

SAND CREEK RESTORATION

A PORTION OF SAND CREEK CHANNEL STERLING RANCH
 LOCATED IN SECTIONS 33, 28, TOWNSHIP 12S, RANGE 65W OF THE 6TH PRINCIPAL MERIDIAN
 COUNTY OF EL PASO, STATE OF COLORADO

PCD PROJECT NUMBER: CDR-20-004 PUBLIC IMPROVEMENT CONSTRUCTION PLANS

ERD STORMWATER REVIEW COMMENTS
 IN ORANGE BOXES WITH BLACK TEXT

AGENCIES

OWNER/DEVELOPER: SR LAND, LLC
 20 BOULDER CRESCENT, SUITE 201
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY (719) 471-1742

CIVIL ENGINEER: JR ENGINEERING, LLC
 5475 TECH CENTER DRIVE
 COLORADO SPRINGS, CO 80919
 MIKE BRAMLETT P.E. (303) 267-6240

COUNTY ENGINEERING: EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT
 2880 INTERNATIONAL CIRCLE, SUITE 110
 COLORADO SPRINGS, CO 80910
 JEFF RICE, P.E. (719) 520-6300

WATER RESOURCES: STERLING RANCH METRO DISTRICT ENGINEERS
 JDS+HYDRO CONSULTANTS
 545 E. PIKES PEAK AVE., SUITE 300
 COLORADO SPRINGS, CO 80903
 JOHN MCGINN (719) 668-8769

FIRE DISTRICT: BLACK FOREST FIRE PROTECTION DISTRICT
 11445 TEACHOUT ROAD
 COLORADO SPRINGS, CO 80908
 CHIEF BRYAN JACK (719) 495-4300

GAS DEPARTMENT: COLORADO SPRINGS UTILITIES
 7710 DURANT DR.
 COLORADO SPRINGS, CO 80947
 TIM WENDT (719) 668-3556

ELECTRIC DEPARTMENT: MOUNTAIN VIEW ELECTRIC
 11140 E. WOODMEN ROAD
 FALCON, CO 80831
 (719) 495-2283

COMMUNICATIONS: QWEST COMMUNICATIONS (U.N.C.C. LOCATORS) (800) 922-1987
 AT&T (LOCATORS) (719) 635-3674

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GAS: STEPHEN BACON SR. ROW AGENT II
 COLORADO INTERSTATE GAS CO. (KINDER MORGAN)
 2 N. NEVADA AVE.
 COLORADO SPRINGS, CO 80903
 719-659-5936

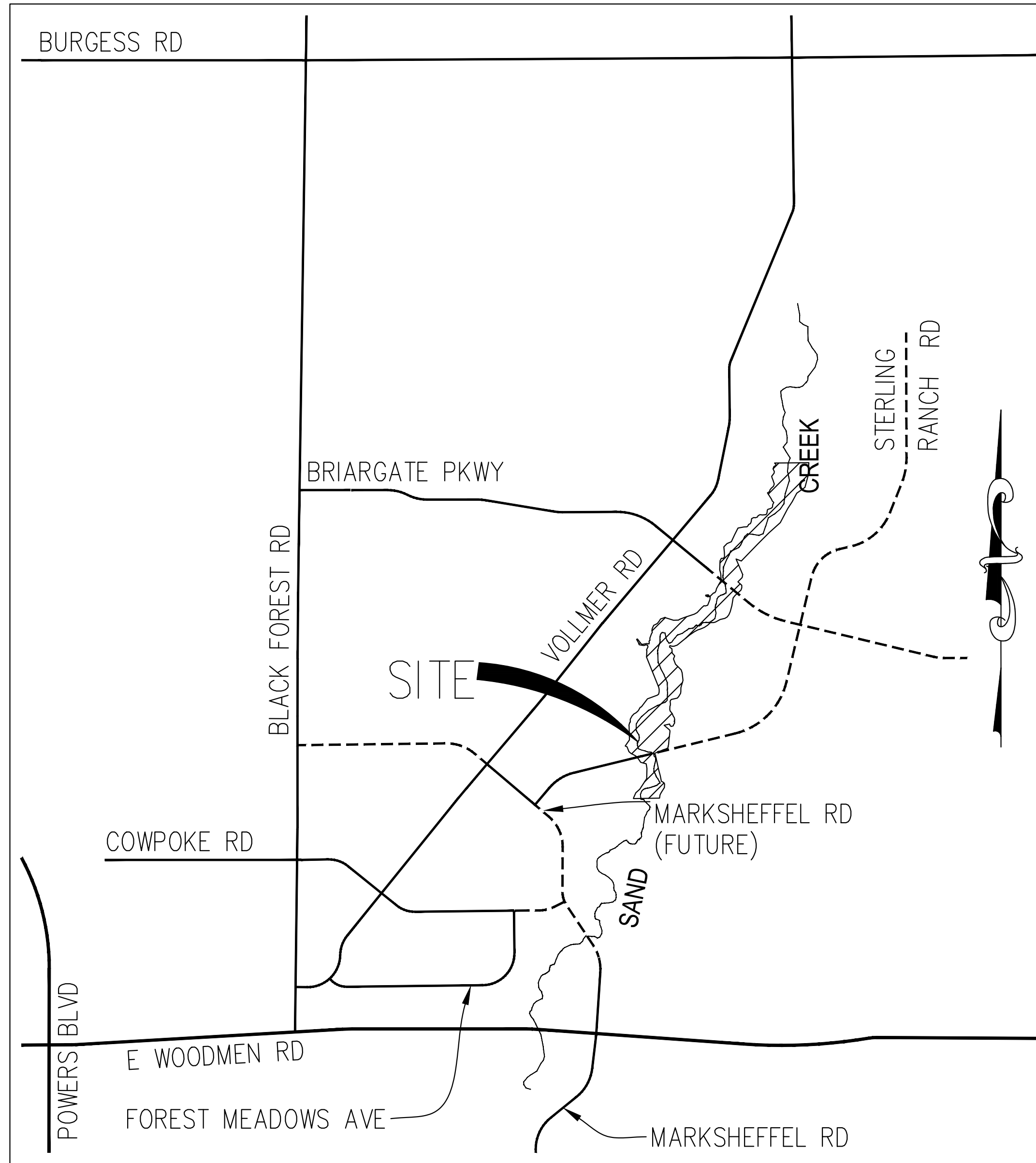
GAS: CRAIG KEIRSEY REAL ESTATE | MAGELLAN MIDSTREAM PARTNERS, L.P.
 ONE WILLIAMS CENTER, OTC-B, TULSA, OK 74172
 918-574-7986

BENCHMARK

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411416.273
 EASTING = 235167.071
 ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANNEE RANCHEROS SUBDIVISION
 NORTHING = 410095.404
 EASTING = 235052.131
 ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411399.962
 EASTING = 233849.817
 ELEVATION = 7030.82

BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



VICINITY MAP
 1" = 1000'



PCD PROJECT NUMBER: CDR-20-004



DISTRICT APPROVALS

THESE DOCUMENTS HAVE BEEN REVIEWED AND APPROVED FOR STORM DRAIN AND ASSOCIATED UTILITY SERVICE CONSTRUCTION.

FOR AND ON BEHALF OF THE STERLING RANCH METRO DISTRICT NO.3 DATE _____

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EL PASO COUNTY STATEMENT

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTORS DISCRETION.

JOSHUA PALMER, P.E. DATE _____
 COUNTY ENGINEER/ECM ADMINISTRATOR

OWNER/DEVELOPER STATEMENT

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN AND ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

JAMES F. MORLEY DATE _____

SR LAND, LLC
 20 BOULDER CRESCENT, SUITE 201
 COLORADO SPRINGS, CO 80903

ENGINEER'S STATEMENT

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

MIKE A. BRAMLETT, P.E.
 COLORADO P.E. 32314
 FOR AND ON BEHALF OF JR ENGINEERING, LLC DATE _____



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE AS DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
 SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY (719) 471-3024

J.R. ENGINEERING
 A Westman Company
 Centennial 303-740-9888 • Colorado Springs 719-583-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

H-SCALE	N/A	V-SCALE	N/A	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				1/23/23	SCH	SCH	

SAND CREEK RESTORATION
COVER SHEET

SHEET 1 OF 111
 JOB NO. 25188.04

CONSTRUCTION NOTES:

- 1. ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN COMPLIANCE WITH EL PASO COUNTY ENGINEERING CRITERIA MANUAL AND EL PASO COUNTY DRAINAGE CRITERIA MANUAL.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK.
3. CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
3.1. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
3.2. CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL VOLUMES 1&2
4. THE CONTRACTOR WILL HOLD A PRE-CONSTRUCTION MEETING WITH THE EL PASO COUNTY ENGINEERING DEPARTMENT REPRESENTATIVE AND THE ENGINEER PRIOR TO CONSTRUCTION OF PUBLIC IMPROVEMENTS.
5. ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT, REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
7. CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND EPC.
8. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS.
9. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
10. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DOT, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
11. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED.
12. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER OR APPLICABLE ENTITY.
13. EL PASO COUNTY SHALL BE NOTIFIED 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.
14. ALL WORK SHALL BE DONE TO THE LINES, GRADES, SECTIONS, AND ELEVATIONS SHOWN ON THE PLANS UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER.
15. ALL RANGE POINTS, TIES, BENCH MARKS, AND OTHER SURVEY CONTROL POINTS WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION MUST BE PRESERVED.
16. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE AND/OR TOES OF SLOPE AS SHOWN ON THE PLANS AND CROSS SECTIONS.
17. CONSTRUCTION ACTIVITY SHALL BE SCHEDULED WITH MINIMUM IMPACT TO PEDESTRIAN AND VEHICULAR TRAFFIC.
18. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL UTILITIES AND STRUCTURES AFFECTED BY THE WORK AND ANY DAMAGE SHALL BE REPAIRED AND RESTORED TO THE SATISFACTION OF THE ENGINEER OR APPLICABLE ENTITY.
19. THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN TEMPORARY TRAFFIC CONTROL DEVICES NECESSARY THROUGHOUT THE DURATION OF CONSTRUCTION IN CONFORMANCE WITH TRAFFIC CONTROL PLANS.
20. THE CONTRACTOR SHALL MAINTAIN PAVEMENT MARKINGS ON THE ROADWAYS DURING ALL PHASES OF CONSTRUCTION IN ACCORDANCE WITH MUTCD AND CDOT STANDARDS.
21. WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED.
22. THE CONTRACTOR SHALL OBTAIN A STATE CONSTRUCTION DEWATERING DISCHARGE PERMIT FOR DISCHARGES TO ANY ROADWAY DITCHES, STORM SEWER, CHANNEL, IRRIGATION DITCH, ANY STREAM THAT IS TRIBUTARY TO THE AFOREMENTIONED FACILITIES, OR ANY WATERS OF THE UNITED STATES.
23. DEWATERING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 107 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
24. CONTRACTOR SHALL NOTIFY ALL BUSINESSES AND RESIDENTS, IN WRITING, PRIOR TO ANY INTERRUPTION IN UTILITY SERVICE.
25. AT THE COMPLETION OF CONSTRUCTION AND PRIOR TO PROJECT CLOSEOUT, THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF PLANS MARKED "AS-BUILT".
26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A SITE SPECIFIC STAGING PLAN FOR ACCESS TO THE WORK AREAS AND FIELD FACILITIES TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO BEGINNING CONSTRUCTION.
27. THE CONTRACTOR SHALL PROTECT EXISTING WETLANDS WITH TEMPORARY FENCING BEFORE ANY GROUND DISTURBANCE BEGINS.

GRADING NOTES:

- 1. SAND CREEK IS AN ACTIVE MAJOR DRAINAGEWAY WITH PERENNIAL BASE FLOWS.
2. THERE IS A LIKELIHOOD FOR LARGE FLOW EVENTS IN SAND CREEK WHICH COULD JEOPARDIZE CONSTRUCTION.
3. DEWATERING.
3.a. DEWATERING/BYPASS PUMPING OF SAND CREEK SHALL OCCUR IN ADVANCE OF CONSTRUCTION ACTIVITIES.
3.b. THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION DEWATERING (CDW) PERMIT FROM CDPHE ANYTIME GROUNDWATER, INCLUDING GROUNDWATER THAT IS COMMINGLED WITH STORMWATER OR SURFACE WATER, IS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES.
3.c. WATER FROM DEWATERING OPERATIONS SHALL ONLY BE DISCHARGED INTO STATE WATERS IF ALLOWED BY A PERMIT.
4. MUCK EXCAVATION IS NOT ANTICIPATED FOR THIS PROJECT.
5. THE MAXIMUM SLOPE FOR EXCAVATION AND PLACEMENT OF FILL IS 4:1 HORIZONTAL:VERTICAL.
6. THE EXISTING DROP STRUCTURE, ANY ASSOCIATED FEATURES, AND DEBRIS SHOULD BE REMOVED FROM THE PROPOSED CONSTRUCTION AREA.
7. EXPOSED AREAS WHICH WILL RECEIVE FILL, ONCE PROPERLY CLEARED WHERE NECESSARY, SHOULD BE SCOURED TO A MINIMUM DEPTH OF 8 INCHES.
8. A GEOTECHNICAL ENGINEER SHALL BE PRESENT FOR OVER-EXCAVATION AND FILL OPERATIONS.
9. THE EARTHWORK EFFORTS SHOULD BE MONITORED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER.
10. EACH LIFT OF COMPACTED FILL SHOULD BE TESTED, EVALUATED, AND REWORKED AS NECESSARY UNTIL APPROVED BY THE GEOTECHNICAL ENGINEER.
11. IN AREAS OF FOUNDATION EXCAVATIONS, THE BEARING SUBGRADE SHOULD BE EVALUATED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER.
12. THE ON-SITE SOILS ARE GENERALLY CONSIDERED SUITABLE FOR REUSE AS STRUCTURAL AND/OR GENERAL FILL.
13. THE FILL SHALL BE PLACED IN THIN, LOOSE LIFTS OF 8 INCHES OR LESS.
14. A COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE) WATER QUALITY DIVISION STORMWATER DISCHARGE PERMIT SHALL BE OBTAINED AND A COPY SHALL BE SUBMITTED TO EL PASO COUNTY.
15. PROPOSED SPOT ELEVATIONS REFLECT MEAN FINISHED GROUND GRADES.
16. EXISTING GRADES REFLECT CHANNEL CONDITIONS AS OF AUGUST 1, 2017.
17. TOPSOIL SHALL BE STOCKPILED TO THE EXTENT PRACTICAL ON THE SITE FOR USE ON AREAS TO BE REVEGETATED.

ABBREVIATIONS

Table with 4 columns: Abbreviation, Description, Abbreviation, Description. Includes AC ACRE, AD ALGEBRAIC DIFFERENCE, AH AHEAD, ARCH ARCHITECT, ASCE AMERICAN SOCIETY OF CIVIL ENGINEERS, ASSY ASSEMBLY, AVE AVENUE, BB BOX BASE, BK BACK, BNDY BOUNDARY, BOP BOTTOM OF PIPE, BOV BLOW OFF VALVE, BVF BUTTERFLY VALVE, BLVD BOULEVARD, BW BOTTOM OF WALL, C&G CURB & GUTTER, CATV CABLE TELEVISION, CB CATCH BASIN, CBC CONCRETE BOX CULVERT, CDOT COLORADO DEPARTMENT OF TRANSPORTATION, CDS CUL-DE-SAC, CF CUBIC FOOT, CFS CUBIC FEET PER SECOND, CL CENTER LINE, CLOMR CONDITIONAL LETTER OF MAP REVISION, CLR CLEAR, CMP CORRUGATED METAL PIPE, CO CLEAN OUT, COCS CITY OF COLORADO SPRINGS, CONC CONCRETE, CR CIRCLE, CSP CORRUGATED STEEL PIPE, CSU COLORADO SPRINGS UTILITIES, CT COURT, CTB CONCRETE THRUST REDUCER BLOCK, CY CUBIC YARD, DBPS DRAINAGE BASIN PLANNING STUDY, DE DRAINAGE EASEMENT, DIA DIAMETER, DIP DUCTILE IRON PIPE, DR DRIVE, DRC DESIGN REVIEW COMMITTEE, DU DWELLING UNITS, DY DWAY, E EAST, EA EACH, EGL ENERGY GRADE LINE, EL ELEVATION, ELEC ELECTRIC, EOA EDGE OF ASPHALT, EPC EL PASO COUNTY, ERCP ELLIPTICAL RCP, ESMT EASEMENT, EST ESTIMATE, EX EXISTING, FDP FINAL DEVELOPMENT PLAN, FDR FINAL DRAINAGE REPORT, FES FLARED END SECTION, FF FINISHED FLOOR ELEVATION, FG FINISHED GRADE, FH FIRE HYDRANT, FL FLOWLINE, FLD FILING, FO FIBER OPTIC CABLE, GB GRADE BREAK, GE GAS EASEMENT, GIS GEOGRAPHIC INFORMATION SYSTEM, GL GAS LINE, GPS GLOBAL POSITIONING SYSTEM, GV GATE VALVE, HBP HOT BITUMINOUS PAVEMENT, HO HANDICAP, HOC HIGH DEFLECTION COUPLING, HDPE HIGH DENSITY POLYETHYLENE, HGL HYDRAULIC GRADE LINE, HMA HOT MIX ASPHALT, HOA HOME OWNERS ASSOCIATION, HP HIGH POINT, HR HOUR, I INLET, IE IRRIGATION EASEMENT, INT INTERSECTION, INV INVERT, IRR IRRIGATION, KB KICK (THRUST) BLOCK, LB POUND, LE LANDSCAPE EASEMENT, LF LINEAR FOOT, LN LANE, LMR LETTER OF MAP REVISION, LP LOW POINT, LS LUMP SUM, LT LEFT, MAX MAXIMUM, M/D MOISTURE DENSITY, MDDP MASTER DEVELOPMENT DRAINAGE PLAN, MH MANHOLE, MIN MINIMUM, MS MOUNTABLE SIDEWALK, N NORTH, NRCP NON-REINFORCED CONCRETE PIPE, OPF OFFICIAL DEVELOPMENT PLAN, OHE OVERHEAD ELECTRIC, OHU OVERHEAD UTILITY, PC POINT OF CURVATURE, PCC POINT OF COMPOUND CURVATURE, PCR POINT OF CURB RETURN, PDP PRELIMINARY DEVELOPMENT PLAN, PE PROFESSIONAL ENGINEER, PI POINT OF INTERSECTION PARKWAY, PL PROPERTY LINE, PR PROPOSED, PRC POINT OF REVERSE CURVATURE, PT POINT OF TANGENCY, PV HANDICAP, PVC POLYVINYL CHLORIDE, R RADIUS, RBCB REINFORCED CONCRETE BOX CULVERT, RCP REINFORCED CONCRETE PIPE, RD ROAD, ROW RIGHT OF WAY, RT RIGHT, S SOUTH, SEC SECTION, SAN SANITARY SEWER, SF SQUARE FOOT, ST STREET, STA STATION, STM STORM SEWER, SY SQUARE YARD, SY-IN SQUARE YARD INCH, TB THRUST BLOCK, TBC TOP BACK OF CURB, TBL TOP BACK OF WALK, TEL TELEPHONE, TN TON, TOA TOP OF ASPHALT, TOB TOP OF BOX, TOC TOP OF CURB OR CONCRETE, TOF TOP OF FOUNDATION, TOP TOP OF PIPE, TW TOP OF WALL, TYP TYPICAL, UDFCD URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, UE UTILITY EASEMENT, U&DE UTILITY & DRAINAGE EASEMENT, UGE UNDERGROUND ELECTRIC, VCP VITRIFIED CLAY PIPE, VPC VERTICAL POINT OF CURVATURE, VPI VERTICAL POINT OF INTERSECTION, VPT VERTICAL POINT OF TANGENCY, VTC VEHICLE TRACKING CONTROL, W WEST, WL WATER LINE, WM WATER MAIN, WRD WATER RESOURCES DEPARTMENT, WS WATER SURFACE, WSE WATER SURFACE ELEVATION, WTR WATER, YR YEAR

GRADING, EROSION AND STORMWATER QUALITY NOTES:

- 1. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS.
2. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS.
3. A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION.
4. ONCE THE ESQCP IS APPROVED AND A NOTICE TO PROCEED HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STATE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC.
5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES.
6. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED.
7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS.
8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES.
9. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS.
10. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION.
11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES.
12. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH OR FROM THE EARTH DISTURBANCE AREA SHALL BE STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF-SITE.

RIPRAP NOTES:

- 1. WHERE "SOIL RIPRAP" IS DESIGNATED ON THE CONTRACT DRAWINGS, RIPRAP VOIDS ARE TO BE FILLED WITH APPROVED FILL.
2. PLACE ALL RIPRAP AND SOIL-RIPRAP TO RESULT IN SECURELY INTERLOCKED ROCK AT THE DESIGN THICKNESS AND GRADE.
3. ALL SOIL RIPRAP THAT IS BURIED WITH TOPSOIL SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ANY TOPSOIL PLACEMENT.
4. CRIMP OR TACKIFY MULCH OR USE APPROVED HYDROMULCH AS CALLED FOR IN THE PLANS AND SPECIFICATIONS.
5. ELEVATION TOLERANCES FOR RIPRAP SHALL BE 0.10 FEET. THICKNESS OF SOIL RIPRAP SHALL BE NO LESS THAN THICKNESS SHOWN AND NO MORE THAN 2-INCHES GREATER THAN THE THICKNESS SHOWN.

Table with 4 columns: Riprap Designation, Intermediate Rock Dimension (in.), Percent Passing (%), D50 (in.). Rows include TYPE VL, TYPE M, and TYPE H.



ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

MIKE A. BRAMLETT, P.E. COLORADO P.E. 32314 FOR AND ON BEHALF OF JR ENGINEERING, LLC.

DATE

Vertical sidebar containing: PREPARED FOR (SR LAND, LLC), PROJECT ADDRESS (20 BOULDER CRESCENT), ENGINEER (J.R. ENGINEERING), PERMIT INFORMATION (EL PASO COUNTY PERMIT 80903), DATE, REVISIONS, H-SCALE, V-SCALE, DESIGN BY, DRAWN BY, CHECKED BY, SAND CREEK RESTORATION, GENERAL NOTES, SHEET 2 OF 111, JOB NO. 25188.04.

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LAYER LINETYPE LEGEND

	EXISTING	PROPOSED
PHASE LINE	---	---
MATCH LINE	---	---
SECTION LINE	---	---
BOUNDARY LINE	---	---
PROPERTY LINE	---	---
EASEMENT LINE	---	---
RIGHT OF WAY	---	---
R.O.W. A LINE	A ---	A ---
CENTERLINE	---	---
CITY LIMITS	---	---
WIRE FENCE	X --- X	X --- X
CHAIN LINK FENCE	○ --- ○	● --- ●
WOOD FENCE	◇ --- ◇	◆ --- ◆
MASONRY FENCE	□ --- □	■ --- ■
GUARDRAIL	---	---
CONC. BARRIER	---	---
CABLE TV	TV --- TV	TV --- TV
ELECTRIC	E --- E	E --- E
FIBER OPTIC	FO --- FO	FO --- FO
GAS MAIN	G --- G	G --- G
IRRIGATION MAIN	IRR --- IRR	IRR --- IRR
OIL/PETRO. MAIN	O --- O	O --- O
OVERHEAD UTILITY	OHU --- OHU	OHU --- OHU
SANITARY SEWER	S --- S	S --- S
STORM DRAIN	---	---
TELEPHONE	T --- T	T --- T
WATER MAIN	W --- W	W --- W
RAW WATER LINE	---	---
SWALE/WATERWAY FLOWLINE	---	---
DIVERSION DITCH	---	---
DIVERSION CHANNEL	---	---
MAJOR DRAINAGE BASIN	---	---
MINOR DRAINAGE BASIN	---	---
TOP OF SLOPE	---	---
TOE OF SLOPE	---	---
EDGE OF WATER	---	---
INDEX CONTOUR	6100 ---	6100 ---
INTERMEDIATE CONTOUR	---	---
DEPRESSION CONT. (INDEX)	6100 ---	6100 ---
DEPRESSION CONT. (INTER)	---	---
TOP OF CUTS	---	---
TOE OF FILLS	---	---
CUT AND FILL LINE	SF --- SF	C/F --- C/F
SILT FENCE	SF --- SF	SF --- SF
100 YEAR FLOODPLAIN	100YR ---	100YR ---
500 YEAR FLOODPLAIN	500YR ---	500YR ---
FLOODWAY	FLDWTY ---	FLDWTY ---
BASE FLOOD ELEVATION	---	---
EDGE OF WETLANDS	---	---

UTILITIES LEGEND

	EXISTING	PROPOSED
STORM SEWER		
MANHOLE	⊙	●
STORM INLET	---	---
AREA INLET - SQUARE	□	---
AREA INLET - ROUND	○	---
FLARED END SECTION	⊲	⊲
RIPRAP	---	---
SANITARY SEWER		
LINE MARKER	Mr San	---
SERVICE MARKER	△	---
CLEAN-OUT	---	---
MANHOLE W/ DIRECTIONAL FLOW ARROW	⊙	---
WATER LINE		
LINE MARKER	Mr W	---
SERVICE MARKER	△	---
FIRE HYDRANT	⊙	---
FIRE CONNECTION	---	---
MANHOLE	⊙	---
BEND	⊞	---
BLOW-OFF VALVE	⊞	---
WELL	WELL	WELL
METER	⊙	---
VALVE	⊞	---
REDUCER	---	---
THRUST BLOCK	---	---
CROSS	---	---
PLUG W/ THRUST BLOCK	---	---
TEE	---	---
REVERSE ANCHOR	---	---
ANODE	---	---
AIR & VACUUM VALVE ASSEMBLY	---	---
TRANSMISSION BLOW-OFF ASSEMBLY	---	---
GAS LINE		
MARKER	Mr G	---
SERVICE MARKER	△	---
METER	⊙	---
VALVE	⊞	---
PLUG	---	---
TEE	---	---
DRY UTILITIES		
CABLE TV MARKER	Mr TV	---
CABLE TELEVISION PEDESTAL	---	---
ELECTRIC MARKER	Mr E	---
ELECTRIC SERVICE MARKER	△	---
ELECTRICAL PEDESTAL	---	---
ELECTRICAL METER	⊙	---
ELECTRICAL MANHOLE	⊙	---
FIBER-OPTIC MARKER	Mr FO	---
IRRIGATION PEDESTAL	---	---
TELEPHONE MARKER	Mr T	---
TELEPHONE PEDESTAL	---	---
TELEPHONE MANHOLE	⊙	---
UTILITY POLE	---	---
GUY ANCHOR	---	---
GUY POLE	---	---
MISC. UTILITIES		
VENT PIPE	VP	VP
TEST HOLE DESIGNATOR	TH#	---
FIRM/AGENCY	---	---

MONUMENTATION LEGEND

ALUMINUM CAP - FOUND	AC
BRASS CAP - FOUND	BC
BENCHMARK - FOUND	⊕
CROSS - FOUND	+
MONUMENT - SET	○
MONUMENT - FOUND (DEFAULT)	●
MONUMENT - FOUND (ALTERNATE 1)	■
MONUMENT - FOUND (ALTERNATE 2)	⊞
MONUMENT - FOUND (ALTERNATE 3)	▲
MONUMENT - FOUND (ALTERNATE 4)	⊞
MONUMENT - FOUND (ALTERNATE 5)	⊞
MONUMENT - FOUND (ALTERNATE 6)	⊞
MONUMENT - FOUND (ALTERNATE 7)	⊞
NAIL & WASHER - FOUND	NAIL & WASHER
PANEL - FOUND	---
PK NAIL - FOUND	PK NAIL
ROW MONUMENT - FOUND	---
ROW MARKER - FOUND	---
SECTION CORNER - FOUND	---
SECTION CORNER - SET	---
QUARTER-SECTION CORNER - FOUND	---
QUARTER-SECTION CORNER - SET	---
SECTION CENTER - FOUND	---
SECTION CENTER - FOUND	---
CONTROL/TRVERSE POINT - SET	---

TRAFFIC LEGEND

	EXISTING	PROPOSED
PARKING METER	⊙	⊙
TRAFFIC SIGNAL BOX	---	---
TRAFFIC SIGNAL POLE	---	---
TRAFFIC SIGNAL	---	---
BARRICADE	---	---
GUARD RAIL POST	---	---
IMPACT ATTENUATOR	---	---
BRIDGE STYLE HIGHWAY SIGN POST	---	---
CANTILEVER STYLE HIGHWAY SIGN POST	---	---
RAILROAD MARKER/SIGN	---	---
STREET LIGHT	---	---
STREET LIGHT - SINGLE	---	---
STREET LIGHT - DOUBLE	---	---
LUMINAIRE	---	---
ALTERNATE LUMINAIRE	---	---
SIGNAL MAST ARM W/ LUMINAIRE	---	---
PEDESTAL POLE FOUNDATION	---	---
TRAFFIC SIGNAL POLE	---	---
ROUND PULL BOX	---	---
MEDIUM PULL BOX	---	---
LARGE PULL BOX (20X33X15)	---	---
SIGNAL HEAD WITHOUT BACK PLATE	---	---
SIGNAL HEAD WITH BACK PLATE	---	---
PEDESTRIAN SIGNAL HEAD	---	---
VIDEO IMAGE DETECTOR	---	---
OPTICOM DETECTOR	---	---
VEHICLE DETECTION ZONE	---	---

STORM WATER MANAGEMENT

KEY	SYMBOL
CHECK DAM	CD
CONSTRUCTION ROAD STABILIZATION	CRS
CURB SOCK INLET PROTECTION	CS
CONCRETE WASHOUT AREA	CWA
DIVERSION DITCH AND DIKE, TEMPORARY	DD
DIVERSION CHANNEL, TEMPORARY	DV
DEWATERING	DW
EROSION CONTROL BLANKET	ECB
INLET FILTER	IF
INLET PROTECTION	IP
MULCHING	ML
OUTLET PROTECTION	OP
PAVED FLUME	PF
PERMENTENT SEEDING	FS
REINFORCED CONCRETE DAM	RCD
ROUGH CUT STREET CONTROL	RCS
SEDIMENT BASIN	SB
SEDIMENT CONTROL LOG	SCL
SILT FENCE	SF
SURFACE ROUGHENING	SR
STABILIZED STAGING AREA	SSA
SEDIMENT TRAP	ST
STRAW BALE BARRIER	STB
TERRACING	TER
TEMPORARY SEEDING	TS
TEMPORARY STREAM CROSSING CULVERT/BRIDGE	TSC C
TEMPORARY STREAM CROSSING FORD TYPE	TSC F
TEMPORARY SLOPE DRAIN	TSD
VEHICLE TRACKING CONTROL	VTC
VEHICLE TRACKING CONTROL WITH WASH RACK	WR

LANDSCAPE LEGEND

	EXISTING
TREE - CONIFEROUS	---
TREE - DECIDUOUS	---
SHRUB/BUSH	---
SHRUBS AND BUSHES	---
IRRIGATION BOX	---
IRRIGATION SPRINKLER	---
IRRIGATION VALVE	---
BOLLARD	---
FLAGPOLE	---



Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

MIKE A. BRAMLETT, P.E.
COLORADO P.E. 32314
FOR AND ON BEHALF OF JR ENGINEERING, LLC.

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
A Westman Company
Central 303-740-8888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

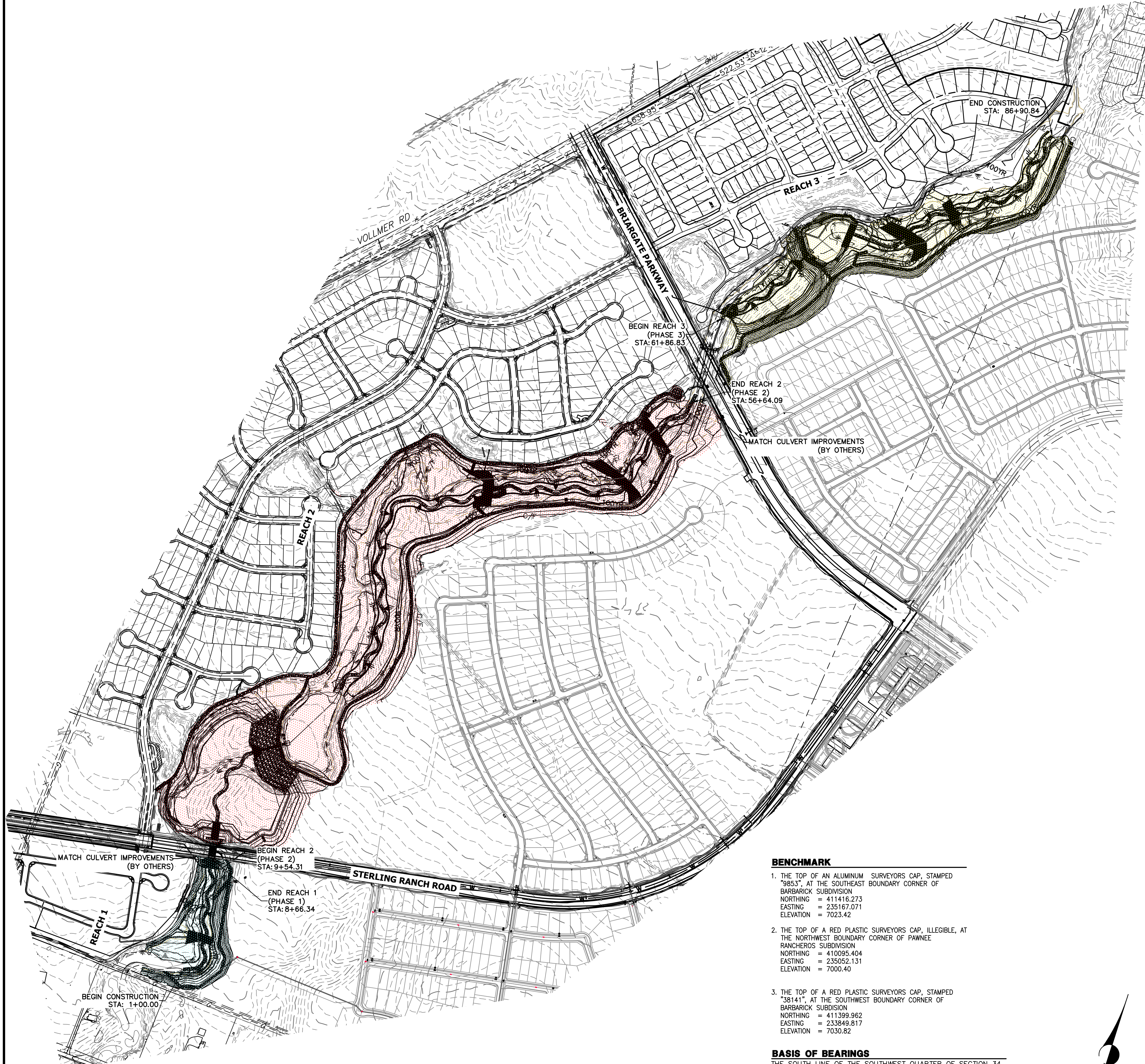
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	REVISION	
						No.	DATE
N/A	N/A	1/23/23	SCH	SCH			

SAND CREEK RESTORATION
LEGEND

SHEET 3 OF 111

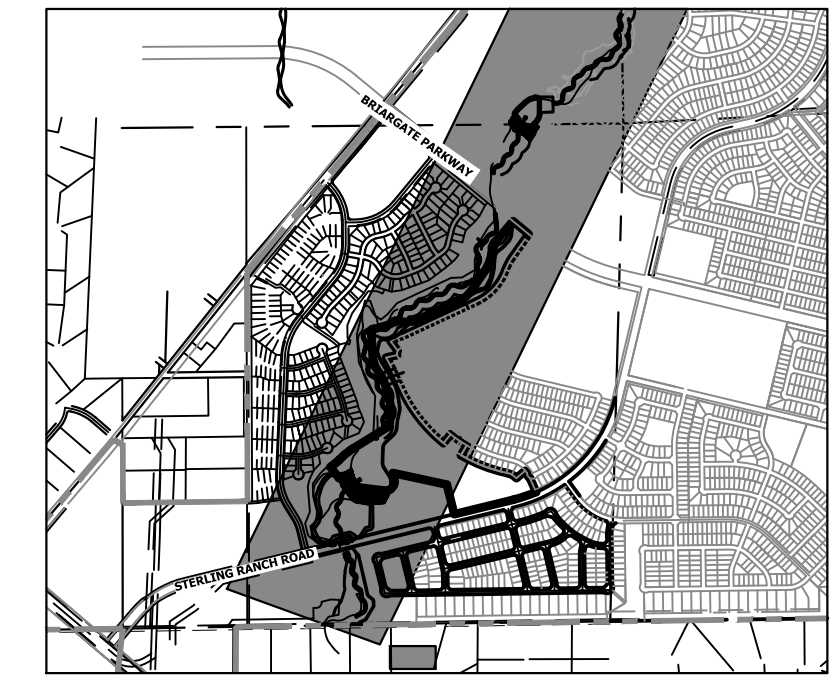
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LEGEND

- REACH 1 (PHASE 1)
- REACH 2 (PHASE 2)
- REACH 3 (PHASE 3)



GRADING NOTES:

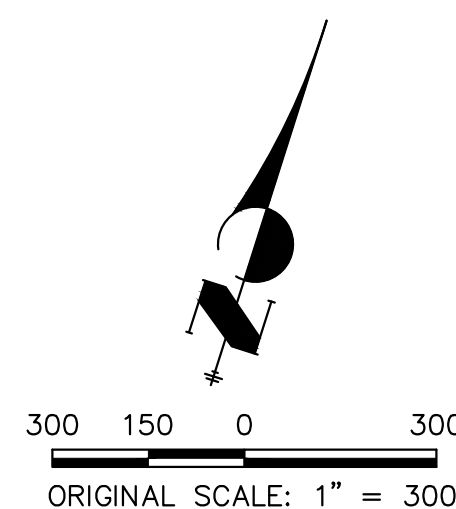
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 - 3.a. DEWATERING/BYPASS PUMPING OF SAND CREEK SHALL OCCUR IN ADVANCE OF CONSTRUCTION ACTIVITIES.
 - 3.b. THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION DEWATERING (CDW) PERMIT FROM CDPHE PRIOR TO GROUNDWATER, INCLUDING GROUNDWATER THAT IS COMMINGLED WITH STORMWATER OR SURFACE WATER, BEING ENCOUNTERED DURING CONSTRUCTION ACTIVITIES AND THE GROUNDWATER OR COMMINGLED WATER NEEDS TO BE DISCHARGED TO SURFACE WATER.
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 - 13.a. WITHIN 10 FEET OF STRUCTURES, OR IN CONSTRUCTED SLOPES:
95 PERCENT OF MAXIMUM DRY DENSITY.
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90 PERCENT OF MAXIMUM DRY DENSITY.
14. A COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE) WATER QUALITY DIVISION STORMWATER DISCHARGE PERMIT SHALL BE OBTAINED AND A COPY SHALL BE SUBMITTED TO EL PASO COUNTY.
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BENCHMARK

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411416.273
EASTING = 235167.071
ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANWEE RANCHEROS SUBDIVISION
NORTHING = 410095.404
EASTING = 235052.131
ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411399.962
EASTING = 233849.817
ELEVATION = 7030.82

BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



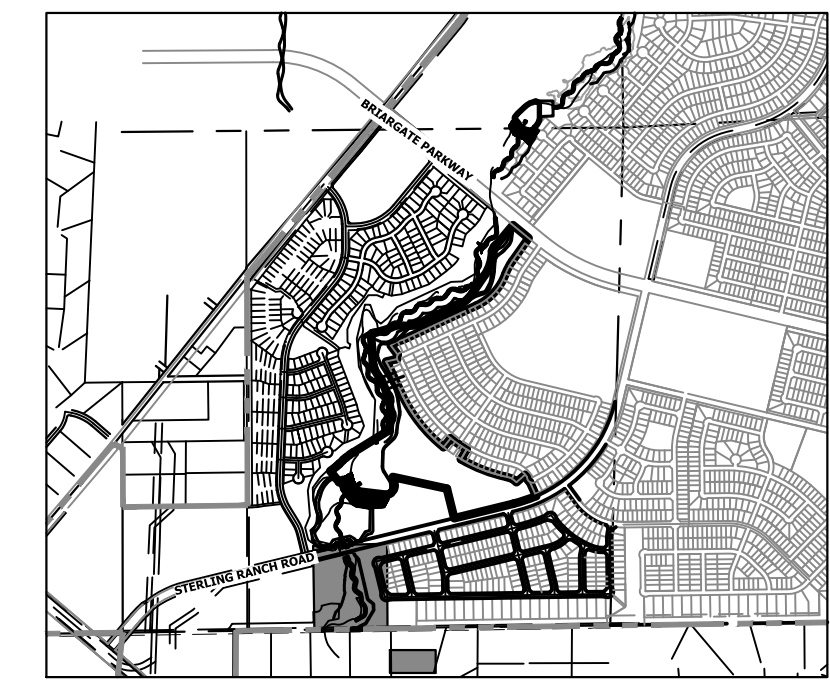
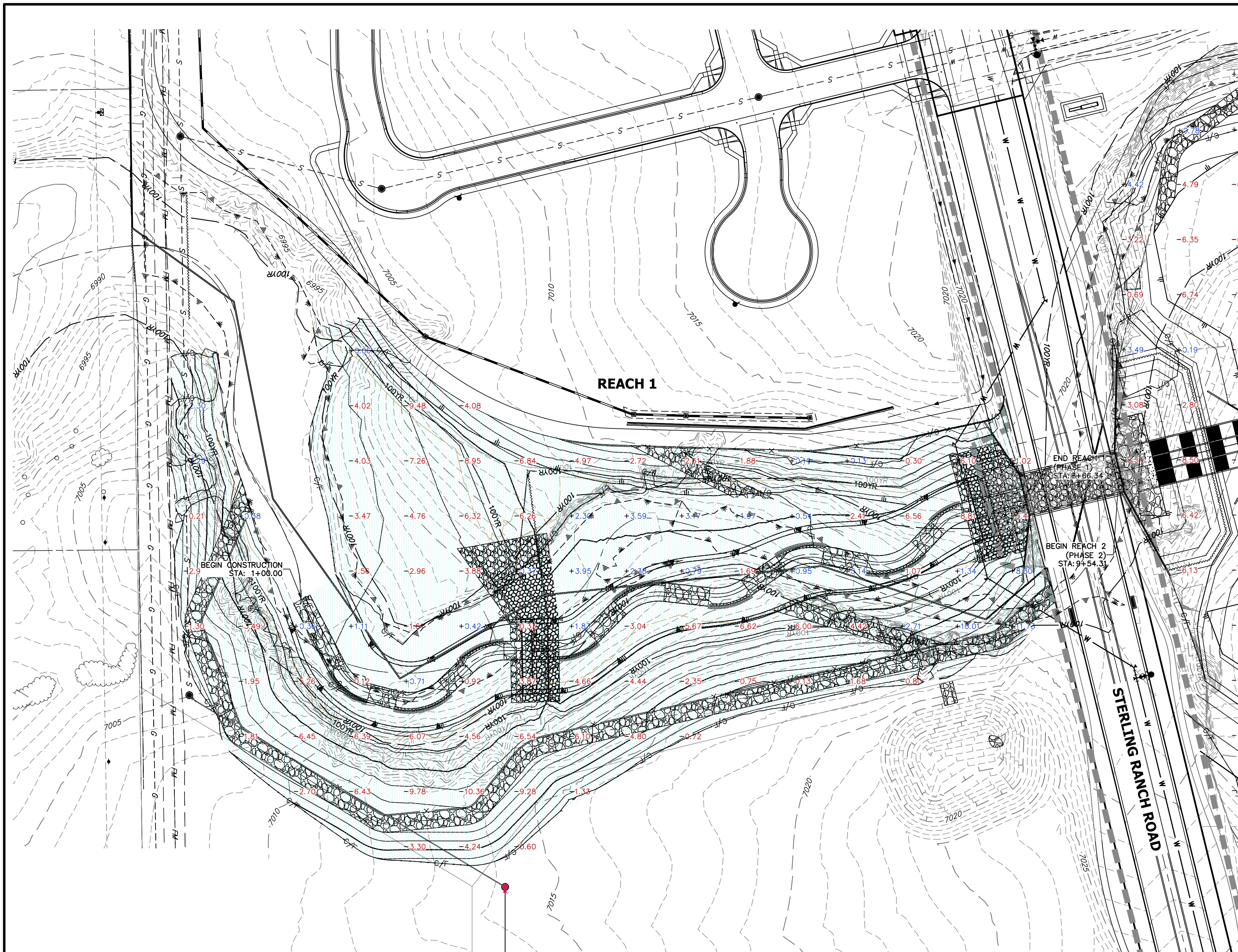
ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

**PRELIMINARY
NOT FOR
CONSTRUCTION**

MIKE A. BRAMBLE
COLORADO P.E. 30112
FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.
J.R. ENGINEERING A Westman Company Central 303-740-9383 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	
SAND CREEK RESTORATION EARTHWORK & PHASING PLAN	
SHEET 4 OF 111 JOB NO. 25188.04	

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KEY MAP
SCALE: 1" = 2000'

LEGEND

- REACH 1 (PHASE 1)
- REACH 2 (PHASE 2)
- REACH 3 (PHASE 3)
- 0.00 CUT HEIGHT (FEET)
- +0.00 FILL HEIGHT (FEET)

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BENCHMARK

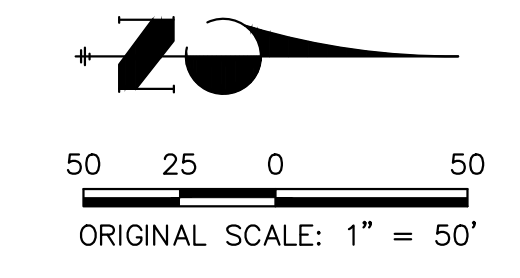
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NORTHING = 411399.962
EASTING = 233849.817
ELEVATION = 7030.82

APPROXIMATE QUANTITY SUMMARY

CUT/FILL SUMMARY						
NAME	CUT FACTOR	FILL FACTOR	2D AREA (ACRES)	CUT (CY)	FILL (CY)	NET (CY)
REACH 1	1	1	5.3202	25795	5652	20144 <CUT>
REACH 2	1	1	44.4228	625035	38932	586102 <CUT>
REACH 3	1	1	16.0801	114827	10005	104822 <CUT>
TOTAL			65.8231	765657	54589	711068

BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY
NOT FOR
CONSTRUCTION

MIKE A. BRAMLEY
COLORADO P.E. NO. 35082
FOR AND ON BEHALF OF JR. ENGINEERING, INC.

PREPARED FOR

SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

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Central 303-740-9383 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	NO.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1" = 300'	N/A	1/23/23	DUV	SCH	

SAND CREEK RESTORATION

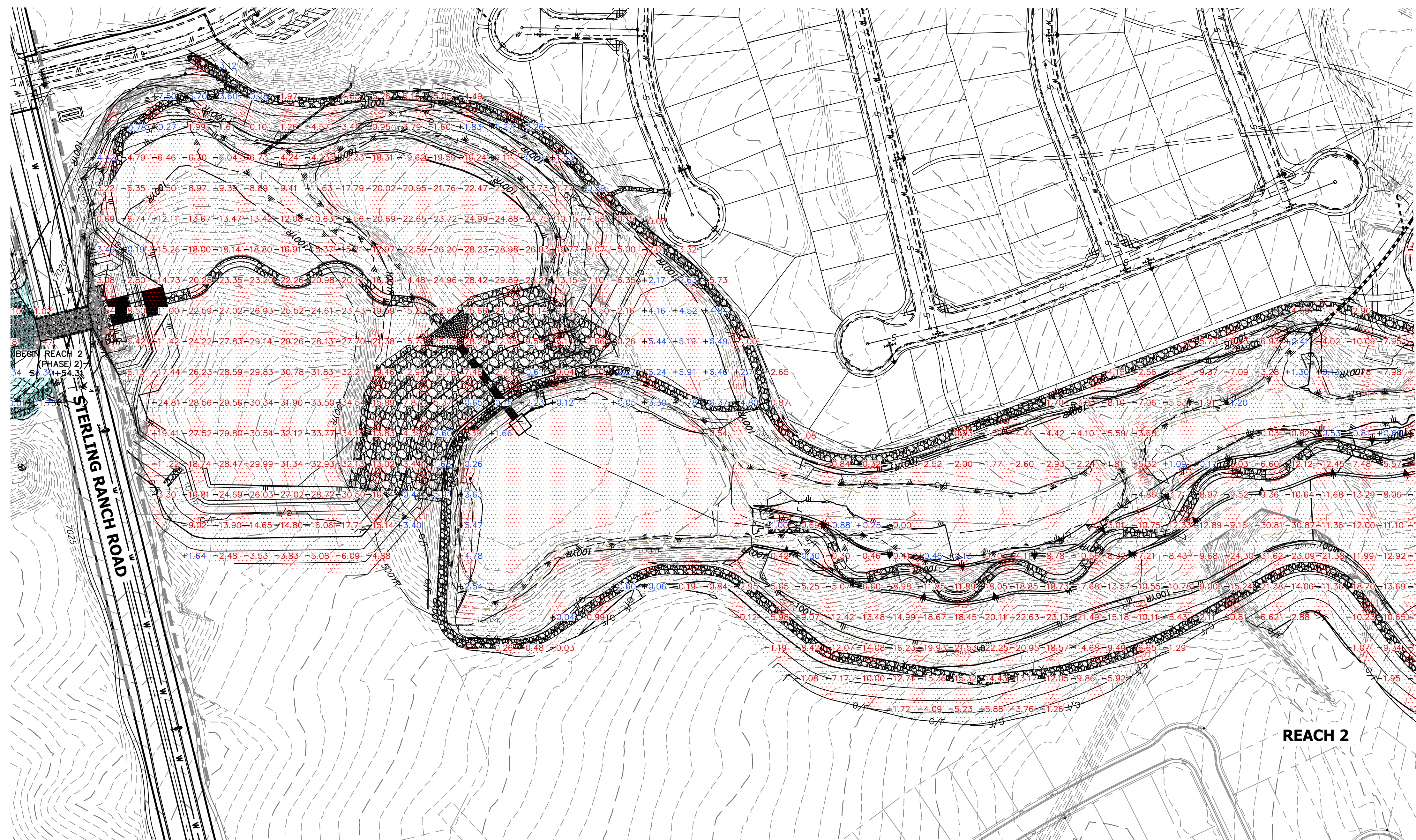
EARTHWORK & PHASING

PLAN

SHEET 5 OF 111

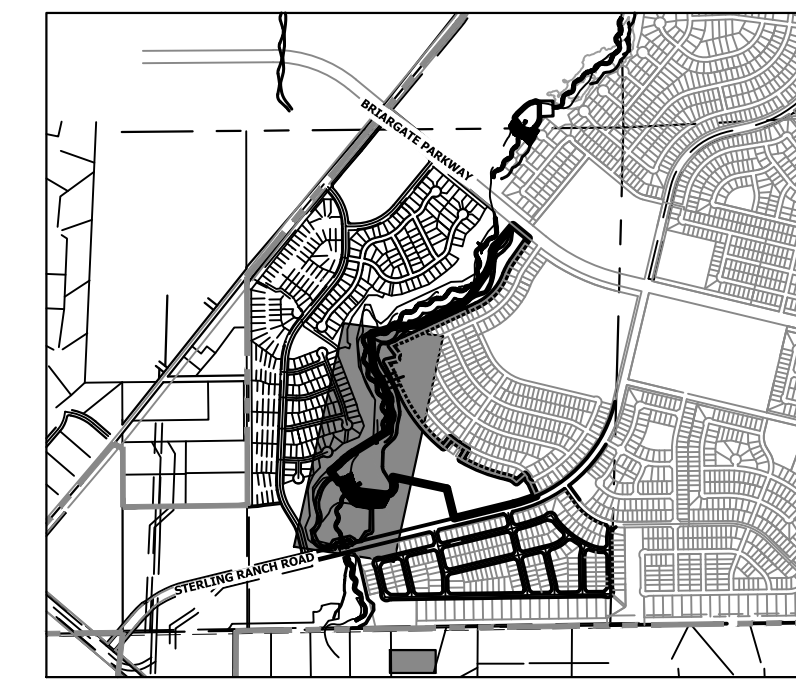
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LEGEND

- REACH 1 (PHASE 1)
- REACH 2 (PHASE 2)
- REACH 3 (PHASE 3)
- 0.00 CUT HEIGHT (FEET)
- +0.00 FILL HEIGHT (FEET)



KEY MAP
SCALE: 1"=2000'

GRADING NOTES:

1. SAND CREEK IS AN ACTIVE MAJOR DRAINAGEWAY WITH PERENNIAL BASE FLOWS. CONTRACTOR SHALL ANTICIPATE STORMWATER INFLOWS TO THE SITE DURING CONSTRUCTION AND PROVIDE A MEANS OF CONVEYANCE/REMOVAL OF ANY CONTINUOUS INFLOWS.
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 - 3.c. WATER FROM DEWATERING OPERATIONS SHALL ONLY BE DISCHARGED INTO STATE WATERS IF ALLOWED BY A PERMIT.
4. MUCK EXCAVATION IS NOT ANTICIPATED FOR THIS PROJECT. IF ENCOUNTERED, CONTRACTOR SHALL REMOVE UNSUITABLE ORGANIC MATERIAL TO THE DEPTH AS DETERMINED BY THE ENGINEER AND REPLACE THE EXCAVATED VOLUME WITH SUITABLE APPROVED FILL MATERIAL PRIOR TO CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
5. THE MAXIMUM SLOPE FOR EXCAVATION AND PLACEMENT OF FILL IS 4:1 HORIZONTAL:VERTICAL, UNLESS OTHERWISE SHOWN IN THE PLANS.
6. THE EXISTING DROP STRUCTURE AT BRIARGATE PARKWAY, ANY ASSOCIATED FEATURES, AND DEBRIS SHOULD BE REMOVED FROM THE PROPOSED CONSTRUCTION AREA. EXPOSED SURFACES SHOULD BE FREE OF MOUNDS AND DEPRESSIONS WHICH COULD PREVENT UNIFORM COMPACTION.
7. EXPOSED AREAS WHICH WILL RECEIVE FILL, ONCE PROPERLY CLEARED WHERE NECESSARY, SHOULD BE SCARIFIED TO A MINIMUM DEPTH OF 8 INCHES, CONDITIONED TO NEAR OPTIMUM WATER CONTENT, AND COMPACTED.
8. A GEOTECHNICAL ENGINEER SHALL BE PRESENT FOR OVER-EXCAVATION AND FILL OPERATIONS.
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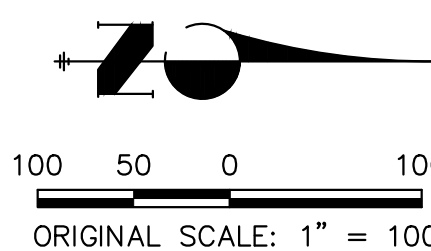
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 ELEVATION = 7023.42
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 MIKE A. BRAMBLE
 COLORADO P.E. NO. 35477
 FOR AND ON BEHALF OF JR. ENGINEERING, P.C.

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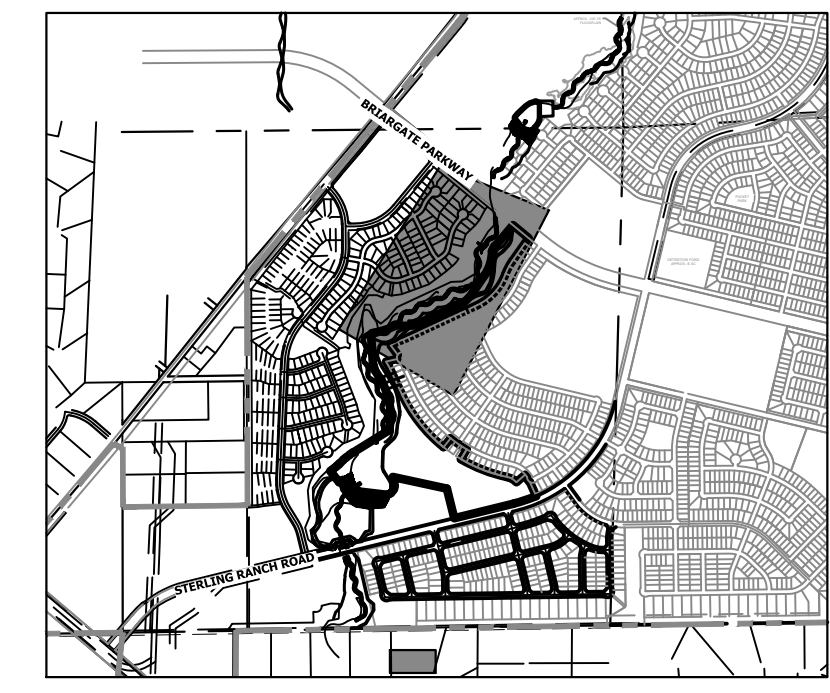
PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

J.R. ENGINEERING
 A Westman Company
 Centennial 300-740-9088 • Colorado Springs 719-583-2593
 Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY

SAND CREEK RESTORATION
EARTHWORK & PHASING PLAN
 SHEET 6 OF 111
 JOB NO. 25188.04

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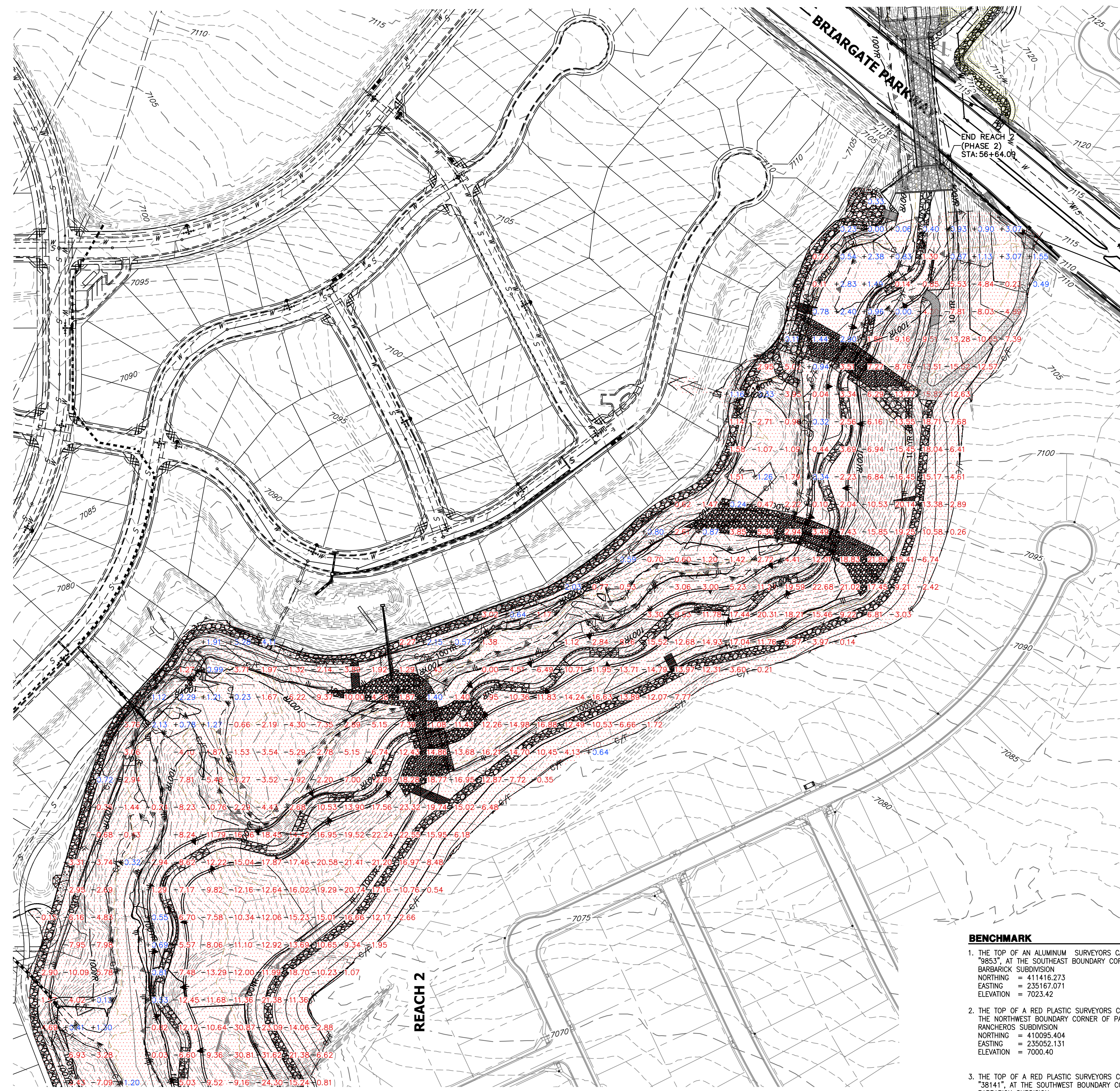
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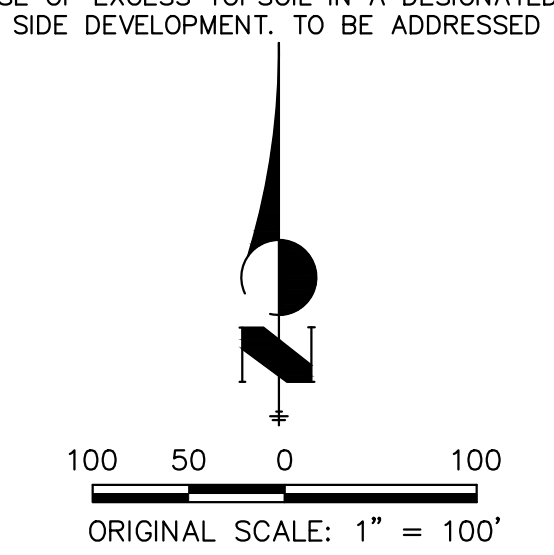
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PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
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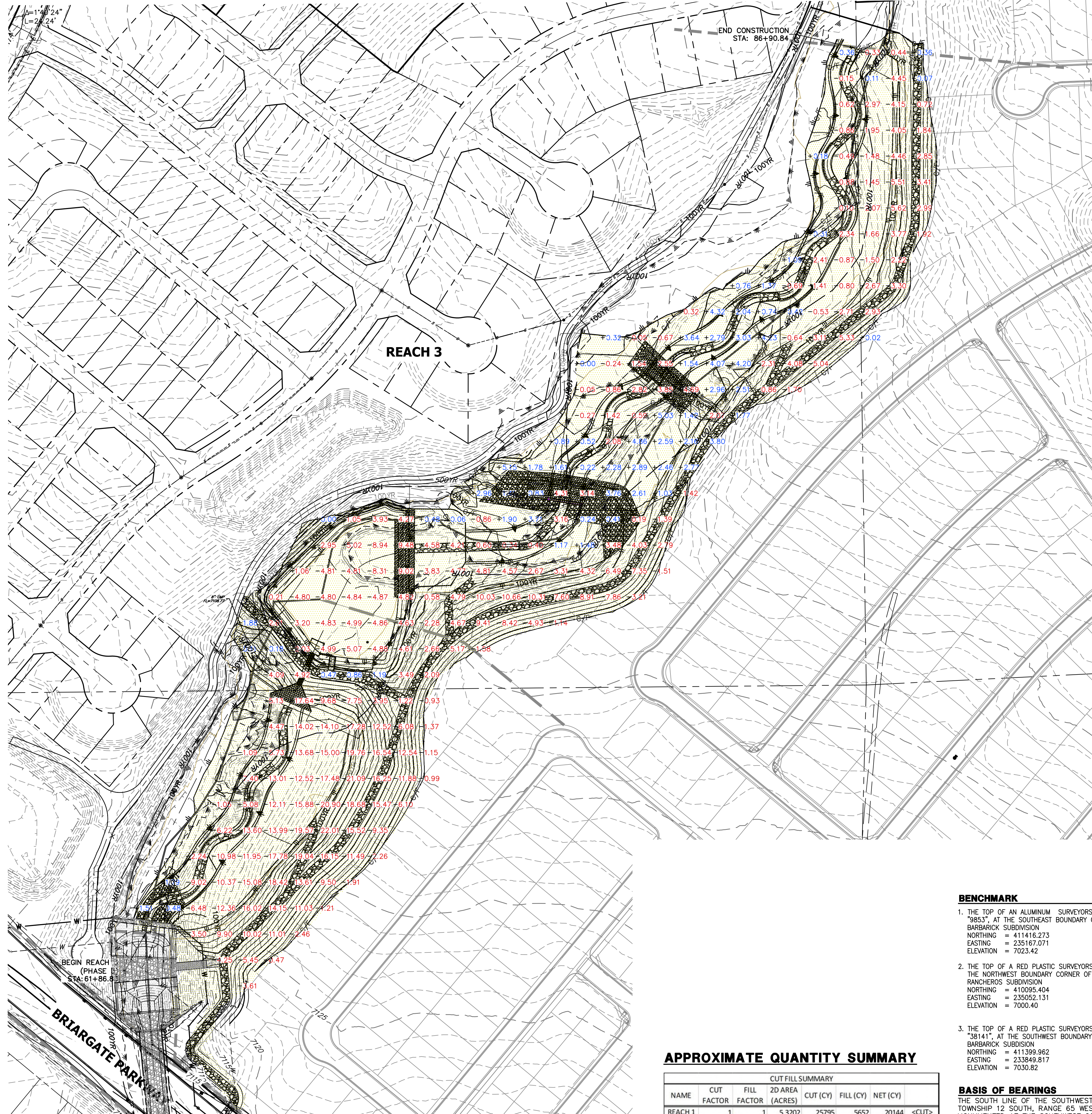
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BY	DATE	REVISION

H-SCALE 1"=300'
 V-SCALE N/A
 DATE 1/23/23
 DESIGNED BY DJV
 DRAWN BY SCH
 CHECKED BY

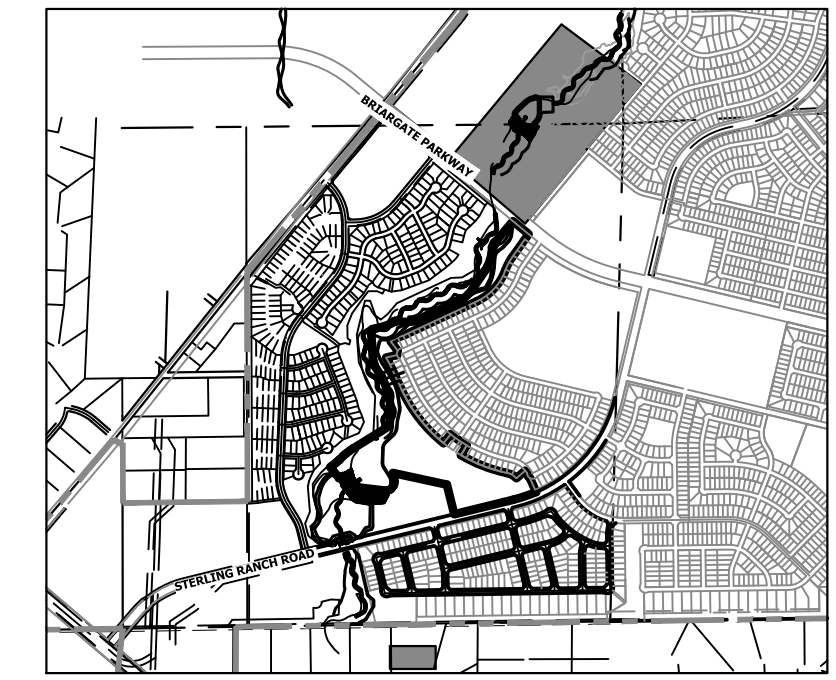
SAND CREEK RESTORATION
EARTHWORK & PHASING
PLAN

SHEET 7 OF 111
 JOB NO. 25188.04



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TOTAL			65.8231	765567	54589	711068

BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHWEST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.

811

Know what's below.
Call before you dig.

ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND SEAL

**PRELIMINARY
NOT FOR
CONSTRUCTION**

MIKE A. BRAMLEY
COLORADO P.E. 30141
FOR AND ON BEHALF OF JR ENGINEERING, INC.

PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEW AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

J.R. ENGINEERING
 A Westman Company
 Centennial 300-740-8888 • Colorado Springs 719-583-2593
 Fort Collins 970-491-9888 • www.jrengineering.com

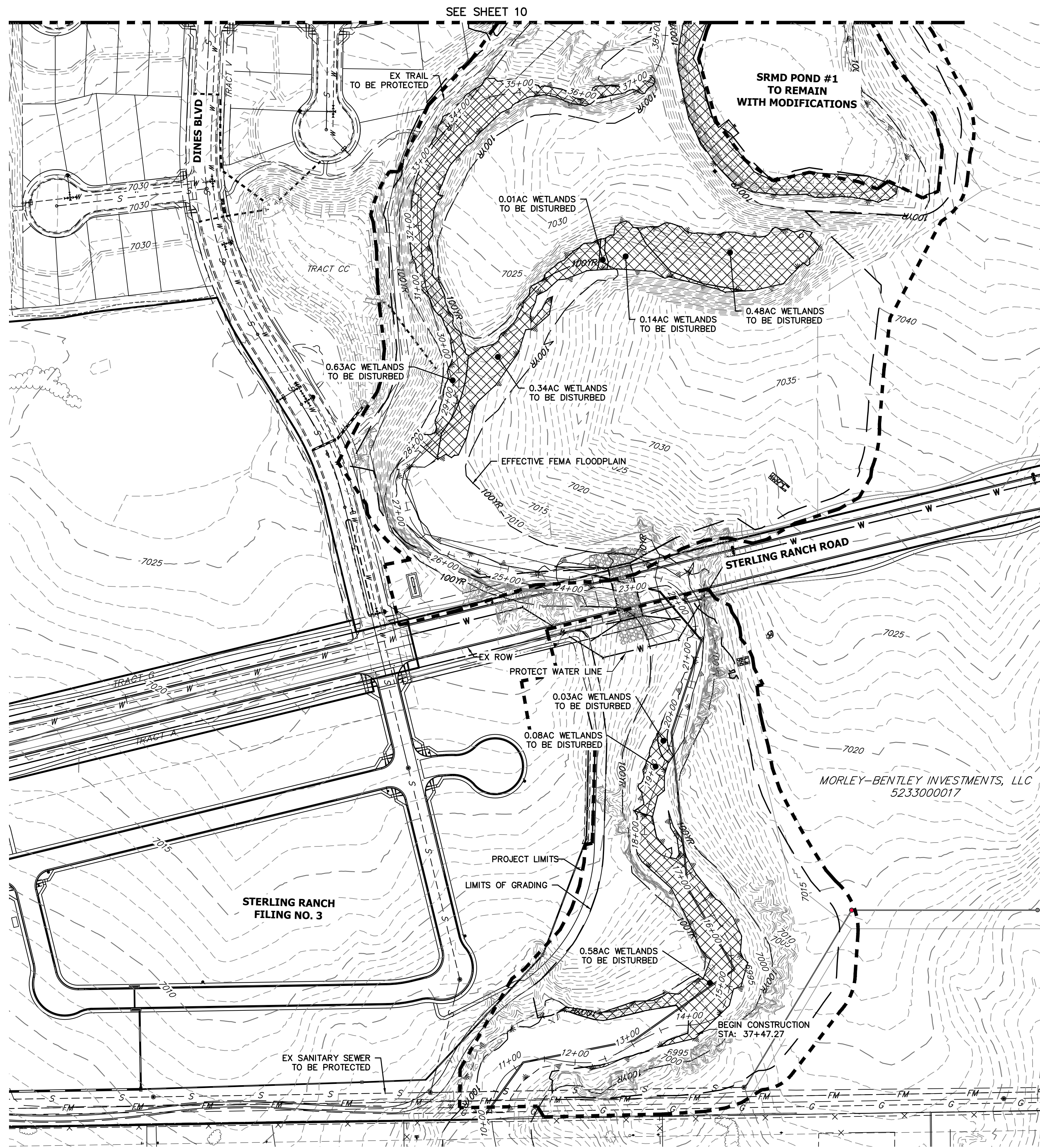
NO.	REVISION	BY	DATE

H-SCALE 1"=300'
 V-SCALE N/A
 DATE 1/23/23
 DESIGNED BY DJV
 DRAWN BY SCH
 CHECKED BY

SAND CREEK RESTORATION
EARTHWORK & PHASING PLAN

SHEET 8 OF 111
 JOB NO. 25188.04

X:\25188\04\Drawings\Sheet\Drawn\Drawn.dwg, 8 GRIPS, 12/28/2023, 11:33:03 PM, VaughnD



DEMOLITION PLANS
EX STA 11+00.00 TO 38+00.00
SCALE: 1"=100'

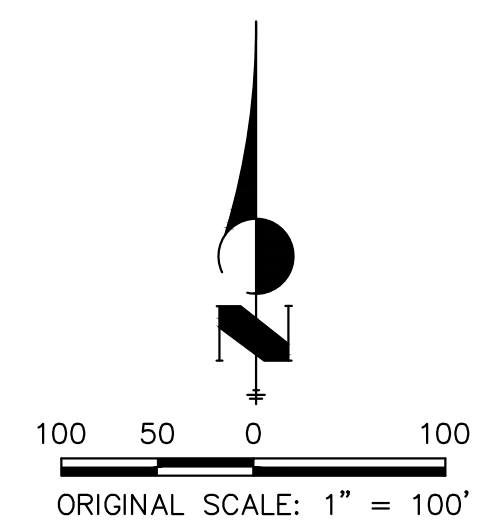
Sand Creek Demolitions		
Totals	Sq Ft	Acres
Reach 1 Permanent Loss	32,636.00	0.74
Reach 2 Permanent Loss	159,695.00	4.28
Reach 3 Permanent Loss	184,711.00	5.44
Total Permanent Loss	377,042.00	10.46

BENCHMARK

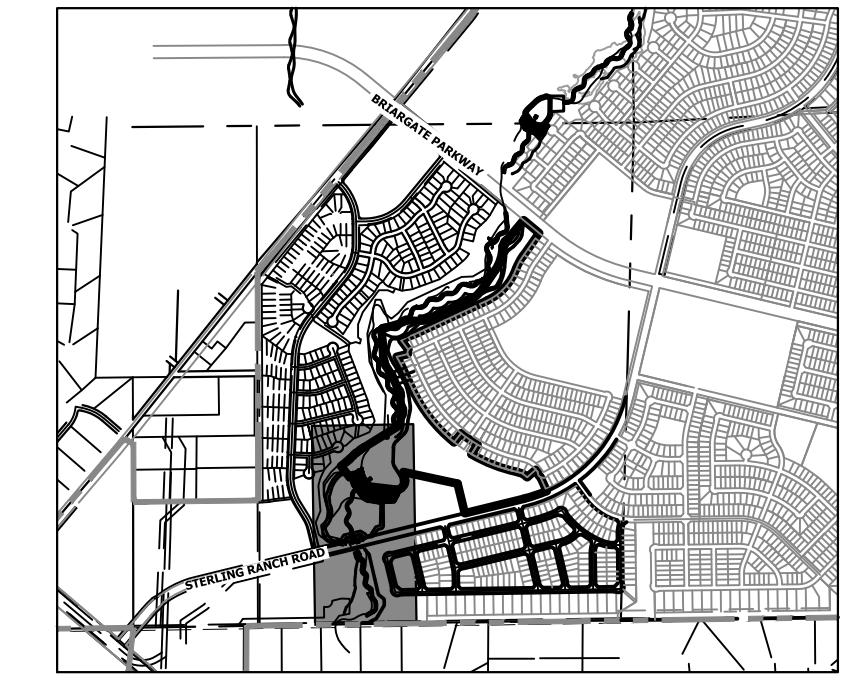
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411416.273
EASTING = 235167.071
ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION
NORTHING = 410095.404
EASTING = 235052.131
ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411399.962
EASTING = 233849.817
ELEVATION = 7030.82

BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHWEST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



LEGEND
WETLAND: DISTURBED AREAS



KEY MAP
SCALE: 1"=2000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
A Westman Company
Central 303-740-9888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

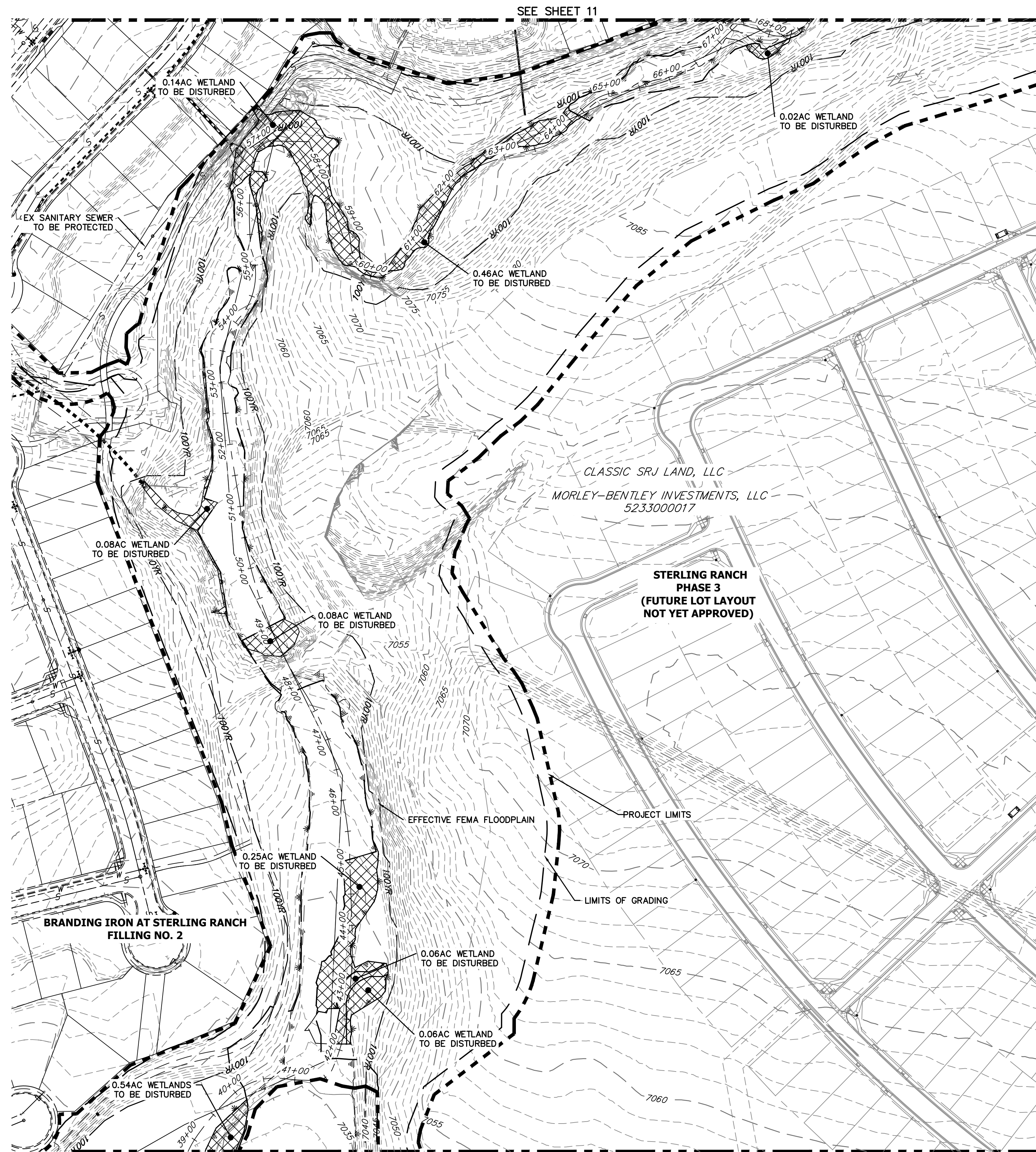
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	No.	REVISION	BY		DATE	
								1"=100'	N/A	1/23/23	DJV

SAND CREEK RESTORATION
DEMOLITION PLAN
SHEET 9 OF 111
JOB NO. 25188.04



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMBLE
COLORADO P.E. 33212
FOR AND ON BEHALF OF J.R. ENGINEERING, LLC



SEE SHEET 11

SEE SHEET 9

DEMOLITION PLANS
 EX STA: 38+00.00 TO 68+00.00
 SCALE: 1"=100'

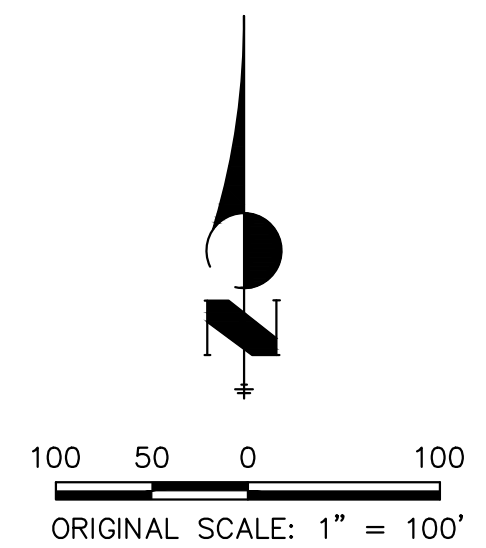
Sand Creek Demolitions		
Totals	Sq Ft	Acres
Reach 1 Permanent Loss	32,636.00	0.74
Reach 2 Permanent Loss	159,695.00	4.28
Reach 3 Permanent Loss	184,711.00	5.44
Total Permanent Loss	377,042.00	10.46

BENCHMARK

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411416.273
 EASTING = 235167.071
 ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAVNEE RANCHEROS SUBDIVISION
 NORTHING = 410095.404
 EASTING = 235052.131
 ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411399.962
 EASTING = 233849.817
 ELEVATION = 7030.82

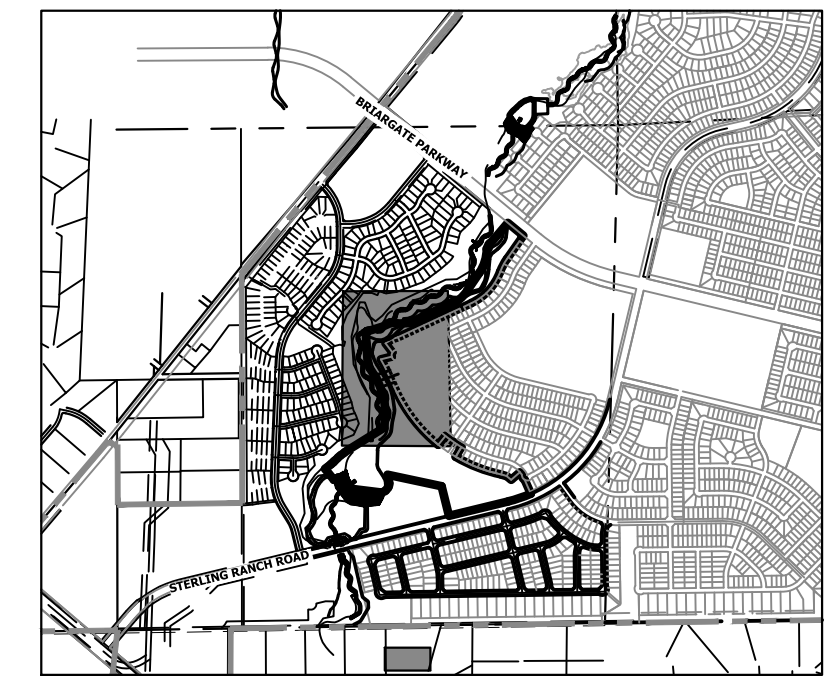
BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



LEGEND

WETLAND: DISTURBED AREAS



KEY MAP
 SCALE: 1"=2000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

J.R. ENGINEERING
 A Westman Company
 Centennial 303-740-9888 • Colorado Springs 719-583-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

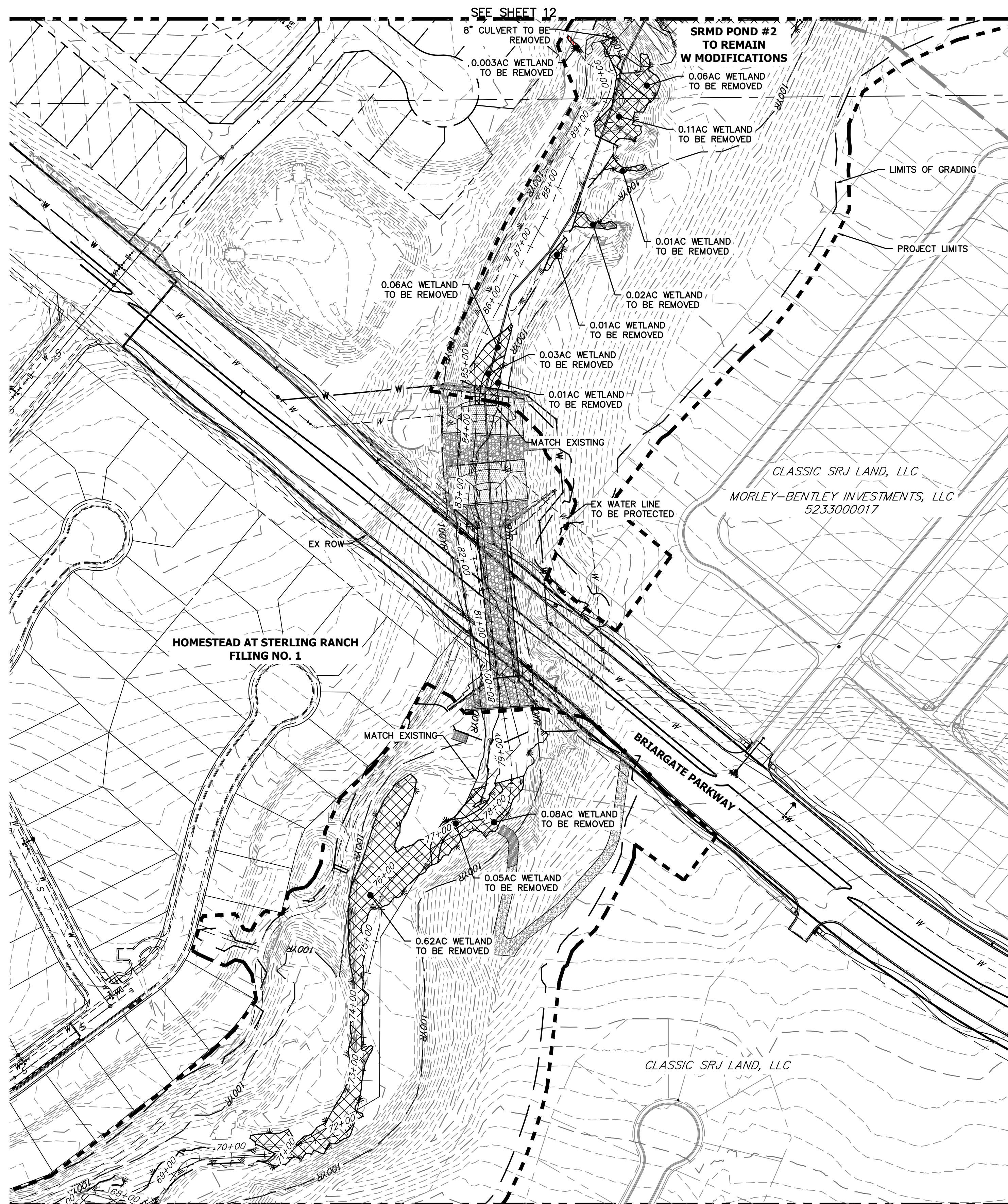
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=100'	N/A	1/23/23	DJV	SCH	

SAND CREEK RESTORATION
DEMOLITION PLAN

ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
 MIKE A. BRAMLEY
 COLORADO P.E. 30114
 FOR AND ON BEHALF OF JR ENGINEERING, LLC





SEE SHEET 10

DEMOLITION PLANS
EX STA: 68+00.00 TO 91+00.00
SCALE: 1"=100'

Sand Creek Demolitions		
Totals	Sq Ft	Acres
Reach 1 Permanent Loss	32,636.00	0.74
Reach 2 Permanent Loss	159,695.00	4.28
Reach 3 Permanent Loss	184,711.00	5.44
Total Permanent Loss	377,042.00	10.46

BENCHMARK

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411416.273
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ELEVATION = 7023.42
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NORTHING = 410095.404
EASTING = 235052.131
ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST CORNER OF BARBARICK SUBDIVISION
NORTHING = 411399.962
EASTING = 233849.817
ELEVATION = 7030.82

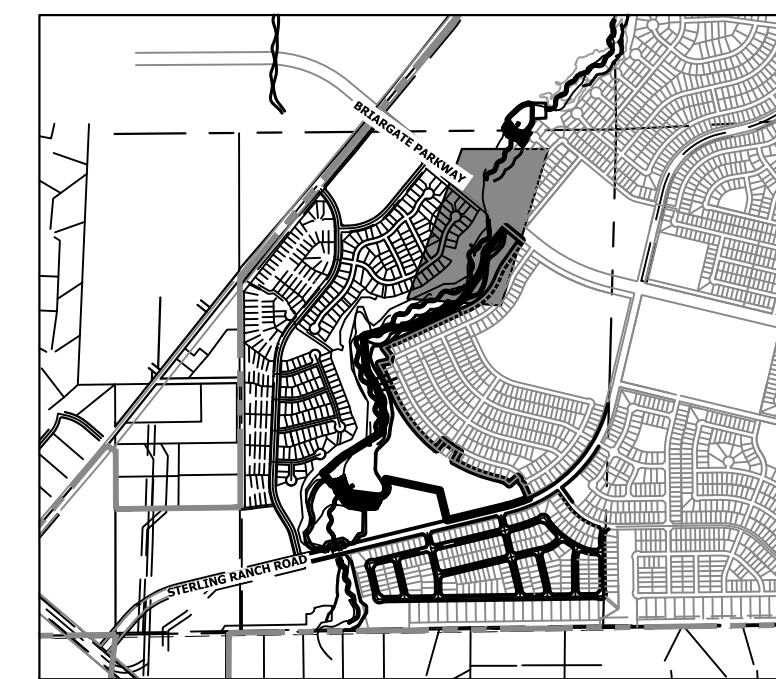
BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND REVIEW
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 30117
FOR AND ON BEHALF OF J.R. ENGINEERING, LLC



KEY MAP
SCALE: 1"=2000'

LEGEND

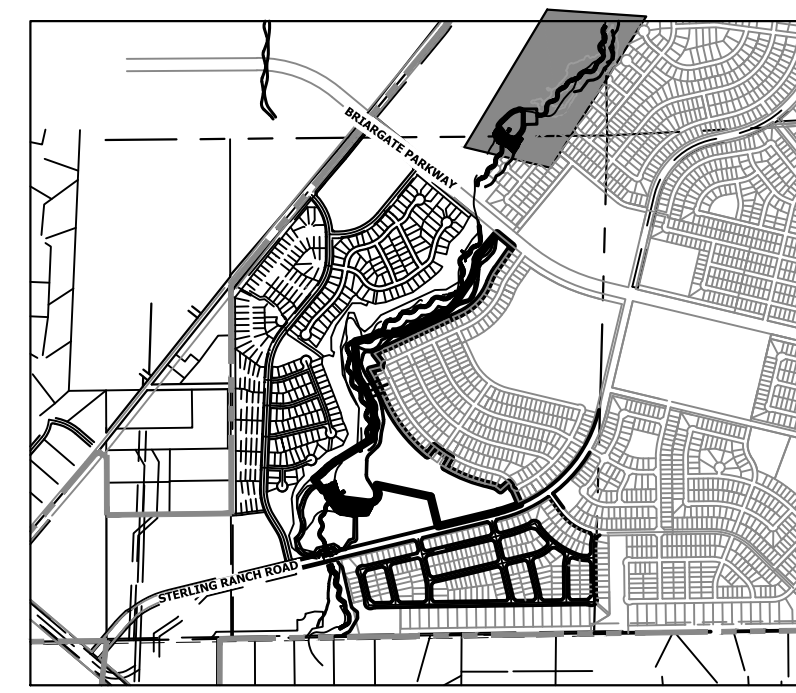
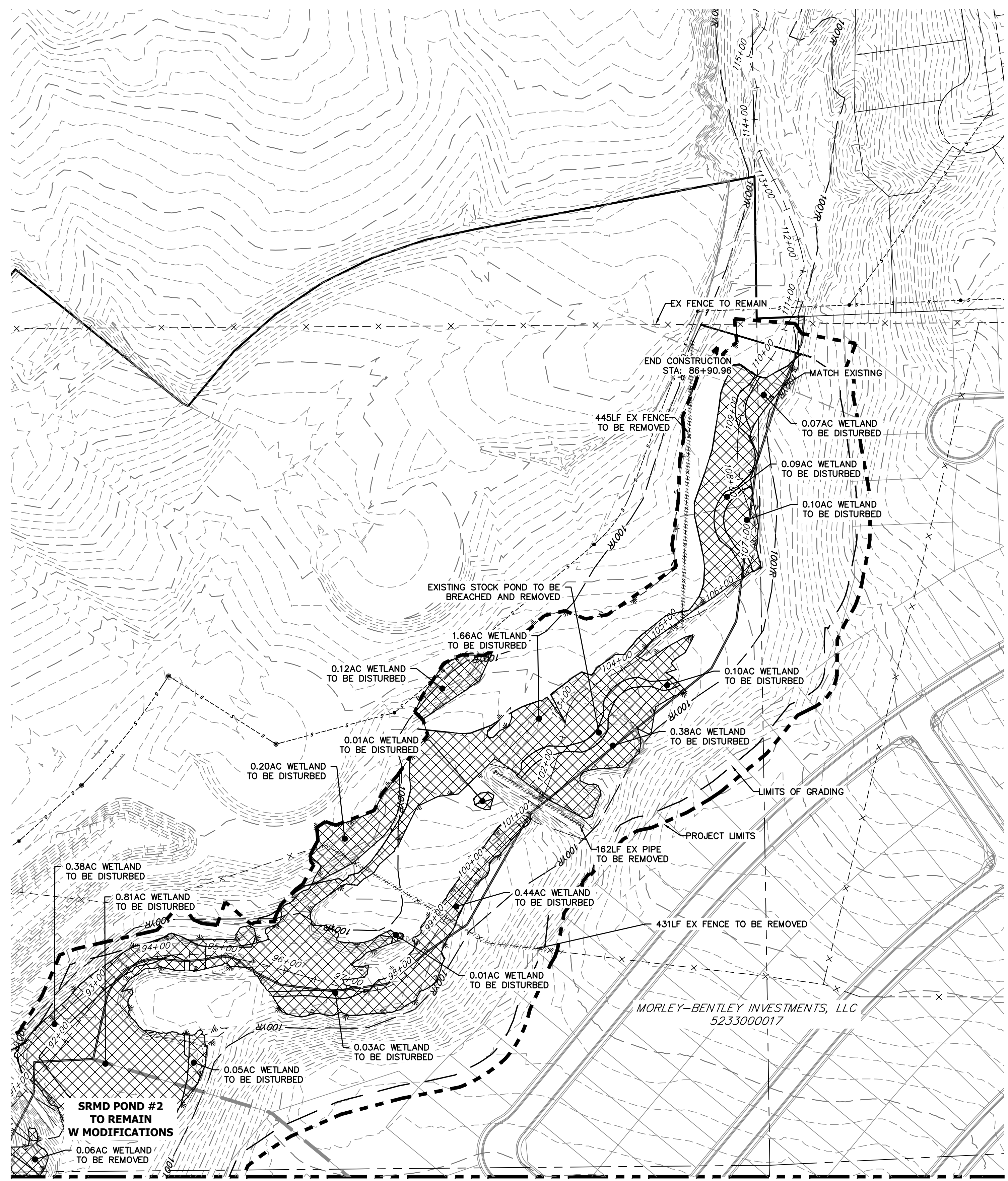
WETLAND: DISTURBED AREAS

BY	DATE	No.	REVISION	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				1"=100'	N/A	1/23/23	DJV	SCH	

SAND CREEK RESTORATION
DEMOLITION PLAN
SHEET 11 OF 111
JOB NO. 25188.04

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THEY ARE NOT TO BE USED OR REPRODUCED WITHOUT THE WRITTEN AUTHORIZATION.
PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
A Westman Company
Central 303-740-9888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com



KEY MAP
SCALE: 1"=2000'

LEGEND

WETLAND: DISTURBED AREAS

SEE SHEET 11

DEMOLITION PLANS
EX STA 91+00.00 TO 110+00.00
SCALE: 1"=100'

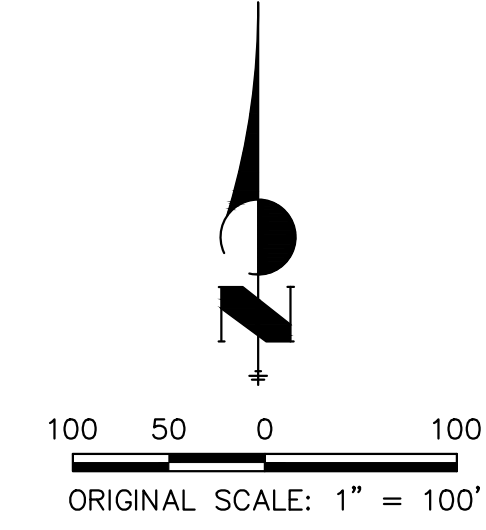
Sand Creek Demolitions		
Totals	Sq Ft	Acres
Reach 1 Permanent Loss	32,636.00	0.74
Reach 2 Permanent Loss	159,695.00	4.28
Reach 3 Permanent Loss	184,711.00	5.44
Total Permanent Loss	377,042.00	10.46

BENCHMARK

- THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "98537", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411416.273
EASTING = 235167.071
ELEVATION = 7023.42
- THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANWEE RANCHEROS SUBDIVISION
NORTHING = 410095.404
EASTING = 235052.131
ELEVATION = 7000.40
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ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION OF
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMBLE
COLORADO P.E. 30117
FOR AND ON BEHALF OF JR ENGINEERING



SAND CREEK RESTORATION

DEMOLITION PLAN

SHEET 12 OF 111

JOB NO. 25188.04

BY DATE

No. REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=100'	N/A	1/23/23	DJV	SCH	

PREPARED FOR

SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

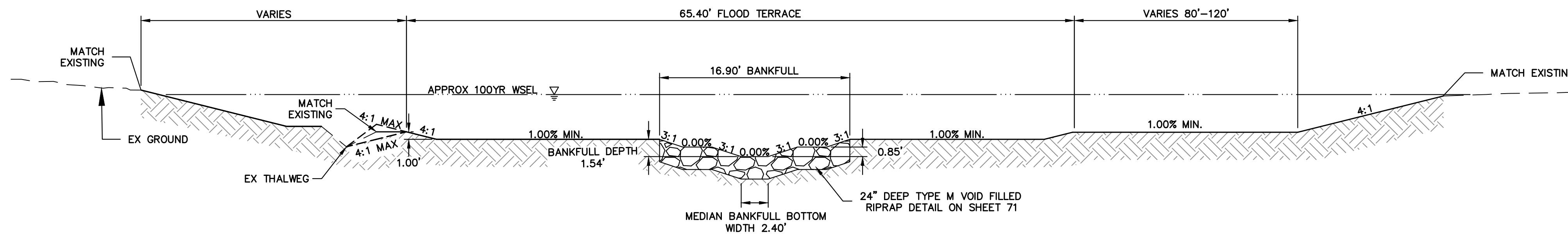
J.R. ENGINEERING
A Westman Company



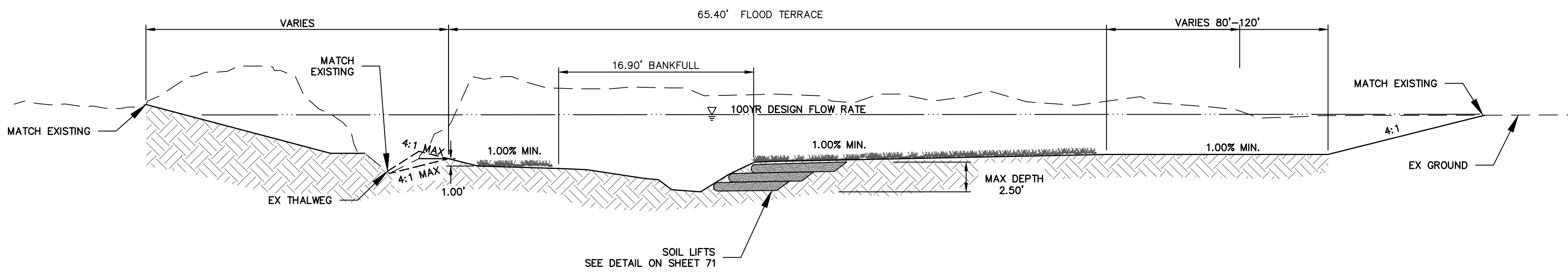
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Fort Collins 970-491-9888 • www.jrengineering.com

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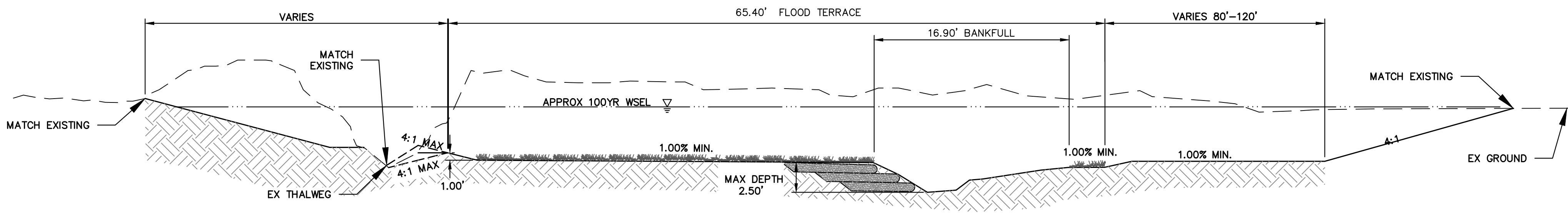
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RIFFLE TYPICAL SECTION A-A
SCALE: N.T.S

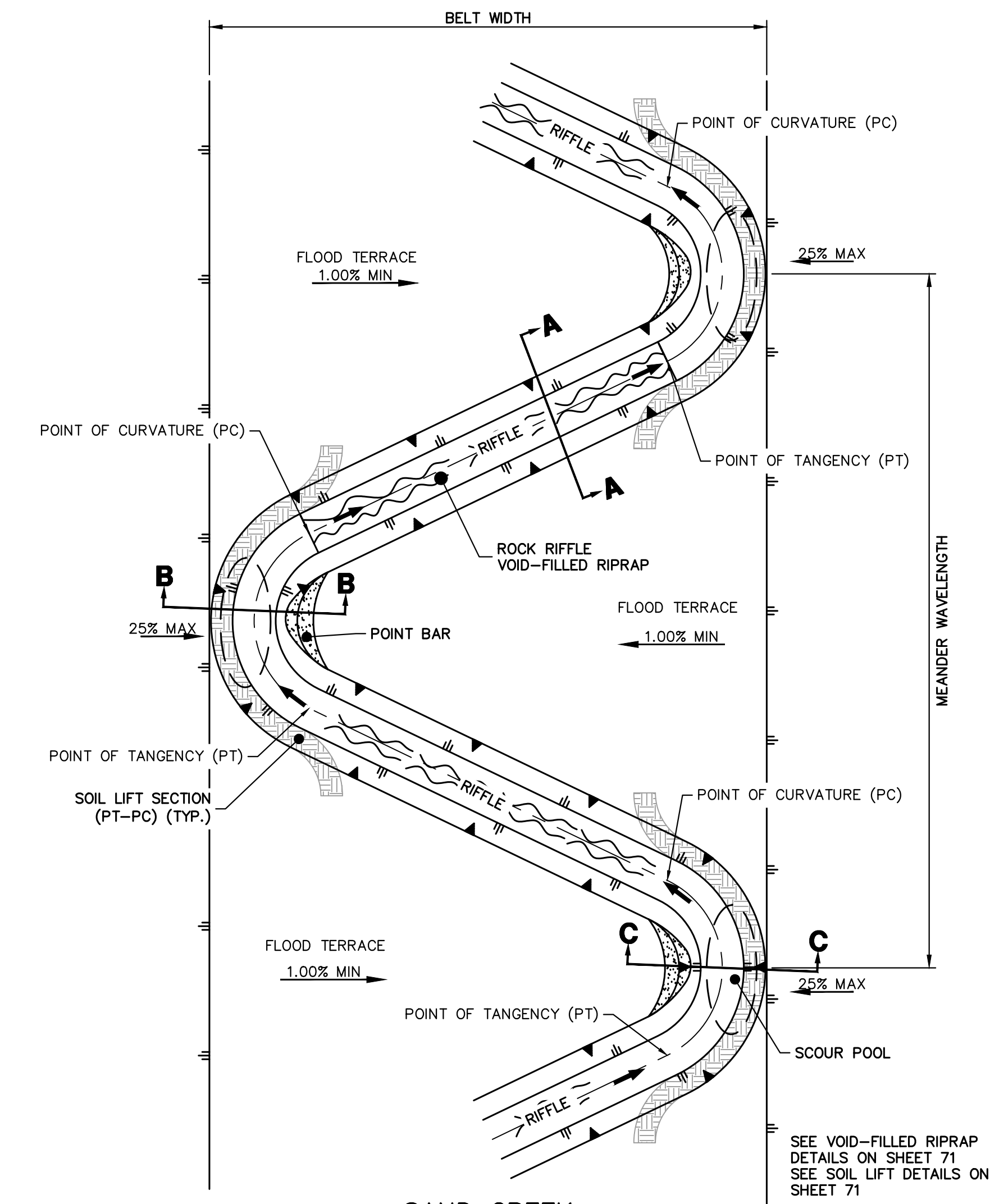


LEFT POOL TYPICAL SECTION B-B
SCALE: N.T.S



RIGHT POOL TYPICAL SECTION C-C
SCALE: N.T.S

SAND CREEK TYPICAL SECTIONS
REACH 1: STA: 1+00.00 TO 10+05.89
REACH 2: STA: 11+18.00 TO 59+27.25
REACH 3: STA: 61+54.83 TO 88+62.94



SAND CREEK STREAM LAYOUT TYPICAL - PLAN
SCALE: N.T.S

Parameter	Value	Value
Bankfull Channel Width; ft	16.9	
Bankfull Channel Mean Depth; ft	0.85	
Bankfull Channel Max Depth; ft		
Bankfull Channel Area; sqft	14.0	
Bankfull Channel Bend to Bend Spacing; ft	4.5 - 6 times Bankfull Width	76 101
Bankfull Channel Radius of Curvature (ROC); ft	2.5 - 3.5 times Bankfull Width	42 59
Bankfull Channel Tangent Lengths; ft	1.5 - 2.5 times Bankfull Width	25 42
Bankfull Channel Meander Wavelength; ft	9 - 12 times Bankfull Width	152 203
Bankfull Channel Meander Beltwidth; ft	2 - 3.5 times Bankfull Width	34 59
Flood Terrace Area (300% of Bankfull Area); sqft	64.5	
Flood Terrace Bend to Bend Spacing; ft	Same as Bankfull Pattern	
Flood Terrace Radius of Curvature; ft	2 - 4 times the Flood Terrace Width	129 258
Flood Terrace Tangent Riffle Lengths; ft	1 - 2 times the Bankfull Width	17 34
Flood Terrace Meander Beltwidth; ft	1.5 - 2 times the Flood Terrace Width	97 129
Flood Terrace Expansion and Contraction Ratios	greater than 10:1	

Location	Station	Flow Rate (cfs)						
		2-YR	5-YR	10-YR	25-YR	50-YR	100-YR Design	100-YR FIS
Northern Bndy	STA: 87+10	149.3	472.6	771.4	1012.8	1386.3	1644.1	2600
SRMD Pond 2	STA: 73+50	149.6	477.2	780.5	1025.8	1405.3	1667.0	2600
Briargate Pkwy	STA: 61+00	146.5	512.4	847.5	1108.9	1497.6	1763.9	2600
	STA: 36+05	143.9	533.2	890.8	1171.0	1589.8	1880.4	2600
SRMD Pond 1	STA: 16+80	133.7	512.3	863.8	1143.6	1561.3	1848.8	2600
Sterling Ranch Road	STA: 09+05	101.6	398.7	676.7	931.2	1282.9	1562.5	2600
Sterling Ranch Southern Bndy	STA: 00+00	128.6	480.4	763.8	1005.4	1368.3	1585.2	2600



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 30000
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, OR ENGINEERING APPROVES, THEIR USE IS DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

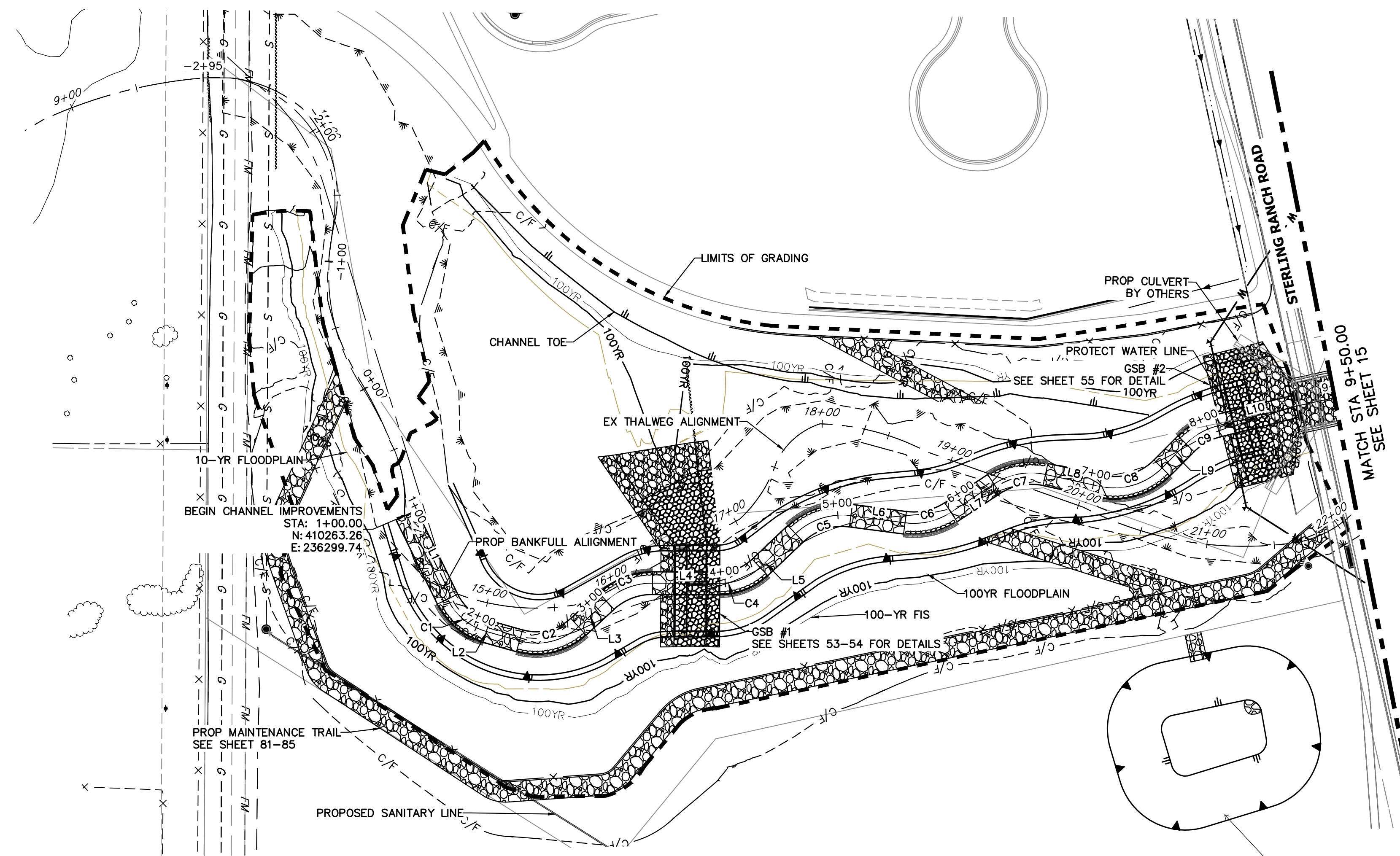
J.R. ENGINEERING
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Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION

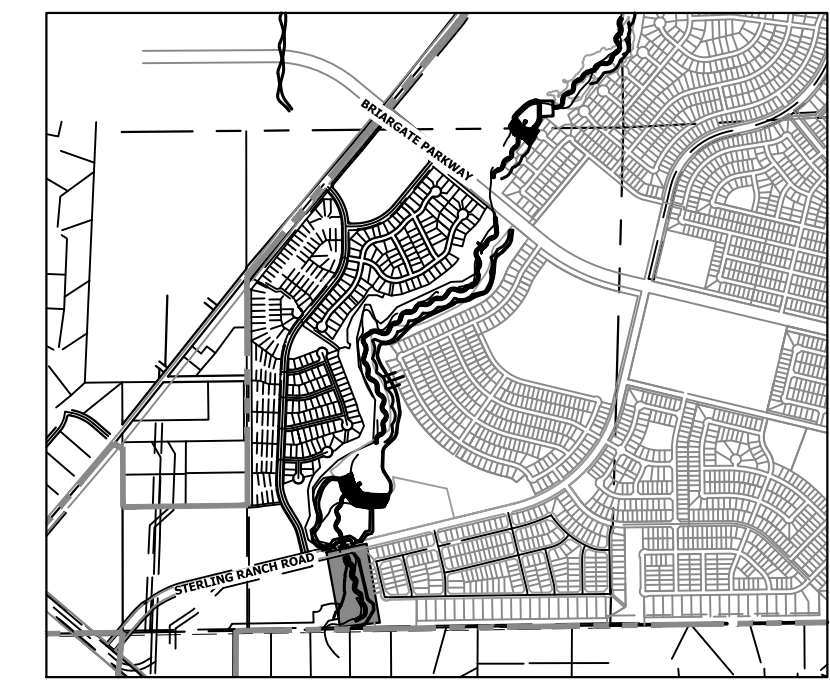
H-SCALE: N/A
V-SCALE: N/A
DATE: 1/23/23
DESIGNED BY: DJV
DRAWN BY: SCH
CHECKED BY:

