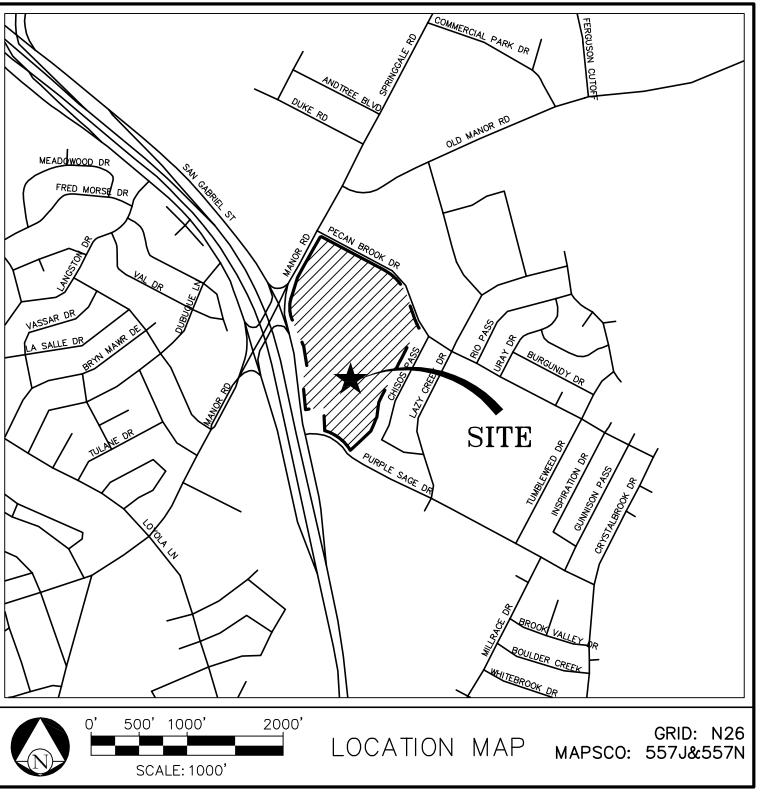
OWNER

AUSTIN ISD PM: MATTHEW GROSSO 812 SAN ANTONIO STREET, SUITE 200 AUSTIN, TEXAS 78701 PHONE: 512-414-4910

DESIGN TEAM

ENGINEER CIVIL ENGINEERING CIVILITUDE LLC 5110 LANCASTER COURT AUSTIN, TX 78723 (512) 761-6161



AISD WILHELMINA DELCO CENTER 4601 PECAN BROOK DR AUSTIN, TEXAS 78724

SHEET INDEX

SHEET TITLE

- 1. COVER
- 2. GENETAL NOTES & DETAILS
- 3. EROSION CONTROL PLAN
- 4. PAVEMENT REPAIR PLAN
- 5. ALTERNATE #3 DRAINAGE IMPROVEMENTS PLAN
- 6. DETAILS
- 7. REFERENCE GRADING PLAN 1 OF 2
- 8. REFERENCE GRADING PLAN 2 OF 2

SUBMITTED BY



ENGINEERS & PLANNERS 5110 LANCASTER CT AUSTIN, TX 78723

06/06/2019 DATE

PHONE 512 761 6161 FAX 512 761 6167 INFO@CIVILITUDE.COM

CONSTRUCTION NOTES

- 1. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- 2. CONTRACTOR TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS REGARDING EXCESS AND WASTE MATERIAL, INCLUDING METHODS OF HANDLING AND DISPOSAL. ALL DEBRIS OR EXCESS SOIL TO BE HAULED AWAY.
- 3. USE TEXAS 811 UTILITY LOCATE: DIAL (800) 344-8377 AT LEAST 48 HOURS BEFORE YOU
- 4. QUANTITIES CALLED OUT ON PLANS ARE FOR BASE BID. ACTUAL QUANTITIES WILL USE UNIT PRICES AS ADDITIONS/DEDUCTIONS.

REVEGETATIONL NOTES

- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR VEGETATIVE ESTABLISHMENT INCLUDING
- 3. INSTALL PERMANENT SOIL RETENTION BLANKET(JUTE MESH OR APPROVED EQUAL) FOR ALL SLOPES GRATER THAN 1V:10H(10%). APPROXIMATE AREA 2,800 SY.

- 1. REVEG ALL DISTURBED AREAS USING HYDROMULCH SEEDING. THE INSTALLATION OF NECESSARY TEMPORARY IRRIGATION SYSTEM & RESEEDING
- IN THE FALL. EX IRRIGATION SYSTEM CAN BE USED WHERE AVAILABLE.

