JUNO LANDING EXTENSION

GENERAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION JUNE 2008, OR LATEST.
- NO EXTRA PAYMENT SHALL BE ALLOWED FOR WORK CALLED FOR ON THE PLANS, BUT NOT INCLUDED IN THE BID PROPOSAL. THIS INCIDENTAL WORK WILL BE REQUIRED AND SHALL BE INCLUDED IN THE PAY ITEM TO WHICH IT RELATES.
- THE CONTRACTOR SHALL PROVIDE ACCESS FOR THE DELIVERY OF MAIL BY THE U.S. POSTAL SERVICE. 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION ANY DAMAGE DONE TO EXISTING FENCES, CONCRETE ISLANDS, STREET PAVING. CURBS. SHRUBS. BUSHES OR DRIVEWAYS. (NO SEPARATE PAY ITEM).
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL SIGNS AND BARRICADES ARE PROPERLY INSTALLED AND MAINTAINED, ALL LOCATIONS AND DISTANCES WILL BE DECIDED. UPON IN THE FIELD BY THE CONTRACTOR, USING THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". THE CITY'S CONSTRUCTION INSPECTOR AND TRAFFIC ENGINEERING REPRESENTATIVE WILL ONLY BE RESPONSIBLE TO INSPECT BARRICADES AND SIGNS. IF. IN THE OPINION OF THE TRAFFIC ENGINEERING REPRESENTATIVE AND THE CONSTRUCTION INSPECTOR THE BARRICADES AND SIGNS DO NOT CONFORM TO ESTABLISHED STANDARDS OR ARE INCORRECTLY PLACED OR ARE INSUFFICIENT IN QUANTITY TO PROTECT THE GENERAL PUBLIC, THE CONSTRUCTION INSPECTOR SHALL HAVE THE OPTION TO STOP OPERATIONS UNTIL SUCH TIME AS THE CONDITIONS ARE CORRECTED.
- IF THE NEED ARISES, ADDITIONAL BARRICADES AND DIRECTIONAL DEVICES MAY BE ORDERED BY THE TRAFFIC ENGINEERING REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
- DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.171 C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.
- CONTRACTOR SHALL NOTIFY THE CITY INSPECTOR TWENTY FOUR (24) HOURS PRIOR TO BACKFILL OF ANY UTILITY TRENCHES TO SCHEDULE FOR DENSITY TEST AS REQUIRED.
- CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES, MARKS, ETC. IF ANY ARE DESTROYED OR REMOVED BY THE CONTRACTOR OR HIS EMPLOYEES, THEY SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF EXISTING UTILITIES. CONTRACTOR SHALL NOTIFY THE FOLLOWING AT LEAST FORTY-FIGHT (48) HOURS PRIOR TO EXCAVATION OPERATION

SAN ANTONIO WATER SYSTEM (SAWS)
BEXAR METROPOLITAN WATER DISTRICT (BEXAR MET)
COSA DRAINAGE
COSA SIGNAL OPERATIONS
TEXAS STATE WIDE ONE CALL LOCATOR
CITY PUBLIC SERVICE ENERGY - TIME WARNER - AT&T - MCI

233-2010 354-6538 / 357-5741 207-8048 207-7720 / 207-7765 1-800-344-8377

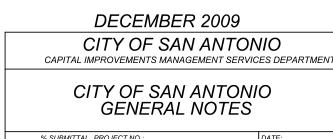
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED, BUT SHALL BE INVESTIGATED AND VERIFIED BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO AND FOR THE MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES EVEN IF THEY ARE NOT SHOWN ON THE PLANS. LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HERE ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND HE SHALL BE RESPONSIBLE FOR PROTECTION OF SAME DURING CONSTRUCTION.
- ALL WASTE MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE HIS SOLE RESPONSIBILITY TO DISPOSE OF THIS MATERIAL OFF THE LIMITS OF THE PROJECT. NO WASTE MATE- RIAL SHALL BE PLACED IN EXISTING LOWS THAT WILL BLOCK OR ALTER FLOW LIMITS OF EXISTING ARTIFICIAL OR NATURAL DRAINAGE.
- THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIAL IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN DEVELOPMENT PERMIT.
- THE CONTRACTOR SHALL MAINTAIN ALL ADJOINING STREETS AND TRAVELED ROUTES FREE FROM SPILLED AND / OR TRACKED CONSTRUCTION MATERIALS AND / OR DEBRIS.
- IF THE CONTRACTOR ENCOUNTERS ANY ARCHAEOLOGICAL DEPOSITS DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR MUST STOP EXCAVATION IMMEDIATELY, CONTACT THE CITY INSPECTOR, AND CALL THE CITY HISTORIC PRESERVATION OFFICE AT 207-7306 OR 207-3327 FOR AN ARCHAEOLOGICAL INVESTIGATION. THE CONTRACTOR CANNOT BEGIN EXCAVATION AGAIN WITHOUT WRITTEN PERMISSION FROM THE CITY. IF MORE THAN THREE (3) DAYS ARE REQUIRED FOR INVESTIGATION (NOT INCLUDING HOLIDAY AND WEEKENDS) AND IF THE CONTRACTOR IS UNABLE TO WORK IN OTHER AREAS, THEN THE CONTRACTOR WILL BE ALLOWED TO NEGOTIATE FOR ADDITIONAL CONSTRUCTION TIME UPON WRITTEN REQUEST WITHIN TEN (10) DAYS AFTER THE FIRST NOTICE TO THE CITY OF ARCHAEOLOGICAL INVESTIGATION FOR EACH EVENT. IF THE TIME REQUIRED FOR INVESTIGATION IS LESS THAN OR EQUAL TO THREE (3) DAYS FOR EACH EVENT, CONTRACT DURATION WILL NOT BE EXTENDED.
- IF SUSPECTED CONTAMINATION IS ENCOUNTERED DURING CONSTRUCTION OPERATIONS. C.O.S.A. SHALL BE NOTIFIED IMMEDIATELY WHEN CONTAMINATED SOILS AND / OR GROUNDWATER ARE ENCOUNTERED AT LOCATIONS NOT IDENTIFIED IN THE PLANS. THE NOTIFICATION SHOULD INCLUDE THE STATION NUMBER. TYPE OF CONTAMINATED MEDIA. EVIDENCE OF CONTAMINATION AND MEASURES TAKEN TO CONTAIN THE CONTAMINATED MEDIA AND PREVENT PUBLIC ACCESS. THE CONTAMINATED SOIL AND / OR GROUNDWATER SHALL NOT BE REMOVED FROM THE LOCATION WITHOUT PRIOR C.O.S.A. APPROVAL. THE CONTRACTOR MUST STOP THE EXCAVATION IMMEDIATELY AND CONTACT THE C.O.S.A. INSPECTOR. THE CONTRACTOR CANNOT BEGIN EXCAVATION ACTIVITIES WITHOUT WRITTEN PERMISSION FROM THE CITY.
- CONTRACTOR IS TO INCLUDE A MAILBOX POST BLOCKOUT FOR VACANT LOTS AND ALL RESIDENCES WHICH DO NOT HAVE MAILBOXES AT THE CURB. BLOCKOUTS ARE PROVIDED FOR FUTURE USE BY THE POST OFFICE.
- CONTRACTOR SHALL NOT REMOVE OR ADJUST ANY VIA FACILITIES. THE CONTRACTOR MUST CONTACT VIA FOURTEEN DAYS PRIOR, FOR THE REMOVAL OF BENCHES, STOP POLES OR ANY OTHER VIA FACILITIES THAT MAY BE PRESENT. PLEASE PROVIDE THIRTY DAYS PRIOR NOTICE FOR SHELTER REMOVAL (TELEPHONE NOS: (210) 362-2155 OR (210) 362-2096). THE CONTRACT OR WILL BE LIABLE FOR ANY DAMAGES TO VIA FACILITIES NOT REMOVED BY VIA. THE CON-TRACTOR IS REQUIRED TO REPLACE ALL FLATWORK REMOVED OR DAMAGED IN THE COURSE OF EXECUTING THE CONTRACT UNLESS OTHERWISE NOTED BY VIA. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING VIA FACILITIES IF ADJACENT TO WORK AREA.

TREE PROTECTION AND PRESERVATION GENERAL NOTES

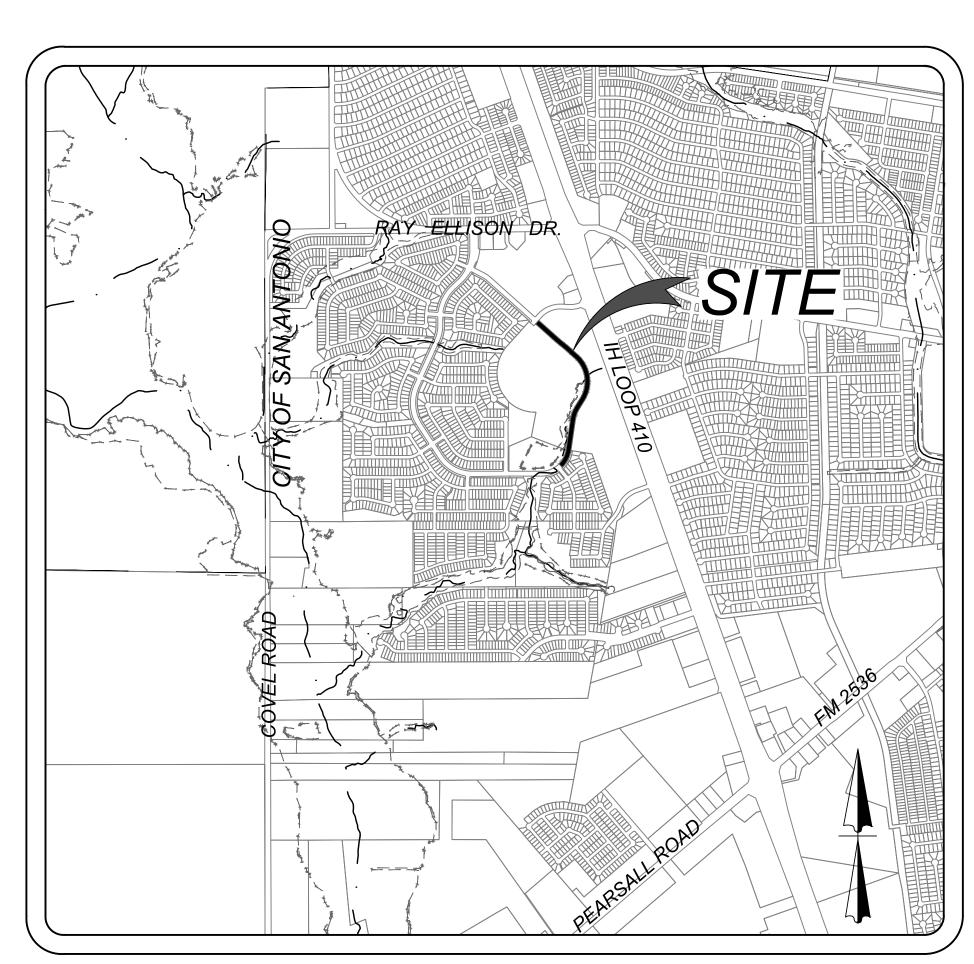
- NO UTILITY OR STREET EXCAVATION WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND TREATMENT MEASURES HAVE NOT BEEN COMPLETED AND APPROVED
- TREE PROTECTION FENCING SHALL BE REQUIRED. TREE PROTECTION FENCING SHALL BE INSTALLED, MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION. DURING CONSTRUCTION ACTIVITY, AT LEAST A SIX-INCH I AYER OF COARSE MULCH SHALL BE PLACED AND MAINTAINED OVER THE ROOT PROTECTION ZONE (NO SEPARATE PAY ITEM).
- THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN THE VICINITY OF TREES SHALL PROCEED WITH CAUTION. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR FOR GUIDANCE
- ROOTS WILL BE CUT WITH A ROCK SAW OR BY HAND, NOT BY AN EXCAVATOR OR OTHER ROAD CONSTRUCTION EQUIPMENT.
- ALL CURB AND SIDEWALK WORK SHALL USE ALTERNATIVE CONSTRUCTION METHODS TO MINIMIZE EXTENSIVE ROOT DAMAGE TO TREES (REFER TO DETAILS).
- EXPOSED ROOTS SHALL BE COVERED AT THE END OF THE DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH, OR WET BURLAP.
- NO EQUIPMENT, VEHICLES OR MATERIALS SHALL OPERATE OR BE STORED WITHIN THE ROOT PROTECTION ZONE OF ANY TREE NEAR THE PROJECT. ROOT PROTECTION ZONE IS 1 FOOT OF RADIUS PER INCH OF TREE'S DIAMETER. A 10-INCH DIAMETER TREE WOULD HAVE A 10 FOOT RADIUS ROOT PROTECTION ZONE AROUND THE TREE. ROOTS OR BRANCHES IN CONFLICT WITH THE CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. OAK WOUNDS SHALL BE PAINTED OVER WITHIN 30 MINUTES TO PREVENT OAK WILT.
- SAPLINGS, SHRUBS OR BUSHES TO BE CLEARED FROM THE PROTECTED ROOT ZONE AREA OF A LARGE TREE SHALL BE REMOVED BY HAND AS DESIGNATED BY THE INSPECTOR
- 9. NO WIRES, NAILS OR OTHER MATERIAL MAY BE ATTACHED TO PROTECTED TREES.
- 10. TREES, TREE LIMBS, BUSHES AND SHRUBS LOCATED IN THE CITY STREET OR ALLEY RIGHT-OF-WAY OR PERMANENT EASEMENTS WHICH INTERFERE WITH PROPOSED CONSTRUCTION ACTIVITIES SHALL BE PROPERLY PRUNED FOLLOWING THE ANSI A-300 STANDARDS FOR PRUNING. ALL TREE PRUNING SHALL BE COMPLETED BY A CITY OF SAN ANTONIO TREE MAINTENANCE LICENSED CONTRACTOR (ARTICLE 21-171, CITY CODE) ONLY AFTER APPROVAL FROM THE CAPITAL PROJECTS MANAGEMENT THROUGH THE INSPECTOR.
- 11. NO EXCESSIVE TREE TRIMMING WILL BE PERMITTED
- 12. ALL DEBRIS GENERATED BY THE PRUNING AND TRIMMING OF THE TREES AND / OR BUSHES SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY (NO SEPARATE PAY ITEM).
- 13. TREES MUST BE MAINTAINED IN GOOD HEALTH THROUGHOUT THE CONSTRUCTION PROCESS. MAINTENANCE MAY INCLUDE, BUT NOT LIMITED TO: WATERING THE ROOT PROTECTION ZONE, WASHING FOLIAGE, FERTILIZATION, PRUNING, ADDITIONAL MULCH APPLICATIONS AND OTHER MAINTENANCE AS NEEDED ON THE PROJECT
- 14. ANY TREE REMOVAL SHALL BE APPROVED BY THE CITY ARBORIST. (207-0278).
- 15. TREES WHICH ARE DAMAGED OR LOST DUE TO THE CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED TO THE CITY'S SATISFACTION.
- 16. TREE PLANTING FOR MITIGATION OR ENHANCEMENT: ALL PLANTED TREES SHALL BE MAINTAINED IN A HEALTHY CONDITION AT ALL TIMES. THIS INCLUDES IRRIGATION, FERTILIZING, PRUNING AND OTHER MAINTENANCE AS NEEDED ON THE PROJECT. TREES THAT DIE WITHIN TWELVE (12) MONTHS SHALL BE REPLACED WITH A TREE OF EQUAL SIZE AND SPECIES.

ACCESSIBILITY REQUIREMENTS

- 1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN VEHICULAR AND PEDESTRIAN ACCESS AT ALL TIMES TO LOCAL RESIDENCES AND BUSINESSES.
- WHEN THE WORK REQUIRES THE EXCAVATION OF THE STREET AND THE REMOVAL OF THE EXISTING DRIVEWAY APPROACHES AND SIDEWALKS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY ALL-WEATHER ACCESS TO THE BUSINESSES AND RESIDENCES. THE TEMPORARY DRIVEWAY APPROACHES SHALL BE CONSTRUCTED WITH FLEXIBLE BASE OR GRAVEL MATERIAL AT NO SEPARATE COST TO THE CITY.
- PRIOR TO INITIATING THE CONSTRUCTION OF NEW DRIVEWAY APPROACHES, THE 3. CONTRACTOR SHALL GIVE ADVANCE WARNING IN PERSON, OR IN WRITING, OF AT LEAST 48 HOURS TO EACH RESIDENCE THAT WILL BE IMMEDIATELY AFFECTED, SO THAT ALTERNATE PLANS MAY BE MADE BY THE RESIDENTS.
- 4. FOR BUSINESSES WITH MORE THAN ONE DRIVEWAY, AT LEAST ONE DRIVEWAY SHALL REMAIN OPEN WHILE THE OTHER NEW DRIVEWAY APPROACHES ARE CONSTRUCTED. FOR BUSINESSES WITH ONLY ONE DRIVEWAY, THE NEW DRIVEWAY APPROACH SHALL BE CONSTRUCTED IN HALF WIDTHS, UNLESS A TEMPORARY ASPHALT DRIVEWAY IS FIRST INSTALLED AT NO SEPARATE COST TO THE CITY.



SAN ANTONIO, TEXAS STREET, DRAINAGE, WATER, SANITARY SEWER, AND UTILITY IMPROVEMENTS



LOCATION MAP N.T.S.

