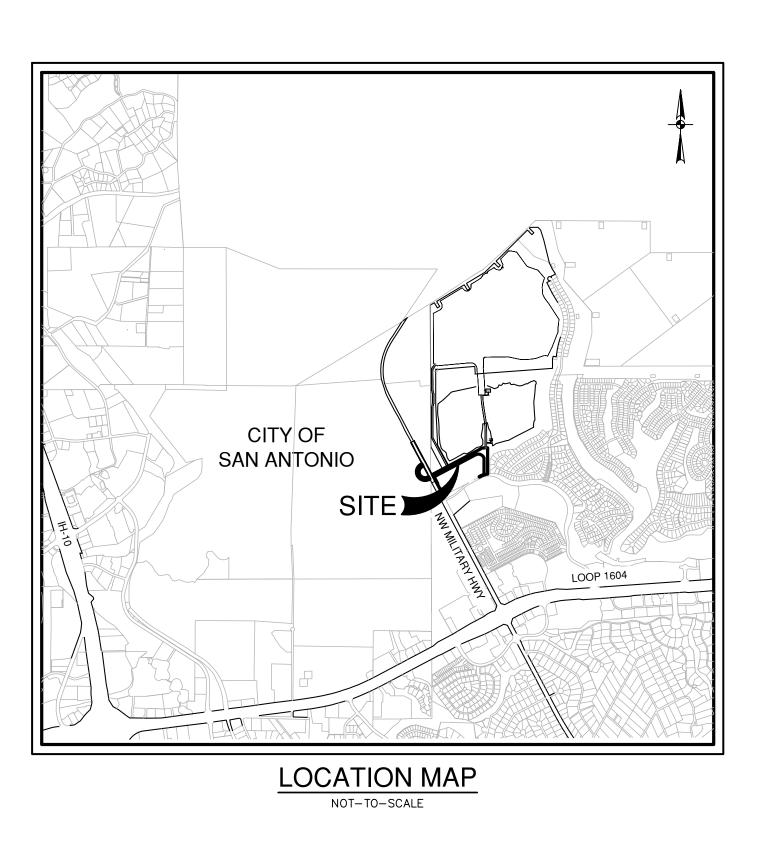
0 440 QUARRY IMPROVEMENTS (PRIVATE)

440 QUARRY IMPROVEMENTS (PRIVATE)

SAN ANTONIO, TEXAS

CIVIL CONSTRUCTION PLANS



GENERAL CONSTRUCTION NOTES C0.10 MASTER DRAINAGE PLAN C1.00 DRAIN A PLAN & PROFILE STA. 1+00.00 TO END C1.01 **DRAIN B PLAN & PROFILE** STA. 1+00.00 TO END C1.02 DRAIN C PLAN & PROFILE STA. 1+04.58 TO END C1.03 DRAIN D PLAN & PROFILE STA. 1+33.85 TO END C1.04 C1.05 DRAIN DETAILS DRAIN DETAILS DRAIN DETAILS EASTBOUND PRIVATE STREET PLAN STA. 1+00.00 TO END WESTBOUND PRIVATE STREET PLAN STA. 1+00.00 TO END

SHEET INDEX

Sheet Description

Sheet Number

C3.20

C3.21

C6.00

C6.01

Sheet Title

STREET DETAILS

STREET DETAILS

OVERALL GRADING PLAN

OVERALL GRADING PLAN

PREPARED FOR:

SHAVANO QUARRY DEVELOPMENT, LTD 11 LYNN BATTS LANE, SUITE 100 SAN ANTONIO, TEXAS 78218

MARCH 2024

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AUTHORIZATION OF CALEB
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SAN ANTONIO I AUSTIN I HOUSTON I FORT WORTH I DALLAS 2000 NW LOOP 410 I SAN ANTONIO, TX 78213 I 210.375.9000 TEXAS ENGINEERING FIRM #470 I TEXAS SURVEYING FIRM #10028800

DIMENSIONAL CONTROL NOTES

- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT OR LIMITS OF DIMENSIONS NECESSARY FOR CONSTRUCTION OF THE PROJECT.
- THE CONTRACTOR SHALL PRESERVE ALL CONTROL POINTS, PROPERTY PINS, BENCH MARKS, HUBS OR OTHER KEY CONTROL POINTS. THE CONTRACTOR SHALL BE RESPONSIBLE TO RE-ESTABLISH ANY SUCH POINTS AT THEIR OWN EXPENSE IN THE EVENT THEY ARE REMOVED.
- DIMENSIONAL CONTROL FOR ANY STRUCTURE IS BASED ON INFORMATION PROVIDED BY THE ARCHITECT OR STRUCTURAL ENGINEER. THE CONTRACTOR SHALL VERIFY ALL PROJECT DIMENSIONS WITH THE PROJECT DRAWINGS PRIOR TO CONSTRUCTION AND TO COMMUNICATE TO THE ENGINEER OF ANY DISCREPANCIES.
- UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL USE THE TRAVERSE CONTROL POINTS FOR HORIZONTAL CONTROL POINTS. IF TRAVERSE CONTROL POINTS ARE NOT PROVIDED, THE CONTRACTOR MAY USE PROPERTY CORNER PINS. BENCHMARKS ARE NOT TO BE USED FOR
- COORDINATES FOR HORIZONTAL CONTROL POINTS ARE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE, AND 83(96) DISPLAYED IN SURFACE VALUES USING A SURFACE ADJUSTMENT FACTOR FOR EACH COUNTY. (THE SURFACE ADJUSTMENT FACTOR FOR BEXAR COUNTY IS 1.00017. OTHER COUNTIES WILL HAVE A DIFFERENT FACTOR: CHECK WITH THE SURVEYOR TO OBTAIN THE CORRECT SURFACE ADJUSTMENT FACTOR FOR PROJECTS LOCATED OUTSIDE OF BEXAR
- BENCHMARK ELEVATIONS ARE BASED ON NAVD 88, GEOID 03.
- ALL DIMENSIONAL CONTROL POINTS OR DIMENSIONS ARE TO THE FACE O CURB, FACE OF RETAINING WALL AT THE BOTTOM TOE OF SLOPE, AND CENTER OF PAINT STRIPING. ALL DIMENSIONS ARE PERPENDICULAR TO THE POINT OF REFERENCE.

PAVEMENT & STRIPING NOTES

- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THIS SCOPE OF WORK WHERE NOT SPECIFICALLY COVERED IN THE SPECIFICATIONS OR GEOTECHNICAL REPORT SHALL CONFORM TO ALL APPLICABLE CITY, COUNTY OR TXDOT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION).
- THE CONTRACTOR SHALL LOCATE AND PROTECT ALL EXISTING UTILITY AND STORM DRAIN SYSTEMS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL. OR BETTER, CONDITION ANY DAMAGE DONE TO EXISTING TREES, BUILDINGS, UTILITIES, FENCES, PAVEMENT, CURBS, OR DRIVEWAYS (NO SEPARATE PAY
- THE CONTRACTOR SHALL VERIFY ELEVATIONS AND LOCATIONS OF EXISTING FACILITIES AND NOTIFY THE ENGINEER OF ANY CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
- ALL PAINT SHALL BE 4" WIDE REFLECTIVE PAINT: WHITE ON ASPHALT PAVING AND YELLOW ON CONCRETE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL PAVEMENT MARKINGS SHALL RECEIVE TWO COATS OF PAINT. NO WORK SHALL BE PERFORMED IN A PUBLIC RIGHT-OF-WAY WITHOUT A
- . ALL SIGNS SHALL CONFORM TO MUTCD, LATEST EDITION.
- THE CONTRACTOR SHALL SAW CUT EXISTING PAVING, CURB, AND SIDEWALKS TO PROVIDE A SMOOTH TRANSITION. NO JAGGED OR IRREGULAR EDGES WILL BE ALLOWED.

GRADING NOTES:

. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THIS SCOPE OF WORK WHERE NOT SPECIFICALLY COVERED IN THE SPECIFICATIONS OR GEOTECHNICAL REPORT SHALL CONFORM TO ALL APPLICABLE CITY. COUNTY AND TXDOT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

2. SITE PREPARATION, GRADING, EXCAVATION AND FILL SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT AND SPECIFICATIONS.

3. ALL SELECT FILL MATERIAL PROVIDED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING AND COMPACTING.

4. ALL ELEVATIONS AND PROPOSED CONTOURS SHOWN ON THIS GRADING PLAN REFLECT FINISHED GRADES. THE THICKNESS OF PAVING, BASE, GRASS, TOPSOIL, AND MULCH MUST BE SUBTRACTED TO OBTAIN SUBGRADE

. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS OR GRADES NECESSARY FOR CONSTRUCTION OF THIS

5. THE CONTRACTOR 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.

. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.

B. THE CONTRACTOR SHALL REMOVE TOP SOIL, GRASS, ROOTS, DEBRIS, ETC. AND DISPOSE OFF SITE THOSE MATERIALS NOT SUITABLE FOR EMBANKMENT AND TOPSOIL. CLEAN STRIPPINGS AND TOPSOIL MAY BE STOCKPILED ON SITE FOR REUSE IN A LOCATION SPECIFIED BY THE OWNER.

9. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE STABILIZATION. ALL DISTURBED AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND TPDES/SWPPP REQUIREMENTS. REFERENCE THE LANDSCAPE ARCHITECT'S PLAN, IF APPLICABLE.

IO. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS (USE OF SILT FENCES, ETC.) TO KEEP DRAINAGE AND SILT FROM WASHING ONTO ADJACENT PROPERTY, STREETS, OR DRAINAGE WAYS. CONTRACTOR SHALL IMMEDIATELY REMOVE SILT/DEBRIS WHICH WASHES OFFSITE OR INTO EXISTING STORM DRAIN SYSTEMS. (SEE SWPPP PLANS & TPDES BOOK).

11. THE CONTRACTOR SHALL OBTAIN GRADES SHOWN HEREON WITHIN +/- ONE-TENTH (0.10) FOOT.

12. IN PROPOSED PAVING AREAS, STREET DESIGN PLANS SHALL CONTROL. ALL EARTHEN SLOPES SHALL BE A MAXIMUM OF 3:1 AND A MINIMUM OF 1.0% UNLESS OTHERWISE SHOWN.

13. THE CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING SITE AND PROPOSED IMPROVEMENTS.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL, OR BETTER, CONDITION ANY DAMAGE DONE TO EXISTING TREES, BUILDINGS, UTILITIES, FENCES, PAVEMENT, CURBS, OR DRIVEWAYS (NO SEPARATE PAY ITEMS).

15. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN WORKING NEAR UTILITIES, GAS LINES, SEWER, OR EXISTING APPURTENANCES. PRIOR TO PERFORMING ANY EXCAVATION, CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND ASSURE HIMSELF THAT ALL UTILITIES HAVE BEEN ADEQUATELY LOCATED AND IDENTIFIED. THE ENGINEER SHALL BE NOTIFIED IF ANY UTILITY CONFLICTS ARE DISCOVERED.

16. UTILITIES SHOWN ON THE PLANS ARE FROM INFORMATION SOURCES AVAILABLE AT THE TIME OF DESIGN BUT MAY NOT REPRESENT ALL EXISTING UTILITIES ON SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION AND VERIFY SIZE, GRADE AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES. WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE

17. POSITIVE DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE SCOPE OF THE PROJECT. DRAINAGE SHALL BE DIRECTED AWAY FROM ALL BUILDING FOUNDATIONS. CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW ANY PONDING OF WATER.

THE CONTRACTORS RESPONSIBILITY TO REPAIR, AT HIS OWN EXPENSE.

18. FOR FILL PLACEMENT ON HILL SIDES OR STEEP SLOPE AREAS, THE CONTRACTOR SHALL REFERENCE THE PROJECT SPECIFICATIONS AND GEOTECHNICAL REPORT FOR SPECIAL INSTRUCTIONS REGARDING BENCHING.

19. NO WORK SHALL BE PERFORMED IN A PUBLIC RIGHT-OF-WAY WITHOUT

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DRAINAGE NOTES

TO INSIDE FACE OF STRUCTURES.

- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THIS SCOPE OF WORK SHALL COMPLY WITH THE PROJECT GEOTECH REPORT, THE PROJECT SPECIFICATIONS, AND THE CURRENT CITY, COUNTY OR TXDOT.
- THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES. CONTRACTOR SHOULD EXERCISE EXTREME CAUTION WHEN WORKING NEAR OPERATIONS, THE CONTRACTOR WILL BE REQUIRED TO REPAIR OR REPLACE THE DAMAGED FACILITIES AT CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ORIGINAL OR BETTER CONDITION DAMAGE DONE TO EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, LANDSCAPING AND STRUCTURES.
- 4. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS UPON PROJECT COMPLETION.
- NORTHINGS AND EASTINGS LISTED ON THESE PLANS ARE TO CENTER OF BOX FOR JUNCTION BOXES AND GRATE INLETS AND TO OUTSIDE CORNER FACE OF CURB FOR ALL CURB AND COMBINATION INLETS. ALL LENGTHS OF PIPE ARE
- CONTRACTOR SHALL ENSURE PROPER SIZE OF JUNCTION BOXES NEEDED WHERE INDICATED ON PLAN. CONTRACTOR SHALL CONNECT STORM DRAIN PIPE TO JUNCTION BOXES PER MANUFACTURES SPECIFICATIONS.
- ALL STORM DRAIN TO JUNCTION BOX CONNECTIONS SHALL HAVE CONCRETE
- COLLARS.

ALL GRATE INLETS MUST BE HS20 EQUIVALENT RATED GRATES.

- 10. TOPS OF MANHOLES, JUNCTION BOXES AND GRATES SHALL BE SET FLUSH TO FINISHED SURFACE BASED UPON GRADING PLAN.
- . CONTRACTOR SHALL GROUT INVERTS OF ALL STORM DRAIN INLETS, JUNCTION BOXES, AND DROP STRUCTURES TO DRAIN.