EROSION CONTROL NOTES

- 1. EROSION CONTROL MEASURES, SITE WORK AND RESTORATION WORK SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN EROSION AND SEDIMENTATION CONTROL
- 2. ALL SLOPES SHALL BE SODDED OR SEEDED WITH APPROVED GRASS. GRASS MIXTURES OR GROUND COVER SUITABLE TO THE AREA AND SEASON IN WHICH
- 3. SILT FENCES, ROCK BERMS, SEDIMENTATION BASINS AND SIMILARLY RECOGNIZED TECHNIQUES AND MATERIALS SHALL BE EMPLOYED DURING CONSTRUCTION TO PREVENT POINT SOURCE SEDIMENTATION LOADING OF DOWNSTREAM FACILITIES. SUCH INSTALLATION SHALL BE REGULARLY INSPECTED BY THE CITY OF AUSTIN FOR EFFECTIVENESS. ADDITIONAL MEASURES MAY BE REQUIRED IF, IN THE OPINION OF THE CIVILITUDE, THEY ARE WARRANTED.
- 4. ALL TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL FINAL INSPECTION AND APPROVAL OF THE PROJECT BY THE ENGINEER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL TEMPORARY EROSION CONTROL STRUCTURES AND TO REMOVE EACH STRUCTURE AS APPROVED BY THE ENGINEER.
- 5. ALL MUD, DIRT, ROCKS, DEBRIS, ETC., SPILLED, TRACKED OR OTHERWISE DEPOSITED ON EXISTING PAVED STREETS, DRIVES AND AREAS USED BY THE PUBLIC SHALL BE CLEANED UP IMMEDIATELY.
- 6. THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR EXCAVATION).
- 7. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE ENVIRONMENTAL CRITERIA MANUAL AND THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN.
- 8. THE PLACEMENT OF TREE/NATURAL AREA PROTECTIVE FENCING SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION AND THE APPROVED GRADING/TREE AND NATURAL
- 9. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND ENVIRONMENTAL INSPECTOR AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTION MEASURES AND PRIOR TO BEGINNING ANY SITE PREPARATION WORK. THE CONTRACTOR SHALL NOTIFY THE PLANNING AND DEVELOPMENT REVIEW DEPARTMENT, 767-6672, AT LEAST THREE DAYS PRIOR TO THE MEETING DATE.
- 10. ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER, ENVIRONMENTAL SPECIALIST OR CITY ABORIST AS APPROPRIATE. MAJOR REVISIONS MUST BE APPROVED BY THE PLANNING AND DEVELOPMENT REVIEW DEPARTMENT. MINOR CHANGES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENVIRONMENTAL INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES.
- 11. THE CONTRACTOR IS REQUIRED TO INSPECT THE CONTROLS AND FENCES AT WEEKLY INTERVALS AND AFTER SIGNIFICANT RAINFALL EVENTS TO INSURE THAT THEY ARE FUNCTIONING PROPERLY. THE PERSON(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES.
- 12. PRIOR TO FINAL ACCEPTANCE BY THE CITY, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING DEBRIS SHALL BE DISPOSED OF IN APPROVED SPOIL DISPOSAL SITES.
- 13. ALL WORK MUST STOP IF A VOID IN THE ROCK SUBSTRATE IS DISCOVERED WHICH IS; ONE SQUARE FOOT IN TOTAL AREA; BLOWS AIR FROM WITHIN THE SUBSTRATE AND/OR CONSISTENTLY RECEIVES WATER DURING ANY RAIN EVENT. AT THIS TIME IT IS THE RESPONSIBILITY OF THE PROJECT MANAGER TO IMMEDIATELY CONTACT A CITY OF AUSTIN ENVIRONMENTAL INSPECTOR FOR FURTHER INVESTIGATION.
- 14. TEMPORARY AND PERMANENT EROSION CONTROL: ALL DISTURBED AREAS TO BE REVEGETATED ARE REQUIRED TO PLACE A MINIMUM OF SIX (6) INCHES OF TOPSOIL [SEE STANDARD SPECIFICATION ITEM NO. 601S.3(A)]. DO NOT ADD TOPSOIL WITHIN THE CRITICAL ROOT ZONE OF EXISTING TREES. THE TOPSOIL SHALL BE COMPOSED OF 3 PARTS OF SOIL MIXED WITH 1 PART COMPOST, BY VOLUME. THE COMPOST SHALL BE DILLO DIRT OR AN EQUAL APPROVED BY THE ENGINEER, OR DESIGNATED REPRESENTATIVE. THE APPROVED EQUAL, IF USED SHALL MEET THE DEFINITION OF COMPOST (AS DEFINED BY TXDOT SPECIFICATION ITEM 161). THE SOIL SHALL BE LOCALLY AVAILABLE NATIVE SOIL THAT MEETS THE FOLLOWING SPECIFICATIONS:
- SHALL BE FREE OF TRASH, WEEDS, DELETERIOUS MATERIALS, ROCKS, AND DEBRIS.
- 100% SHALL PASS THROUGH A 0.375-INCH (3/8") SCREEN.
- SOIL TEXTURE CLASS TO BE LOAM, SANDY CLAY LOAM, OR SANDY LOAM IN ACCORDANCE WITH THE USDA TEXTURE TRIANGLE. SOIL KNOWN LOCALLY AS "RED DEATH" OR AUSTIN SANDY LOAM IS NOT AN ALLOWABLE SOIL. TEXTURAL COMPOSITION SHALL MEET THE FOLLOWING CRITERIA:

TEXTURE CLASS	MINIMUM	MAXIMUM
CLAY	5%	25%
SILT	10%	50%
SAND	30%	80%

- TOPSOIL SALVAGED FROM THE EXISTING SITE MAY OFTEN BE USED, BUT IT SHOULD MEET THE SAME STANDARDS AS SET FORTH IN THESE STANDARDS.
- THE VEGETATIVE STABILIZATION OF AREAS DISTURBED BY CONSTRUCTION SHALL BE AS
- FOLLOWS: 9.1 TEMPORARY VEGETATIVE STABILIZATION:
- 1. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH COOL SEASON COVER CROPS (WHEAT AT 0.5 POUNDS PER 1000 SF, OATS AT 0.5 POUNDS PER 1000 SF, CEREAL RYE GRAIN AT 0.5 POUNDS PER 1000 SF) WITH A TOTAL RATE OF 1.5 POUNDS PER 1000 SF. COOL SEASON COVÉR CROPS ARE NOT PERMANENT EROSION CONTROL.
- 2. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 1 POUNDS PER 1000 SF.
- a. FERTILIZER SHALL BE WATER SOLUBLE WITH AN ANALYSIS OF 15-15-15 TO BE APPLIED ONCE AT PLANTING AND ONCE DURING THE PERIOD OF ESTABLISHMENT AT A RATE OF 1/2 POUND PER 1000 SF.
- b. HYDROMULCH SHALL COMPLY WITH TABLE1, BELOW.
- c. TEMPORARY EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1 1/2 INCHES HIGH WITH 95% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 16 SQUARE FEET EXIST.
- d. WHEN REQUIRED. NATIVE GRASS SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL.

HYDROMULCHING FOR TEMPORARY VEGETATIVE STABILIZATION					
MATERIAL	DESCRIPTION	LONGEVITY	TYPIC AL	APPLIC ATION	
			APPLIC ATION	RATES	
100% OR ANY BLEND	70% OR		MODERATE SLOPES; FROM FLAT TO 3:1		
OF WOOD, CELLULOSE,	GREATER				
STRAW, AND/OR	WOOD/STRAW	0-3		1500 TO	
COTTON PLANT	30% OR LESS	MONTHS		200 LBS	
MATERIAL (EXCEPT NO	PAPER OR	MICHILIS		PER ACRE	
MULCH SHALL EXCEED	NATURAL				
30% PAPER)	FIBERS				

9.2. PERMANENT VEGETATIVE STABILIZATION:

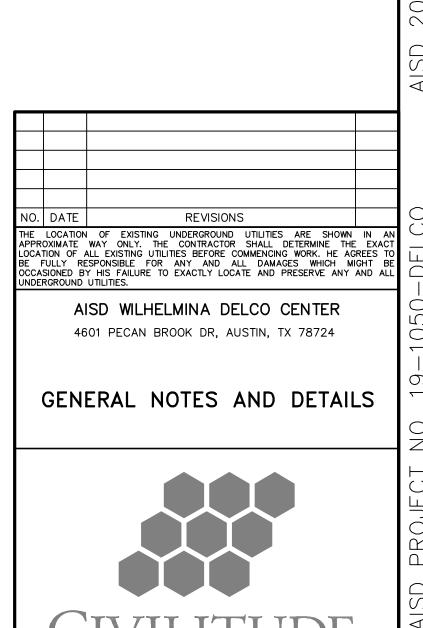
- FROM SEPTEMBER 15 TO MARCH 1, SEEDING IS CONSIDERED TO BE TEMPORARY STABILIZATION ONLY. IF COOL SEASON COVER CROPS EXIST WHERE PERMANENT VEGETATIVE STABILIZATION IS DESIRED, THE GRASSES SHALL BE MOWED TO A HEIGHT OF LESS THAN ONE-HALF (1/2) INCH AND THE AREA SHALL BE RE-SEEDED IN ACCORDANCE WITH 2. BÈLOW.
- 2. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 1 POUND PER 1000 SF WITH A PURITY OF 95% WITH 85% GERMINATION. BERMUDA GRASS IS A WARM SEASON GRASS AND IS CONSIDERED PERMANENT EROSION CONTROL.
- a. FERTILIZER SHALL BE A WATER SOLUBLE WITH AN ANALYSIS OF 15-15-15 TO BE APPLIED ONCE AT PLANTING AND ONCE DURING THE PERIOD OF ESTABLISHMENT AT A RATE OF 1/2 POUND PER 1000 SF.

b. HYDROMULCH SHALL COMPLY WITH TABLE 2, BELOW.

- c. THE PLANTED AREA SHALL BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF SIX INCHES. THE IRRIGATION SHALL OCCUR AT DAILY INTERVALS (MINIMUM) DURING THE FIRST TWO MONTHS. RAINFALL OCCURRENCES OF 1/2 INCH OR MORE SHALL POSTPONE THE WATERING SCHEDULE FOR ONE WEEK.
- d. PERMANENT EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1½ INCHES HIGH WITH 95% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 16 SQUARE FEET EXIST.
- e. WHEN REQUIRED, NATIVE GRASS SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL.