OWNER/DEVELOPER: DHI COMMUNITIES 1341 HORTON CIRCLE ARLINGTON, TEXAS 76011



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DESCRIPTION	SHEET NO.
STREET IMPROVEMENTS COVER SHEET	0.0
SURVEY CONTROL & PROJECT LAYOUT	1.0
ROADWAY DEMO SHEET	1.1
OVERALL ROADWAY LAYOUT	1.2
STA. 1+00-13+00 PLAN & PROFILE	1.3
STA. 13+00-END PLAN & PROFILE	1.4
STREET DETAIL SHEET	1.5
WHEELCHAIR RAMP DETAIL SHEET	1.6
PROPOSED SIGNAGE & STRIPING PLAN	1.7
TRAFFIC SIGNAGE NOTES & DETAILS	1.8
TRAFFIC STRIPING NOTES & DETAILS	1.9
SANITARY SEWER IMPROVEMENTS COVER SHEET	2.0
OVERALL SANITARY SEWER IMPROVEMENT PLAN	2.1
SANITARY SEWER LINE A STA 1+00 - 11+00	2.2
SANITARY SEWER LINE A STA 11+00 - END	2.3
SANITARY SEWER LINE B STA 1+00 - END	2.4
SAWS SANITARY SEWER DETAILS	2.5
WATER IMPROVEMENT COVER SHEET	3.0
OVERALL WATER IMPROVEMENT PLAN	3.1
WATER MAIN LINE A STA 1+00 - END	3.2
WATER MAIN LINE B STA 1+00 - END	3.3
OVERALL STORM DRAIN PLAN	4.0
CULVERT A PLAN & PROFILE	4.1
CULVERT B PLAN & PROFILE	4.2
STORM DRAIN DETAILS	4.3
HANDRAIL AND GUARDRAIL DETAILS	4.4
STORM WATER POLLUTION PREVENTION PLAN NOTES	5.0
STORM WATER POLLUTION PREVENTION PLAN	5.1
EROSION CONTROL DETAIL SHEET	5.2

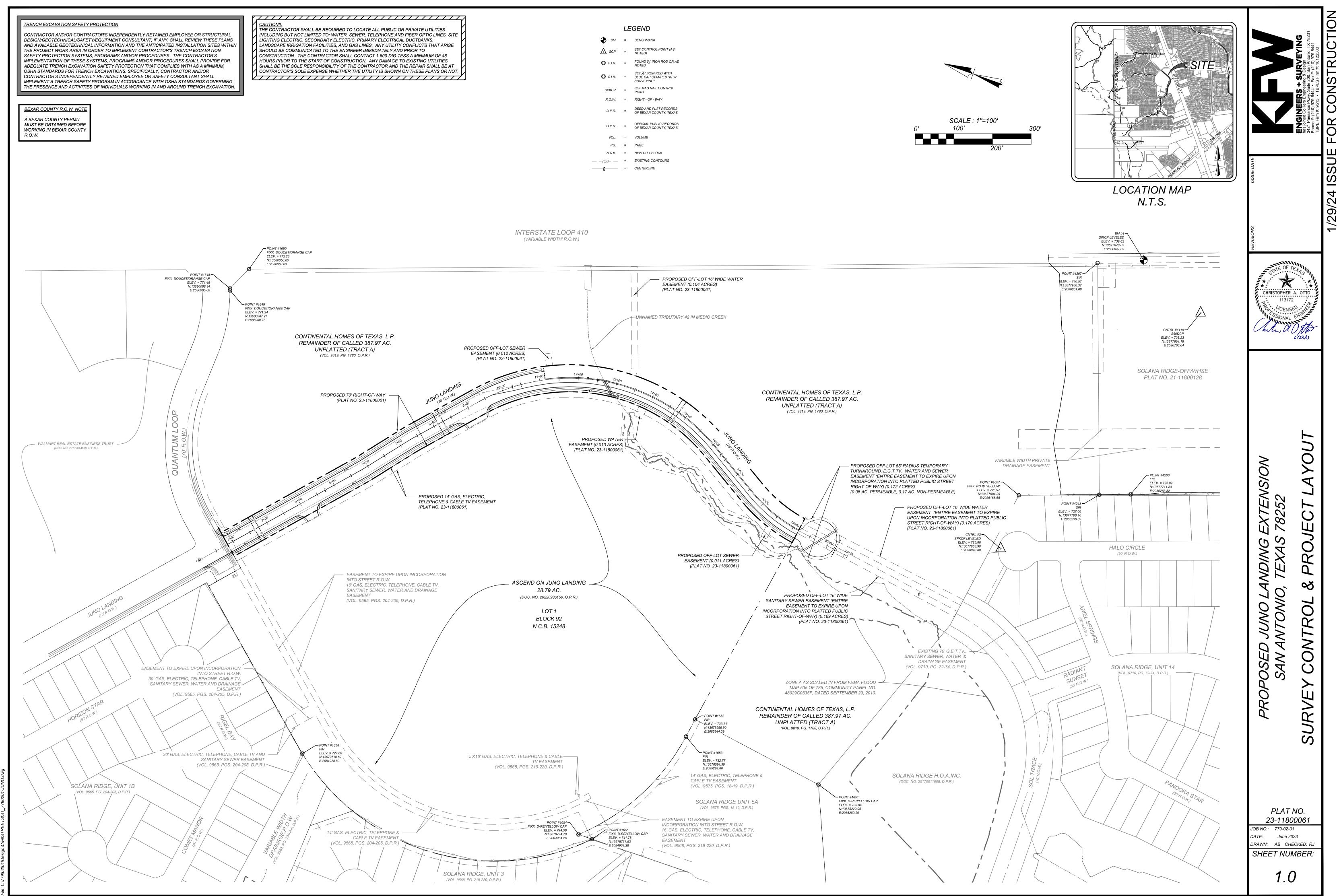
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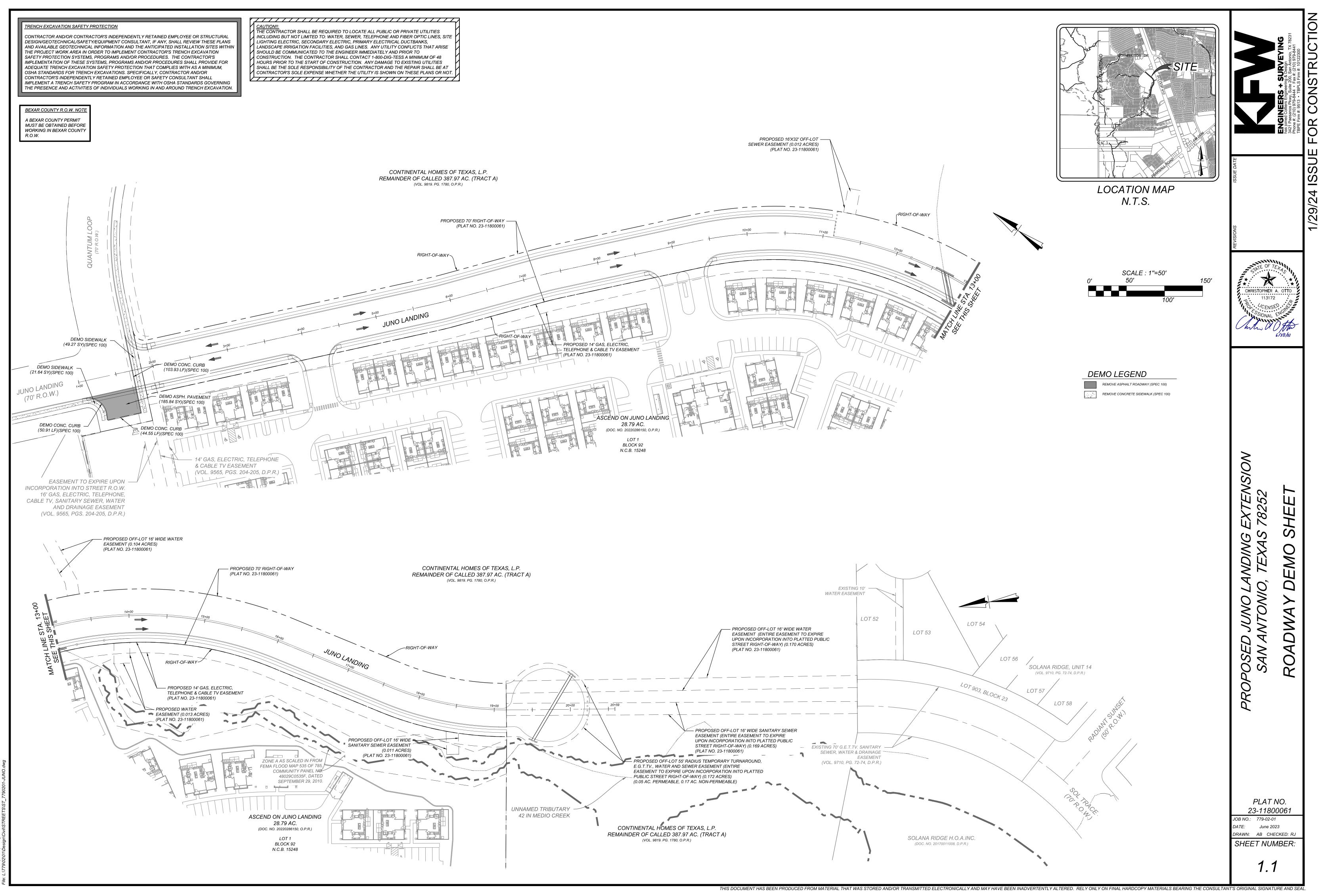
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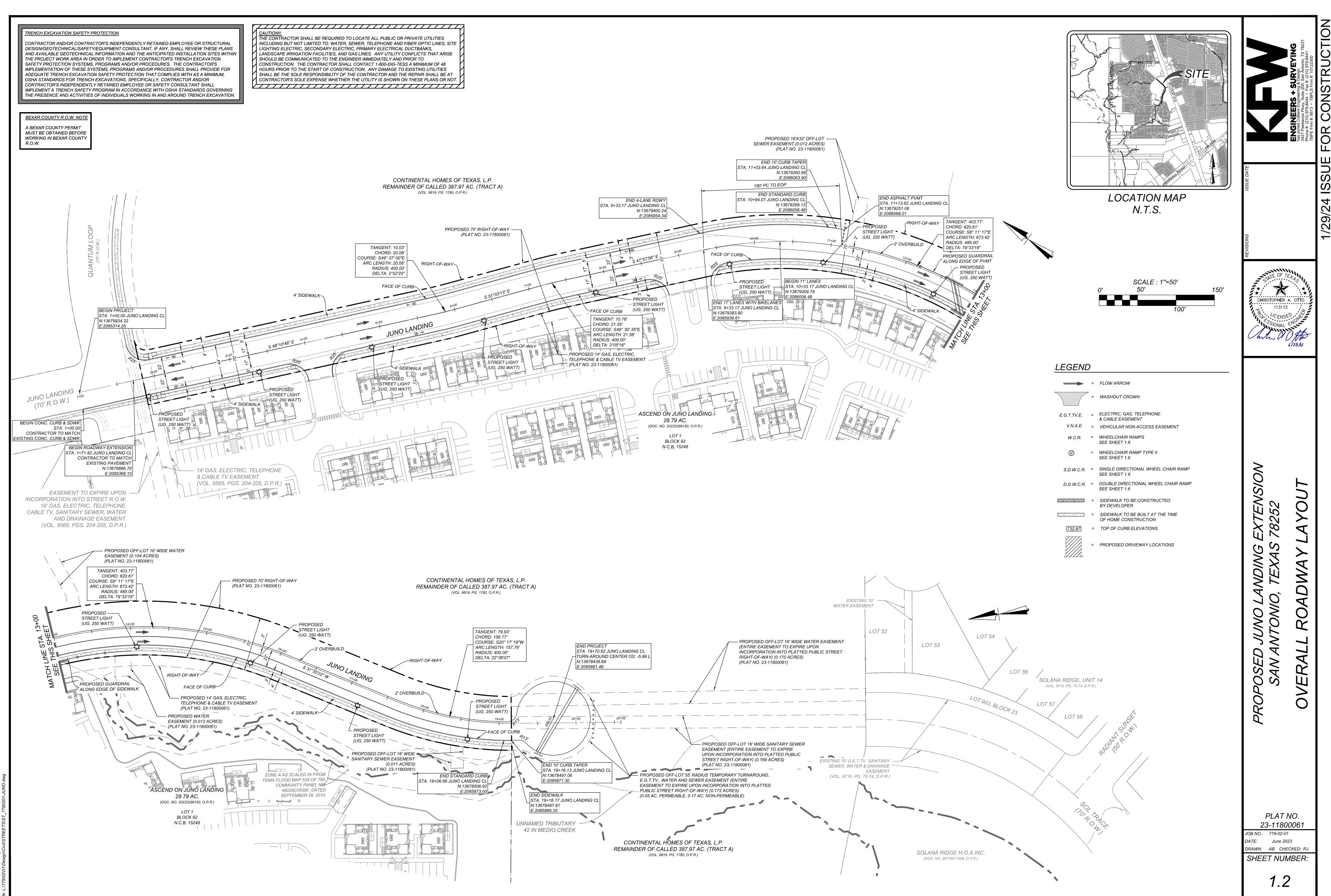
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PLAT NO. 23-11800061



<table-cell-rows> вм</table-cell-rows>	=	BENCHMARK
∆ SCP	=	SET CONTROL POINT (AS NOTED)
O F.I.R.	=	FOUND 1⁄2" IRON ROD OR AS NOTED
O S.I.R.	=	SET 1⁄2" IRON ROD WITH BLUE CAP STAMPED "KFW SURVEYING"
SPKCP	=	SET MAG NAIL CONTROL POINT
R.O.W.	=	RIGHT - OF - WAY
D.P.R.	=	DEED AND PLAT RECORDS OF BEXAR COUNTY, TEXAS
0. <i>P.R</i> .	=	OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS
VOL.	=	VOLUME
PG.	=	PAGE
N.C.B.	=	NEW CITY BLOCK
-750	=	EXISTING CONTOURS
	=	CENTERLINE





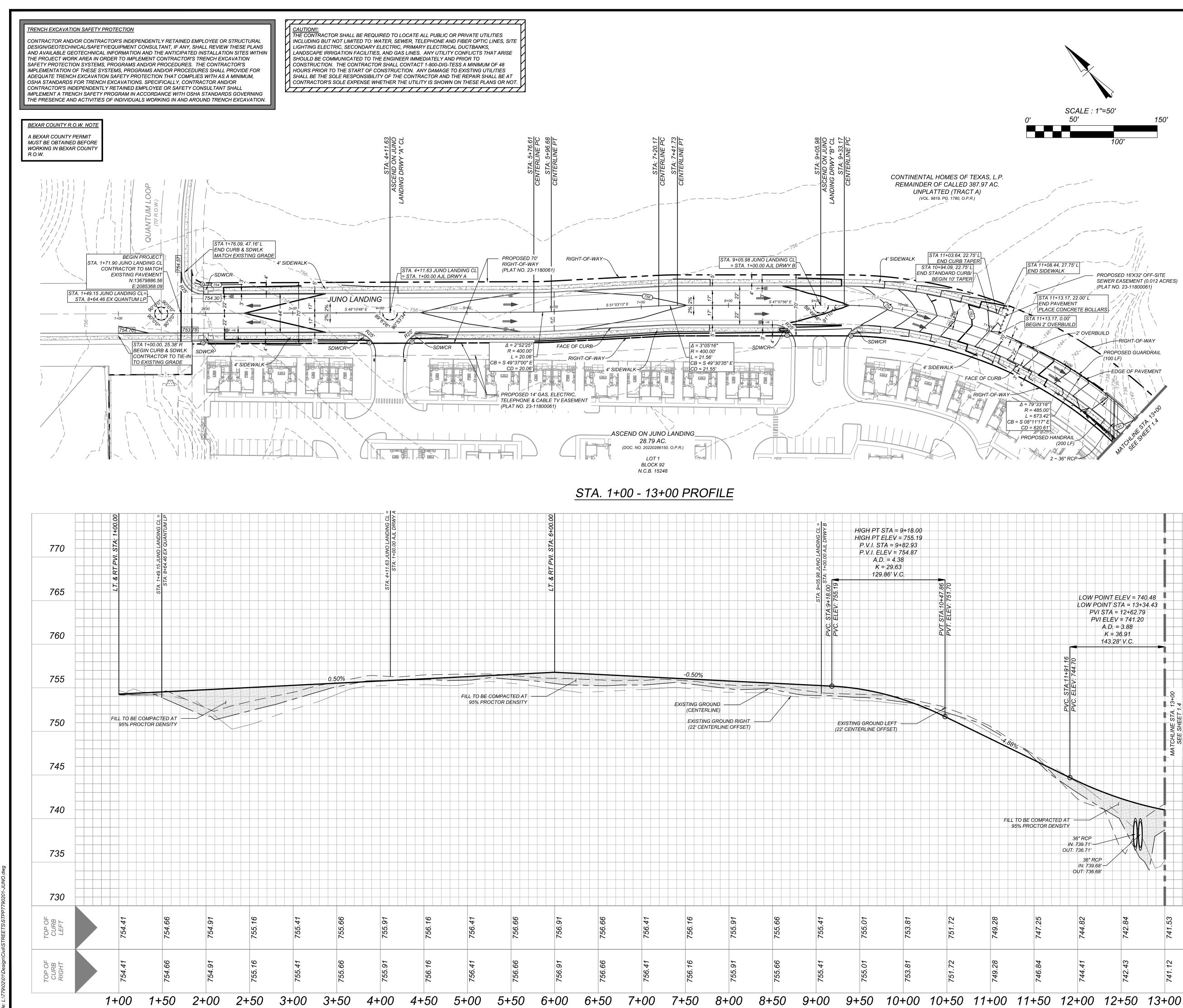
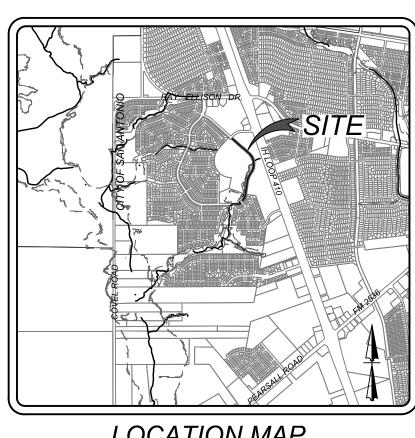


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COMPACTED AT		EXIS			EXISTING GROUND LEFT (22' CENTERLINE OFFSET)		
							FILL TO BE COU 95% PROCT
756.66 756.91	756.66	756.41 756.16	755.91	755.66 755.41	755.01	753.81 751.72	749.28
5+50 6+00 6	+50 7+0	756.41 756.16			10 [.] 9+50 10- HIS DOCUMENT HAS BEEN PRO		749.28 716.84

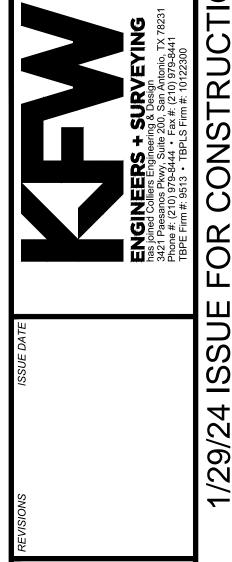


LOCATION MAP N.T.S.

LEGEND

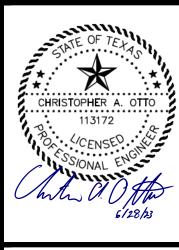
	=	FLOW ARROW
	=	WASHOUT CROWN
E.G.T.TV.E.	=	ELECTRIC, GAS, TELEPHONE & CABLE EASEMENT
V.N.A.E.	=	VEHICULAR NON-ACCESS EASEMENT
W.C.R.	=	WHEELCHAIR RAMPS SEE SHEET 1.6
())	=	WHEELCHAIR RAMP TYPE II SEE SHEET 1.6
S.D.W.C.R.	=	SINGLE DIRECTIONAL WHEEL CHAIR RAMP SEE SHEET 1.6
D.D.W.C.R.	=	DOUBLE DIRECTIONAL WHEEL CHAIR RAMP SEE SHEET 1.6
747777777777777777777777777777777777777	=	SIDEWALK TO BE CONSTRUCTED BY DEVELOPER.
	=	SIDEWALK TO BE BUILT AT THE TIME OF HOME CONSTRUCTION
732.87	=	TOP OF CURB ELEVATIONS
	=	PROPOSED DRIVEWAY LOCATIONS

HORZ SCALE: 1"=50' VERT SCALE: 1"=5'