CAUTION UNDERGROUND UTILITIES

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: EXISTING UTILITIES AND SHOULD THEY BE DAMAGED DURING CONSTRUCTION | WATER, SEWER, TELEPHONE, AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC SECONDARY ÉLECTRIC, PRIMARY ELECTRICAL DUCT BANKS, LANDSCAPÉ IRRIGATION FACILITIES, AND GAS LINES. THE CONTRACTOR MUST CONTACT 1-800-DIG-TESS AND CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION AND/OR START OF CONSTRUCTION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES (WHETHER SHOWN ON PLANS OR NOT) WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE WATER JETTING THE BACKFILL OF STORM DRAIN TRENCHES WILL NOT BE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTORS SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

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CONTRACTOR AND / OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF

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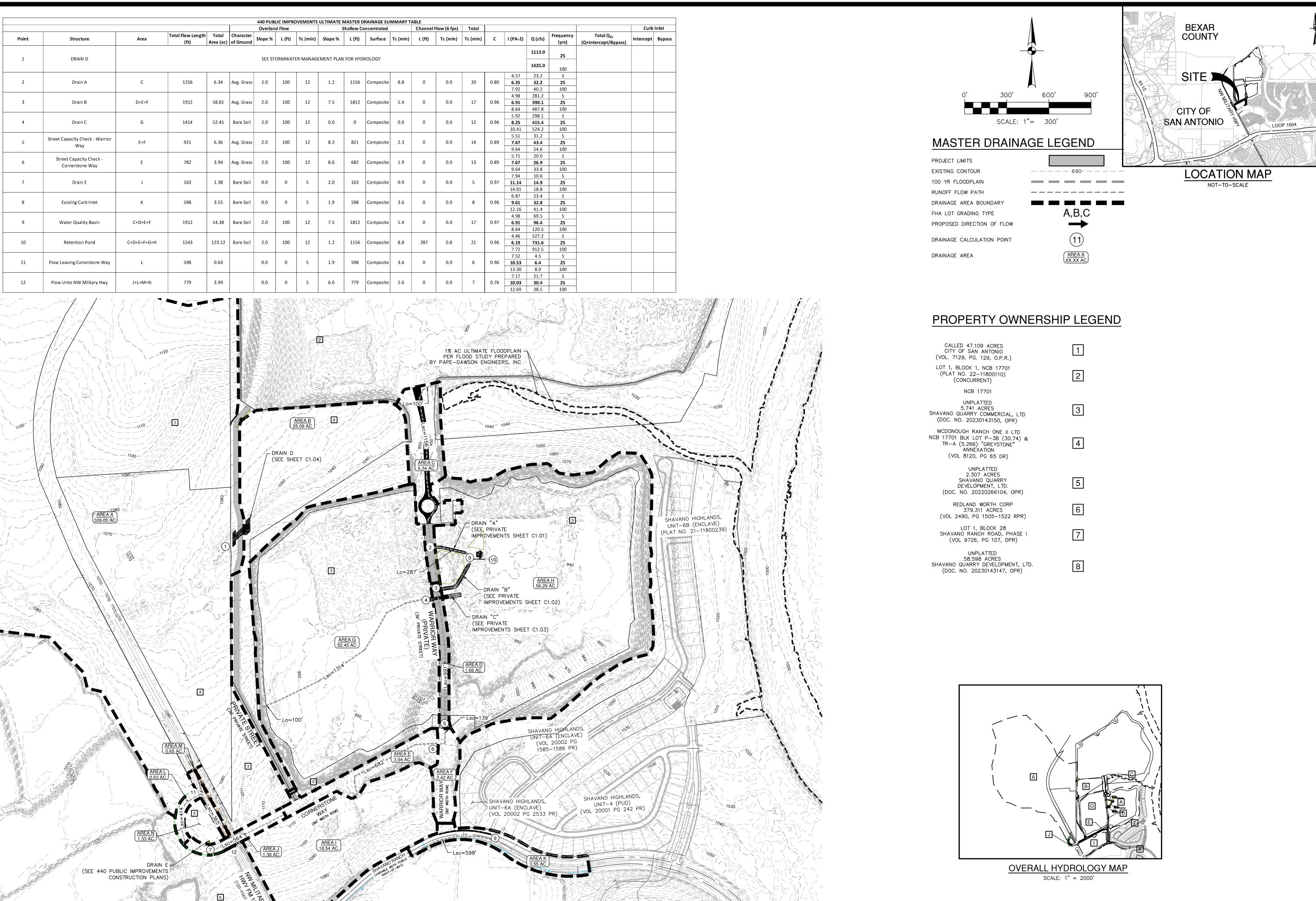
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TRENCH EXCAVATION SAFETY PROTECTION

INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL 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



HILLTOP (ENCLAVE) (PLAT NO. 23-11800016)

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PAPE-DAWSON ENGINEERS

SAN ANTONIO I AUSTIN I HOUSTON I FORT WI 2000 NW LOOP 410 I SAN ANTONIO, TX 78213

HOVEINIEN IS (PHIVALE)
NTONIO, TEXAS

QUARRY IMPROVEMENT SAN ANTONIO, TEXAS

PLAT NO.

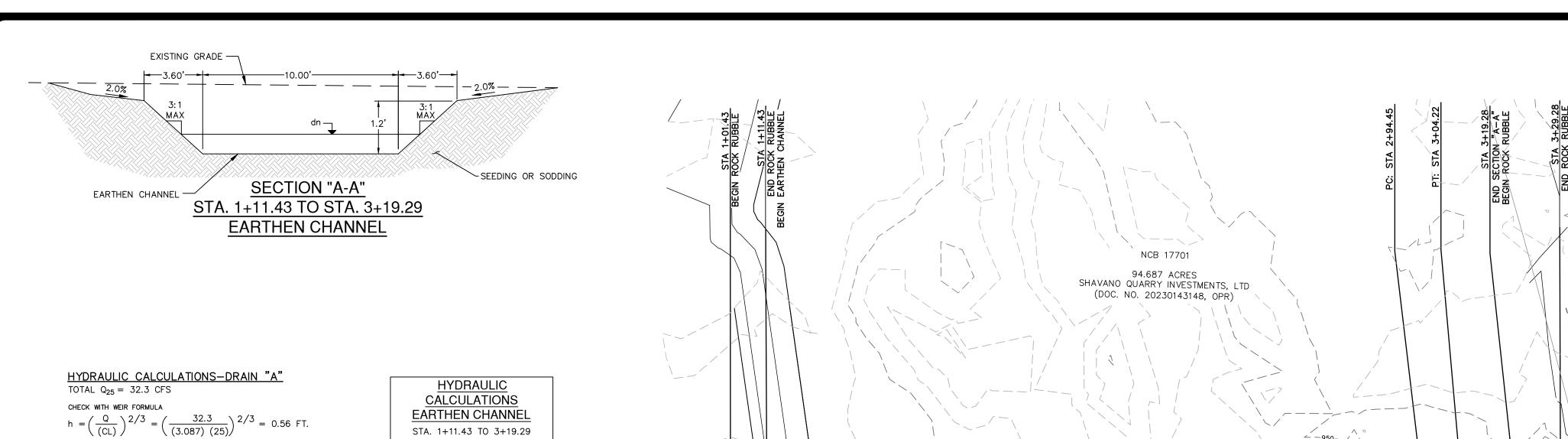
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DATE MARCH 2024

DESIGNER DL

CHECKED AS DRAWN DD

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Q25 = 32.3 CFS

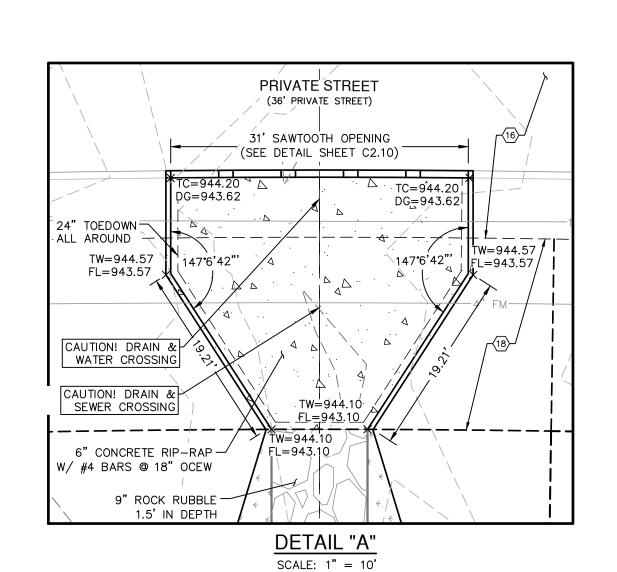
Bw = 10'

n = 0.035

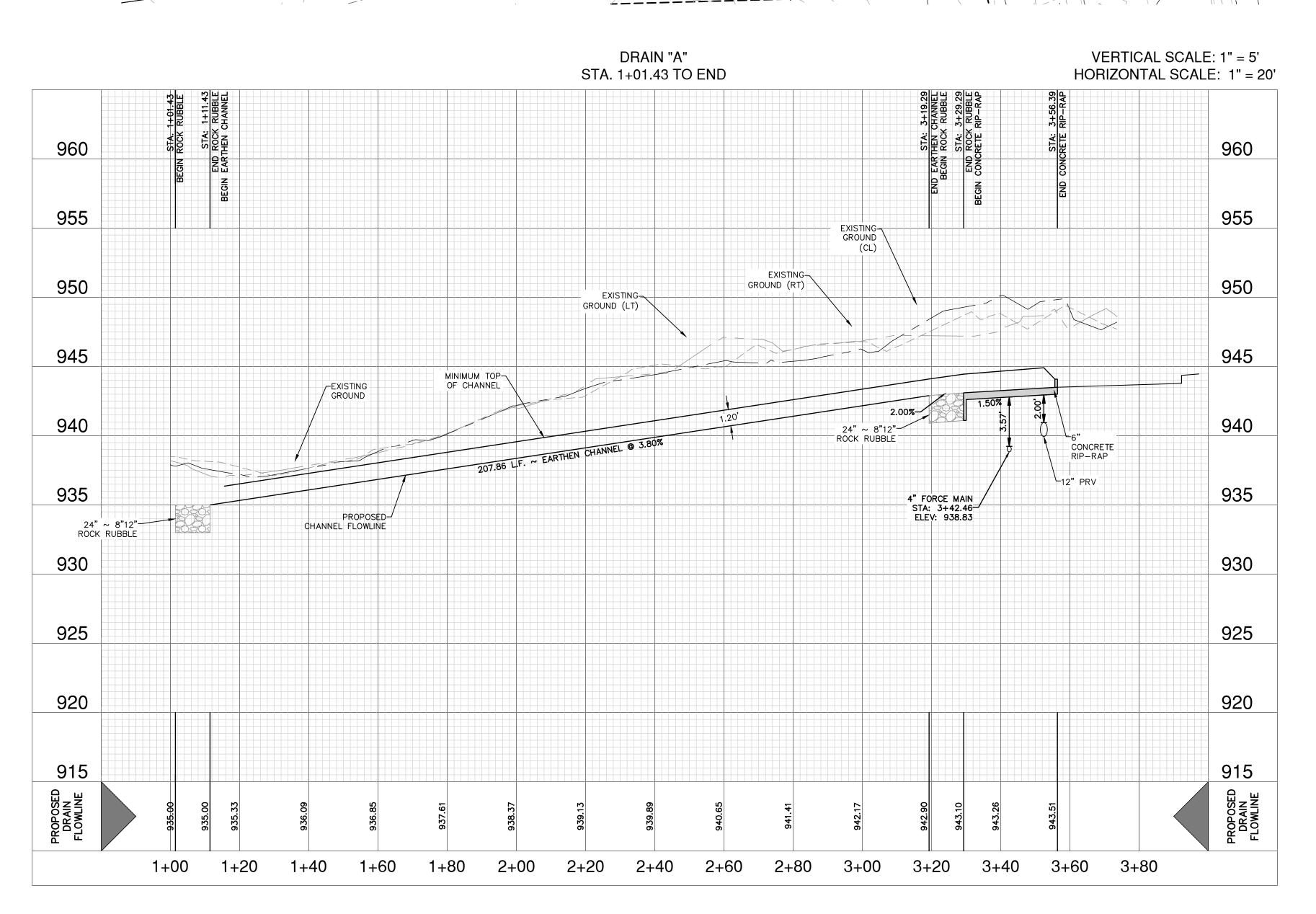
S = 3.80%

V = 5.04 FPS

D = 1.20'dn = 0.55'

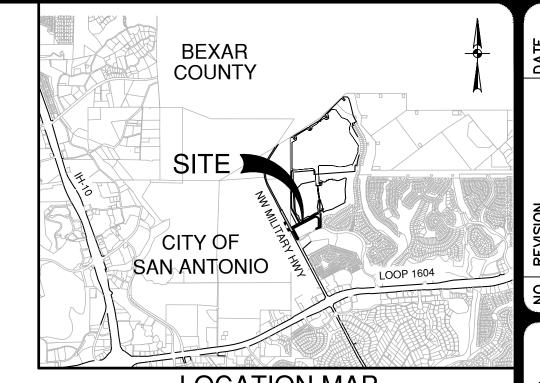


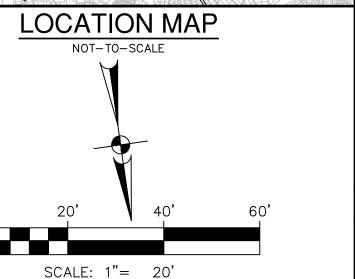
h = 0.56 < 0.79 OK



SEWER/DRAIN CROSSING

R30.00





DRAINAGE LEGEND PROJECT LIMITS EXISTING CONTOUR PROPOSED CONTOUR PROPOSED STORM DRAIN FLOW ARROW

KEYED NOTES

10' GAS, ELECTRIC, TELEPHONE, WATER, AND CABLE TV EASEMENT

SANITARY SEWER,
WATER, DRAINAGE, GAS,
ELECTRIC, TELEPHONE, CABLE TELEVISION EASEMENT

50' SANITARY SEWER, WATER RAINAGE, GAS, ELECTRIC TELEPHONE, CABLE
TELEVISION AND ACCESS EASEMENT

DRAINAGE & GRADING NOTES:

- 1. A BEXAR COUNTY ROW PERMIT MUST BE OBTAINED BEFORE WORKING BEXAR COUNTY ROW. CONTRACTOR SHALL COORDINATE A TRAFFIC CONTROL PLAN FOR ALL WORK WITHIN THE ROW. ADDITIONAL WARNING SIGNS MAY BE RECOMMENDED BY THE ENGINEER ONCE THE ROADWAYS ARE CONSTRUCTED.
- 2. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXAC LOCATION OF ALL UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION TO VERIFY SIZE, GRADE, AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE.
- 3. ALL CONCRETE FOR TXDOT DRAINAGE STRUCTURES SHALL MEET TXDOT SPECIFICATIONS. ALL OTHER CONCRETE SHALL BE CLASS "A" 3000 PS
- CYLINDER STRENGTH IN 28 DAYS. 4. REFERENCE DRAINAGE DETAILS FOR PIPE TRENCH DETAILS, BO CULVERT, HEADWALL, AND WINGWALL CONSTRUCTION DETAILS, AND BOX
- 5. CONTRACTOR SHALL GROUT ALL CURB INLETS AND JUNCTION BOXES T

CULVERT BEDDING AND EXCAVATION LIMITS.

BEFORE THE CITY OF SAN ANTONIO WILL ACCEPT.

- PROVIDE FOR POSITIVE DRAINAGE. 6. EARTHEN CHANNELS WILL BE VEGETATED BY SEEDING OR SODDING. 85% OF THE CHANNEL SURFACE MUST HAVE ESTABLISHED VEGETATION
- 7. CONTRACTOR SHALL MATCH TOP OF CHANNEL TO NATURAL GROUND AND MAINTAIN A MINIMUM CHANNEL DEPTH OF "D" AS SHOWN IN TH

