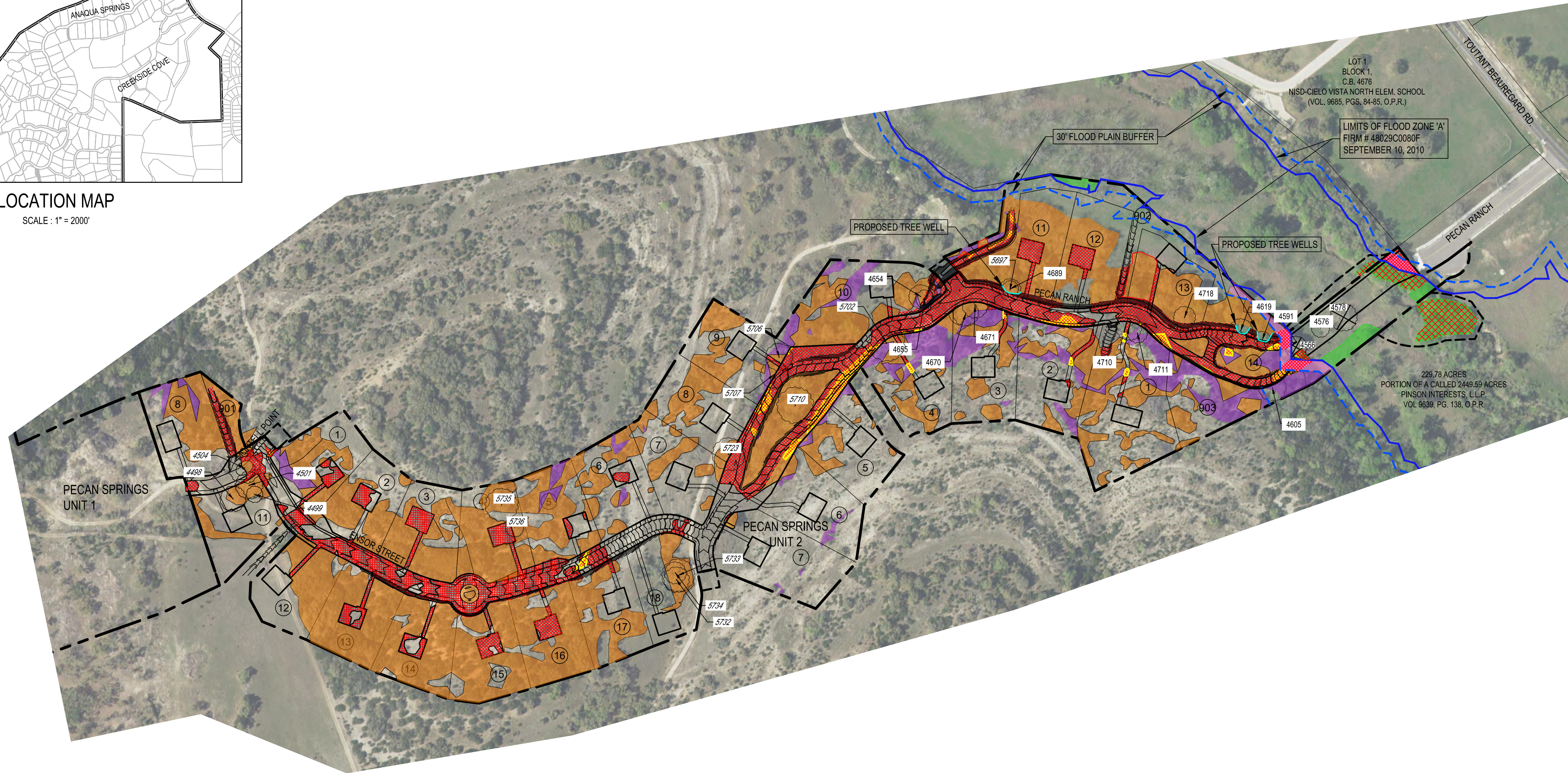


LOCATION MAP
SCALE : 1" = 2000'

