUARD RAIL ON TH WEST SIDE OF TEEL PARKWAY SOUTH OF THE INTERSECTION OF TEEL PARKWAY AND ELDORADO PARKWAY. ELEVATION = 589.43 FEET

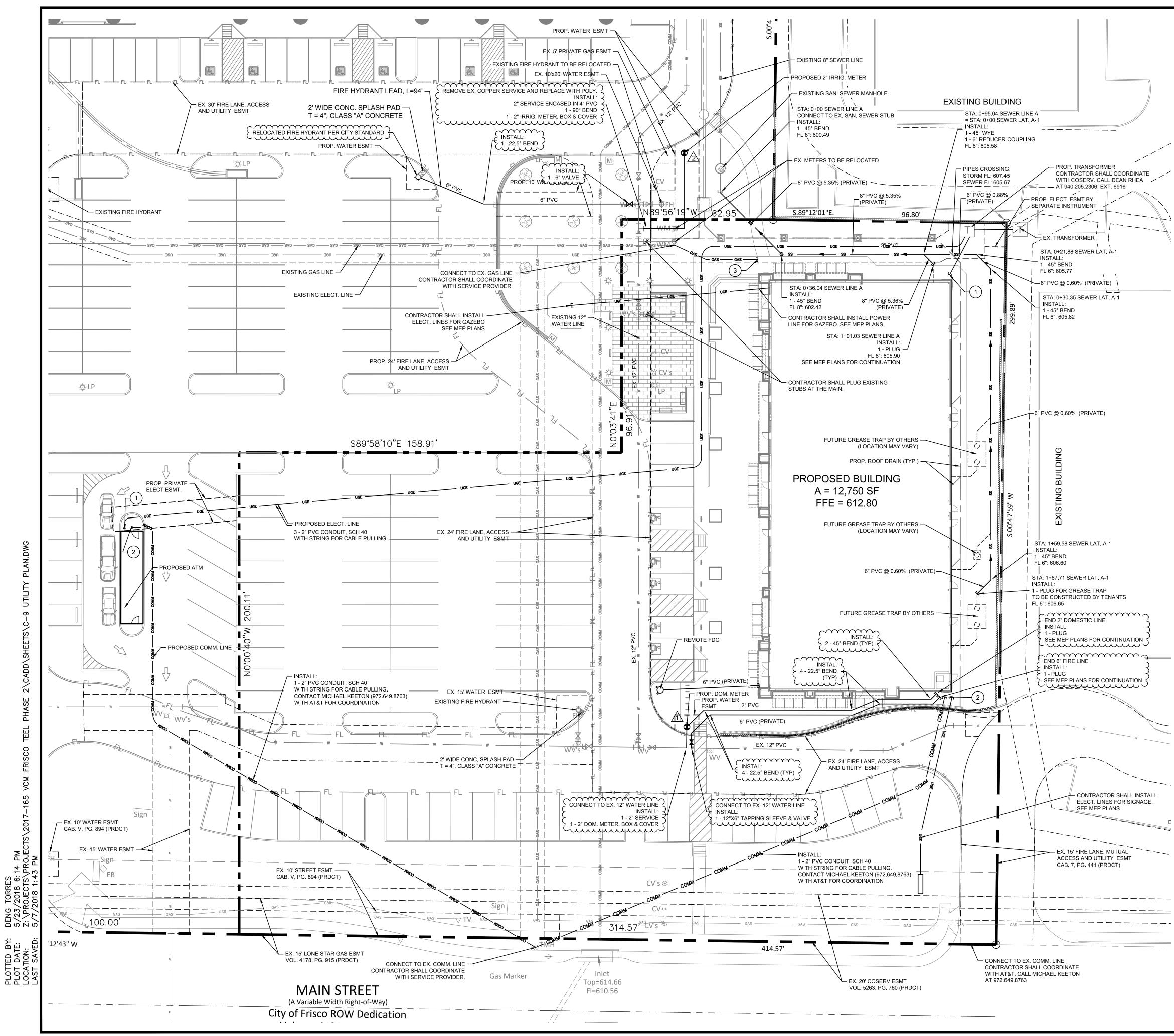
SHEET

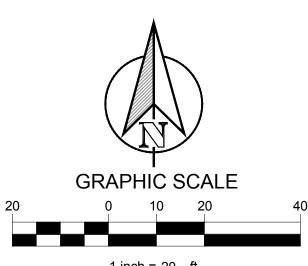
**C-7** 

5/23/20

DATE:







1 inch = 20 ft.

	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 CONNECTION: INSTALL 2" GAS METER SEE MEP PLANS FOR CONTINUATION OF SERVICE.

LEGEND					
w	EXISTING WATER MAIN				
ss(S)	EXISTING SANITARY SEWER AND MANHOLE				
w	PROPOSED WATER LINE				
ssO	PROPOSED SANITARY SEWER LINE AND CLEAN OUT				
UGE	PROPOSED UNDERGROUND ELECTRIC				
UGT	PROPOSED UNDERGROUND COMMUNICATION LINE				
GAS	PROPOSED UNDERGROUND GAS LINE				

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

### <u>NOTES</u>

- - -

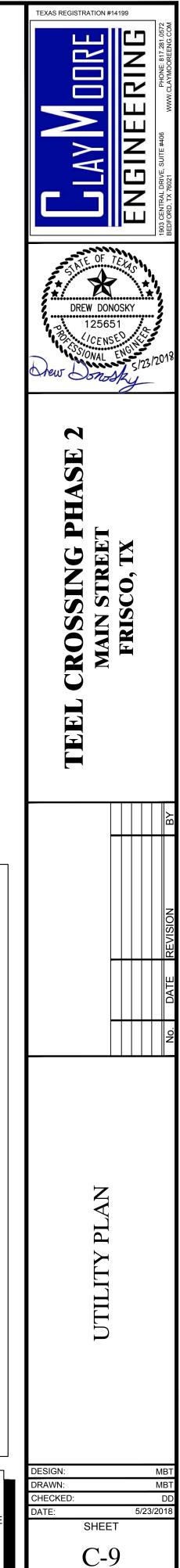
CONTRACTOR SHALL COORDINATE WITH FRANCHISE UTILITY COMPANIES AND 1. IRRIGATION PLANS TO DETERMINE QUANTITY, SIZE, AND LOCATION FOR ALL CONDUIT AND SLEEVING REQUIRED TO SERVE BUILDING AND SITE. ALL CONDUIT AND SLEEVES SHALL BE INSTALLED PRIOR TO SUBGRADE PREPARATION AND PAVING.

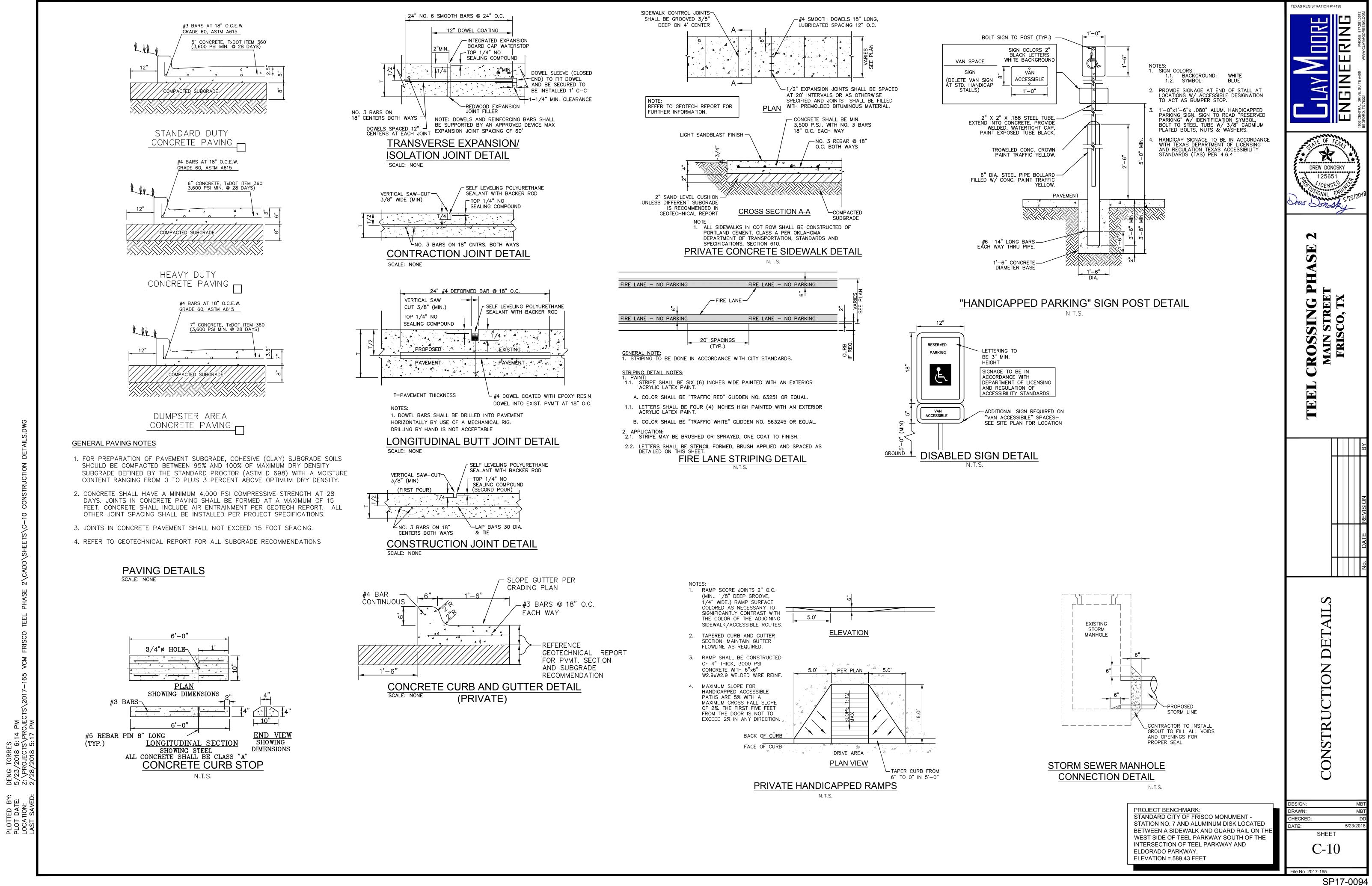
FRANCHISE UTILITY NOTES:

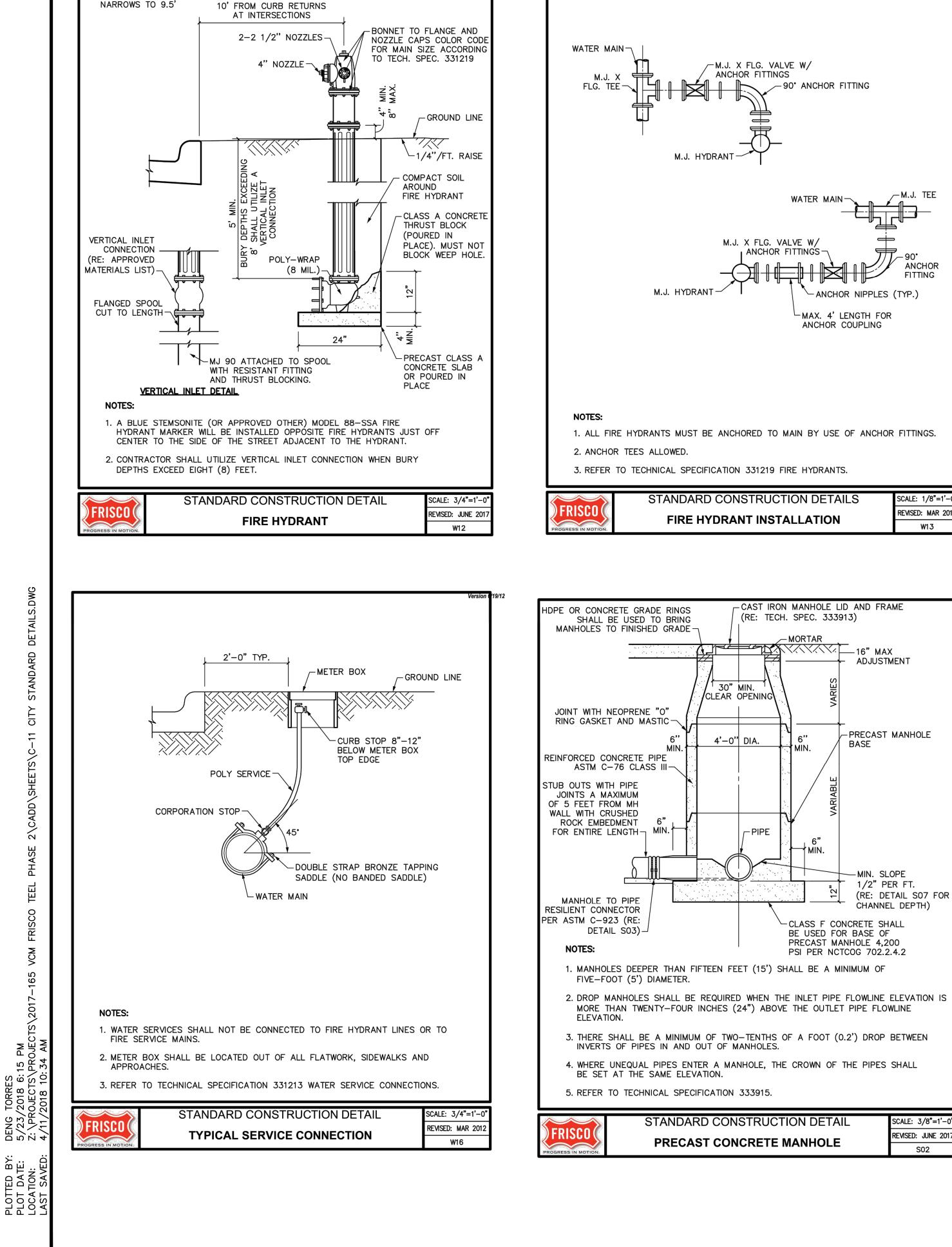
- 1. THE GAS, ELECTRIC AND TELEPHONE INFORMATION SHOWN ON THIS PLAN IS BASED UPON THE LATEST INFORMATION AVAILABLE FROM THE RESPECTIVE FRANCHISE UTILITY COMPANIES. IT IS INTENDED FOR PURPOSES OF GENERAL BIDDING AND BASIC CLARITY. SPECIFIC JOB SITE CONDITIONS SHALL BE FIELD VERIFIED PER NOTES 2 THROUGH 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.
- 3. 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.
- 4. CONTRACTOR SHALL VERITY 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.
- FRANCHISE UTILITIES SHOULD BE 4', HORIZONTALLY, FROM CITY WET UTILITIES AND CROSSINGS SHOULD BE DONE AT 90 DEGREES AND, WHEN THE CITY UTILITY IS LESS THAN 8' DEEP, AT LEAST 18" BELOW THE CITY UTILITY. INCLUDE THAT DISTANCES APPLY TO MAINS, LATERALS, SERVICES AND LEADS.