SAND CREEK RESTORATION
TYPICAL SECTIONS

SHEET 13 OF 111
JOB NO. 25188.04



HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL
SCALE: 1"=60'



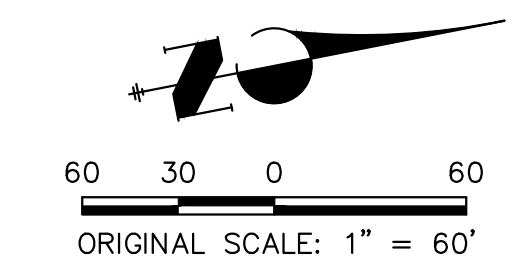
KEY MAP
SCALE: 1"=2000'

note filing this will be constructed under


LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL

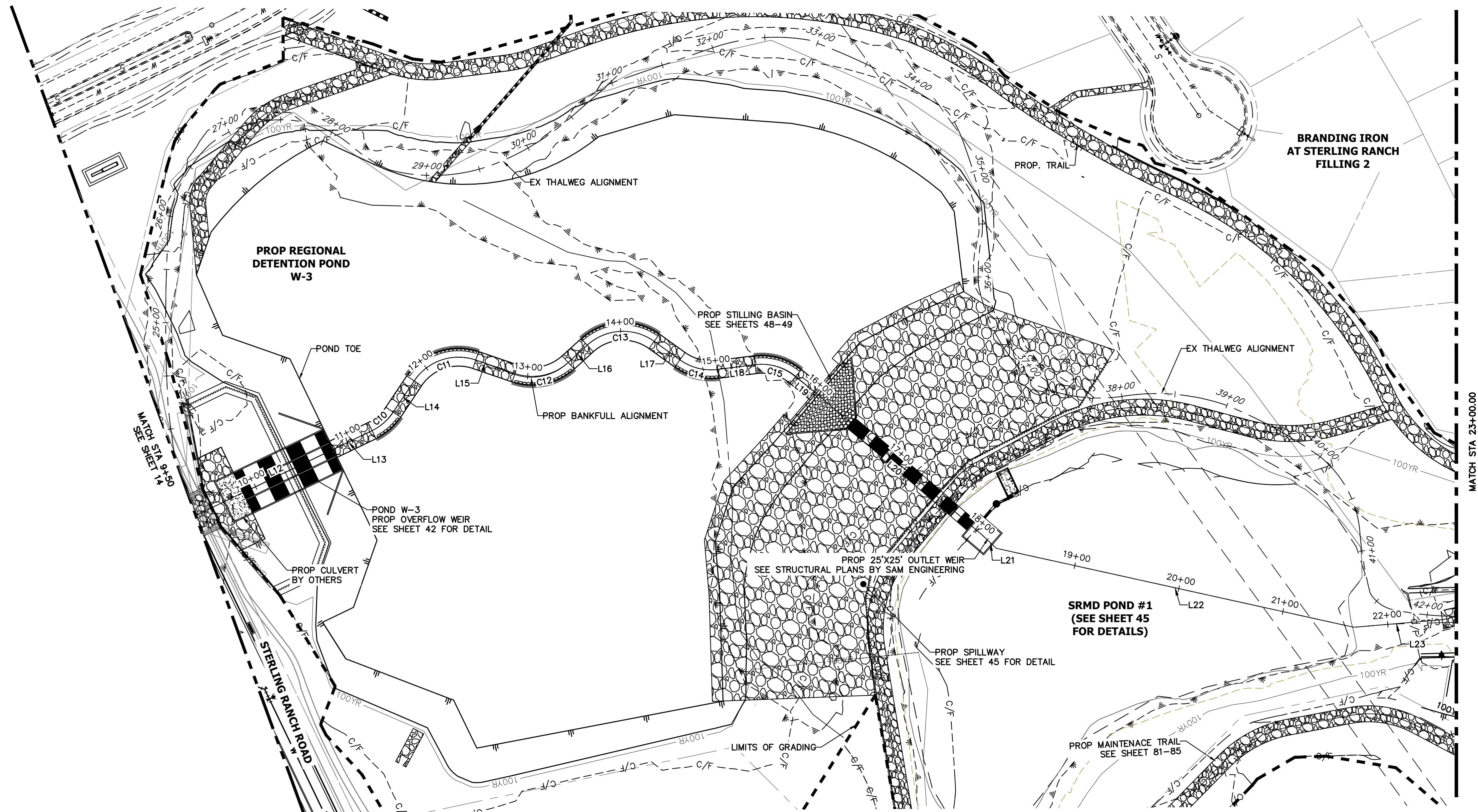
LINE TABLE		
LINE	BEARING	DISTANCE
L1	N62°37'57"E	69.39'
L2	N14°33'15"E	25.49'
L3	N43°57'43"W	28.06'
L4	N01°00'09"W	49.93'
L5	N44°46'46"W	36.31'
L6	N06°15'46"E	40.46'
L7	S34°33'06"E	38.16'
L8	N11°07'56"E	41.11'
L9	N46°25'49"W	25.24'
L10	N15°18'22"W	61.05'

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	48°04'42"	46.00'	38.60'
C2	58°30'58"	46.00'	46.98'
C3	42°57'35"	50.00'	37.49'
C4	43°46'38"	43.00'	32.85'
C5	51°02'32"	50.00'	44.54'
C6	40°48'52"	50.00'	35.62'
C7	45°41'02"	50.00'	39.87'
C8	57°33'46"	50.00'	50.23'
C9	31°07'27"	50.00'	27.16'



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. # 30000
FOR AND ON BEHALF OF JR ENGINEERING, LLC

SAND CREEK RESTORATION HORIZONTAL CONTROL PLAN	H-SCALE	1"=60'	No. REVISION	BY	DATE
	V-SCALE	N/A			
	DATE	1/23/23			
	DESIGNED BY	DJV			
	DRAWN BY	SCH			
	CHECKED BY				
SHEET 14 OF 111 JOB NO. 25188.04					
PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024					
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE. REVISES DESIGNATED BY WRITTEN AUTHORIZATION.					
J.R. ENGINEERING A Westman Company  Centennial 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com					



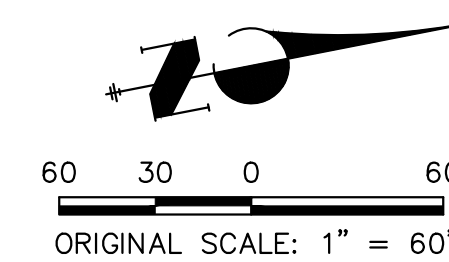
HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL

SCALE: 1"=60'

LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL

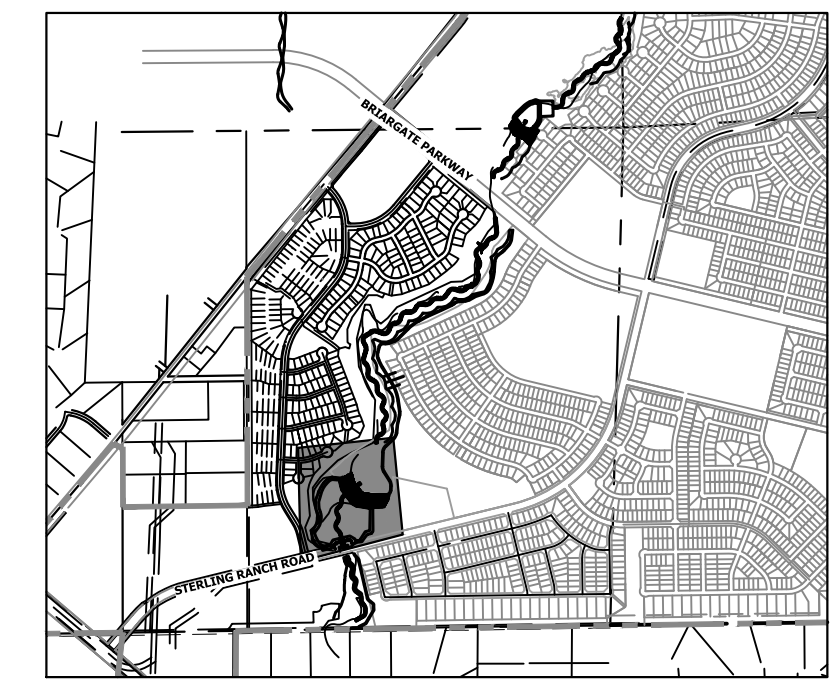
LINE TABLE		
LINE	BEARING	DISTANCE
L12	N13°40'36"W	112.14'
L13	N13°44'44"W	41.29'
L14	N44°17'13"W	35.34'
L15	N30°54'11"E	38.94'
L16	N30°18'24"W	24.14'
L17	N47°41'02"E	29.75'
L18	N04°47'34"E	35.38'
L19	N51°32'30"E	23.98'
L20	N52°27'37"E	205.18'
L21	N55°27'43"E	18.57'
L22	N24°26'44"E	343.60'
L23	N07°07'50"E	83.24'

CURVE TABLE				
CURVE	DELTA	RADIUS	LENGTH	
C10	30°32'29"	50.00'	26.65'	
C11	75°11'23"	50.00'	65.62'	
C12	61°12'35"	50.00'	53.42'	
C13	77°59'26"	50.00'	68.06'	
C14	42°53'28"	50.00'	37.43'	
C15	46°44'56"	50.00'	40.80'	




ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
 PRELIMINARY
 NOT FOR
 CONSTRUCTION

MIKE A. BRAMLEY
 COLORADO P.E. # 30000
 FOR AND ON BEHALF OF J.R. ENGINEERING, LLC



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

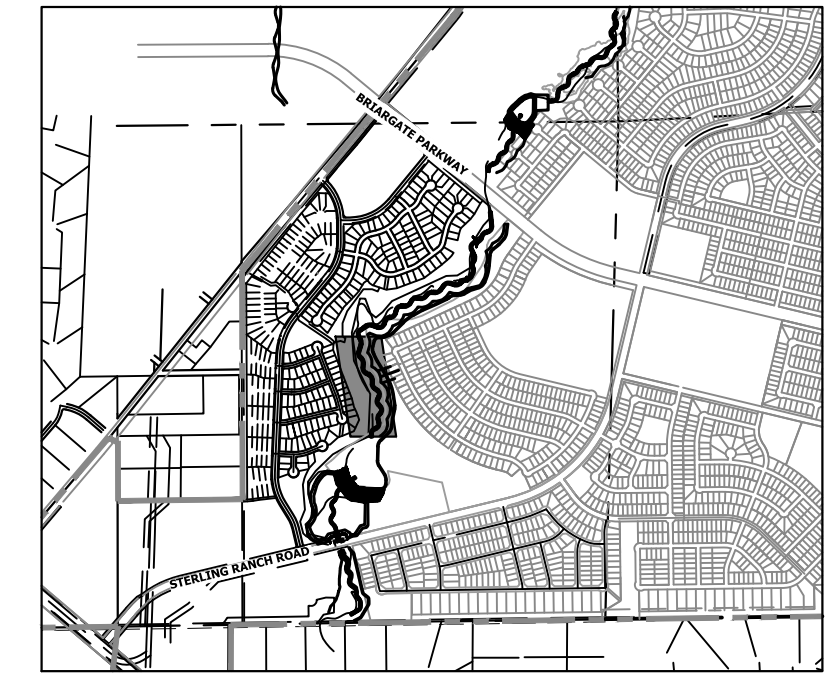
J.R. ENGINEERING
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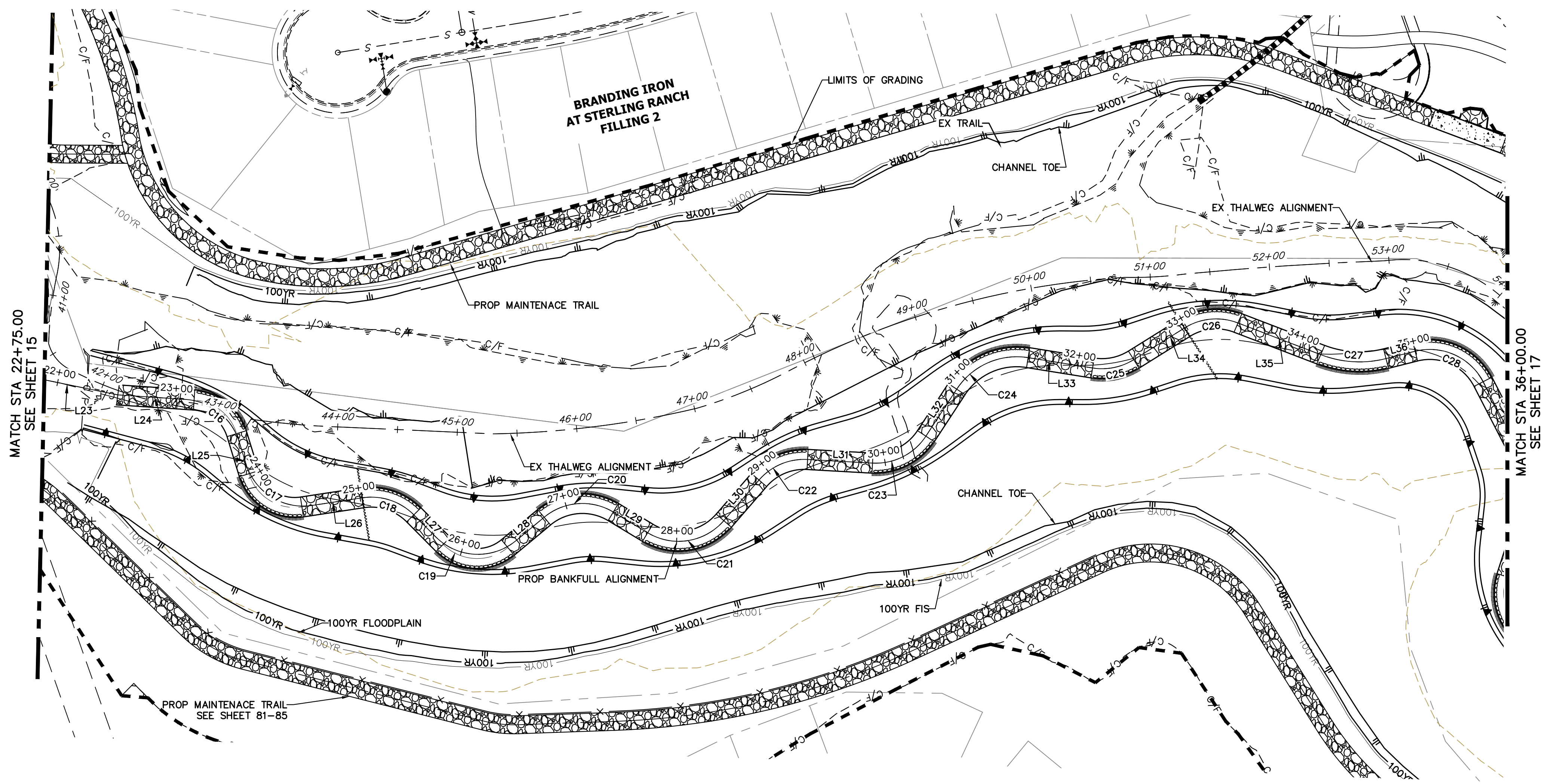
SAND CREEK RESTORATION
HORIZONTAL CONTROL PLAN

SHEET 15 OF 111
 JOB NO. 25188.04

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KEY MAP
SCALE: 1"=2000'

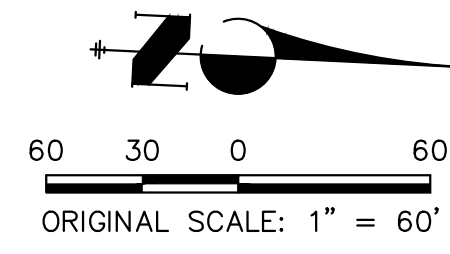


HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL
SCALE: 1"=60'

LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL

LINE	BEARING	DISTANCE
L23	N07°07'50"E	83.24'
L24	N00°39'41"W	63.90'
L25	N68°26'27"E	35.05'
L26	N13°07'27"W	51.07'
L27	N40°46'05"E	34.86'
L28	N44°15'32"W	39.48'
L29	N26°36'38"E	33.54'
L30	N53°36'32"W	44.94'
L31	N01°16'36"W	54.35'
L32	N61°14'53"W	46.99'
L33	N04°37'48"E	54.56'
L34	N36°27'31"W	50.02'
L35	N16°27'51"E	74.39'
L36	N18°40'48"W	25.12'

CURVE	DELTA	RADIUS	LENGTH
C16	69°06'08"	40.00'	48.24'
C17	79°32'05"	40.00'	55.53'
C18	53°53'33"	50.00'	47.03'
C19	85°01'35"	40.00'	59.36'
C20	70°52'11"	50.00'	61.85'
C21	80°13'10"	50.00'	70.00'
C22	52°19'56"	50.00'	45.67'
C23	59°58'18"	50.00'	52.34'
C24	65°52'41"	60.00'	68.99'
C25	41°05'20"	50.00'	35.86'
C26	53°16'13"	50.02'	46.50'
C27	35°08'56"	90.00'	55.21'
C28	76°55'41"	50.00'	67.13'



ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
 MIKE A. BRAMLEY
 COLORADO P.E. # 30000
 FOR AND ON BEHALF OF JR ENGINEERING, LLC

SAND CREEK RESTORATION
 HORIZONTAL CONTROL PLAN
 SHEET 16 OF 111
 JOB NO. 25188.04

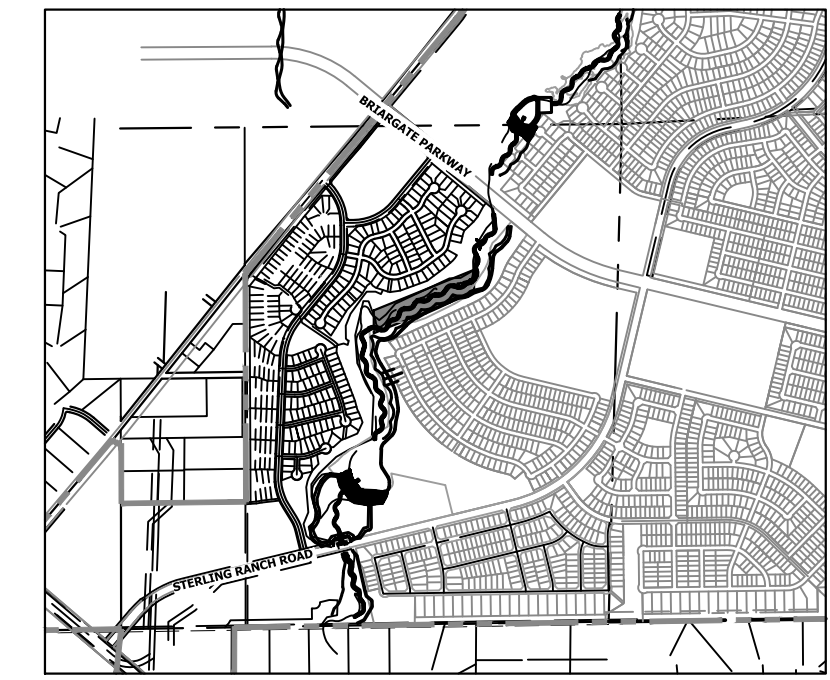
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=60'	N/A	1/23/23	DJV	SCH	

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PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

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KEY MAP
SCALE: 1"=2000'

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PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
A Westman Company

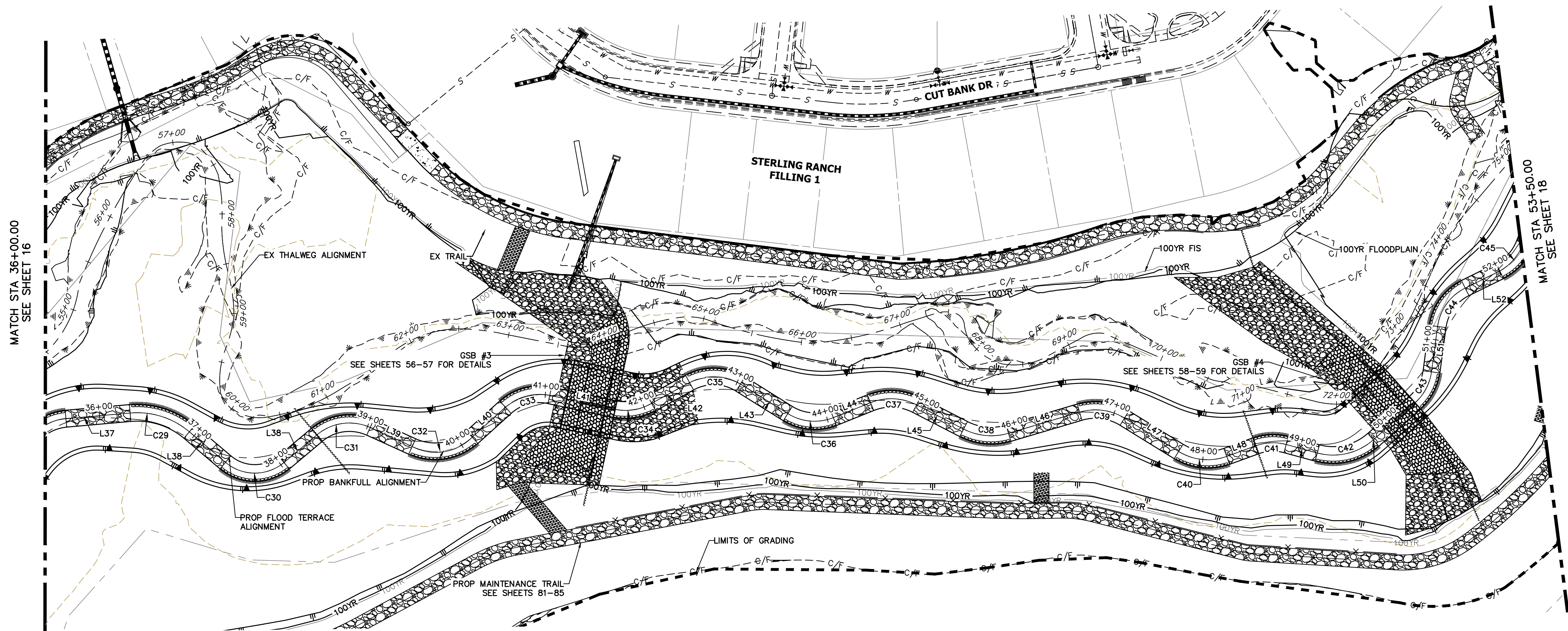
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No.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=60'	N/A	1/23/23	DJV	SCH	

SAND CREEK RESTORATION
HORIZONTAL CONTROL PLAN

SHEET 17 OF 111
JOB NO. 25188.04

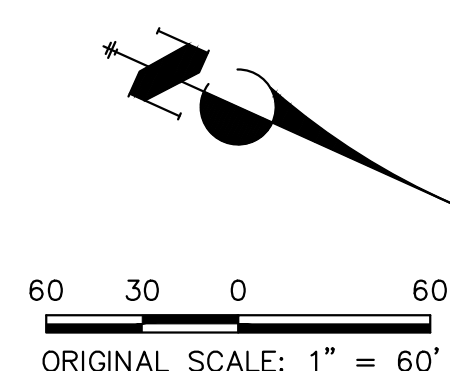


HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL
SCALE: 1"=60'

LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL

LINE	BEARING	DISTANCE
L37	N58°14'53"E	63.95'
L38	N23°17'02"E	42.76'
L38	S76°25'16"E	47.01'
L39	N87°41'41"E	45.75'
L40	N21°13'33"E	44.40'
L41	N75°25'05"E	64.51'
L42	N34°33'05"E	42.89'
L43	S84°38'01"E	55.36'
L44	N41°26'25"E	39.80'
L45	S89°25'20"E	52.47'
L46	N46°45'21"E	73.56'
L47	S85°00'28"E	63.14'
L48	N43°19'47"E	30.76'
L49	N78°33'01"E	31.87'
L50	N21°39'45"E	55.35'
L51	N19°00'37"W	45.47'
L52	N37°01'40"E	38.30'

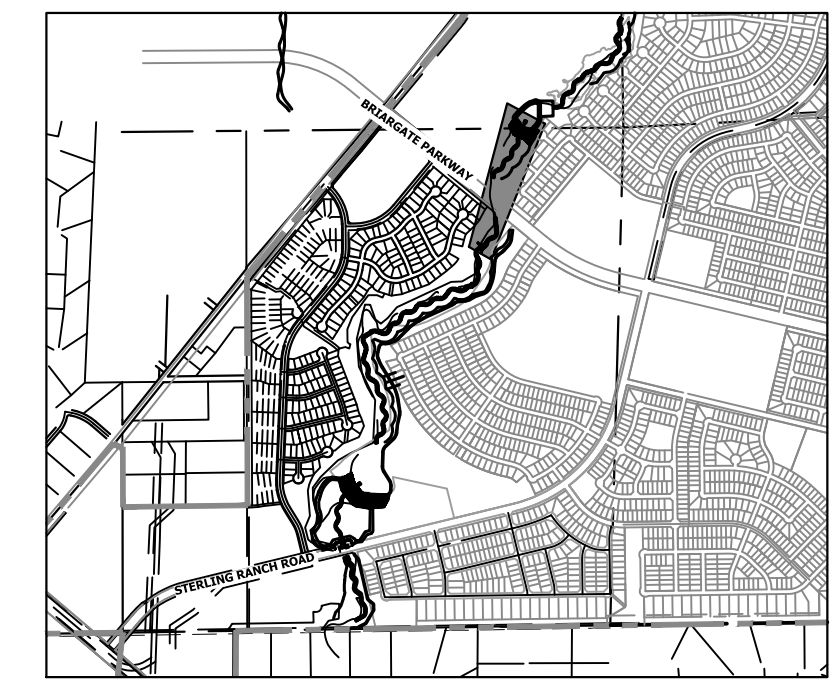
CURVE	DELTA	RADIUS	LENGTH
C29	45°19'51"	80.00'	63.29'
C30	80°20'28"	44.98'	63.07'
C31	64°24'39"	50.00'	56.21'
C32	66°28'07"	55.00'	63.81'
C33	54°11'32"	50.00'	47.29'
C34	40°52'01"	55.00'	39.23'
C35	60°48'54"	50.00'	53.07'
C36	53°55'33"	50.00'	47.06'
C37	49°08'15"	55.00'	47.17'
C38	43°49'19"	60.00'	45.89'
C39	48°14'11"	55.00'	46.30'
C40	51°39'45"	55.00'	49.59'
C41	35°13'13"	50.00'	30.74'
C42	58°17'59"	58.67'	59.70'
C43	40°40'23"	50.00'	35.49'
C44	56°02'17"	50.00'	48.90'
C45	43°02'19"	50.00'	37.56'



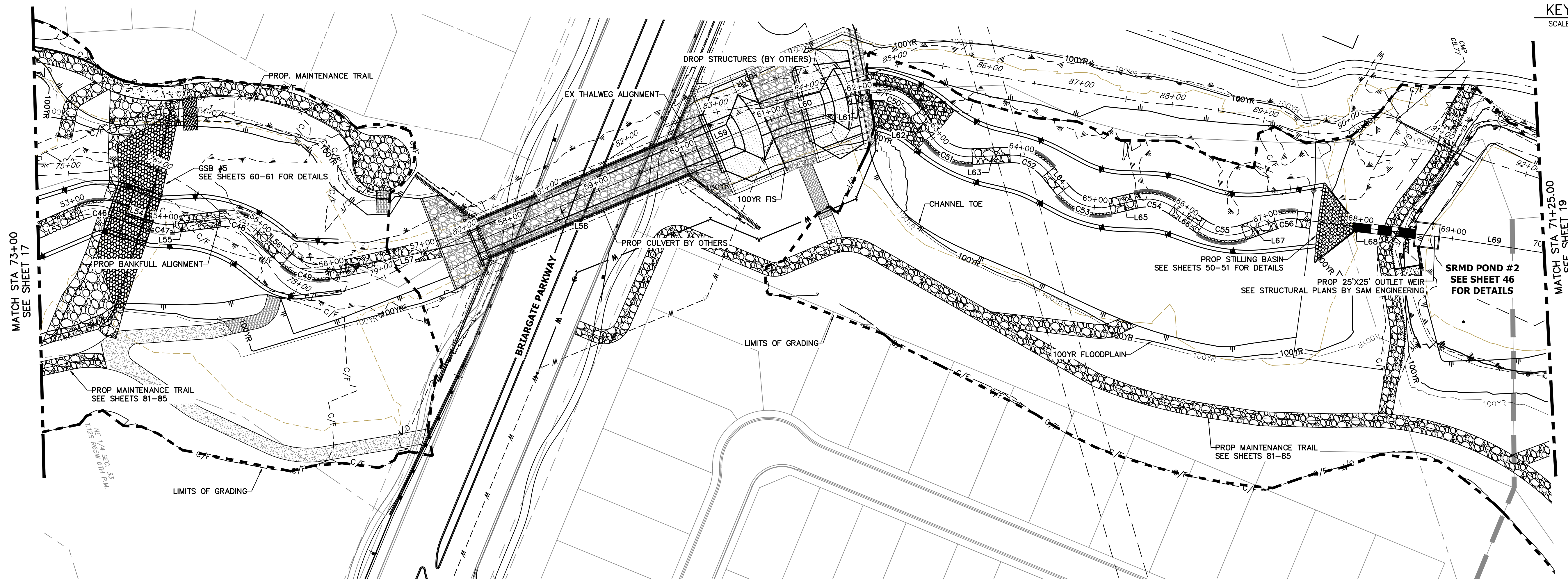
811
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PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. # 10000
FOR AND ON BEHALF OF JR ENGINEERING, LLC

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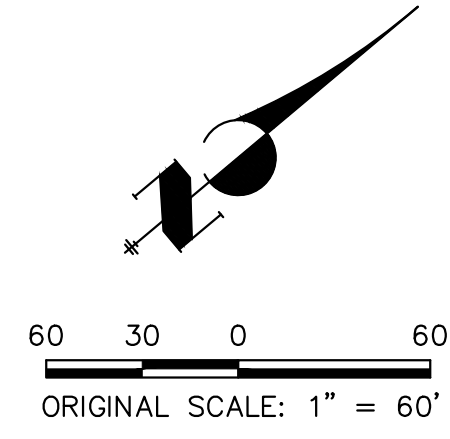
KEY MAP
SCALE: 1" = 2000'



HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL
SCALE: 1" = 60'

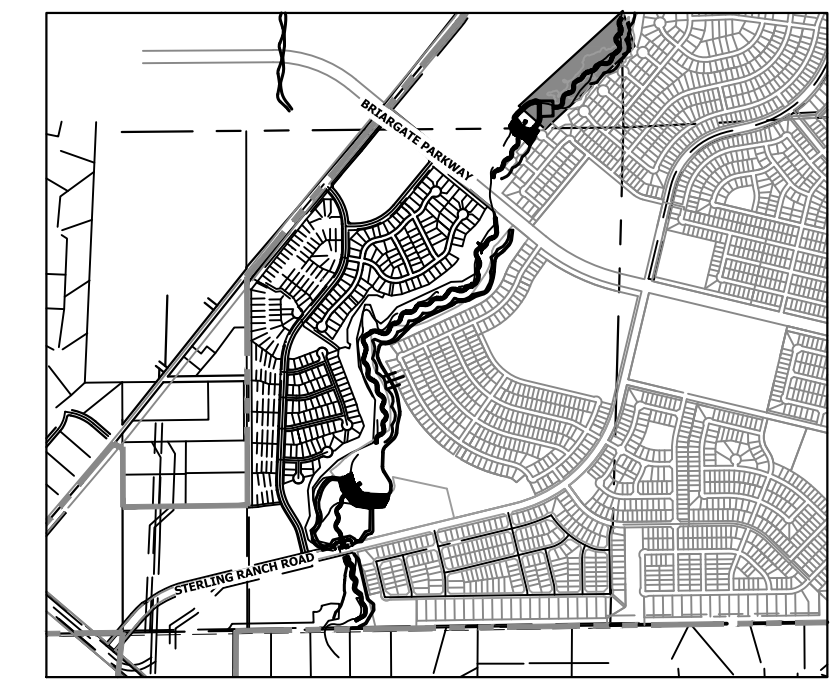
LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL

LINE TABLE			CURVE TABLE			
LINE	BEARING	DISTANCE	CURVE	DELTA	RADIUS	LENGTH
L53	N06°00'39"W	66.75'	C46	42°15'20"	55.00'	40.56'
L54	N36°14'46"E	39.38'	C47	25°52'40"	50.02'	22.59'
L55	N10°21'29"E	49.36'	C48	50°32'41"	50.00'	44.11'
L56	N60°54'10"E	43.33'	C49	54°19'17"	50.00'	47.40'
L57	N05°12'24"E	171.36'	C50	65°59'46"	50.00'	57.59'
L58	N05°23'49"W	227.79'	C51	58°56'29"	50.19'	51.63'
L59	N05°23'49"W	100.46'	C52	53°32'09"	50.00'	46.72'
L60	N00°44'30"E	91.02'	C53	64°10'24"	50.00'	56.00'
L61	N07°39'00"E	24.57'	C54	47°58'23"	50.00'	41.86'
L62	N73°38'46"E	29.14'	C55	54°20'55"	50.00'	47.43'
L63	N14°36'29"E	40.64'	C56	26°43'51"	50.00'	23.33'
L64	N68°08'38"E	25.60'				
L65	N03°58'14"E	28.73'				
L66	N51°56'37"E	36.80'				
L67	N02°24'18"W	36.29'				
L68	N24°19'33"E	149.34'				
L69	N25°56'53"E	128.38'				



ENGINEER'S STATEMENT
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 PRELIMINARY
 NOT FOR
 CONSTRUCTION
 MIKE A. BRAMLEY
 COLORADO P.E. 31111
 FOR AND ON BEHALF OF JR. ENGINEERING, LLC

PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR. ENGINEERING APPROVES THEIR USE. REVISES DESIGNATED BY WRITTEN AUTHORIZATION.
SAND CREEK RESTORATION HORIZONTAL CONTROL PLAN	SHEET 18 OF 111 JOB NO. 25188.04



KEY MAP
SCALE: 1"=2000'



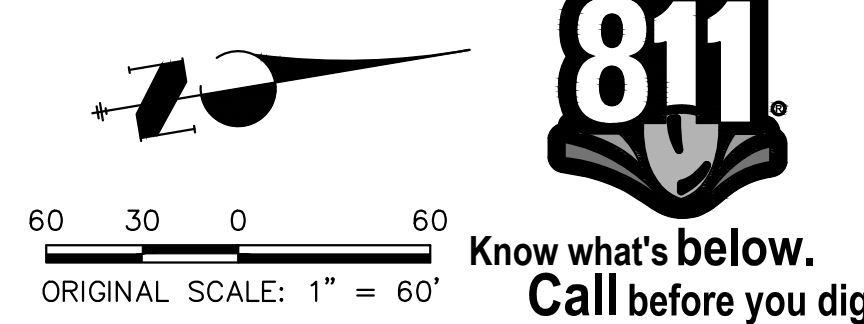
HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL

SCALE: 1"=50'

LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL

LINE TABLE		
LINE	BEARING	DISTANCE
L70	N71°47'03"E	19.62'
L71	N75°44'54"E	61.12'
L72	N88°15'33"E	204.10'
L73	N43°02'34"E	52.87'
L74	N09°08'25"E	54.02'
L75	N57°53'21"E	33.46'
L76	N09°48'06"E	28.21'
L77	N73°17'31"E	27.67'
L78	N41°18'28"E	51.56'
L79	N74°55'24"E	46.84'
L80	N22°53'04"E	37.83'
L81	N86°42'25"E	36.83'
L82	N22°00'31"E	51.65'
L83	N52°26'30"E	45.59'
L84	N31°41'54"W	43.63'
L85	N45°44'54"E	36.65'
L86	N24°37'06"W	34.08'
L87	N29°45'43"E	33.26'

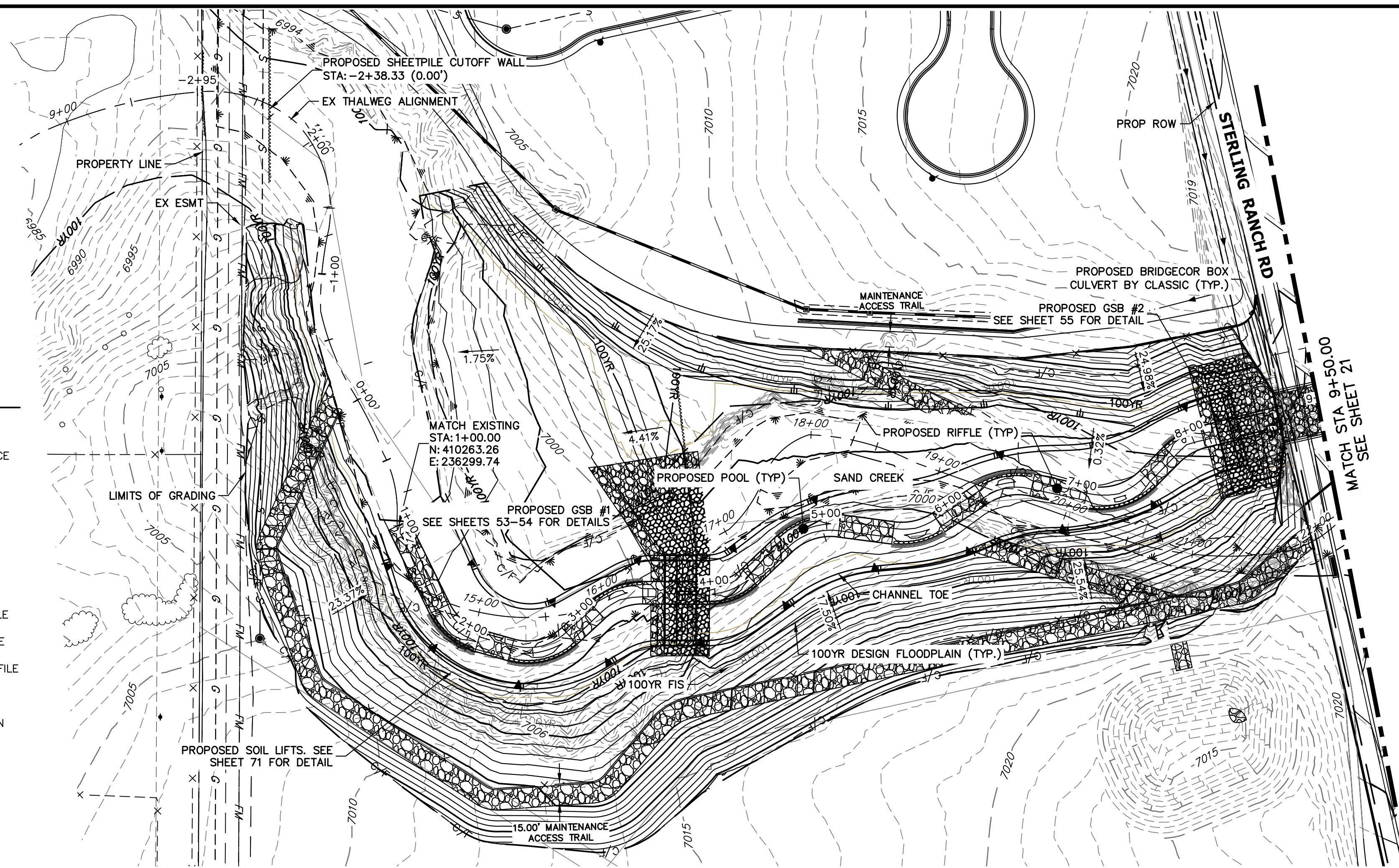
CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C57	45°50'10"	90.00'	72.00'
C58	46°32'33"	50.08'	40.68'
C59	34°22'46"	50.02'	30.02'
C60	47°43'06"	50.03'	41.67'
C61	48°17'05"	49.81'	41.98'
C62	63°30'09"	49.99'	55.41'
C63	32°34'55"	50.22'	28.56'
C64	33°32'59"	75.28'	44.08'
C65	52°02'18"	50.00'	45.41'
C66	63°49'22"	50.00'	55.70'
C67	64°37'45"	45.04'	50.81'
C68	30°26'04"	50.00'	26.56'
C69	83°48'51"	50.22'	73.47'
C70	77°26'48"	50.00'	67.59'
C71	70°22'00"	50.00'	61.41'
C72	54°22'49"	50.00'	47.46'



ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
 MIKE A. BRAMLEY
 COLORADO P.E. # 31111
 FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION. PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	J.R. ENGINEERING A Westman Company Centennial 303-740-9383 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	No.	REVISION	BY	DATE
		H-SCALE 1"=60'	V-SCALE N/A	DATE 1/23/23	DESIGNED BY SCH
SAND CREEK RESTORATION HORIZONTAL CONTROL PLAN		SHEET 19 OF 111 JOB NO. 25188.04			

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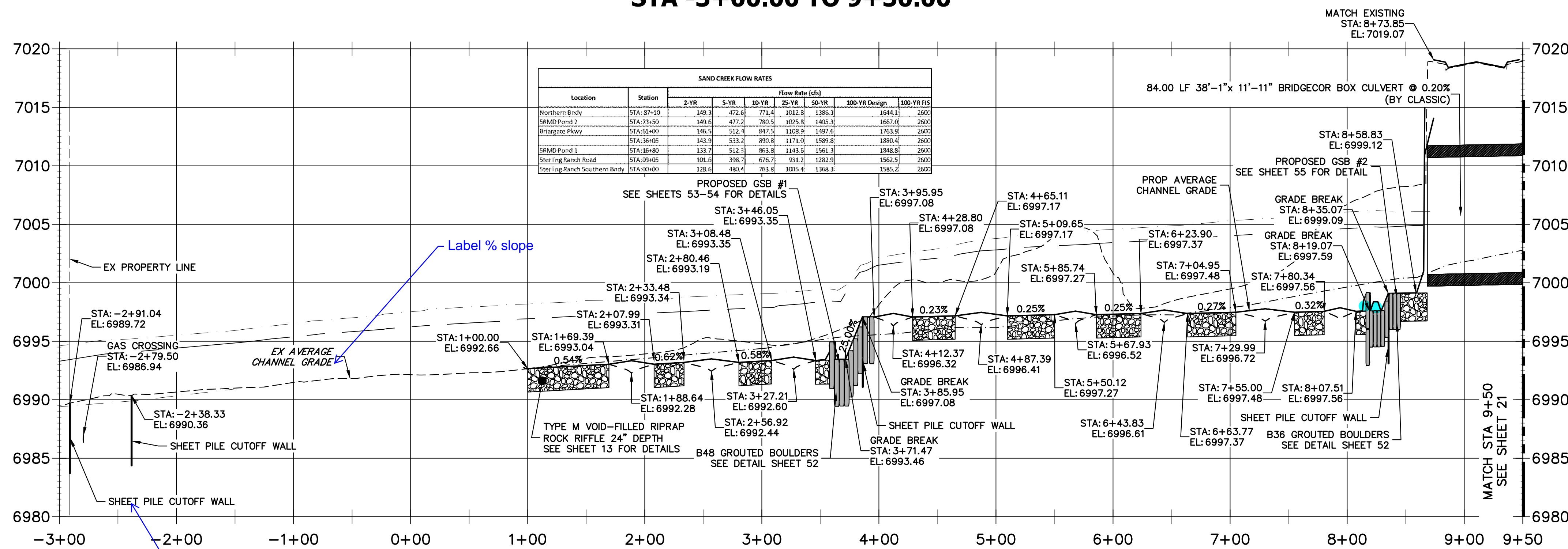
BENCHMARK

- THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411416.273
EASTING = 235167.071
ELEVATION = 7023.42
- THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANNEE RANCHEROS SUBDIVISION
NORTHING = 410095.404
EASTING = 235052.131
ELEVATION = 7000.40
- THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "381417", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411399.962
EASTING = 233849.817
ELEVATION = 7030.82

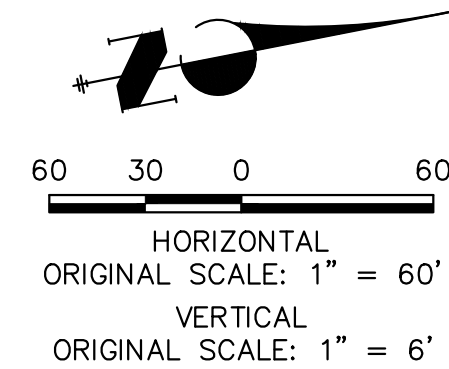
BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.

**SAND CREEK - BANKFULL PROFILE 1
STA -3+00.00 TO 9+50.00**



- NOTE**
- NO GRADING OR CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY
 - DRIVE SHEET PILE THROUGH BEDROCK OR MINIMUM OF 6 FEET.
 - SEE SHEETS 26-31 FOR STABLE GRADE PROFILES.



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ENGINEER'S STATEMENT

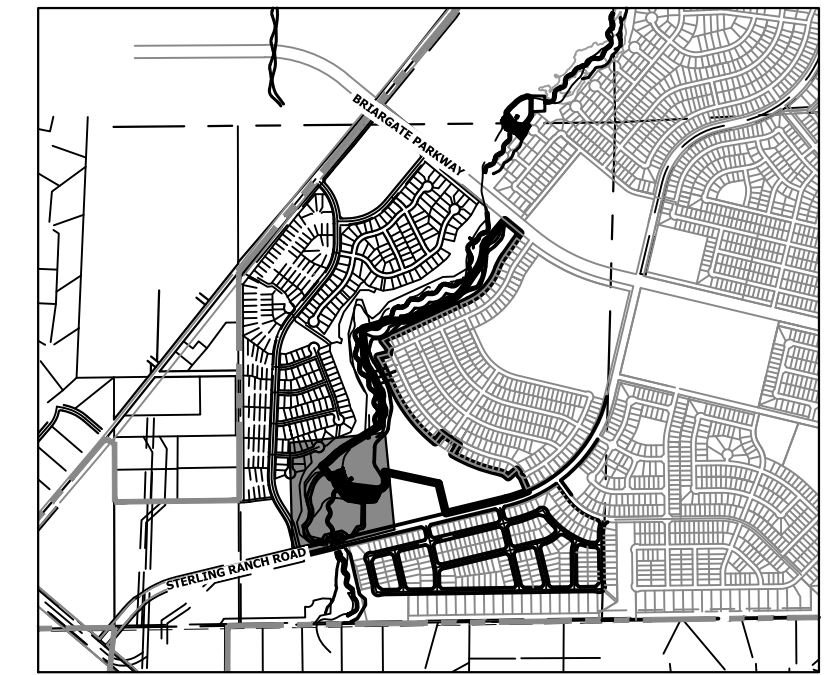
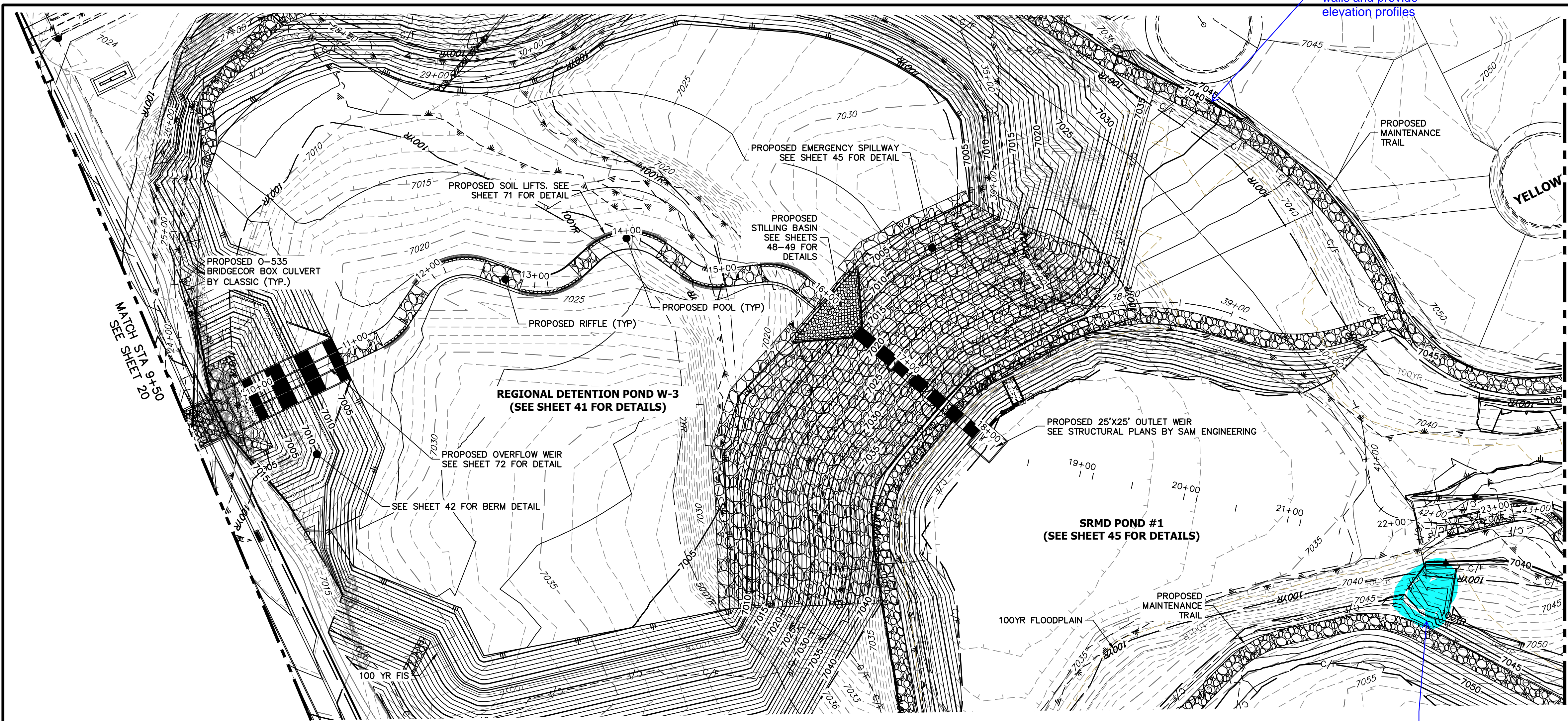
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMBLE
COLORADO P.E. NO. 30112
FOR AND ON BEHALF OF JR ENGINEERING

SAND CREEK RESTORATION CHANNEL PLAN & PROFILE	BY	DATE					
	NO.	REVISION					
	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	
	1"=60'	1"=6'	1/23/23	DJV	NEO		
SHEET 20 OF 111		JOB NO. 25188.04					

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PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
A Westman Company
Central 303-740-8888 • Colorado Springs 719-583-2583
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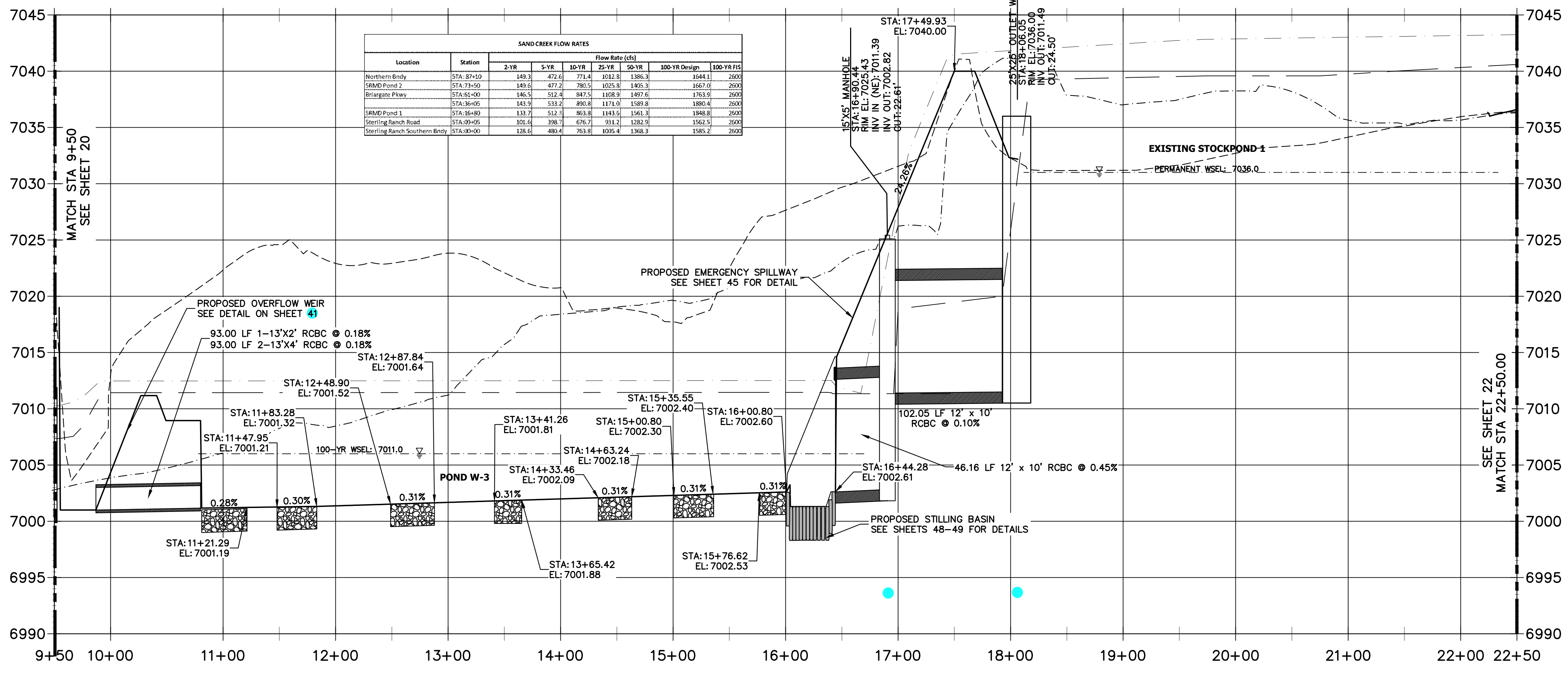


KEY MAP
SCALE: 1"=2000'

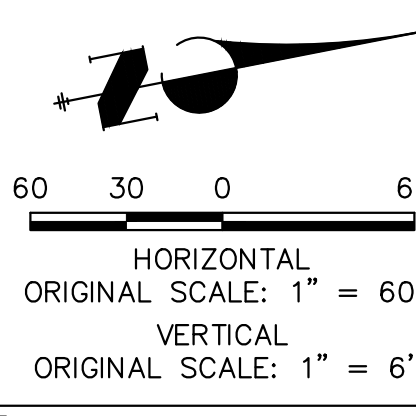
LEGEND

- PROPOSED BANKFULL ALIGNMENT
- PROPOSED FLOOD TERRACE ALIGNMENT
- EXISTING ALIGNMENT
- FINISHED GRADE PROFILE
- THALWEG PROFILE
- EXISTING GRADE PROFILE
- EXISTING THALWEG PROFILE
- 100-YR FIS WSEL PROFILE
- 100-YR MDDP WSEL PROFILE
- 100-YR FIS FLOODPLAIN
- 100-YR MDDP FLOODPLAIN

**SAND CREEK - BANKFULL PROFILE 2
STA 9+50.00 TO 22+50.00**



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ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL.
PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMBLE
COLORADO P.E. NO. 12345
FOR AND ON BEHALF OF JR. ENGINEERING, INC.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR. ENGINEERING APPROVES THEIR USE AS DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

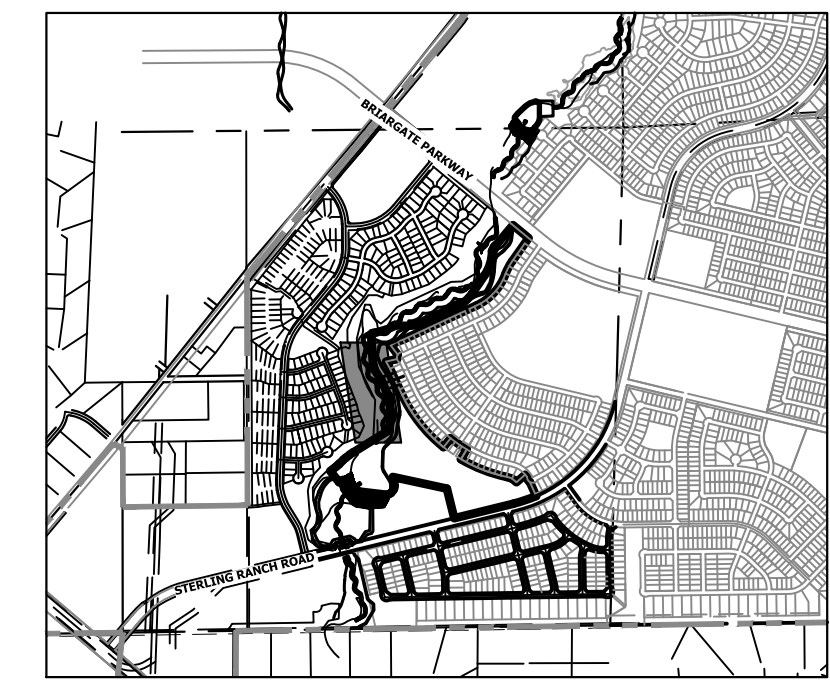
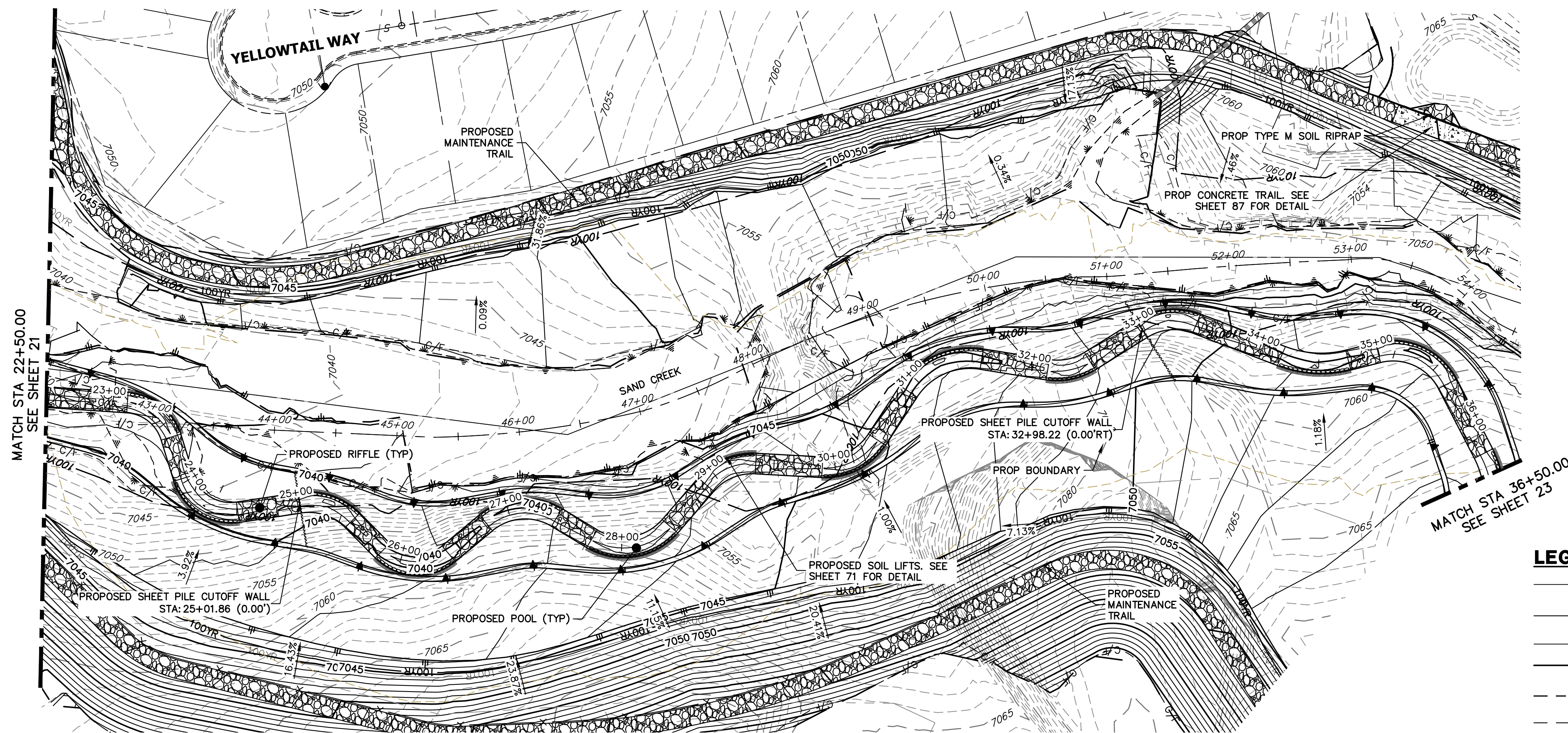
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BY	DATE	REVISION

H-SCALE: 1"=60'
V-SCALE: 1"=6'
DATE: 1/23/23
DESIGNED BY: DJV
DRAWN BY: NEO
CHECKED BY:

**SAND CREEK RESTORATION
CHANNEL PLAN & PROFILE**

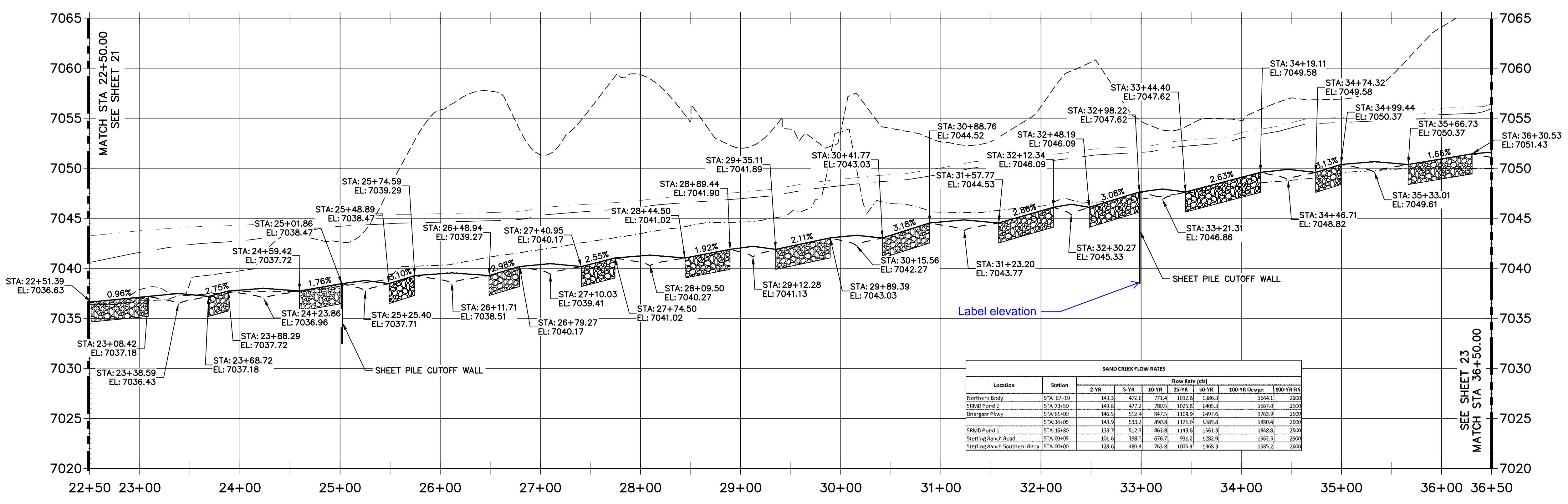
SHEET 21 OF 111
JOB NO. 25188.04



LEGEND

—	PROPOSED BANKFULL & ALIGNMENT
—	PROPOSED FLOOD TERRACE & ALIGNMENT
—	EXISTING & ALIGNMENT
—	FINISHED GRADE PROFILE & CHANNEL &
—	THALWEG PROFILE
—	EXISTING GRADE PROFILE & CHANNEL &
—	EXISTING THALWEG PROFILE
—	100-YR FIS WSEL PROFILE
—	100-YR MDDP WSEL PROFILE
—	100-YR FIS FLOODPLAIN
—	100-YR MDDP FLOODPLAIN

**SAND CREEK - BANKFULL PROFILE 3
STA 22+50.00 TO 36+50.00**



SAND CREEK FLOW RATES

Location	Station	Flow Rate (cfs)				
		2-YR	5-YR	10-YR	25-YR	50-YR
Northern Bend	STA: 29+10	149.3	472.6	773.4	1032.8	1386.3
SAND Pond 2	STA: 27+50	140.6	477.2	780.5	1025.8	1405.3
Briargate Pkwy	STA: 26+00	146.5	512.4	847.5	1108.9	1497.6
SAND Pond 1	STA: 26+05	141.9	533.2	893.8	1171.0	1539.8
Sterling Ranch Road	STA: 26+80	133.7	512.1	863.8	1143.0	1561.3
Sterling Ranch Southern Bend	STA: 26+05	101.6	398.7	676.7	931.2	1282.9
	STA: 26+00	126.6	484.0	794.8	1036.4	1408.3

811
Know what's below.
Call before you dig.

ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

**PRELIMINARY
NOT FOR
CONSTRUCTION**

MIKE A. BRAMBLE
COLORADO P.E. 30112
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE WRITTEN DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
A Westman Company
Central 303-740-8888 • Colorado Springs 719-583-2683
Fort Collins 970-491-9888 • www.jrengineering.com

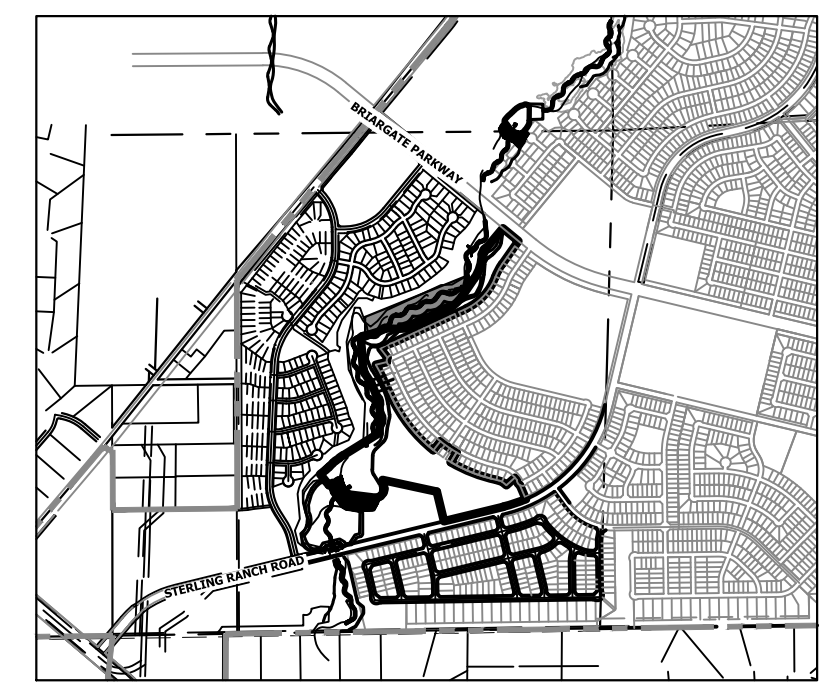
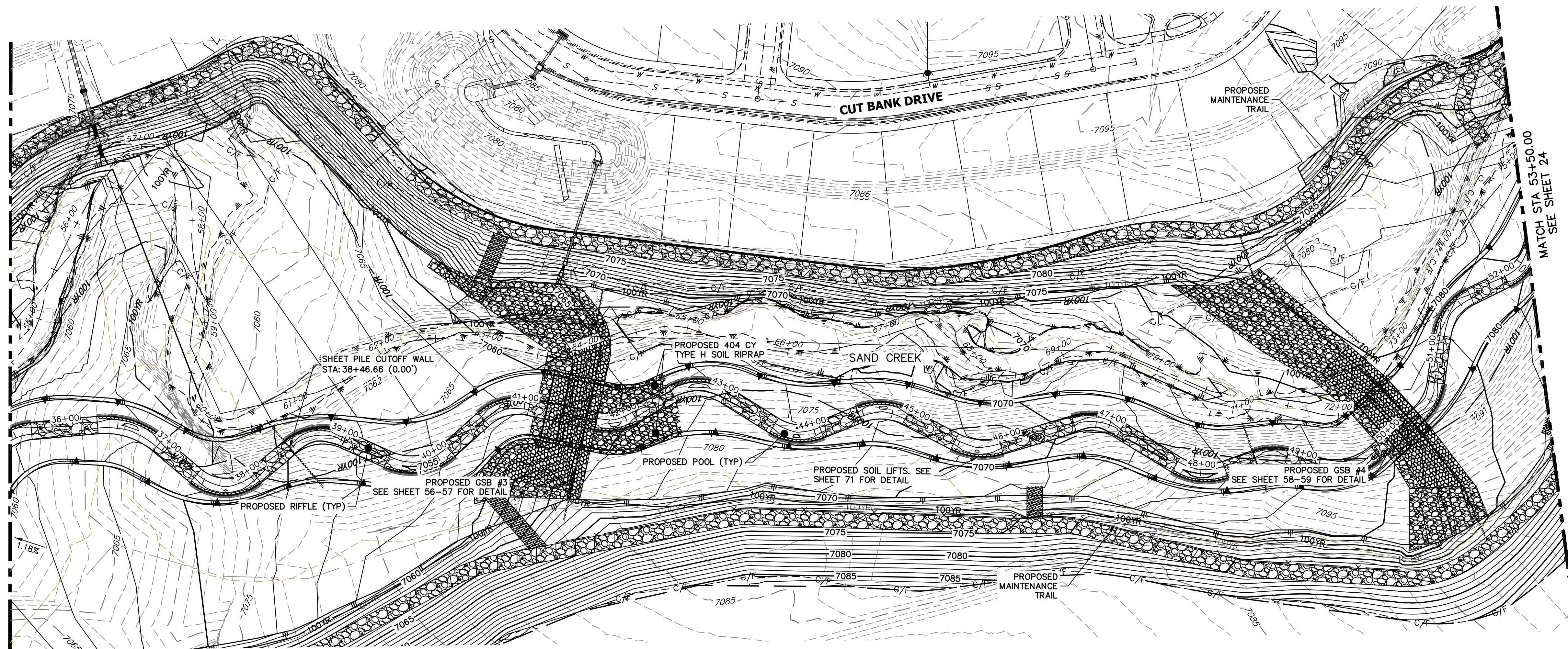
BY	DATE	No.	REVISION

H-SCALE 1"=60'
V-SCALE 1"=6'
DATE 1/23/23
DESIGNED BY DJV
DRAWN BY NEO
CHECKED BY

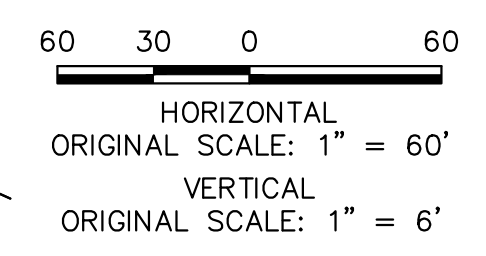
**SAND CREEK RESTORATION
CHANNEL PLAN & PROFILE**

SHEET 22 OF 111
JOB NO. 25188.04

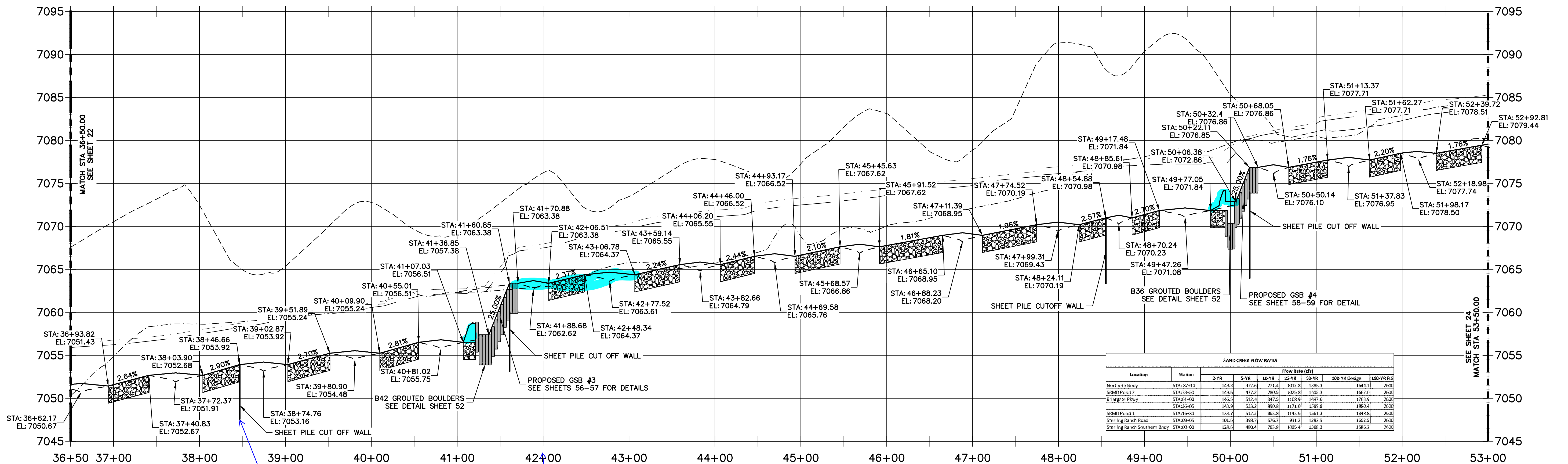
MATCH STA 36+50.00
SEE SHEET 22



- LEGEND**
- PROPOSED BANKFULL & ALIGNMENT
 - PROPOSED FLOOD TERRACE & ALIGNMENT
 - EXISTING & ALIGNMENT
 - FINISHED GRADE PROFILE & CHANNEL &
 - THALWEG PROFILE
 - EXISTING GRADE PROFILE & CHANNEL &
 - EXISTING THALWEG PROFILE
 - 100-YR FIS WSEL PROFILE
 - 100-YR MDDP WSEL PROFILE
 - 100-YR FIS FLOODPLAIN
 - 100-YR MDDP FLOODPLAIN



**SAND CREEK - BANKFULL PROFILE 4
STA 36+50.00 TO 53+00.00**



SAND CREEK FLOW RATES

Location	Station	Flow Rate (cfs)					
		2-YR	5-YR	10-YR	25-YR	50-YR	100-YR FIS
Northern Bend	STA: 39+50	149.3	472.6	771.4	1032.8	1385.3	1644.1
SRMDF Pond 2	STA: 37+50	149.6	472.7	789.5	1035.8	1403.3	1657.0
Bergrate Pkwy	STA: 45+00	146.5	512.4	847.5	1108.9	1497.6	1763.9
SRMDF Pond 1	STA: 36+05	143.9	533.2	896.8	1171.0	1589.8	1880.4
Sterling Ranch Road	STA: 49+05	133.7	512.1	863.8	1143.5	1541.8	1848.8
Sterling Ranch Southern Bend	STA: 40+00	128.6	480.4	783.8	1035.4	1368.3	1585.2



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMBLE
COLORADO P.E. No. 30107
FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
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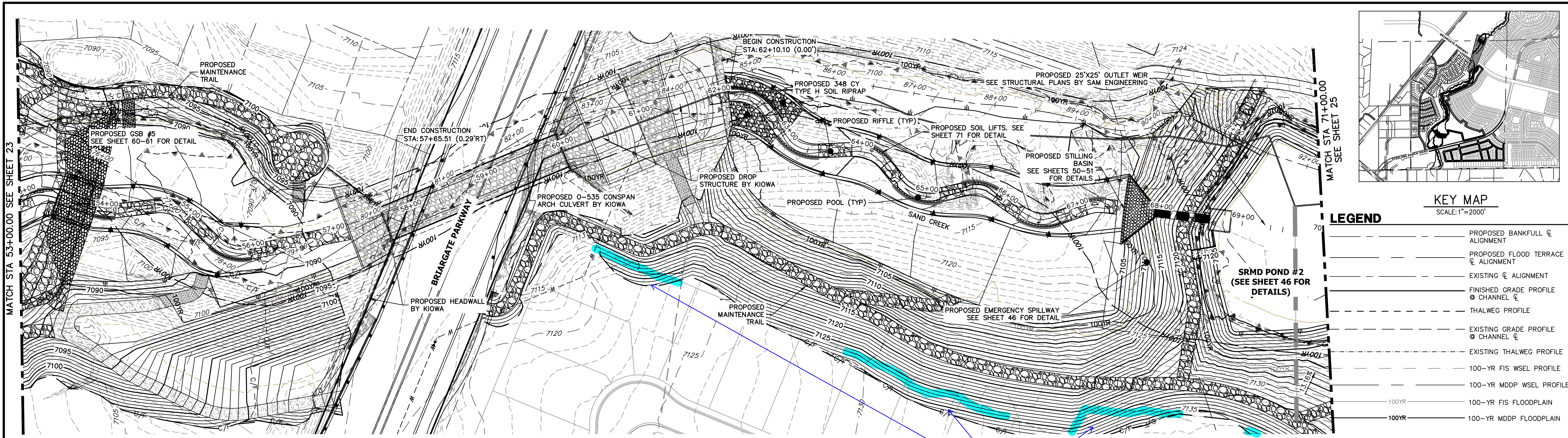
BY	DATE	REVISION

H-SCALE 1"=60'
V-SCALE 1"=6'
DATE 1/23/23
DESIGNED BY DJV
DRAWN BY NEO
CHECKED BY

SAND CREEK RESTORATION CHANNEL PLAN & PROFILE

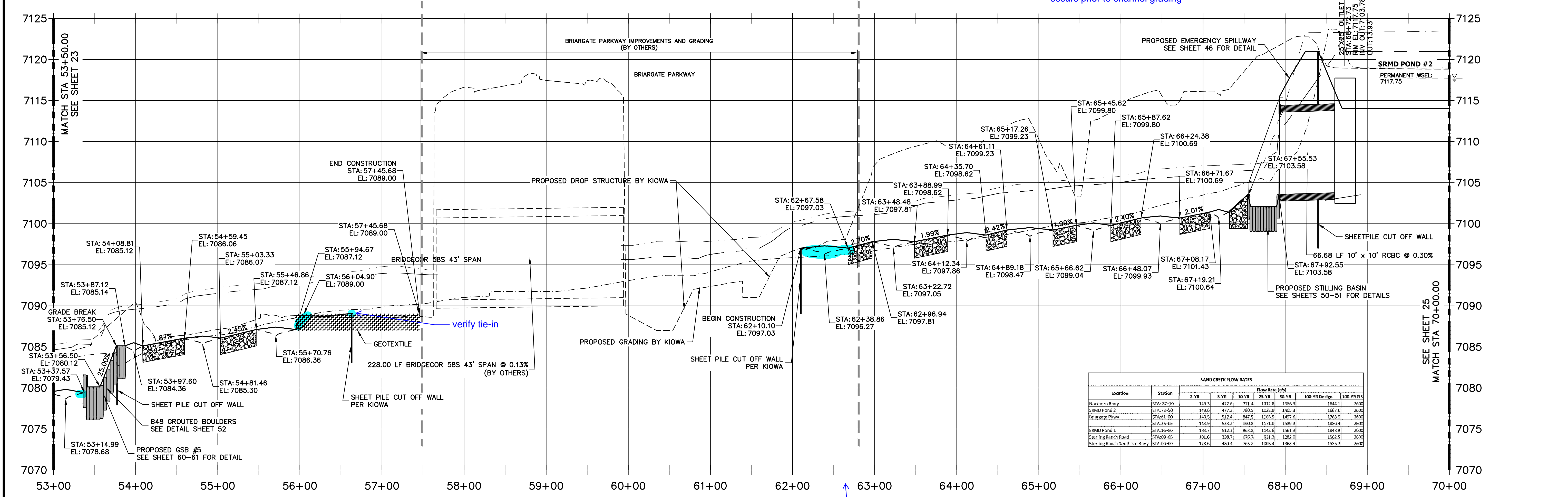
SHEET 23 OF 111
JOB NO. 25188.04

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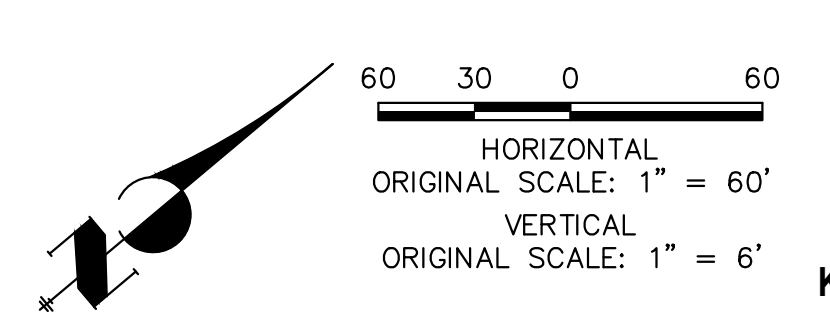


**SAND CREEK - BANKFULL PROFILE 5
STA 53+00.00 TO 70+00.00**

Add note that these areas will be graded with subdivision grading if it occurs prior to channel grading



Modeling indicates supercritical flows - verify stability. Response says soil riprap will be added.



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMBLE
COLORADO P.E. 30112
FOR AND ON BEHALF OF JR ENGINEERING

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PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

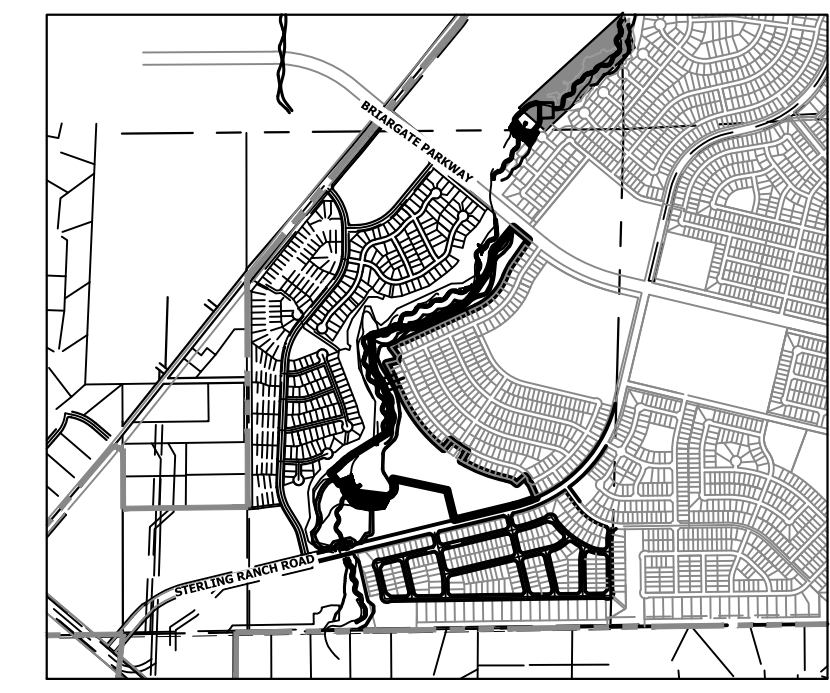
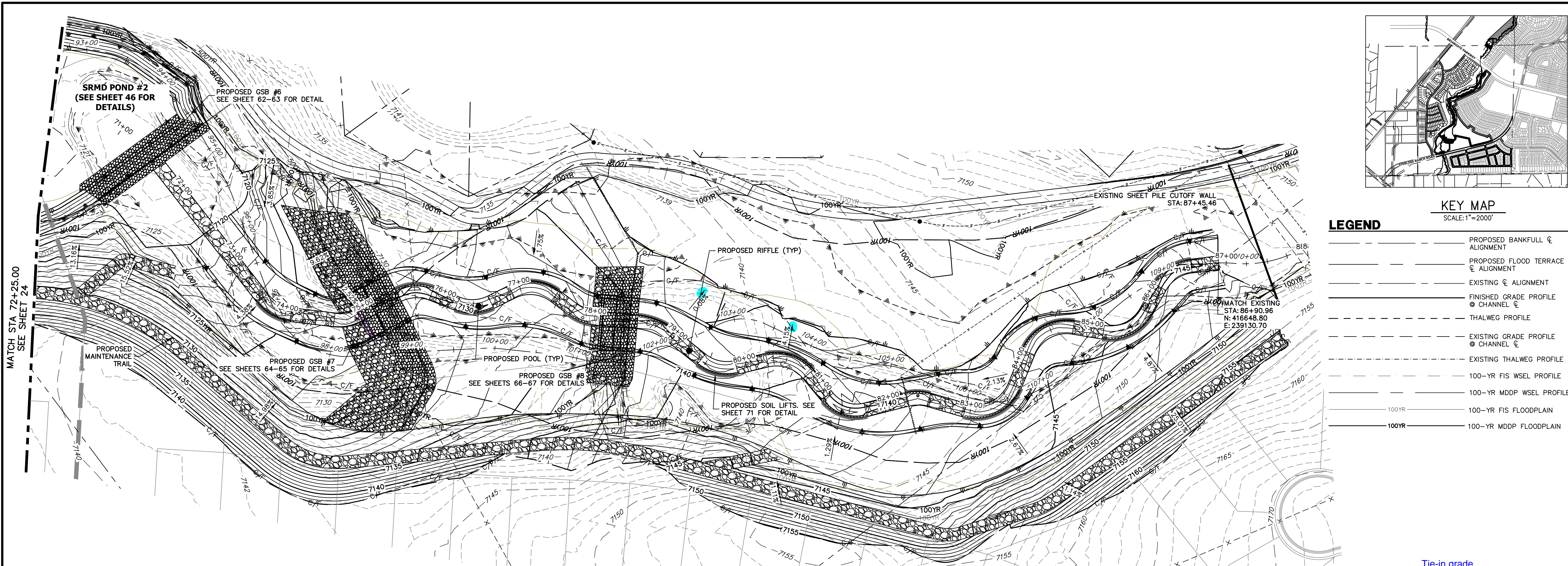
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NO.	REVISION	DATE

H-SCALE 1"=60'
V-SCALE 1"=6'
DATE 1/23/23
DESIGNED BY DUV
DRAWN BY NEO
CHECKED BY

SAND CREEK RESTORATION
CHANNEL PLAN & PROFILE

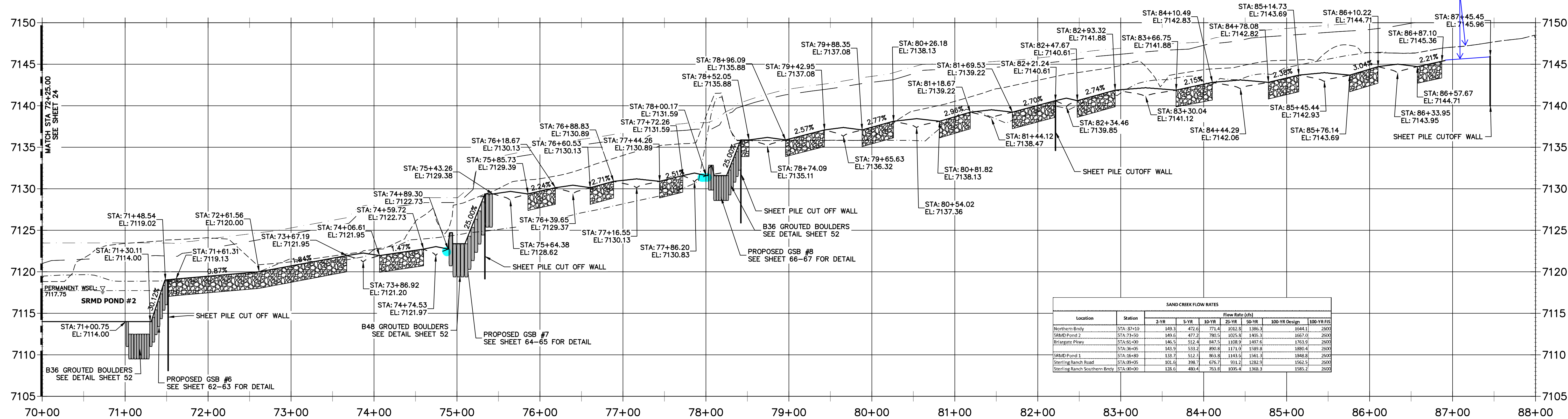
SHEET 24 OF 111
JOB NO. 25188.04



LEGEND

- PROPOSED BANKFULL & ALIGNMENT
- PROPOSED FLOOD TERRACE & ALIGNMENT
- EXISTING & ALIGNMENT
- FINISHED GRADE PROFILE @ CHANNEL &
- THALWEG PROFILE
- EXISTING GRADE PROFILE @ CHANNEL &
- EXISTING THALWEG PROFILE
- 100-YR FIS WSEL PROFILE
- 100-YR MDDP WSEL PROFILE
- 100-YR FIS FLOODPLAIN
- 100-YR MDDP FLOODPLAIN

**SAND CREEK - BANKFULL PROFILE 6
STA 70+00.00 TO 88+00.00**



SAND CREEK FLOW RATES

Location	Station	Flow Rate (cfs)				
		2-YR	5-YR	10-YR	25-YR	100-YR
Northern Bendy	STA: 83+20	149.3	472.4	771.4	1032.5	1386.3
Sand Pond 2	STA: 73+20	189.5	472.2	780.5	1005.9	1409.3
Burglar's Pass	STA: 35+00	146.5	512.4	847.5	1108.9	1497.6
Sand Pond 1	STA: 36+05	143.9	533.2	890.8	1171.0	1589.8
Sand Pond 3	STA: 36+30	133.7	512.2	863.8	1143.5	1543.3
Steering Ranch Road	STA: 0+05	102.6	398.7	676.9	911.4	1282.9
Steering Ranch Southern Bendy	STA: 00+00	138.6	480.4	763.8	1005.4	1368.3

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

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BY	DATE	REVISION

H-SCALE: 1"=60'
 V-SCALE: 1"=6'
 DATE: 1/23/23
 DESIGNED BY: DJV
 DRAWN BY: NEO
 CHECKED BY:

SAND CREEK RESTORATION
CHANNEL PLAN & PROFILE

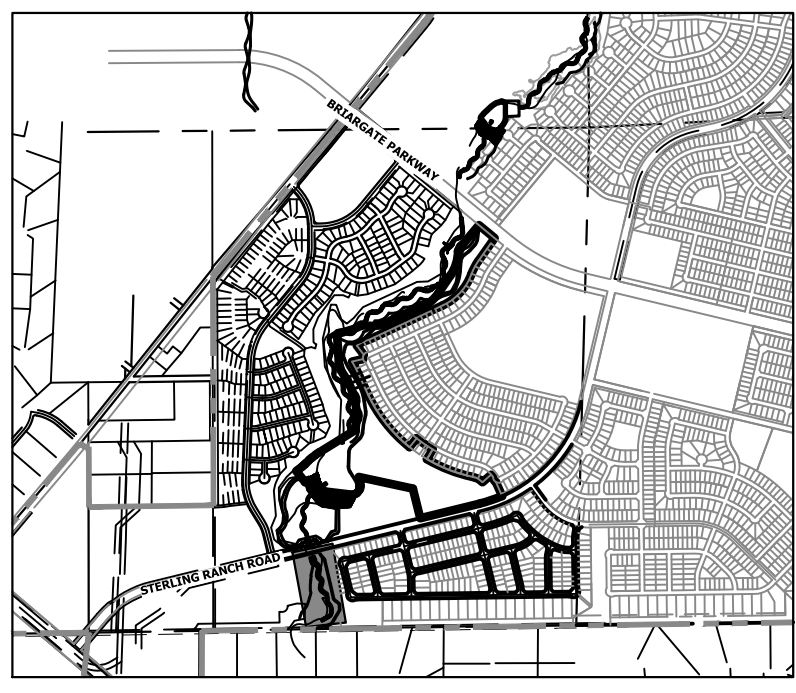
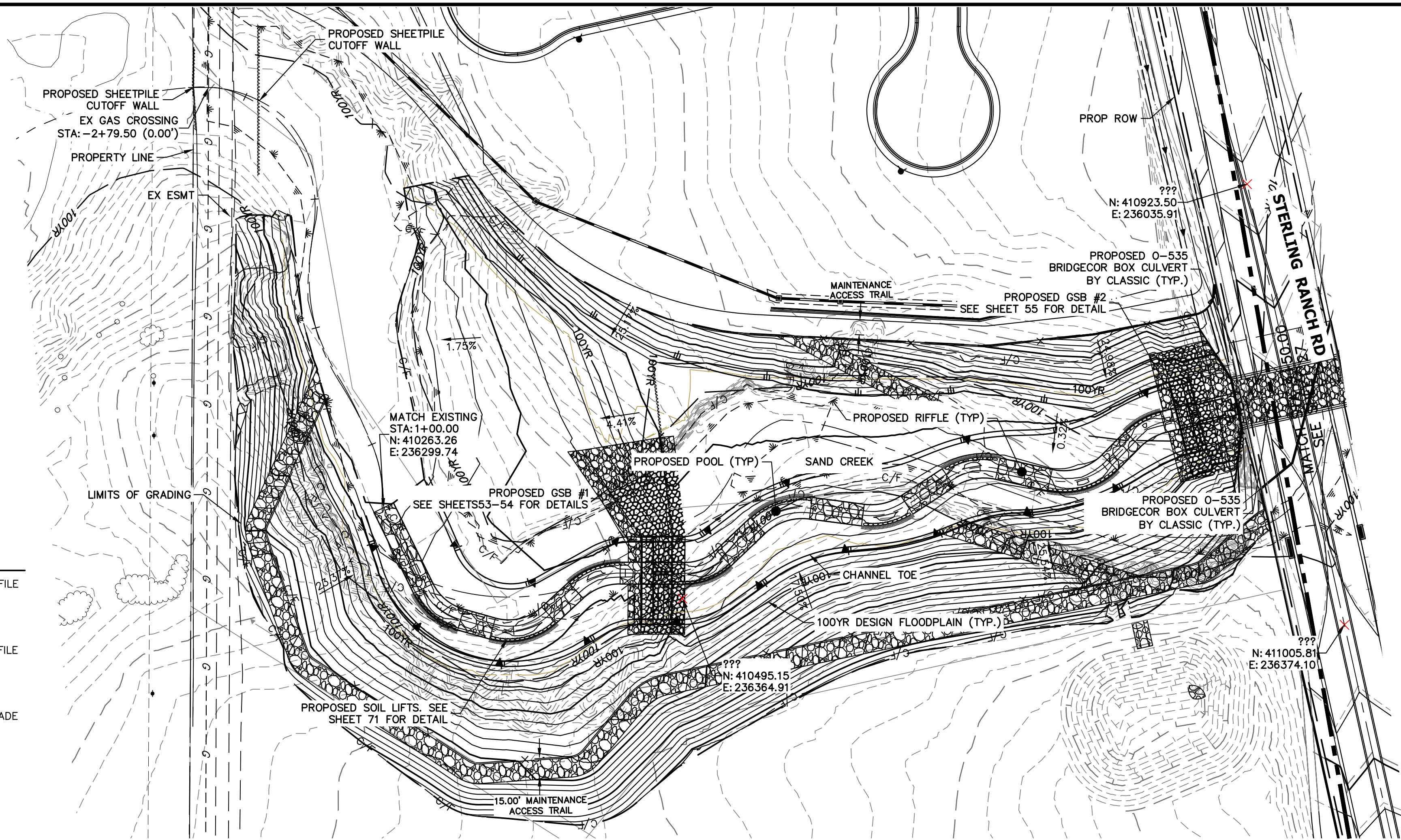
SHEET 25 OF 111
 JOB NO. 25188.04

ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMBLE
 COLORADO P.E. #30000
 FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

60 30 0 60
 HORIZONTAL ORIGINAL SCALE: 1" = 60'
 VERTICAL ORIGINAL SCALE: 1" = 6'



LEGEND

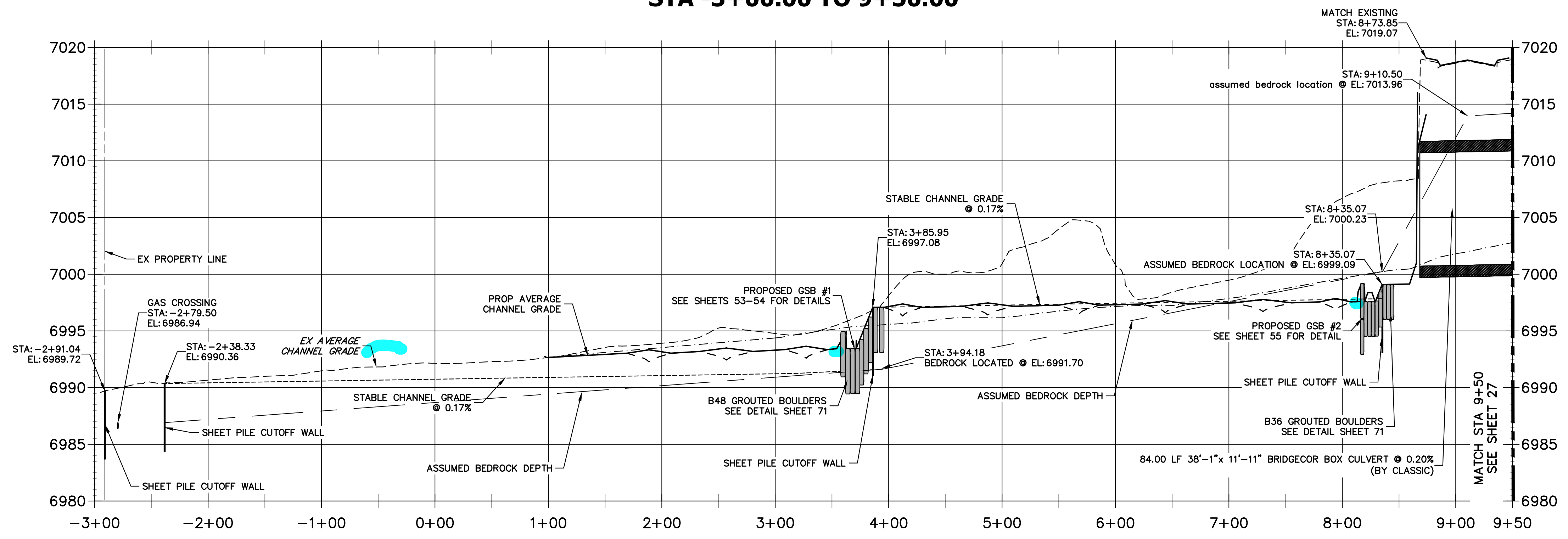
—	FINISHED GRADE PROFILE
⊙	CHANNEL
- - -	THALWEG PROFILE
- - -	EXISTING GRADE PROFILE
⊙	EXISTING THALWEG PROFILE
- - -	STABLE CHANNEL GRADE PROFILE
- - -	ASSUMED BEDROCK LOCATION PROFILE

- BENCHMARK**
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411416.273
EASTING = 235167.071
ELEVATION = 7023.42
 2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANWEE RANCHEROS SUBDIVISION
NORTHING = 410095.404
EASTING = 235052.131
ELEVATION = 7000.40
 3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "381417", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411399.962
EASTING = 233849.817
ELEVATION = 7030.82

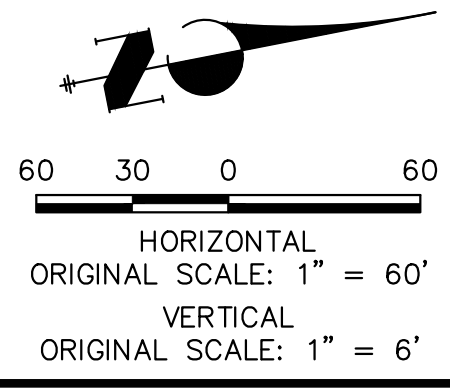
BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.

**SAND CREEK -STABLE CHANNEL GRADE BANKFULL PROFILE 1
STA -3+00.00 TO 9+50.00**



- NOTE**
1. NO GRADING OR CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY
 2. DRIVE SHEET PILE THROUGH BEDROCK OR MINIMUM OF 6 FEET.

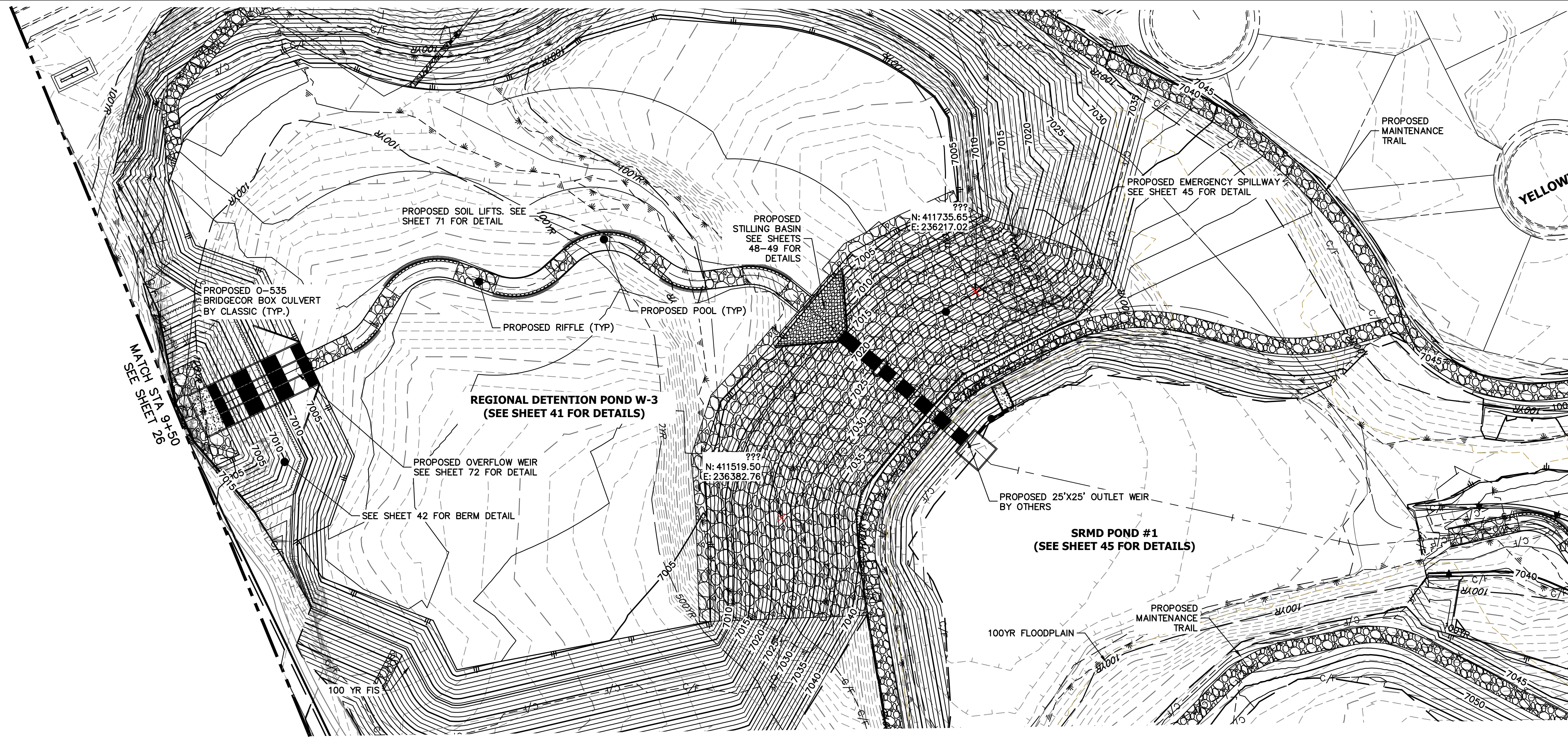


ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

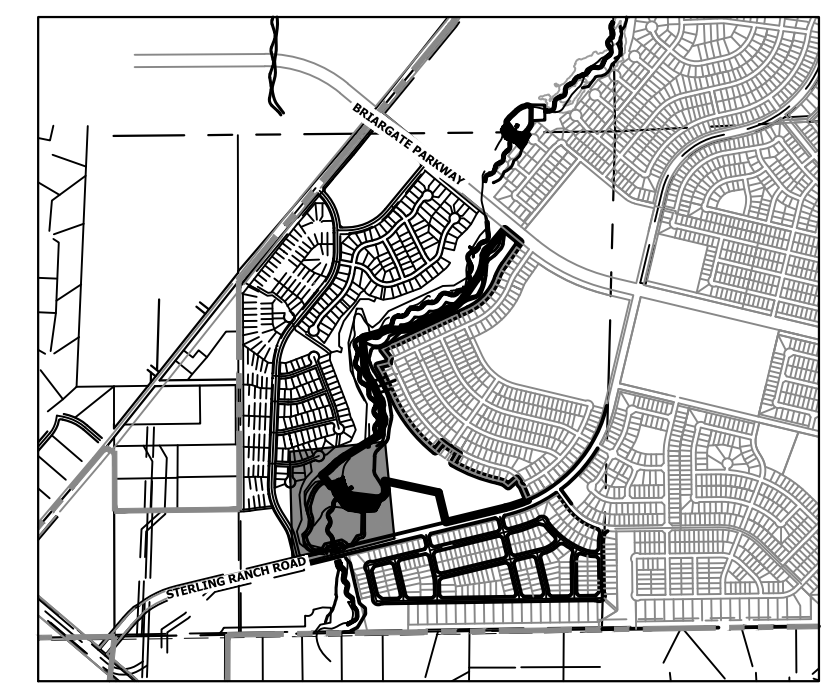
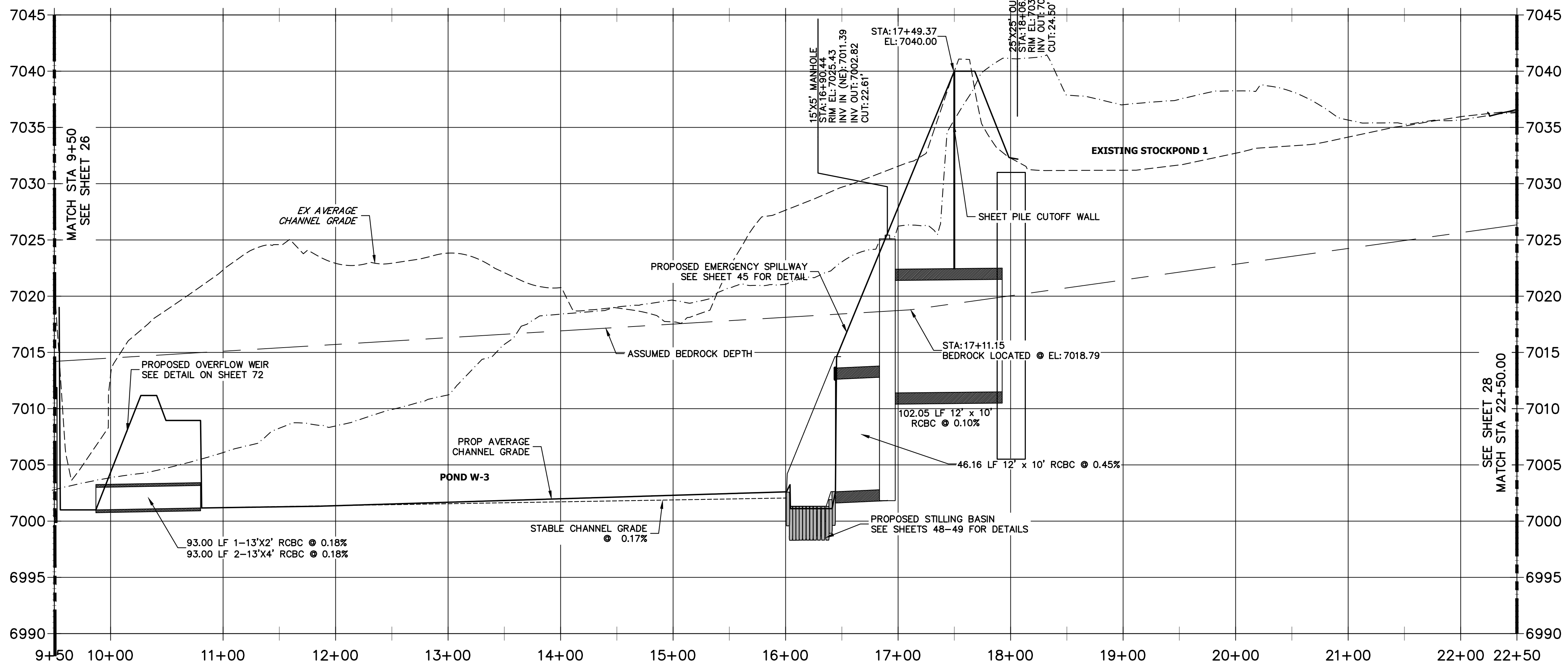
PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMBLE
COLORADO P.E. 30112
FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.	PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	 J.R. ENGINEERING A Westman Company Centennial 300-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE							
			No.	REVISION							
H-SCALE	1"=60'	V-SCALE	1"=6'	DATE	1/23/23	DESIGNED BY	DJV	DRAWN BY	NEO	CHECKED BY	
SAND CREEK RESTORATION											
CHANNEL STABLE GRADE PLAN AND PROFILE											
SHEET 26 OF 111										JOB NO. 25188.04	



**SAND CREEK - STABLE CHANNEL GRADE BANKFULL PROFILE 2
STA 9+50.00 TO 22+50.00**



KEY MAP
SCALE: 1"=2000'

MATCH STA. 22+50.00
SEE SHEET 28

MATCH STA. 9+50
SEE SHEET 26

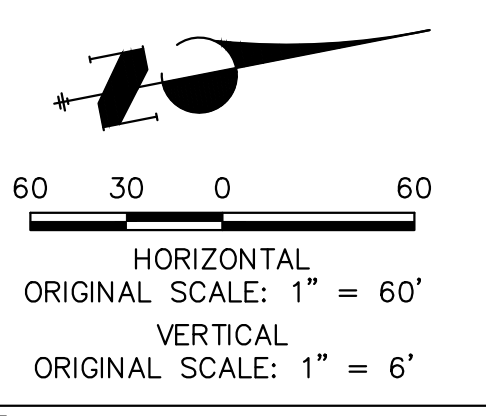
LEGEND

—	FINISHED GRADE PROFILE
⊙ CHANNEL	CHANNEL
- - -	THALWEG PROFILE
- - -	EXISTING GRADE PROFILE
⊙ CHANNEL	CHANNEL
- - -	EXISTING THALWEG PROFILE
- - -	STABLE CHANNEL GRADE PROFILE
- - -	ASSUMED BEDROCK LOCATION PROFILE

- NOTE**
- NO GRADING OR CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY
 - DRIVE SHEET PILE THROUGH BEDROCK OR MINIMUM OF 6 FEET.