PECAN SPRINGS MASTER DEVELOPMENT PLAN



HERITAGE TREE TABLE					
POINT NUMBER	SPECIES	TRUNK DIA (IN)	SPREAD (FT)	TRUNK COUNT	AREA LOCATION
4498	LIVE OAK	28	70	N/A	
4499	LIVE OAK	26	45	14" x 12" x 12"	
4501	LIVE OAK	33.5	75	N/A	
4504	LIVE OAK	38	85	26" x 24"	
4566*	LIVE OAK	24	60	N/A	FLOODPLAIN
4576	PECAN	26.5	50	N/A	FLOODPLAIN
4578*	PECAN	27	75	N/A	FLOODPLAIN
4591	ELM	24	45	N/A	
4605	LIVE OAK	30	75	N/A	FLOODPLAIN BUFFER
4619	ELM	32	65	N/A	
4654	LIVE OAK	27	65	N/A	
4655	LIVE OAK	24	50	N/A	
4670	LIVE OAK	40	70	N/A	
4671	LIVE OAK	37	70	N/A	
4689	LIVE OAK	24	45	16.5" x 15"	
4710	LIVE OAK	32.5	70	N/A	
4711	LIVE OAK	25.5	55	N/A	STEEP SLOPE
4718	LIVE OAK	25	60	N/A	
5697	LIVE OAK	29	60	16" x 16" x 10"	
5702	LIVE OAK	32	100	N/A	STEEP SLOPE
5706	LIVE OAK	27.5	75	15" x 12.5" x 12.5"	
5707	LIVE OAK	25	75	N/A	
5710	LIVE OAK	33.5	100	22.5" x 22"	
5723	LIVE OAK	33.5	90	N/A	
5726	LIVE OAK	30.75	80	22" x 17.5"	
5732	LIVE OAK	24.75	70	19" x 11.5"	
5733	LIVE OAK	27	90	N/A	
5734	LIVE OAK	24	60	N/A	
5735	LIVE OAK	38	90	17.5" x 12.5" x 8.5" x 19"	
5736	LIVE OAK	30	50	20.5" x 19"	

* REMOVED HERITAGE TREE

TREE CANOPY-ESA TOTALS (STEEP SLOPE AND FLOODPLAIN BUFFER COMBINED)		
	ACRES	SQUARE FEET
TREE CANOPY-STEEP SLOPE	5.91	257,379
TREE CANOPY-STEEP SLOPE REMAINDER	5.47	238,059
PRESERVATION %	92.49%	
TREE CANOPY-FLOODPLAIN BUFFER	0.27	11,801
TREE CANOPY-BUFFER REMAINDER	0.14	5,991
PRESERVATION %	50.77%	
TREE CANOPY-TOTALS	6.18	269,180
TREE CANOPY REMAINDER TOTALS	5.60	244,050
PRESERVATION %	90.66%	

FINAL TREE CANOPY COVER CALCULATIONS		
	ACRES	SQUARE FEET
TOTAL PLAT AREA	42.23	1,839,364.56
38% TREE CANOPY REQUIRED	16.05	698,958.53
TREE CANOPY REMAINING	15.79	687,602.00
TREE CANOPY-FLOODPLAIN REMAINING	0.71	30,989.00
TREE CANOPY-STEEP SLOPE REMAINING	5.47	238,058.60
TREE CANOPY-FLOODPLAIN BUFFER REMAINING	0.14	5,991.00
TOTAL TREE CANOPY REMAINING	22.10	962,640.60
TOTAL TREE CANOPY % REMAINING	52.3%	

NOTES :

- SHADED TREE LISTINGS ARE TO BE REMOVED.
- TOTAL INCHES OF SURPLUS WAS CALCULATED USING A SHADED AREA OF 875 FOR LIVE OAK TREE, OBTAINED FROM CoSA UDC CHAPTER 35 APPENDIX E.
- CONTRACTOR TO ENSURE PRESERVATION OF AT LEAST 50% OF THE ROOT PROTECTION ZONE FOR HERITAGE TREES 5697, 4689, 4619, 4591, 4504.