### PROJECT BENCHMARK: STANDARD CITY OF FRISCO MONUMENT -

STATION NO. 7 AND ALUMINUM DISK LOCATED BETWEEN A SIDEWALK AND GUARD RAIL ON T WEST SIDE OF TEEL PARKWAY SOUTH OF THE INTERSECTION OF TEEL PARKWAY AND ELDORADO PARKWAY. ELEVATION = 589.43 FEET





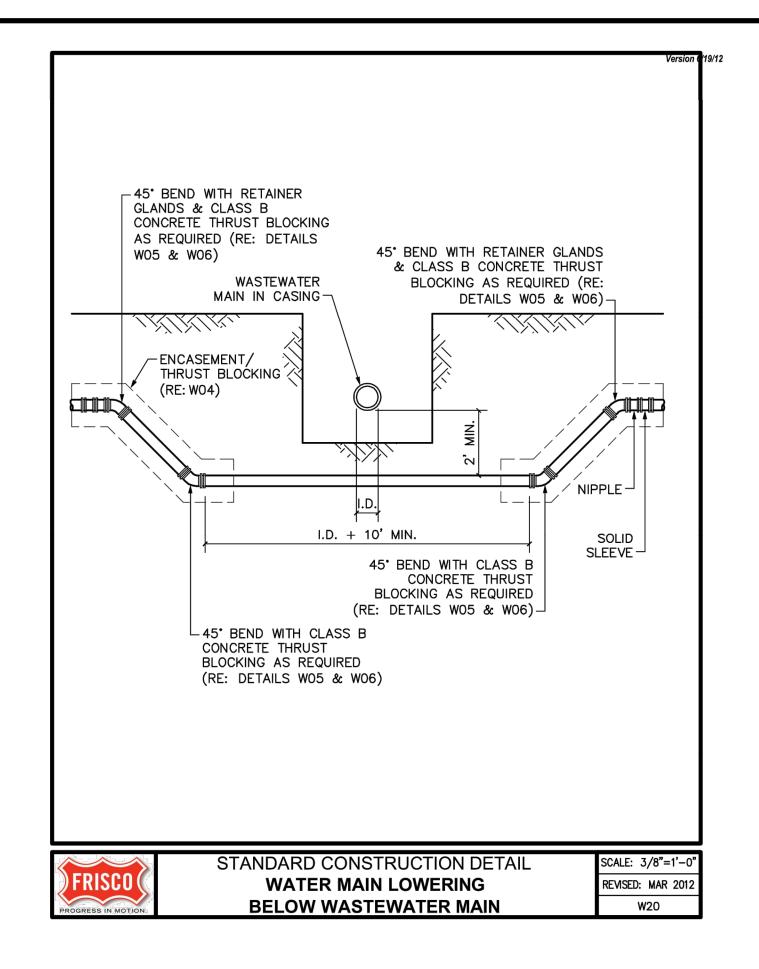


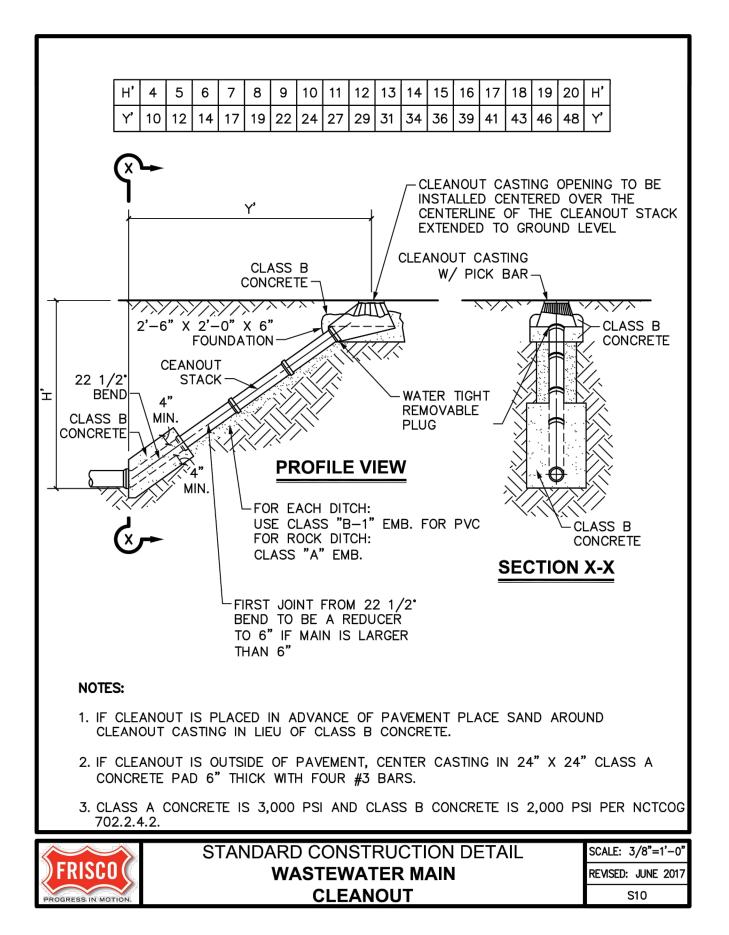
\*3.5' MIN WHERE ROW

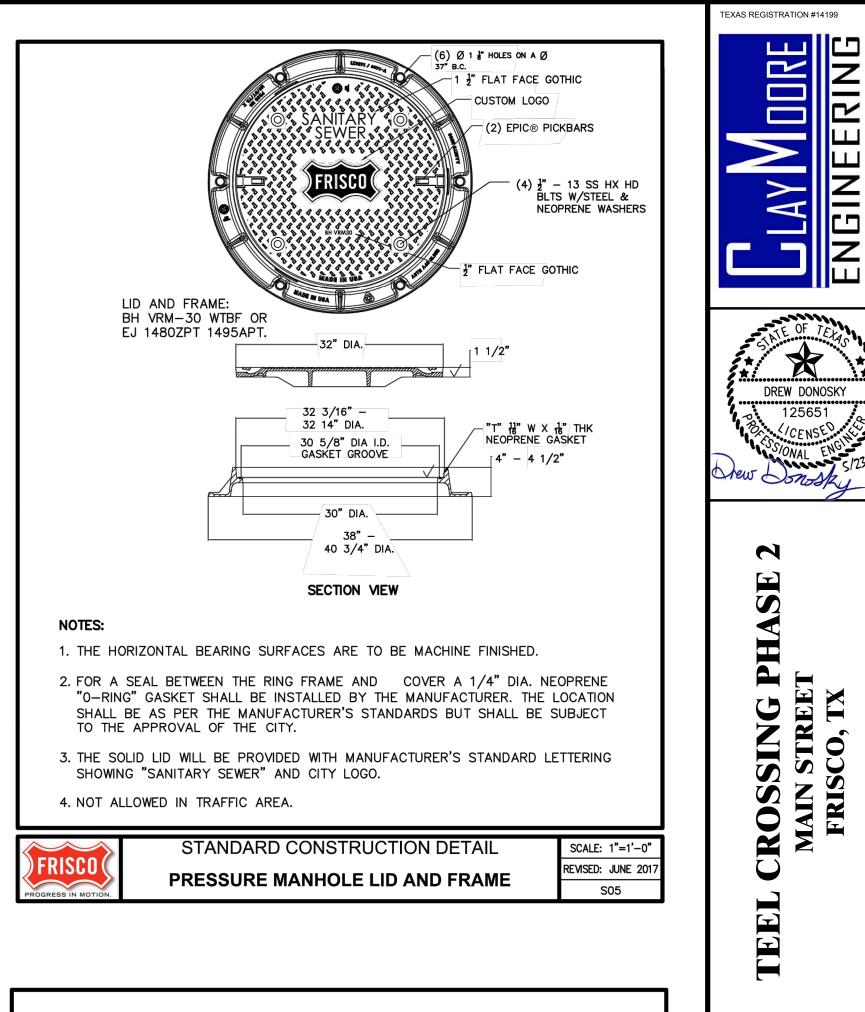
4.5' MIN. 6' MAX.\*

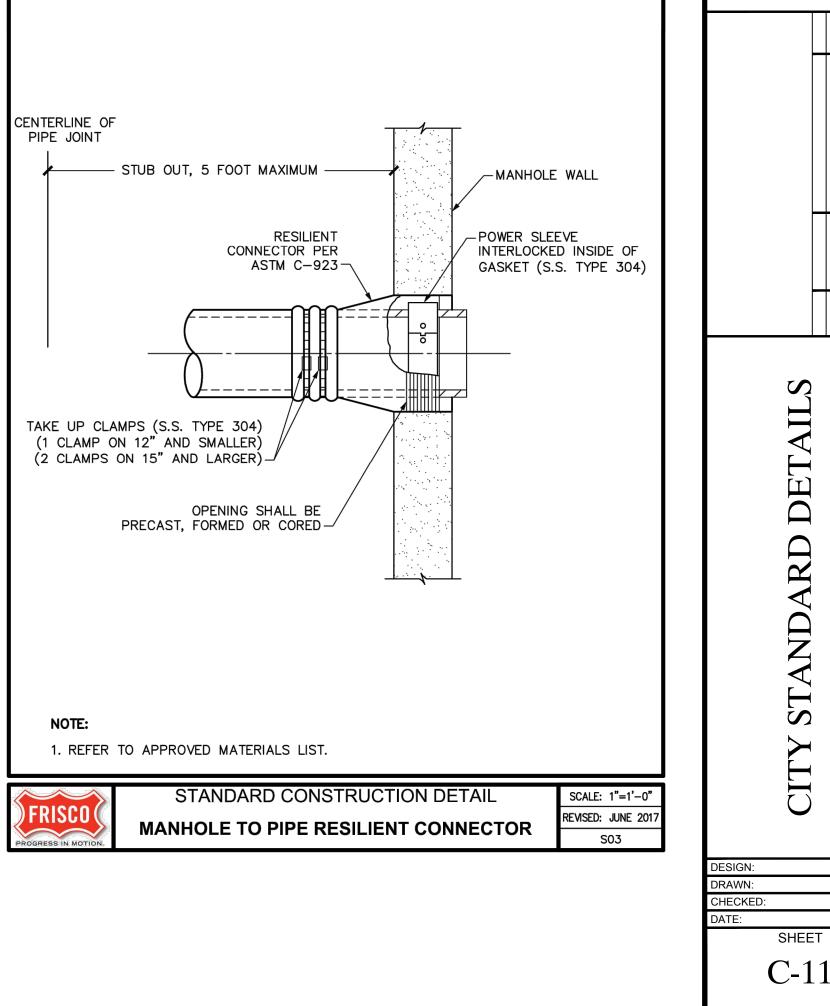
ARD CONSTRUCTION DETAILS	SCALE: 1/8"=1'-0"
HYDRANT INSTALLATION	REVISED: MAR 2012
ENTDRANT INSTALLATION	W13

