

# 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

### 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

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

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

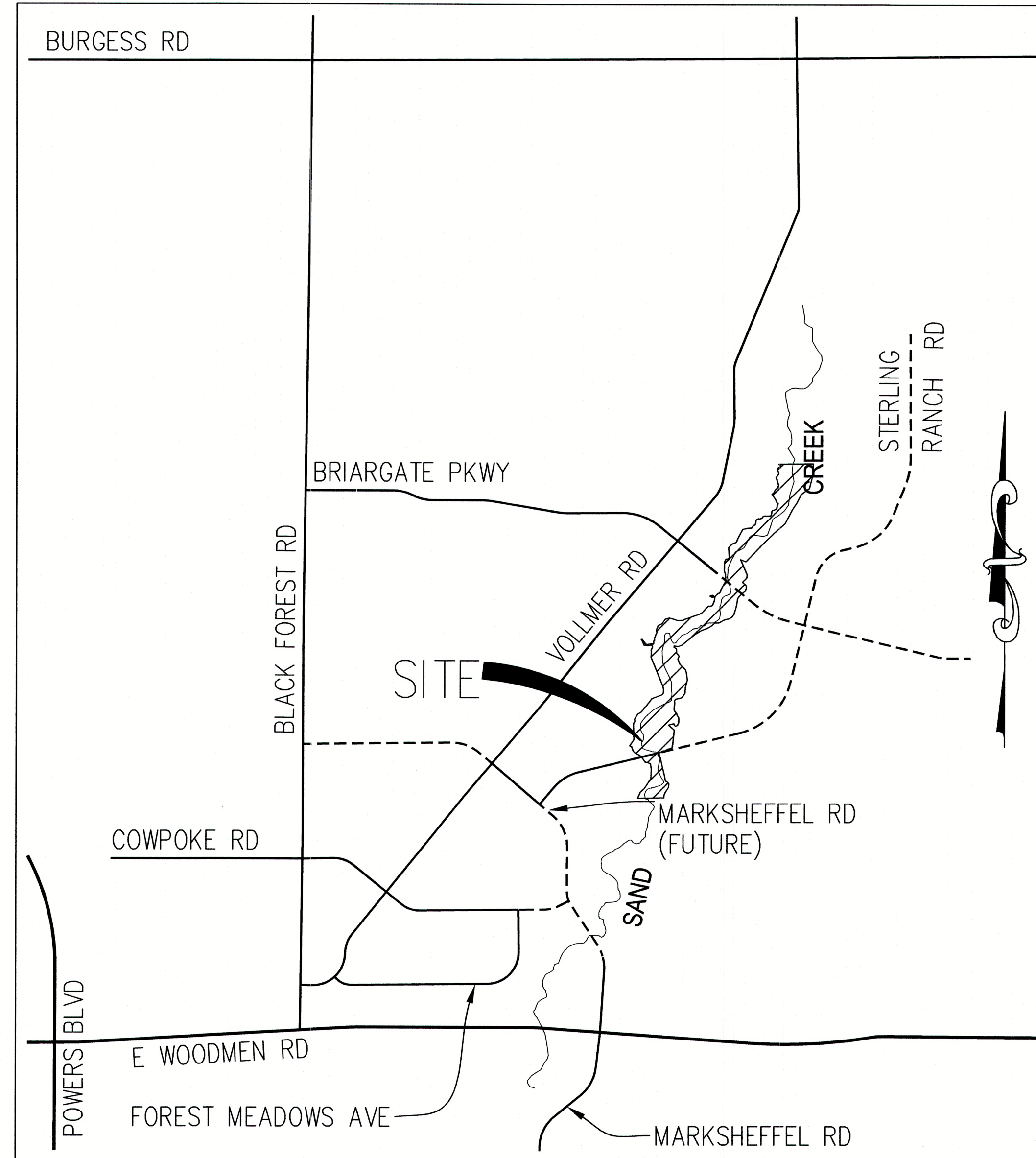
**GAS:** CRAIG KERSEY  
REAL ESTATE | MAGELLAN MIDSTREAM PARTNERS, L.P.  
ONE WILLIAMS CENTER, OTC-8, TULSA, OK 74172  
918-574-7986

### 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.

*James F. Morley* 11/20/23  
FOR AND ON BEHALF OF THE STERLING RANCH METRO DISTRICT NO.3 DATE

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S1-S25	-	STRUCTURAL PLANS & DETAILS
146	-	TOTAL SHEETS

### 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.

*James F. Morley* 11/20/23  
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 Bramlett* 11/20/23  
DATE

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

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT, THESE DRAWINGS ARE NOT TO BE USED FOR ANY 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

JR ENGINEERING  
A Westman Company



Central 303-740-8888 • Colorado Springs 719-589-2588  
Fort Collins 970-491-8888 • www.jrengineering.com

No.	REVISION	BY	DATE	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	SHEET	OF	TOTAL SHEETS		
													N/A	N/A
SAND CREEK RESTORATION														
COVER SHEET														
											SHEET	1	OF	121
											JOB NO.	25188.04		



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	---	---
CENTERLINE	---	---
CITY LIMITS	---	---
WIRE FENCE	---X---	---X---
CHAIN LINK FENCE	---◇---	---◇---
WOOD FENCE	---◇---	---◇---
MASONRY FENCE	---□---	---□---
GUARDRAIL	--- ---	--- ---
CONC. BARRIER	--- ---	--- ---
CABLE TV	---TV---	---TV---
ELECTRIC	---E---	---E---
FIBER OPTIC	---FO---	---FO---
GAS MAIN	---G---	---G---
IRRIGATION MAIN	---IRR---	---IRR---
OIL/PETRO. MAIN	---O---	---O---
OVERHEAD UTILITY	---OHU---	---OHU---
SANITARY SEWER	---S---	---S---
STORM DRAIN	---	---
TELEPHONE	---T---	---T---
WATER MAIN	---W---	---W---
RAW WATER LINE	---RWL---	---RWL---
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	---	---
SILT FENCE	---SF---	---SF---
100 YEAR FIS FLOODPLAIN	---100YR---	---100YR---
100 YEAR MDDP FLOODPLAIN	---100YR---	---100YR---
500 YEAR FLOODPLAIN	---500YR---	---500YR---
FLOODWAY	---FLDWY---	---FLDWY---
BASE FLOOD ELEVATION	---	---
EDGE OF WETLANDS	---	---

UTILITIES LEGEND

	EXISTING	PROPOSED
<b>STORM SEWER</b>		
MANHOLE	⊙	⦿
STORM INLET		■
AREA INLET - SQUARE	□	
AREA INLET - ROUND	○	
FLARED END SECTION	▷	▷
RIPRAP	[Stippled]	[Stippled]
<b>SANITARY SEWER</b>		
LINE MARKER	Mkr San	
SERVICE MARKER	△	
CLEAN-OUT	-	-
MANHOLE W/ DIRECTIONAL FLOW ARROW	⊙	⦿
<b>WATER LINE</b>		
LINE MARKER	Mkr W	
SERVICE MARKER	△	
FIRE HYDRANT	⊙	⦿
FIRE CONNECTION	⊙	⦿
MANHOLE	⊙	⦿
BEND	⌋	⌋
BLOW-OFF VALVE	⊕	⊕
WELL	⊕	⦿
METER	⊕	⦿
VALVE	⊕	⦿
REDUCER	⊕	⦿
THRUST BLOCK	⊕	⦿
CROSS	⊕	⦿
PLUG W/ THRUST BLOCK	⊕	⦿
TEE	⊕	⦿
REVERSE ANCHOR	⊕	⦿
ANODE	⊕	⦿
AIR & VACUUM VALVE ASSEMBLY	⊕	⦿
TRANSMISSION BLOW-OFF ASSEMBLY	⊕	⦿
<b>GAS LINE</b>		
MARKER	Mkr G	
SERVICE MARKER	△	
METER	⊕	⦿
VALVE	⊕	⦿
PLUG	⊕	⦿
TEE	⊕	⦿
<b>DRY UTILITIES</b>		
CABLE TV MARKER	Mkr TV	
CABLE TELEVISION PEDESTAL	⊕	
ELECTRIC MARKER	Mkr E	
ELECTRIC SERVICE MARKER	△	
ELECTRICAL PEDESTAL	⊕	
ELECTRICAL METER	⊕	
ELECTRICAL MANHOLE	⊕	
FIBER-OPTIC MARKER	Mkr FO	
IRRIGATION PEDESTAL	⊕	
TELEPHONE MARKER	Mkr T	
TELEPHONE PEDESTAL	⊕	
TELEPHONE MANHOLE	⊕	
UTILITY POLE	⊕	
GUY ANCHOR	⊕	
GUY POLE	⊕	
<b>MISC. UTILITIES</b>		
VENT PIPE	⊕	⦿
TEST HOLE DESIGNATOR	⊕	⦿

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/TRAVVERSE POINT - SET	△

STORM WATER MANAGEMENT

KEY	SYMBOL
CHECK DAM	⊕
CONSTRUCTION ROAD STABILIZATION	⊕
CURB SOCK INLET PROTECTION	⊕
CONCRETE WASHOUT AREA	[Stippled]
DIVERSION DITCH AND DIKE, TEMPORARY	→
DIVERSION CHANNEL, TEMPORARY	→
DEWATERING	⊕
EROSION CONTROL BLANKET	[Stippled]
INLET FILTER	⊕
INLET PROTECTION	⊕
MULCHING	[Stippled]
OUTLET PROTECTION	⊕
PAVED FLUME	⊕
PERMENTENT SEEDING	⊕
REINFORCED CONCRETE DAM	⊕
ROUGH CUT STREET CONTROL	⊕
SEDIMENT BASIN	⊕
SEDIMENT CONTROL LOG	⊕
SILT FENCE	⊕
SURFACE ROUGHENING	⊕
STABILIZED STAGING AREA	⊕
SEDIMENT TRAP	⊕
STRAW BALE BARRIER	⊕
TERRACING	⊕
TEMPORARY SEEDING	⊕
TEMPORARY STREAM CROSSING CULVERT/BRIDGE	⊕
TEMPORARY STREAM CROSSING FORD TYPE	⊕
TEMPORARY SLOPE DRAIN	⊕
VEHICLE TRACKING CONTROL	⊕
VEHICLE TRACKING CONTROL WITH WASH RACK	⊕

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 SIGN	⊕	⊕
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	⊕	⊕

LANDSCAPE LEGEND

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

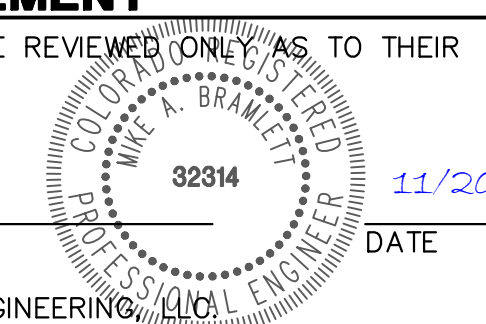


Know what's below. Call before you dig.

ENGINEER'S STATEMENT

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

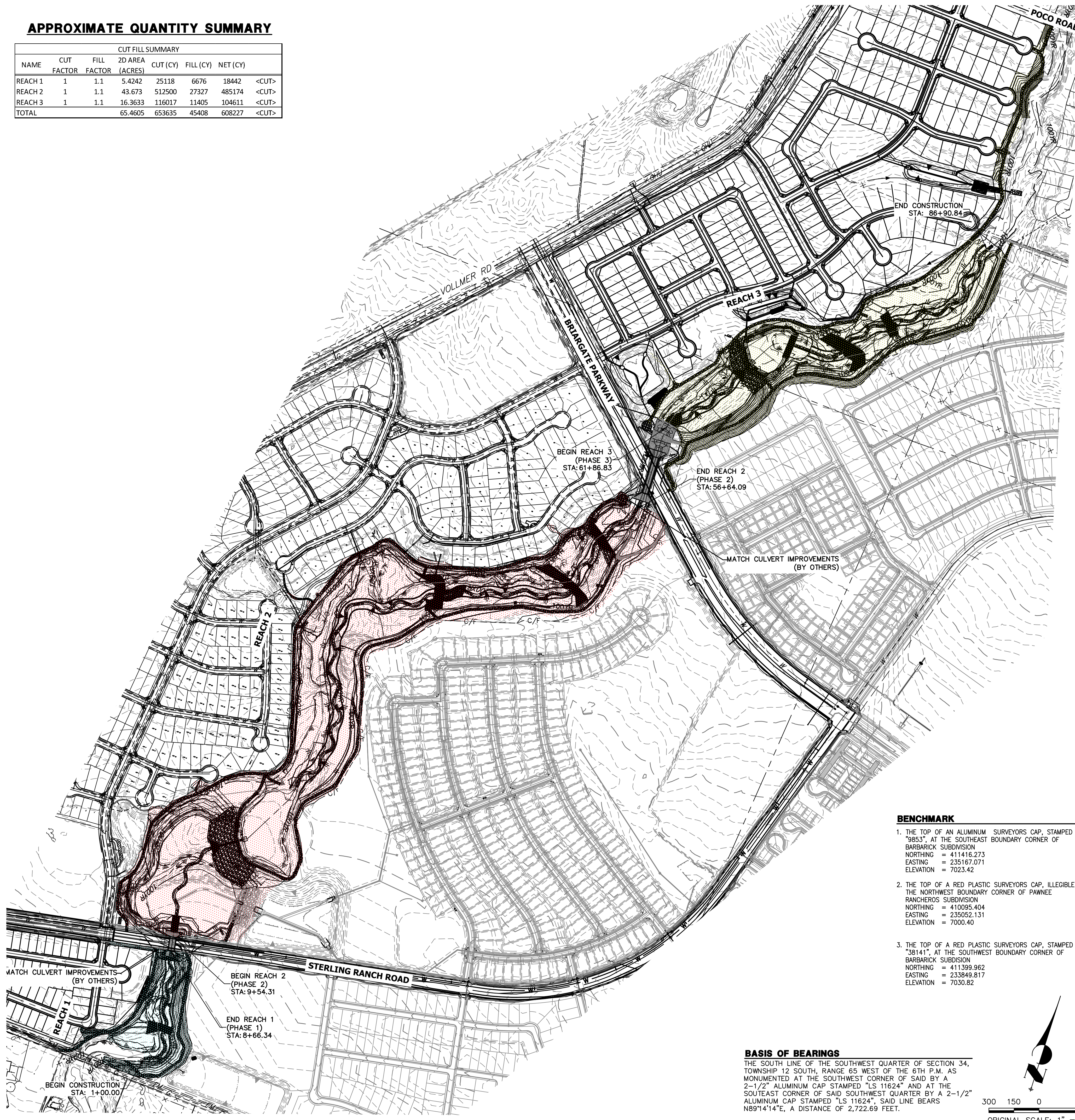
Mike Bramlett  
32314  
DATE 11/20/23  
FOR AND ON BEHALF OF JR ENGINEERING, INC.



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.
PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024
<b>J.R. ENGINEERING</b> A Westman Company Centennial 303-740-8888 • Colorado Springs 719-588-2583 Fort Collins 970-491-8888 • www.jrengineering.com
BY: _____ DATE: _____ NO. _____ REVISION: _____
H-SCALE N/A V-SCALE N/A DATE 11/20/23 DESIGNED BY SCH DRAWN BY SCH CHECKED BY
SAND CREEK RESTORATION LEGEND
SHEET 3 OF 121 JOB NO. 25188.04

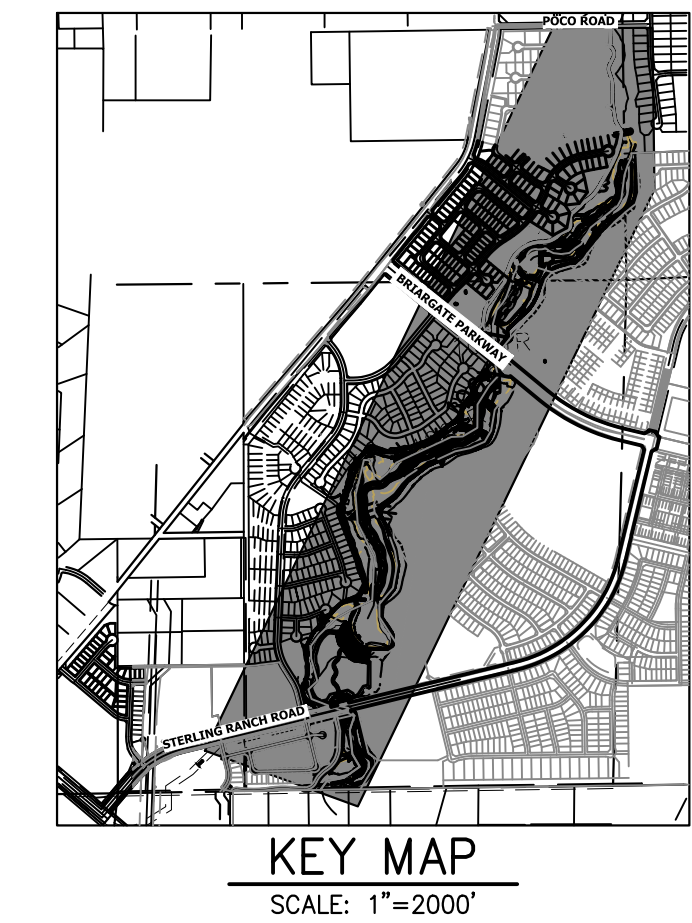
**APPROXIMATE QUANTITY SUMMARY**

NAME	CUT/FILL SUMMARY					
	CUT FACTOR	FILL FACTOR	2D AREA (ACRES)	CUT (CY)	FILL (CY)	NET (CY)
REACH 1	1	1.1	5.4242	25118	6676	18442 <CUT>
REACH 2	1	1.1	43.673	512500	27327	485174 <CUT>
REACH 3	1	1.1	16.3633	116017	11405	104611 <CUT>
TOTAL			65.4605	653635	45408	608227 <CUT>



**LEGEND**

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



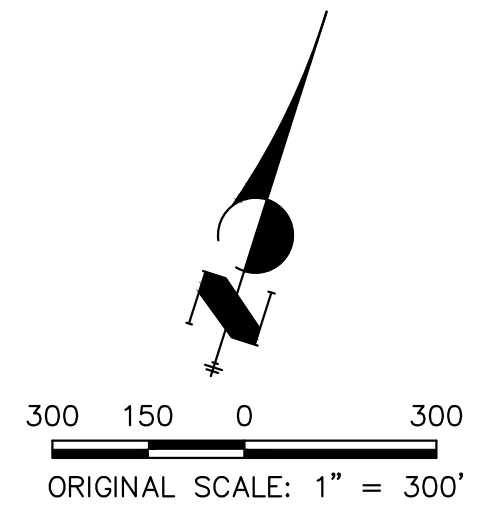
**GRADING NOTES:**

- 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.
- THERE IS A LIKELIHOOD FOR LARGE FLOW EVENTS IN SAND CREEK WHICH COULD JEOPARDIZE CONSTRUCTION. THE LIKELIHOOD OF THESE EVENTS CHANGES WITH THE SEASONS. THE CONTRACTOR SHOULD ACCOUNT FOR THE EVENTUALITY OF THESE LARGE FLOW EVENTS BASED ON THE TIMING OF CONSTRUCTION.
- DEWATERING:
  - DEWATERING/BYPASS PUMPING OF SAND CREEK SHALL OCCUR IN ADVANCE OF CONSTRUCTION ACTIVITIES.
  - 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.
  - WATER FROM DEWATERING OPERATIONS SHALL ONLY BE DISCHARGED INTO STATE WATERS IF ALLOWED BY A PERMIT.
- 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.
- THE MAXIMUM SLOPE FOR EXCAVATION AND PLACEMENT OF FILL IS 4:1 HORIZONTAL:VERTICAL, UNLESS OTHERWISE SHOWN IN THE PLANS.
- 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.
- 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.
- A GEOTECHNICAL ENGINEER SHALL BE PRESENT FOR OVER-EXCAVATION AND FILL OPERATIONS.
- THE EARTHWORK EFFORTS SHOULD BE MONITORED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER. MONITORING SHOULD INCLUDE DOCUMENTATION OF ADEQUATE REMOVAL OF VEGETATION AND TOP SOIL, PROOF-ROLLING AND MITIGATION OF AREAS DELINEATED BY THE PROOF-ROLL TO REQUIRE MITIGATION.
- EACH LIFT OF COMPACTED FILL SHOULD BE TESTED, EVALUATED, AND REWORKED AS NECESSARY UNTIL APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF ADDITIONAL LIFTS. EACH LIFT OF FILL SHOULD BE TESTED FOR DENSITY AND WATER CONTENT AT A FREQUENCY OF AT LEAST ONE TEST FOR EVERY 2,500 SQUARE FEET OF COMPACTED FILL PLACED BENEATH THE DROP STRUCTURE, OR WITHIN CONSTRUCTED SLOPES.
- IN AREAS OF FOUNDATION EXCAVATIONS, THE BEARING SUBGRADE SHOULD BE EVALUATED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER. IN THE EVENT UNANTICIPATED CONDITIONS ARE ENCOUNTERED, THE GEOTECHNICAL ENGINEER SHOULD PRESCRIBE MITIGATION OPTIONS.
- THE ON-SITE SOILS ARE GENERALLY CONSIDERED SUITABLE FOR REUSE AS STRUCTURAL AND/OR GENERAL FILL. IMPORTED SOILS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER. ALL UNSUITABLE MATERIAL SHALL BE DISPOSED OF AS DIRECTED. PARTIAL REMOVAL OF THE FILL SOILS SHOULD INCLUDE OVER-EXCAVATING A MINIMUM OF 4 FEET OF THE FILL SOILS, PROCESSING AS REQUIRED, MOISTURE CONDITIONING, AND RECOMPACTING AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
- THE FILL SHALL BE PLACED IN THIN, LOOSE LIFTS OF 8 INCHES OR LESS (WHEN HEAVY SELF-PROPELLED COMPACTION EQUIPMENT IS USED) OR 4-6 INCHES (WHEN HAND-GUIDED EQUIPMENT IS USED). WATER CONTENT SHALL BE WITHIN 3 PERCENT OF OPTIMUM. FILL IS TO BE COMPACTED TO A MINIMUM OF:
  - WITHIN 10 FEET OF STRUCTURES, OR IN CONSTRUCTED SLOPES: 95 PERCENT OF MAXIMUM DRY DENSITY.
  - GENERAL FILL OUTSIDE OF STRUCTURAL AREAS: 90 PERCENT OF MAXIMUM DRY DENSITY.
- 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.
- PROPOSED SPOT ELEVATIONS REFLECT MEAN FINISHED GROUND GRADES IRRESPECTIVE OF VARIATIONS DUE TO PROPOSED GROUT, BOULDER, AND RIPRAP.
- EXISTING GRADES REFLECT CHANNEL CONDITIONS AS OF AUGUST 1, 2017. CHANNEL SCOUR MAY AFFECT SHOWN ELEVATIONS.
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**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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 ELEVATION = 7000.40
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 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

*Mike Bramlett*  
 MIKE A. BRAMLETT, P.E.  
 COLORADO P.E. 32314  
 FOR AND ON BEHALF OF JR ENGINEERING, INC.

32314 11/20/23

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.

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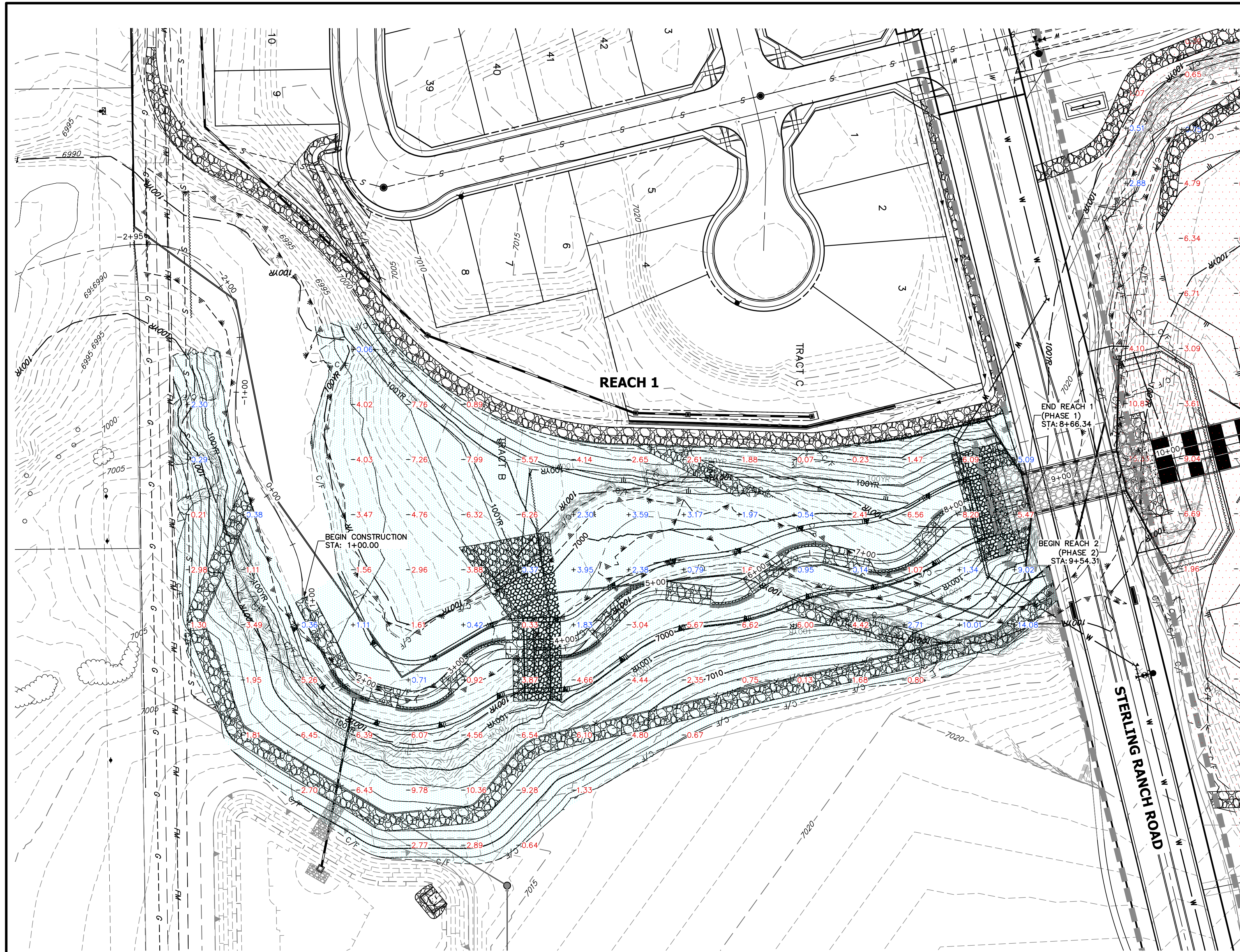
**J.R. ENGINEERING**  
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 Centennial 303-740-9383 • Colorado Springs 719-583-2583  
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION

H-SCALE: 1"=300'  
 V-SCALE: N/A  
 DATE: 11/20/23  
 DESIGNED BY: DJV  
 DRAWN BY: NEO  
 CHECKED BY: 

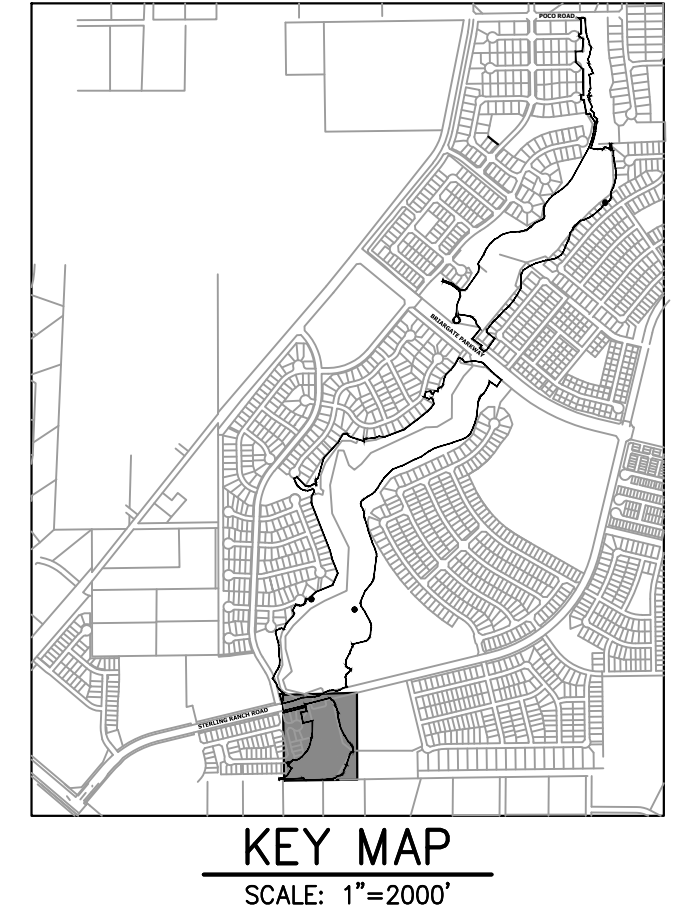
**SAND CREEK RESTORATION**  
**EARTHWORK & PHASING**  
**PLAN**

SHEET 4 OF 121  
 JOB NO. 25188.04



### LEGEND

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



### GRADING NOTES:

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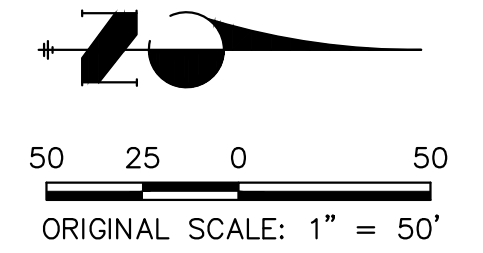
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### APPROXIMATE QUANTITY SUMMARY

NAME	CUT FILL SUMMARY			CUT (CY)	FILL (CY)	NET (CY)
	CUT FACTOR	FILL FACTOR	2D AREA (ACRES)			
REACH 1	1	1.1	5.4242	25118	6676	18442 <CUT>
REACH 2	1	1.1	43.673	512500	27327	485174 <CUT>
REACH 3	1	1.1	16.3633	116017	11405	104611 <CUT>
TOTAL			65.4605	653635	45408	608227 <CUT>

### 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.



Know what's below.  
Call before you dig.

### ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION

*Mike Bramlett* 11/20/23

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

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BY	DATE	NO.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=50'	N/A	11/20/23	DJV	NEO	

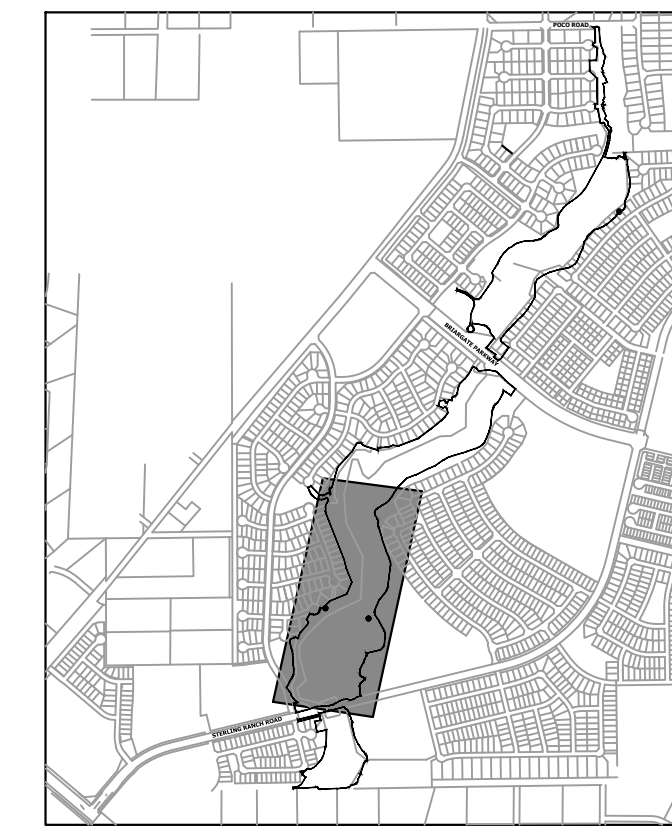
SAND CREEK RESTORATION  
EARTHWORK & PHASING  
PLAN

SHEET 5 OF 121  
JOB NO. 25188.04



**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'

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**REACH 2**

**BENCHMARK**

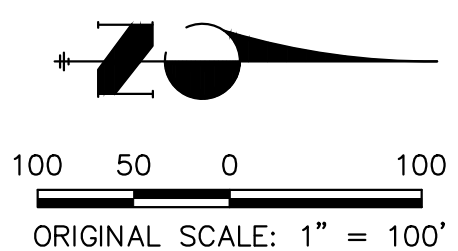
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**BASIS OF BEARINGS**

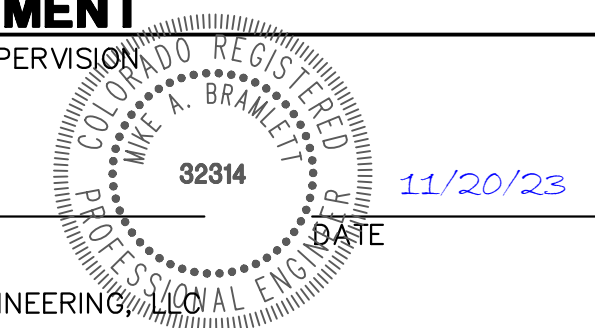
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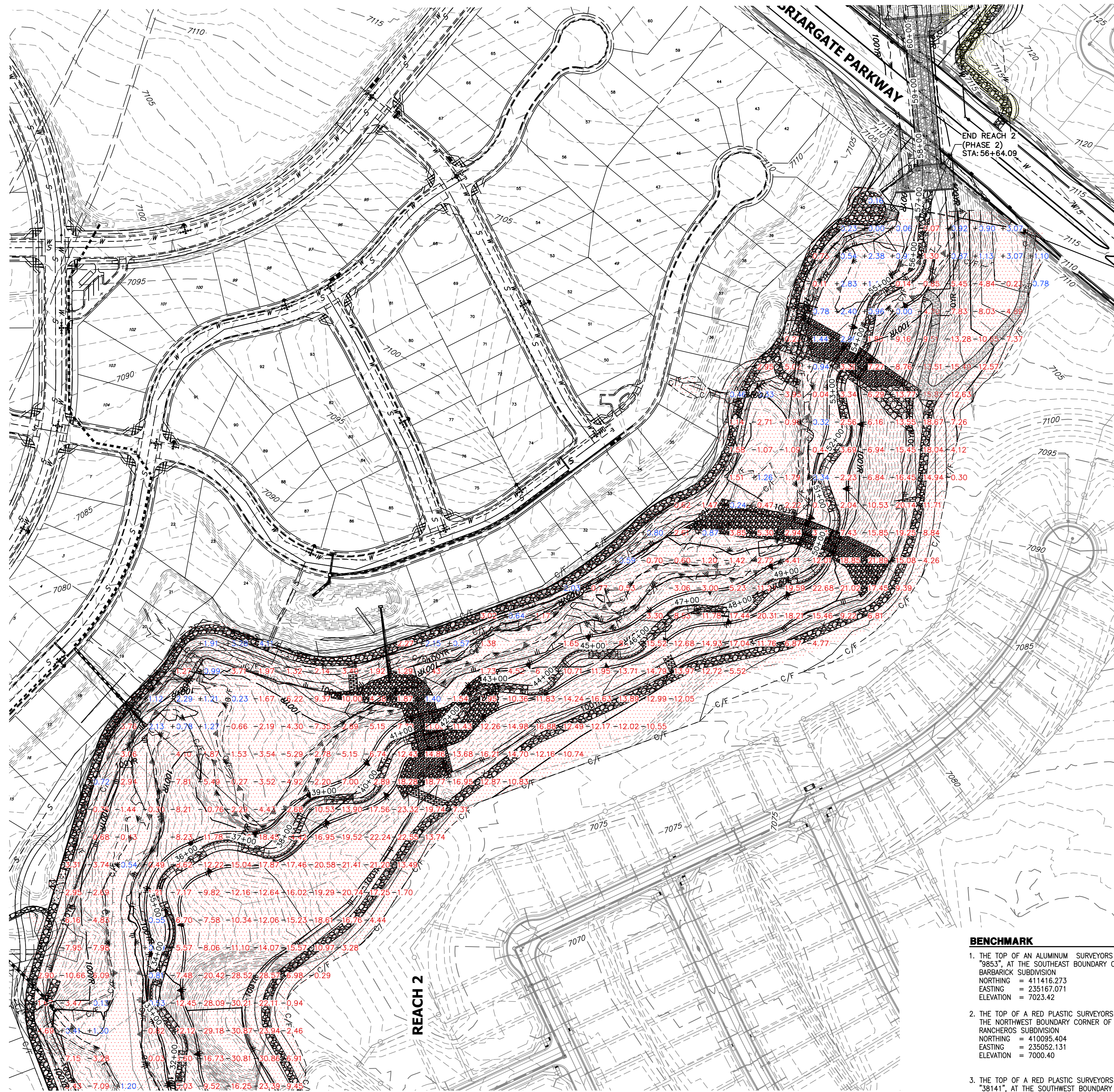
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BY	DATE	REVISION

H-SCALE: 1"=100'  
V-SCALE: N/A  
DATE: 11/20/23  
DESIGNED BY: DJV  
DRAWN BY: NEO  
CHECKED BY: 

**SAND CREEK RESTORATION**  
**EARTHWORK & PHASING**  
**PLAN**

SHEET 6 OF 121  
JOB NO. 25188.04



**LEGEND**

- REACH 1 (PHASE 1)
- REACH 2 (PHASE 2)
- REACH 3 (PHASE 3)
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9. THE EARTHWORK EFFORTS SHOULD BE MONITORED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER. MONITORING SHOULD INCLUDE DOCUMENTATION OF ADEQUATE REMOVAL OF VEGETATION AND TOP SOIL, PROOF-ROLLING AND MITIGATION OF AREAS DELINEATED BY THE PROOF-ROLL TO REQUIRE MITIGATION.
10. EACH LIFT OF COMPACTED FILL SHOULD BE TESTED, EVALUATED, AND REWORKED AS NECESSARY UNTIL APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF ADDITIONAL LIFTS. EACH LIFT OF FILL SHOULD BE TESTED FOR DENSITY AND WATER CONTENT AT A FREQUENCY OF AT LEAST ONE TEST FOR EVERY 2,500 SQUARE FEET OF COMPACTED FILL PLACED BENEATH THE DROP STRUCTURE, OR WITHIN CONSTRUCTED SLOPES.
11. IN AREAS OF FOUNDATION EXCAVATIONS, THE BEARING SUBGRADE SHOULD BE EVALUATED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER. IN THE EVENT UNANTICIPATED CONDITIONS ARE ENCOUNTERED, THE GEOTECHNICAL ENGINEER SHOULD PRESCRIBE MITIGATION OPTIONS.
12. THE ON-SITE SOILS ARE GENERALLY CONSIDERED SUITABLE FOR REUSE AS STRUCTURAL AND/OR GENERAL FILL. IMPORTED SOILS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER. ALL UNSUITABLE MATERIAL SHALL BE DISPOSED OF AS DIRECTED. PARTIAL REMOVAL OF THE FILL SOILS SHOULD INCLUDE OVER-EXCAVATING A MINIMUM OF 4 FEET OF THE FILL SOILS, PROCESSING AS REQUIRED, MOISTURE CONDITIONING, AND RECOMPACTION AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
13. THE FILL SHALL BE PLACED IN THIN, LOOSE LIFTS OF 8 INCHES OR LESS (WHEN HEAVY SELF-PROPELLED COMPACTION EQUIPMENT IS USED) OR 4-6 INCHES (WHEN HAND-GUIDED EQUIPMENT IS USED). WATER CONTENT SHALL BE WITHIN 3 PERCENT OF OPTIMUM. FILL IS TO BE COMPACTED TO A MINIMUM OF:
  - 13.a. WITHIN 10 FEET OF STRUCTURES, OR IN CONSTRUCTED SLOPES: 95 PERCENT OF MAXIMUM DRY DENSITY
  - 13.b. GENERAL FILL OUTSIDE OF STRUCTURAL AREAS: 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.
15. PROPOSED SPOT ELEVATIONS REFLECT MEAN FINISHED GROUND GRADES IRRESPECTIVE OF VARIATIONS DUE TO PROPOSED GROUT, BOULDER, AND RIPRAP.
16. EXISTING GRADES REFLECT CHANNEL CONDITIONS AS OF AUGUST 1, 2017. CHANNEL SCOUR MAY AFFECT SHOWN ELEVATIONS.
17. TOPSOIL SHALL BE STOCKPILED TO THE EXTENT PRACTICAL ON THE SITE FOR USE ON AREAS TO BE REVEGETATED. ANY AND ALL STOCKPILES SHALL BE LOCATED AND PROTECTED FROM EROSION ELEMENTS. THE MINIMUM THICKNESS OF TOPSOIL SHALL BE 4" AND SHALL BE OBTAINED BY STOCKPILING EXISTING TOPSOIL. THE TOPSOIL SHALL BE APPLIED TO ALL SURFACES REQUIRING SEEDING OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL DISPOSE OF EXCESS TOPSOIL IN A DESIGNATED AREA ON SITE.
18. CONFLICTS OF PROPOSED GRADING WITHIN FUTURE LOTS EAST OF THE PROPOSED CHANNEL WILL BE ADDRESSED DURING DESIGN OF THE RESPECTIVE FILINGS. THESE LOTS ARE CURRENTLY UNPLATTED AND PLANNED FUTURE LOT LINES ARE SHOWN REFERENCE ONLY.