**Know what's below.
Call before you dig.**

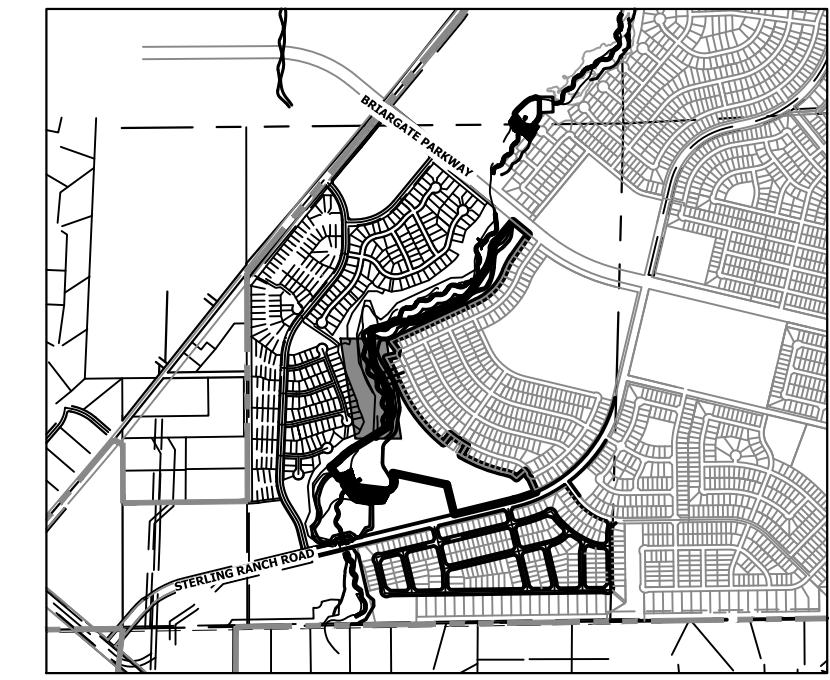
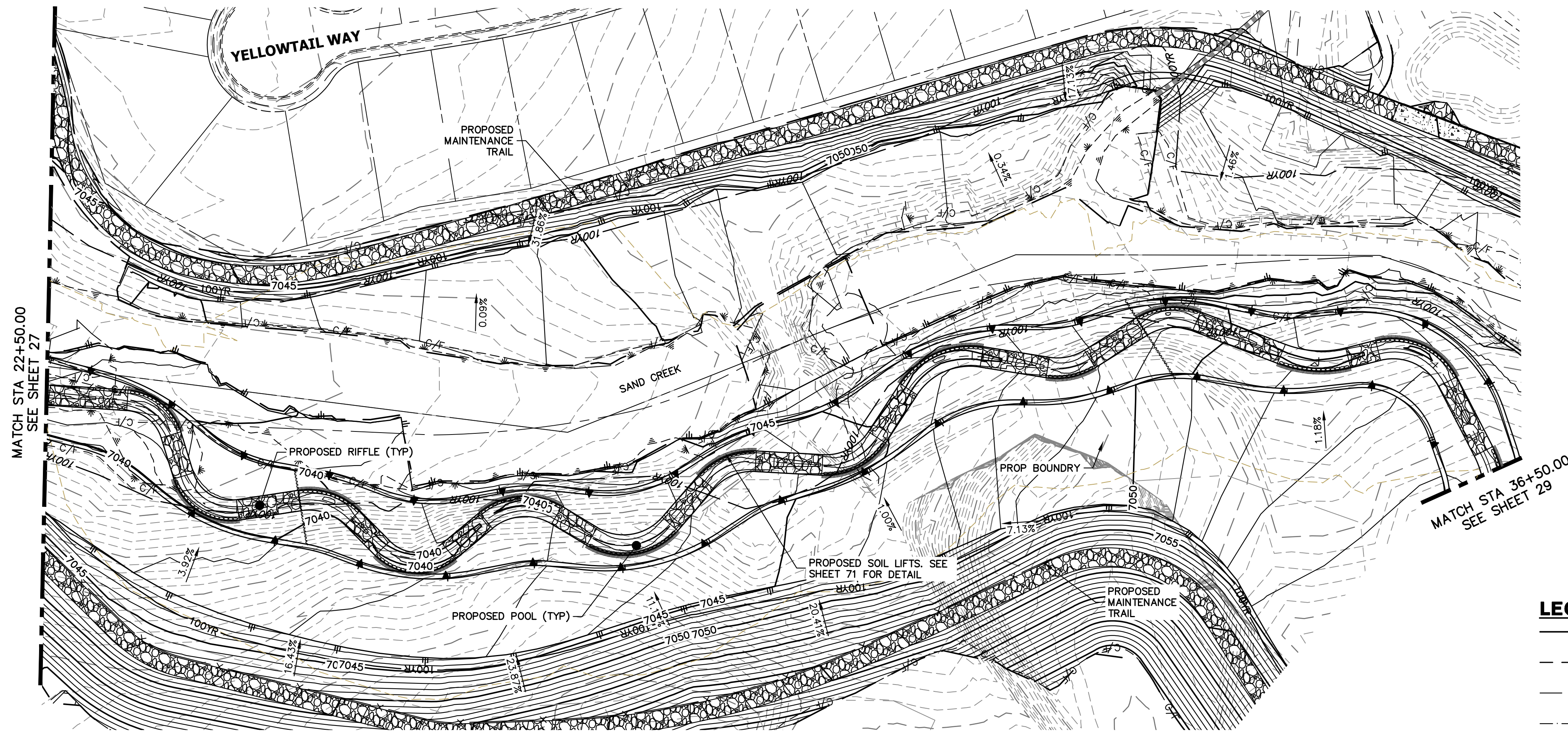


ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

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MIKE A. BRAMBLE
COLORADO P.E. 30112
FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE. THE OFFICES DESIGNATED BY WRITTEN AUTHORIZATION.
SAND CREEK RESTORATION CHANNEL STABLE GRADE PLAN AND PROFILE	SHEET 27 OF 111 JOB NO. 25188.04

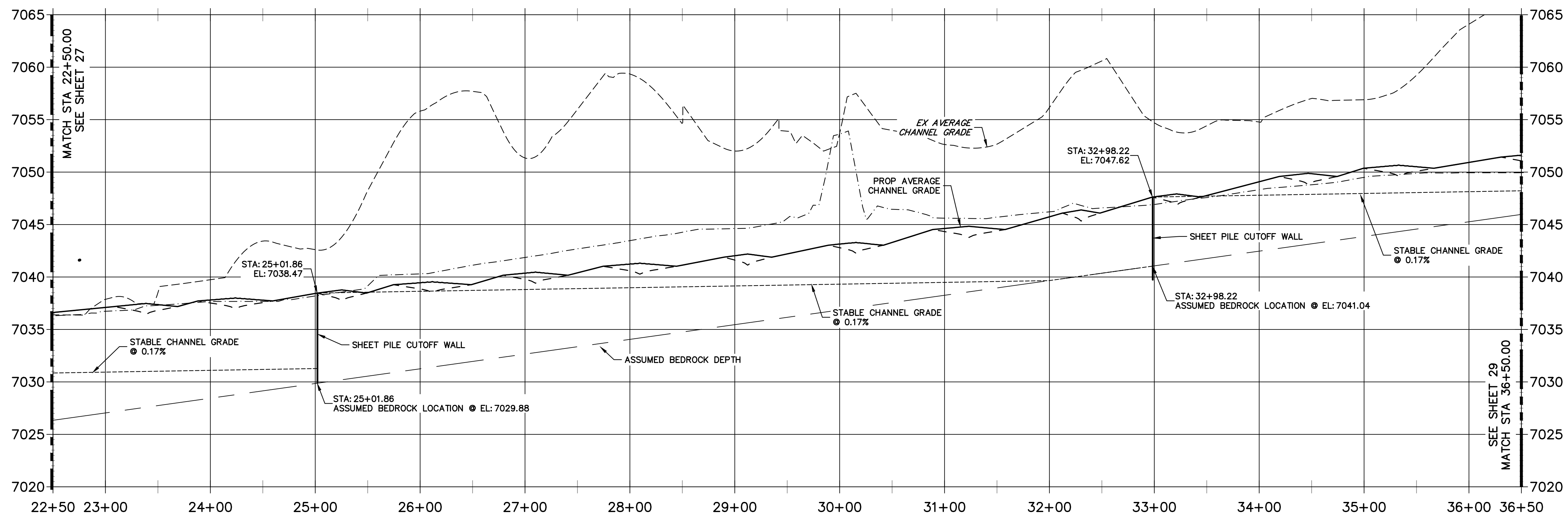


KEY MAP
SCALE: 1"=2000'

LEGEND

—	FINISHED GRADE PROFILE
⊙	CHANNEL
- - -	THALWEG PROFILE
- - -	EXISTING GRADE PROFILE
⊙	EXISTING CHANNEL
- - -	EXISTING THALWEG PROFILE
- - -	STABLE CHANNEL GRADE PROFILE
- - -	ASSUMED BEDROCK LOCATION PROFILE

**SAND CREEK - STABLE CHANNEL GRADE BANKFULL PROFILE 3
STA 22+50.00 TO 36+50.00**



811
Know what's below.
Call before you dig.

HORIZONTAL ORIGINAL SCALE: 1" = 60'
VERTICAL ORIGINAL SCALE: 1" = 6'

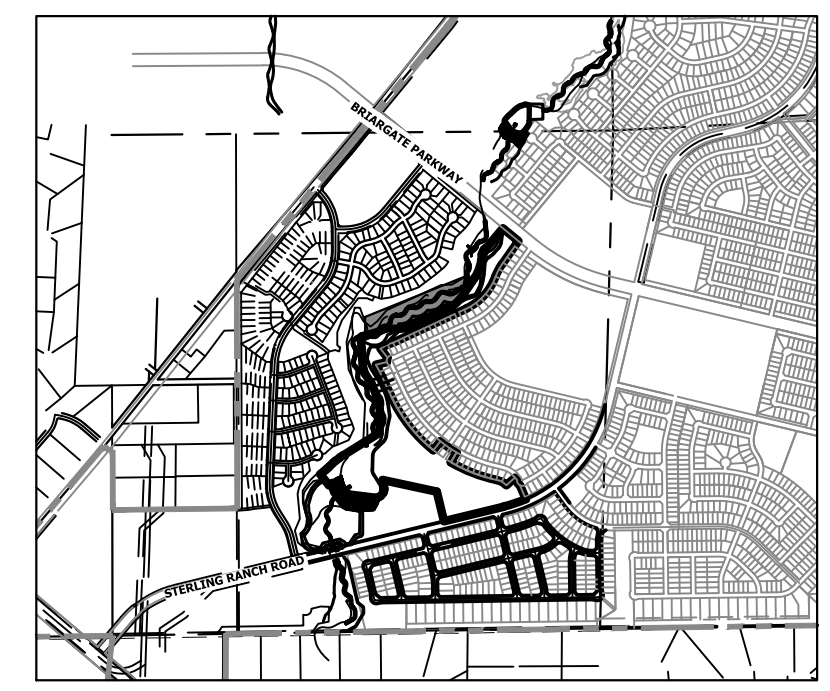
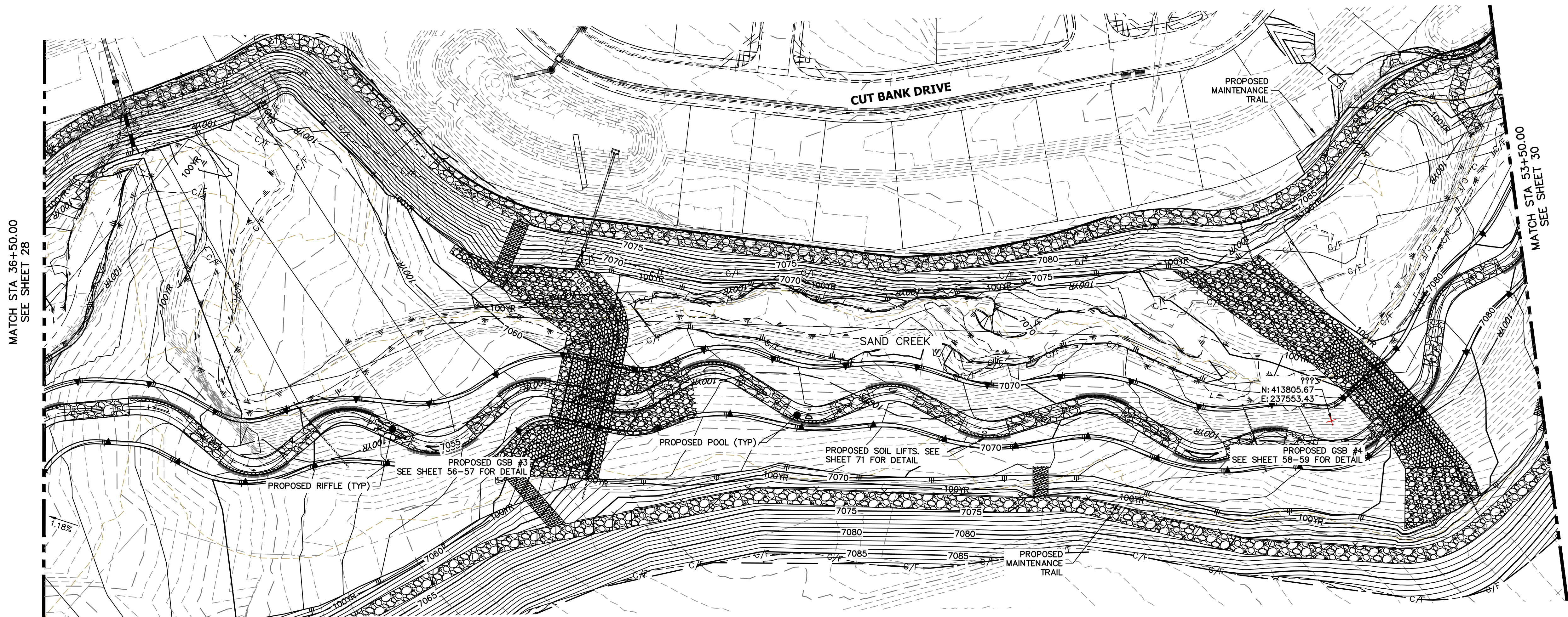
NOTE
1. NO GRADING OR CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY
2. DRIVE SHEET PILE THROUGH BEDROCK OR MINIMUM OF 6 FEET.

ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

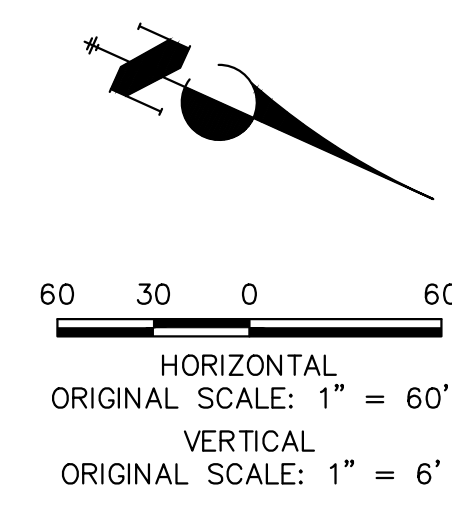
MIKE A. BRAMLEY
COLORADO P.E. NO. 30000
FOR AND ON BEHALF OF JR. ENGINEERING, INC.

PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.	
	J.R. ENGINEERING A Westman Company Centennial 300-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY DATE
No. REVISION	H-SCALE 1"=60' V-SCALE 1"=6' DATE 1/23/23 DESIGNED BY DJV DRAWN BY NEO CHECKED BY	SAND CREEK RESTORATION CHANNEL STABLE GRADE PLAN AND PROFILE
SHEET 28 OF 111 JOB NO. 25188.04	811 logo and text	

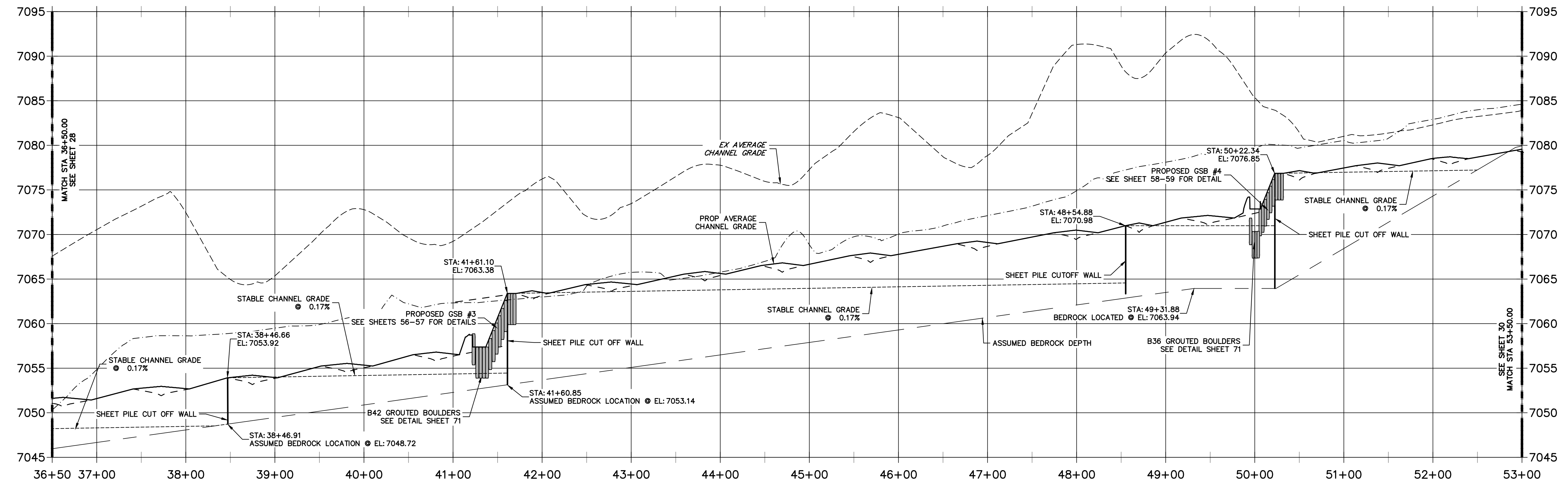


LEGEND

—	FINISHED GRADE PROFILE
⊙	CHANNEL
- - -	THALWEG PROFILE
- - -	EXISTING GRADE PROFILE
⊙	EXISTING CHANNEL
- - -	EXISTING THALWEG PROFILE
- - -	STABLE CHANNEL GRADE PROFILE
- - -	ASSUMED BEDROCK LOCATION PROFILE



**SAND CREEK - STABLE CHANNEL GRADE BANKFULL PROFILE 4
STA 36+50.00 TO 53+00.00**

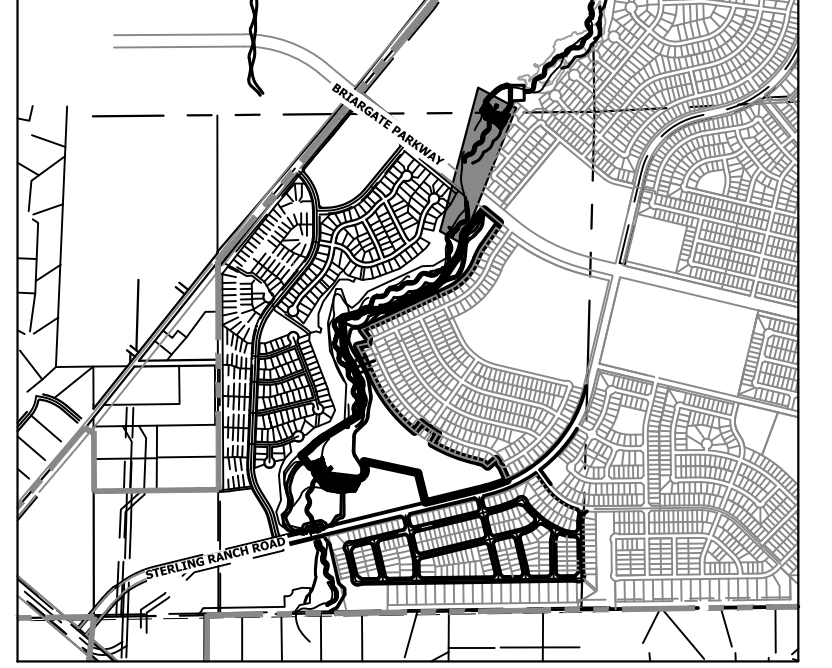
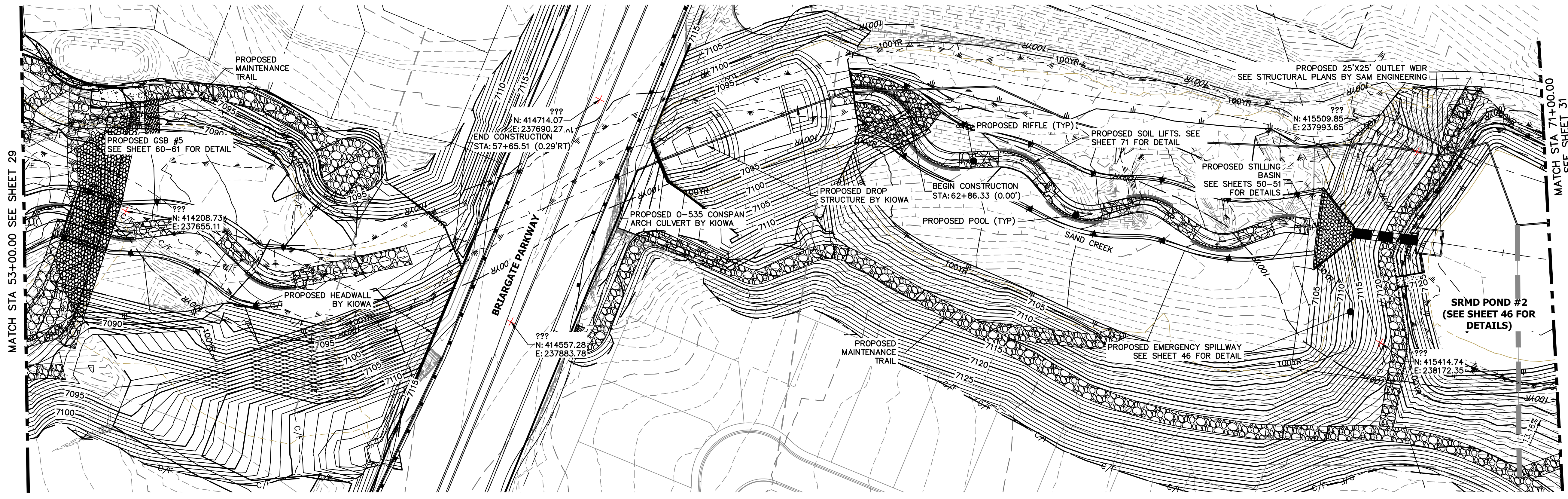


NOTE
 1. NO GRADING OR CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY.
 2. DRIVE SHEET PILE THROUGH BEDROCK OR MINIMUM OF 6 FEET.

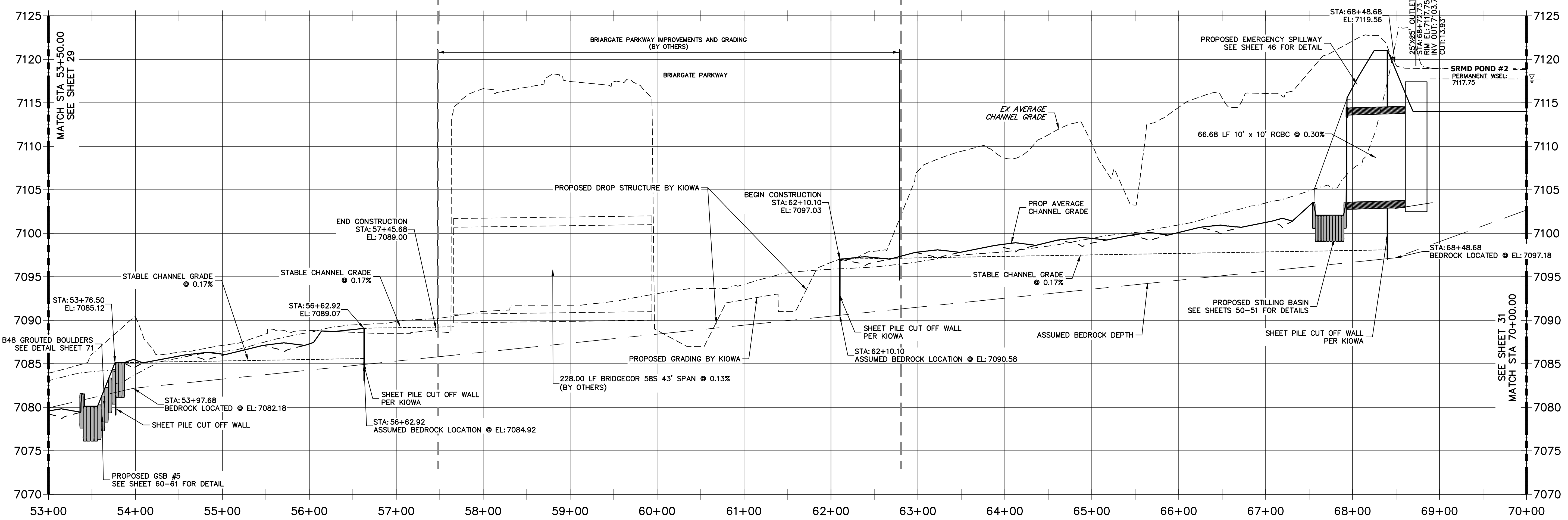


ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
 MIKE A. BRAMBLE
 COLORADO P.E. 30112
 FOR AND ON BEHALF OF JR ENGINEERING

PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE. DESIGNATED BY WRITTEN AUTHORIZATION.
BY: _____ DATE: _____ No. REVISION: _____ H-SCALE 1"=60' V-SCALE 1"=6' DATE 1/23/23 DESIGNED BY DJV DRAWN BY SCH CHECKED BY _____	SAND CREEK RESTORATION CHANNEL STABLE GRADE PLAN AND PROFILE
SHEET 29 OF 111 JOB NO. 25188.04	



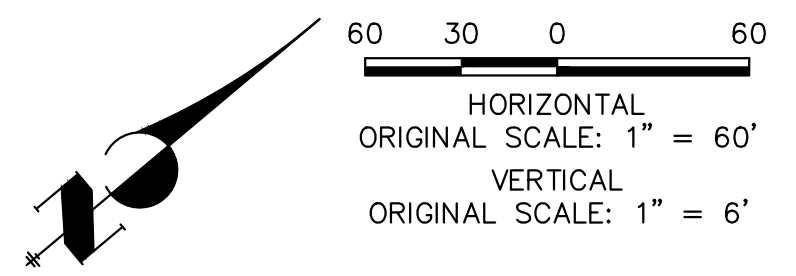
**SAND CREEK -STABLE CHANNEL GRADE BANKFULL PROFILE 5
STA 53+00.00 TO 70+00.00**



LEGEND

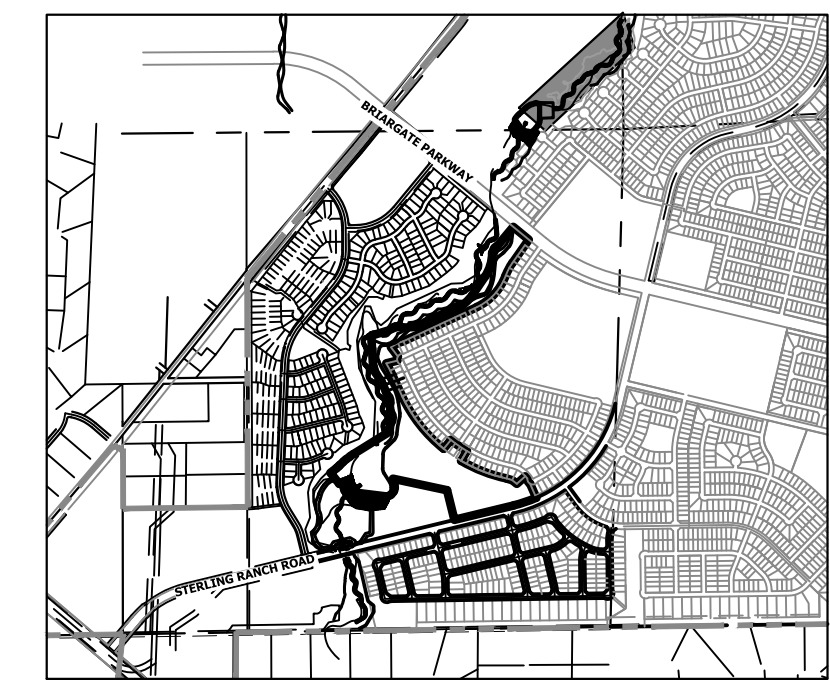
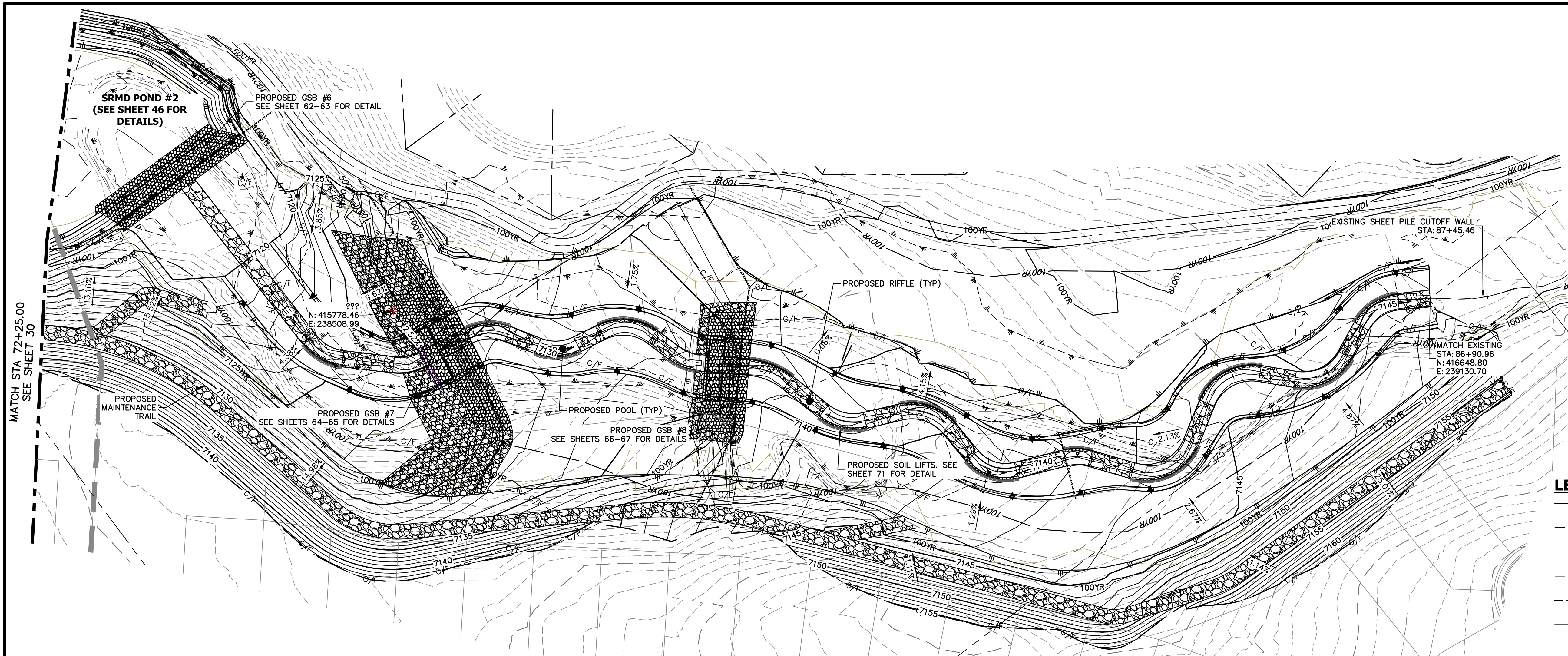
	FINISHED GRADE PROFILE ● CHANNEL E
	THALWEG PROFILE
	EXISTING GRADE PROFILE ● CHANNEL E
	EXISTING THALWEG PROFILE
	STABLE CHANNEL GRADE PROFILE
	ASSUMED BEDROCK LOCATION PROFILE

NOTE
 1. NO GRADING OR CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY.
 2. DRIVE SHEET PILE THROUGH BEDROCK OR MINIMUM OF 6 FEET.



ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
 MIKE A. BRAMBLE
 COLORADO P.E. NO. 30112
 FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

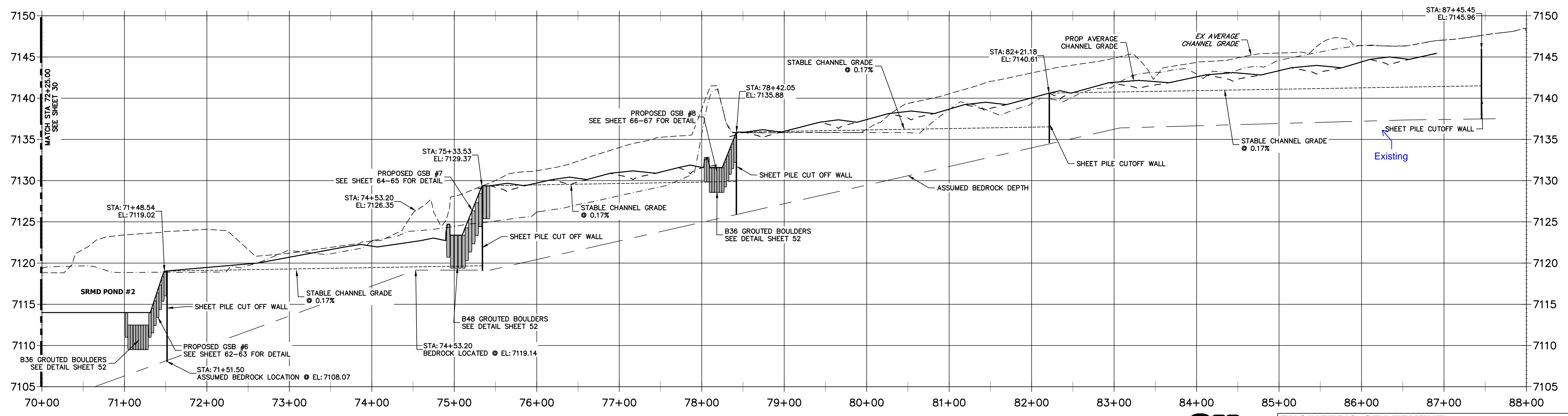
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION. PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	J.R. ENGINEERING A Westman Company Centennial 300-740-0888 • Colorado Springs 719-583-2593 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE
		No.	REVISION
H-SCALE 1"=60'	V-SCALE 1"=6'	DATE 1/23/23	DESIGNED BY DUV
		DRAWN BY NEO	CHECKED BY
SAND CREEK RESTORATION CHANNEL STABLE GRADE PLAN AND PROFILE		SHEET 30 OF 111 JOB NO. 25188.04	



LEGEND

—	FINISHED GRADE PROFILE
⊙ CHANNEL	CHANNEL
- - -	THALWEG PROFILE
- - -	EXISTING GRADE PROFILE
⊙ CHANNEL	EXISTING CHANNEL
- - -	EXISTING THALWEG PROFILE
- - -	STABLE CHANNEL GRADE PROFILE
- - -	ASSUMED BEDROCK LOCATION PROFILE

**SAND CREEK - STABLE CHANNEL GRADE BANKFULL PROFILE 6
STA 70+00.00 TO 88+00.00**

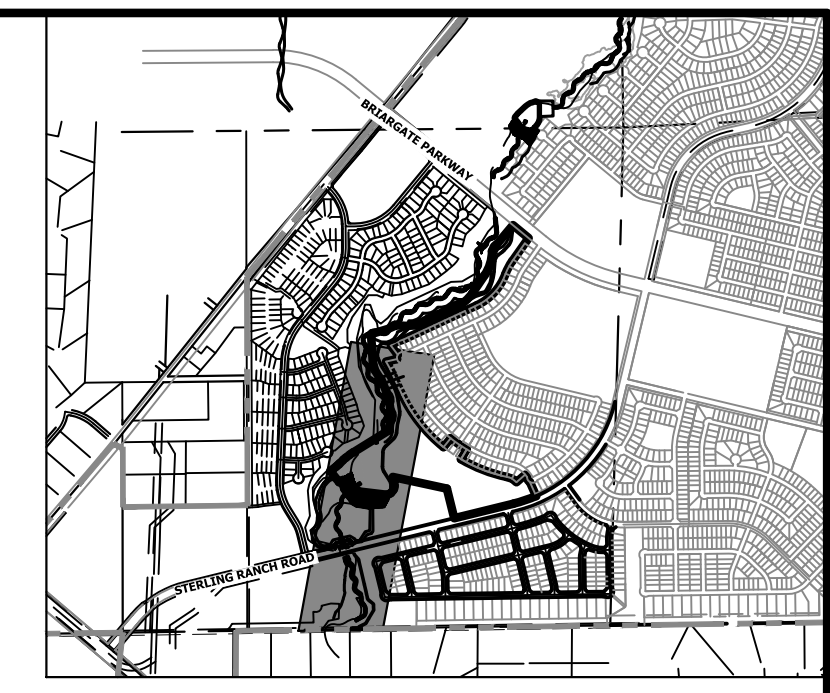
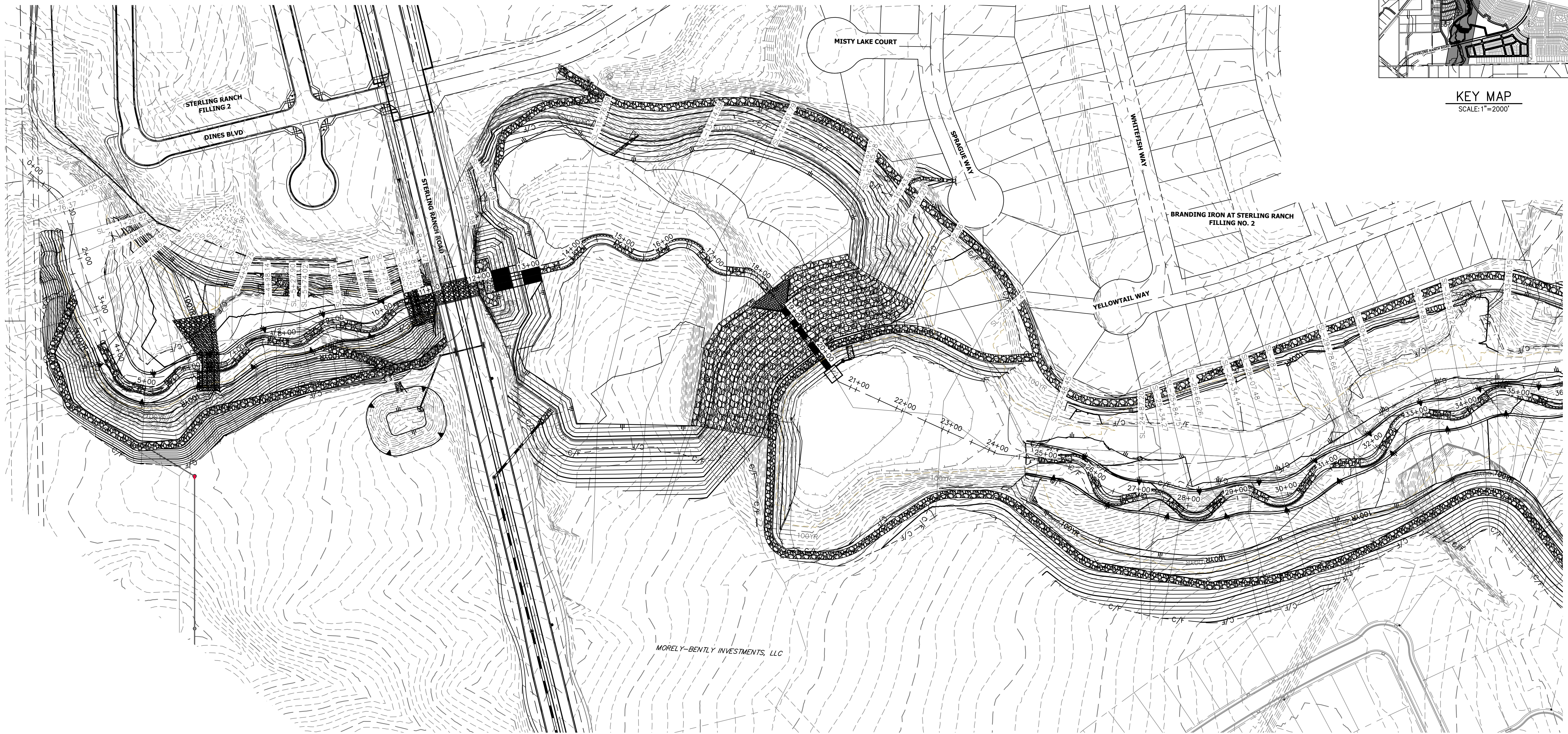


- NOTE**
- NO GRADING OR CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY
 - DRIVE SHEET PILE THROUGH BEDROCK OR MINIMUM OF 6 FEET.



ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
 MIKE A. BRAMBLE
 COLORADO P.E. NO. 10000
 FOR AND ON BEHALF OF JR. ENGINEERING, INC.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR. ENGINEERING APPROVES THEIR USE. REVISES DESIGNATED BY WRITTEN AUTHORIZATION. PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	J.R. ENGINEERING A Westman Company Centennial 303-740-8888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE
		No.	REVISION
H-SCALE	V-SCALE	DATE	DESIGNED BY
1"=60'	1"=6'	1/23/23	DJV
			SCH
SAND CREEK RESTORATION CHANNEL STABLE GRADE PLAN AND PROFILE		CHECKED BY	
		SHEET 31	OF 111
		JOB NO.	25188.04



BANKFULL CROSS SECTION – SAND CREEK
 STA: 1+00 TO 35+00
 SCALE: 1"=100'

BENCHMARK

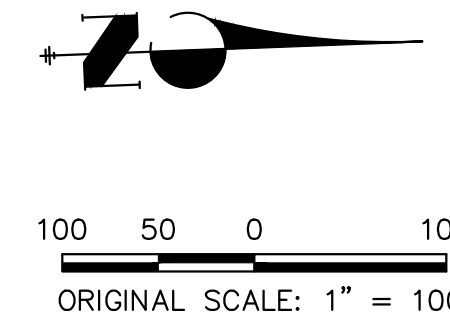
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853" AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411416.273
 EASTING = 235167.071
 ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION
 NORTHING = 410095.404
 EASTING = 235052.131
 ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141" AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411399.962
 EASTING = 233849.817
 ELEVATION = 7030.82

NOTE

SEE SHEETS 35-40 FOR CROSS SECTIONS

BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

**PRELIMINARY
 NOT FOR
 CONSTRUCTION**

MIKE A. BRAMLE
 COLORADO P.E. 30000
 FOR AND ON BEHALF OF JR ENGINEERING, LLC

SAND CREEK RESTORATION

CROSS SECTIONS

SHEET 32 OF 111

JOB NO. 25188.04

BY DATE

No. REVISION

H-SCALE 1"=100'
 V-SCALE N/A
 DATE 1/23/23
 DESIGNED BY DJV
 DRAWN BY NEO
 CHECKED BY

PREPARED FOR

SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

J.R. ENGINEERING
 A Westman Company



Central 303-740-8888 • Colorado Springs 719-583-2683
 Fort Collins 970-491-9888 • www.jrengineering.com

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.



BANKFULL CROSS SECTION - SAND CREEK
 STA: 35+00 TO 60+00
 SCALE: 1"=100'

BENCHMARK

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411416.273
 EASTING = 235167.071
 ELEVATION = 7023.42
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SEE SHEETS 35-40 FOR CROSS SECTIONS

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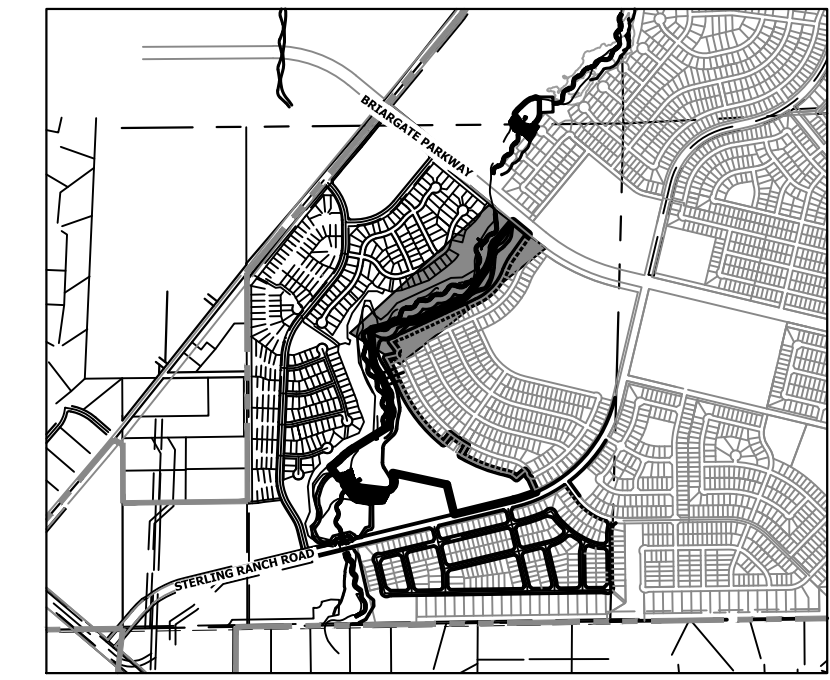


100 50 0 100
 ORIGINAL SCALE: 1" = 100'



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
**PRELIMINARY
 NOT FOR
 CONSTRUCTION**
 MIKE A. BRAMLEY
 COLORADO P.E. 5812
 FOR AND ON BEHALF OF J.R. ENGINEERING, LLC



KEY MAP
 SCALE: 1"=2000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.
 PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

J.R. ENGINEERING
 A Westman Company

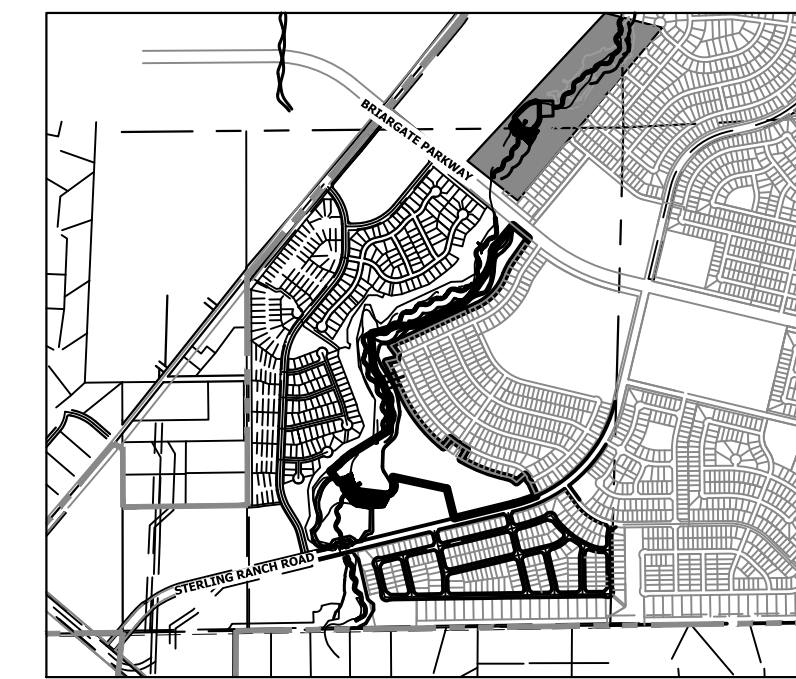
 Centennial 303-740-9888 • Colorado Springs 719-583-2683
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H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	No.	REVISION	BY	DATE
								1"=100'	N/A

SAND CREEK RESTORATION
 CROSS SECTIONS
 SHEET 33 OF 111
 JOB NO. 25188.04



BANKFULL CROSS SECTION – SAND CREEK
 STA: 60+00 TO 88+60
 SCALE: 1"=100'



KEY MAP
 SCALE: 1"=2000'

BENCHMARK

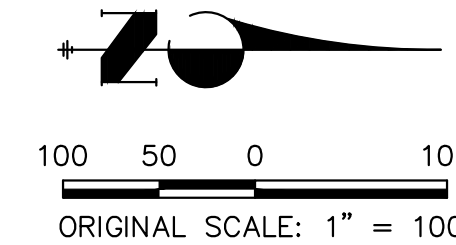
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
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 ELEVATION = 7030.82

NOTE

SEE SHEETS 35-40 FOR CROSS SECTIONS

BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION.	PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	J.R. ENGINEERING A Westman Company Central 303-740-8888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE						
			No.	REVISION						
H-SCALE	1"=100'	V-SCALE	N/A	DATE	1/23/23	DESIGNED BY	DJV	DRAWN BY	NEO	CHECKED BY
SAND CREEK RESTORATION		CROSS SECTIONS		SHEET 34 OF 111		JOB NO. 25188.04				



Know what's below.
 Call before you dig.

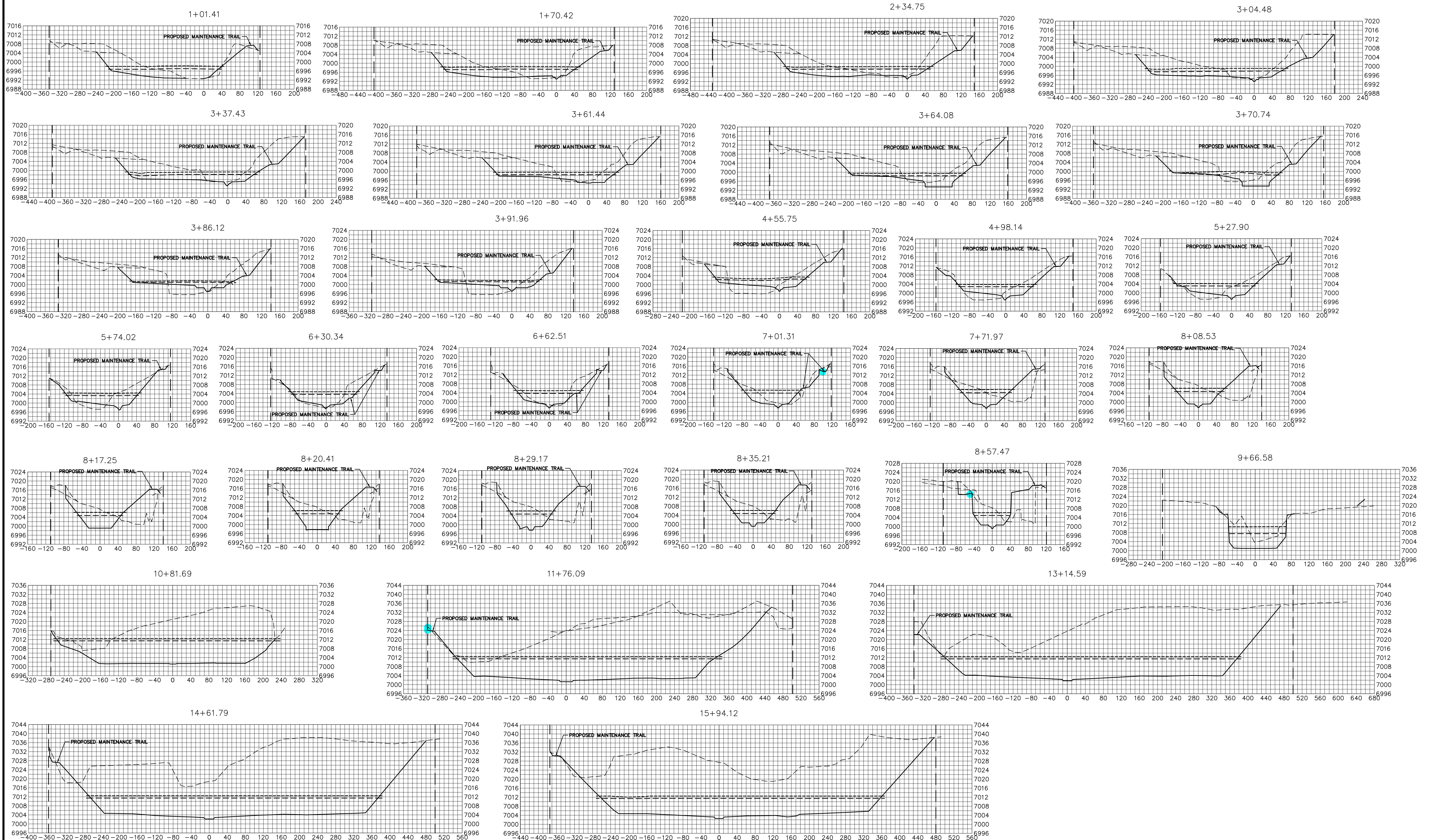
ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND REVIEW

**PRELIMINARY
 NOT FOR
 CONSTRUCTION**

MIKE A. BRAMLEY
 COLORADO P.E.
 FOR AND ON BEHALF OF JR ENGINEERING, LLC

X:\25188.04\25188.04\Drawings\Sheet\Draw/Cross Sections\25188.04_CS01.dwg, 30 XS03, 1/24/2023 1:22:17 PM, VvaughnD

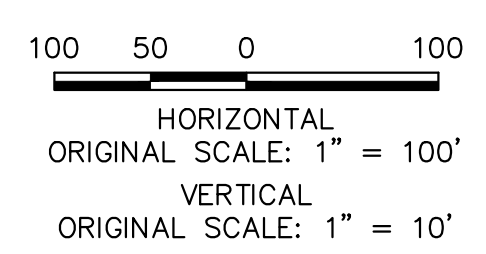


BENCHMARK

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
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ELEVATION = 7030.82

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LEGEND

- PROP GROUND SURFACE
- - - EX GROUND SURFACE
- - - - 100YR FIS WSEL
- - - - 100YR DESIGN WSEL
- - - - PROPERTY LINE



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

**PRELIMINARY
NOT FOR
CONSTRUCTION**

MIKE A. BRAMBLE
COLORADO P.E. # 30000
FOR AND ON BEHALF OF JR ENGINEERING, LLC

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE ENGINEERING AGENCIES, JR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
A Westman Company
Central 300-740-9888 • Colorado Springs 719-588-2583
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

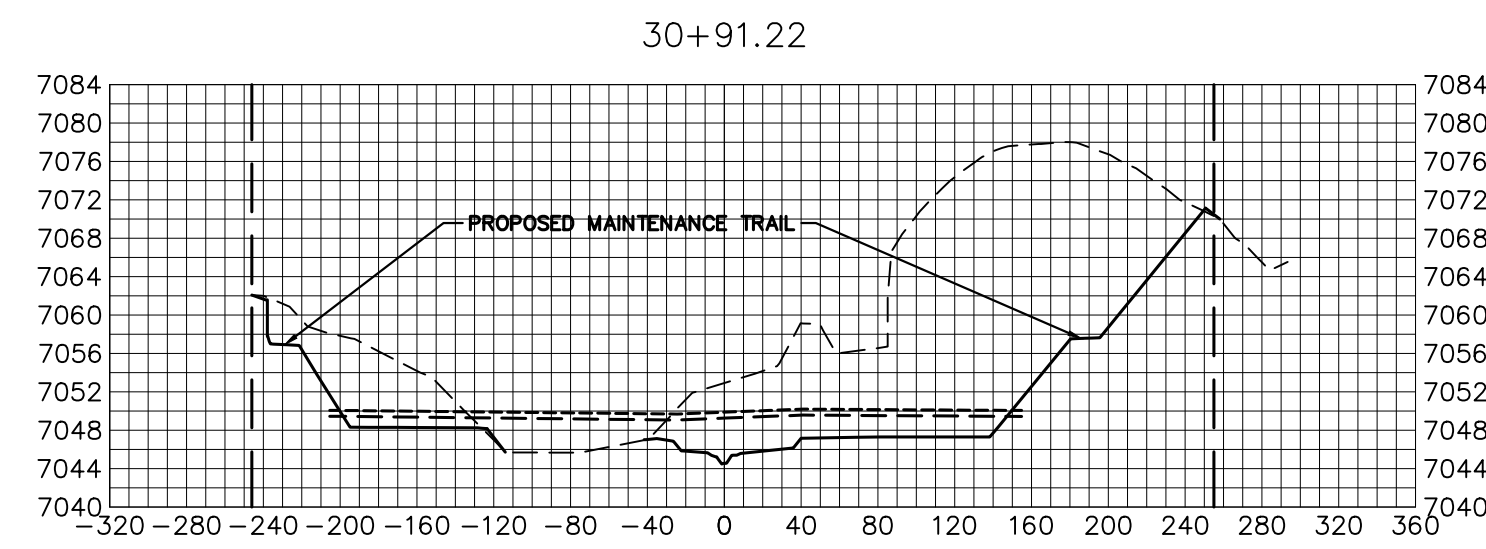
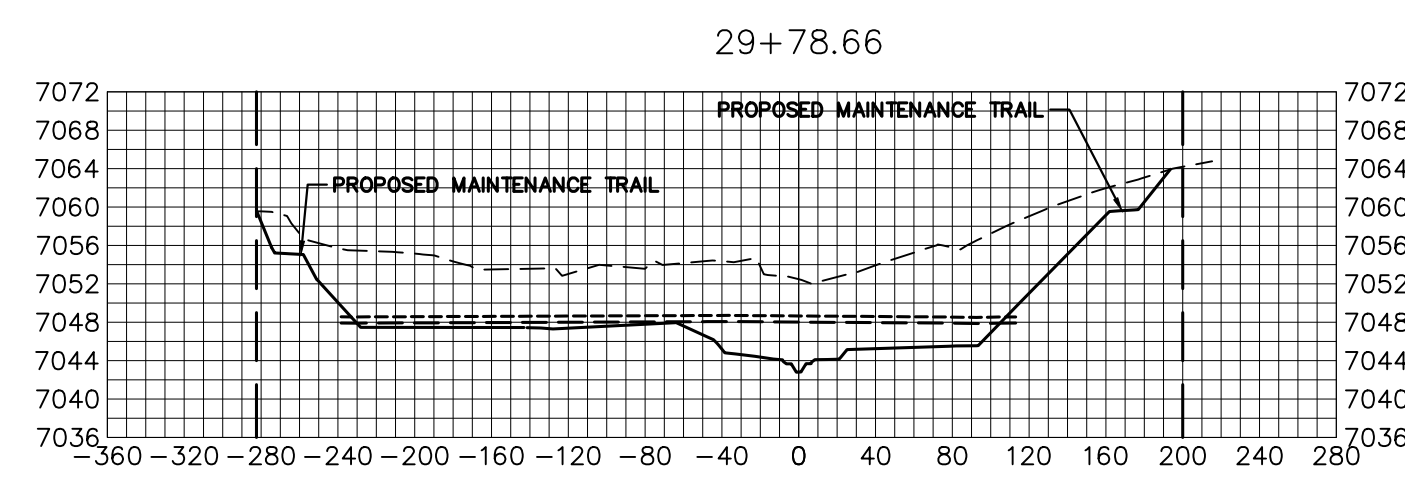
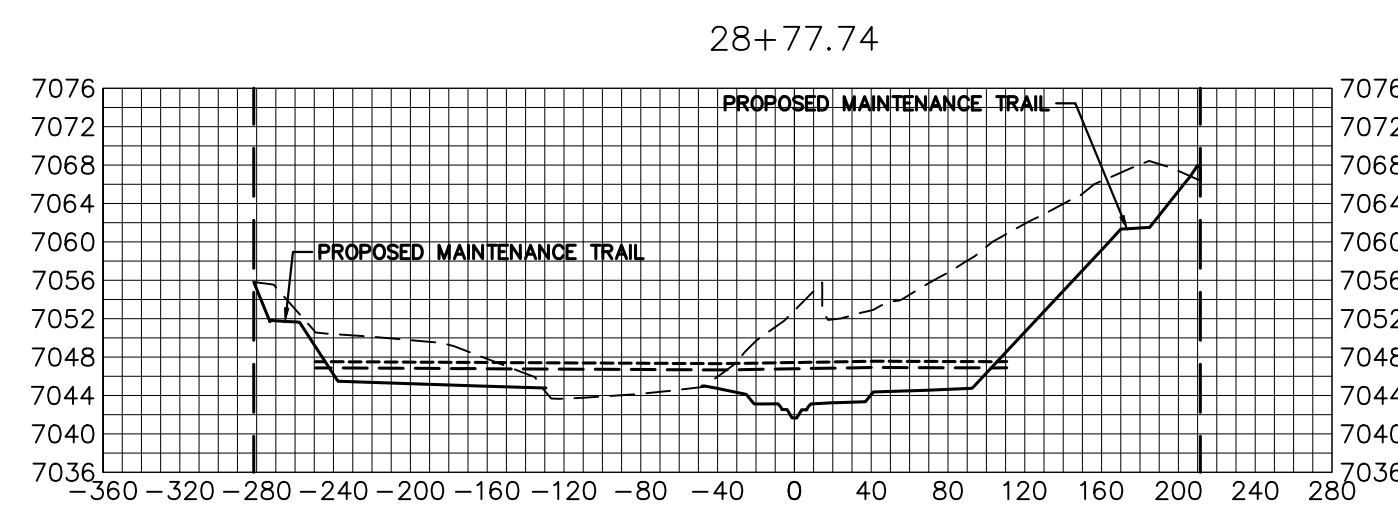
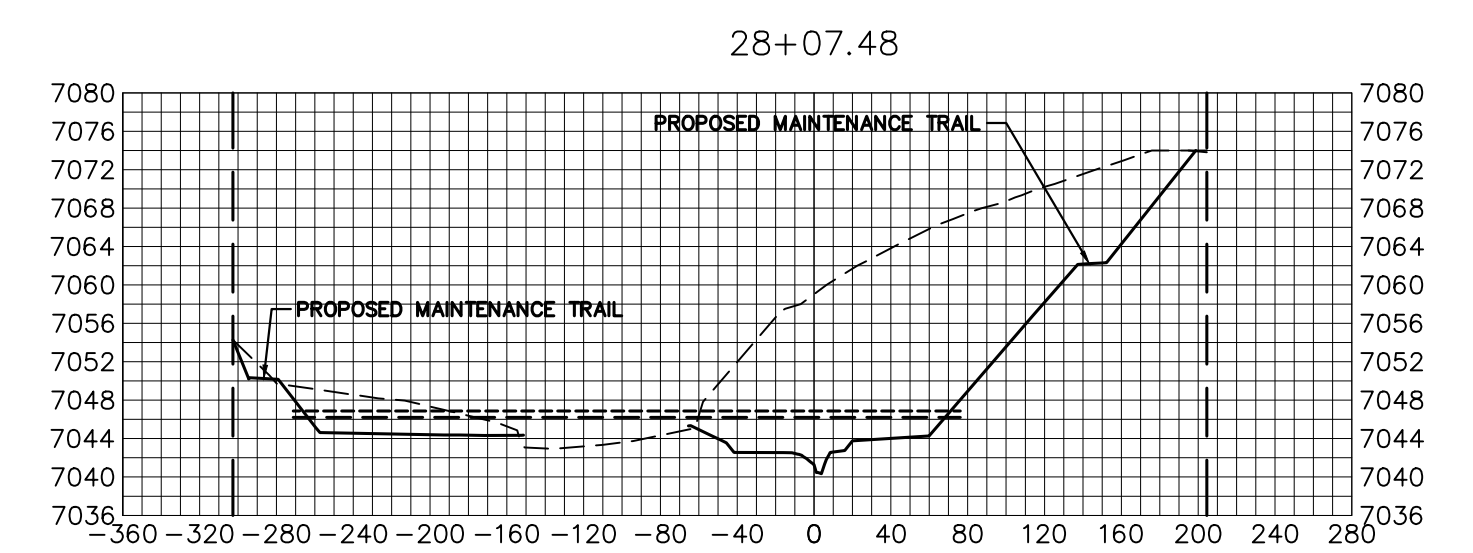
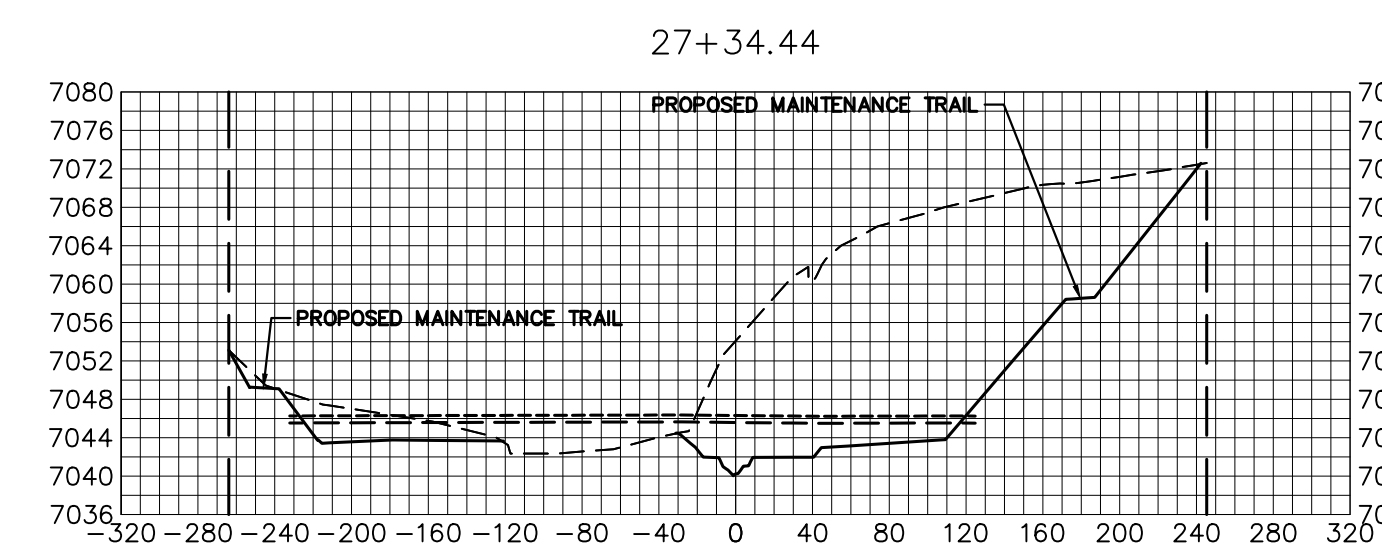
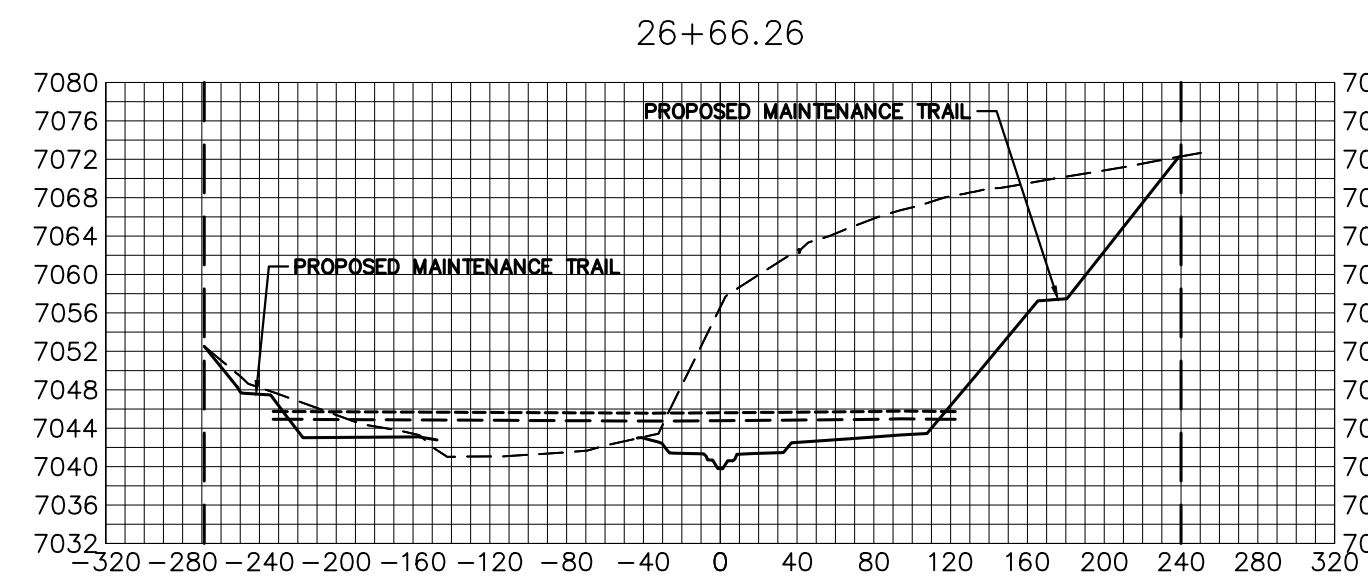
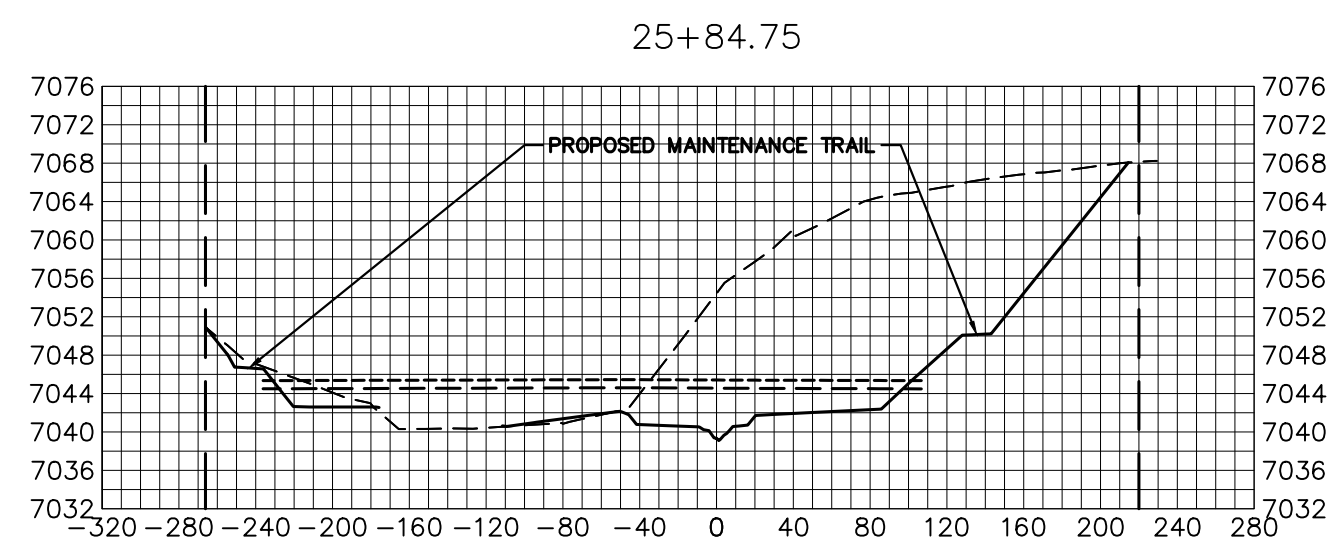
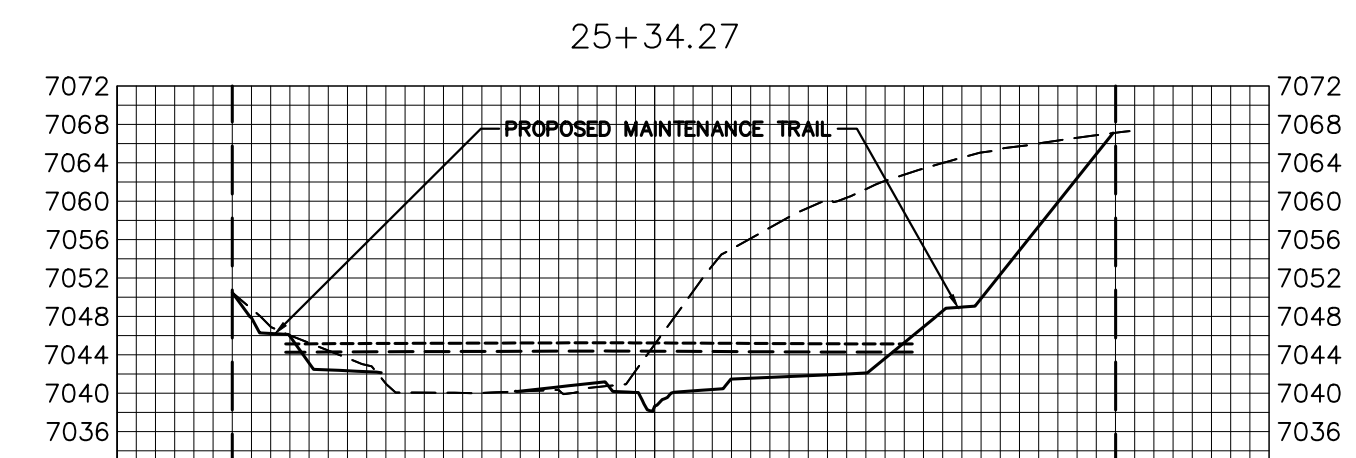
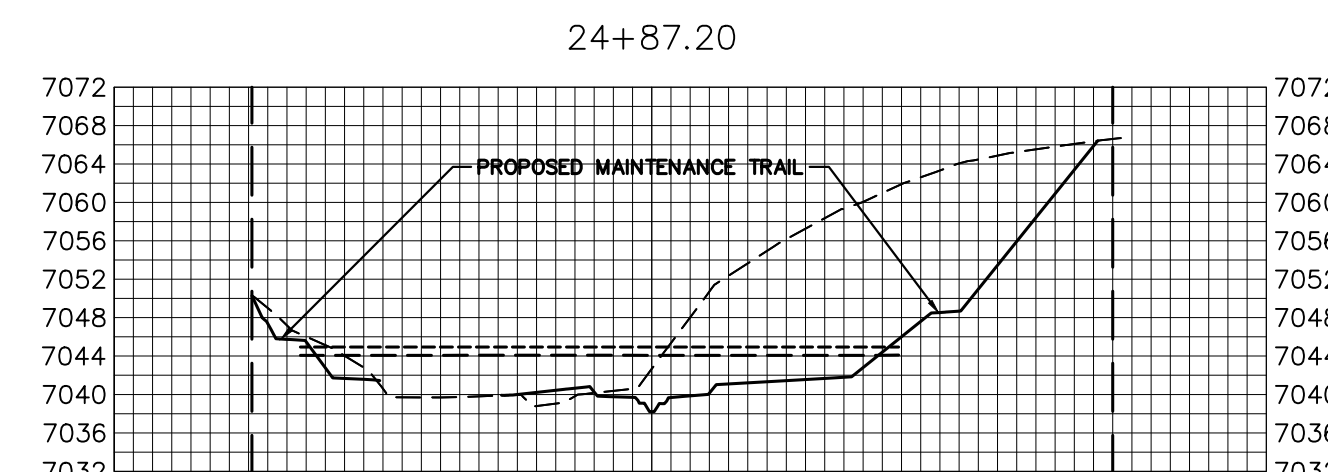
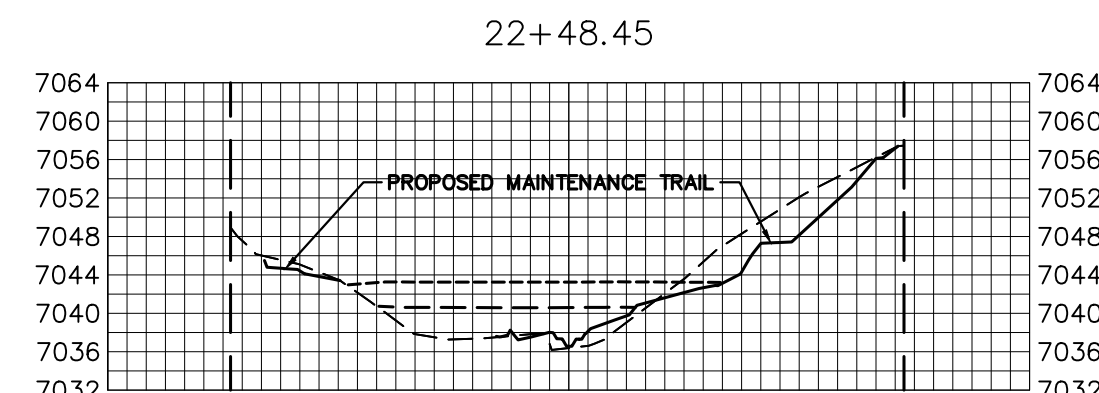
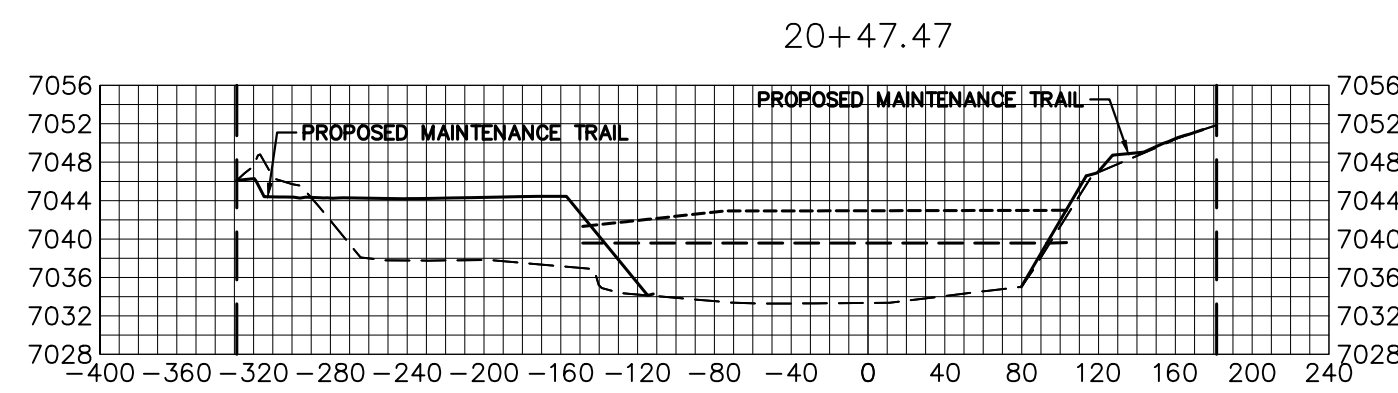
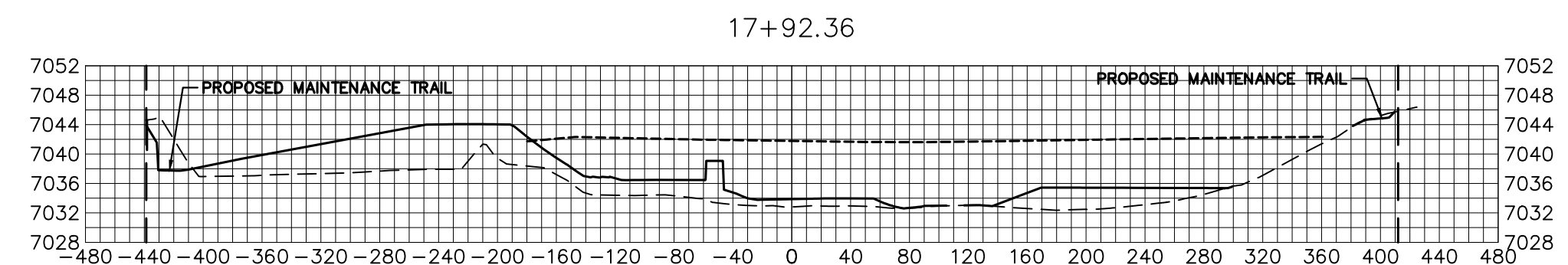
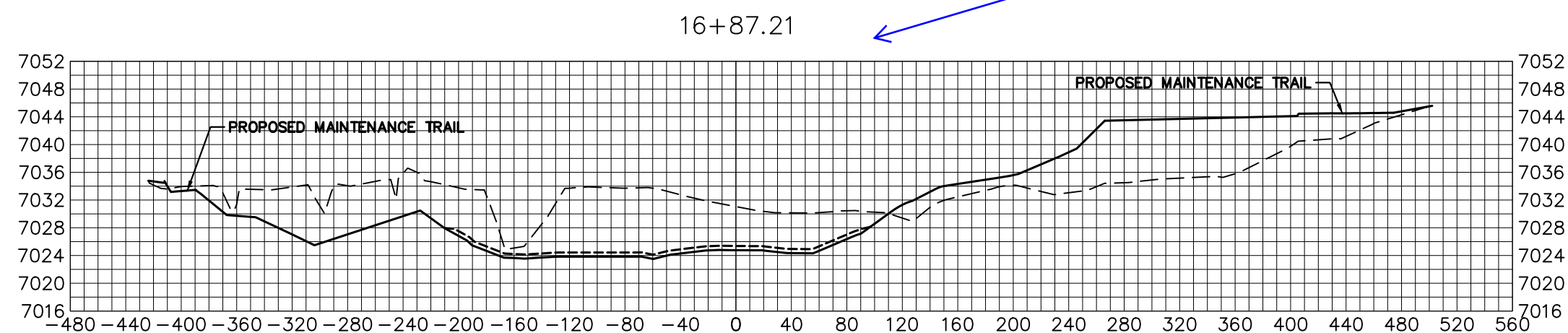
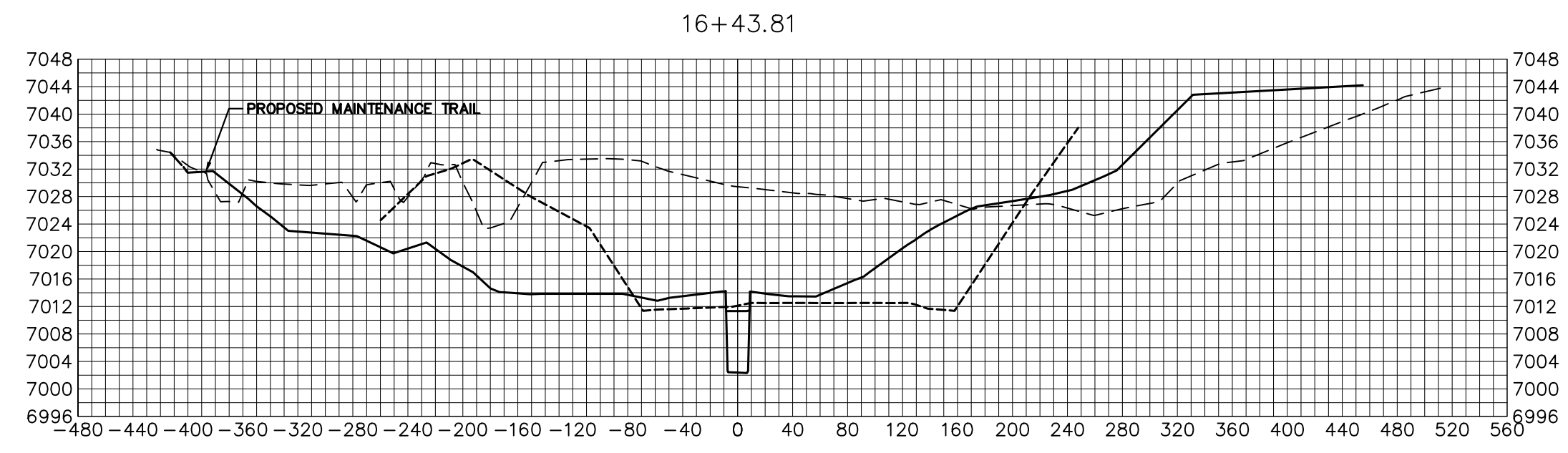
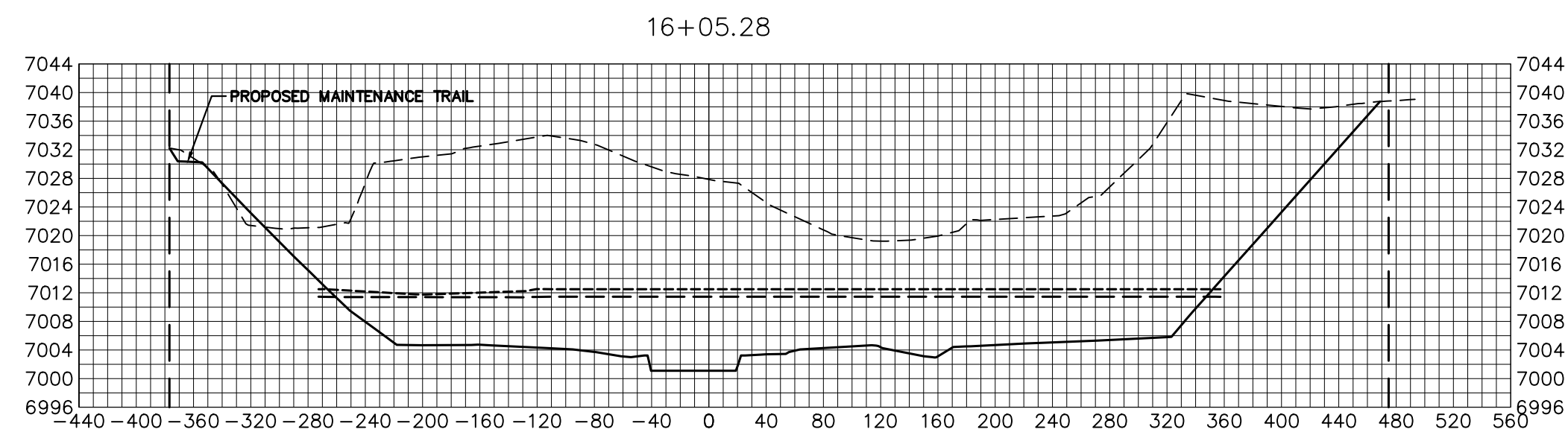
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=100'	1"=10'	1/19/23	DJV	SCH	

SAND CREEK RESTORATION

CROSS SECTIONS

SHEET 35 OF 111

JOB NO. 25188.04



BENCHMARK

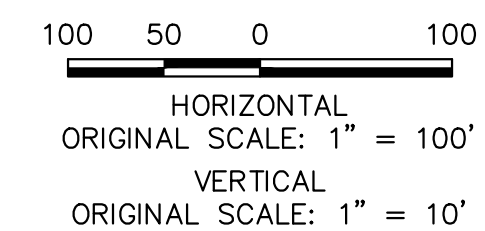
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411416.273
 EASTING = 235167.071
 ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION
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 EASTING = 235052.131
 ELEVATION = 7000.40
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 NORTHING = 411399.962
 EASTING = 233849.817
 ELEVATION = 7030.82

LEGEND

- PROP GROUND SURFACE
- EX GROUND SURFACE
- 100YR FIS WSEL
- 100YR DESIGN WSEL
- PROPERTY LINE

BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



Know what's below.
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ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
**PRELIMINARY
 NOT FOR
 CONSTRUCTION**
 MIKE A. BRAMBLE
 COLORADO P.E. #3111
 FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE AS DESIGNATED BY WRITTEN AUTHORIZATION.
 PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
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J.R. ENGINEERING
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No.	REVISION	BY	DATE	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				1"=100'	1"=10'	1/23/23	DJV	SCH	

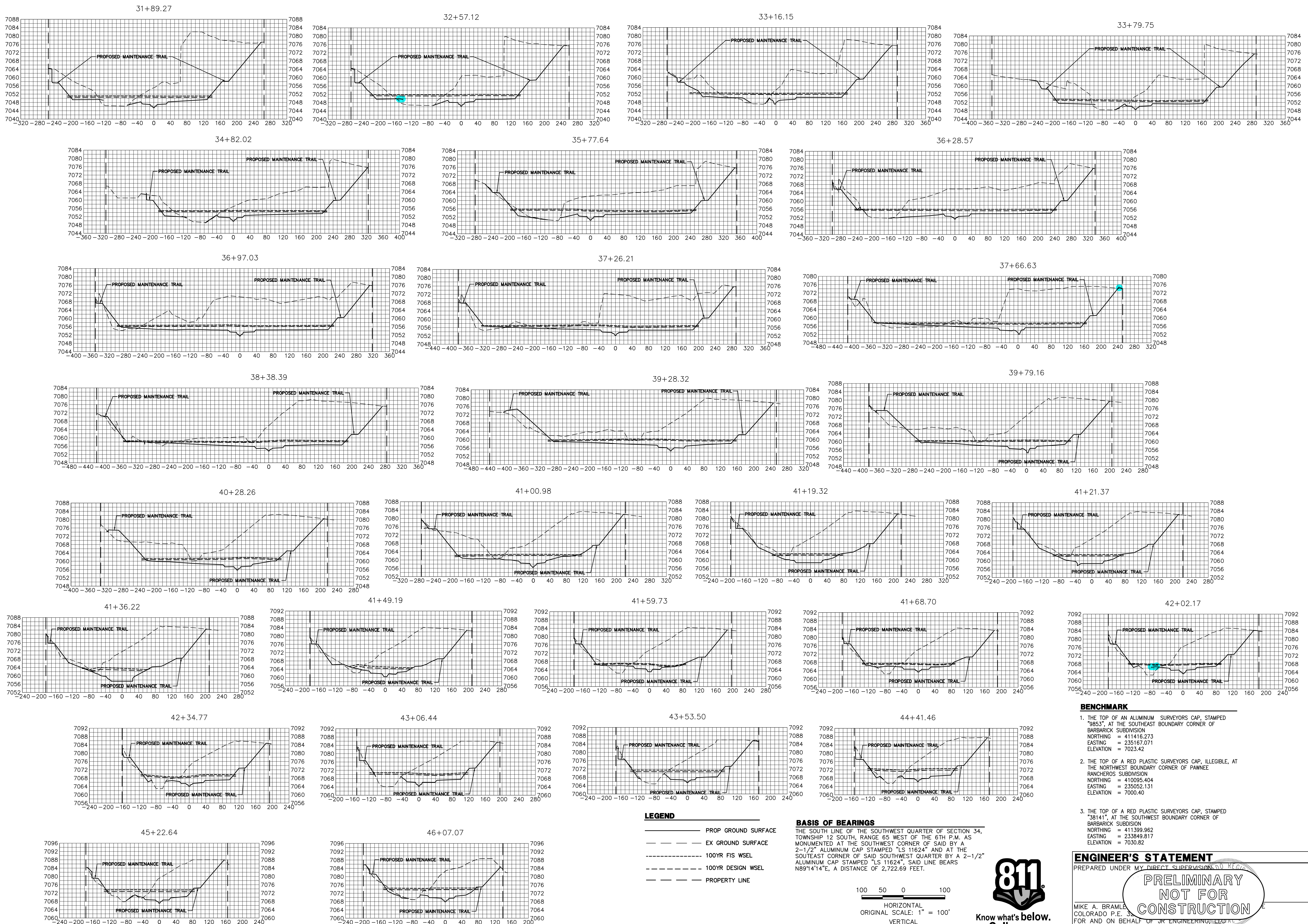
SAND CREEK RESTORATION

CROSS SECTIONS

SHEET 36 OF 111

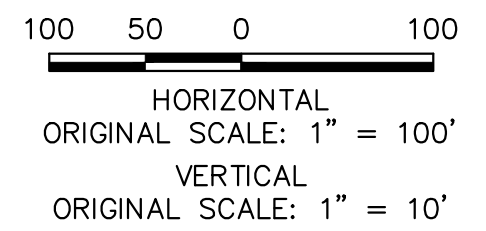
JOB NO. 25188.04

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- LEGEND**
- PROP GROUND SURFACE
 - EX GROUND SURFACE
 - 100YR FIS WSEL
 - 100YR DESIGN WSEL
 - - - - - PROPERTY LINE

BASIS OF BEARINGS
 THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624". SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



BENCHMARK

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 41146.273
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 EASTING = 233849.817
 ELEVATION = 7030.82

ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

 MIKE A. BRAMLEY, REGISTERED PROFESSIONAL ENGINEER
 COLORADO P.E. NO. 32570
 FOR AND ON BEHALF OF JR. ENGINEERING COMPANY

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR. ENGINEERING APPROVES THEIR USE. THIS STATEMENT IS DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

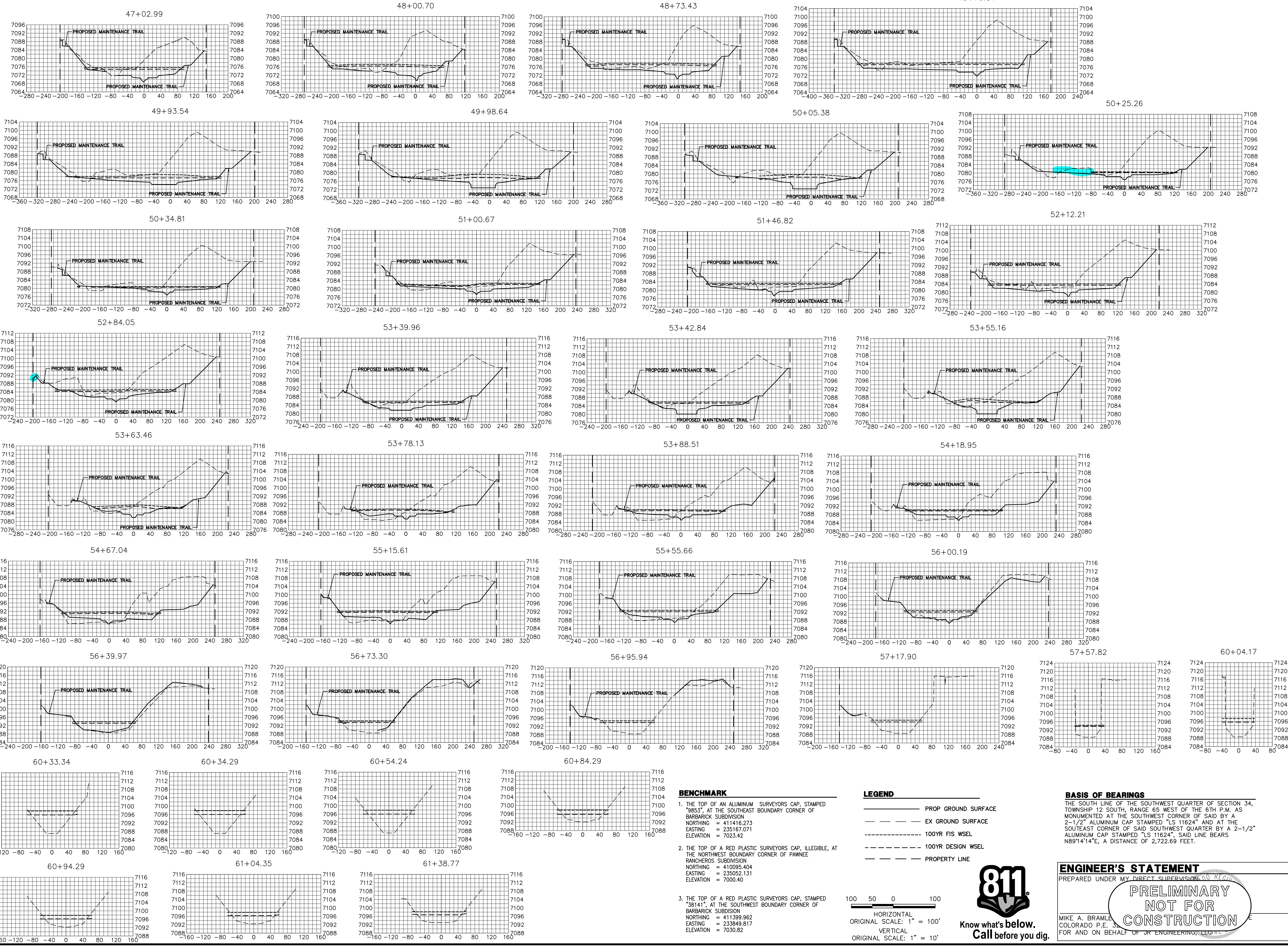
J.R. ENGINEERING
 A Westplan Company

 Centennial 300-740-0888 • Colorado Springs 719-583-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

BY DATE		REVISION	
NO.	DATE	NO.	DESCRIPTION

H-SCALE	1"=100'
V-SCALE	1"=10'
DATE	1/23/23
DESIGNED BY	DJW
DRAWN BY	SCH
CHECKED BY	

SAND CREEK RESTORATION
CROSS SECTIONS
 SHEET 37 OF 111
 JOB NO. 25188.04



BENCHMARK

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411416.273
 EASTING = 235167.071
 ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANWEE RANCHEROS SUBDIVISION
 NORTHING = 410095.404
 EASTING = 235052.131
 ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411399.962
 EASTING = 233949.817
 ELEVATION = 7030.82

LEGEND

- PROP GROUND SURFACE
- - - EX GROUND SURFACE
- - - 100YR FIS WSEL
- - - 100YR DESIGN WSEL
- - - PROPERTY LINE

100 50 0 100

HORIZONTAL ORIGINAL SCALE: 1" = 100'
 VERTICAL ORIGINAL SCALE: 1" = 10'

BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.

ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMBLE
 COLORADO P.E. # 33108
 FOR AND ON BEHALF OF J.R. ENGINEERING, LLC

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE AGENCIES, J.R. ENGINEERING APPROVES THEIR USE AS DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

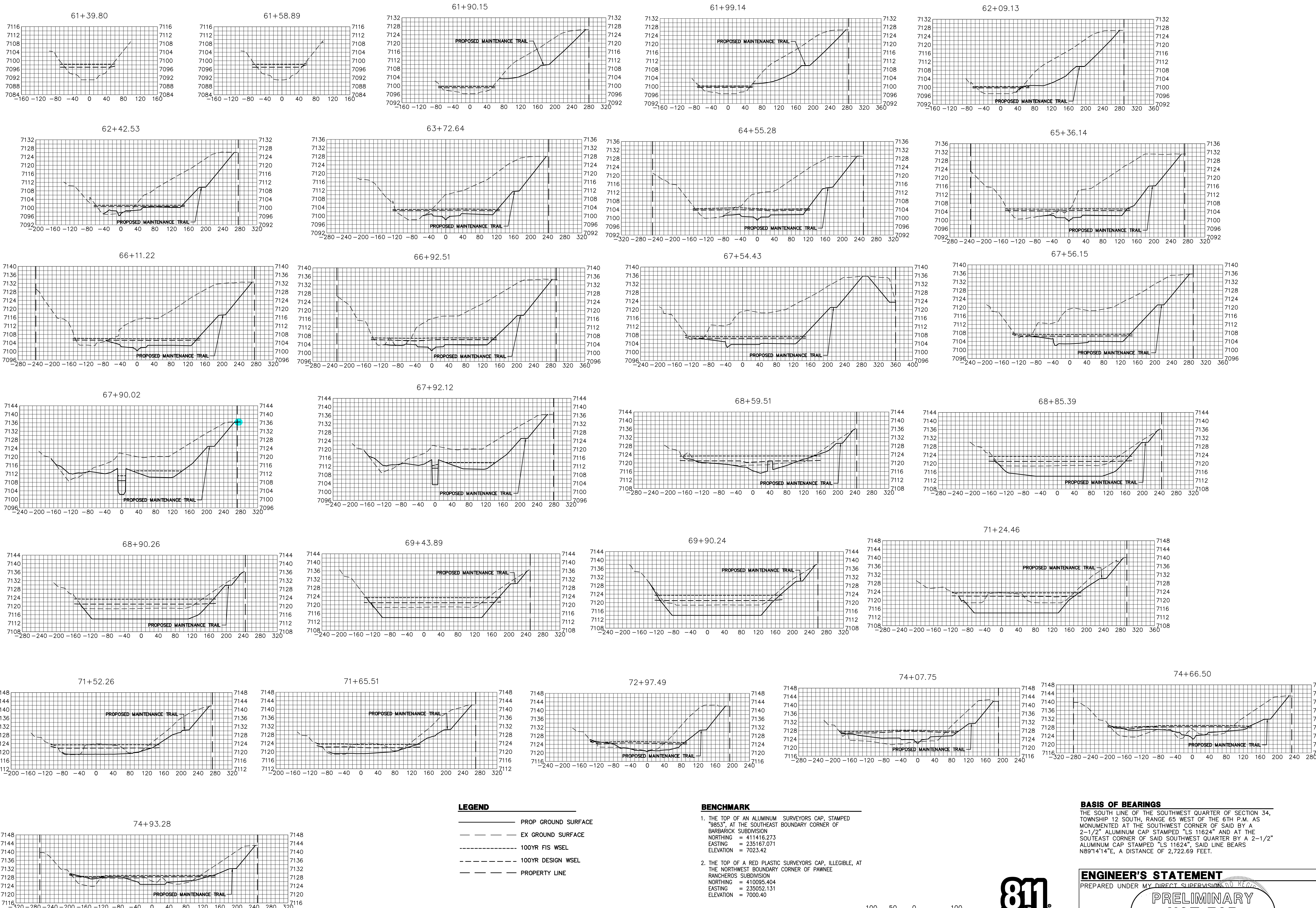
J.R. ENGINEERING
 A Westman Company
 Centennial 300-740-9888 • Colorado Springs 719-583-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

H-SCALE 1"=100'
 V-SCALE 1"=10'
 DATE 1/23/23
 DESIGNED BY DUV
 DRAWN BY SCH
 CHECKED BY

SAND CREEK RESTORATION
CROSS SECTIONS

SHEET 38 OF 111
 JOB NO. 25188.04



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE. DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

J.R. ENGINEERING
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 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE

No.	REVISION	H-SCALE	V-SCALE	DATE	DIV	SCH
1	1"=100'	1"=10'	1/23/23	DJV	SCH	

SAND CREEK RESTORATION
CROSS SECTIONS

SHEET 39 OF 111
 JOB NO. 25188.04

- BENCHMARK**
- THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411416.273
 EASTING = 235167.071
 ELEVATION = 7023.42
 - THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANWEE RANCHEROS SUBDIVISION
 NORTHING = 410095.404
 EASTING = 235052.131
 ELEVATION = 7000.40
 - THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411399.962
 EASTING = 233849.817
 ELEVATION = 7030.82

BASIS OF BEARINGS
 THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.