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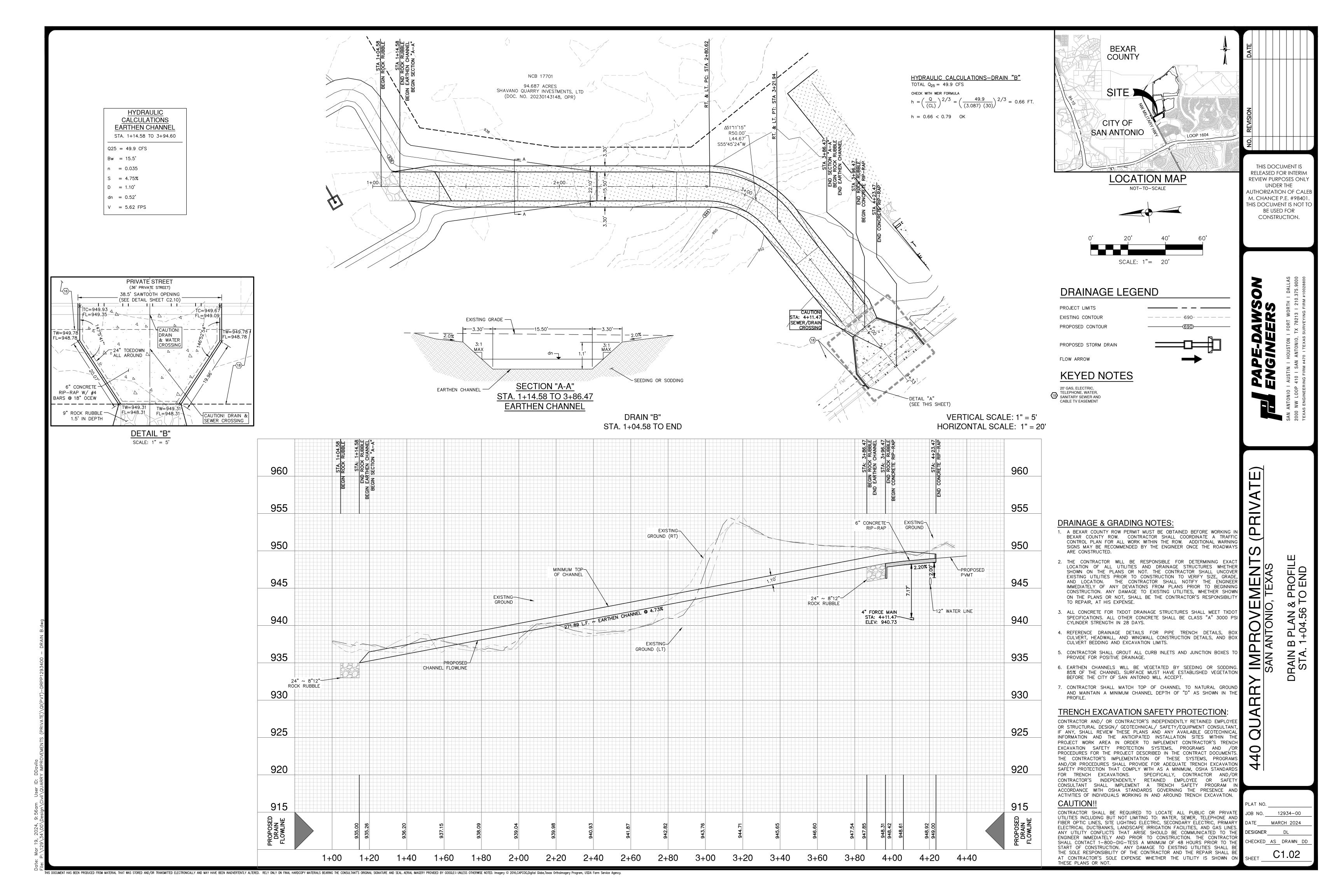
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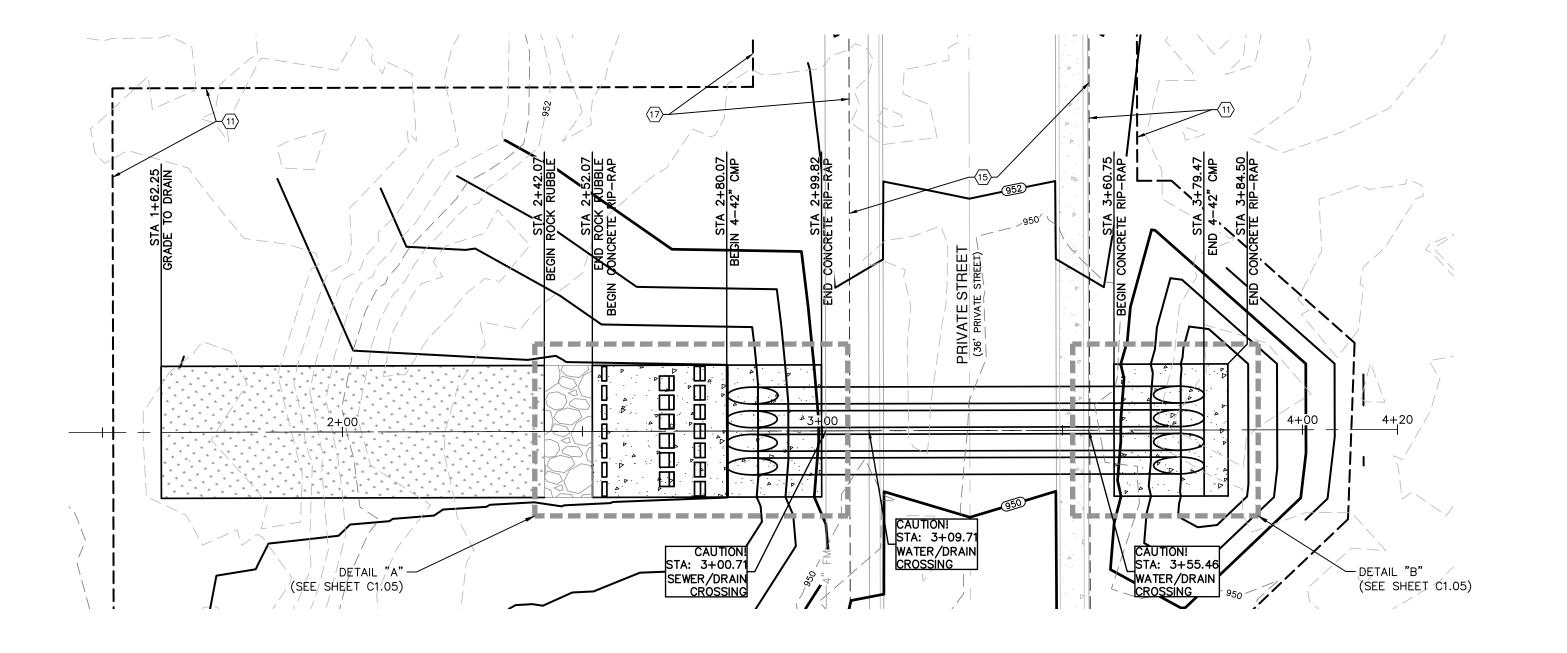
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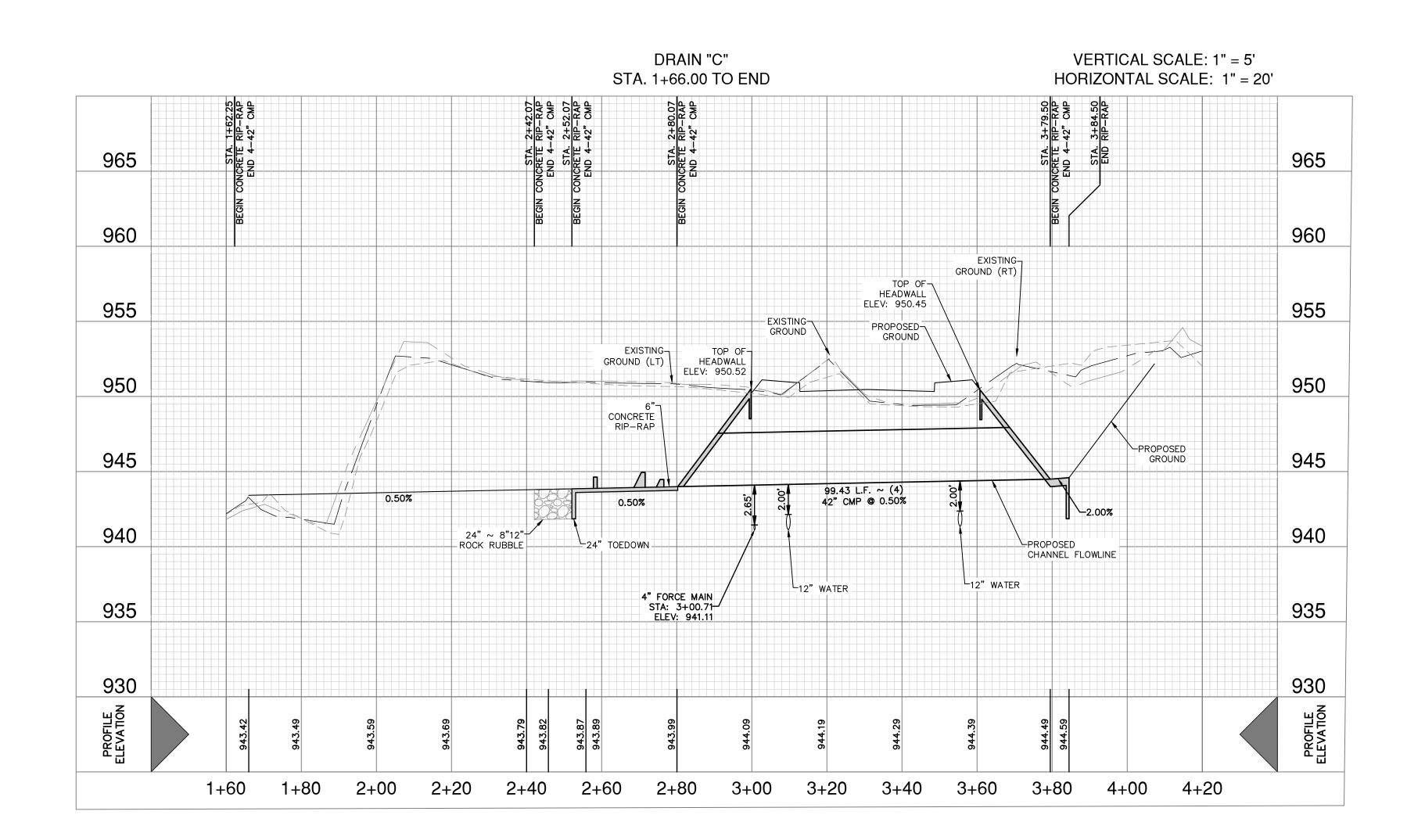
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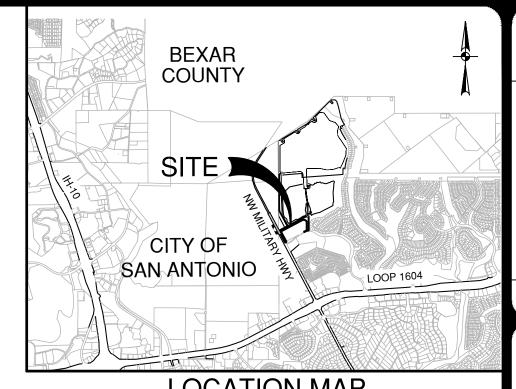
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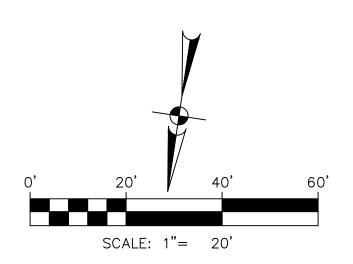




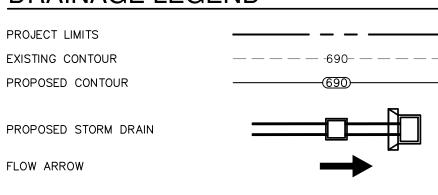




LOCATION MAP NOT-TO-SCALE



DRAINAGE LEGEND



KEYED NOTES

VARIABLE WIDTH, SANITARY
SEWER, WATER, DRAINAGE, GAS,
ELECTRIC, TELEPHONE, CABLE TELEVISION EASEMENT

50' SANITARY SEWER, FORCE MAIN, WATER, DRAINAGE, GAS, ELECTRIC, TELEPHONE, CABLE TELEVISION AND LIFT STATION EASEMENT (OFF-LOT)

(PERMEABLE 1.630 ACRES) 20' GAS, ELECTRIC, TELEPHONE, WATER, SANITARY SEWER AND CABLE TV EASEMENT

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CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO 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 E THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL B AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN OF THESE PLANS OR NOT.

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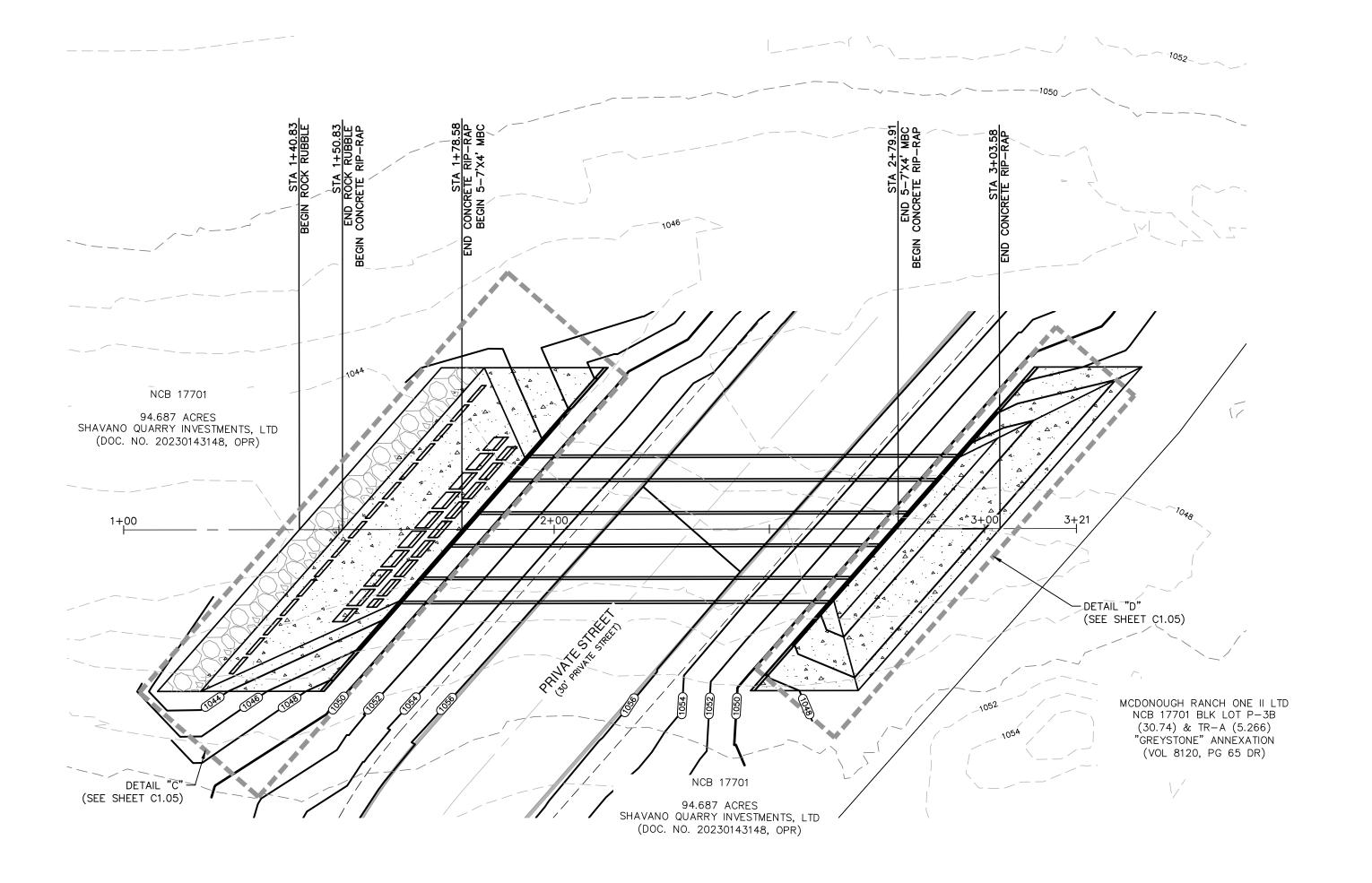
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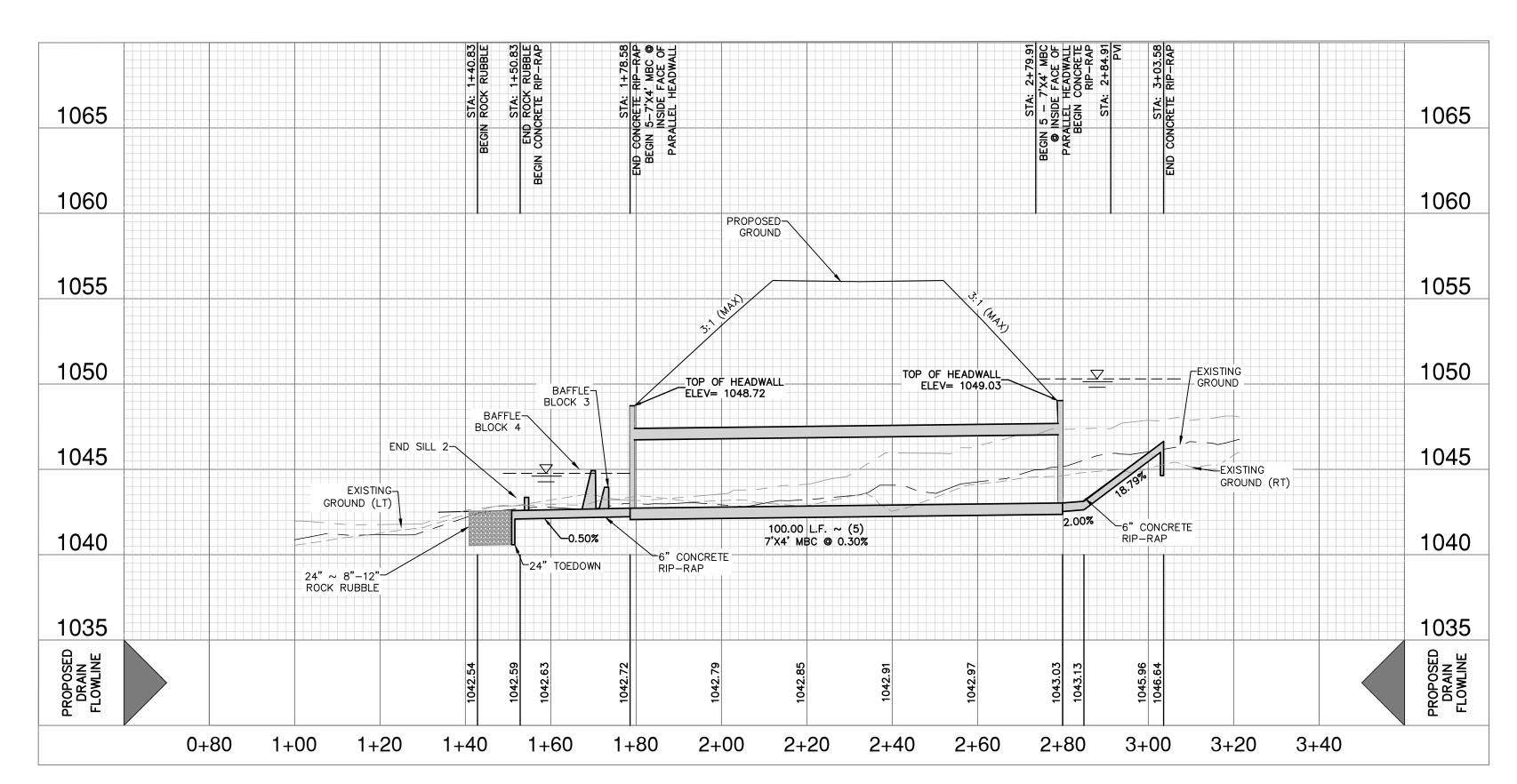
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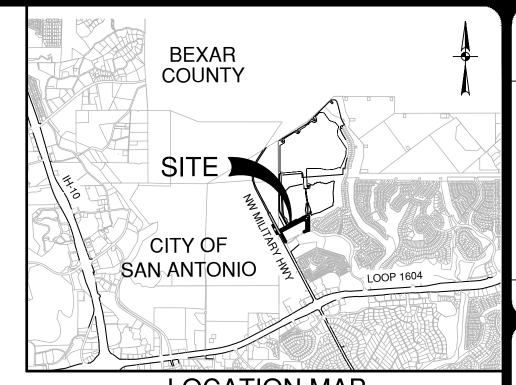
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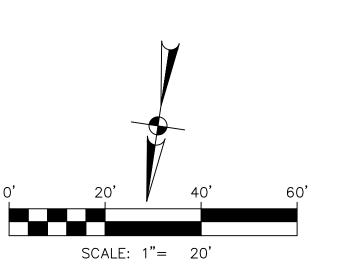
DRAIN "D" STA. 1+40.83 TO END VERTICAL SCALE: 1" = 5' HORIZONTAL SCALE: 1" = 20'