**BENCHMARK**

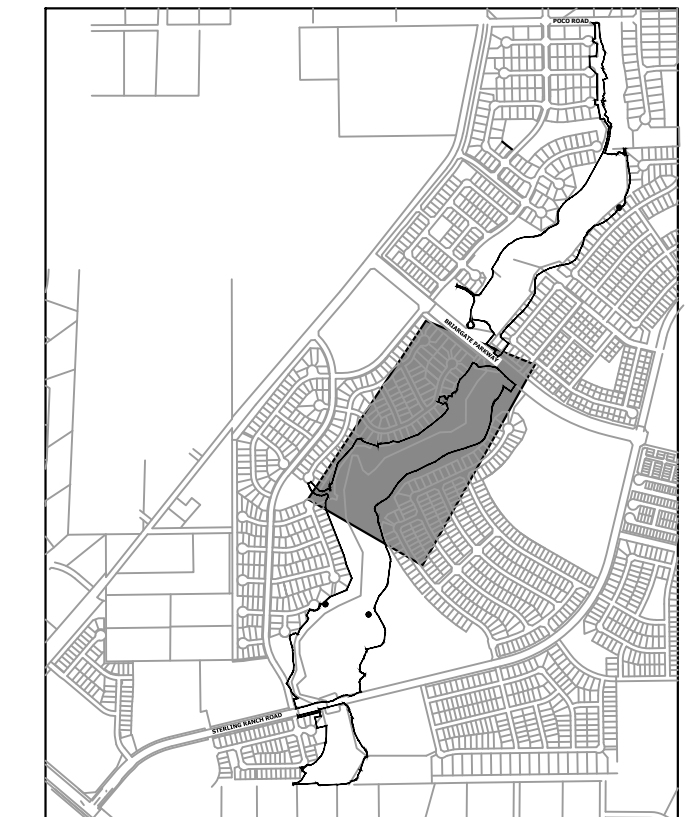
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
 NORTHING = 411416.273  
 EASTING = 235167.071  
 ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANWEE RANCHEROS SUBDIVISION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

**APPROXIMATE QUANTITY SUMMARY**

NAME	CUT FILL SUMMARY			CUT (CY)	FILL (CY)	NET (CY)
	CUT FACTOR	FILL FACTOR	2D AREA (ACRES)			
REACH 1	1	1.1	5.4242	25118	6676	18442 <CUT>
REACH 2	1	1.1	43.673	512500	27327	485174 <CUT>
REACH 3	1	1.1	16.3633	116017	11405	104611 <CUT>
<b>TOTAL</b>			<b>65.4605</b>	<b>653635</b>	<b>45408</b>	<b>608227 &lt;CUT&gt;</b>



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE PURPOSES 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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 Centennial 300-740-9383 • 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

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

**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION  

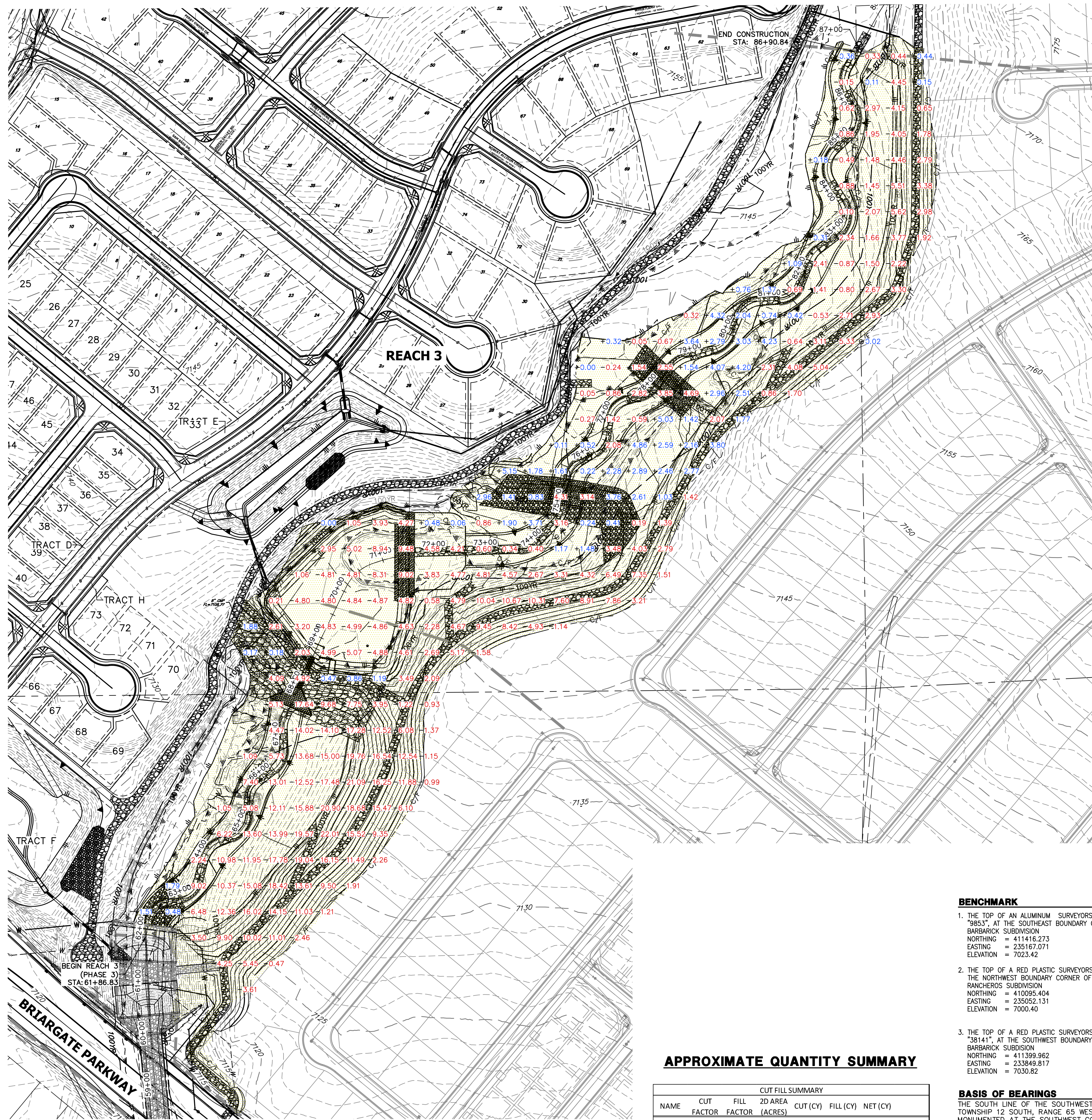
 MIKE A. BRAMLETT, P.E.  
 COLORADO P.E. 32314  
 FOR AND ON BEHALF OF JR ENGINEERING, INC.

**SAND CREEK RESTORATION**

**EARTHWORK & PHASING PLAN**

SHEET 7 OF 121

JOB NO. 25188.04



**LEGEND**

<span style="background-color: #ADD8E6; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	REACH 1 (PHASE 1)
<span style="background-color: #FFB6C1; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	REACH 2 (PHASE 2)
<span style="background-color: #FFFFE0; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	REACH 3 (PHASE 3)
-0.00	CUT HEIGHT (FEET)
+0.00	FILL HEIGHT (FEET)

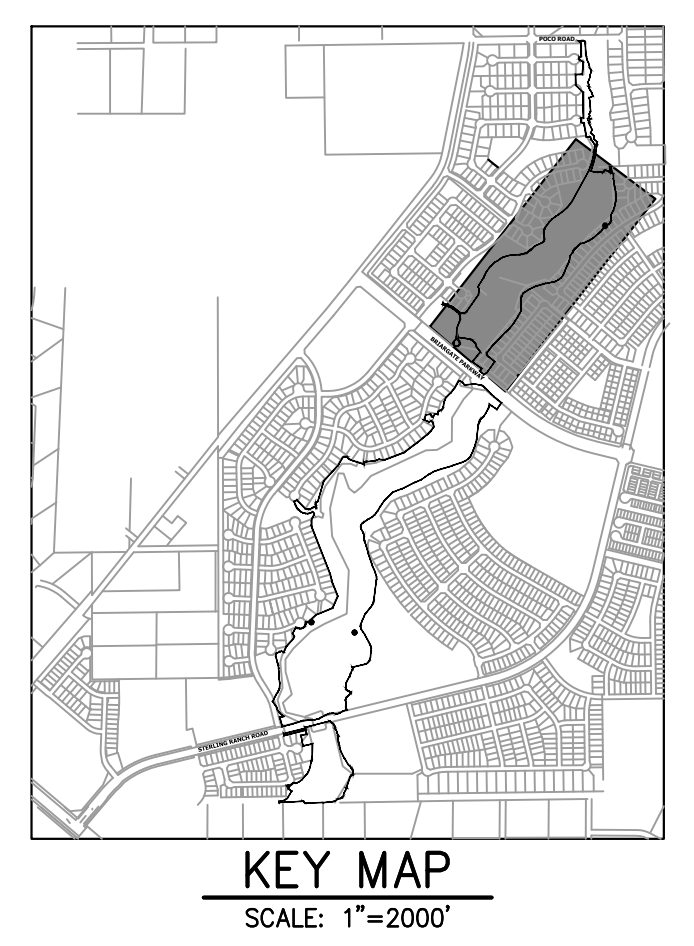
- GRADING NOTES:**
- SAND CREEK IS AN ACTIVE MAJOR DRAINAGEWAY WITH PERENNIAL BASE FLOWS. CONTRACTOR SHALL ANTICIPATE STORMWATER INFLOWS TO THE SITE DURING CONSTRUCTION AND PROVIDE A MEANS OF CONVEYANCE/REMOVAL OF ANY CONTINUOUS INFLOWS.
  - THERE IS A LIKELIHOOD FOR LARGE FLOW EVENTS IN SAND CREEK WHICH COULD JEOPARDIZE CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION DEWATERING (CDW) PERMIT FROM CDPHE PRIOR TO THE EVENTUALITY OF THESE LARGE FLOW EVENTS BASED ON THE TIMING OF CONSTRUCTION.
  - DEWATERING.
    - DEWATERING/BYPASS PUMPING OF SAND CREEK SHALL OCCUR IN ADVANCE OF CONSTRUCTION ACTIVITIES.
    - 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.
    - WATER FROM DEWATERING OPERATIONS SHALL ONLY BE DISCHARGED INTO STATE WATERS IF ALLOWED BY A PERMIT.
  - 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.
  - THE MAXIMUM SLOPE FOR EXCAVATION AND PLACEMENT OF FILL IS 4:1 HORIZONTAL:VERTICAL, UNLESS OTHERWISE SHOWN IN THE PLANS.
  - 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.
  - 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.
  - A GEOTECHNICAL ENGINEER SHALL BE PRESENT FOR OVER-EXCAVATION AND FILL OPERATIONS.
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    - GENERAL FILL OUTSIDE OF STRUCTURAL AREAS: 90 PERCENT OF MAXIMUM DRY DENSITY.
  - 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.
  - PROPOSED SPOT ELEVATIONS REFLECT MEAN FINISHED GROUND GRADES IRRESPECTIVE OF VARIATIONS DUE TO PROPOSED GROUT, BOULDER, AND RIPRAP.
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 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
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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	1.1	5.4242	25118	6676	18442 <CUT>
REACH 2	1	1.1	43.673	512500	27327	485174 <CUT>
REACH 3	1	1.1	16.3633	116017	11405	104611 <CUT>
TOTAL			65.4605	653635	45408	608227 <CUT>

**BASIS OF BEARINGS**  
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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**  
 A Westman Company  
 Central 303-740-9383 • Colorado Springs 719-583-2593  
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION	1"=100'	
			H-SCALE	V-SCALE
			N/A	11/20/23
			DUV	NEO
			DESIGNED BY	CHECKED BY

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

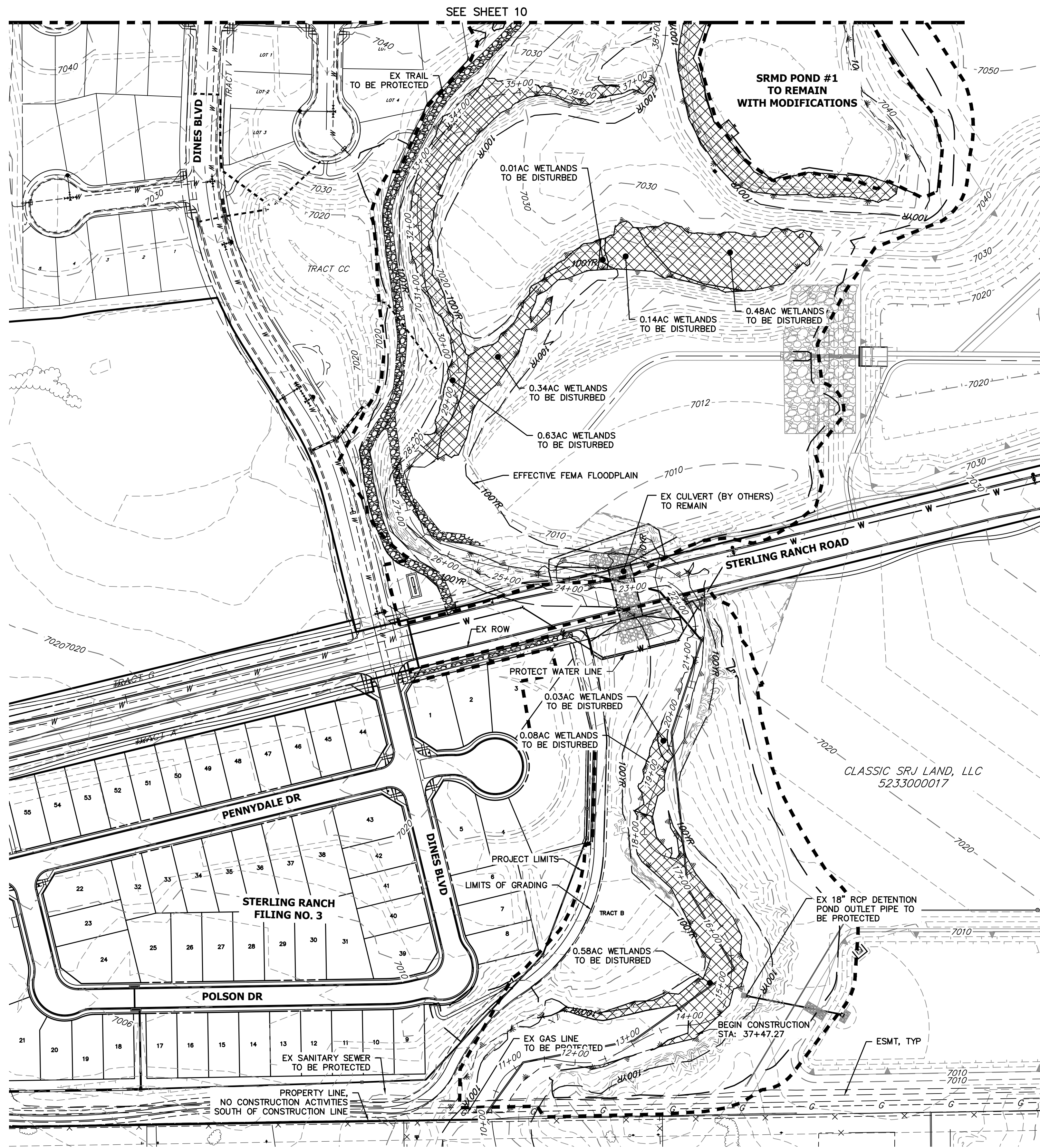
100 50 0 100  
 ORIGINAL SCALE: 1" = 100'

**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION

*Mike Bramlett*  
 MIKE A. BRAMLETT, P.E.  
 COLORADO P.E. 32314  
 FOR AND ON BEHALF OF JR ENGINEERING, INC.

32314 11/20/23





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

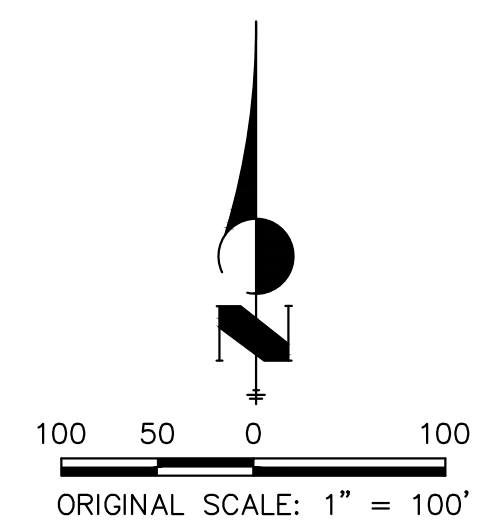
SAND CREEK APPROXIMATE WETLAND IMPACTS		
Totals	Sq Ft	Acres
Reach 1 Permanent Loss	32,636.00	0.74
Reach 2 Permanent Loss	159,695.00	4.28
Reach 3 Permanent Loss	184,711.00	5.44
<b>Total Permanent Loss</b>	<b>377,042.00</b>	<b>10.46</b>

**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
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  
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**LEGEND**

- WETLAND: DISTURBED AREAS
- LIMIT OF GRADING
- LIMIT OF CONSTRUCTION



PREPARED FOR  
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No.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=100'	N/A	11/20/23	DJV	NEO	

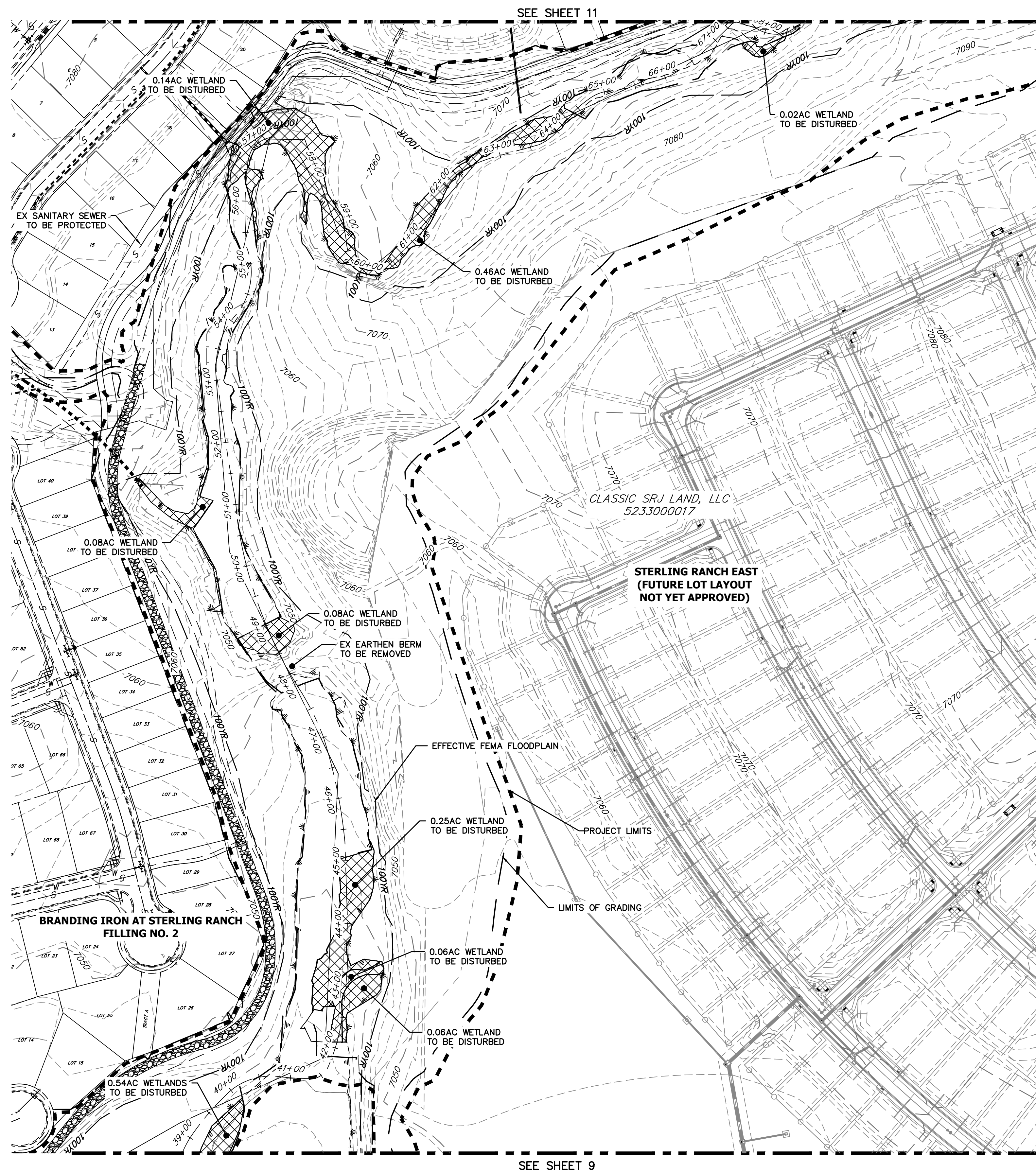


**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION

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

11/20/23

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

SAND CREEK APPROXIMATE WETLAND IMPACTS			
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	
<b>Total Permanent Loss</b>	<b>377,042.00</b>	<b>10.46</b>	

**BENCHMARK**

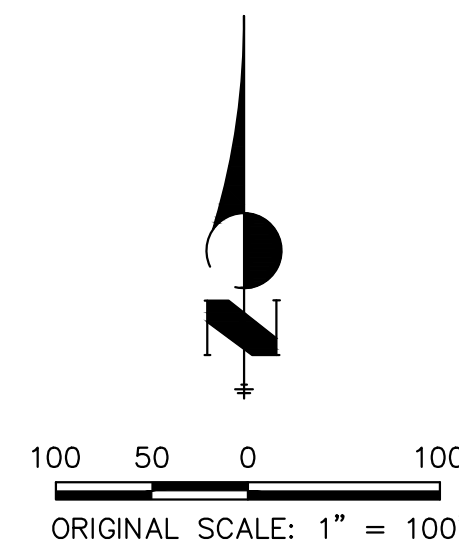
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NORTHING = 411418.273  
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**LEGEND**

- WETLAND: DISTURBED AREAS
- LIMIT OF GRADING
- LIMIT OF CONSTRUCTION



**KEY MAP**  
SCALE: 1"=2000'



Know what's below.  
Call before you dig.

**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION

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

32314  
11/20/23

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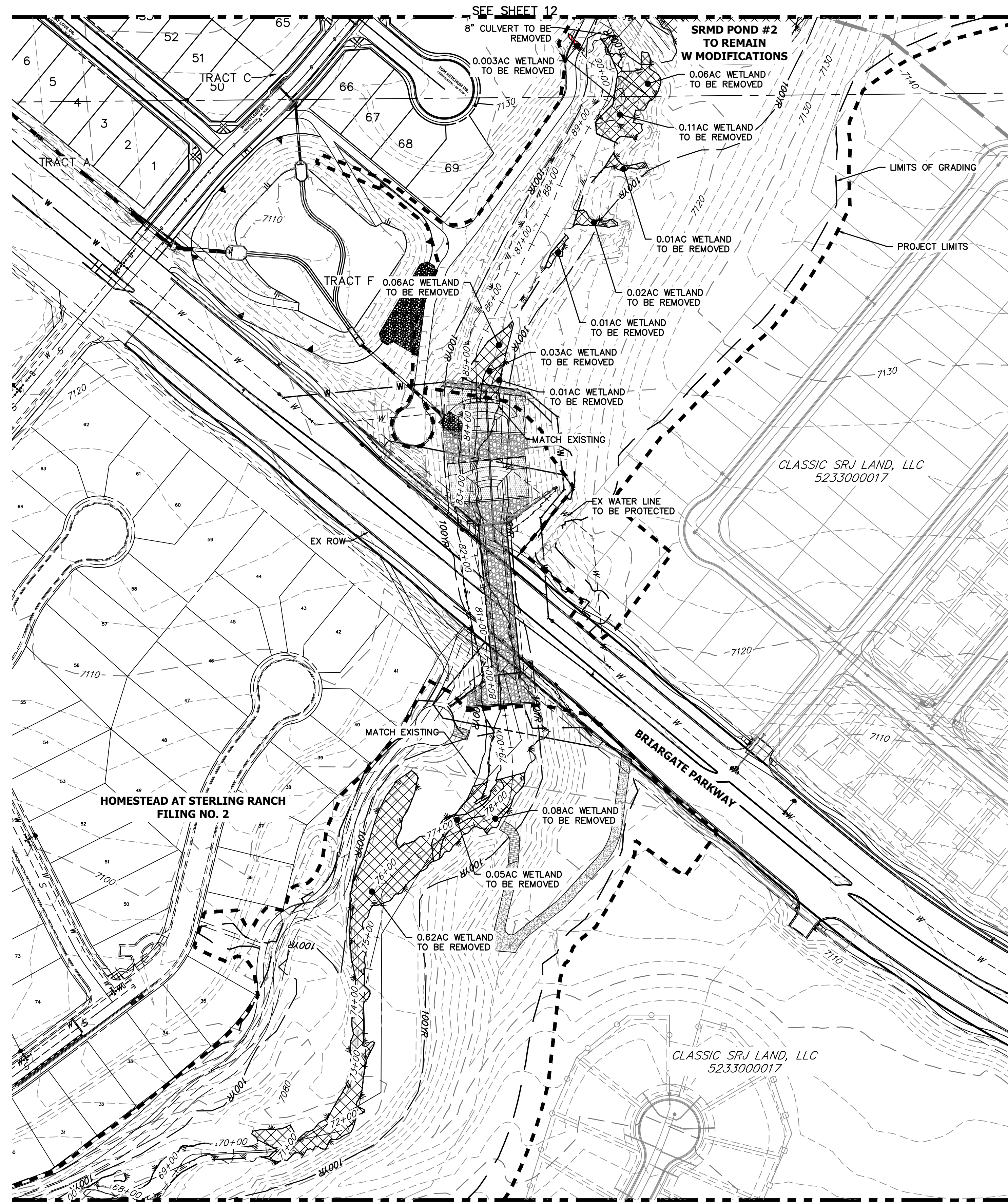
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1"=100'	N/A	11/20/23	DJV	NEO	

**SAND CREEK RESTORATION**  
**DEMOLITION PLAN**

SHEET 10 OF 121  
JOB NO. 25188.04

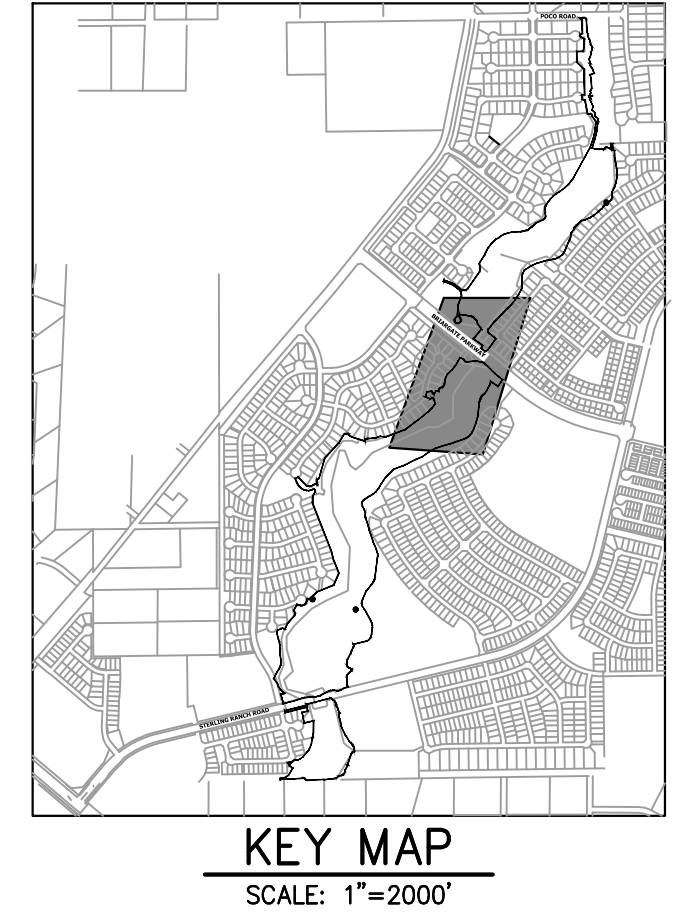


**LEGEND**

WETLAND: DISTURBED AREAS

LIMIT OF GRADING

LIMIT OF CONSTRUCTION



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			N/A	DJV	NEO			
1"=100'	N/A	11/20/23						

SAND CREEK RESTORATION	DEMOLITION PLAN	SHEET 11 OF 121
		JOB NO. 25188.04

SEE SHEET 10

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

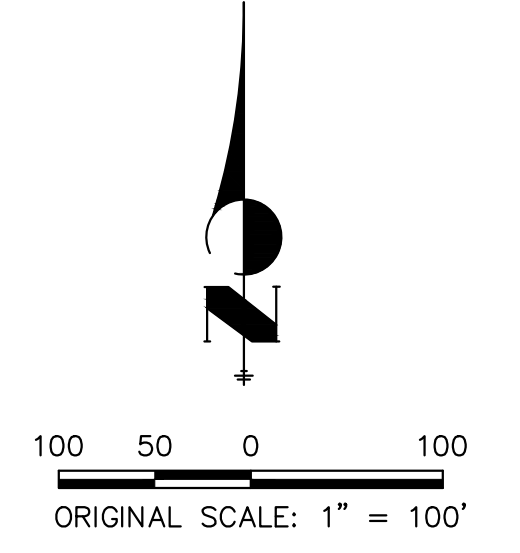
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 EASTING = 235167.071  
 ELEVATION = 7023.42
  - THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION  
 NORTHING = 410095.404  
 EASTING = 235052.131  
 ELEVATION = 7000.40
  - THE TOP OF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

**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.



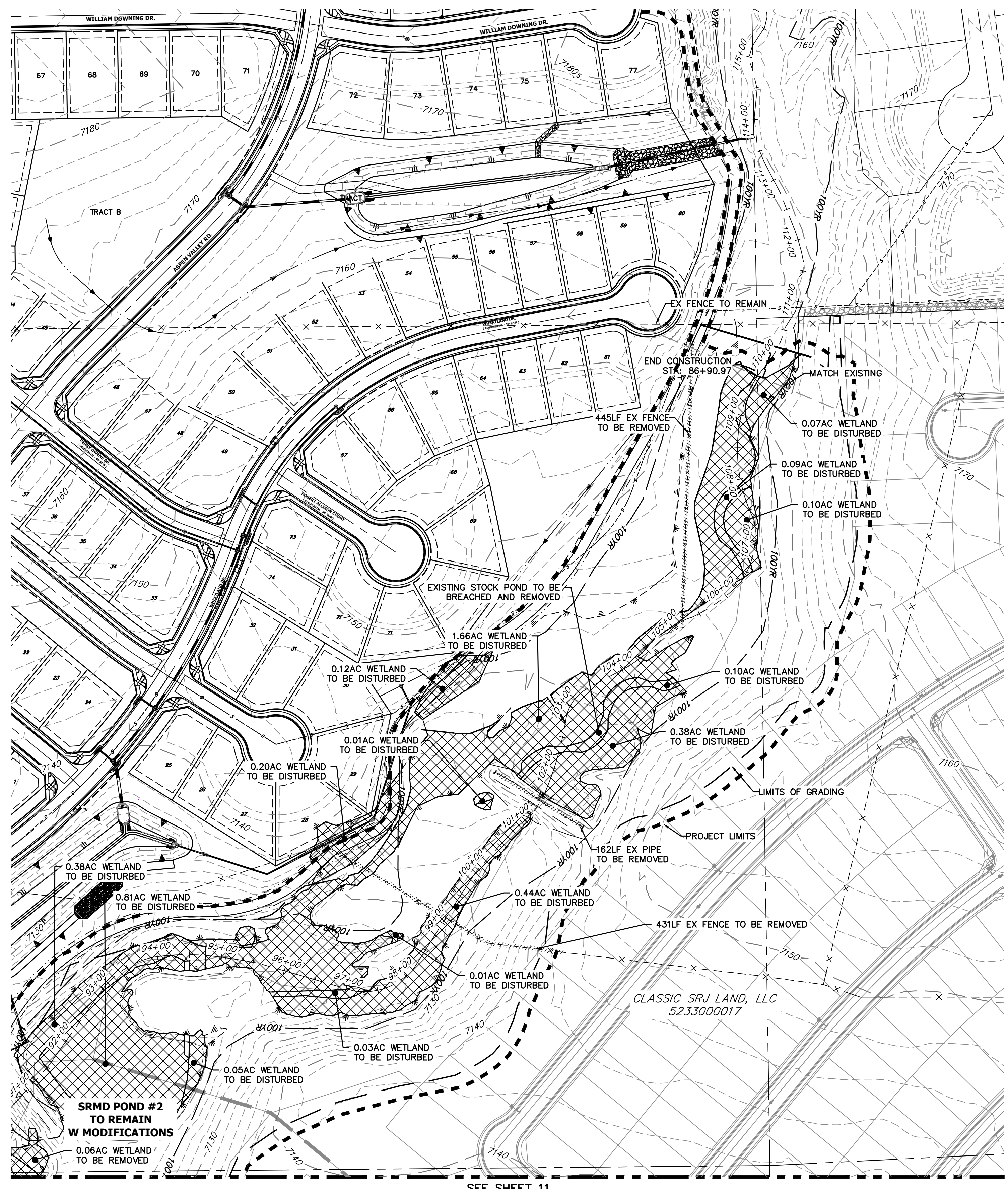
**811**  
 Know what's below.  
 Call before you dig.

**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION

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

32314  
 11/20/23

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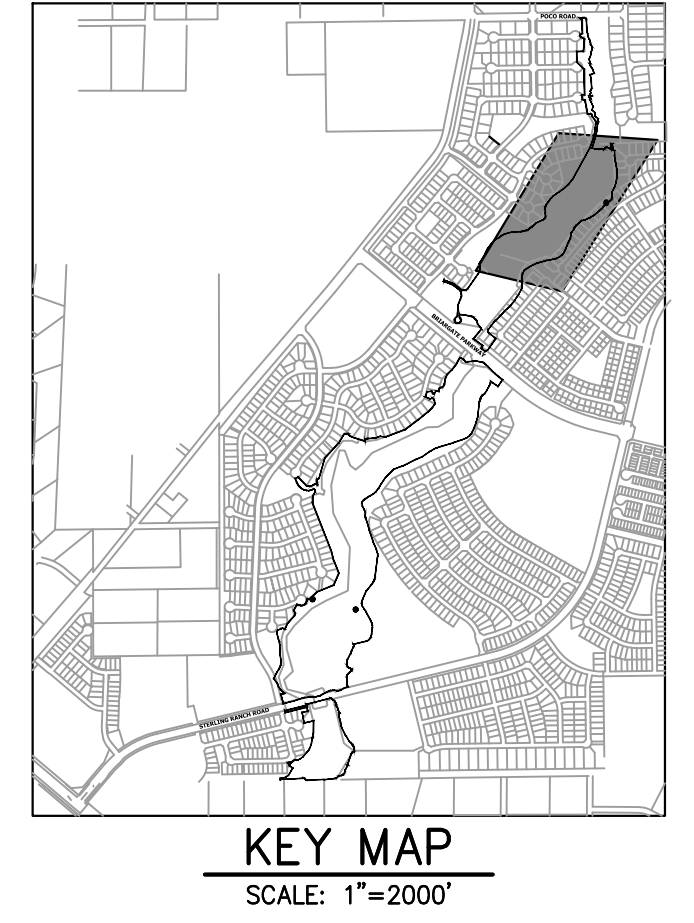


**LEGEND**

WETLAND: DISTURBED AREAS

LIMIT OF GRADING

LIMIT OF CONSTRUCTION



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

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BY	DATE	No.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=100'	N/A	11/20/23	DJV	NEO	

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

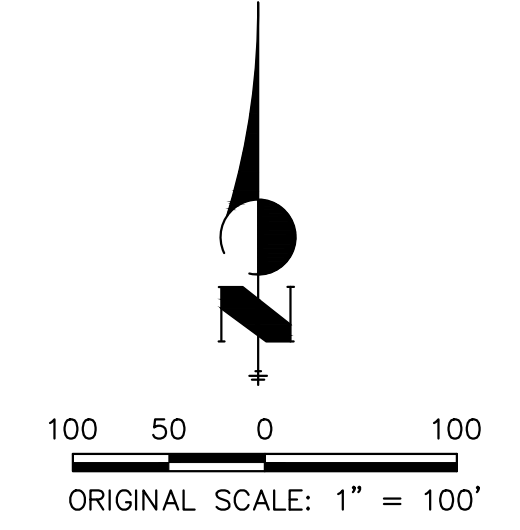
**SAND CREEK APPROXIMATE WETLAND IMPACTS**

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
<b>Total Permanent Loss</b>	<b>377,042.00</b>	<b>10.46</b>

- BENCHMARK**
- THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "98537" 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 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**

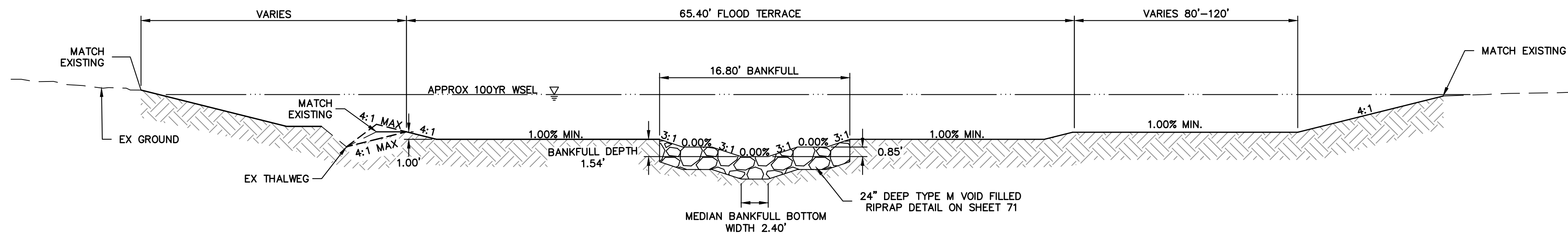
THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE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



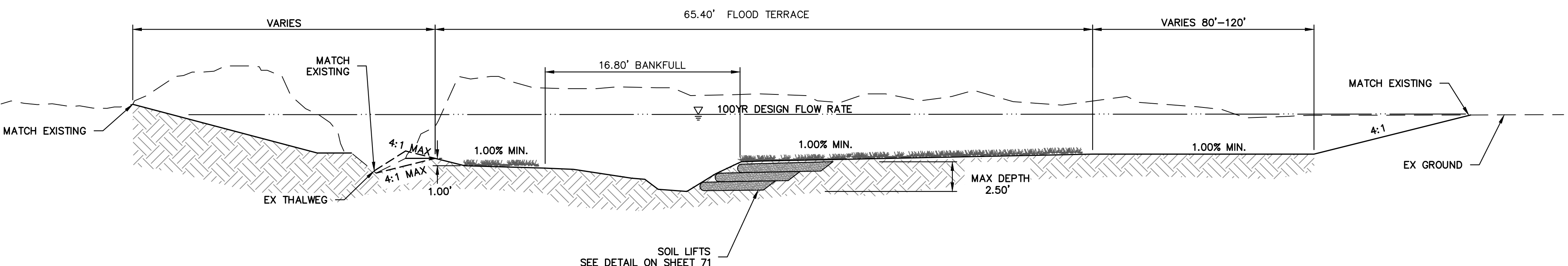
**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION

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

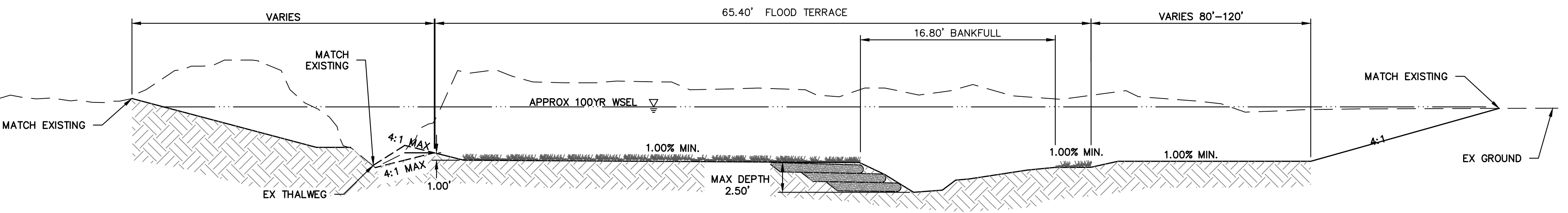
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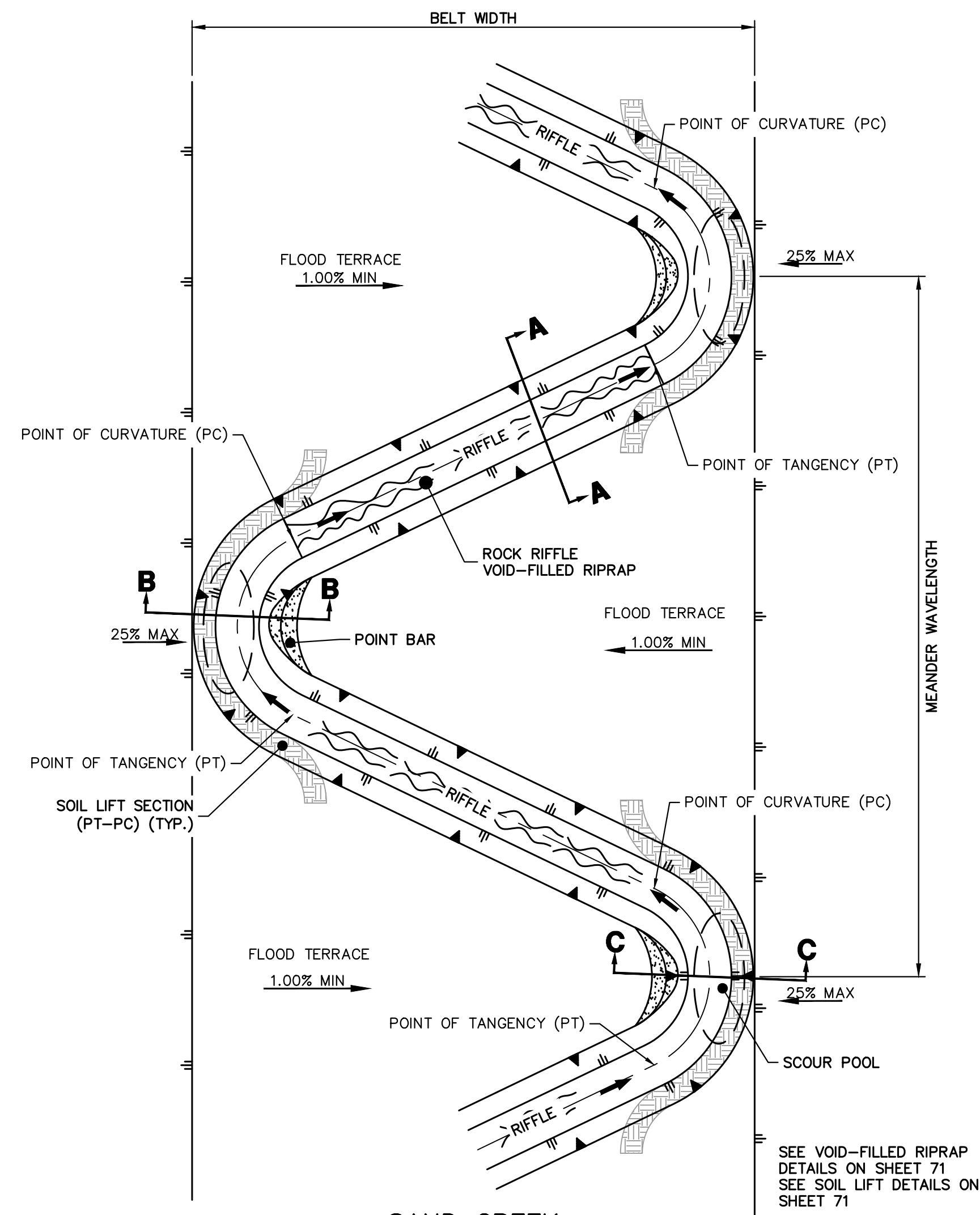
**RIFFLE TYPICAL SECTION A-A**  
SCALE: N.T.S