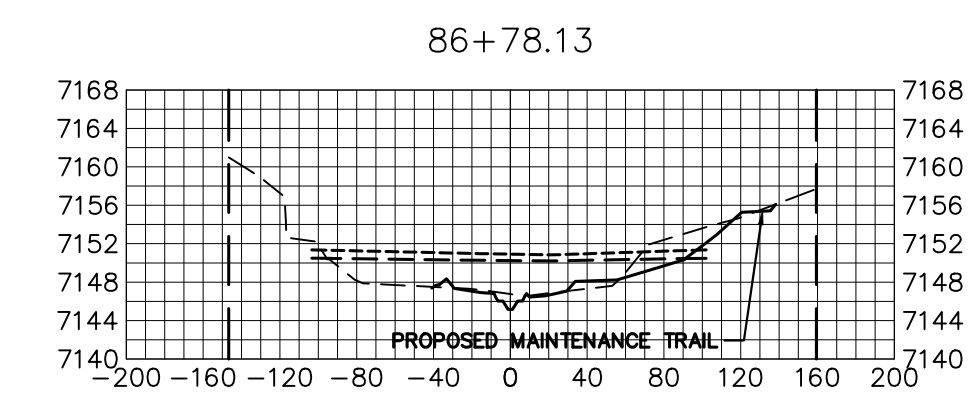
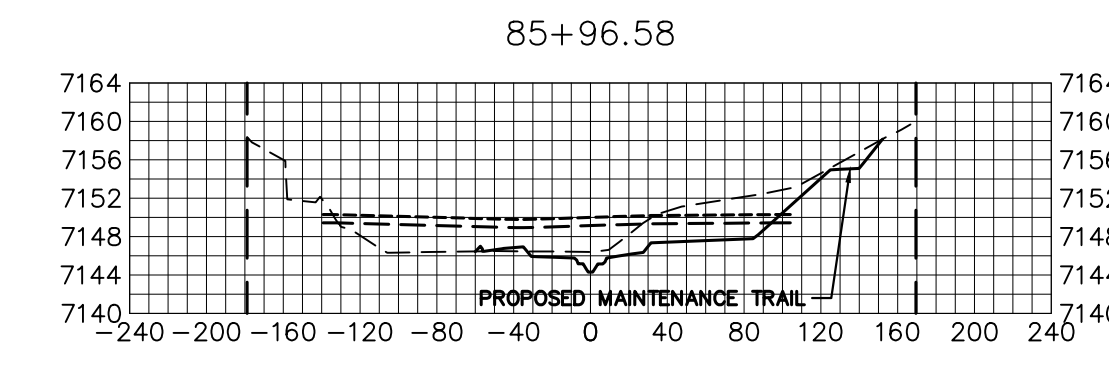
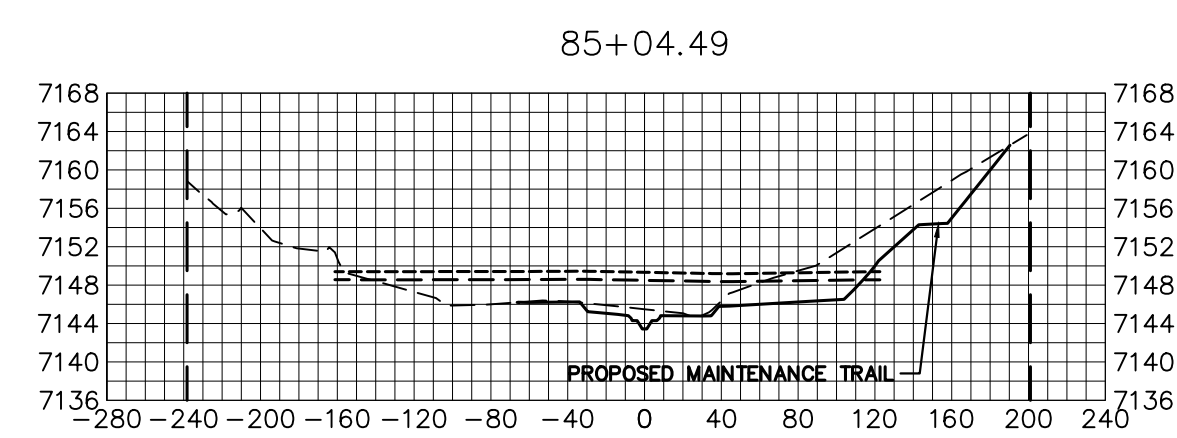
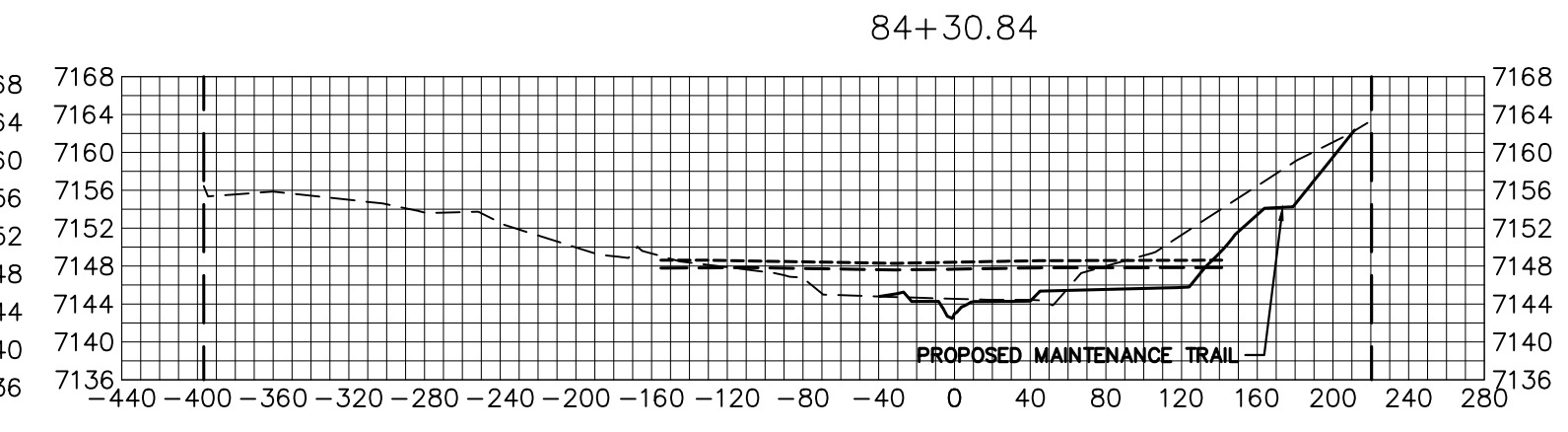
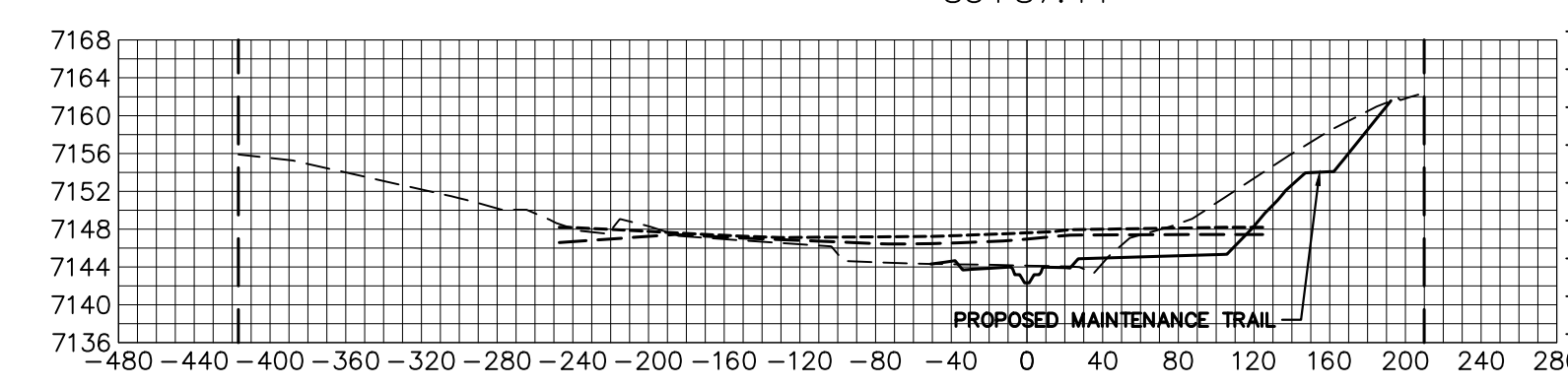
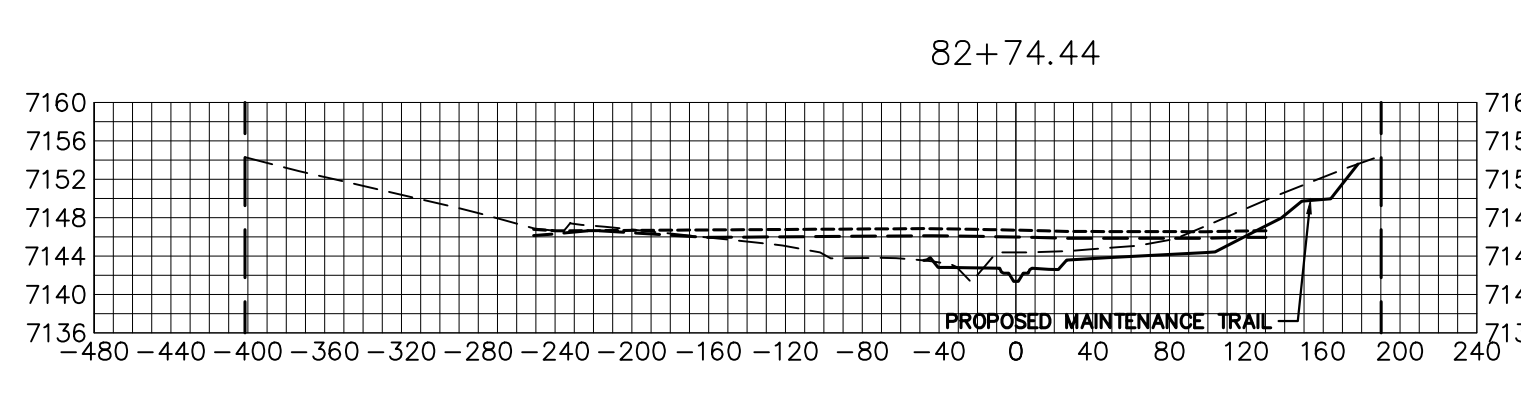
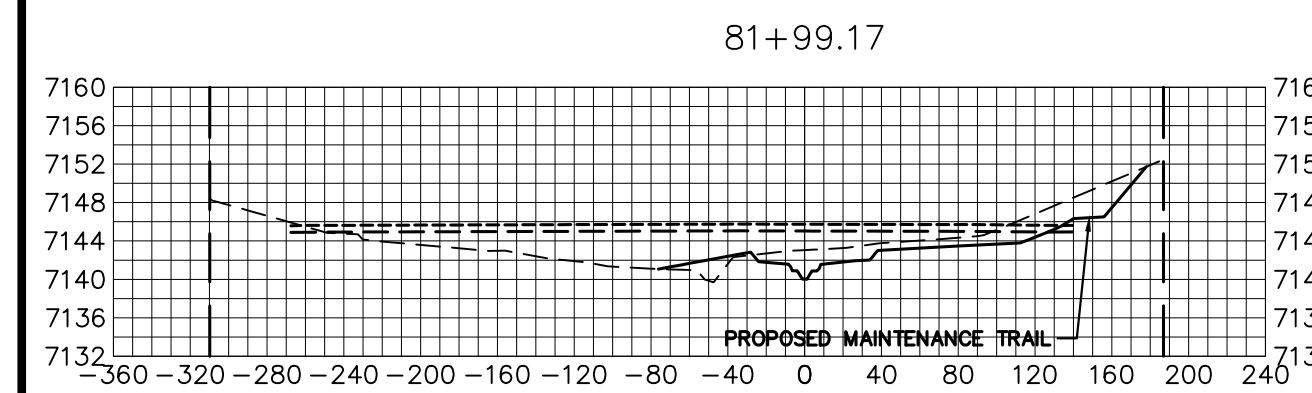
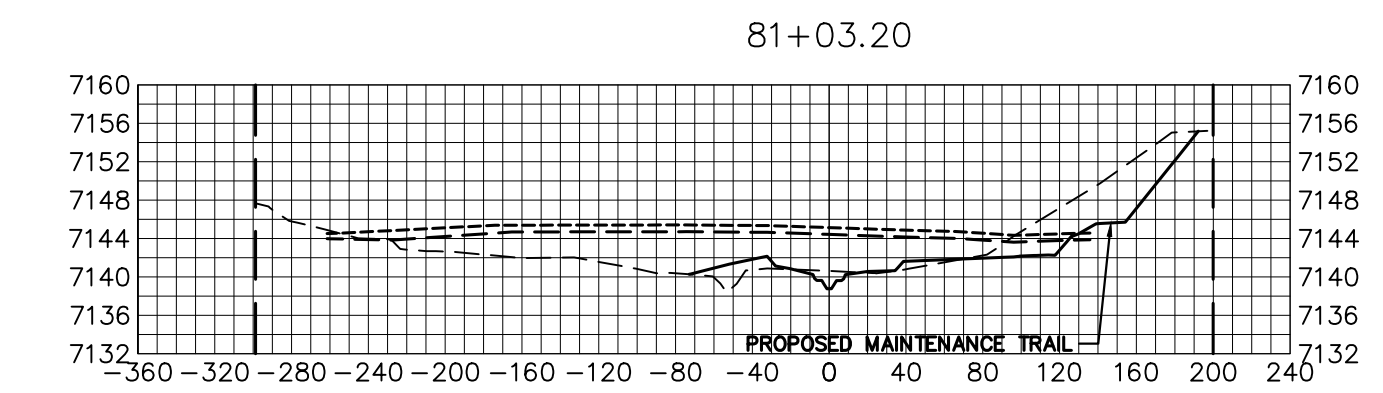
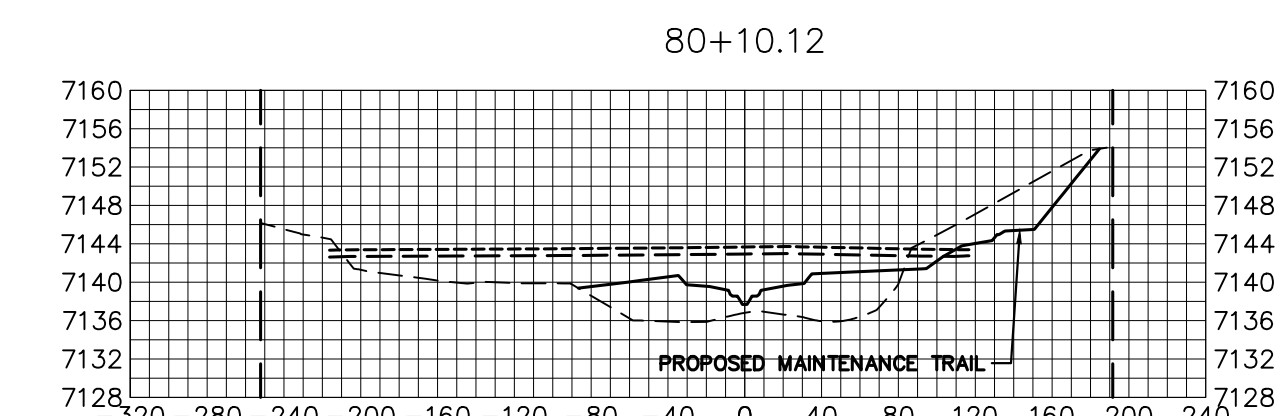
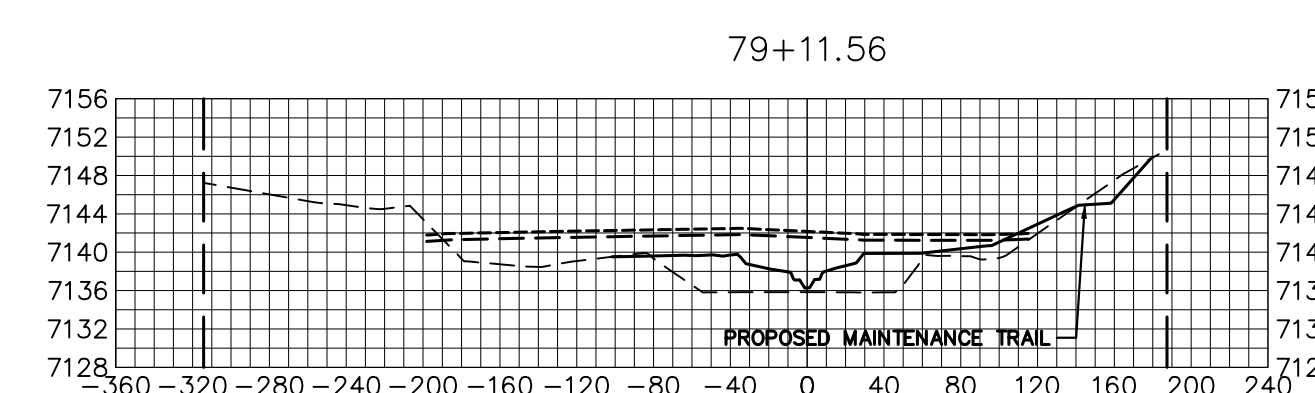
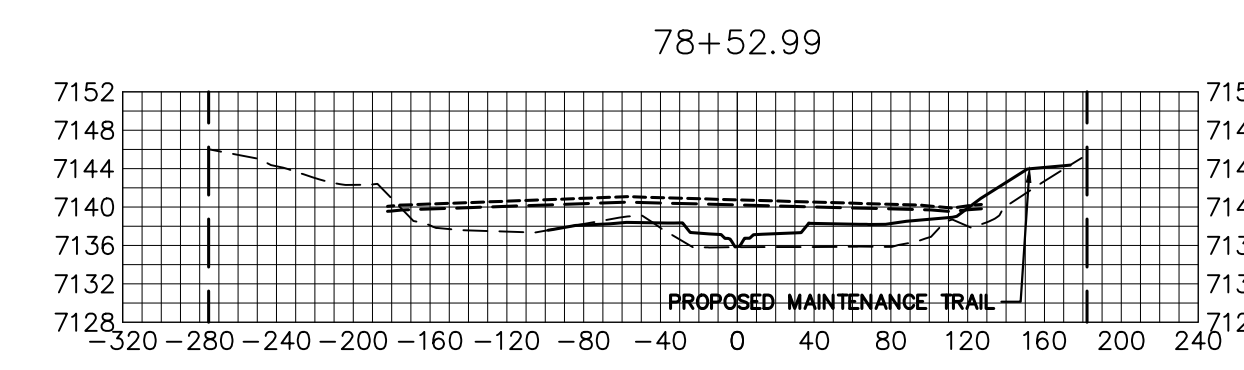
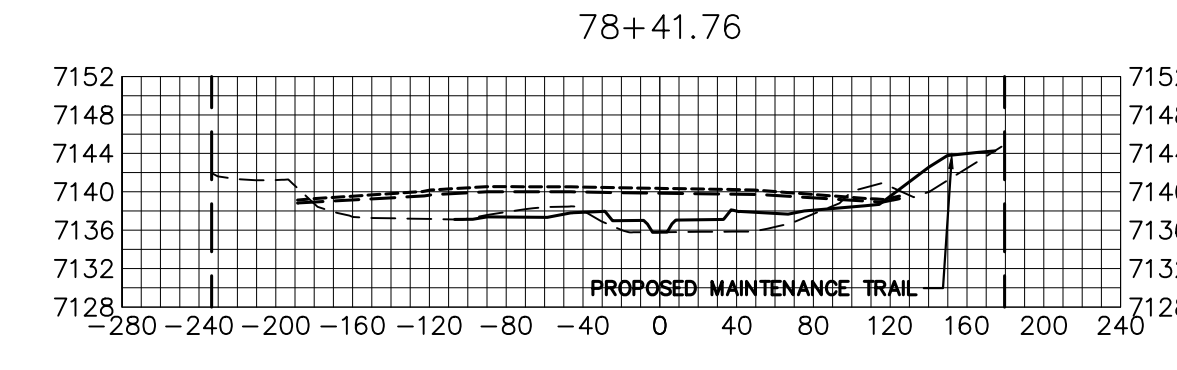
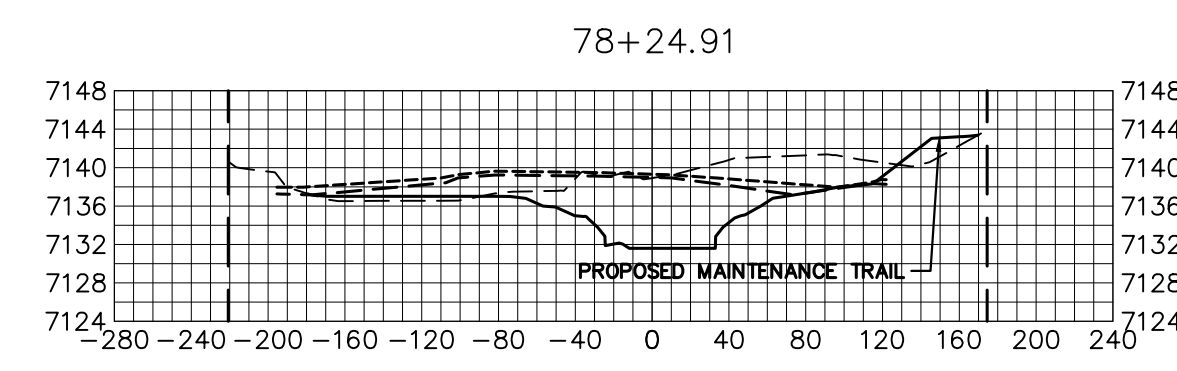
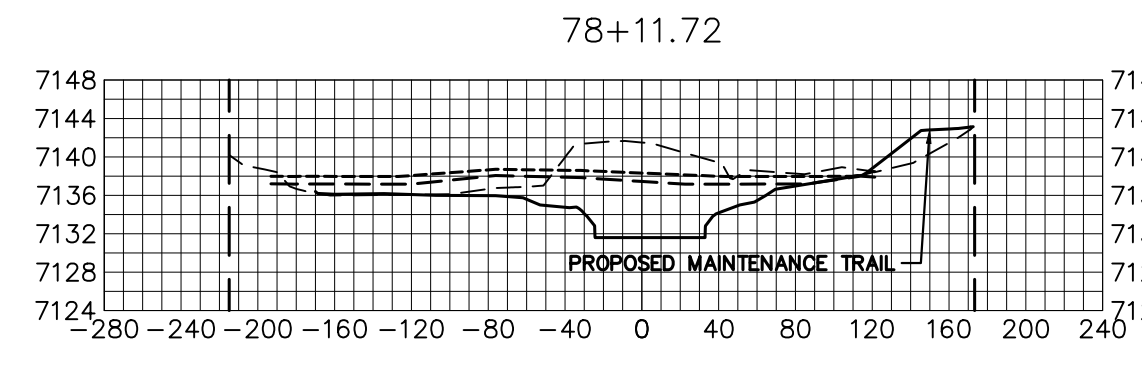
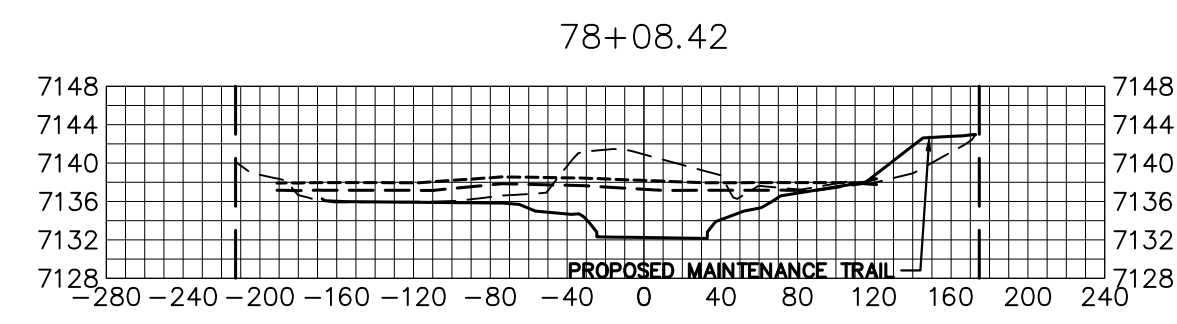
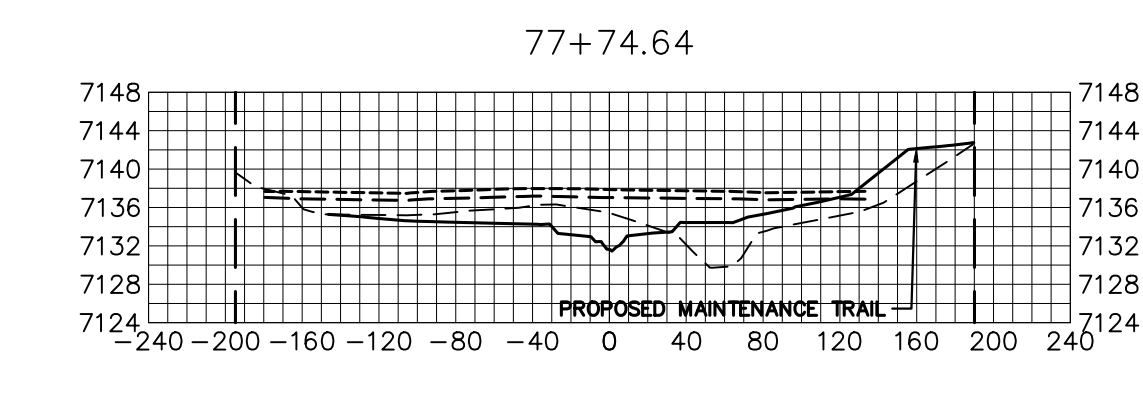
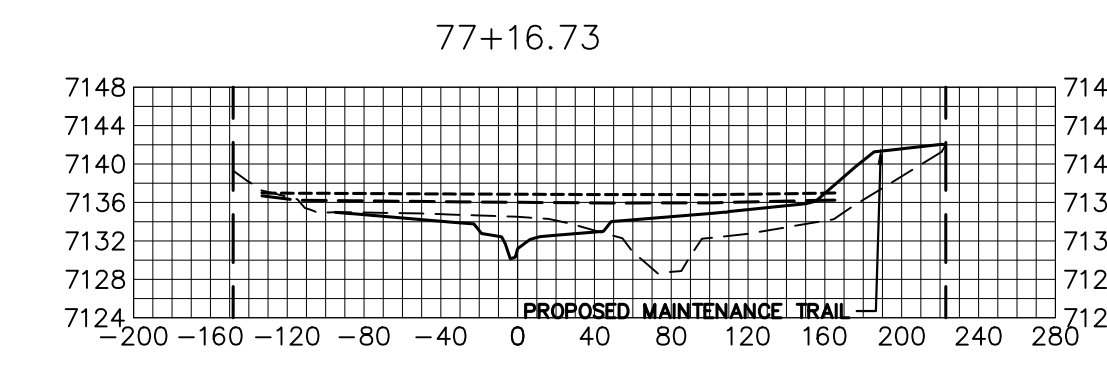
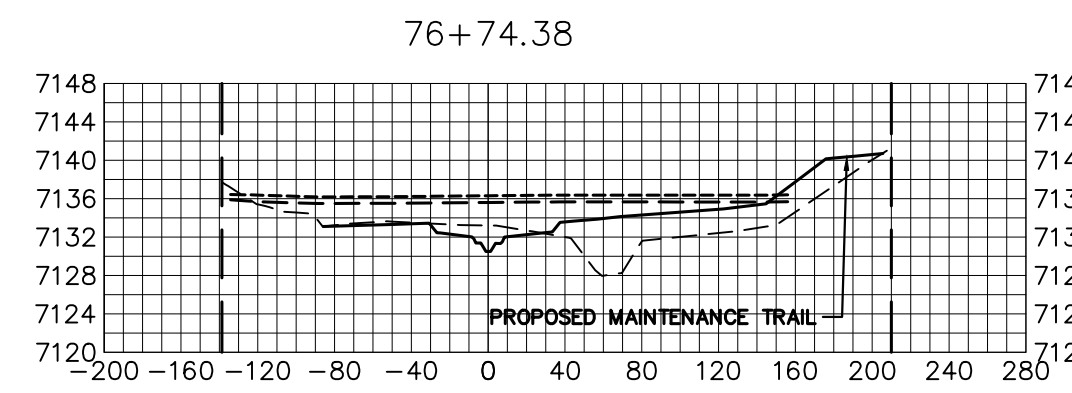
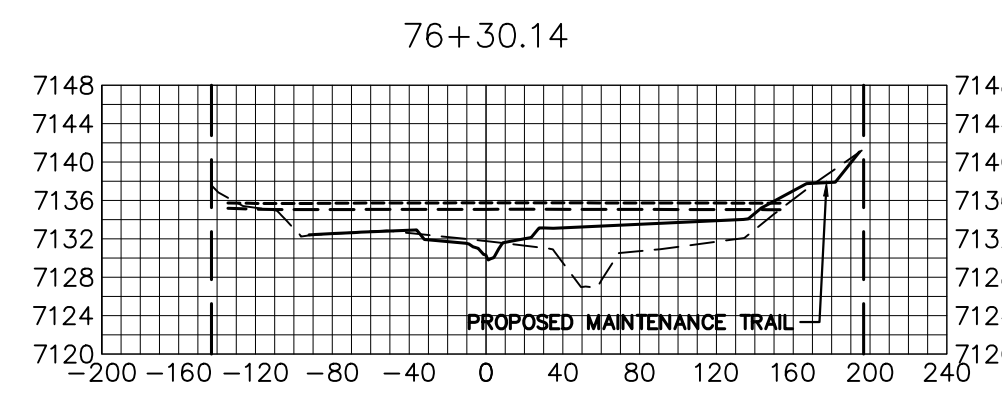
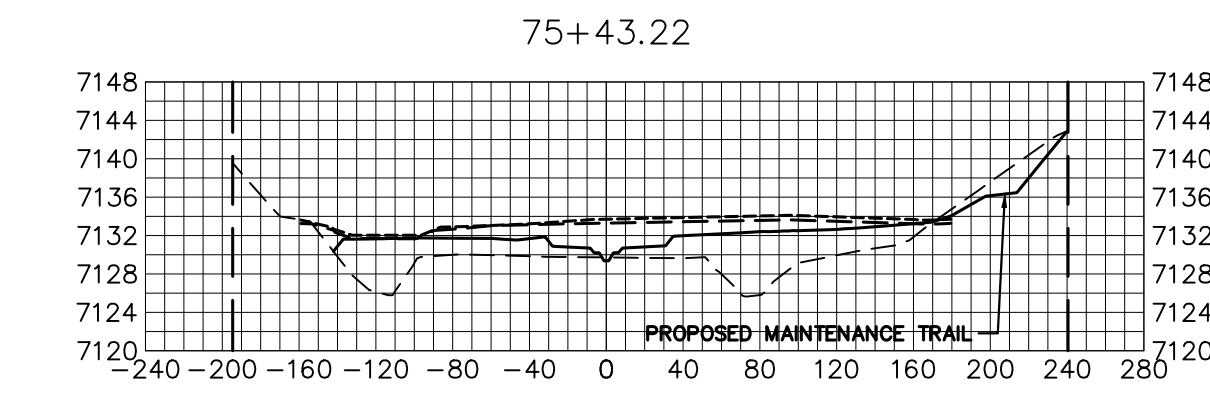
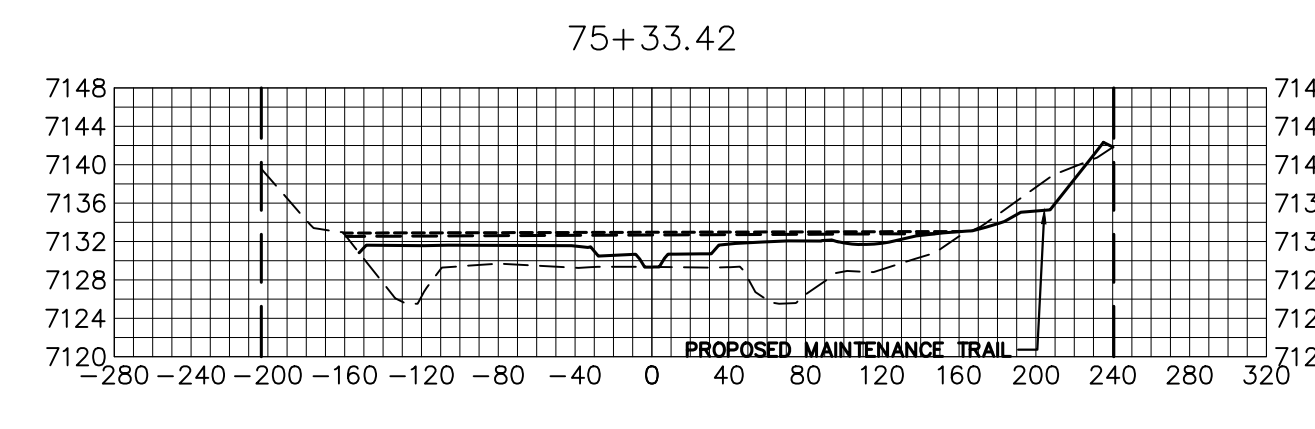
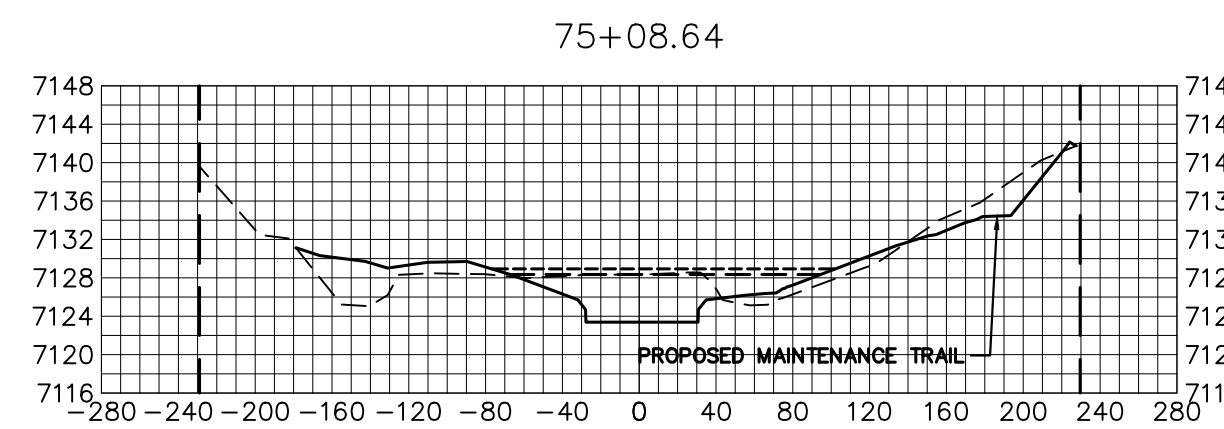
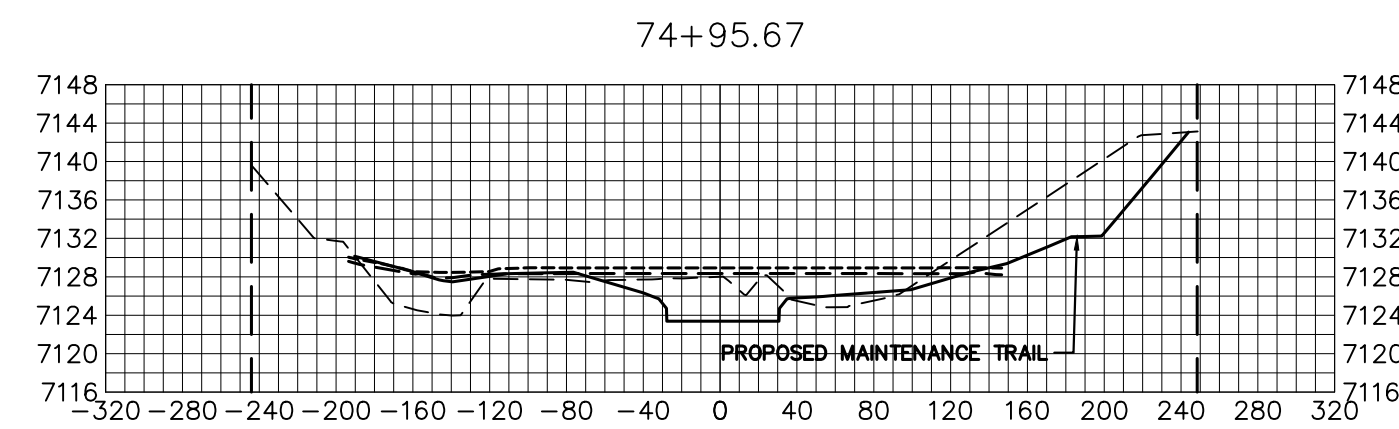
ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMLE
 COLORADO P.E. 30174
 FOR AND ON BEHALF OF JR ENGINEERING, LLC

81
 Know what's below.
 Call before you dig.

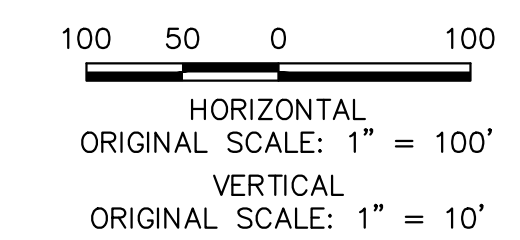
100 50 0 100
 HORIZONTAL ORIGINAL SCALE: 1" = 100'
 VERTICAL ORIGINAL SCALE: 1" = 10'



- LEGEND**
- PROP GROUND SURFACE
 - - - EX GROUND SURFACE
 - - - 100YR FIS WSEL
 - - - 100YR DESIGN WSEL
 - - - PROPERTY LINE

BENCHMARK

- THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411416.273
 EASTING = 235167.071
 ELEVATION = 7023.42
- THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANNEE RANCHEROS SUBDIVISION
 NORTHING = 410095.404
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- THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411399.962
 EASTING = 233849.817
 ELEVATION = 7030.82



BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.

ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

**PRELIMINARY
NOT FOR
CONSTRUCTION**

MIKE A. BRAMBLE
 COLORADO P.E. 30112
 FOR AND ON BEHALF OF J.R. ENGINEERING

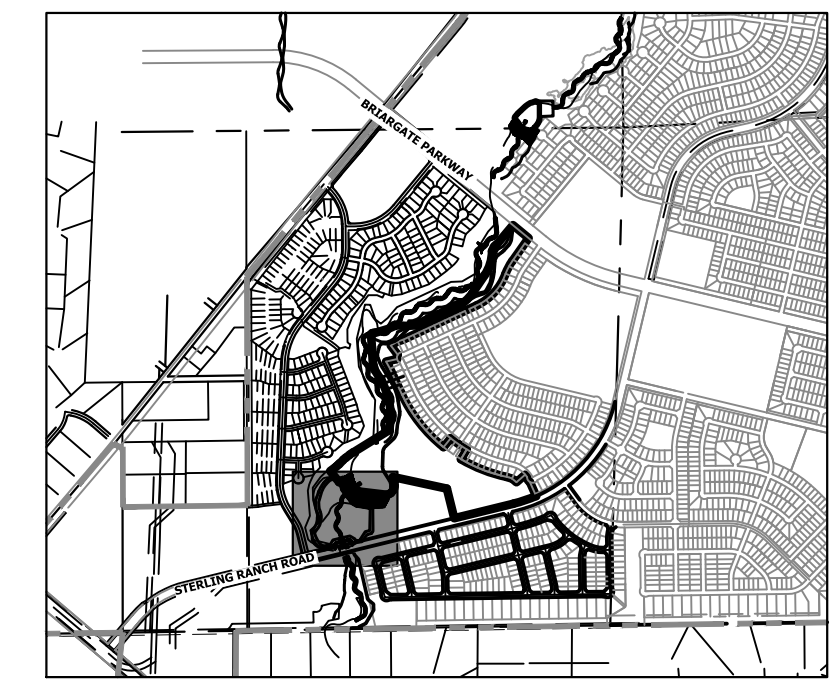
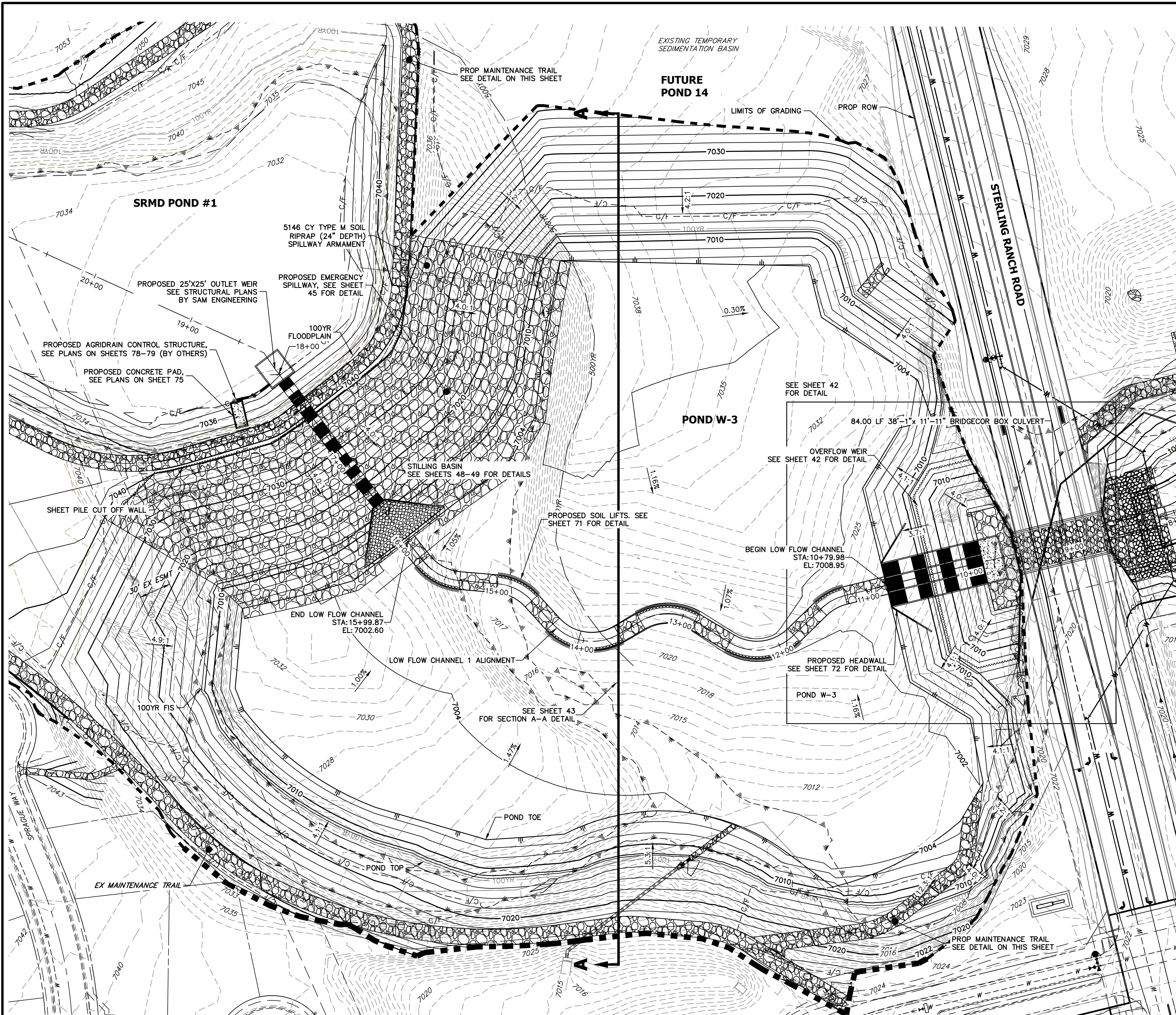
SAND CREEK RESTORATION	CROSS SECTIONS	BY DATE		NO. REVISION		H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
		1"=100'	1"=10'	1/23/23	DJV	NEO					
SHEET 40 OF 111		JOB NO. 25188.04									

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

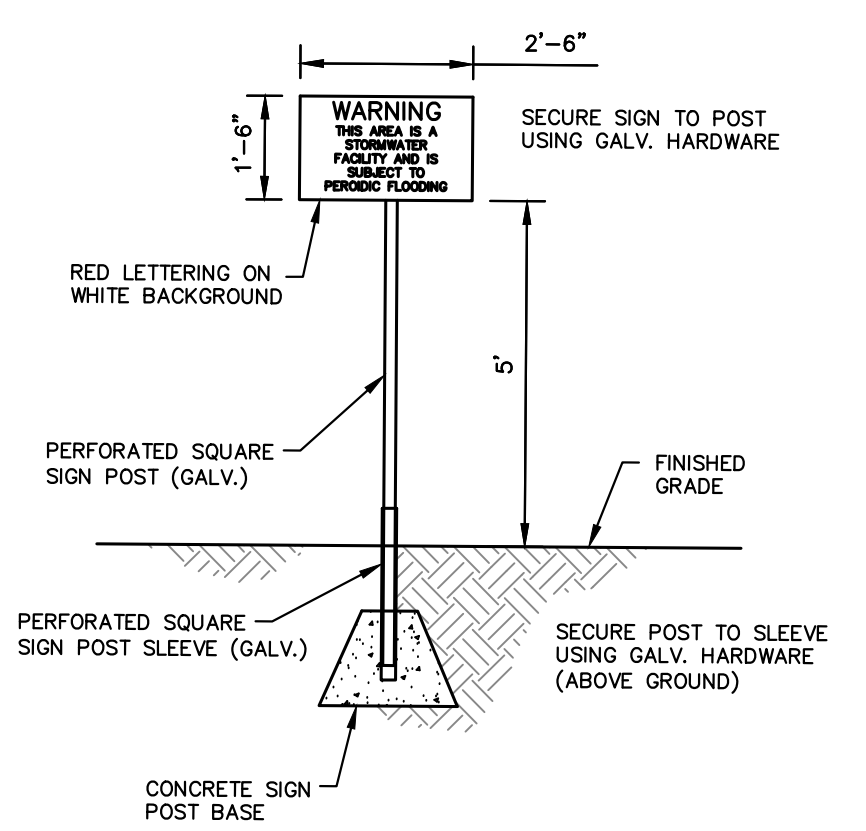
J.R. ENGINEERING
 A Westman Company
 Centennial 300-740-9888 • Colorado Springs 719-583-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

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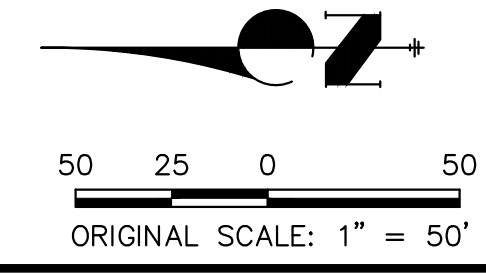
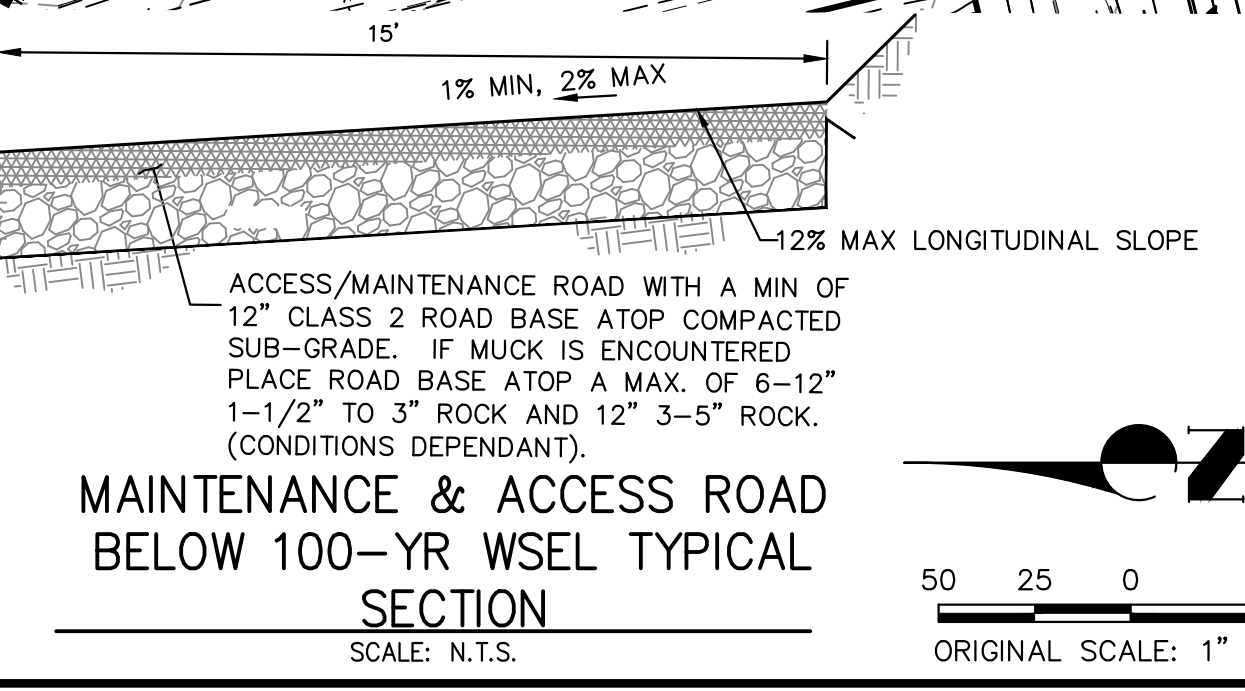
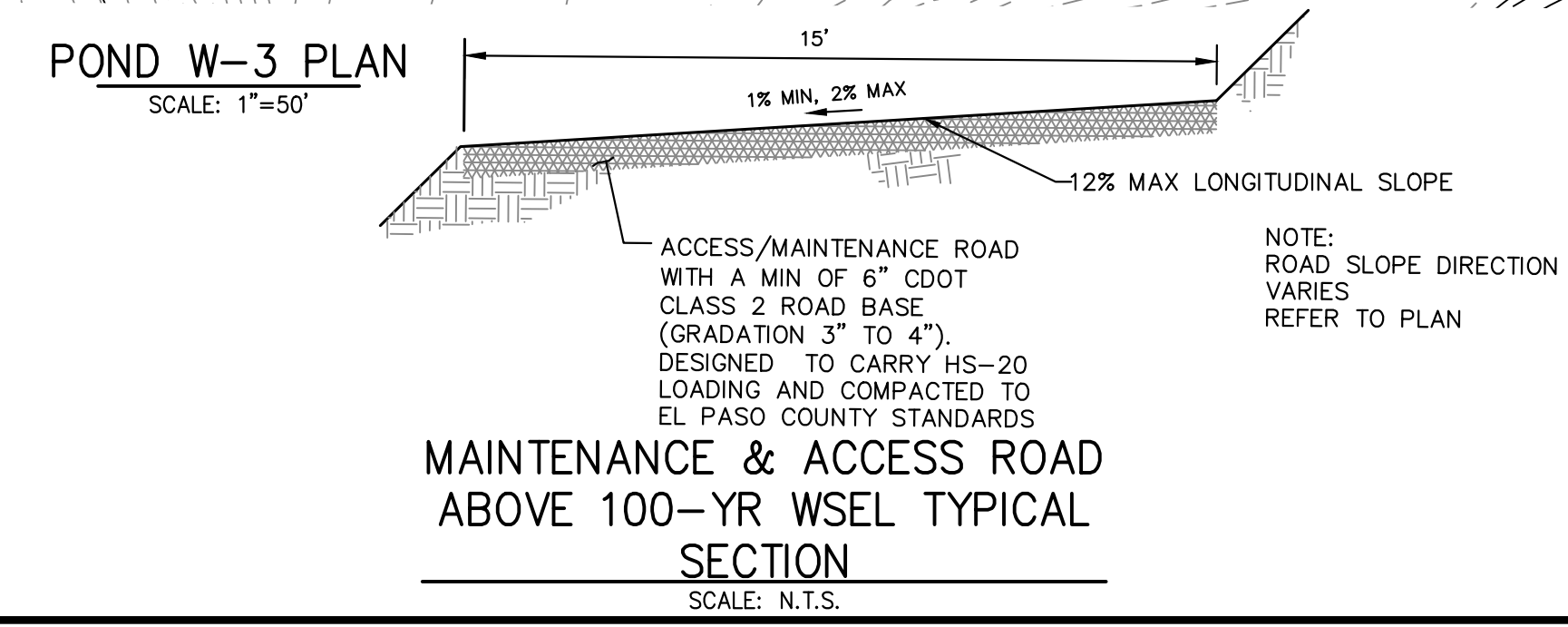


KEY MAP
SCALE: 1"=2000'

POND W-3	
DRAINAGE AREA (AC)	2729.9
AVERAGE % IMP.	17%
Q _{IN} (CFS)	578.95
Q _{OUT} (CFS)	470.55
WSEL (FT)	7004.72
DEPTH (FT)	3.55
VOLUME (AC-FT)	6.75
SURFACE AREA (AC)	5.46



POND WARNING SIGN
SCALE: N.T.S.



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION

PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMBLE
COLORADO P.E. 30000
FOR AND ON BEHALF OF J.R. ENGINEERING

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

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J.R. ENGINEERING
A Westman Company
Central 303-740-8888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

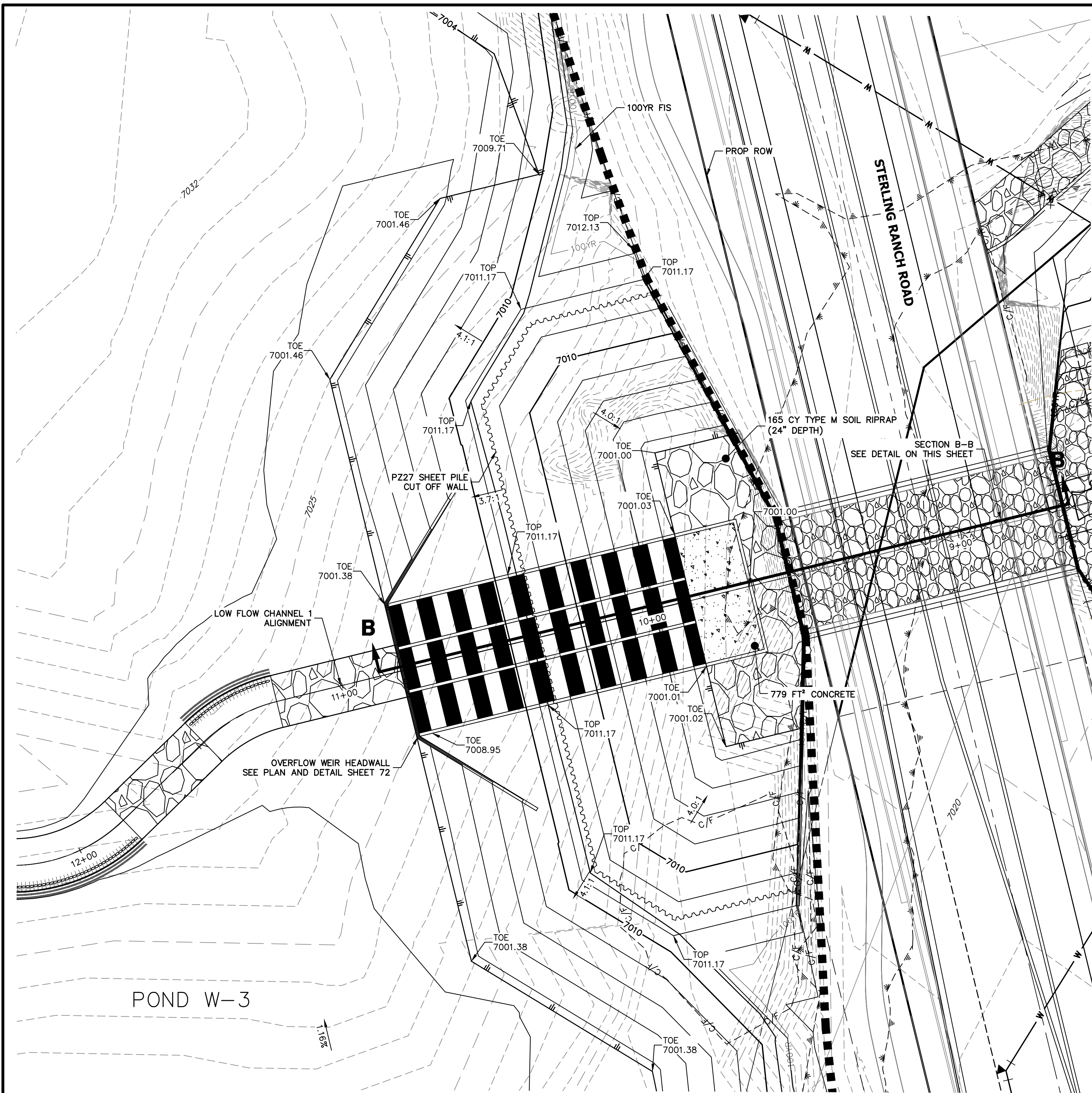
BY DATE

No.	REVISION	DATE	BY

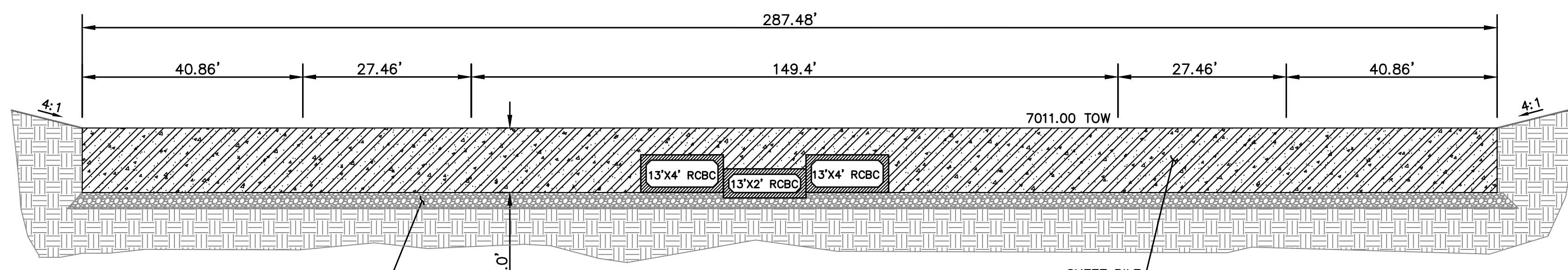
H-SCALE 1"=50'
V-SCALE N/A
DATE 1/23/23
DESIGNED BY DV
DRAWN BY NEO
CHECKED BY

SAND CREEK RESTORATION
POND PLANS

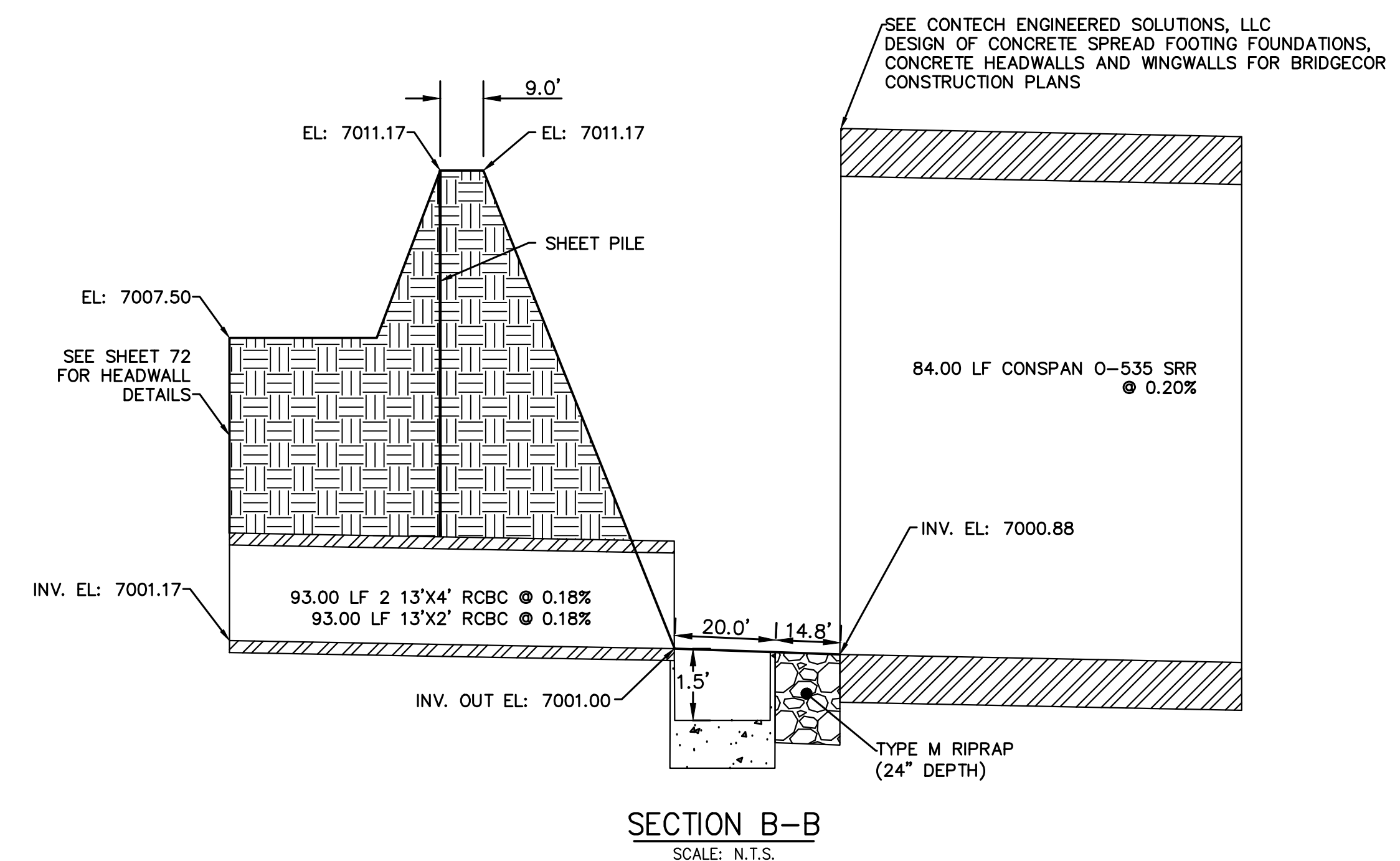
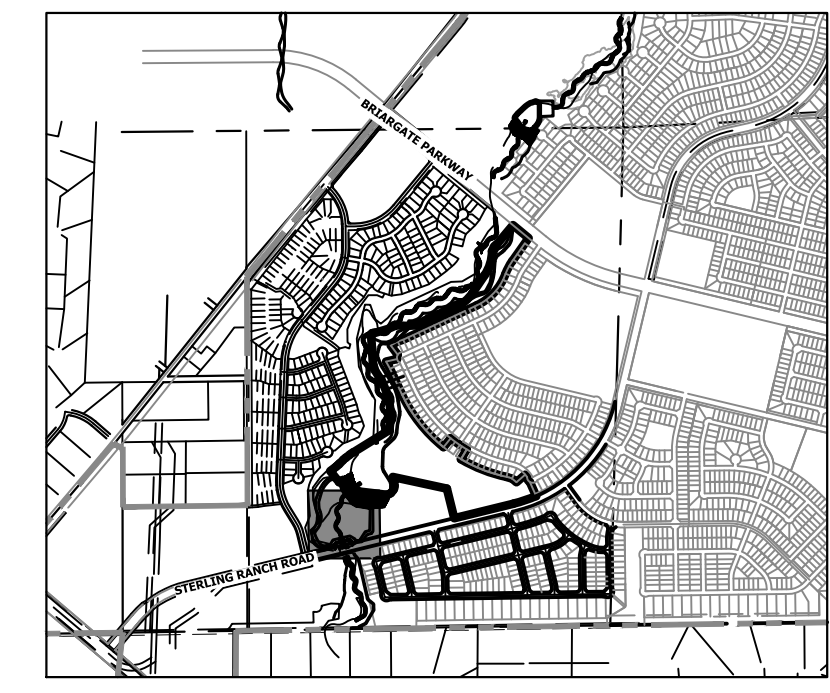
SHEET 41 OF 111
JOB NO. 25188.04



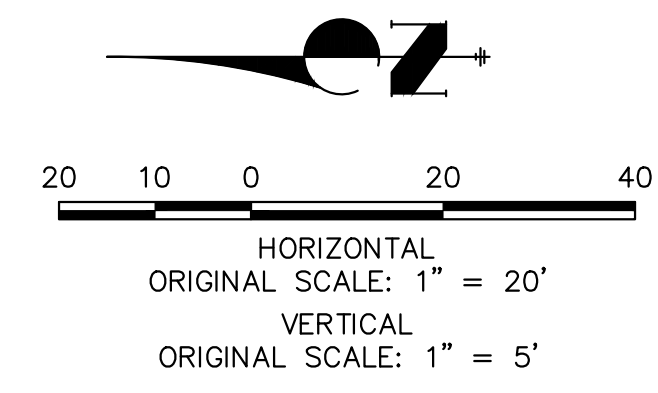
POND W-3 OVERFLOW WEIR
SCALE: 1"=20'



PLACE FLOOR ATOP 6" OF AGGREGATE BASE
BASE COARSE AND COMPACTED SUBGRADE. IF
MUCK IS ENCOUNTERED, USE MAX. OF 1-1/2"
TO 3" ROCK ATOP 12" OF 3"-5" ROCK
(DEPENDANT UPON FIELD CONDITIONS)



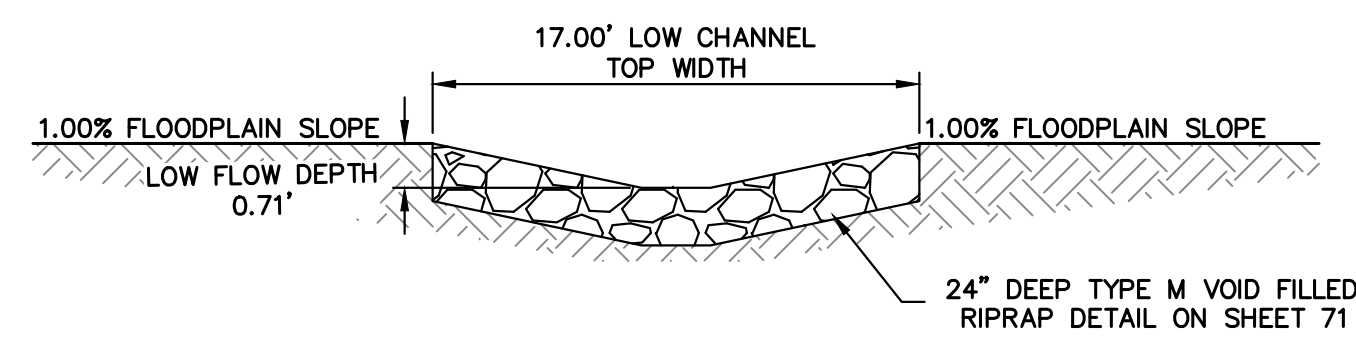
SEE CONTECH ENGINEERED SOLUTIONS, LLC
DESIGN OF CONCRETE SPREAD FOOTING FOUNDATIONS,
CONCRETE HEADWALLS AND WINGWALLS FOR BRIDGECOR
CONSTRUCTION PLANS



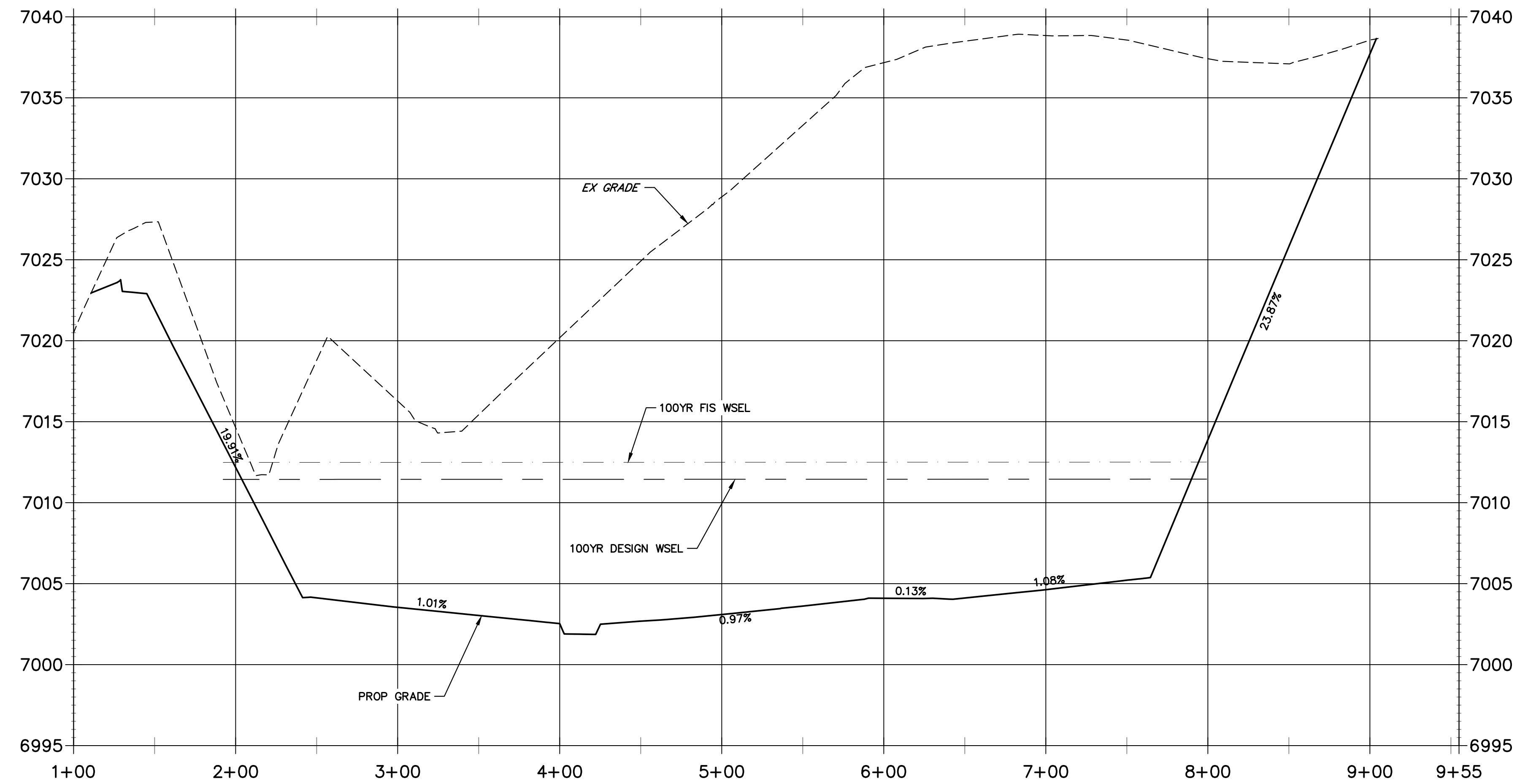
ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 30000
FOR AND ON BEHALF OF J.R. ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.	PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	 J.R. ENGINEERING A Westman Company Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	No. REVISION 1"=20' 1"=5' DATE 1/23/23 DESIGNED BY DV DRAWN BY SCH CHECKED BY	BY	DATE
SAND CREEK RESTORATION POND PLANS		SHEET 42 OF 111 JOB NO. 25188.04			

**CROSS SECTION A-A
STA 1+00.00 TO 9+55.00**

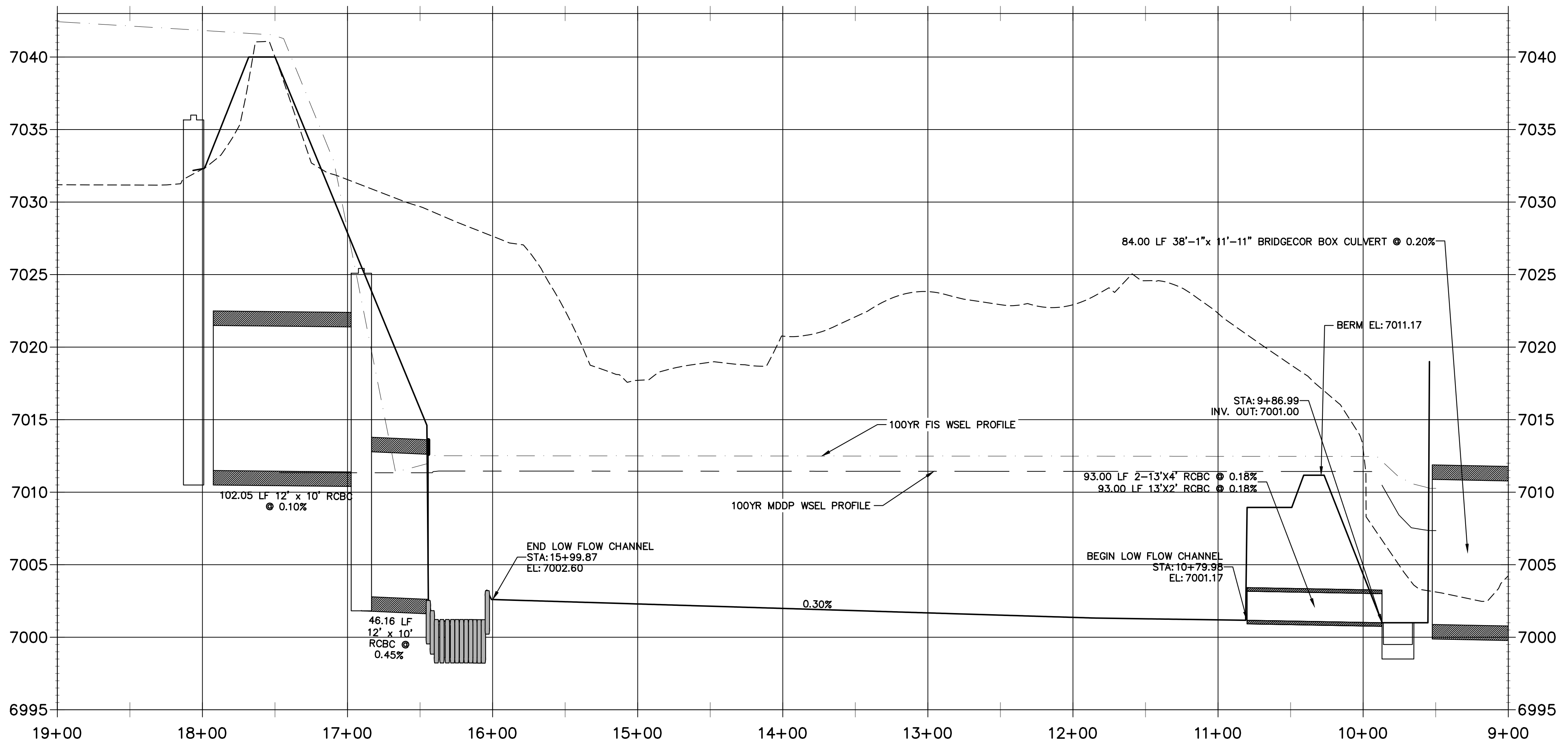


LOW FLOW CHANNEL DETAIL
SCALE: NTS

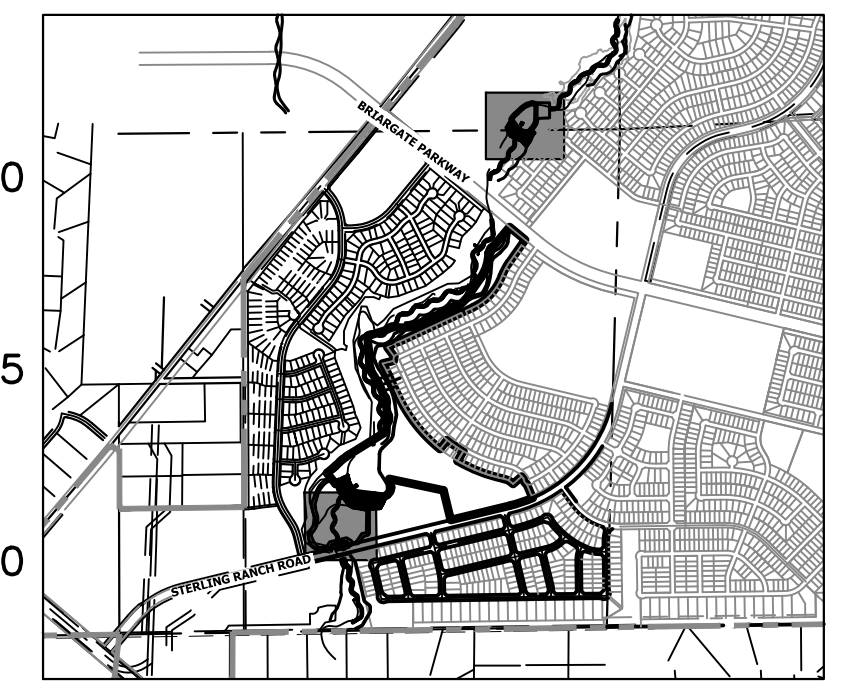


**LOW FLOW CHANNEL 1
STA 9+00.00 TO 19+00.00**

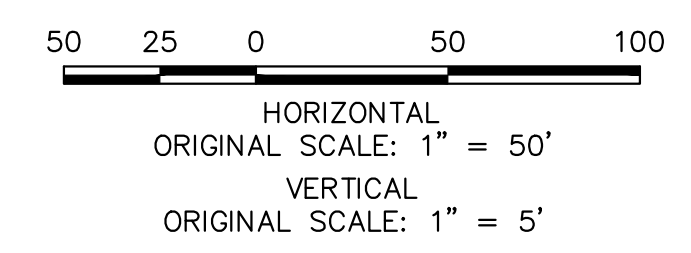
**POND W-3
CROSS SECTION A-A**
HORIZONTAL SCALE: 1"=50'



POND W-3 LOW FLOW CHANNEL
HORIZONTAL SCALE: 1"=100'



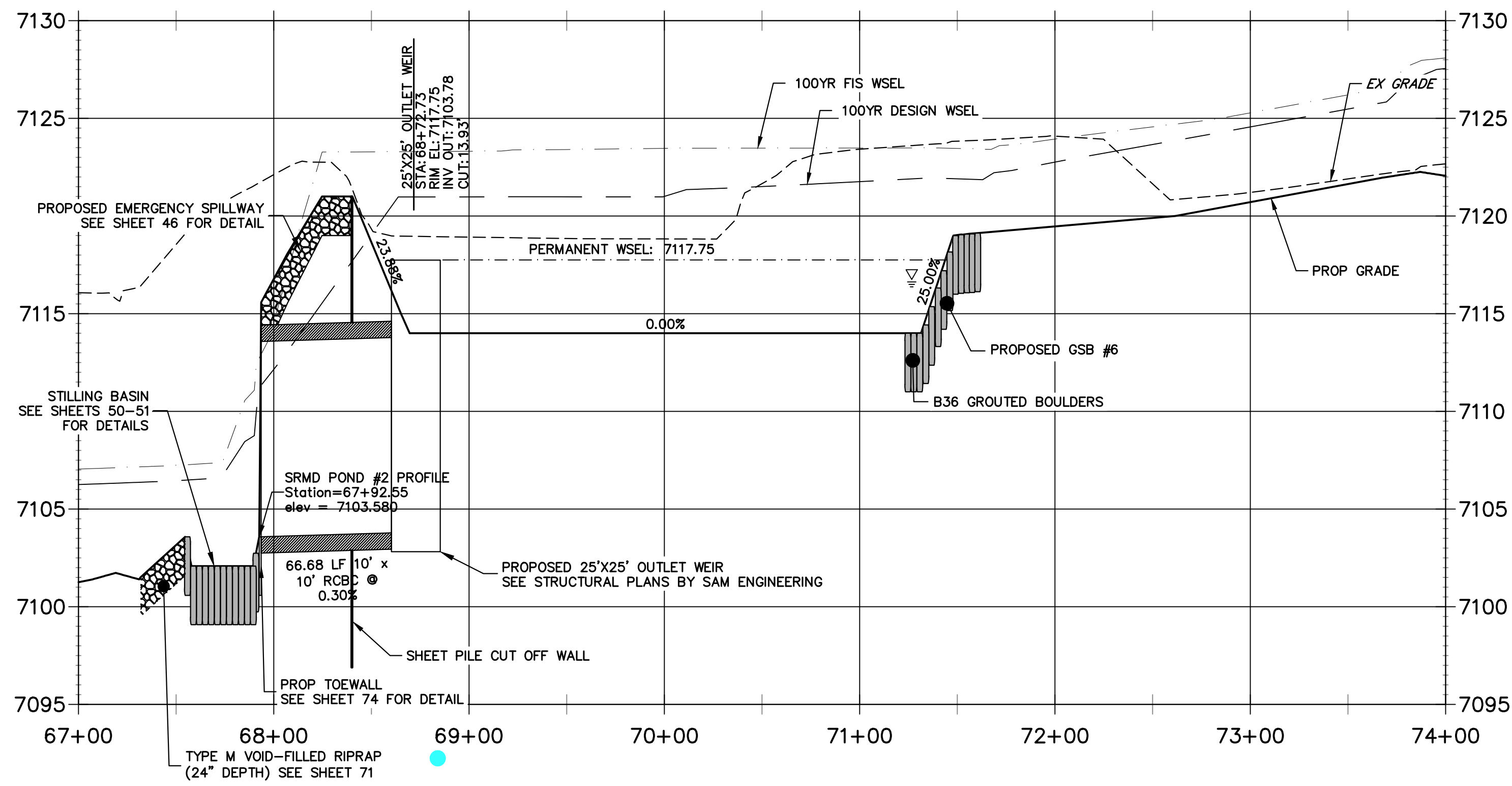
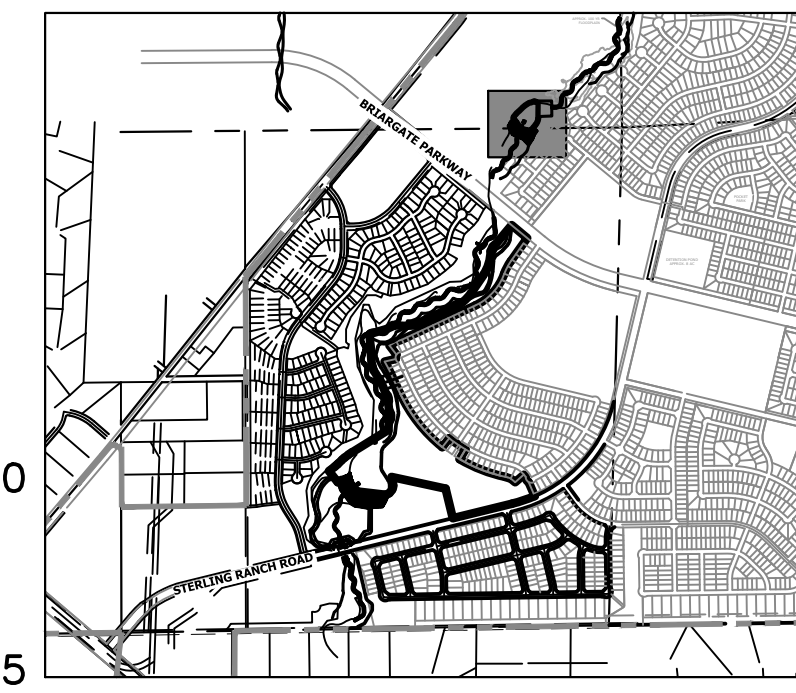
KEY MAP
SCALE: 1"=2000'



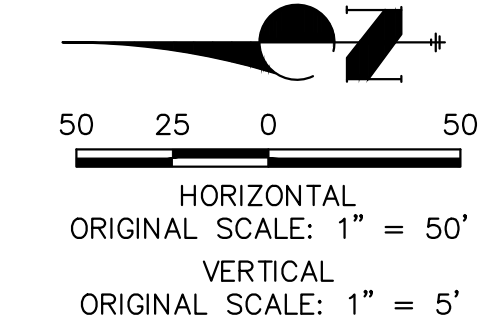
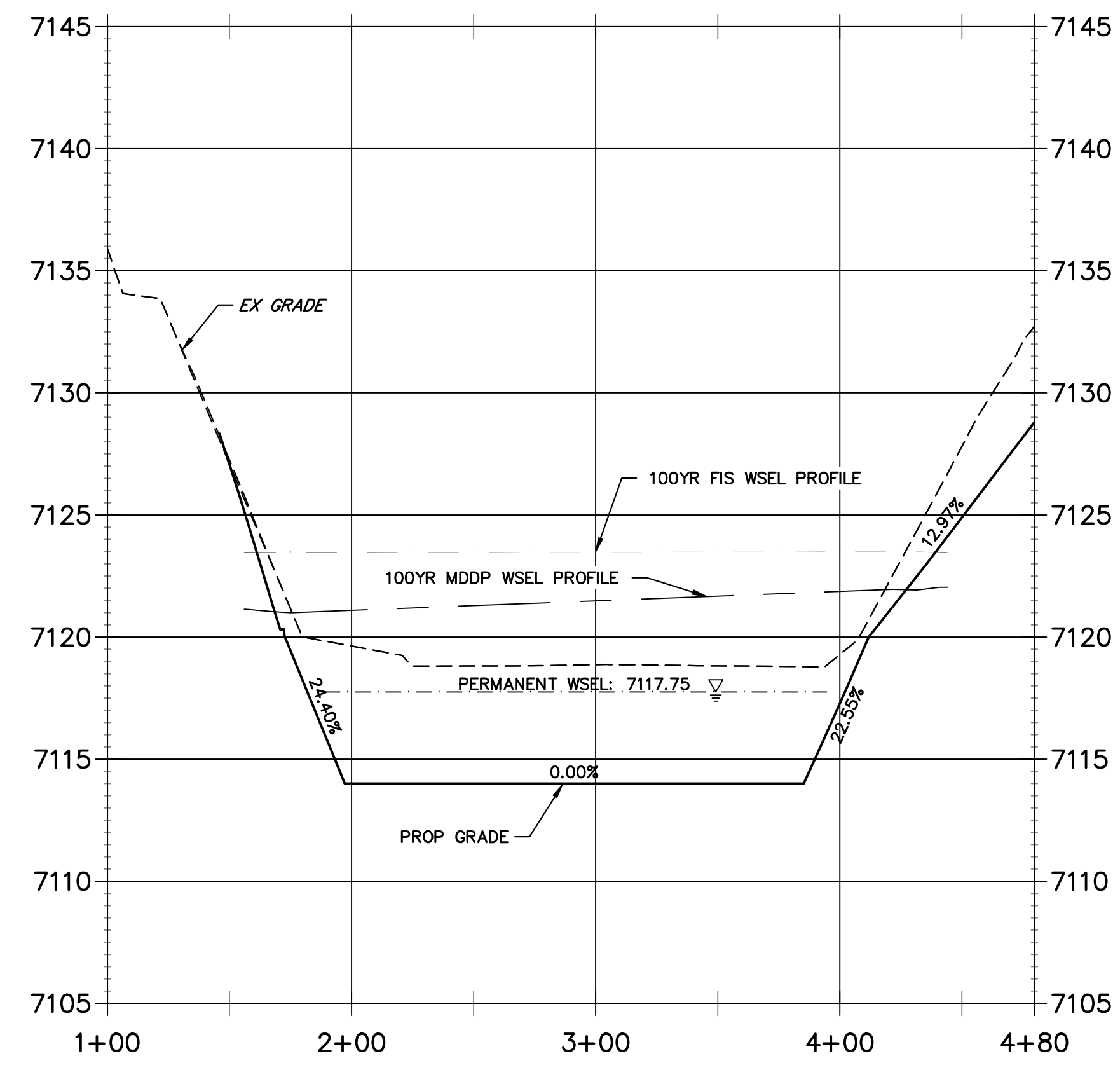
ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
**PRELIMINARY
NOT FOR
CONSTRUCTION**
MIKE A. BRAMLEY
COLORADO P.E. 30001
FOR AND ON BEHALF OF JR ENGINEERING

UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE IN FEET AND DECIMALS THEREOF. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO CENTERLINE UNLESS OTHERWISE SPECIFIED. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO CENTERLINE UNLESS OTHERWISE SPECIFIED. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO CENTERLINE UNLESS OTHERWISE SPECIFIED.	
PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024
BY	DATE
NO.	REVISION
H-SCALE 1"=50'	V-SCALE 1"=5'
DESIGNED BY	DATE 1/23/23
DRAWN BY	DV
CHECKED BY	SCH
SAND CREEK RESTORATION	
POND PLANS	
SHEET 43 OF 111	
JOB NO. 25188.04	

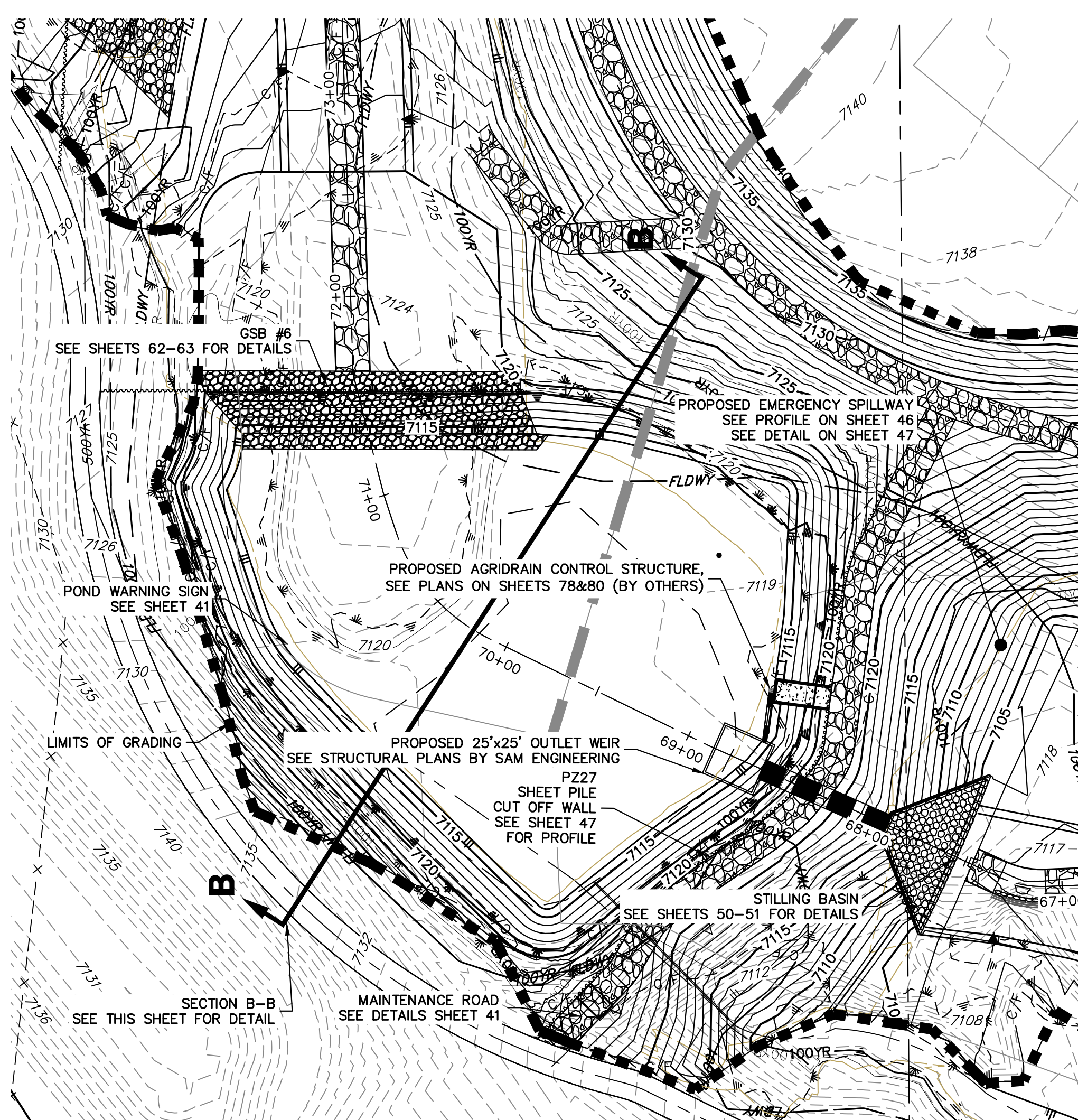
SRMD POND #2 PROFILE STA 67+00.00 TO 74+00.00



CROSS SECTION B-B STA 1+00.00 TO 4+79.69



ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND REVIEW
**PRELIMINARY
 NOT FOR
 CONSTRUCTION**
 MIKE A. BRAMLEY
 COLORADO P.E. 33843
 FOR AND ON BEHALF OF JR ENGINEERING



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE AS DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

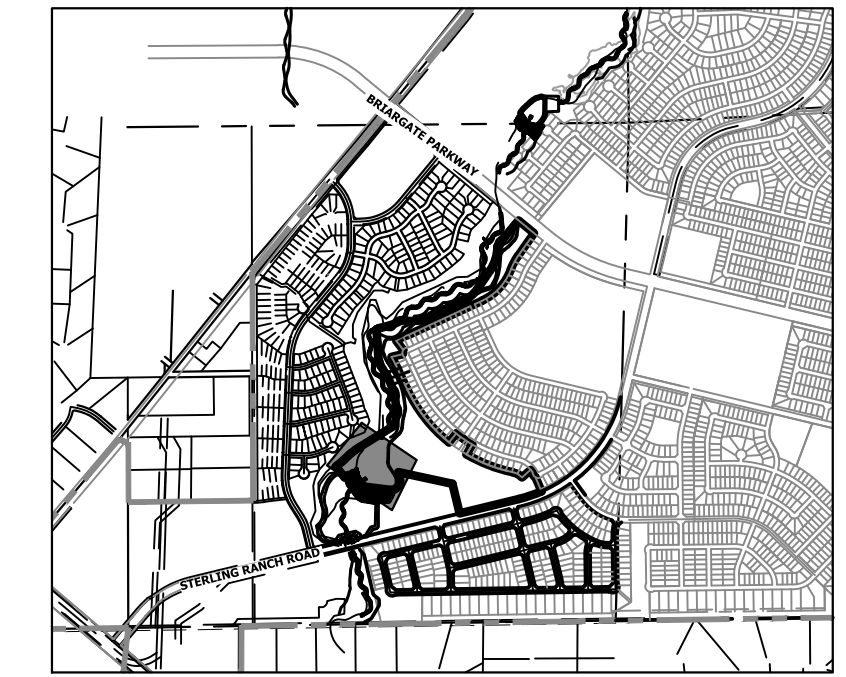
J.R. ENGINEERING
 A Westman Company
 Centennial 300-740-9888 • Colorado Springs 719-583-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

SAND CREEK RESTORATION
 POND PLANS
 SHEET 44 OF 111
 JOB NO. 25188.04

GRADING NOTES:

1. ALL PROPOSED CONTOURS ARE TO FINISHED GRADE.
2. EARTHEN CUT AND FILL SLOPES SHALL BE 3:1 MAXIMUM. SLOPES IN EXCESS OF 4:1 AND AREAS OTHERWISE INDICATED BY WITHIN THESE PLANS, SHALL BE COVERED WITH SOIL RETENTION BLANKET OVER 4" MIN. THICKNESS OF TOPSOIL AND SEEDED.
3. IF THE PROJECT IS CONSTRUCTED DURING THE SUMMER WHEN SEEDING IS NOT ALLOWED, APPLY 1-1/2 TONS OF CERTIFIED WEED FREE MULCH PER ACRE MECHANICALLY CRIMPED INTO THE SOIL IN COMBINATION WITH AN ORGANIC MULCH TACKIFIER.
4. PRIOR TO ANY CONSTRUCTION ACTIVITIES THE PROPOSED SILT FENCE SHOWN ON THE EROSION CONTROL SHEET SHALL BE CONSTRUCTED. THE FENCE SHALL BE REMOVED UPON THE LATER OF STABILIZATION OF THE SITE OR COMPLETION OF CONSTRUCTION.
5. TO REDUCE THE POTENTIAL FOR CLOGGING OF DEBRIS GRATES, NO STRAW MULCH SHALL BE USED WITHIN THE ERMV OR WQCV OF A DETENTION BASIN. INSTEAD, EROSION CONTROL BLANKETS SHALL BE INSTALLED FOR A WIDTH OF AT LEAST 6 FEET ON EITHER SIDE OF CONCRETE LOW-FLOW CHANNELS. THE BLANKETS SHALL COMPLY WITH THE MATERIALS AND INSTALLATION REQUIREMENTS FOR EROSION CONTROL BLANKETS (STRAW COCONUT OR 100 PERCENT COCONUT). SITE-SPECIFIC CONDITIONS MAY REQUIRE ADDITIONAL BLANKET OR OTHER EROSION CONTROL MEASURES.



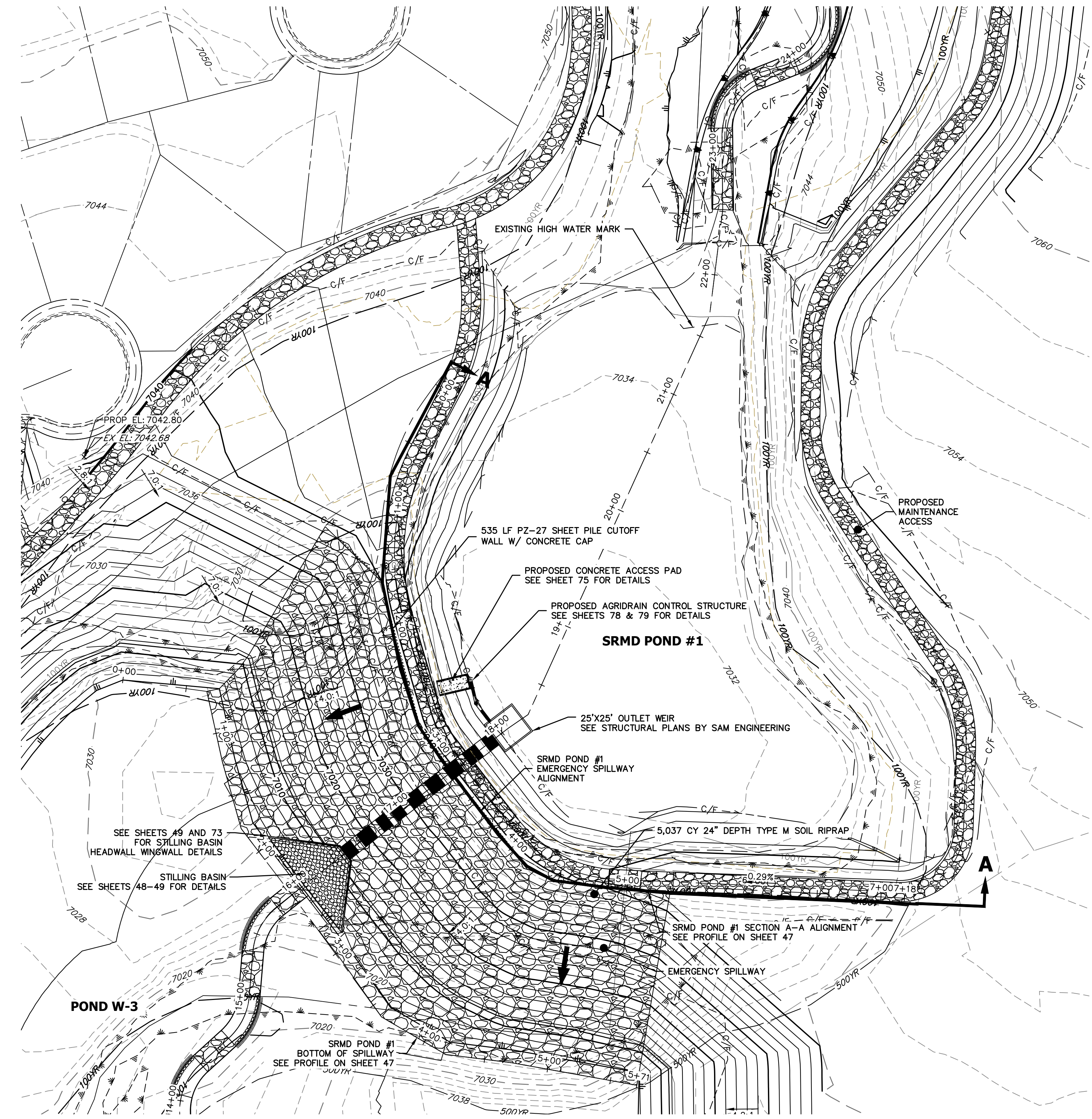
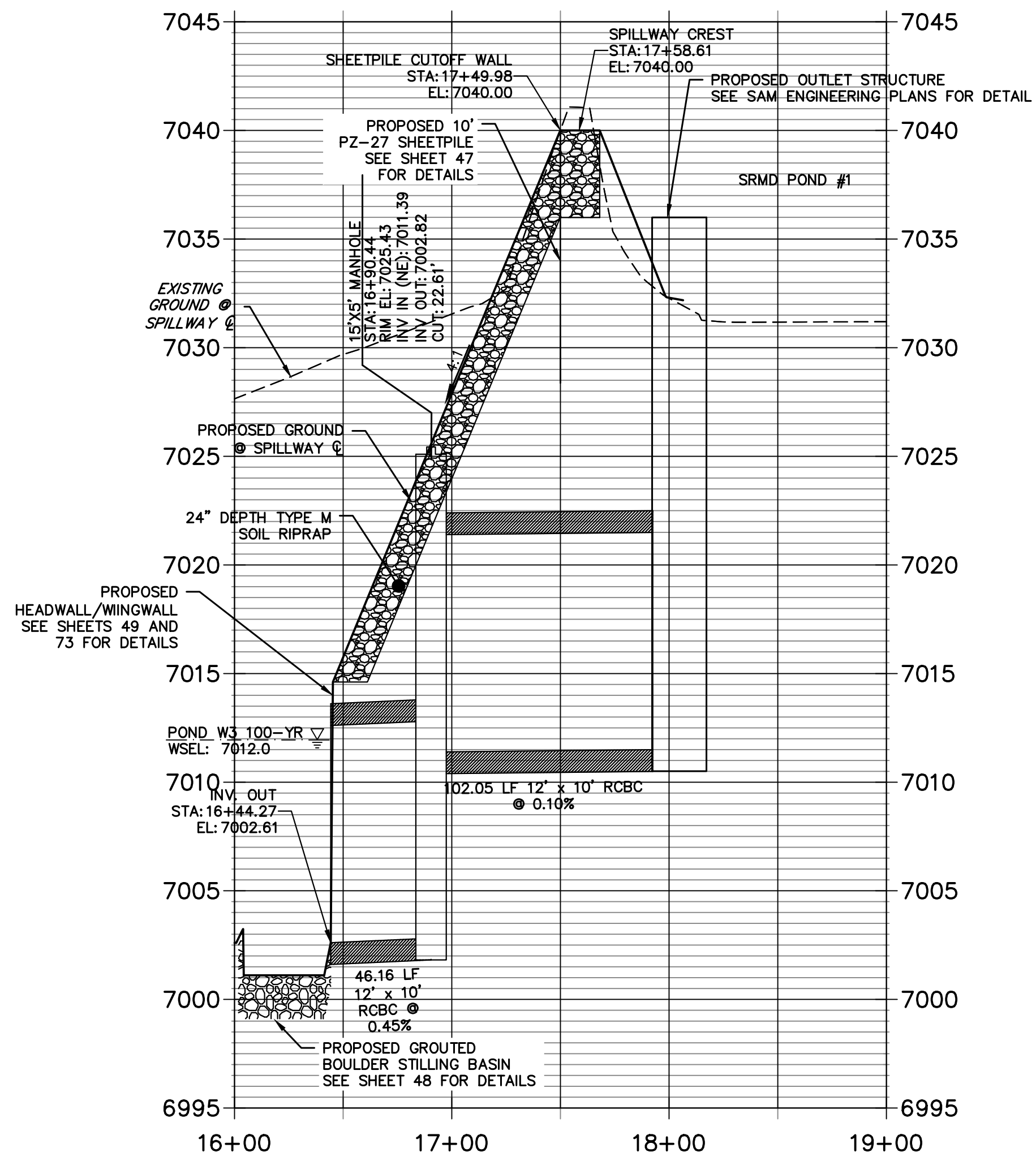
KEY MAP
SCALE: 1"=200'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE. DESIGNED BY: JAMES F. MORLEY AUTHORIZATION:

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

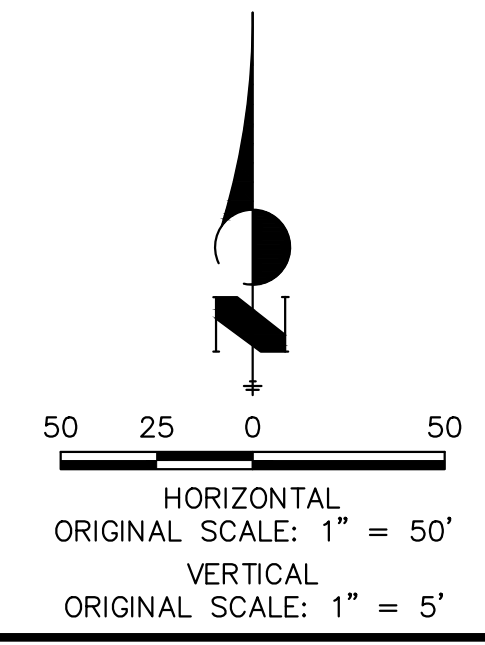
J.R. ENGINEERING
A Westman Company
Central 303-740-8888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

**SRMD POND #1 EMERGENCY SPILLWAY PROFILE
STA 16+00.00 TO 19+00.00**



EXISTING SRMD POND #1 EMERGENCY SPILLWAY
SCALE: 1"=50'

SRMD POND #1		
DRAINAGE AREA (AC)	2313.1	
AVERAGE % IMP.	9%	
	5-YR	100-YR
Q ₅ (CFS)	511.84	1977.60
Q ₁₀₀ (CFS)	499.73	1819.90
STATIC WSEL (FT)	7036.00	7036.00
MAX WSEL (FT)	7040.00	7040.00
DEPTH (FT)	6.17	8.09
VOLUME (AC-FT)	10.43	36.00
SURFACE AREA (AC)	2.7	4.40

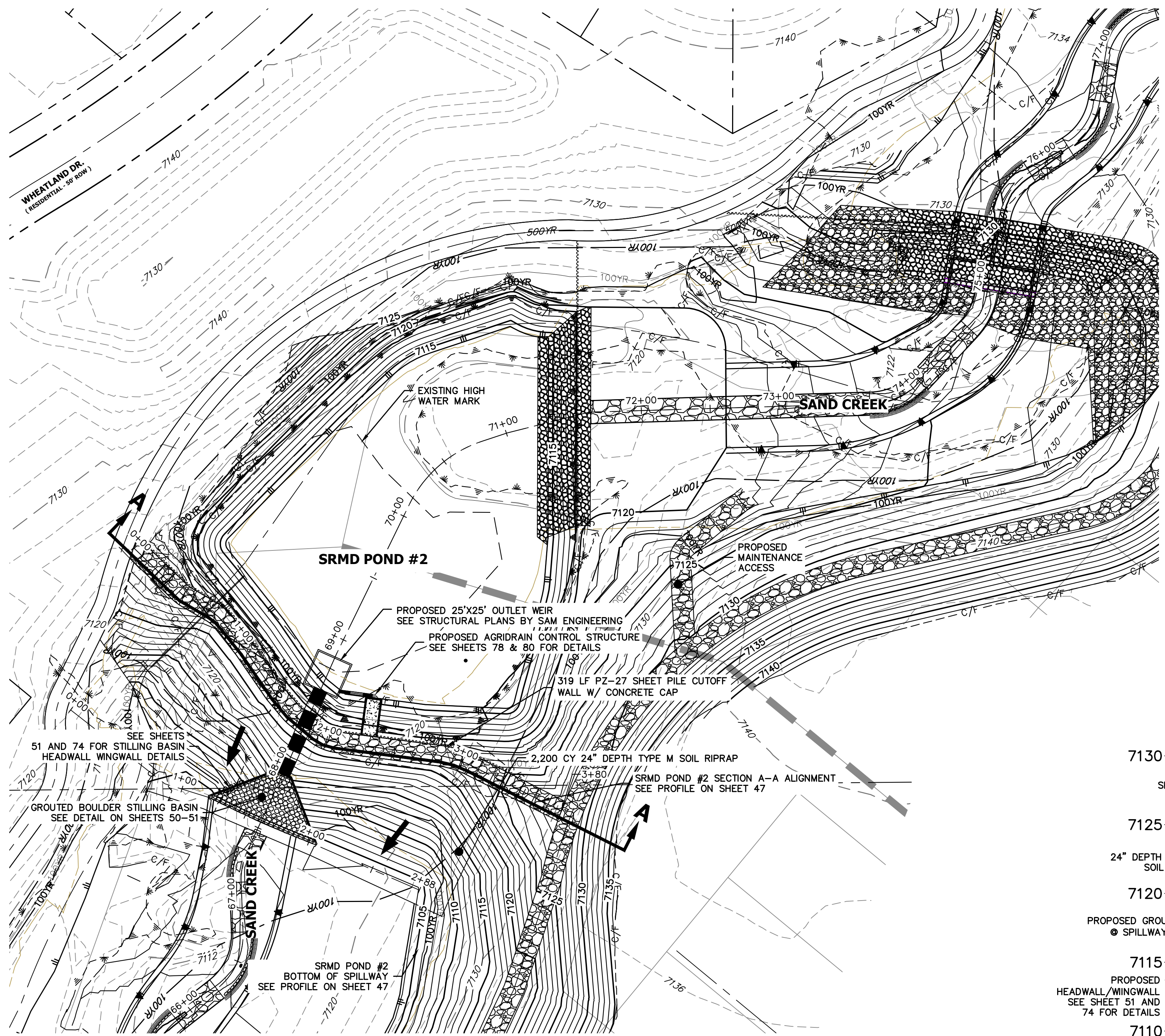


ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 33111
FOR AND ON BEHALF OF JR ENGINEERING

No.	REVISION	BY	DATE

SAND CREEK RESTORATION
POND PLANS
SHEET 45 OF 26
JOB NO. 25188.04

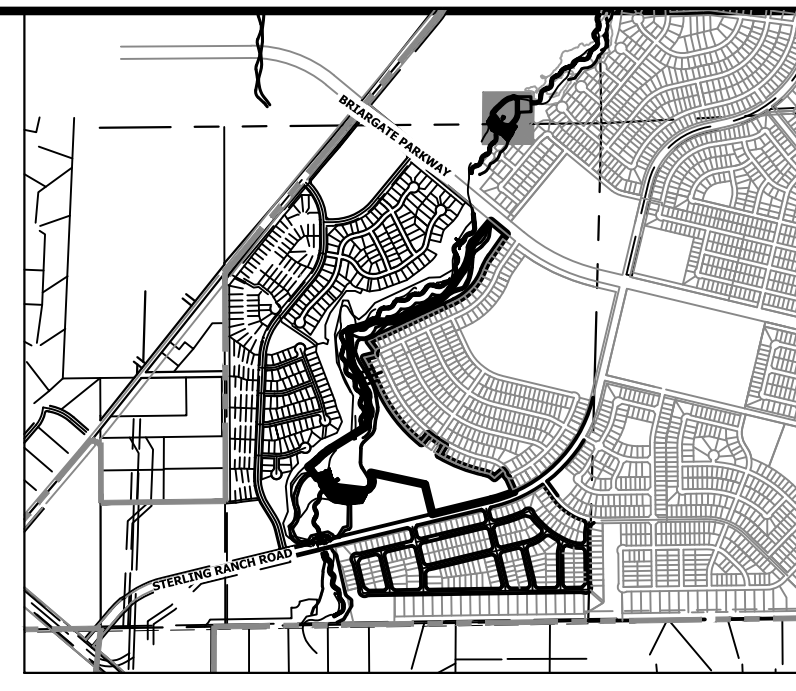
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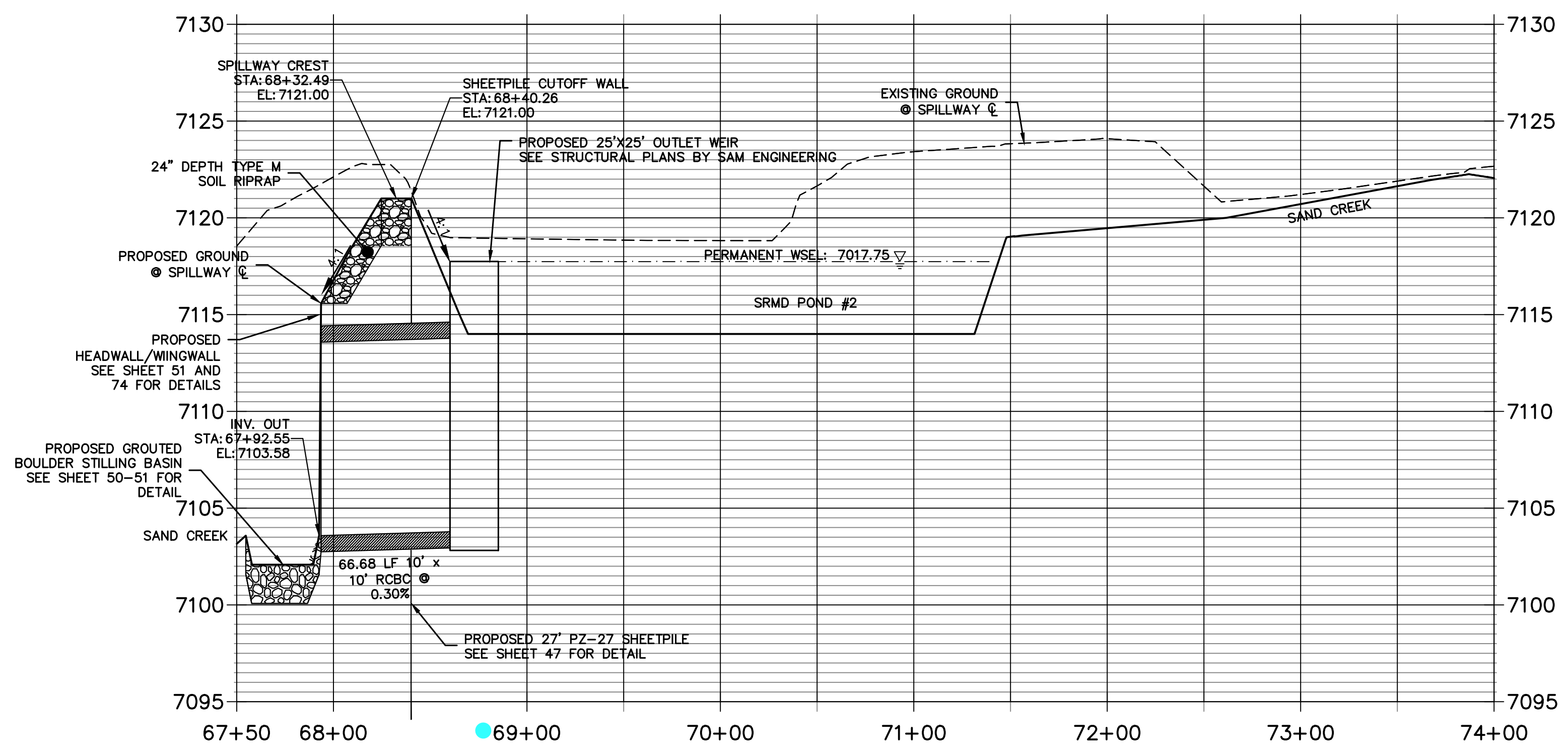
GRADING NOTES:

- ALL PROPOSED CONTOURS ARE TO FINISHED GRADE.
- EARTHEN CUT AND FILL SLOPES SHALL BE 3:1 MAXIMUM. SLOPES IN EXCESS OF 4:1 AND AREAS OTHERWISE INDICATED BY WITHIN THESE PLANS, SHALL BE COVERED WITH SOIL RETENTION BLANKET OVER 4" MIN. THICKNESS OF TOPSOIL AND SEEDED.
- IF THE PROJECT IS CONSTRUCTED DURING THE SUMMER WHEN SEEDING IS NOT ALLOWED, APPLY 1-1/2 TONS OF CERTIFIED WEED FREE MULCH PER ACRE MECHANICALLY CRIMPED INTO THE SOIL IN COMBINATION WITH AN ORGANIC MULCH TACKIFIER.
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SRMD POND #2		
DRAINAGE AREA (AC)	2003.2	
AVERAGE % IMP.	8%	
Q ₅ (CFS)	477.23	1666.90
Q ₁₀₀ (CFS)	476.24	1661.20
STATIC WSEL (FT)	7117.75	7117.75
MAX WSEL (FT)	7019.27	7021.00
DEPTH (FT)	5.08	6.81
VOLUME (AC-FT)	6.26	8.70
SURFACE AREA (AC)	1.35	2.10



**SRMD POND #2 EMERGENCY SPILLWAY PROFILE
STA 67+50.00 TO 74+00.00**



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
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BY	DATE	REVISION

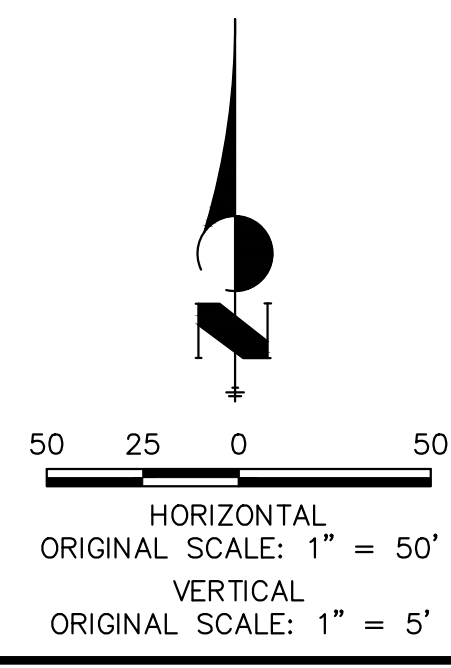
H-SCALE 1"=50'
V-SCALE 1"=5'
DATE 1/23/23
DESIGNED BY DJV
DRAWN BY DJV
CHECKED BY

SAND CREEK RESTORATION
POND PLANS

SHEET 46 OF 26
JOB NO. 25188.04



Know what's below.
Call before you dig.

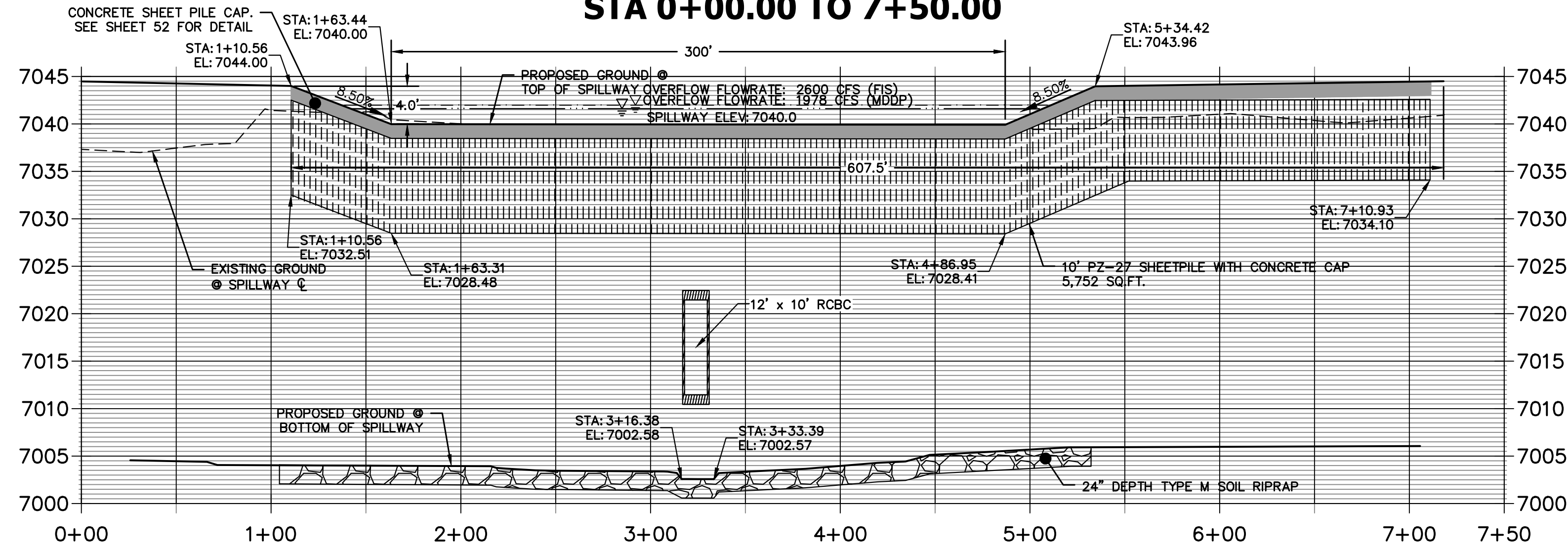


ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMBLE
COLORADO P.E. 31111
FOR AND ON BEHALF OF JR ENGINEERING

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SRMD POND #1 SECTION A-A PROFILE STA 0+00.00 TO 7+50.00



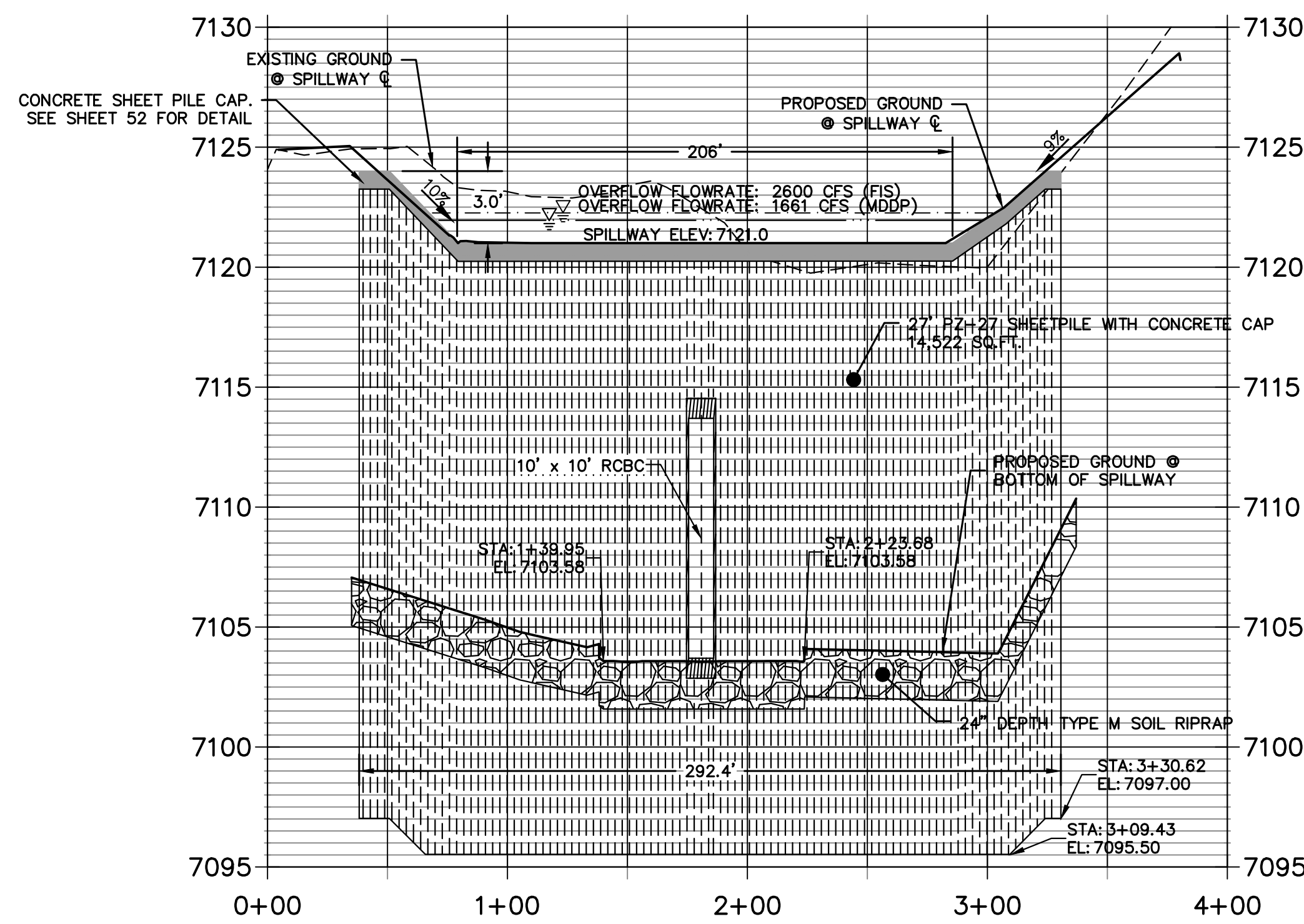
SRMD POND #1 SECTION A-A PROFILE

HORZ SCALE: 1"=50'
VERT SCALE: 1"=10'

NOTES:

SEE STRUCTURAL PLANS BY SAM ENGINEERING FOR OUTLET STRUCTURE DESIGN.