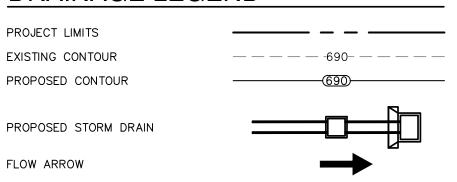
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LOCATION MAP



DRAINAGE LEGEND



DRAINAGE & GRADING NOTES:

- 1. A BEXAR COUNTY ROW PERMIT MUST BE OBTAINED BEFORE WORKING IN BEXAR COUNTY ROW. CONTRACTOR SHALL COORDINATE A TRAFFIC CONTROL PLAN FOR ALL WORK WITHIN THE ROW. ADDITIONAL WARNING SIGNS MAY BE RECOMMENDED BY THE ENGINEER ONCE THE ROADWAYS ARE CONSTRUCTED.
- 2. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION TO VERIFY SIZE, GRADE, AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE.
- ALL CONCRETE FOR TXDOT DRAINAGE STRUCTURES SHALL MEET TXDOT SPECIFICATIONS. ALL OTHER CONCRETE SHALL BE CLASS "A" 3000 PS CYLINDER STRENGTH IN 28 DAYS.
- CULVERT, HEADWALL, AND WINGWALL CONSTRUCTION DETAILS, AND BOX CULVERT BEDDING AND EXCAVATION LIMITS.

 5. CONTRACTOR SHALL GROUT ALL CURB INLETS AND JUNCTION BOXES TO

4. REFERENCE DRAINAGE DETAILS FOR PIPE TRENCH DETAILS, BC

- PROVIDE FOR POSITIVE DRAINAGE.
- 6. EARTHEN CHANNELS WILL BE VEGETATED BY SEEDING OR SODDING. 85% OF THE CHANNEL SURFACE MUST HAVE ESTABLISHED VEGETATION BEFORE THE CITY OF SAN ANTONIO WILL ACCEPT.
- CONTRACTOR SHALL MATCH TOP OF CHANNEL TO NATURAL GROUND AND MAINTAIN A MINIMUM CHANNEL DEPTH OF "D" AS SHOWN IN THE PROFILE.

TRENCH EXCAVATION SAFETY PROTECTION:

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I SAN ANTONIO, TX 78213 I 210.375.9000

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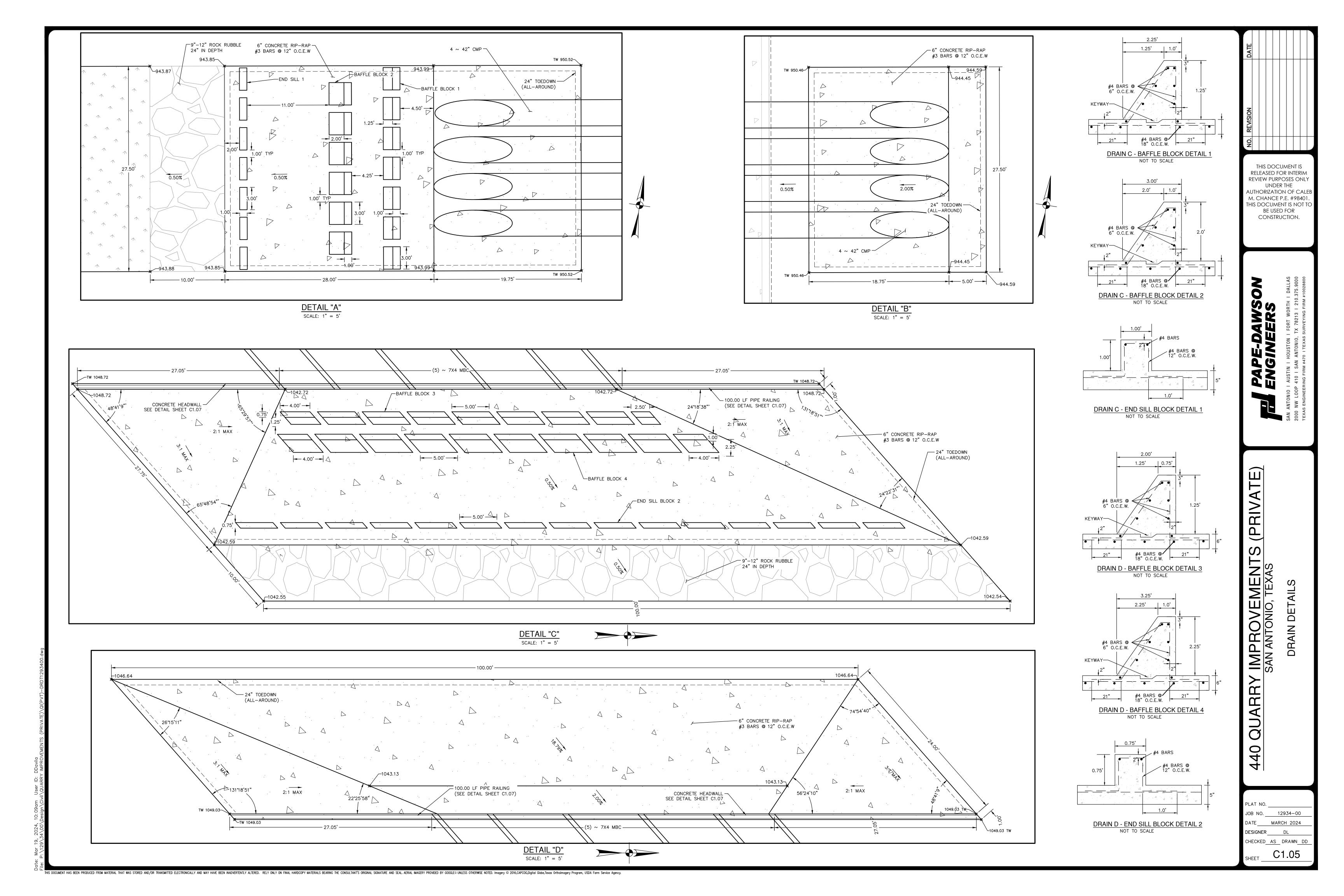
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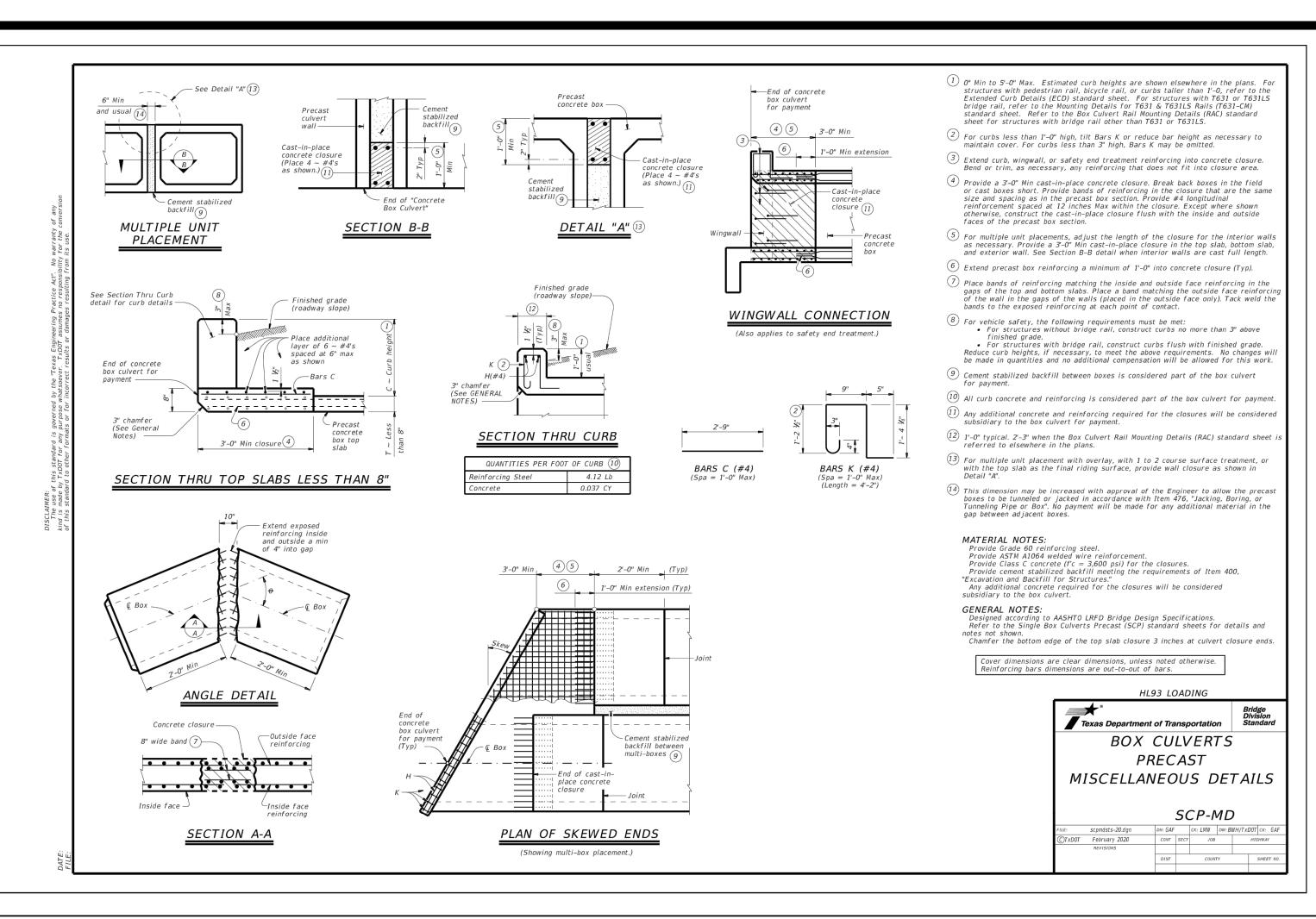
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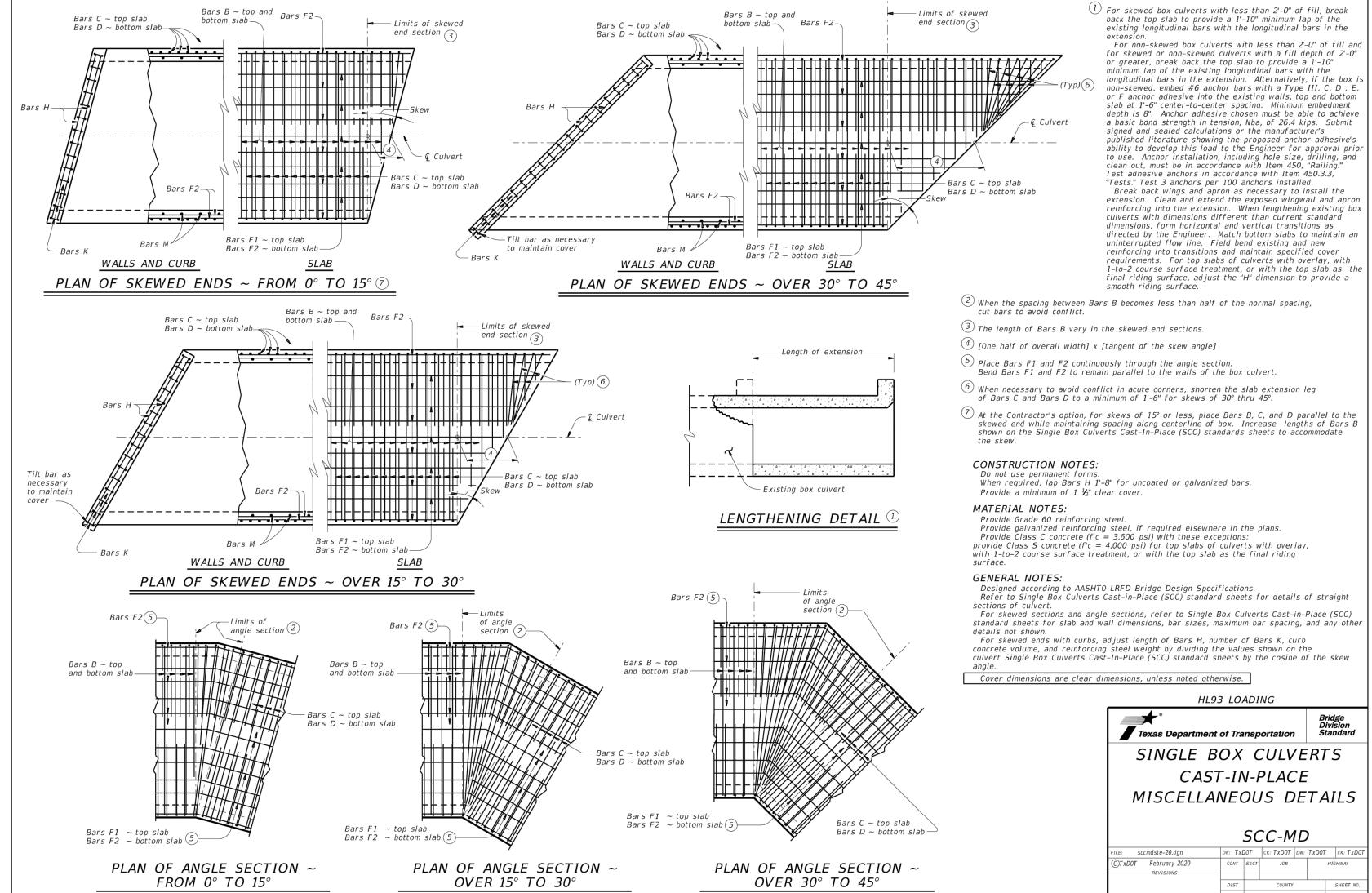
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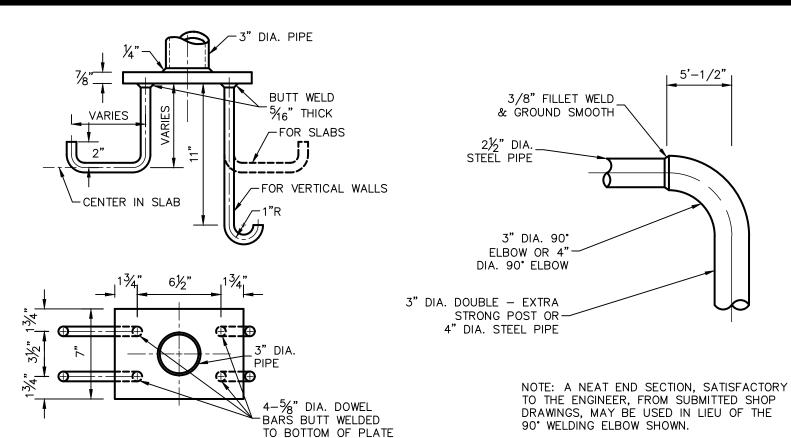
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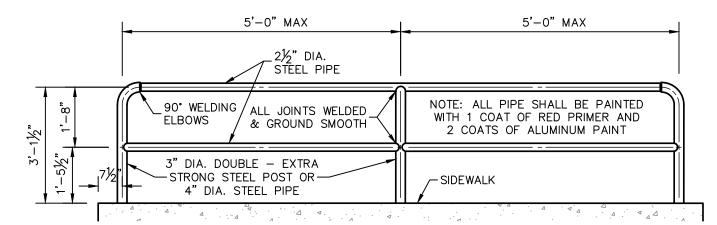