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



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



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

Sand Creek Design Matrix				
Bankfull Channel	Width; ft		16.8	
	Mean Depth; ft		0.85	
	Max Depth; ft			
	Area; sqft		14.0	
	Bend to Bend Spacing; ft	4.5 - 6 times Bankfull Width	76	101
	Radius of Curvature (ROC); ft	2.5 - 3.5 times Bankfull Width	42	59
	Tangent Lengths; ft	1.5 - 2.5 times Bankfull Width	25	42
	Meander Wavelength; ft	9 - 12 times Bankfull Width	151	202
	Meander Beltwidth; ft	2 - 3.5 times Bankfull Width	34	59
	Width; ft		64.5	
Flood Terrace	Area (300% of Bankfull Area); sqft			
	Bend to Bend Spacing; ft	Same as Bankfull Pattern		
	Radius of Curvature; ft	2 - 4 times the Flood Terrace Width	129	258
	Tangent Riffle Lengths; ft	1 - 2 times the Bankfull Width	17	34
	Meander Beltwidth; ft	1.5 - 2 times the Flood Terrace Width	97	129
Expansion and Contraction Ratios	greater than 10:1			

SAND CREEK FLOW RATES				
Location	Station	MDDP DESIGN POINT	Flow Rate (cfs)	
			100-YR Design MDDP	100-YR FIS
Northern Bndy	STA: 87+10	DP-72	1644.1	2600
Stock Pond 2	STA: 73+50	DP-71	1667.0	2600
Briargate Pkwy	STA: 61+00	DP-70	1763.9	2600
	STA: 36+05	DP-69	1880.4	2600
SRMD Pond 1	STA: 16+80	DP-87	1848.8	2600
Sterling Ranch Road	STA: 09+05	DP-68	1562.5	2600
Sterling Ranch Southern Bndy	STA: 00+00	DP-63	1585.2	2600

**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



**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION

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

32314 11/20/23

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PREPARED FOR  
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COLORADO SPRINGS, CO 80903  
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(719) 419-3024

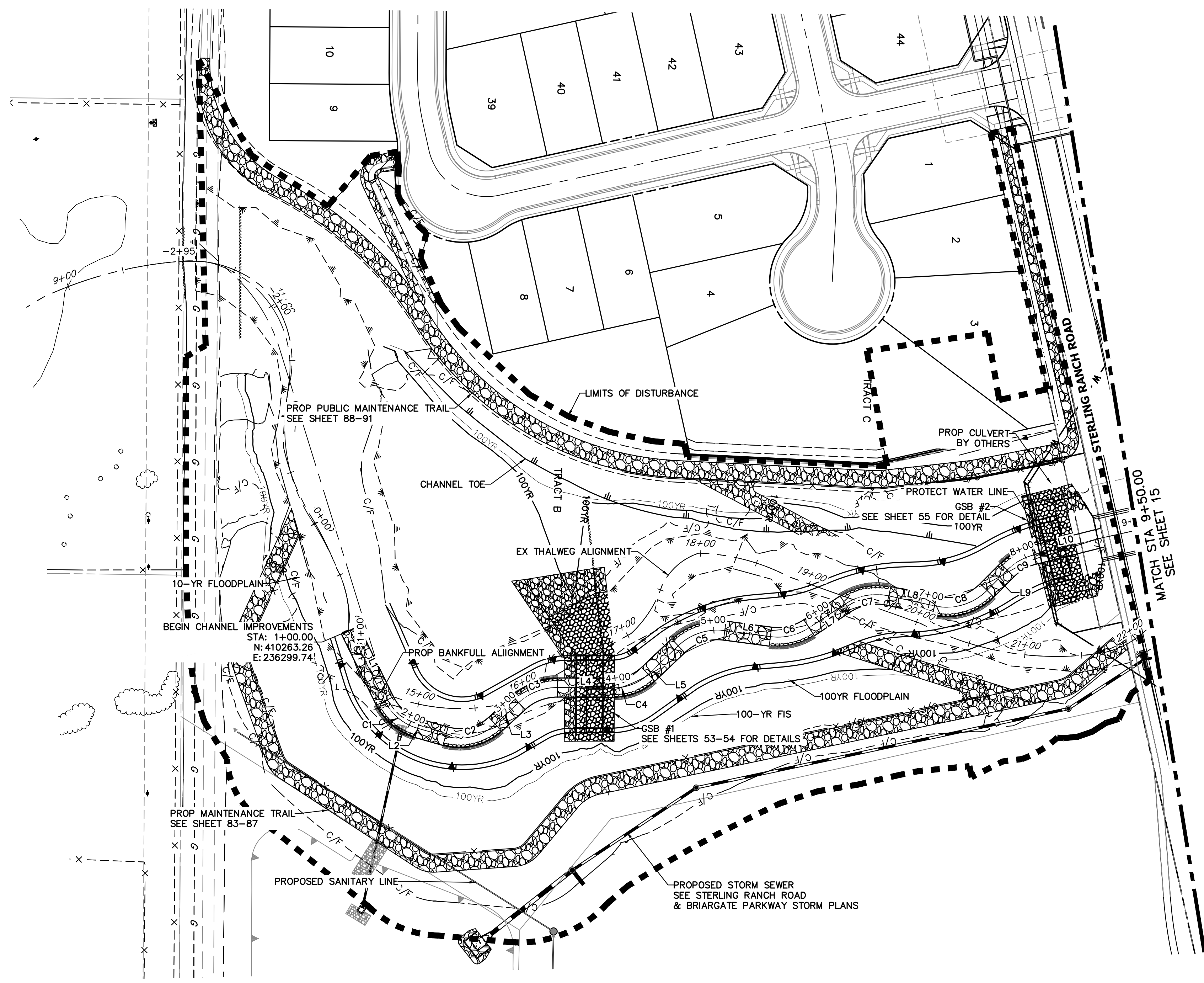
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Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION

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V-SCALE: N/A  
DATE: 11/20/23  
DESIGNED BY: DJV  
DRAWN BY: NEO  
CHECKED BY: 

**SAND CREEK RESTORATION**  
**TYPICAL SECTIONS**

SHEET 13 OF 121  
JOB NO. 25188.04

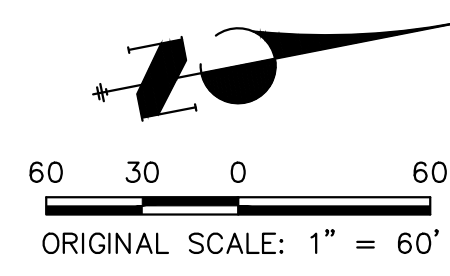



**HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL**  
SCALE: 1"=60'

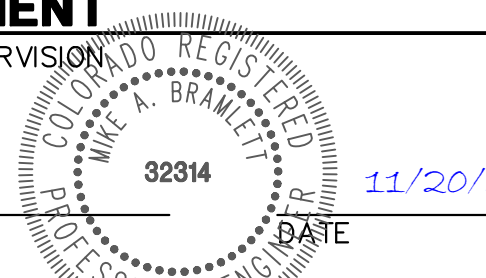
**LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL**

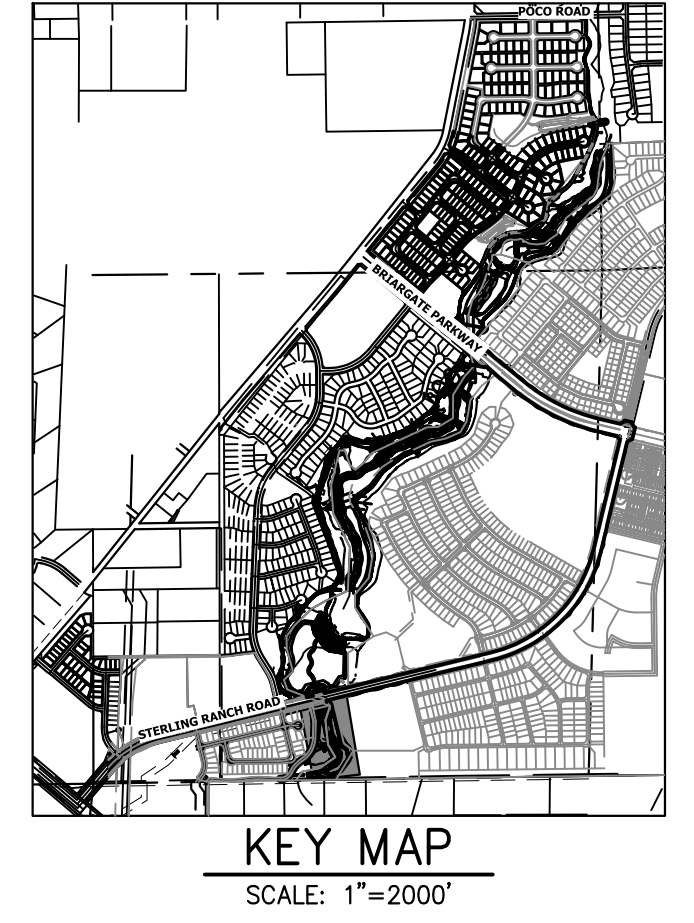
LINE TABLE		
LINE	BEARING	DISTANCE
L1	N62°37'57"E	69.39'
L2	N14°33'15"E	25.49'
L3	N43°57'43"W	28.06'
L4	N01°00'09"W	49.93'
L5	N44°46'46"W	36.31'
L6	N06°15'46"E	40.46'
L7	S34°33'06"E	38.16'
L8	N11°07'56"E	41.11'
L9	N46°25'49"W	25.24'
L10	N15°18'22"W	61.05'

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

  
 DATE: 11/20/23



PREPARED FOR  
**SR LAND, LLC**  
 20 BOULDER CRESCENT  
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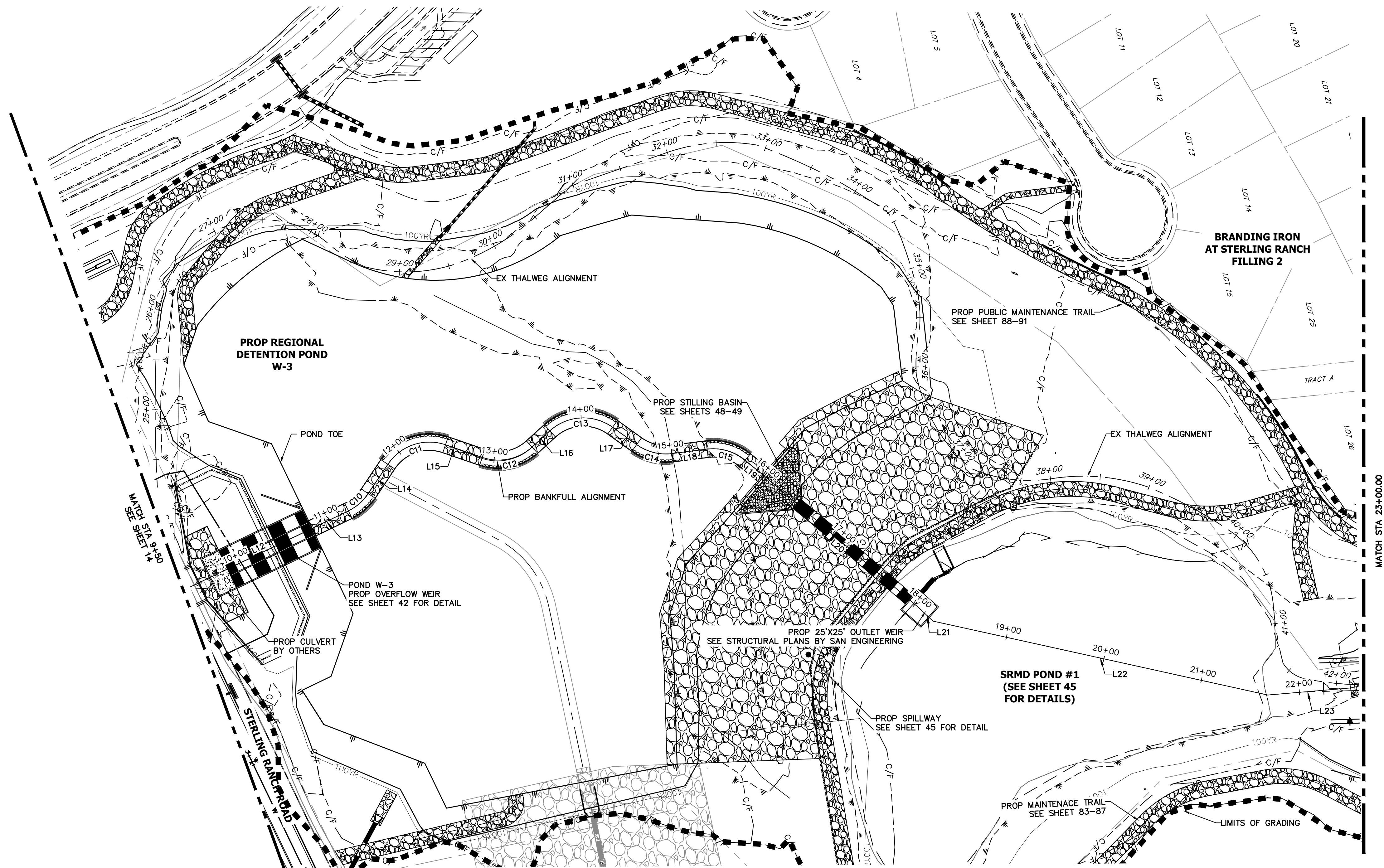
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						BY	DATE
1"=60'	N/A	11/20/23	DJV	NEO			

**SAND CREEK RESTORATION**  
**HORIZONTAL CONTROL PLAN**

SHEET 14 OF 121  
 JOB NO. 25188.04

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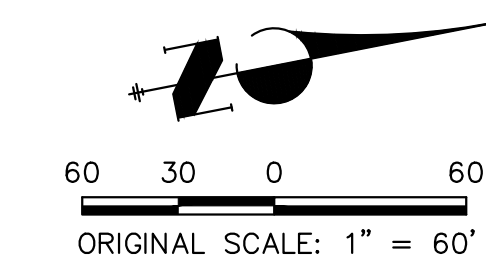


**HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL**  
SCALE: 1"=60'

**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'

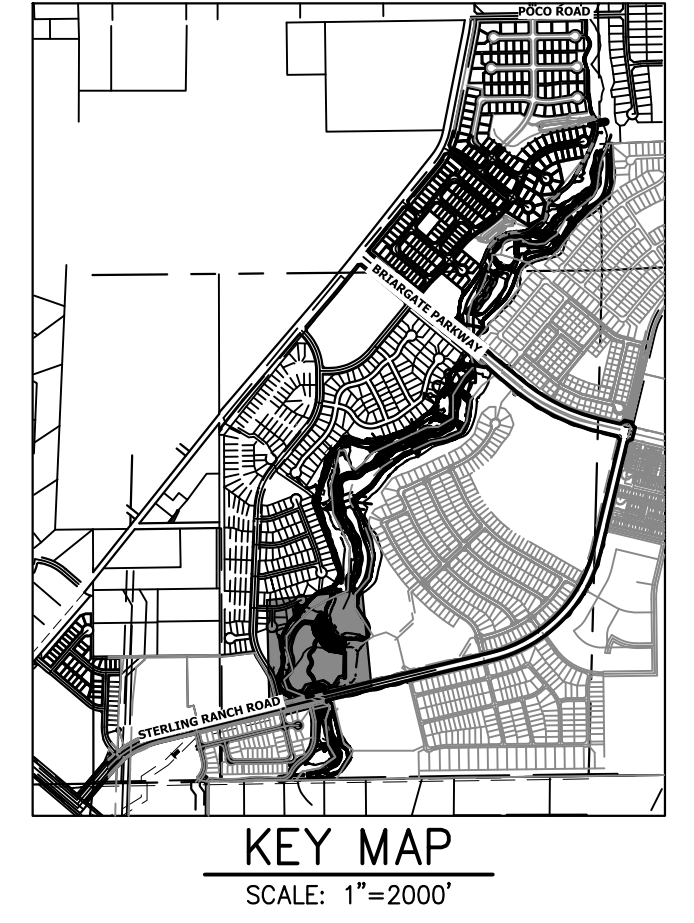
CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C10	30°32'29"	50.00'	26.65'
C11	75°11'23"	50.00'	65.62'
C12	61°12'35"	50.00'	53.42'
C13	77°59'26"	50.00'	68.06'
C14	42°53'28"	50.00'	37.43'
C15	46°44'56"	50.00'	40.80'



**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION

*Mike Bramlett*  
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COLORADO P.E. 32314  
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32314  
11/20/23



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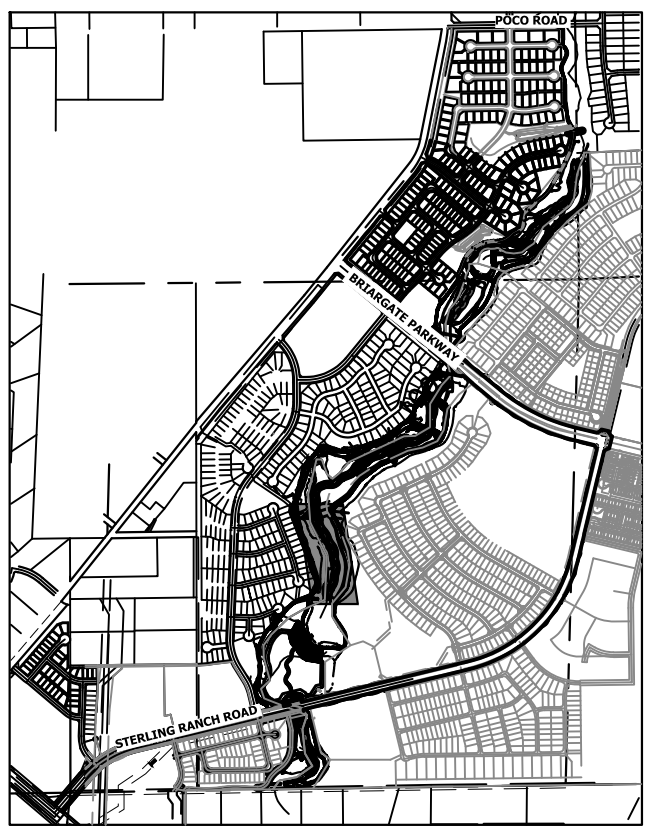
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**SAND CREEK RESTORATION**  
**HORIZONTAL CONTROL PLAN**

SHEET 15 OF 121  
JOB NO. 25188.04

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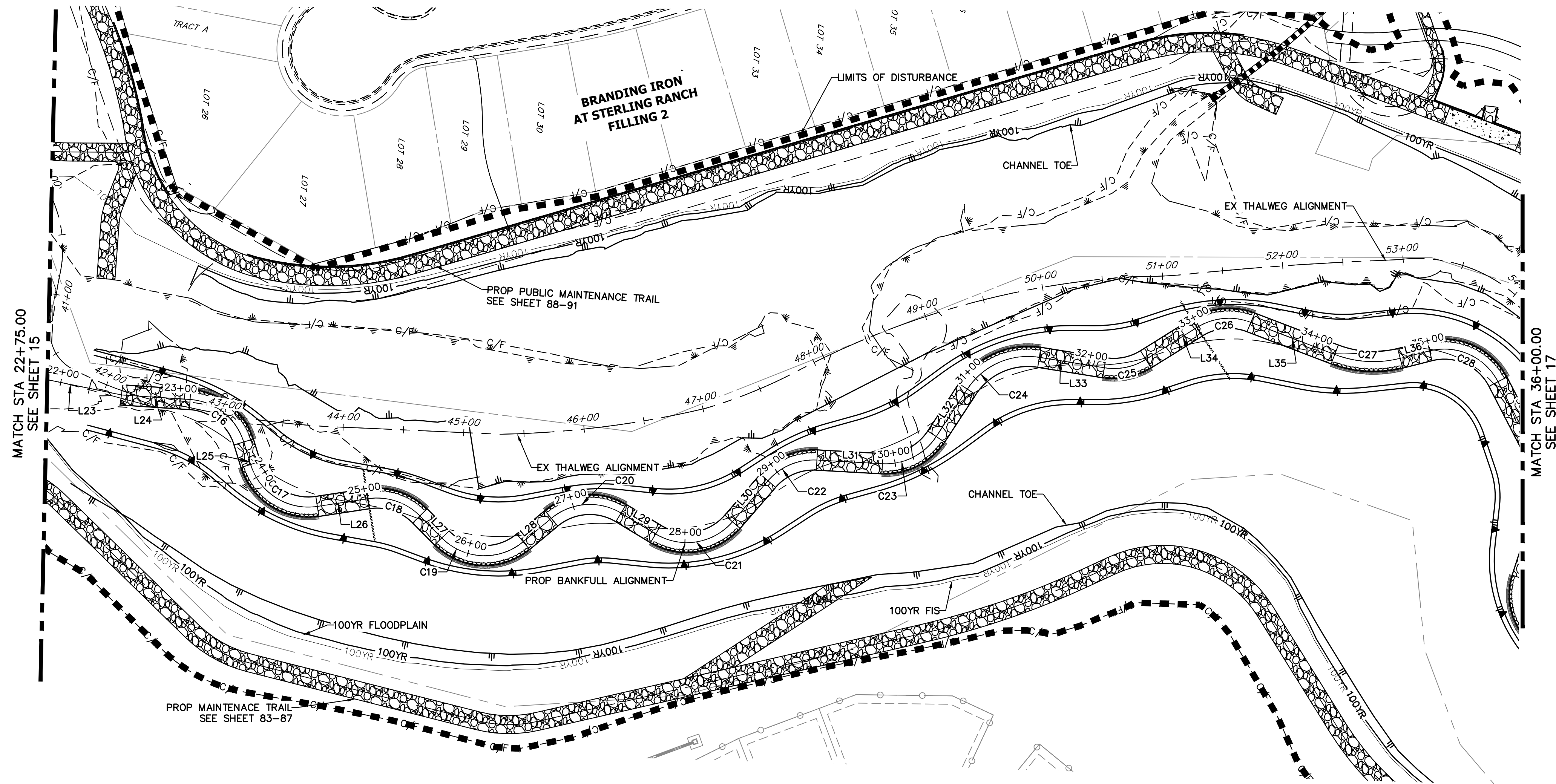


KEY MAP  
SCALE: 1"=2000'

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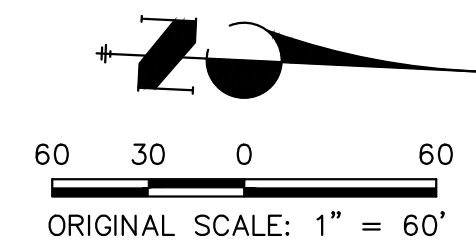
**HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL**

SCALE: 1"=60'

**LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL**

LINE	BEARING	DISTANCE
L23	N07°07'50"E	83.24'
L24	N00°39'45"W	57.02'
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'

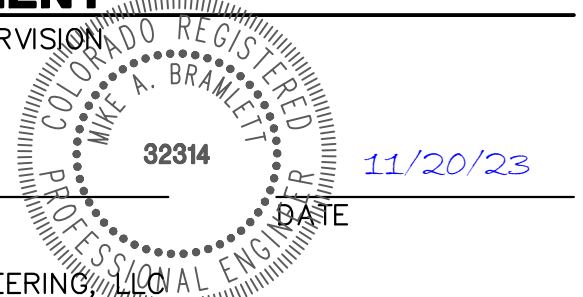
CURVE	DELTA	RADIUS	LENGTH
C16	69°37'36"	49.66'	60.35'
C17	81°38'38"	49.95'	71.18'
C18	53°53'33"	50.00'	47.03'
C19	85°03'54"	49.97'	74.20'
C20	70°52'11"	50.00'	61.85'
C21	80°13'10"	50.00'	70.00'
C22	52°19'56"	50.00'	45.67'
C23	59°58'18"	50.00'	52.34'
C24	65°52'41"	60.00'	68.99'
C25	41°05'20"	50.00'	35.86'
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

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



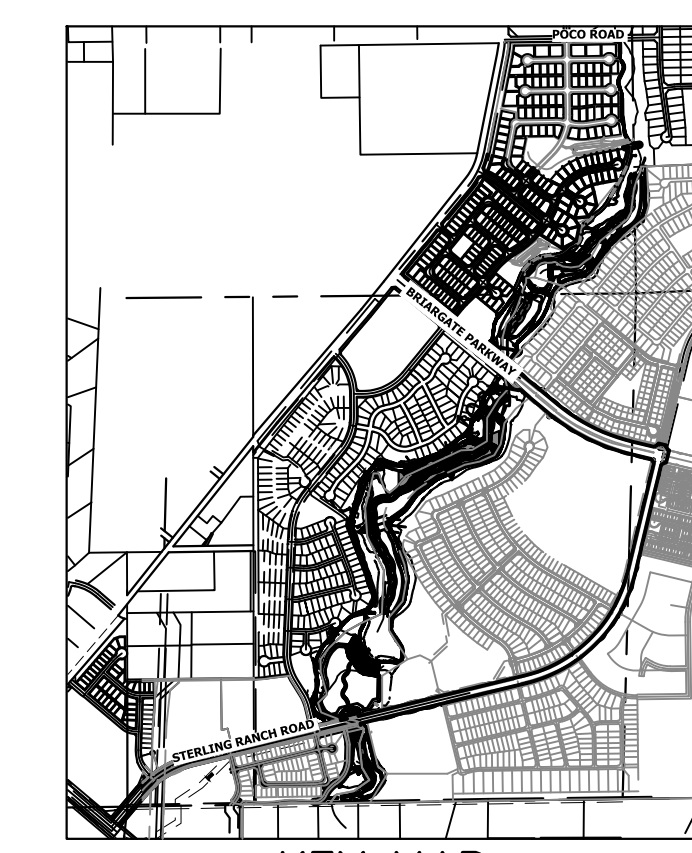
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=60'	N/A	11/20/23	DJV	NEO	

No.	REVISION	BY	DATE

SAND CREEK RESTORATION  
HORIZONTAL CONTROL PLAN  
SHEET 16 OF 121  
JOB NO. 25188.04

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KEY MAP  
SCALE: 1"=2000'

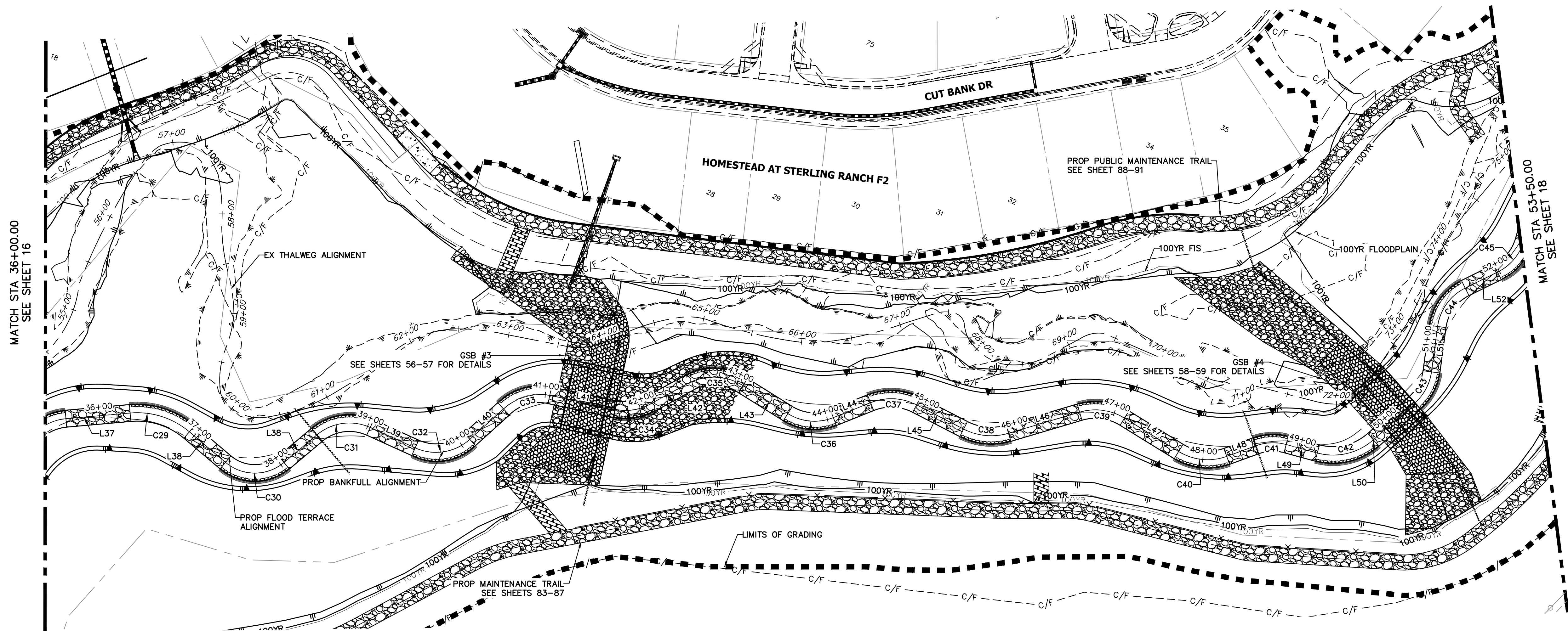
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H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	No. REVISION	
						1"=60'	N/A
11/20/23	DJV	NEO					

**SAND CREEK RESTORATION**  
**HORIZONTAL CONTROL PLAN**  
SHEET 17 OF 121  
JOB NO. 25188.04

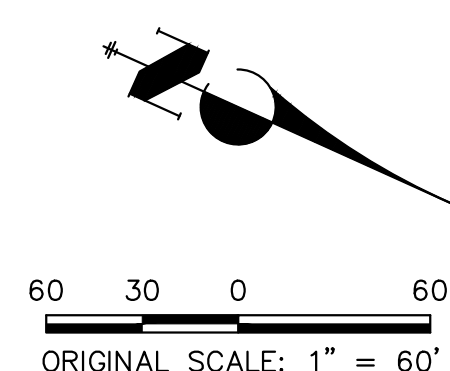


**HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL**  
SCALE: 1"=60'

**LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL**

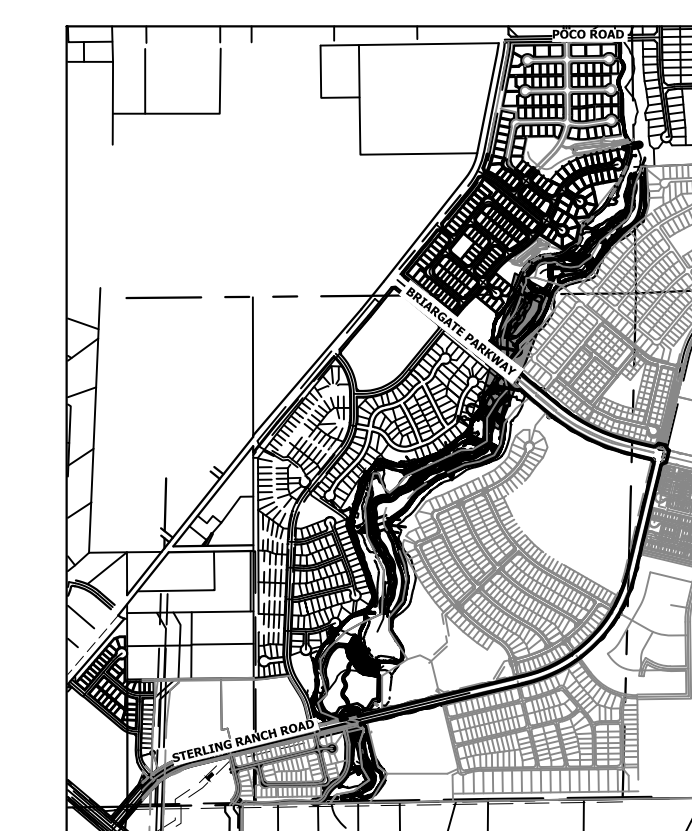
LINE TABLE		
LINE	BEARING	DISTANCE
L37	N58°14'53"E	63.95'
L38	N23°17'02"E	42.76'
L38	S76°25'16"E	47.01'
L39	N87°41'41"E	45.75'
L40	N21°13'33"E	44.40'
L41	N75°25'05"E	64.51'
L42	N34°33'05"E	42.89'
L43	S84°42'53"E	55.35'
L44	N41°26'25"E	39.80'
L45	S89°25'20"E	52.47'
L46	N46°45'21"E	73.56'
L47	S85°00'28"E	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 TABLE			
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°28'33"	50.00'	58.01'
C33	54°11'32"	50.00'	47.29'
C34	40°52'03"	50.00'	35.66'
C35	54°22'21"	55.35'	52.53'
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	48°10'16"	49.86'	41.92'

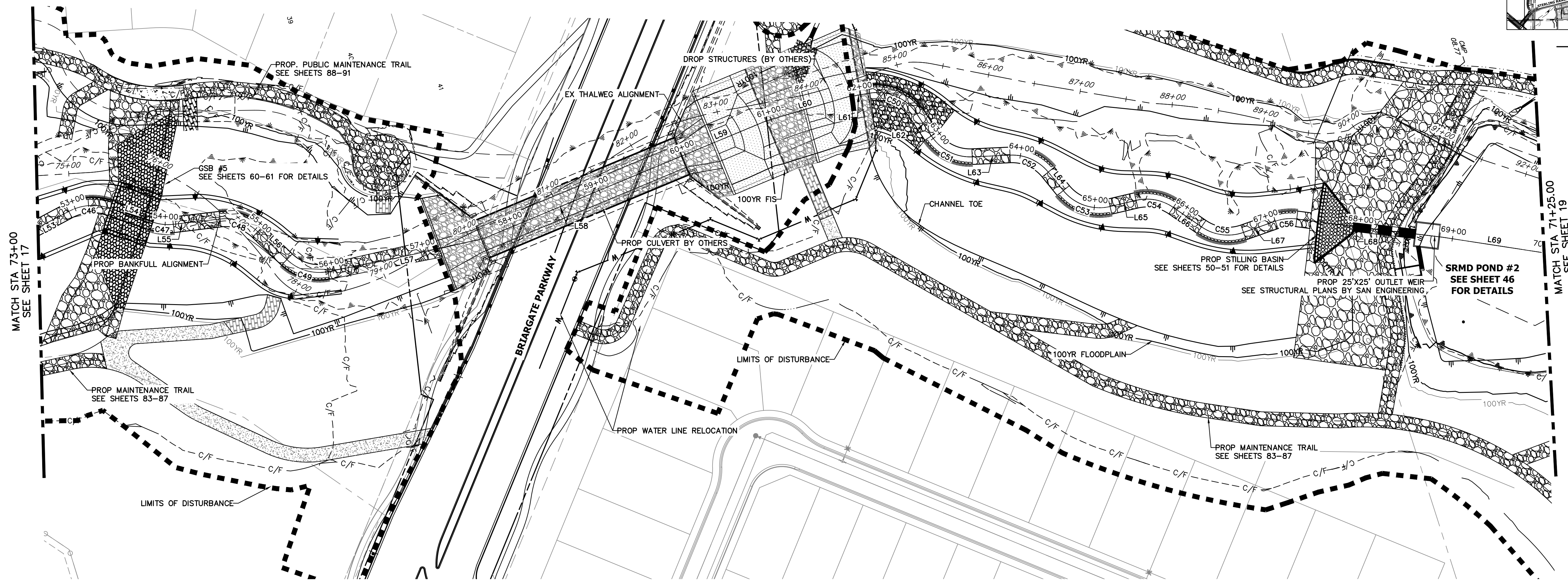


**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION  
*Mike Bramlett*  
MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING  
DATE 11/20/23

X:\25188\04\25188.dwg, 19-HC04, 1/27/2023, 5:29:49 PM, vvaughn



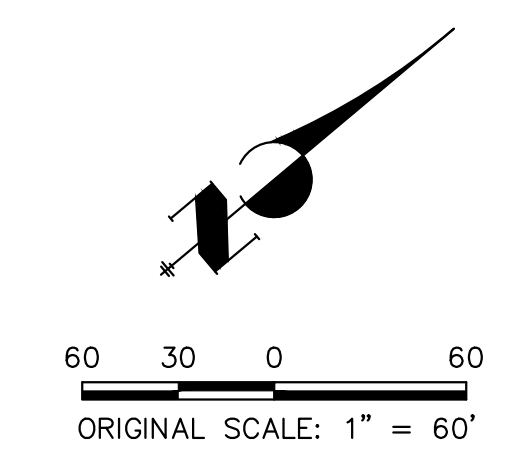
KEY MAP  
SCALE: 1"=2000'



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	N10°26'39"W	52.51'	C46	45°46'29"	55.01'	43.95'
L54	N35°00'03"E	50.07'	C47	25°20'29"	50.22'	22.21'
L55	N10°44'45"E	50.63'	C48	50°37'31"	50.00'	44.18'
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**  
 PREPARED UNDER MY DIRECT SUPERVISION

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

32314  
 11/20/23

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 Westman Company  
 Central 303-740-9383 • Colorado Springs 719-583-2683  
 Fort Collins 970-491-9888 • www.jrengineering.com

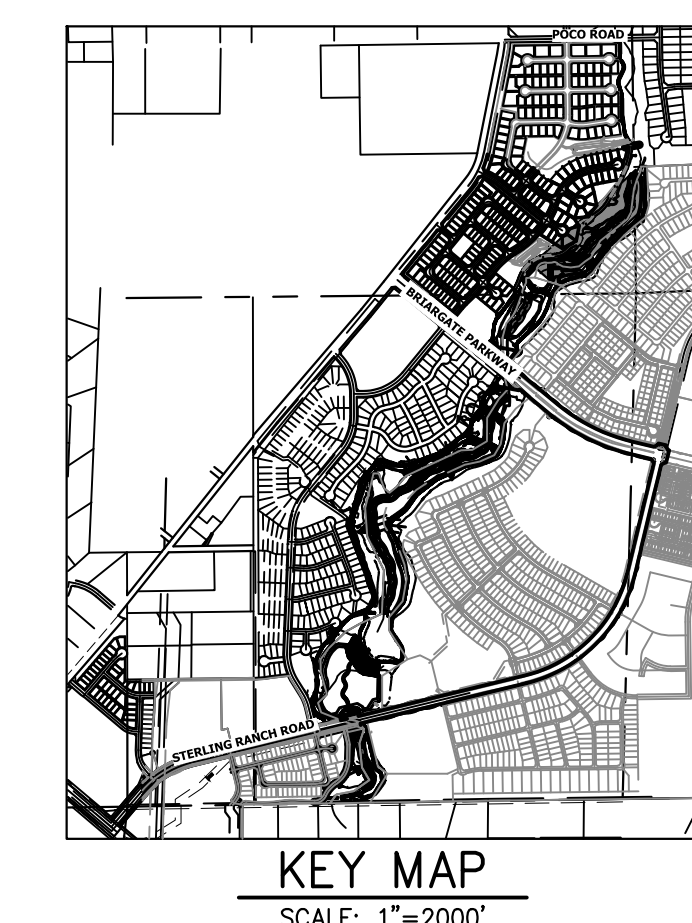
No.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=60'	N/A	11/20/23	DJW	NEO	

**SAND CREEK RESTORATION**  
**HORIZONTAL CONTROL PLAN**

SHEET **18** OF **121**  
 JOB NO. 25188.04

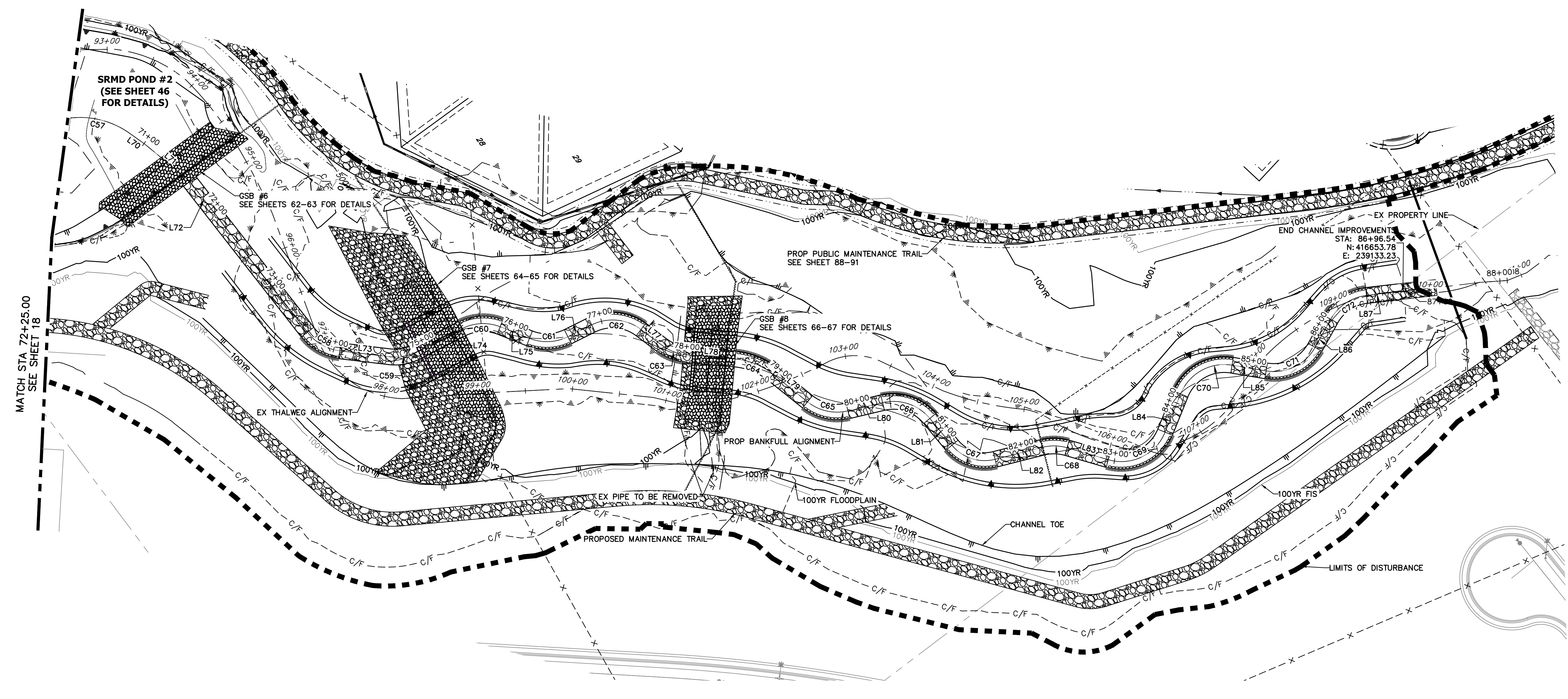
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PREPARED FOR  
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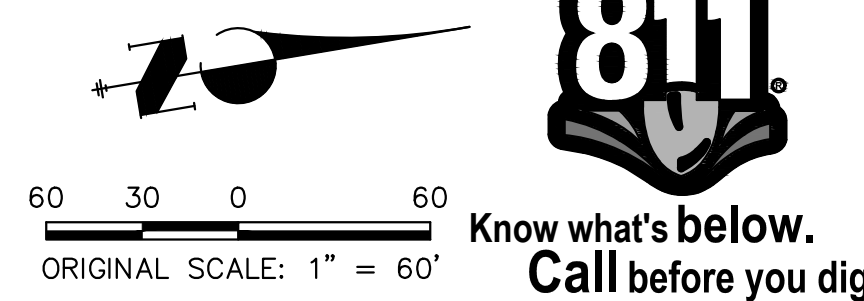
**HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL**