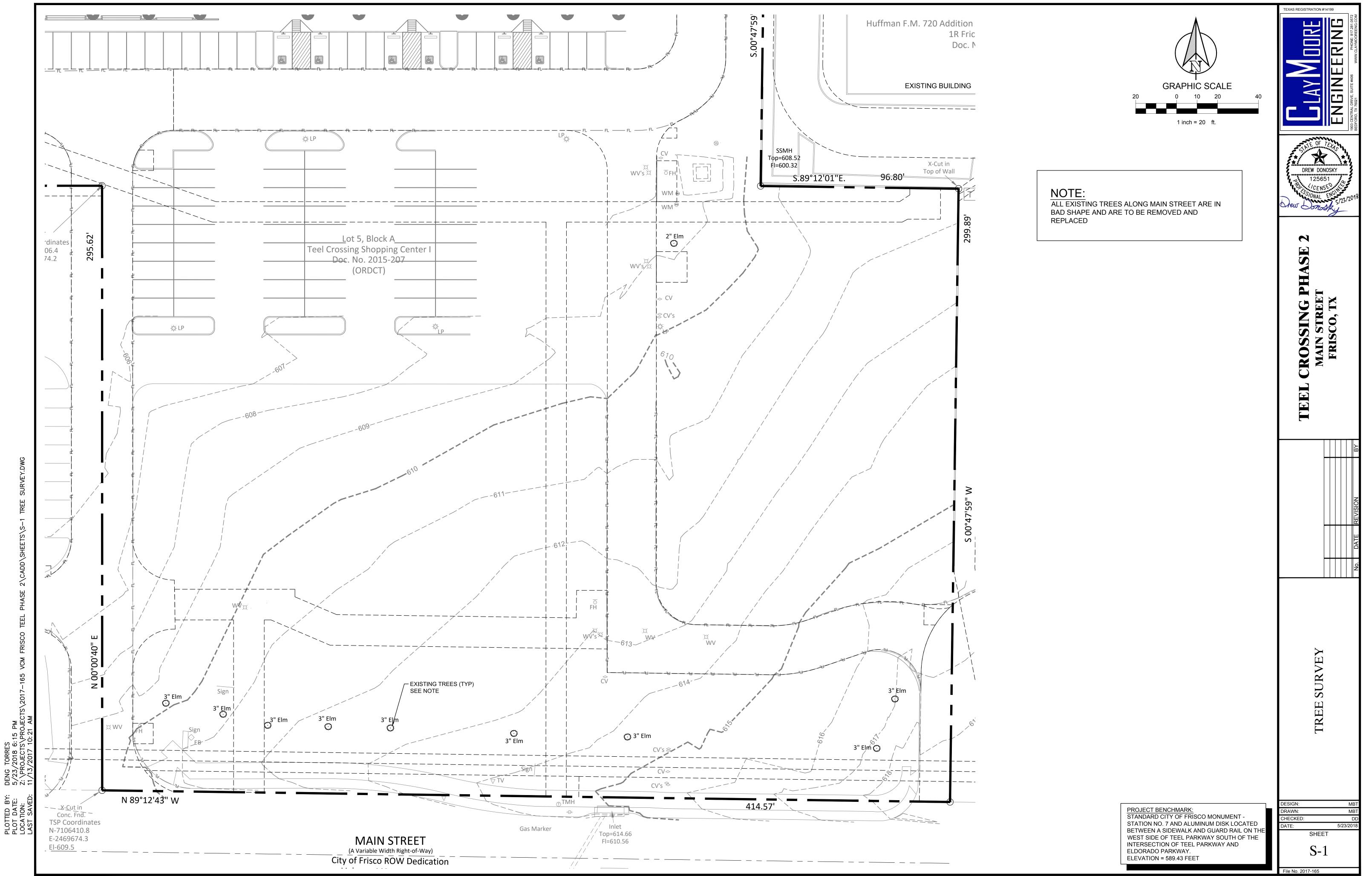
ARD CONSTRUCTION DETAIL	SCALE: 3/8"=1'-0"			
AST CONCRETE MANHOLE	REVISED: JUNE 2017			
AST CONCRETE MANHOLE	S02			



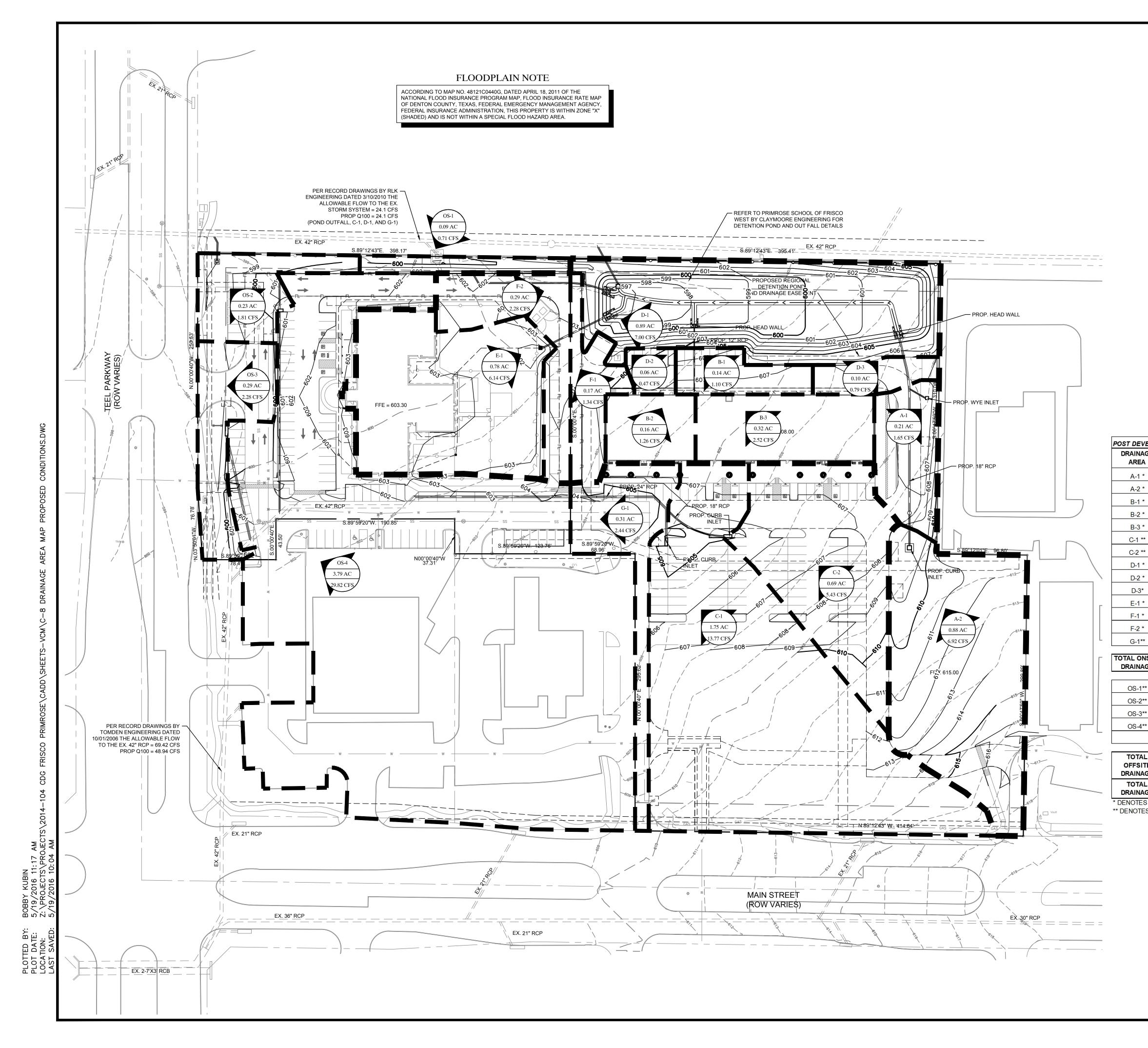








SP17-0094



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2 * 3 * ** ** 1 * 2 * 3*	0.16 0.32 1.75 0.69 0.89 0.06 0.10	0.90 0.90 0.90 0.90 0.90 0.90 0.90	10 10 10 10 10 10 10	5.81 5.81 5.81 5.81 5.81 5.81 5.81	0.84 1.67 9.15 3.61 4.65 0.31 0.52	8.74 8.74 8.74 8.74 8.74 8.74 8.74 8.74	1.26 2.52 13.77 5.43 7.00 0.47 0.79	ROOF DRAINS ROOF DRAINS DRAINS TO CURB INLET DRAINS TO CURB INLET DETENTION POND DRAINS TO DETENTION PON DRAINS TO DETENTION PON					
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PROJECT BENCHMARK: STANDARD CITY OF FRISCO MONUMENT -STATION NO. 7 AND ALUMINUM DISK LOCATED BETWEEN A SIDEWALK AND GUARD RAIL ON THE WEST SIDE OF TEEL PARKWAY SOUTH OF THE INTERSECTION OF TEEL PARKWAY AND ELDORADO PARKWAY. ELEVATION = 589.43 FEET

AWN

CHECKED:

05/19/201

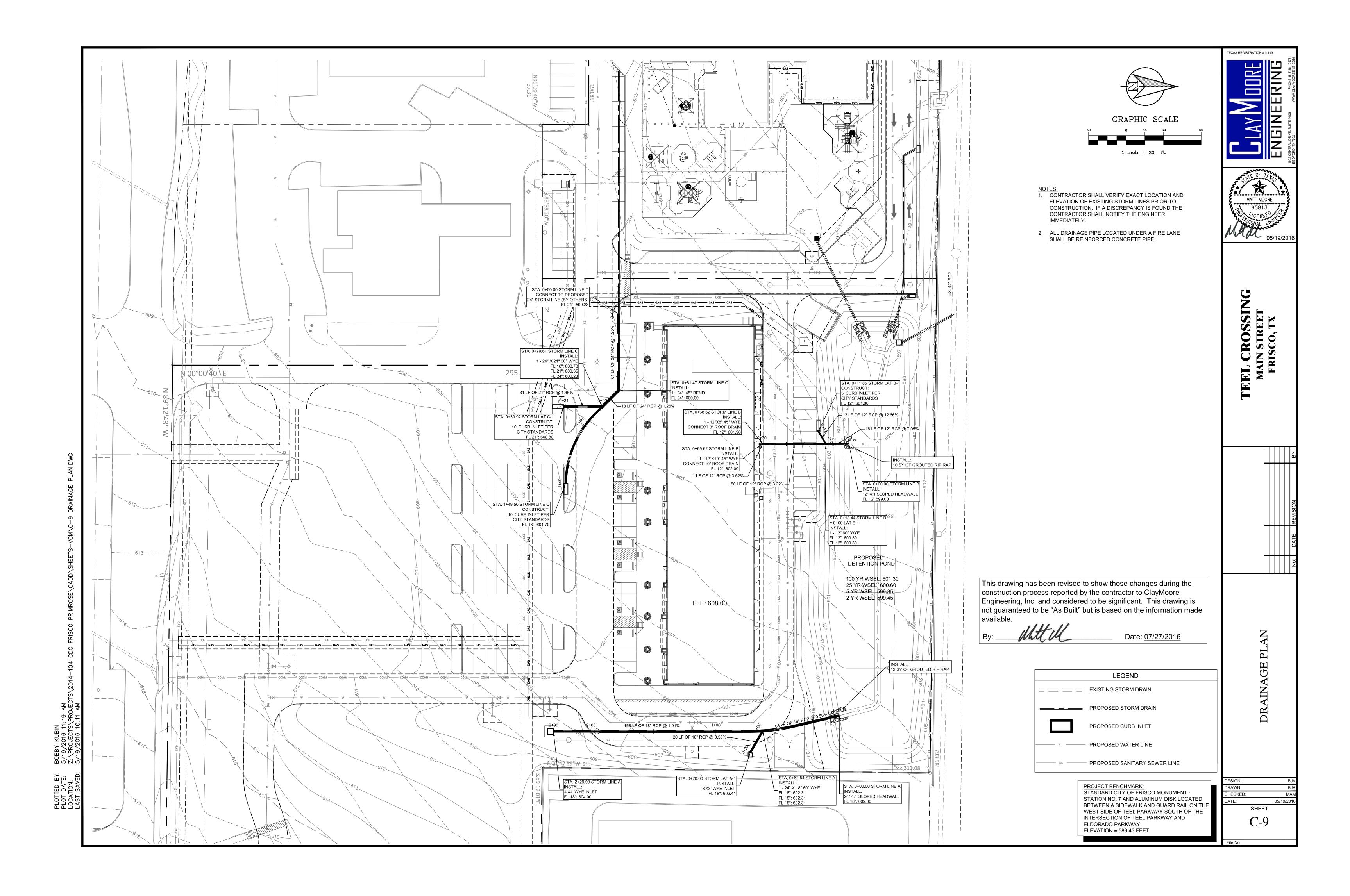
SHEET

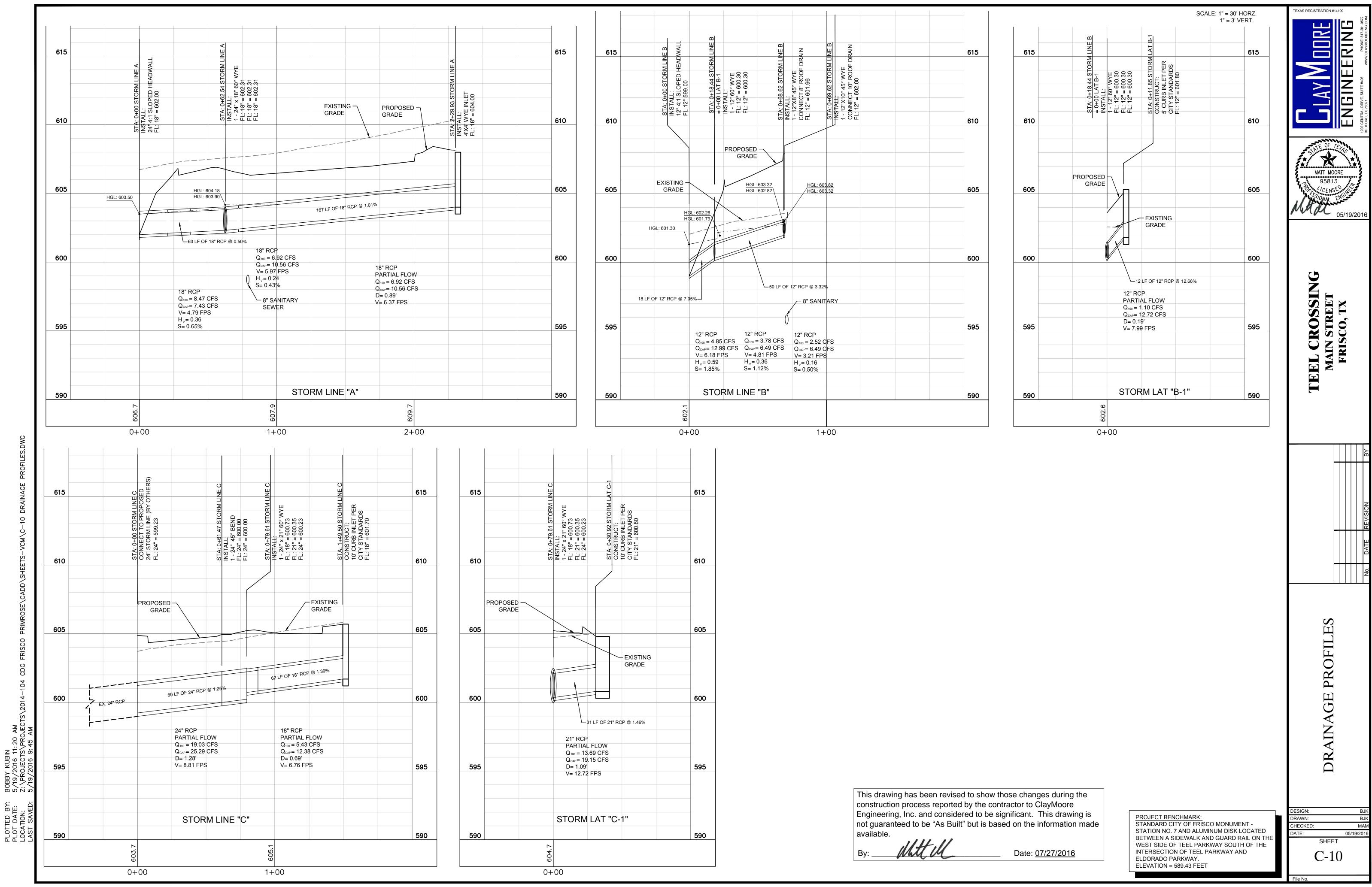
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DATE