PIPE ANCHORAGE DETAIL

NOT-TO-SCALE

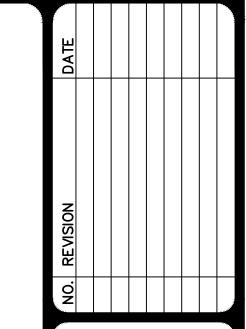
DETAIL OF 90° WELDING ELBOW



NOTE: ALL CONSTRUCTION OF HANDRAIL SHALL FOLLOW
THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR PUBLIC
WORKS CONSTRUCTION.

PIPE RAILING DETAIL

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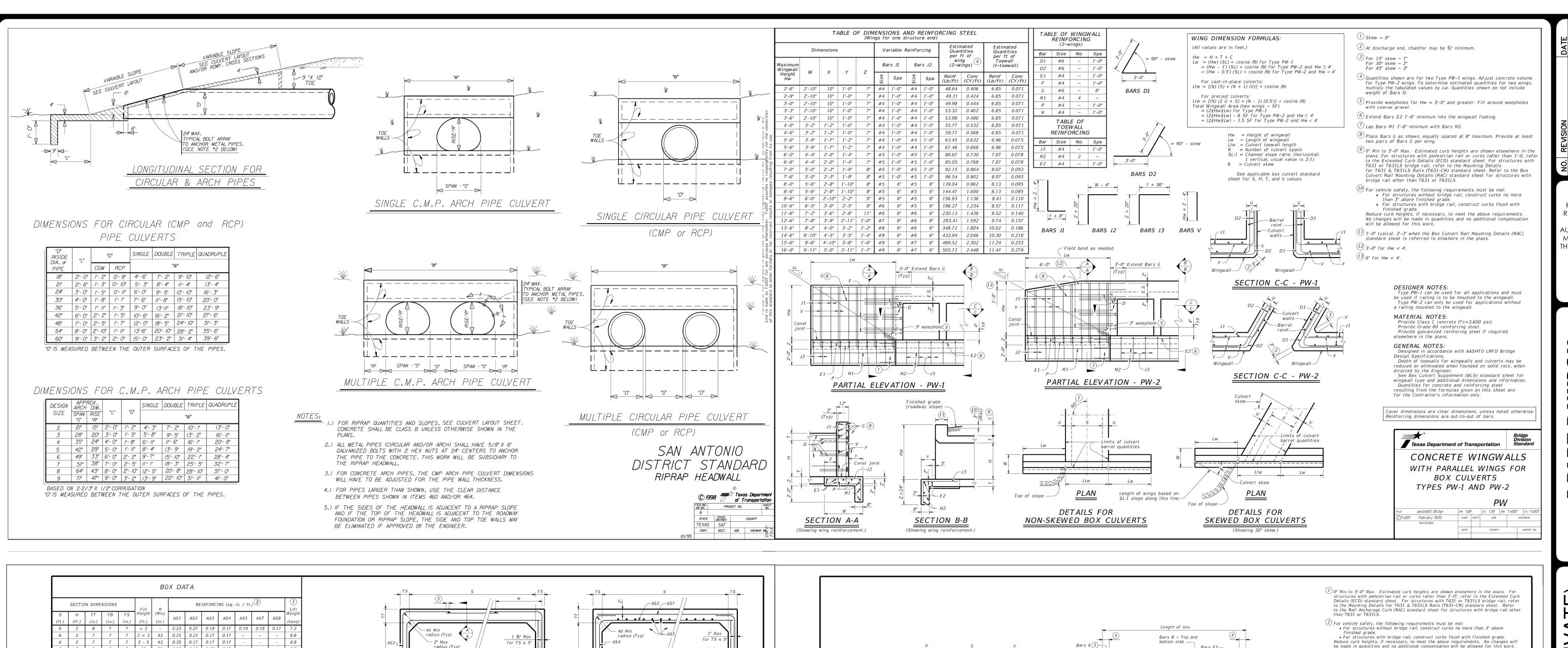
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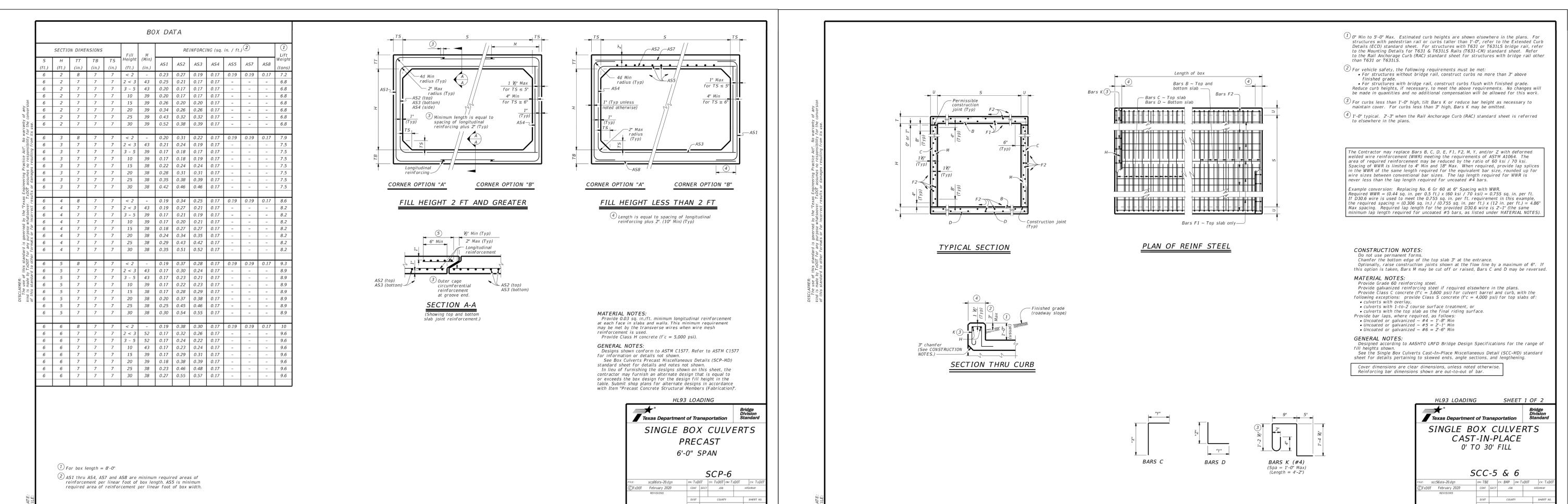
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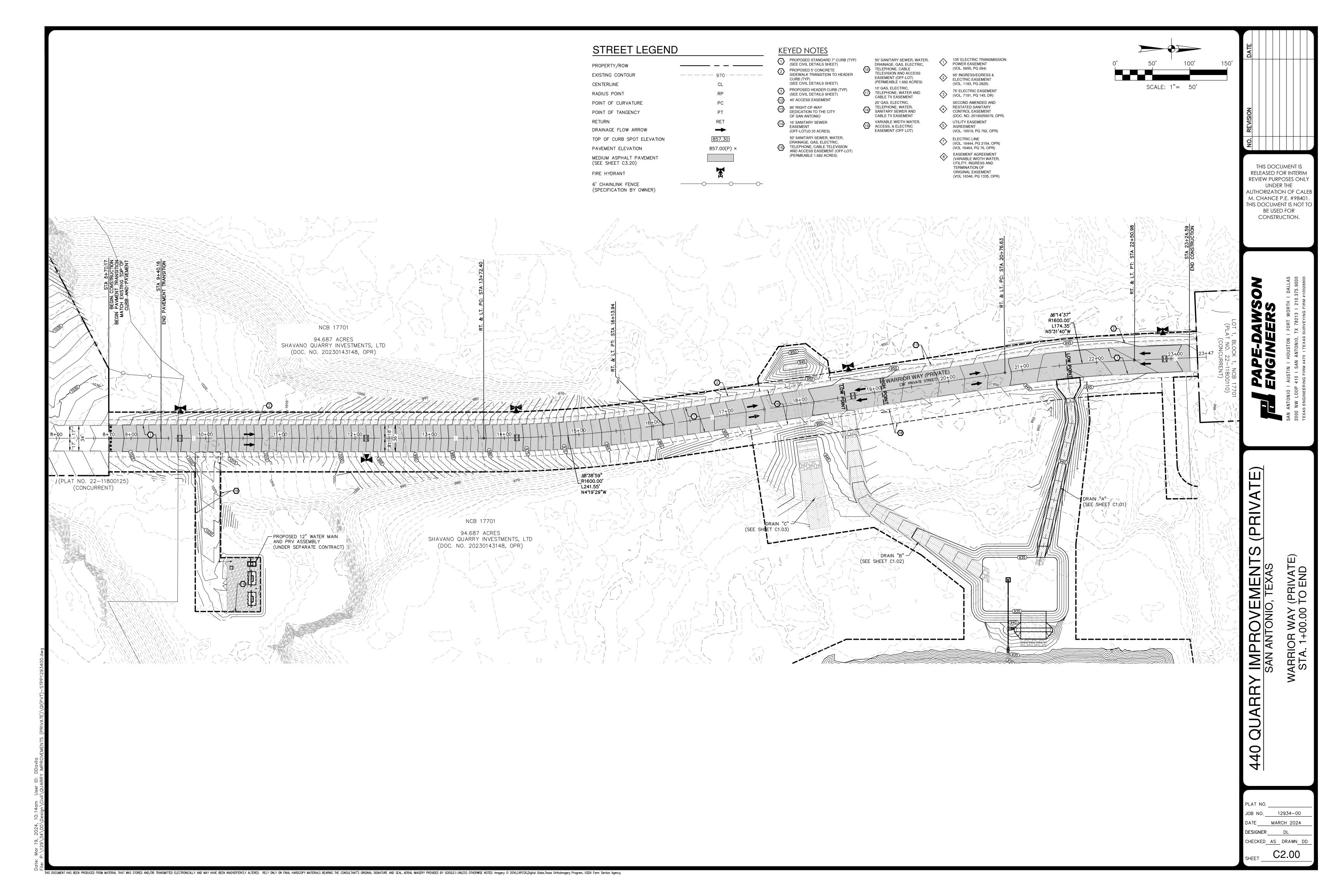
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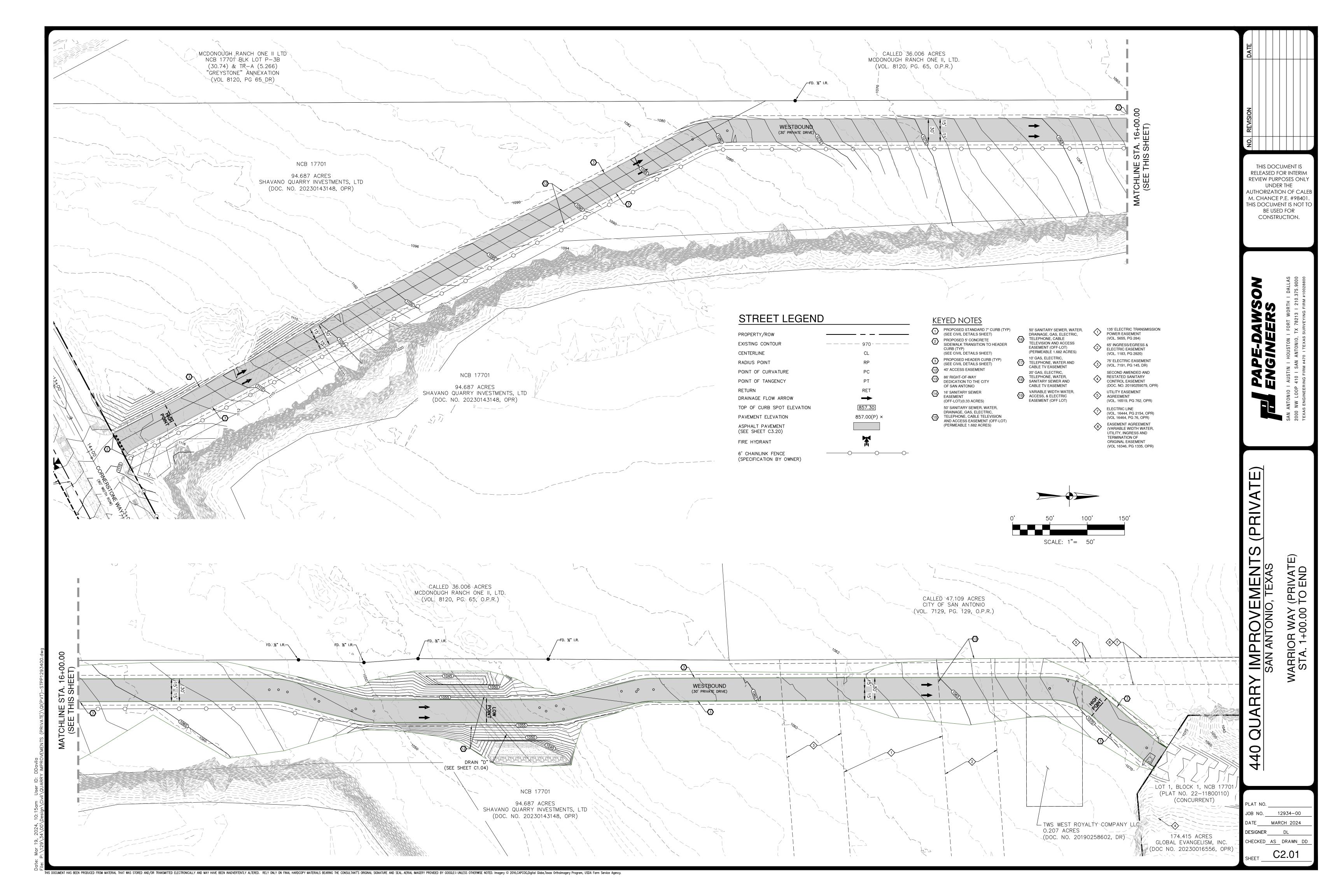
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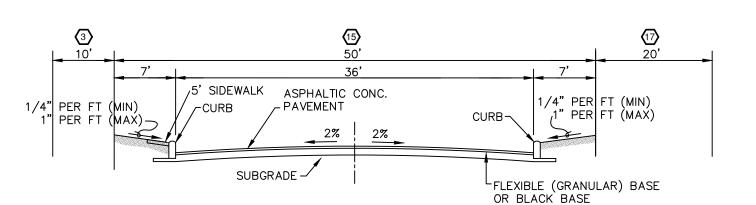
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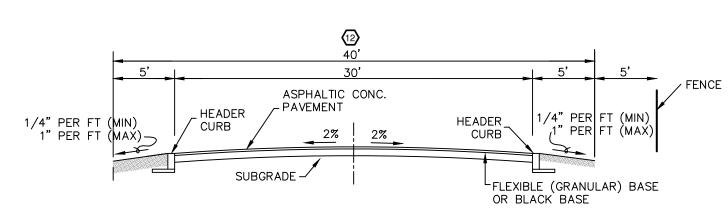
	PAVEMENT SECTION DETAIL							
	STREET NAME	STATION	TYPE "D" HMAC	CRUSHED LIMESTONE BASE	STABILIZED SUBGRADE	GEOGRID (TENSAR TRIAX TX5)	CBR	STRUCTURAL NUMBER
	PRIVATE STREET	1+00.00 TO END	3.00"	17.00"	*	NO	5.0	3.70
WAR	RRIOR WAY (PRIVATE)	8+70.17 TO END	4.00"	15.50"	*	NO	5.0	3.93