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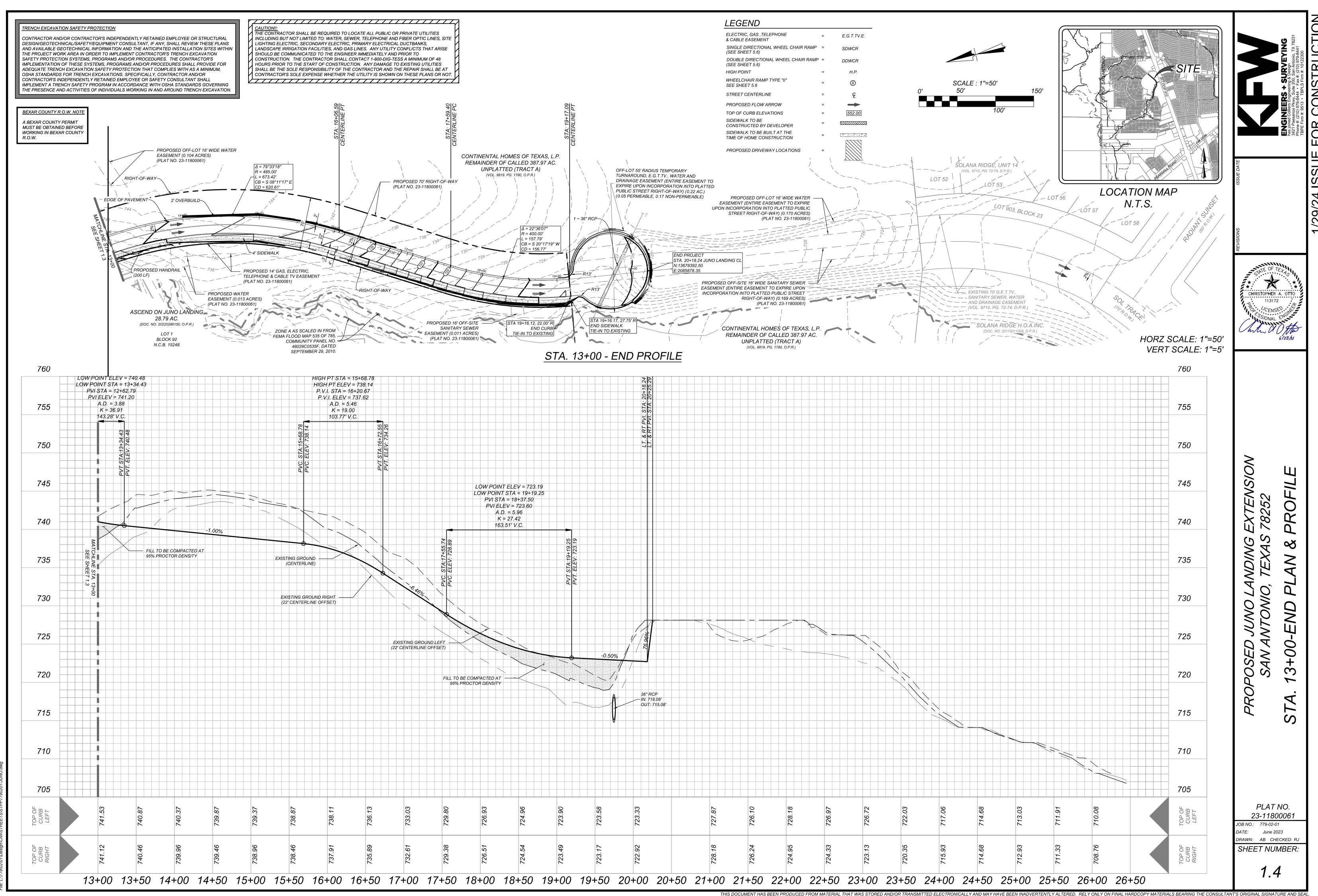
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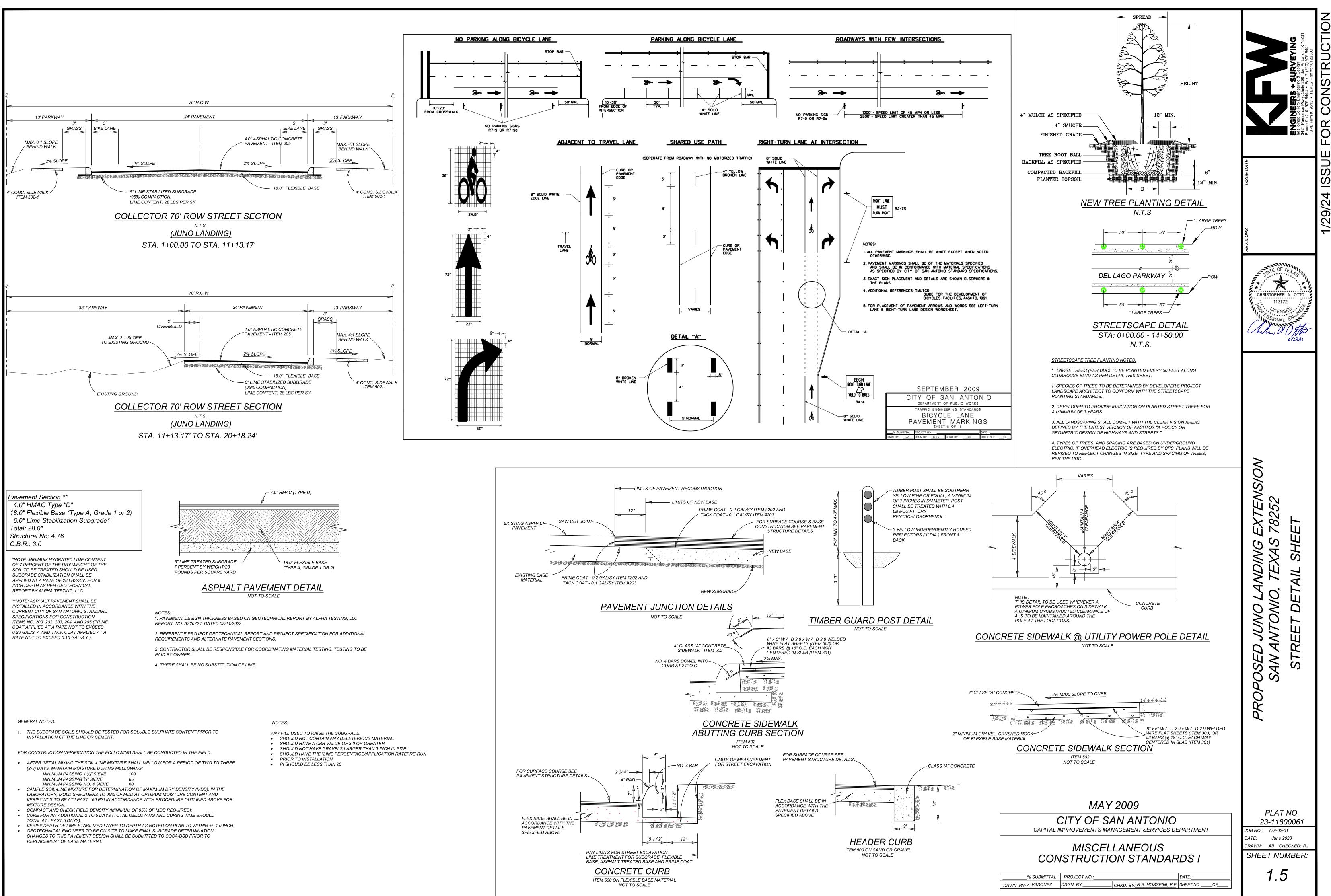
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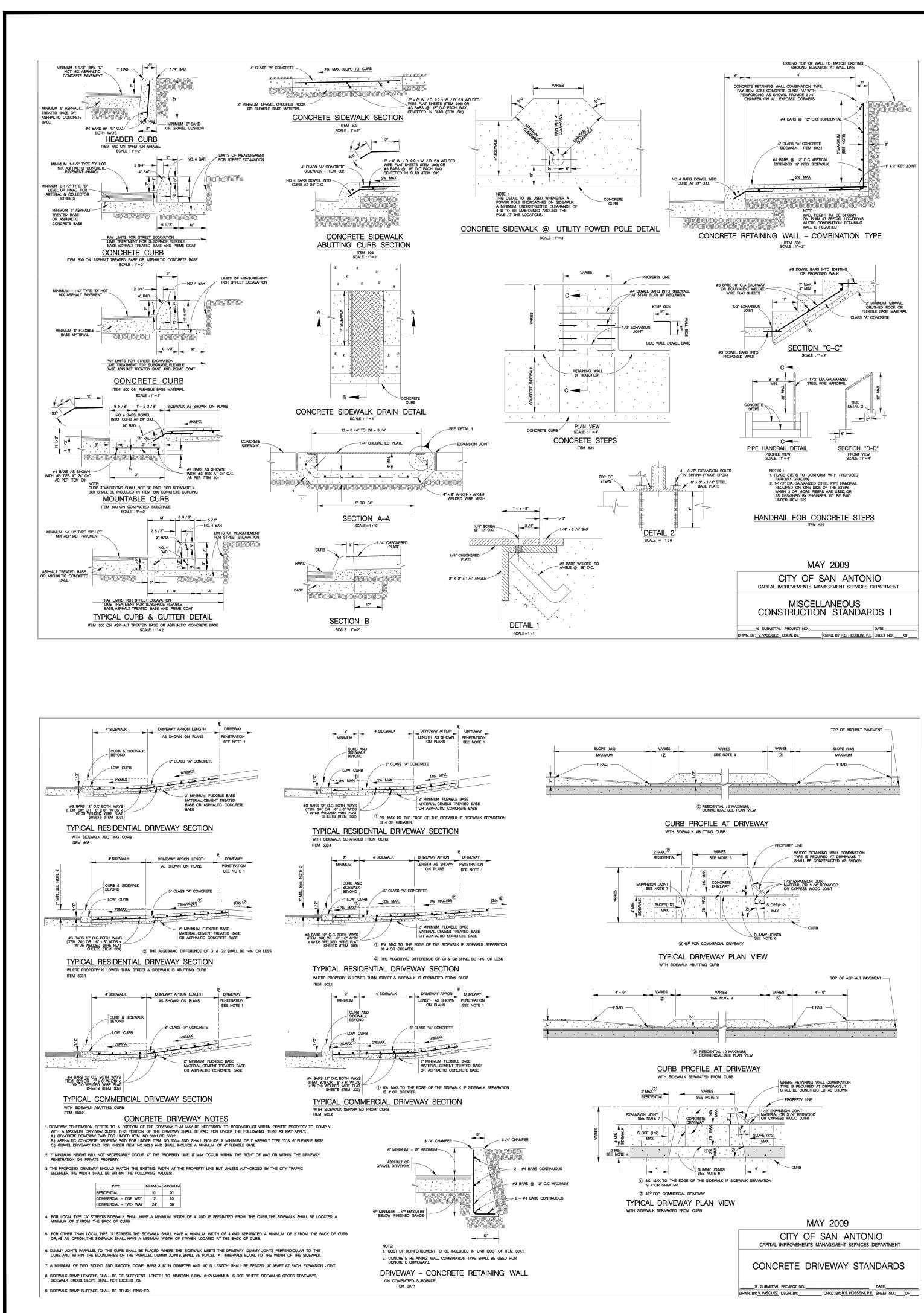
770 765 760 755 750 745 740 735 730 TOP OF CURB LEFT TOP OF CURB RIGHT TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL

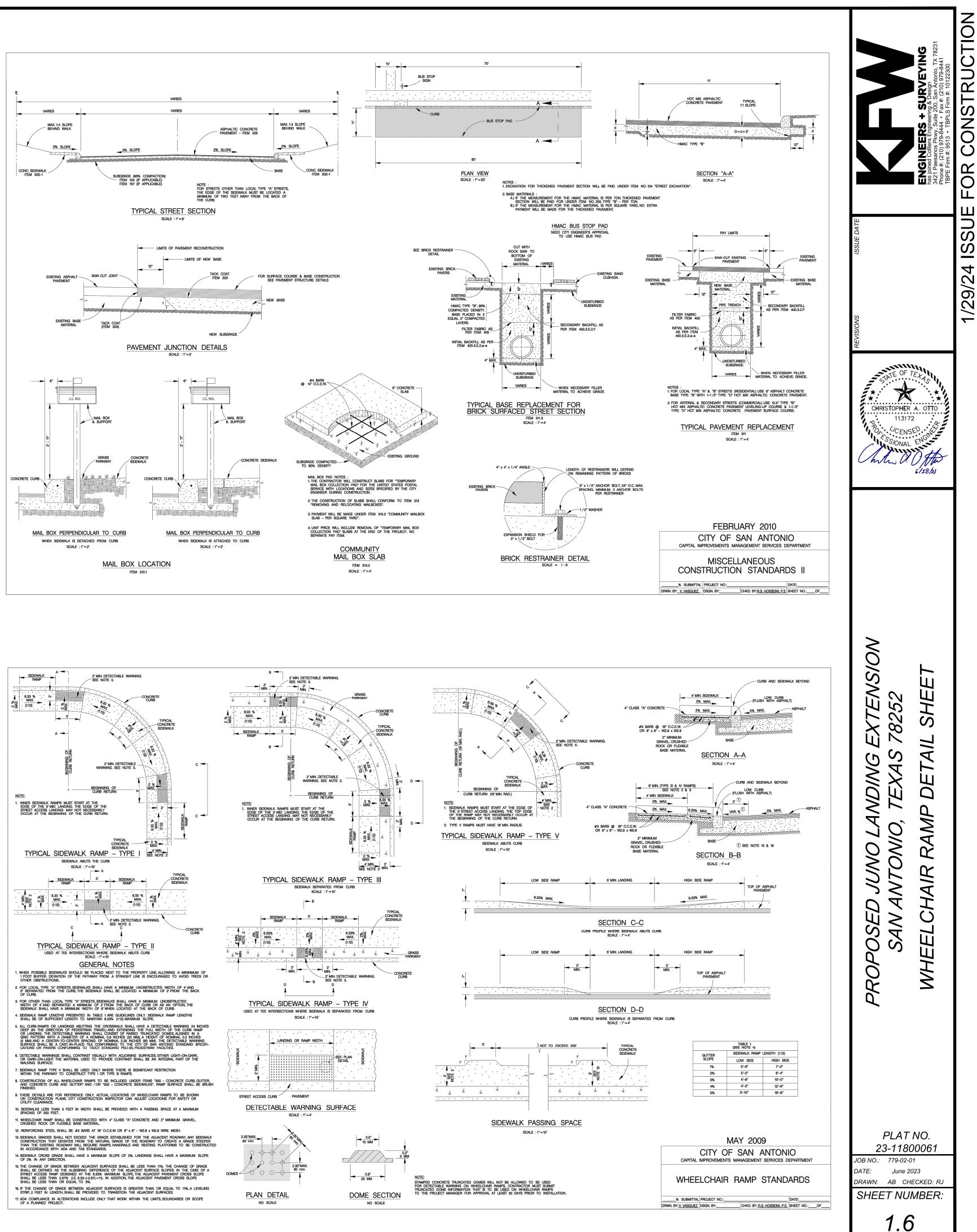


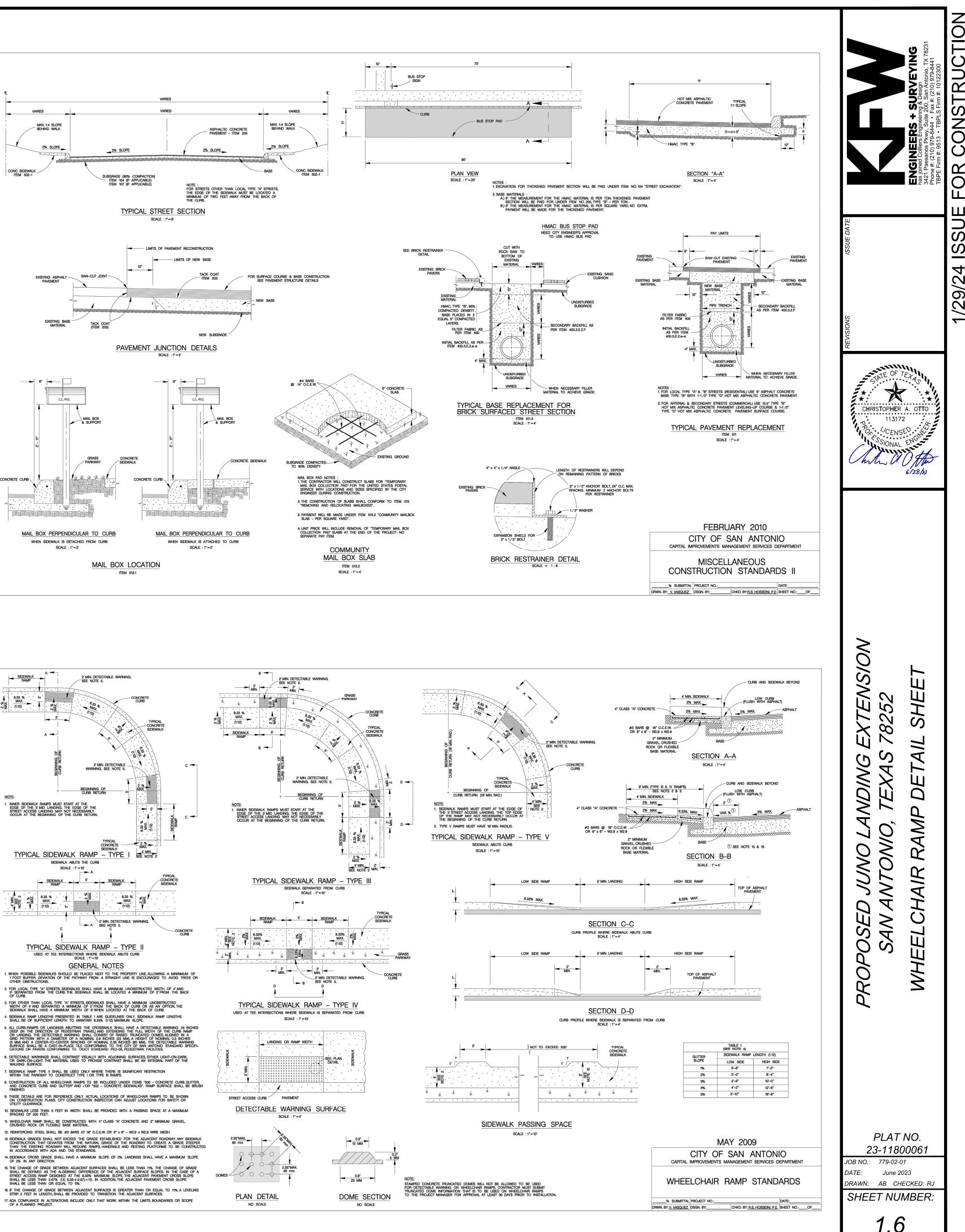
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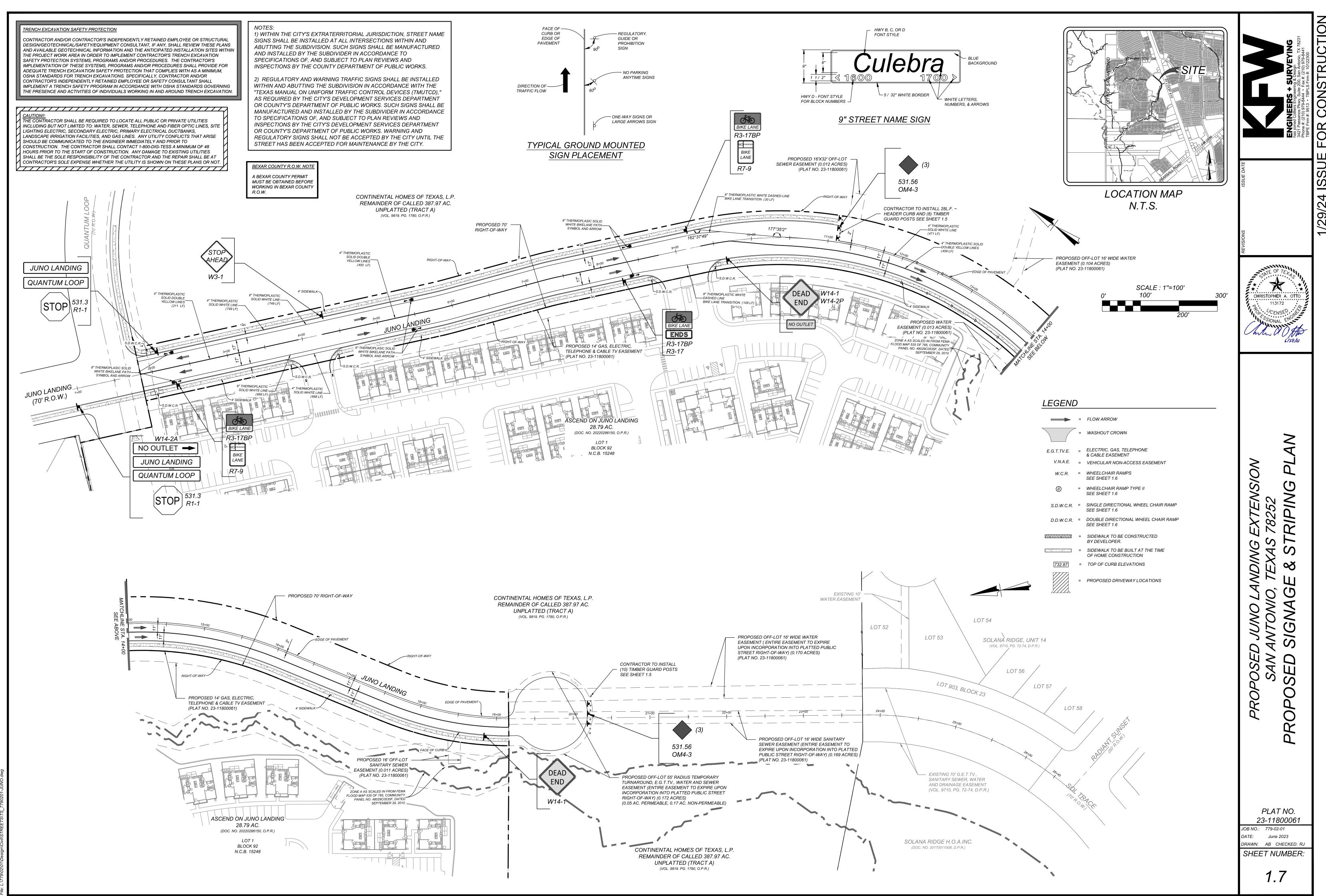