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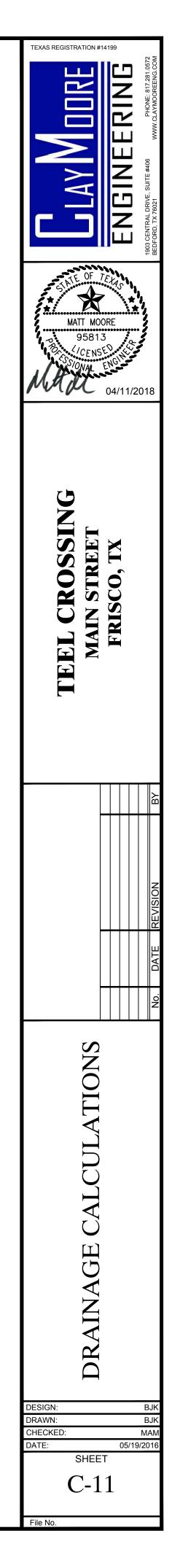


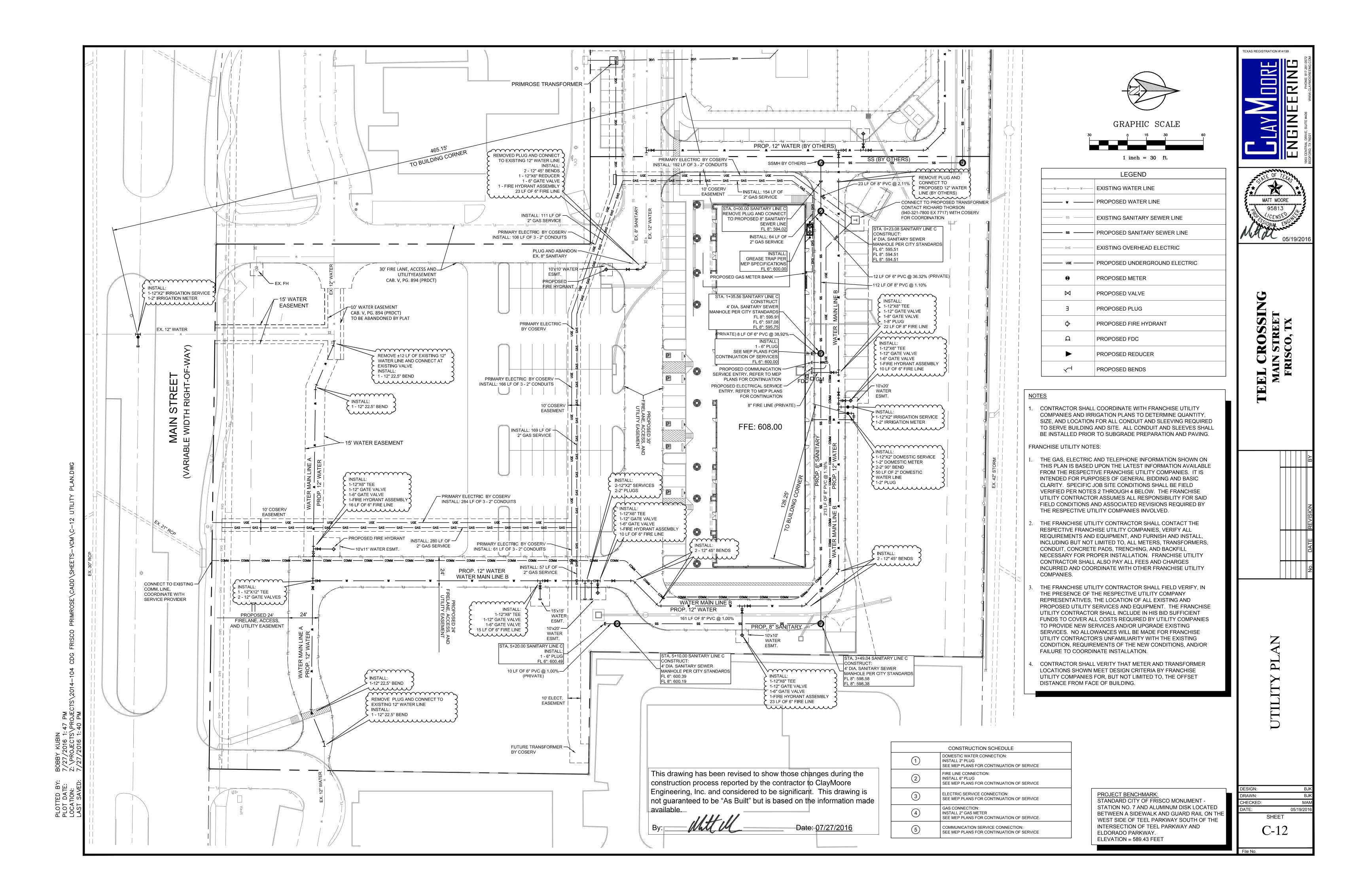


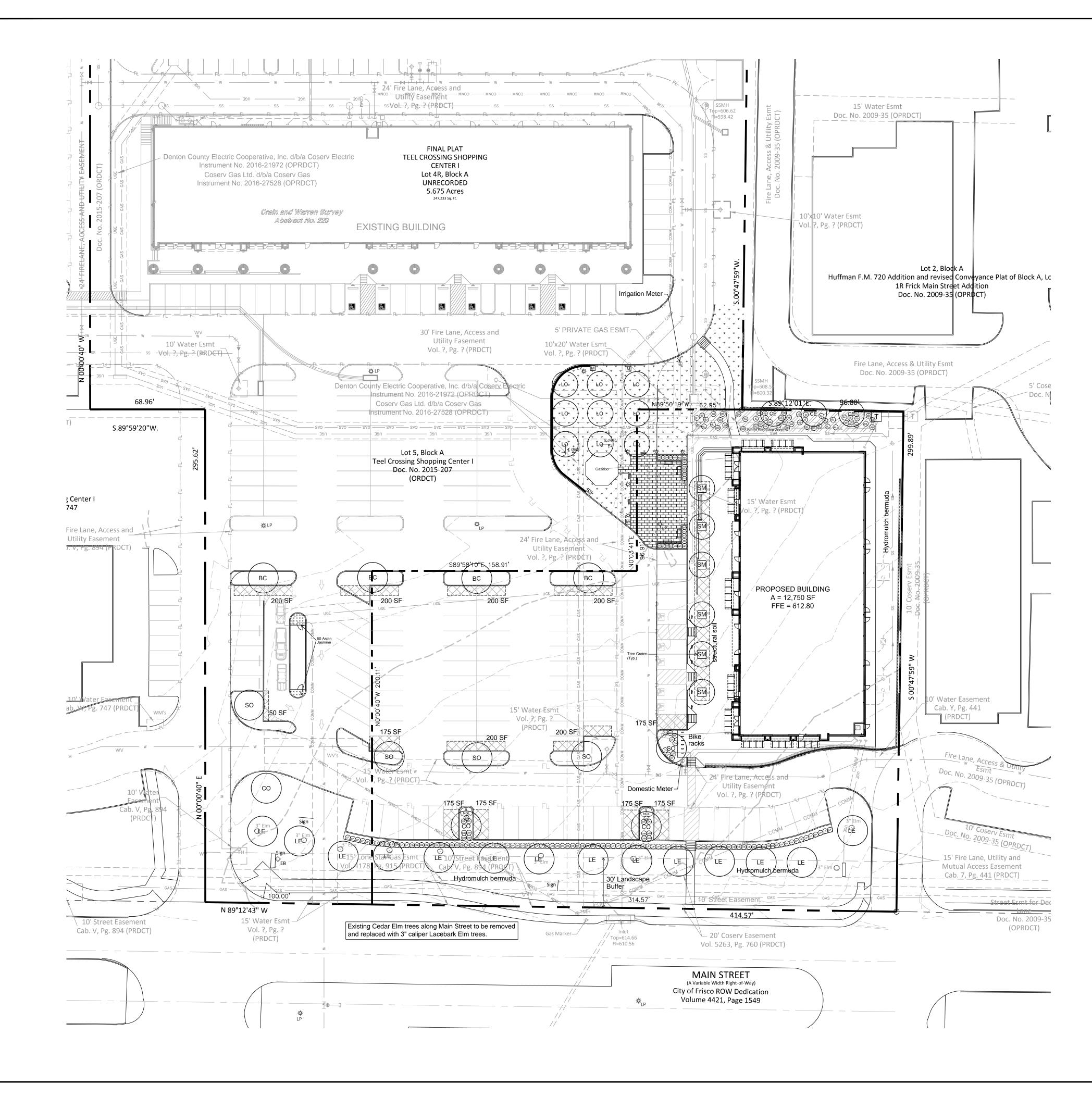
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			AREA	AREA	COEFFICIENT	CA	CA	IN P	PE CONCENTRATION	1		FLOW				NESS	SLOPE	CAPACITY	·			Flow		SLOPE		K <sub>j</sub>	H <sub>j</sub>	PIPE	PIPE	PIPE	PIPE
										I <sub>100</sub>		Q <sub>100</sub> I	DIA. SPAN	RISE NU			So	Q <sub>cap</sub>	V <sub>design</sub>	V <sub>f ull</sub> Q/Qfull	V/Vfull d/	D Depth	Vpartia	l Sf	Hv	-	(MIN 0.1)	,	· · · · · · · · · · · · · · · · · · ·		
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	0.00 54		0.04	1.09	0.00	0.40	0.98	0.2		0.04	62.54	8.4/	18	1.5		1.77 0.375 0.013	0.50%	7.43	4.79	4.20 1.141	1.00 1.0	00 1.50	4.20	0.65%	0.36	- 0.05		- <u> </u>	<u> </u>		
	0+62.54	60 DEGREE WYE	0.21	0.88	0.90	0.19	0.79	0.4	10.44	8.64	167.20	6.00	18	1 5		1.77 0.375 0.013	1.01%	10.56	202	F 07 0 656			6.27	0.430/	- 0.24	0.35	0.27	604.18	603.90	602.31	602.31
	2+29.93	INLET	0.88	0.00	0.90	0.79	0.79	10.00	+ 10.00	8.74	167.39	0.92	10	1.5		1.77 0.375 0.013	1.01%	10.56	3.92	5.97 0.656	1.07 0.3	0.09	0.37	0.43%	0.24	1.25	0.24	605.14	604.90	604.00	604.00
	2+29.93		0.00		0.90	0.79		10.00	10.00	0.74															1	1.25	0.24	003.14	004.90	004.00	
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				0.62			0.56	0.0			26.45	4.86	12	1		0.79 0.250 0.013	12.48%	12.59	6.19 1	6.03 0.386	0.93 0.4	43 0.43	14.97	1.85%	0.60			,	,		
	0+26.45	60 DEGREE WYE	0.14		0.90	0.13			10.11	8.72																0.35	0.47	603.30	601.79	602.30	602.30
				0.48			0.43	0.1			50.17	3.78	12	1		0.79 0.250 0.013	3.32%	6.49	4.81	8.27 0.582	1.03 0.	54 0.54	8.53	1.12%	0.36	'		<u> </u> '	<u> </u> '	<u> </u>	
	0+76.62	45 DEGREE WYE	0.16		0.90	0.14			10.01	8.74															1	0.50	0.50	604.97	603.86	603.97	603.97
				0.32			0.29	0.0			1.00	2.52	12	1		0.79 0.250 0.013	3.32%	6.49	3.21	8.27 0.388	0.93 0.4	43 1.00	7.72	0.50%	0.16	'		<u> </u> '	<u> '</u>	<u> </u>	
	0+77.62	45 DEGREE WYE	0.32		0.90	0.29		10.00	10.00	8.74															<b></b>	0.50	0.50	605.47	604.97	604.00	604.00
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									40.00																1	'	<u> </u>	<u> </u> '	<b></b> '		
LAT B-1	0+00.00	LINE B		0.11			0.40		10.02		44.05		10			0.70 0.050 0.040	10.000/	40.00		0.4.4		10 0.10	0.00	0.40%	1	'	<b>_</b>	602.26	<b></b> '	600.30	
	0+11.85	INLET	0.14	0.14	0.00	0.40	0.13	0.0	2 10.00	0.74	11.85	1.10	12	1		0.79 0.250 0.013	12.66%	12.68	1.40	6.14 0.087	0.60 0.	19 0.19	9.63	0.10%	0.03	4.05		L 000 07	602.27	601.90	601.80
	0+11.85		0.14		0.90	0.13		10.00	10.00	8.74															1	1.25	0.10	602.37	602.27	601.90	601.80
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	0+00.00	PROPOSED 24" RCP							10.40																<u> </u>	'	+	599.23	·'	599.23	+
	0100.00			2.79			2.51	0.1			61 47	21.80	24	2		3.14 0.500 0.013	1 25%	25.29	6.94	8.05 0.862		71 1 42	9.04	0.92%	0.75	'	+	000.20	·'		
	0+61.47	45 DEGREE BEND	0.00	2.75	0.90	0.00	2.01	0.1	10.29	8.67		21.00	27	2		0.010	1.2070	20.20	0.04	0.00 0.002	1.12 0.	1.72		0.5270	0.75	0.35	0.49	602.00	599.80	600.00	600.00
	0.01.47		0.00	2.79	0.00	0.00	2.51	0.0		0.07	18 14	21.80	24	2		3.14 0.500 0.013	1 25%	25.29	6.94	8.05 0.862		71 2.00	9.04	0.92%	0.75	0.00		002.00			
	0+79.61	60 DEGREE WYE	1.75	2.70	0.90	1.58	2.01	0.0	10.25	8.68	10.11	21.00		-			1.2070			0.00 0.002		2.00	0.01	0.0270	<u> </u>	0.35	0.63	602.80	602.17	600.73	600.23
			1.70	1.04	0.00	1.00	0.94	0.2		0.00	69 89	8.18	18	1.5		1.77 0.375 0.013	1 39%	12.38	4 63	7.01 0.661	1 07 0	59 1 50	7.47	0.60%	0.33				, ,		
	1+49.50	INLET	1.04		0.90	0.94		10.00	10.00	8.74																1.25	0.42	603.64	603.22	601.70	601.70
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LAT C-1	0+00.00	LINE C							10.04																			601.00	, ,	600.23	
				1.75			1.58	0.0			30.92	13.77	21	1.75		2.41 0.438 0.013	1.46%	19.15	5.72	7.96 0.719	1.08 0.0	62 1.09	8.63	0.75%	0.51			, ,	,		
	0+30.92	INLET	1.75		0.90	1.58		10.00	10.00	8.74																1.25	0.64	601.87	601.23	600.68	600.68
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																									<u> </u>	′		<u> </u>	<u> </u>		
LINE D	0+00.00	EXISTING 42" RCP							10.06																<u> </u>	′	<u> </u>	599.50	<u> </u> '	596.41	
								0.0			47.13	19.30	24	2		3.14 0.500 0.013	0.50%	16.00	6.14	5.09 1.207	1.00 1.0	2.00	5.09	0.72%	0.59	<u> </u>	<u> </u>	<u> '</u>	<u>                                     </u>	<u> </u>	
	0+47.13	OUTFALL STRUCTURE						10.00	10.00	8.74															<u> </u>	1.25	0.73	600.57	599.84	596.65	596.65