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'



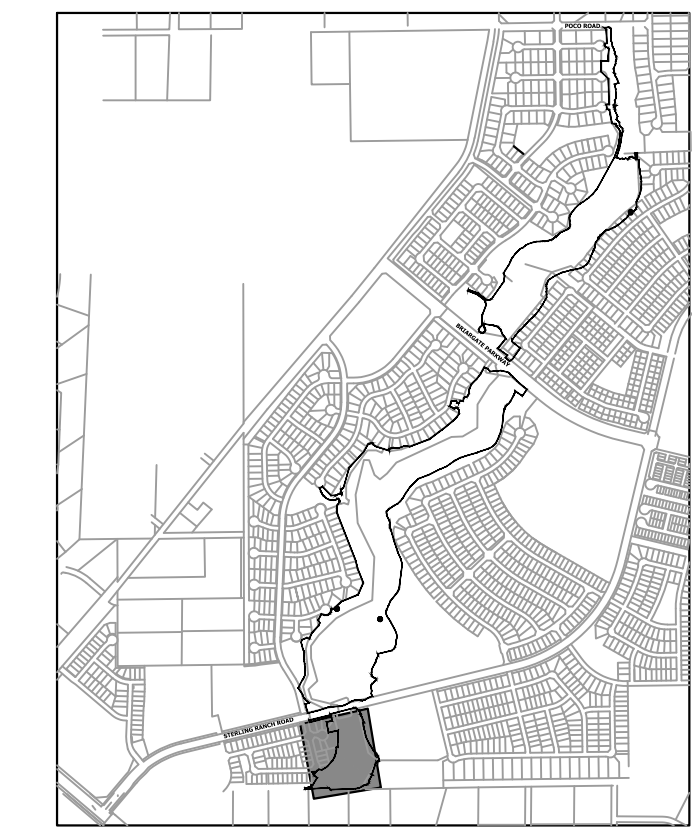
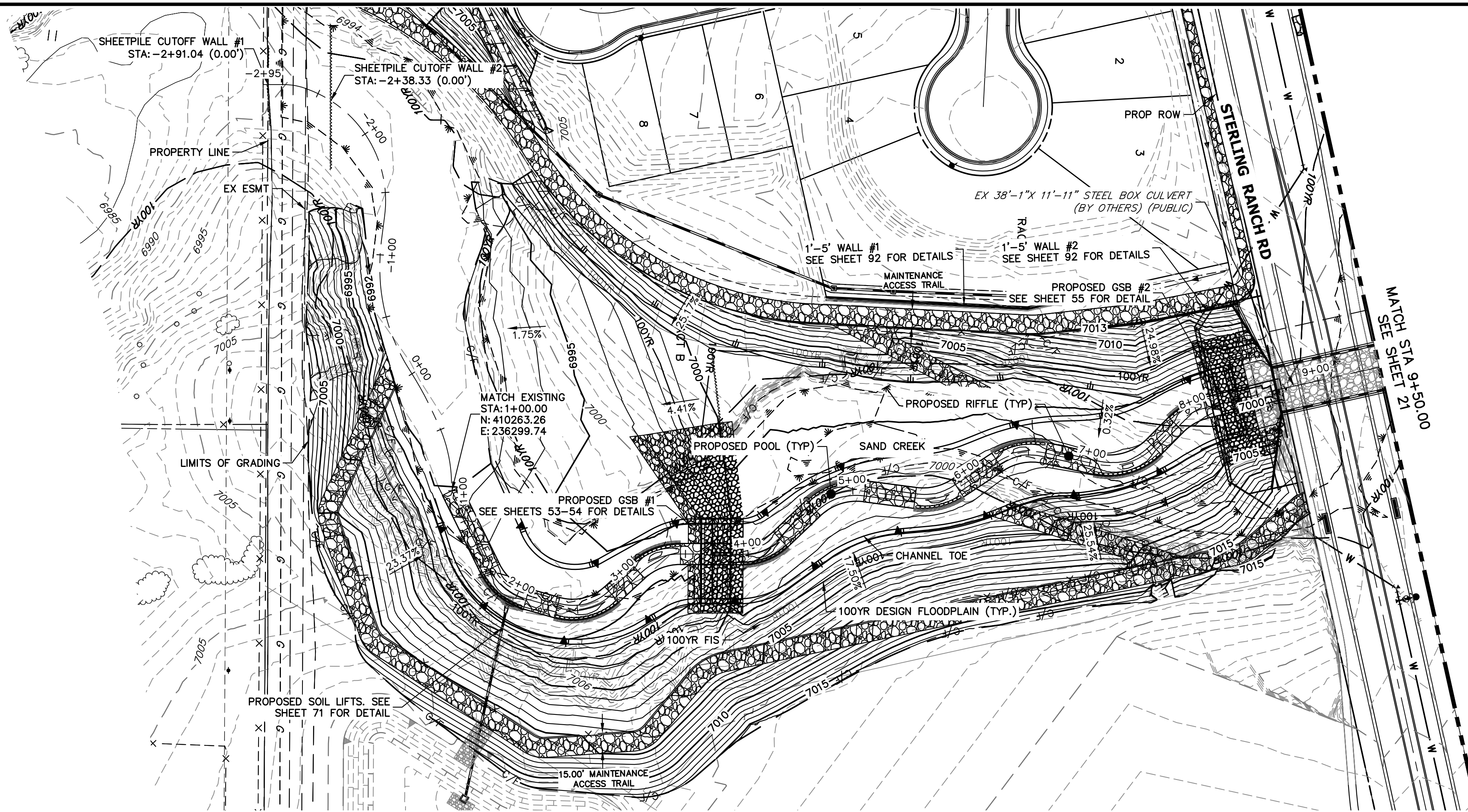
**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION

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

32314  
 11/20/23  
 DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY		DRAWN BY		CHECKED BY	
			N/A	11/20/23	NEO	NEO	NEO	NEO
1"=60'	N/A	11/20/23						
SAND CREEK RESTORATION								
HORIZONTAL CONTROL PLAN								
SHEET 19 OF 121								
JOB NO. 25188.04								

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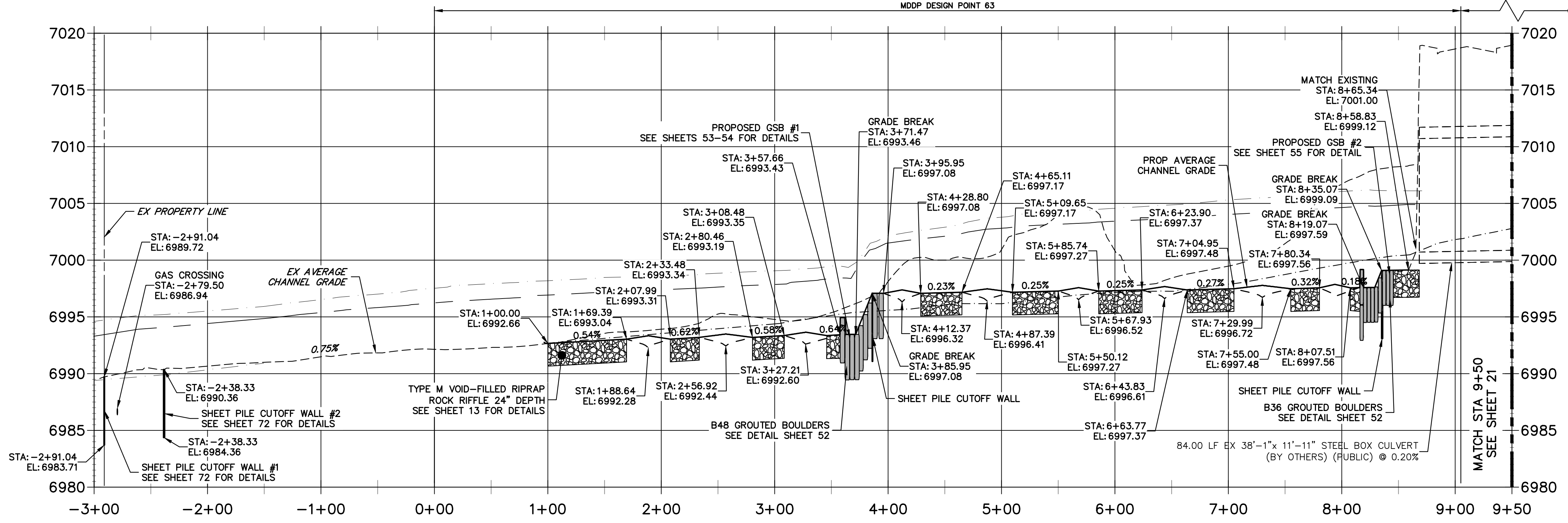
**PROFILE LEGEND**

- EXISTING GRADE PROFILE
- CHANNEL @
- FINISHED GRADE PROFILE
- CHANNEL @
- EXISTING THALWEG PROFILE
- THALWEG PROFILE
- 100-YR FIS WSEL PROFILE
- 100-YR MDDP WSEL PROFILE

**SAND CREEK FLOW RATES**

Location	Station	MDDP DESIGN POINT	Flow Rate (cfs)	
			100-YR Design MDDP	100-YR FIS
Northern Bndy	STA: 87+10	DP-72	1644.1	2600
Stock Pond 2	STA: 73+50	DP-71	1667.0	2600
BriarGate Pkwy	STA: 61+00	DP-70	1763.9	2600
	STA: 36+05	DP-69	1880.4	2600
SRMD Pond 1	STA: 16+80	DP-87	1848.8	2600
Sterling Ranch Road	STA: 09+05	DP-68	1562.5	2600
Sterling Ranch Southern Bndy	STA: 00+00	DP-63	1585.2	2600

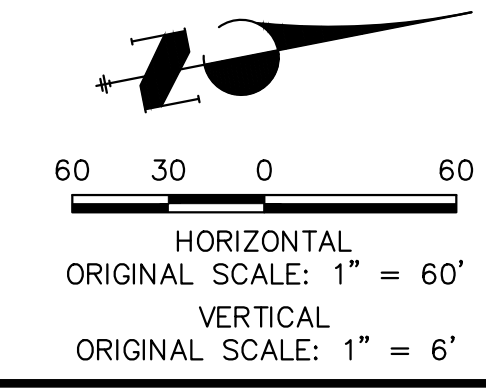
**SAND CREEK - BANKFULL PROFILE 1  
STA -3+00.00 TO 9+50.00**



- 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.

- 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 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 = 411399.862  
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

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

32314 11/20/23

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 AS DESIGNATED BY WRITTEN AUTHORIZATION.

**J.R. ENGINEERING**  
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BY DATE

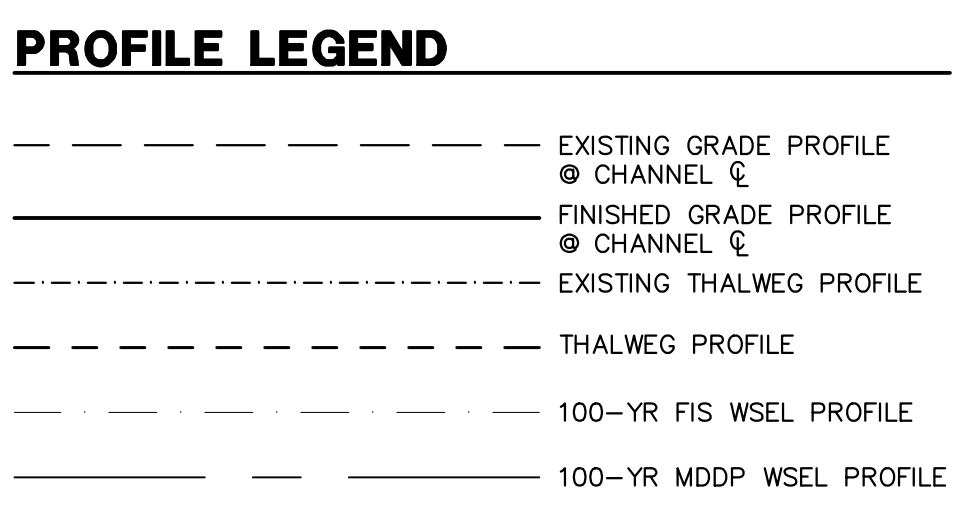
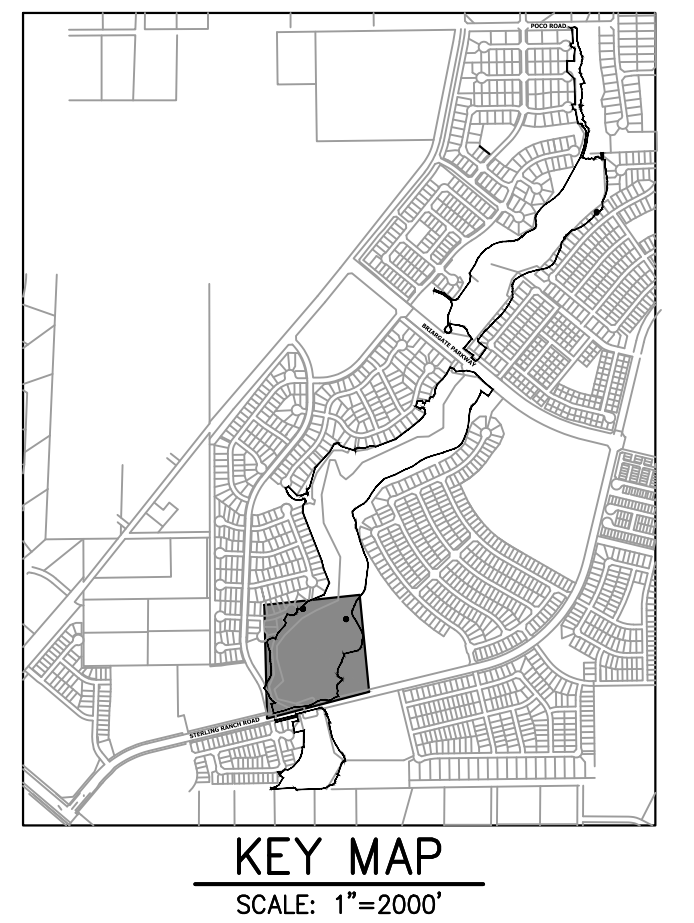
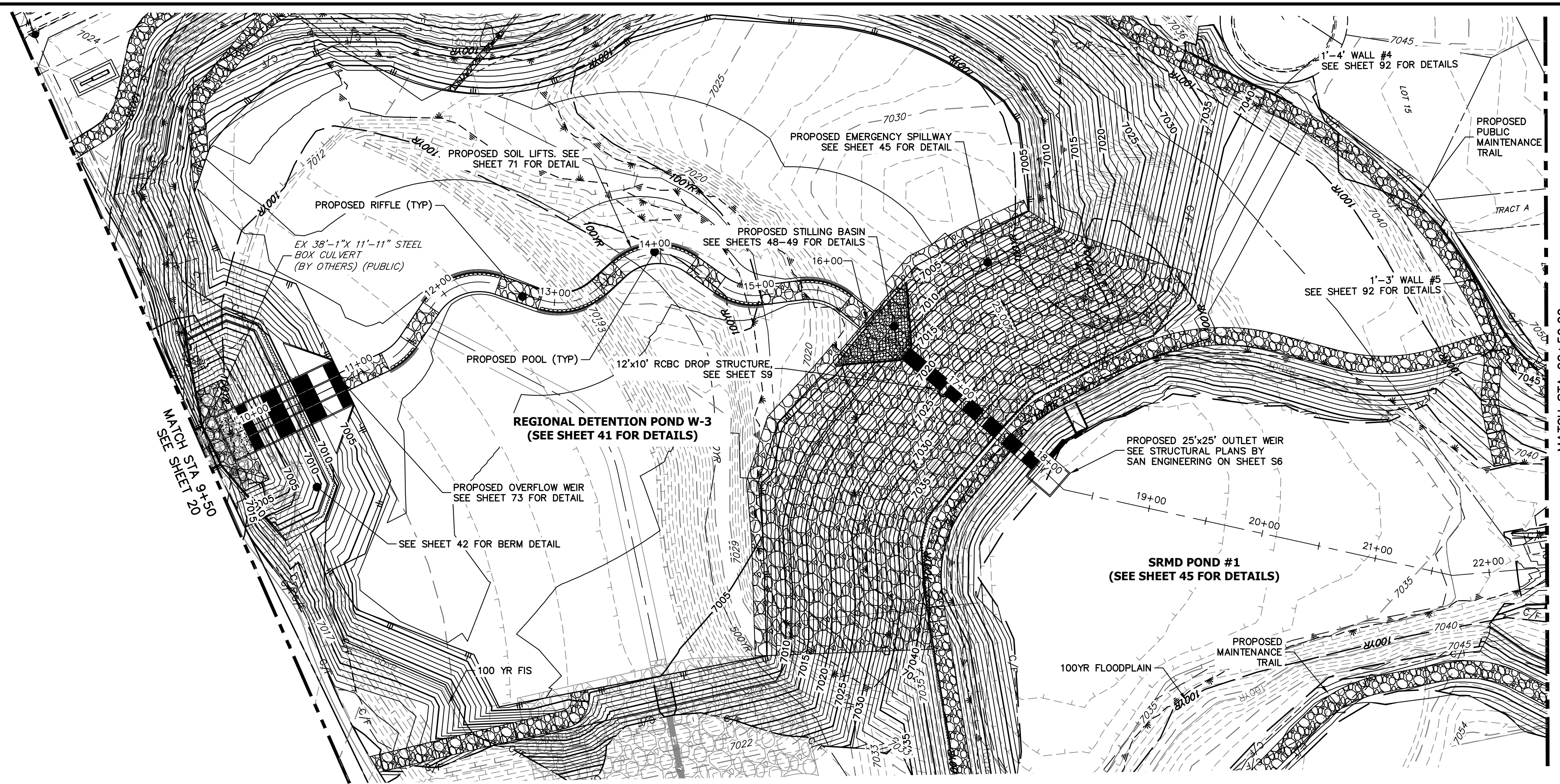
No. REVISION

H-SCALE 1"=60'  
V-SCALE 1"=6'

DATE 11/20/23  
DESIGNED BY DJV  
DRAWN BY NEO  
CHECKED BY

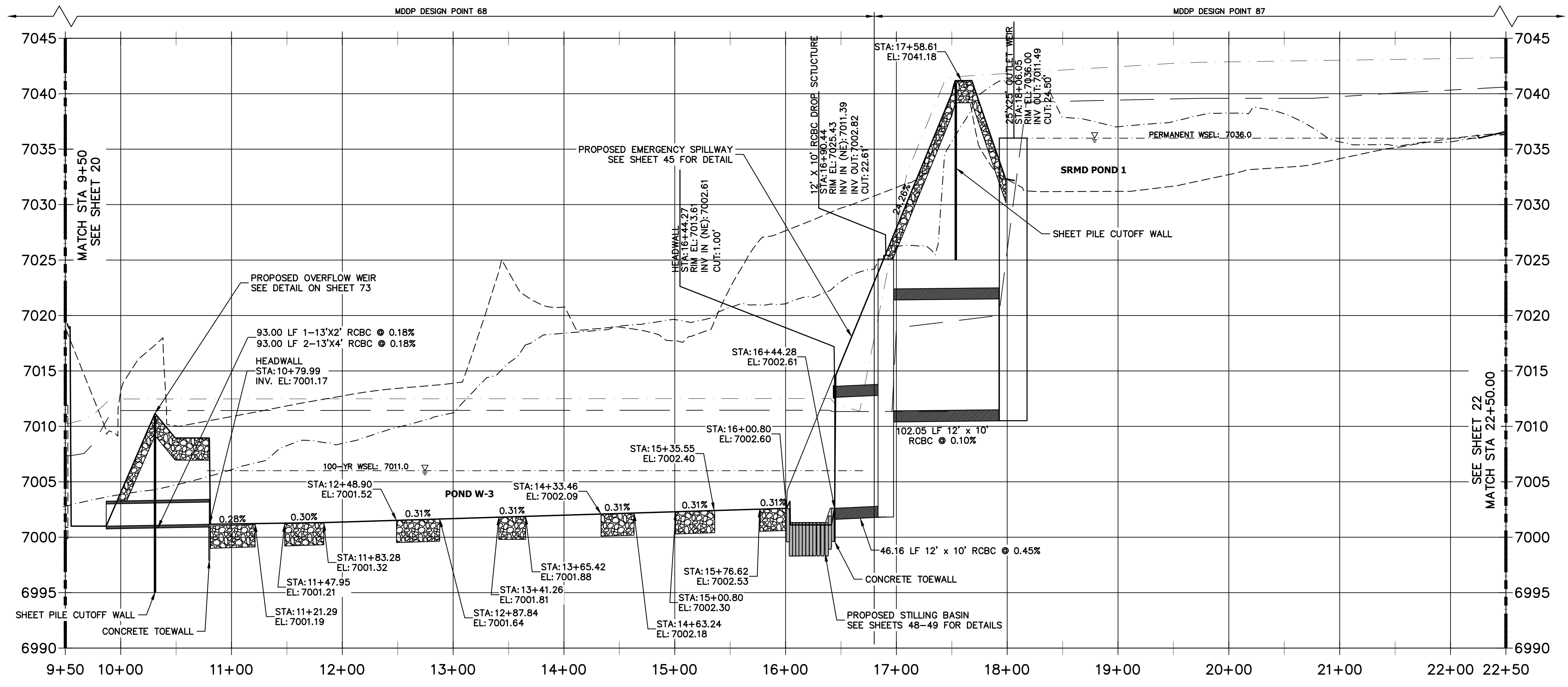
**SAND CREEK RESTORATION**  
**CHANNEL PLAN & PROFILE**

SHEET 20 OF 121  
JOB NO. 25188.04



SAND CREEK FLOW RATES				
Location	Station	MDDP DESIGN POINT	Flow Rate (cfs)	
			100-YR Design MDDP	100-YR FIS
Northern Bndy	STA: 87+10	DP-72	1644.1	2600
Stock Pond 2	STA: 73+50	DP-71	1667.0	2600
Briargate Pkwy	STA: 61+00	DP-70	1763.9	2600
	STA: 36+05	DP-69	1880.4	2600
SRMD Pond 1	STA: 16+80	DP-87	1848.8	2600
Sterling Ranch Road	STA: 09+05	DP-68	1562.5	2600
Sterling Ranch Southern Bndy	STA: 00+00	DP-63	1585.2	2600

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



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

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

**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION

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

32314  
11/20/23  
DATE

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

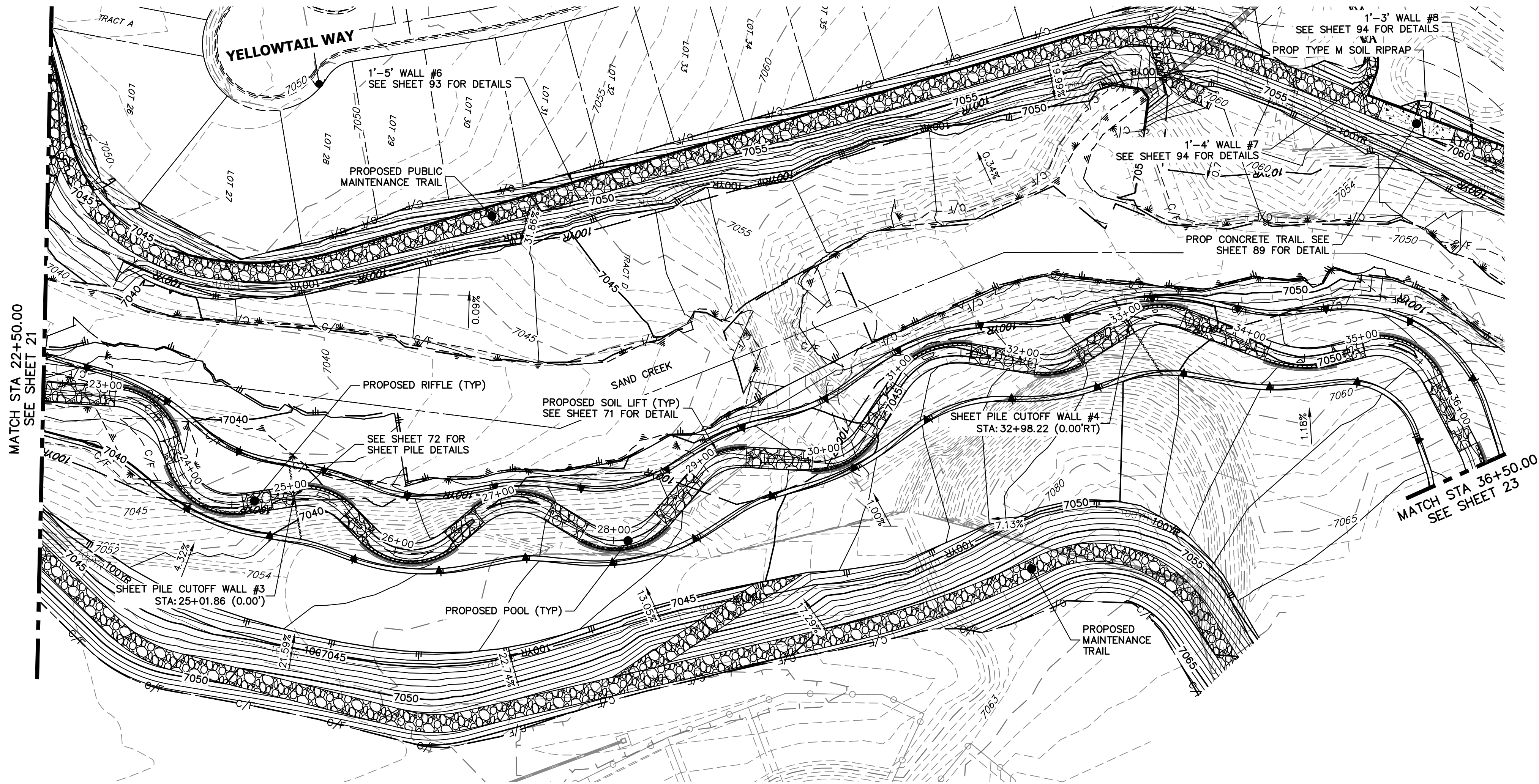
**J.R. ENGINEERING**  
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Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION

H-SCALE 1"=60'  
V-SCALE 1"=6'  
DATE 11/20/23  
DESIGNED BY DJV  
DRAWN BY NEO  
CHECKED BY

**SAND CREEK RESTORATION**  
**CHANNEL PLAN & PROFILE**

SHEET 21 OF 121  
JOB NO. 25188.04

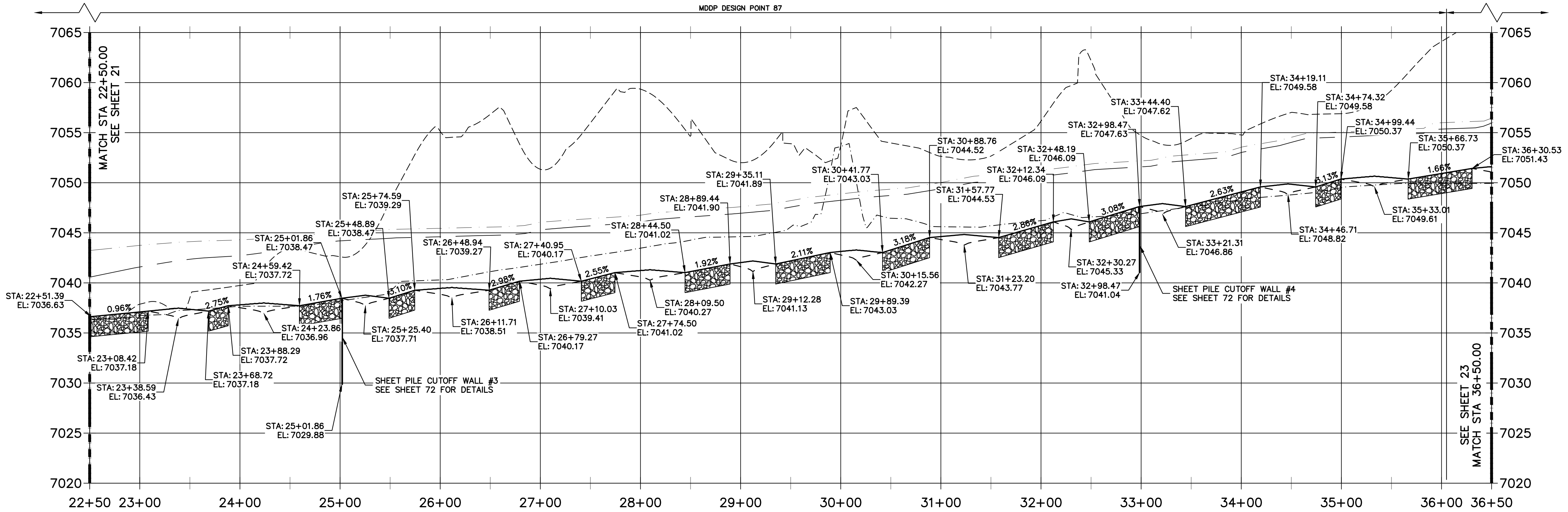


**PROFILE LEGEND**

- - - - - EXISTING GRADE PROFILE
- ⊙ CHANNEL ⊕ FINISHED GRADE PROFILE
- - - - - EXISTING THALWEG PROFILE
- - - - - THALWEG PROFILE
- - - - - 100-YR FIS WSEL PROFILE
- - - - - 100-YR MDDP WSEL PROFILE

SAND CREEK FLOW RATES				
Location	Station	MDDP POINT	100-YR Design MDDP	100-YR FIS
Northern Bend	STA: 87+10	DP-72	1644.1	2600
Stock Pond 2	STA: 73+50	DP-71	1667.0	2600
Briargate Pkwy	STA: 61+00	DP-70	1763.9	2600
	STA: 36+05	DP-69	1880.4	2600
SRMD Pond 1	STA: 16+80	DP-87	1848.8	2600
Sterling Ranch Road	STA: 09+05	DP-68	1562.5	2600
Sterling Ranch Southern Bend	STA: 00+00	DP-63	1585.2	2600

**SAND CREEK - BANKFULL PROFILE 3  
STA 22+50.00 TO 36+50.00**  
MDDP DESIGN POINT 87



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

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

**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION

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

32314 11/20/23

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

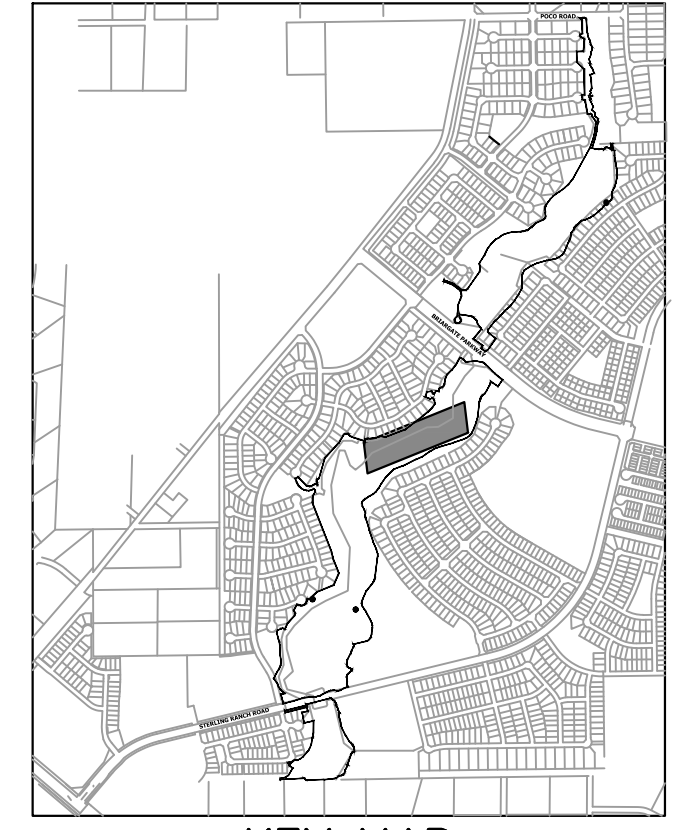
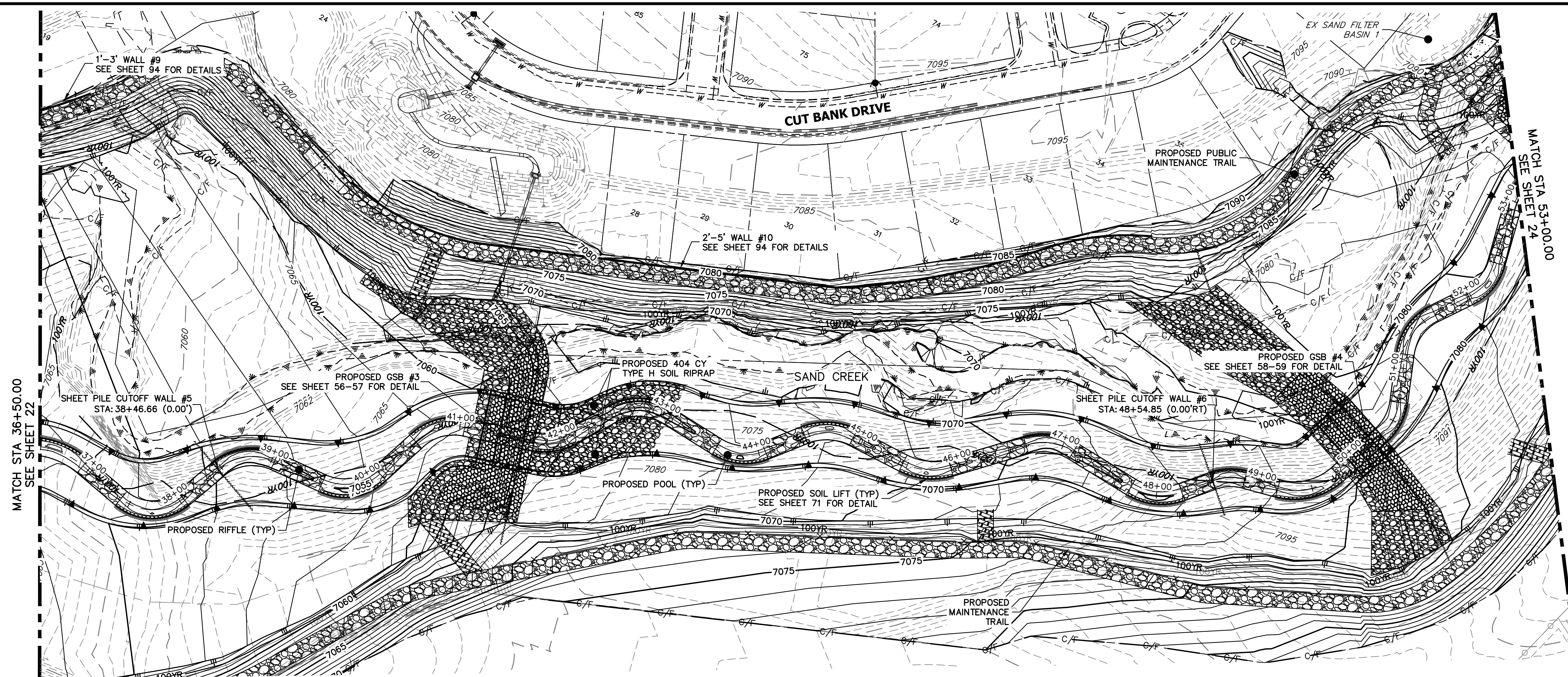
**J.R. ENGINEERING**  
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Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION

H-SCALE: 1"=60'  
V-SCALE: 1"=6'  
DATE: 11/20/23  
DESIGNED BY: DJV  
DRAWN BY: NEO  
CHECKED BY:  

**SAND CREEK RESTORATION**  
**CHANNEL PLAN & PROFILE**

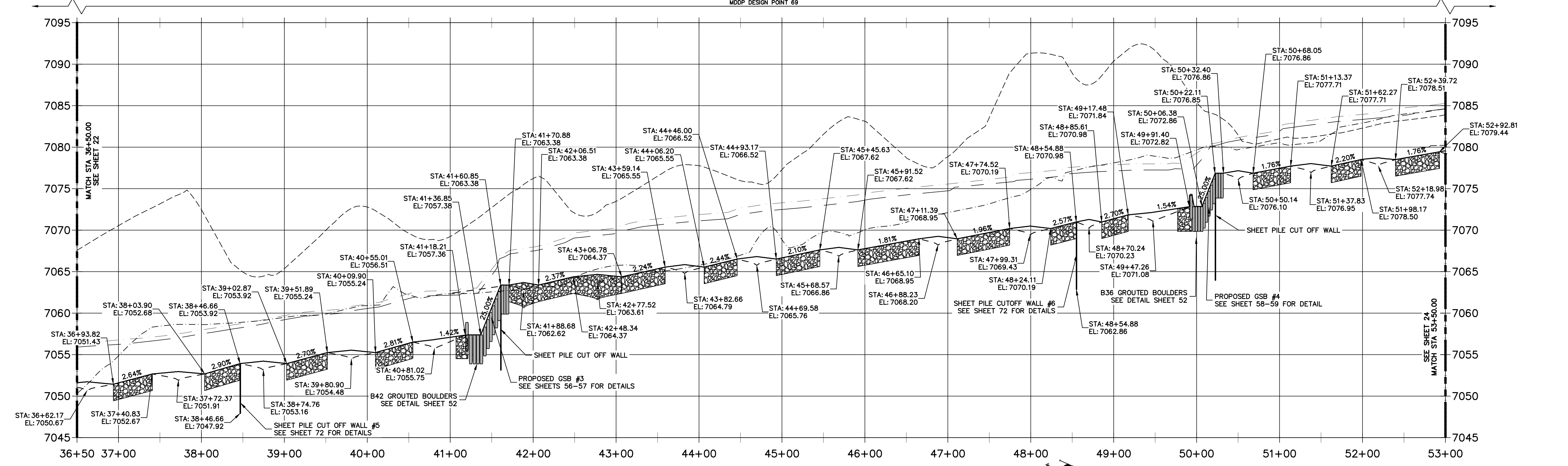
SHEET 22 OF 121  
JOB NO. 25188.04



- PROFILE LEGEND**
- EXISTING GRADE PROFILE
  - FINISHED GRADE PROFILE
  - EXISTING THALWEG PROFILE
  - THALWEG PROFILE
  - 100-YR FIS WSEL PROFILE
  - 100-YR MDDP WSEL PROFILE

SAND CREEK FLOW RATES				
Location	Station	MDDP DESIGN POINT	100-YR Design MDDP	100-YR FIS
Northern Bndy	STA: 87+10	DP-72	1644.1	2600
Stock Pond 2	STA:73+50	DP-71	1667.0	2600
Briargate Pkwy	STA:61+00	DP-70	1763.9	2600
	STA:36+05	DP-69	1880.4	2600
SRMD Pond 1	STA:16+80	DP-87	1848.8	2600
Sterling Ranch Road	STA:09+05	DP-68	1562.5	2600
Sterling Ranch Southern Bndy	STA:00+00	DP-63	1585.2	2600

**SAND CREEK - BANKFULL PROFILE 4**  
**STA 36+50.00 TO 53+00.00**  
 MDDP DESIGN POINT 69



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

**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION

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

32314 11/20/23

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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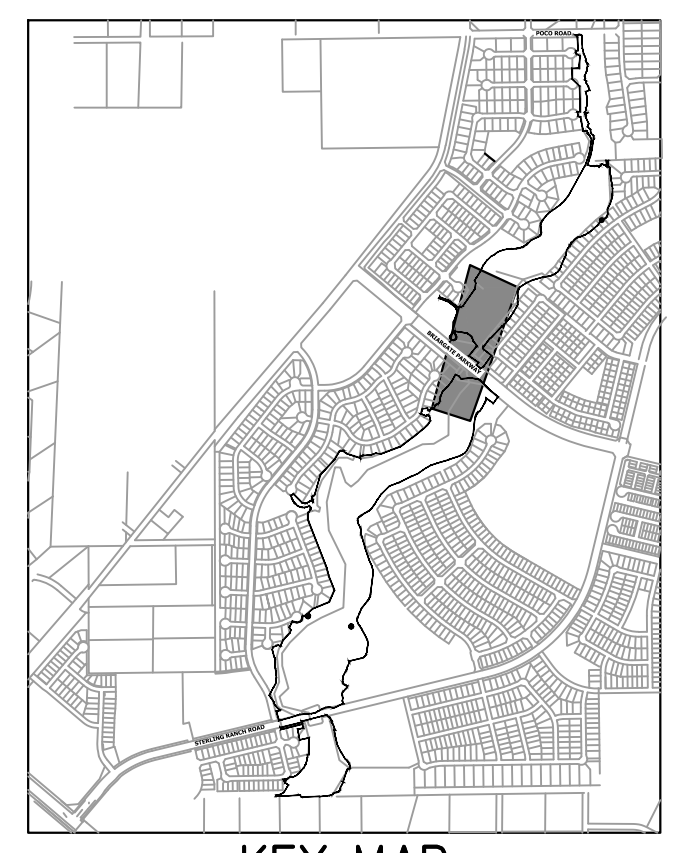
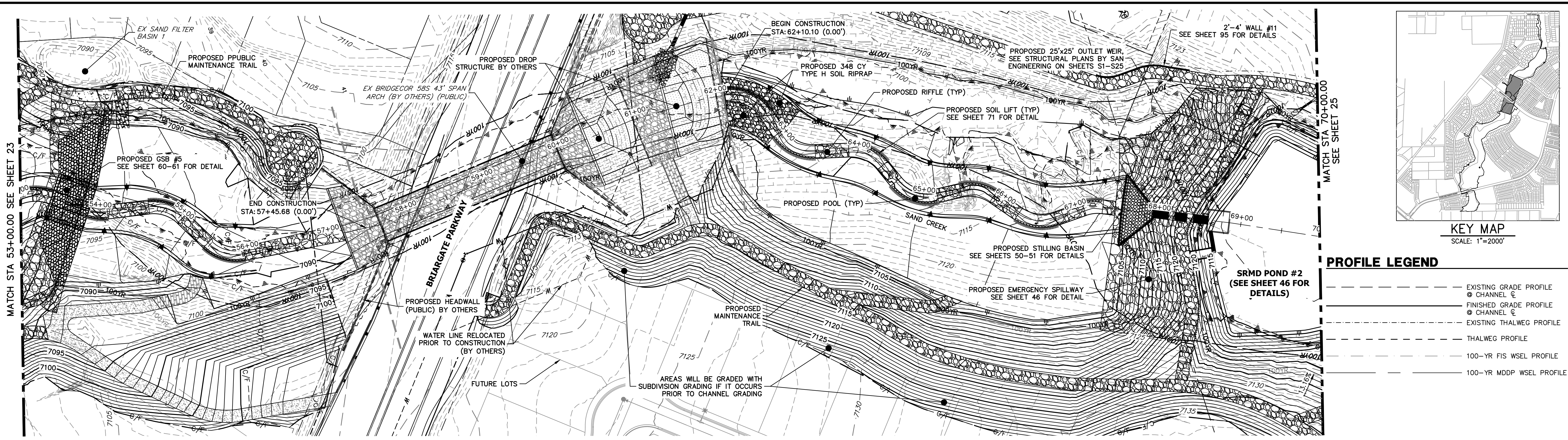
BY	DATE	REVISION