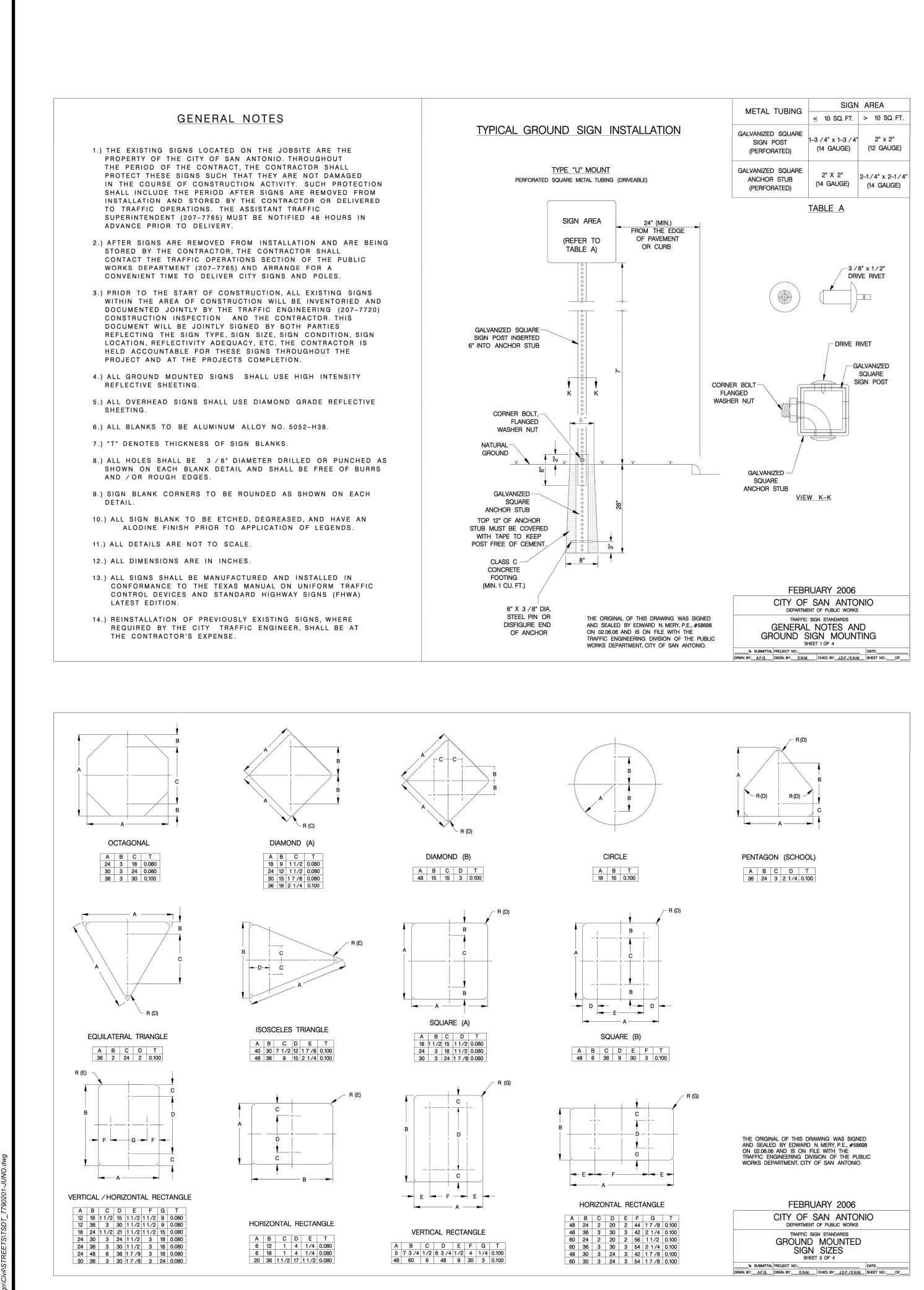
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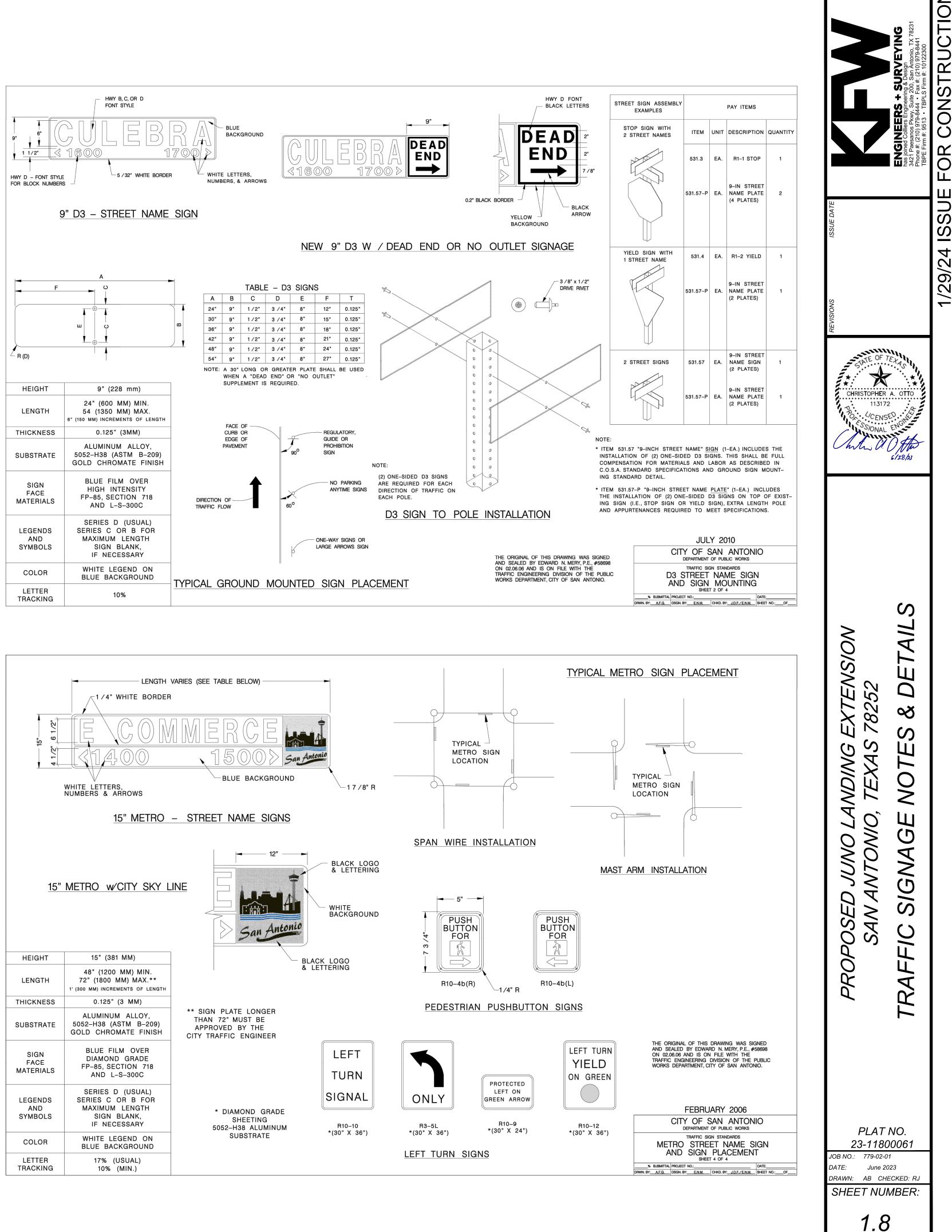


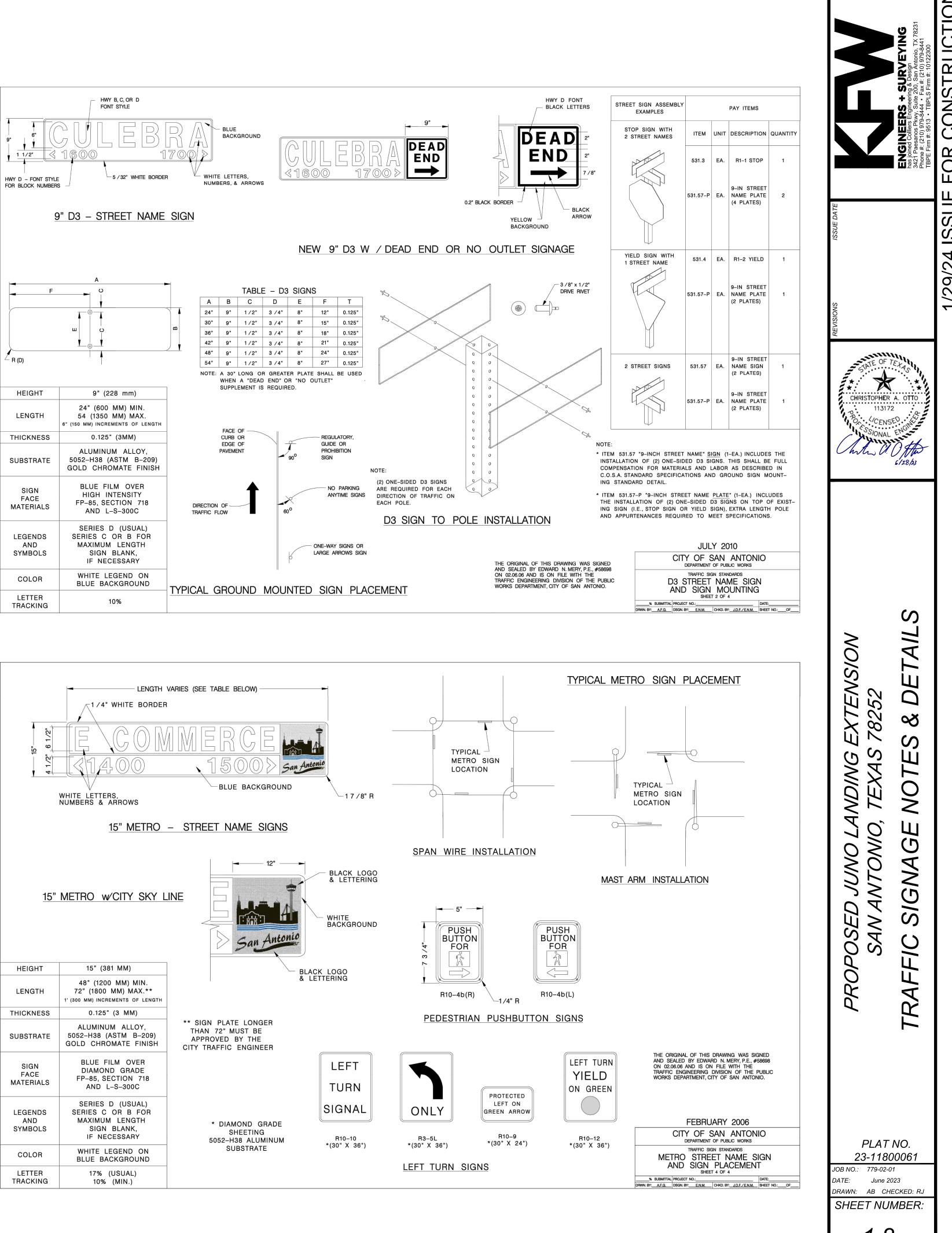




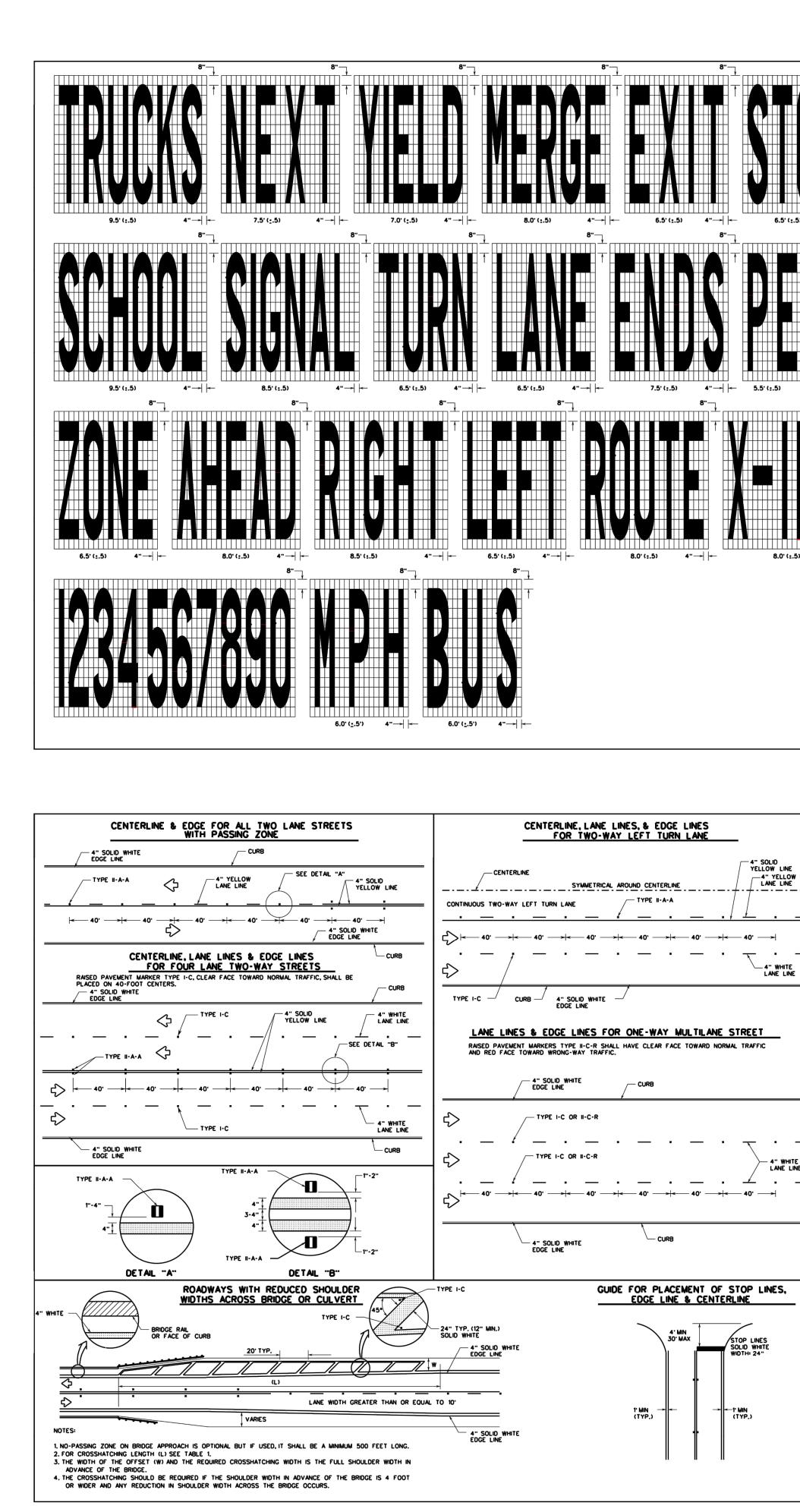






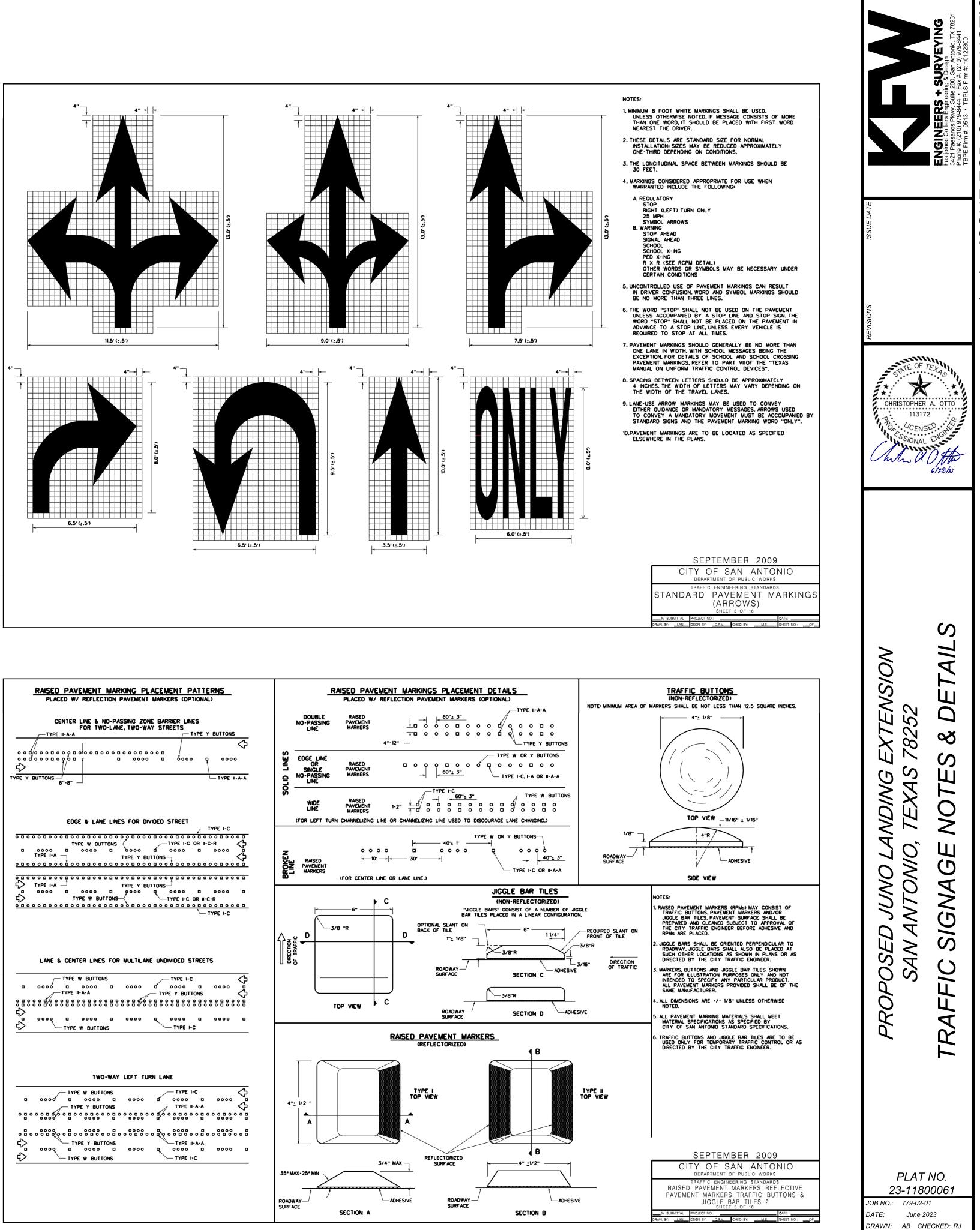


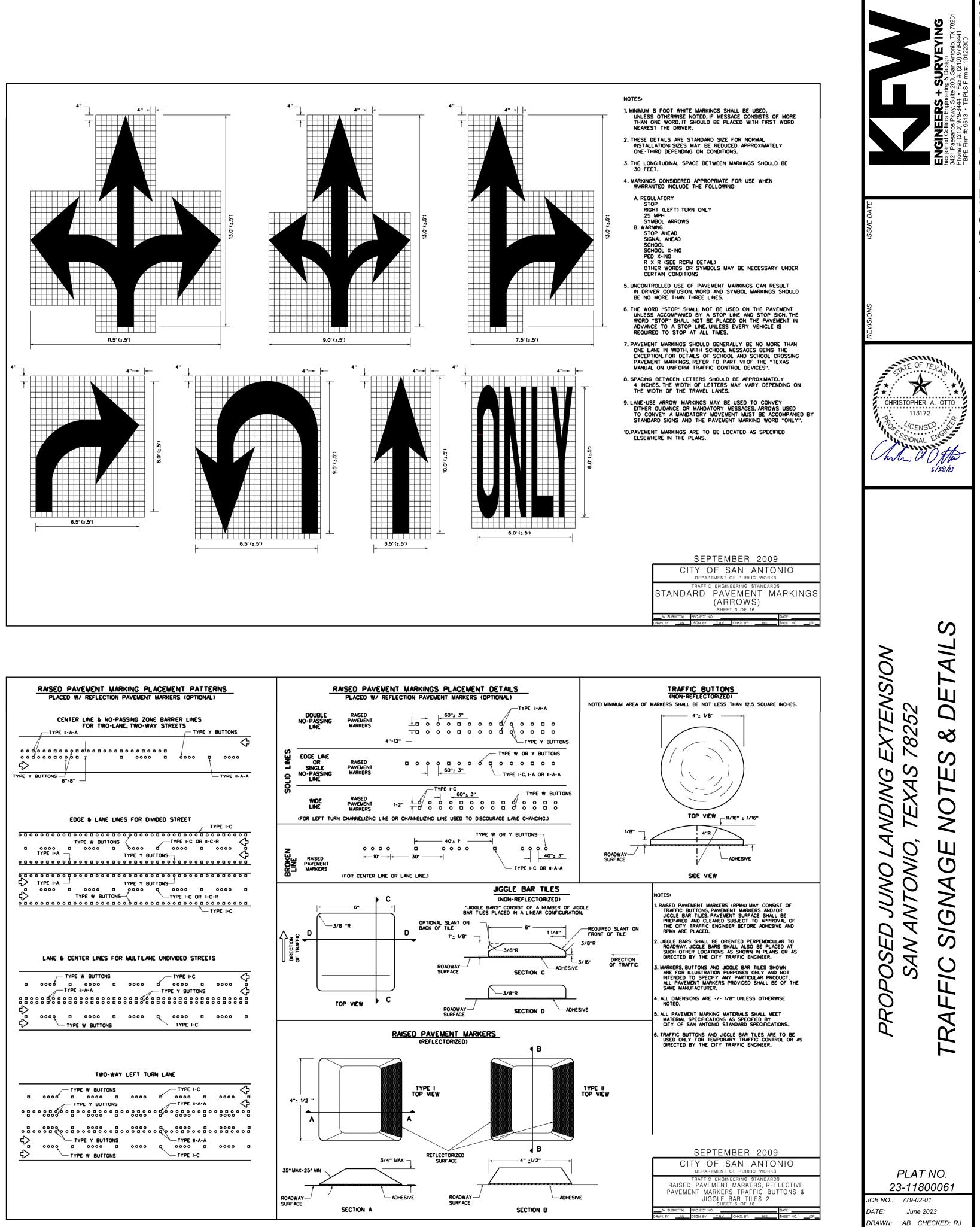
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	SEPTEMBER 2009
	CITY OF SAN ANTONIO
	DEPARTMENT OF PUBLIC WORKS TRAFFIC ENGINEERING STANDARDS STANDARD PAVEMENT MARKINGS (WORDS) SHEET 2 OF 16
	SHEET 2 OF 16 DATE: % SUBMITTAL PROJECT NO.: DATE: DRWN. BY: LAN DSGN. BY: C.R.V. CHKD. BY: M.E. SHEET NO.: OF