HYDROMULCHING FOR PERMANENT VEGETATIVE STABILIZATION							
MATERIAL	DESC RIPTION	LONGEVITY	TYPIC AL APPLIC ATION	APPLICATION RATES			
BONDED FIBER MATRIX (BFM)	80% ORGANIC DEFIBRATED FIBERS 10% TACKIFIER	6 MONTHS	ON SLOPES UP TO 2:1 AND EROSIVE SOIL CONDITIONS	2500 TO 4000 LBS PER ACRE (SEE MANUFACTURERS RECOMMENDATIONS)			
FIBER REINFORC ED MATRIX (FRM)	65% ORGANIC DEFIBRATED FIBERS 25% REINFORCING FIBERS OR LESS 10% TACKIFIER	UP TO 12 MONTHS	ON SLOPES UP TO 1:1 AND EROSIVE SOIL CONDITIONS	3000 TO 4500 LBS PER ACRE (SEE MANUFACTURERS RECOMMENDATIONS)			

- 10. THE CONTRACTOR SHALL NOT DISPOSE OF SURPLUS EXCAVATED MATERIAL FROM THE SITE WITHOUT NOTIFYING THE WATERSHED PROTECTION DEPARTMENT AT 767-6672 AT LEAST 48 HOURS PRIOR WITH THE LOCATION AND A COPY OF THE PERMIT ISSUED TO RECEIVE THE MATERIAL.
- 11. IF DISTURBED AREA IS NOT TO BE WORKED ON FOR MORE THAN 14 DAYS, DISTURBED AREA NEEDS TO BE STABILIZED BY REVEGETATION, MULCH, TARP OR
- 12. ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN-COMPLIANCE WITH THE CITY OF AUSTIN RULES AND REGULATIONS.
- 13. CONTRACTOR SHALL UTILIZE DUST CONTROL MEASURES DURING SITE CONSTRUCTION SUCH AS IRRIGATION TRUCKS AND MULCHING AS PER ECM 1.4.5(A), OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
- 14. CONTRACTOR TO CLEAN UP SPOILS THAT MIGRATE ONTO THE ROADS A MINIMUM OF ONCE DAILY.