H-SCALE 1"=60'  
 V-SCALE 1"=6'

DATE 11/20/23  
 DESIGNED BY DJV  
 DRAWN BY NEO  
 CHECKED BY

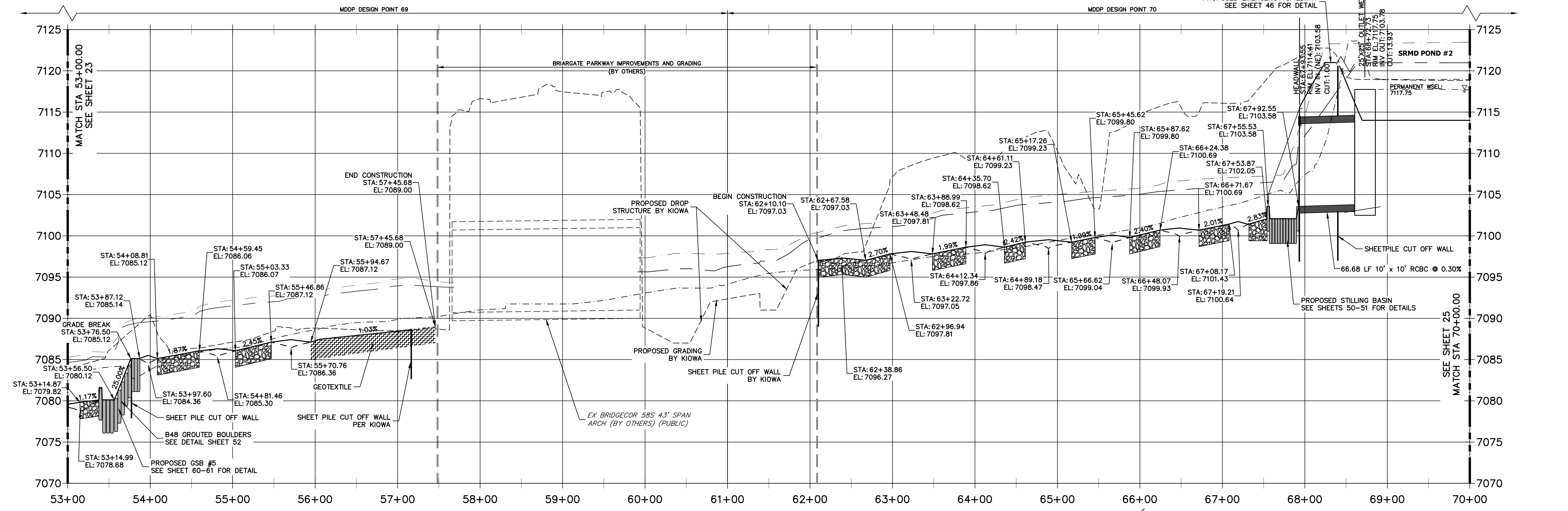
**SAND CREEK RESTORATION**  
**CHANNEL PLAN & PROFILE**

SHEET 23 OF 121  
 JOB NO. 25188.04



- PROFILE LEGEND**
- - - - - EXISTING GRADE PROFILE @ CHANNEL
  - - - - - FINISHED GRADE PROFILE @ CHANNEL
  - - - - - EXISTING THALWEG PROFILE
  - - - - - THALWEG PROFILE
  - - - - - 100-YR FIS WSEL PROFILE
  - - - - - 100-YR MDDP WSEL PROFILE

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



**SAND CREEK FLOW RATES**

Location	Station	MDDP DESIGN POINT	Flow Rate (cfs)	
			100-YR Design MDDP	100-YR FIS
Northern Bndy	STA: 87+10	DP-72	1644.1	2600
Stock Pond 2	STA: 73+50	DP-71	1667.0	2600
BriarGate Pkwy	STA: 61+00	DP-70	1763.9	2600
	STA: 36+05	DP-69	1880.4	2600
SRMD Pond 1	STA: 16+80	DP 87	1848.8	2600
Sterling Ranch Road	STA: 09+05	DP-68	1562.5	2600
Sterling Ranch Southern Bndy	STA: 00+00	DP-63	1585.2	2600

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

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

**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION

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

32314 11/20/23

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

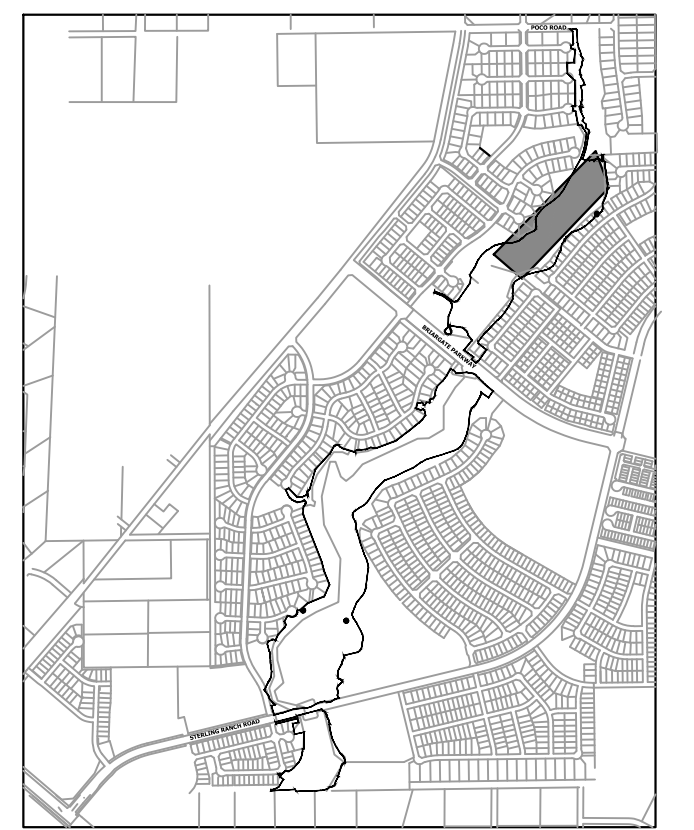
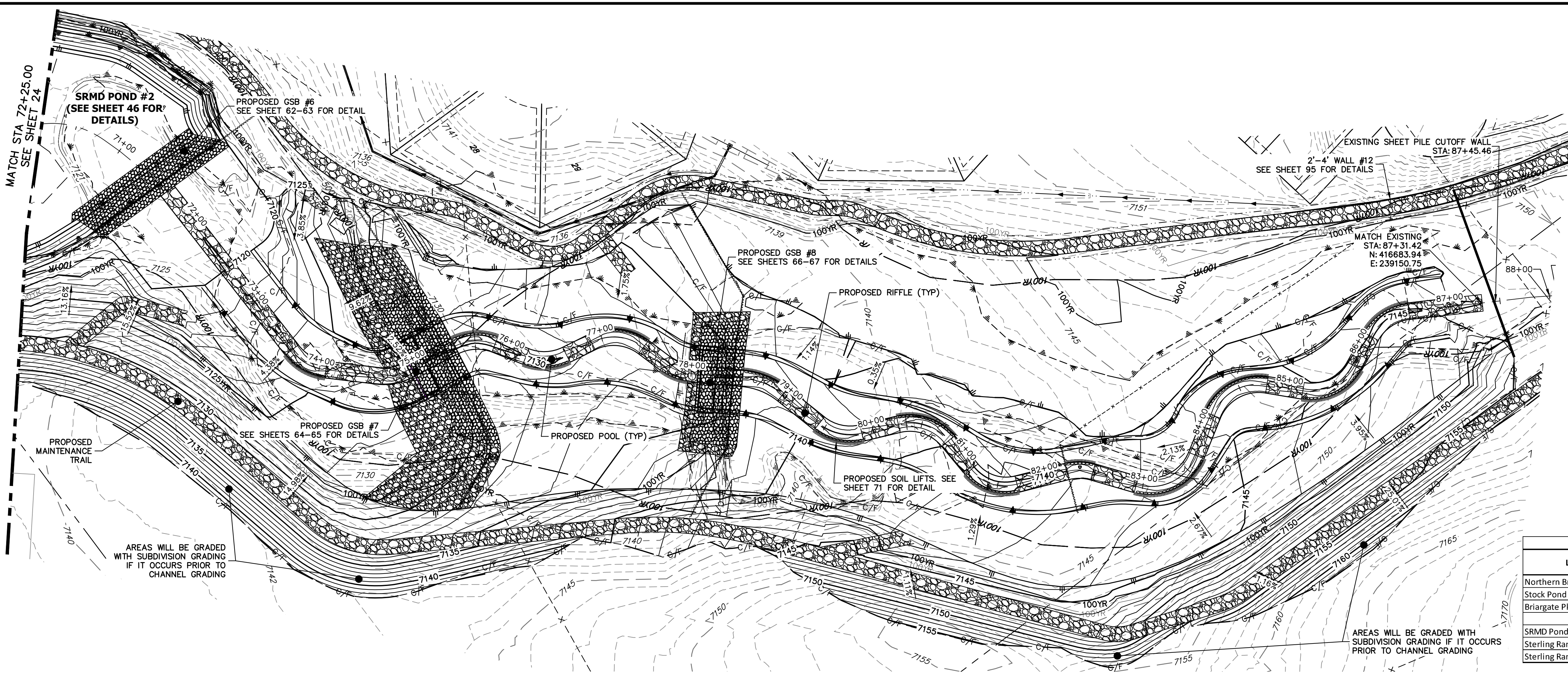
**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2593  
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION

SAND CREEK RESTORATION  
CHANNEL PLAN & PROFILE

SHEET 24 OF 121  
JOB NO. 25188.04



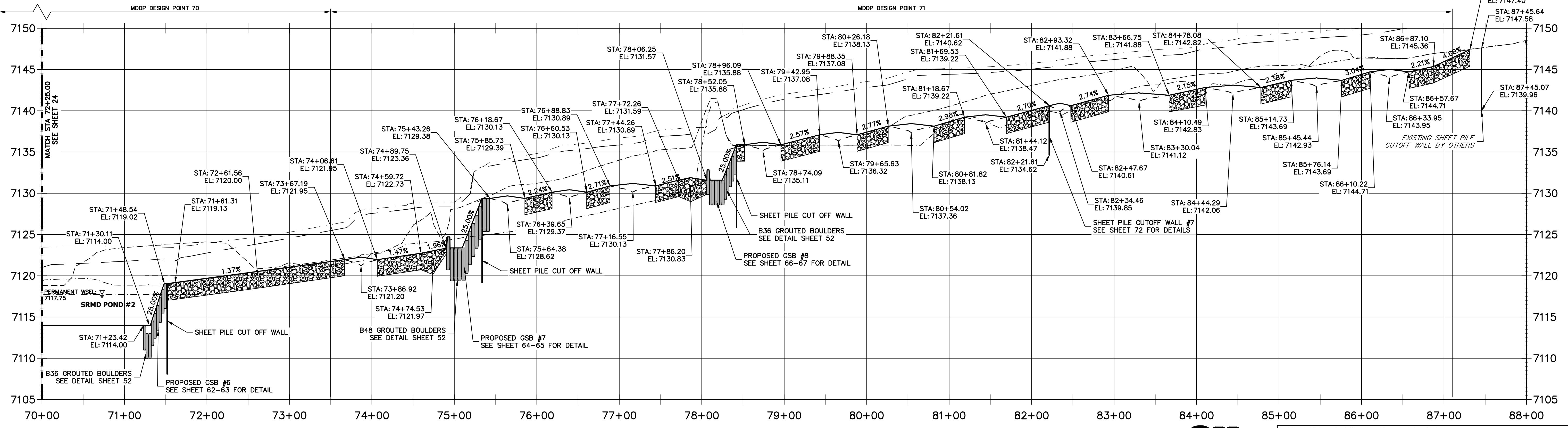


**PROFILE LEGEND**

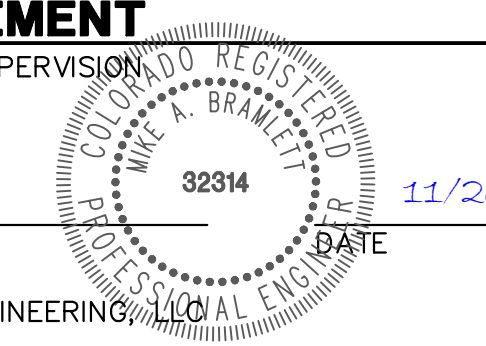
- EXISTING GRADE PROFILE
- CHANNEL
- FINISHED GRADE PROFILE
- CHANNEL
- EXISTING THALWEG PROFILE
- THALWEG PROFILE
- 100-YR FIS WSEL PROFILE
- 100-YR MDDP WSEL PROFILE

SAND CREEK FLOW RATES				
Location	Station	MDDP DESIGN POINT	Flow Rate (cfs)	
			100-YR Design MDDP	100-YR FIS
Northern Body	STA: 87+10	DP-72	1644.1	2600
Stock Pond 2	STA: 73+50	DP-71	1667.0	2600
Briargate Pkwy	STA: 61+00	DP-70	1763.9	2600
	STA: 36+05	DP-69	1880.4	2600
SRMD Pond 1	STA: 16+80	DP-87	1848.8	2600
Sterling Ranch Road	STA: 09+05	DP-68	1562.5	2600
Sterling Ranch Southern Body	STA: 00+00	DP-63	1585.2	2600

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



**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION


 11/20/23

MIKE A. BRAMLETT, P.E.  
 COLORADO P.E. 32314  
 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. 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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 Centennial 300-740-9888 • Colorado Springs 719-583-2893  
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BY	DATE	REVISION

H-SCALE 1"=60'  
 V-SCALE 1"=6'  
 DATE 11/20/23  
 DESIGNED BY DJV  
 DRAWN BY NEO  
 CHECKED BY

**SAND CREEK RESTORATION**  
**CHANNEL PLAN & PROFILE**

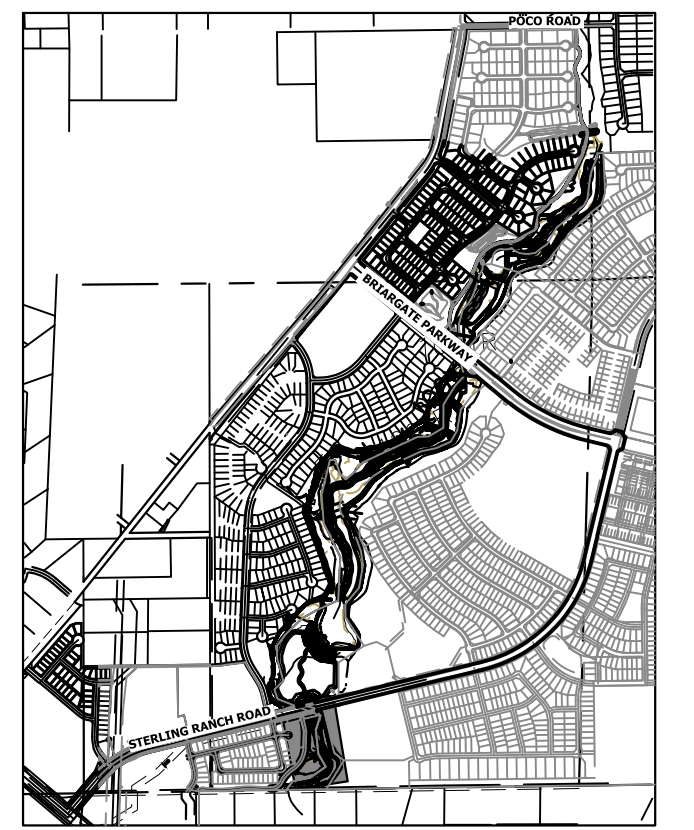
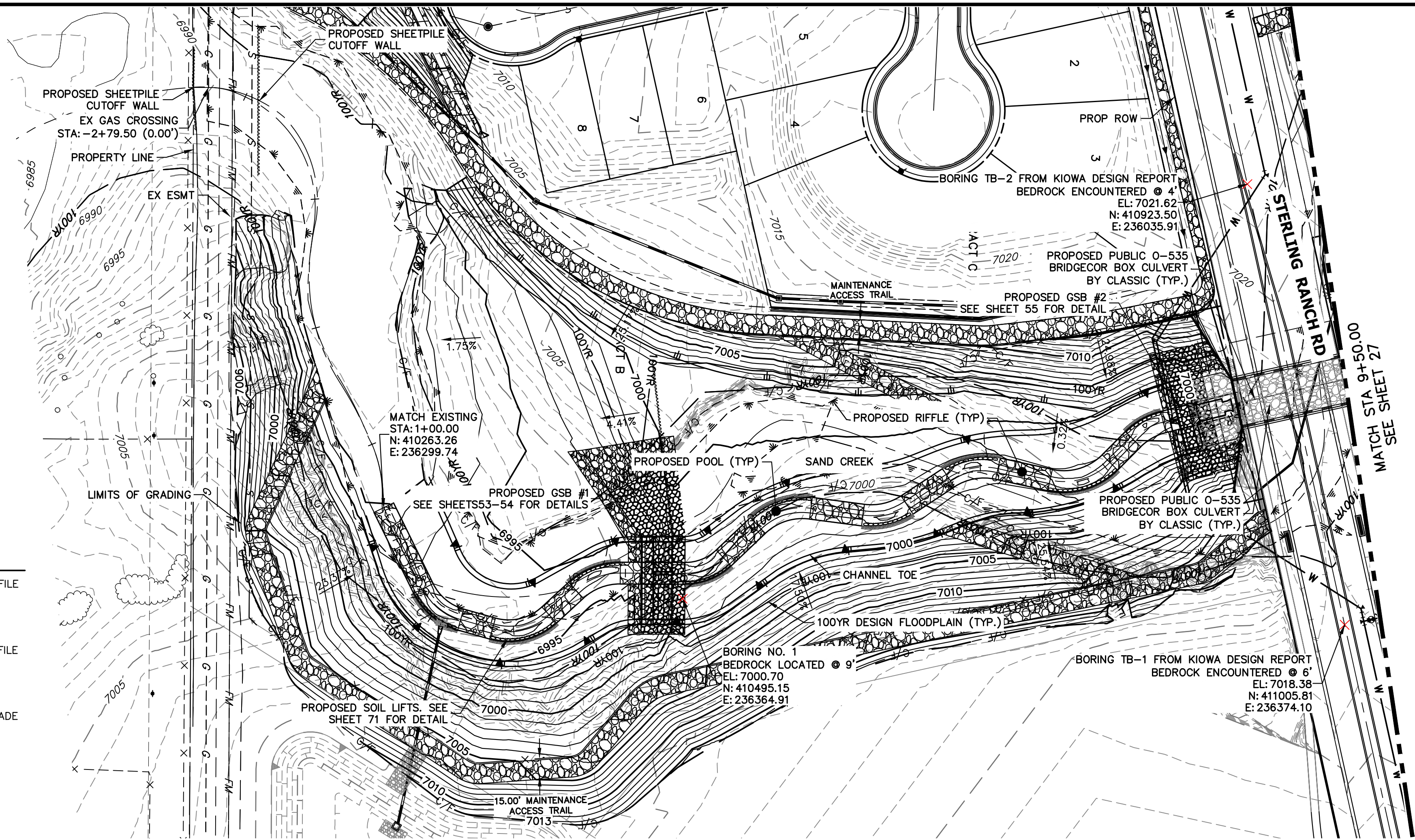
SHEET 25 OF 121  
 JOB NO. 25188.04



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

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

X:\25188\04\Drawings\Sheet\Drawings\Second Creek\_Plan\Profile\25188\04\_C101.dwg, 27 CH06, 12/7/2023, 5:29:49 PM, VaughtD



**LEGEND**

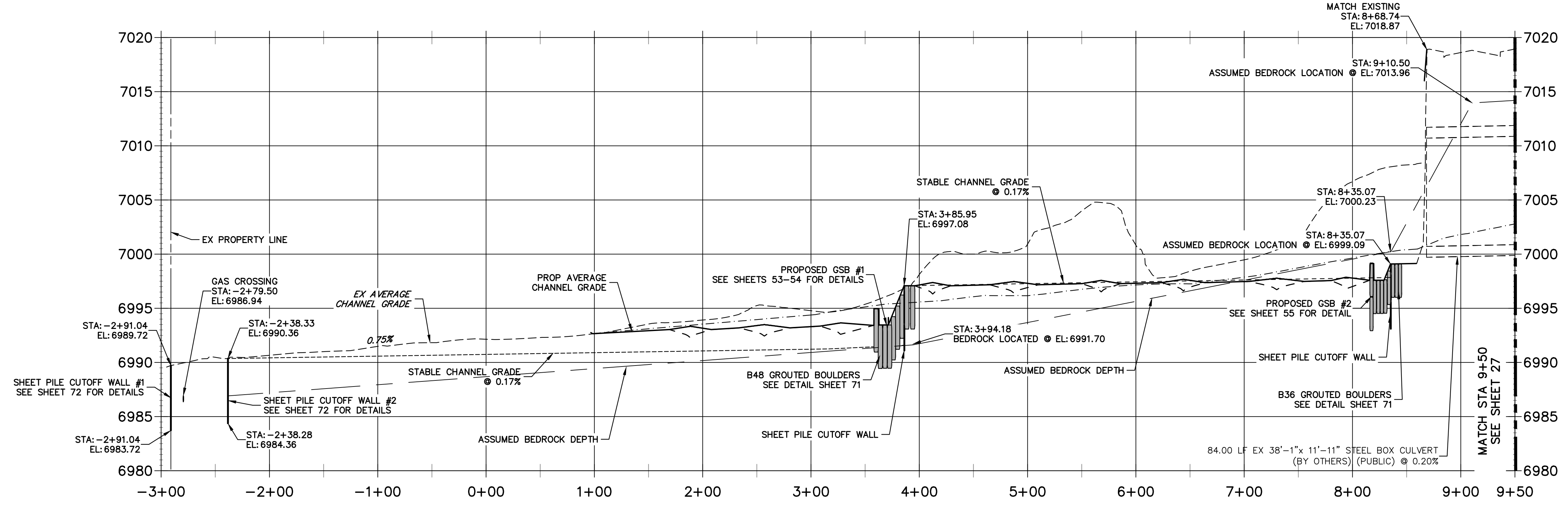
---	FINISHED GRADE PROFILE
○	CHANNEL
- - -	THALWEG PROFILE
---	EXISTING GRADE PROFILE
○	EXISTING CHANNEL
- - -	EXISTING THALWEG PROFILE
---	STABLE CHANNEL GRADE PROFILE
---	ASSUMED BEDROCK LOCATION PROFILE

- 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 PANNEE 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

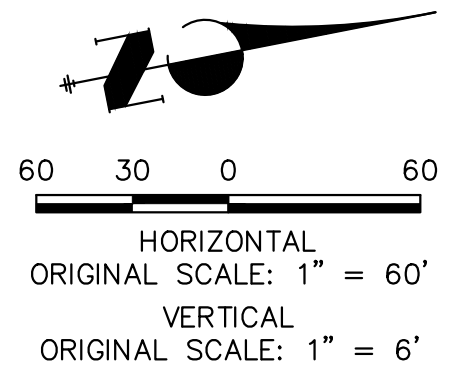
**BASIS OF BEARINGS**

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.



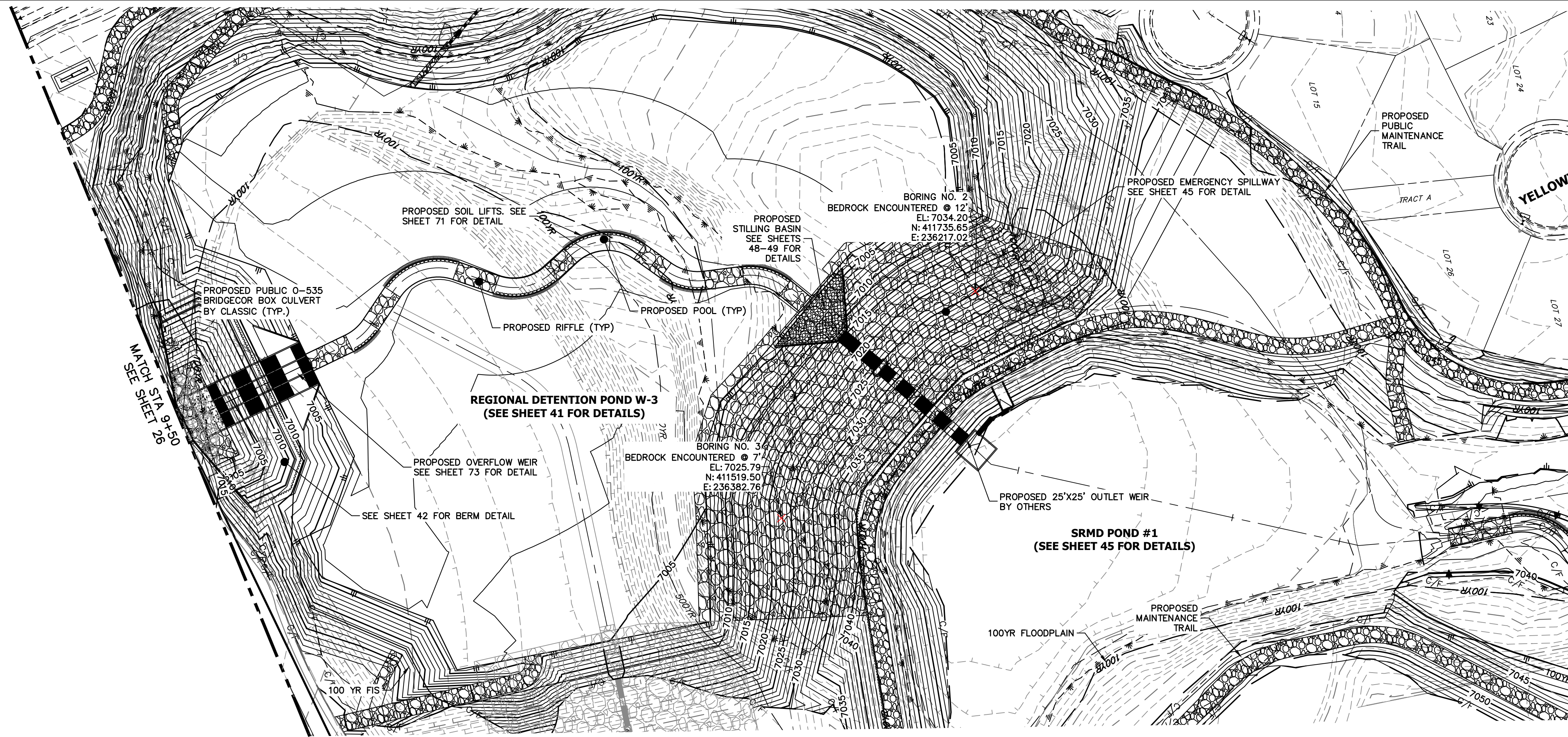
**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION

Mike Bramlett

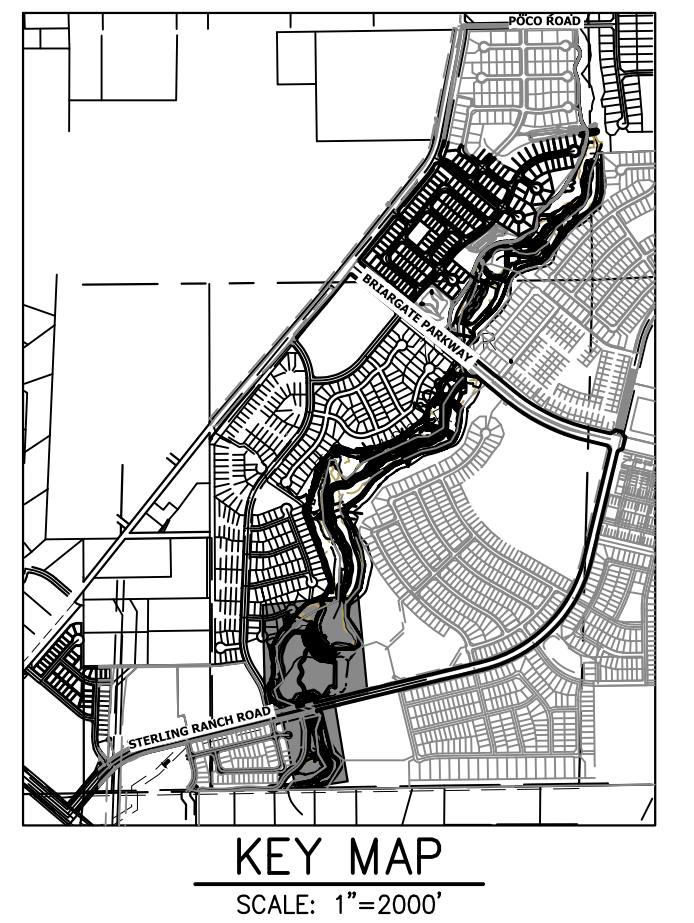
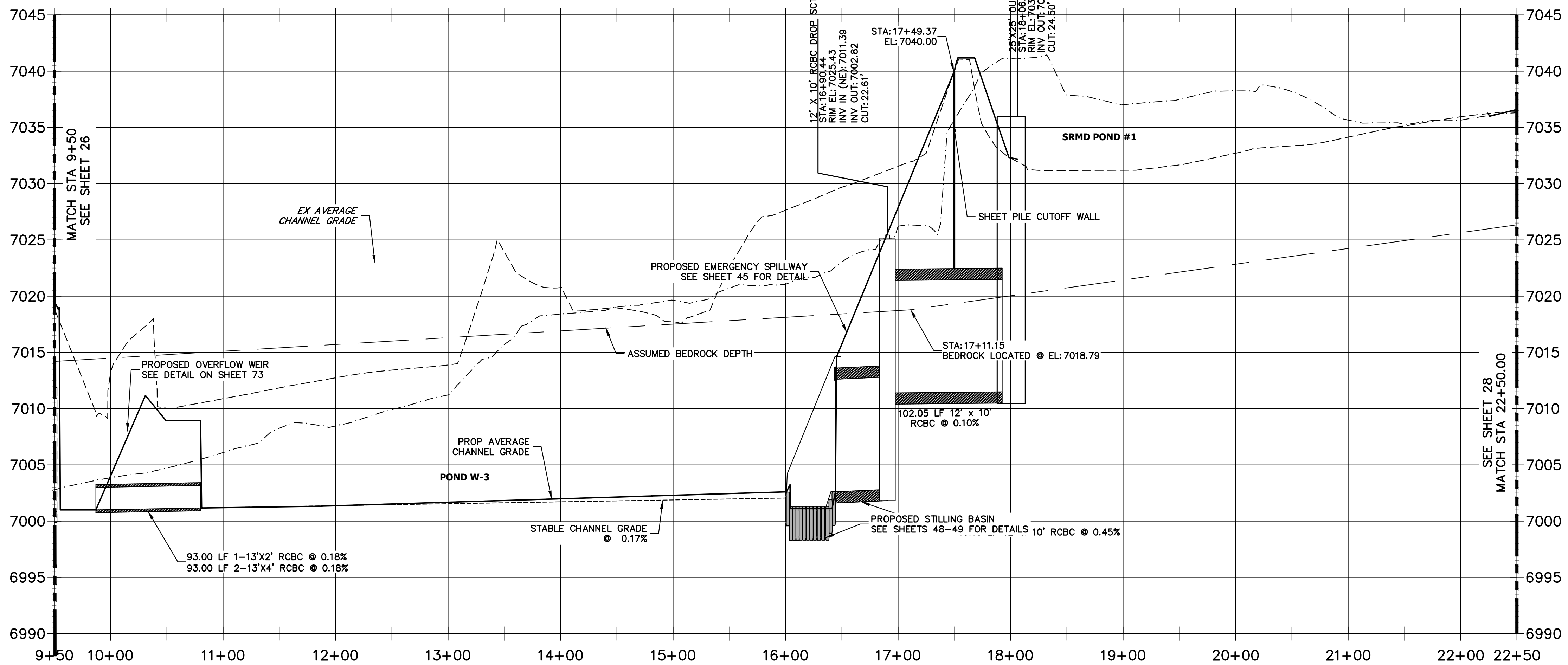
MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING

32314  
11/20/23

PREPARED FOR <b>SR LAND, LLC</b> 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 AS DESIGNATED BY WRITTEN AUTHORIZATION.
SAND CREEK RESTORATION CHANNEL STABLE GRADE PLAN AND PROFILE	SHEET 26 OF 121 JOB NO. 25188.04



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

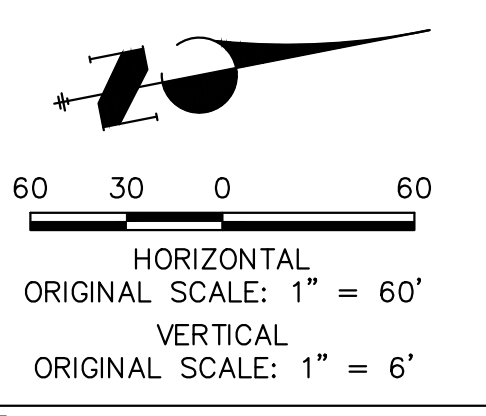


MATCH STA 22+50.00  
SEE SHEET 28

**LEGEND**

—	FINISHED GRADE PROFILE
⊙ CHANNEL	CHANNEL
- - -	THALWEG PROFILE
- - -	EXISTING GRADE PROFILE
- - -	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.



**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION

*Mike Bramlett*

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

32314  
11/20/23

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

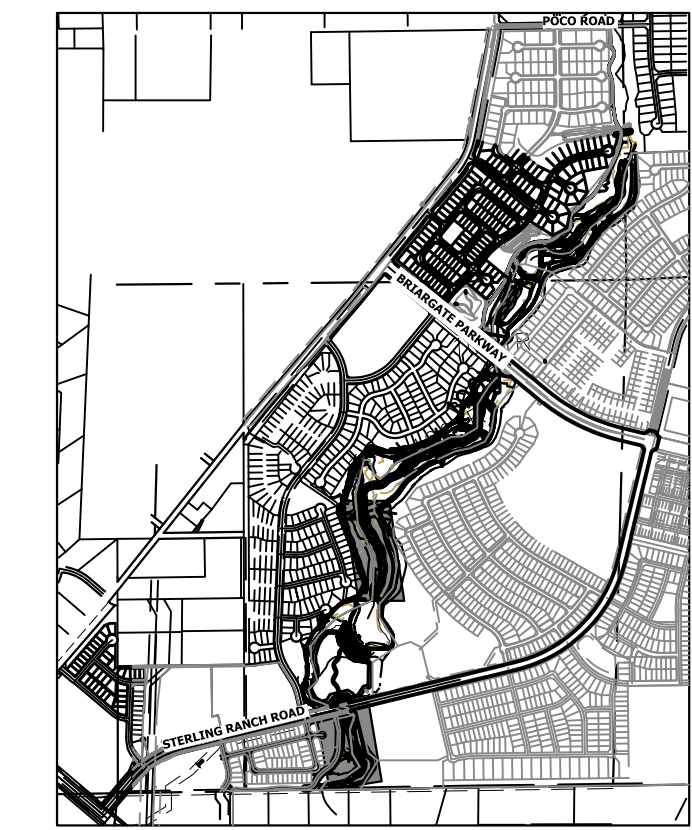
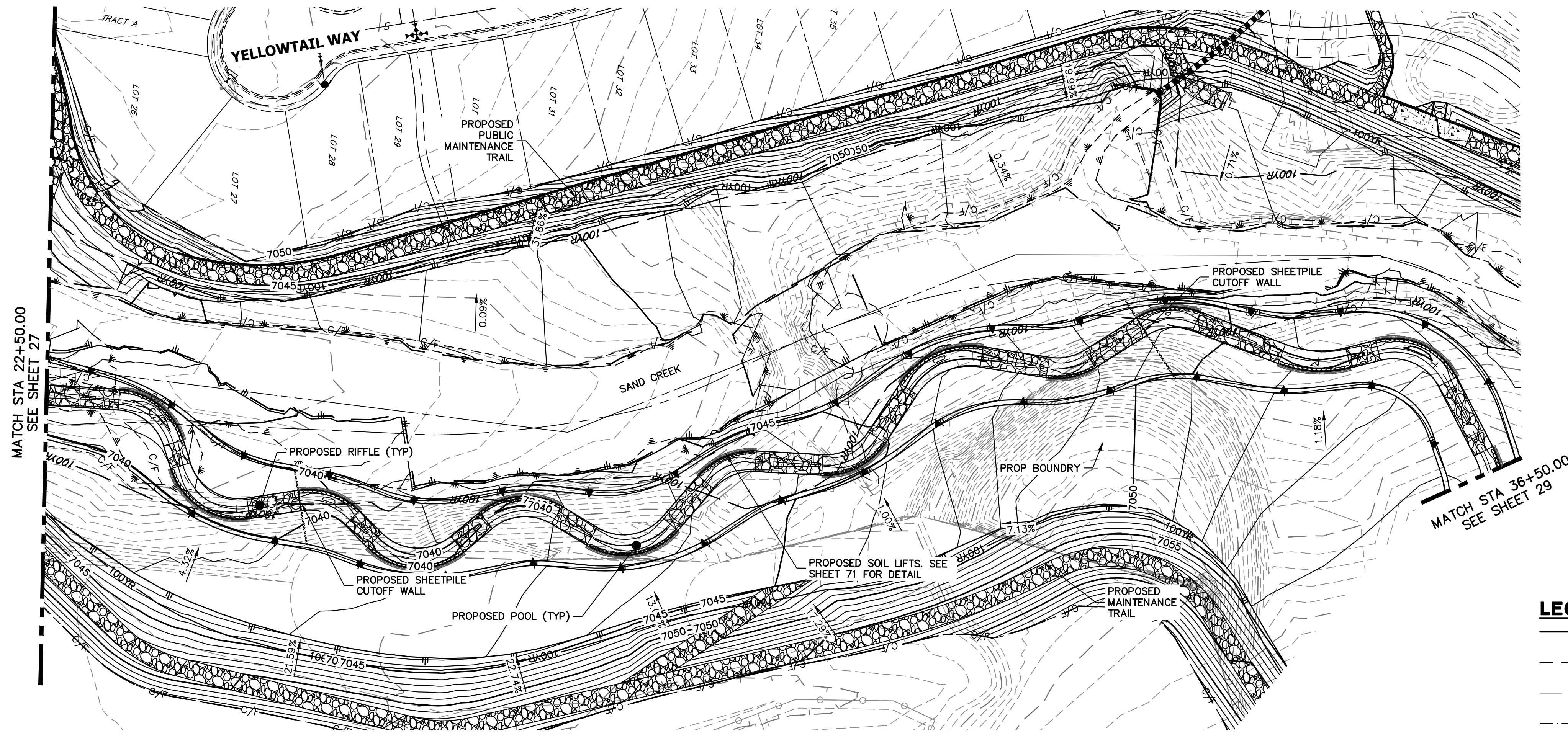
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Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION

H-SCALE 1"=60'  
V-SCALE 1"=6'  
DATE 11/20/23  
DESIGNED BY DJV  
DRAWN BY NEO  
CHECKED BY

**SAND CREEK RESTORATION**  
**CHANNEL STABLE GRADE PLAN AND PROFILE**

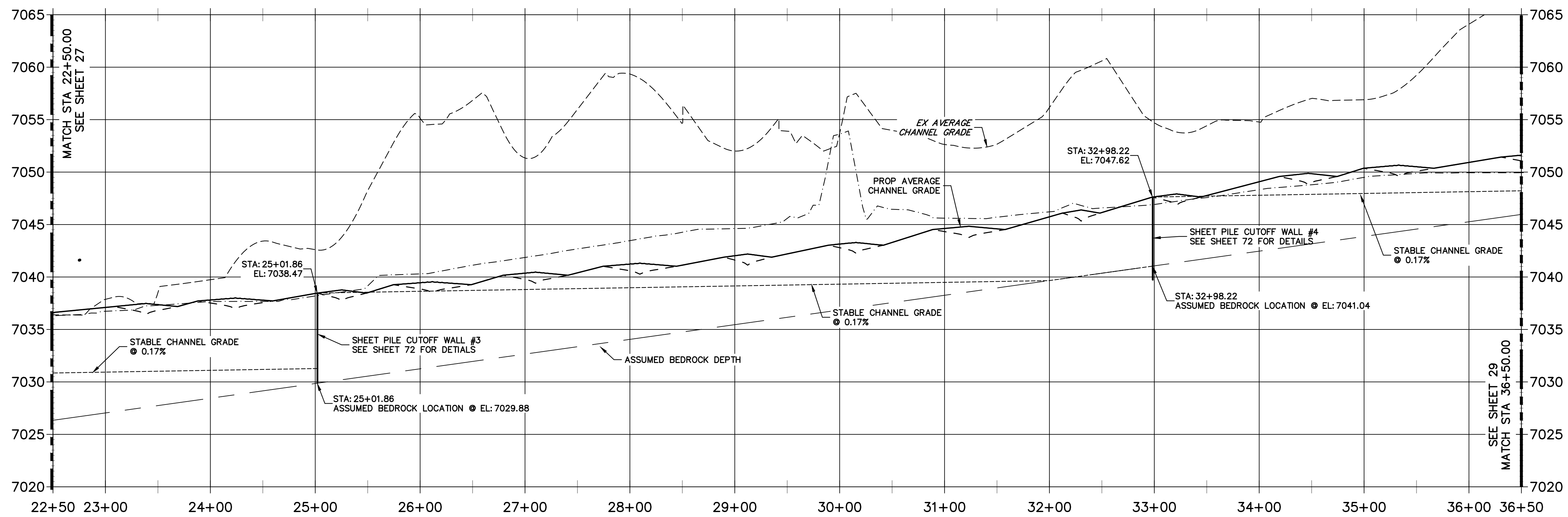
SHEET 27 OF 121  
JOB NO. 25188.04



**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.

- 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

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

32314  
11/20/23  
DATE

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

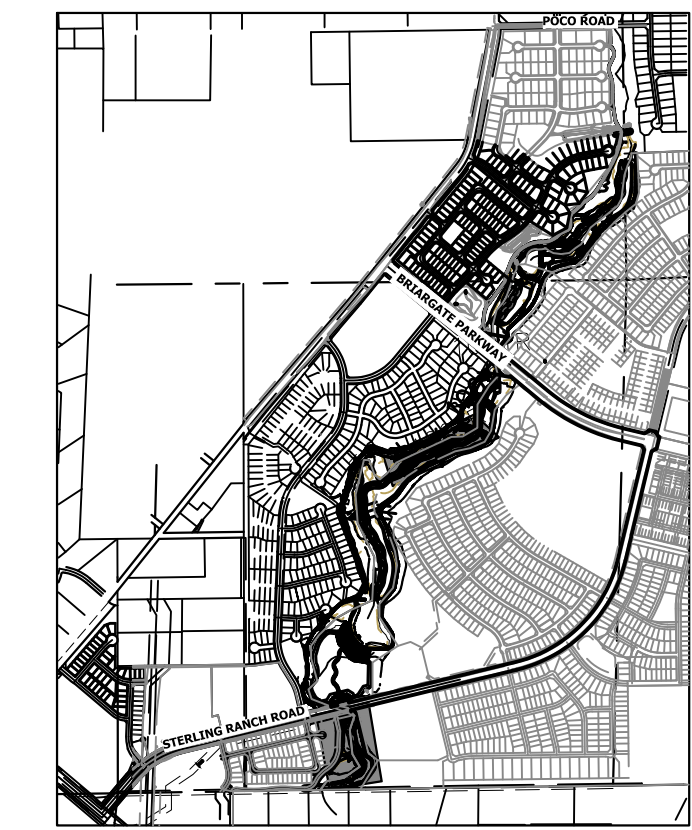
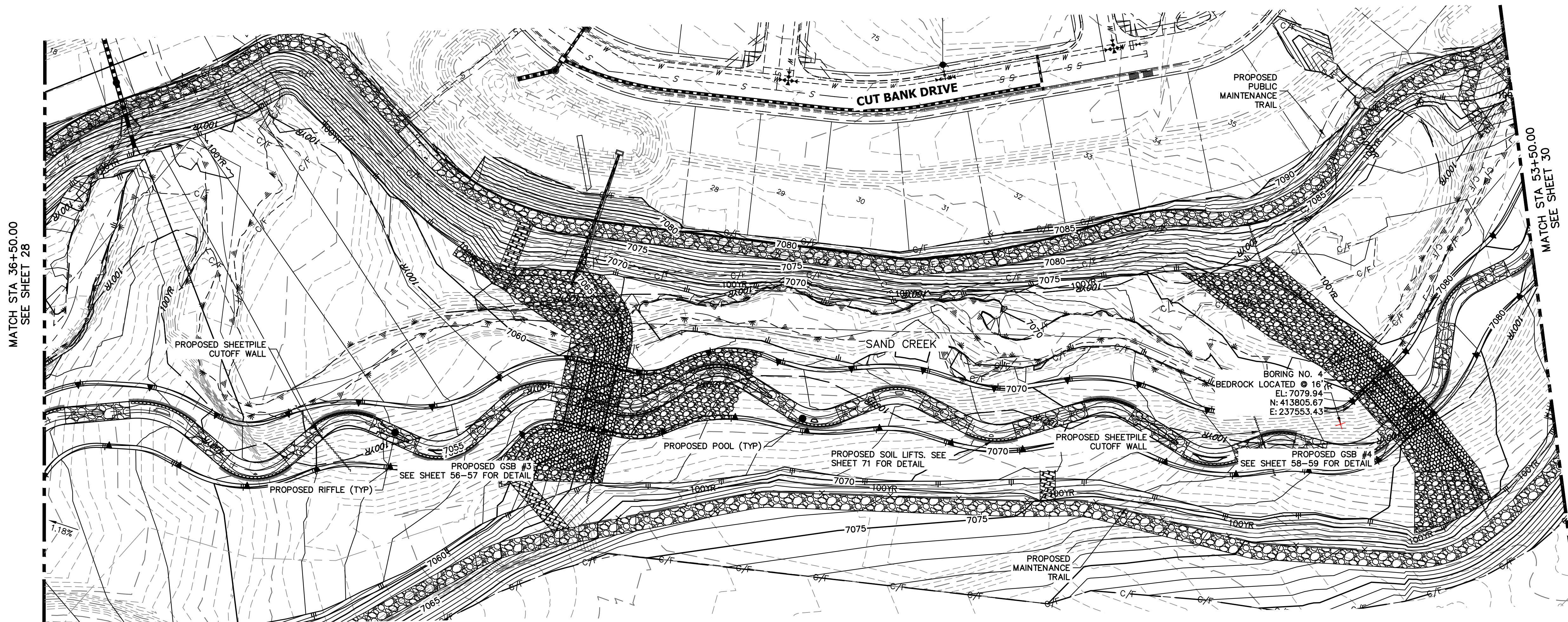
**J.R. ENGINEERING**  
A Westman Company  
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BY	DATE	No.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=60'	1"=6'	11/20/23	DJV	NEO	