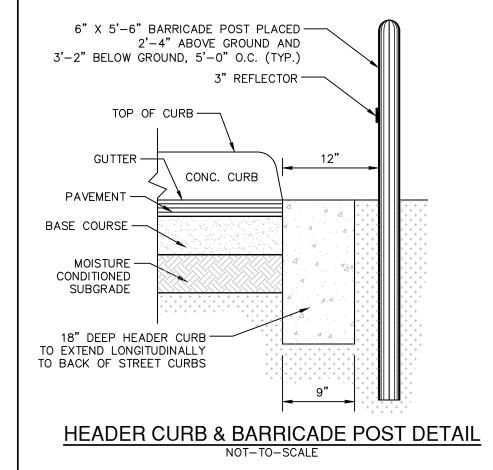
KEYED NOTES:

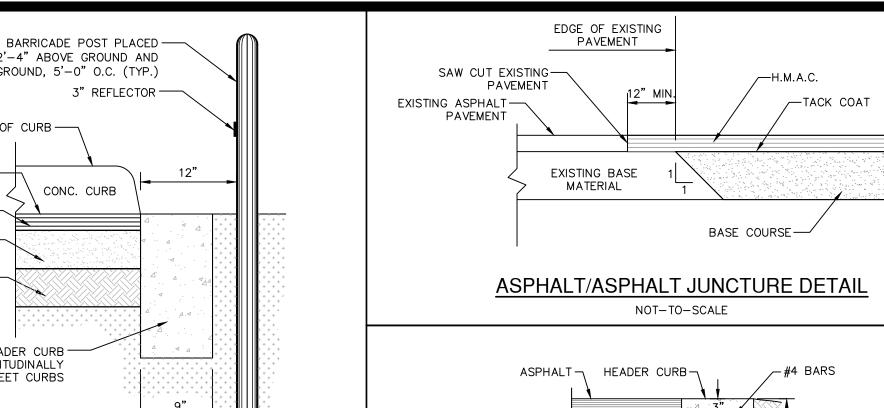
- 3 10' GAS, ELECTRIC, TELEPHONE, WATER AND CABLE TV EASEMENT
- 40' ACCESS EASEMENT 50' SANITARY SEWER, WATER, DRAINAGE, GAS, ELECTRIC, TELEPHONE, CABLE TELEVISION AND ACCESS EASEMENT (OFF-LOT) (PERMEABLE 1.682 ACRES)
- 20' GAS, ELECTRIC, TELEPHONE, WATER, SANITARY SEWER AND CABLE TV EASEMENT

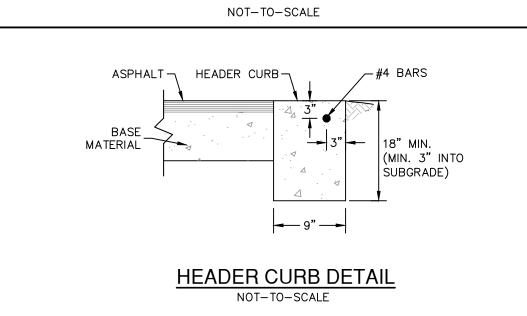
WARRIOR WAY (PRIVATE) STREET SECTION NOT-TO-SCALE



WESTBOUND (PRIVATE) DRIVE STREET SECTION







STREET SUBGRADE NOTES:

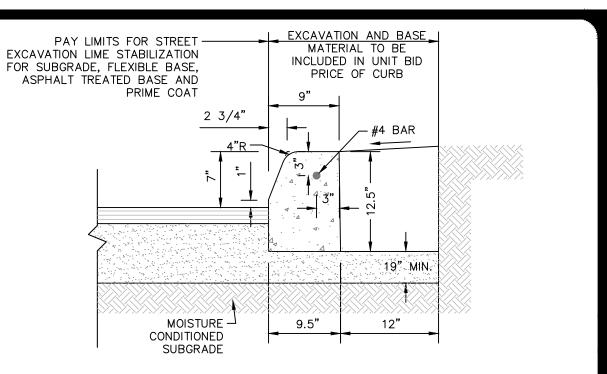
- 1. IF THE STREET SUBGRADE PLASTICITY INDEX VALUE IS GREATER THAN 20, SUBGRADE STABILIZATION IS NEEDED AS PER CITY OF SAN ANTONIO REQUIREMENTS.
- 2. IF THE SUBGRADE PLASTICITY INDEX VALUE IS 20 OR LESS. SUBGRADE STABILIZATION IS NOT NEEDED. THE SUBGRADE SHOULD BE MOISTURE CONDITIONED (COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AT A MINIMUM MOISTURE CONTENT OF OPTIMUM PLUS 2 PERCENT (TEX114E)).
- 3. THE SUBGRADE SOILS SHOULD BE TESTED FOR SOIL SULFATE CONTENT PRIOR TO STABILIZATION. IF THE SOIL SULFATE CONTENT IS HIGH, AN ALTERNATE PROCEDURE / RECOMMENDATION WILL BE NEEDED.
- 4. LIME APPLICATION RATE OF 27 LBS PER SQ YARD FOR 6 INCH DEPTH OF STABILIZATION IS RECOMMENDED.
- 5. APPROVED FILL MATERIAL SHOULD BE USED TO RAISE THE GRADE. THE FILL SHOULD BE FREE OF DELETERIOUS MATERIAL WITH A MINIMUM CBR VALUE OF 5.0. LIME APPLICATION RATES SHOULD BE RE-EVALUATED AND TESTED FOR SULFATE CONTENT PRIOR TO USE OF THE FILL MATERIAL. THE MATERIAL SHOULD BE PLACED AS PER APPLICABLE CITY OR COUNTY GUIDELINES.
- 6. THE SUBGRADE SHOULD BE PROOF ROLLED TO IDENTIFY SOFT AREAS BEFORE STABILIZATION.

LIME NOTES:

FOR LIME STABILIZATION CONSTRUCTION VERIFICATION THE FOLLOWING SHALL BE CONDUCTED ON THE FIELD: 1. AFTER INITIAL MIXING THE SOIL-LIME MIXTURE SHALL MELLOW FOR A PERIOD

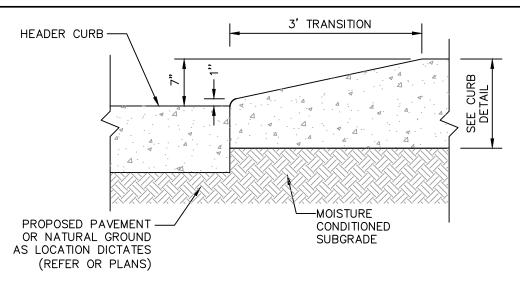
OF TWO TO THREE (2-3) DAYS. MAINTAIN MOISTURE DURING MELLOWING.

- 2. AFTER MELLOWING AND FINAL MIXING, THE PULVERIZATION SHALL BE CHECKED USING THE FOLLOWING CRITERIA (REMOVE NON—SLAKING AGGREGATES RETAINED ON THE $\frac{3}{4}$ INCH SIEVE FROM THE SAMPLE): 100
- MINIMUM PASSING 1¾" SIEVE MINIMUM PASSING ¾ SIEVE MINIMUM PASSING NO. 4 SIEVE
- 3. SAMPLE SOIL-LIME MIXTURE FOR DETERMINATION OF MAXIMUM DRY DENSITY (MDD). IN THE LABORATORY, MOLD SPECIMENS TO 95% OF MDD AT OPTIMUM MOISTURE CONTENT AND VERIFY UCS TO BE AT LEAST 160 PSI IN ACCORDANCE WITH PROCEDURE OUTLINED IN THE BEXAR COUNTY FLEXIBLE PAVEMENT DESIGN CRITERIA GUIDE FOR MIXTURE DESIGN.
- 4. COMPACT AND CHECK FIELD DENSITY (MINIMUM OF 95% OF MDD REQUIRED).
- 5. CURE FOR AN ADDITIONAL 2 TO 5 DAYS (TOTAL MELLOWING AND CURING TIME SHOULD TOTAL AT LEAST 5 DAYS).
- 6. VERIFY DEPTH OF LIME STABILIZED LAYER TO DEPTH AS NOTED ON PLAN TO WITHIN +/- 1.0 INCH.



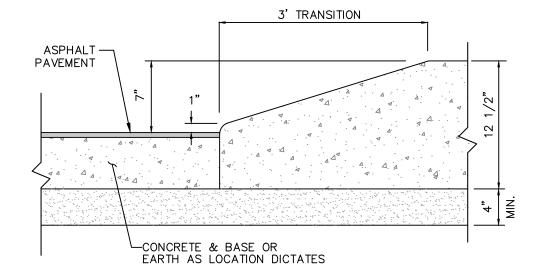
CONCRETE CURB DETAIL

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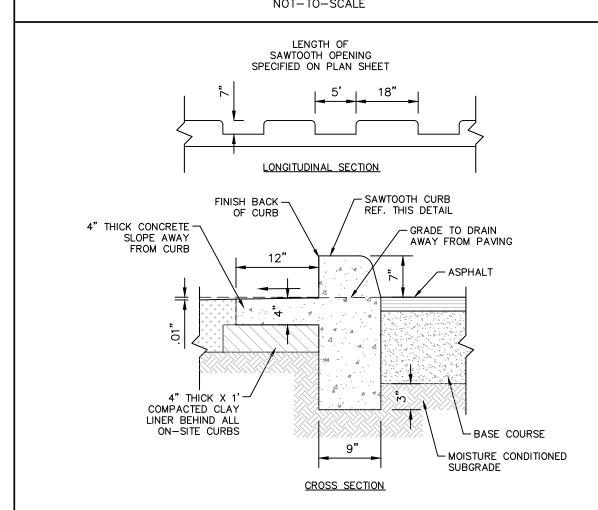


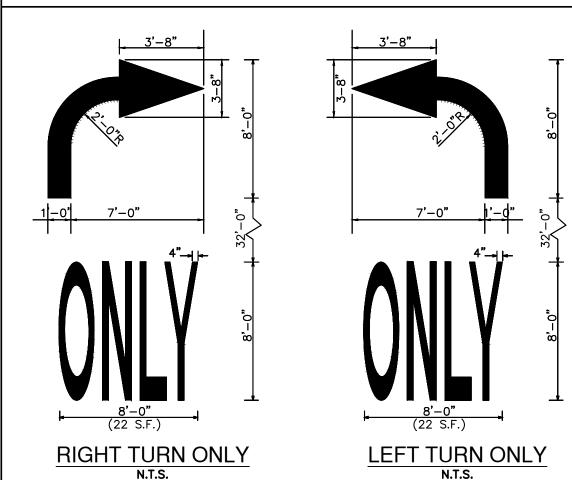
CURB TRANSITION DETAIL (FROM HEADER CURB TO STANDARD CURB

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CURB TRANSITION DETAIL (FROM PAVEMENT TO STANDARD CURB)