ENGINEERS & PLANNERS

FAX 512 761 6167

INFO@CIVILITUDE.COM

DGN. BY: <u>NMH</u> DWN. BY: ____ISL__

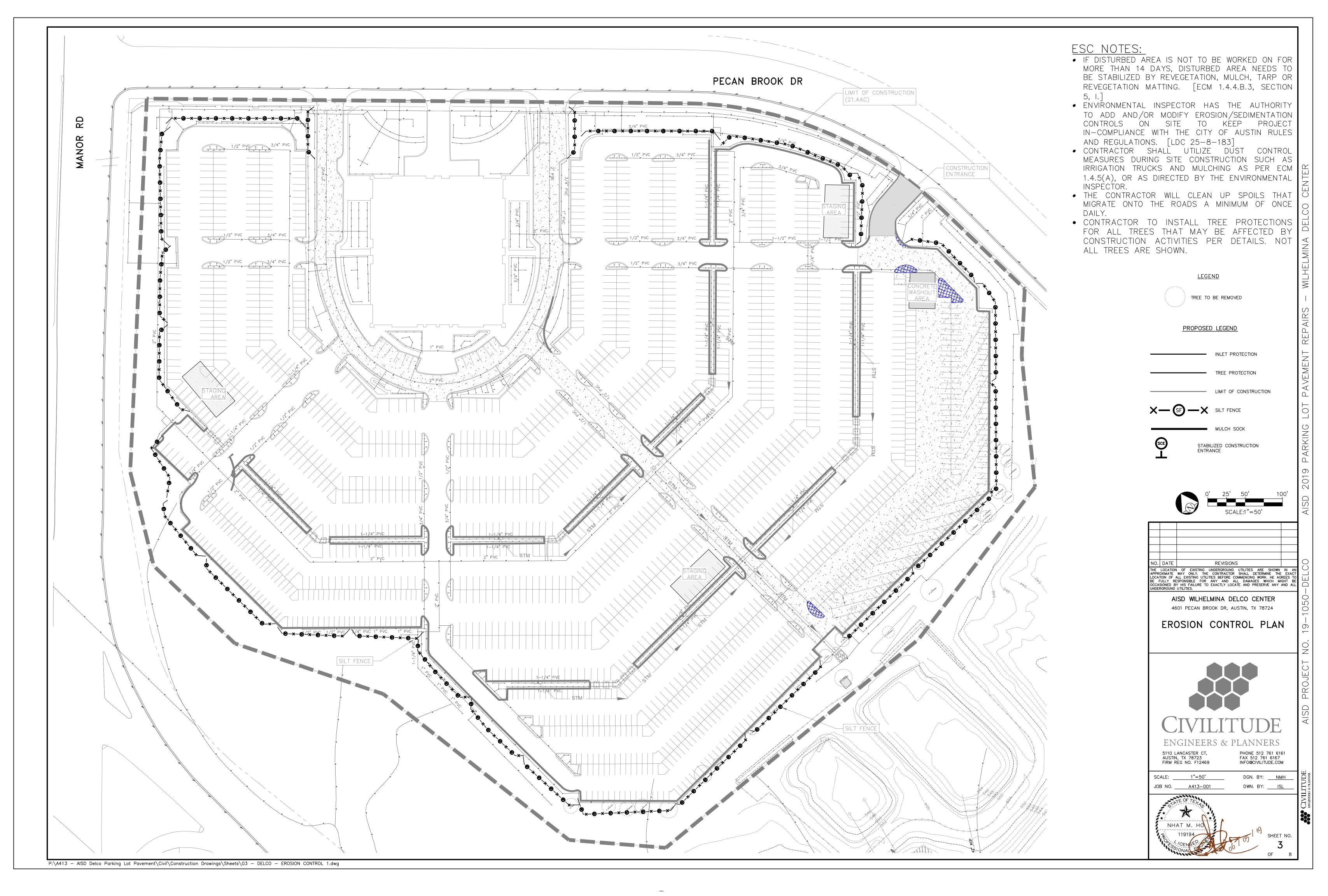
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