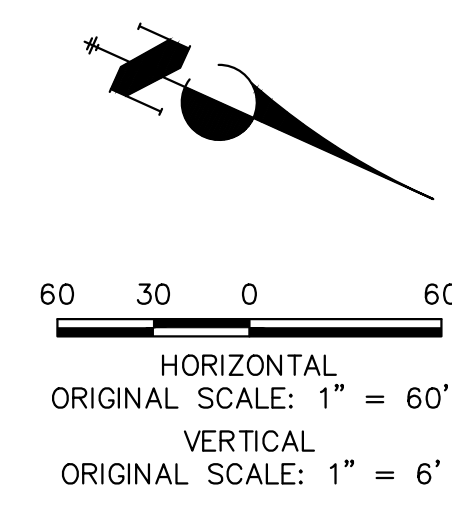
**SAND CREEK RESTORATION**  
CHANNEL STABLE GRADE  
PLAN AND PROFILE

SHEET 28 OF 121  
JOB NO. 25188.04

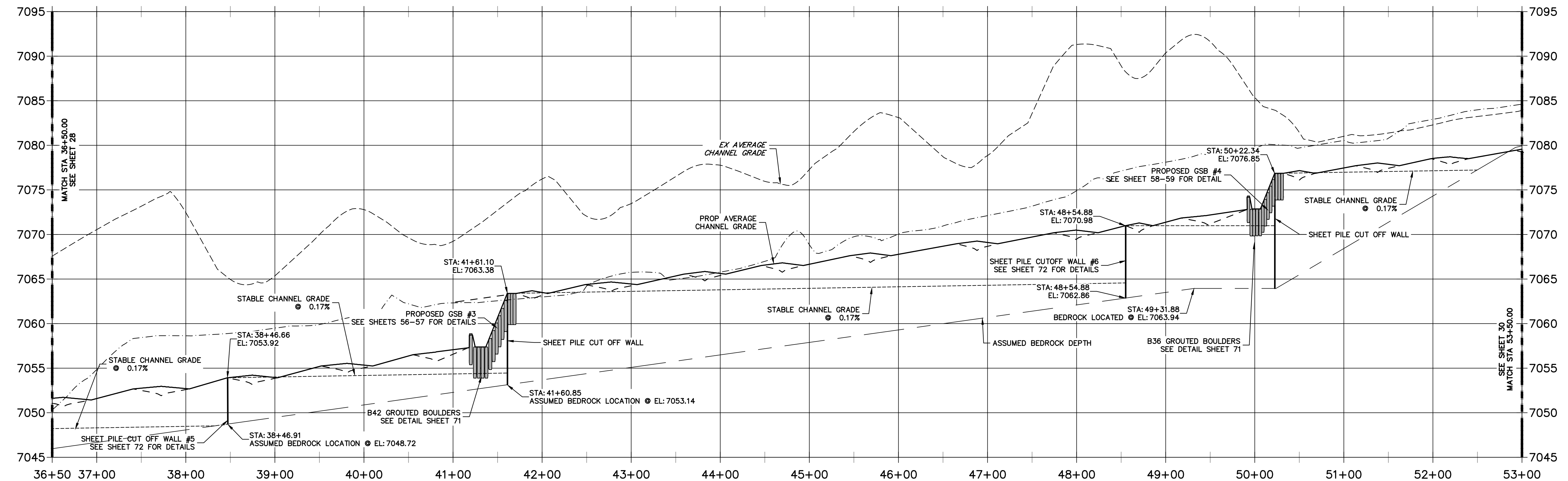


**LEGEND**

---	FINISHED GRADE PROFILE
⊙ CHANNEL	CHANNEL
---	THALWEG PROFILE
---	EXISTING GRADE PROFILE
⊙ CHANNEL	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**

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

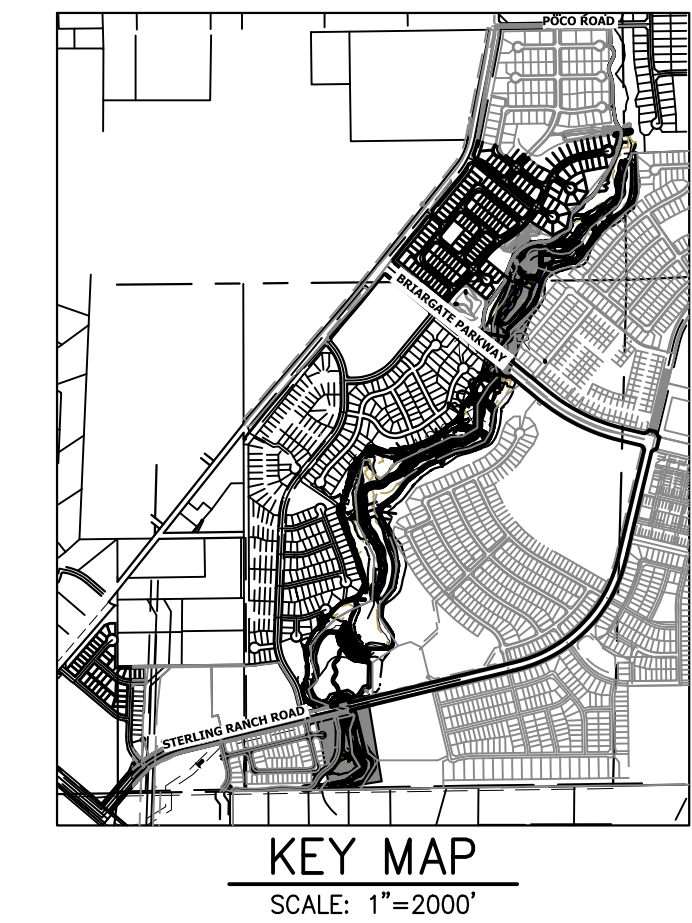
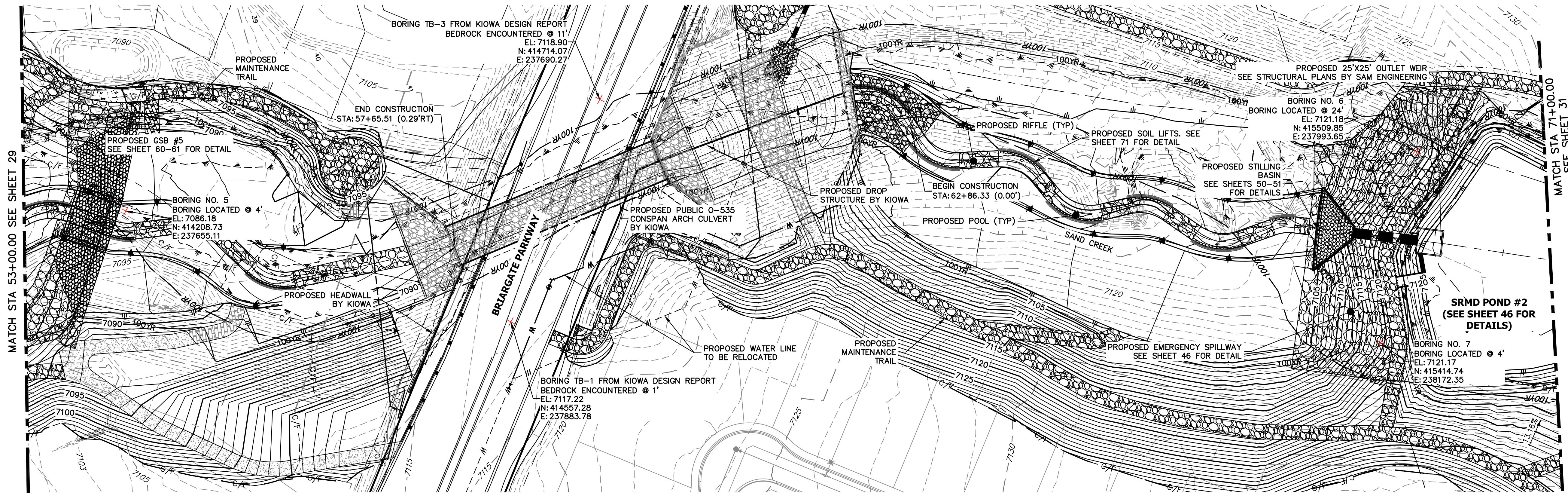


**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION

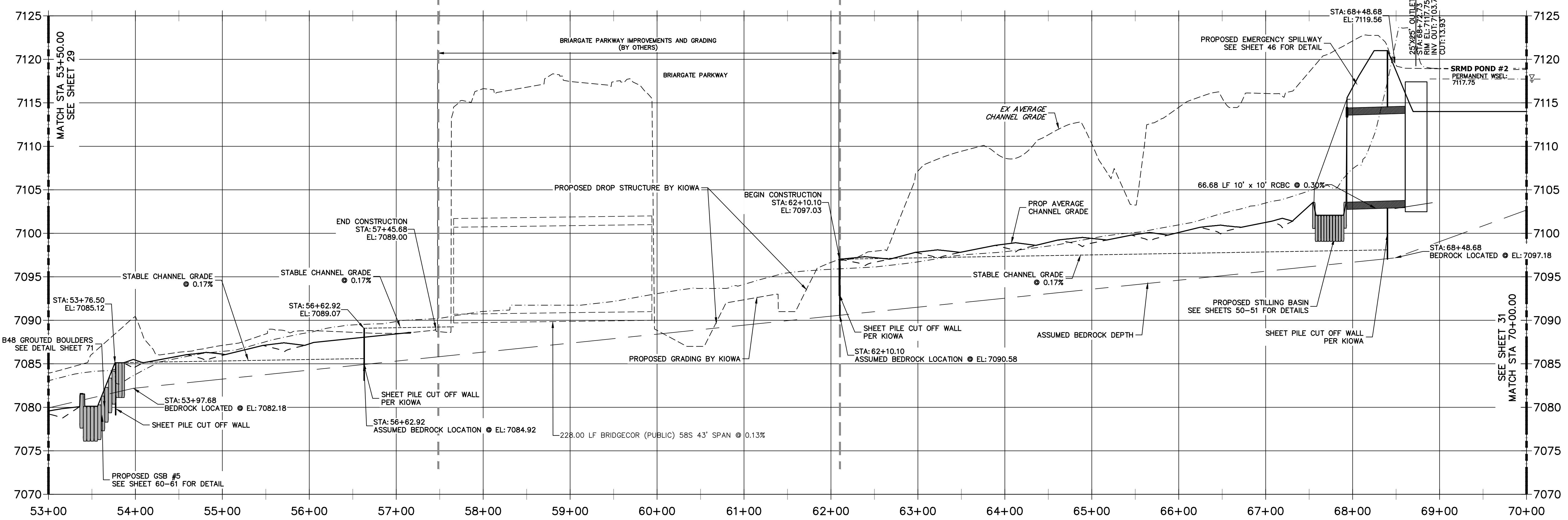
*Mike Bramlett*  
MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING

32314 11/20/23

PREPARED FOR <b>SR LAND, LLC</b> 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.	<b>J.R. ENGINEERING</b> 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	1"=60'	DESIGNED BY	DJV	CHECKED BY	NEO
V-SCALE	1"=6'	DATE	11/20/23		
<b>SAND CREEK RESTORATION</b> <b>CHANNEL STABLE GRADE PLAN AND PROFILE</b>		SHEET 29 OF 121 JOB NO. 25188.04			



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

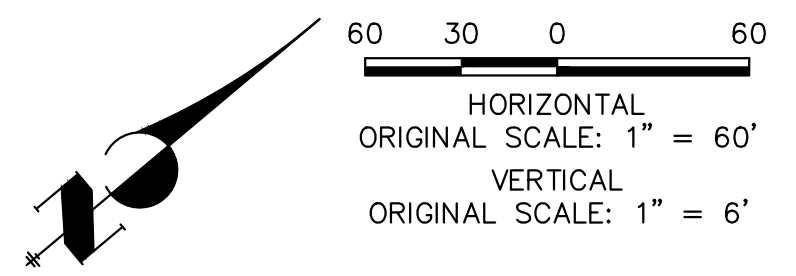


**LEGEND**

—————	FINISHED GRADE PROFILE
● CHANNEL @	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.



**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION

*Mike Bramlett*

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

32314 11/20/23

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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 303-740-8888 • Colorado Springs 719-583-2593  
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	NO.	REVISION

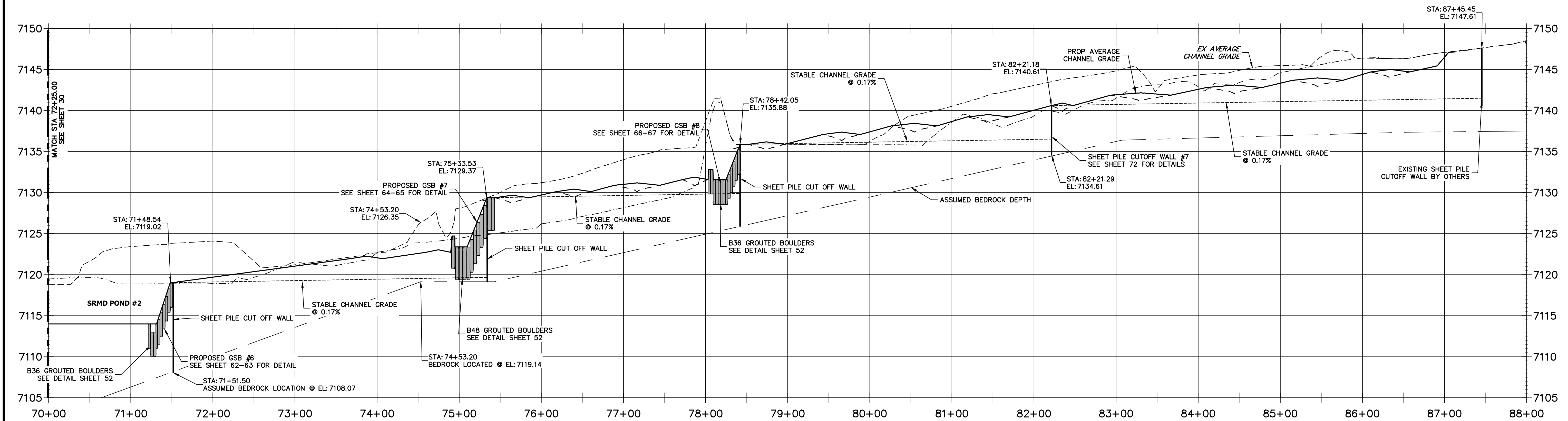
H-SCALE 1"=60'  
V-SCALE 1"=6'  
DATE 11/20/23  
DESIGNED BY DJV  
DRAWN BY NEO  
CHECKED BY

**SAND CREEK RESTORATION**  
**CHANNEL STABLE GRADE**  
**PLAN AND PROFILE**

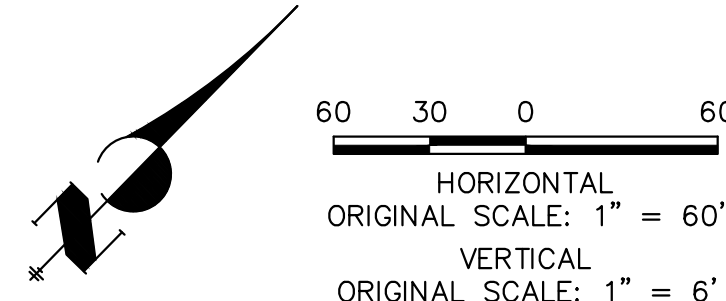
SHEET 30 OF 121  
JOB NO. 25188.04



**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.



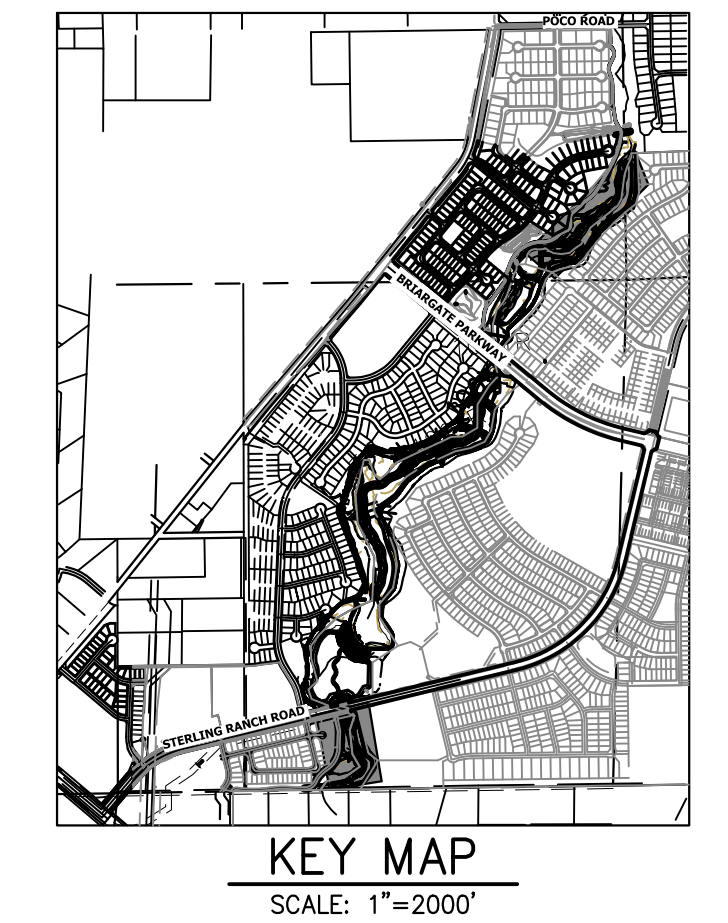
**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION

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

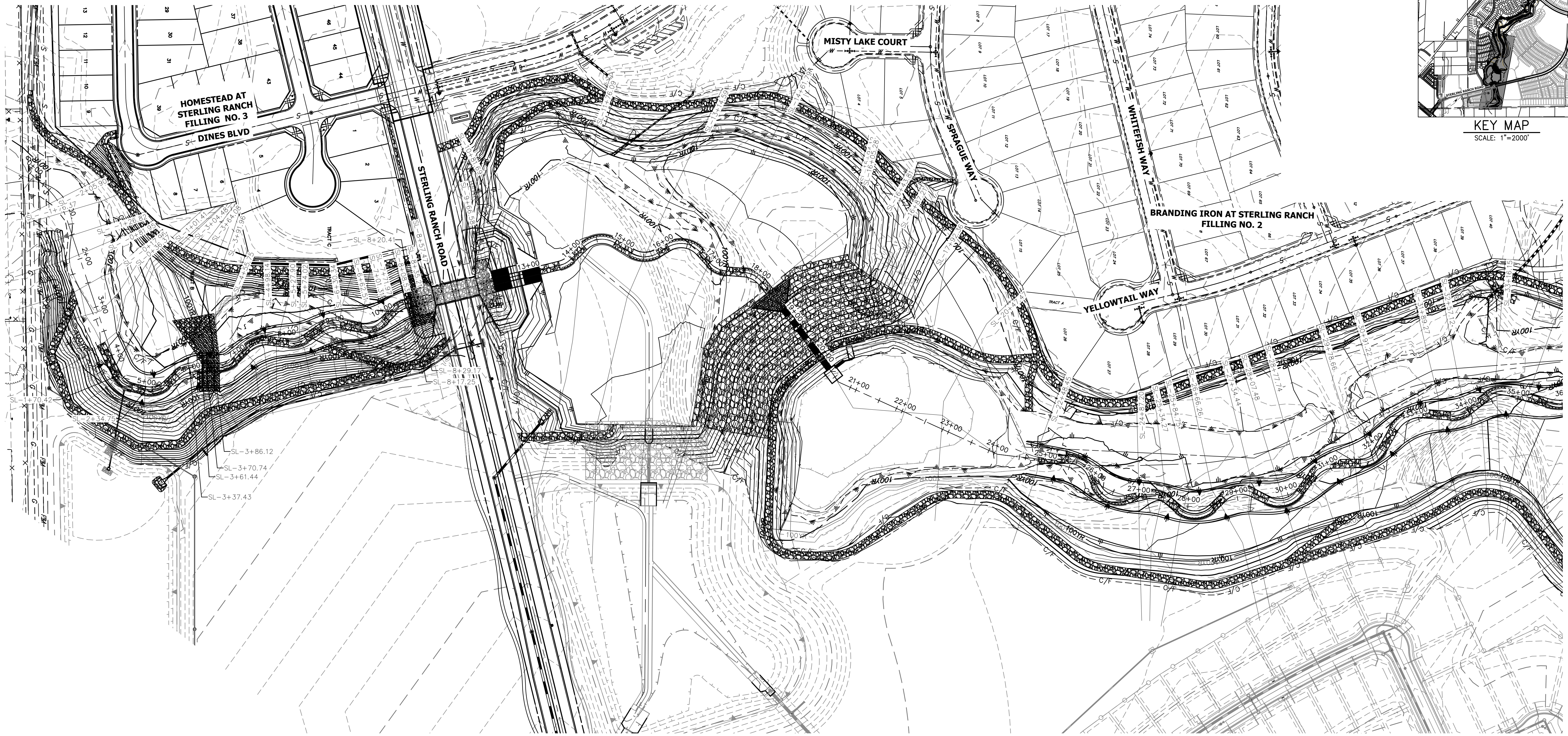
DATE: 11/20/23

**LEGEND**

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



PREPARED FOR <b>SR LAND, LLC</b> 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.
<b>J.R. ENGINEERING</b> A Westman Company Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	No. REVISION
	H-SCALE 1"=60' V-SCALE 1"=6' DATE 11/20/23 DESIGNED BY DJV DRAWN BY NEO CHECKED BY
SAND CREEK RESTORATION CHANNEL STABLE GRADE PLAN AND PROFILE	SHEET 31 OF 121 JOB NO. 25188.04



**BANKFULL CROSS SECTION – SAND CREEK**  
**STA: 1+00 TO 35+00**

SCALE: 1"=100'

**BENCHMARK**

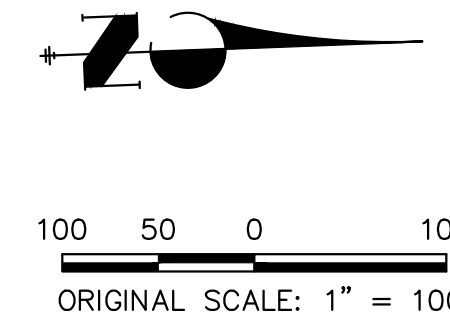
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853" AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
 NORTHING = 411416.273  
 EASTING = 235167.071  
 ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION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

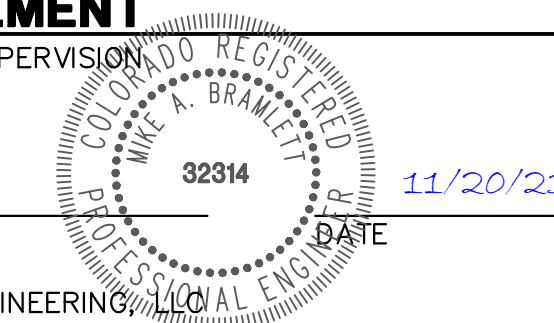
THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE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



**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION

*Mike Bramlett*  
 MIKE A. BRAMLETT, P.E.  
 COLORADO P.E. 32314



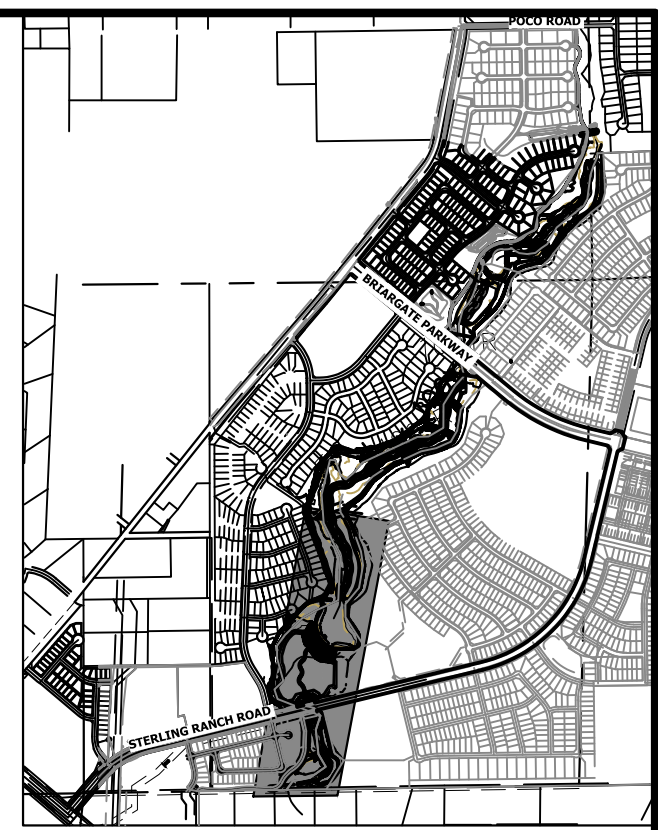
FOR AND ON BEHALF OF JR ENGINEERING, INC. LOCAL ENGINEER

SAND CREEK RESTORATION	H-SCALE		V-SCALE		DATE	DESIGNED BY	DRAWN BY	CHECKED BY
	1"=100'	N/A	N/A	N/A	11/20/23	DJV	NEO	
CROSS SECTIONS	BY DATE							
	No.	REVISION						
SHEET 32 OF 121	JOB NO. 25188.04							

**J.R. ENGINEERING**  
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 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.



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

**BENCHMARK**

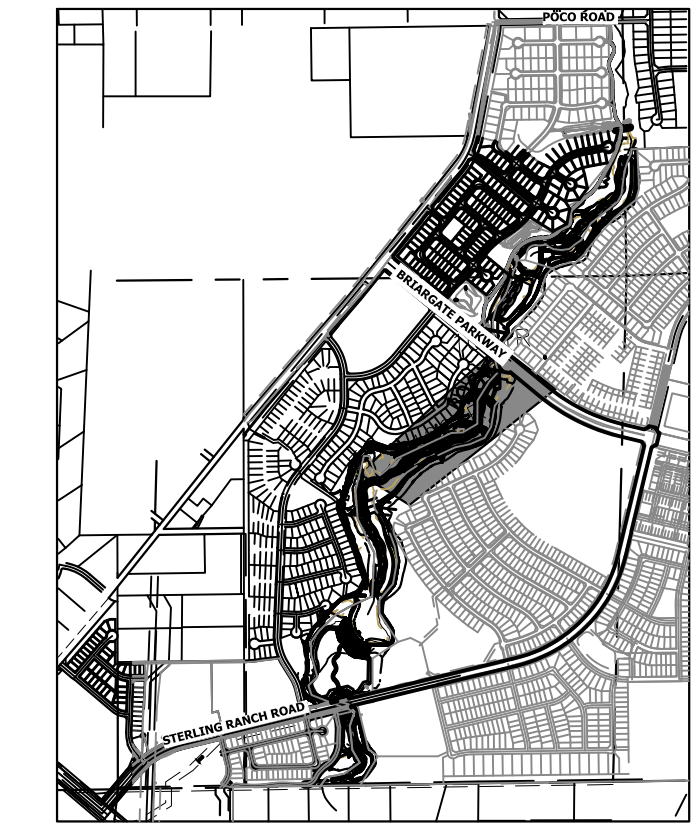
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
 NORTHING = 411416.273  
 EASTING = 235167.071  
 ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION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

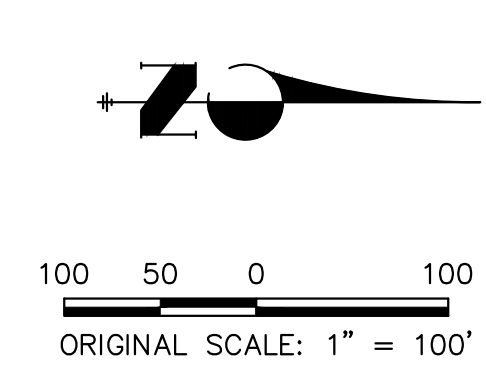
SEE SHEETS 35-40 FOR CROSS SECTIONS

**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.

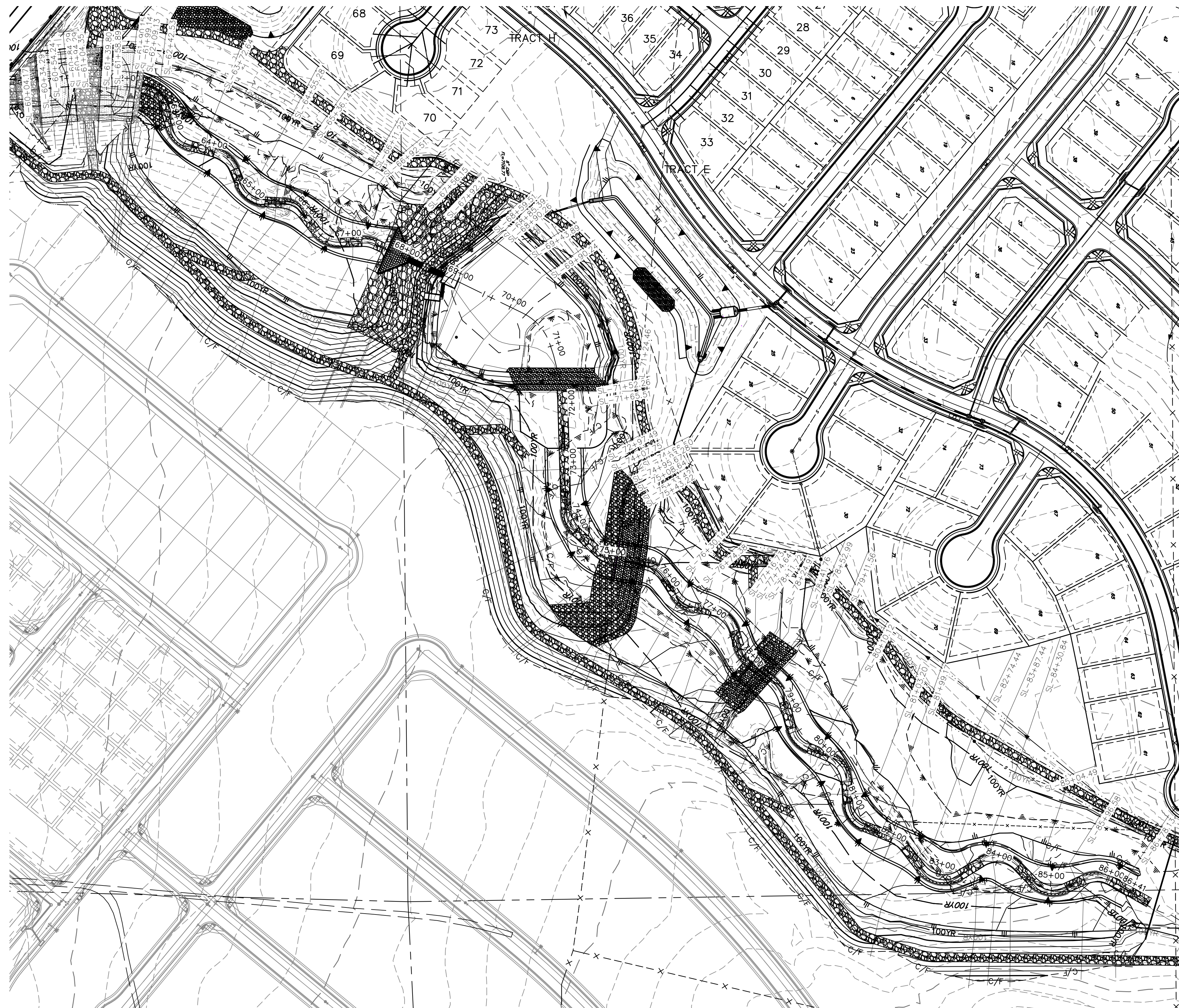


KEY MAP  
 SCALE: 1"=2000'

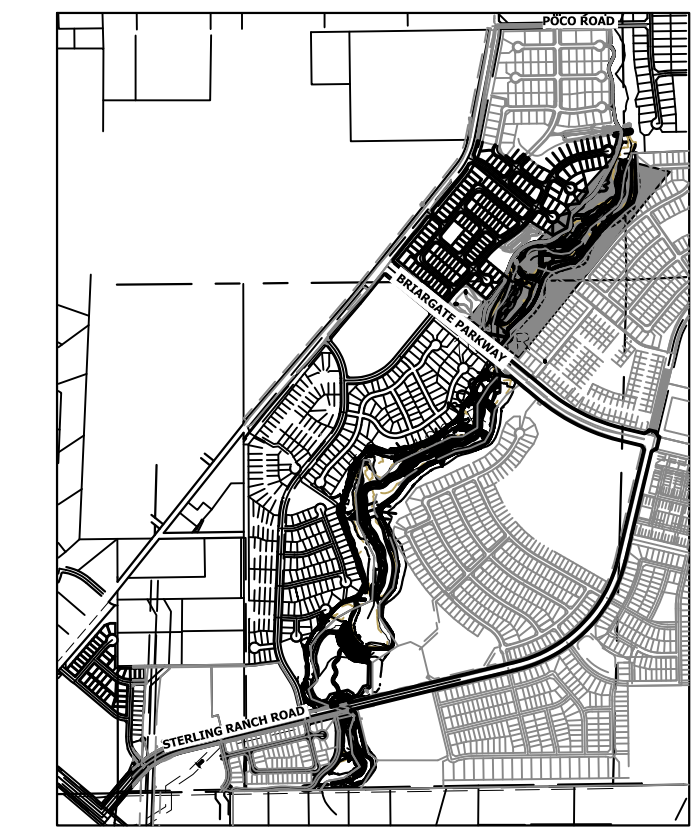


**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION  
 Mike Bramlett  
 MIKE A. BRAMLETT, P.E.  
 COLORADO P.E. 32314  
 FOR AND ON BEHALF OF JR ENGINEERING  
 11/20/23

SAND CREEK RESTORATION CROSS SECTIONS	H-SCALE 1"=100'	V-SCALE N/A	DATE 11/20/23	DESIGNED BY DJV	DRAWN BY NEO	CHECKED BY	
	No.	REVISION	BY	DATE	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.	
SHEET 33 OF 121	JOB NO. 25188.04		J.R. ENGINEERING A Westman Company Centennial 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	J.R. ENGINEERING A Westman Company			PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024



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



KEY MAP  
 SCALE: 1"=2000'

**BENCHMARK**

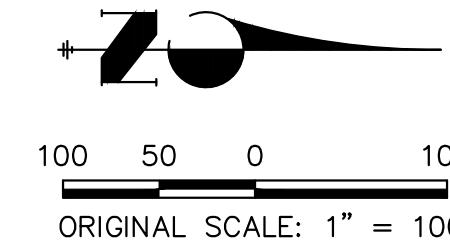
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
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 ELEVATION = 7030.82

**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.

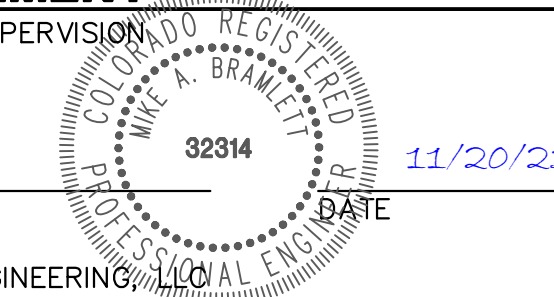


**ENGINEER'S STATEMENT**


PREPARED UNDER MY DIRECT SUPERVISION

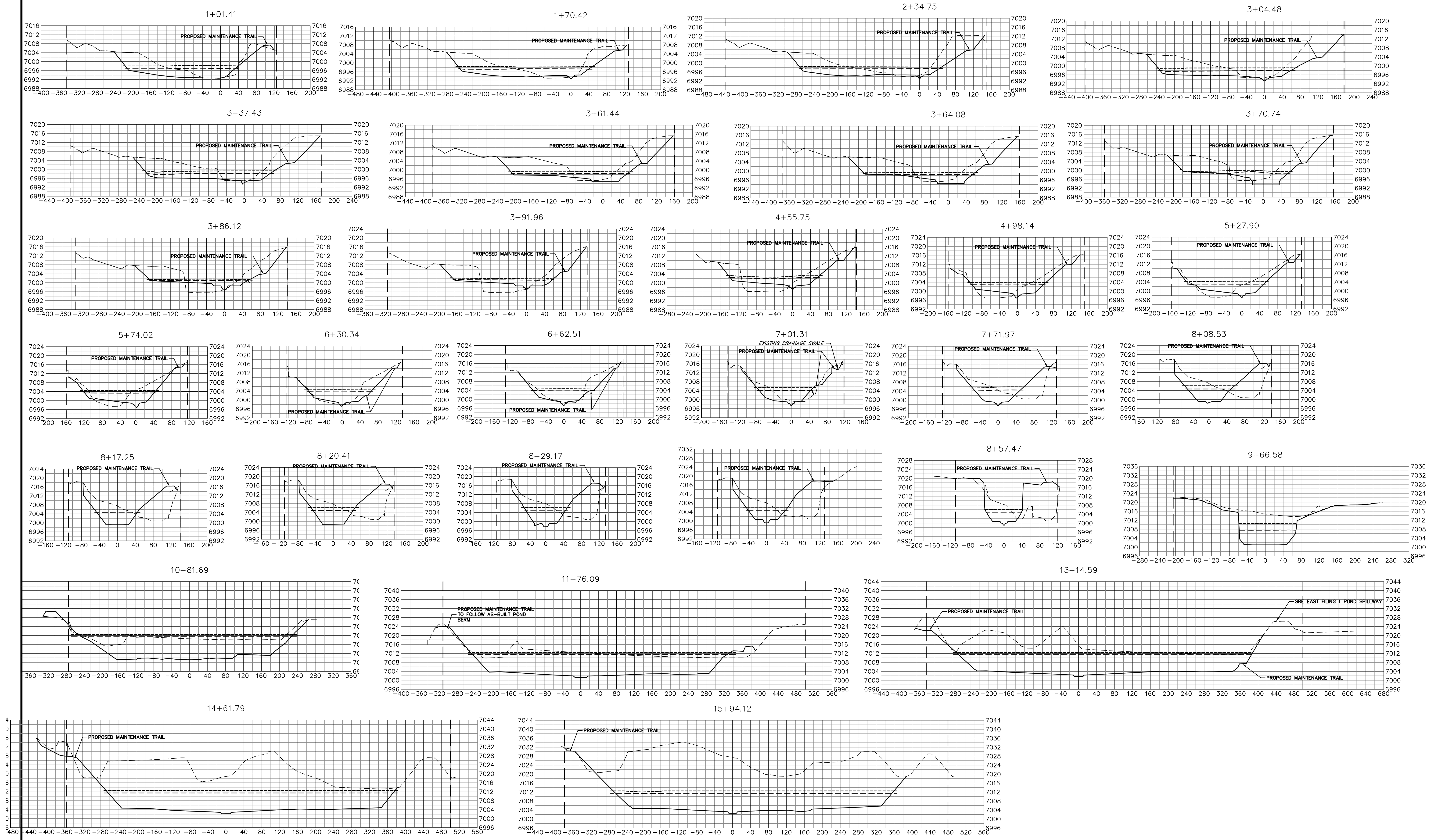
*Mike Bramlett*

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



DATE 11/20/23

PREPARED FOR <b>SR LAND, LLC</b> 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 USES DESIGNATED BY WRITTEN AUTHORIZATION.	<b>J.R. ENGINEERING</b> 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	1"=100'	V-SCALE	N/A	DATE	11/20/23
DESIGNED BY	DJV	DRAWN BY	NEO	CHECKED BY	
SAND CREEK RESTORATION CROSS SECTIONS		SHEET 34 OF 121 JOB NO. 25188.04			