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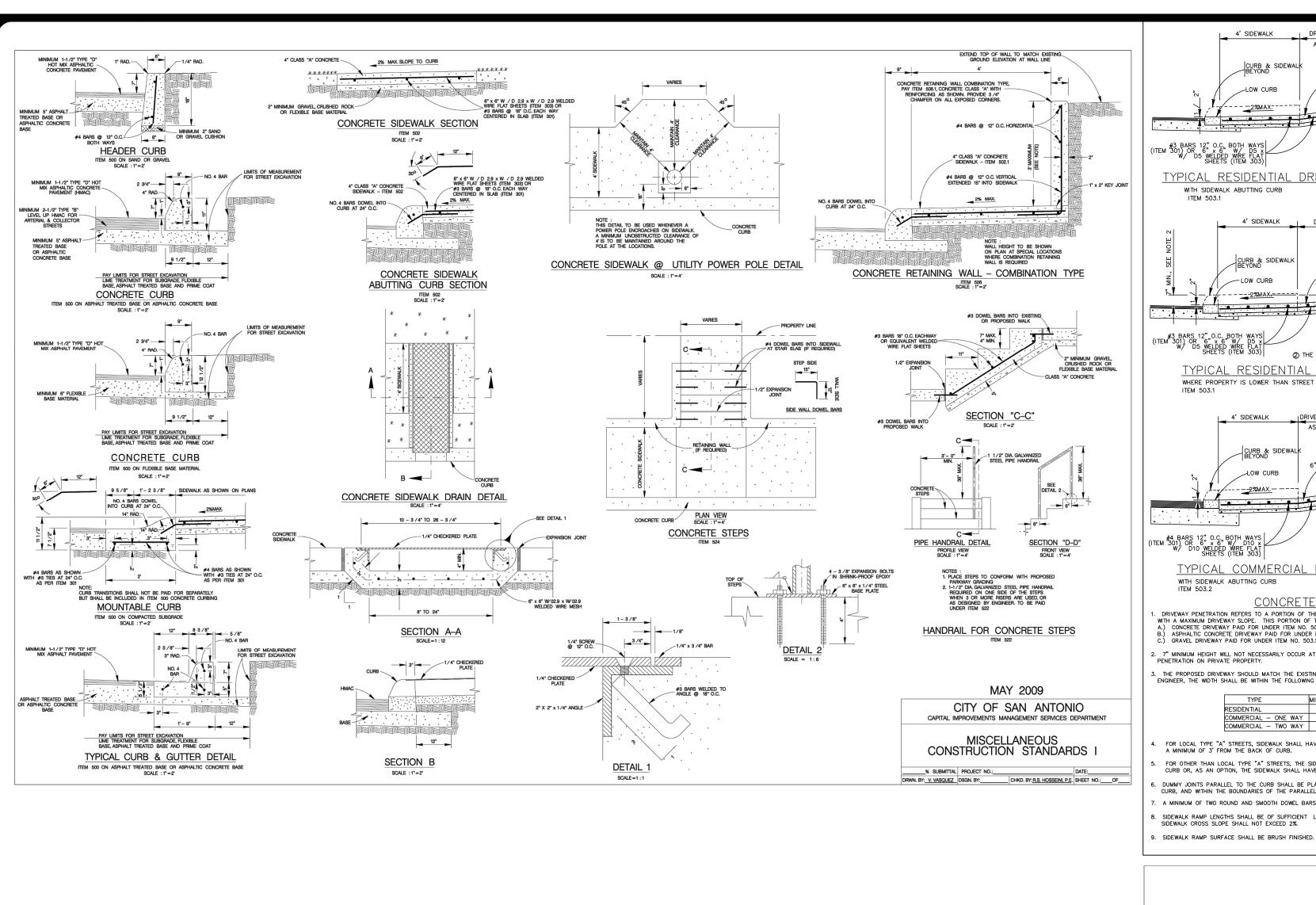
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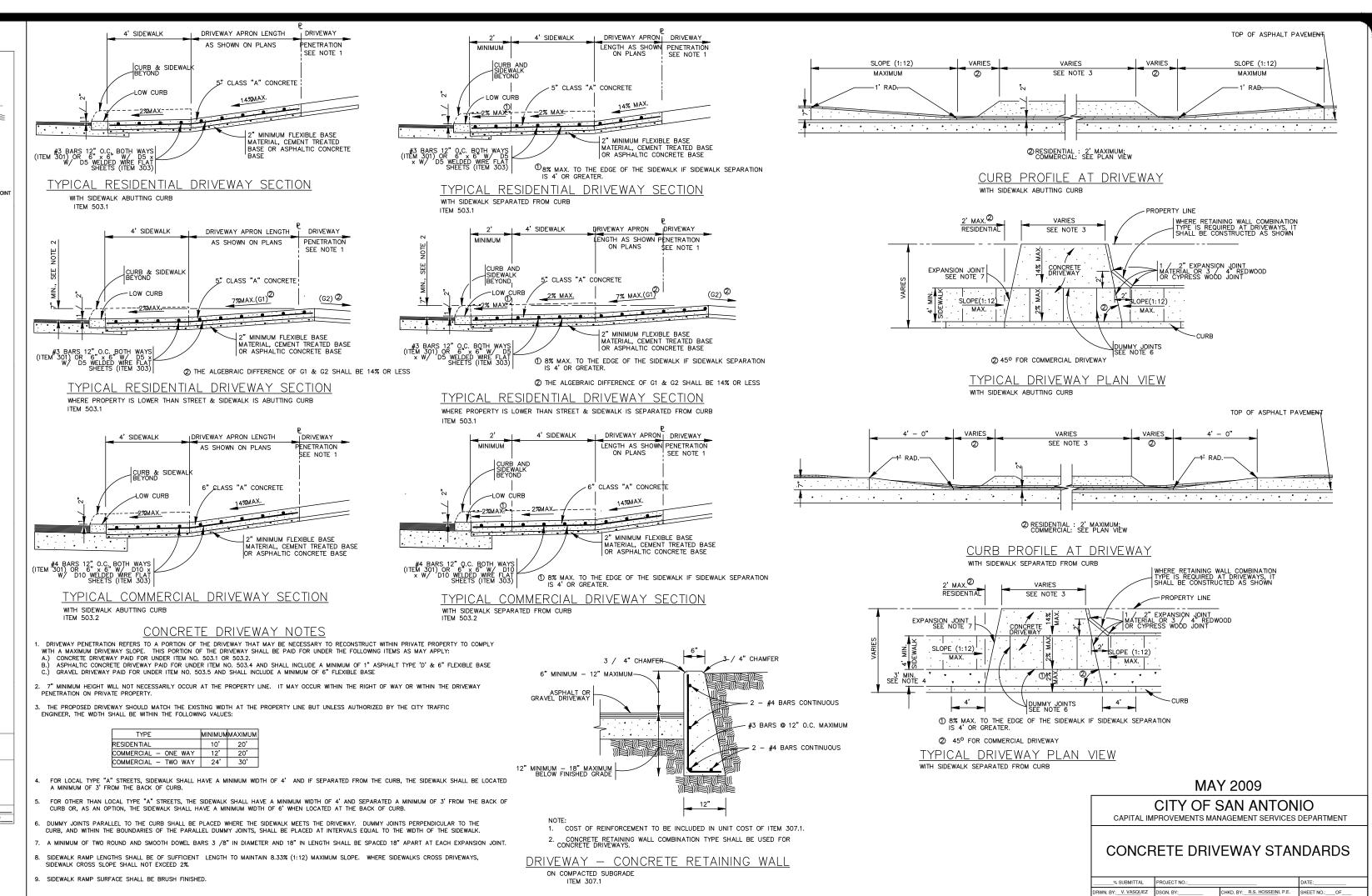
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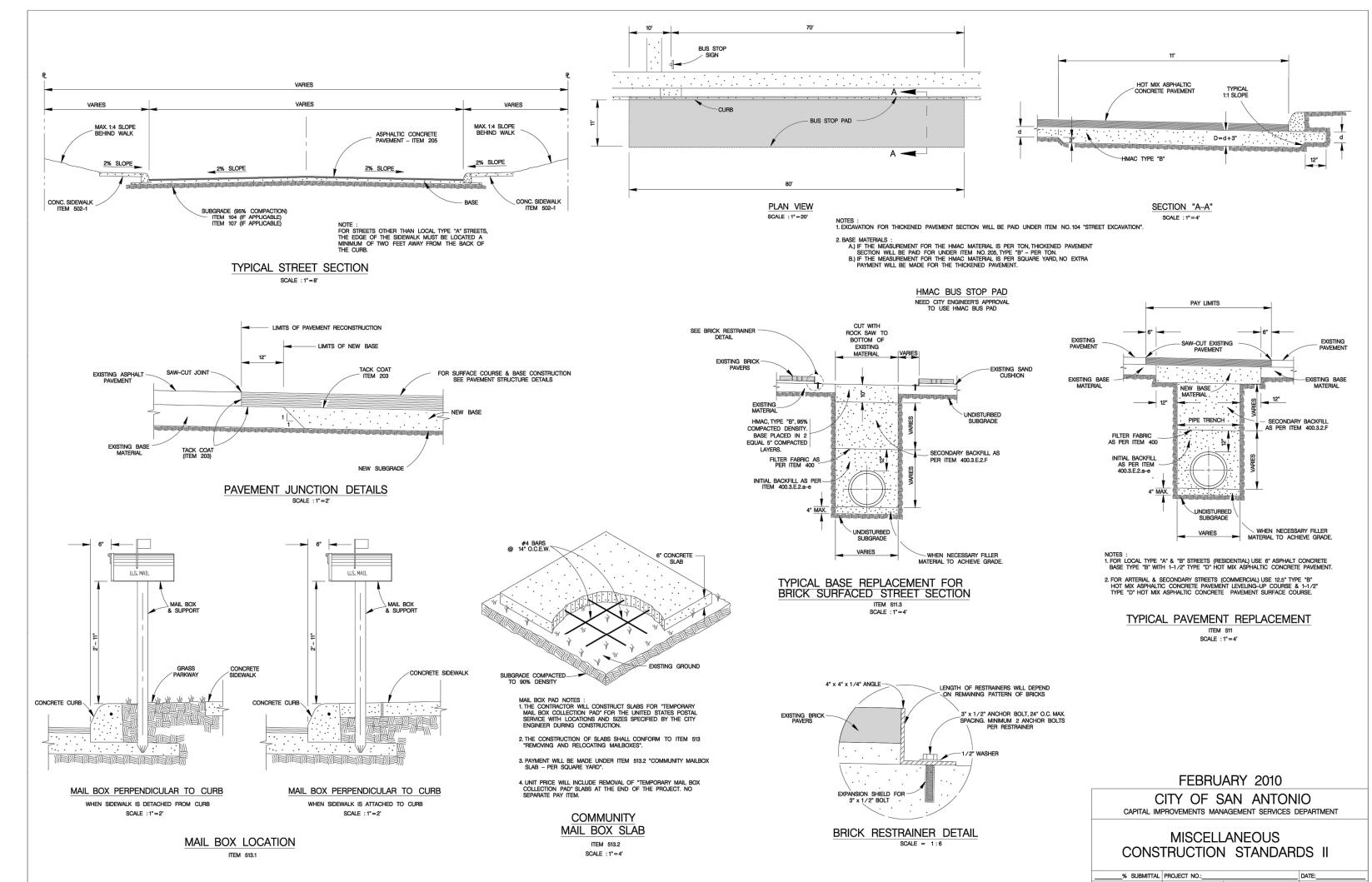
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440 QUARRY IMPROVEMENTS (PRIVATE)
SAN ANTONIO, TEXAS
STREET DETAILS