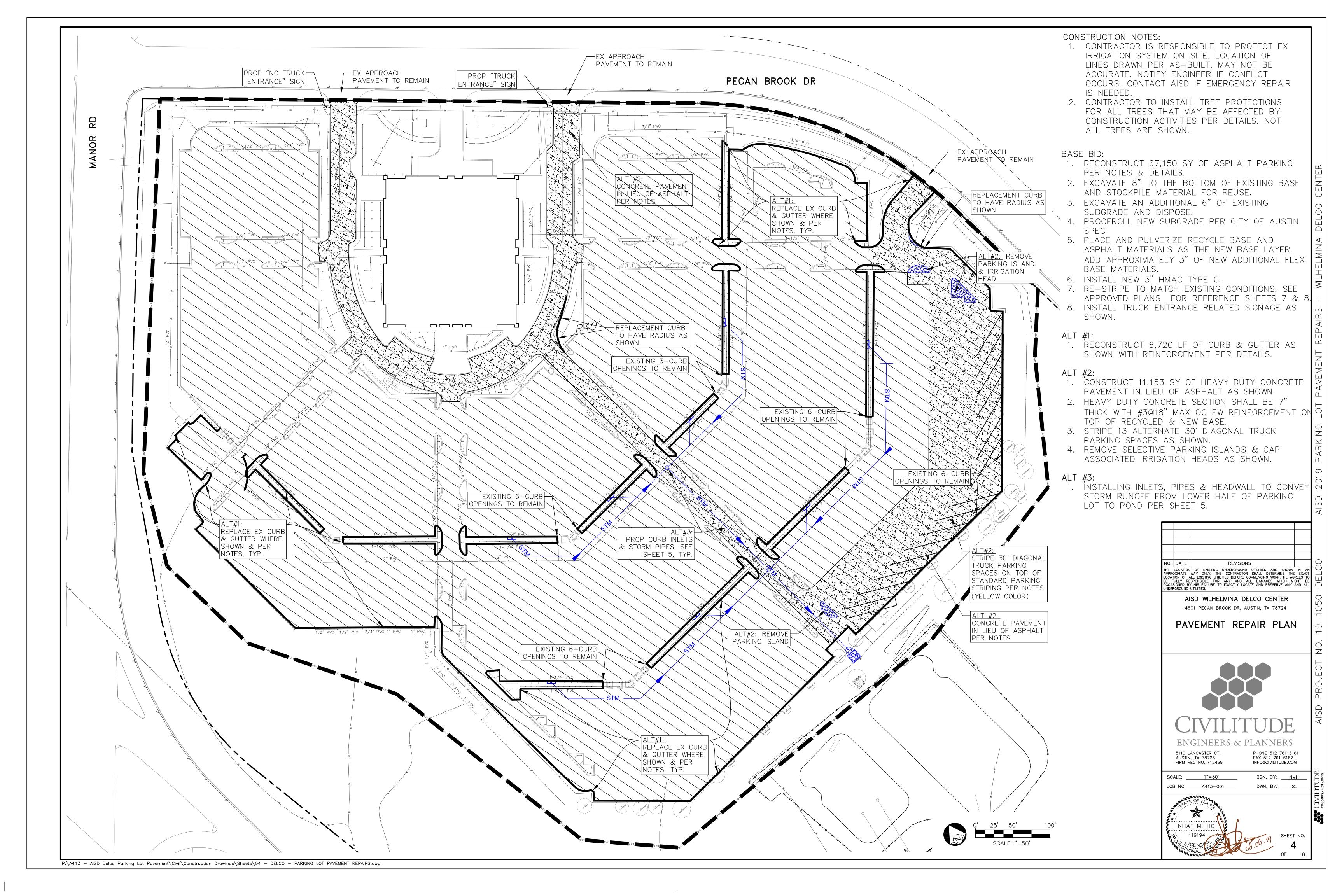
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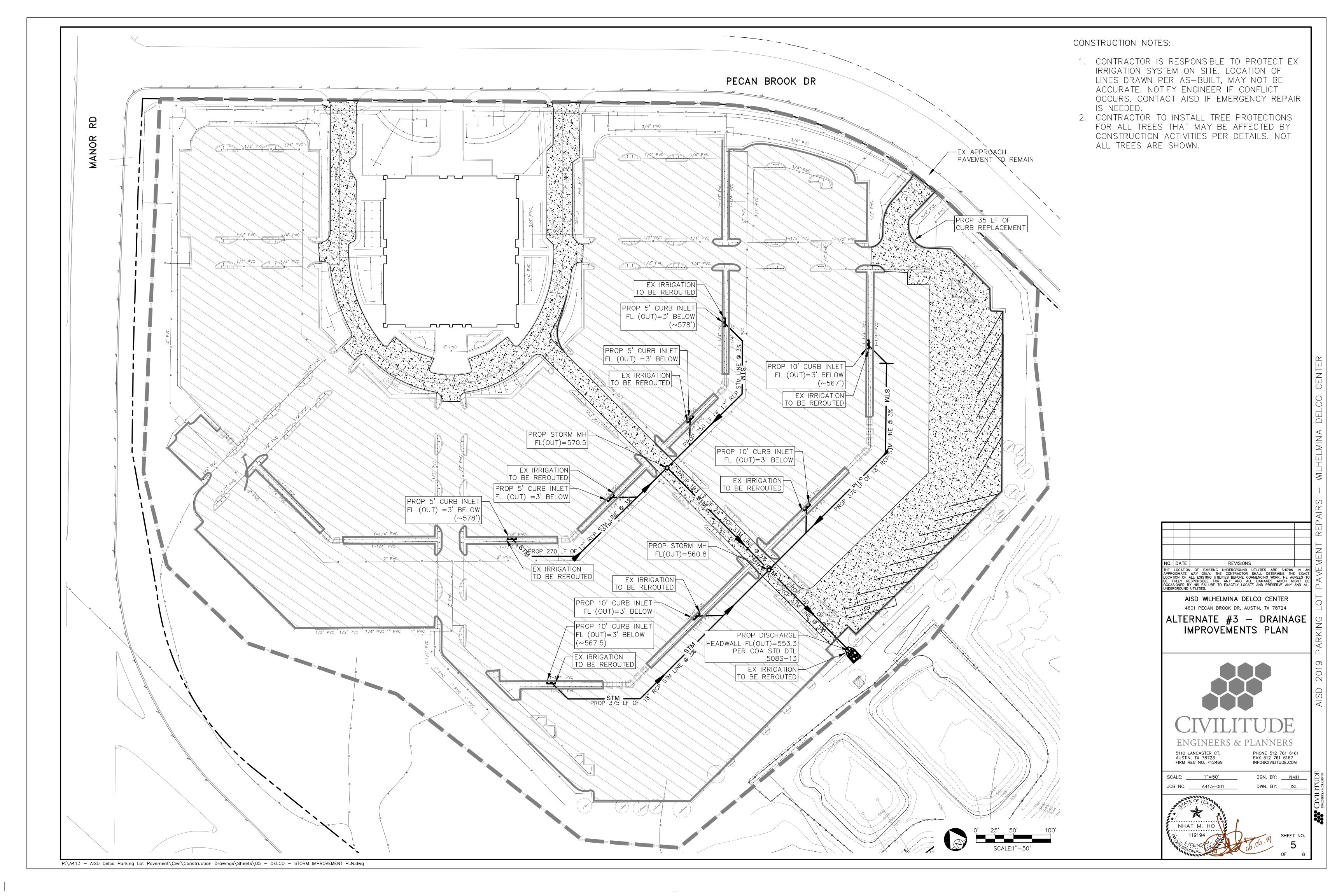
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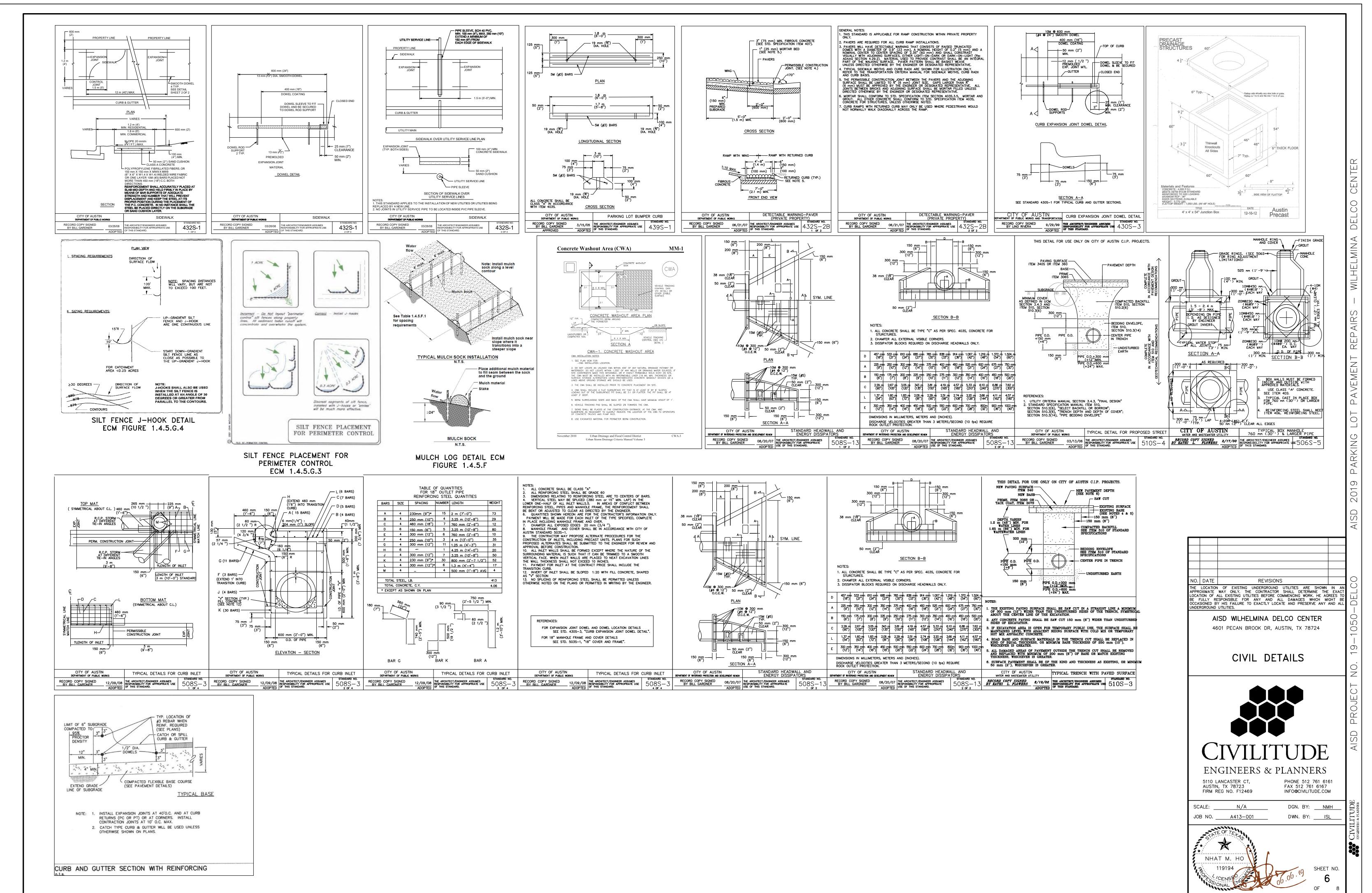