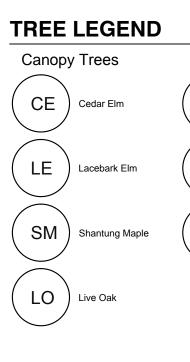
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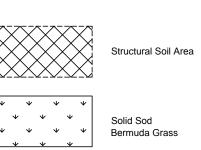




### SHRUB LEGEND

- LP Chinese Fringe Shrub
- DA Dwarf Abelia DIH Dwarf Indian Hawthorne
- DB Dwarf Burford Holly
- NGL New Gold Lantana
- NR Nellie R. Stevens Holly
- MS Miscanthus DY Dwarf Yaupon

### HATCH LEGEND



## LANDSCAPE NOTES

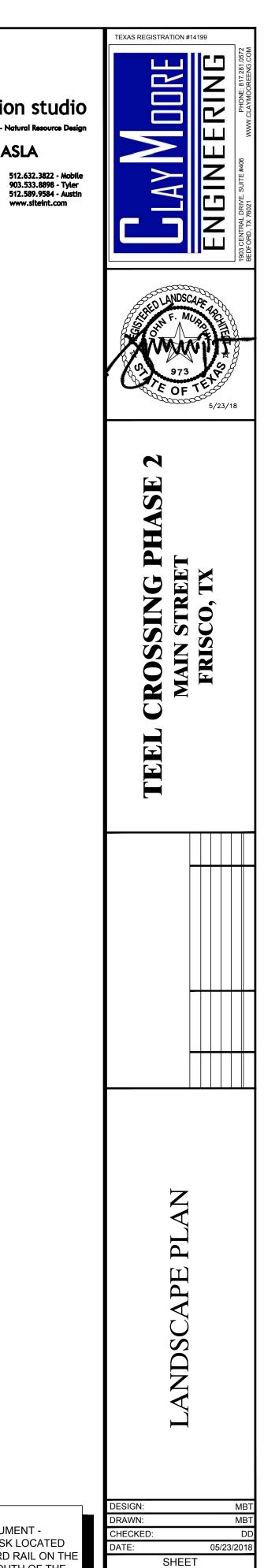
- 1. The project will have an undergound automatic irrigation system to water all new plantings.
- 2. Install 4" layer of shredded hardwood mulch to all planting beds.
- 3. Install 4" Benda Board edging between all shrub beds and grass areas.
- 4. Shrub beds to have 12 inches of prepared planting mix (75% import topsoil, 15% composted amendment, 10% washed sand.
- 5. Shredded hardwood mulch must be contain long strands along with double shred finer material obtained from a local source.
- 6. Install 4 inches of clean topsoil in all areas of the site disturbed by grading and construction operations. Topsoil shall be free from sticks, debris and rocks larger than 2 inches in diameter pH range between 5.5 and 7.4 percent. Provide soil test analysis from a soil test laboratory showing soil makeup and organic percentage.
- 7. Hydromulch bermuda or solid sod any areas disturbed by construction activities as shown on plan.
- 8. Provide CU structural soil for each tree to be planted in an area area plus structural soil area shal total 500 square feet.
- 9. Trees shall have central leaders maintained to the top of the tree.

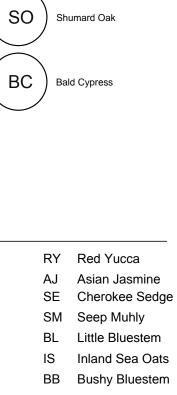


# s i t e integration studio

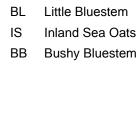
### John F. Murphy, ASLA

6647 Oak Hill Blvd. Tyler, TX 75703 john@siteint.com scott@siteint.com

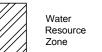




CO ) Chinquapin Oak



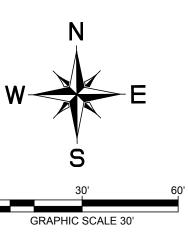




and have an organic matter level of 3 percent minimum and a

# of less than 500 square feet. Calculated as follows: Open space

Contractor to backfill tree pits in pavement with expanded shale Structural Soil available from Trinity ESC in Arlington, TX 877-647-3383 www.trinityesc.com



PROJECT BENCHMARK: STANDARD CITY OF FRISCO MONUMENT -STATION NO. 7 AND ALUMINUM DISK LOCATED BETWEEN A SIDEWALK AND GUARD RAIL ON THE WEST SIDE OF TEEL PARKWAY SOUTH OF THE INTERSECTION OF TEEL PARKWAY AND ELDORADO PARKWAY. ELEVATION = 589.43 FEET



### LANDSCAPE & TREE PROTECTION NOTES

### **INSPECTIONS:**

- 1. No excavation shall occur in city R.O.W. without a R.O.W. permit—contact Public Works Department.
- 2. The Contractor shall mark all water lines, sewer
- lines, and tree locations prior to calling for ROW permit. 3. The landscape installation shall comply with approved landscape drawings prior to Final
- Acceptance by the City and issuance of a Certificate of Occupancy. Contact Development Services landscape architect for a landscape inspection. 4. Water meters, cleanouts and other appurtenances,
- shall be accessible, adjusted to grade, clearly marked with flagging, and compliant with Public Works Department standards prior to calling for landscape and final R.O.W. inspections.

### LANDSCAPE STANDARDS:

- 1. Plantings and landscape elements shall comply with Engineering Standards, Public R.O.W. Visibility requirements.
- 2. Unless otherwise specified, trees shall be planted no less than 6' from curbs, and 4' from sidewalks, utility lines, and screening walls. The City has final approval for all tree placements.
- 3. A Three foot radius around a fire hydrant shall remain clear of plant materials pursuant to the Fire Code. 4. Street trees, where required, shall be (10') minimum
- from the edge of a storm sewer curb inlet box and the edge of the root ball shall be (4') minimum from the water meter.
- 5. All plants shall be grown and harvested in accordance with The American Standard for Nursery <u>Stock</u> (ANSI Z60.1-2004)
- 6. Tree planting shall comply with details herein and the <u>International Society of Arboriculture</u> (ISA) standards.
- 7. Tree pits shall be tested for water percolation. If water does not drain out of tree pit within 24-hours, the tree shall be moved or drainage shall be
- provided. 8. Native site topsoil is to be protected from erosion or stockpiled.
- 9. Native site topsoil shall be laboratory tested by and accredited laboratory and amended per said laboratory's recommendations.

### Updated: 1/22/14

## **IRRIGATION STANDARDS:**

- 1. Any changes to these approved irrigation drawings shall be authorized by the Development Services Landscape Architect.
- 2. Contact Development Services for irrigation permit prior to installing the irrigation system.
- 3. Irrigation overspray on streets and walks is prohibited.
- 4. Mainlines, valves, or control wires shall not be
- located in the R.O.W. 5. ET irrigation controllers shall be programmed and adjusted to not exceed the Landscape Water Allowance (LWA) prior to approval of landscape
- installation. 6. Valves shall be located a minimum of (3') away from storm sewers, and sanitary sewer lines and 5 feet
- from City fire hydrants and water valves. 7. The bore depth under streets, drive aisles, and fire
- lanes shall provide (2') of clearance (minimum).
- 8. Irrigation heads that run parallel and near public water and sanitary sewer lines; shall be fed from stubbed laterals or bull-beads. A minimum 5-foot separation is required between irrigation main lines and laterals that run parallel to public water and sanitary sewer lines.
- 9. No valves, backflow prevention assemblies, quick couplers etc. shall be located closer than 10' from the curb at street or driveway intersections.

### MAINTENANCE STANDARDS:

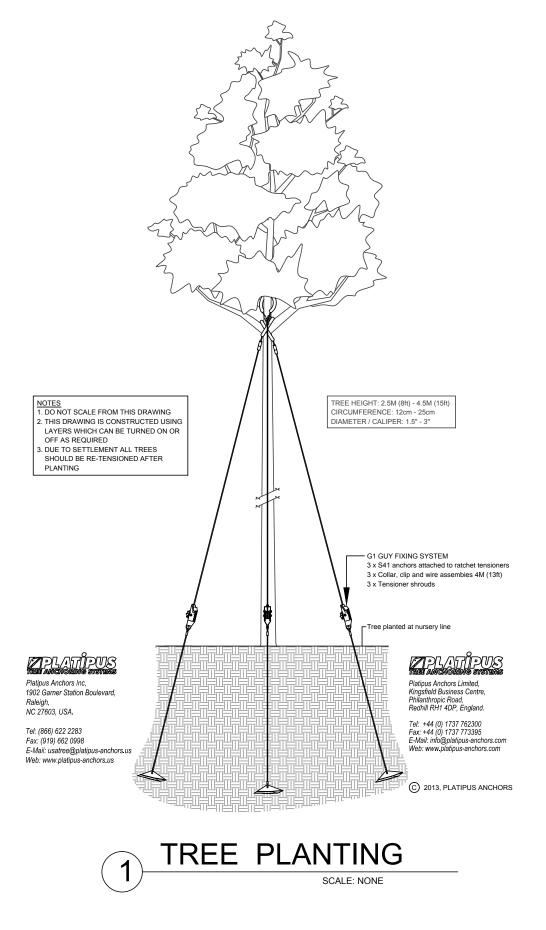
- 1. The owner shall be responsible for the establishment, maintenance, and vigor of plant material in accordance with the design intent and as appropriate for the season of the year.
- 2. Landscape and open areas shall be free of trash, litter and weeds.
- 3. All trees and shrubs shall be maintained in accordance with the Engineering Design Standards -Public R.O.W. Visibility Requirements.
- 4. Tree maintenance shall be in accordance with the American National Standards for Tree Care Operations, ANSI A300 and the standards of the
- International Society of Arboriculture (ISA). 5. Tree staking materials, if used, shall be removed after (1) growing season and not more than (1) year after installation. Steel tree stakes, wires, and hoses are prohibited.