TREE CANOPY CALCULATIONS		
TREE CANOPY	ACRES	SQUARE FEET
TREE CANOPY REMOVAL	20.29	883,902
TREE CANOPY REMAINDER	4.51	196,300
	15.79	687,602
PRESERVATION %	77.79%	
REQUIRED PRESERVATION (35%)	883,902 SF X 35%	309,365.70
TREE CANOPY SURPLUS	687,602.00 SF - 309,365.70 SF	378,236.30
INCHES OF SURPLUS	378,236.30 SF / 875 = 432.27 TREES	7,219 IN.
	432.27 TREES X 16.7 =	
TREE CANOPY-STEEP SLOPE ESA CALCULATIONS		
TREE CANOPY-ESA	ACRES	SQUARE FEET
TREE CANOPY-ESA REMOVAL	5.91	257,379
TREE CANOPY-ESA REMAINDER	0.44	19,321
	5.47	238,059
PRESERVATION %	92.49%	
REQUIRED PRESERVATION (80%)	257,379 SF X 80%	205,903.39
TREE CANOPY SURPLUS	238,058.60 SF - 205,903.39 SF	32,155.21
INCHES OF SURPLUS	32,155.21 SF / 875 = 36.75 TREES	614 IN.
	36.75 TREES X 16.7 =	
TREE CANOPY-FLOODPLAIN BUFFER ESA		
TREE CANOPY-BUFFER	ACRES	SQUARE FEET
TREE CANOPY-BUFFER REMOVAL	0.27	11,801
TREE CANOPY-BUFFER REMAINDER	0.13	5,810
	0.14	5,991
PRESERVATION %	50.77%	
REQUIRED PRESERVATION (80%)	11,801 SF X 80%	9,440.80
TREE CANOPY SURPLUS	5,991.00 SF - 9,440.80 SF	(3,450)
INCHES OF SURPLUS	-3,449.80 SF / 875 = -3.94 TREES	(66) IN.
	-3.94 TREES X 16.7 =	
TREE CANOPY-FLOODPLAIN		
TREE CANOPY-FLOODPLAIN	ACRES	SQUARE FEET
TREE CANOPY-FLOODPLAIN REMOVAL	1.17	50,980
TREE CANOPY-FLOODPLAIN REMAINDER	0.46	19,991
	0.71	30,989
PRESERVATION %	60.79%	
REQUIRED PRESERVATION (80%)	50,980 SF X 80%	40,784.00
TREE CANOPY SURPLUS	30,989.00 SF - 40,784.00 SF	(9,795)
INCHES OF SURPLUS	-9,795.00 SF / 875 = -11.19 TREES	(187) IN.
	-11.19 TREES X 16.7 =	

SURPLUS TOTALS	
CANOPY AREA	SURPLUS [IN]
TREE CANOPY	7,219
TREE CANOPY - ESA (STEEP SLOPE+BUFFER)	548
TREE CANOPY-FLOODPLAIN	(187)
TOTAL SURPLUS INCHES	7,580

FLOODPLAIN HERITAGE TREE MITIGATION	
	INCHES
HERITAGE INCHES REMOVED	51
HERITAGE MITIGATION REQUIRED (3:1) (IN.)	153
TOTAL MITIGATION REQUIRED	
HERITAGE + FLOODPLAIN (IN.)	340
NUMBER OF LOTS	29
PROPOSED TREE SIZE (IN.) TO PLANT PER LOT	2
REQUIRED 1.5" TREES PER LOT	58
REQ'D TREES - 0.5" TOWARD MITIGATION (IN.)	29
PROPOSED 8 ADDTL 2 IN. TREES PER LOT (IN.)	464
TOTAL PROPOSED MITIGATION	493

PROJECT BOUNDARY	
	TREE CANOPY
	TREE CANOPY REMOVED
	TREE CANOPY IN FLOODPLAIN
	TREE CANOPY IN FLOODPLAIN REMOVED
	TREE CANOPY- STEEP SLOPE ESA
	TREE CANOPY- STEEP SLOPE ESA REMOVED
	TREE CANOPY - FLOODPLAIN BUFFER ESA AREA
	TREE CANOPY - FLOODPLAIN BUFFER ESA AREA REMOVED
	EXISTING HERITAGE TREE
	REMOVED HERITAGE TREE