SRMD POND #2 SECTION A-A PROFILE STA 0+00.00 TO 4+00.00



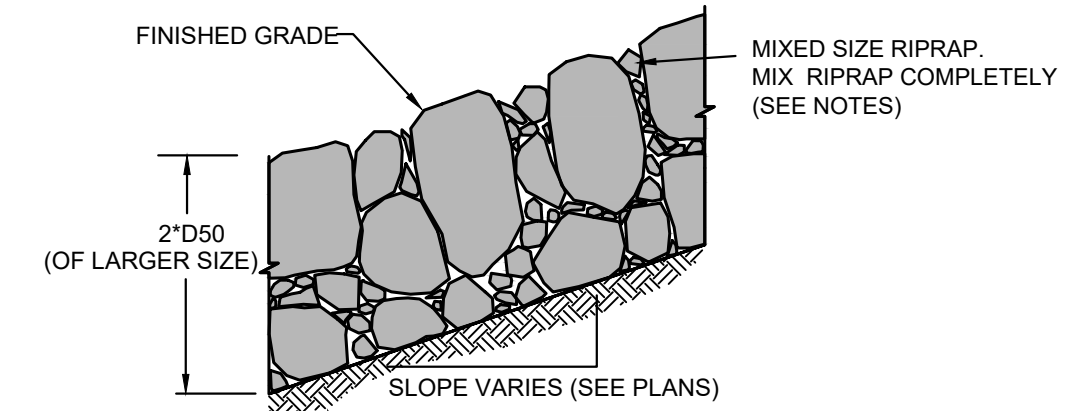
SRMD POND #2 SPILLWAY PROFILE

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

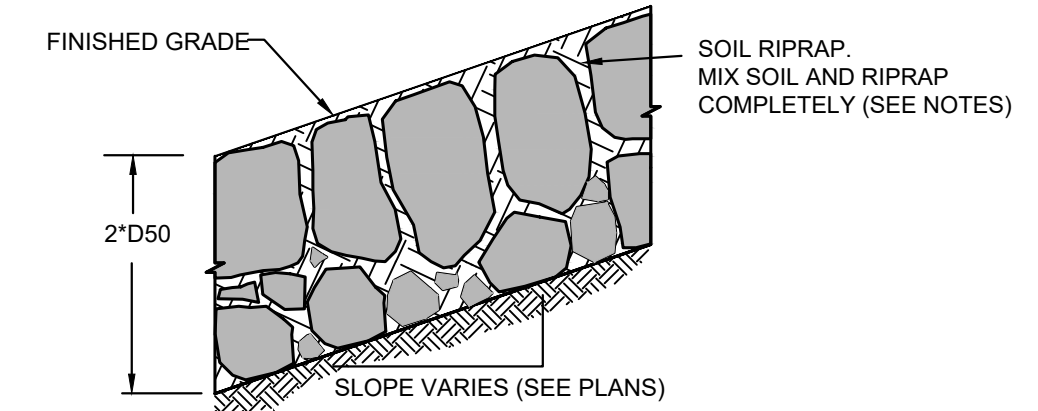
RIPRAP NOTES:

- WHERE "SOIL RIPRAP" IS DESIGNATED ON THE CONTRACT DRAWINGS, RIPRAP VOIDS ARE TO BE FILLED WITH APPROVED FILL. THE RIPRAP SHALL BE PRE-MIXED WITH THE APPROVED FILL AT THE FOLLOWING PROPORTIONS BY VOLUME: 65 PERCENT RIPRAP AND 35 PERCENT SOIL. THE SOIL USED FOR MIXING SHALL BE NATIVE TOPSOIL AND SHALL HAVE A MINIMUM FINES CONTENT OF 15 PERCENT. THE SOIL RIPRAP SHALL BE INSTALLED IN A MANNER THAT RESULTS IN A DENSE, INTERLOCKED LAYER OF RIPRAP WITH RIPRAP VOIDS FILLED COMPLETELY WITH SOIL. SEGREGATION OF MATERIALS SHALL BE AVOIDED AND IN NO CASE SHALL THE COMBINED MATERIAL CONSIST PRIMARILY OF SOIL; THE DENSITY AND INTERLOCKING NATURE OF RIPRAP IN THE MIXED MATERIAL SHALL ESSENTIALLY BE THE SAME AS IF THE RIPRAP WAS PLACED WITHOUT SOIL.
- PLACE ALL RIPRAP AND SOIL-RIPRAP TO RESULT IN SECURELY INTERLOCKED ROCK AT THE DESIGN THICKNESS AND GRADE. COMPACT AND ALL LEVEL TO ELIMINATE VOIDS AND ROCKS PROJECTING DESIGN ABOVE RIPRAP TOP GRADE.
- ALL SOIL RIPRAP THAT IS BURIED WITH TOPSOIL SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ANY TOPSOIL PLACEMENT.
- CRIMP OR TACKIFY MULCH OR USE APPROVED HYDROMULCH AS CALLED FOR IN THE PLANS AND SPECIFICATIONS.
- ELEVATION TOLERANCES FOR RIPRAP SHALL BE 0.10 FEET. THICKNESS OF SOIL RIPRAP SHALL BE NO LESS THAN THICKNESS SHOWN AND NO MORE THAN 2-INCHES GREATER THAN THE THICKNESS SHOWN.

RIPRAP DESIGNATION	INTERMEDIATE ROCK DIMENSION (IN.)	PERCENT PASSING (%)	D50 (IN.)
TYPE VL	12	70-100	6
	9	50-70	
	6	35-50	
	2	2-10	
TYPE M	21	70-100	12
	18	50-70	
	12	35-50	
	4	2-10	
TYPE H	30	70-100	18
	24	50-70	
	18	35-50	
	6	2-10	



TYPICAL SECTION - MIXED SIZE RIPRAP



TYPICAL SECTION - SOIL RIPRAP



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ENGINEER'S STATEMENT

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PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMLEY
COLORADO P.E. #1000000000
FOR AND ON BEHALF OF JR ENGINEERING

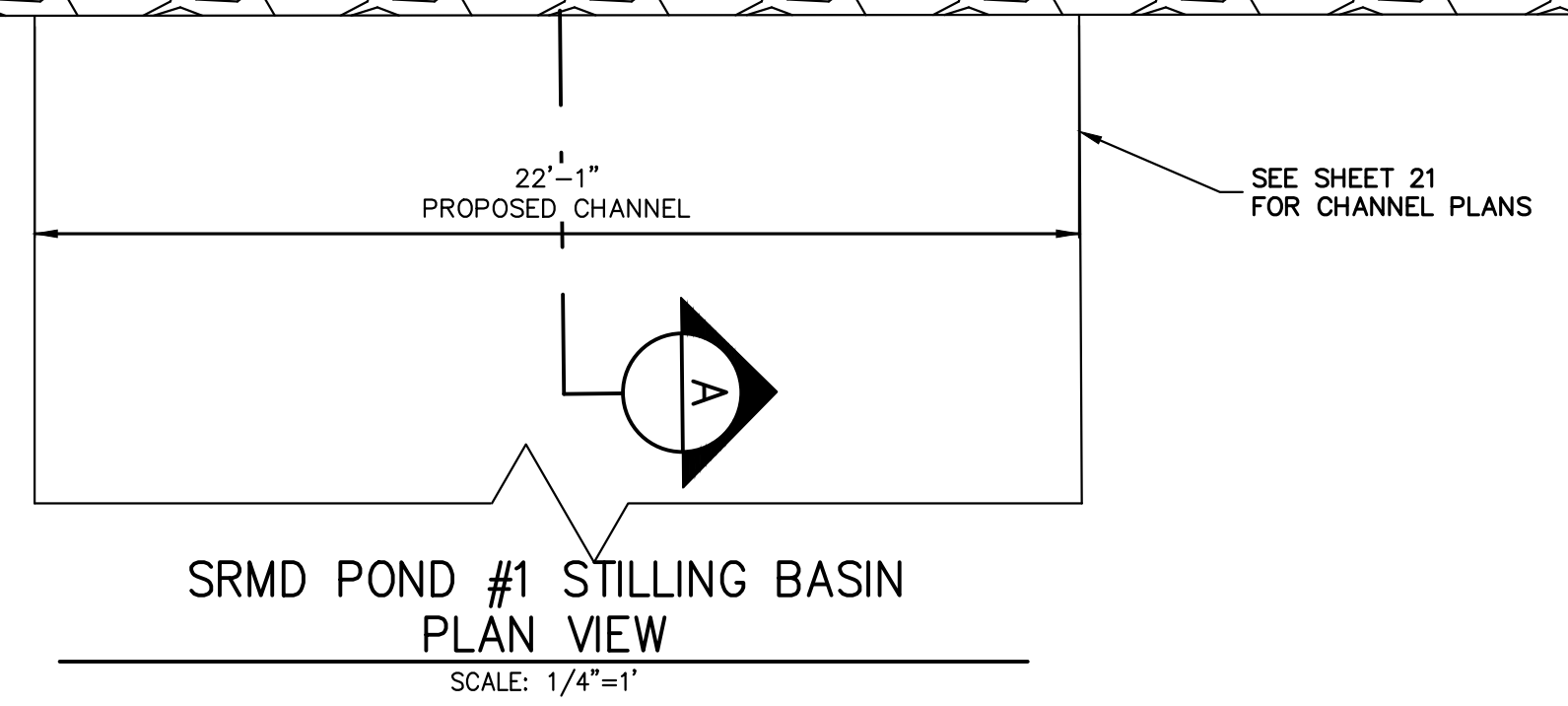
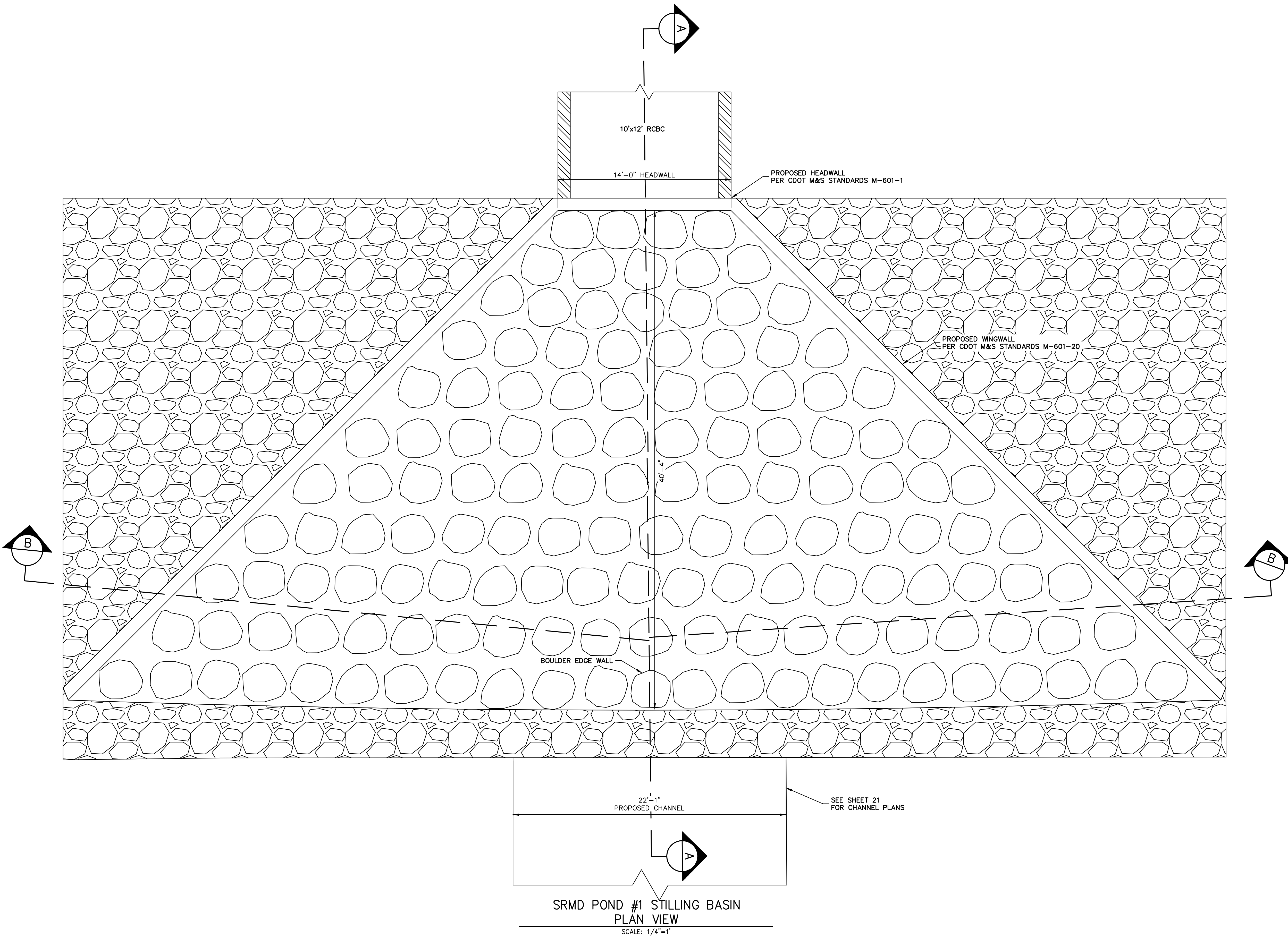
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PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

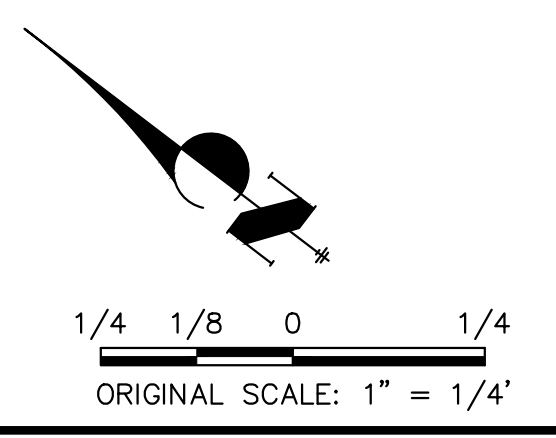
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A Westman Company
Central 303-740-0888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION				
				H-SCALE	V-SCALE	DATE	DESIGNED BY
		1"=50'	VARIES	1/23/23	DJV	DJV	DJV

SAND CREEK RESTORATION
POND PLANS



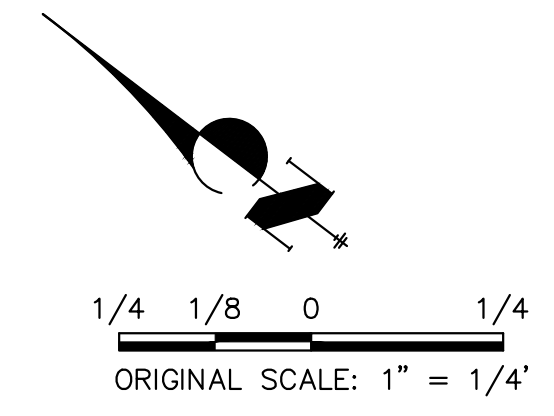
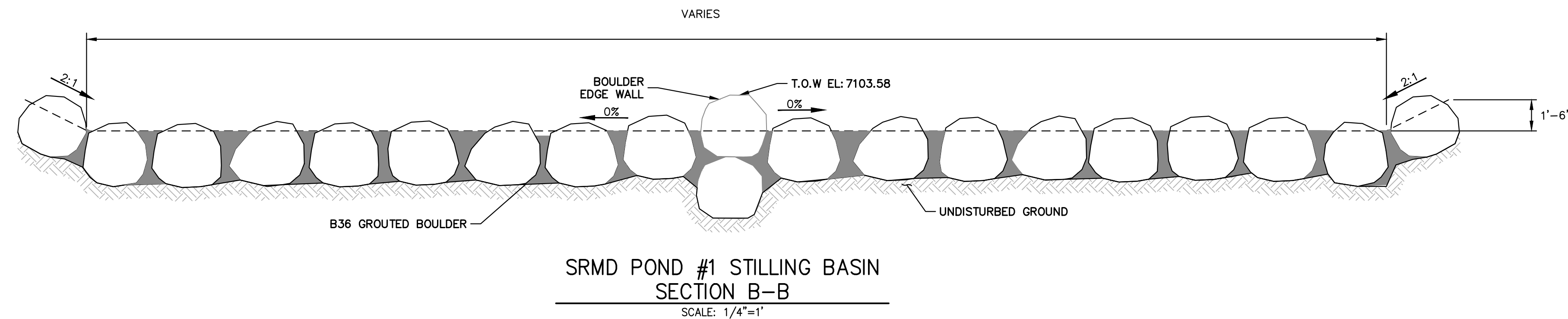
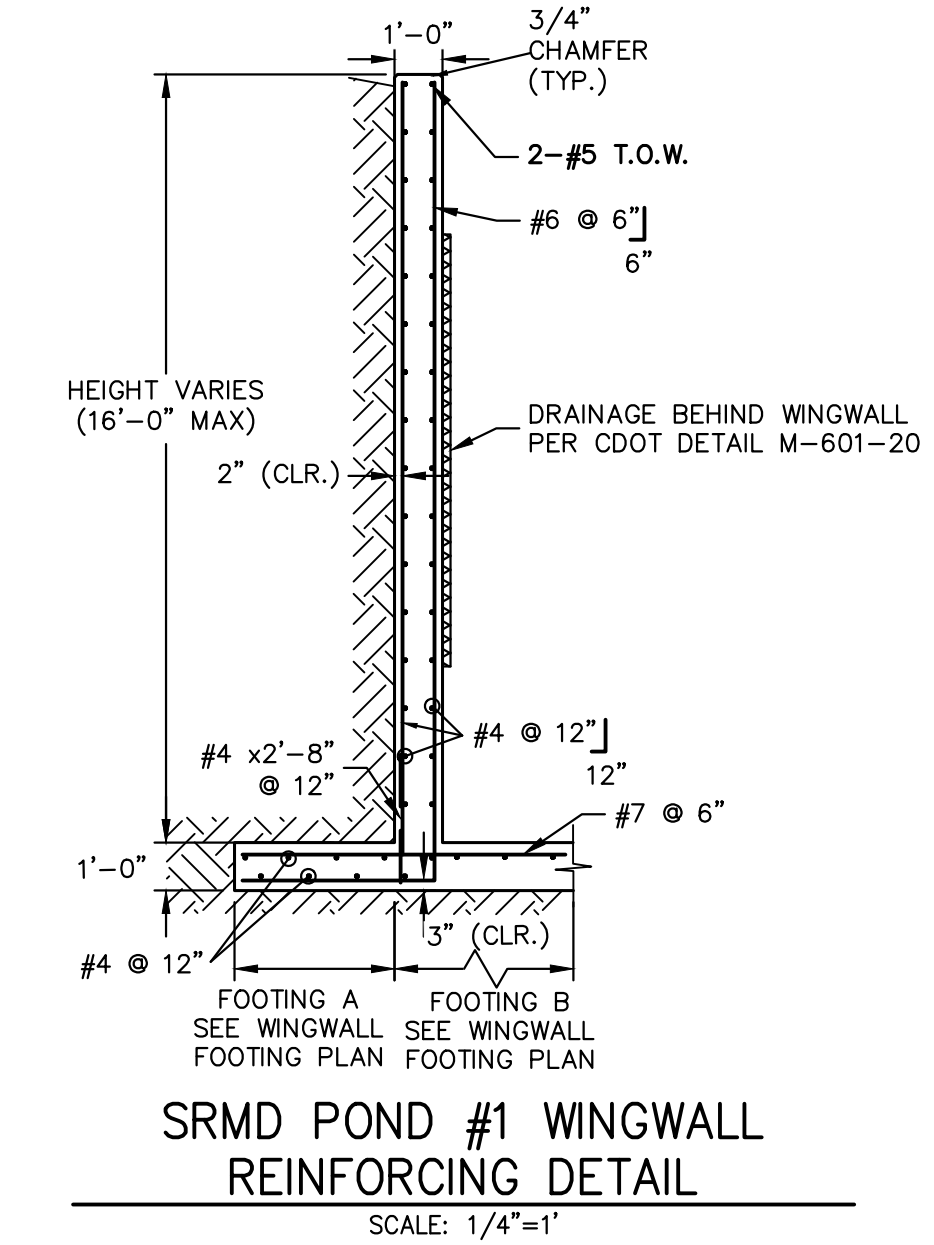
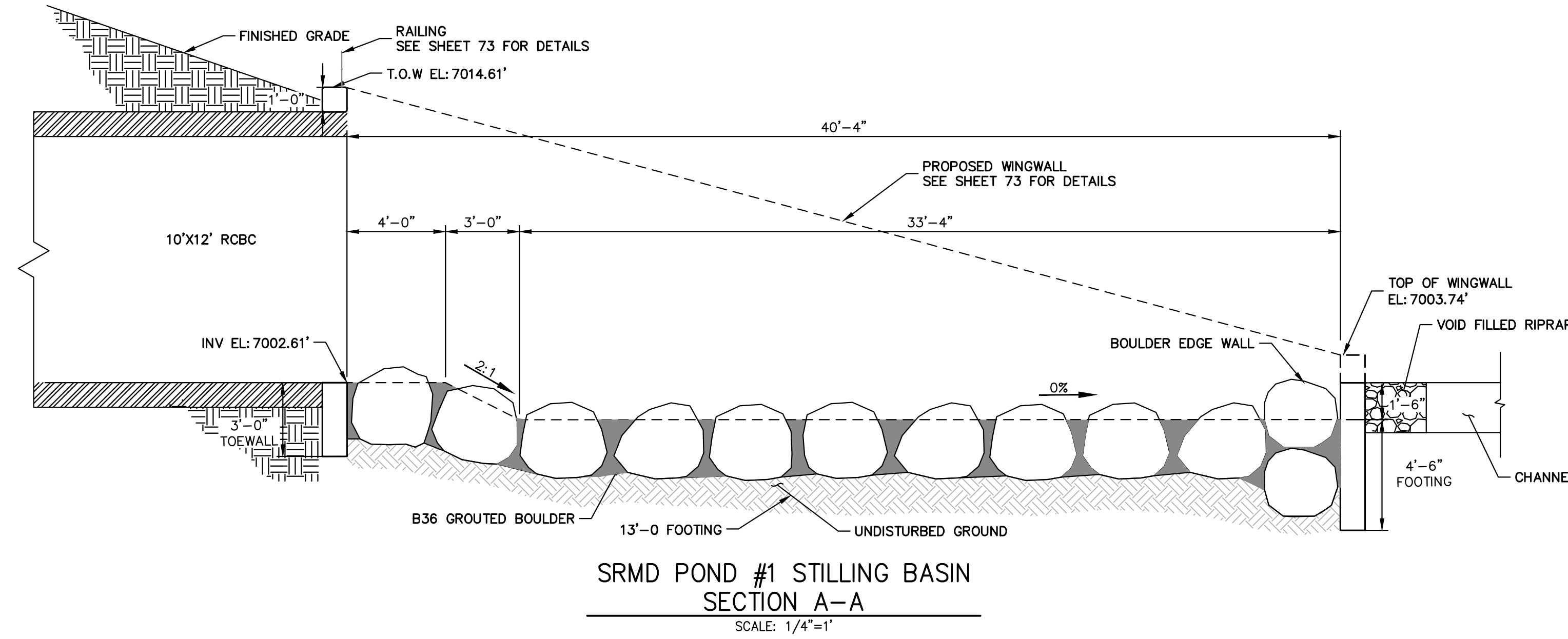
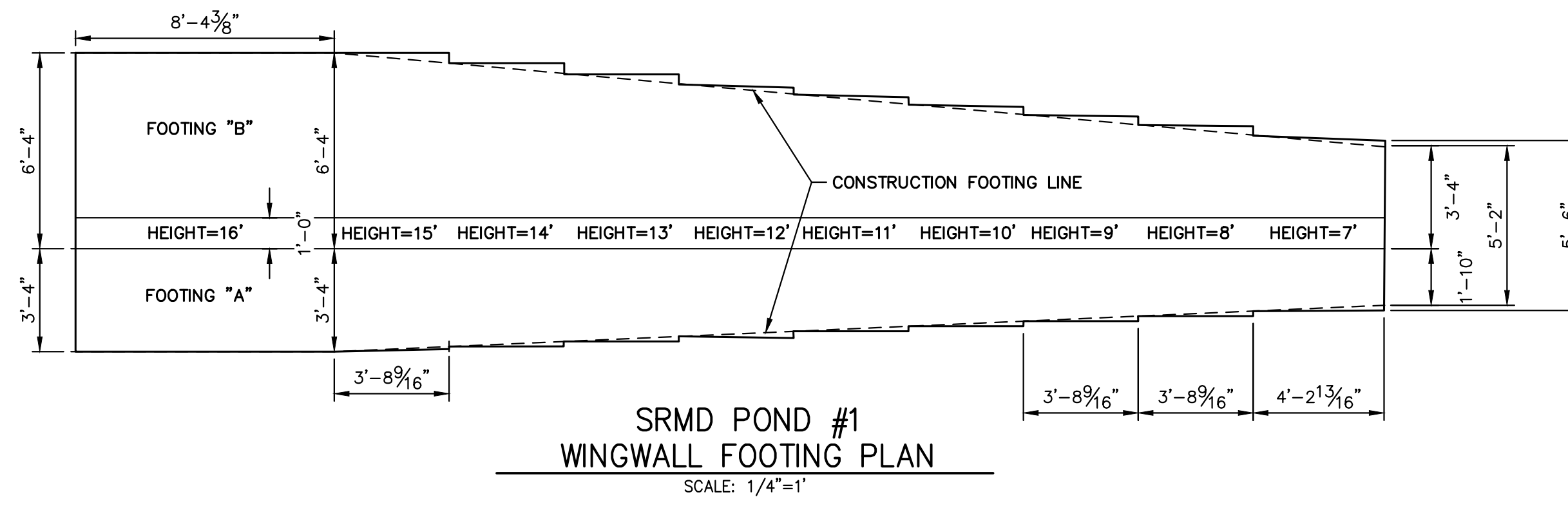
SRMD POND #1 STILLING BASIN
PLAN VIEW
SCALE: 1/4"=1'



ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
 MIKE A. BRAMLEY
 COLORADO P.E. 30112
 FOR AND ON BEHALF OF J.R. ENGINEERING, LLC

SAND CREEK RESTORATION	POND PLANS	SHEET 48 OF 111	JOB NO. 25188.04	BY	DATE
				NO.	REVISION
				1/4"=1"	1/23/23
				1/4"=1"	1/23/23
				DESIGNED BY	DJV
				DRAWN BY	NEO
				CHECKED BY	
PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024				UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE NOT TO BE REPRODUCED, COPIED, OR OTHERWISE USED WITHOUT WRITTEN AUTHORIZATION.	
J.R. ENGINEERING A Westman Company Centennial 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com					

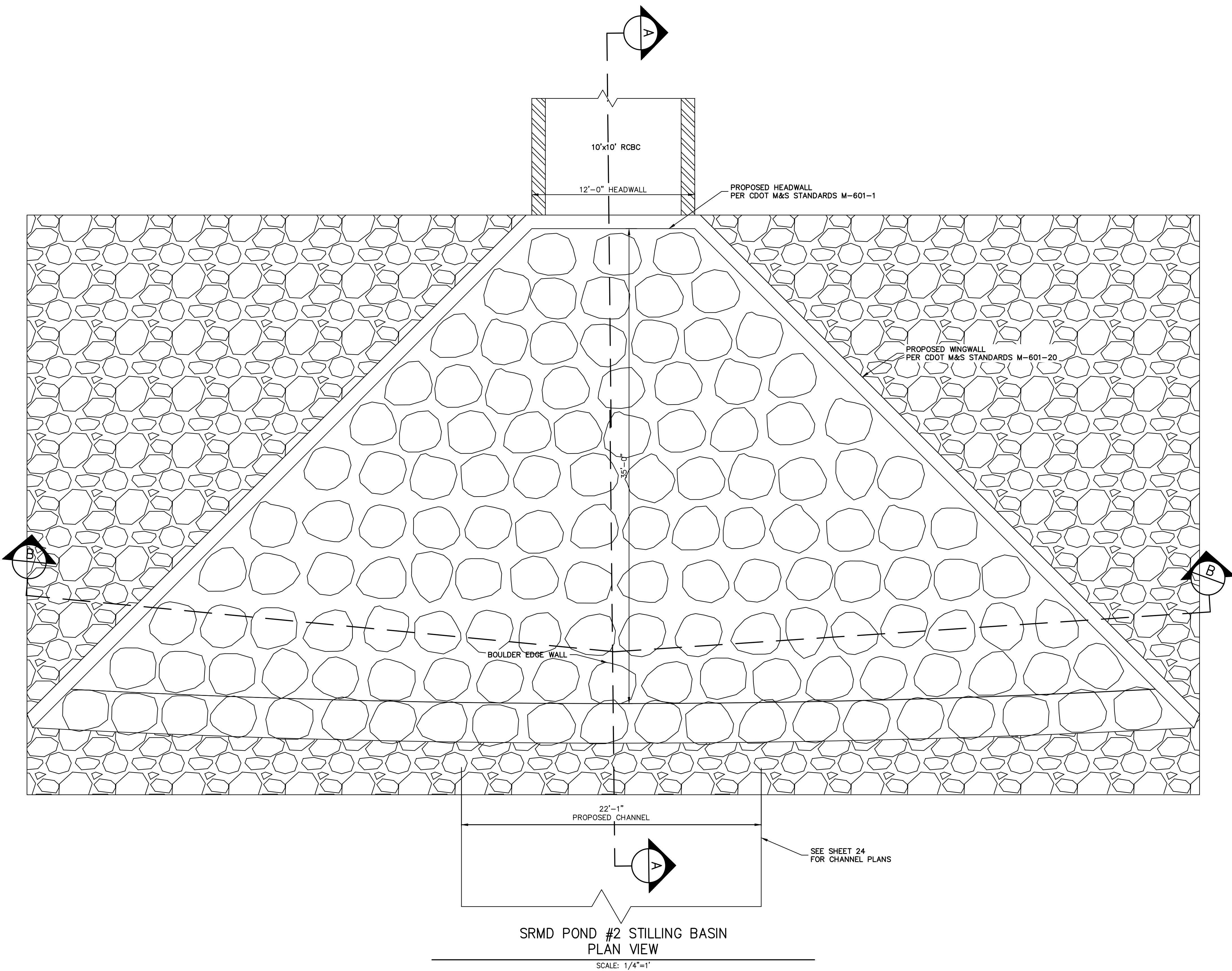
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ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
 PRELIMINARY
 NOT FOR
 CONSTRUCTION
 MIKE A. BRAMBLE
 COLORADO P.E. 30112
 FOR AND ON BEHALF OF J.R. ENGINEERING, LLC

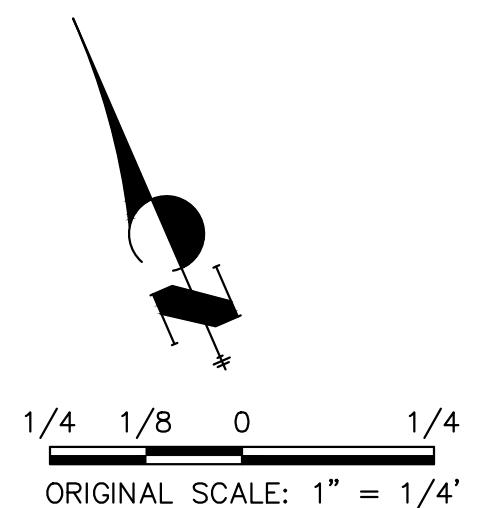
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.	PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	J.R. ENGINEERING A Westman Company Central 303-740-9888 • Colorado Springs 719-588-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE	
			No.	REVISION	
H-SCALE	1/4"=1'	DESIGNED BY	DJV	DRAWN BY	NEO
V-SCALE	N/A	CHECKED BY			
DATE	1/23/23				
SAND CREEK RESTORATION		POND PLANS			
SHEET 49 OF 111		JOB NO. 25188.04			

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SRMD POND #2 STILLING BASIN
PLAN VIEW

SCALE: 1/4"=1'



ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
 PRELIMINARY
 NOT FOR
 CONSTRUCTION
 MIKE A. BRAMLEY
 COLORADO P.E. 30000
 FOR AND ON BEHALF OF J.R. ENGINEERING, LLC

BY	DATE	NO.	REVISION

H-SCALE	1/4"=1"
V-SCALE	N/A
DATE	1/23/23
DESIGNED BY	DJV
DRAWN BY	NEO
CHECKED BY	

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

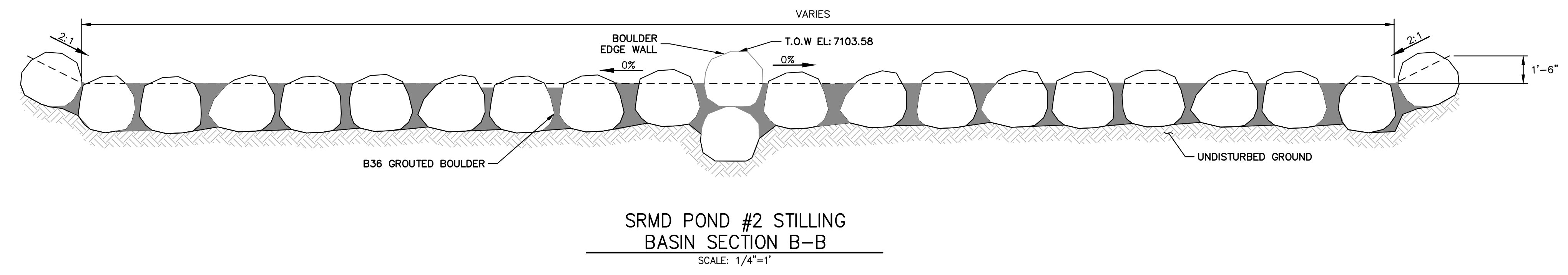
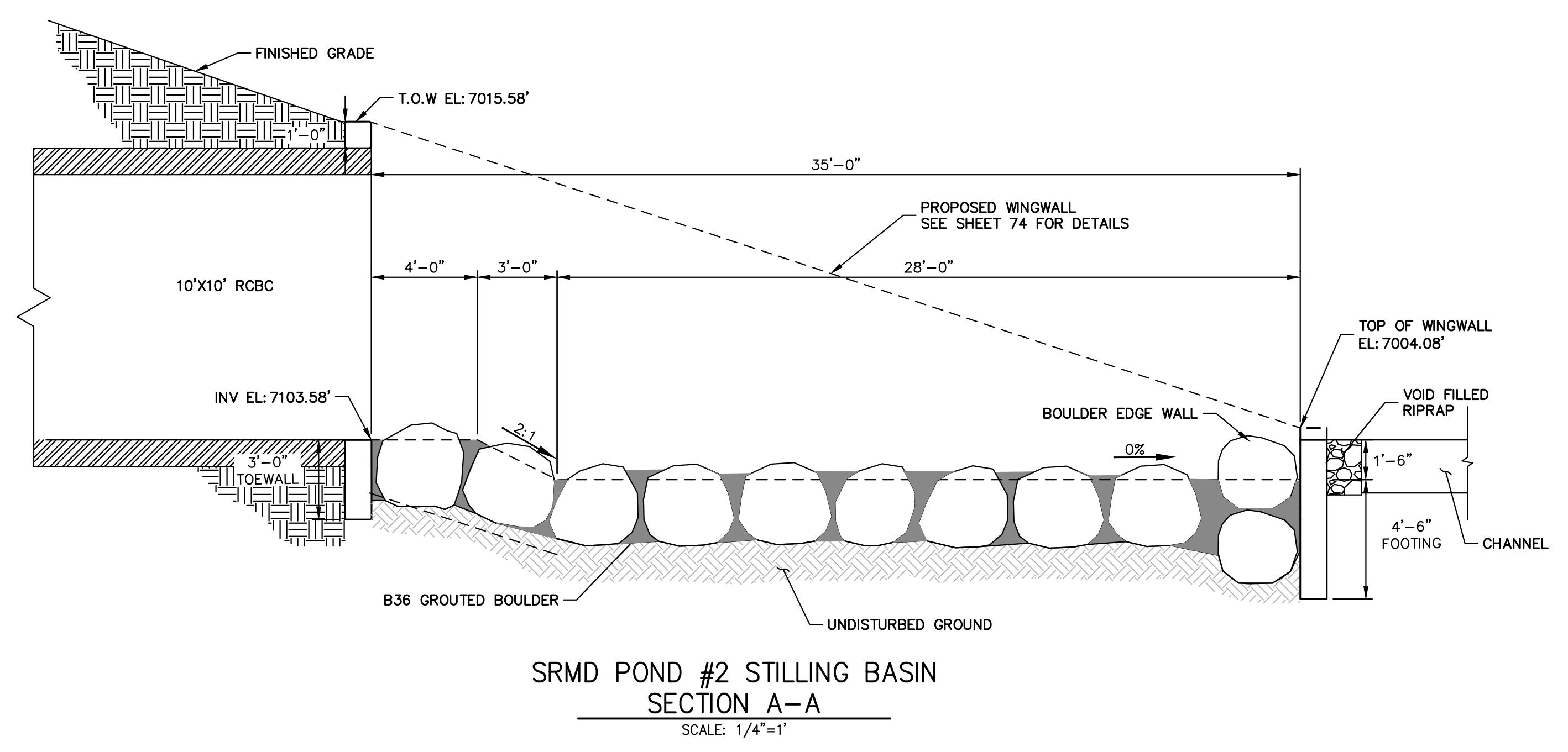
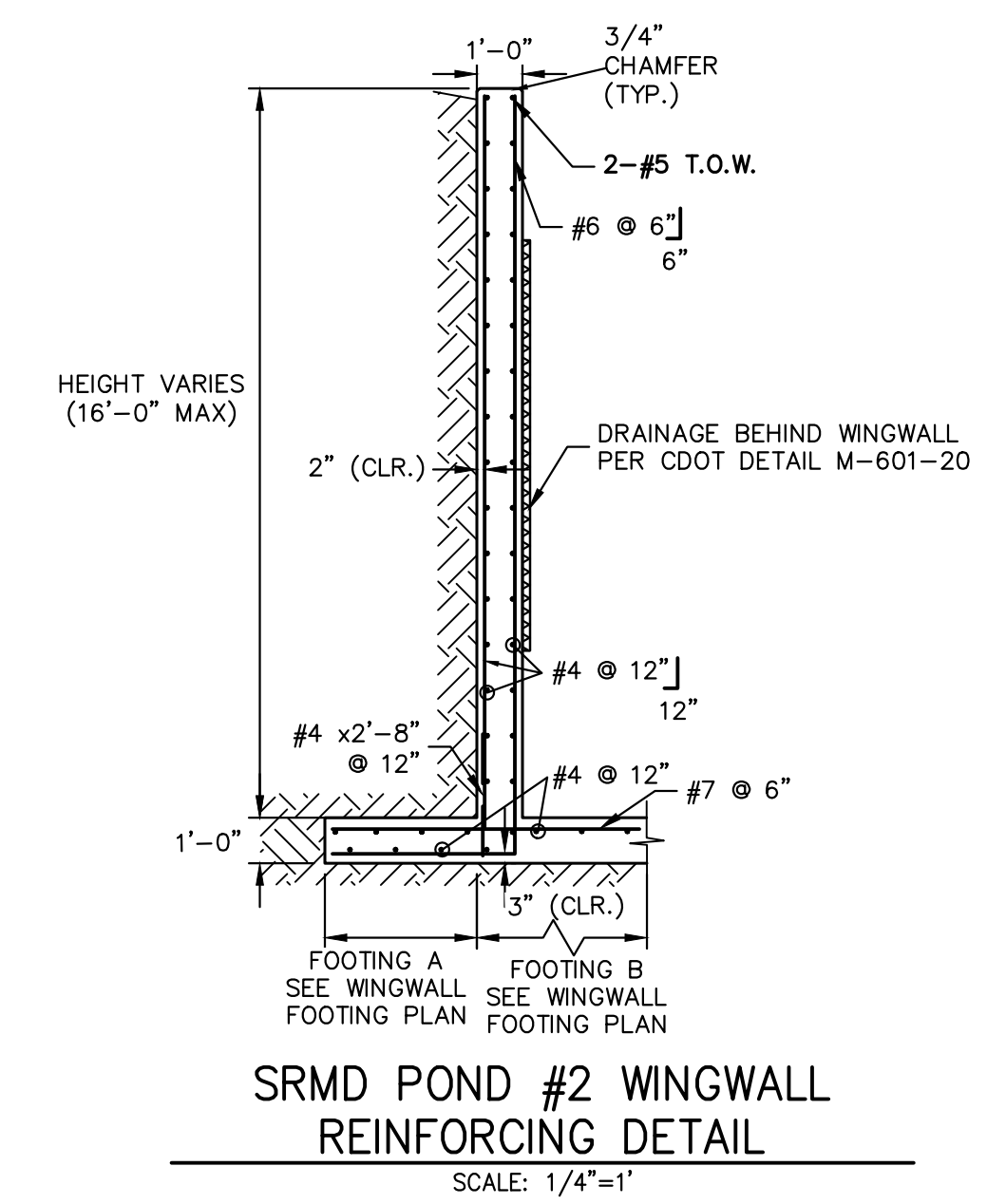
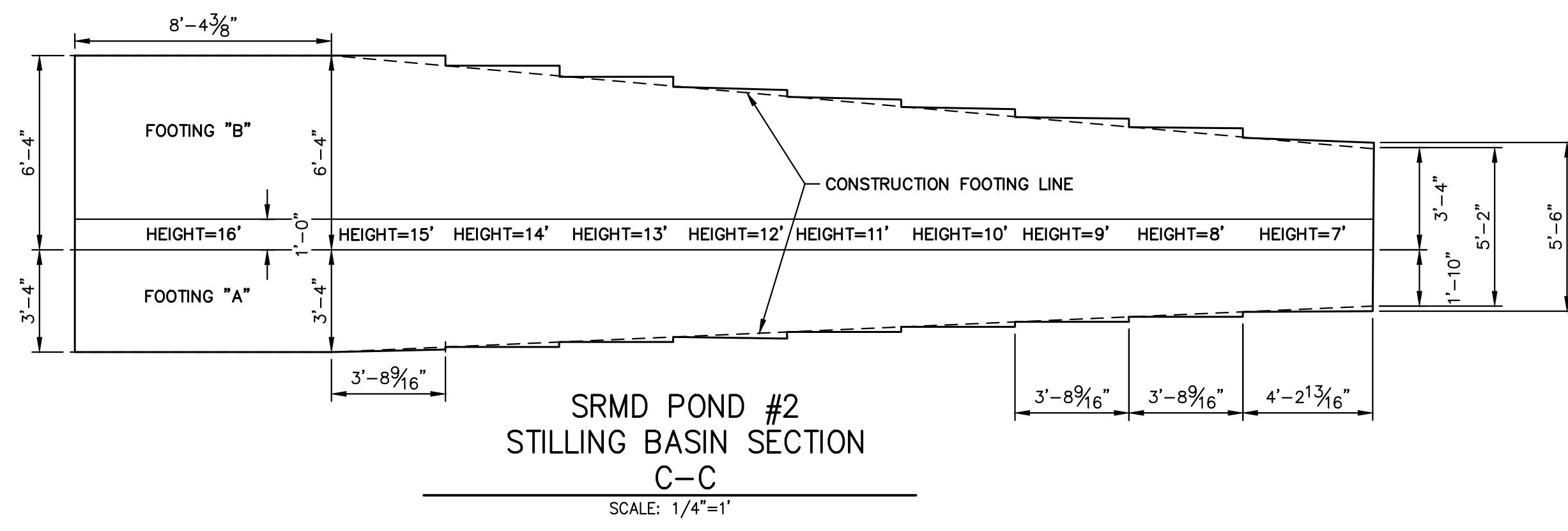
PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

J.R. ENGINEERING
 A Westman Company

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SAND CREEK RESTORATION
 POND PLANS
 SHEET 50 OF 111
 JOB NO. 25188.04

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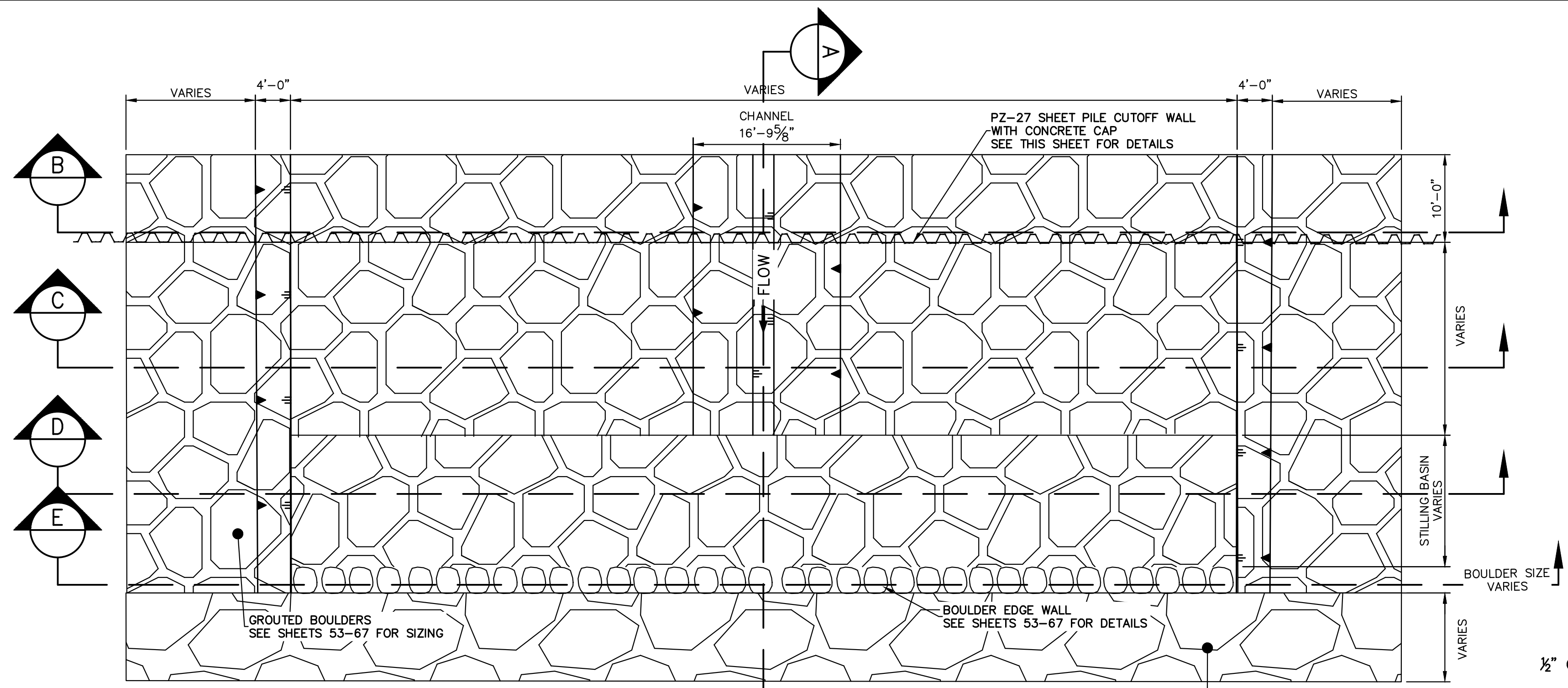
ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY
NOT FOR
CONSTRUCTION

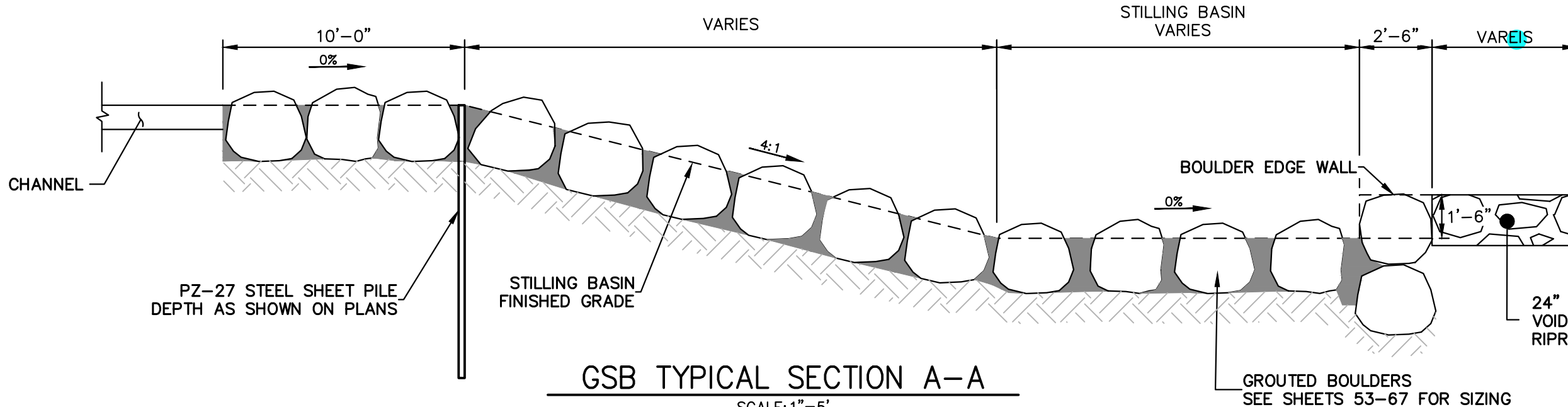
MIKE A. BRAMBLE
 COLORADO P.E. 30111
 FOR AND ON BEHALF OF J.R. ENGINEERING, LLC

SAND CREEK RESTORATION	POND PLANS	SHEET 51 OF 111 JOB NO. 25188.04	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION. PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024
BY DATE	No. REVISION	H-SCALE 1/4"=1" V-SCALE N/A DATE 1/23/23 DESIGNED BY DJV DRAWN BY NEO CHECKED BY	J.R. ENGINEERING A Westman Company Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com

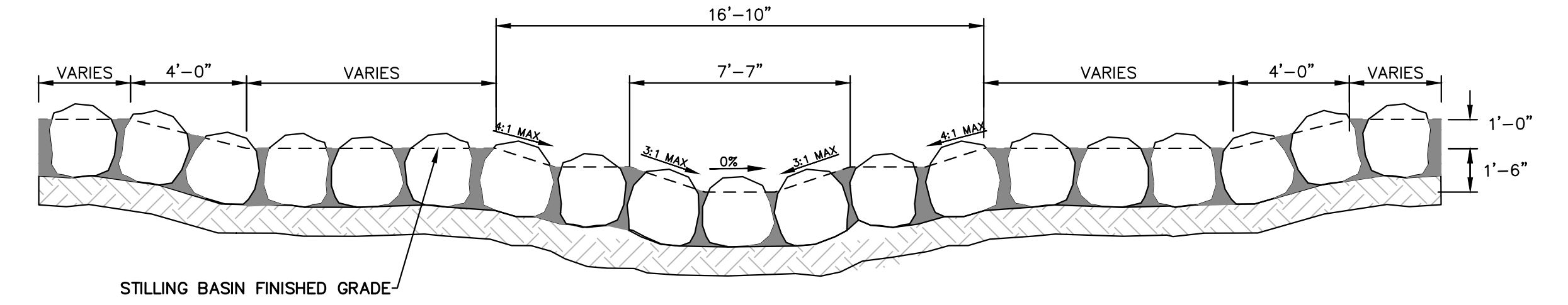
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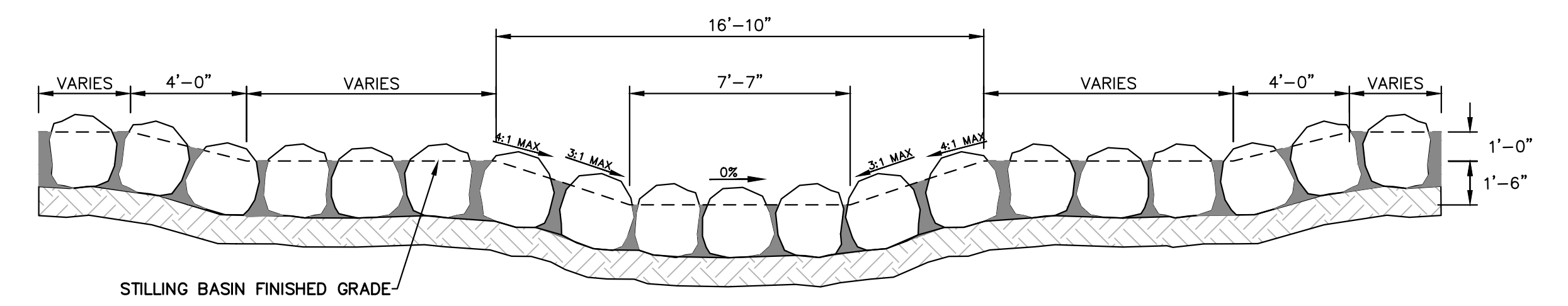
GSB TYPICAL SECTION PLAN VIEW
SCALE: 1"=10'



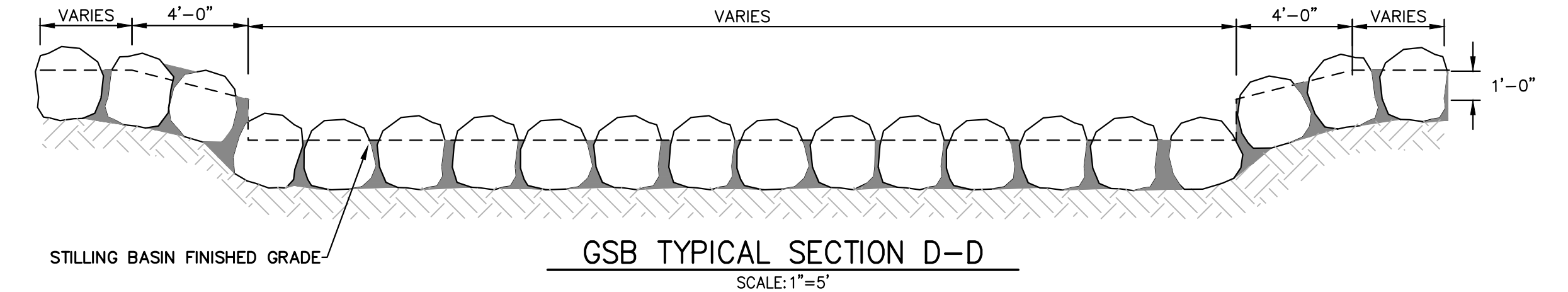
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SCALE: 1"=5'



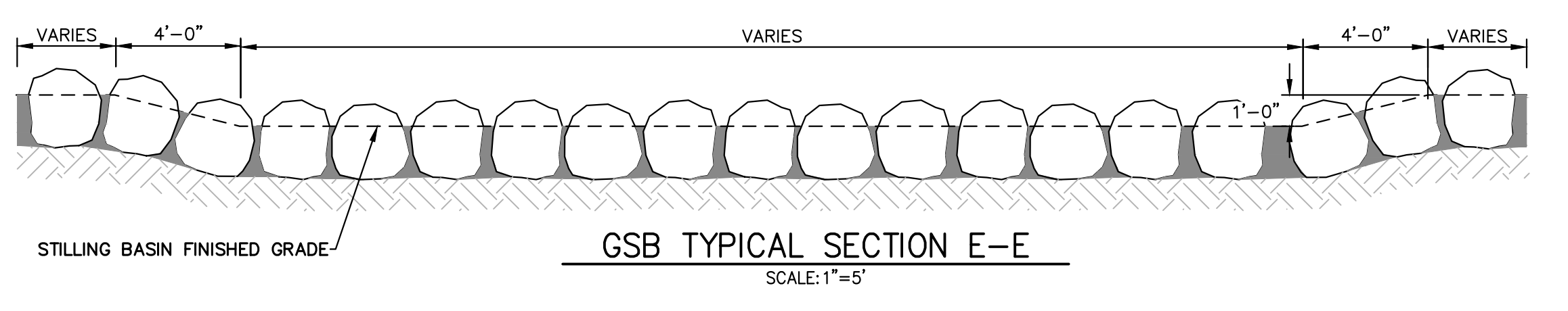
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SCALE: 1"=5'



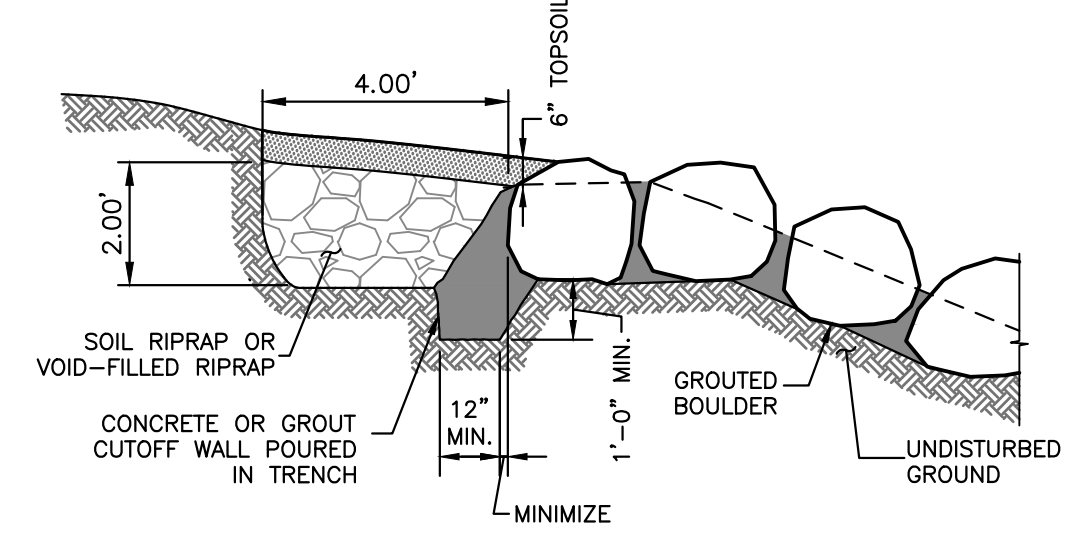
GSB TYPICAL SECTION C-C
SCALE: 1"=5'



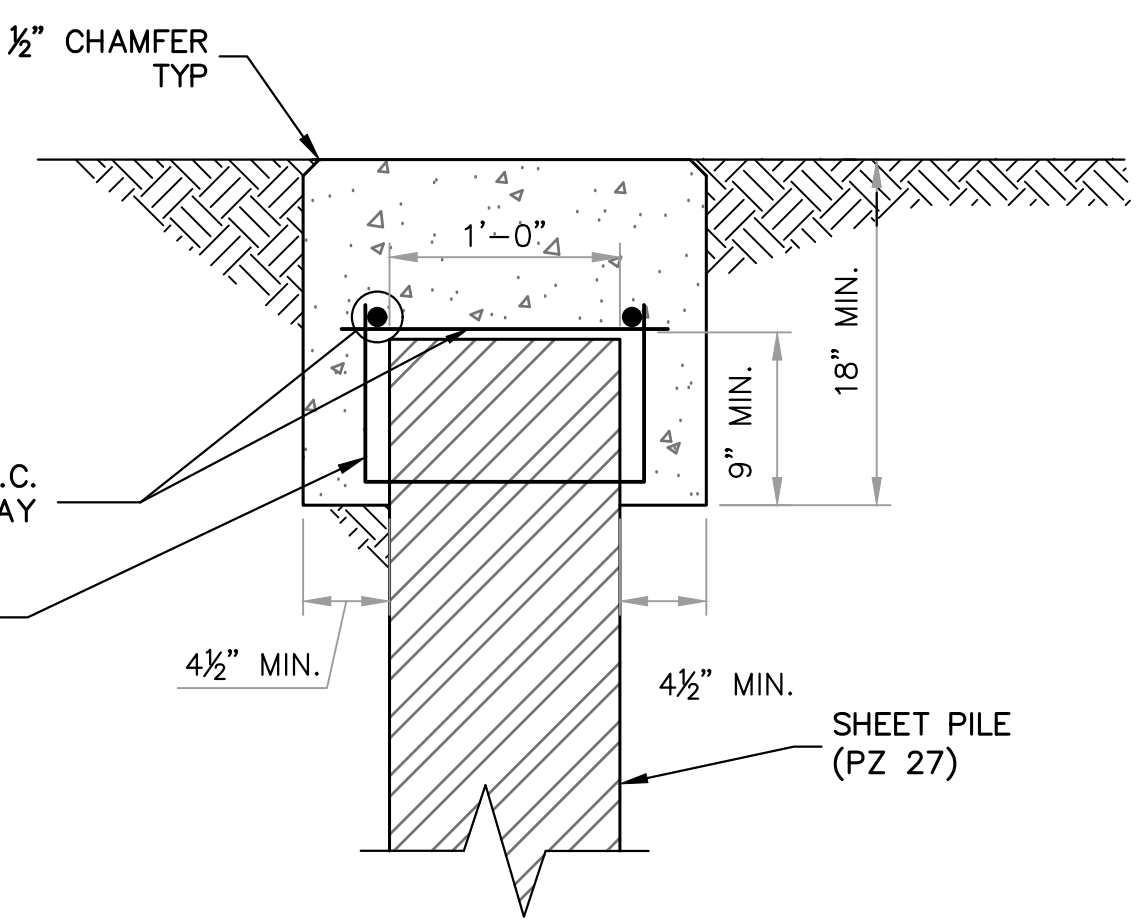
GSB TYPICAL SECTION D-D
SCALE: 1"=5'



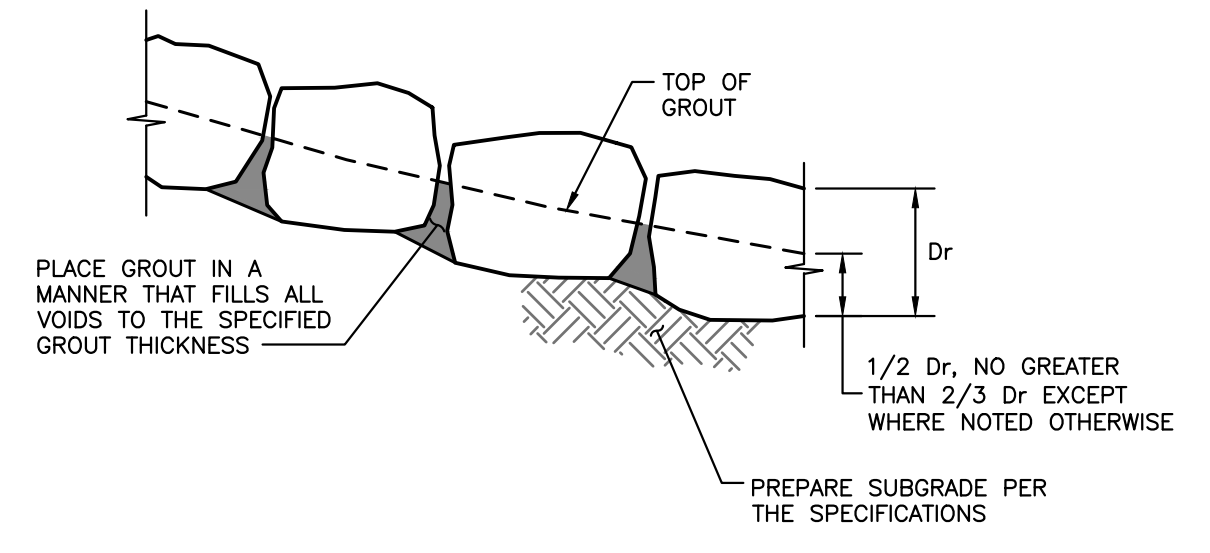
GSB TYPICAL SECTION E-E
SCALE: 1"=5'



STRUCTURE EDGE WALL DETAIL (GSB)
N.T.S.



CONCRETE SHEET PILE CAP
N.T.S.

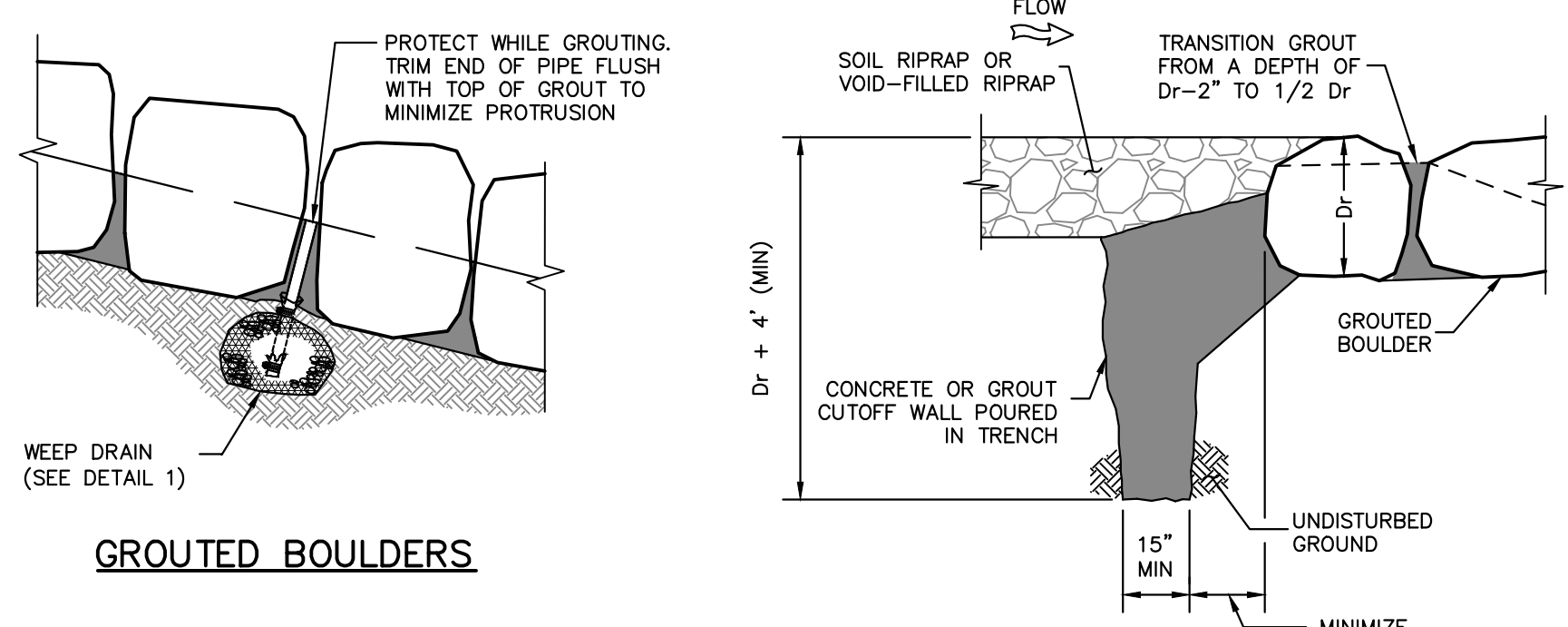


GROUTED BOULDER PLACEMENT DETAIL
N.T.S.

BOULDER PLACEMENT NOTES:
1. PLACE BOULDERS WITH THE REQUIRED BOULDER HEIGHT VERTICAL. PLACE BOULDERS AS TIGHTLY TOGETHER AS POSSIBLE (WITHOUT TOUCHING) WHILE PROVIDING ENOUGH ROOM BETWEEN THEM TO THOROUGHLY VIBRATE THE GROUT AND TO ENSURE NO GAPS IN THE GROUT. THE SMALL DIMENSION OF A 244 CAN BE USED AS A GUIDE TO CHECK MINIMUM SPACING.
2. BEFORE GROUTING, CLEAN ALL DIRT AND MATERIAL FROM ROCK THAT COULD PREVENT THE GROUT FROM BINDING TO THE ROCK. KEEP BOULDERS FROM TOUCHING. AVOID SLIDING BOULDERS AGAINST SUBGRADE TO PROPERLY POSITION.

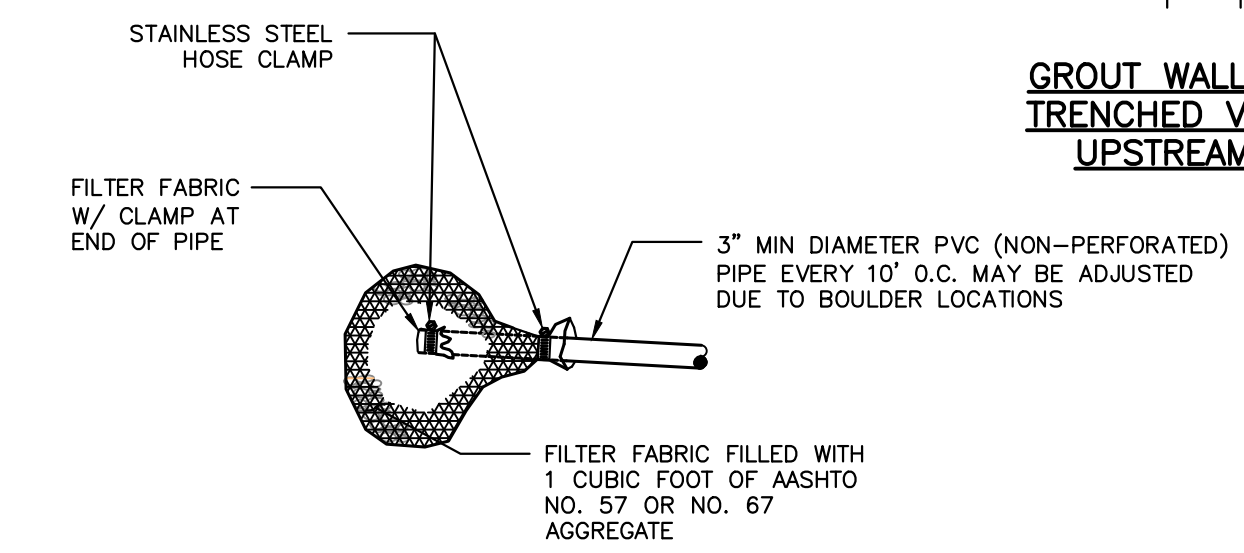
MATERIAL SPECIFICATIONS:
1. ALL GROUT SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH EQUAL TO 3200 PSI.
2. ONE CUBIC YARD OF GROUT SHALL HAVE A MINIMUM OF SIX (6) SACKS OF TYPE II PORTLAND CEMENT.
3. A MAXIMUM OF 25% TYPE F FLY ASH MAY BE SUBSTITUTED FOR THE PORTLAND CEMENT.
4. THE AGGREGATE SHALL BE COMPRISED OF 70% NATURAL SAND (FINES) AND 30% 3/4-INCH ROCK (COARSE).
5. THE GROUT SLUMP SHALL BE BETWEEN 4-INCHES TO 6-INCHES.
6. AIR ENTRAINMENT SHALL BE BETWEEN 5.5% AND 7.5%.
7. TO CONTROL SHRINKAGE AND CRACKING, 1.5 POUNDS OF FIBERMESH, OR EQUIVALENT, SHALL BE USED PER CUBIC YARD OF GROUT.
8. COLOR ADDITIVE IN REQUIRED AMOUNTS SHALL BE USED WHEN SO SPECIFIED BY CONTRACT.

GROUT PLACEMENT SPECIFICATIONS:
1. SPECIAL PROCEDURES SHALL BE REQUIRED FOR GROUT PLACEMENT WHEN THE AIR TEMPERATURES ARE LESS THAN 40°F OR GREATER THAN 90°F. CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FROM THE DESIGN ENGINEER OF THE PROCEDURES TO BE USED FOR PROTECTING THE GROUT.
2. GROUT SHALL BE DELIVERED BY MEANS OF A LOW PRESSURE (LESS THAN 10 PSI) GROUT PUMP USING A 2-INCH DIAMETER (MAXIMUM) NOZZLE.
3. FULL DEPTH PENETRATION OF THE GROUT INTO THE BOULDER VOIDS SHALL BE ACHIEVED BY INJECTING GROUT STARTING WITH THE NOZZLE NEAR THE BOTTOM AND RAISING IT AS THE GROUT FILLS, WHILE VIBRATING GROUT INTO PLACE USING A PENCIL VIBRATOR.
4. ALL GROUT BETWEEN BOULDERS SHALL BE TREATED WITH A BROOM FINISH.
5. AFTER GROUT PLACEMENT, EXPOSED BOULDER FACES SHALL BE CLEANED AND FREE OF GROUT.
6. ALL FINISHED GROUT SURFACES SHALL BE SPRAYED WITH A CLEAR LIQUID MEMBRANE CURING COMPOUND AS SPECIFIED IN ASTM C309.



GROUTED BOULDERS

GROUT WALL CONNECTION TRENCHED VERTICAL WALL UPSTREAM OF DROP



DETAIL 1 WEEP DRAIN

NOTE: INSTALL WEEP DRAINS FOR DROPS AND WALLS 5' AND GREATER AT 10' O.C. AT ELEVATIONS AND LOCATIONS SHOWN ON THE DRAWINGS

WEEP DRAINS

GROUTED BOULDER NOTES:

- BOULDERS USED FOR GROUTING SHOULD MEET ALL THE PROPERTIES OF ROCK FOR ORDINARY RIPRAP, AND ROCK OF UNIFORM SIZE SHOULD BE USED.
- ROCK SHALL BE HARD, DURABLE, AND FREE FROM CRACKS, OVERBURDEN, SHALE, AND ORGANIC MATTER.
- GROUTED BOULDERS SHALL BE PLACED DIRECTLY ON STABILIZED, COMPACTED SUBGRADE WITHOUT GRANULAR BEDDING.
- THE TOP ONE-THIRD OF THE BOULDERS SHALL BE LEFT UNGROUTED AND EXPOSED.
- ROCK HAVING A MINIMUM SPECIFIC GRAVITY OF 2.65 IS PREFERRED; HOWEVER, IN NO CASE SHALL ROCK HAVE A SPECIFIC GRAVITY LESS THAN 2.50.
- WEEP HOLES SHALL BE PROVIDED AT THE CHANNEL SLOPES AND CHANNEL DROPS AS SHOWN TO REDUCE UPLIFT FORCES ON THE GROUTED CHANNEL LINING.
- PLACEMENT AND GROUTING OF BOULDERS SHALL GENERALLY CONFORM TO THE SPECIFICATIONS AND DETAILS FOR GROUTED BOULDER DROPS. SEE DETAILS AND NOTES FOR GROUTED BOULDER DROPS ON THIS SHEET.
- BOULDERS SHALL BE SET IN A STEPPED MANNER. BOULDERS SHALL NOT BE ORIENTED INTO A SMOOTH SLOPING FACE.
- BOULDERS SHALL BE GROUTED TO 3/8 THE ROCK HEIGHT.
- BOULDERS OF DIFFERENT SOURCES AND/OR COLORS SHALL BE MIXED WITH THE OTHER ROCK AND EVENLY DISPersed THROUGHOUT THE PROJECT TO AVOID HAVING AREAS OF NON-UNIFORMITY.
- THE BOULDER SIZES SHOWN ON THE PLANS ARE MINIMUM DIMENSIONS. LARGER ROCK MAY BE SUBSTITUTED AS LONG AS THE TOP OF BOULDER ELEVATIONS SHOWN ON THE PLANS ARE MET AND THE MINIMUM OVER-EXCAVATION REQUIREMENTS ARE MET AT EACH BOULDER LOCATION.

ENGINEER'S STATEMENT

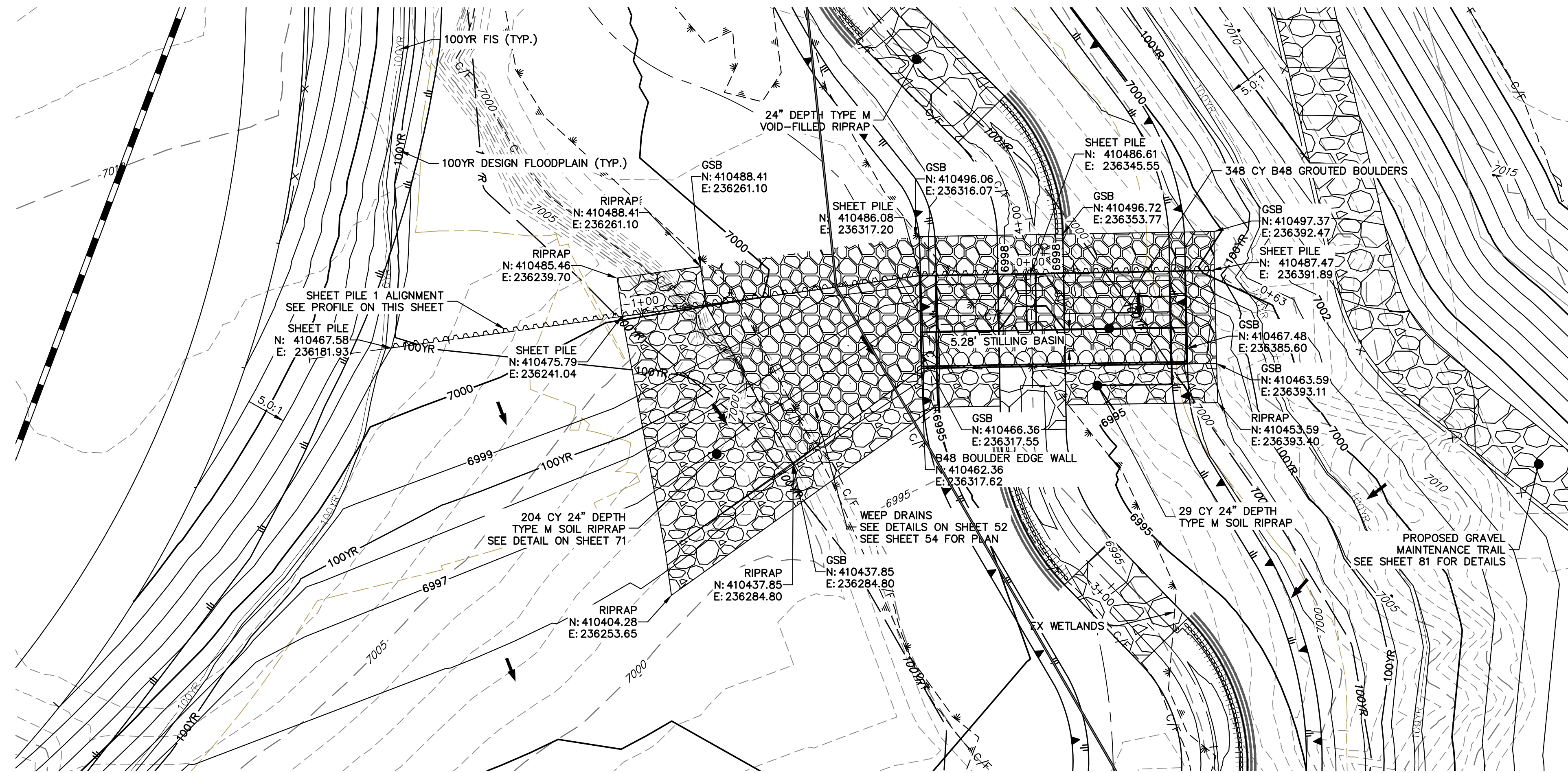
PREPARED UNDER MY DIRECT SUPERVISION

PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMLEY
COLORADO P.E. 30110
FOR AND ON BEHALF OF JR ENGINEERING, LLC

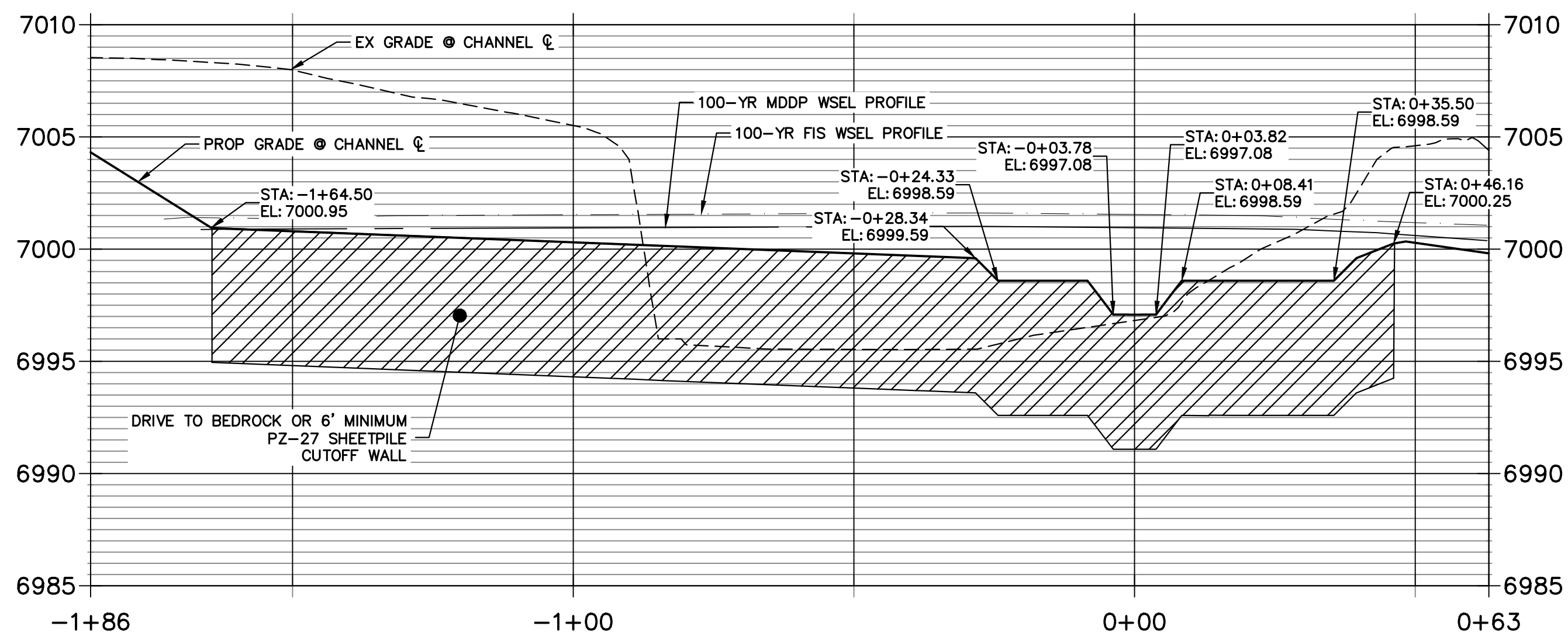


PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024			
	J.R. ENGINEERING A Westman Company Central 303-740-8888 • Colorado Springs 719-588-2583 Fort Collins 970-491-9888 • www.jrengineering.com			
BY	DATE			
	DATE			
REVISION	NO.			
	NO.			
AS SHOWN	H-SCALE			
	V-SCALE			
AS SHOWN	DATE	1/23/23	DJV	NEO
	DESIGNED BY			
DRAWN BY	CHECKED BY			
	CHECKED BY			
SAND CREEK RESTORATION	GSB DETAILS			
	SHEET 52 OF 111			
JOB NO. 25188.04				

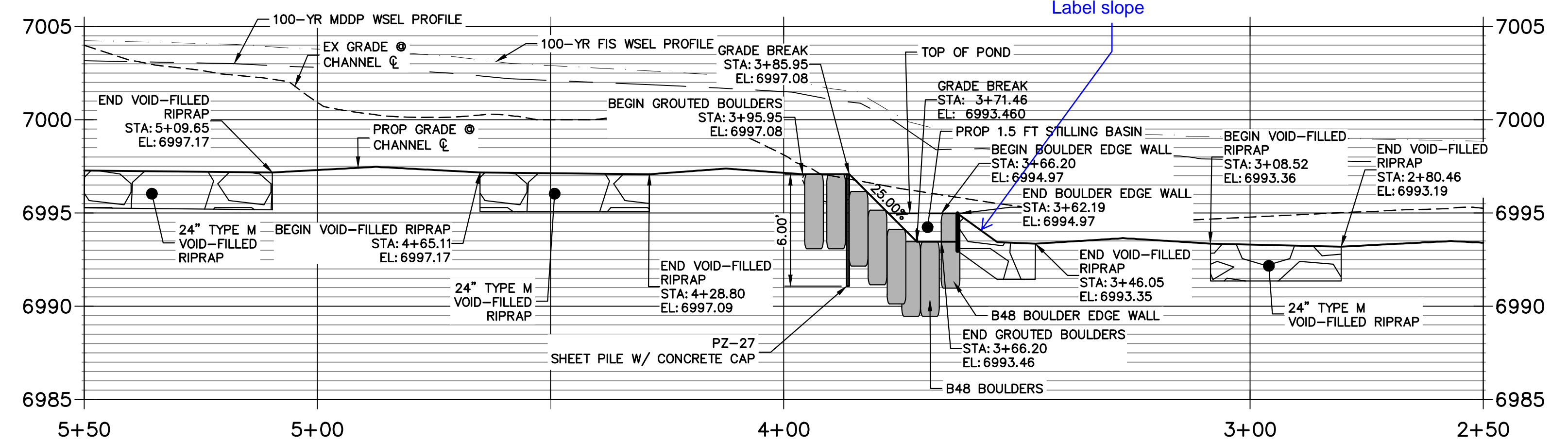


GRouted STEPPED BOULDER DROP #1 DETAIL
PLAN VIEW
 SCALE: 1"=20"

SHEET PILE 1 PROFILE
STA -1+85.99 TO 0+63.12

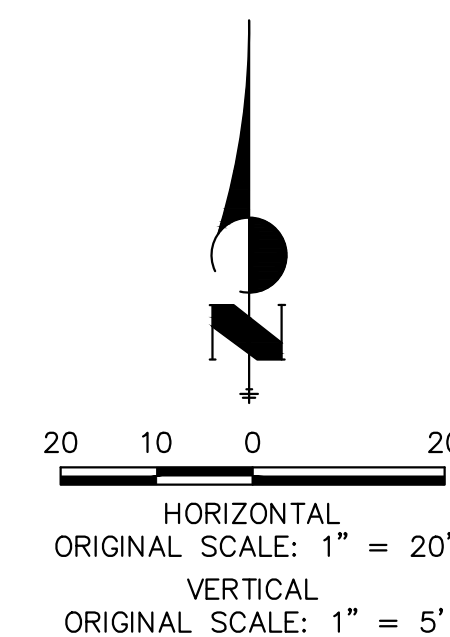


GSB DETAIL 1
STA 2+50.00 TO 5+50.00



NOTE

1. SEE TYPICAL GSB DETAILS ON SHEET 52
2. DRIVE SHEET PILE THROUGH BEDROCK OR MINIMUM OF 6 FEET.
3. SHEET PILE ELEVATIONS ARE AT TOP OF CONCRETE CAP.
4. NO GRADING OR CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY

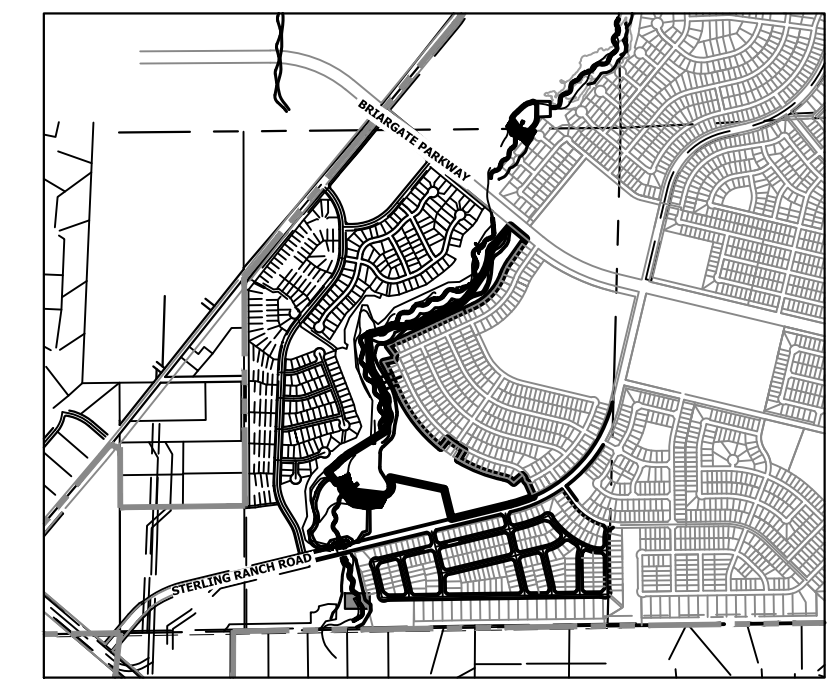


ENGINEER'S STATEMENT

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**PRELIMINARY
 NOT FOR
 CONSTRUCTION**

MIKE A. BRAMLEY
 COLORADO P.E. 30000
 FOR AND ON BEHALF OF JR ENGINEERING



KEY MAP
 SCALE: 1"=2000'

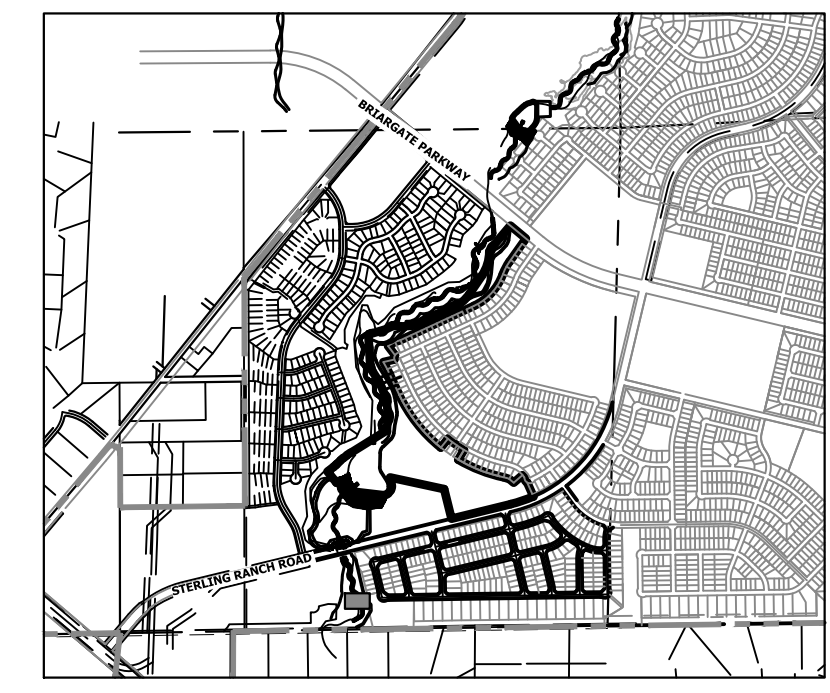
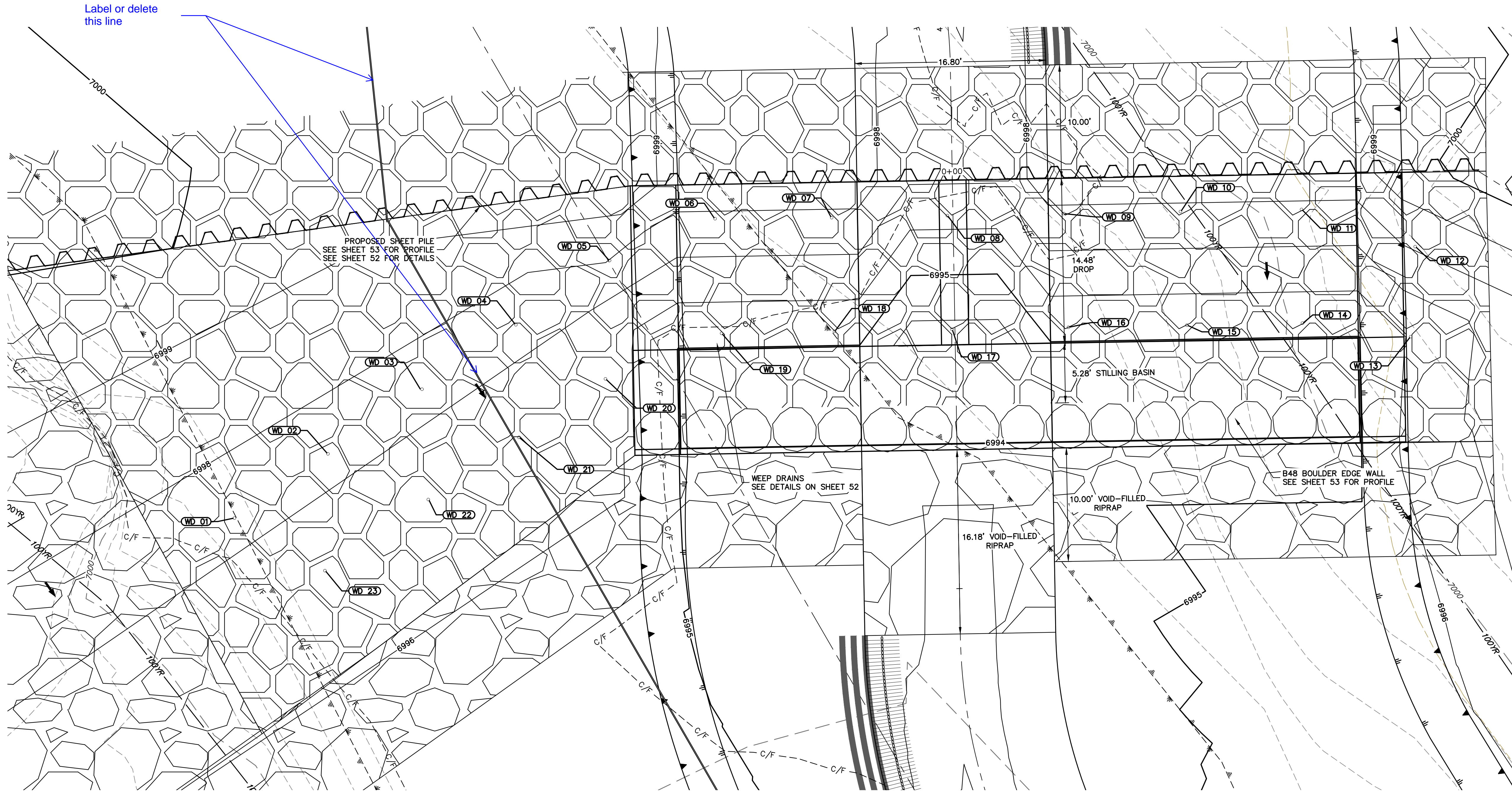
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE AS DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
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 COLORADO SPRINGS, CO 80903
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 A Westman Company
 Centennial 303-740-9888 • Colorado Springs 719-583-2583
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BY	DATE	REVISION

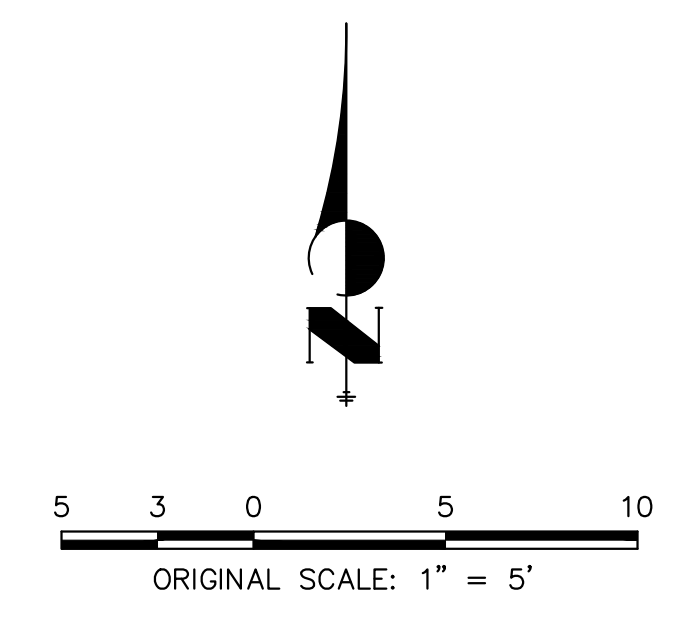
SAND CREEK RESTORATION
GSB DETAILS
 SHEET 53 OF 111
 JOB NO. 25188.04



GSB01 WEEP DRAINS PLAN VIEW
SCALE: 1"=5'

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 01	WEEP DRAIN	N: 410456.84 E: 236282.37	6997.36
WD 02	WEEP DRAIN	N: 410462.49 E: 236290.60	6997.44
WD 03	WEEP DRAIN	N: 410468.11 E: 236298.80	6997.46
WD 04	WEEP DRAIN	N: 410473.85 E: 236307.14	6997.46
WD 05	WEEP DRAIN	N: 410479.51 E: 236315.39	6997.97
WD 06	WEEP DRAIN	N: 410483.18 E: 236324.67	6997.84
WD 07	WEEP DRAIN	N: 410483.27 E: 236334.93	6997.81
WD 08	WEEP DRAIN	N: 410483.45 E: 236345.11	6996.30
WD 09	WEEP DRAIN	N: 410483.63 E: 236355.37	6997.81
WD 10	WEEP DRAIN	N: 410483.81 E: 236365.63	6997.81
WD 11	WEEP DRAIN	N: 410484.00 E: 236376.28	6997.81
WD 12	WEEP DRAIN	N: 410480.72 E: 236386.28	6998.09

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 13	WEEP DRAIN	N: 410472.80 E: 236385.88	6996.07
WD 14	WEEP DRAIN	N: 410473.99 E: 236378.36	6995.31
WD 15	WEEP DRAIN	N: 410473.81 E: 236366.19	6995.31
WD 16	WEEP DRAIN	N: 410473.63 E: 236355.77	6995.31
WD 17	WEEP DRAIN	N: 410473.45 E: 236345.51	6993.80
WD 18	WEEP DRAIN	N: 410473.27 E: 236335.18	6995.31
WD 19	WEEP DRAIN	N: 410473.10 E: 236325.24	6995.31
WD 20	WEEP DRAIN	N: 410469.09 E: 236315.02	6996.52
WD 21	WEEP DRAIN	N: 410463.95 E: 236307.41	6996.53
WD 22	WEEP DRAIN	N: 410458.47 E: 236299.43	6996.53
WD 23	WEEP DRAIN	N: 410452.21 E: 236290.33	6996.63



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE. THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
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2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
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J.R. ENGINEERING
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No.	REVISION	BY	DATE

H-SCALE	1"=5'	N/A	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
V-SCALE	1/23/23	DV	NEO			

SAND CREEK RESTORATION

GSB DETAILS

SHEET 54 OF 111

JOB NO. 25188.04



ENGINEER'S STATEMENT
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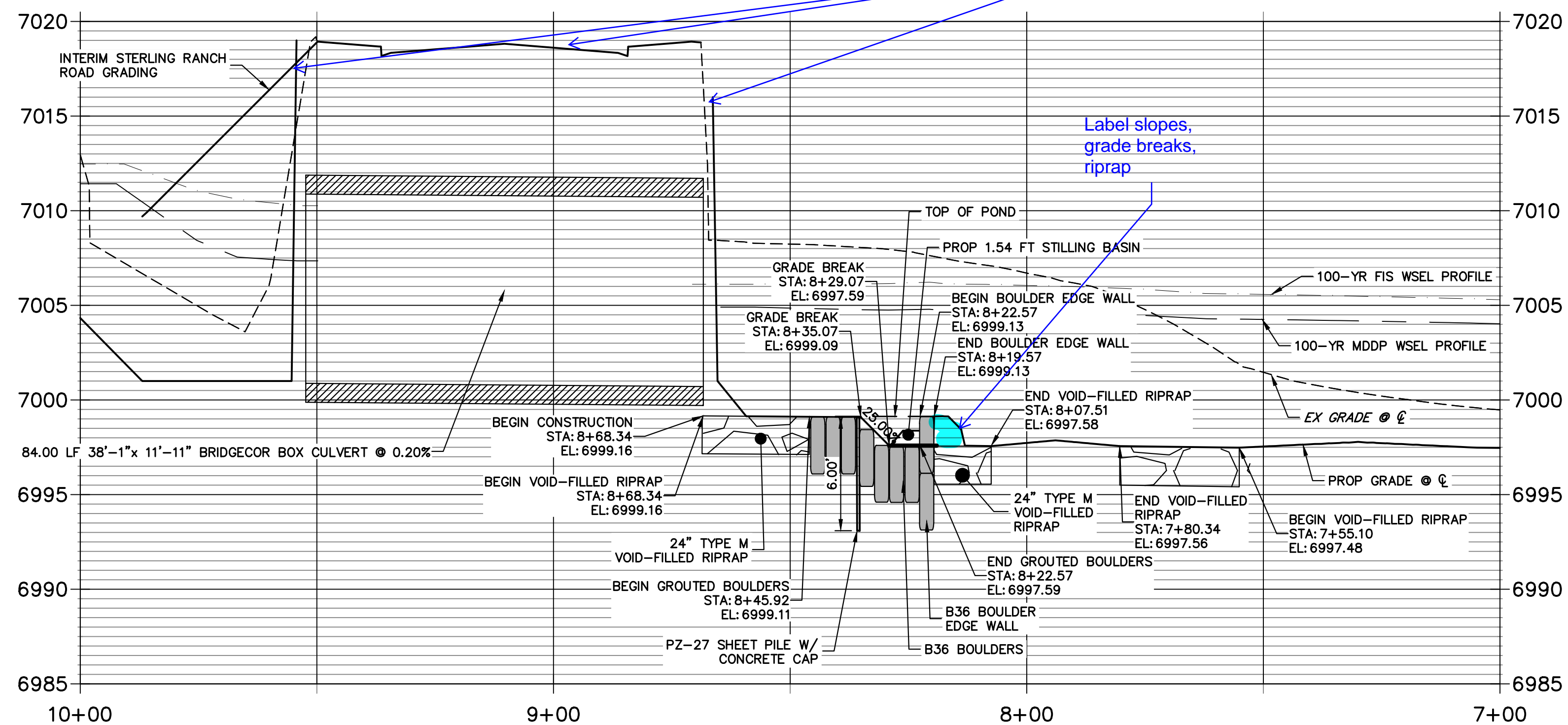
MIKE A. BRAMLEY
COLORADO P.E. 38004
FOR AND ON BEHALF OF JR ENGINEERING, LLC

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GRouted STEPPED BOULDER DROP #2 DETAIL
PLAN VIEW
SCALE: 1"=20'

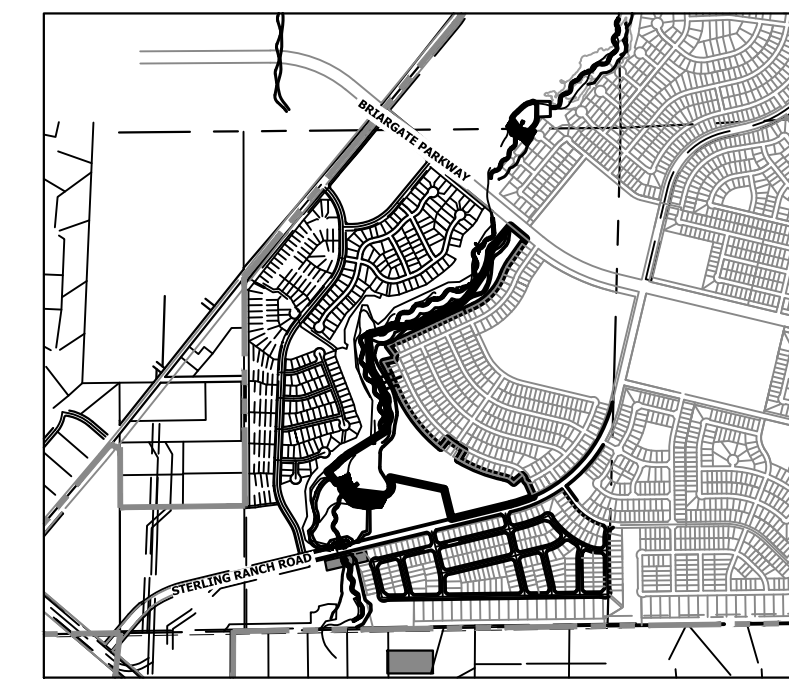
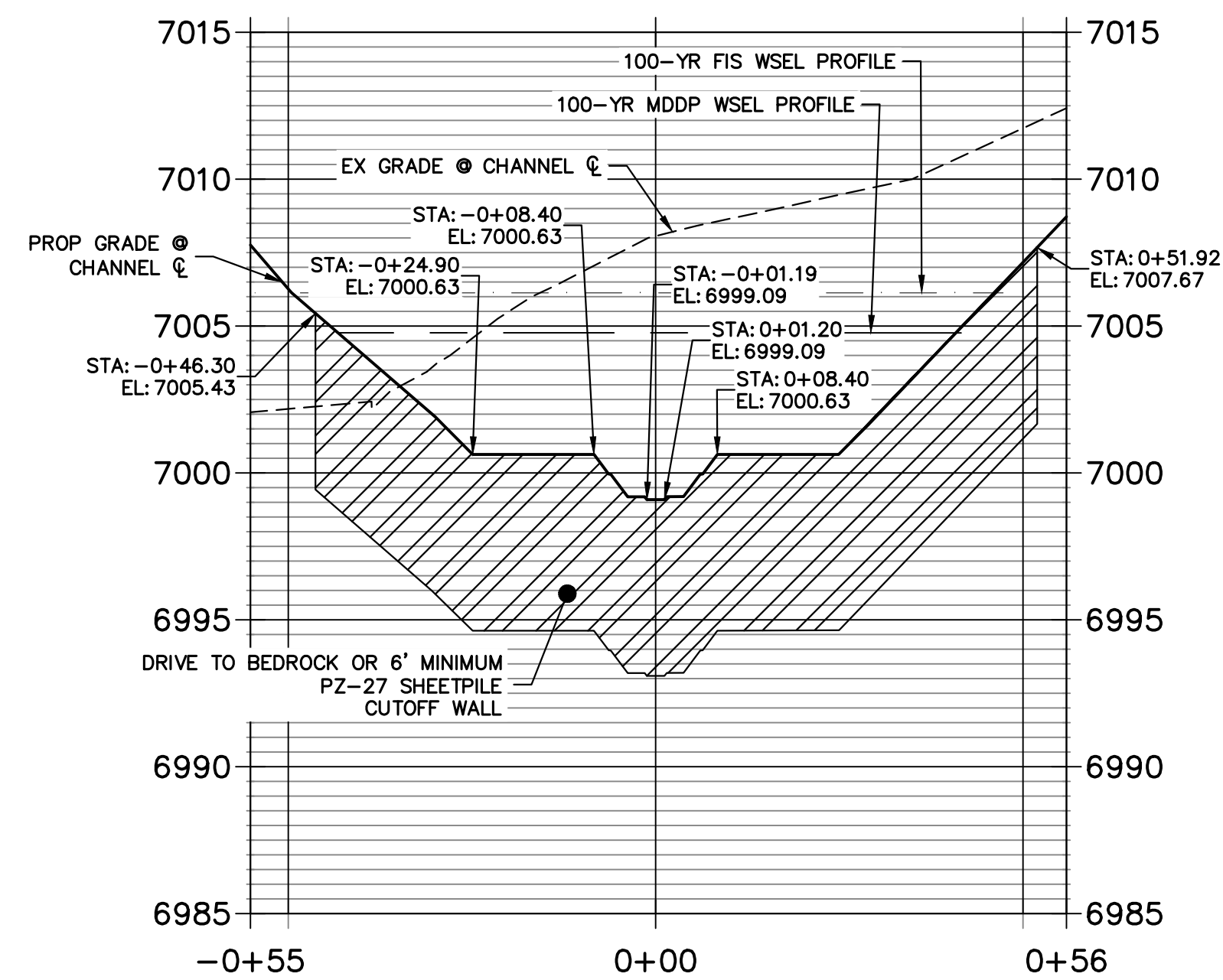
GSB PROFILE 2
STA 7+00.00 TO 10+00.00



Show as existing grades?

Label slopes, grade breaks, riprap

SHEET PILE 2 PROFILE
STA -0+55.15 TO 0+55.91



KEY MAP
SCALE: 1"=2000'

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PREPARED FOR
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2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

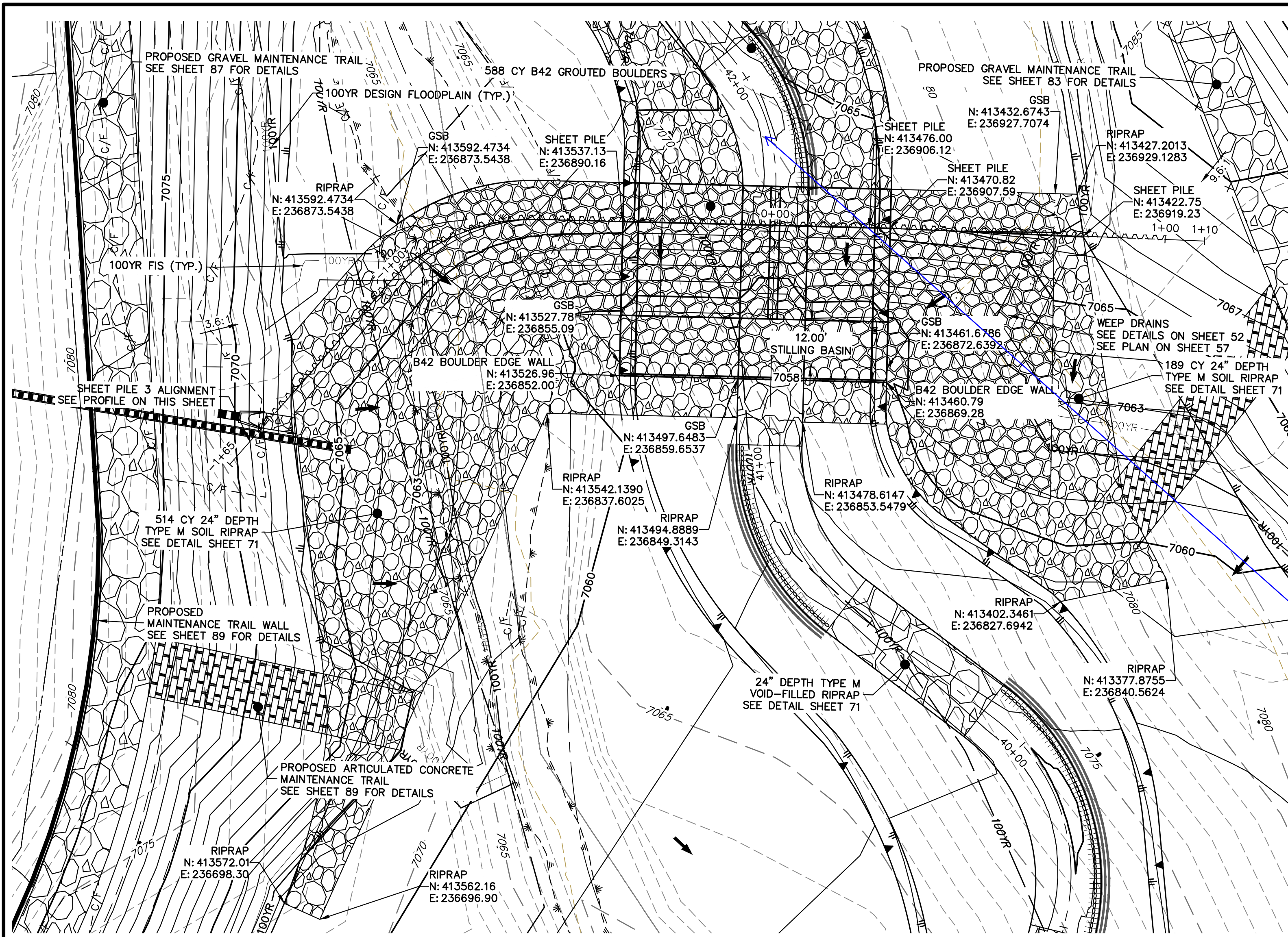
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No.	REVISION	BY	DATE

SAND CREEK RESTORATION
GSB DETAILS
SHEET 55 OF 111
JOB NO. 25188.04

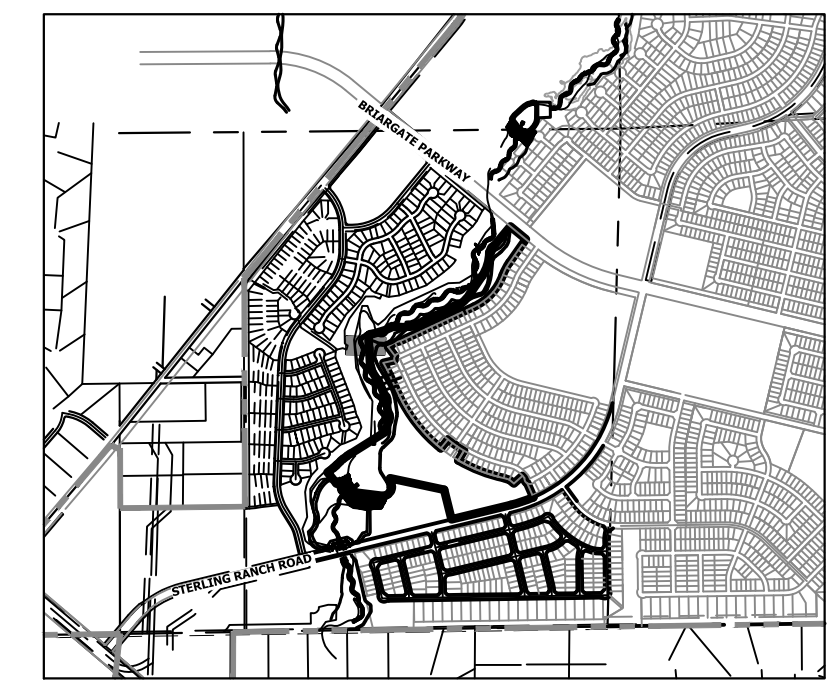
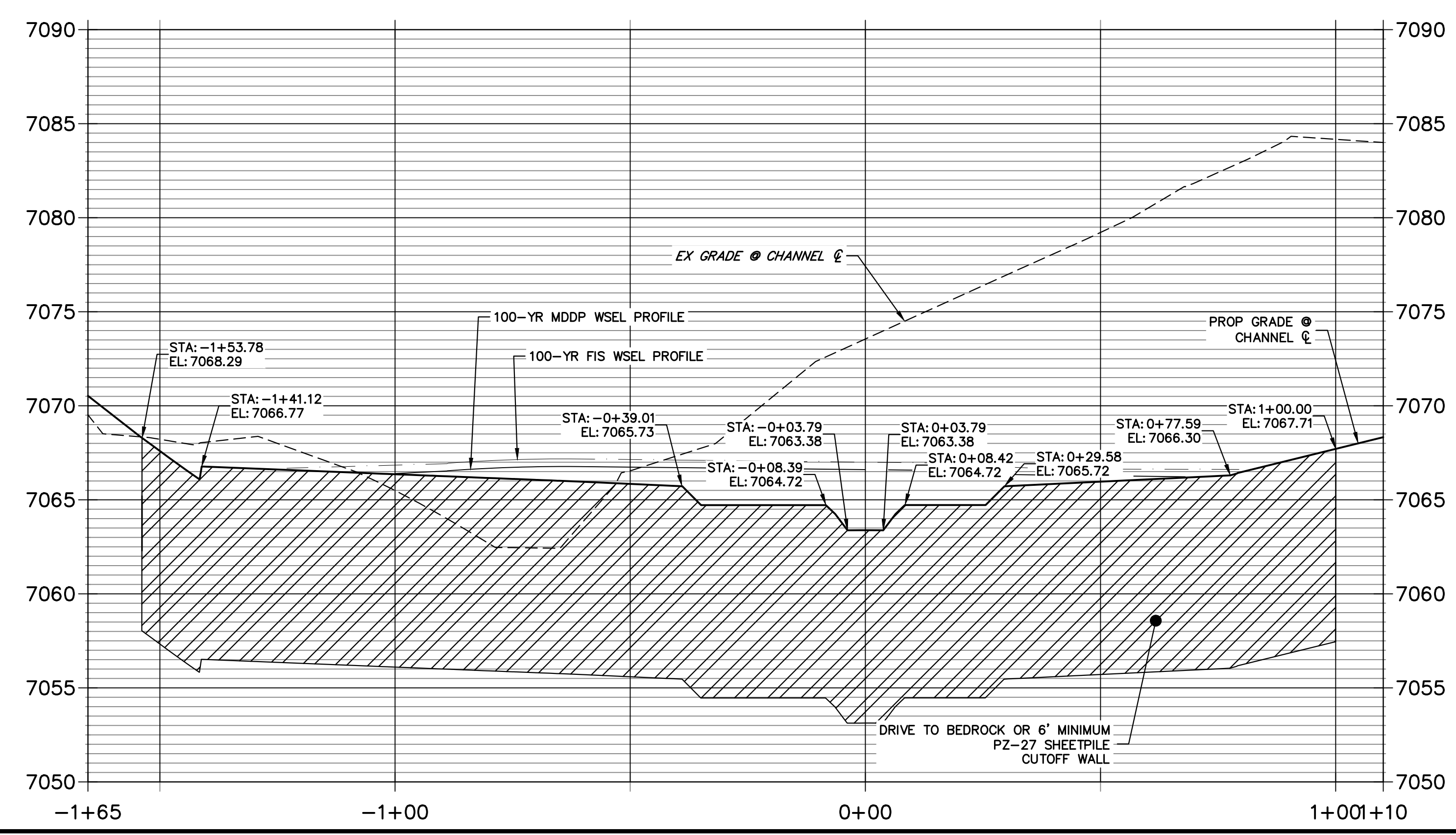
811
Know what's below.
Call before you dig.

ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMBLE
COLORADO P.E. 30127
FOR AND ON BEHALF OF JR ENGINEERING



GROUPED STEPPED BOULDER DROP #3 DETAIL
PLAN VIEW
SCALE: 1"=20'

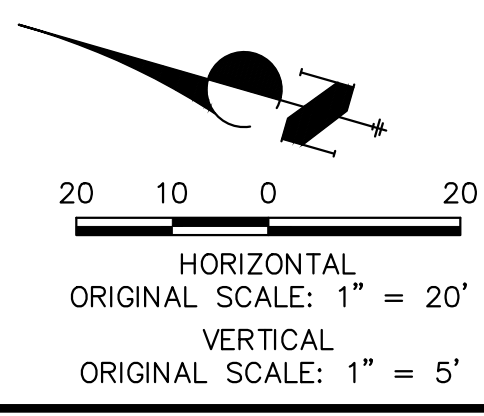
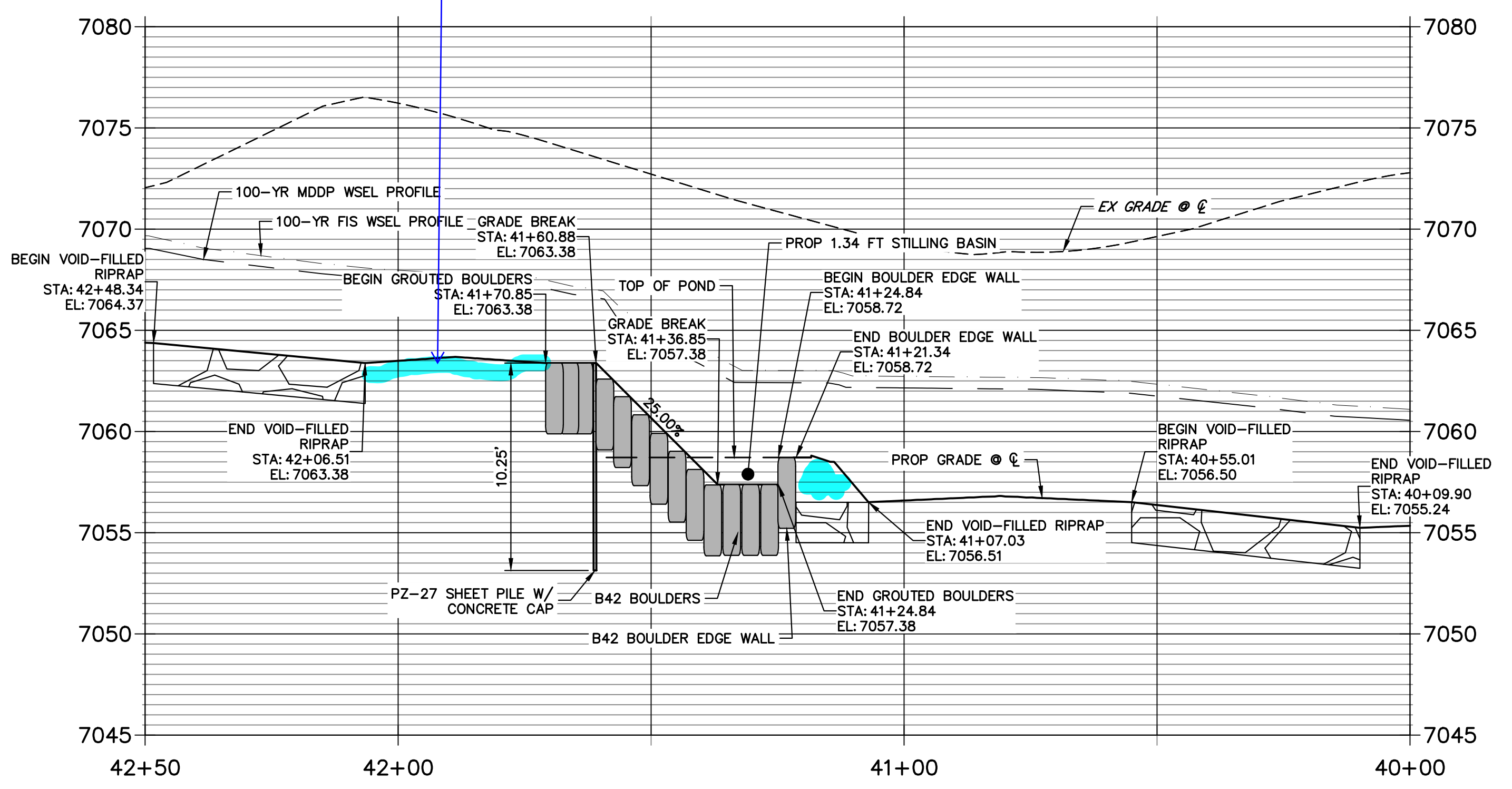
**SHEET PILE 3
STA -1+65.30 TO 1+10.11**



KEY MAP
SCALE: 1"=2000'

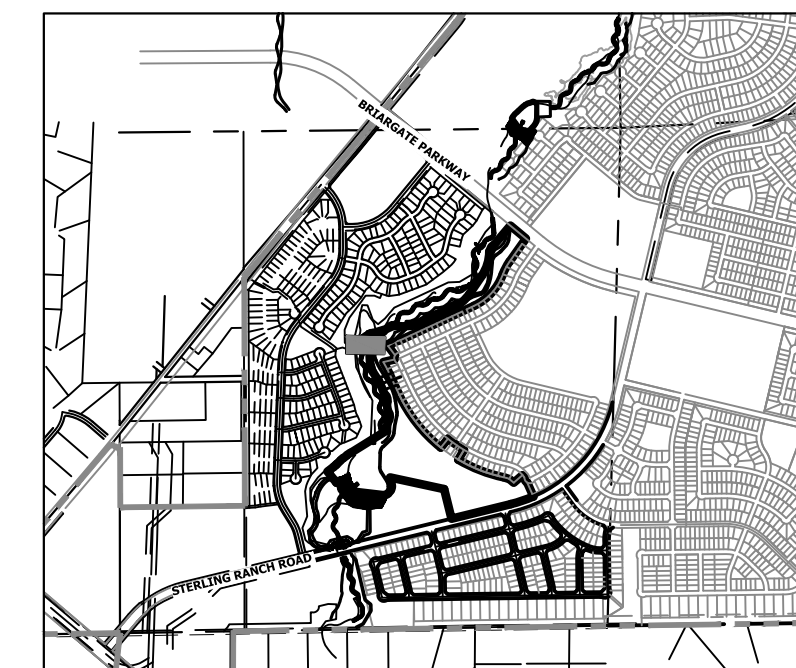
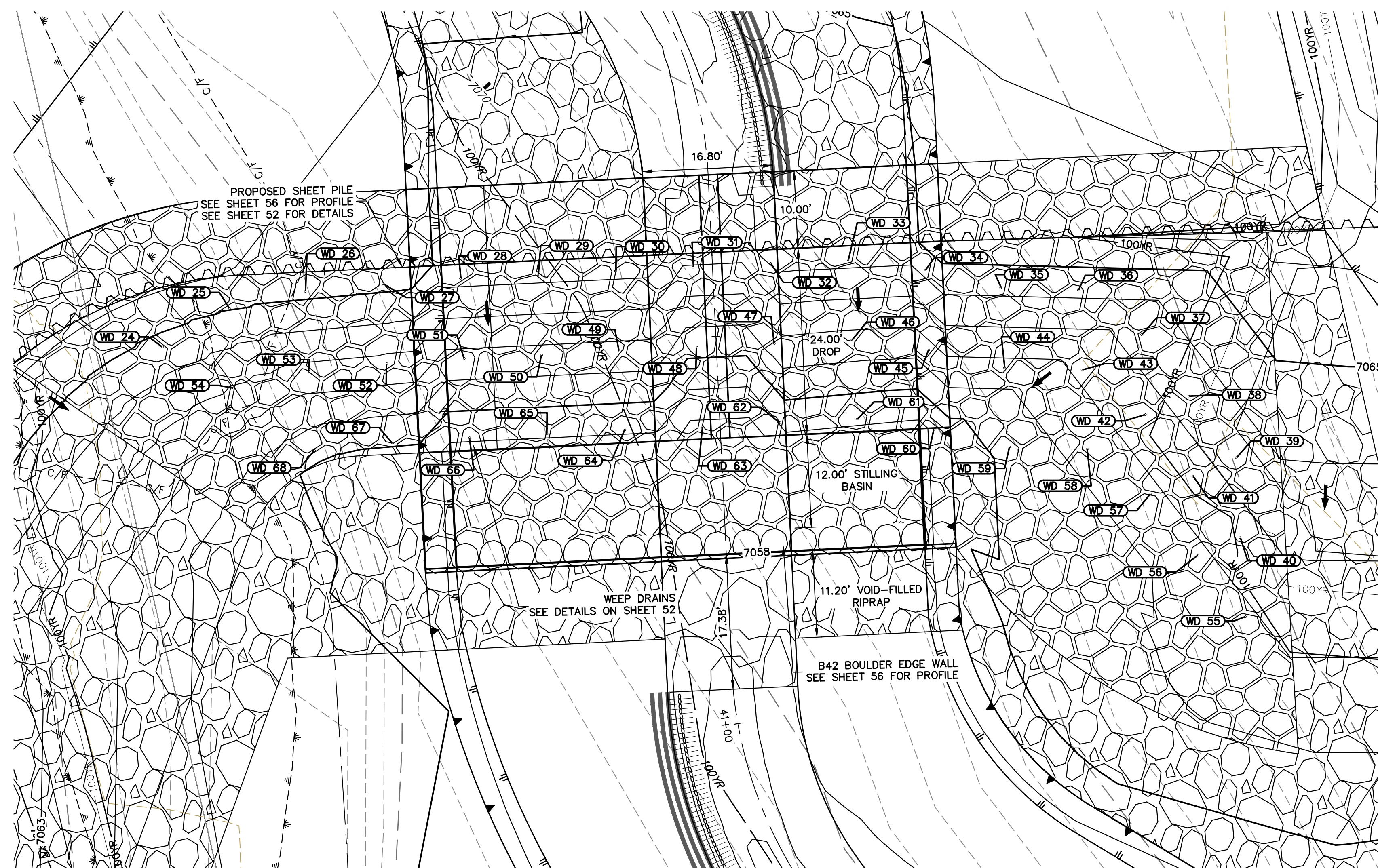
lining needed?
Response says
soil riprap will be
added.

**GSB PROFILE 3
STA 40+00.00 TO 42+50.00**



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. NO. 100000000
FOR AND ON BEHALF OF J.R. ENGINEERING, LLC

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			No.	REVISION	
H-SCALE 1"=20'	V-SCALE 1"=5'	DATE 1/23/23	DESIGNED BY DV	DRAWN BY NEO	CHECKED BY
SAND CREEK RESTORATION		GSB DETAILS		SHEET 56 OF 111	
				JOB NO. 25188.04	

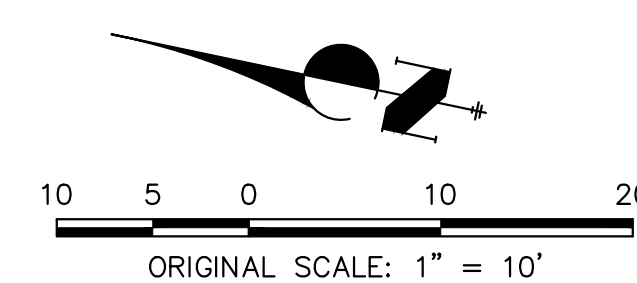


GSB03 WEEP DRAINS PLAN VIEW
SCALE: 1"=10'

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 24	WEEP DRAIN	N: 413566.16 E: 236873.55	7064.66
WD 25	WEEP DRAIN	N: 413558.73 E: 236880.22	7065.06
WD 26	WEEP DRAIN	N: 413549.62 E: 236884.33	7065.26
WD 27	WEEP DRAIN	N: 413540.02 E: 236887.35	7065.27
WD 28	WEEP DRAIN	N: 413530.39 E: 236890.05	7064.26
WD 29	WEEP DRAIN	N: 413520.71 E: 236892.57	7064.26
WD 30	WEEP DRAIN	N: 413511.04 E: 236895.10	7064.26
WD 31	WEEP DRAIN	N: 413501.36 E: 236897.63	7062.93
WD 32	WEEP DRAIN	N: 413491.69 E: 236900.15	7064.05
WD 33	WEEP DRAIN	N: 413482.01 E: 236902.67	7064.26
WD 34	WEEP DRAIN	N: 413472.04 E: 236903.43	7064.26
WD 35	WEEP DRAIN	N: 413462.04 E: 236903.18	7064.27
WD 36	WEEP DRAIN	N: 413452.20 E: 236904.97	7064.27
WD 37	WEEP DRAIN	N: 413443.03 E: 236900.99	7063.40
WD 38	WEEP DRAIN	N: 413435.43 E: 236894.49	7063.40

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 39	WEEP DRAIN	N: 413427.84 E: 236887.98	7063.40
WD 40	WEEP DRAIN	N: 413425.24 E: 236878.00	7062.59
WD 41	WEEP DRAIN	N: 413432.84 E: 236884.50	7062.59
WD 42	WEEP DRAIN	N: 413440.43 E: 236891.01	7062.59
WD 43	WEEP DRAIN	N: 413449.61 E: 236894.98	7062.18
WD 44	WEEP DRAIN	N: 413459.45 E: 236893.19	7061.69
WD 45	WEEP DRAIN	N: 413469.44 E: 236893.45	7061.68
WD 46	WEEP DRAIN	N: 413479.42 E: 236892.68	7061.69
WD 47	WEEP DRAIN	N: 413489.09 E: 236890.17	7061.48
WD 48	WEEP DRAIN	N: 413498.77 E: 236887.64	7060.35
WD 49	WEEP DRAIN	N: 413508.45 E: 236885.12	7061.69
WD 50	WEEP DRAIN	N: 413518.12 E: 236882.59	7061.68
WD 51	WEEP DRAIN	N: 413527.80 E: 236880.06	7061.68
WD 52	WEEP DRAIN	N: 413537.42 E: 236877.36	7062.68
WD 53	WEEP DRAIN	N: 413547.03 E: 236874.34	7062.71

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 54	WEEP DRAIN	N: 413556.14 E: 236870.24	7062.93
WD 55	WEEP DRAIN	N: 413422.47 E: 236868.15	7061.81
WD 56	WEEP DRAIN	N: 413430.07 E: 236874.66	7061.81
WD 57	WEEP DRAIN	N: 413437.66 E: 236881.16	7061.81
WD 58	WEEP DRAIN	N: 413446.84 E: 236885.14	7061.40
WD 59	WEEP DRAIN	N: 413456.68 E: 236883.34	7060.34
WD 60	WEEP DRAIN	N: 413466.67 E: 236883.60	7059.20
WD 61	WEEP DRAIN	N: 413476.64 E: 236882.84	7059.20
WD 62	WEEP DRAIN	N: 413486.32 E: 236880.32	7059.07
WD 63	WEEP DRAIN	N: 413496.00 E: 236877.80	7057.79
WD 64	WEEP DRAIN	N: 413505.67 E: 236875.27	7059.13
WD 65	WEEP DRAIN	N: 413515.35 E: 236872.74	7059.13
WD 66	WEEP DRAIN	N: 413525.03 E: 236870.22	7059.13
WD 67	WEEP DRAIN	N: 413534.65 E: 236867.52	7060.12
WD 68	WEEP DRAIN	N: 413544.26 E: 236864.50	7060.37



ENGINEER'S STATEMENT
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PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. # 30100
FOR AND ON BEHALF OF JR. ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR. ENGINEERING APPROVES THEIR USE FOR PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
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20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

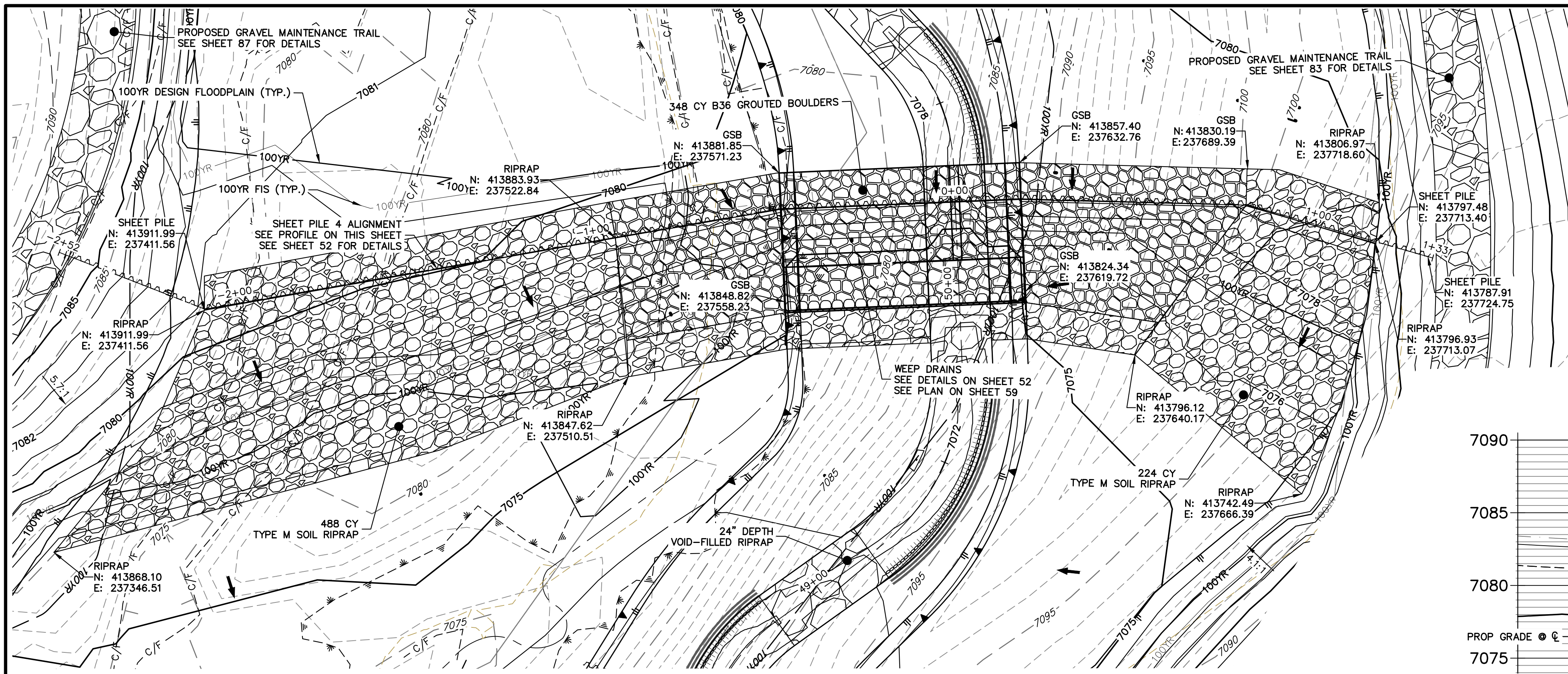
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BY	DATE	REVISION

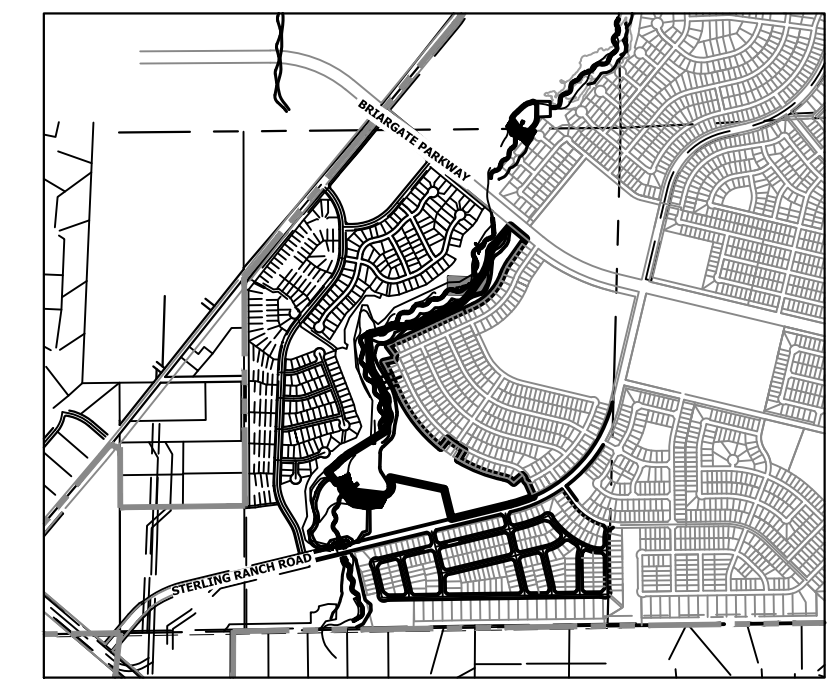
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=10'	N/A	1/23/23	DV	NEO	

SAND CREEK RESTORATION
GSB DETAILS
SHEET 57 OF 111
JOB NO. 25188.04

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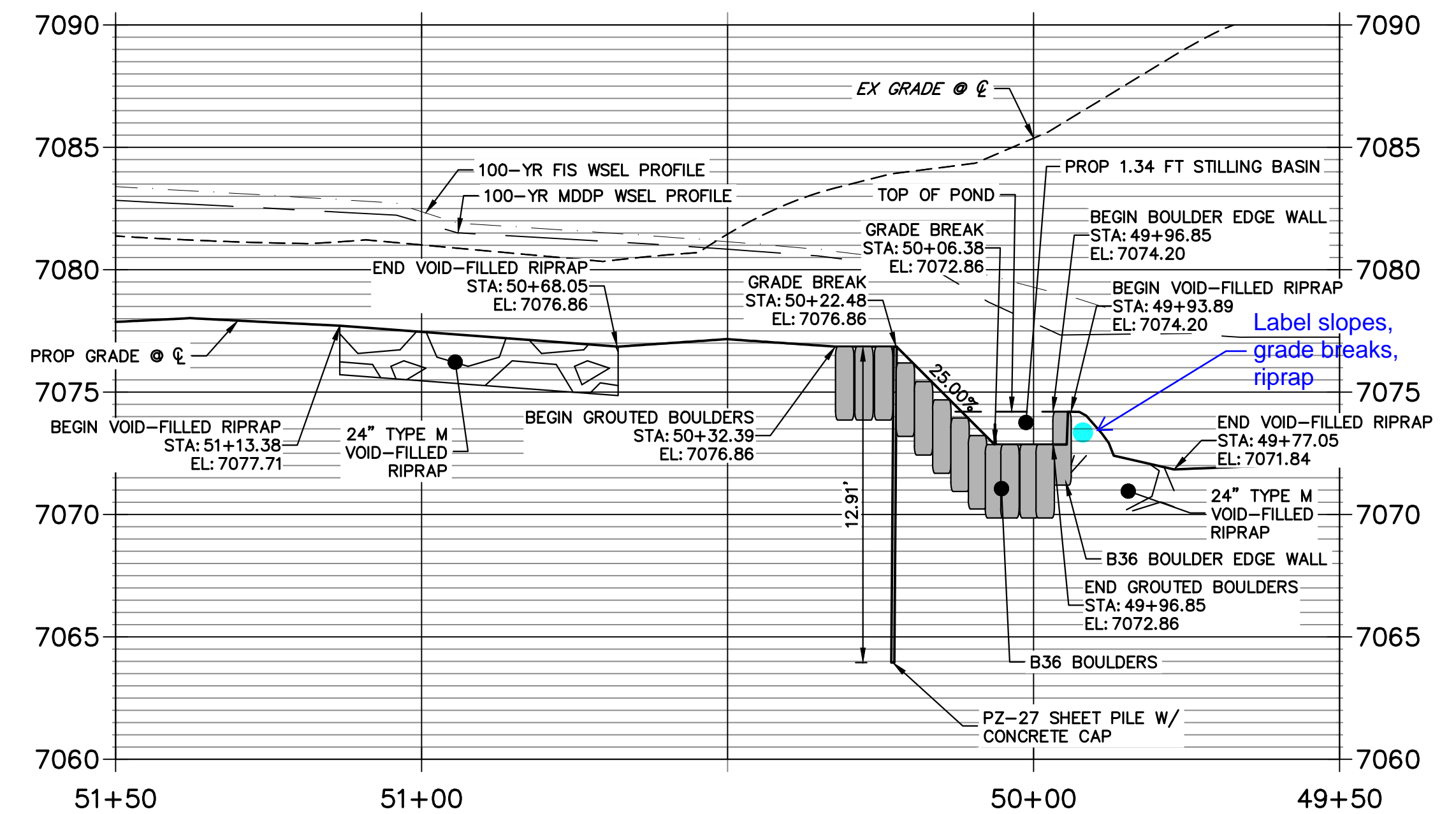


**GRouted STEPPED BOULDER DROP #4 DETAIL
PLAN VIEW**
SCALE: 1"=20'

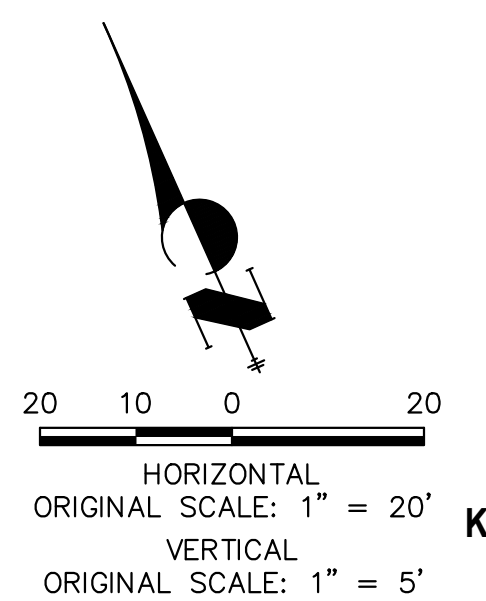
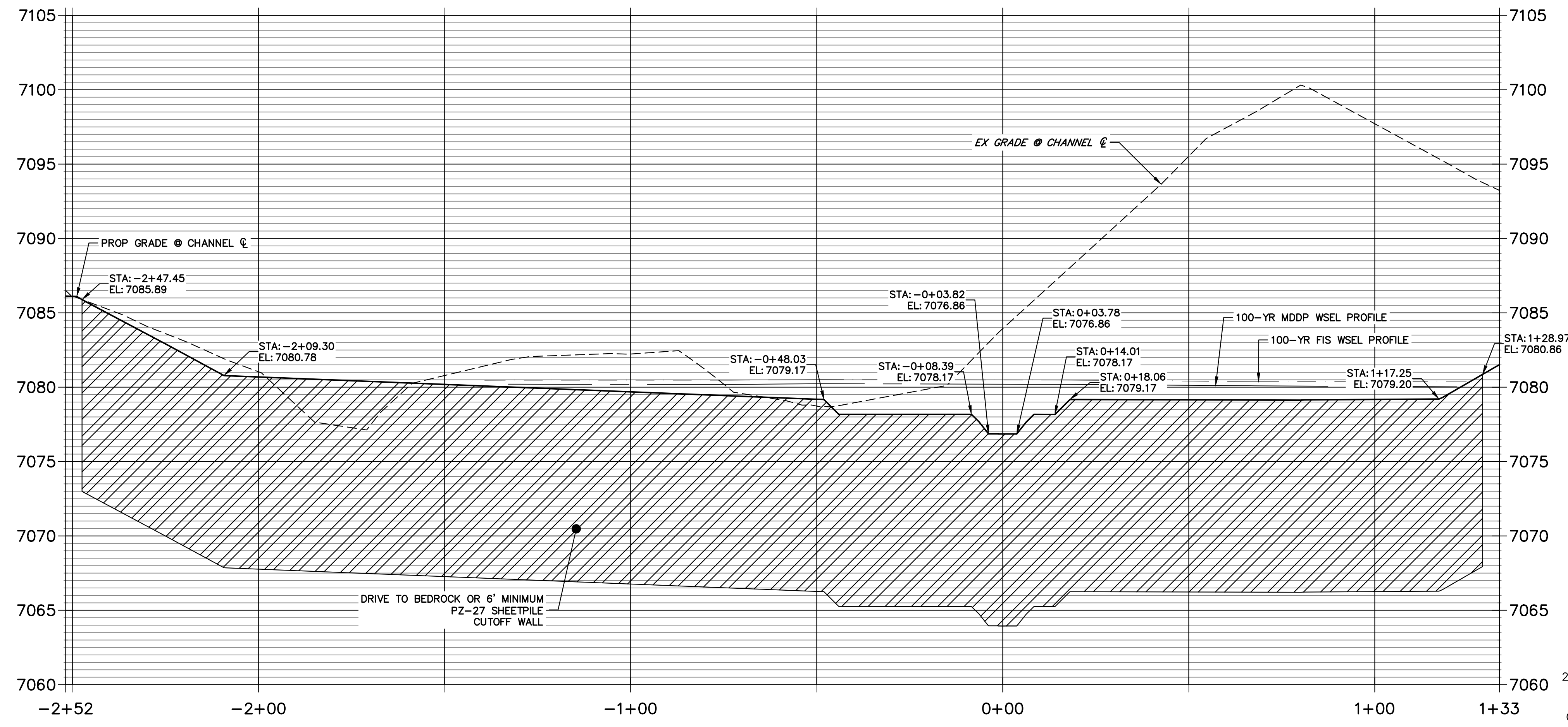


KEY MAP
SCALE: 1"=2000'

**GSB PROFILE 4
STA 49+50.00 TO 51+50.00**

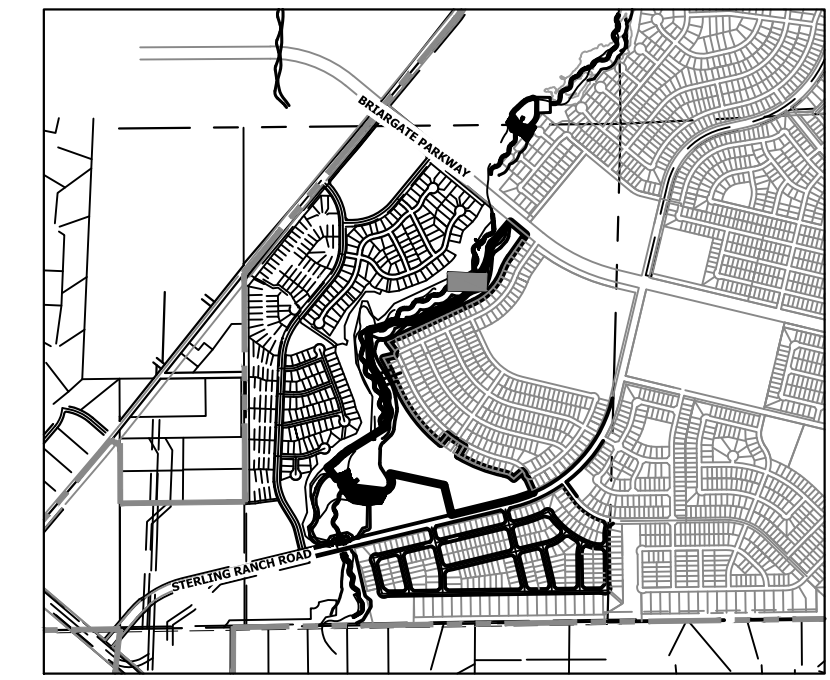


**SHEET PILE 4 PROFILE
STA -2+51.83 TO 1+33.48**

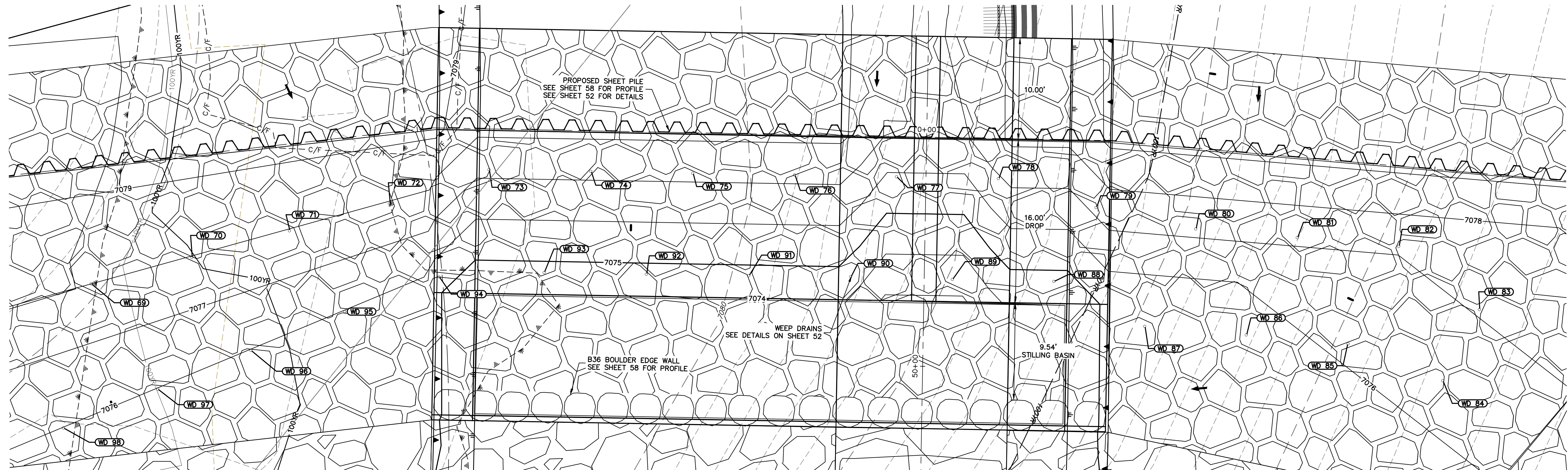


ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 30112
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION.	
PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024
BY	DATE
No.	REVISION
H-SCALE 1"=20'	V-SCALE 1"=5'
DATE 1/23/23	DESIGNED BY DV
DRAWN BY NEO	CHECKED BY
SAND CREEK RESTORATION	
GSB DETAILS	
SHEET 58	OF 111
JOB NO. 25188.04	



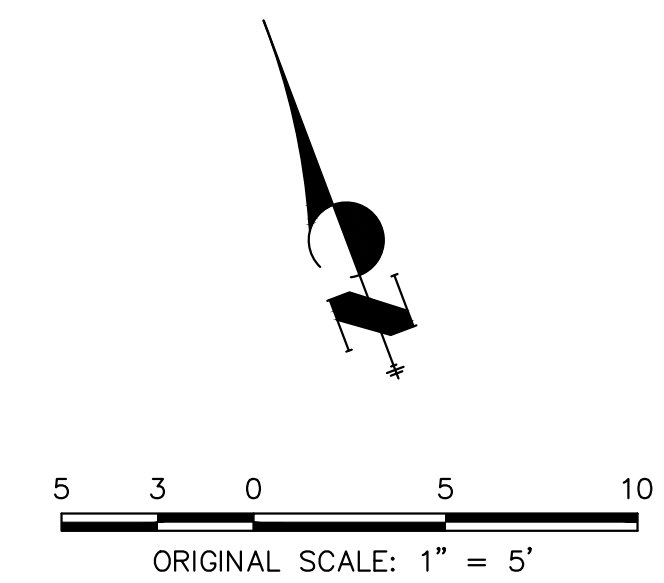
KEY MAP
SCALE: 1" = 2000'



GSB04 WEEP DRAINS PLAN VIEW
SCALE: 1" = 5'

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 69	WEEP DRAIN	N: 413870.35 E: 237530.45	7078.00
WD 70	WEEP DRAIN	N: 413869.31 E: 237540.62	7077.99
WD 71	WEEP DRAIN	N: 413868.36 E: 237550.49	7077.98
WD 72	WEEP DRAIN	N: 413867.36 E: 237560.66	7077.97
WD 73	WEEP DRAIN	N: 413867.07 E: 237570.93	7077.21
WD 74	WEEP DRAIN	N: 413863.38 E: 237580.22	7077.21
WD 75	WEEP DRAIN	N: 413859.69 E: 237589.52	7077.21
WD 76	WEEP DRAIN	N: 413856.00 E: 237598.81	7077.21
WD 77	WEEP DRAIN	N: 413852.31 E: 237608.11	7075.90
WD 78	WEEP DRAIN	N: 413848.62 E: 237617.40	7076.90
WD 79	WEEP DRAIN	N: 413842.57 E: 237625.37	7077.22
WD 80	WEEP DRAIN	N: 413837.16 E: 237633.78	7077.21
WD 81	WEEP DRAIN	N: 413832.85 E: 237642.80	7077.21
WD 82	WEEP DRAIN	N: 413828.54 E: 237651.82	7077.21
WD 83	WEEP DRAIN	N: 413819.94 E: 237657.03	7077.06

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 84	WEEP DRAIN	N: 413814.67 E: 237651.21	7076.40
WD 85	WEEP DRAIN	N: 413821.35 E: 237643.80	7076.16
WD 86	WEEP DRAIN	N: 413825.68 E: 237634.75	7075.70
WD 87	WEEP DRAIN	N: 413829.99 E: 237625.73	7075.27
WD 88	WEEP DRAIN	N: 413837.25 E: 237618.94	7074.73
WD 89	WEEP DRAIN	N: 413840.95 E: 237609.69	7073.41
WD 90	WEEP DRAIN	N: 413844.72 E: 237600.45	7074.46
WD 91	WEEP DRAIN	N: 413848.33 E: 237591.12	7074.74
WD 92	WEEP DRAIN	N: 413852.02 E: 237581.76	7074.73
WD 93	WEEP DRAIN	N: 413855.72 E: 237572.44	7074.73
WD 94	WEEP DRAIN	N: 413858.95 E: 237562.64	7075.46
WD 95	WEEP DRAIN	N: 413859.02 E: 237552.78	7075.99
WD 96	WEEP DRAIN	N: 413858.71 E: 237542.82	7075.99
WD 97	WEEP DRAIN	N: 413858.39 E: 237532.91	7075.99
WD 98	WEEP DRAIN	N: 413858.08 E: 237522.91	7076.00



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
A Westman Company
Central 303-740-9383 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1" = 5'	N/A	1/23/23	DV	NEO	

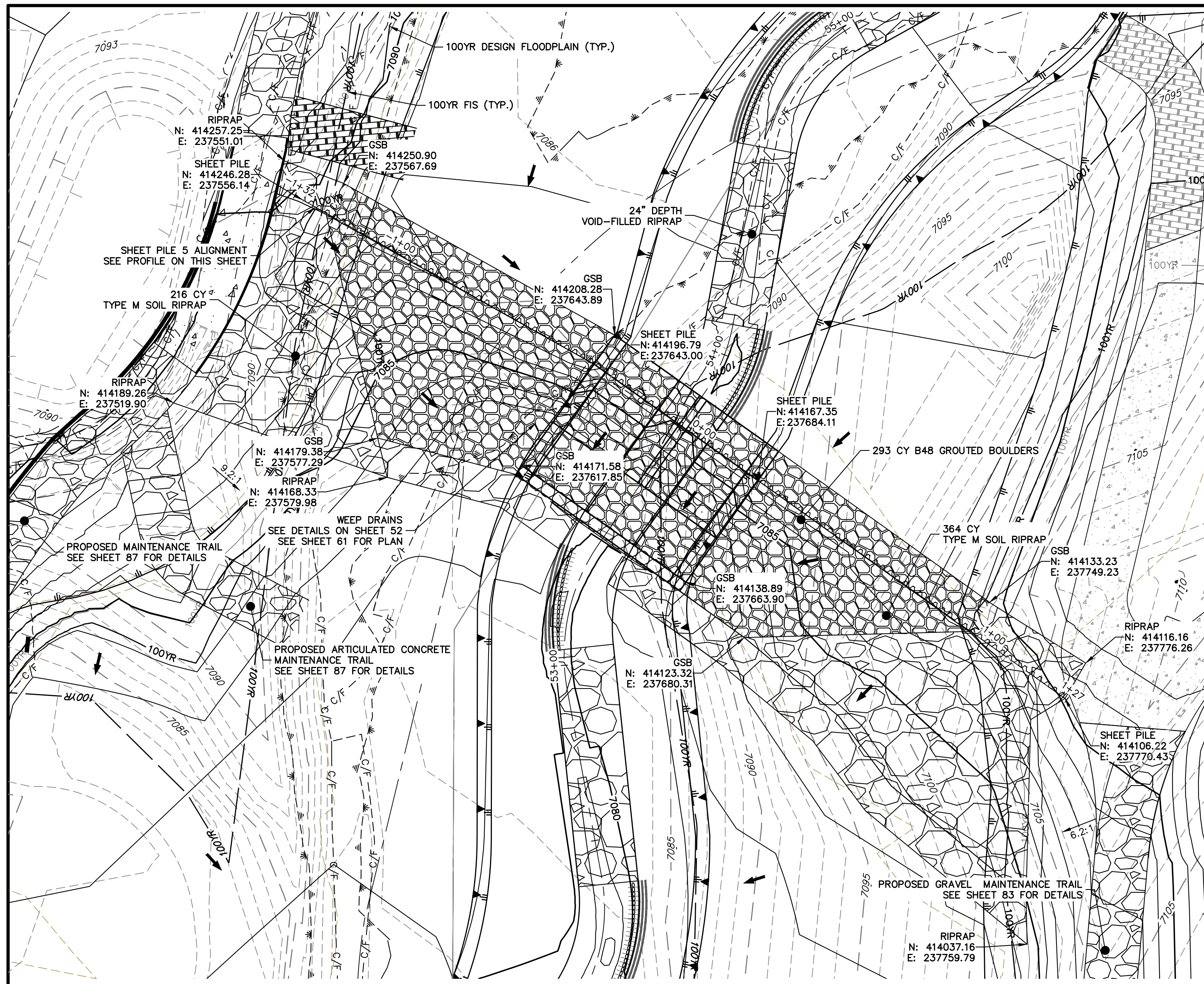
SAND CREEK RESTORATION
GSB DETAILS
SHEET 59 OF 111
JOB NO. 25188.04



Know what's below.
Call before you dig.

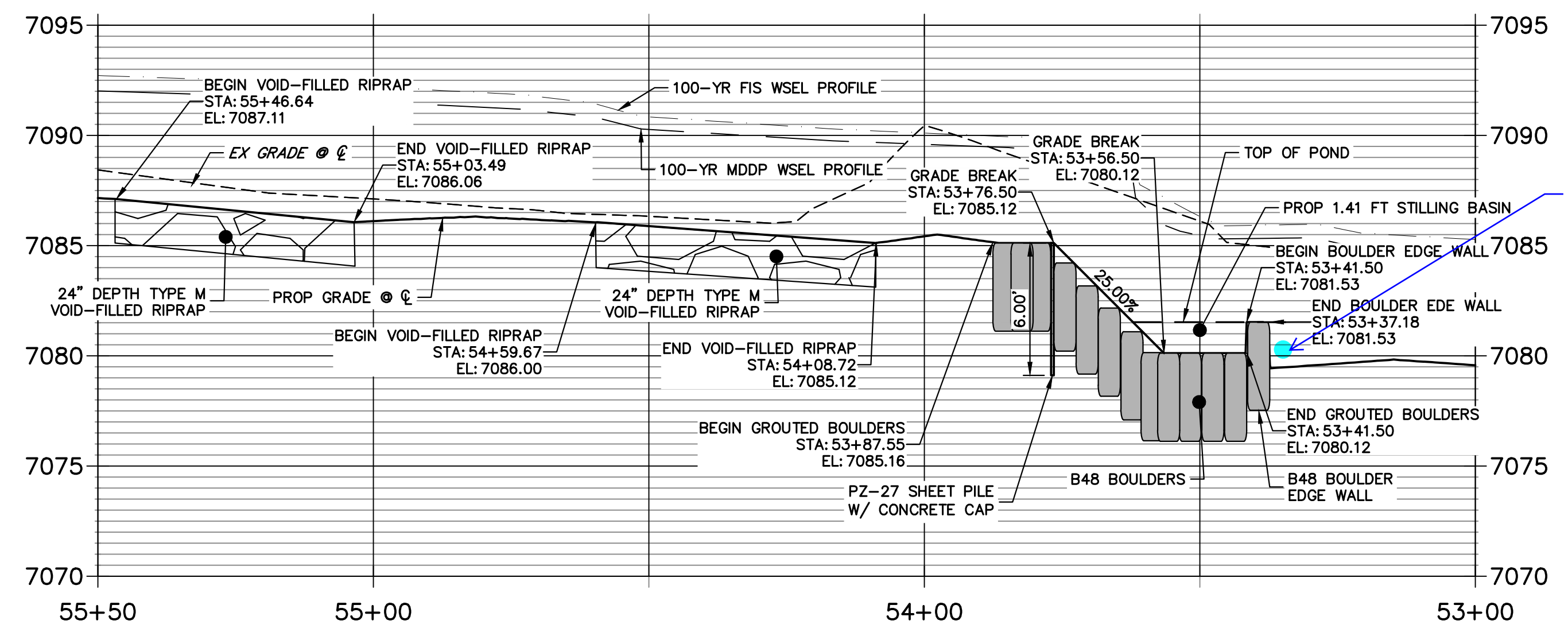
ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 30100
FOR AND ON BEHALF OF JR ENGINEERING

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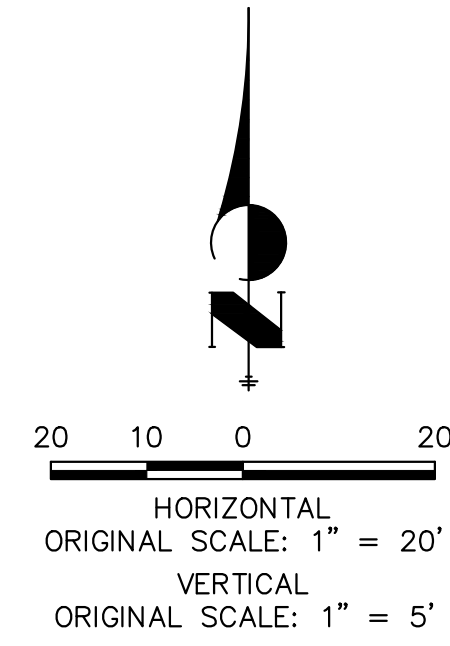


GRouted STEPPED BOULDER DROP #5 DETAIL
PLAN VIEW
SCALE: 1"=20'

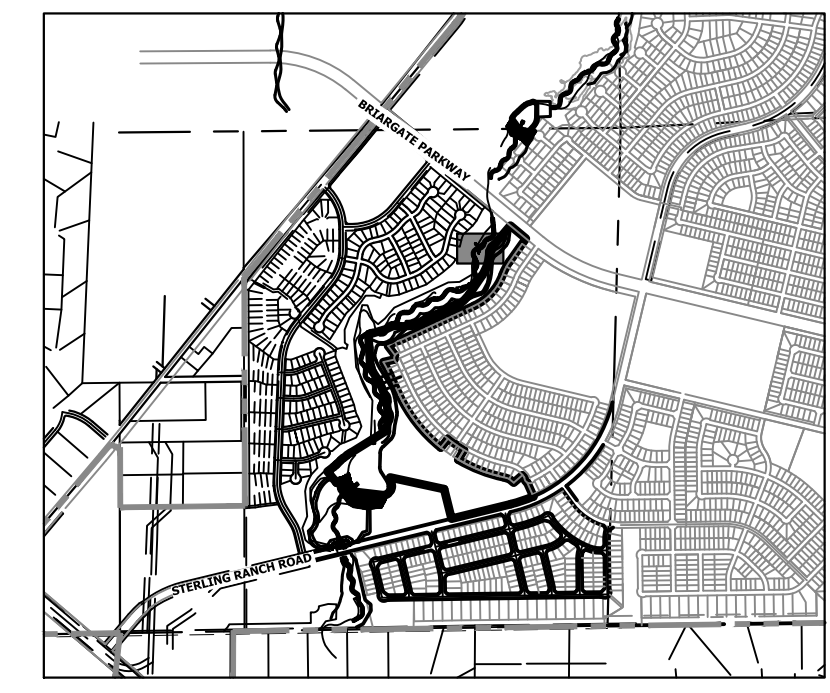
**GSB PROFILE 5
STA 53+00.00 TO 55+50.00**



Label slopes,
grade breaks,
riprap (more
detail is needed)

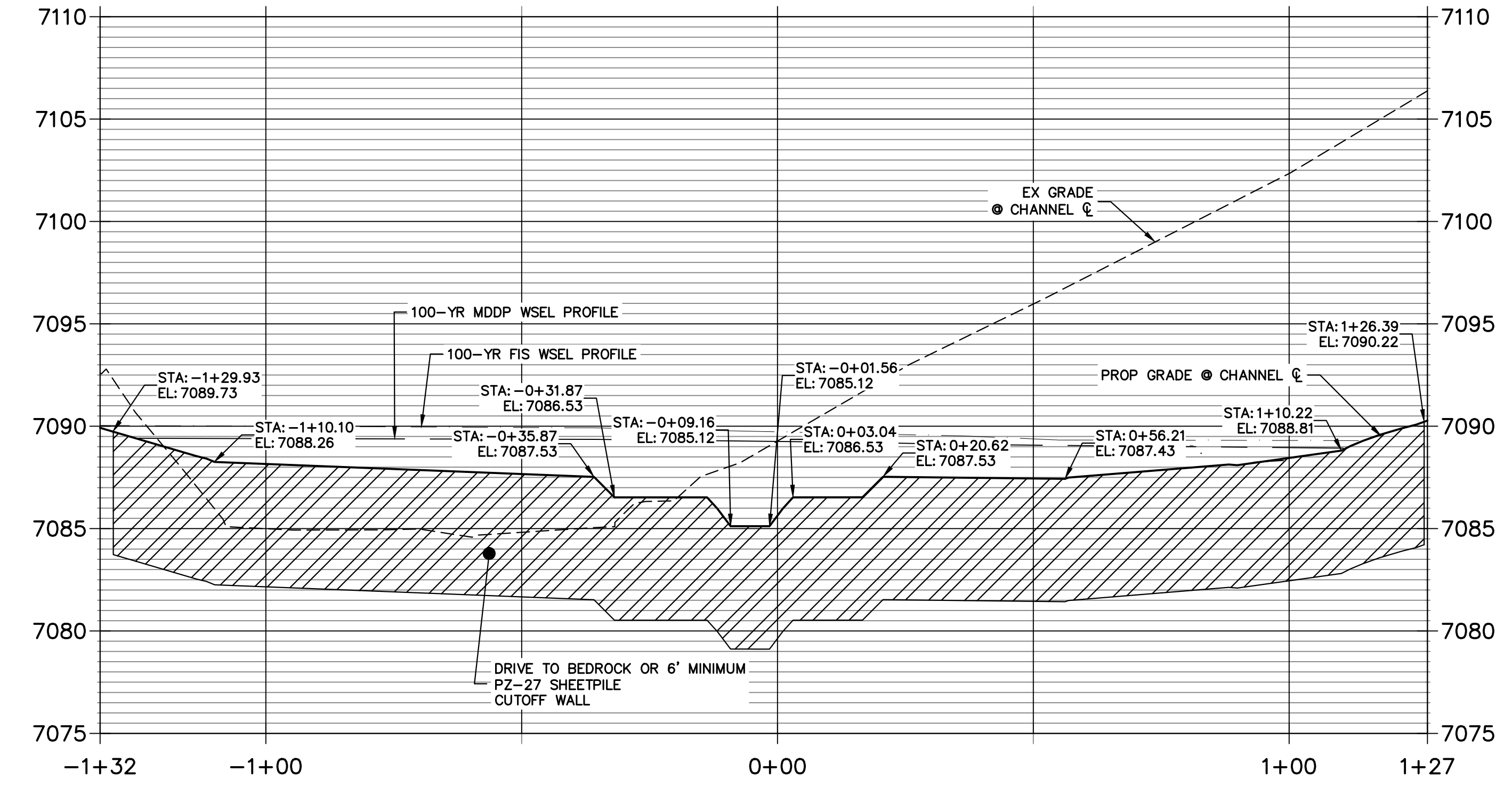


ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 30000
FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

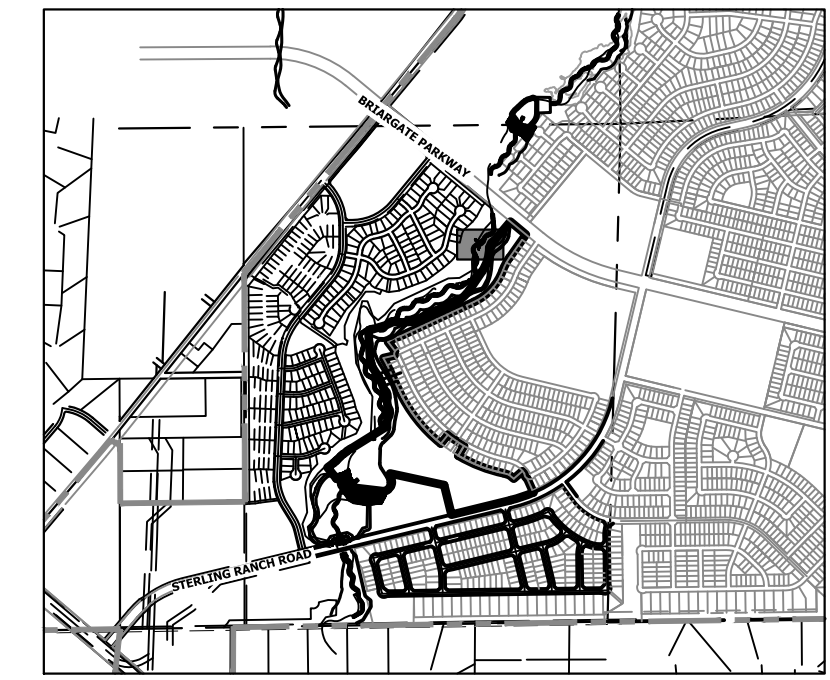


KEY MAP
SCALE: 1"=2000'

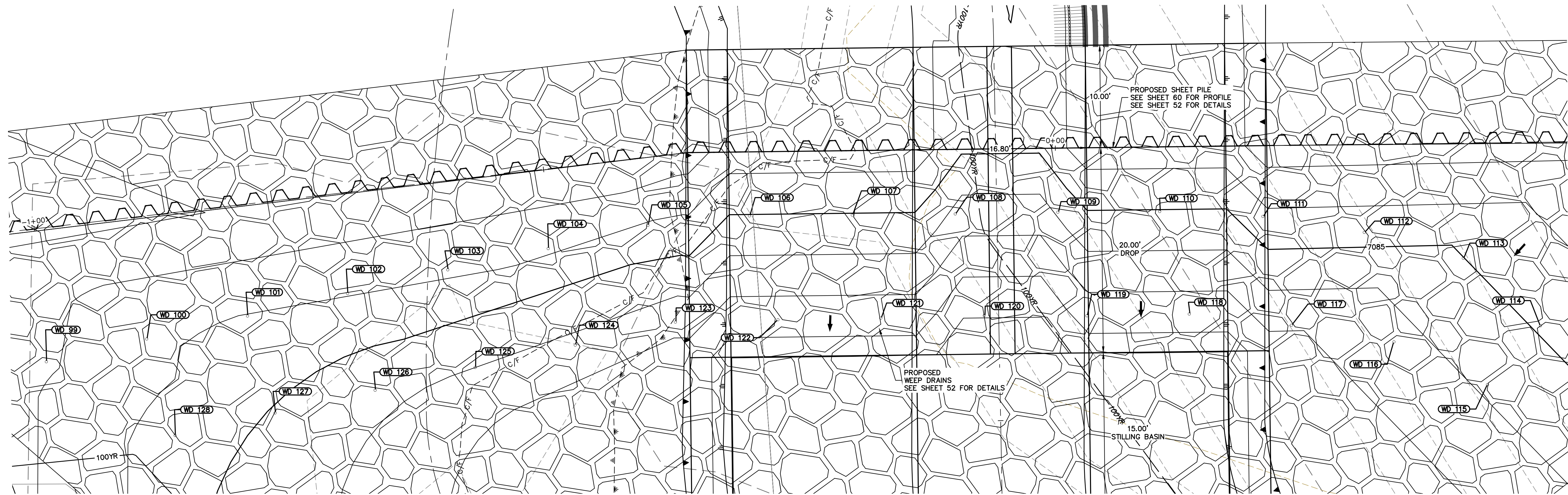
**SHEET PILE 5 PROFILE
STA -1+32.40 TO 1+27.04**



PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024																						
	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, J.R. ENGINEERING APPROVES THEIR USE AS DESIGNATED BY WRITTEN AUTHORIZATION.																						
BY DATE	J.R. ENGINEERING A Westman Company Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com																						
	<table border="1"> <thead> <tr> <th>No.</th> <th>REVISION</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				No.	REVISION	BY	DATE															
No.	REVISION	BY	DATE																				
H-SCALE	1"=20'	DESIGNED BY	DJV	CHECKED BY	NEO																		
V-SCALE	1"=5'	DATE	1/23/23																				
SAND CREEK RESTORATION																							
GSB DETAILS																							
SHEET 60 OF 111																							
JOB NO. 25188.04																							



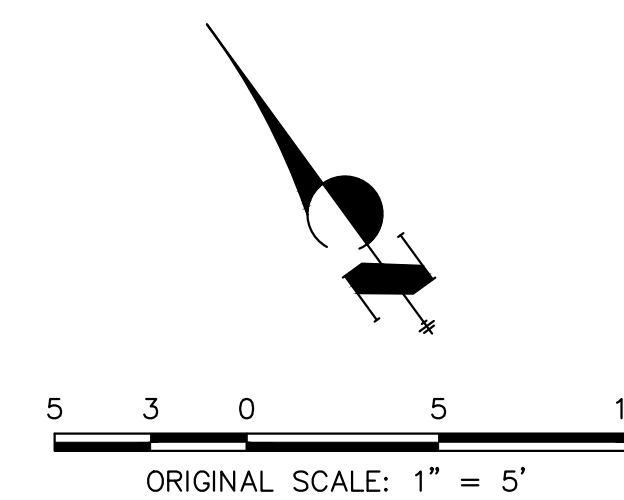
KEY MAP
SCALE: 1"=2000'



GSB05 WEEP DRAINS PLAN VIEW
SCALE: 1"=5'

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 99	WEEP DRAIN	N: 414220.44 E: 237575.56	7087.12
WD 100	WEEP DRAIN	N: 414216.47 E: 237584.78	7086.30
WD 101	WEEP DRAIN	N: 414212.50 E: 237594.05	7085.97
WD 102	WEEP DRAIN	N: 414208.53 E: 237603.22	7086.05
WD 103	WEEP DRAIN	N: 414204.64 E: 237612.48	7086.16
WD 104	WEEP DRAIN	N: 414200.55 E: 237621.61	7086.17
WD 105	WEEP DRAIN	N: 414196.66 E: 237630.80	7085.91
WD 106	WEEP DRAIN	N: 414191.58 E: 237639.36	7084.97
WD 107	WEEP DRAIN	N: 414185.74 E: 237647.51	7084.96
WD 108	WEEP DRAIN	N: 414179.92 E: 237655.69	7083.76
WD 109	WEEP DRAIN	N: 414174.17 E: 237663.88	7084.13
WD 110	WEEP DRAIN	N: 414168.38 E: 237671.94	7084.95
WD 111	WEEP DRAIN	N: 414162.06 E: 237679.80	7085.69
WD 112	WEEP DRAIN	N: 414154.99 E: 237686.87	7085.36
WD 113	WEEP DRAIN	N: 414147.26 E: 237693.19	7084.99

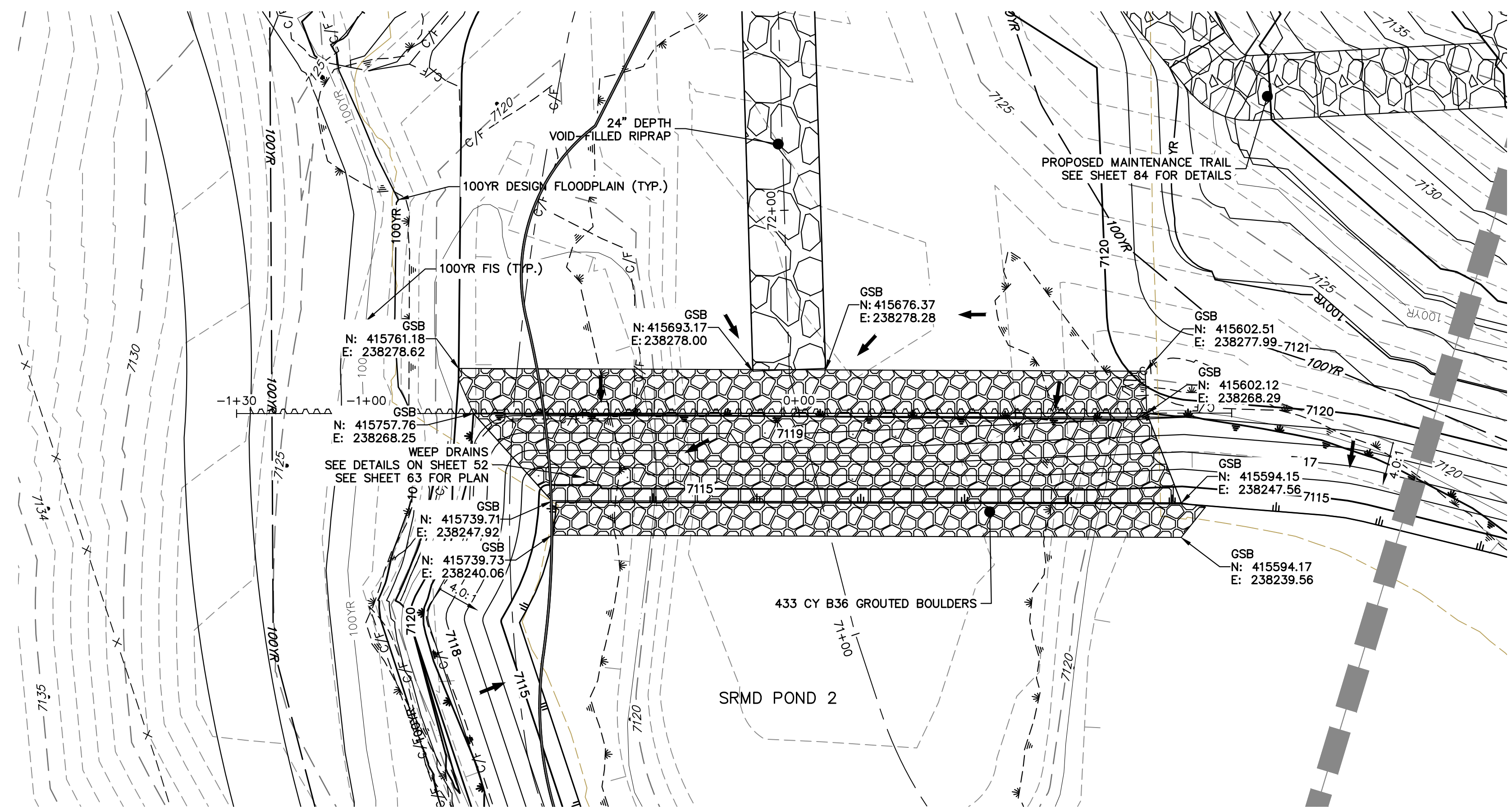
POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 114	WEEP DRAIN	N: 414137.51 E: 237695.40	7085.09
WD 115	WEEP DRAIN	N: 414135.91 E: 237687.84	7084.14
WD 116	WEEP DRAIN	N: 414144.65 E: 237682.92	7083.69
WD 117	WEEP DRAIN	N: 414151.85 E: 237675.80	7083.14
WD 118	WEEP DRAIN	N: 414158.60 E: 237668.39	7082.45
WD 119	WEEP DRAIN	N: 414164.33 E: 237660.22	7082.39
WD 120	WEEP DRAIN	N: 414170.24 E: 237652.14	7081.06
WD 121	WEEP DRAIN	N: 414175.98 E: 237643.84	7082.43
WD 122	WEEP DRAIN	N: 414181.75 E: 237635.63	7082.42
WD 123	WEEP DRAIN	N: 414187.46 E: 237627.42	7083.38
WD 124	WEEP DRAIN	N: 414191.39 E: 237618.21	7083.77
WD 125	WEEP DRAIN	N: 414195.37 E: 237609.03	7084.00
WD 126	WEEP DRAIN	N: 414198.32 E: 237599.84	7084.38
WD 127	WEEP DRAIN	N: 414203.27 E: 237590.66	7084.93
WD 128	WEEP DRAIN	N: 414207.23 E: 237581.48	7085.62



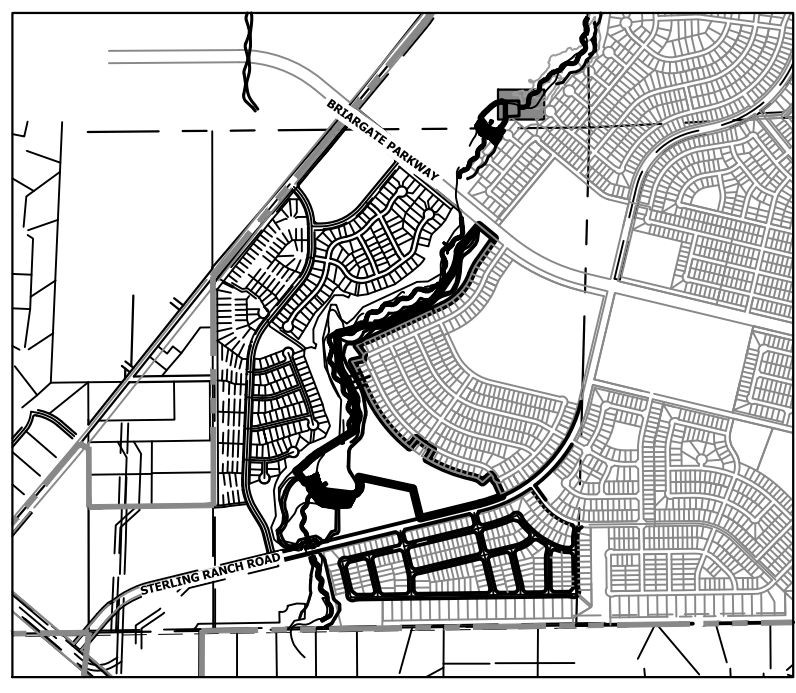
ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 30110
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION. PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	J.R. ENGINEERING A Westman Company Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY: _____ DATE: _____
		No. REVISION: _____
H-SCALE: 1"=5' V-SCALE: N/A DATE: 1/23/23 DESIGNED BY: DJV DRAWN BY: SCH CHECKED BY: _____	SAND CREEK RESTORATION GSB DETAILS	SHEET 61 OF 111 JOB NO. 25188.04

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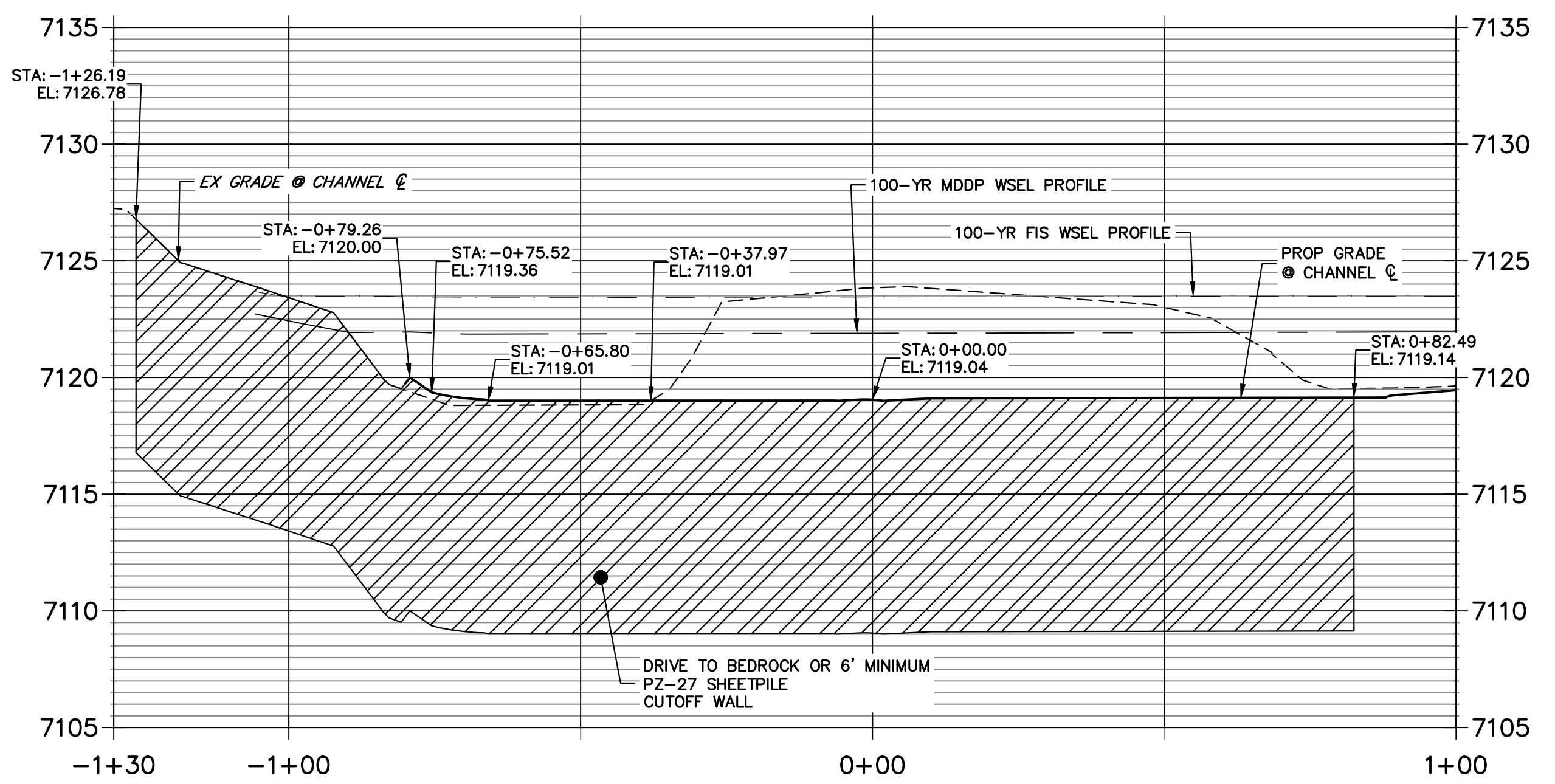


GRouted STEPPED BOULDER DROP #6 DETAIL
PLAN VIEW
SCALE: 1"=20'

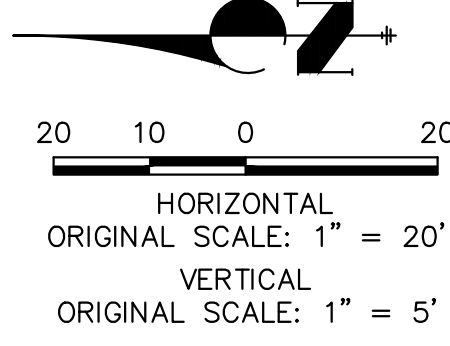
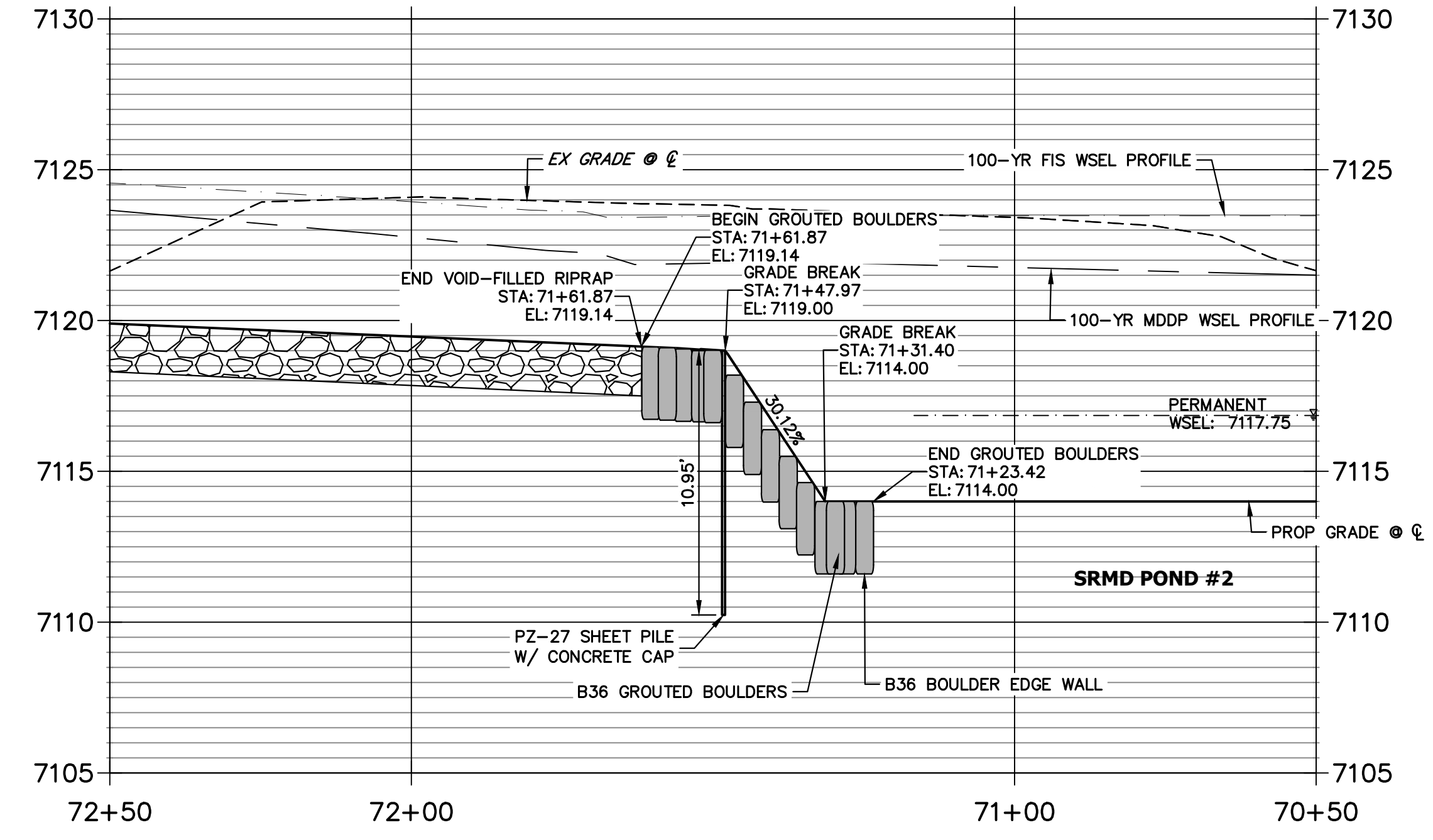


KEY MAP
SCALE: 1"=2000'

SHEET PILE 6 PROFILE
STA -1+30.00 TO 1+00.00



GSB PROFILE 6
STA 70+50.00 TO 72+50.00



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 30110
FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

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PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

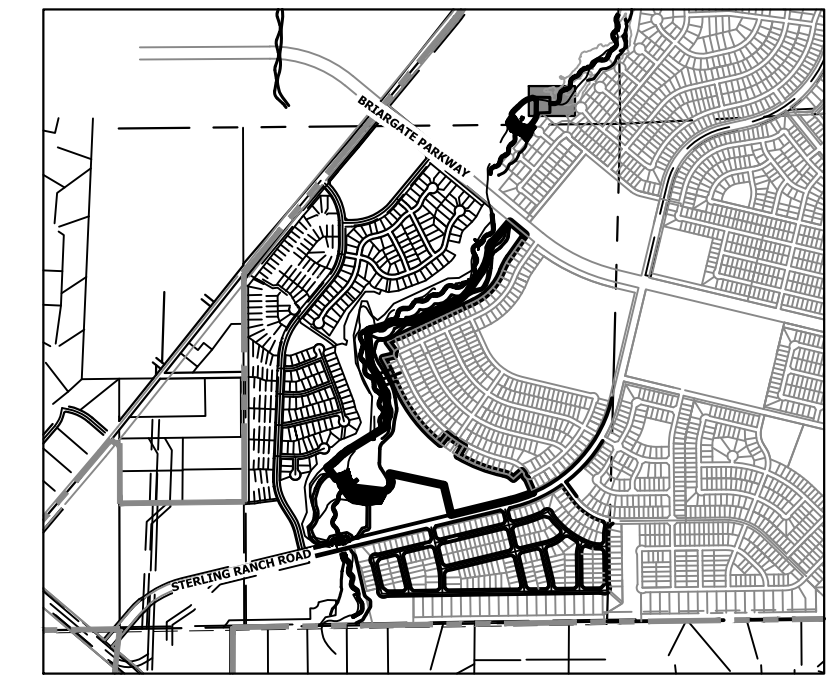
J.R. ENGINEERING
A Westman Company
Central 303-740-9888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION

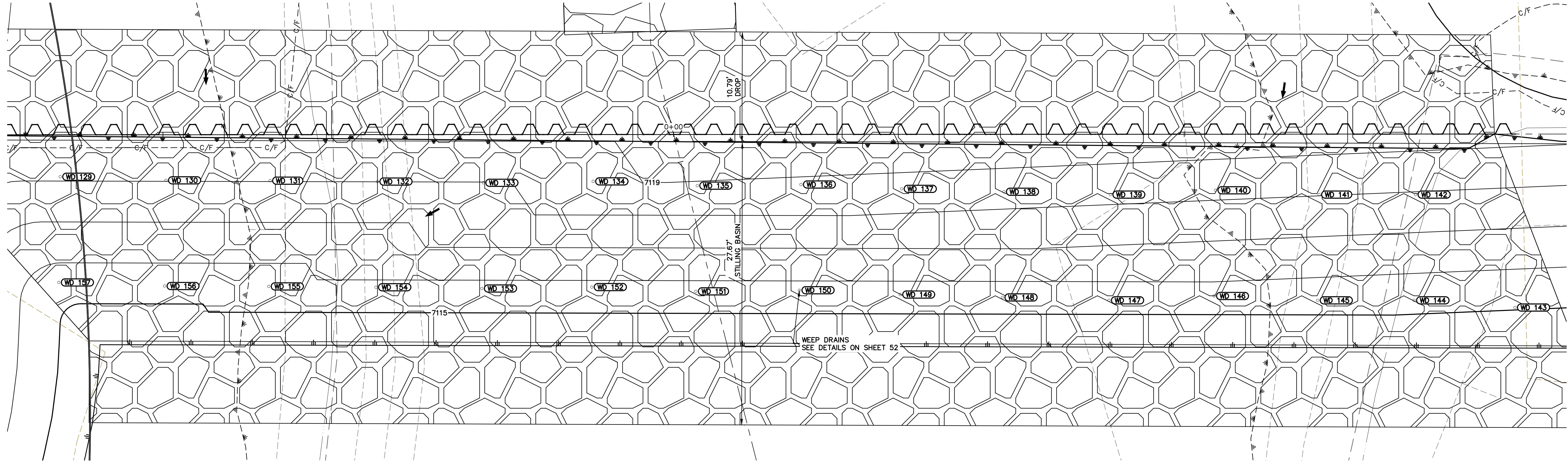
H-SCALE: 1"=20'
V-SCALE: 1"=5'
DATE: 1/23/23
DESIGNED BY: DJV
DRAWN BY: NEO
CHECKED BY:

SAND CREEK RESTORATION
GSB DETAILS

SHEET 62 OF 111
JOB NO. 25188.04



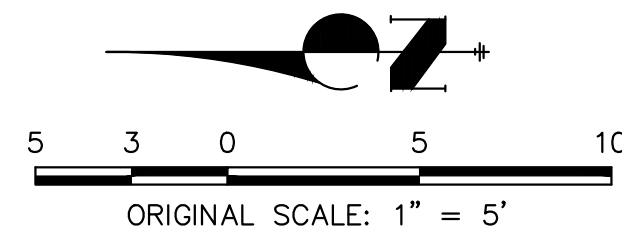
KEY MAP
SCALE: 1"=2000'



GSB06 WEEP DRAINS PLAN VIEW
SCALE: 1"=5'

ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 129	WEEP DRAIN	N: 415742.56 E: 238264.15	7118.11
WD 130	WEEP DRAIN	N: 415732.20 E: 238263.80	7118.02
WD 131	WEEP DRAIN	N: 415722.01 E: 238263.76	7118.02
WD 132	WEEP DRAIN	N: 415711.50 E: 238263.67	7118.01
WD 133	WEEP DRAIN	N: 415701.13 E: 238263.56	7117.98
WD 134	WEEP DRAIN	N: 415690.38 E: 238263.69	7118.63
WD 135	WEEP DRAIN	N: 415680.18 E: 238263.27	7118.89
WD 136	WEEP DRAIN	N: 415670.03 E: 238263.39	7118.81
WD 137	WEEP DRAIN	N: 415660.17 E: 238262.96	7118.60
WD 138	WEEP DRAIN	N: 415650.16 E: 238262.68	7118.43
WD 139	WEEP DRAIN	N: 415639.73 E: 238262.40	7118.25
WD 140	WEEP DRAIN	N: 415629.44 E: 238262.82	7118.24
WD 141	WEEP DRAIN	N: 415619.29 E: 238262.40	7118.03
WD 142	WEEP DRAIN	N: 415609.85 E: 238262.40	7117.93
WD 143	WEEP DRAIN	N: 415600.12 E: 238251.35	7115.06

ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 144	WEEP DRAIN	N: 415609.99 E: 238252.06	7115.34
WD 145	WEEP DRAIN	N: 415619.43 E: 238252.06	7115.44
WD 146	WEEP DRAIN	N: 415629.58 E: 238252.48	7115.57
WD 147	WEEP DRAIN	N: 415639.87 E: 238252.06	7115.43
WD 148	WEEP DRAIN	N: 415650.30 E: 238252.34	7115.51
WD 149	WEEP DRAIN	N: 415660.31 E: 238252.62	7115.59
WD 150	WEEP DRAIN	N: 415670.17 E: 238253.05	7115.72
WD 151	WEEP DRAIN	N: 415680.32 E: 238252.93	7115.67
WD 152	WEEP DRAIN	N: 415690.52 E: 238253.35	7115.80
WD 153	WEEP DRAIN	N: 415701.27 E: 238253.21	7115.75
WD 154	WEEP DRAIN	N: 415711.64 E: 238253.33	7115.78
WD 155	WEEP DRAIN	N: 415722.15 E: 238253.42	7115.59
WD 156	WEEP DRAIN	N: 415732.34 E: 238253.45	7115.44
WD 157	WEEP DRAIN	N: 415742.70 E: 238253.81	7115.57



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 30000
FOR AND ON BEHALF OF JR ENGINEERING, LLC

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

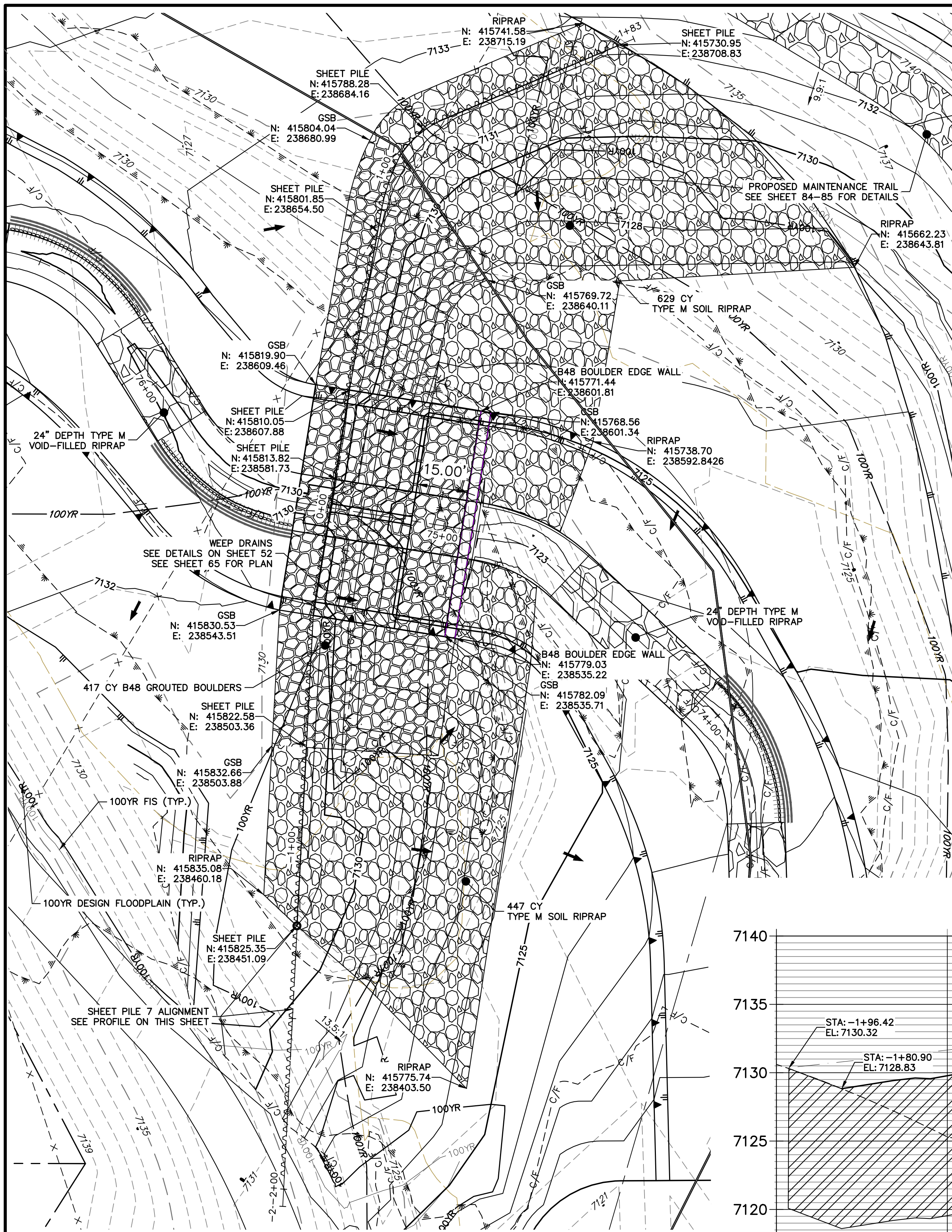
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

J.R. ENGINEERING
A Westman Company
Central 303-740-9383 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION	1"=5'		DESIGNED BY	D/JV	NEO	CHECKED BY
				H-SCALE	V-SCALE				

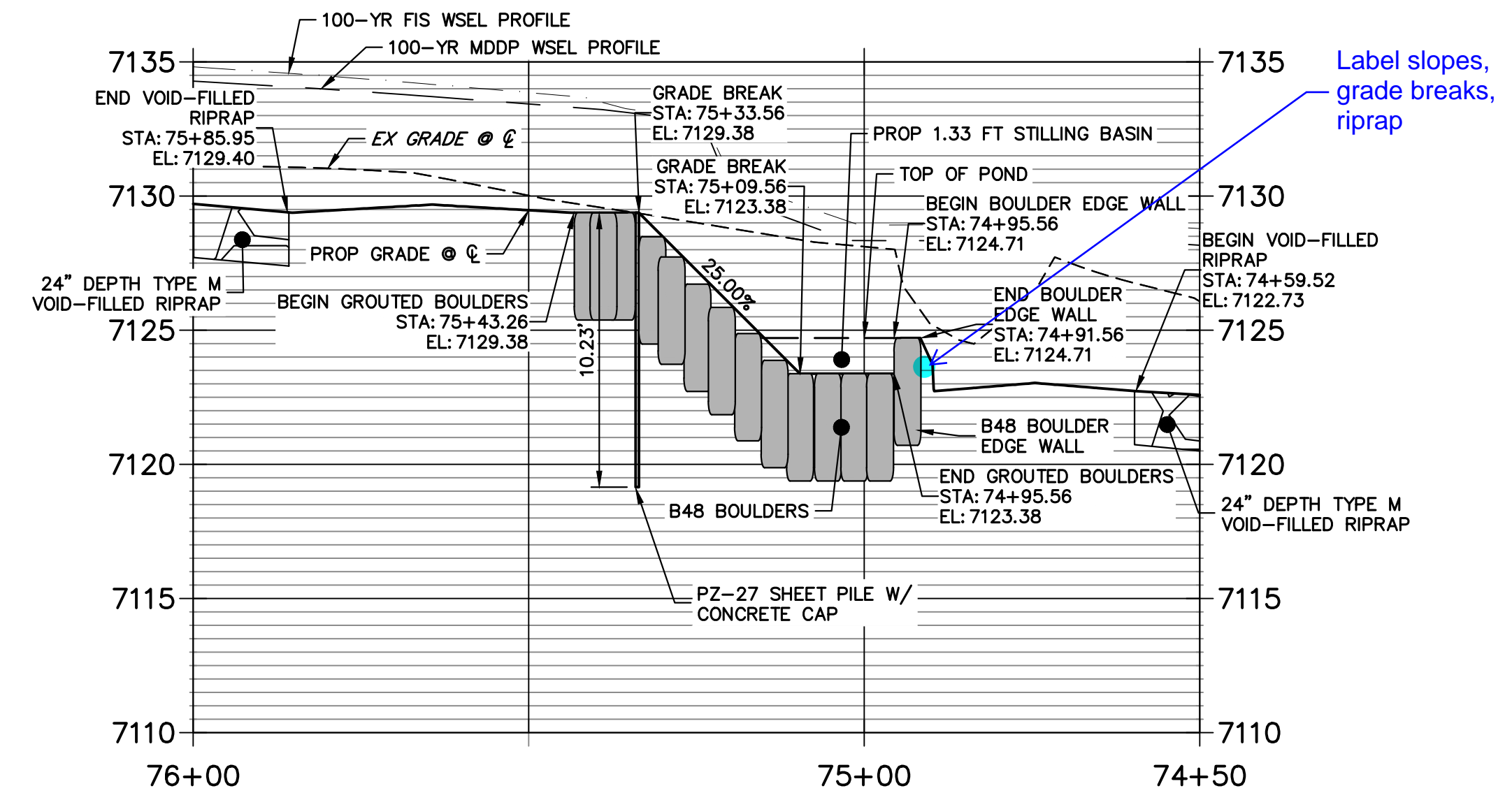
SAND CREEK RESTORATION
GSB DETAILS
SHEET 63 OF 111
JOB NO. 25188.04

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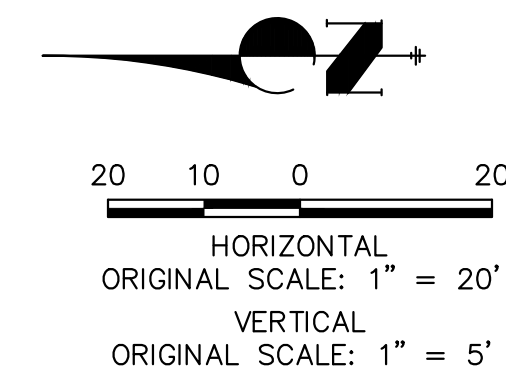
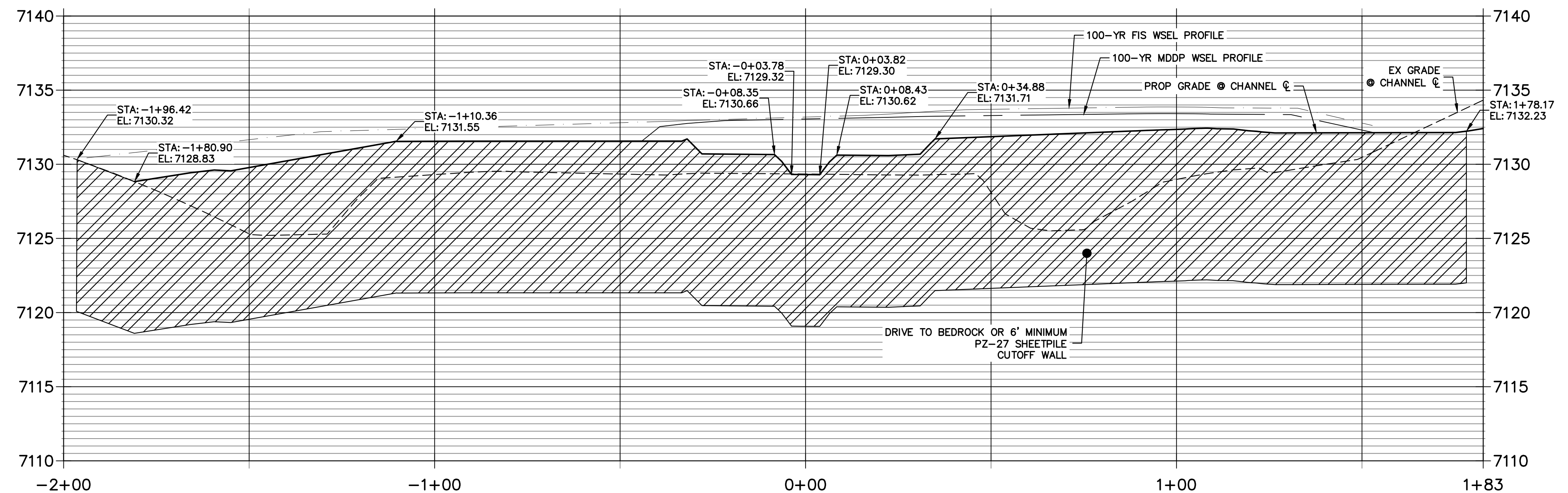


**GRouted STEPPED BOULDER DROP #7 DETAIL
PLAN VIEW**
HORIZONTAL SCALE: 1"=20'

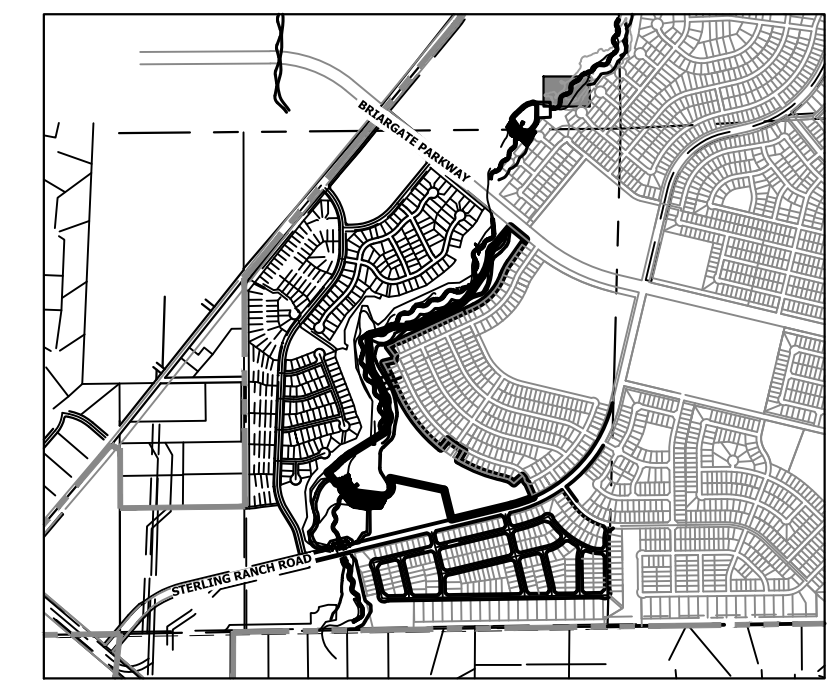
**GSB PROFILE 7
STA 74+50.00 TO 76+00.00**



**SHEET PILE 7 PROFILE
STA -2+00.00 TO 1+82.67**



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
**PRELIMINARY
NOT FOR
CONSTRUCTION**
MIKE A. BRAMLEY
COLORADO P.E. 30101
FOR AND ON BEHALF OF J.R. ENGINEERING, LLC



KEY MAP
SCALE: 1"=2000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE AS DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

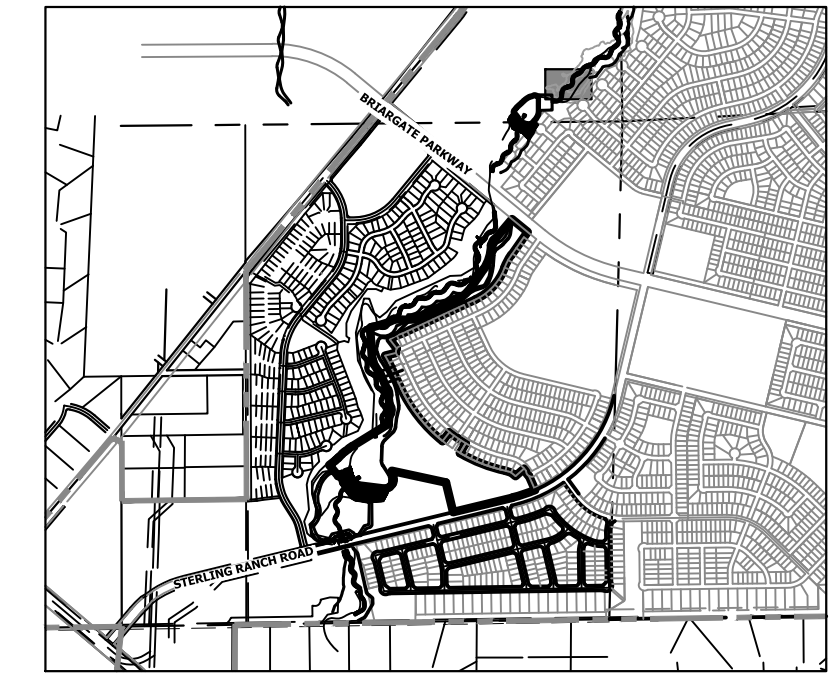
J.R. ENGINEERING
A Westman Company
Central 303-740-9383 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION

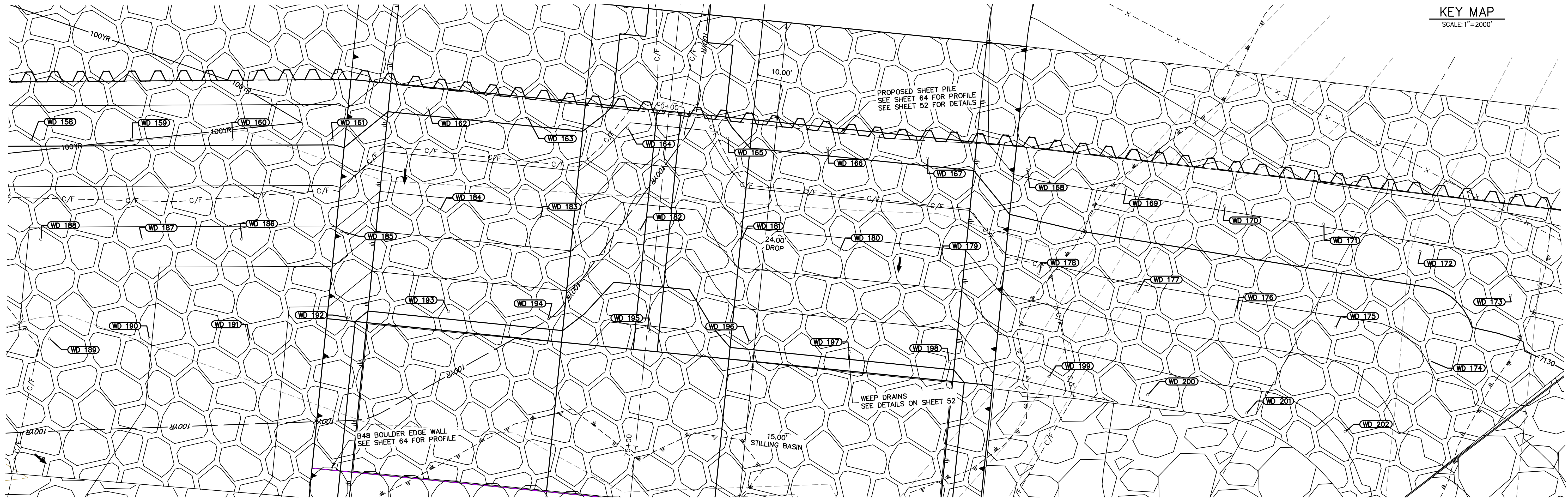
H-SCALE: 1"=20'
V-SCALE: 1"=5'
DATE: 1/23/23
DESIGNED BY: DJV
DRAWN BY: NEO
CHECKED BY:

**SAND CREEK RESTORATION
GSB DETAILS**

SHEET 64 OF 111
JOB NO. 25188.04



KEY MAP
SCALE: 1"=2000'



GSB07 WEEP DRAINS PLAN VIEW
SCALE: 1"=5'

ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 158	WEEP DRAIN	N: 415816.51 E: 238509.68	7130.17
WD 159	WEEP DRAIN	N: 415815.95 E: 238519.70	7130.16
WD 160	WEEP DRAIN	N: 415815.35 E: 238529.71	7130.15
WD 161	WEEP DRAIN	N: 415814.70 E: 238539.71	7130.13
WD 162	WEEP DRAIN	N: 415817.29 E: 238549.40	7130.19
WD 163	WEEP DRAIN	N: 415815.69 E: 238559.30	7130.19
WD 164	WEEP DRAIN	N: 415814.10 E: 238569.20	7128.91
WD 165	WEEP DRAIN	N: 415812.51 E: 238579.11	7129.61
WD 166	WEEP DRAIN	N: 415810.92 E: 238589.01	7130.19
WD 167	WEEP DRAIN	N: 415809.32 E: 238598.91	7130.19
WD 168	WEEP DRAIN	N: 415807.60 E: 238608.79	7131.20
WD 169	WEEP DRAIN	N: 415805.20 E: 238618.53	7131.16
WD 170	WEEP DRAIN	N: 415802.80 E: 238628.27	7131.11
WD 171	WEEP DRAIN	N: 415800.41 E: 238638.01	7131.06
WD 172	WEEP DRAIN	N: 415797.09 E: 238647.48	7130.79

ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 173	WEEP DRAIN	N: 415792.20 E: 238656.24	7130.67
WD 174	WEEP DRAIN	N: 415786.14 E: 238647.82	7129.05
WD 175	WEEP DRAIN	N: 415790.01 E: 238638.57	7128.73
WD 176	WEEP DRAIN	N: 415792.40 E: 238628.83	7128.78
WD 177	WEEP DRAIN	N: 415794.80 E: 238619.09	7128.83
WD 178	WEEP DRAIN	N: 415797.20 E: 238609.35	7128.72
WD 179	WEEP DRAIN	N: 415799.10 E: 238599.50	7127.69
WD 180	WEEP DRAIN	N: 415800.69 E: 238589.60	7127.69
WD 181	WEEP DRAIN	N: 415802.25 E: 238579.82	7127.69
WD 182	WEEP DRAIN	N: 415803.88 E: 238569.79	7126.36
WD 183	WEEP DRAIN	N: 415805.58 E: 238559.91	7127.72
WD 184	WEEP DRAIN	N: 415807.06 E: 238549.99	7127.69
WD 185	WEEP DRAIN	N: 415805.51 E: 238540.08	7127.76
WD 186	WEEP DRAIN	N: 415805.34 E: 238530.06	7127.68
WD 187	WEEP DRAIN	N: 415805.94 E: 238520.05	7127.70

ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 188	WEEP DRAIN	N: 415806.51 E: 238510.04	7127.91
WD 189	WEEP DRAIN	N: 415796.53 E: 238510.31	7127.77
WD 190	WEEP DRAIN	N: 415795.93 E: 238520.32	7127.02
WD 191	WEEP DRAIN	N: 415795.33 E: 238530.33	7126.27
WD 192	WEEP DRAIN	N: 415796.89 E: 238540.23	7125.26
WD 193	WEEP DRAIN	N: 415796.89 E: 238550.26	7125.19
WD 194	WEEP DRAIN	N: 415795.57 E: 238560.20	7125.26
WD 195	WEEP DRAIN	N: 415793.68 E: 238570.21	7123.86
WD 196	WEEP DRAIN	N: 415792.09 E: 238580.11	7125.19
WD 197	WEEP DRAIN	N: 415790.50 E: 238590.01	7125.19
WD 198	WEEP DRAIN	N: 415788.90 E: 238599.92	7125.19
WD 199	WEEP DRAIN	N: 415786.84 E: 238609.73	7126.25
WD 200	WEEP DRAIN	N: 415784.44 E: 238619.47	7126.37
WD 201	WEEP DRAIN	N: 415782.04 E: 238629.21	7126.45
WD 202	WEEP DRAIN	N: 415779.60 E: 238638.94	7127.16



5 3 0 5 10
ORIGINAL SCALE: 1" = 5'



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMBLE
COLORADO P.E. 30112
FOR AND ON BEHALF OF JR. ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR. ENGINEERING APPROVES THEIR USE ONLY AS DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
A Weidman Company
Central 303-740-9383 • Colorado Springs 719-583-2593
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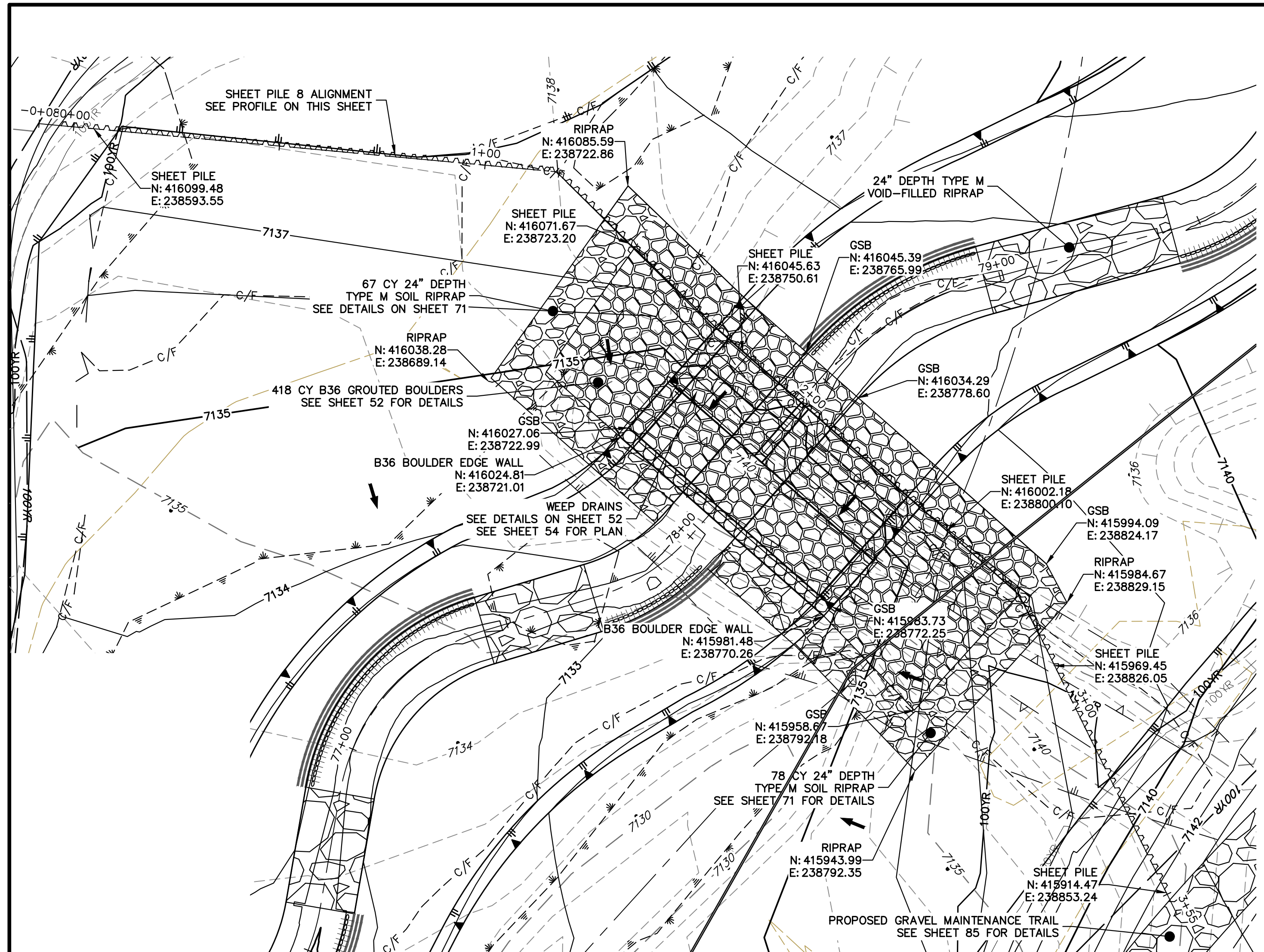
No.	REVISION	BY	DATE

SAND CREEK RESTORATION
GSB DETAILS

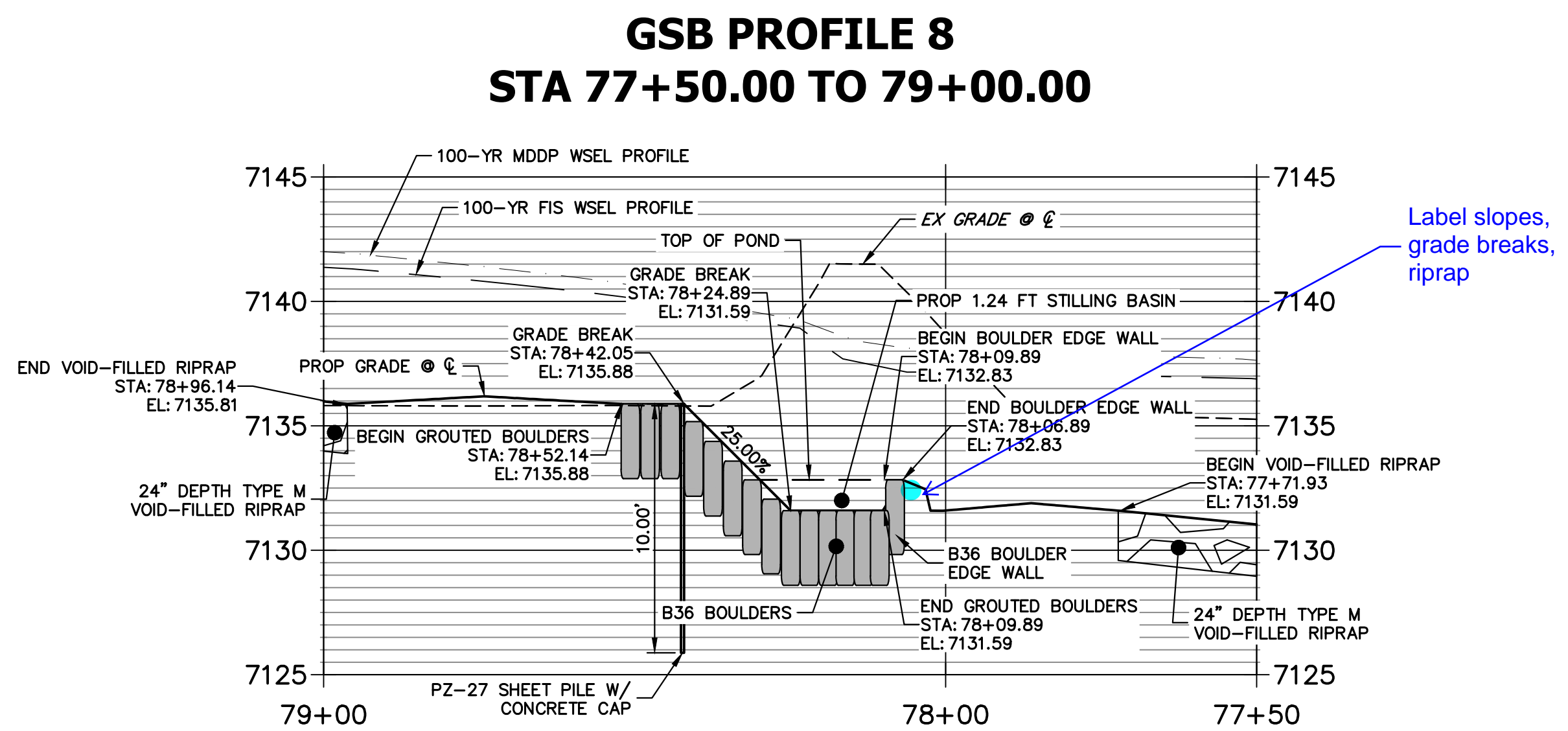
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V-SCALE N/A
DATE 1/23/23
DESIGNED BY DJV
DRAWN BY SCH
CHECKED BY