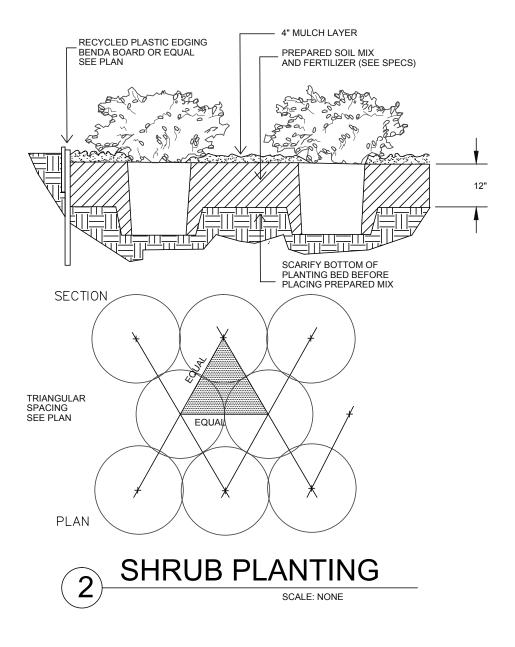
**FRISCO** LANDSCAPE & TREE PROTECTION NOTES

### TREE PROTECTION NOTES

- 1. Contact Development Services for a Tree Removal Permit at 972-292-5300 prior to removal or transplanting of any trees.
- 2. All trees which are to remain on site shall be protected with a (4') tall brightly colored plastic fence, or silt fence, placed at the drip line of the
- tree 3. Prior to the Pre-construction meeting or obtaining a grading permit, all tree markings and protective fencing shall be installed by the owner and shall be inspected by the Development Services Landscape
- Architect. 4. No equipment shall be cleaned, or harmful liquids deposited within the limits of the root zone of trees
- which remain on site. 5. No signs, wires, or other attachments shall be
- attached to any tree to remain on site. 6. Vehicular and construction equipment shall not park
- or drive within the limits of the drip line.
- 7. Grade changes in excess of 3 inches (cut or fill) shall not be allowed within a root zone, unless adequate
- tree preservation methods are approved by the City. 8. No trenching shall be allowed within the drip-line of
- a tree, unless approved by the City. 9. All removed trees shall be chipped and used for mulch on site or hauled off-site.
- 10. All tree maintenance techniques shall be in conformance with American National Standards for Tree Care Operations, ANSI A300 industry identified standards. Improper or malicious pruning techniques are strictly prohibited.

Updated: 1/22/14





### LANDSCAPE ARCHITECT / ARBORIST STATEMENT

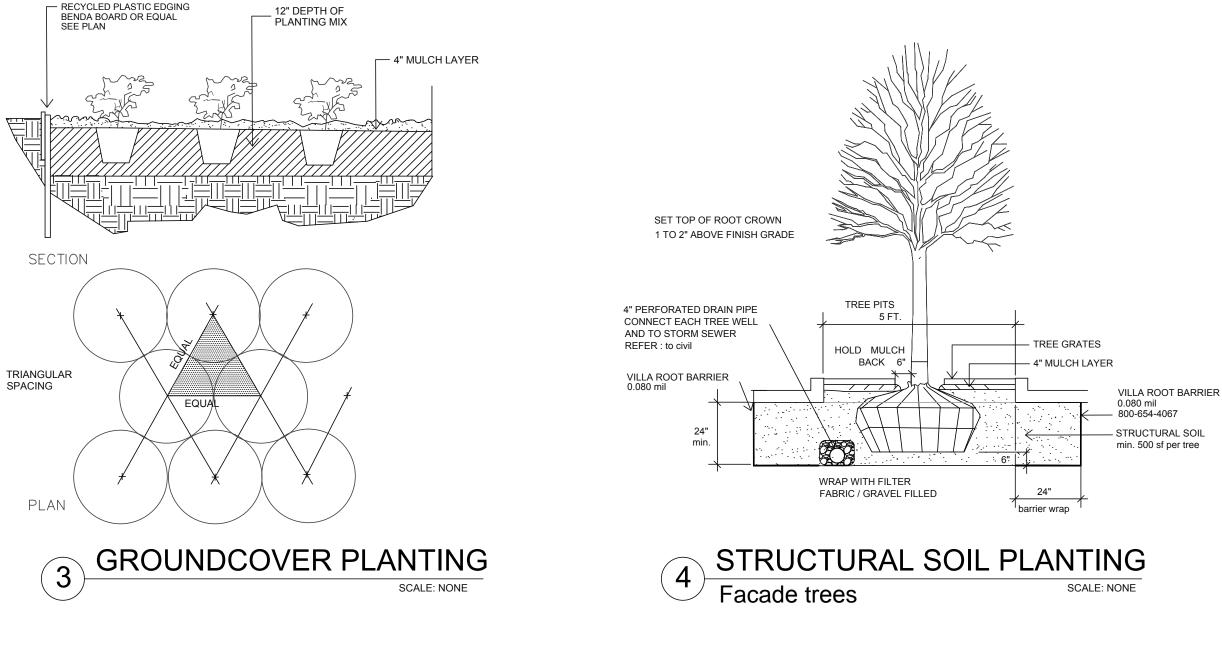
being a landscape architect or arborist attest that the identification and size of trees identified on this survey are correct and that all Protected Trees have been shown."

### City of Frisco, Texas LANDSCAPE CALCULATIONS

Total Site Area	Phase 1 and 2	247,233 sf area	5.675 acres
Site Trees		Required	Provided
12 tree per acre		68 canopy trees	44 Phase 1 trees
Main Street FM 720		30 ft. landscape	53 Phase 2 trees
		setback area	30 ft. width
Street Frontage Lar	ndscape	Required	Provided
Main Street 414.5	7 LF	14 canopy trees	14 canopy trees
1 canopy tree per 30 ft.			
Facade Trees	177 LF	Required	Provided
1 canopy tree per 30 ft.		6 canopy trees	6 canopy trees
Water Resource Zo	<b>NE</b> Phase 1	Required	Provided
15 SF per Parking spac	e 123 spaces	1,845 sf	2,537 sf
1 canopy tree per 500 s	f	4 trees	6 trees
	Phase 2		
15 SF per Parking spac	e 90 spaces	1,350 sf	1,350 sf
1 canopy tree per 500 s	۲	3 trees	3 trees

### PLANT LIST

PY TREE	S		
LO	Live Oak	Quercus virginiana	3" cal. 65 gal. 12' ht. 5' s
SM	Shantung Maple	Acer truncatum 'Fire Dragon'	3" cal. 65 gal. 12' ht. 5' s
CO	Chinquapin Oak	Quercus muhlenbergia	3" cal. 65 gal. 12' ht. 6' s
CE	Cedar Elm	Ulmus crassifolia	3" cal. 65 gal. 12' ht. 6' s
BC	Bald Cypress	Taxodium distichum	3 1/2" cal. 65 gal. 12' ht.
SO	Shumard Oak	Quercus shumardii	3" cal. 65 gal. 12' ht. 6' s
LE	Lacebark Elm	Ulmus parvifolia	3" cal. 65 gal. 12' ht. 6' s
BS & GR	OUNDCOVERS		
LP	Chinese Fringe Shrub	Loropetalum 'Ruby'	5 gal. 36" oc
DA	Dwarf Abelia	Abelia x grandiflora 'Ed. Goucher'	5 gal. 36" oc
DIH	Dwarf Indian Hawthorne	Raphiolepis indica 'Pinkie'	5 gal. 36" oc
DB	Dwarf Burford Holly	llex cornuta 'Burfordii nana'	5 gal. 36" oc
NGL	New Gold Lantana	Lantana 'New Gold'	1 gal. 24" oc
NR	Nellie R. Stevens Holly	llex 'Nellie R. Stevens'	5 gal. 36" oc
MS	Miscanthus	Miscanthus sinensis 'Gracillimus'	5 gal. 36" oc
DY	Dwarf Yaupon	llex vomitorium	5 gal. 36" oc
RY	Red Yucca	Hesperaloe parviflora	5 gal. 36" oc
AJ	Asian Jasmine	Trachelospermum asiaticum	1 gal. 24" oc
SE	Cherokee Sedge	Carex cherokeensis	1 gal. space as shown
SM	Seep Muhly	Muhlenbergia revershonii	1 gal. space as shown
BL	Little Bluestem	Schizachyrium scoparium	1 gal. space as shown
IS	Inland Sea Oats	Chasmanthium latifolium	1 gal. space as shown
BB	Bushy Bluestem	Andropogon glomaterus	1 gal. space as shown
	LO SM CO CE BC SO LE BS & GR LP DA DIH DB NGL NR MS DY RY AJ SE SM BL IS	LOLive OakSMShantung MapleCOChinquapin OakCECedar ElmBCBald CypressSOShumard OakLELacebark ElmBS & GROUNDCOVERSBS & GROUNDCOVERSLPChinese Fringe ShrubDADwarf AbeliaDIHDwarf Indian HawthorneDBDwarf Burford HollyNGLNew Gold LantanaNRNellie R. Stevens HollyMSMiscanthusDYDwarf YauponRYRed YuccaAJAsian JasmineSECherokee SedgeSMSeep MuhlyBLLittle BluestemISInland Sea Oats	LOLive OakQuercus virginianaSMShantung MapleAcer truncatum 'Fire Dragon'COChinquapin OakQuercus muhlenbergiaCECedar ElmUlmus crassifoliaBCBald CypressTaxodium distichumSOShumard OakQuercus shumardiiLELacebark ElmUlmus parvifoliaS & GROUNDCOVERSLPChinese Fringe ShrubLoropetalum 'Ruby'DADwarf AbeliaAbelia x grandiflora 'Ed. Goucher'DIHDwarf Indian HawthorneRaphiolepis indica 'Pinkie'DBDwarf Burford HollyIlex cornuta 'Burfordii nana'NGLNew Gold LantanaLantana 'New Gold'NRNellie R. Stevens HollyIlex vomitoriumRYRed YuccaHesperaloe parvifloraAJAsian JasmineTrachelospermum asiaticumSECherokee SedgeCarex cherokeensisSMSeep MuhlyMuhlenbergia revershoniiBLLittle BluestemSchizachyrium scopariumISInland Sea OatsChasmanthium latifolium



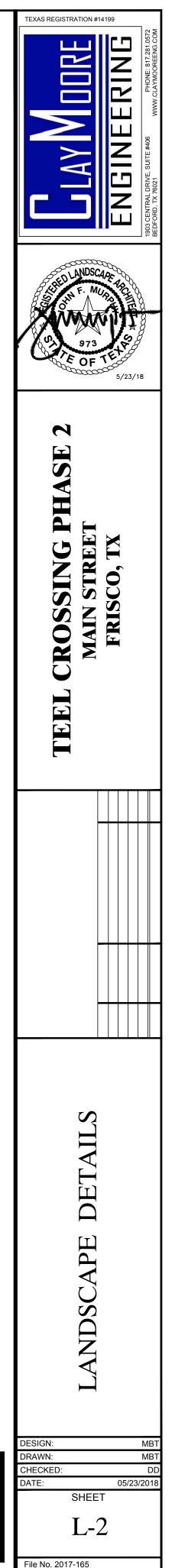


# t e integration studio

John F. Murphy, ASLA

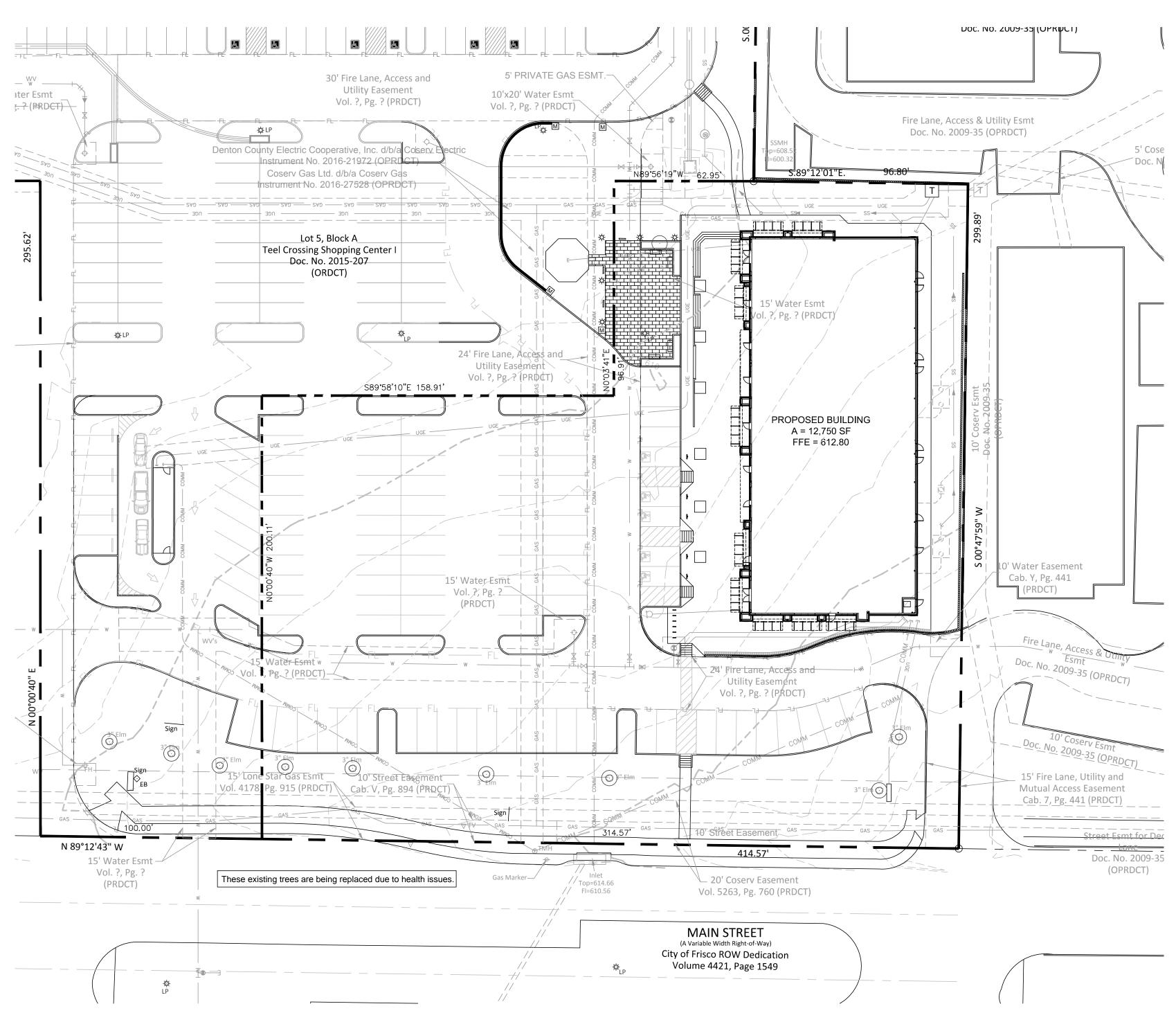
6647 Oak Hill Blvd. Tyler, TX 75703 john@siteint.com scott@siteint.com

512.632.3822 - Mobile 903.533.8898 - Tyler 512.589.9584 - Austin www.siteint.com

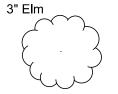


5 gal. 12' ht. 5' spread 5 gal. 12' ht. 5' spread 5 gal. 12' ht. 6' spread 5 gal. 12' ht. 6' spread I. 65 gal. 12' ht. 5' spread 5 gal. 12' ht. 6' spread 5 gal. 12' ht. 6' spread

PROJECT BENCHMARK: STANDARD CITY OF FRISCO MONUMENT STATION NO. 7 AND ALUMINUM DISK LOCATED BETWEEN A SIDEWALK AND GUARD RAIL ON THE WEST SIDE OF TEEL PARKWAY SOUTH OF THE INTERSECTION OF TEEL PARKWAY AND ELDORADO PARKWAY. ELEVATION = 589.43 FEET



### TREE LEGEND



Existing trees

Note: All existing trees along Main Street and at NW corner of building to be removed and replaced with trees of equal or greater trunk caliper.