N

SCALE: 1"=200'

0 100' 200' 300' 400'

2/3/2021

STATE OF TEXAS

CODY LEE MORRIS

131472

EXPIRES 02/01/2024

REVISIONS:

MATKINHOOVER

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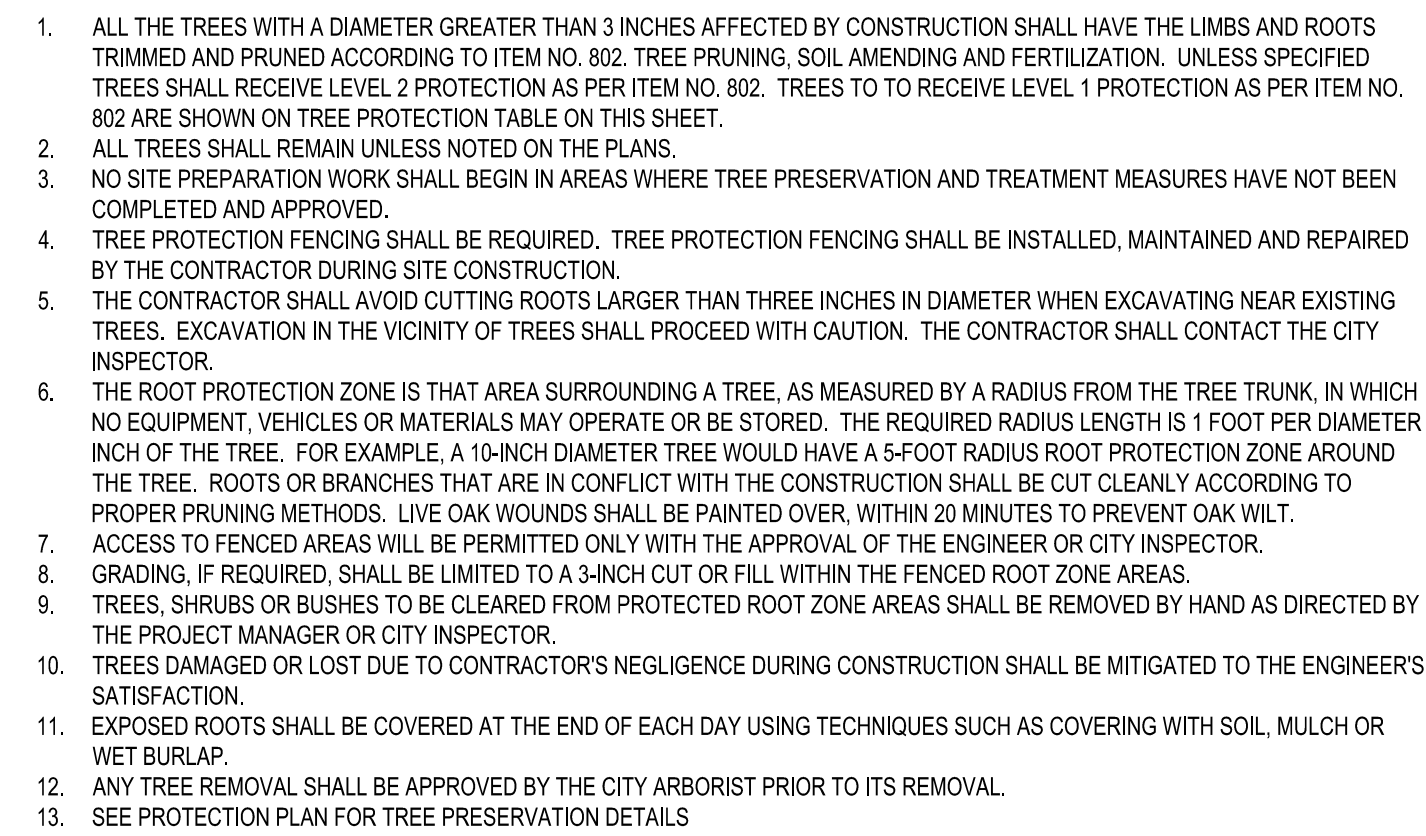
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TEXAS REGISTERED ENGINEERING FIRM F-004512 SURVEYING FIRM F-10024000