	TABLE 1 - TYPICAL LENGTH (L)
	POSTED SPEED FORMULA
	45> L. $\frac{\text{ws}^2}{60}$
	<u>≥</u> 45 L• WS
	* 85TH PERCENTILE SPEED MAY BE USED ON ROADS WHERE TRAFFIC SPEEDS NORMALLY EXCEED THE POSTED SPEED LIMIT. CROSSHATCHING LENGTH SHOULD BE ROUNDED UP TO NEAREST 5 FOOT INCREMENT.
	L-LENGTH OF CROSSHATCHING (FT) W-WIDTH OF OFFSET (FT) S-POSTED SPEED (MPH)
	EXAMPLES: AN 8 FOOT SHOULDER IN ADVANCE OF A BRIDGE REDUCES TO 4 FEET ON A 70 MPH ROADWAY. THE LENGTH OF THE CROSS- HATCHING SHOULD BE: L-8X70-560 FT
	A 4 FOOT SHOULDER IN ADVANCE OF A BRIDGE REDUCES TO 2 FEET ON A 40 MPH ROADWAY. THE LENGTH OF THE CROSS- HATCHING SHOULD BE: L. 4(40) ² / 60- 106.67 FT ROUNDED TO 110 FT
	YIELD LINES
	$\frac{3 \text{ to } 12^{n}}{18^{n} \overline{\downarrow} \forall \forall$
	CENERAL NOTES:
	GENERAL NOTES: 1. EDGELINE ADJACENT TO CURB AND GUTTER IS NOT REQUIRED IN ALL CASES, HOWEVER SHALL BE PLACED AS DIRECTED BY CITY TRAFFIC ENGINEER.
	2. THE TRAVELED WAY INCLUDES ONLY THAT PORTION OF THE ROADWAY USED FOR VEHICULAR TRAVEL AND NOT THE PARKING
	LANES, SIDEWALKS, BERMS AND SHOULDERS. THE TRAVELED WAYS SHALL BE MEASURED FROM THE INSIDE OF EDGELINE TO INSIDE OF EDGELINE OF A TWO LANE ROADWAY.
	3. ALL RAISED PAVEMENT MARKERS PLACED IN BROKEN LINES SHALL BE PLACED IN LINE WITH AND MIDWAY BETWEEN THE STRIPES.
	4. ON CONCRETE PAVEMENTS THE RAISED PAVEMENT MARKERS SHOULD BE PLACED TO ONE SIDE OF THE LONGITUDINAL JOINTS.
1	5. ALL PAVEMENT MARKING MATERIAL SHALL MEET THE REQUIRED MATERIAL SPECIFICATIONS AS SPECIFIED BY CITY OF SAN ANTONIO STANDARD SPECIFICATIONS.
	6.4" SOLID WHITE EDGE LINES ARE OPTIONAL AS DIRECTED BY THE CITY TRAFFIC ENGINEER.
	SEDTEMPER 2000
	SEPTEMBER 2009 CITY OF SAN ANTONIO
	DEPARTMENT OF PUBLIC WORKS
	TRAFFIC ENGINEERING STANDARDS
	STANDARD PAVEMENT MARKINGS WITH REFLECTIVE RAISED PAVEMENT MARKER
	STANDARD PAVEMENT MARKINGS WITH





1.9

SHEET NUMBER:

ONSTRUCTION Ŭ FOR ш 1/29/24 ISSU

STORM DRAIN GENERAL NOTES:

1. THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH FINAL PLAN OR RECORD MEASUREMENTS, LOCATIONS, TOPS AND LENGTH OF SERVICE CONNECTIONS AND UNDERGROUND PIPING UPON COMPLETION OF CONSTRUCTION.

2. CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO THE START OF CONSTRUCTION.

3. ALL GARBAGE OR SPOIL MATERIAL FROM THIS WORK SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AT HIS EXPENSE.

4. THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE, AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCT BANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHALL BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT THE CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

5. ALL ONSITE STORM DRAIN PIPES WILL BE PRIVATE AND NOT DEDICATED TO THE CITY OF SAN ANTONIO.

6. ALL STORM DRAIN PIPE SHALL BE HDPE N-12 PROLINK ULTRA HDPE PIPE (UNLESS NOTED OTHERWISE) WITH BELLED ENDS AND WITH RUBBER GASKETS. NO SUBSTITUTIONS SHALL BE ALLOWED UNLESS AUTHORIZED BY OWNER.

7. ALL LENGTHS OF PIPE ARE TO INSIDE FACE OF STRUCTURES.

8. CONTRACTOR SHALL ENSURE PROPER SIZE OF JUNCTION BOXES NEEDED WHERE INDICATED ON PLAN. CONTRACTOR SHALL CONNECT STORM DRAIN PIPE TO JUNCTION BOXES PER MANUFACTURERS SPECIFICATIONS. SIZE OF GRATE INLETS ARE REFERENCED FOR PROPER SIZE OF GRATES AND DO NOT REFLECT SIZE OF PROPOSED JUNCTION BOXES ASSOCIATED WITH GRATE COVERS.

NOTE: CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PIPE, MANHOLES, JUNCTION BOXES, ADA ACCESSIBLE TRENCH DRAINS, ETC. TO ENGINEER PRIOR TO ORDERING MATERIALS FOR CONSTRUCTION.

UPON COMPLETION OF THE PROPOSED SITE IMPROVEMENTS, AND PRIOR TO THE RELEASE OF THE CERTIFICATE OF ACCEPTANCE OR OCCUPANCY BY THE PERMIT CENTER, THE DESIGN ENGINEER SHALL CERTIFY IN WRITING THAT THE PROPOSED DETENTION FACILITY, FILTRATION FACILITIES AND/OR WATER QUALITY FACILITIES WERE CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS. ANY SUCH FACILITIES BUILT WITHIN THE CITY OF SAN MARCOS CITY LIMITS MUST MAINTAIN COMPLIANCE WITH THE CITY'S MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ORDINANCES. PRIOR TO INTERSTATE LOOP 410 RELEASE OF THE CERTIFICATE OF ACCEPTANCE OR OCCUPANCY, A CITY EASEMENT MUST BE SHOWN AROUND ALL FACILITIES INCLUDING A MAINTENANCE COVENANT FOR (VARIABLE WIDTH R.O.W.) EACH FACILITY WITHIN THE CITY LIMITS.

> CONTINENTAL HOME'S OF TEXAS, L.P. REMAINDER OF CALLED 387.97 AC. UNPLATTED (TRACT A) (VOL. 9819. PG. 1780, O.P.R.)

PROPOSED OFF-LOT SEWER EASEMENT (0.012 ACRES) (PLAT. NO. 23-11800061)

REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

> PROPOSED 70' RIGHT-OF-WAY (PLAT. NO. 23-11800061)

PROPOSED 36" RCP (2) |

PROPOSED GUARDRAIL

(TXDOT GF(31))(100 LF)

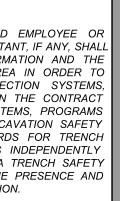
(SHEET 4.1) 🗕

ROPOSED HANDRAIL

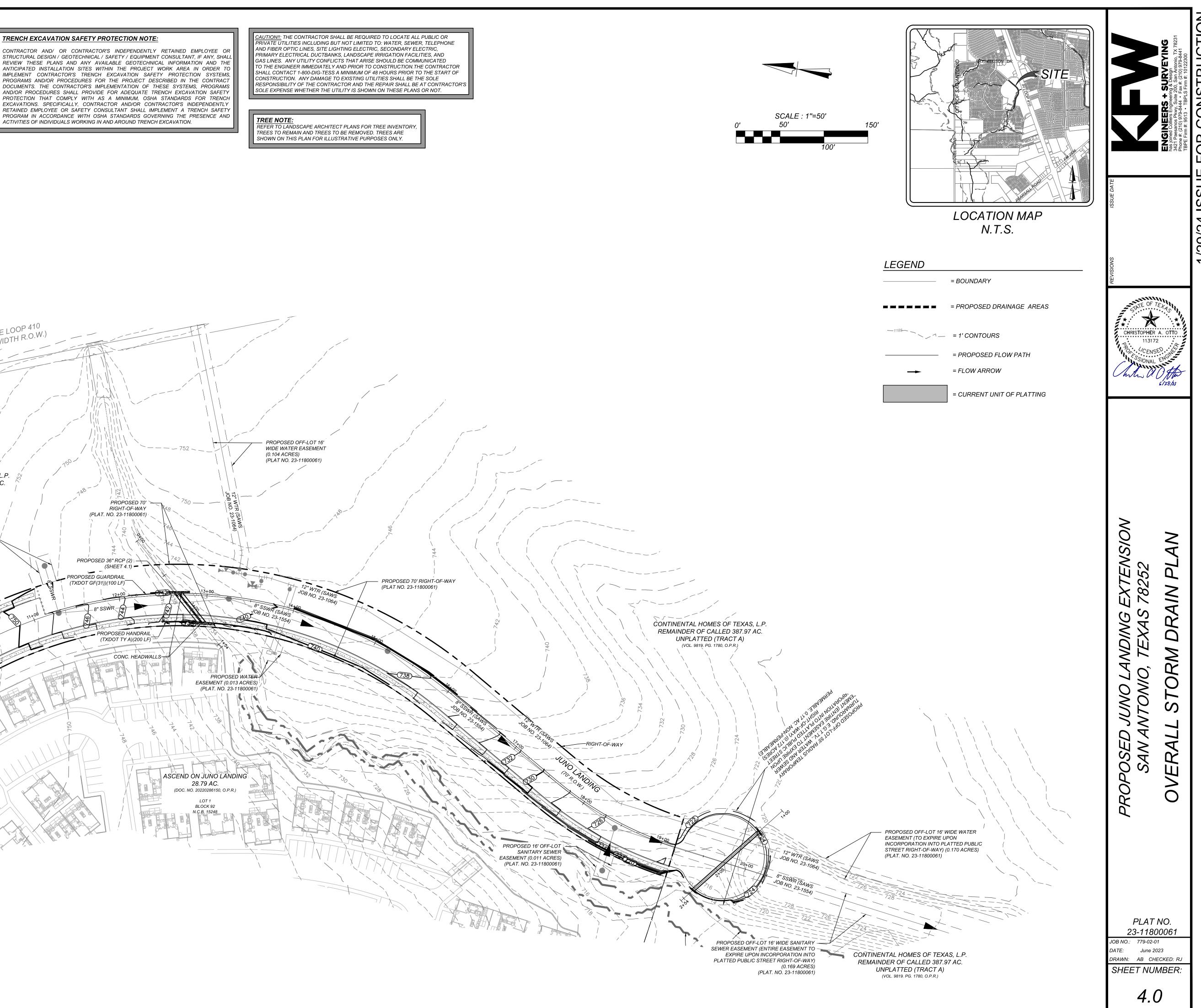
(TXDOT TY A)(200 LF)

CONC. HEADWALLS

TRENCH EXCAVATION SAFETY PROTECTION NOTE:



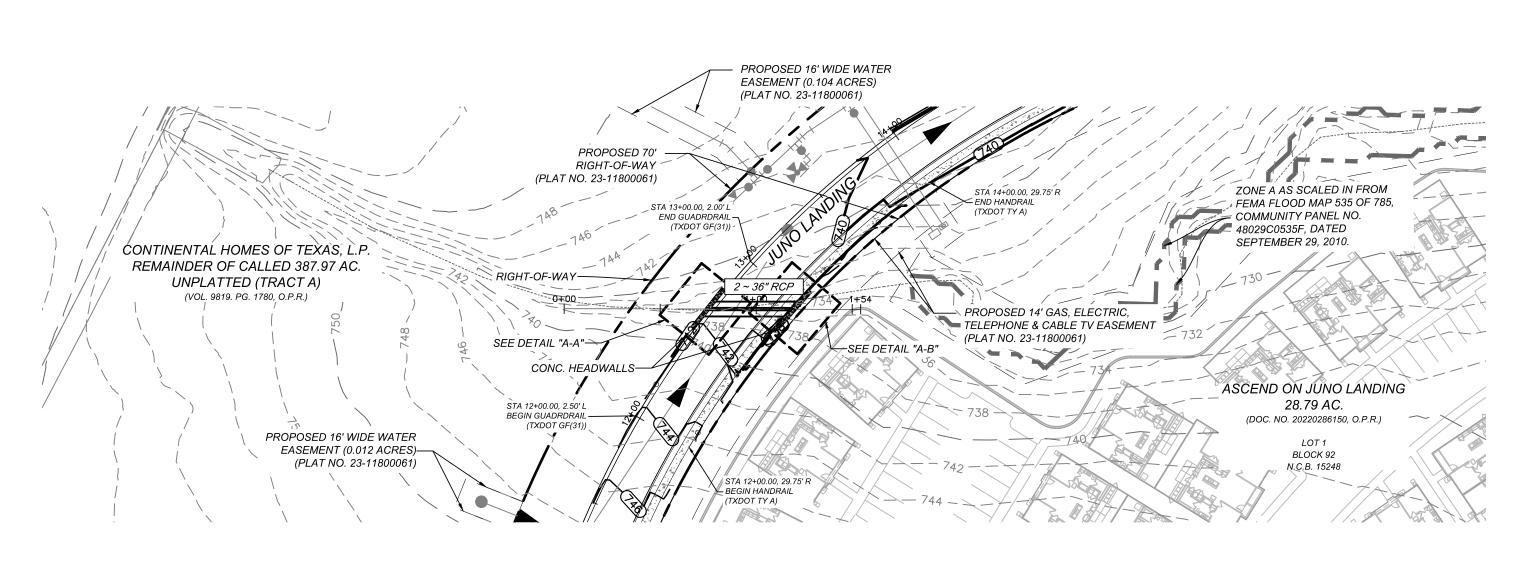
CAUTION!!: THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR

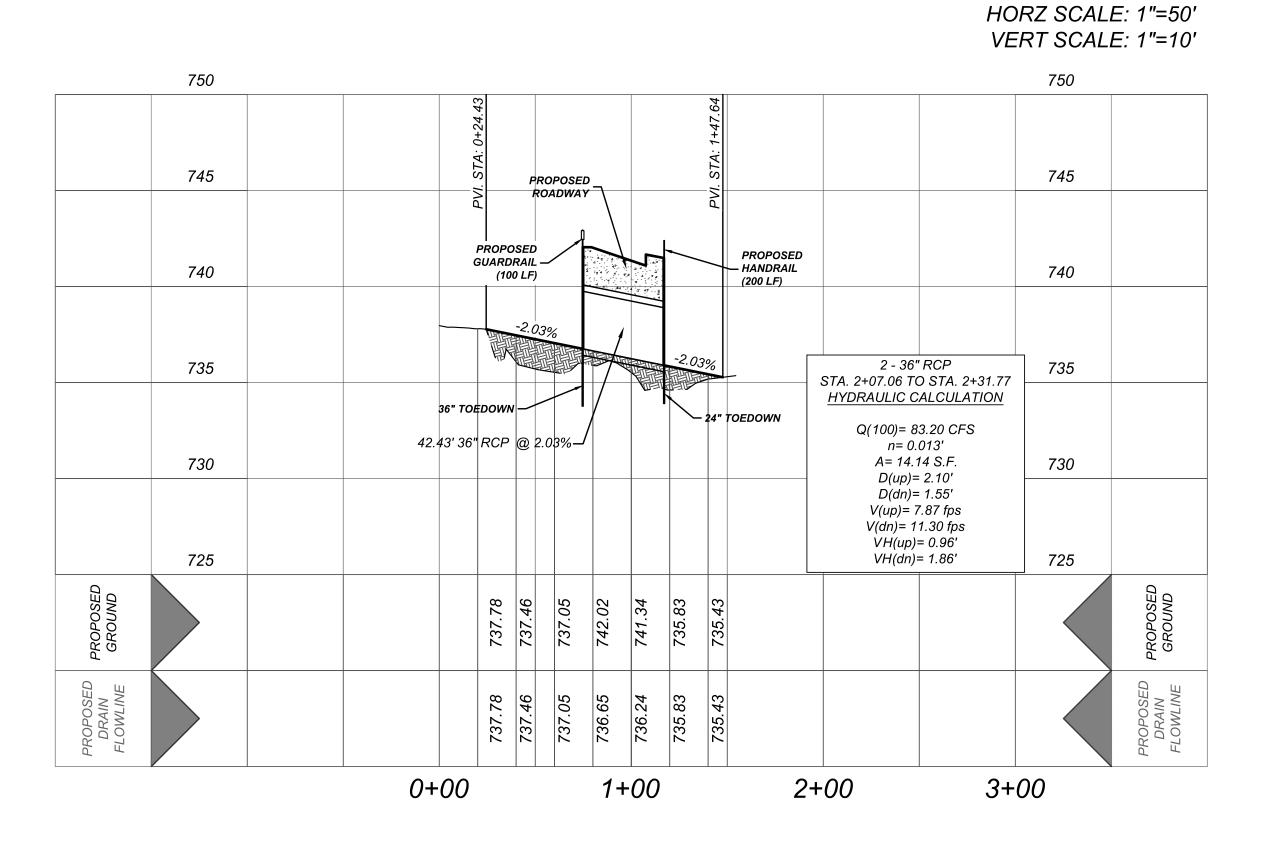


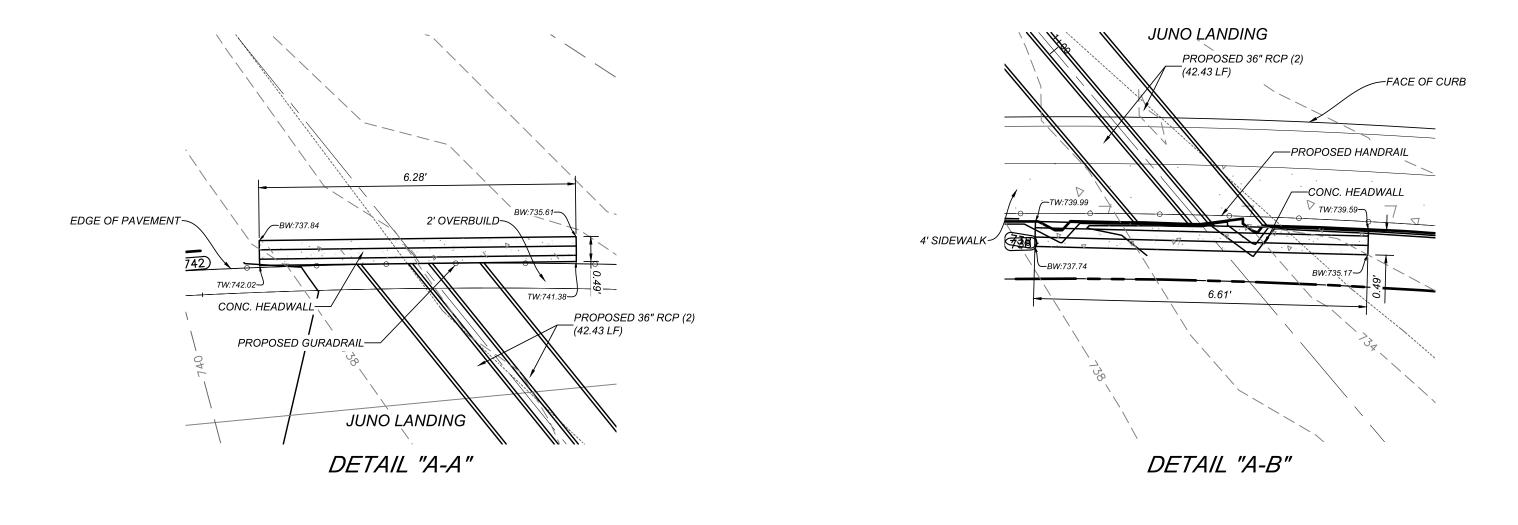
THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL

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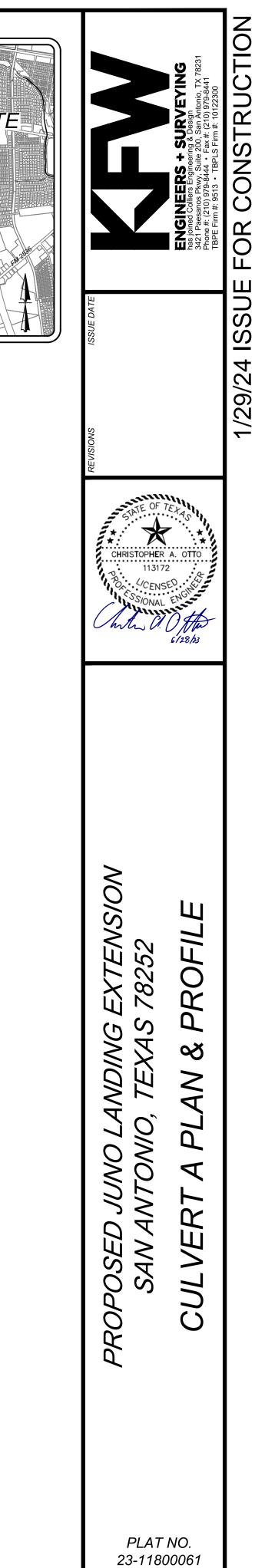
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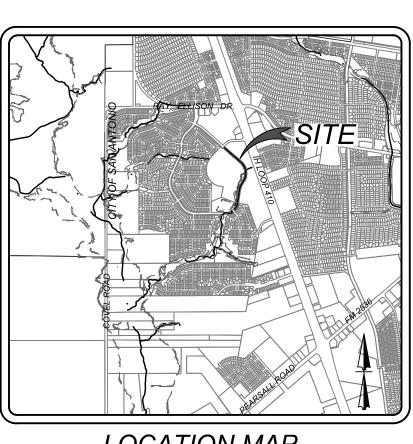
CULVERT A STA: 0+24.43 - STA: 1+47.64



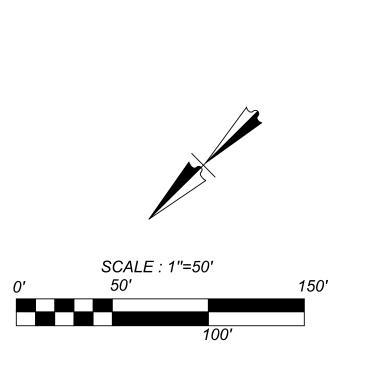
JOB NO.: 779-02-01 DATE: June 2023 DRAWN: AB CHECKED: RJ

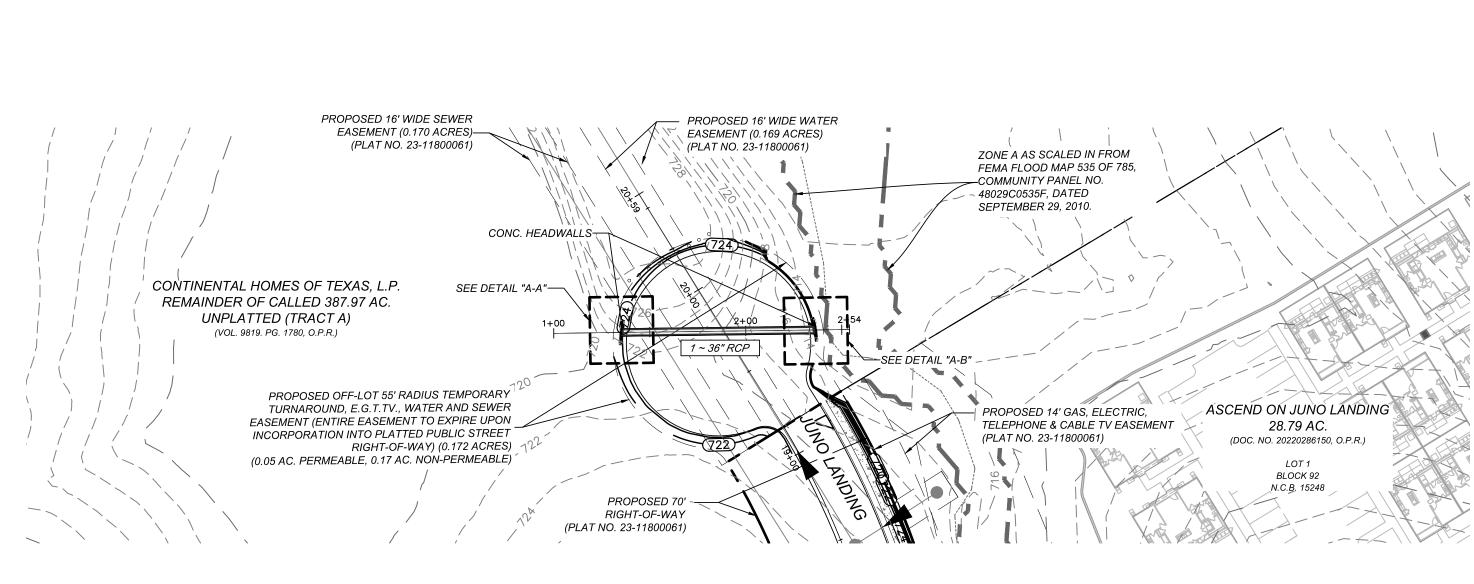
SHEET NUMBER:

4.1

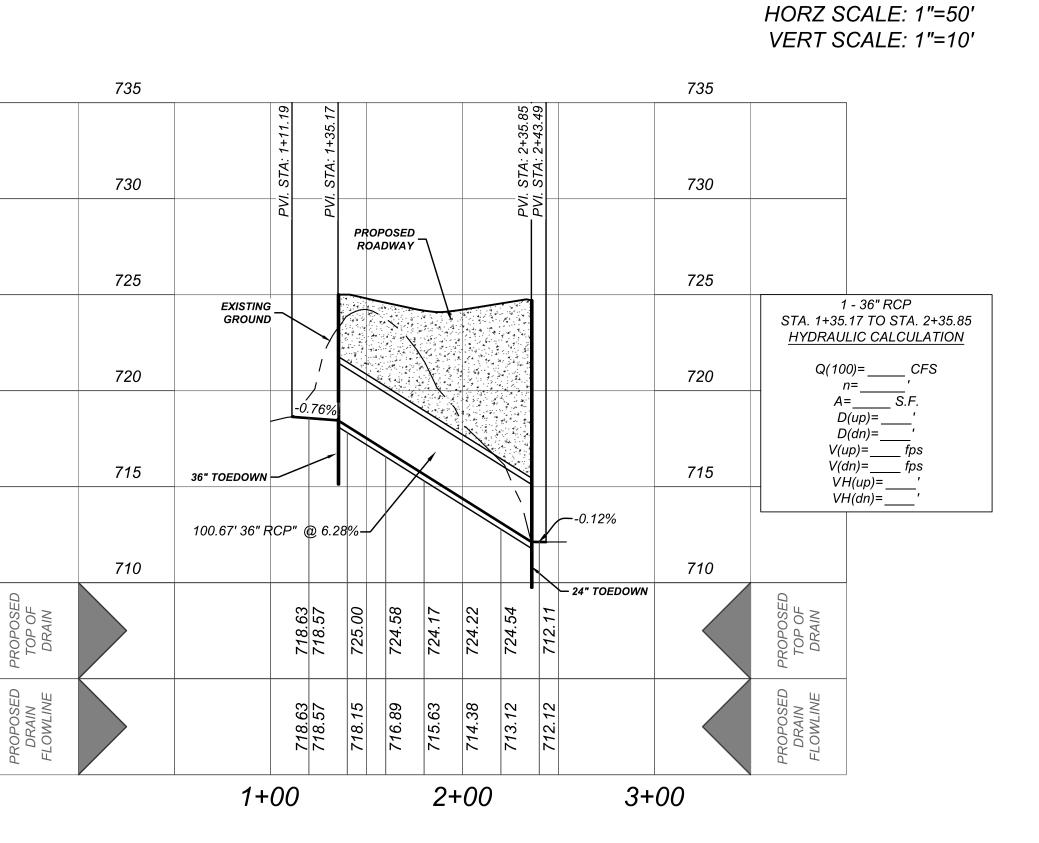


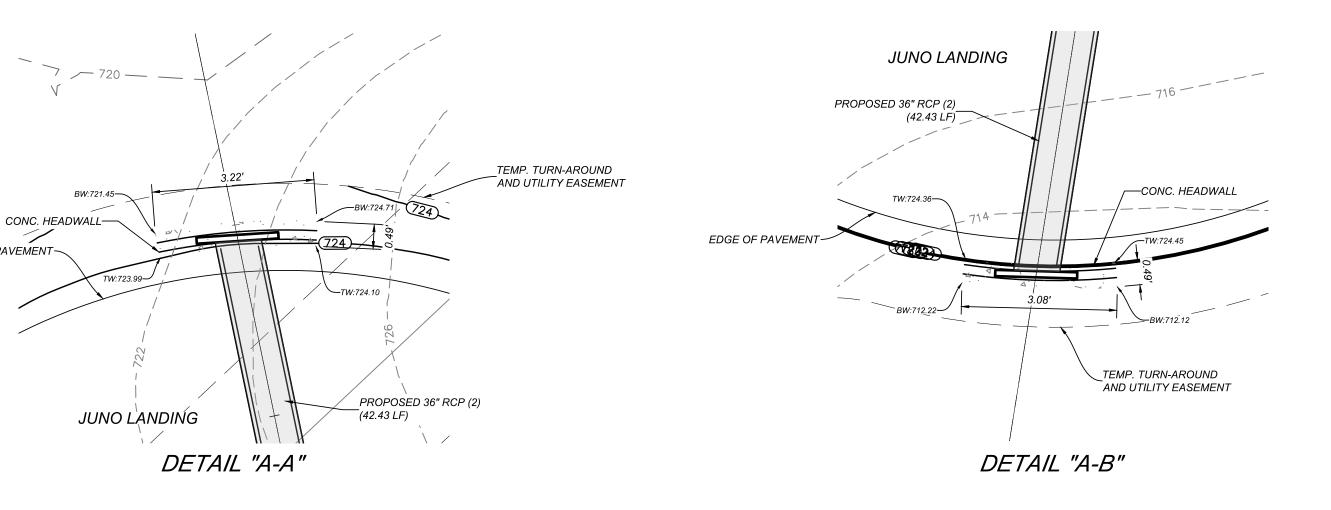
LOCATION MAP N.T.S.





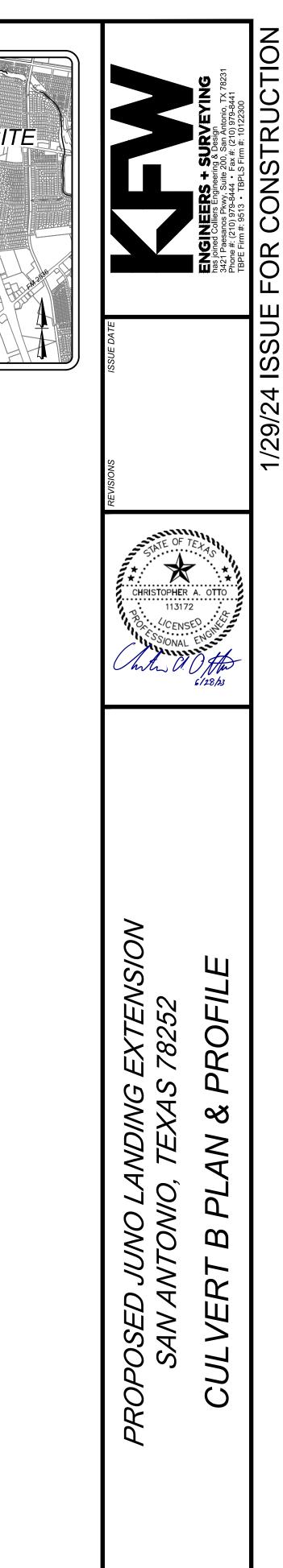
CULVERT B STA: 1+11.19 - STA: 2+43.49





/

EDGE OF PAVEMENT~



PLAT NO. 23-11800061

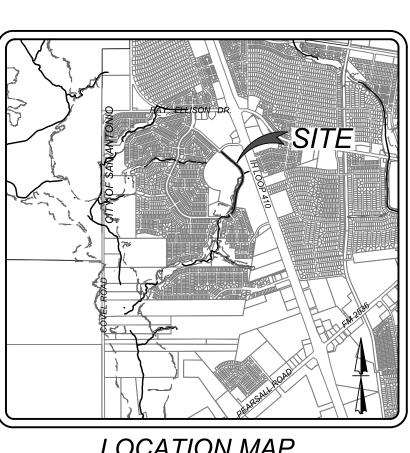
JOB NO.: 779-02-01

DATE: June 2023

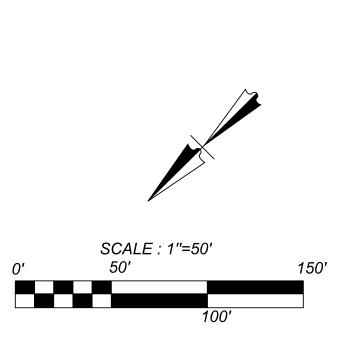
DRAWN: AB CHECKED: RJ

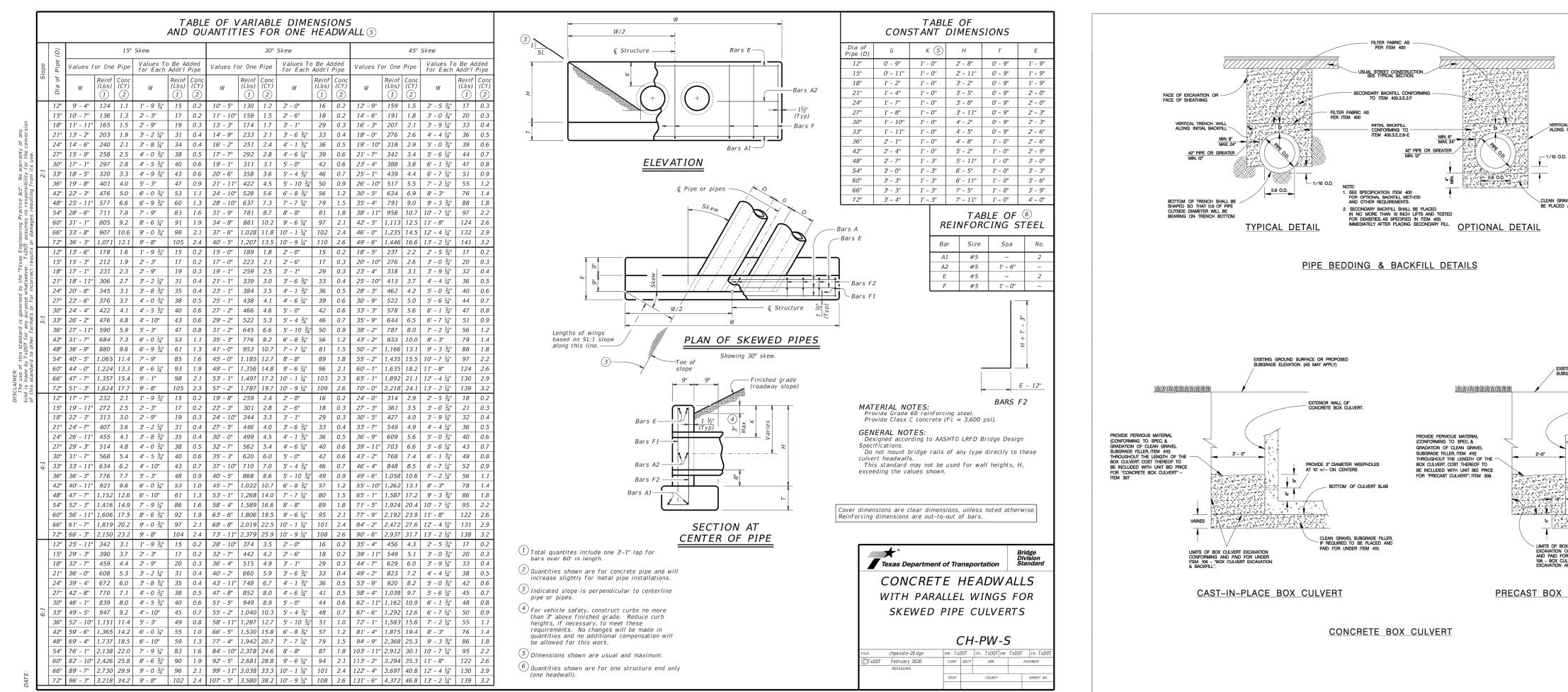
SHEET NUMBER:

4.2











Q25 = 98.17 cfs $B_W (W_B) = USE 23.458'. (WIDTH OF BASIN AT EXIT)$ $Y_1 = 1.27'$ (DEPTH BEFORE JUMP) $V_1 = 9.25$ FPS (VELOCITY BEFORE JUMP)

FROUDE NUMBER at $Y_1 = F_1 = V_1 / ((gY_1)^{0.5}) = 1.45$ ASSUME $L_2 / H_2 = 3.5$

HEIGHT OF BLOCKS: H₁ = HEIGHT OF FIRST BLOCK $H_2 = HEIGHT OF SECOND BLOCK$

 $H_2 / Y_1 = (0.595F_1^{1.092}) = (0.595F_1^{1.092}) * Y_1 = 1.13'$ (USE 1.25') $H_1 = 0.5 * H_2 = 0.625''$

DISTANCE TO FLOOR BLOCKS: $L_1 = DISTANCE TO FIRST BLOCK$ L_2 = DISTANCE TO SECOND BLOCK L_3^- = DISTANCE TO END SILL FROM SECOND BLOCK

 $L_2 = 3.5^*H_2 = 4.375'$ $L_1 = 0.5 * L_2 = 2.1875'$ $L_3 = 3.75 * (H_2 / L_2)^{(0.68)} * L_2 = 7.0'$ LENGTH OF BASIN:

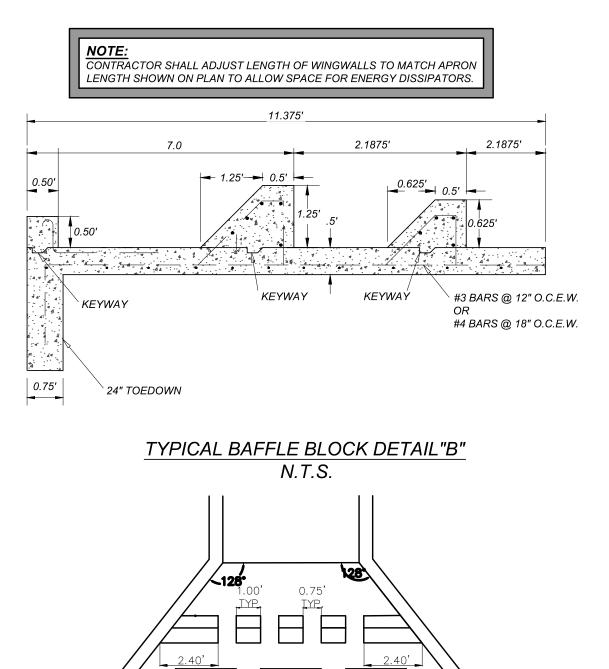
 $L_2 + L_3 = 4.375 + 7.0 = 11.375'$ MAX WATER DEPTH IN BASIN:

 $Y_2 = 1.3 * (L_2 / H_2)^{0.36} * H_2 = 2.55'$ HEIGHT OF END SILL

 $H_3 = 0.1 * Y_2 = 0.255'$ DEPTH OF WATER AT BASIN EXIT:

 $Y_3 = Y_c$ $Q^2 / g = (A_c)^3 / T_c = [Y_c (W_b + Y_c)]^3 / (W_b + 2Y_c)$ $98.17^2 / 32.2 = 299.3 = [Y_c (23.5 + Y_c)]^3 / (23.5 + 2Y_c)$ $Y_c = 0.805$ $A_c = 19.56$ $T_{c} = 25.0$

EXIT VELOCITY $V_2 = V_c = Q / A_c = 98.17 / 19.56 = 5.02 FT/S$





2.50'

3.00

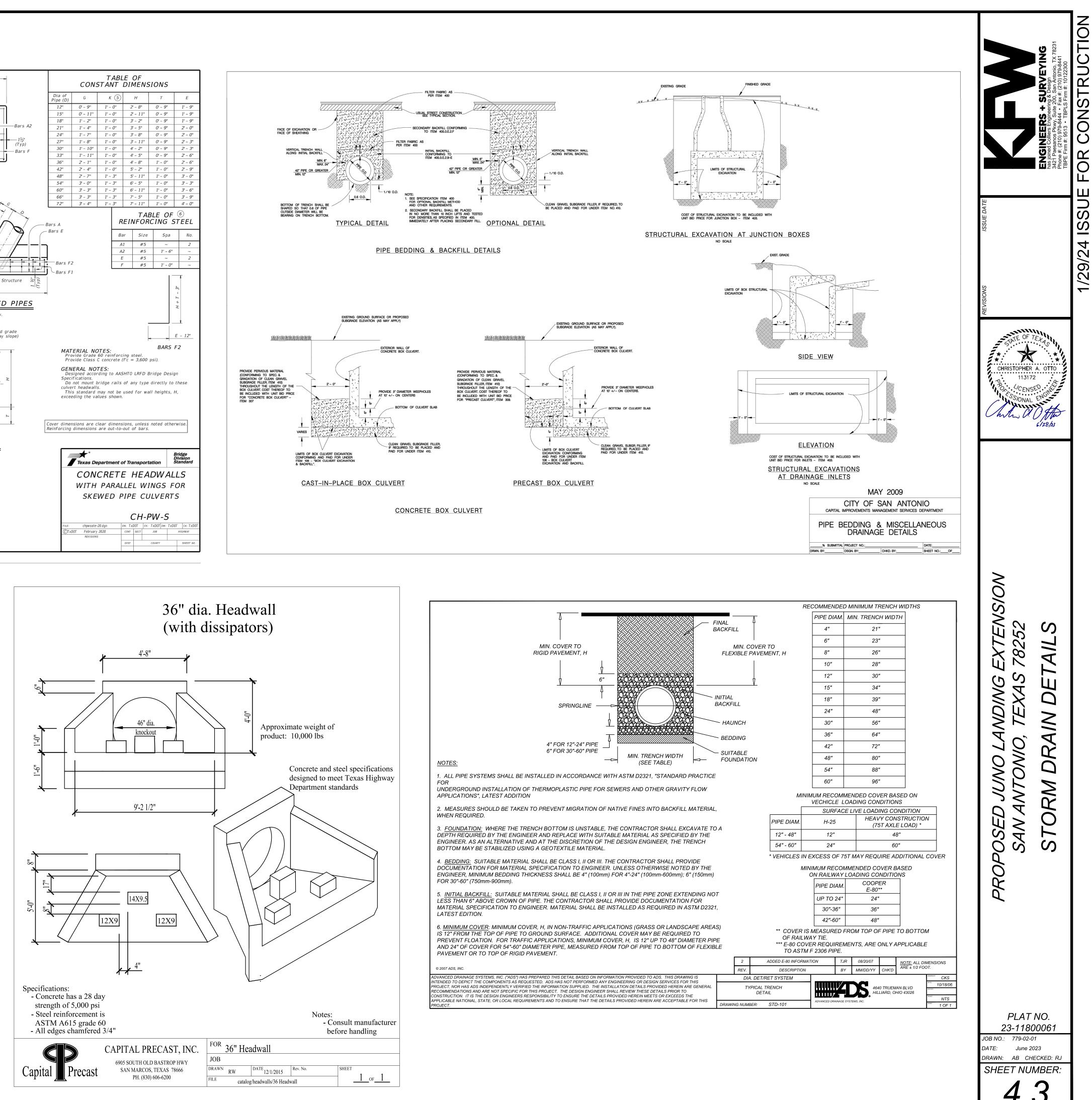
BAFFLE BLOCK SPACING DETAIL CHANNEL B

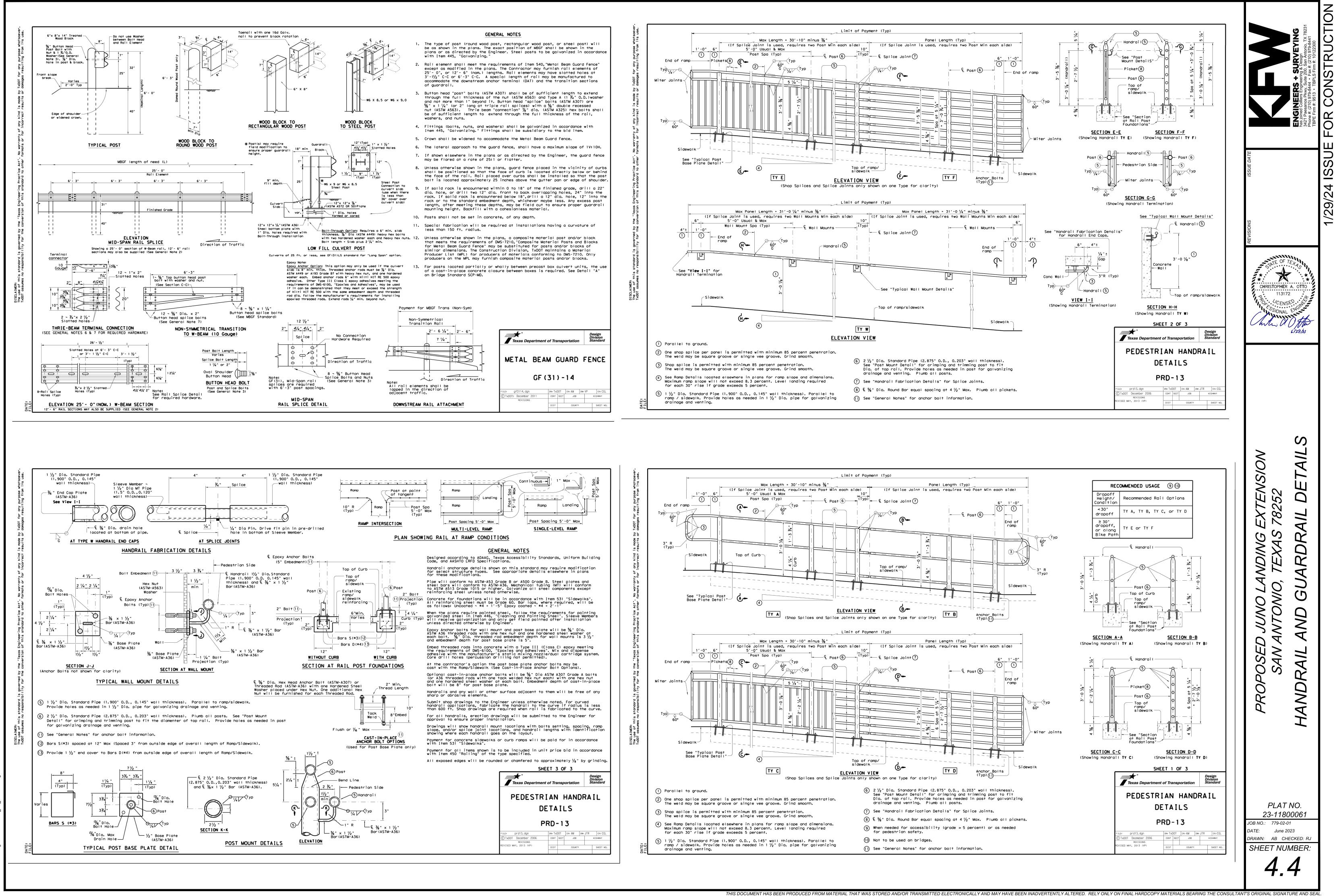
N.T.S.

2.73'

2.86'

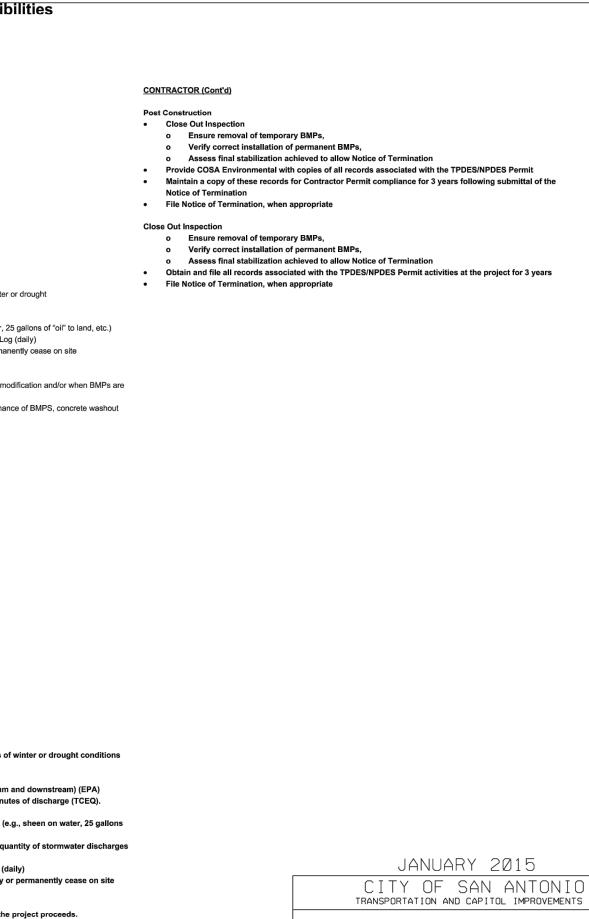
2.73'





Jun 27, 2023, 4:36pm User ID: abratton ..\779\02\01\Design\Civil\Drains\DR_DT_779020

		eneral Permit - Checklist of Record K of San Antonio (COSA) - January-2015	
	ENGINEER	COSA ENVIRONMENTAL GROUP	
	 Pre Construction Design of structural controls Development of SWP3 Development of SWP3 site diagram(s) including grading plans/contours anticipated at initial, interim and final grade Development of project phasing schedule Water Pollution Abatement Plan (WPAP) (Edwards Aquifer) AST Plan (Edwards Aquifer) 	Pre Construction Review SWP3 Plans File Notice of Intent Environmental Preconstruction Meeting Conduct SWP3 Training (EPA only) Post Construction Site Notice	
	Development of project phasing schedule	 Conduct SWP3 Training (EPA only) Post Construction Site Notice Construction Ensure inspection are performed and document every 7 days Ensure maintenance of up to date copies of SWP3 and associated n Corrective Action Documentation- within 7 days of time of diac. Maintenance- document if unable to fix/install item within 7 day Ensure records of rainfall events are being maintained Rainfall during normal business hours that measures 0.25 ind Rainfall -record of total rainfall measured and the approximate conditions resulting in monthly frequency of inspections (TCE4) Follow Up on incidents and spill reports to ensure proper corrective 4: Conduct TCE0, notification as required for spills above a report of Conduct TCE0 notification as required for spills above a report of Conduct TCE0 notification as required for spills above a report of Conduct TCE0 notification as required for spills above a report of Conduct TCE0 and dates when stabilization measures are initiated Ensure construction Project Manager, Contractor, and not effective, are missing, or need maintenance/repair Ensure contractor is noting SWP3 accordingly (Dates of installment or pits date of install and removal, etc.) Post Construction Close Out Inspection Ensure removal of temporary BMPs, Verity correct installation of permanent BMPs, Assess final stabilization achieved to allow Notice of Termination Obtain and file all records associated with the TPDES/NPDES Perm File Notice of Intent Environmental Preconstruction Meeting Conduct SWP3 Training (EPA only) Post Construction Site Notice<	covery (EPA) ys. (EPA) hes or greater (EPA) beginning and ending dates of winter or drought 2) actions rtable quantity (e.g., sheen on water, 25 gallons of "oil" to land, e nd end) and Construction Activities Log (daily) ruction activities temporarily or permanently cease on site Engineer when the SWP3 requires modification and/or when BM of BMPs, removal of BMPs, maintenance of BMPS, concrete wat ion it activities at the project for 3 years ections and corrective actions f discovery (EPA) 7 days. (EPA) (P3 5 inches or greater (EPA) mate beginning and ending dates of winter or drought condi , Turbidity (Twice per day upstream and downstream) (EPA) t completed within the first 30 minutes of discharge (TCEQ). ctive actions spills above a reportable quantity (e.g., sheen on water, 25 g n obtained regarding quality and quantity of stormwater disc and Construction Activities Log (daily) construction activities temporarily or permanently cease on
		 and/or when BMPs are not effective, are missing, or need maint Ensure SWP3 is being noted accordingly (Dates of installment of washout pits date of install and removal, etc.) 	enance/repair
1. PROJECT NAME AN	SITE DESCRIPTION	 and/or when BMPs are not effective, are missing, or need maint Ensure SWP3 is being noted accordingly (Dates of installment o washout pits date of install and removal, etc.) 	enance/repair
1. PROJECT NAME AN 2. CONTACT AND PHC		and/or when BMPs are not effective, are missing, or need maint • Ensure SWP3 is being noted accordingly (Dates of installment or washout pits date of install and removal, etc.) <u>EROSION</u> 1. SOIL STABILIZATION PRACTICES:	enance/repair of BMPs, removal of BMPs, maintenance of BMPS, concrete AND SEDIMENTATION CONTROLS
	DNE NO.:	and/or when BMPs are not effective, are missing, or need maint Ensure SWP3 is being noted accordingly (Dates of installment or washout pits date of install and removal, etc.) EROSION I. SOIL STABILIZATION PRACTICES: HYDROMULCHING PERMANENT PLANTING, SODDING OR SEEDING NULCHING SOIL RETENTION BLANKET BUFFER ZONES	enance/repair of BMPs, removal of BMPs, maintenance of BMPS, concrete AND SEDIMENTATION CONTROLS PRESERVATION OF NATURAL RESOURCES FLEXIBLE CHANNEL LINER
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STORM WATER POLLUTION GENERAL NOTES TALPROJECT NO. . . .

** DSGN. BY: ***** CHKD. BY: ****

ION CONTROLS 7. THE FOLLOWING ITEMS SHOULD BE UPDATED AS NECESSARY AND BE INCLUDED AS PART OF THE WEEKLY INSPECTION REPORTS SCHEDULE OF CONSTRUCTION ACTIVITIES IS MAINTAINED BY _ AND CAN BE ACCESSED BY CONTACTING ___ (NAME) AT _(PHONE) INSTALLATION OF STORMWATER CONTROL MEASURES (INSTALL DATE, OPERATIONAL DATE, DEVIATION FROM MANUFACTURE SPEC): COMMENCEMENT AND DURATION OF EARTH WORK, FINAL GRADING, CREATION OF SOIL AND VEGETATION STOCKPILES REQUIRING STABILIZATION: CESSATION OF CONSTRUCTION ACTIVITIES WITHIN A PORTION OF THE SITE (TEMPORARY AND PERMANENT: _ FINAL AND TEMPORARY STABILIZATION AREAS OF EXPOSED SOILS: LL BE STABILIZED WITHIN REMOVAL OF TEMPORARY STORMWATER CHANNELS, CONTROL MEASURES, CONSTRUCTION EQUIPMENT AND VEHICLES, AND CESSATION OF ANY POLLUTANT-GENERATING ACTIVITIES: NOTE: SW3P NARRATIVE TO ACCOMPANY SITE MAP AND PROJECT DESIGN SHEETS THAT INCLUDE IDENTIFYING EARTH DISTURBING ACTIVITIES, EXISTING AND PROPOSED SLOPES OF GRADING ACTIVITIES, CONSTRUCTION AND SOIL STOCKPILE LOCATIONS, SURFACE WATER CROSSINGS, DESIGNATED EXIST POINTS, STRUCTURES AND IMPERVIOUS SURFACES TO BE CONSTRUCTED, CONSTRUCTION SUPPORT ACTIVITY AREAS, LOCATION OF ALL SURFACE WATERS IN VICINITY, BOUNDARIES OF NATURAL BUFFERS, AREAS OF FEDERALLY LISTED CRITICAL HABITAT, TOPOGRAPHY, VEGETATIVE COVER AND DRAINAGE PATTERNS OF FLOWS ONTO, OVER AND FROM THE PROJECT SITE, STORMWATER AND ALLOWABLE NON STORMWATER DISCHARGE LOCATIONS, ALL STORM INLETS ON AND IN VICINITY OF THE SITE, LOCATION OF ALL POTENTIAL POLLUTANT GENERATING ACTIVITIES LOCATION OF STORMWATER CONTROL MEASURES, AND LOCATIONS WHERE POLYMERS, FLOCCULANTS, AND OTHER CHEMICALS WILL BE USED AND STORED. OCTOBER 2014 CITY OF SAN ANTONIO CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT STORM WATER POLLUTION PREVENTION PLAN (SWP3) NARRATIVE SHEET 1 OF 2