SHEET 65 OF 111
JOB NO. 25188.04

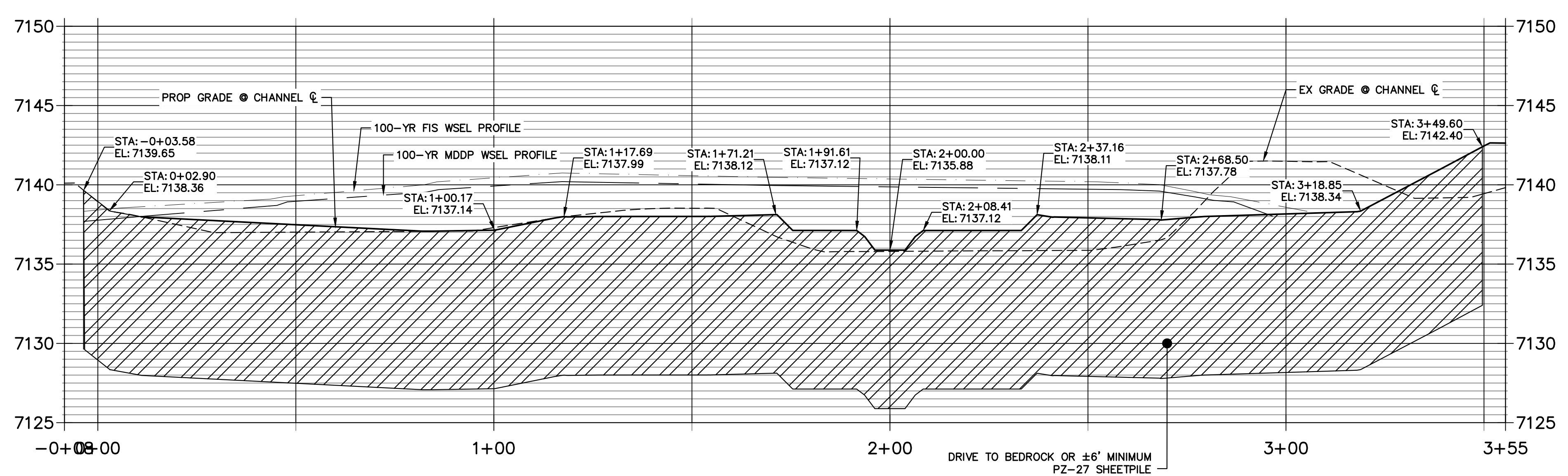
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**GRouted STEPPED BOULDER DROP #8 DETAIL
PLAN VIEW**
HORIZONTAL SCALE: 1"=20'

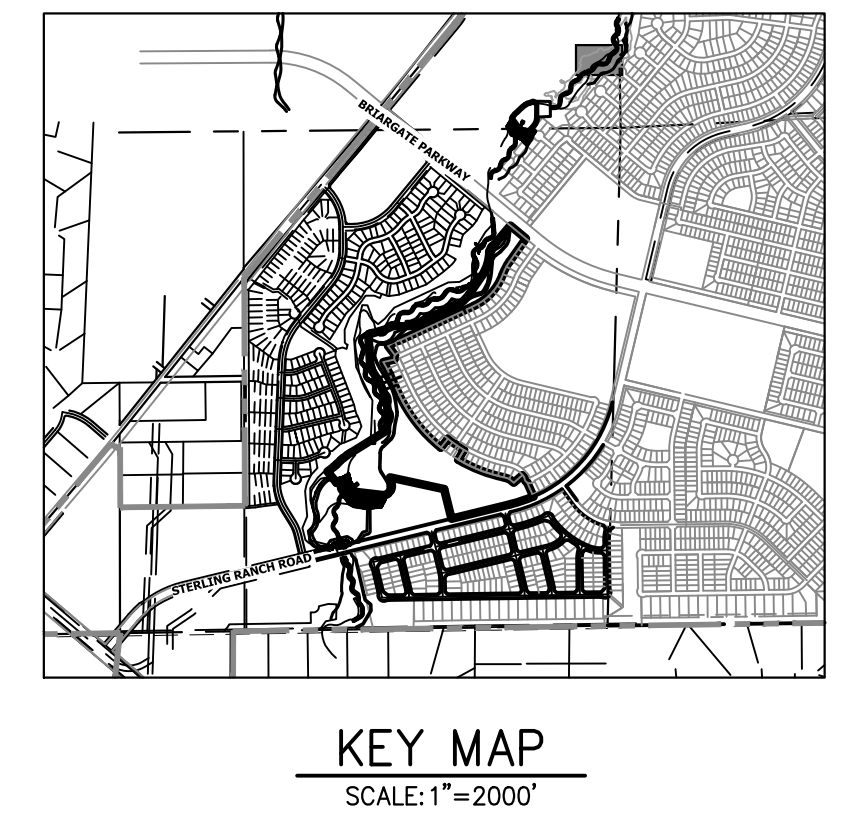


**SHEET PILE 8 PROFILE
STA -0+08.44 TO 3+55.43**



HORIZONTAL ORIGINAL SCALE: 1" = 20'
VERTICAL ORIGINAL SCALE: 1" = 5'

ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMBLE
COLORADO P.E. 30000
FOR AND ON BEHALF OF JR ENGINEERING



PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

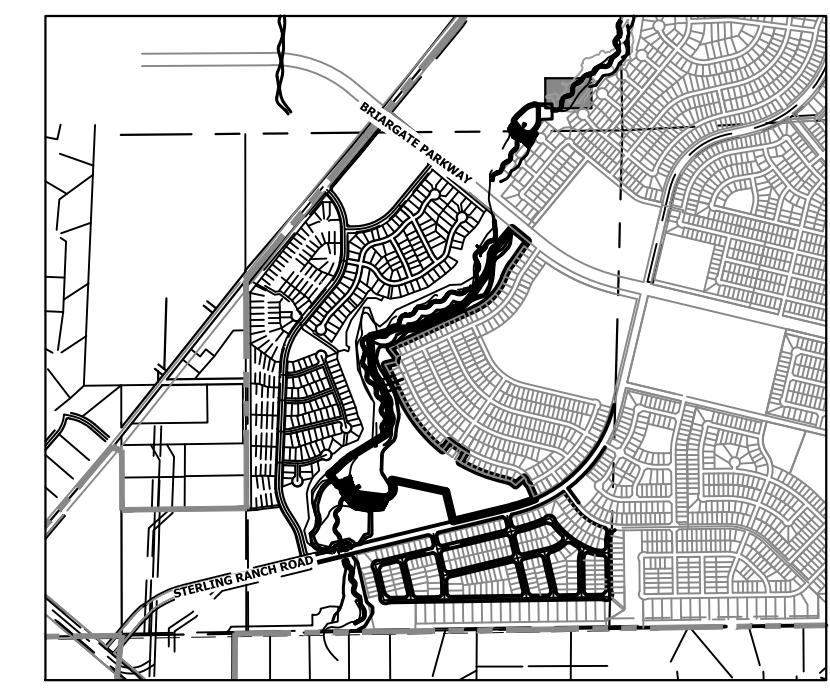
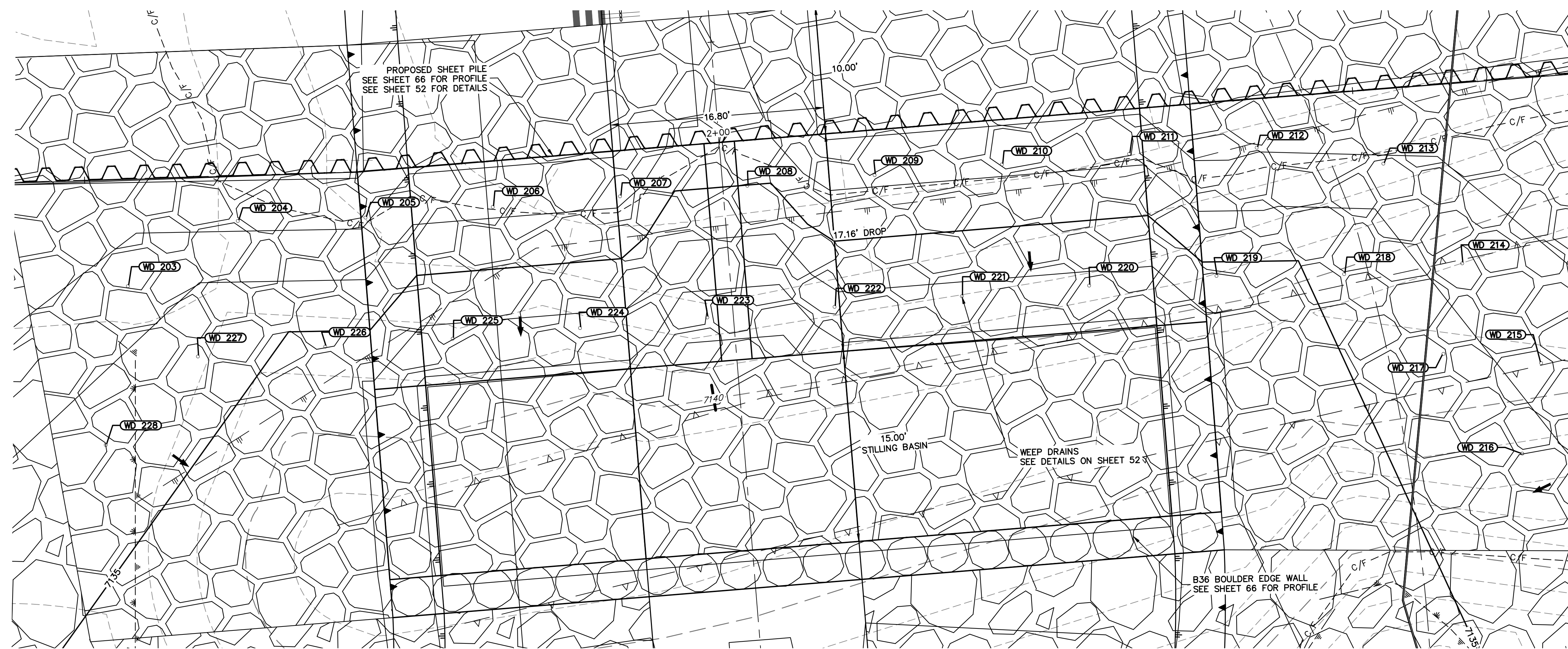
J.R. ENGINEERING
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Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	NO.	REVISION

SAND CREEK RESTORATION
GSB DETAILS
SHEET 66 OF 111
JOB NO. 25188.04

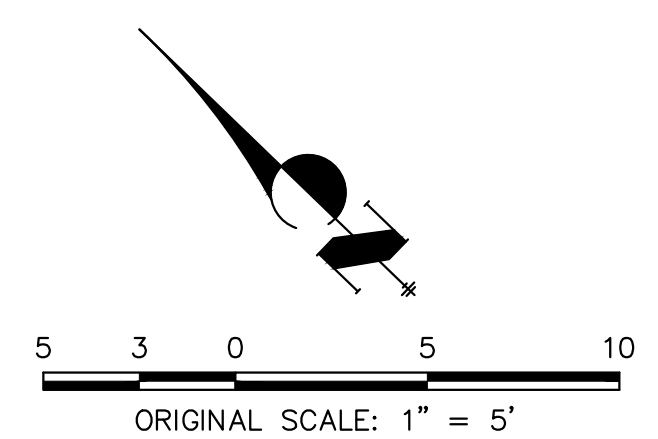
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GSB08 WEEP DRAINS PLAN VIEW
SCALE: 1"=5'

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 203	WEEP DRAIN	N: 416057.94 E: 238725.28	7136.58
WD 204	WEEP DRAIN	N: 416055.29 E: 238734.98	7137.20
WD 205	WEEP DRAIN	N: 416048.25 E: 238742.14	7137.13
WD 206	WEEP DRAIN	N: 416041.63 E: 238749.70	7136.22
WD 207	WEEP DRAIN	N: 416035.01 E: 238757.25	7136.17
WD 208	WEEP DRAIN	N: 416028.39 E: 238764.81	7134.99
WD 209	WEEP DRAIN	N: 416021.77 E: 238772.37	7136.23
WD 210	WEEP DRAIN	N: 416015.15 E: 238779.92	7136.23
WD 211	WEEP DRAIN	N: 416008.53 E: 238787.48	7136.24
WD 212	WEEP DRAIN	N: 416001.65 E: 238794.80	7137.08
WD 213	WEEP DRAIN	N: 415993.62 E: 238800.82	7136.84
WD 214	WEEP DRAIN	N: 415983.71 E: 238799.49	7136.43
WD 215	WEEP DRAIN	N: 415973.79 E: 238798.16	7136.43
WD 216	WEEP DRAIN	N: 415969.91 E: 238792.01	7135.61
WD 217	WEEP DRAIN	N: 415979.82 E: 238793.34	7135.61

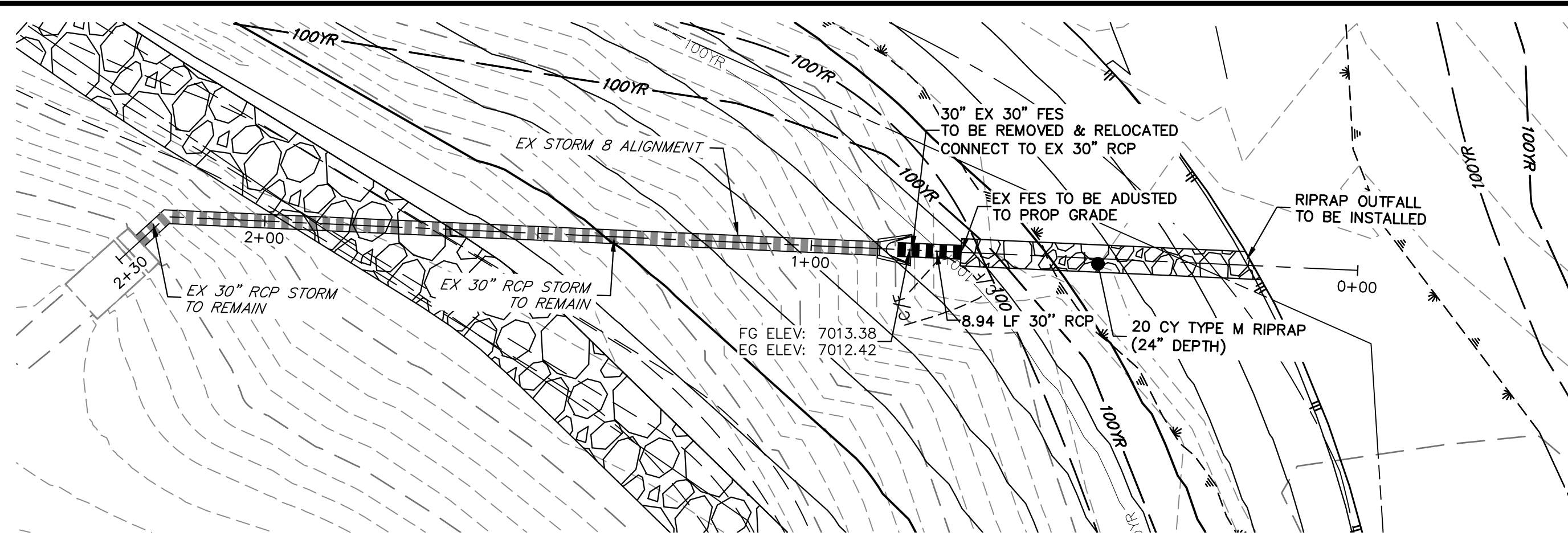
POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 218	WEEP DRAIN	N: 415989.79 E: 238792.42	7135.30
WD 219	WEEP DRAIN	N: 415996.92 E: 238785.35	7134.72
WD 220	WEEP DRAIN	N: 416003.60 E: 238777.84	7133.72
WD 221	WEEP DRAIN	N: 416010.22 E: 238770.28	7133.72
WD 222	WEEP DRAIN	N: 416016.84 E: 238762.73	7133.64
WD 223	WEEP DRAIN	N: 416023.46 E: 238755.17	7132.47
WD 224	WEEP DRAIN	N: 416030.08 E: 238747.62	7133.71
WD 225	WEEP DRAIN	N: 416036.70 E: 238740.06	7133.70
WD 226	WEEP DRAIN	N: 416043.48 E: 238732.65	7134.70
WD 227	WEEP DRAIN	N: 416050.14 E: 238725.13	7135.59
WD 228	WEEP DRAIN	N: 416050.52 E: 238715.08	7135.82



ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION
PRELIMINARY NOT FOR CONSTRUCTION
 MIKE A. BRAMLEY
 COLORADO P.E. 30100
 FOR AND ON BEHALF OF J.R. ENGINEERING

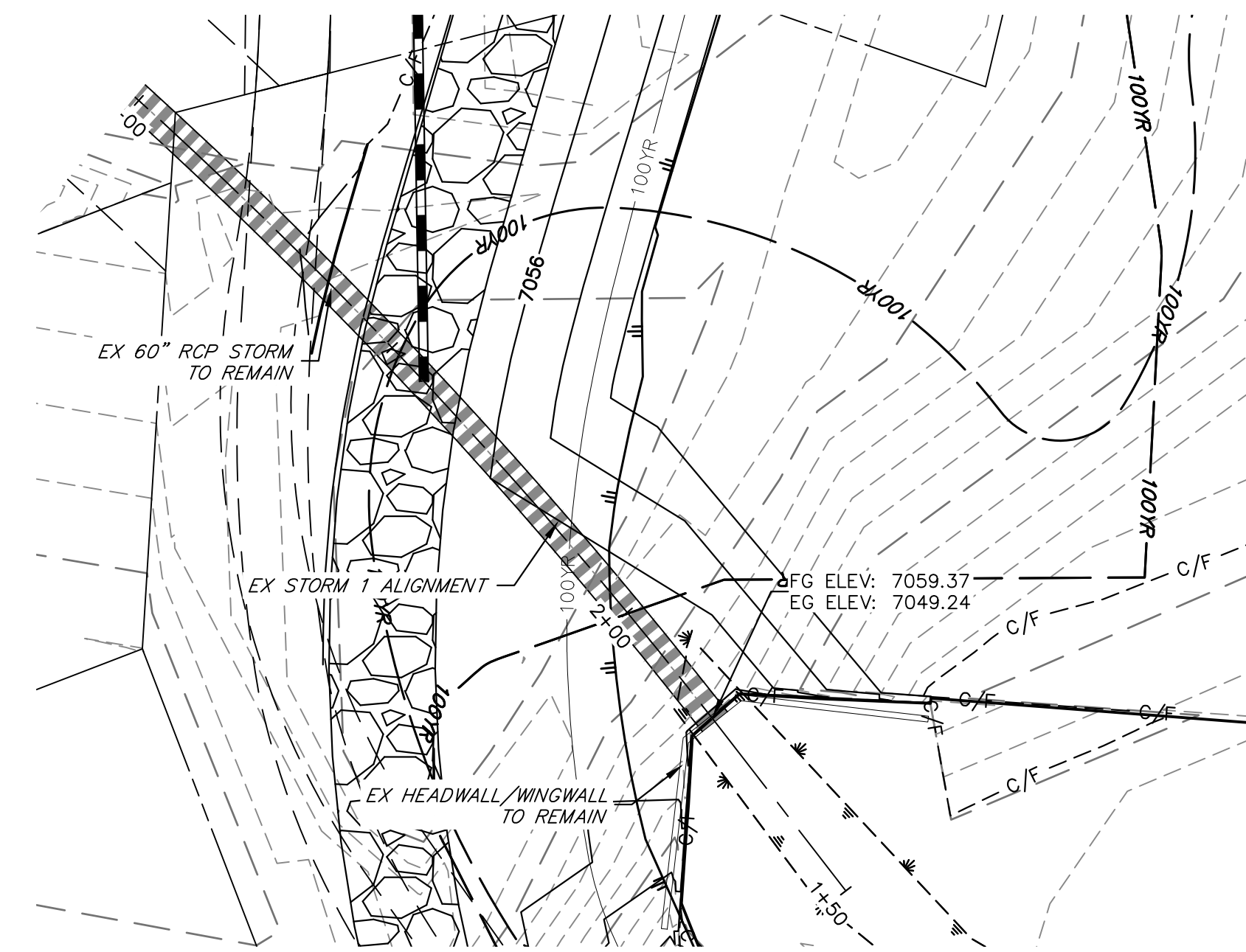
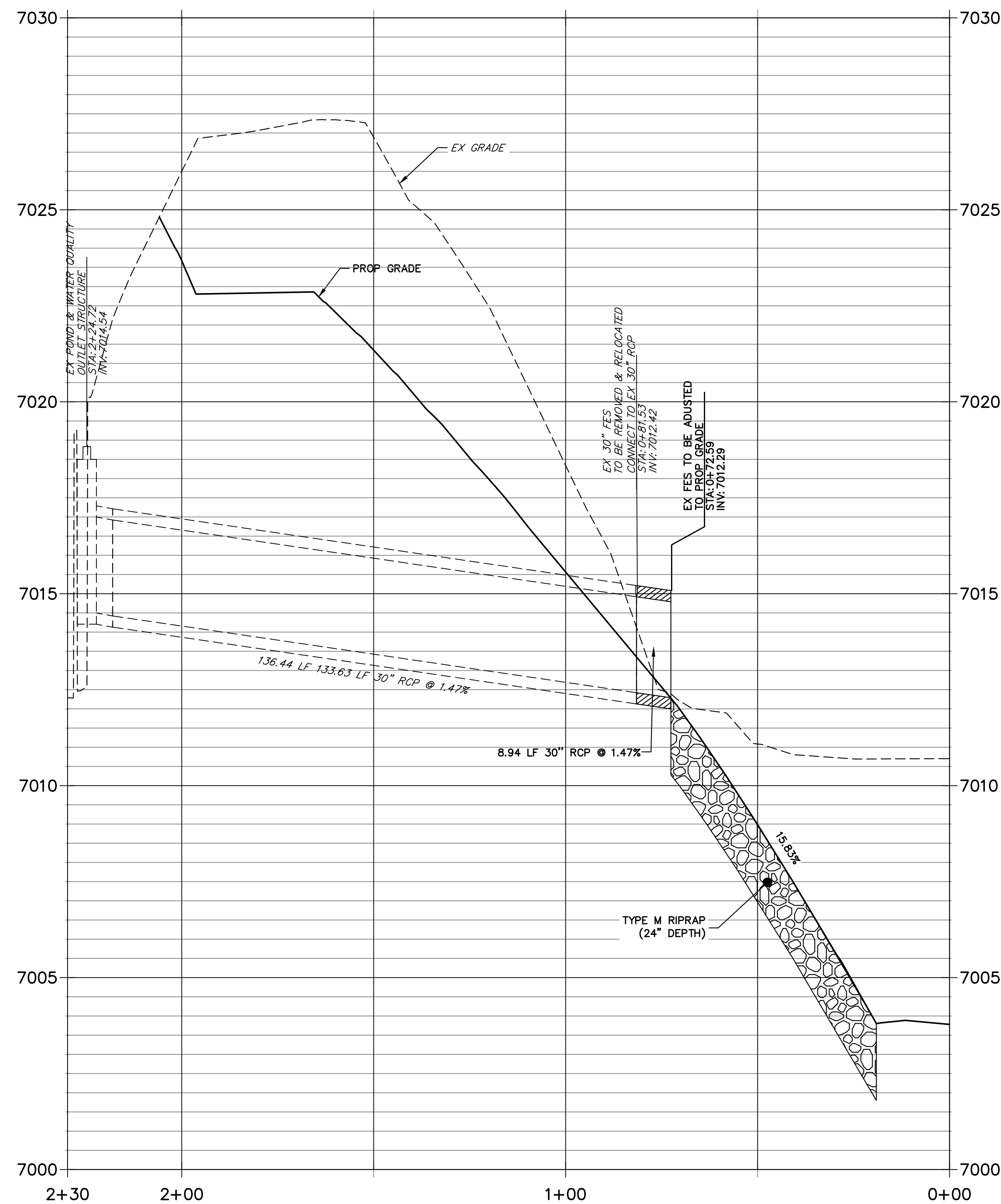
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION. PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	J.R. ENGINEERING A Westman Company Centennial 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE
SAND CREEK RESTORATION GSB DETAILS	SHEET 67 OF 111 JOB NO. 25188.04	No.	REVISION
		H-SCALE	1"=5'
		V-SCALE	N/A
DESIGNED BY	DATE	1/23/23	DIV
DRAWN BY			NEO
CHECKED BY			

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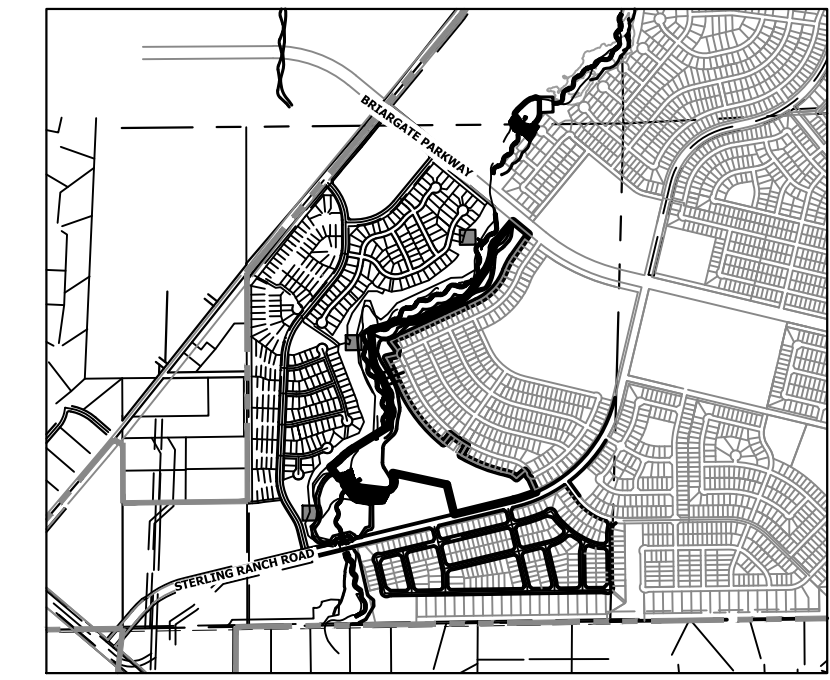
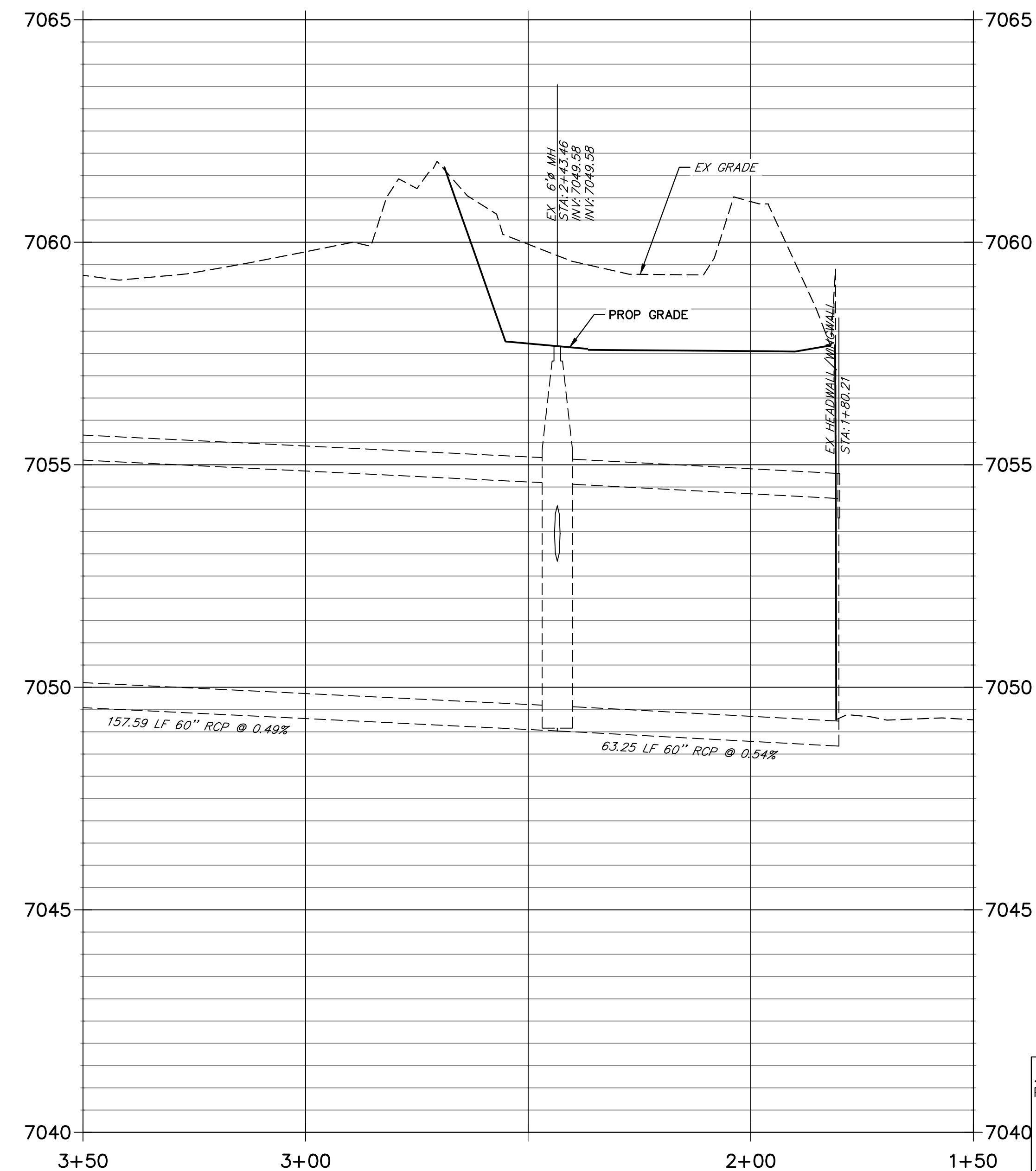
SEE STERLING RANCH FILING NO. 1 PLANS FOR AS BUILTS
(BY M&S CIVIL)

EX STORM 8 STA 0+00.00 TO 2+29.72



SEE STERLING RANCH FILING NO. 1 PLANS FOR AS BUILTS
(BY M&S CIVIL)

EX STORM 1 STA 1+50.00 TO 3+50.00



KEY MAP
SCALE: 1" = 2000'

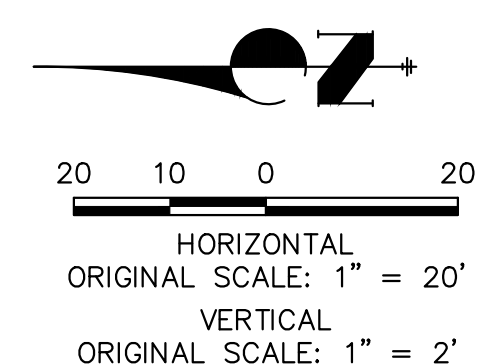
BENCHMARK

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 41148.273
EASTING = 235167.071
ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANNEE RANCHEROS SUBDIVISION
NORTHING = 410095.404
EASTING = 235052.131
ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411399.962
EASTING = 233849.817
ELEVATION = 7030.82

BASIS OF BEARINGS
THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



Know what's below.
Call before you dig.



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

**PRELIMINARY
NOT FOR
CONSTRUCTION**

MIKE A. BRAMBLE
COLORADO P.E. 30117
FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, J.R. ENGINEERING APPROVES THEIR USE AS DESIGNATED BY WRITTEN AUTHORIZATION.

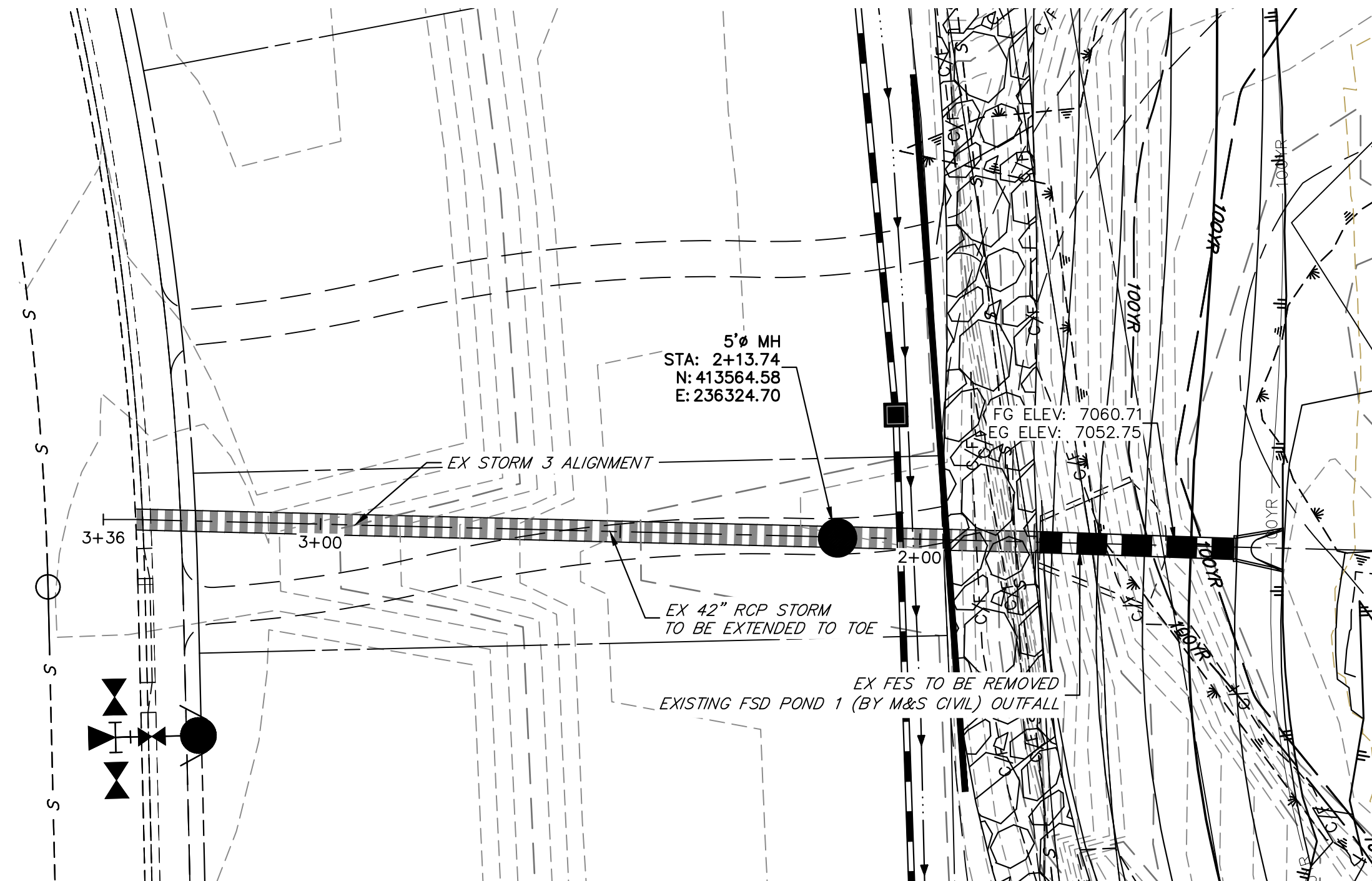
PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
A Westman Company
 Centennial 300-740-9888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

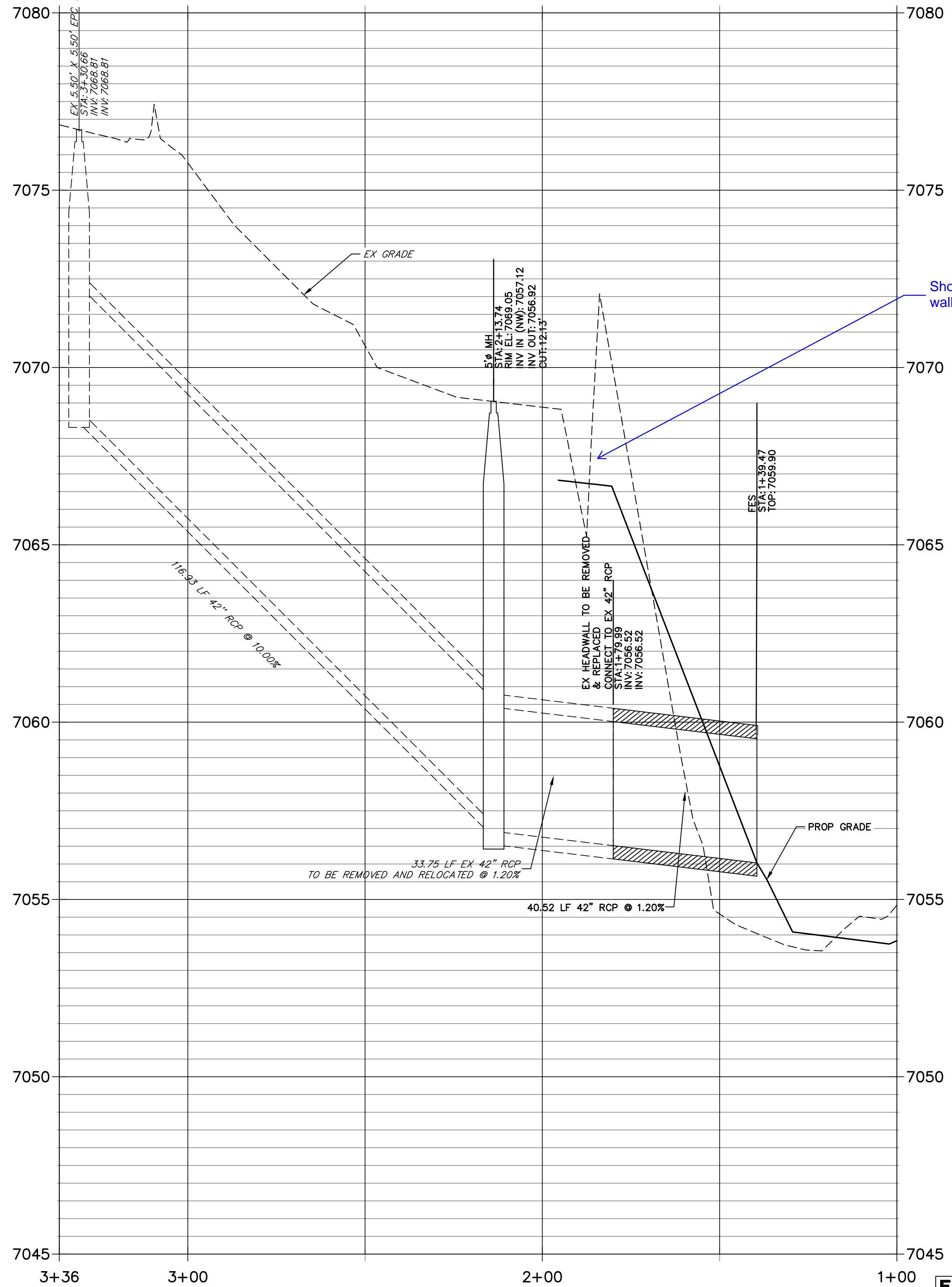
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1" = 20'	1" = 2'	1/23/23	DJV	WLL	

SAND CREEK RESTORATION
STORM PLAN & PROFILE
SHEET 68 OF 111
JOB NO. 25188.04

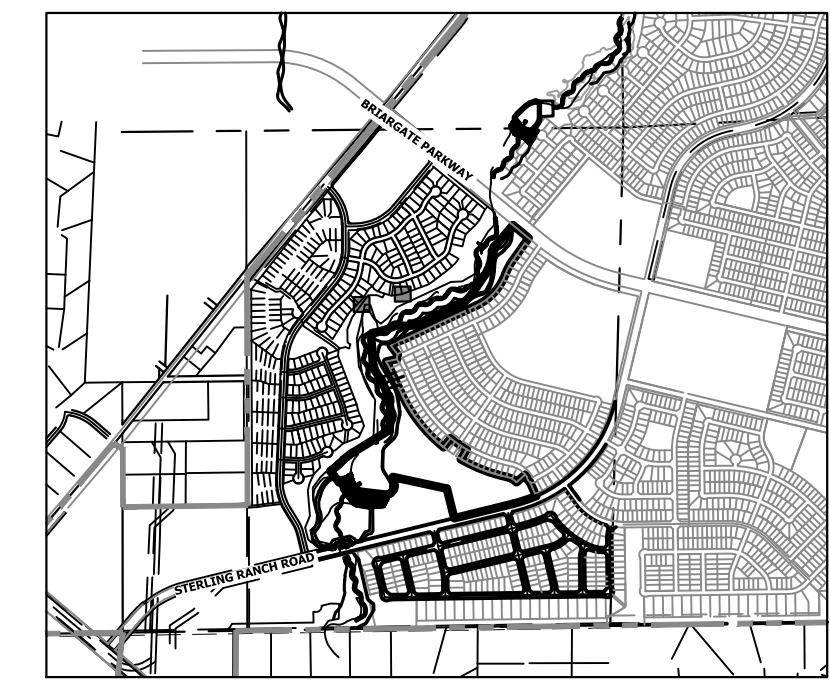


SEE HOMESTEAD AT STERLING RANCH FILING NO. 2 PLANS FOR AS BUILTS (BY M&S CIVIL)

EX STORM 3 STA 1+00.00 TO 3+36.25



Show retaining wall



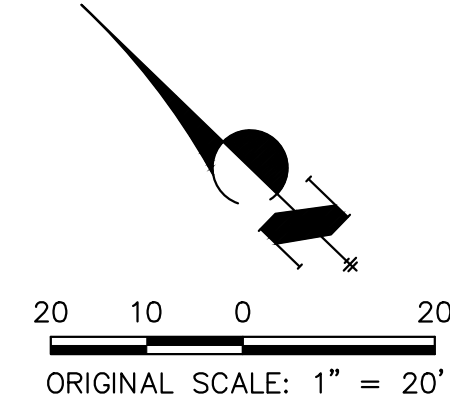
KEY MAP
SCALE: 1" = 2000'

BENCHMARK

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411416.273
EASTING = 235167.071
ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION
NORTHING = 410095.404
EASTING = 235052.131
ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411389.962
EASTING = 233849.817
ELEVATION = 7030.82

BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M., AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



ENGINEER'S STATEMENT

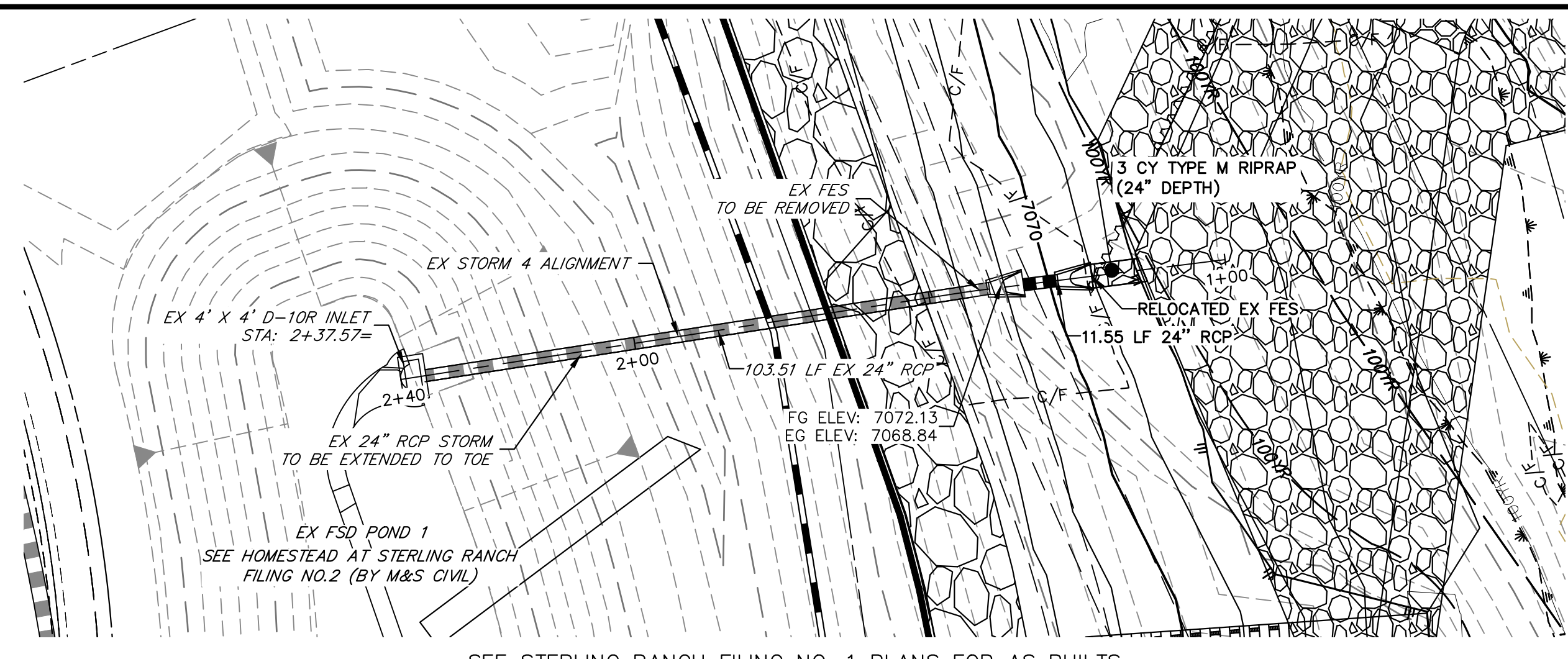
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY
NOT FOR
CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 30042
FOR AND ON BEHALF OF J.R. ENGINEERING, LLC

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

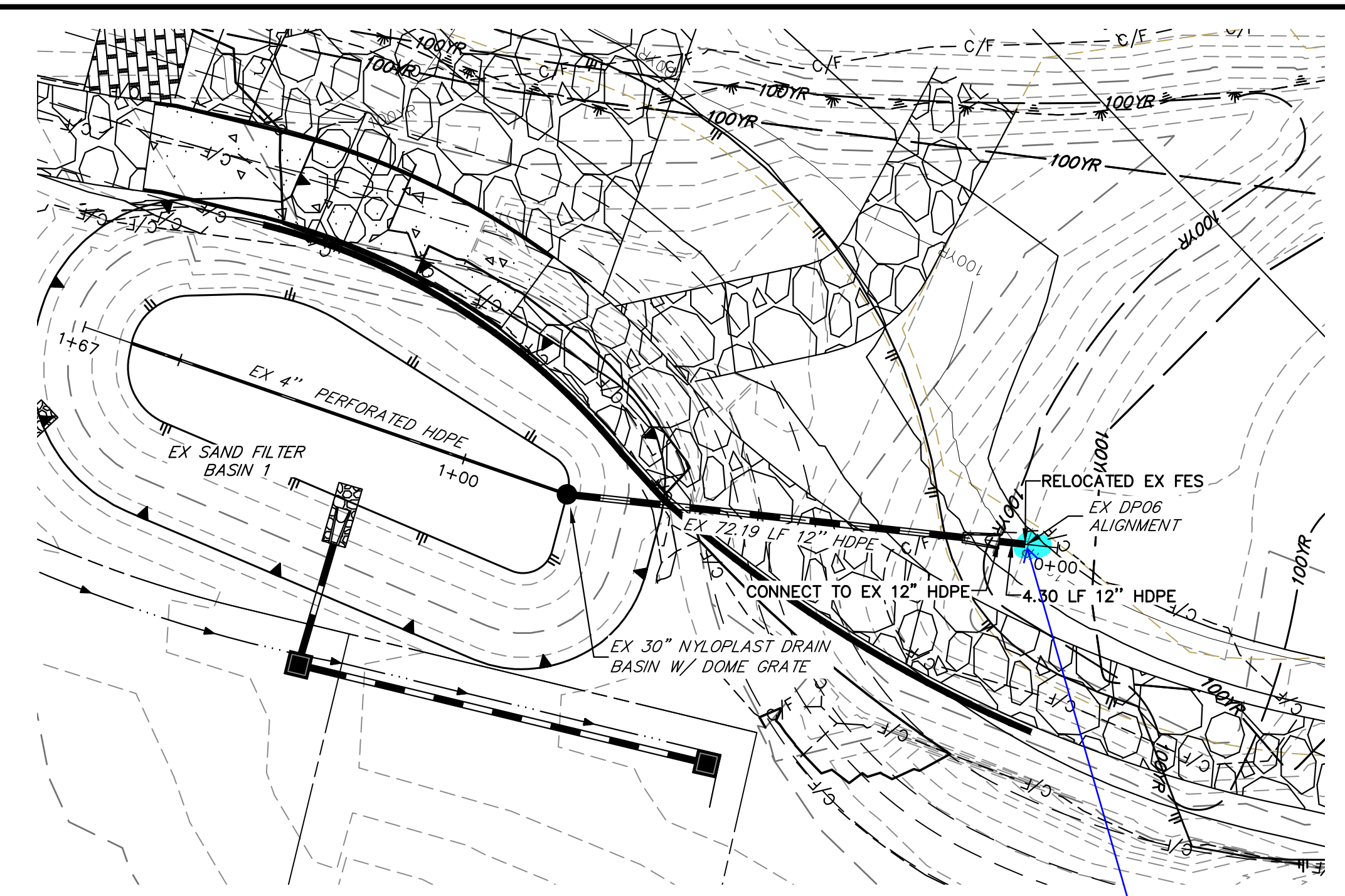
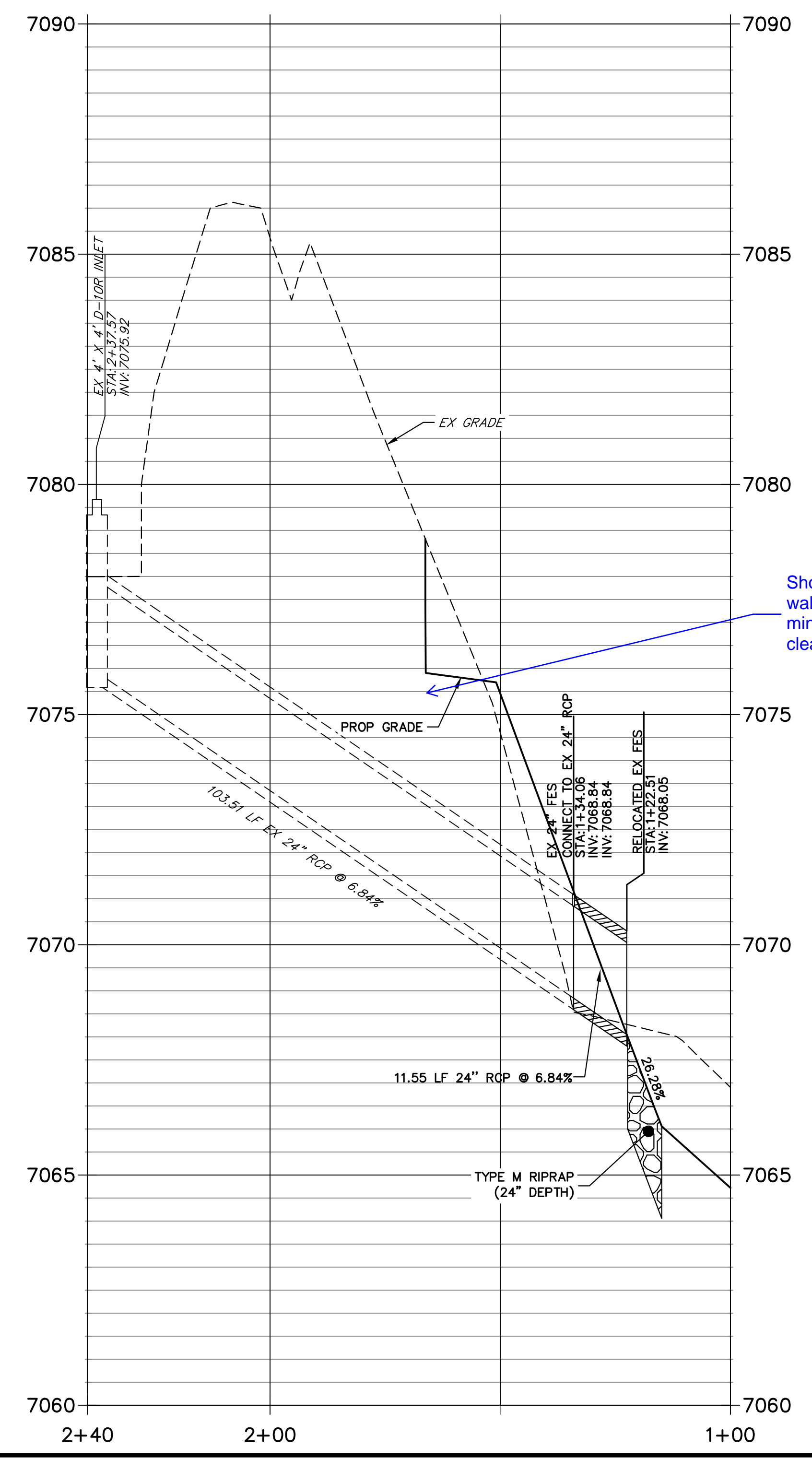
BY		DATE	
No.	REVISION	DATE	BY

SAND CREEK RESTORATION
STORM PLAN & PROFILE
SHEET 69 OF 111
JOB NO. 25188.04



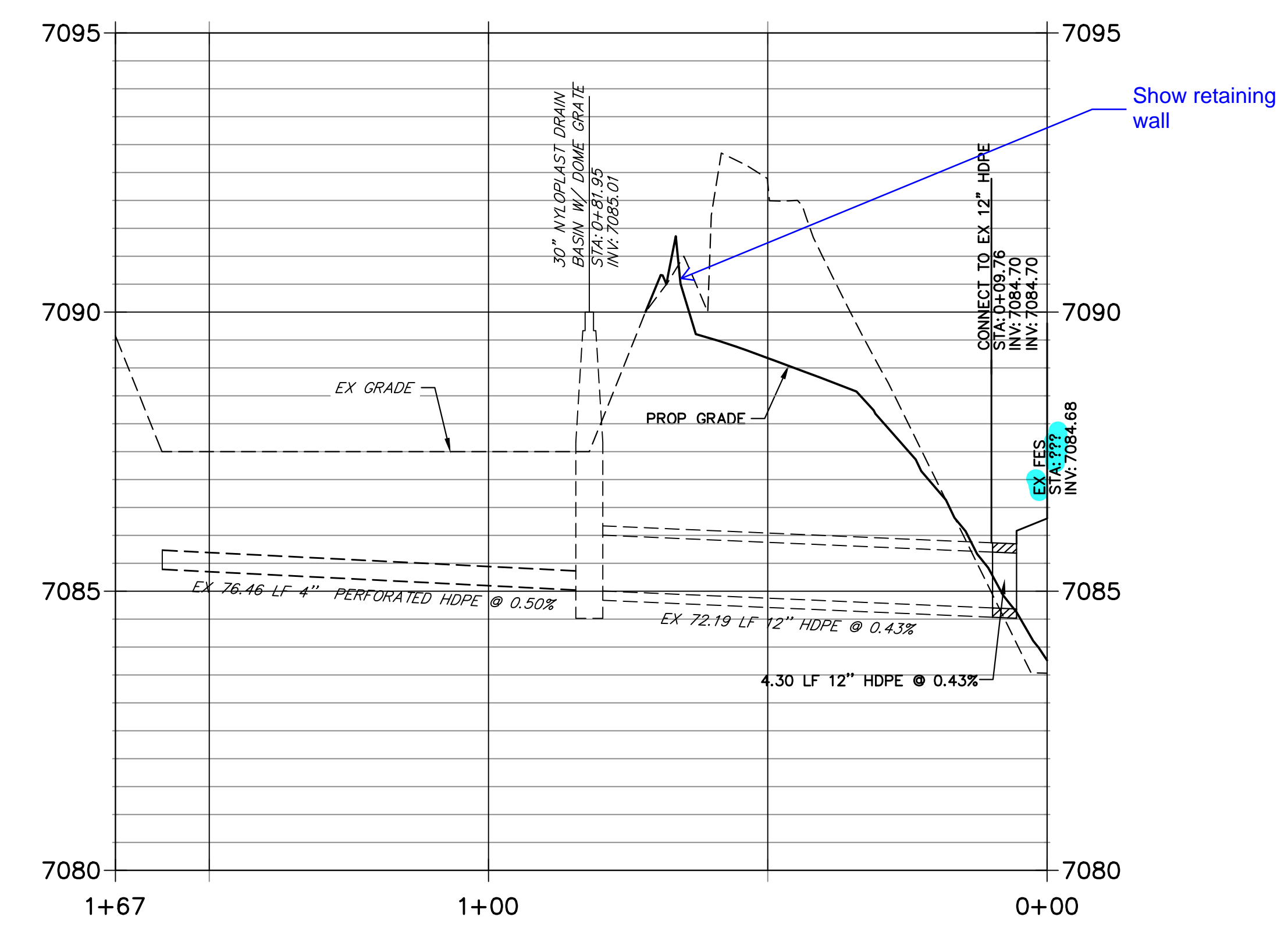
SEE STERLING RANCH FILING NO. 1 PLANS FOR AS BUILTS (BY M&S CIVIL)

**EX STORM 4 (PRIVATE)
 STA 1+00.00 TO 2+39.64**

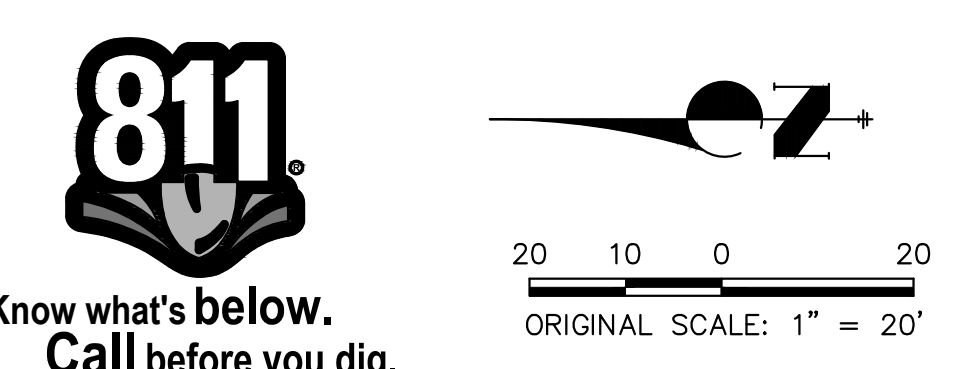


SEE HOMESTEAD 2 COMMONS SAND FILTER STORM PLANS FOR AS BUILTS (BY JR ENGINEERING)

**EX DP06
 STA 0+00.00 TO 1+66.80**



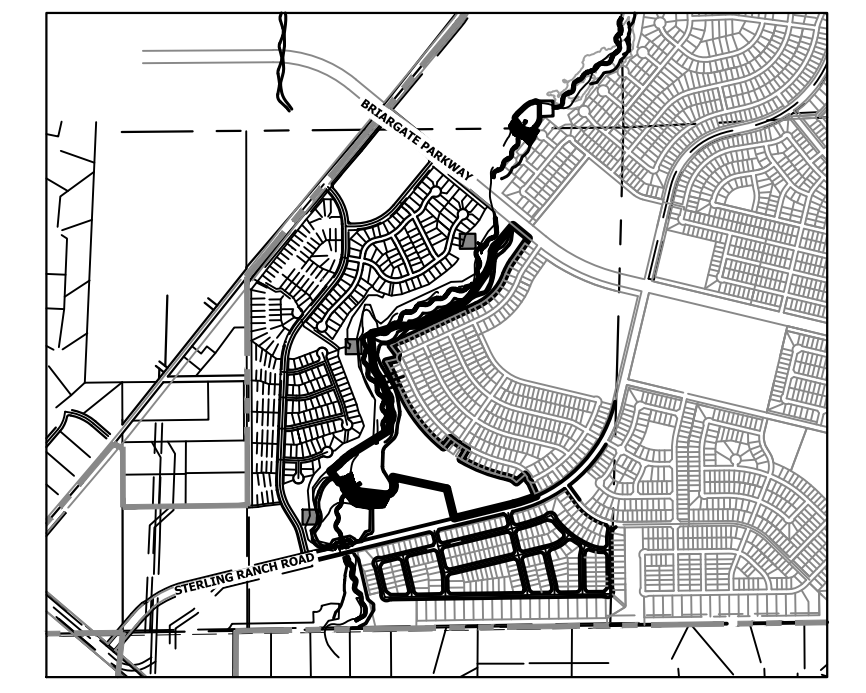
BASIS OF BEARINGS
 THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624". SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

**PRELIMINARY
 NOT FOR
 CONSTRUCTION**

MIKE A. BRAMLEY
 COLORADO P.E. 30112
 FOR AND ON BEHALF OF JR ENGINEERING, LLC



- BENCHMARK**
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411418.273
 EASTING = 235167.071
 ELEVATION = 7023.42
 2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANNEE RANCHEROS SUBDIVISION
 NORTHING = 410095.404
 EASTING = 235052.131
 ELEVATION = 7000.40
 3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411399.962
 EASTING = 233849.817
 ELEVATION = 7030.82

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

J.R. ENGINEERING
 A Westman Company
 Centennial 303-740-9888 • Colorado Springs 719-583-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION

H-SCALE 1"=20'
 V-SCALE 1"=2'
 DATE 1/23/23
 DESIGNED BY DJV
 DRAWN BY WJL
 CHECKED BY

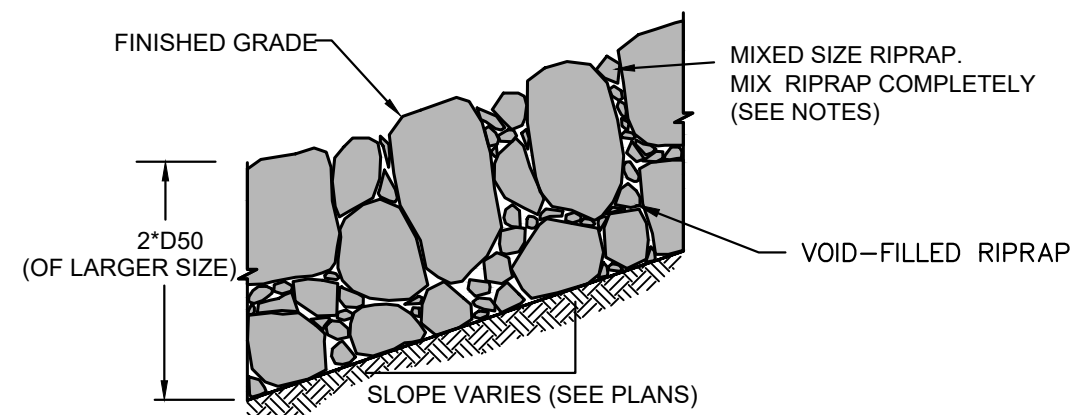
SAND CREEK RESTORATION
STORM PLAN & PROFILE

SHEET 70 OF 111
 JOB NO. 25188.04

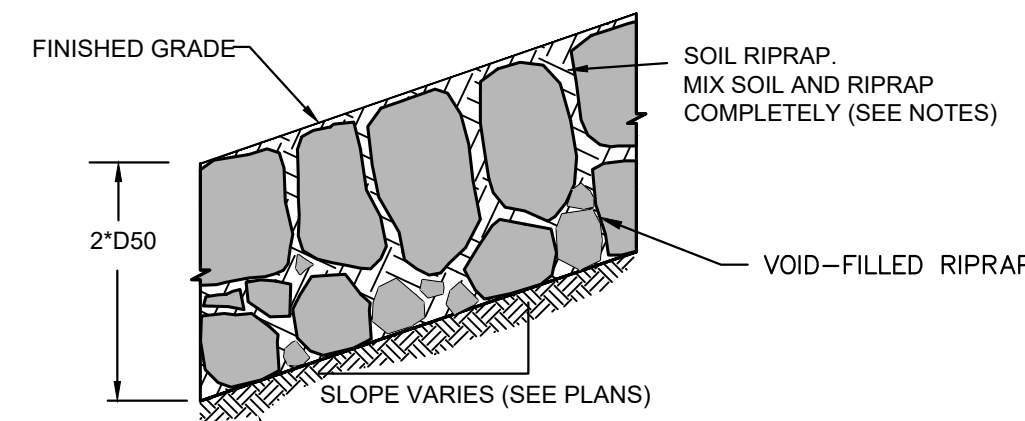
RIPRAP NOTES:

- WHERE "SOIL RIPRAP" IS DESIGNATED ON THE CONTRACT DRAWINGS, RIPRAP VOIDS ARE TO BE FILLED WITH APPROVED FILL. THE RIPRAP SHALL BE PRE-MIXED WITH THE APPROVED FILL AT THE FOLLOWING PROPORTIONS BY VOLUME: 65 PERCENT RIPRAP AND 35 PERCENT SOIL. THE SOIL USED FOR MIXING SHALL BE NATIVE TOPSOIL AND SHALL HAVE A MINIMUM FINES CONTENT OF 15 PERCENT. THE SOIL RIPRAP SHALL BE INSTALLED IN A MANNER THAT RESULTS IN A DENSE, INTERLOCKED LAYER OF RIPRAP WITH RIPRAP VOIDS FILLED COMPLETELY WITH SOIL. SEGREGATION OF MATERIALS SHALL BE AVOIDED AND IN NO CASE SHALL THE COMBINED MATERIAL CONSIST PRIMARILY OF SOIL; THE DENSITY AND INTERLOCKING NATURE OF RIPRAP IN THE MIXED MATERIAL SHALL ESSENTIALLY BE THE SAME AS IF THE RIPRAP WAS PLACED WITHOUT SOIL.
- PLACE ALL RIPRAP AND SOIL-RIPRAP TO RESULT IN SECURELY INTERLOCKED ROCK AT THE DESIGN THICKNESS AND GRADE. COMPACT AND ALL LEVEL TO ELIMINATE VOIDS AND ROCKS PROJECTING DESIGN ABOVE RIPRAP TOP GRADE.
- ALL SOIL RIPRAP THAT IS BURIED WITH TOPSOIL SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ANY TOPSOIL PLACEMENT.
- CRIMP OR TACKIFY MULCH OR USE APPROVED HYDROMULCH AS CALLED FOR IN THE PLANS AND SPECIFICATIONS.
- ELEVATION TOLERANCES FOR RIPRAP SHALL BE 0.10 FEET. THICKNESS OF SOIL RIPRAP SHALL BE NO LESS THAN THICKNESS SHOWN AND NO MORE THAN 2-INCHES GREATER THAN THE THICKNESS SHOWN.

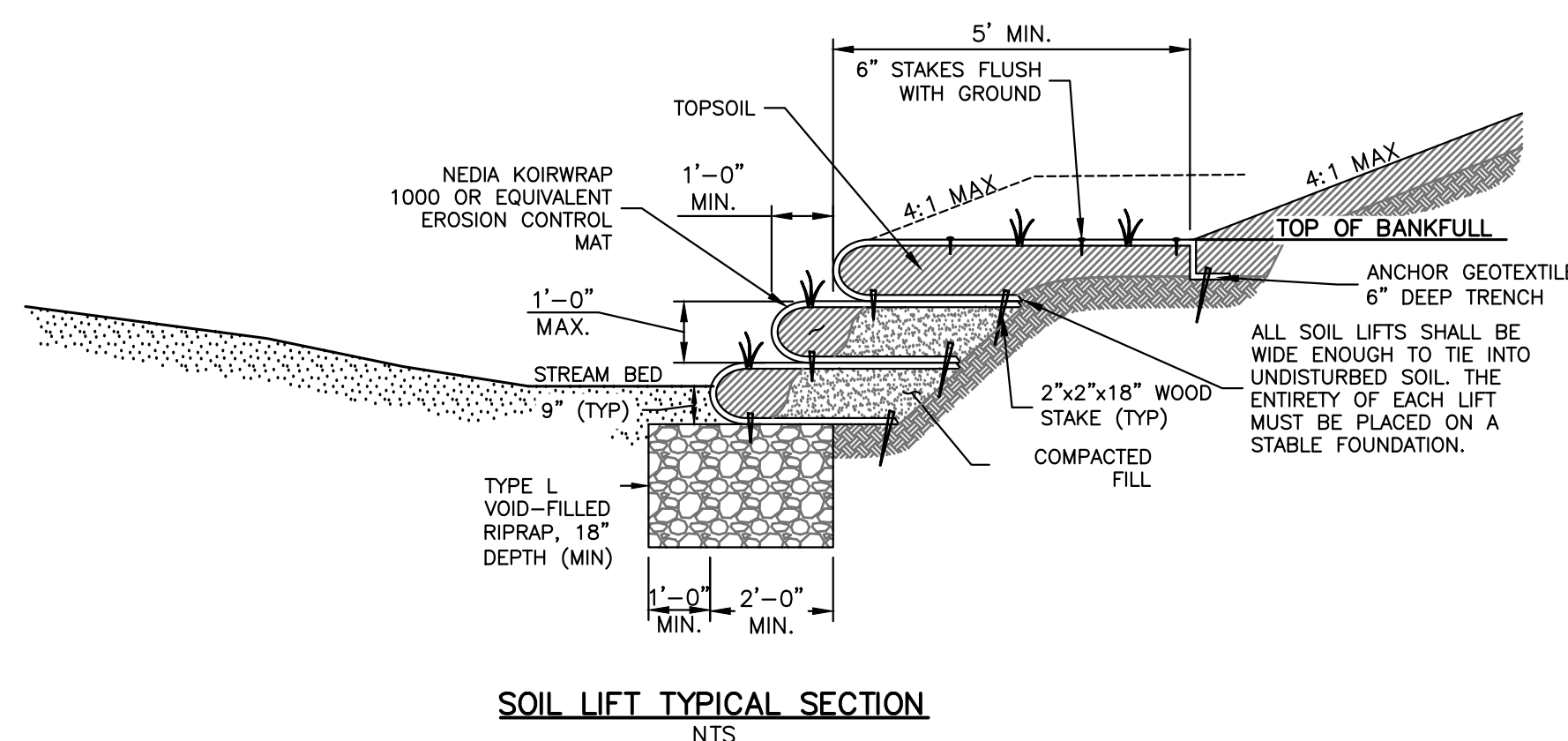
RIPRAP DESIGNATION	INTERMEDIATE ROCK DIMENSION (IN.)	PERCENT PASSING (%)	D50 (IN.)
TYPE VL	12	70-100	6
	9	50-70	
	6	35-50	
	2	2-10	
TYPE M	21	70-100	12
	18	50-70	
	12	35-50	
	4	2-10	
TYPE H	30	70-100	18
	24	50-70	
	18	35-50	
	6	2-10	



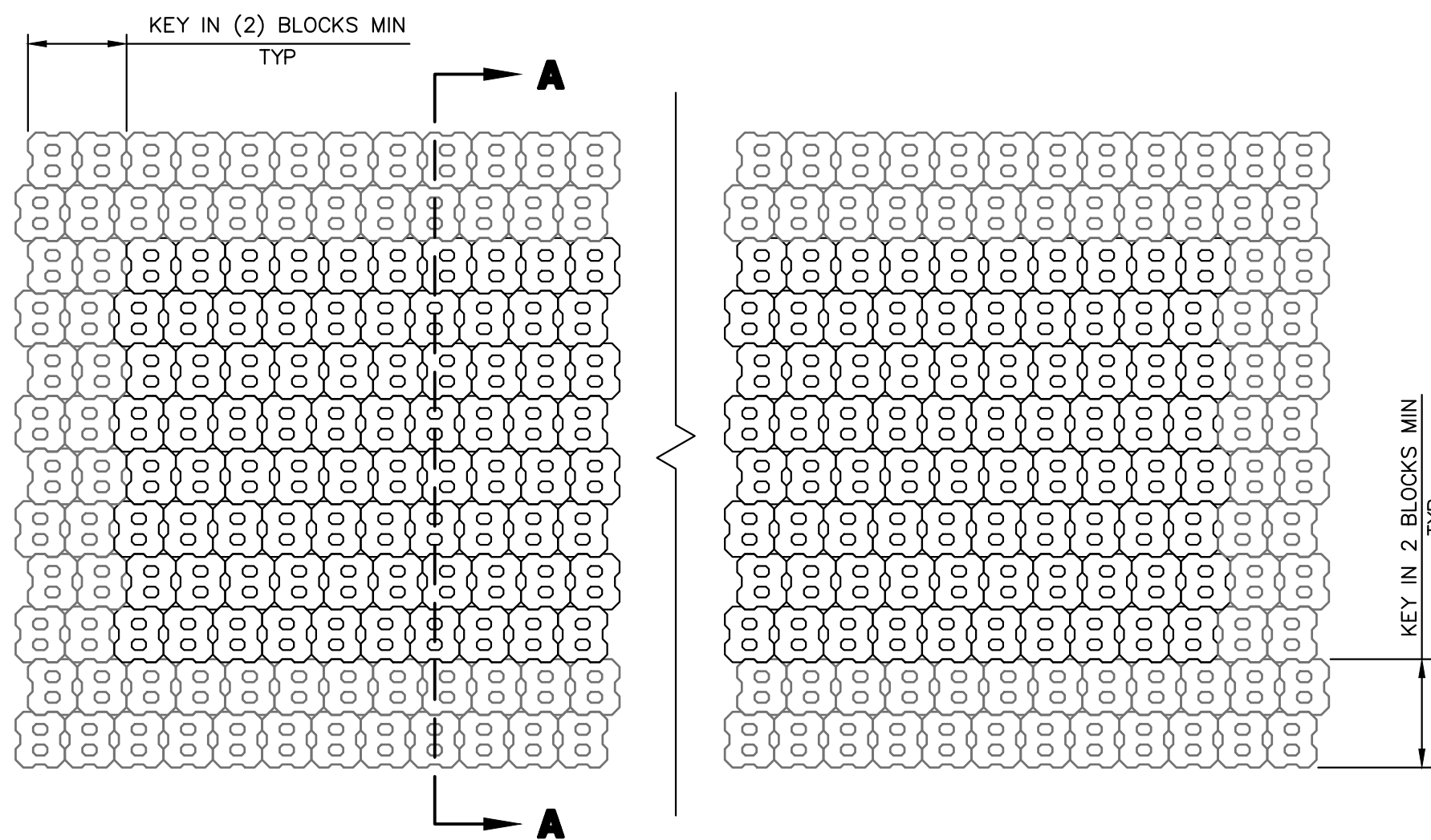
TYPICAL SECTION - MIXED SIZE RIPRAP



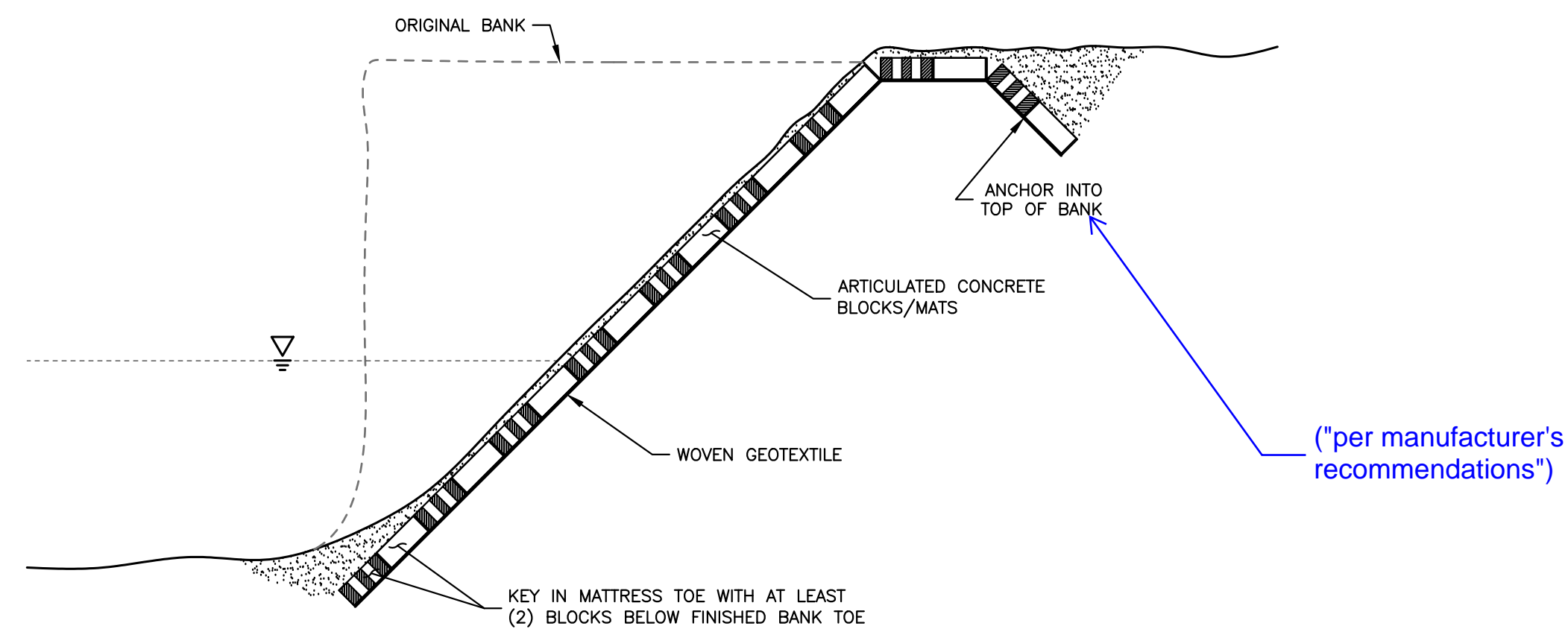
TYPICAL SECTION - SOIL RIPRAP



SOIL LIFT TYPICAL SECTION NTS



PLAN NTS



SECTION A-A NTS

ARTICULATED CONCRETE BLOCK MATS

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

J.R. ENGINEERING
 A Westman Company
 Centennial 303-740-9888 • Colorado Springs 719-583-2583
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BY	DATE	No.	REVISION

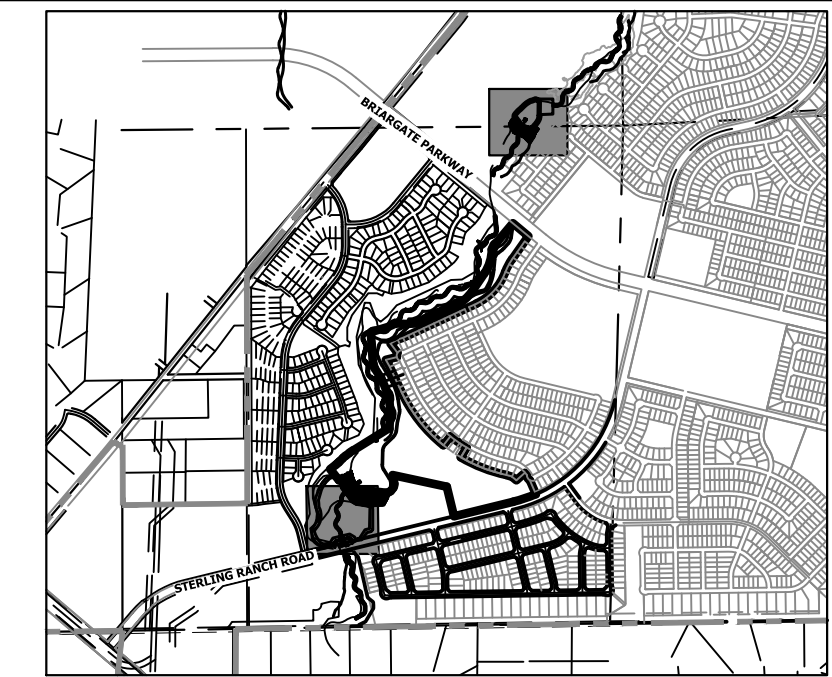
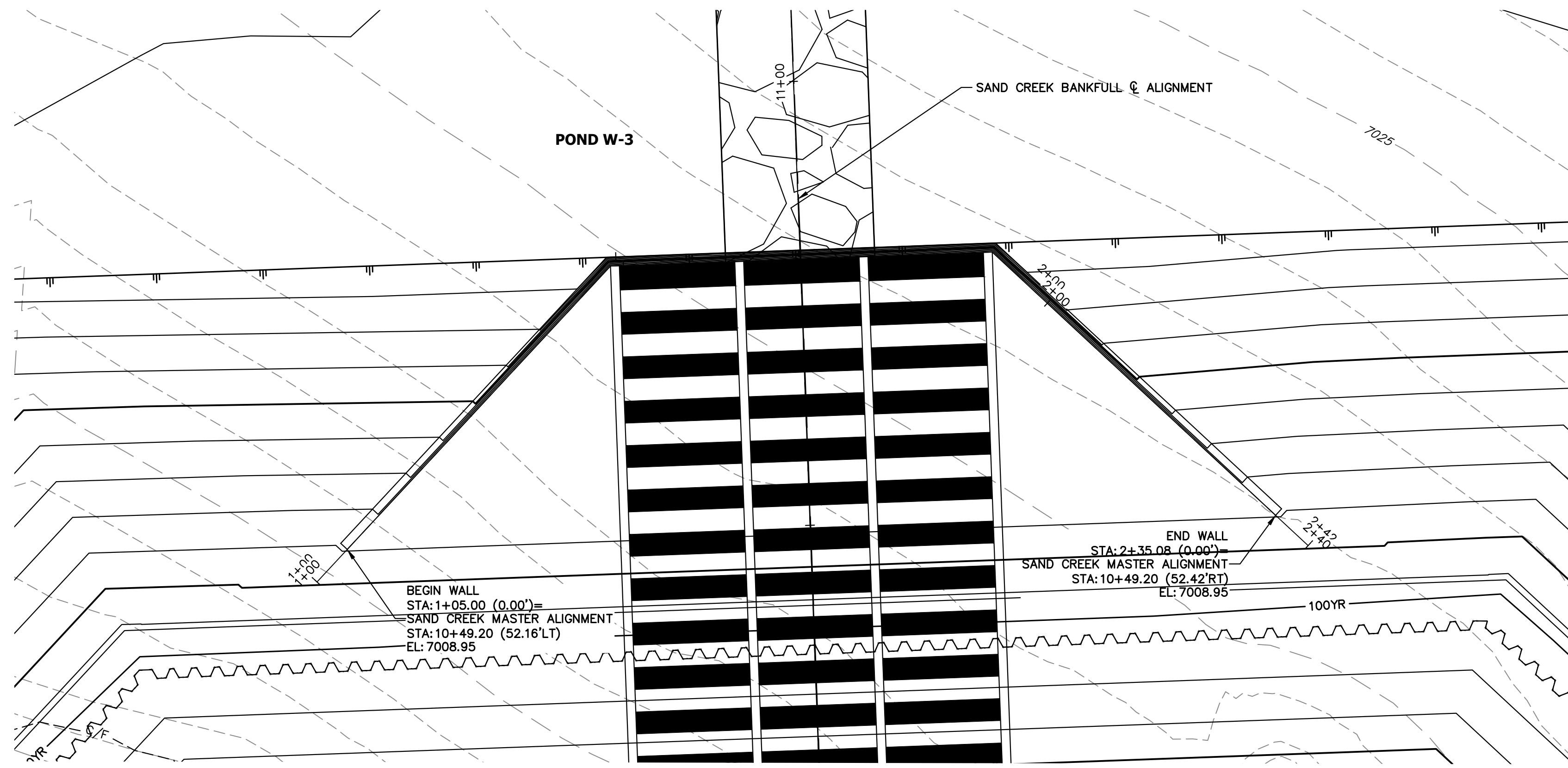
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				1/23/23	DJV	DJV	

SAND CREEK RESTORATION
CONSTRUCTION DETAILS

SHEET 71 OF 111
 JOB NO. 25188.04

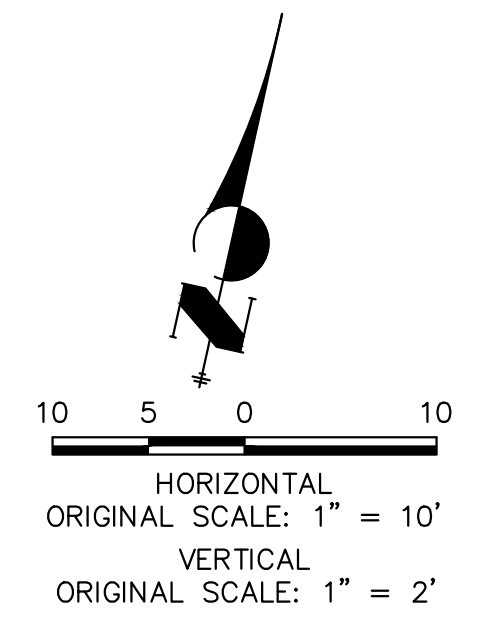
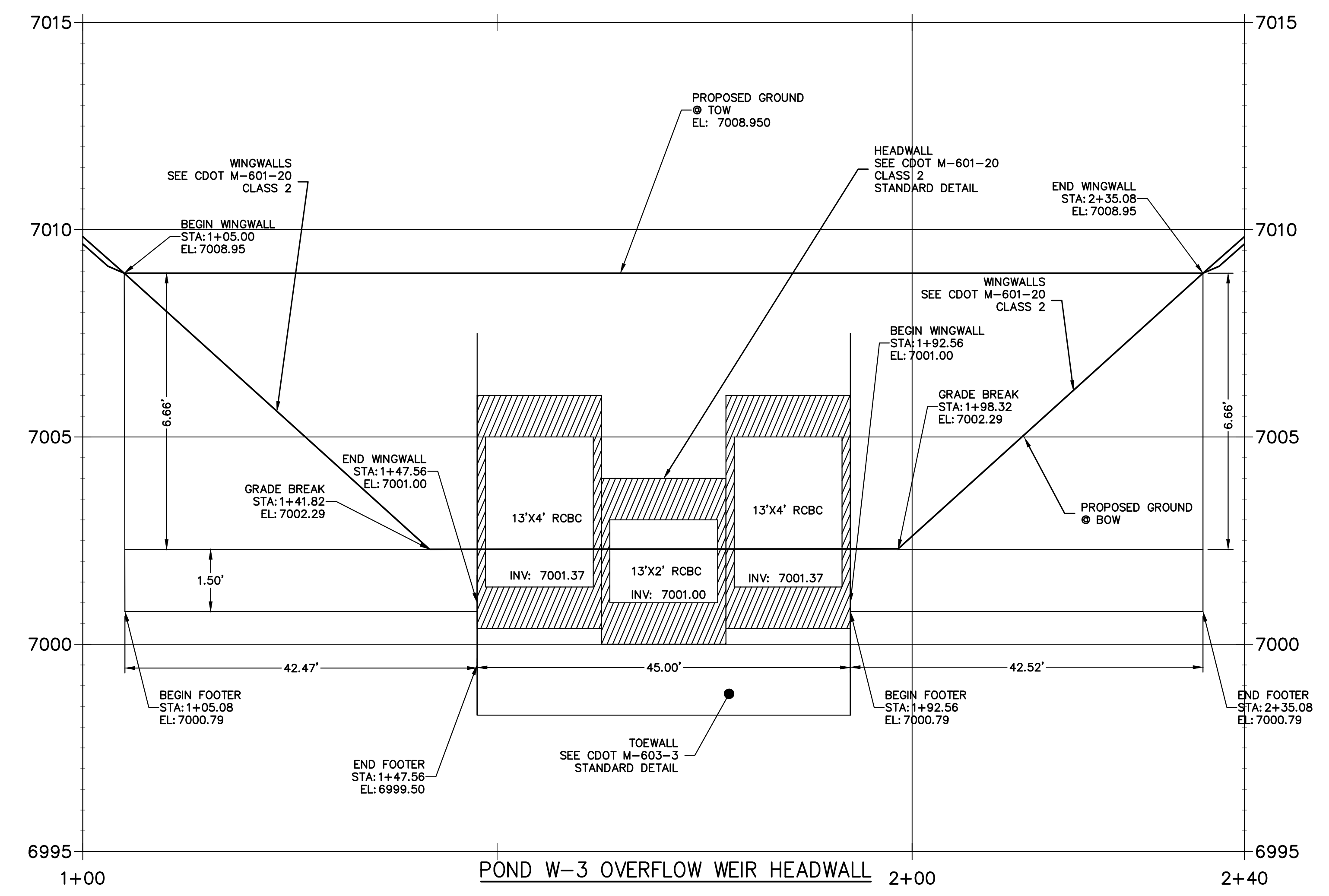
ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
 MIKE A. BRAMLEY
 COLORADO P.E. NO. 11042
 FOR AND ON BEHALF OF JR ENGINEERING, INC.

X:\25188\04\25188\04\Drawings\Sheet\Drawings\25188\04 - Construction Details - Details 1 - 1/24/2023 1:48:46 PM, VvaughD



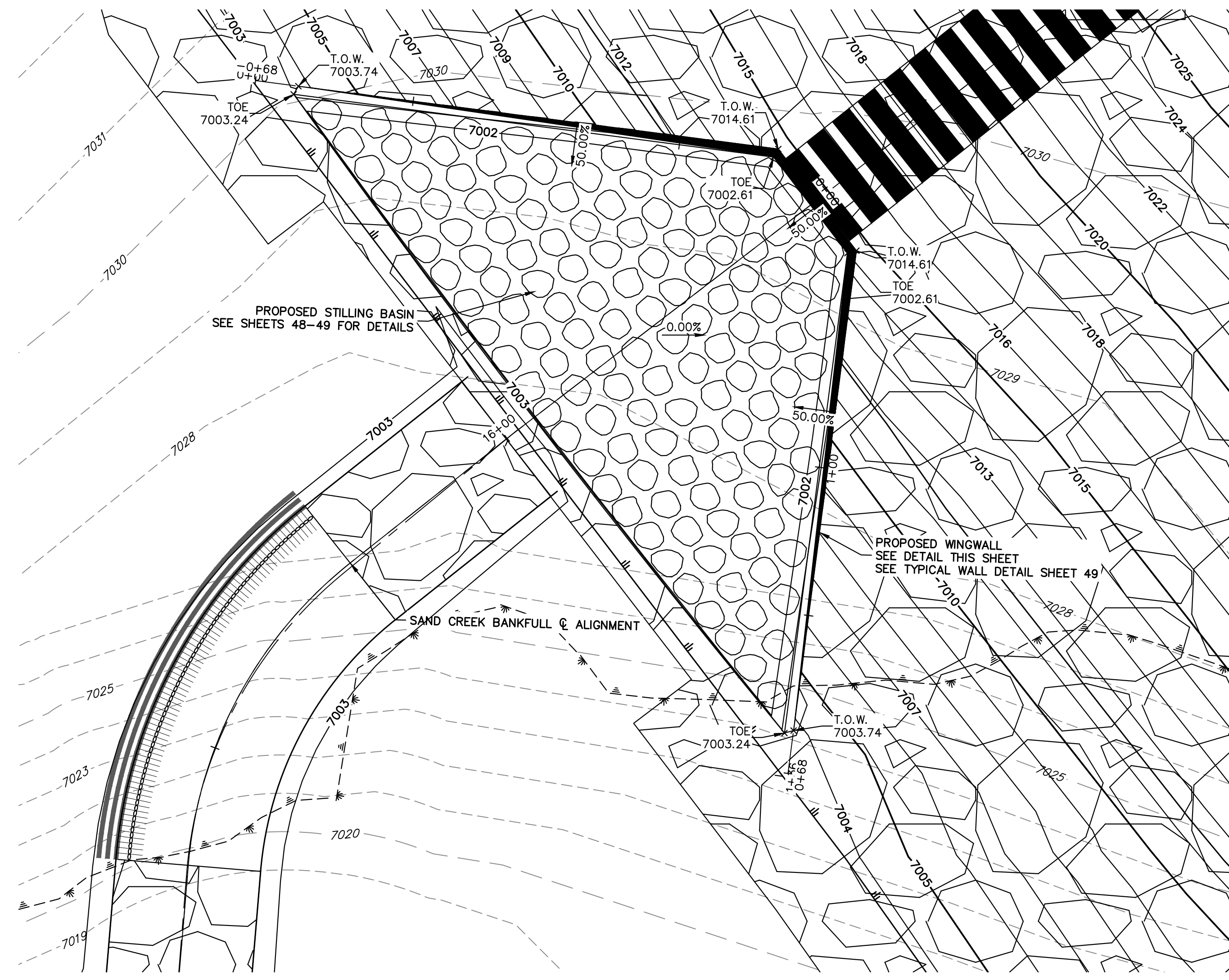
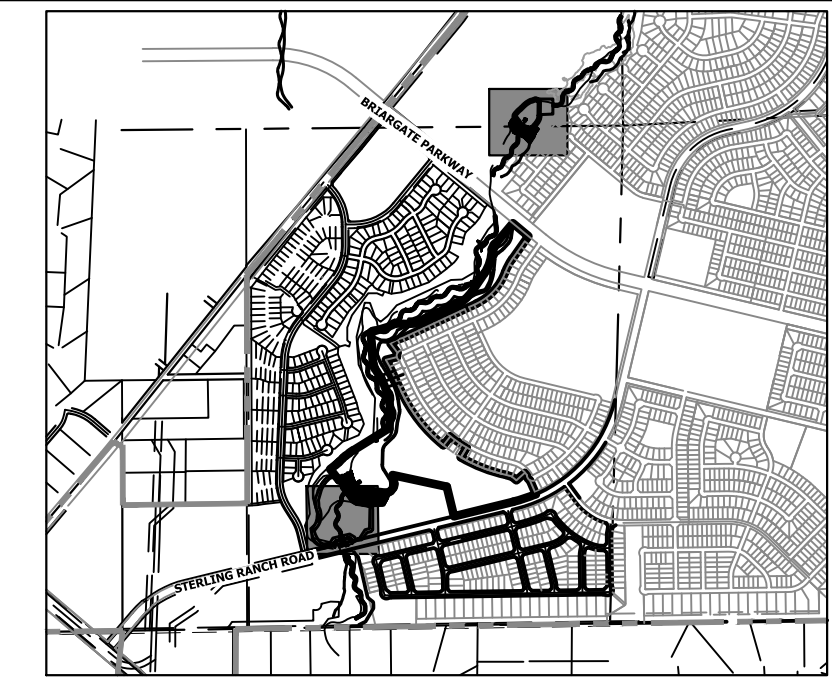
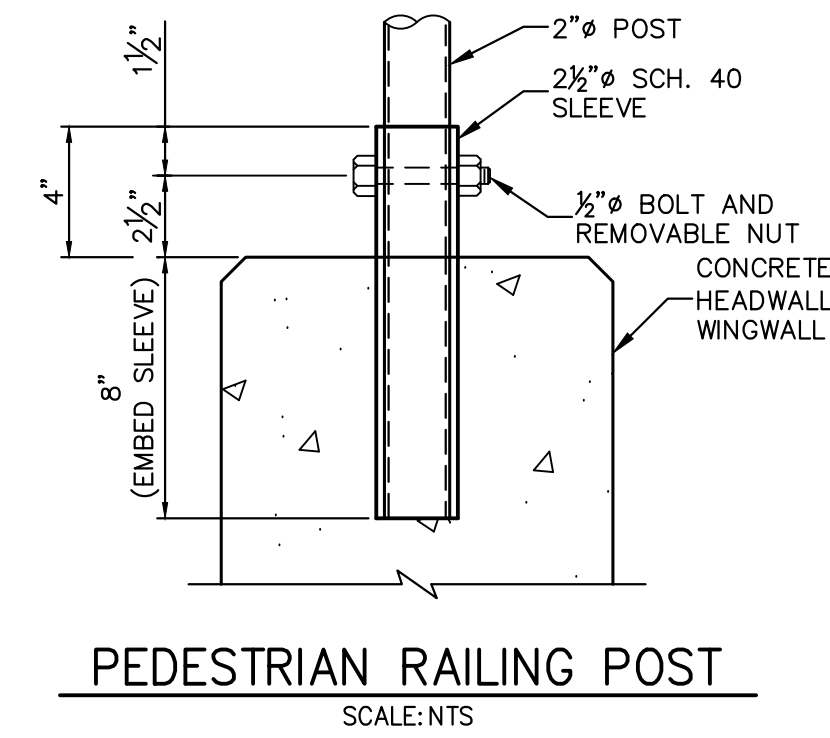
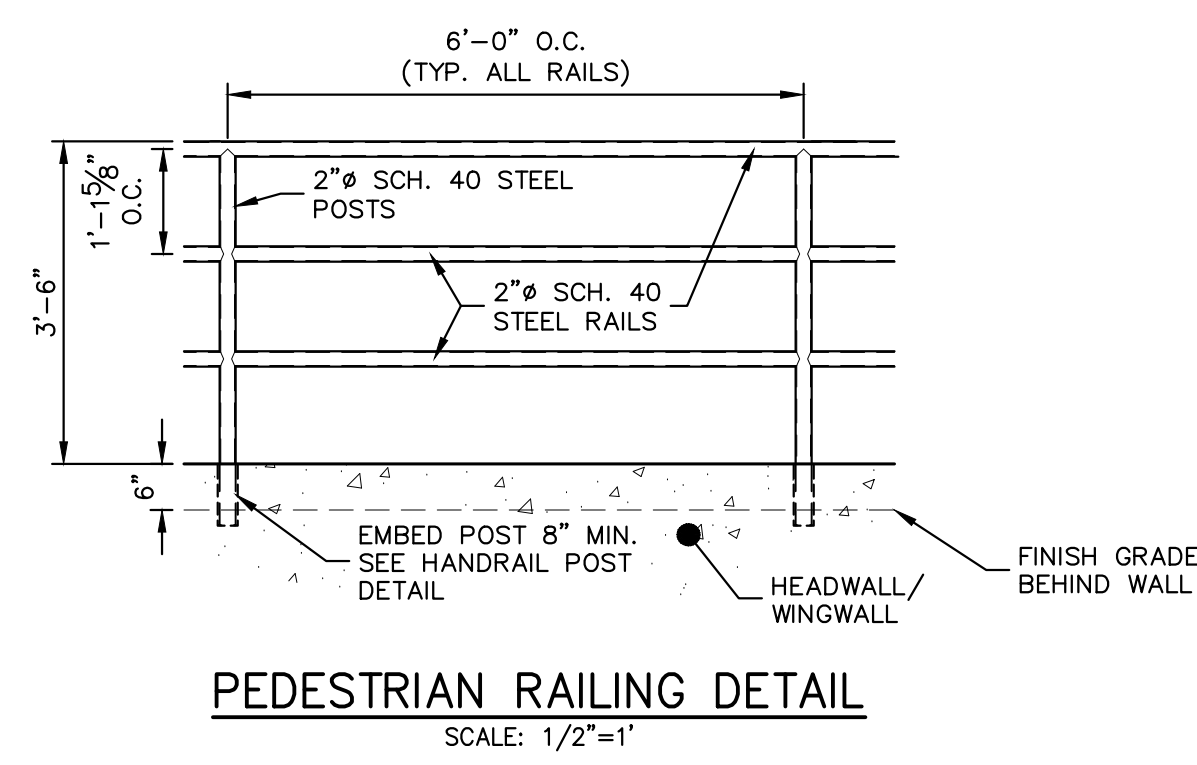
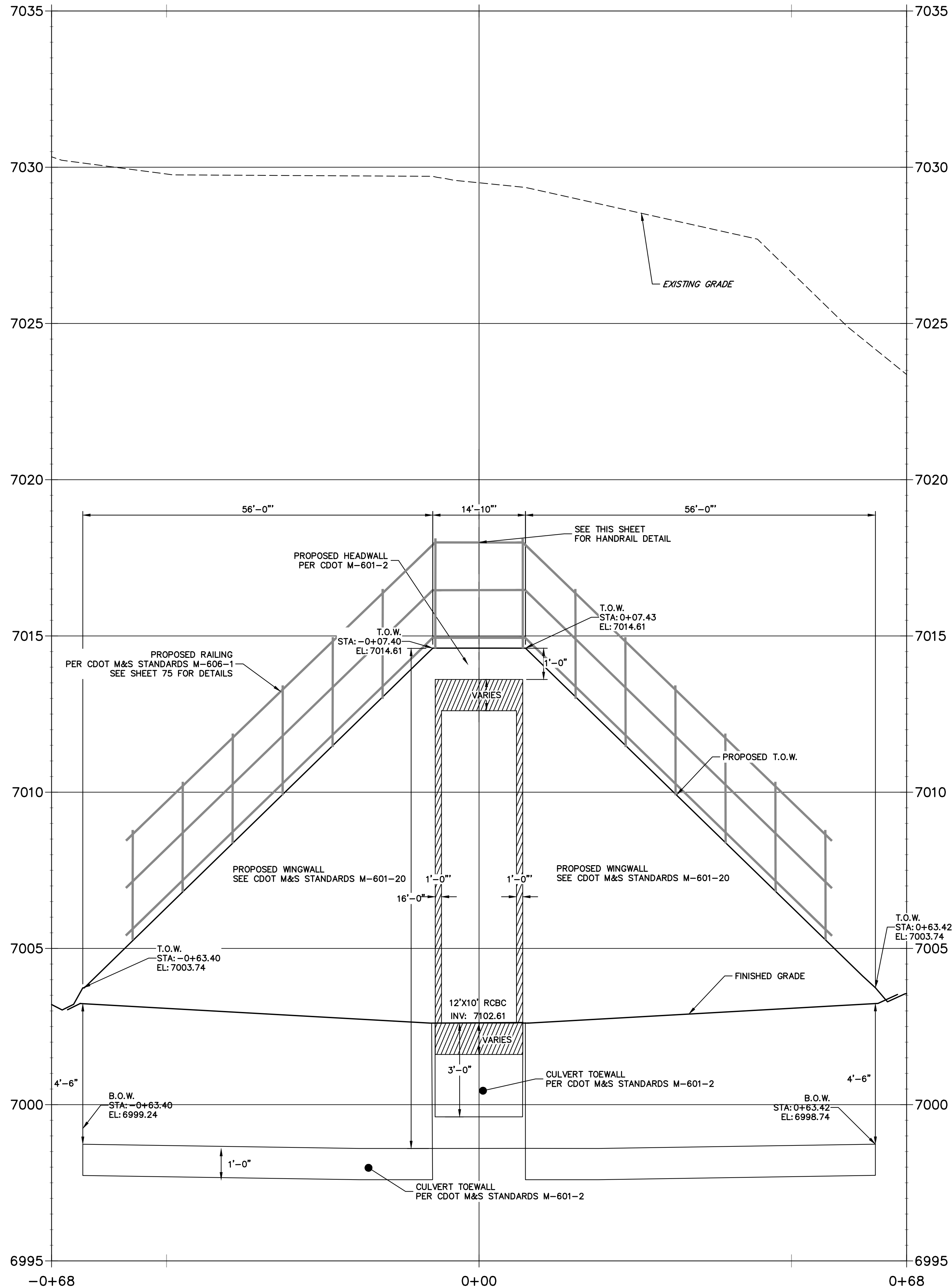
KEY MAP
SCALE: 1"=2000'

**HW TOW PROFILE
STA 1+00.00 TO 2+40.08**

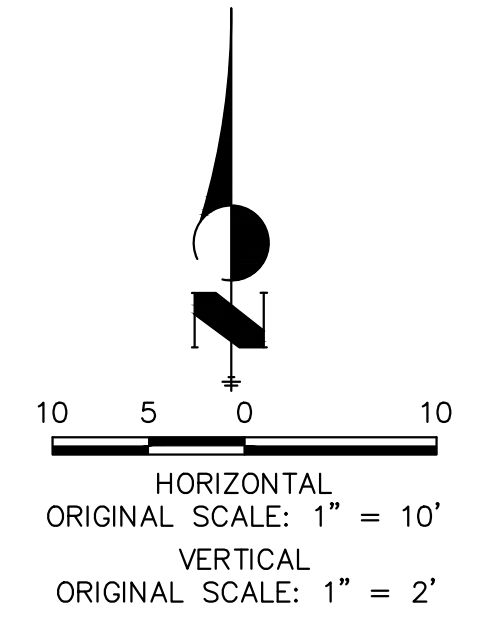


UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE. THIS USE IS DESIGNATED BY WRITTEN AUTHORIZATION. PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	
J.R. ENGINEERING A Westman Company Centennial 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	
No. REVISION	VARIES H-SCALE 1"=2' V-SCALE 1"=2' DATE 1/23/23 DESIGNED BY DV DRAWN BY SCH CHECKED BY
SAND CREEK RESTORATION STRUCTURAL DETAILS	
SHEET 72 OF 111 JOB NO. 25188.04	

**POND 1 STILLING BASIN WINGWALL PROFILE
STA -0+68.40 TO 0+68.42**



**POND 1 STILLING BASIN HEADWALL
WINGWALL PLAN VIEW**



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, OR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
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20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
A Westman Company
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Fort Collins 970-491-9888 • www.jrengineering.com

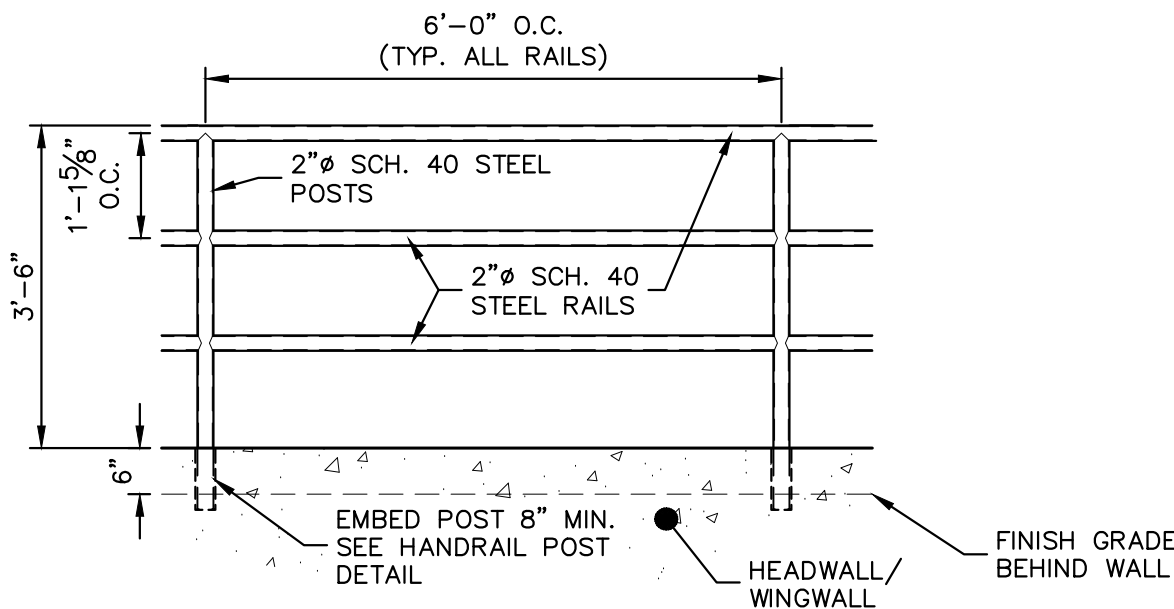
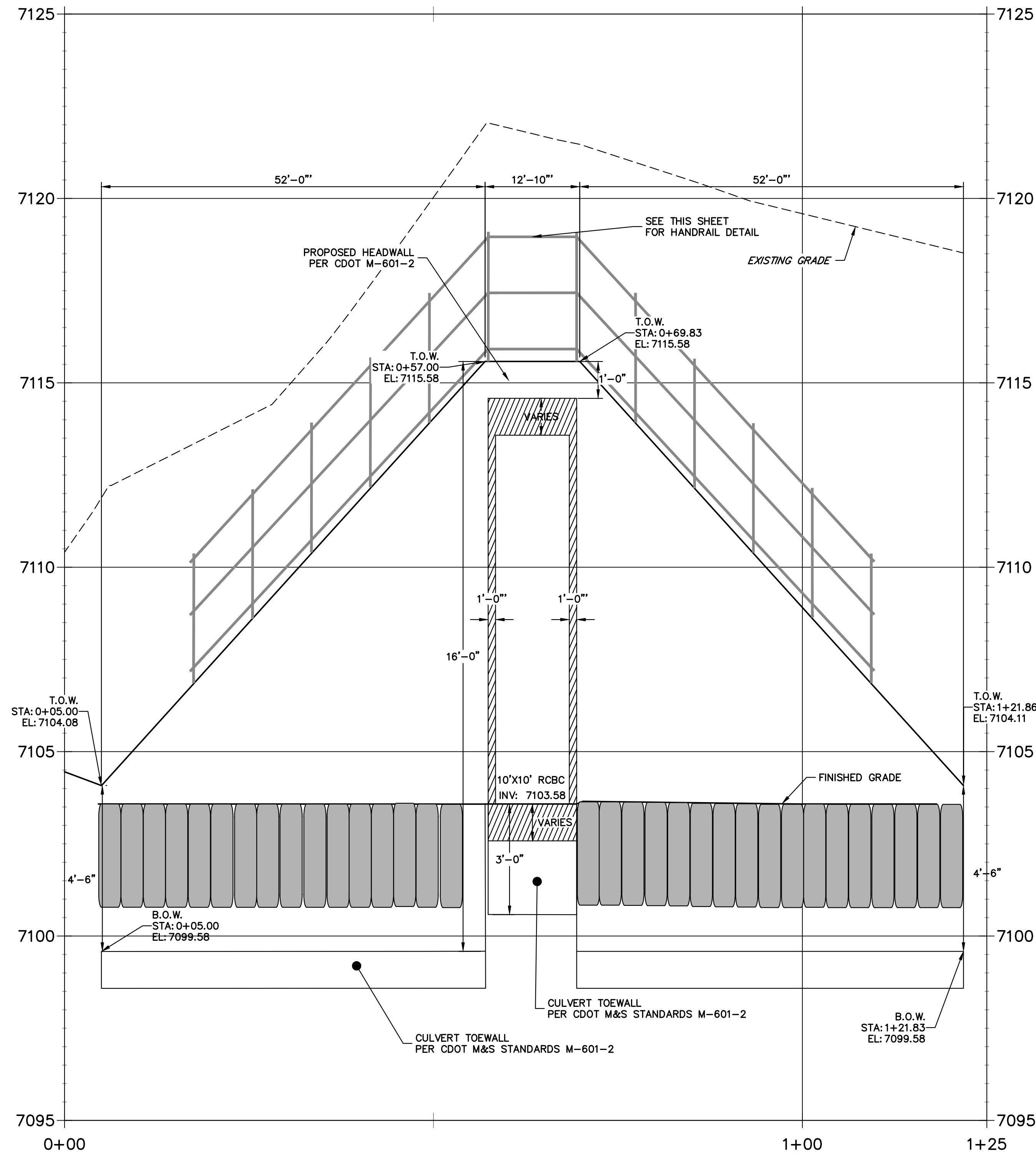
No.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=10'	1"=2'	1/23/23	DV	NEO	

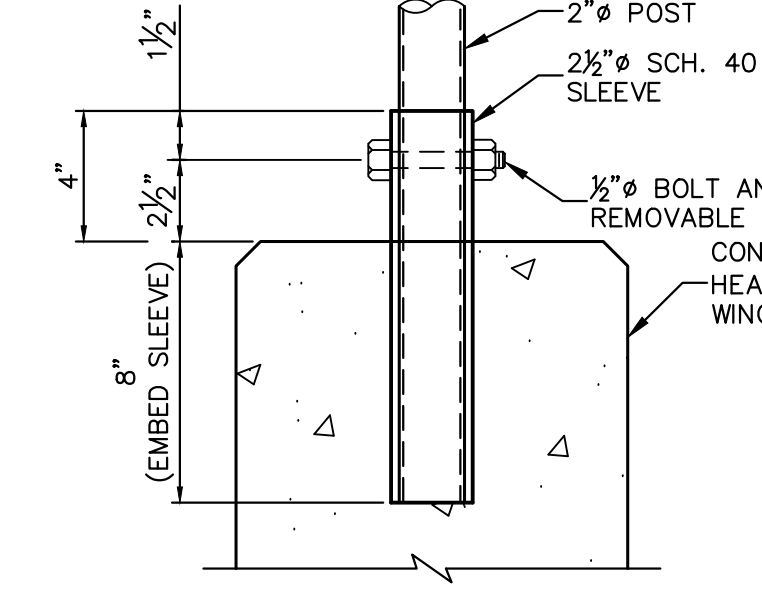
SAND CREEK RESTORATION
STRUCTURAL DETAILS

SHEET 73 OF 111
JOB NO. 25188.04

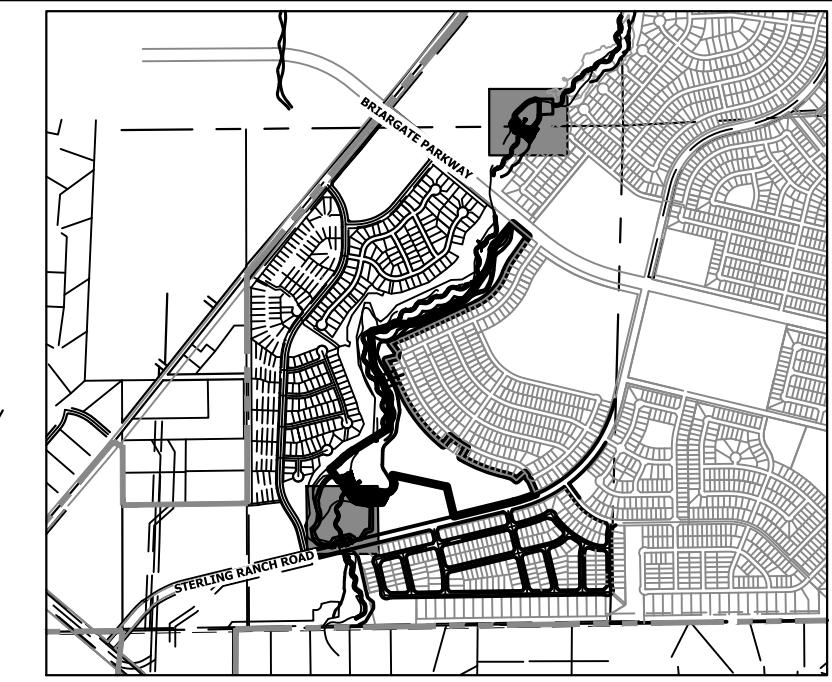
**POND 2 STILLING BASIN WINGWALL PROFILE
STA 0+00.00 TO 1+25.00**



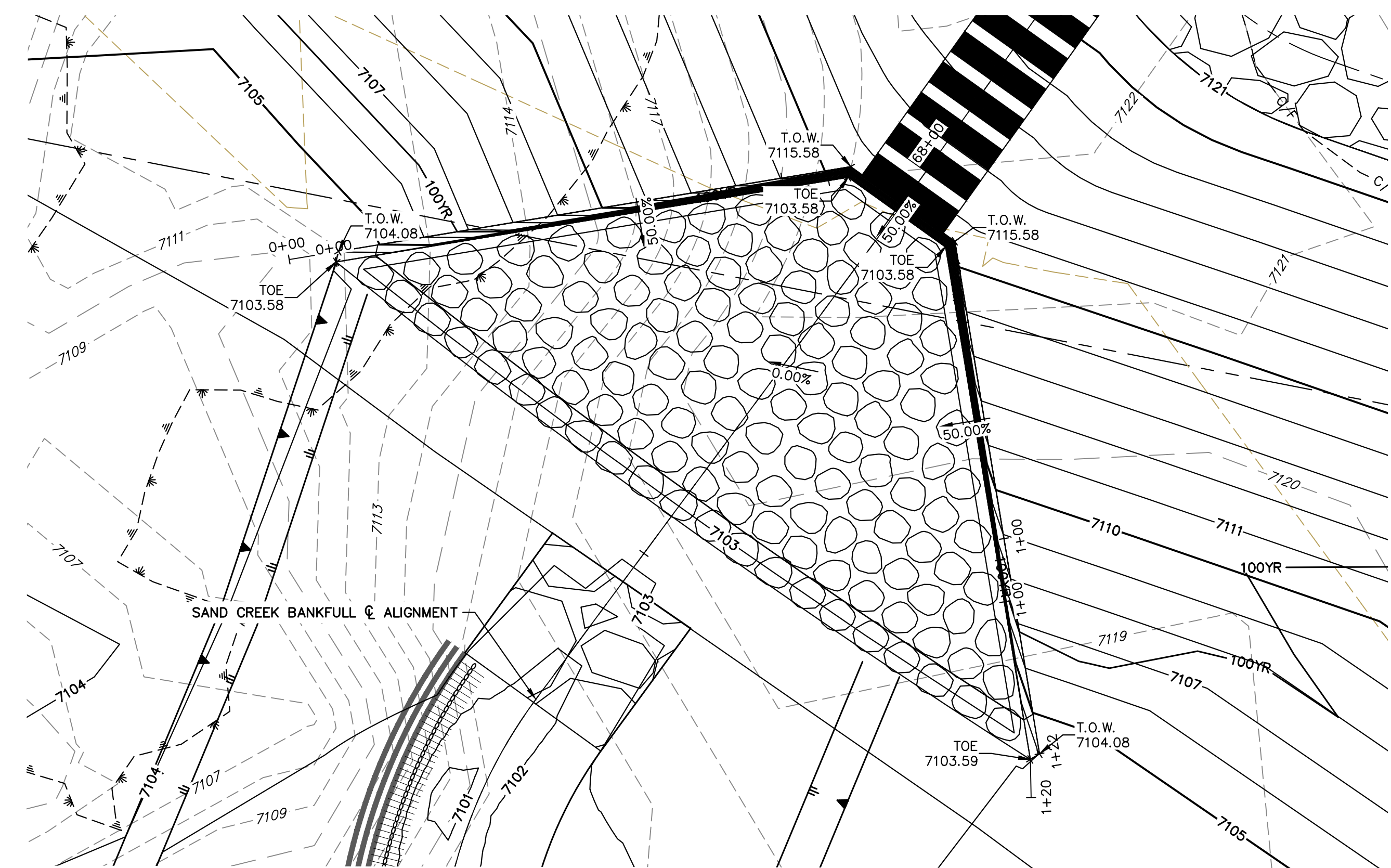
PEDESTRIAN RAILING DETAIL
SCALE: 1/2"=1'



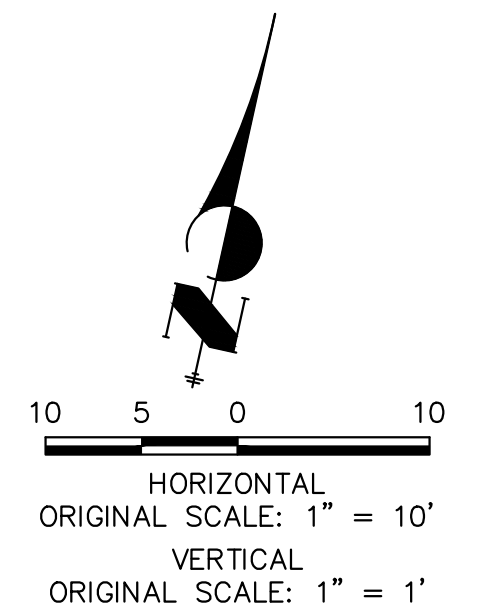
PEDESTRIAN RAILING POST
SCALE: NTS



KEY MAP
SCALE: 1"=2000'



**POND 2 STILLING BASIN HEADWALL
WINGWALL PLAN VIEW**



Know what's below.
Call before you dig.