TREE PRESERVATION PLAN
FOR
PECAN SPRINGS UNIT 2 (P.U.D.)
BEXAR COUNTY, TEXAS

PLAT # 19-11800442
MDP # 20-11100010

JOB NO. 2990.52
DESIGNED BY: AM / DAP
DRAWN BY: DAP
CHECKED BY: GK
SHEET # 12 OF 37



2/3/2021

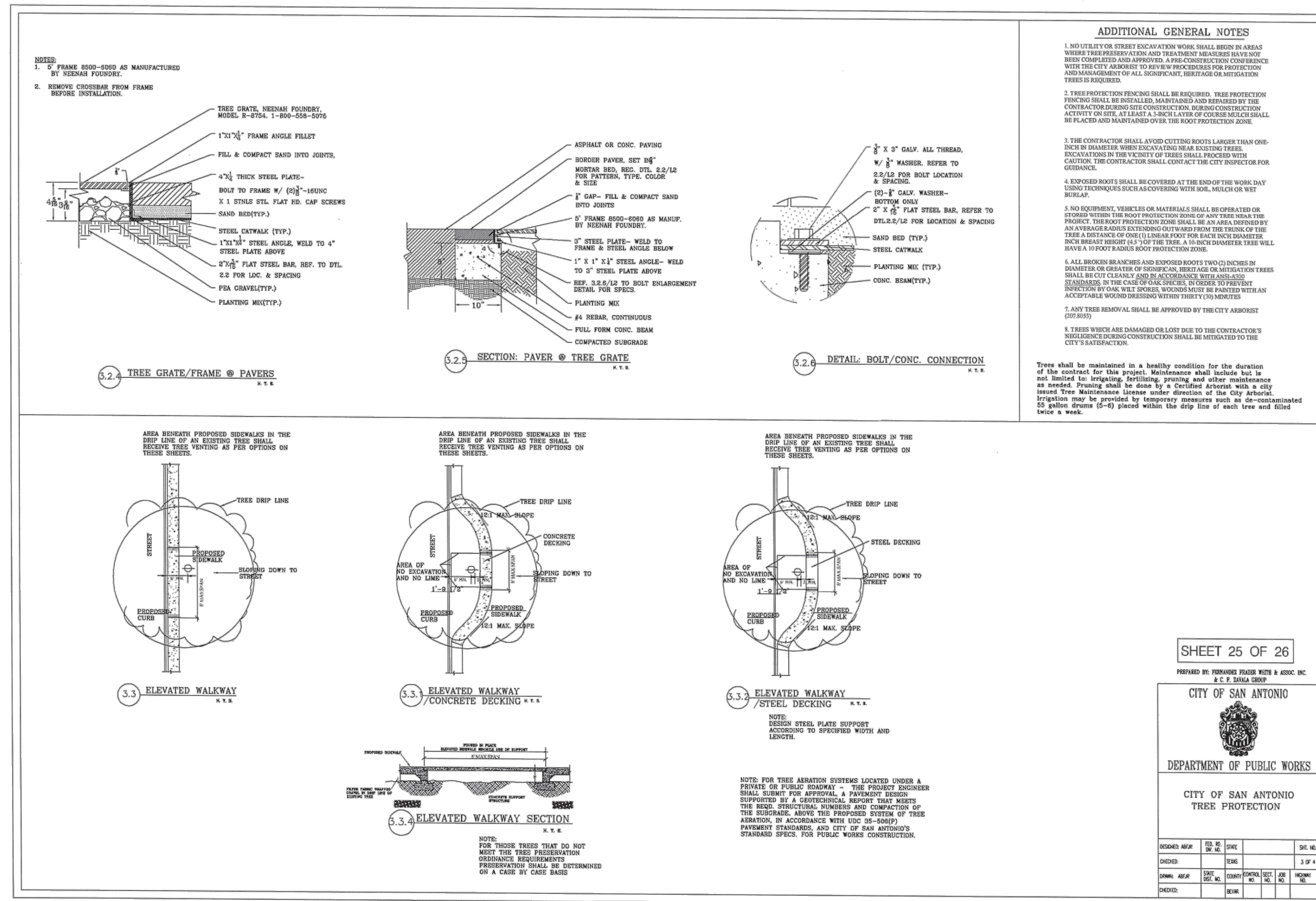


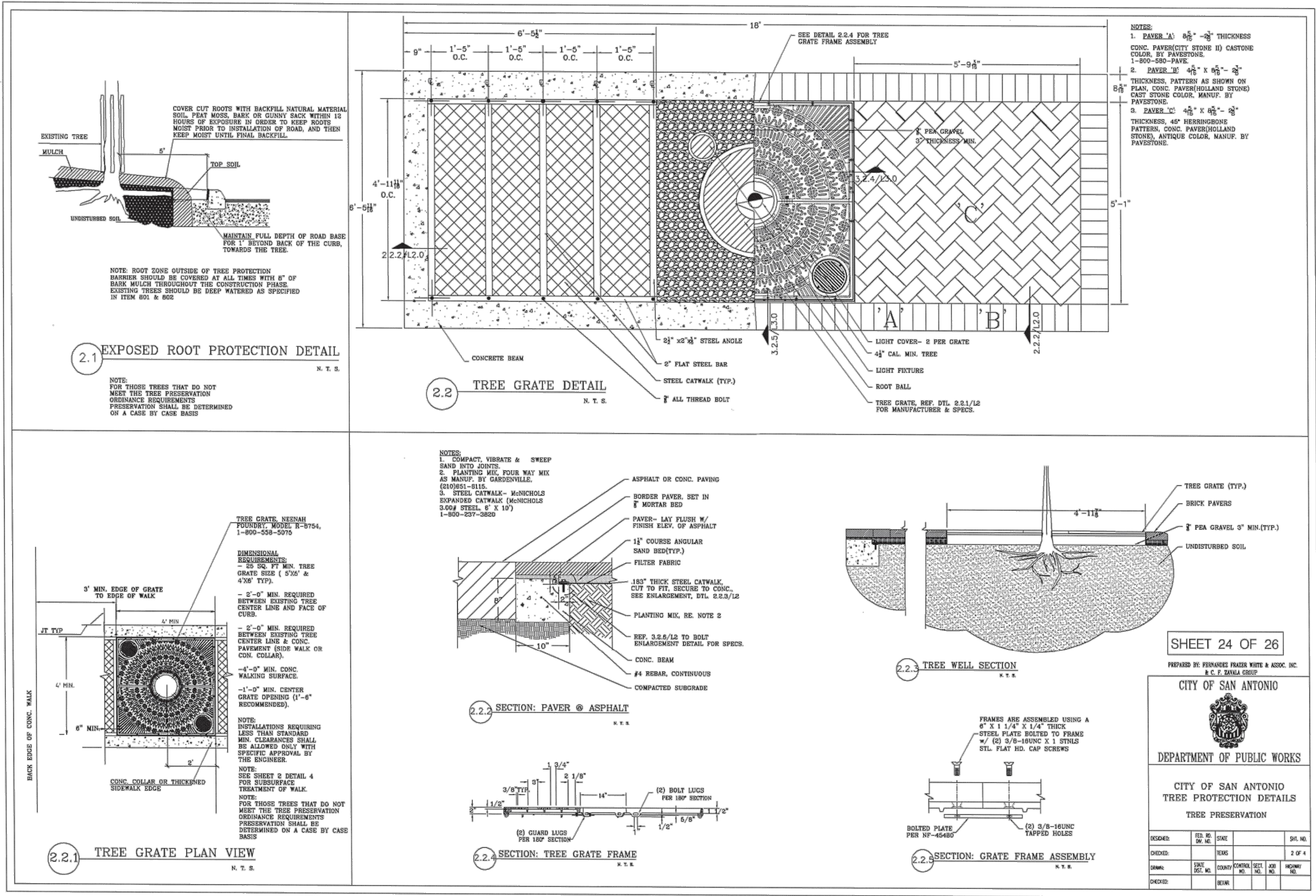
STATE OF TEXAS
CODY LEE MORRIS
131472
LICENSED PROFESSIONAL ENGINEER

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FOR
PECAN SPRINGS UNIT 2 (P.U.D.)
BEXAR COUNTY, TEXAS

JOB NO.	2990.52
DESIGNED BY:	AM / DAP
DRAWN BY:	DAP
CHECKED BY:	GK
SHEET #	2 OF 3





- TREE PROTECTION NOTES:
1. ALL THE TREES WITH A DIAMETER GREATER THAN 3 INCHES AFFECTED BY CONSTRUCTION SHALL HAVE THE LIMBS AND ROOTS TRIMMED AND PRUNED ACCORDING TO ITEM NO. 802. TREE PRUNING, SOIL AMENDING AND FERTILIZATION, UNLESS SPECIFIED TREES SHALL RECEIVE LEVEL 2 PROTECTION AS PER ITEM NO. 802. TREES TO RECEIVE LEVEL 1 PROTECTION AS PER ITEM NO. 802 ARE SHOWN ON TREE PROTECTION TABLE ON THIS SHEET.