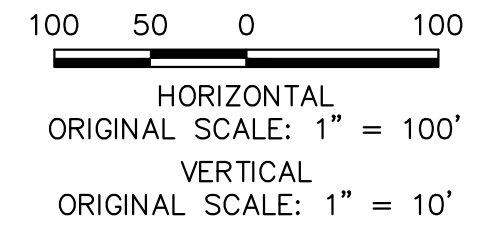


**BENCHMARK**

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
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 ELEVATION = 7023.42
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 ELEVATION = 7000.40
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 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

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

DATE: 11/20/23

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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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 Centennial 300-740-9383 • Colorado Springs 719-583-2583  
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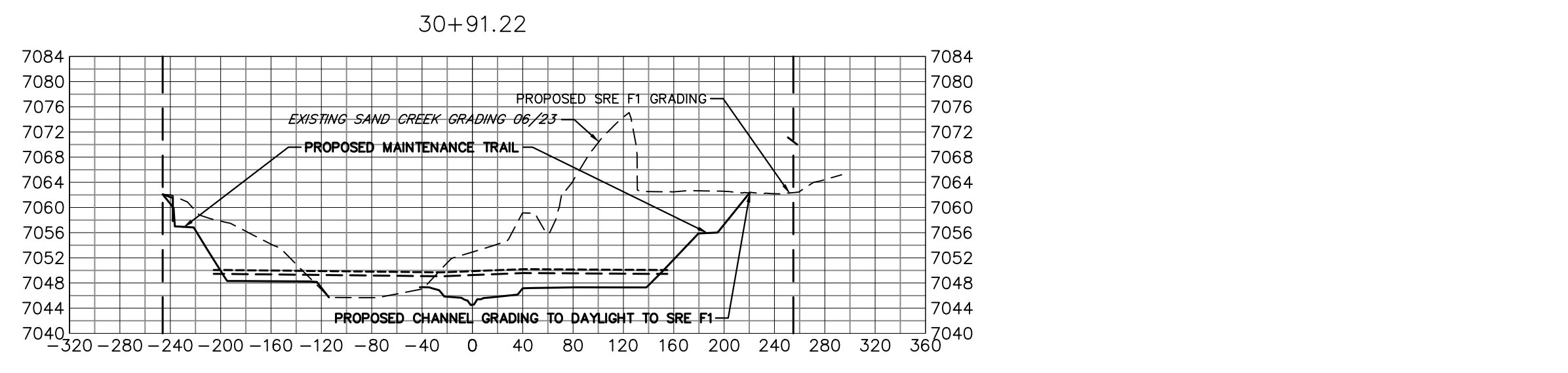
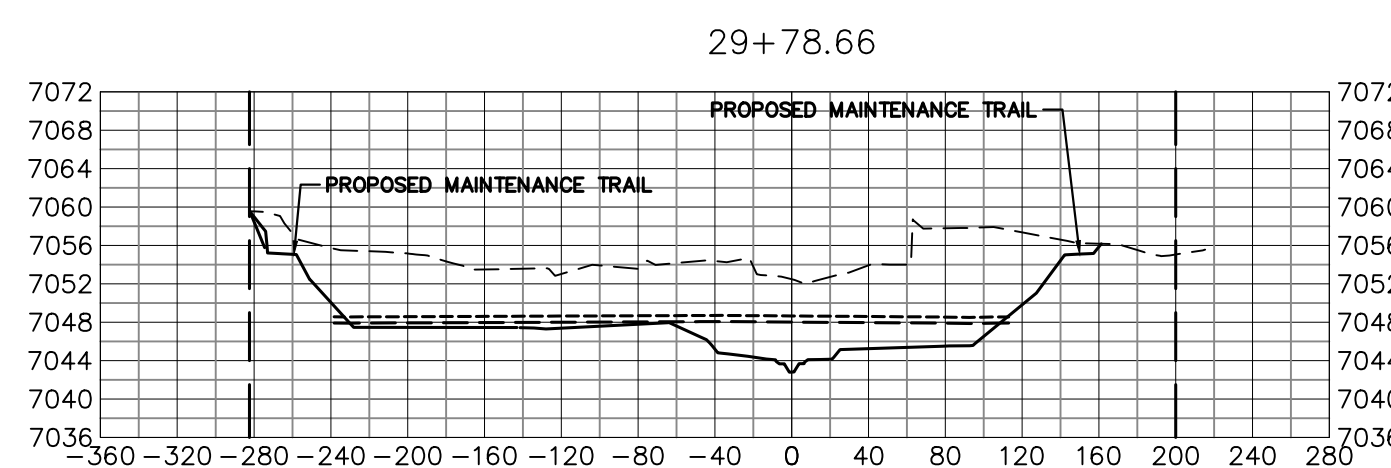
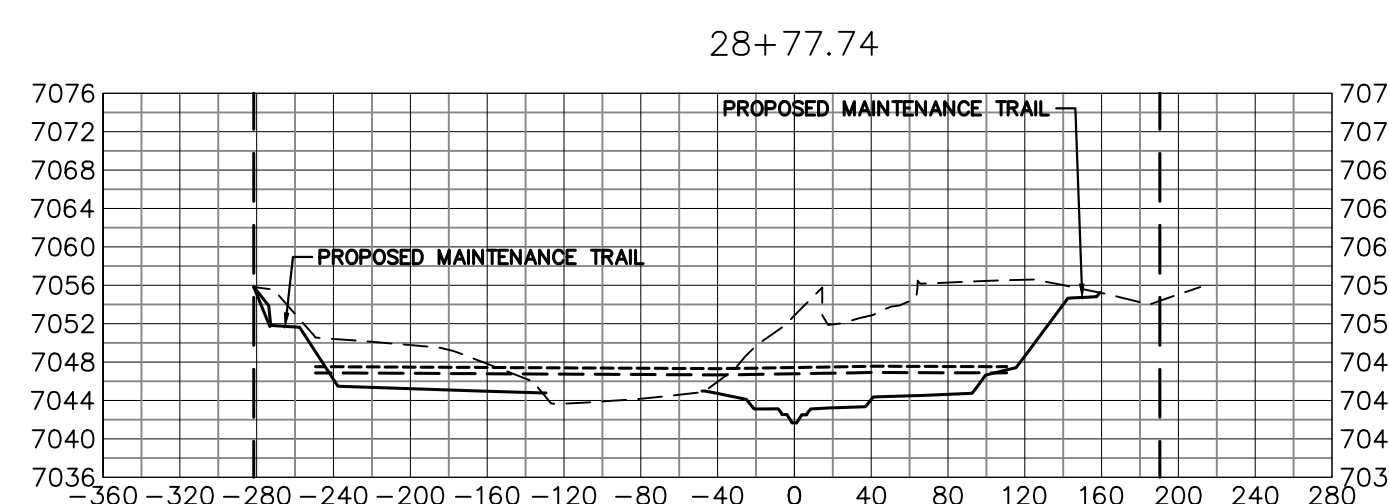
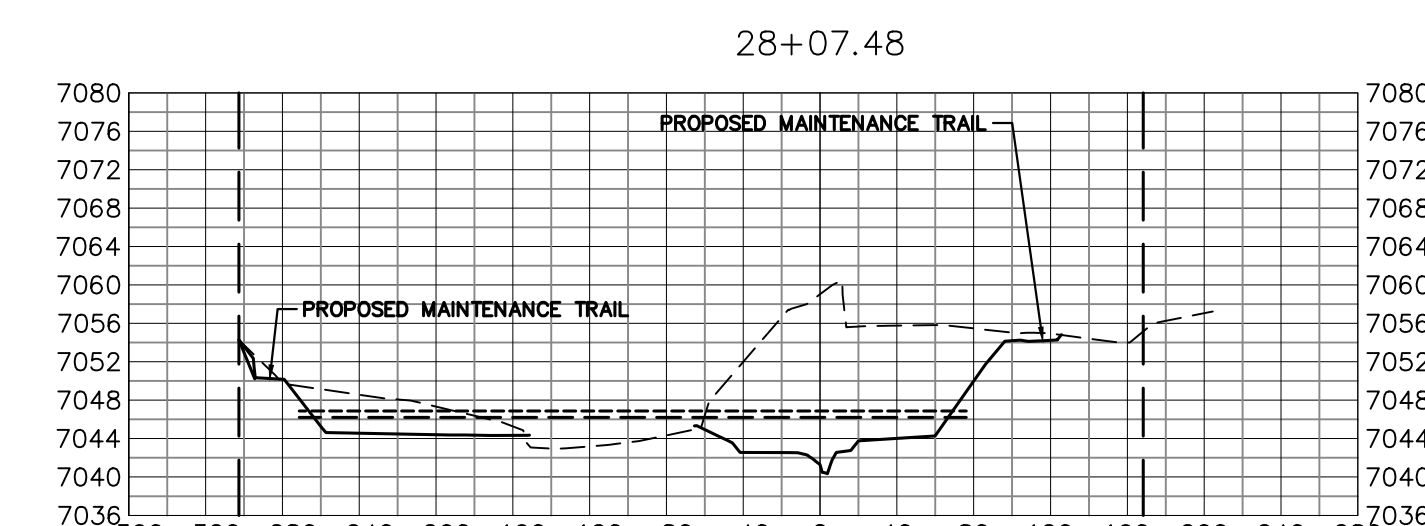
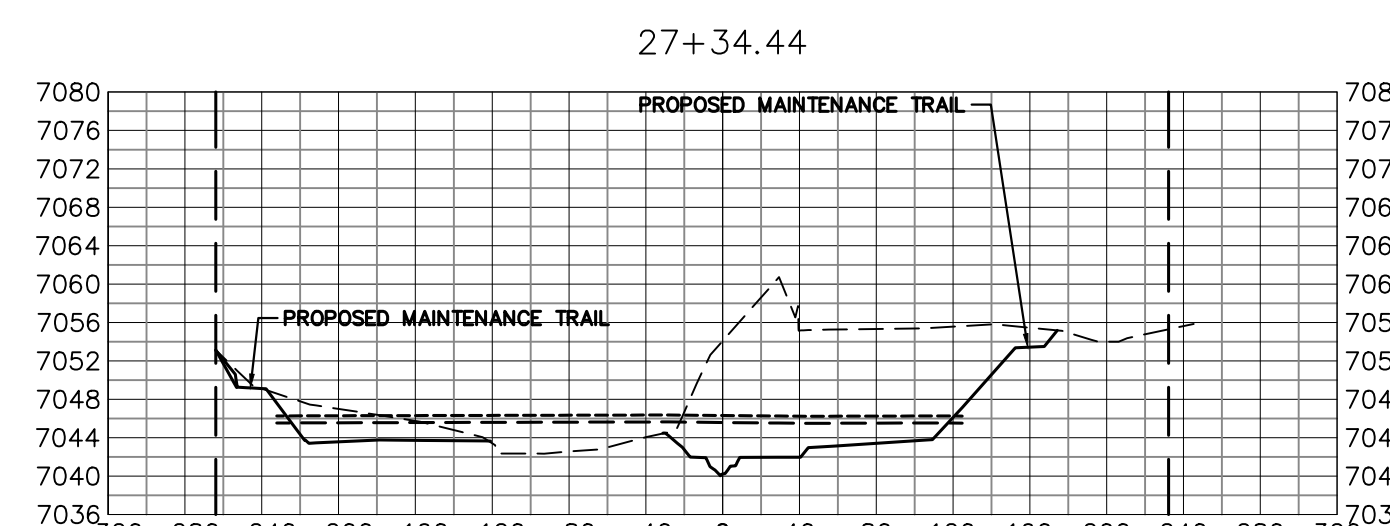
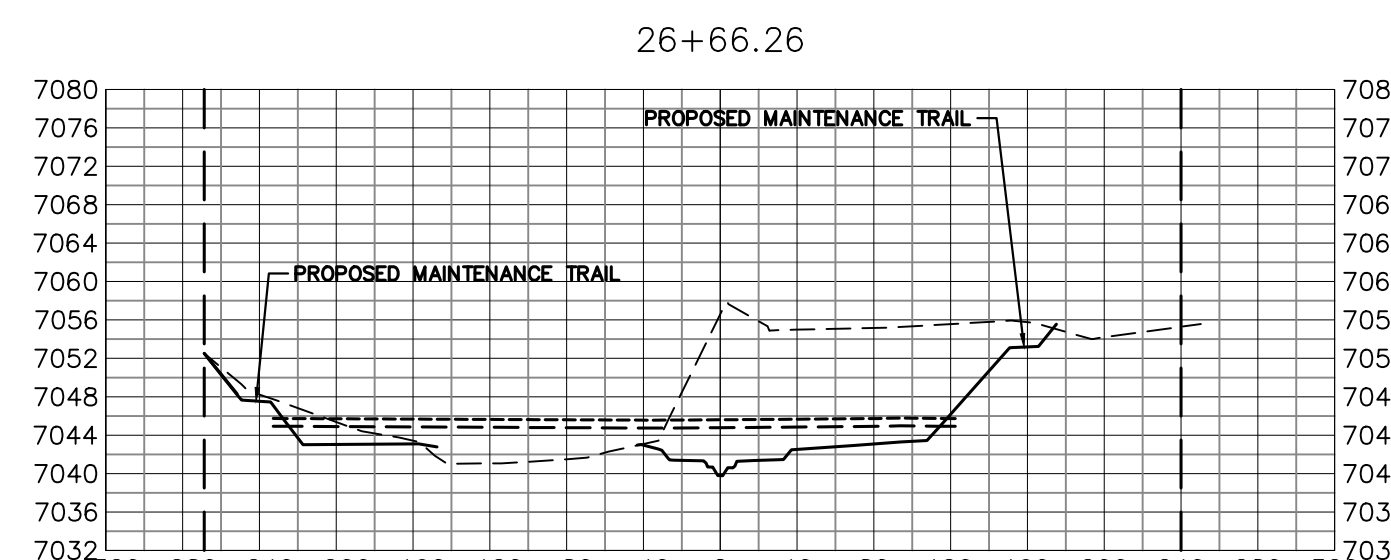
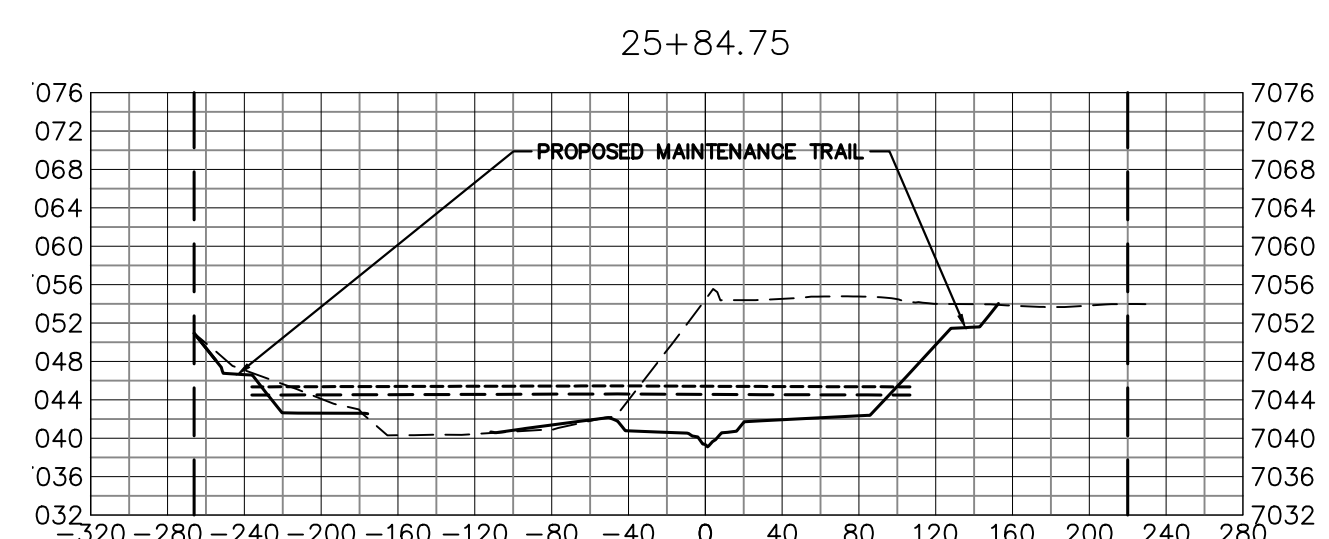
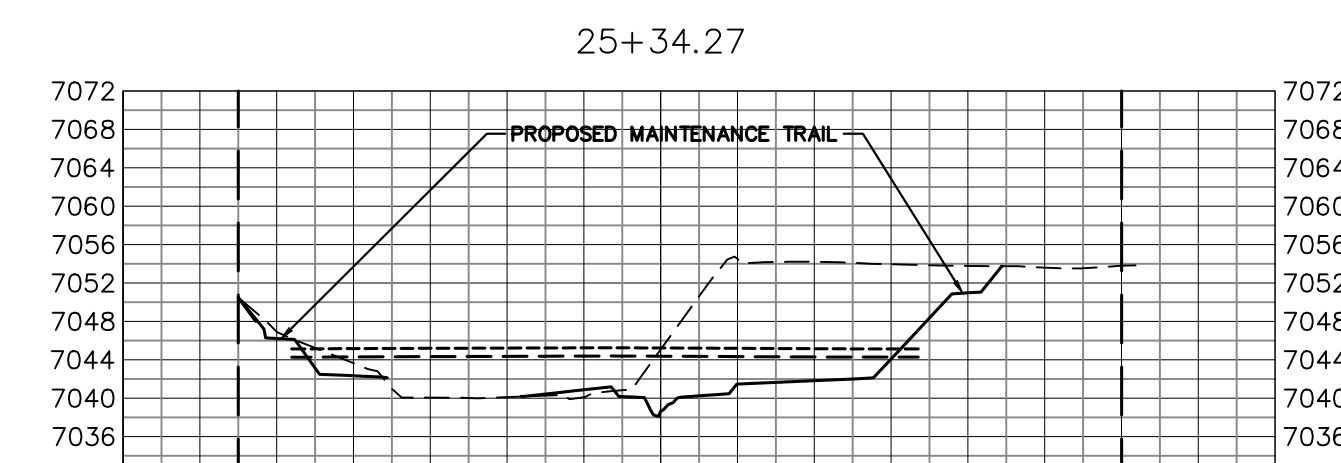
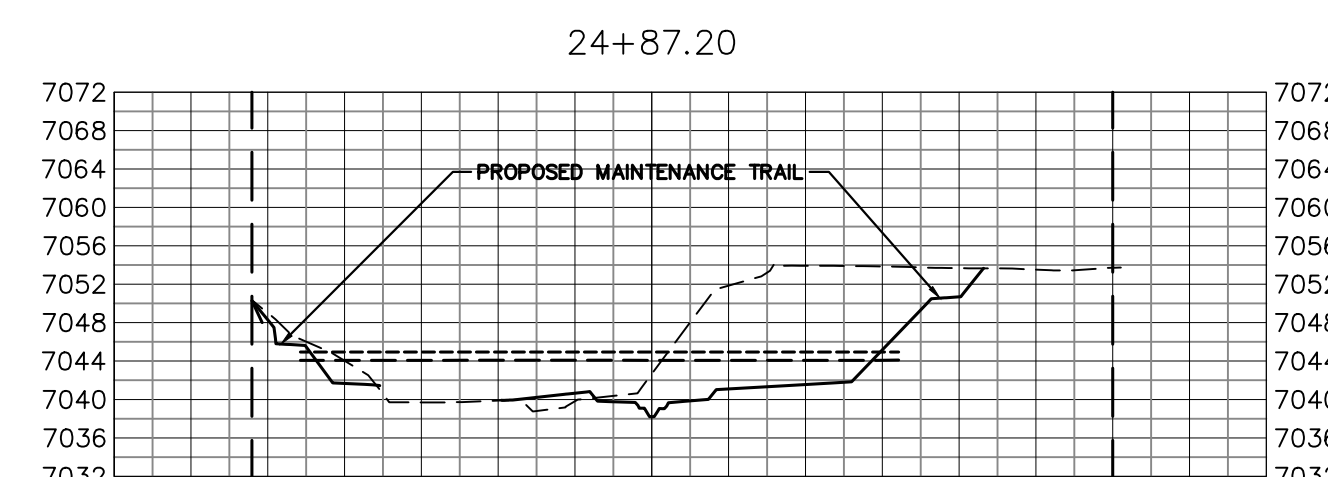
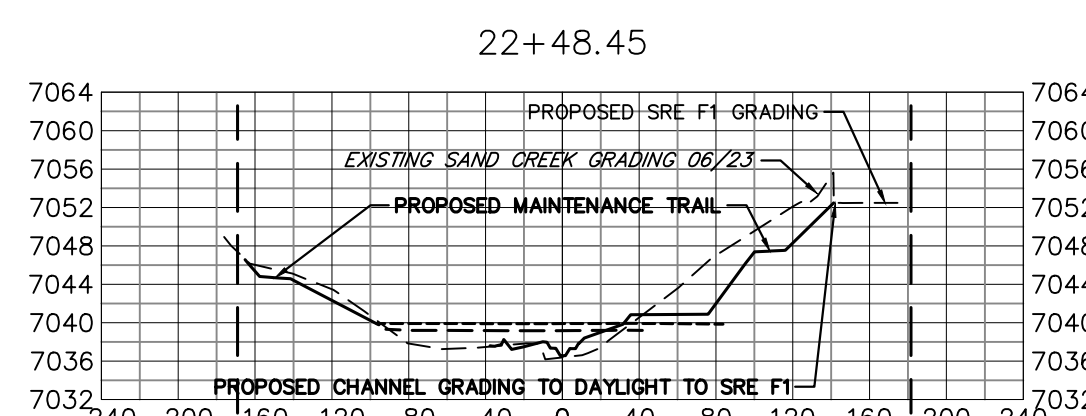
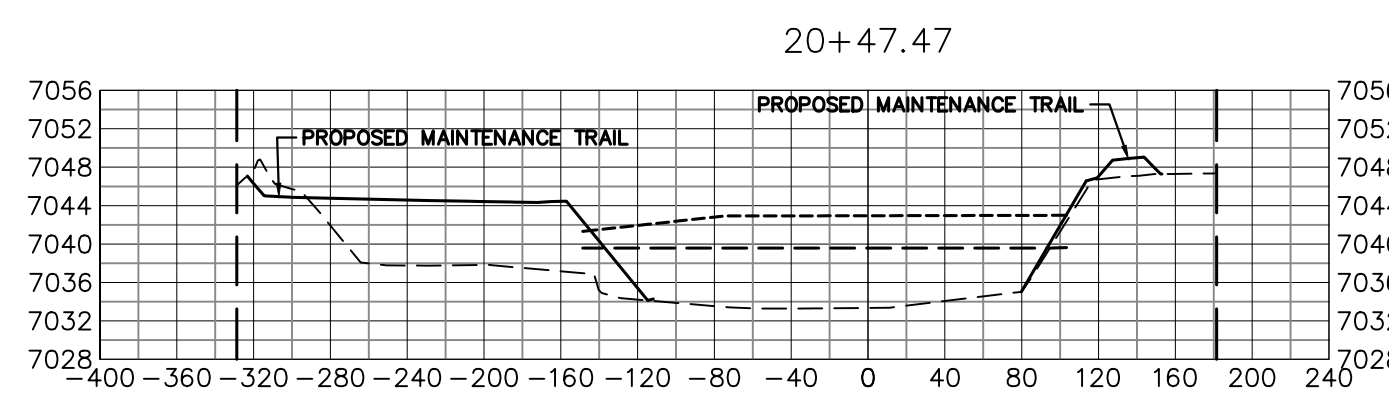
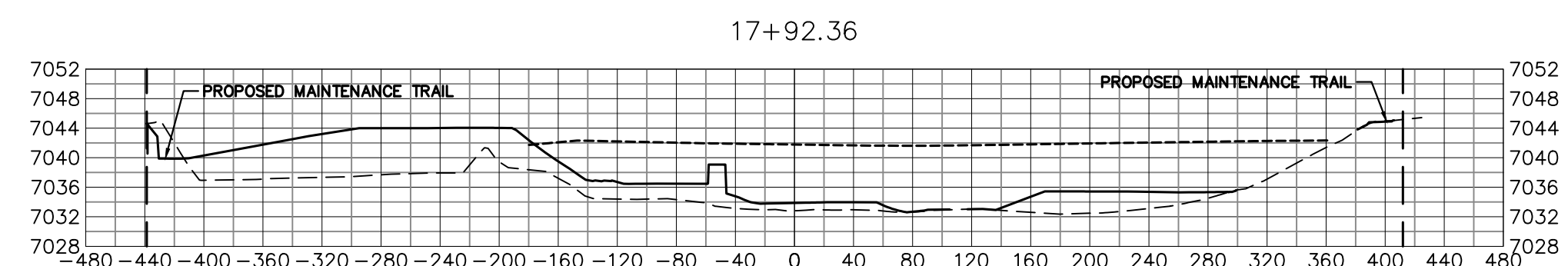
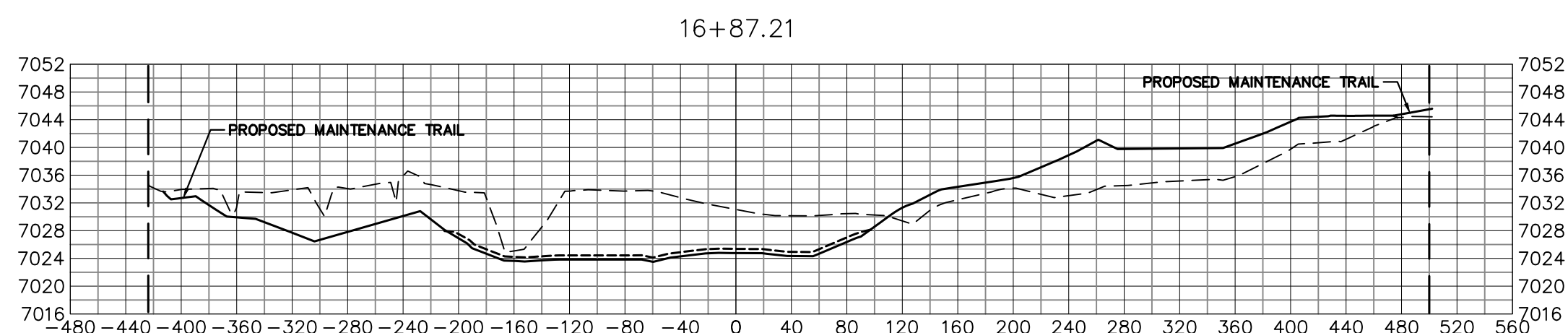
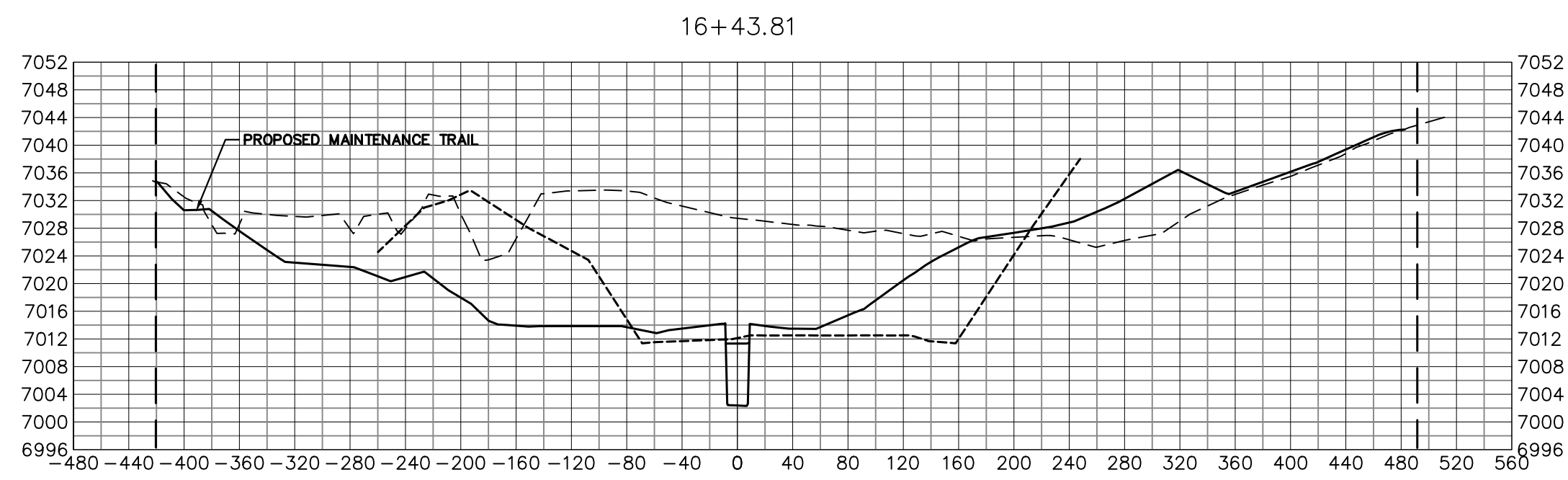
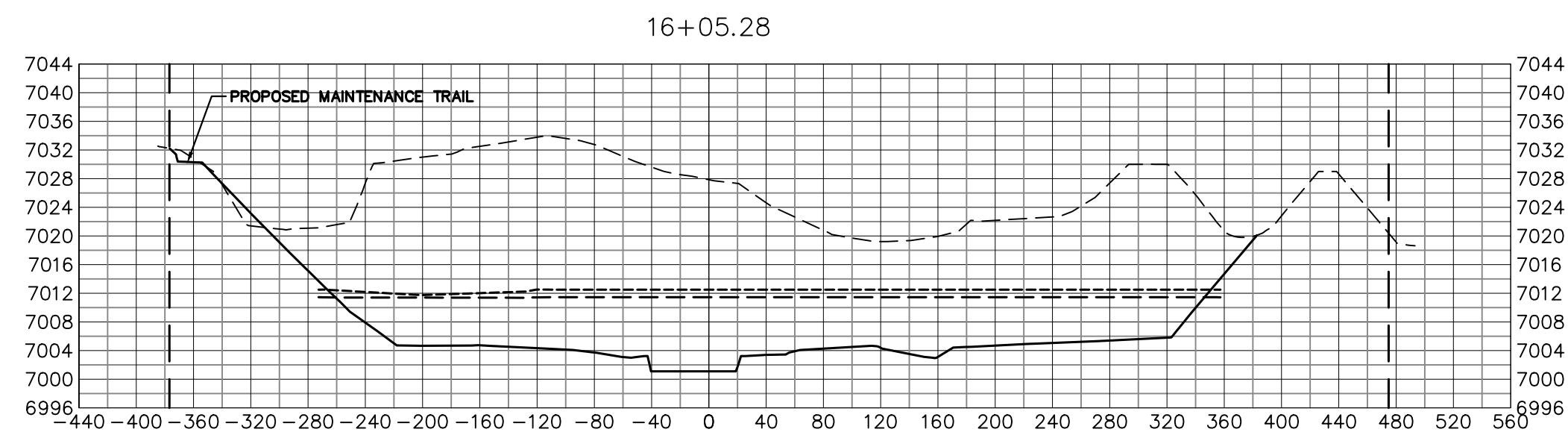
NO.	REVISION	DATE	BY

H-SCALE: 1"=100'  
 V-SCALE: 1"=10'  
 DATE: 12/18/23  
 DESIGNED BY: DJV  
 DRAWN BY: NEO  
 CHECKED BY: 

**SAND CREEK RESTORATION**

**CROSS SECTIONS**

SHEET 35 OF 121  
 JOB NO. 25188.04



**BENCHMARK**

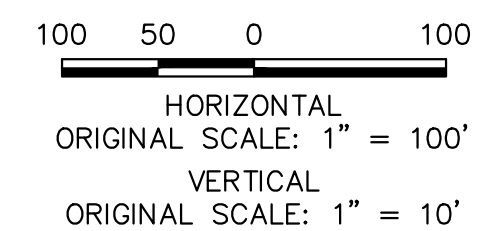
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411416.273  
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ELEVATION = 7000.40
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NORTHING = 411399.962  
EASTING = 233849.817  
ELEVATION = 7030.82

**LEGEND**

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

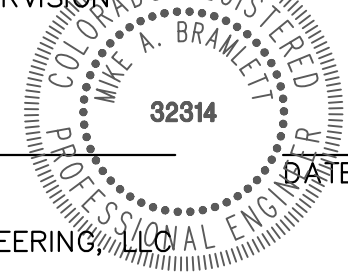
**BASIS OF BEARINGS**

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.



**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION

Mike Bramlett  
  
 11/20/23  
 MIKE A. BRAMLETT, P.E.  
 COLORADO P.E. 32314  
 FOR AND ON BEHALF OF JR ENGINEERING

SAND CREEK RESTORATION

CROSS SECTIONS

SHEET 36 OF 121

JOB NO. 25188.04

BY DATE

No. REVISION

H-SCALE 1"=100'

V-SCALE 1"=10'

DATE 11/20/23

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

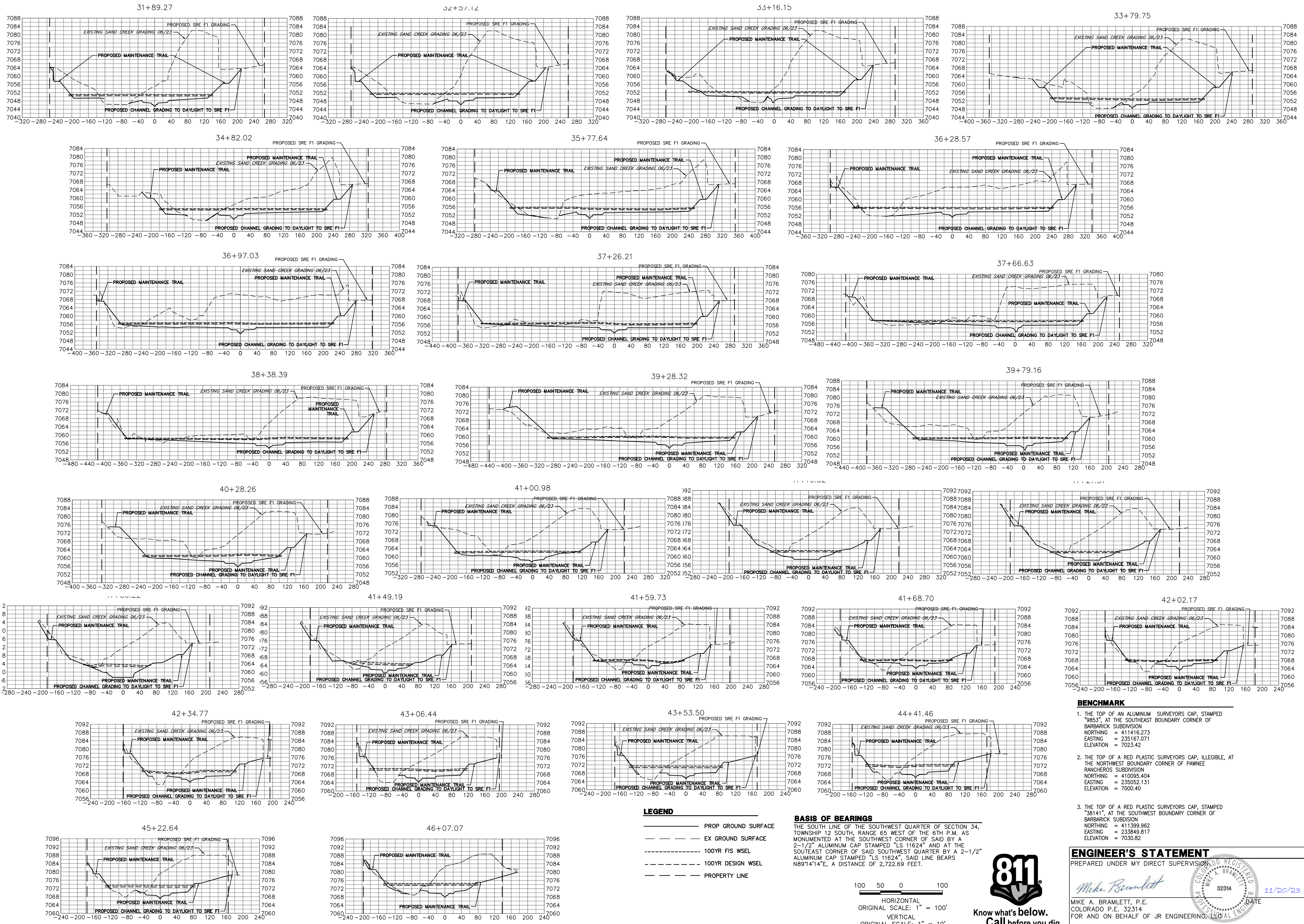
J.R. ENGINEERING  
 A Westcon Company



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

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

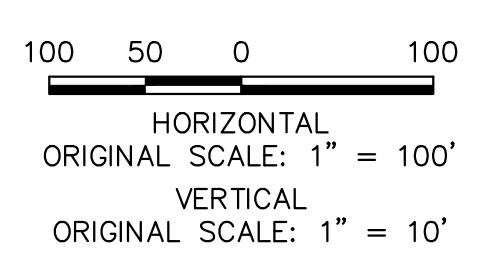
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**LEGEND**

- 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**
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 NORTHING = 411399.962  
 EASTING = 233849.817  
 ELEVATION = 7030.82

**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION

*Mike Bramlett*

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

DATE: 11/20/23

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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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 Centennial 300-740-9888 • Colorado Springs 719-583-2583  
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BY	DATE	REVISION

H-SCALE 1"=100'  
 V-SCALE 1"=10'  
 DATE 11/20/23  
 DESIGNED BY DUV  
 DRAWN BY NEO  
 CHECKED BY

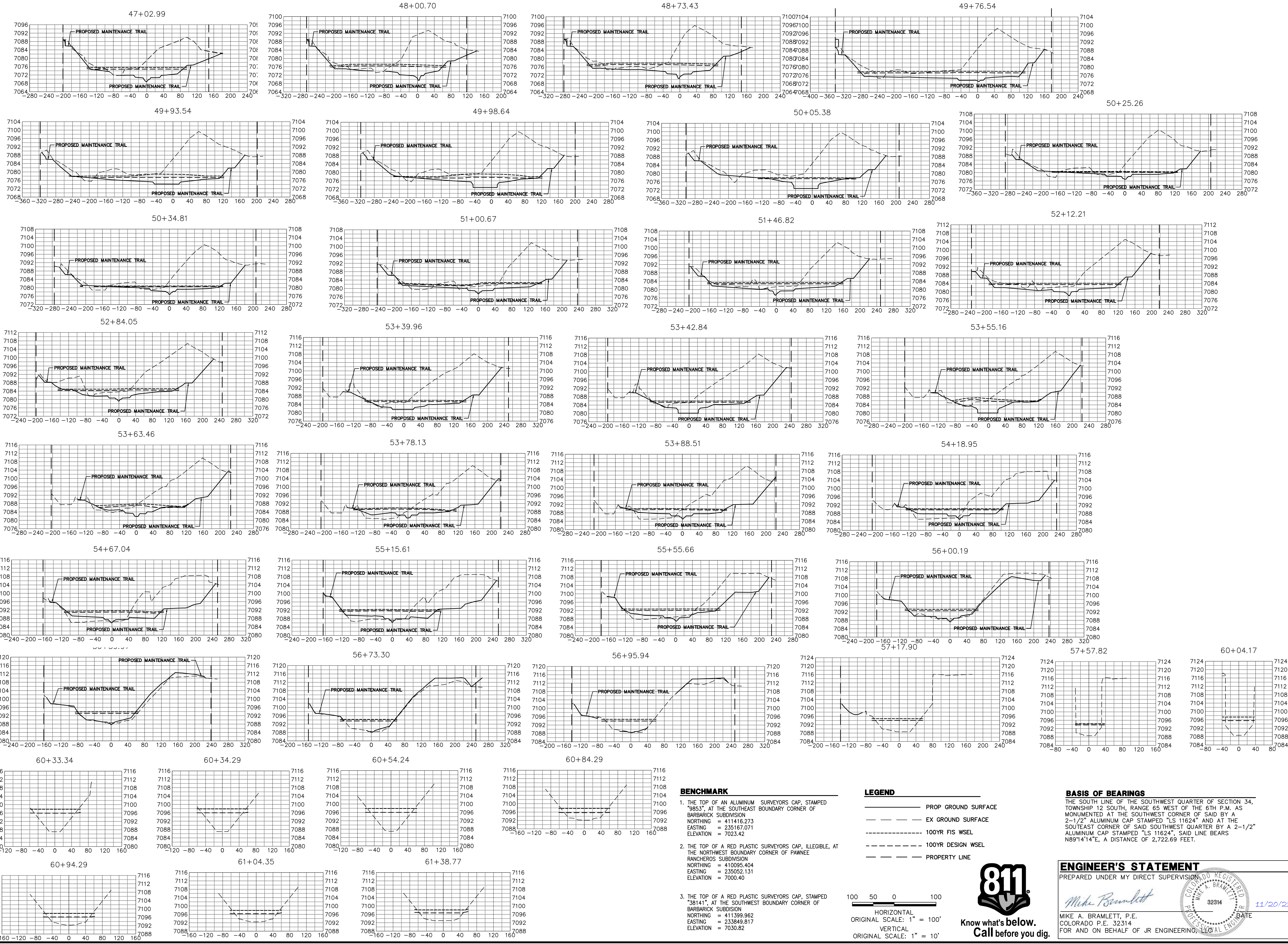
**SAND CREEK RESTORATION**

**CROSS SECTIONS**

SHEET 37 OF 121

JOB NO. 25188.04

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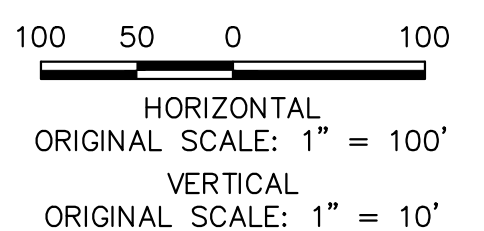


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EASTING = 235349.817  
ELEVATION = 7030.82

**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 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

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

32314  
11/20/23



SAND CREEK RESTORATION  
CROSS SECTIONS  
SHEET 38 OF 121  
JOB NO. 25188.04

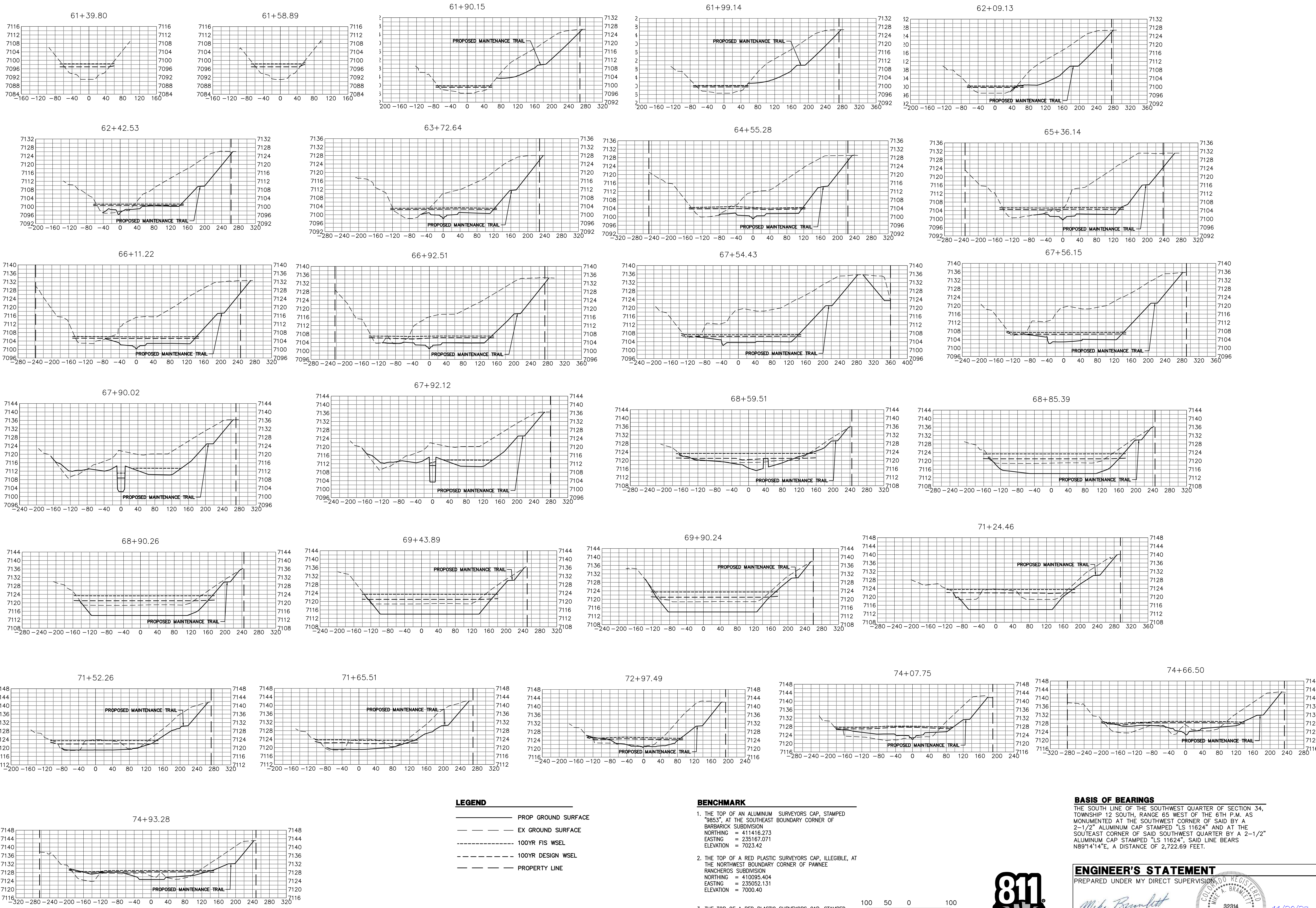
No.	REVISION	BY	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE 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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**LEGEND**

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

**BENCHMARK**

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 NORTHING = 411399.962  
 EASTING = 233849.817  
 ELEVATION = 7030.82

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 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.