BEST MANAGEMENT PRACTICES

1. NATURAL BUFFER SECTION: 50-FOOT (OR MORE) BUFFER ZONE LESS THAN 50-FOOT BUFFER ZONE

2. GENERAL REQUIREMENTS:

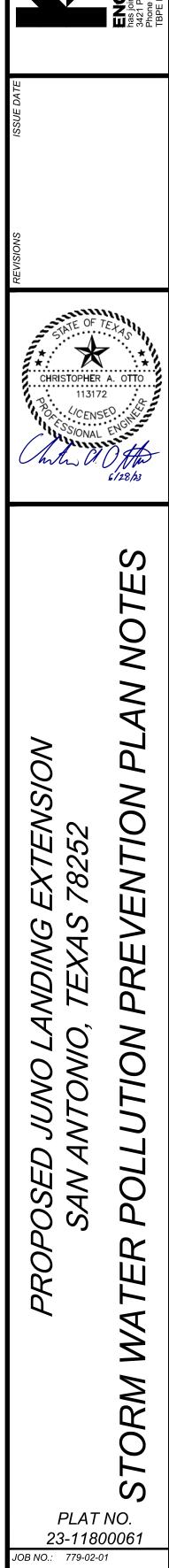
- LINEAR CONSTRUCTION PROJECT; DOES NOT REQUIRE 50-FOOT BUFFER ZONE
- 1. INSTALL PERIMETER CONTROLS TO RETAIN SEDIMENT ON-SITE TO THE EXTENT PRACTICABLE WITH CONSIDERATION FOR LOCAL TOPOGRAPHY, SOIL TYPE, AND RAINFALL. 2. MINIMIZE SEDIMENT TRACK OUT ONTO OFF-SITE STREETS, OR OTHER PAVED AREAS AND SIDEWALKS. RESTRICT VEHICLE USE TO PROPERTY THROUGH DESIGNATED ACCESS POINTS. USE APPROPRIATE STABILIZATION MEASURES. REMOVE SEDIMENT FROM TIRES, WHEN PRACTICABLE.
- 3. CONTROL DISCHARGES FROM STOCKPILED SEDIMENT BY: 1) LOCATING PILES OUTSIDE OF NATURAL BUFFERS AND PHYSICALLY SEPARATING PILES FROM OTHER STORMWATER CONTROLS 2) USE A TEMPORARY PERIMETER SEDIMENT BARRIER 3) PROVIDE COVER OR TEMPORARY STABILIZATION, WHERE PRACTICABLE
- 4) USE DRY CLEAN UP METHODS TO REMOVE ACCUMULATED SEDIMENT FROM PAVED AREAS 5) PROTECT FROM WIND WHERE FEASIBLE 4. MINIMIZE DUST THROUGH THE APPROPRIATE APPLICATION OF WATER.
- 5. MINIMIZE SLOPE STEEPNESS OF EXPOSED SOILS THROUGH PHASED DISTURBANCE AND IMPLEMENTATION OF BMP'S. 6. MINIMIZE SOIL COMPACTION IN AREAS WHERE RE-VEGETATION IS PLANNED BY RESTRICTING VEHICLE USE AND CONDITION SOIL PRIOR TO RE-VEGETATION. 7. PROTECT STORM DRAIN INLETS PRIOR TO LAND DISTURBANCE.
- 3. SEDIMENTATION BASINS:
- SEDIMENTATION BASINS (CHECK ALL THAT APPLY) DRAINAGE AREA > 10 ACRES (SEDIMENTATION BASIN DESIGN ON SHEET _____) DRAINAGE AREA > 10 ACRES (SEDIMENTATION BASIN INFEASIBLE-ALTERNATE EQUIVALENT CONTROL DESIGN ON SHEET _____) DRAINAGE AREA < 10 ACRES (SEDIMENT TRAPS AND BASINS) DRAINAGE AREA < 10 ACRES (PERIMETER CONTROLS)
- 4. DEWATERING PRACTICES:
- 1. DO NOT DISCHARGE VISIBLE FLOATING SOLIDS OR FOAM; USE AN OIL-WATER SEPARATOR OR SUITABLE FILTRATION DEVICE THAT IS DESIGNED TO REMOVE OIL, GREASE, OR OTHER PRODUCTS IF DEWATERING WATER IS FOUND TO CONTAIN THESE MATERIALS. 2. UTILIZE VEGETATED UPLAND AREAS OF THE SITE TO INFILTRATE DEWATERING WATER BEFORE DISCHARGE, WHERE FEASIBLE. 3. DISCHARGE DEWATERING WATER ONTO A VELOCITY DISSIPATION DEVICE. 4. MANAGE BLACKWASH WATER AS A WASTE OR RETURN IT TO THE BEGINNING OF THE TREATMENT PROCESS. 5. REPLACE AND CLEAN FILTER MEDIA USED IN DEWATERING DEVICE ACCORDING TO MANUFACTURE'S SPECIFICATIONS.
- 6. DO NOT USE TREATMENT CHEMICALS WITHOUT PRIOR WRITTEN CONSENT FROM COSA, A WRITTEN MANAGEMENT PLAN IS REQUIRED FOR USE OF TREATMENT CHEMICALS. 5. NON STORM WATER DISCHARGES:
- THE FOLLOWING NON-STORMWATER DISCHARGES ARE AUTHORIZED FOR DISCHARGE BY THE GENERAL PERMIT. PROJECT SITE MAPS MUST REFLECT THE LOCATIONS OF ANY NON-STORMWATER DISCHARGES. NON-STORMWATER DISCHARGES MUST BE MANAGED BY STORMWATER BMP'S TO PROTECT RECEIVING WATER QUALITY.
- 1. DISCHARGES FROM FIRE FIGHTING ACTIVITIES AND/OR FIRE HYDRANT FLUSHING. 2. VEHICLE, EXTERNAL BUILDING, AND PAVEMENT WASH WATER WHERE DETERGENTS AND SOAPS ARE NOT USED AND WHERE SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED (UNLESS ALL SPILLED MATERIAL HAS BEEN REMOVED). 3. PLAIN WATER USED TO CONTROL DUST.
- 4. PLAIN WATER ORIGINATING FROM POTABLE WATER SOURCES. 5. UNCONTAMINATED GROUNDWATER, SPRING WATER, OR ACCUMULATED STORMWATER. 6. FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS SUCH AS SOLVENTS. 7. UNCONTAMINATED AIR CONDITIONING CONDENSATE.
- 8. LAWN WATERING AND SIMILAR DRAINAGE. 9. OTHER
- 6. PROHIBITED STORM WATER DISCHARGES: 1. WASTEWATER FROM WASH OUT OF CONCRETE TRUCKS.
- 2. WASTEWATER FROM WASH OUT AND CLEAN OUT OF STUCCO, PAINT, FORM RELEASE OILS, CUTTING COMPOUNDS, AND OTHER CONSTRUCTION MATERIALS. 3. FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATIONS AND MAINTENANCE. 4. SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- NOTE DO NOT USE TREATMENT CHEMICALS WITHOUT PRIOR WRITTEN CONSENT FROM COSA. A WRITTEN MANAGEMENT PLAN IS REQUIRED FOR USE OF TREATMENT CHEMICALS.
- 7. CONCRETE TRUCK WASH WATER DISCHARGES ON THE SITE SHOULD BE PROHIBITED OR MINIMIZED. IF ALLOWED BY THE ENGINEER, THEY MUST BE MANAGED IN A MANNER SO AS NOT TO CONTAMINATE SURFACE WATER. THEY MUST NOT BE LOCATED IN AREAS OF CONCENTRATED FLOW. CONCRETE TRUCK WASH-OUT LOCATIONS MUST BE SHOWN ON THE SW3P LAYOUT AND INCLUDED IN THE INSPECTIONS. HAZARDOUS MATERIAL SPILL/LEAK SHALL BE PREVENTED OR MINIMIZED. AT A MINIMUM, THIS INCLUDES ASPHALT PRODUCTS, FUELS, OILS, LUBRICANTS, SOLVENTS, PAINTS, ACIDS, CONCRETE CURING COMPOUNDS, AND CHEMICAL ADDITIVES FOR SOIL STABILIZATION. BMP'S SHALL BE IMPLEMENTED TO THE STORAGE OF THESE PRODUCTS. ALL SPILLS MUST BE CLEANED AND DISPOSED PROPERLY AND REPORTED TO THE ENGINEER. REPORT ANY RELEASE AT OR ABOVE THE REPORTABLE QUANTITY DURING A 24 HOUR PERIOD TO THE NATIONAL RESPONSE CENTER AT 1-800-424-8802.
- 8. MATERIAL MANAGEMENT PRACTICES: CONTRACTOR MUST MAINTAIN AN INVENTORY OF CONSTRUCTION AND WASTE MATERIALS EXPECTED TO BE STORED ON-SITE AND A DESCRIPTION OF CONTROLS IMPLEMENTED TO MINIMIZE POLLUTANTS FROM THESE SOURCES.
- 9. COMPLIANCE WITH APPROVED STATE AND LOCAL PLANS: THIS SW3P SHALL CONFORM TO APPLICABLE LOCAL RULES AND REGULATIONS FOR WATER QUALITY, INCLUDING BUT NOT LIMITED TO THOSE ESTABLISHED BY COSA, SAWS, BEXAR COUNTY, EAA, OR OTHERS, AS APPLICABLE.

COPY OF ALL CORRECTIVE ACTION REPORTS AT THE SITE OR AT AN EASILY ACCESSIBLE LOCATION. MAINTAIN ALL CORRECTIVE ACTION REPORTS FOR AT LEAST THREE (3) YEARS FROM THE DATE THAT YOUR PERMIT COVERAGE EXPIRES OR IS TERMINATED. DISTURBED 2. INSPECTIONS:

1. MAINTENANCE:

- 3. WASTE MATERIALS: ALL NON-HAZARDOUS MUNICIPAL WASTE MATERIALS SUCH AS LITTER, RUBBISH, AND GARBAGE LOCATED ON OR ORIGINATING FROM THE IN A MANNER TO MINIMIZE THE RUNOFF OF POLLUTANTS.
- 4. OFFSITE VEHICLE TRACKING:
- 5. STAFF TRAINING REQUIREMENTS: OPERATOR STAFF MUST RECEIVE TRAINING PRIOR TO COMMENCEMENT OF EARTH DISTURBING OR POLLUTANT GENERATING ACTIVITIES,
- THAT MAY BE AFFECTED BY THEIR WORK. 6. SUPPORTING CONCRETE BATCH PLANTS:
- 7. SANITARY WASTE: PORT-A-POT (PLACED OUTSIDE OF FLOODPLAIN)
- 8. OFFSITE EXCAVATION SOURCE LOCATION: CONTRACTOR TO REMOVE AND PLACE SPOILS DAILY.
- 9. OFFSITE FILL SOURCE LOCATION: CONTRACTOR TO REMOVE AND PLACE SPOILS DAILY. 10. OTHER:

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OTHER REQUIREMENTS AND PRACTICES

OTHER REQUIREMENTS AND PRACTICES ALL EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT SHALL BE PERFORMED BY CLOSE OF THE NEXT DAY FOLLOWING DISCOVERY. RECOMMENDATIONS FOR NEW BMP'S OR SIGNIFICANT REPAIRS TO EXISTING BMP'S MADE BY INSPECTORS OF THIS SWPPP OR BY THE EPA WILL BE INSTALLED WITHIN SEVEN (7) CALENDAR DAYS FROM THE DATE OF INSPECTION OR PRIOR TO THE NEXT RAIN EVENT, WHICHEVER IS SOONER. CORRECTIVE ACTIONS, SUCH AS TEMPORARY BMP'S, SHALL BE IMMEDIATELY TAKEN IN THE EVENT THAT A DISCHARGE OF POLLUTANTS IS DISCOVERED TO MINIMIZED OR PREVENT FURTHER DISCHARGE UNTIL A PERMANENT SOLUTION IS INSTALLED. WHEN CORRECTIVE ACTIONS RESULT IN CHANGES TO STORMWATER CONTROLS OR PROCEDURES, AMEND THE SWPPP WITHIN SEVEN (7) CALENDAR DAYS OF COMPLETING THE CORRECTIVE ACTION WORK. EACH CORRECTIVE ACTION REPORT MUST BE SIGNED AND CERTIFIED BY THE AUTHORIZED SIGNATORY AUTHORITY. KEEP A CURRENT

AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED. TEMPORARILY OR PERMANENTLY, SHALL BE STABILIZED WITHIN 14 CALENDAR DAYS UNLESS THEY ARE SCHEDULED TO AND DO RESUME WITHIN 21 CALENDAR DAYS. THE AREAS ADJACENT TO CREEKS AND DRAINAGE WAYS SHALL HAVE PRIORITY FOLLOWED BY PROTECTING STORM WATER INLETS. FOR AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AREAS USED FOR STORAGE OF MATERIALS, STRUCTURAL CONTROL MEASURES, AND LOCATION WHERE VEHICLES ENTER OR EXIT THE SITE. PERSONNEL PROVIDED BY THE PERMITTEE AND FAMILIAR WITH THE SW3P MUST INSPECT DISTURBED AREAS AT LEAST ONCE EVERY 14 CALENDAR DAY AND WITHIN 24 HOURS OF A STORM OF 0.5 INCHES OR GREATER. THE SW3P MAY BE DEVELOPED TO REQUIRE THAT THESE INSPECTIONS WILL OCCUR AT

LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS. IF THIS ALTERNATIVE SCHEDULE IS DEVELOPED, THE INSPECTION MUST OCCUR ON A SPECIALLY DEFINED DAY, REGARDLESS OF WHETHER OR NOT THERE HAS BEEN RAINFALL SINCE THE PREVIOUS INSPECTION. AN INSPECTION AND MAINTENANCE REPORT SHALL BE PREPARED FOR EACH INSPECTION AND THE CONTROLS SHALL BE REVISED ON THE SW3P WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING THE INSPECTION. IF DISCHARGES OCCUR TO SEDIMENT OR NUTRIENT-IMPAIRED WATERS, OR TO OTHER SITES WITH IMPAIRMENT STATUS, INSPECTIONS MUST TAKE PLACE ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT OF 0.25 INCHES OR GREATER. INSPECTION REPORTS MUST BE COMPLETED WITHIN 24 HOURS OF COMPLETING ANY SITE INSPECTION. EACH INSPECTION MUST BE SIGNED BY AUTHORIZED SIGNATORY AUTHORITY.

PROJECT SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER PROVIDED BY THE CONTRACTOR. THE DUMPSTER SHALL BE EMPTIED AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION AND THE TRASH SHALL BE HAULED TO A PERMITTED DISPOSAL FACILITY. THE BURYING OF NON-HAZARDOUS MUNICIPAL WASTE ON THE PROJECT SHALL NOT BE PERMITTED. CONSTRUCTION MATERIAL WASTE SITES, STOCKPILES, AND HAUL ROADS SHALL BE CONSTRUCTED TO MINIMIZE AND CONTROL THE AMOUNT OF SEDIMENT THAT MAY ENTER RECEIVING WATERS. CONSTRUCTION MATERIALS WASTE SITES SHALL NOT BE LOCATED IN ANY WETLAND, WATER BODY, OR STREAM BED. CONSTRUCTION STAGING AREAS AND VEHICLE MAINTENANCE AREAS SHALL BE CONSTRUCTED

OFFSITE VEHICLE TRACKING OF SEDIMENT AND THE GENERATION OF DUST MUST BE MINIMIZED. EXCESS SEDIMENTS ON ROAD SHALL BE REMOVED ON A REGULAR BASIS AS DIRECTED/APPROVED BY THE ENGINEER.

WHICHEVER COMES FIRST. OPERATORS ARE NOT REQUIRED TO PROVIDE OR DOCUMENT FORMAL TRAINING FOR SUBCONTRACTORS OR OTHER OUTSIDE SERVICE PROVIDERS, BUT THEY MUST ENSURE THAT SUCH PERSONNEL UNDERSTAND THE PERMIT REQUIREMENTS

THE CONTRACTOR SHOULD DEVELOP A SEPARATE SW3P FOR OPERATIONS ASSOCIATED WITH A SUPPORTING CONCRETE BATCH PLANT IN CONFORMANCE WITH THE TCEQ TPDES CONSTRUCTION GENERAL PERMIT, PART IV RELATING TO STORM WATER RUNOFF FROM CONCRETE BATCH PLANTS. THIS SW3P DOES NOT PROVIDE ADEQUATE CONTROLS FOR THIS ACTIVITY.

CERTIFICATION THAT SITE DISTURBANCE AND/OR DISCHARGES WILL NOT EFFECT LISTED ENDANGERED SPECIES AND THEIR HABITAT. WHAT METHOD IS USED TO SATISFY THE ENDANGERED SPECIES REQUIREMENTS? SEE THE EPIC SHEET FOR ADDITIONAL INFORMATION.

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL

SPILL PREVENTION AND RESPONSE PROCEDURES (CONTRACTOR TO COMPLETE) 1. IDENTIFY PROCEDURES FOR STOPPING, CONTAINING, AND CLEANING UP SPILLS, LEAKS AND OTHER RELEASE.

2. IDENTIFY THE NAME OR POSITION OF THE PERSON RESPONSIBLE FOR DETECTION AND RESPONSE OF SPILLS AND LEAKS.

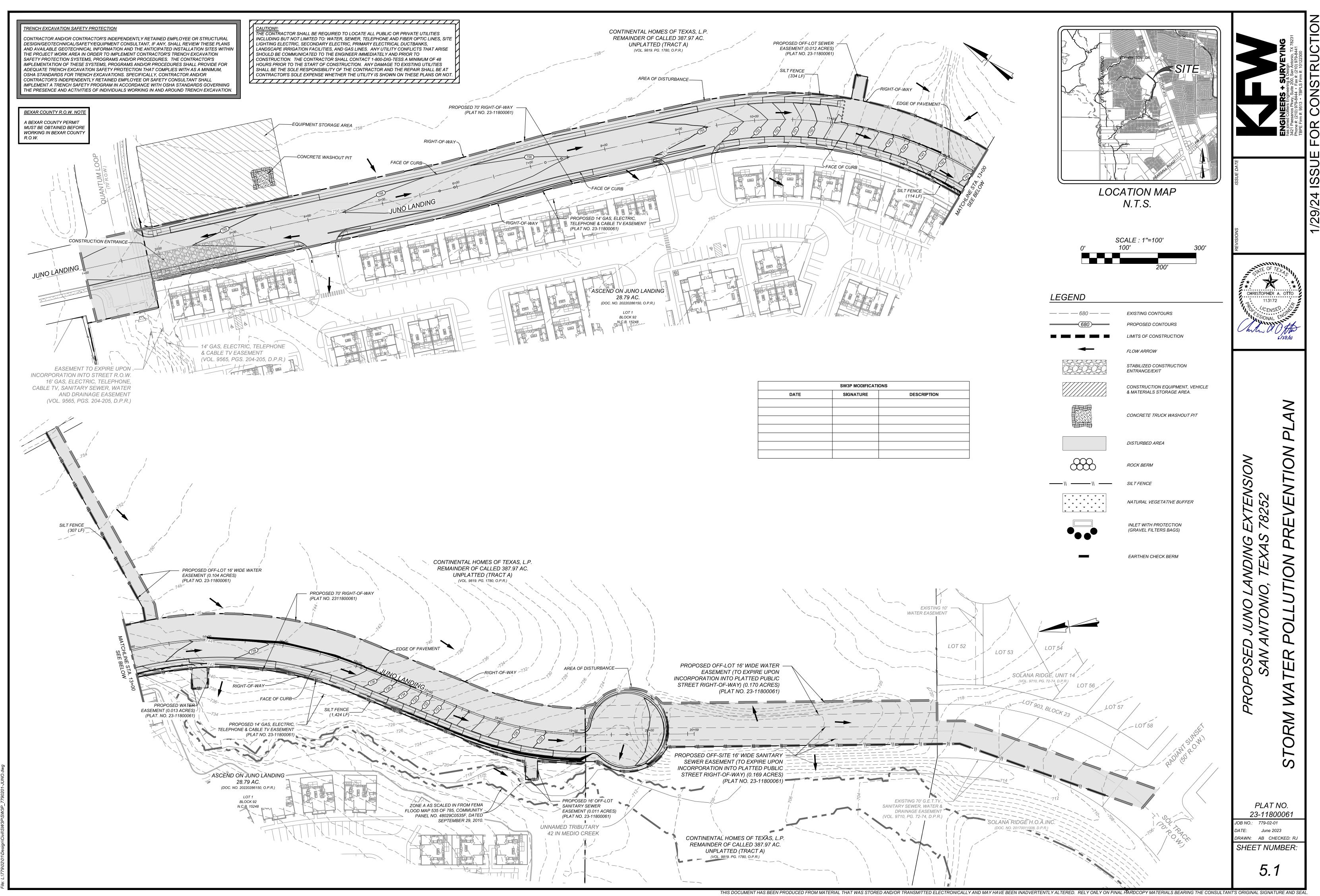
3. IDENTIFY PROCEDURES FOR NOTIFICATION OF APPROPRIATE FACILITY PERSONNEL, REGULATORY AGENCIES, ETC. _____

> REMARKS: DISPOSAL AREAS, STOCKPILES AND HAUL ROADS SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE AND CONTROL THE AMOUNT OF SEDIMENT THAT ENTERS RECEIVING WATERS. DISPOSAL AREAS SHALL NOT BE LOCATED IN ANY WETLAND, BODY OF WATER. STREAMBED, OR FLOODPLAIN, CONSTRUCTION STAGING AREAS AND VEHICLE MAINTENANCE AREAS SHALL BE CONSTRUCTED BY THE CONTRACTOR IN A MANNER TO MINIMIZE THE RUNOFF OF POLLUTANTS. ALL WATERWAYS SHALL BE CLEARED AS SOON AS POSSIBLE OF TEMPORARY EMBANKMENT, TEMPORARY BRIDGES, MATTING, FALSEWORK, PILING DEBRIS, OR OTHER OBSTRUCTION PLACED DURING CONSTRUCTION OPERATIONS THAT ARE NOT PART OF THE FINISHED WORK.

OCTOBER 2014 CITY OF SAN ANTONIO CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT STORM WATER POLLUTION PREVENTION PLAN (SWP3) NARRATIVE SHEET 2 OF 2

DATE: June 2023 DRAWN: AB CHECKED: RJ SHEET NUMBER:

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