 2. ALL TREES SHALL REMAIN UNLESS NOTED ON THE PLANS.
 3. NO SITE PREPARATION WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND TREATMENT MEASURES HAVE NOT BEEN COMPLETED AND APPROVED.
 4. TREE PROTECTION FENCING SHALL BE REQUIRED. TREE PROTECTION FENCING SHALL BE INSTALLED, MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION. THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN THREE INCHES IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN THE VICINITY OF TREES SHALL PROCEED WITH CAUTION. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR.
 5. THE ROOT PROTECTION ZONE IS THAT AREA SURROUNDING A TREE, AS MEASURED BY A RADIUS FROM THE TREE TRUNK, IN WHICH NO EQUIPMENT, VEHICLES OR MATERIALS MAY OPERATE OR BE STORED. THE REQUIRED RADIUS LENGTH IS 1 FOOT PER DIAMETER INCH OF THE TREE. FOR EXAMPLE, A 10-INCH DIAMETER TREE WOULD HAVE A 5-FOOT RADIUS ROOT PROTECTION ZONE AROUND THE TREE. ROOTS OR BRANCHES THAT ARE IN CONFLICT WITH THE CONSTRUCTION ZONE BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. LIVE OAK WOUNDS SHALL BE PAINTED OVER, WITHIN 20 MINUTES TO PREVENT OAK WILT.
 6. ACCESS TO FENCED AREAS WILL BE PERMITTED ONLY WITH THE APPROVAL OF THE ENGINEER OR CITY INSPECTOR.
 7. GRADING, IF REQUIRED, SHALL BE LIMITED TO A 3-INCH CUT OR FILL WITHIN THE FENCED ROOT ZONE AREAS.
 8. TREES, SHRUBS OR BUSHES TO BE CLEARED FROM PROTECTED ROOT ZONE AREAS SHALL BE REMOVED BY HAND AS DIRECTED BY THE PROJECT MANAGER OR CITY INSPECTOR.
 9. TREES DAMAGED OR LOST DUE TO CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED TO THE ENGINEER'S SATISFACTION.
 10. EXPOSED ROOTS SHALL BE COVERED AT THE END OF EACH DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH OR WET BURLAP.
 11. ANY TREE REMOVAL SHALL BE APPROVED BY THE CITY ARBORIST PRIOR TO ITS REMOVAL.
 12. SEE PROTECTION PLAN FOR TREE PRESERVATION DETAILS.