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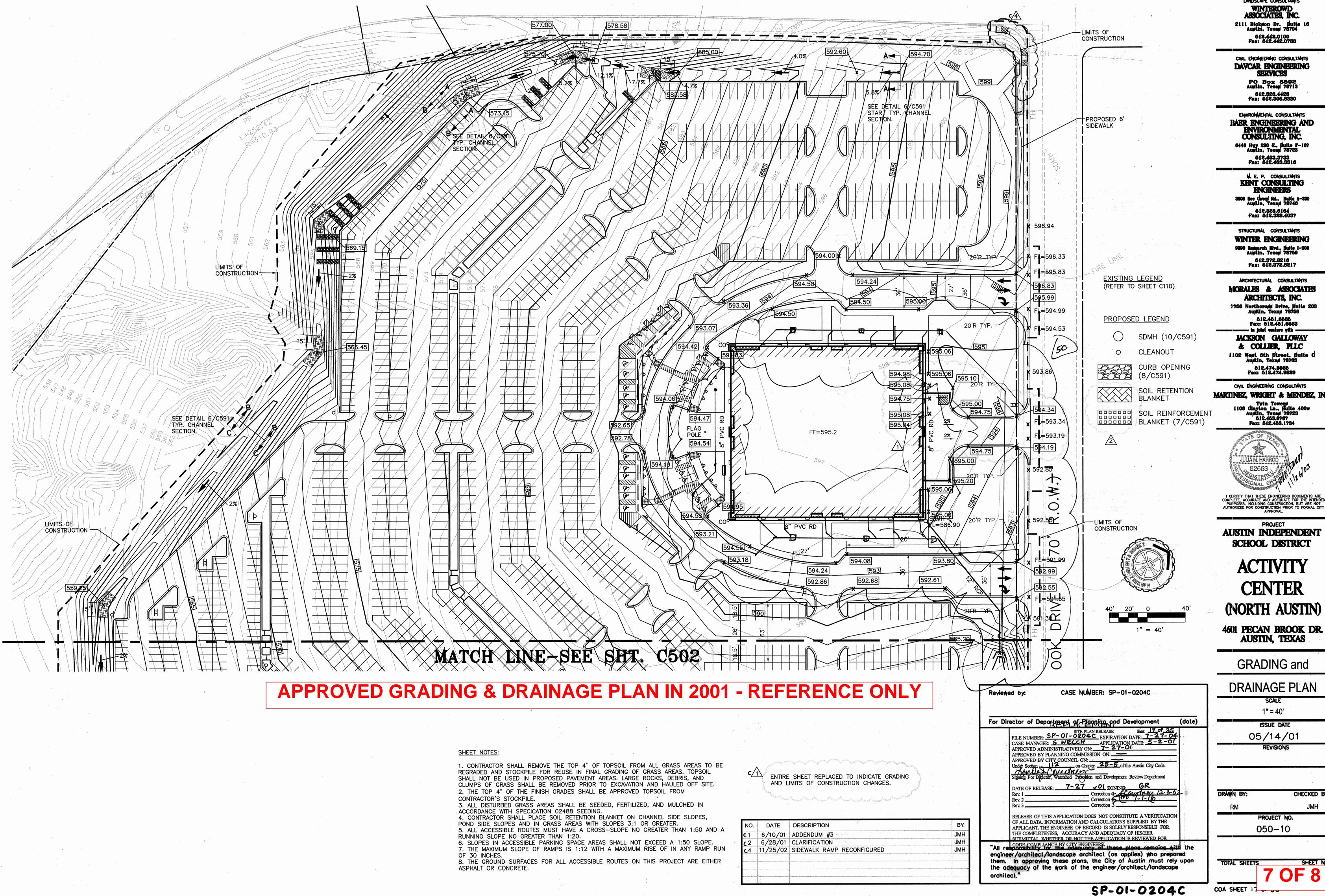
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LANDSCAPE CONSULTANTS