OB NO. 12934-00

HECKED AS DRAWN DD

DESIGNER

DRWN. BY: _V. VASQUEZ__ DSGN. BY: _____ CHKD. BY:R.S. HOSSEINI, P.E. SHEET NO.: ___OF_

MARCH 2024

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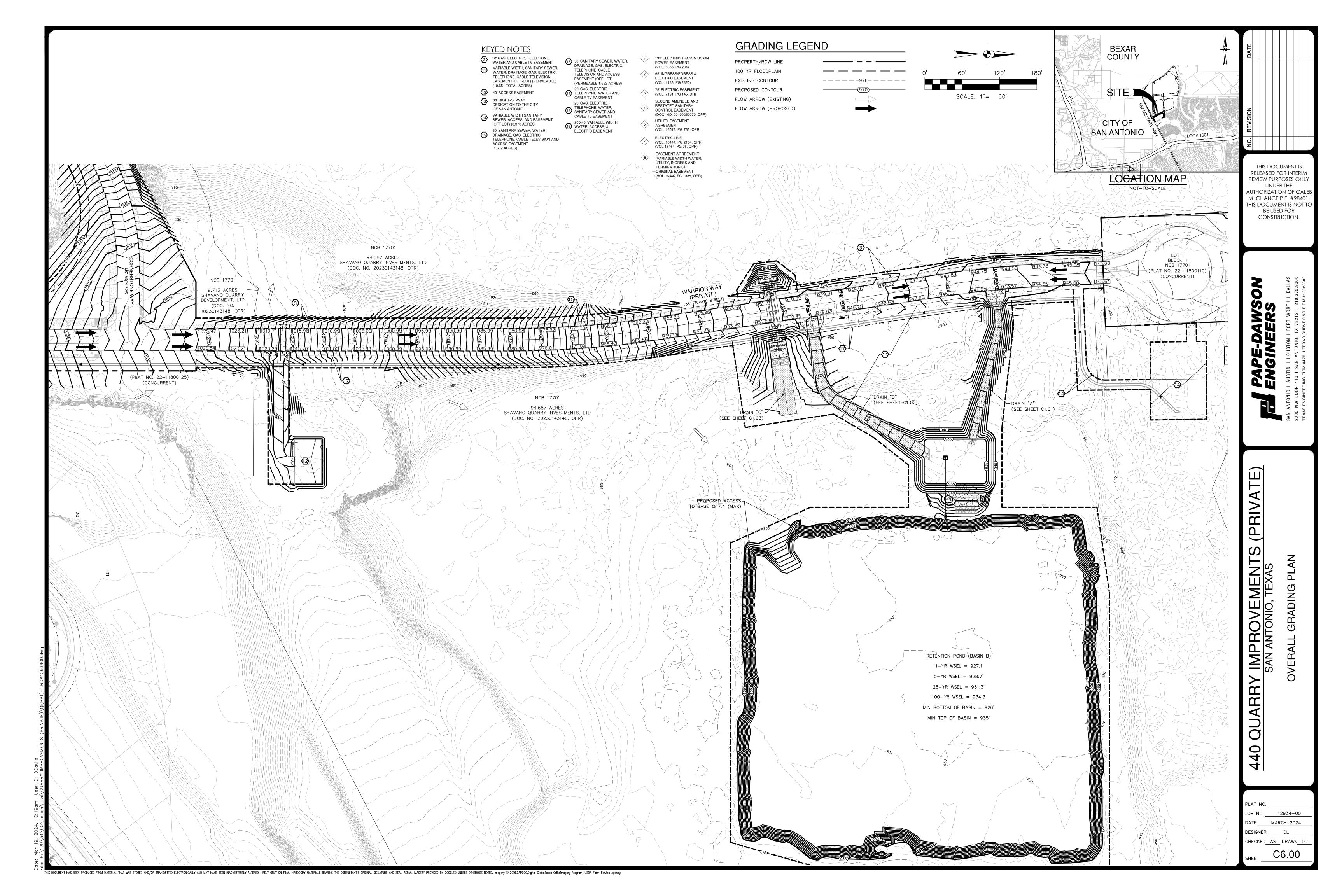
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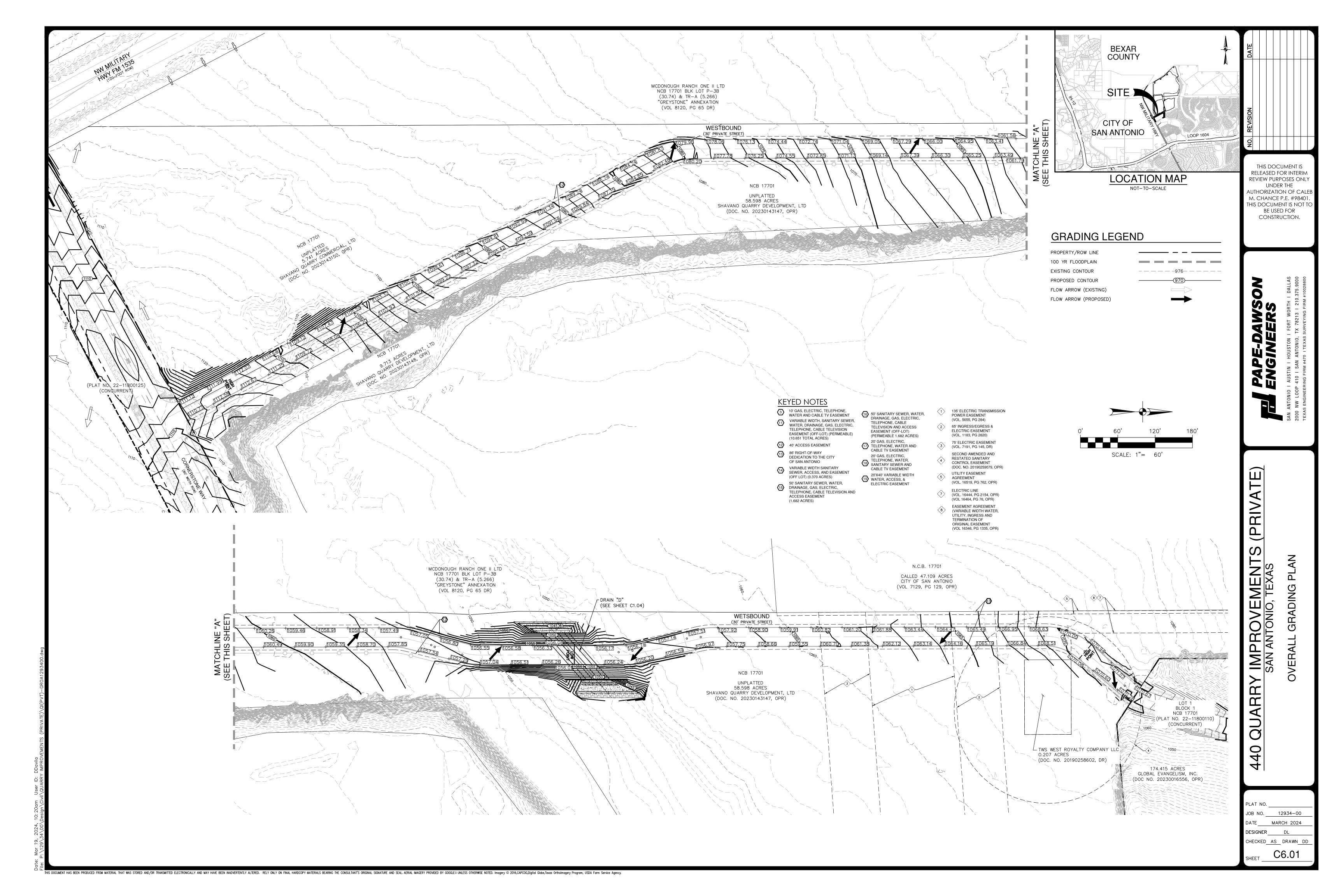
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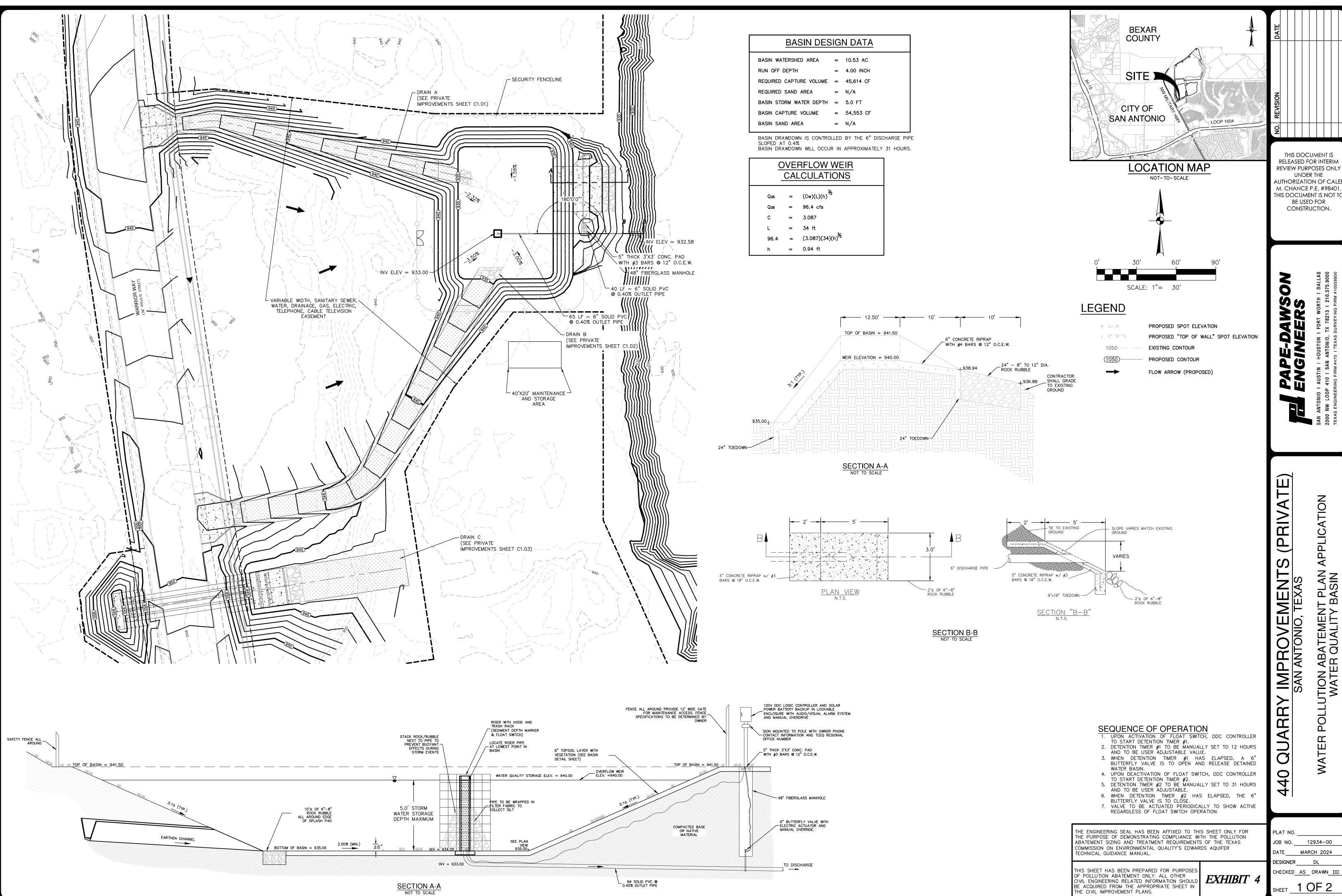
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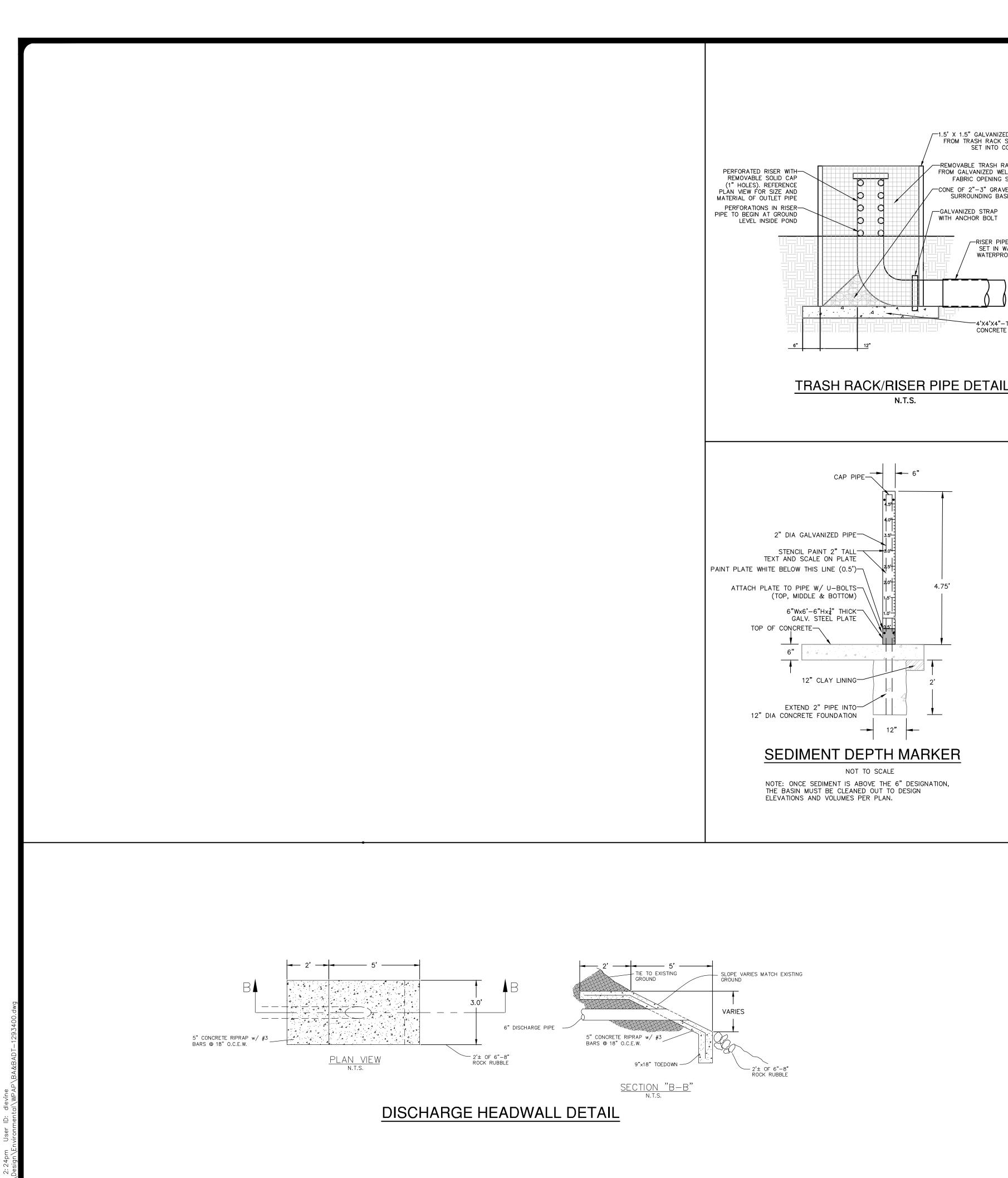


UNDER THE

JOB NO. 12934-00 ATE MARCH 2024 DESIGNER DL

T PLAN BASIN

CHECKED AS DRAWN DD



NOTES

-1.5' X 1.5" GALVANIZED ANGLE FROM TRASH RACK SUPPORT

-REMOVABLE TRASH RACK MADE

FROM GALVANIZED WELDED WIRE

SURROUNDING BASE.

CONE OF 2"-3" GRAVEL

—GALVANIZED STRAP

WITH ANCHOR BOLT

4

N.T.S.

FABRIC OPENING SIZE 1"X1"

SET INTO CONCRETE

-RISER PIPE SLEEVE

SET IN WALL WITH

WATERPROOF SEAL

CONCRETE PAD

1. CONTRACTOR SHALL ENGAGE A TEXAS LICENSED STRUCTURAL ENGINEER TO PROVIDE A SIGNED AND SEALED SET OF STRUCTURAL PLANS, DETAILS AND SPECIFICATION FOR THE STRUCTURAL COMPONENTS OF THE POLLUTION ABATEMENT BASIN INCLUDING INLET DISCHARGE AND BYPASS COMPONENTS. CONTRACTOR SHALL ALSO PROVIDE FOR STRUCTURAL ENGINEER'S INSPECTION DURING BASIN CONSTRUCTION AND STRUCTURAL ENGINEER'S CONSTRUCTION CERTIFICATION UPON COMPLETION OF BASIN.

2. UPON COMPLETION OF CONSTRUCTION, AND IN ACCORDANCE WITH TCEQ REGULATIONS, ALL PERMANENT BMP'S MUST BE CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER.

3. ALL AREAS DISTURBED AS PART OF CONSTRUCTION OF BASIN SHALL BE REVEGETATED PRIOR TO COMPLETION.

4. BASIN HAS BEEN DESIGNED USING TSS REMOVAL AND BMP

SIZING CALCULATIONS AS PER THE TCEQ TGM RG-348 (2005).

5. BASIN PLAN DEPICTS MINIMUM INTERIOR DIMENSIONS (LENGTH, WIDTH & HEIGHT FOR TCEQ REVIEW & APPROVAL. ACTUAL STRUCTURAL PLANS FOR CONSTRUCTION TO BE DESIGNED BY STRUCTURAL ENGINEER AT A LATER DATE.

6. BASIN DRAWDOWN IS CONTROLLED BY THE 4" PVC PIPE. BASIN DRAWDOWN WILL OCCUR IN APPROXIMATELY

FILTER FABRIC SPECIFICATIONS

FILTER FABRIC MEETING THE FOLLOWING SPECIFICATIONS:

UV RESISTANCE AFTER 500 HRS. (%) ASTM D 4355

FABRIC OVERLAP SHALL BE A MINIMUM OF 24".

<u>PROPERTY</u>

WEIGHT (OZ/SY)

GRAB STRENGTH (LBS.)

TRAPEZOID TEAR (LBS)

CBR PUNCTURE STRENGTH (LBS)

ELONGATIONS (%)

AOS (SIEVE #)

FLOW RATE (GPM/SF)

THE SEPARATION LAYER BETWEEN THE SAND FILTER AND GRAVEL LAYERS SHALL BE A DRAINAGE MATTING CONSISTING OF NON—WOVEN

ALL OVERLAPS SHALL BE WIRE TIED AT A MAXIMUM OF 36" INTERVALS

TEST METHOD SPECIFICATION

≥ 4.0

≥125

ASTM D 5261

ASTM D 4632

ASTM D 6241

ASTM D 4491

ASTM D 4632 ≤ 55

7. CONTRACTOR TO SET THE VALVE POSITION TO FULLY OPEN.

NOTES TO CONTRACTOR

FOR EACH PHASE OF BATCH DETENTION BASIN CONSTRUCTION

1. CONTRACTOR IS ADVISED THAT TCEQ DOES NOT ALLOW CHANGES TO PERMANENT POLLUTION ABATEMENT MEASURES WITHOUT THEIR PRIOR APPROVAL.

2. CONTRACTOR SHALL NOTIFY CERTIFYING ENGINEER WHEN BASIN CONSTRUCTION HAS PROGRESSED TO THE FOLLOWING MILESTONES:

a.) REINFORCING STEEL FOR BASIN OVERFLOW WALL OR RIP-RAP LINER HAS BEEN SET, CONCRETE HAS NOT BEEN PLACED AND DRAIN AND RISER PIPE IS IN PLACE. CONTRACTOR SHALL PROVIDE ENGINEER WITH SURVEY DATA WHICH DEMONSTRATES THE RISER PIPE HAS BEEN SET AT PROPER ELEVATION AND GRADE.

b.) BASIN HAS BEEN COMPLETELY FINISHED INCLUDING SOD OR SEED PLACEMENT ON SIDE SLOPES (WHERE APPLICABLE).

3. WORK SHALL NOT CONTINUE ON THE BASIN UNTIL THE ENGINEER HAS HAD AN OPPORTUNITY TO OBSERVE THE STATUS OF CONSTRUCTION AT EACH STAGE. CONTRACTOR SHALL PROVIDE ENGINEER AMNIMUM OF 24 HOURS ADVANCE NOTICE PRIOR TO TIME THE

4. UPON SUBSTANTIAL COMPLETION, OR AS REQUESTED BY ENGINEER, CONTRACTOR TO PROVIDE CERTIFYING ENGINEER WITH FIELD SHOTS VERIFYING ELEVATIONS OF THE FOLLOWING:

- TOP OF BANK/WALL AT EACH CORNER OF BASIN - TOE OF SLOPE AT EACH CORNER OF BASIN (INSIDE BASIN TOE)
- SPLASH PAD/INLET PIPES

BASIN WILL BE AT THE REQUIRED STAGE.

OVERFLOW WEIR

5. BEFORE FINAL ACCEPTANCE OF CONSTRUCTION BY THE OWNER, THE CONTRACTOR WILL REMOVE ALL TRASH, DEBRIS, AND ACCUMULATED SILT FROM THE BASINS AND REESTABLISH THEM TO THE PROPER OPERATING CONDITION.

2. UPON COMPLETION OF CONSTRUCTION, AND IN ACCORDANCE WITH TCEQ REGULATIONS, ALL PERMANENT BMP'S (FILTERSTRIPS AND BASINS) MUST BE CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER.

3. ALL AREAS DISTURBED AS PART OF CONSTRUCTION OF

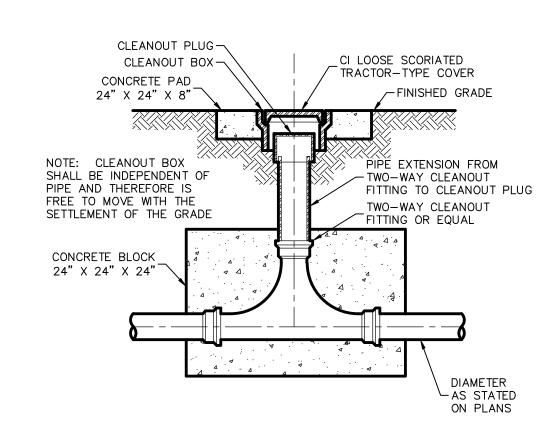
1. CONTRACTOR SHALL INSTALL AND ESTABLISH VEGETATION IN BASINS PER BASIN DETAIL SHEET PRIOR TO SITE CLOSEOUT.

BASINS SHALL BE REVEGATATED PRIOR TO COMPLETION.

1. VALVE WILL BE SET **PARTIALLY CLOSED** SO AS TO PROVIDE A MINIMUM DRAWDOWN TIME OF 24 4" GATE VALVE, M.J. WITH VALVE BOX, COMPLETE -2. CONTRACTOR SHALL PROVIDE OWNER WITH VALVE (STD. SAWS VALVE BOX) OPERATING KEY/ROD PRIOR TO PROJECT 2' X 2' X 6"_ CONCRETE COLLAR ←6" CLEANOUT -6" FLAPPER VALVE PIPE FROM BASIN -

6" GATE & FLAPPER VALVE DETAIL

NOT-TO-SCALE



CLEANOUT DETAIL NOT-TO-SCALE

WATER POLLUTION ABATEMENT PLAN APPLICATION WATER QUALITY DETAILS AND NOTES IMPROVEMENT SAN ANTONIO, TEXAS

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UNDER THE

AUTHORIZATION OF CALEB

M. CHANCE P.E. #98401.

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JOB NO. 12934-00 DATE MARCH 2024 DESIGNER DL CHECKED AS DRAWN DD

SHEET _ 2 OF 2

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