### s i t e integration studio rchitecture - Sustainable Site Planning ource Design

## John F. Murphy, ASLA

GRAPHIC SCALE 30'

STANDARD CITY OF FRISCO MONUMENT -

INTERSECTION OF TEEL PARKWAY AND

STATION NO. 7 AND ALUMINUM DISK LOCATED

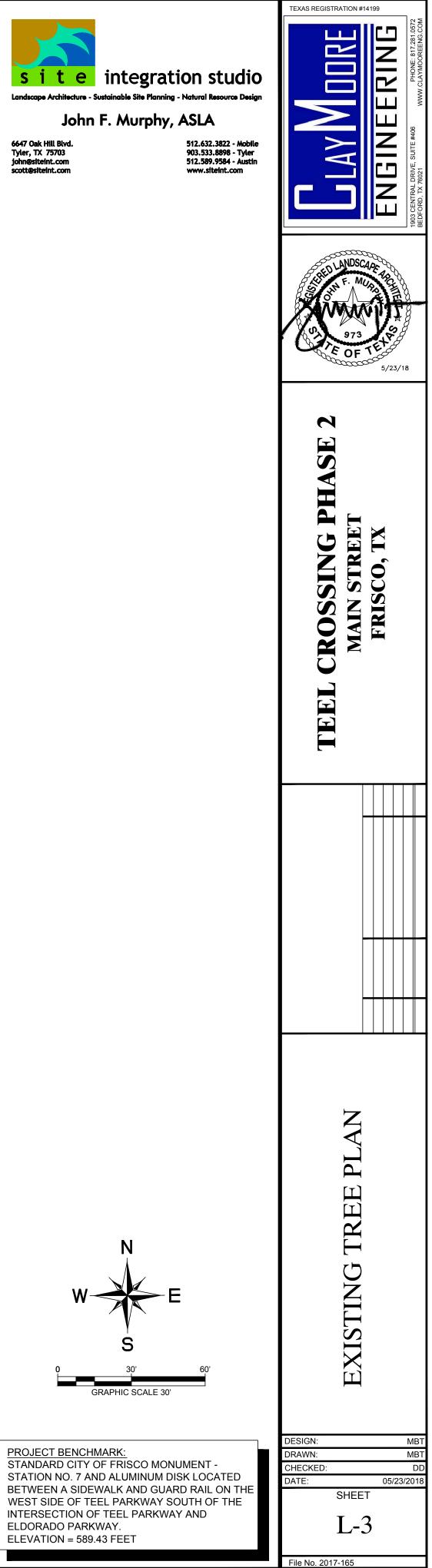
WEST SIDE OF TEEL PARKWAY SOUTH OF THE

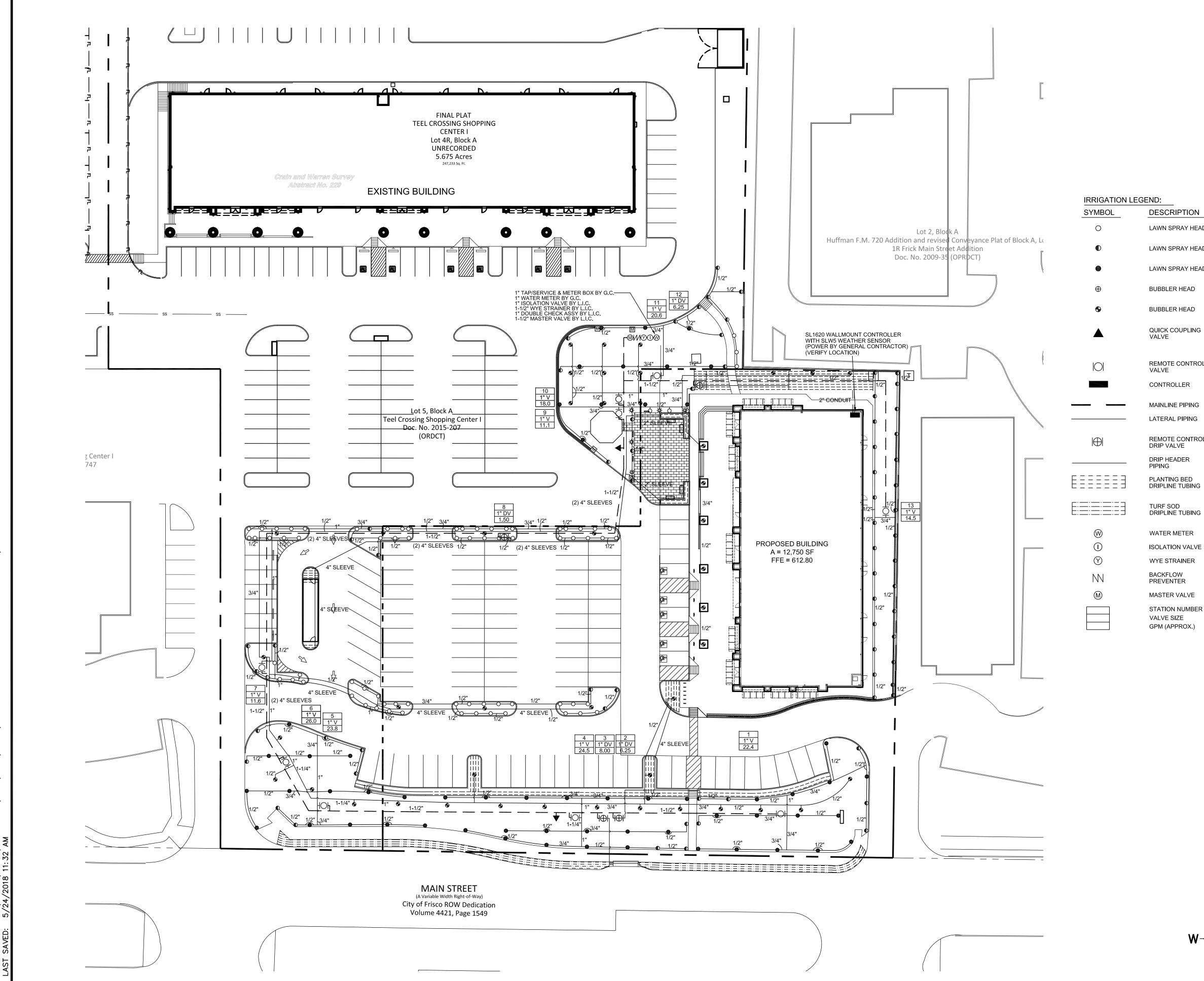
PROJECT BENCHMARK:

ELDORADO PARKWAY. ELEVATION = 589.43 FEET

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33 =S HEIDMAN 5/24/2018 C: \USERS TED BY: DATE: TION: PLOTT PLOT LOCAT

# SETH HEIDMAN IRRIGATION DESIGN & CONSULTING, LLC 6009 W. Parker Rd. #149-221, Plano, Texas 75093 Tel: 972-816-5141

Irrigation in Texas is regulated by the Texas Commission of Environmental Quality (TCEQ), MC-178, P.O. Box 13087, Austin, Texas, 78711-3087. TCEQ website is: www.tceq.state.tx.us

### DESCRIPTION

LAWN SPRAY HEAD

LAWN SPRAY HEAD

LAWN SPRAY HEAD

BUBBLER HEAD

BUBBLER HEAD

QUICK COUPLING

REMOTE CONTROL

MAINLINE PIPING LATERAL PIPING

REMOTE CONTROL DRIP VALVE

PLANTING BED

TURF SOD DRIPLINE TUBING

WATER METER ISOLATION VALVE WYE STRAINER BACKFLOW

MASTER VALVE STATION NUMBER

VALVE SIZE GPM (APPROX.) MANUFACTURER HUNTER (40 PSI) HUNTER (40 PSI) HUNTER (40 PSI) HUNTER (30 PSI) HUNTER (30 PSI) HUNTER

### HUNTER

WEATHERMATIC

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HUNTER

HUNTER

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HUNTER

PROS-04 PRS40 W/ MP1000 ROTATOR NOZZLES PROS-04 PRS40 W/ MP2000 ROTATOR NOZZLE ON HUNTER SJ SWING JOINT PROS-04 PRS40 W/ MP3000 ROTATOR NOZZLE ON HUNTER SJ SWING JOINT PCB-50 NOZZLE ON HUNTER SJ SWING JOINT PCB-10 NOZZLE ON HUNTER SJ SWING JOINT HQ-DNP WITH LASCO BALL VALVE, PURPLE LID READS "RECLAIMED WATER, DO NOT DRINK" IN ENGLISH AND "NO TOME" IN SPANISH. ICV SERIES WITH ACCU-SYNC PRESSURE REGULATOR, REFER TO PLANS FOR SIZE SL1620 WALLMOUNT WITH SLW5 WIRELESS ET WEATHER SENSOR CLASS 200 PVC

MODEL NO,

3/4" & LARGER - CLASS 200 PVC 1/2" - CLASS 315 PVC

ICV-100 CONTROL ZONE KIT, REFER TO PLAN FOR SIZE

CLASS 200 PVC UNLESS OTHERWISE NOTED

PLD-CV-06-18 AT 18" O.C. WITH PLD INSERT FITTINGS, 12 GA. GALVANIZED STAKES AND DRIP INDICATOR HEAD

PLD-CV-06-18 AT 18" O.C. WITH PLD INSERT FITTINGS, 12 GA. GALVANIZE STAKES AND DRIP INDICATOR HEAD

PER LOCAL BUILDING CODE #T-29, REFER TO PLAN FOR SIZE #650, REFER TO PLAN FOR SIZE #850BV, REFER TO PLAN FOR SIZE

ICV, REFER TO PLAN FOR SIZE

\* 5881 -----TITIT 5-23-2018 V Ηd CROSSING I MAIN STREET FRISCO, TX TEEL

> Z ΡΙ IRRIGATIO

DRAWN: CHECKED: 05/23/2018 DATE: SHEET

**GRAPHIC SCALE 30'** 

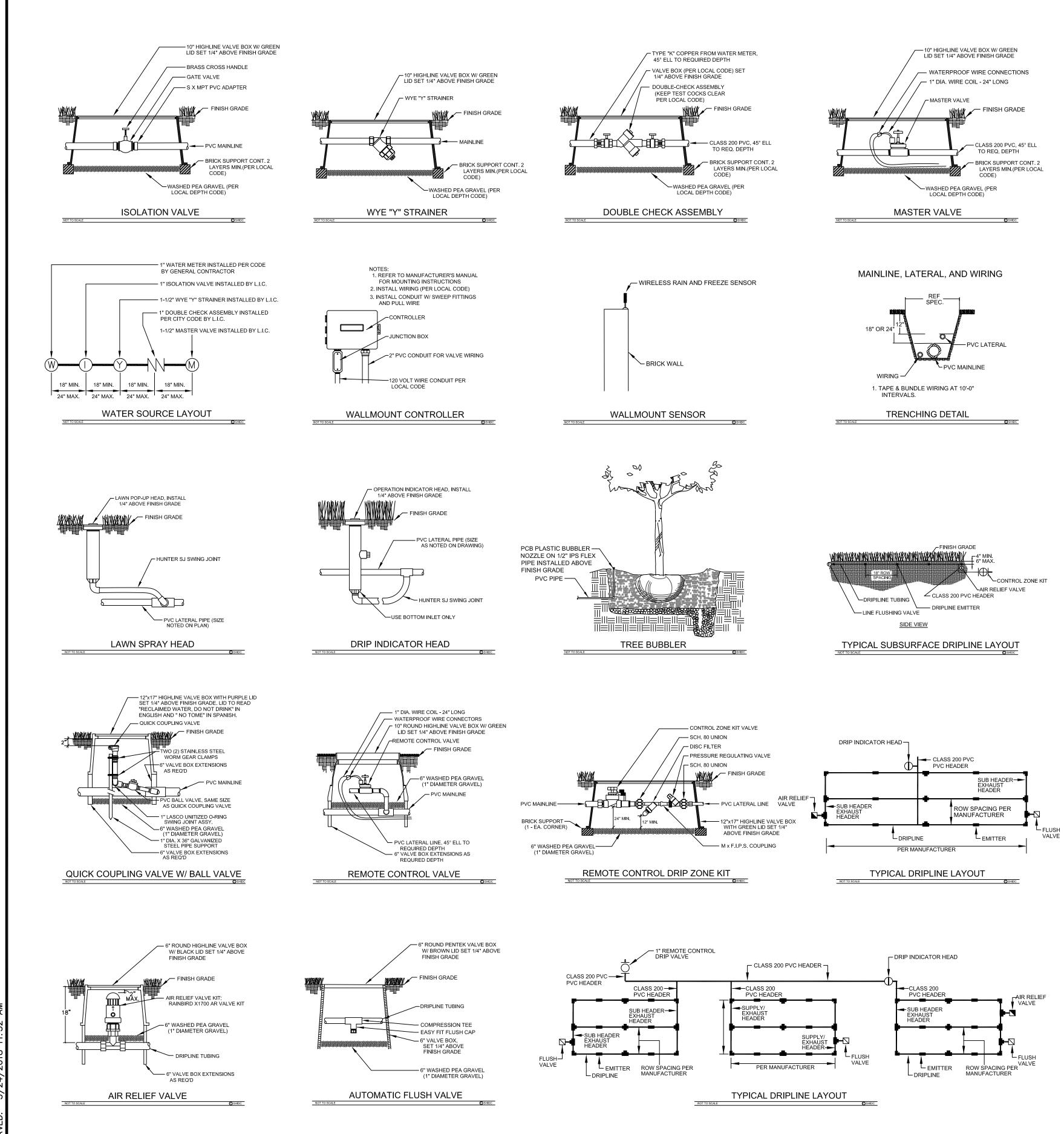
PROJECT BENCHMARK: STANDARD CITY OF FRISCO MONUMENT -STATION NO. 7 AND ALUMINUM DISK LOCATED BETWEEN A SIDEWALK AND GUARD RAIL ON THE WEST SIDE OF TEEL PARKWAY SOUTH OF THE INTERSECTION OF TEEL PARKWAY AND ELDORADO PARKWAY. ELEVATION = 589.43 FEET