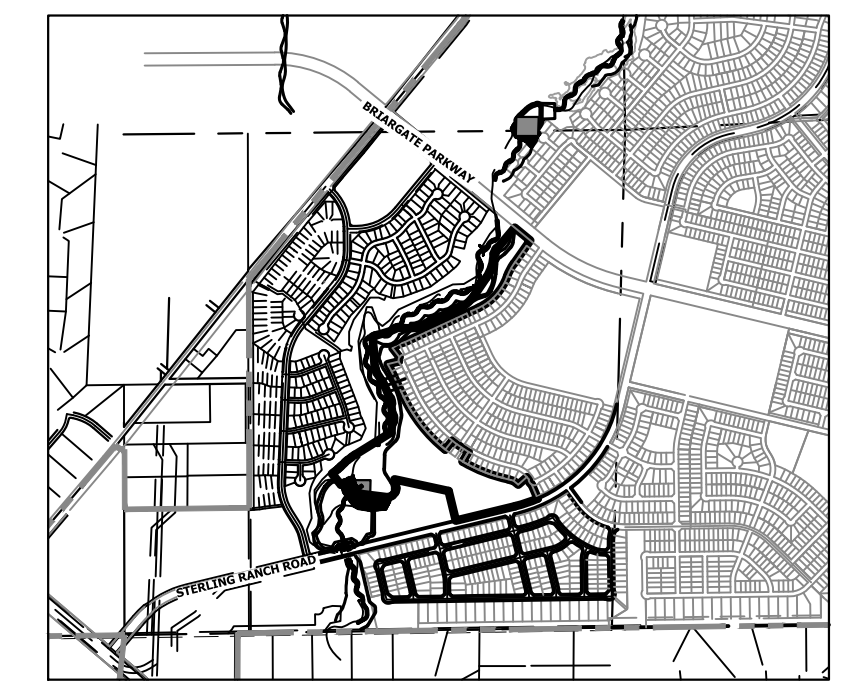
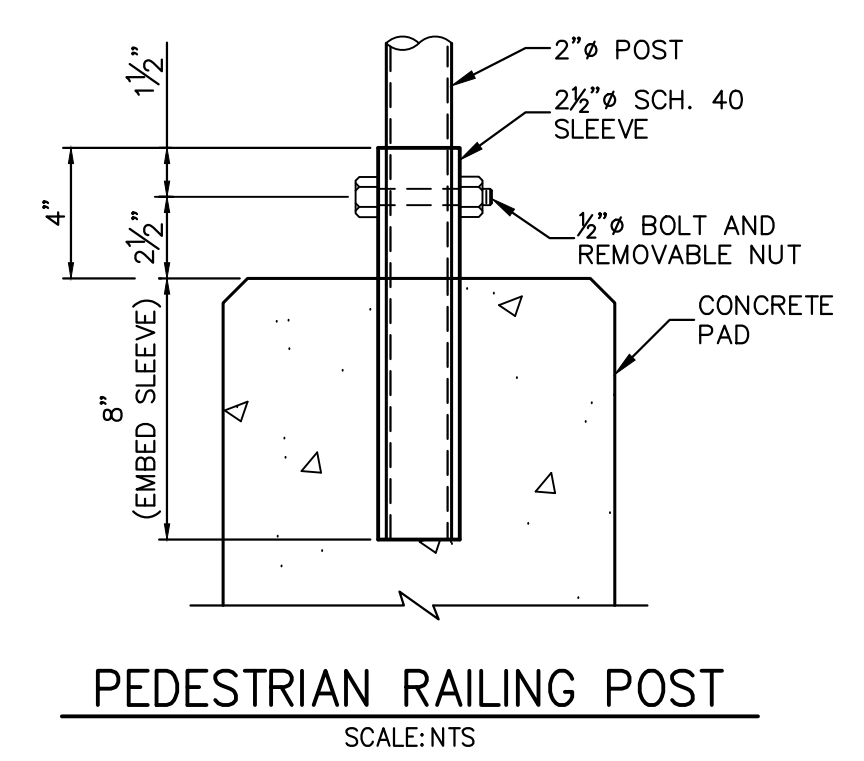
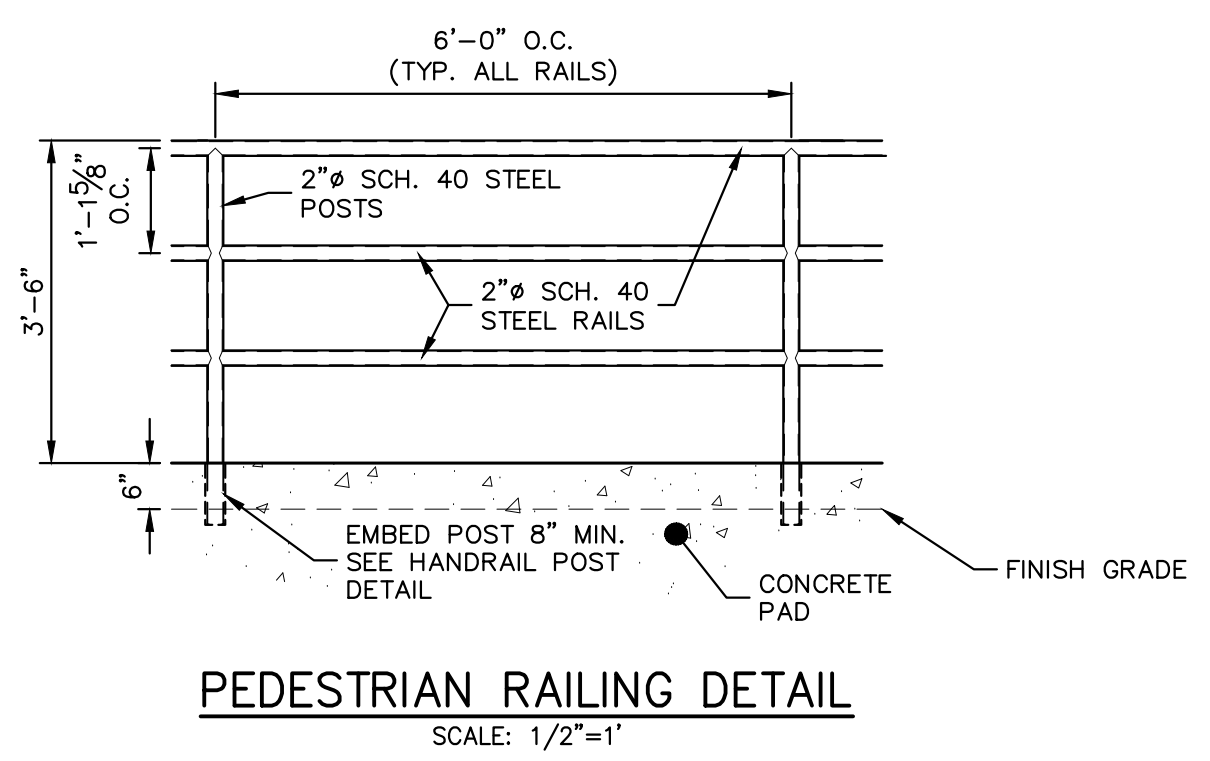
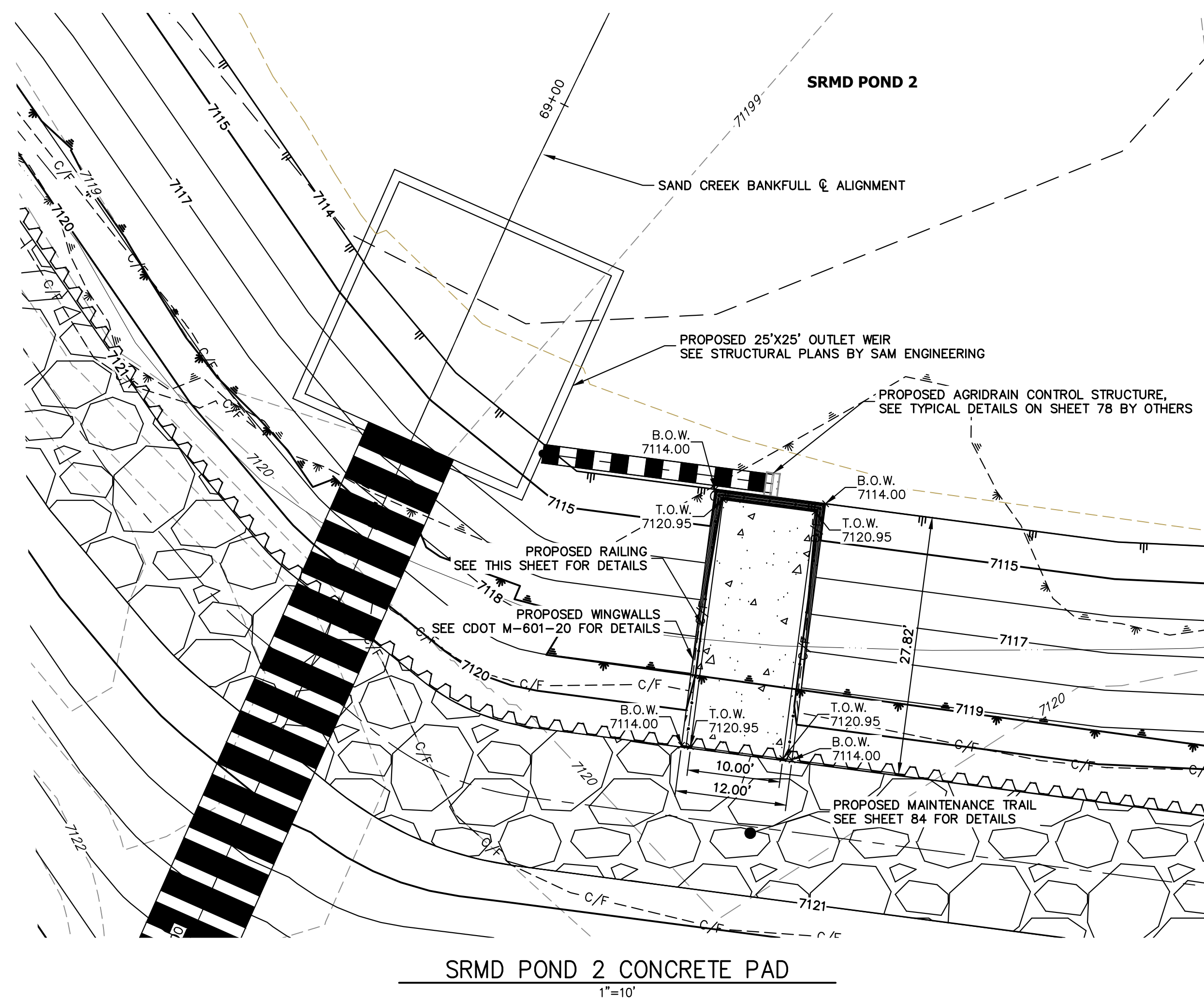
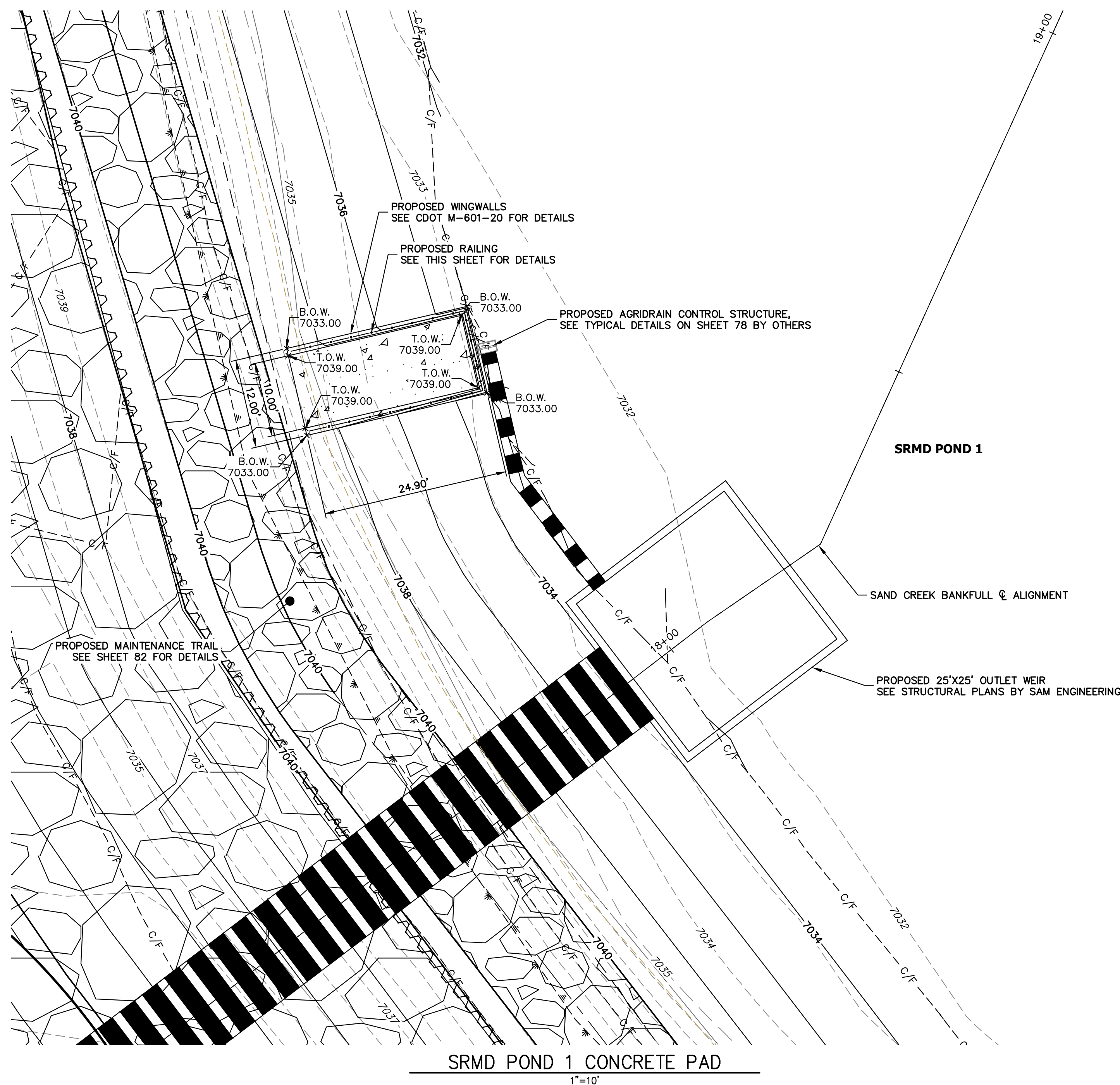
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THEY ARE DESIGNATED BY WRITTEN AUTHORIZATION.
PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
A Westman Company
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Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=10'	1"=1'	1/23/23	DV	SCH	

SAND CREEK RESTORATION
STRUCTURAL DETAILS



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
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NO.	REVISION	BY		DATE	
		BY	DATE	BY	DATE

SAND CREEK RESTORATION
STRUCTURAL DETAILS

DESIGNED BY: DV
DRAWN BY: NEO
CHECKED BY:

SHEET 75 OF 111
JOB NO. 25188.04

ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

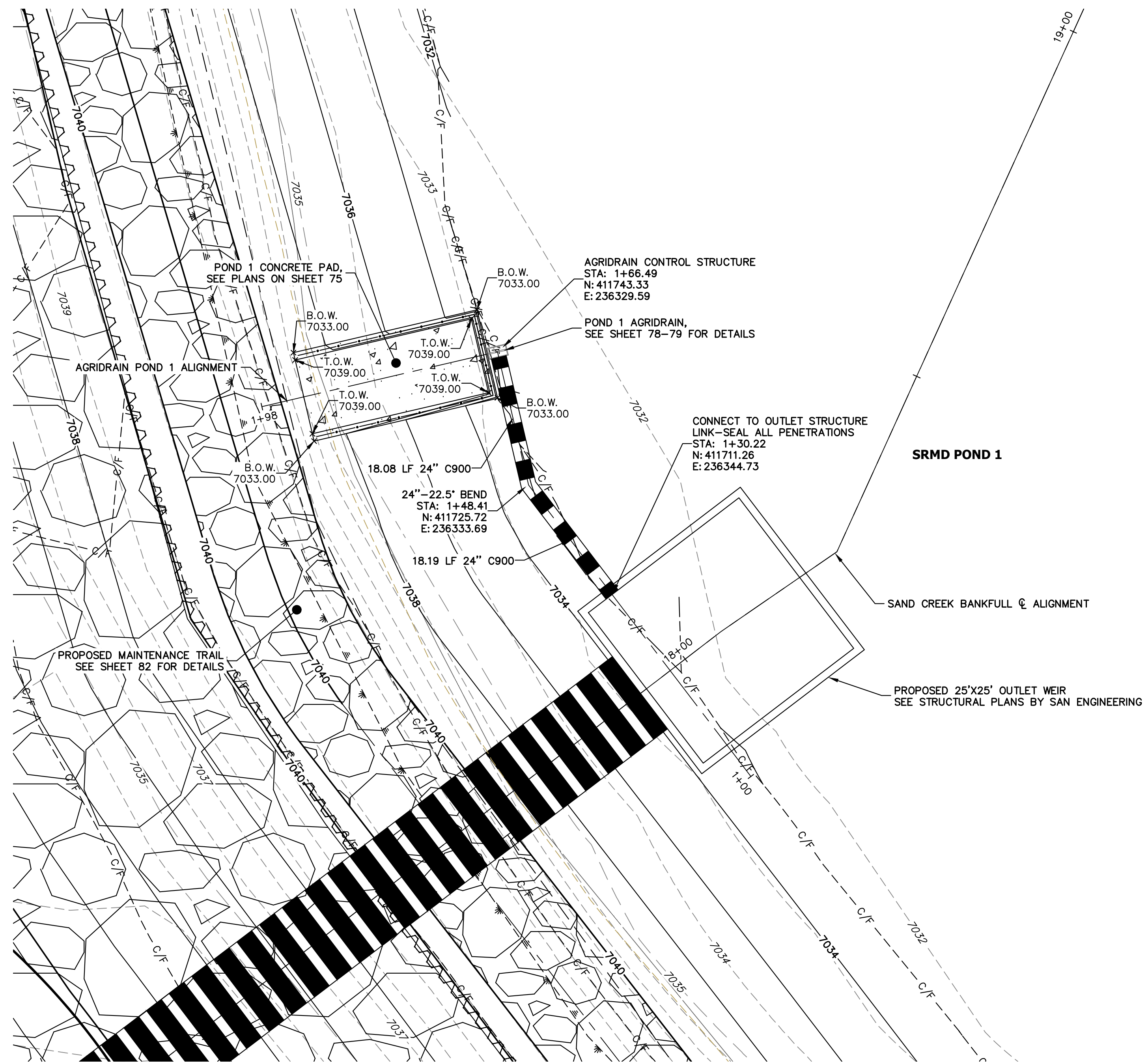
PRELIMINARY
NOT FOR
CONSTRUCTION

MIKE A. BRAMLEY
COLORADO P.E. 33101
FOR AND ON BEHALF OF JR ENGINEERING

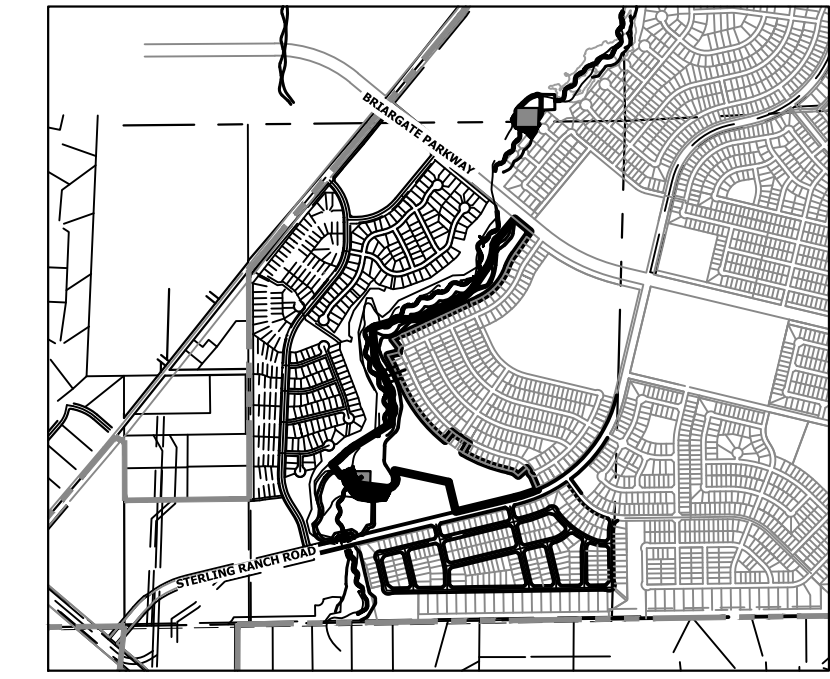
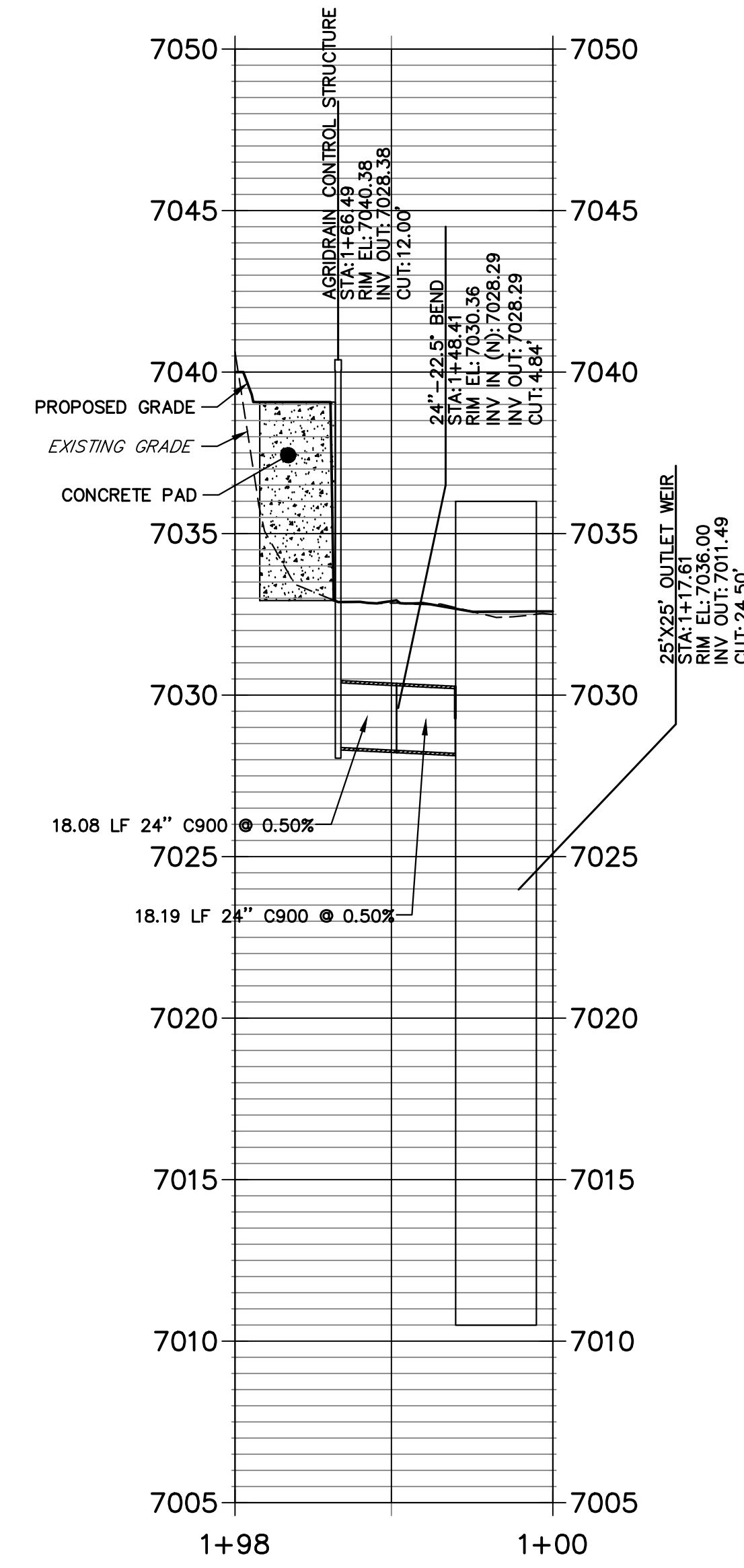
811 Know what's below. Call before you dig.

ORIGINAL SCALE: 1" = 10'

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AGRIDRAIN POND 1 PROFILE
STA 1+00.00 TO 1+98.44



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PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

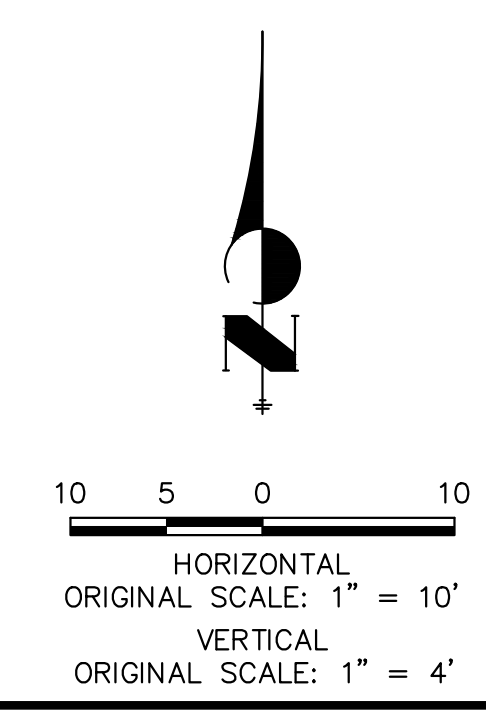
J.R. ENGINEERING
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NO.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
VARIABLES	1"=4'	1/23/23	DV	NEO	

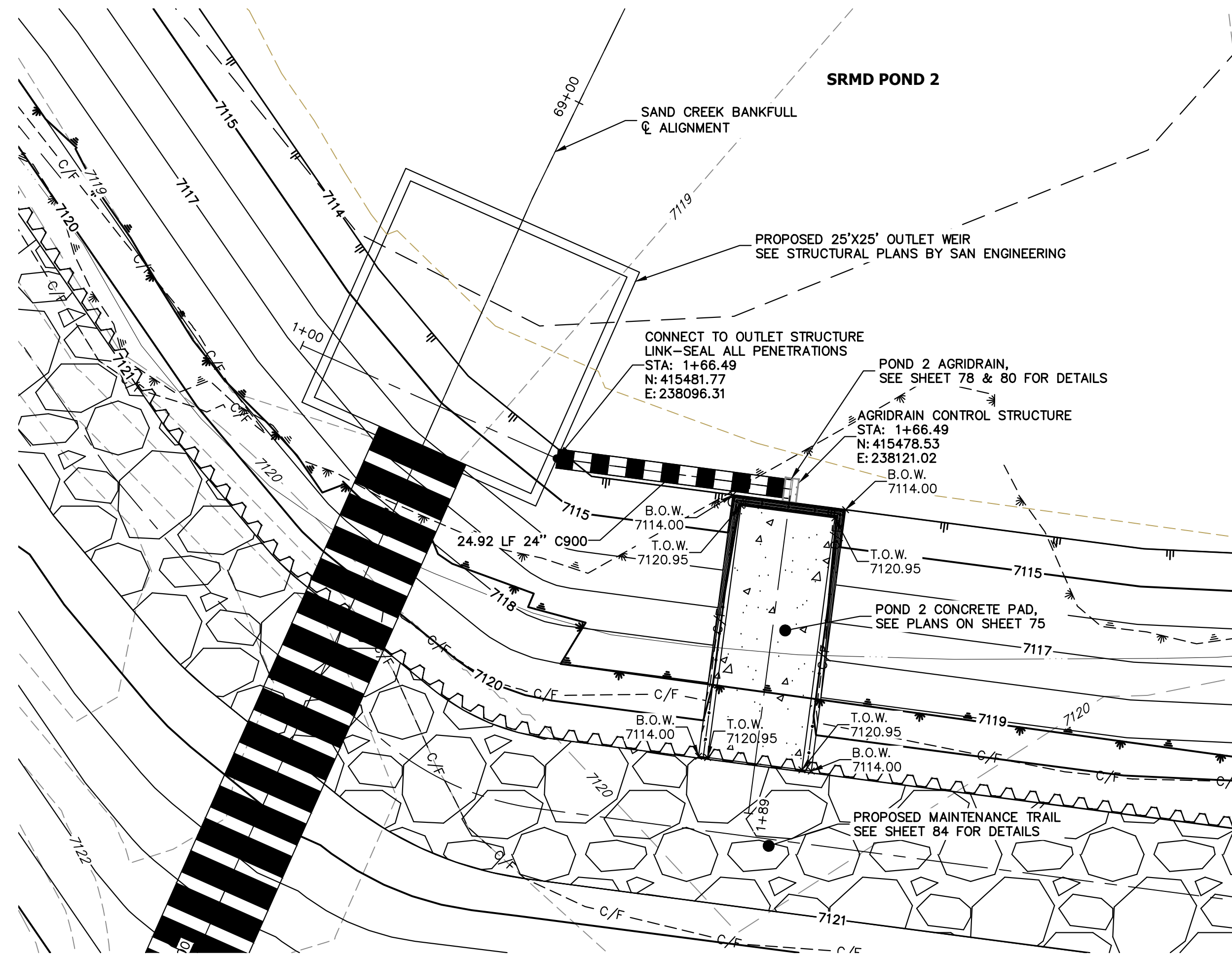
SAND CREEK RESTORATION
AGRIDRAIN DETAILS

SHEET 76 OF 111
JOB NO. 25188.04



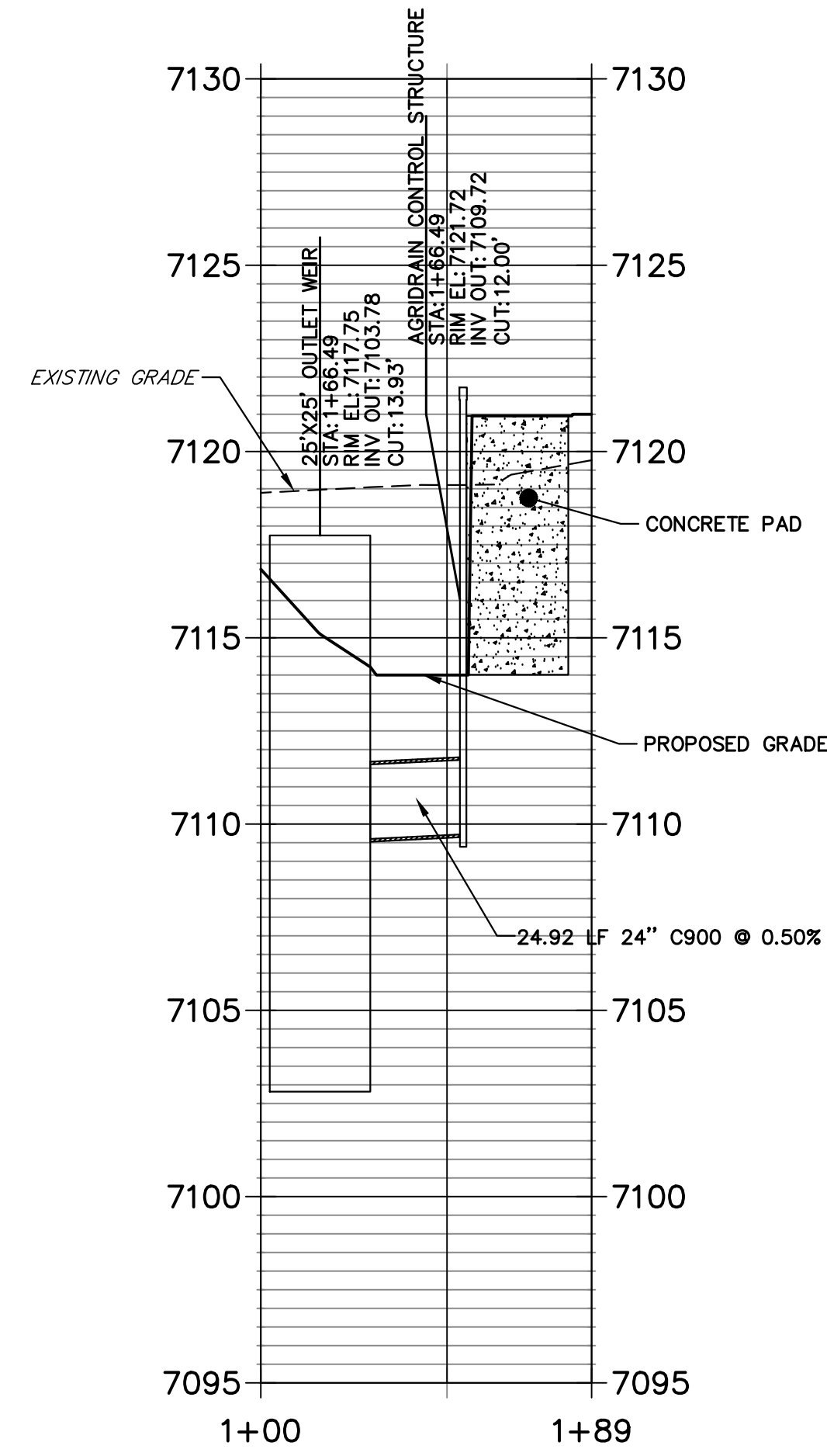
ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 30100
FOR AND ON BEHALF OF J.R. ENGINEERING

X:\25188\04\Drawings\Sheet\Drawings\Second Creek_Plan\Sheet\25188\04_Agridrain_Pond 1 & 2.dwg, Pond 1_Agridrain_Pan 1, Agridrain_Pan 1, 1/24/2023 4:51:52 PM, VaughnD

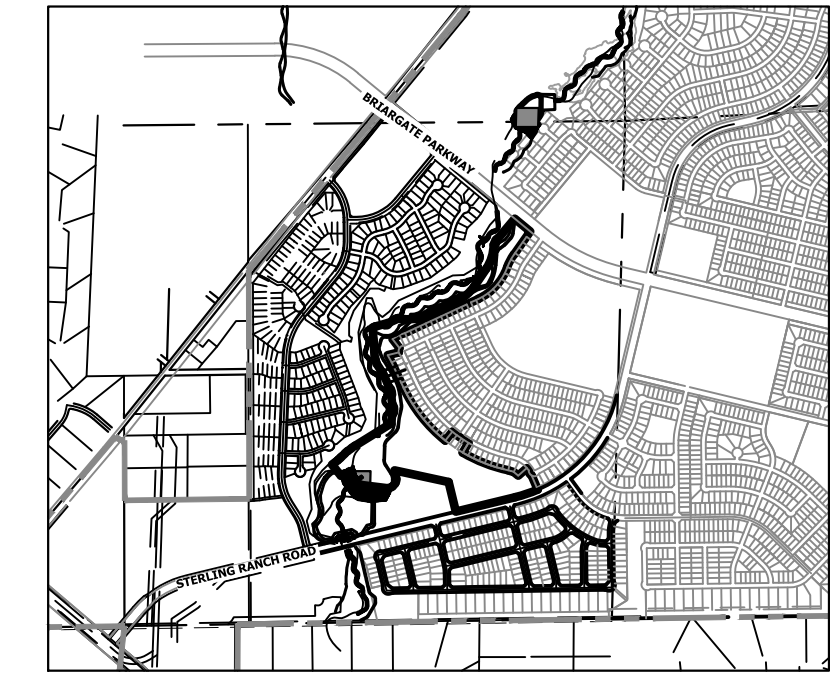


AGRIDRAIN - POND 2
1"=10'

AGRIDRAIN POND 2 PROFILE
STA 1+00.00 TO 1+88.83



AGRIDRAIN - POND 2 PROFILE
1"=40'



KEY MAP
SCALE: 1"=2000'

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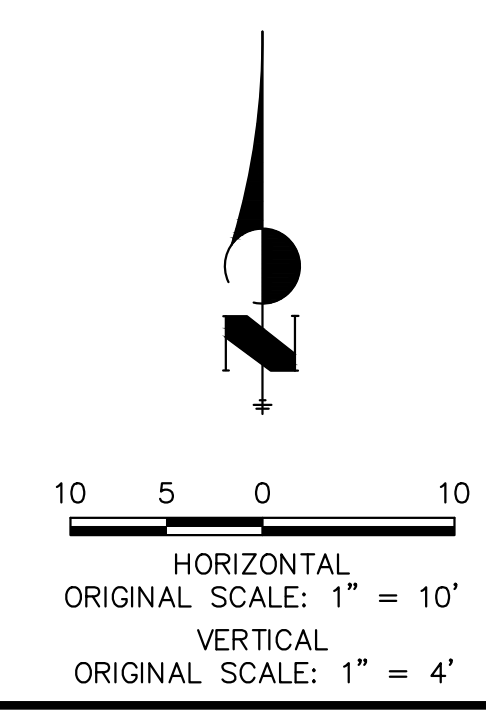
PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
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BY	DATE	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
VARIES	1"=4'	1/23/23	DV	NEO	

SHEET 77 OF 111
JOB NO. 25188.04

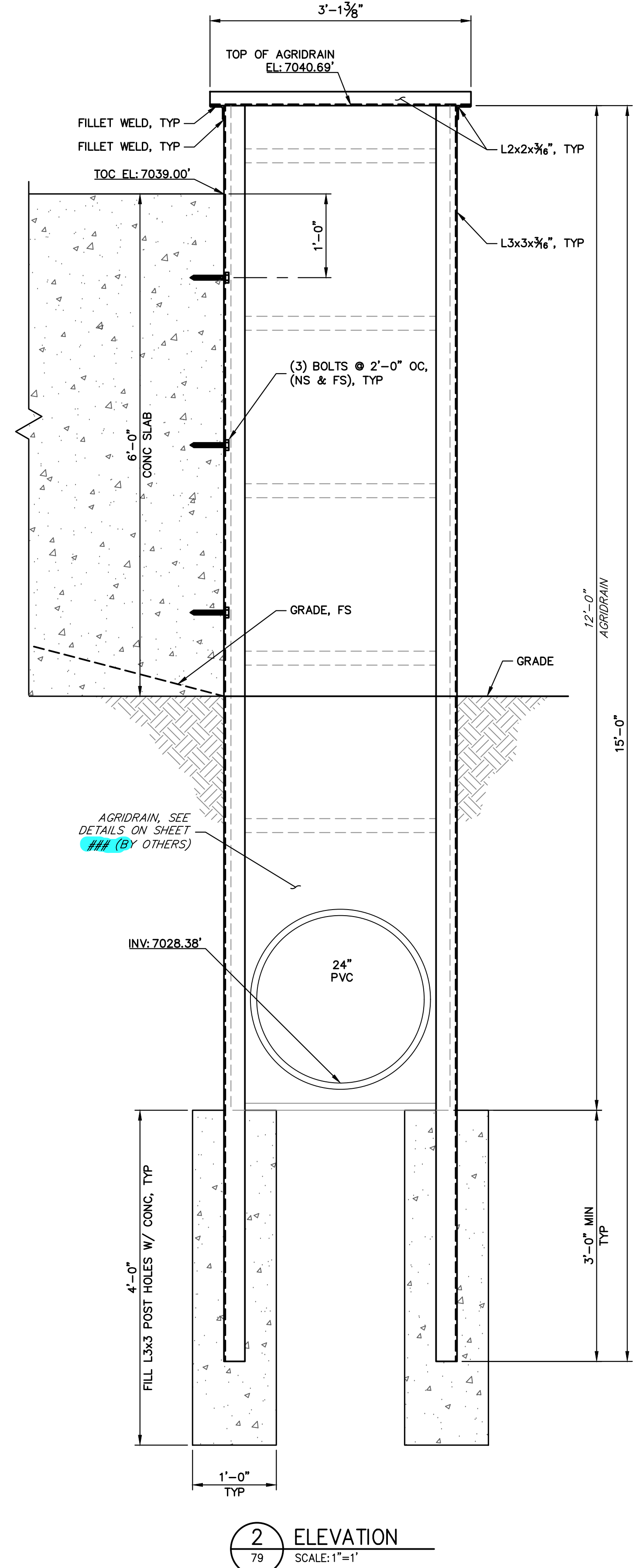
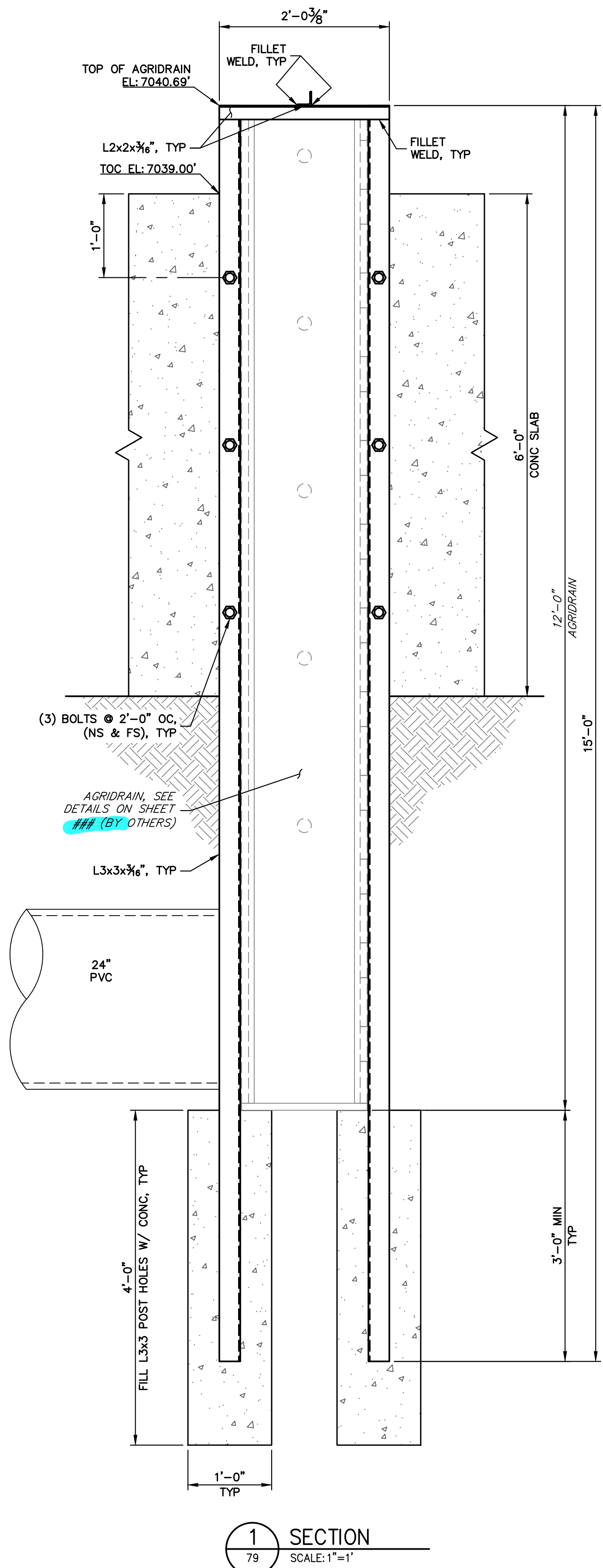
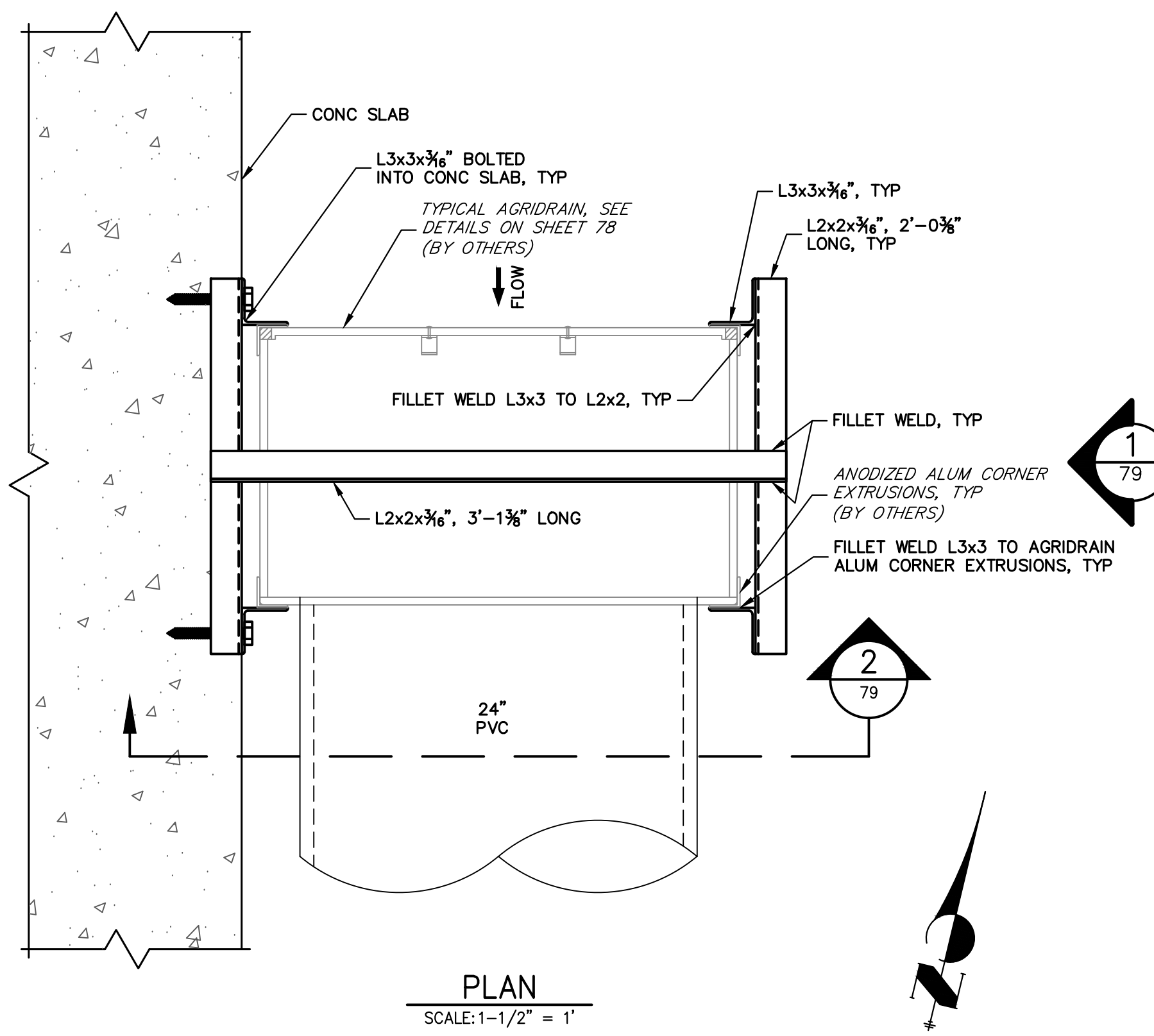


ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMLEY
COLORADO P.E. 30112
FOR AND ON BEHALF OF JR ENGINEERING

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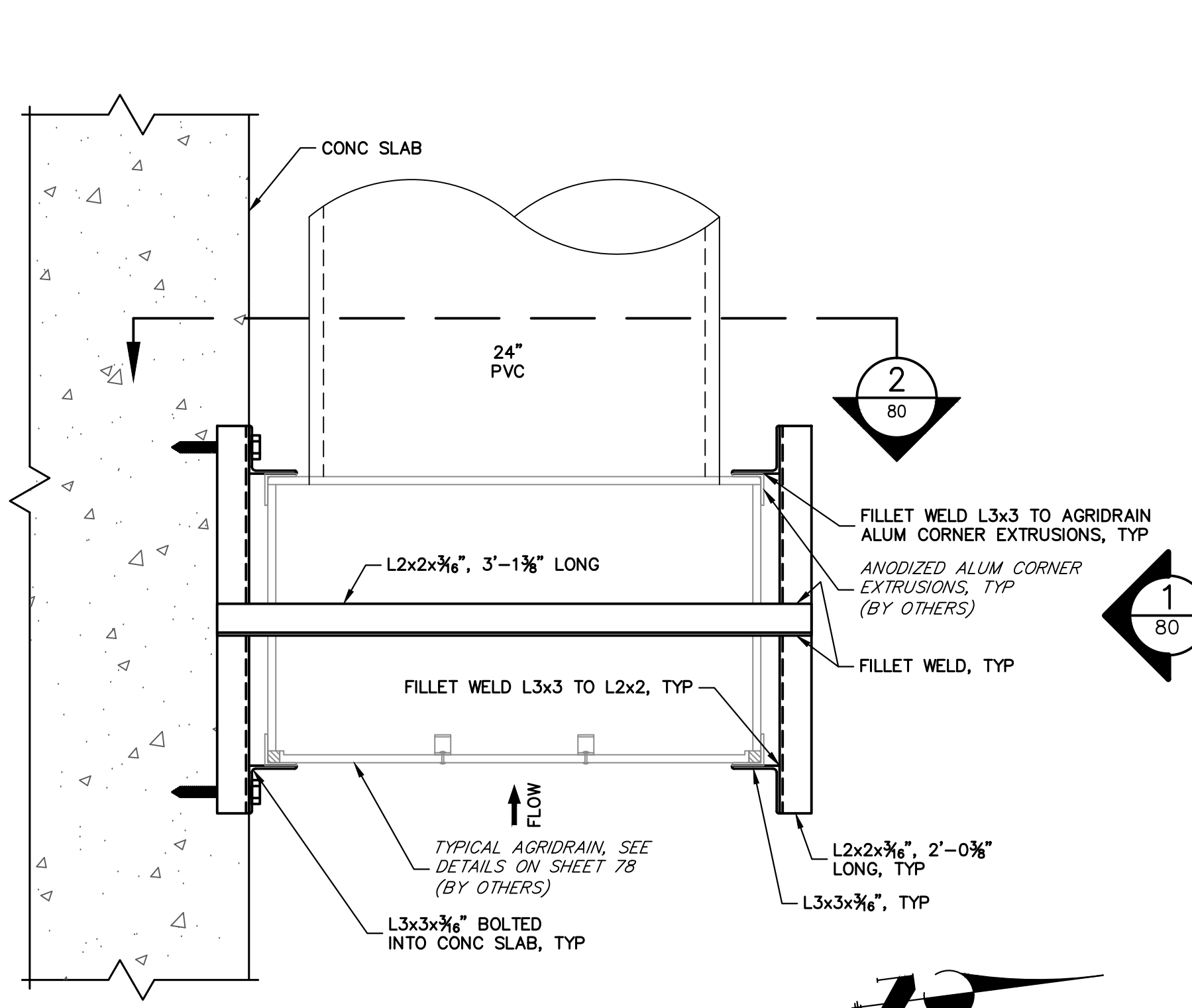


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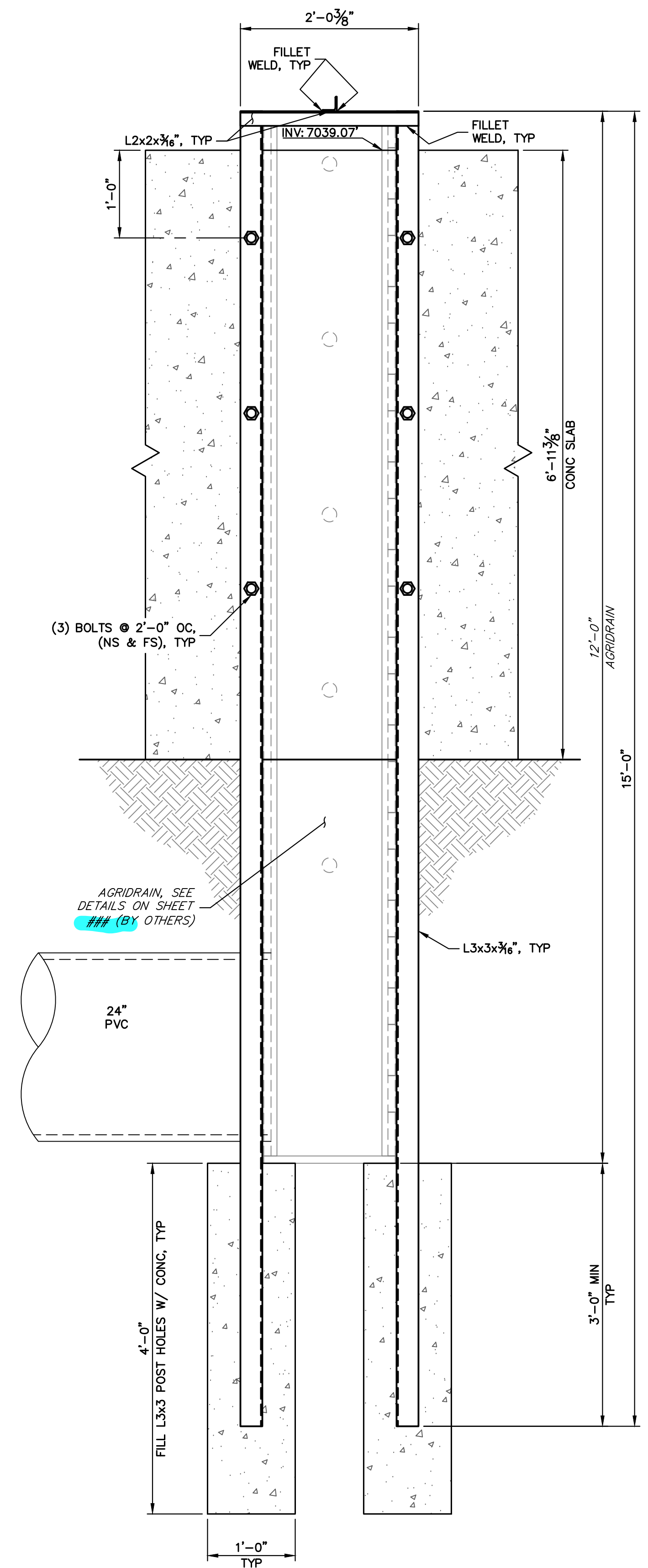


ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION
PRELIMINARY NOT FOR CONSTRUCTION
 MIKE A. BRAMLEY
 COLORADO P.E. 30000
 FOR AND ON BEHALF OF J.R. ENGINEERING

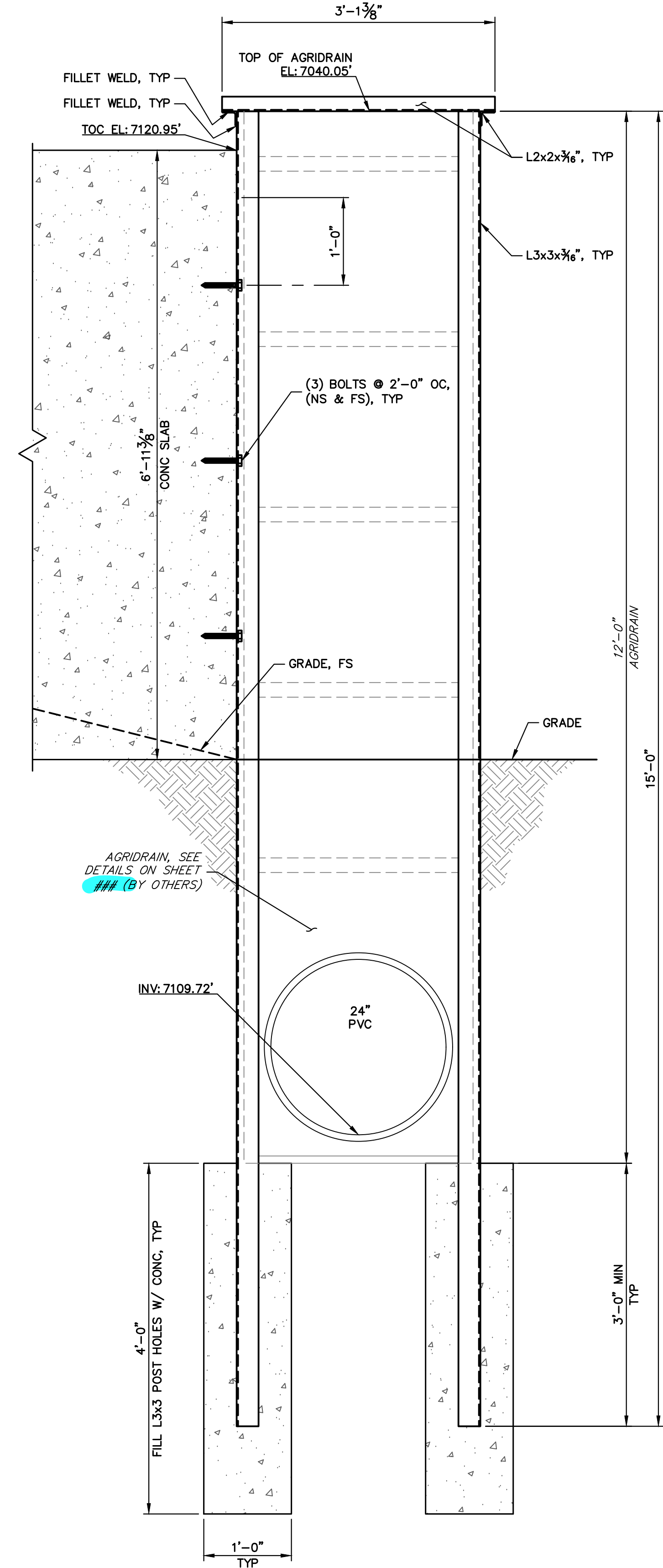
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, OR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.	
PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024
J.R. ENGINEERING A Westman Company	Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com
BY	DATE
No.	REVISION
H-SCALE	V-SCALE
DATE	DESIGNED BY
DRAWN BY	CHECKED BY
SAND CREEK RESTORATION	
AGRIDRAIN DETAILS	
SHEET 79	OF 111
JOB NO. 25188.04	



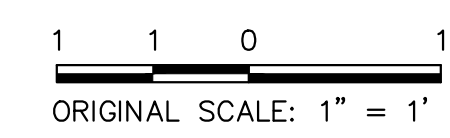
PLAN
SCALE: 1-1/2" = 1'



1 SECTION
SCALE: 1" = 1'

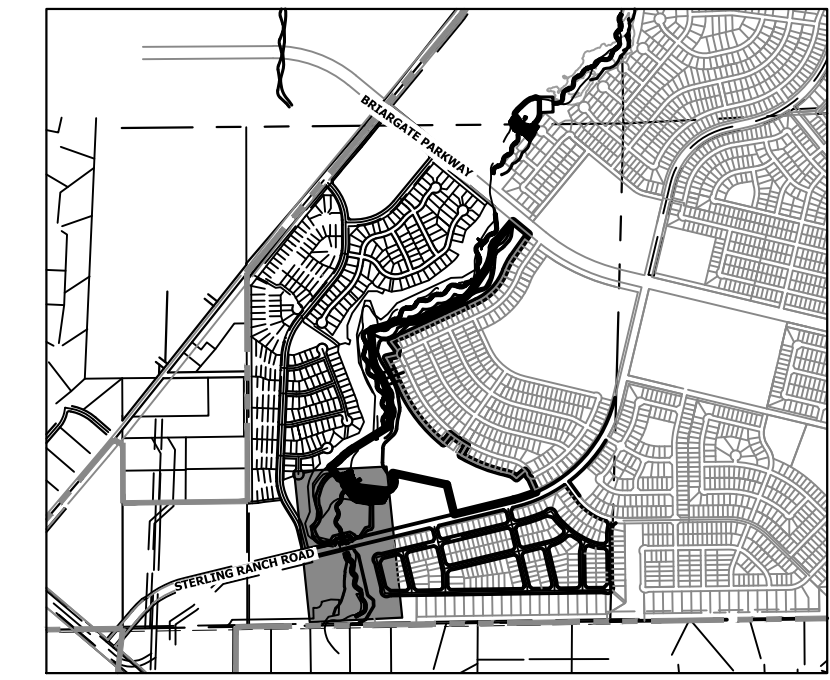
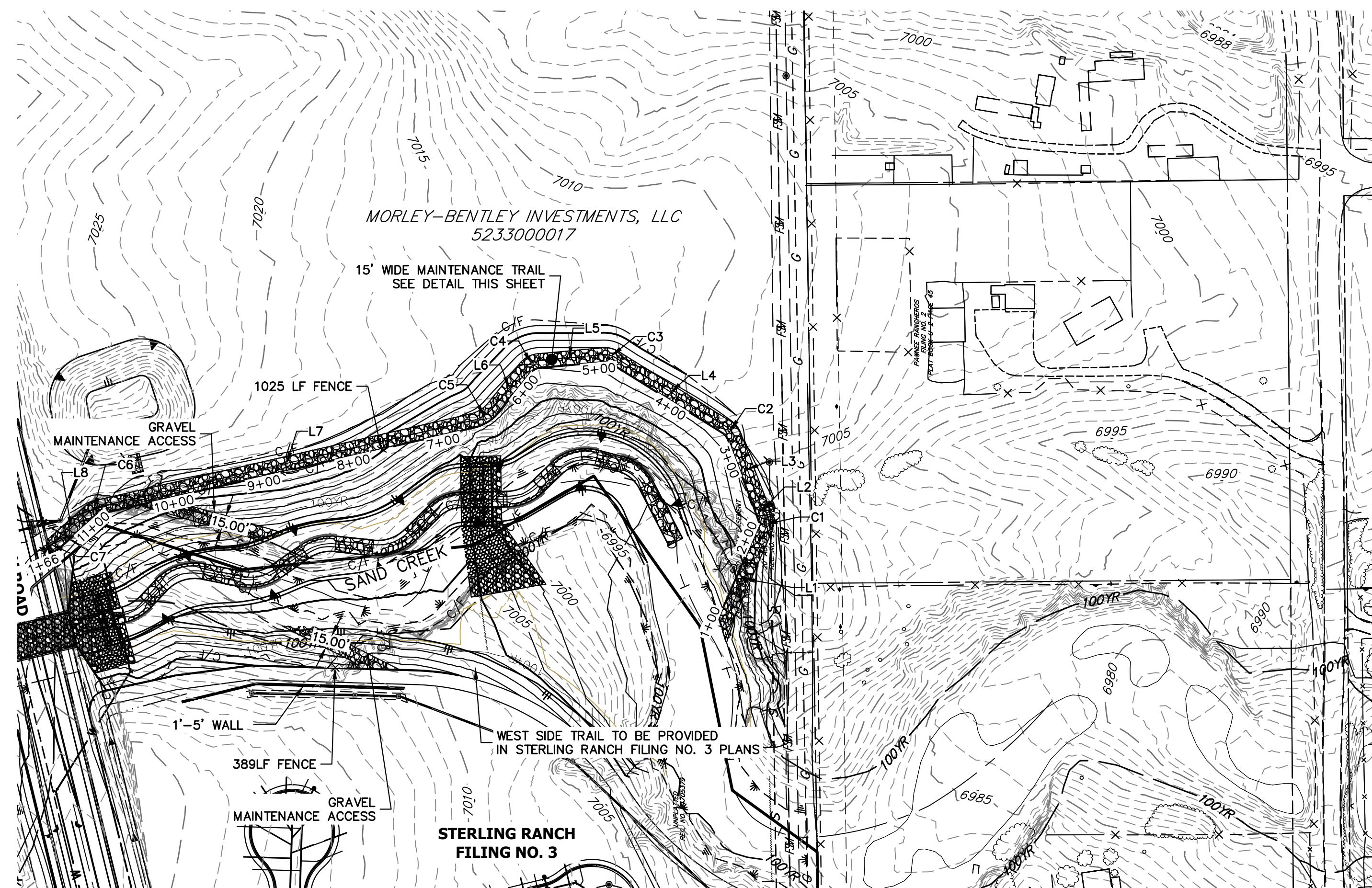


2 ELEVATION
SCALE: 1" = 1'



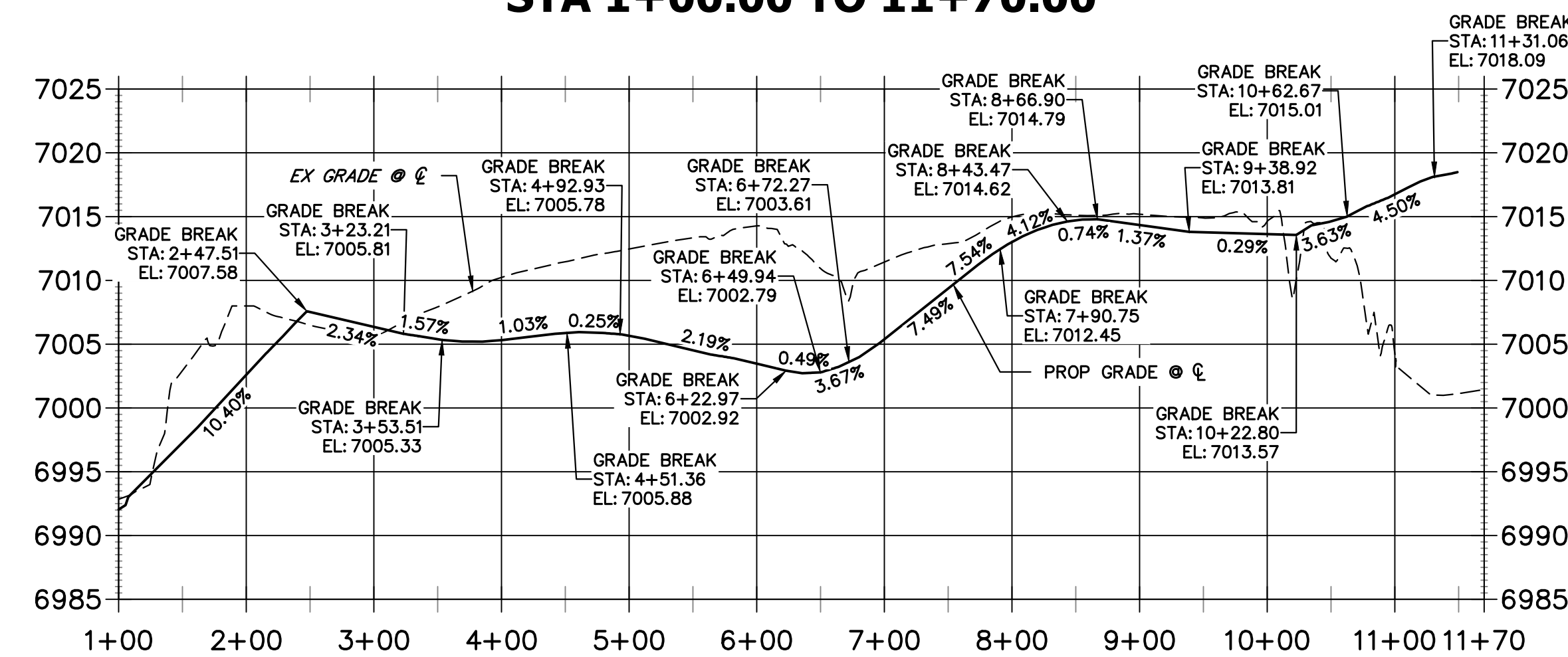
ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 30000
FOR AND ON BEHALF OF J.R. ENGINEERING

SAND CREEK RESTORATION		BY DATE		No. REVISION		H-SCALE V-SCALE		DESIGNED BY R.C.B.		DRAWN BY R.C.B.		CHECKED BY	
AGRIDRAIN DETAILS													
SHEET 80 OF 111		PREPARED FOR		SR LAND, LLC		DATE		1/23/23		DESIGNED BY		R.C.B.	
JOB NO. 25188.04		20 BOULDER CRESCENT		2ND FLOOR		DRAWN BY		R.C.B.		CHECKED BY		R.C.B.	
		UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.		COLORADO SPRINGS, CO 80903		DATE				DESIGNED BY		R.C.B.	
		J.R. ENGINEERING		A Westman Company		DRAWN BY				CHECKED BY		R.C.B.	
		Central 303-740-9888 • Colorado Springs 719-583-2583		Fort Collins 970-491-9888 • www.jrengineering.com		DATE				DESIGNED BY		R.C.B.	
		JAMES F. MORLEY		(719) 419-3024		DATE				CHECKED BY		R.C.B.	



KEY MAP
SCALE: 1"=2000'

**EAST MAINTENANCE ACCESS TRAIL PROFILE REACH 1
STA 1+00.00 TO 11+70.00**



LINE TABLE		
LINE	BEARING	DISTANCE
L1	S66°28'16"E	115.56'
L2	N70°37'22"E	18.85'
L3	N69°00'00"E	75.70'
L4	N31°56'59"E	141.86'
L5	N05°18'50"W	69.68'
L6	N51°23'41"W	53.67'
L7	N12°59'41"W	414.03'
L8	N41°42'42"W	48.15'

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	42°53'48"	17.50'	13.10'
C2	37°03'01"	22.50'	14.55'
C3	37°15'49"	22.50'	14.63'
C4	46°04'50"	22.50'	18.10'
C5	38°23'59"	42.50'	28.48'
C6	28°43'00"	32.50'	16.29'
C7	14°58'17"	32.50'	8.49'

BENCHMARK

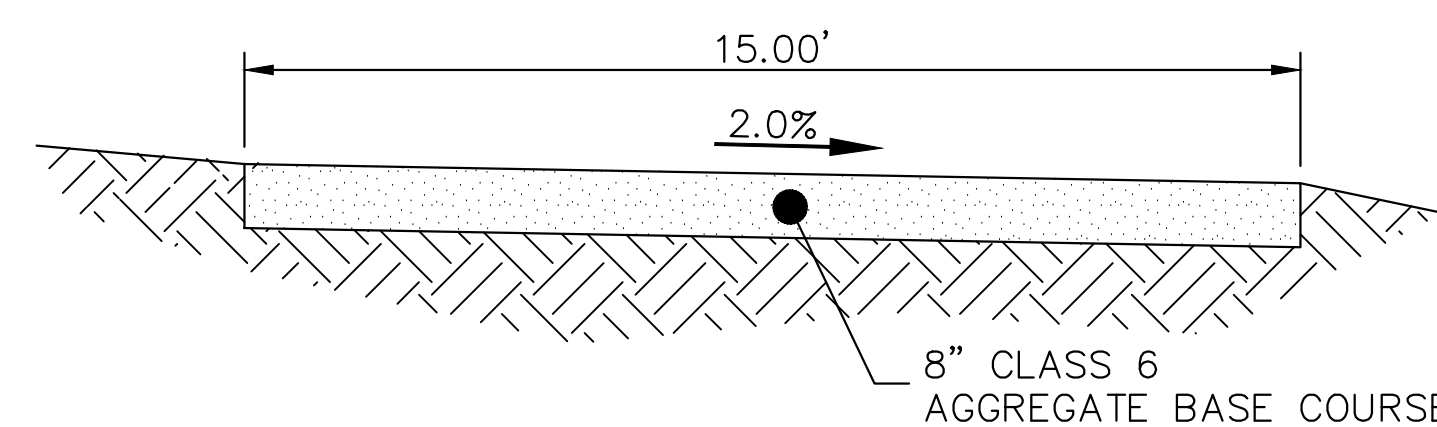
- THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411416.273
EASTING = 235167.071
ELEVATION = 7023.42
- THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION
NORTHING = 410095.404
EASTING = 235052.131
ELEVATION = 7000.40
- THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411399.962
EASTING = 233849.817
ELEVATION = 7030.82

NOTES:

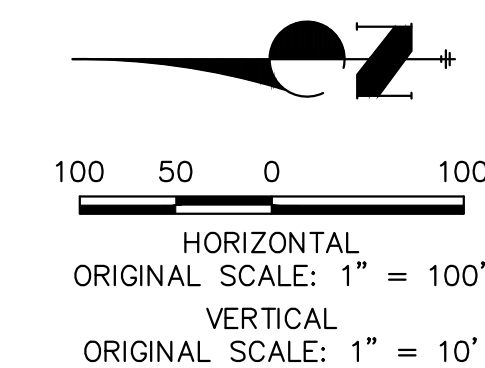
- STEEPEST ALLOWABLE GRADE IS 12%.
- MAINTENANCE ACCESS TRAILS WITH SLOPES GREATER THAN 10% ARTICULATED CONCRETE WILL BE USED.

BASIS OF BEARINGS

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



SAND CREEK MAINTENANCE TRAIL
N.T.S.



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

**PRELIMINARY
NOT FOR
CONSTRUCTION**

MIKE A. BRAMLEY
COLORADO P.E. 30117
FOR AND ON BEHALF OF J.R. ENGINEERING, P.C.

BY	DATE	No.	REVISION	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				1"=100'	1"=50'	1/23/23	SCH	SCH	SCH

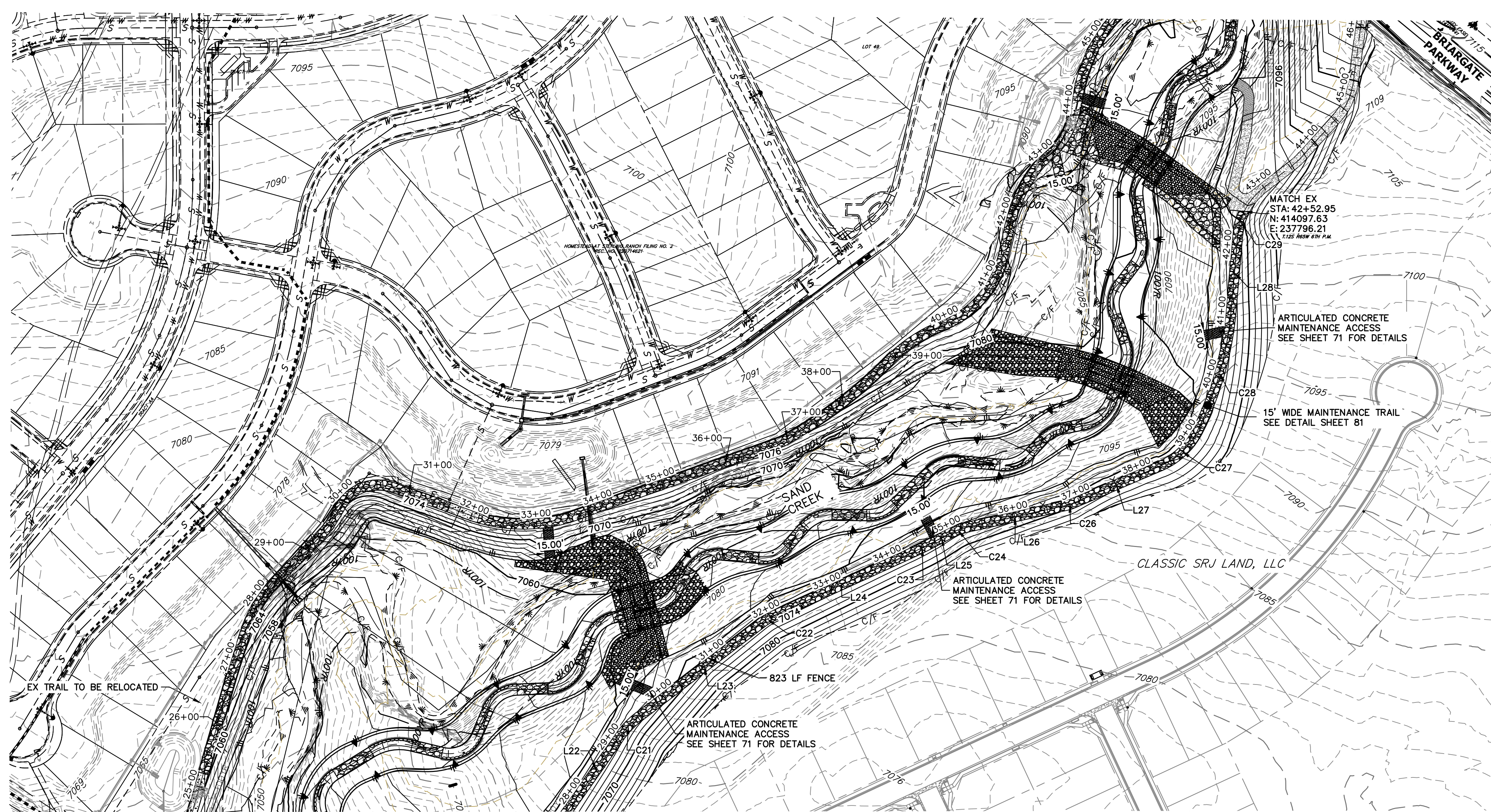
SAND CREEK RESTORATION
MAINTENANCE ACCESS PLAN
& PROFILE

SHEET 81 OF 111
JOB NO. 25188.04

J.R. ENGINEERING
A Westman Company
Central 303-740-9888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

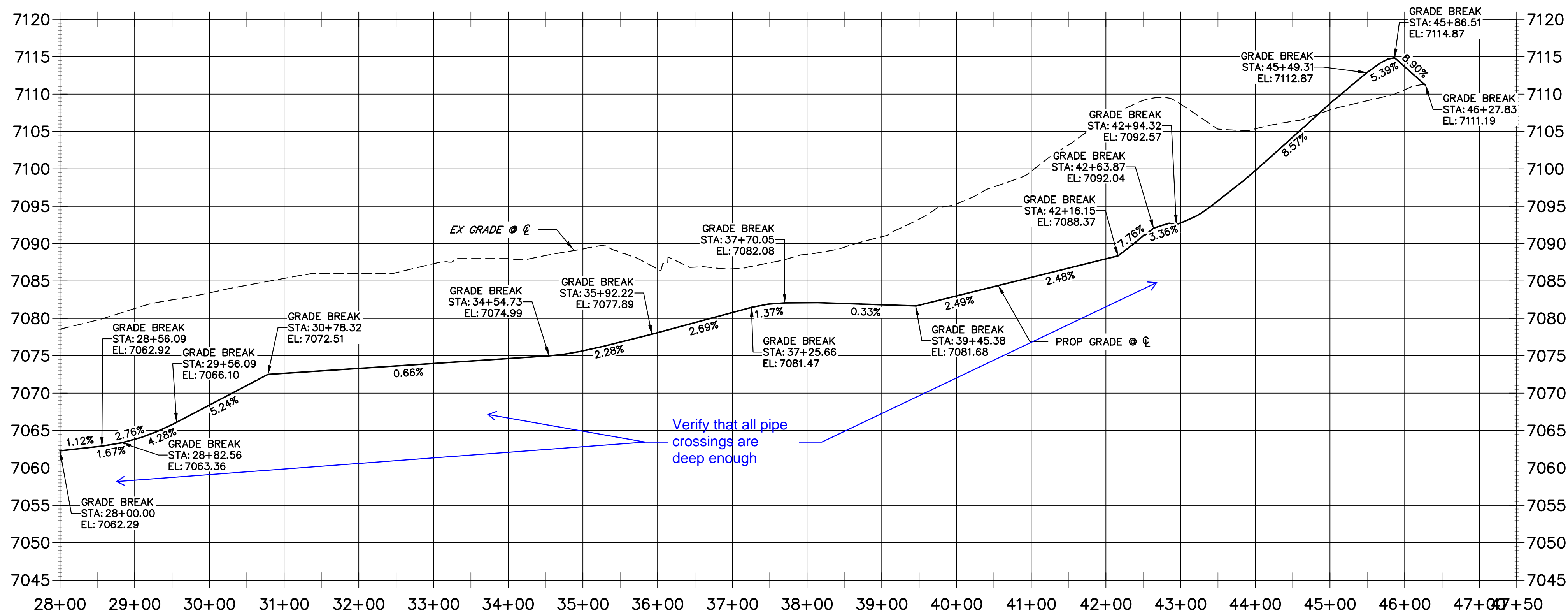
PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.



MATCH STA 28+00
SEE SHEET 82

EAST MAINTENANCE ACCESS TRAIL PROFILE REACH 2 (1) STA 28+00.00 TO 47+50.00



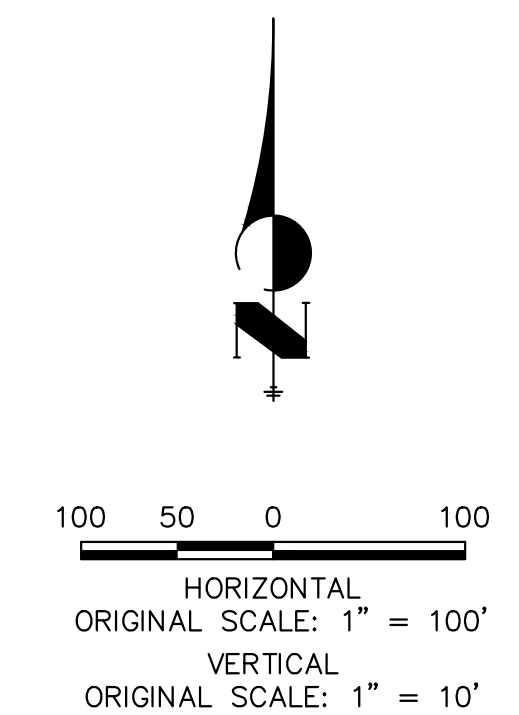
LINE	BEARING	DISTANCE
L22	N35°02'46"E	136.97'
L23	N52°34'53"E	233.05'
L24	N65°29'36"E	225.86'
L25	N62°08'58"E	23.44'
L26	N77°34'21"E	153.82'
L27	N66°49'31"E	144.95'
L28	N05°00'27"E	115.78'

CURVE	DELTA	RADIUS	LENGTH
C21	17°32'07"	140.00'	42.85'
C22	12°54'44"	90.00'	20.28'
C23	3°20'38"	720.00'	42.02'
C24	15°30'13"	114.41'	30.96'
C26	10°44'50"	40.00'	7.50'
C27	39°36'05"	112.28'	77.61'
C28	21°26'03"	505.01'	188.92'
C29	21°06'26"	99.81'	36.77'

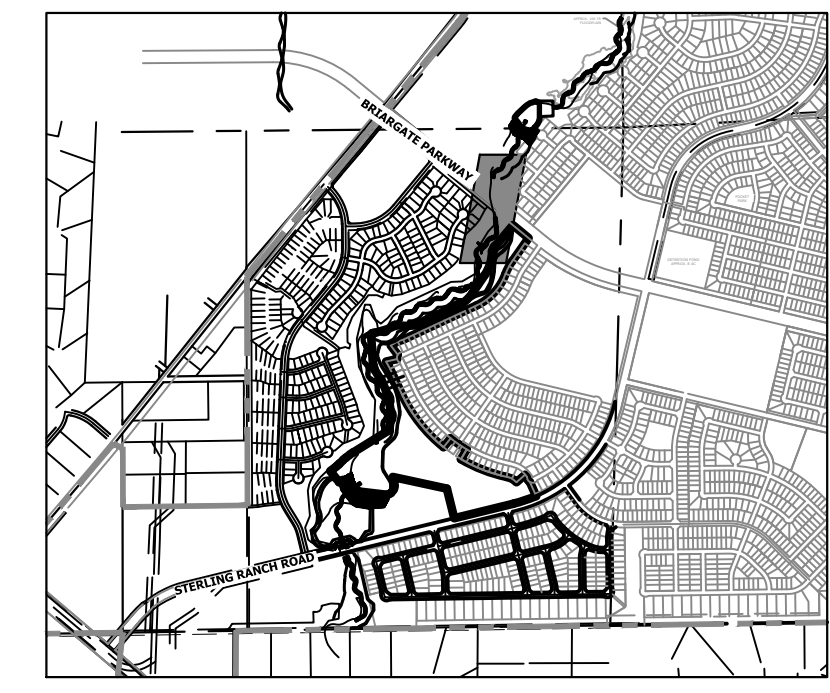
- NOTES:**
1. STEEPEST ALLOWABLE GRADE IS 12%.
 2. MAINTENANCE ACCESS TRAILS WITH SLOPES GREATER THAN 10% ARTICULATED CONCRETE WILL BE USED.

- BENCHMARK**
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411416.273
EASTING = 235167.071
ELEVATION = 7023.42
 2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION
NORTHING = 410095.404
EASTING = 235052.131
ELEVATION = 7000.40
 3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411399.962
EASTING = 233949.817
ELEVATION = 7030.82

BASIS OF BEARINGS
THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624". SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMBLE
COLORADO P.E. 30110
FOR AND ON BEHALF OF JR ENGINEERING, LLC



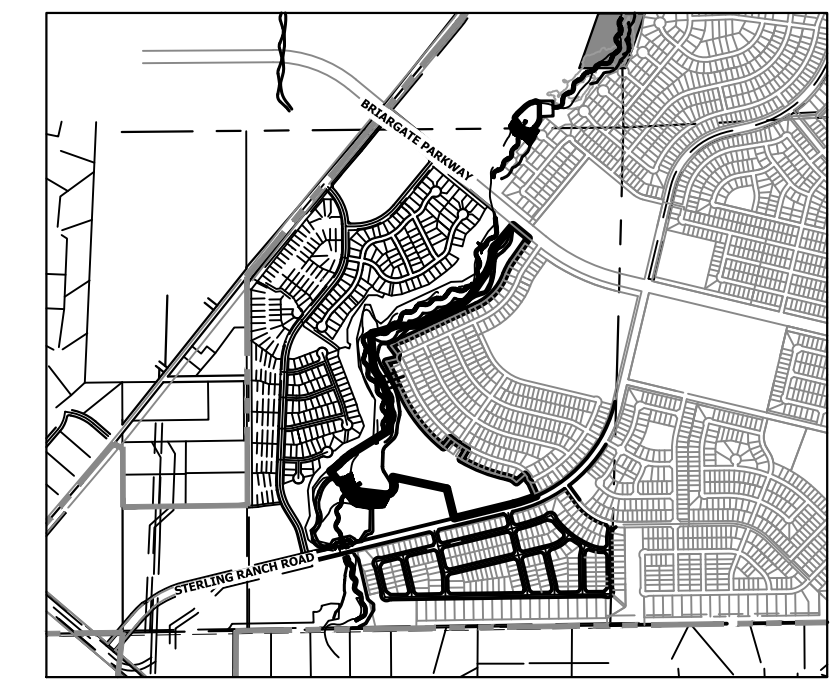
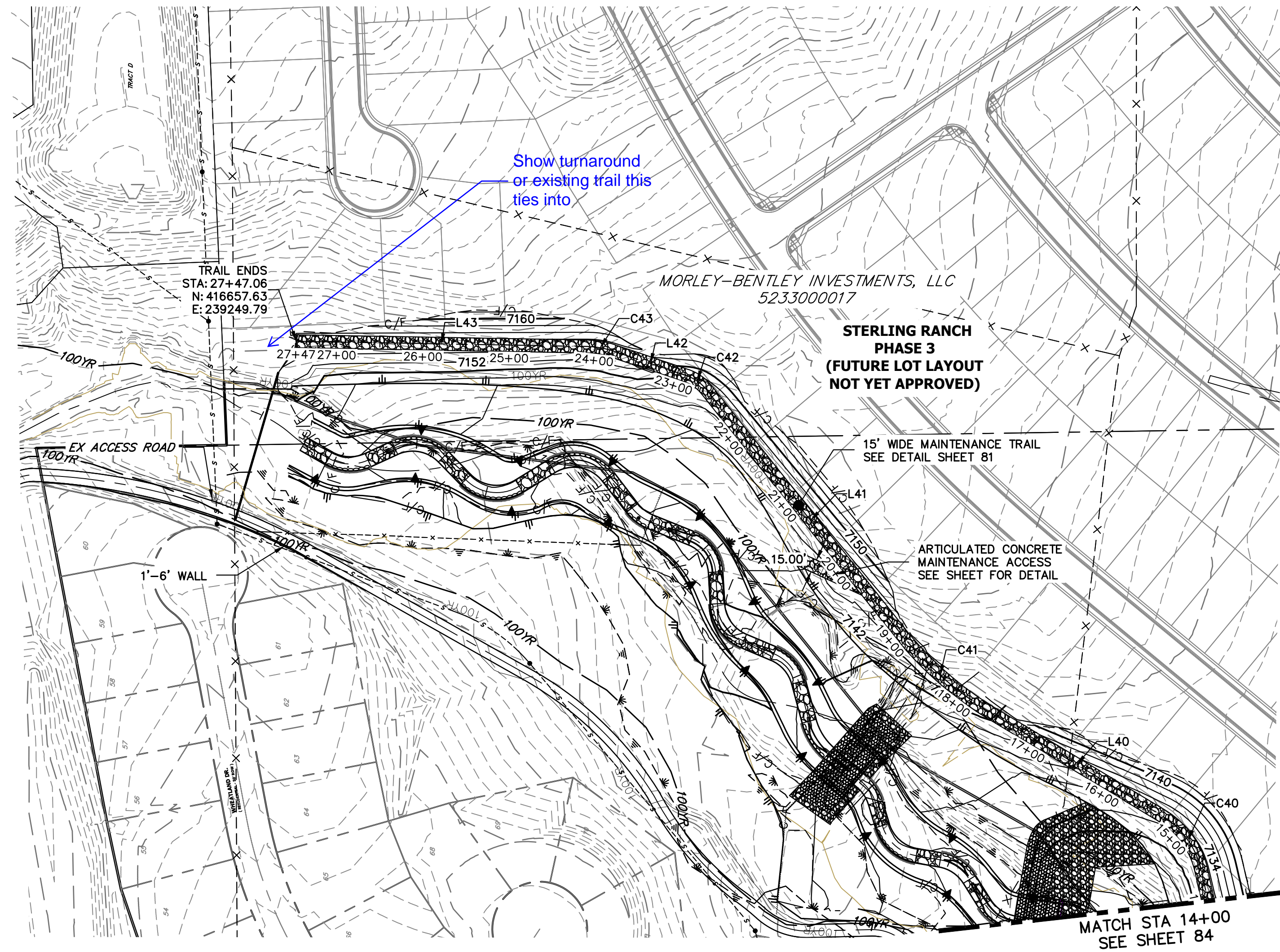
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
A Westman Company
Central 303-740-9888 • Colorado Springs 719-583-2683
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE	H-SCALE		V-SCALE		DATE	DESIGNED BY	SCH	DRAWN BY	SCH	CHECKED BY
				1"=100'	1"=10'	1/23/23	SCH						

SAND CREEK RESTORATION
MAINTENANCE ACCESS PLAN & PROFILE
SHEET 83 OF 111
JOB NO. 25188.04



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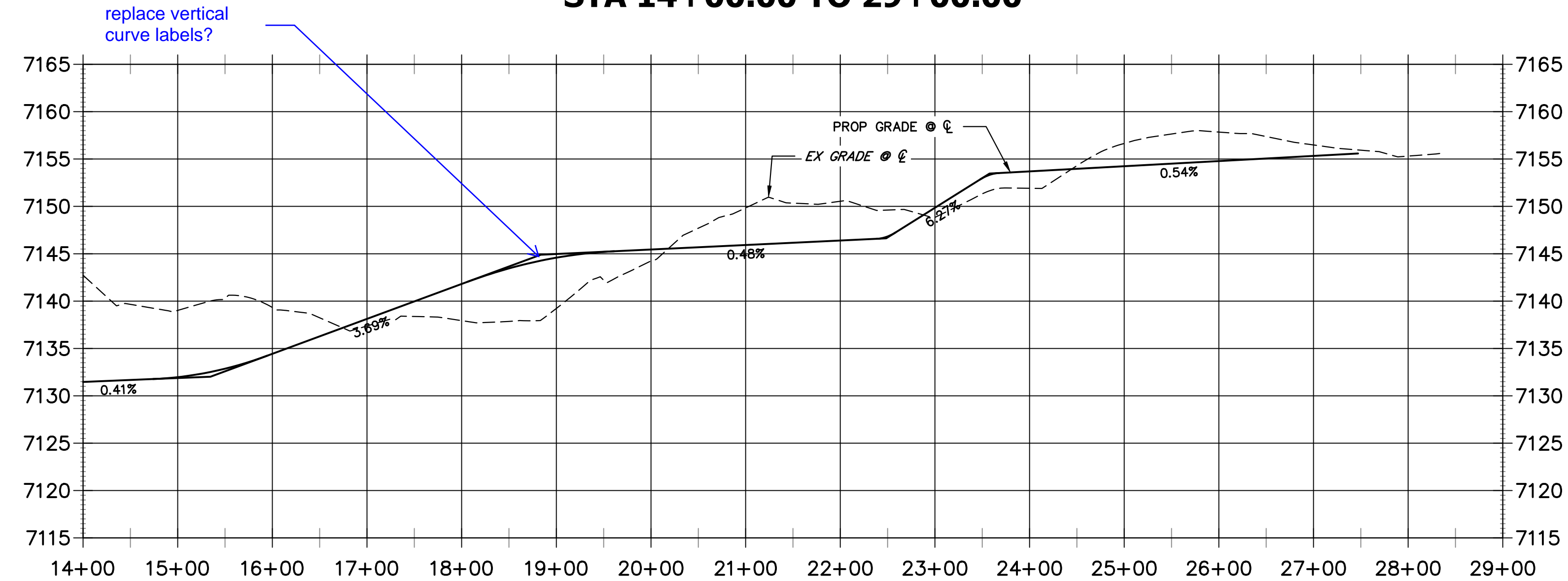
PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
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J.R. ENGINEERING
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 Centennial 303-740-9888 • Colorado Springs 719-583-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C40	46°45'59"	100.00'	81.62'
C41	21°27'49"	400.00'	149.84'
C42	30°11'53"	50.59'	26.66'
C43	17°34'04"	100.00'	30.66'

LINE TABLE		
LINE	BEARING	DISTANCE
L40	N31°01'24"E	229.41'
L41	N51°28'24"E	353.36'
L42	N18°35'32"E	91.99'
L43	N01°01'28"E	337.27'

**EAST MAINTENANCE ACCESS TRAIL PROFILE REACH 3 (2)
 STA 14+00.00 TO 29+00.00**



- BENCHMARK**
1. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
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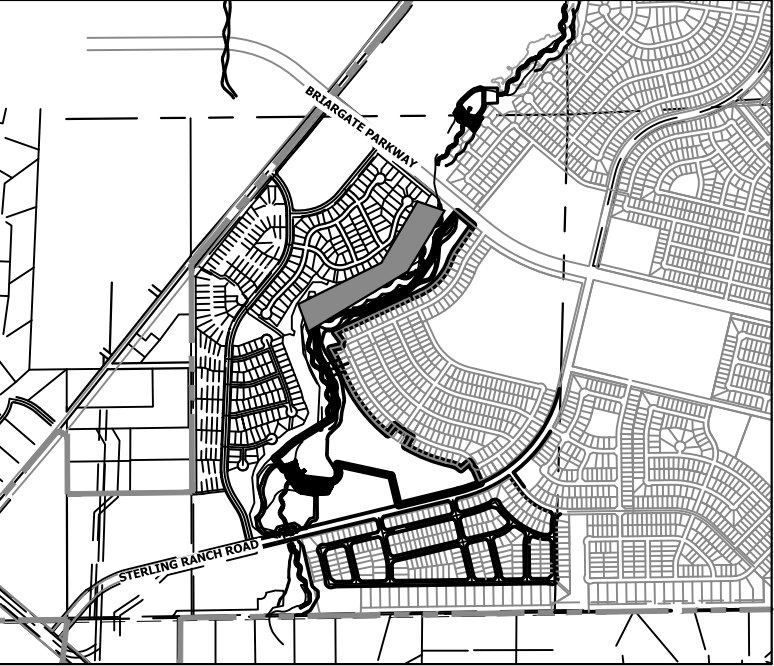
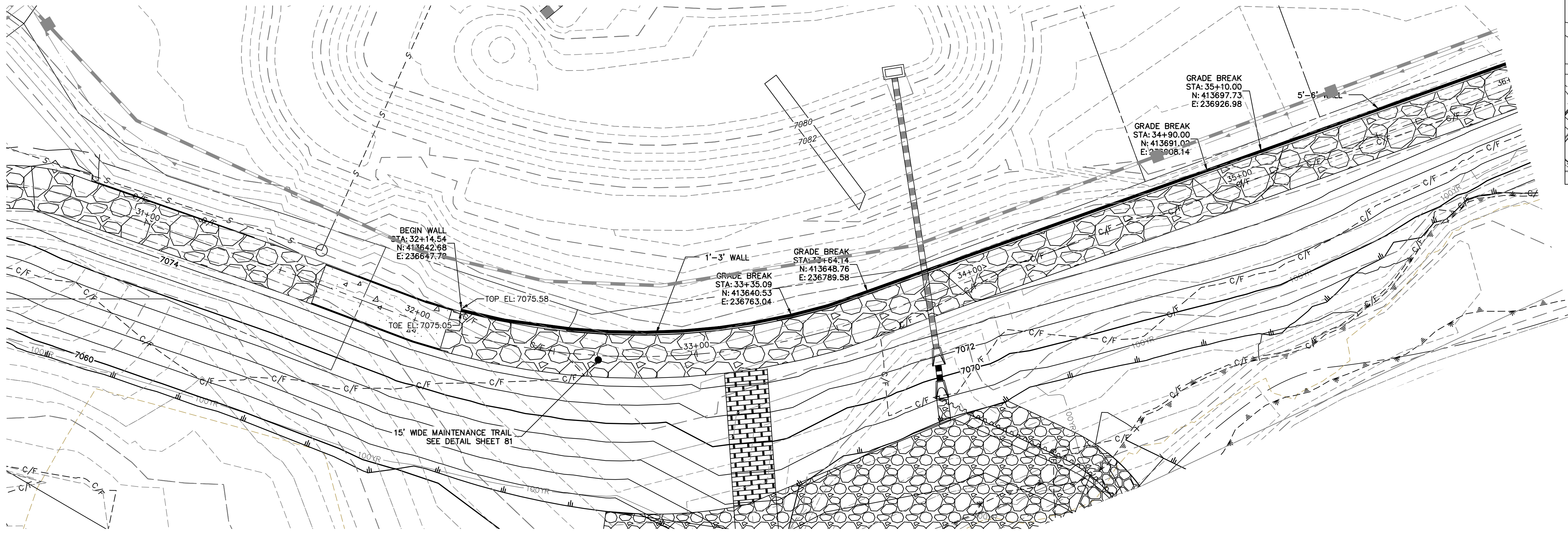
ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
 MIKE A. BRAMLEY
 COLORADO P.E. # 31207
 FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

BY	DATE	No.	REVISION	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				1"=100'	1"=10'	1/23/23	SCH	SCH	SCH

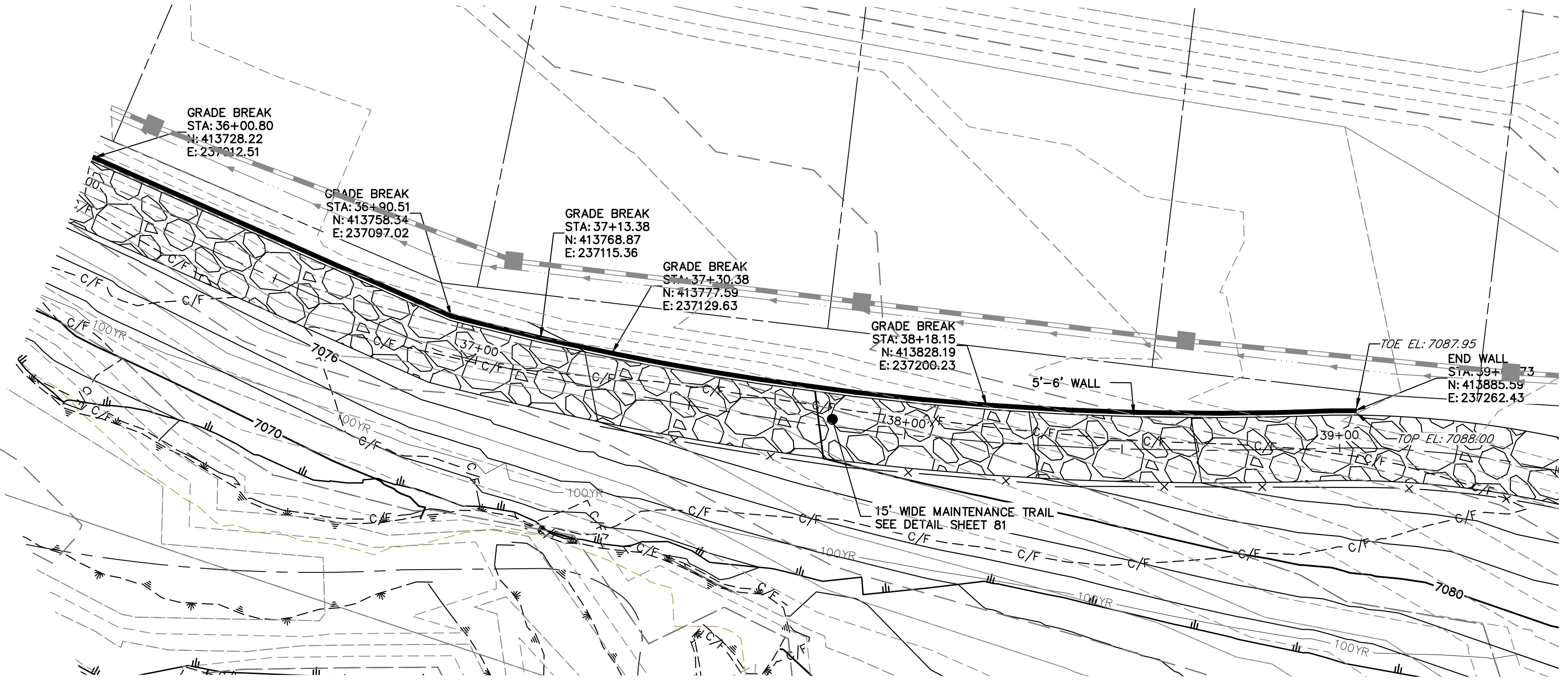
SAND CREEK RESTORATION
MAINTENANCE ACCESS PLAN & PROFILE

SHEET 85 OF 111
 JOB NO. 25188.04

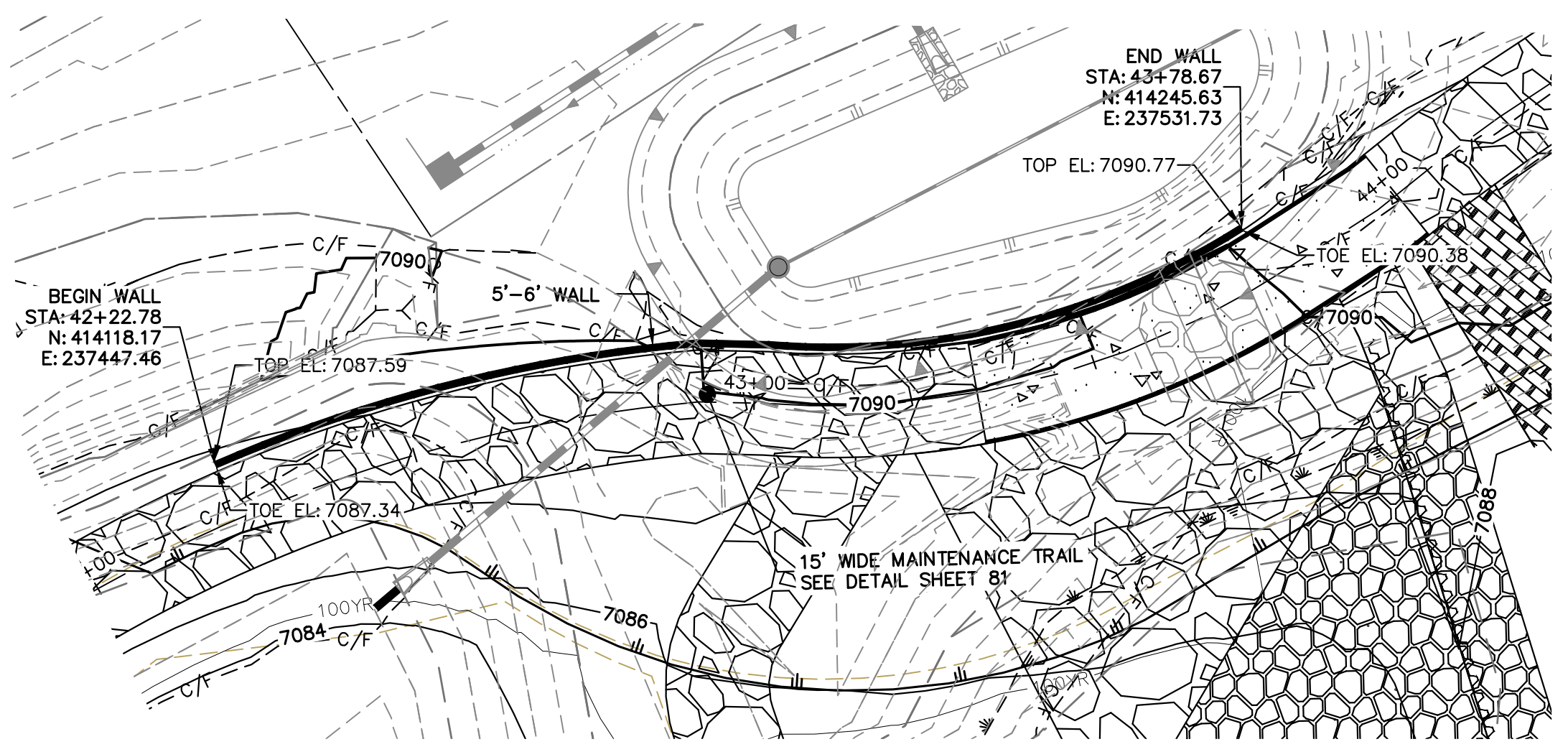
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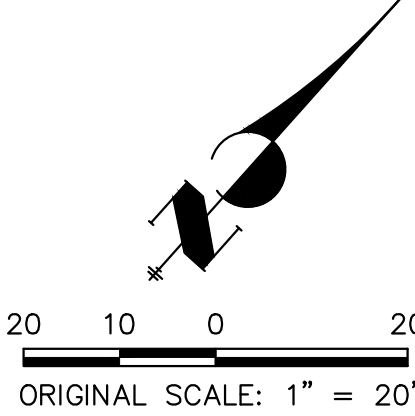
MAINTENANCE TRAIL WALL #4



MAINTENANCE TRAIL WALL #4



MAINTENANCE TRAIL WALL #5



ENGINEER'S STATEMENT
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 MIKE A. BRAMBLE
 COLORADO P.E. 30100
 FOR AND ON BEHALF OF JR ENGINEERING

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BY	DATE	NO.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1" = 20'	N/A	1/23/23	NEO	NEO	

SAND CREEK RESTORATION
 MAINTENANCE ACCESS PLAN
 & PROFILE