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 PREPARED UNDER MY DIRECT SUPERVISION

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

32314  
 11/20/23

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

NO.	REVISION	BY	DATE

H-SCALE 1"=100'  
 V-SCALE 1"=10'  
 DATE 11/20/23  
 DESIGNED BY DJV  
 DRAWN BY NEO  
 CHECKED BY

**SAND CREEK RESTORATION**  
**CROSS SECTIONS**

SHEET 39 OF 121  
 JOB NO. 25188.04

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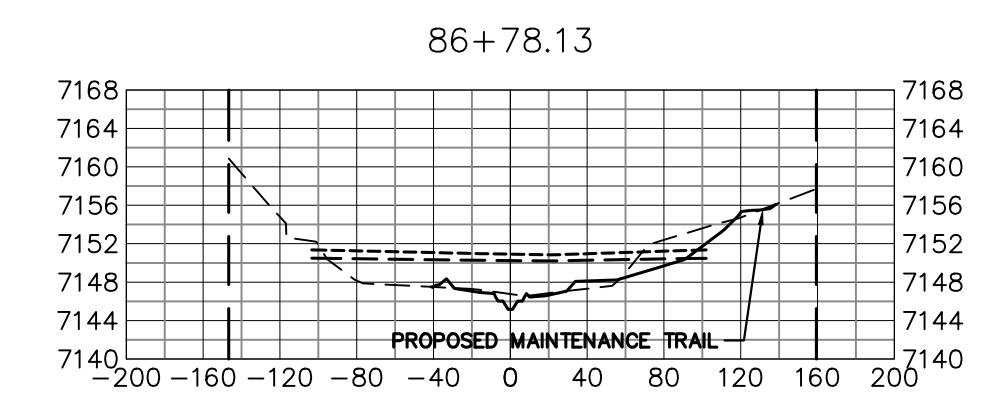
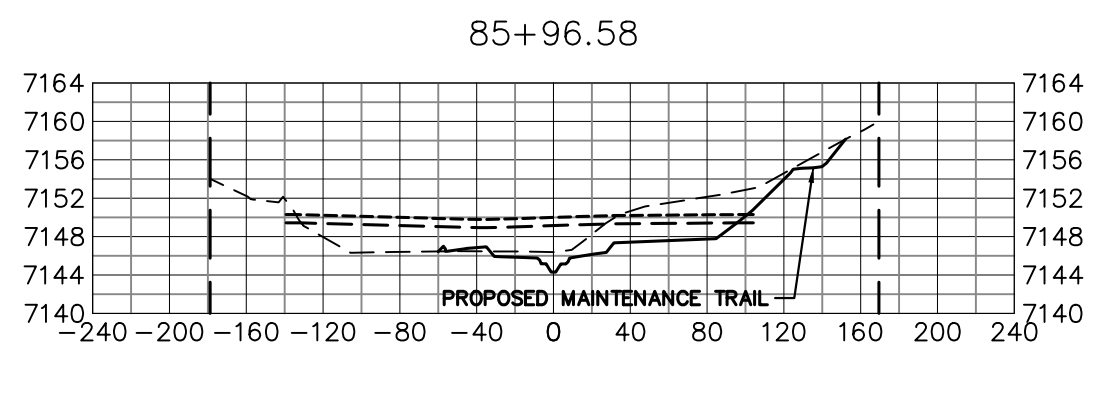
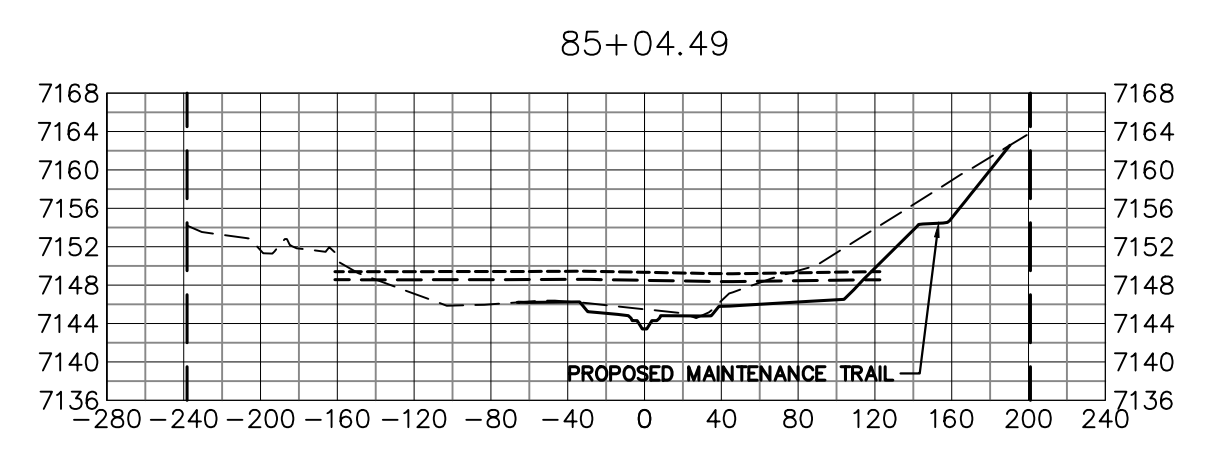
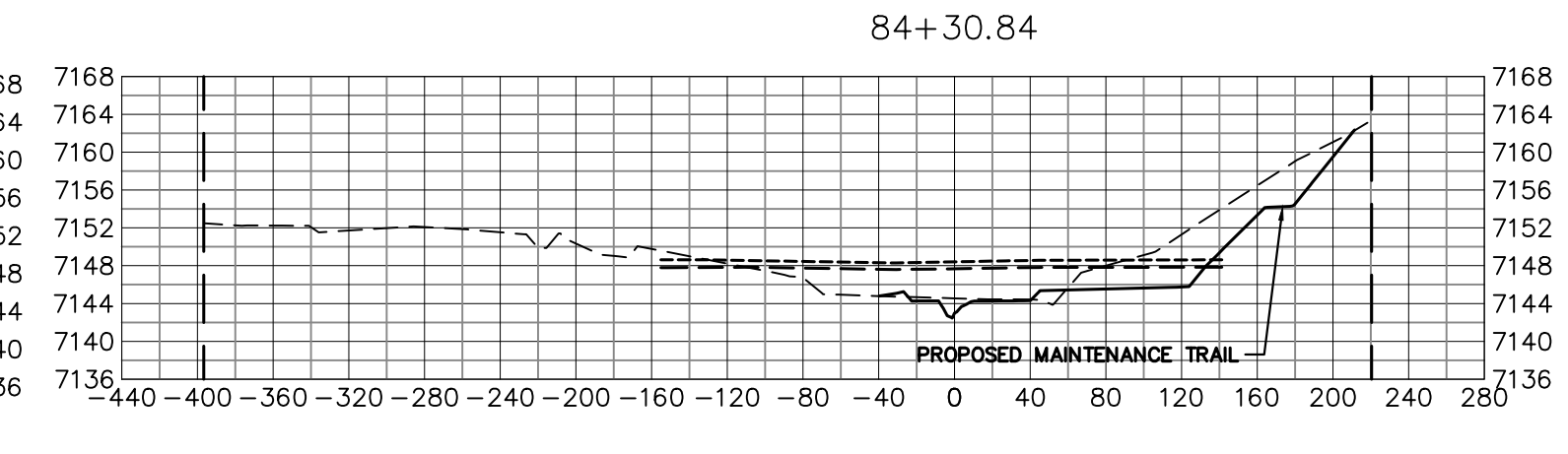
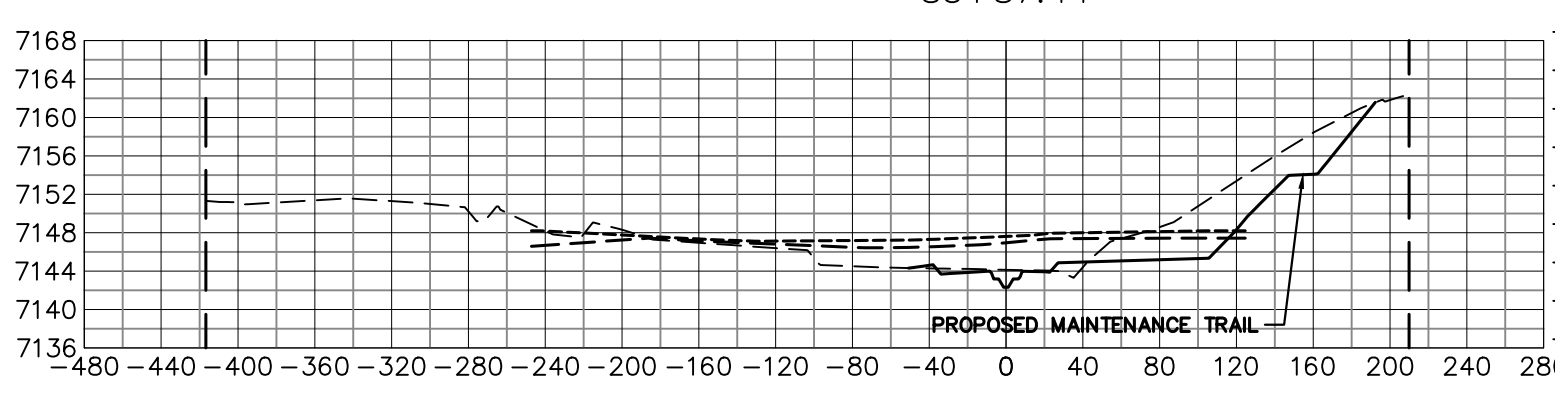
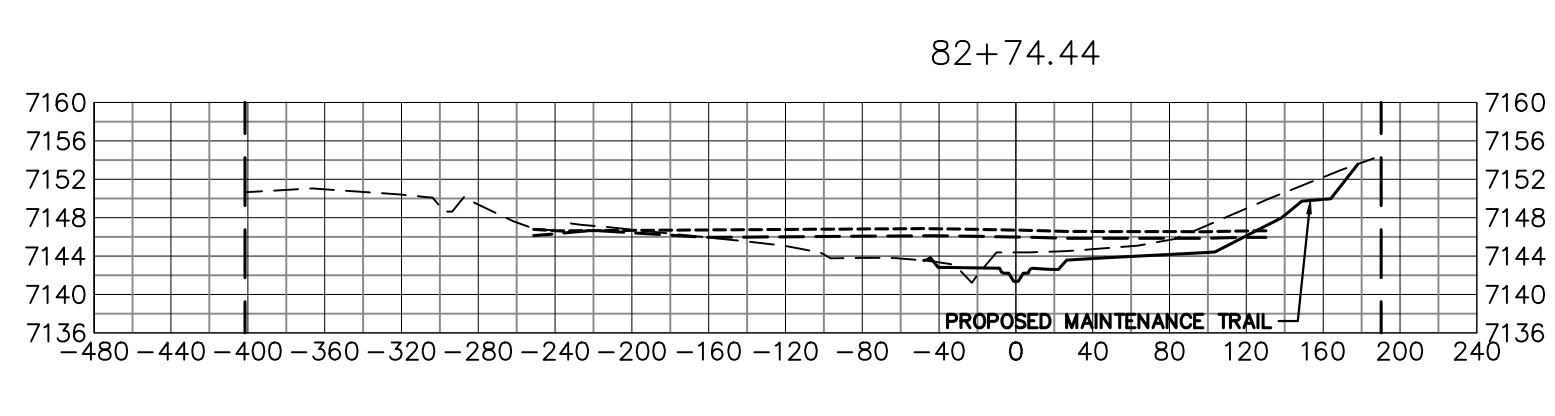
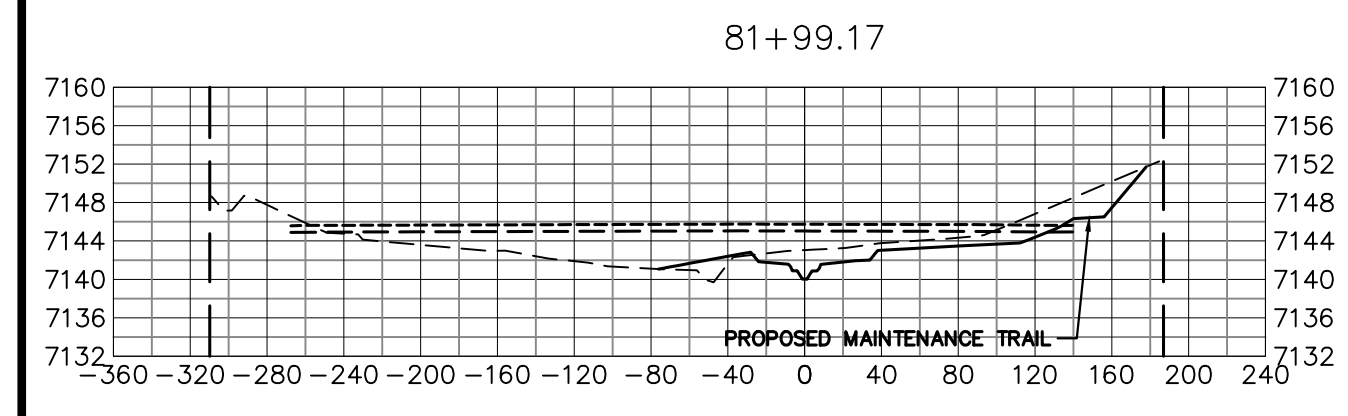
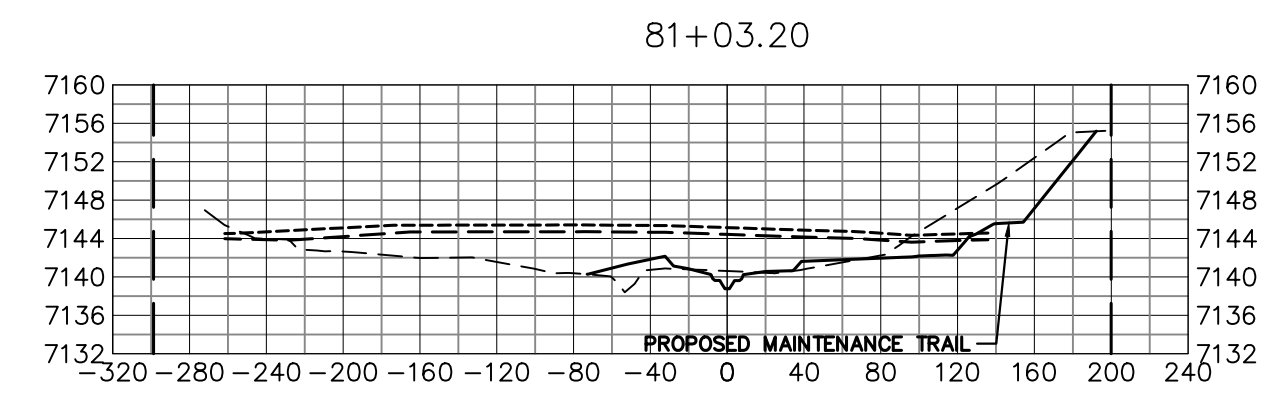
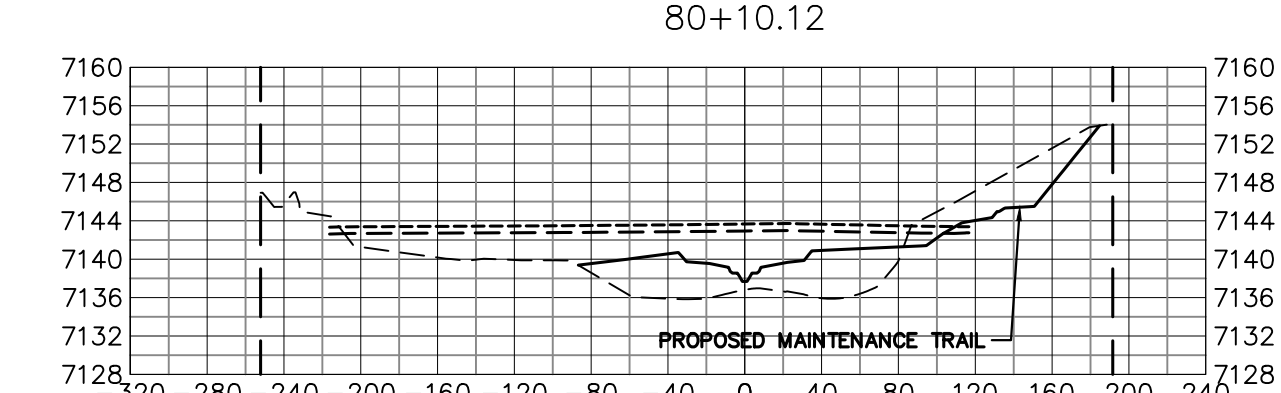
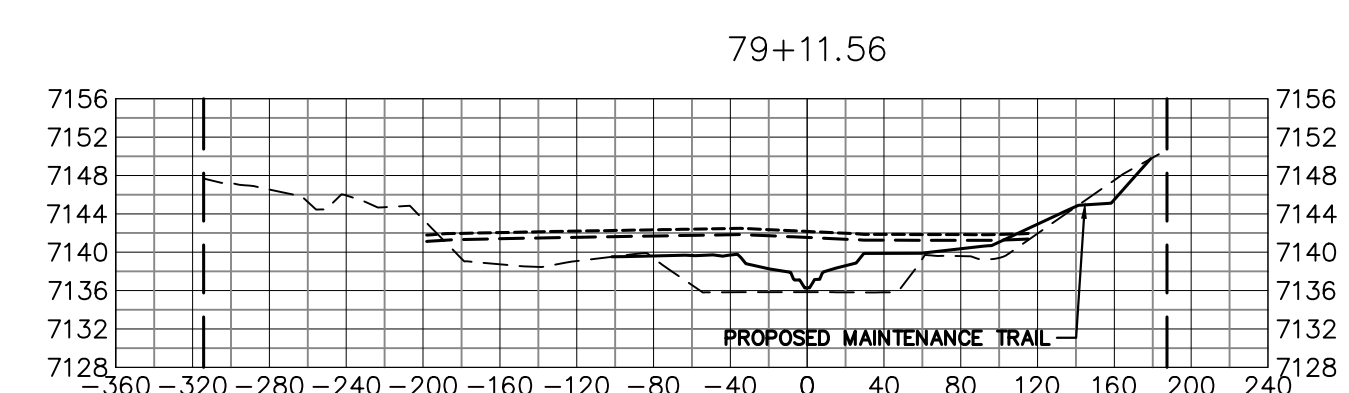
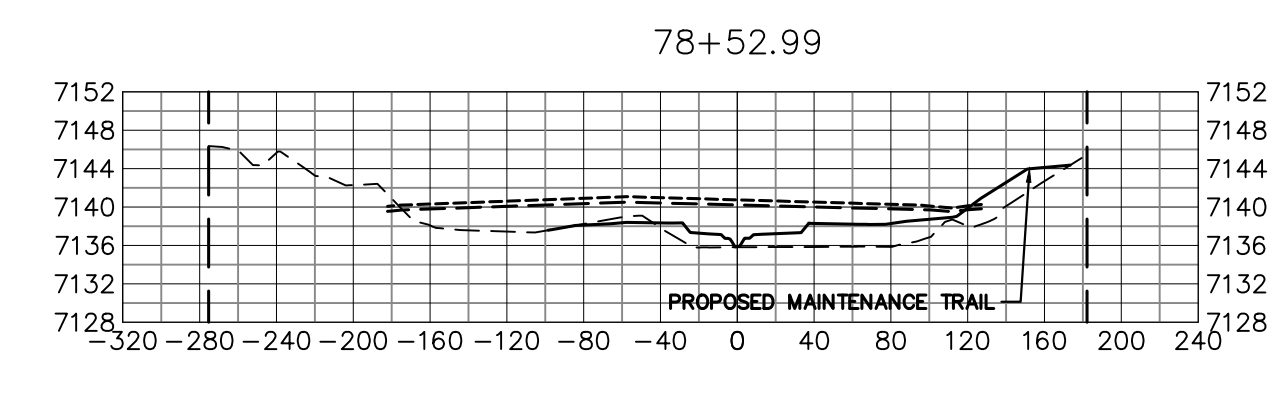
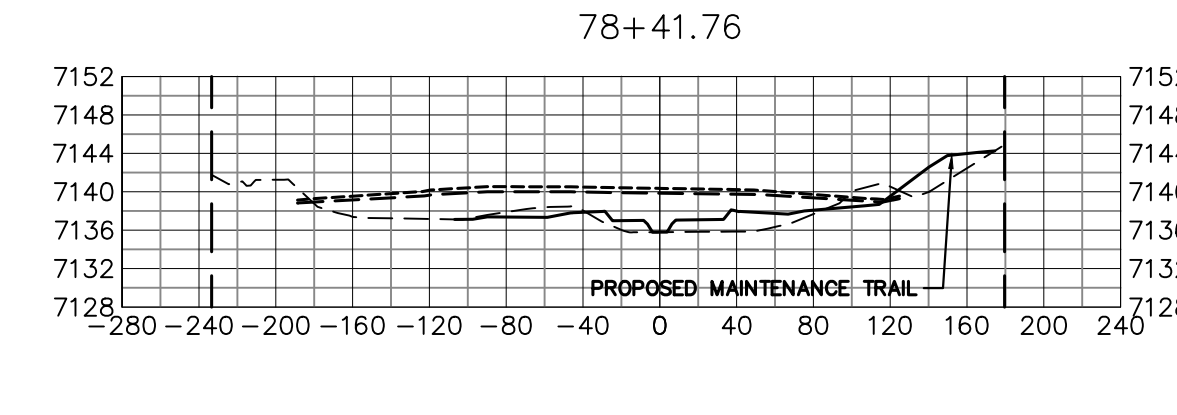
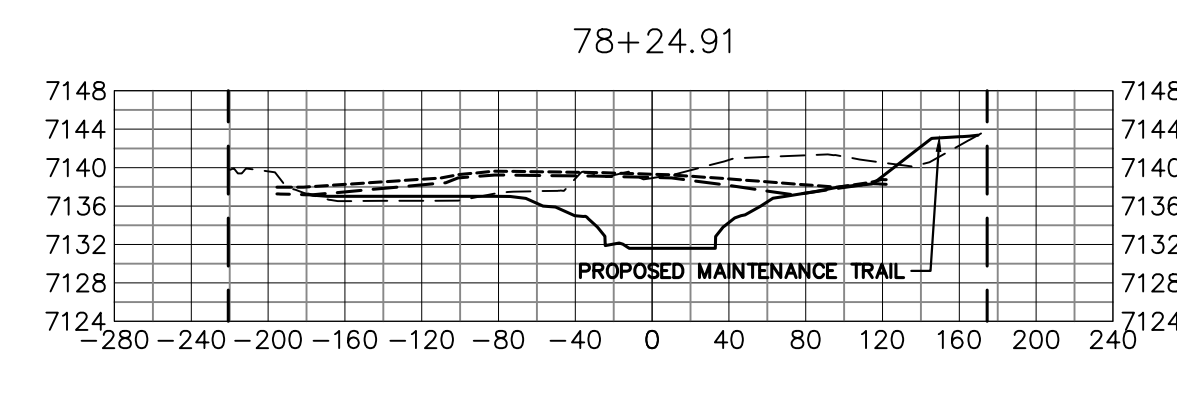
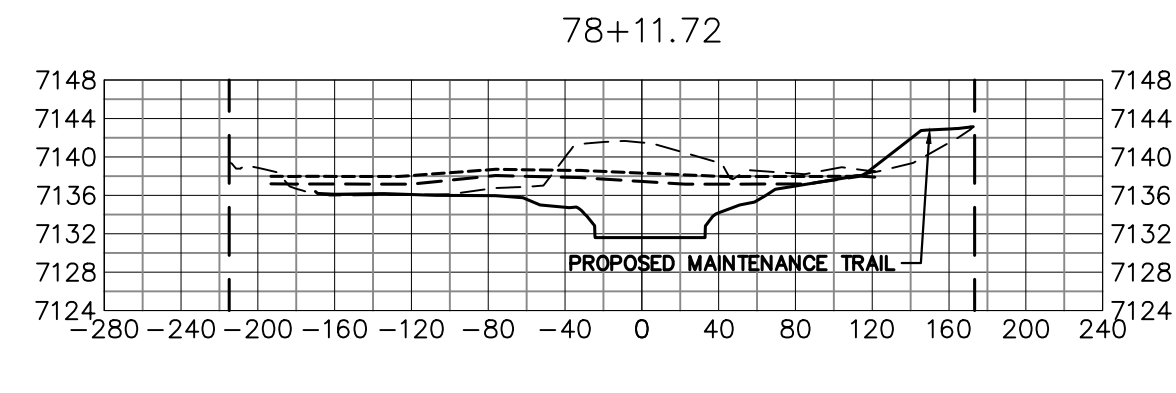
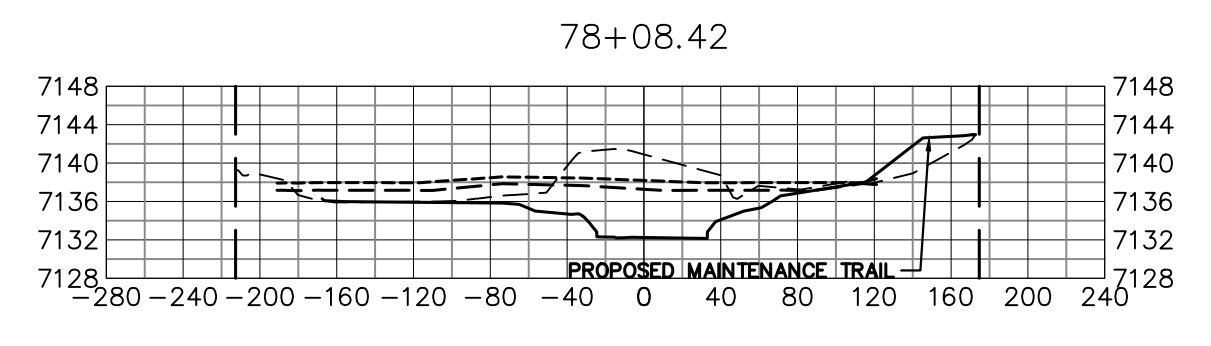
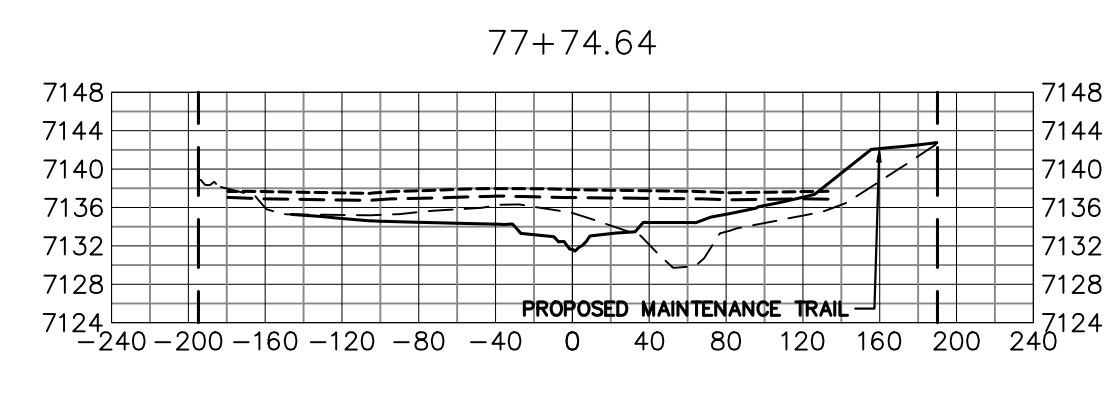
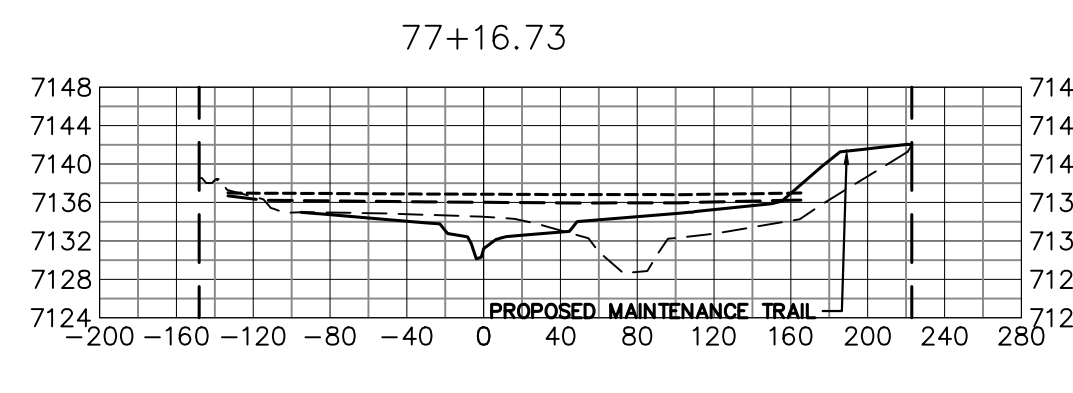
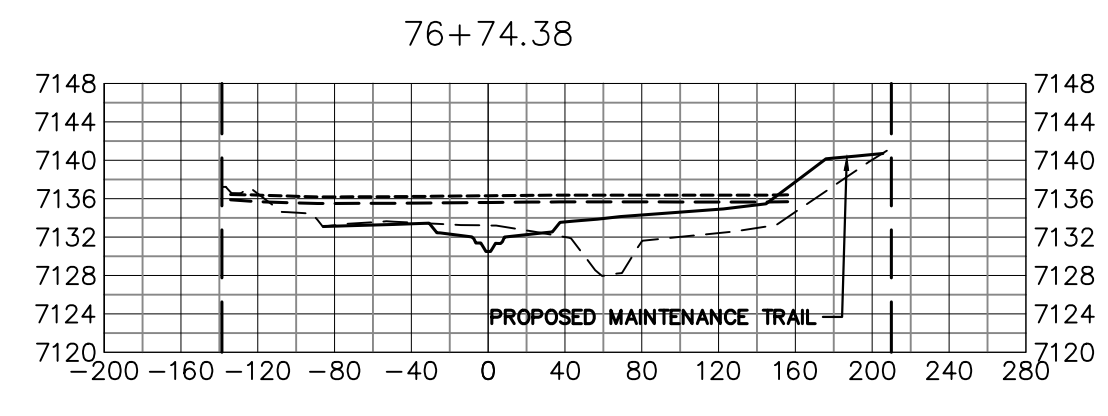
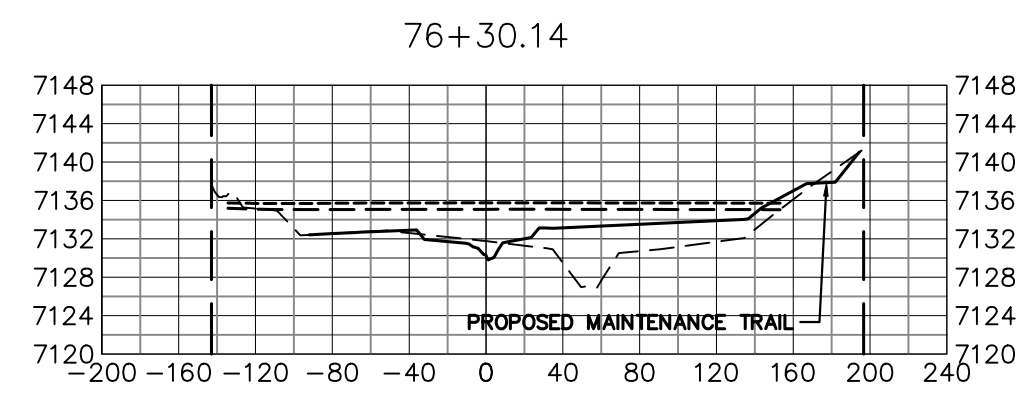
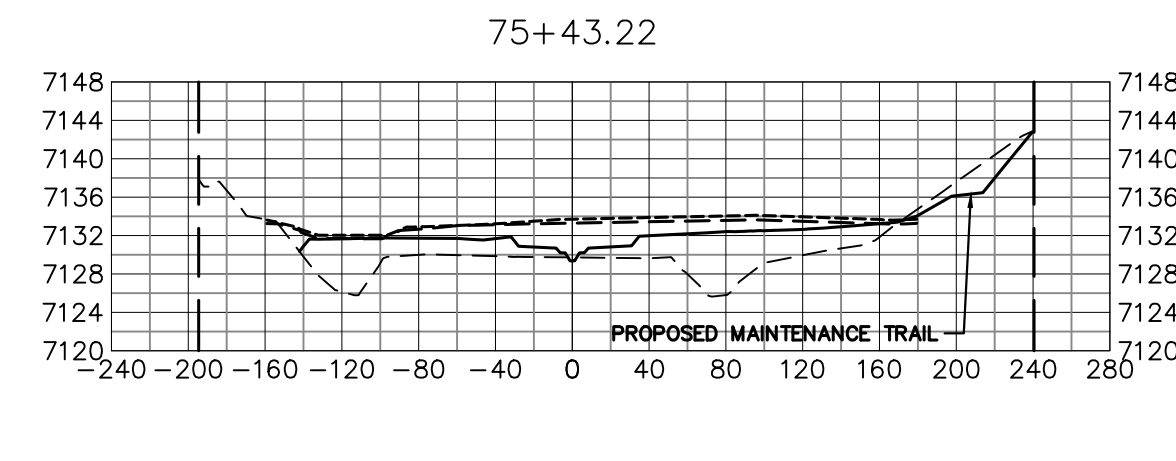
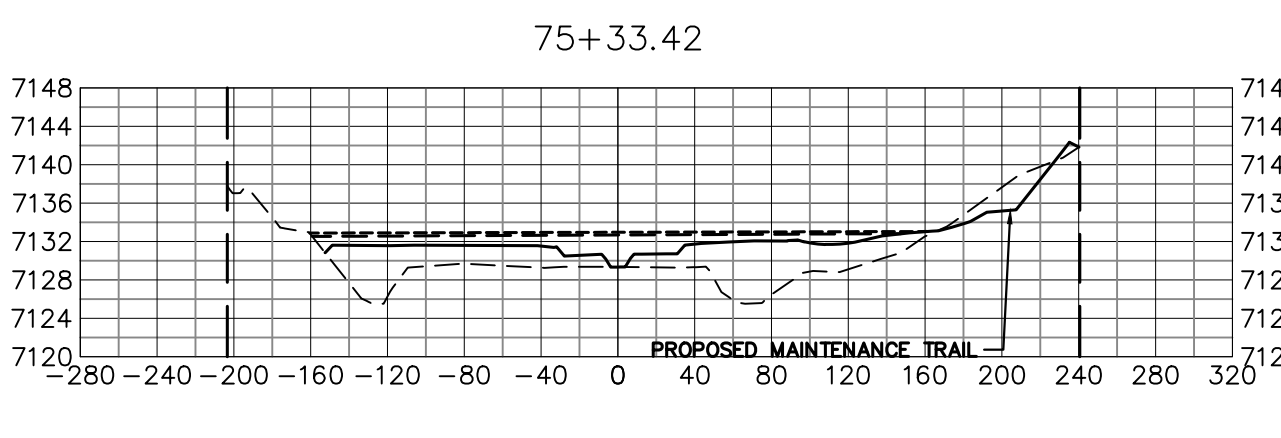
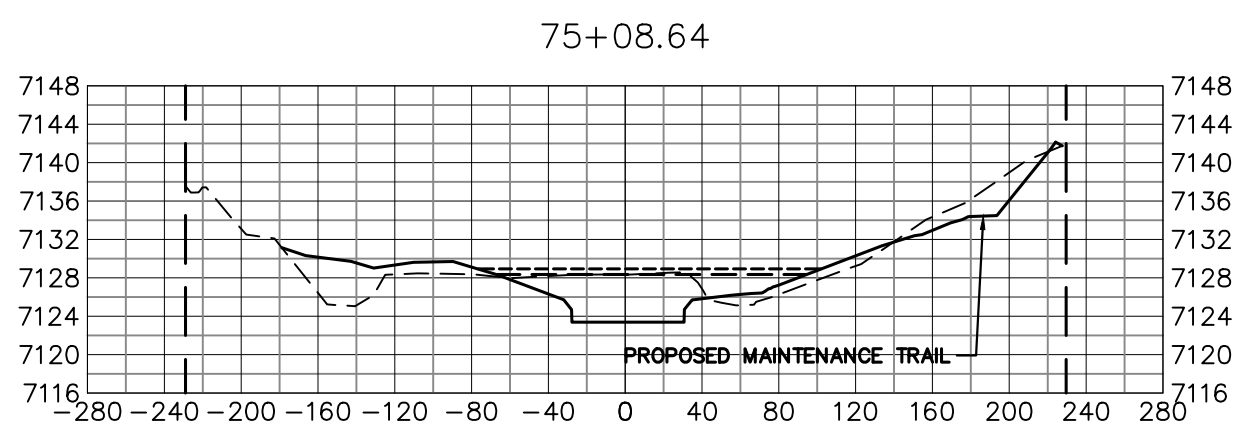
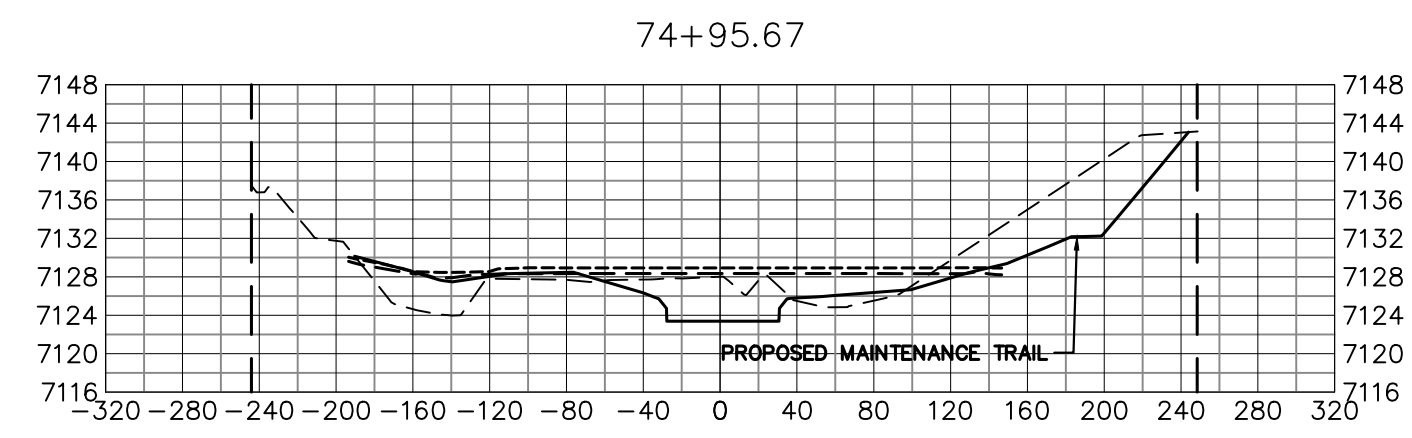
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BY	DATE	REVISION

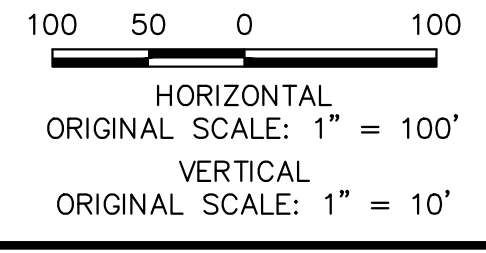
H-SCALE	V-SCALE	DATE	DESIGNED BY	DIV	NEO	CHECKED BY
1"=100'	1"=10'	11/20/23				

SAND CREEK RESTORATION  
 CROSS SECTIONS  
 SHEET 40 OF 121  
 JOB NO. 25188.04



- 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 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 "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.

**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION  
 Mike A. Bramlett  
 MIKE A. BRAMLETT  
 32314  
 11/20/23  
 MIKE A. BRAMLETT, P.E.  
 COLORADO P.E. 32314  
 FOR AND ON BEHALF OF JR ENGINEERING

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