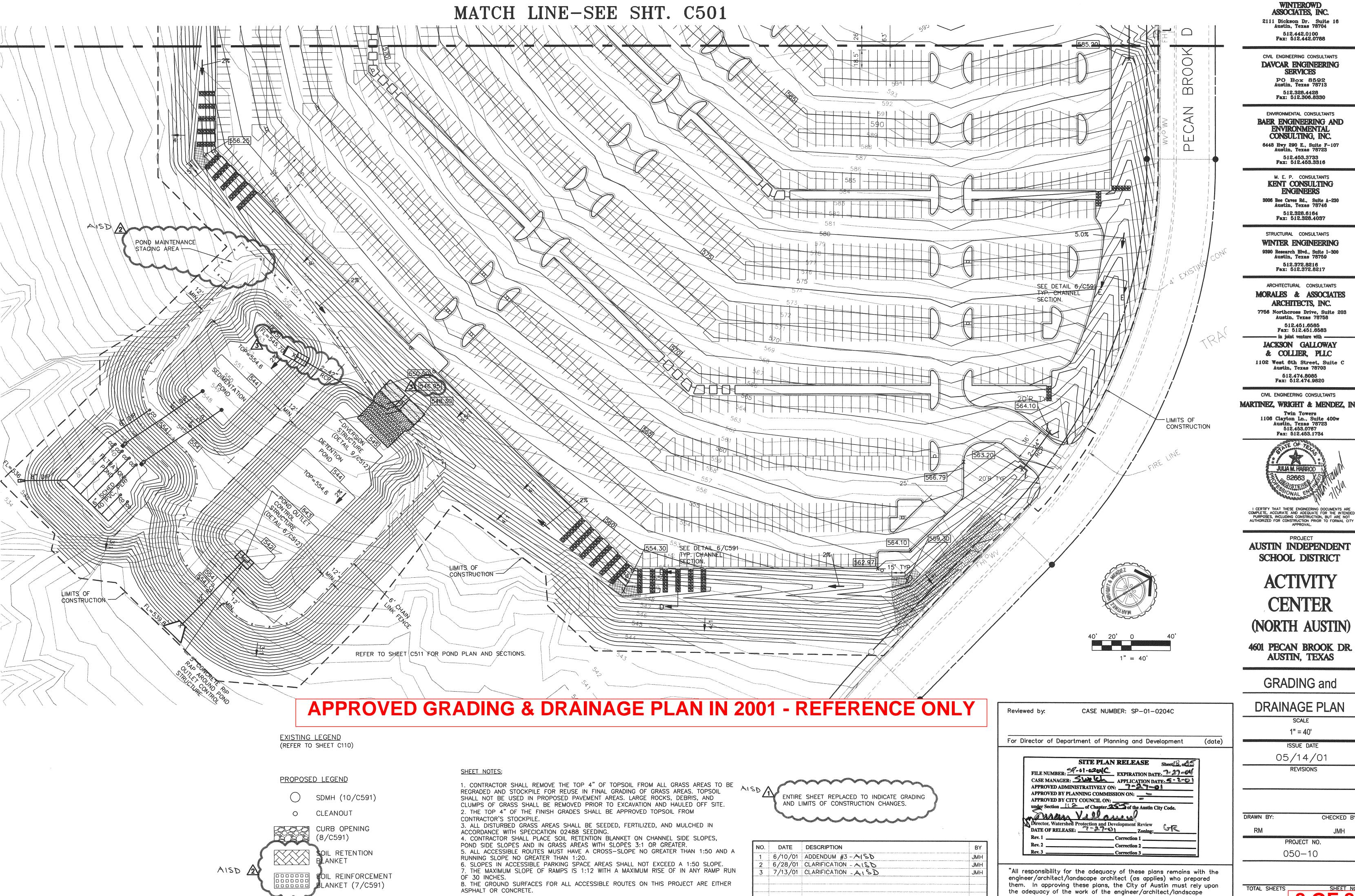
MARTINEZ, WRIGHT & MENDEZ, INC.



SCHOOL DISTRICT

CHECKED BY:

7 OF 8



LANDSCAPE CONSULTANTS WINTEROWD ASSOCIATES, INC.

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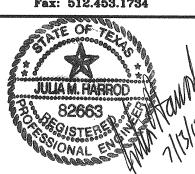
WRIGH1

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512.453.0767

- 512.453.17



PROJECT AUSTIN INDEPENDENT

SCHOOL DISTRICT **ACTIVITY**

CENTER

(NORTH AUSTIN)

DRAINAGE PLAN

1" = 40'

ISSUE DATE

05/14/01

CHECKED BY:

PROJECT NO. 050-10

COA SHEET 18 Ur >S

5P-01-0204C