**IR-1** File No. 2017-165

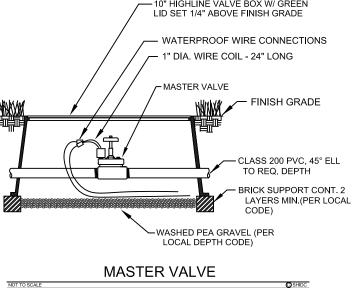


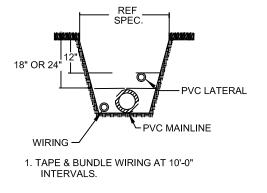


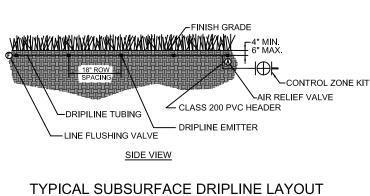
TEXAS REGISTRATION #14199



<u>5</u>33 24 E ကက်ပဲ ப் ம DLO PLO







### NOTES:

- IN ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS.
- 3. PIPING AND VALVES IN PAVING SHOWN FOR CLARITY, INSTALL IN ADJACENT PLANTING BED OR LAWN AREA.
- SPECIFICATIONS

- PURPLE LID READS "NON-POTABLE, NOT SAFE FOR DRINKING" IN ENGLISH AND SPANISH.
- HARDWIRED WITHIN FIVE (5') FEET OF CONTROLLER LOCATION BY GENERAL CONTRACTOR.
- BE CLASS 200 PVC, SIZED AS NOTED ON PLANS AND INSTALLED BY LANDSCAPE IRRIGATION CONTRACTOR.
- SURFACES.
- STATIC PRESSURE IS LESS THAN STATED DO NOT START WORK UNTIL NOTIFIED TO PROCEED BY OWNER.

- DRIPLINE.
- INDICATOR HEAD TO BE A HUNTER ECO INDICATOR HEAD.

- 22. THIS SYSTEM DOES REQUIRE AN ET WEATHER STATION PER CITY REQUIREMENTS.
- FROM ANY FIRE HYDRANTS AND WATER VALVES.

- AND DETAILS AND ROTARY HEADS SHALL UTILIZE A SWING JOINT ASSEMBLY PER SPECIFICATIONS AND DETAILS.
- FROM THE CURB AT STREET OR DRIVE INTERSECTIONS.
- DITCHES AND RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT PRIOR TO ANY TRENCHING OR DIGGING.
- TEXAS OR LOCAL CODES CONCERNING LANDSCAPE IRRIGATION.
- SYSTEM IS BEING INSTALLED PER CITY OF FRISCO REQUIREMENTS.

### 1. ALL 24 VOLT LEAD AND COMMON VALVE WIRING SHALL BE A MINIMUM OF UF-14 GA. SINGLE CONDUCTOR. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR PROPER WIRE SIZE. WIRE SPLICES SHALL BE 3M-DBY PERMANENT AND WATERPROOF PER THE SPECIFICATIONS.

2. COORDINATE INSTALLATION OF IRRIGATION SYSTEM WITH LANDSCAPE CONTRACTOR TO ENSURE ALL PLANT MATERIAL WILL BE WATERED

4. LATERAL PIPING SHALL HAVE A MINIMUM OF 12" OF COVER. MAINLINE AND PIPING UNDER PAVING SHALL HAVE A MINIMUM OF 18" OF COVER. ALL FITTINGS TO BE SCHEDULE 40 PVC. USE WELD-ON #705 SOLVENT AND #P-68 PRIMER FOR PVC CONNECTIONS PER THE

5. SIZE ALL LATERAL PIPING PER MANUFACTURER'S RECOMMENDATIONS OF NOT EXCEEDING 5 FPS. REFERENCE PIPE SIZE CHART

CONNECT LAWN AND DRIP INDICATOR HEADS TO LATERAL PIPING WITH HUNTER 1/2" SJ SWING JOINT PER DETAIL SHOWN.

7. INSTALL QUICK COUPLING VALVES IN TWELVE BY SEVENTEEN (12"x17") INCH HIGHLINE VALVE BOX PER DETAIL SHOWN. CONNECT QUICK COUPLING VALVES TO MAINLINE PIPE WITH HUNTER HSJ SWING JOINT PER DETAIL SHOWN. SUPPLY OWNER WITH ONE (1) COUPLER KEY WITH SWIVEL HOSE BIBB EACH. VALVES TO BE INSTALLED SO THAT TOP OF QUICK COUPLER IS 2" BELOW BOTTOM OF VALVE BOX TOP.

PERFORM ELECTRICAL WORK IN ACCORDANCE WITH LOCAL BUILDING CODE. POWER (120V) SHALL BE LOCATED IN A JUNCTION BOX AND

9. INSTALL REMOTE CONTROL VALVES AND WIRE SPLICES IN TEN (10") INCH ROUND HIGHLINE VALVE BOXES PER DETAIL SHOWN.

10. INSTALL SLEEVES UNDER ALL HARDSCAPE SURFACES SUCH AS ROADS, DRIVES, WALKS, ETC. WHETHER SHOWN OR NOT. SLEEVES SHALL

12. ADJUST NOZZLES FOR SITUATIONS THAT REQUIRE LESS THAN 90° DEGREE RADIUS SPRAY. NO OVERSPRAY ALLOWED ON ANY HARDSCAPE

11. DESIGN PRESSURE IS 61.0 PSI. STATIC PRESSURE IS 65 PSI. TEN DAYS PRIOR TO START OF CONSTRUCTION, VERIFY STATIC PRESSURE. IF

12. MINIMUM DISTANCE BETWEEN MAIN LINE AND LATERAL LINE FITTINGS (EXCEPT FOR REDUCER BUSHINGS) TO BE EIGHTEEN (18") INCHES AND MINIMUM HORIZONTAL DISTANCE OF TWENTY-FOUR (24") INCHES BETWEEN ANY VALVES THAT ARE INSTALLED SIDE BY SIDE.

13. STAKE TREE BUBBLER LOCATIONS AND RECEIVE APPROVAL FROM OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

14. INSTALL REMOTE CONTROL DRIP ZONE KIT VALVES IN TWELVE BY SEVENTEEN (12"x17") INCH HIGHLINE VALVE BOXES PER DETAIL SHOWN.

15. INSTALL DRIPLINE MINIMUM OF 2" AND A MAXIMUM OF 4" FROM HARDSCAPE SURFACES. STAKE DRIPLINE AND RECEIVE APPROVAL FROM OWNER'S REPRESENTATIVE BEFORE INSTALLATION. DO NOT EXCEED MANUFACTURER'S RECOMMENDATIONS OF 5'-0" PER SECOND IN

16. PROVIDE AND INSTALL DISTRIBUTION TUBING, STAKES, EMITTERS, TRANSFER FITTINGS, DIFFUSER BUG CAP, CONTROL ZONE KITS, ETC. NECESSARY FOR PROPER INSTALLATION OF THE BEDS. ALL PVC HEADER PIPING TO BE CLASS 200 PVC SOLVENT WELD PIPE. INSERT ALL HUNTER PLD BARBED FITTINGS PER MANUFACTURER'S RECOMMENDATIONS. INSTALL ONE DRIP INDICATOR HEAD FOR EACH DRIP ZONE.

17. AIR/VACUUM RELIEF VALVE TO BE HUNTER PLD-ARV INSTALLED IN A SIX-INCH (6") HIGHLINE ROUND VALVE BOX WITH 6" OF GRAVEL SUMP. AUTOMATIC FLUSH VALVE TO BE HUNTER AFV INSTALLED IN A SIX-INCH (6") HIGHLINE ROUND VALVE BOX WITH 6" OF GRAVEL SUMP.

18. ALL HUNTER PLD-CV DRIPLINE AND DISTRIBUTION TUBING TO BE INSTALLED BELOW FINISH GRADE APPROXIMATELY 4" TO 6" PER MANUFACTURER'S RECOMMENDATIONS. ALL DRIPLINE TO BE INSTALLED MINIMUM OF 1'-4" AND MAXIMUM OF 1'-8" ROW SPACING UNLESS INSTRUCTED OTHERWISE. VERIFY THE EXACT EMITTER FLOW, EMITTER SPACING, AND ROW SPACING WITH MANUFACTURER PRIOR TO INSTALLING TO PROVIDE PROPER PRECIPITATION RATE BASED ON PLANT MATERIAL AND SOIL TYPE. TUBING TO BE STAKED WITH 12 GA. GALVANIZED TIE DOWNS. INSTALL STAKES EVERY 3'-0" ALONG ENTIRE LENGTH OF TUBING AND A MINIMUM OF 24" FROM ANY FITTINGS.

19. INCLUDE THE FOLLOWING ALLOWANCES FOR PROVIDING AND INSTALLING AIR RELIEF VALVES AND FLUSH VALVES FOR THE DRIP SYSTEM. EXACT QUANTITY AND LOCATION OF THESE DEVICES WILL BE DETERMINED AT THE TIME OF INSTALLATION. IN GENERAL, ALL AIR RELIEF VALVES WILL BE INSTALLED AT THE HIGH POINTS AND FLUSH VALVES WILL BE INSTALLED AT THE LOW POINTS OF EXHAUST HEADER. ALLOW FOR APPROXIMATELY ONE (1) AIR RELIEF VALVE AND APPROXIMATELY ONE (1) FLUSH VALVE FOR EACH DRIP ZONE KIT.

21. IRRIGATION MAINLINES, VALVES, AND CONTROL WIRES SHALL NOT BE LOCATED IN THE CITY OF FRISCO RIGHT-OF-WAY.

23. LOCATE VALVES A MINIMUM OF THREE FEET AWAY FROM ANY STORM SEWER, WATER, AND SANITARY SEWER LINES AND FIVE FEET AWAY

24. ANYTIME HEADS ARE LOCATED IN SUCH A MANNER AS TO BE PARALLEL AND NEAR A PUBLIC WATER AND SANITARY SEWER LINE, THESE HEADS SHALL BE INSTALLED AS STUBBED LATERALS OR BULLHEADS. A MINIMUM OF FIVE FEET SEPARATION IS REQUIRED BETWEEN IRRIGATION MAINLINES AND LATERAL LINES THAT RUN PARALLEL TO PUBLIC WATER AND SANITARY SEWER LINES.

25. IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED TO MINIMIZE WATER RUNOFF OR OVERSPRAY ON ALL HARDSCAPE SURFACES

26. ALL IRRIGATION POP-UP SPRAY HEADS LOCATED IN THE CITY OF FRISCO RIGHT-OF-WAY SHALL UTILIZE FLEX PIPE PER SPECIFICATIONS

27. NO REMOTE CONTROL VALVES, QUICK COUPLING VALVES, BACKFLOW PREVENTER, ETC. SHALL BE LOCATED CLOSER THAN TEN FEET

28. PROVIDE ALL LABOR AND MATERIAL NECESSARY TO HAND DIG WITHIN ALL EXISTING TREE ROOT ZONES. CONTRACTOR MUST STAKE

29. ALL STATE OF TEXAS LAWS/RULES AND ALL LOCAL CODES/ORDINANCES ARE MADE PART OF THESE PLANS AND SPECIFICATIONS WHETHER SHOWN OR NOT. THESE LAWS AND ORDINANCES WILL SUPERCEDE THE PLANS, DETAILS, AND/OR SPECIFICATIONS FOR THIS PROJECT. CONTRACTOR IS CAUTIONED THAT HE IS TO INCLUDE ANY AND ALL COST NECESSARY TO MEET OR EXCEED THE LAWS OF THE STATE OF

30. A LICENSED IRRIGATOR OR LICENSED IRRIGATION TECHNICIAN SHALL BE ON-SITE AT ALL TIMES WHILE THE LANDSCAPE IRRIGATION

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R TO MANUFACTURER'S F PER THE SPECIFICATIONS.	
ATERIAL WILL BE WATERED	ENGINE #406
A MINIMUM OF 18" OF INECTIONS PER THE	1903 CENT
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EXAS REGISTRATION #14199