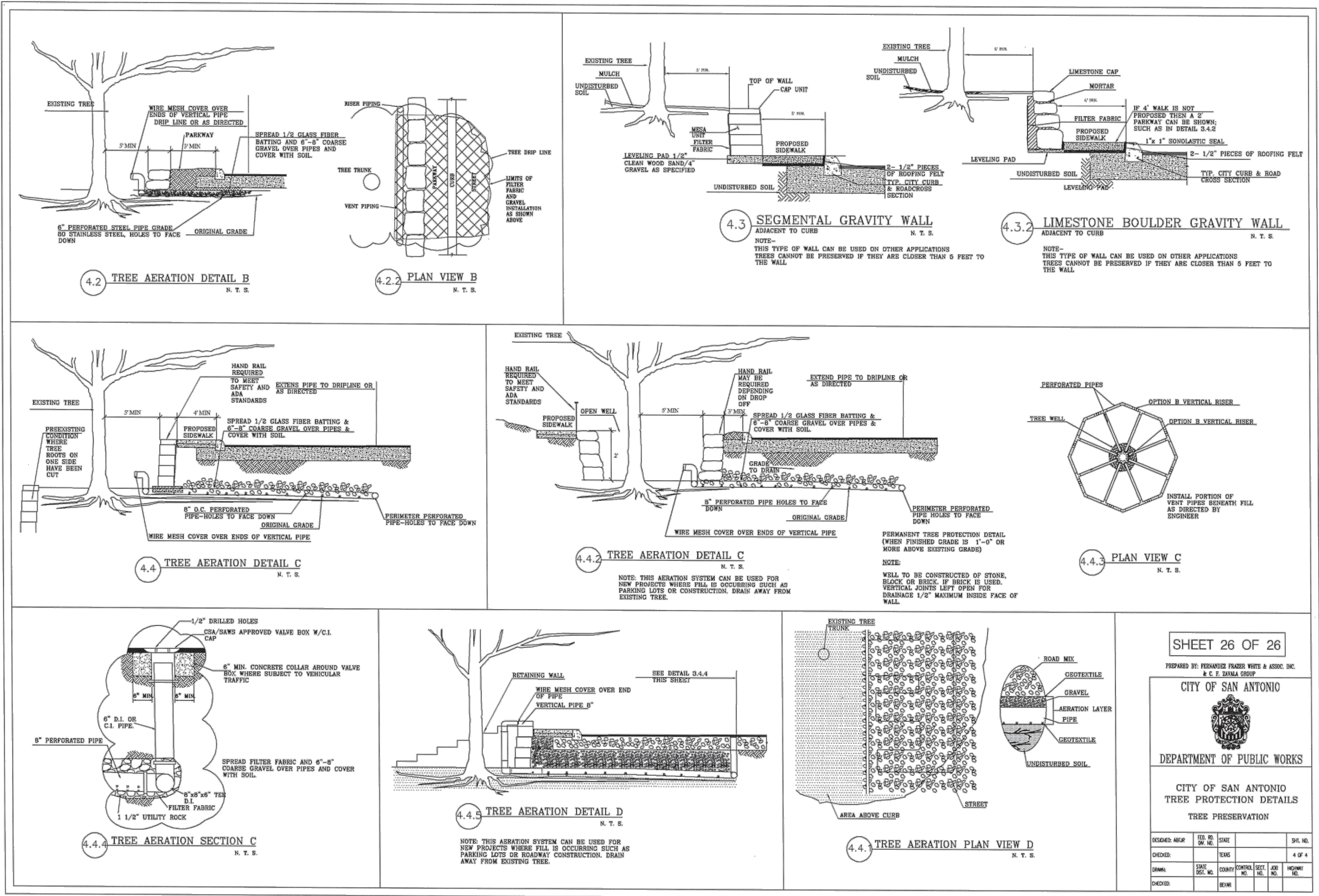


REVISIONS:

NO.	DATE	BY	CHKD.	APP'D.
1	02/10/21	CM	CM	CM

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TREE PRESERVATION PLAN DETAILS SHEET 2
FOR
PECAN SPRINGS UNIT 2 (P.U.D.)
BEXAR COUNTY, TEXAS

PLAT # 19-11800442
MDP # 20-11100010

JOB NO. 2990.52
DESIGNED BY: AM / DAP
DRAWN BY: DAP
CHECKED BY: GK
SHEET # 3 OF 3