

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

EPC STORMWATER REVIEW COMMENTS
 IN ORANGE BOXES WITH BLACK TEXT

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

No.	REVISION	BY	DATE

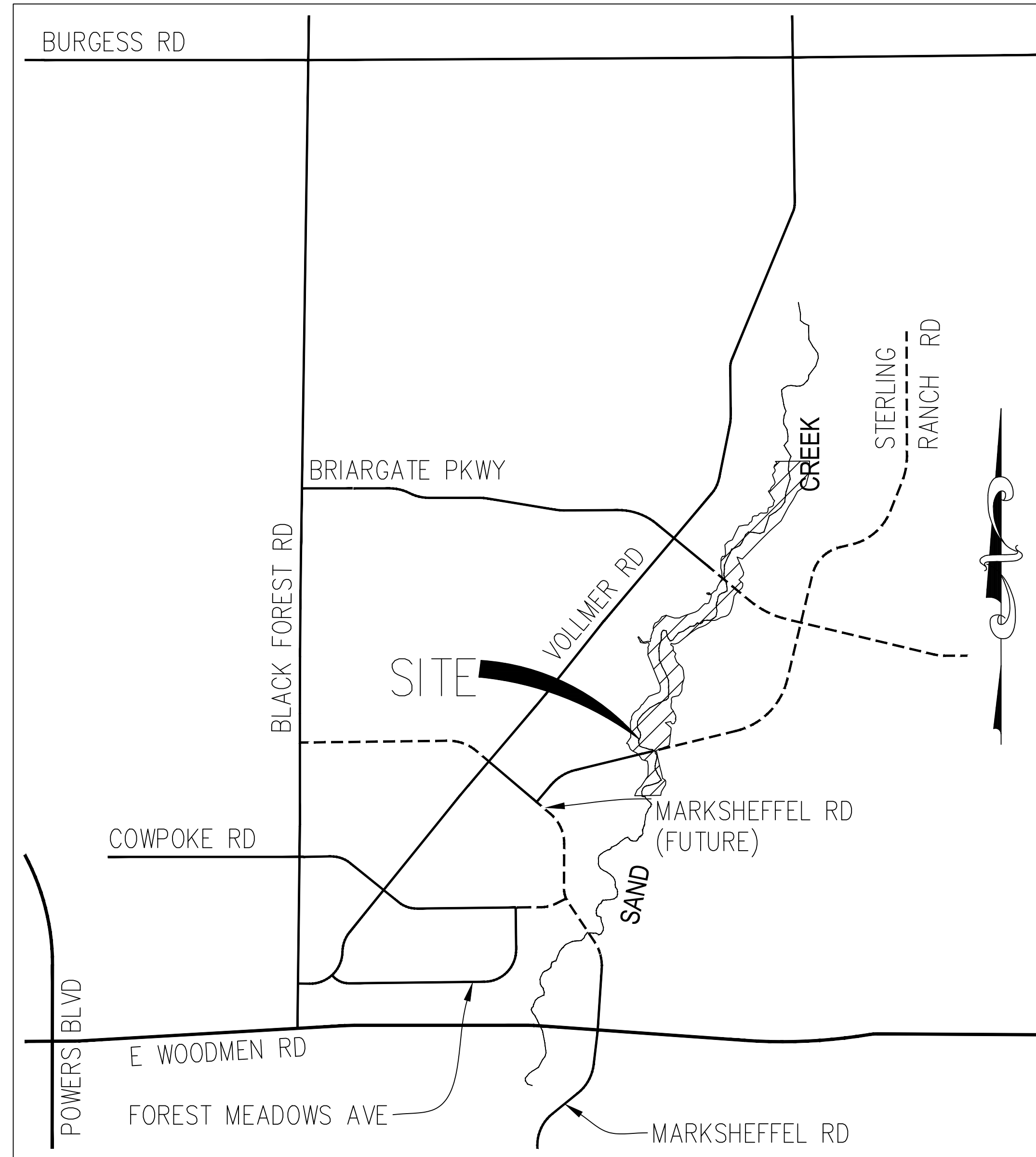
AGENCIES

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

Structural Detail Drawings by
 SAM Engineering for, pond outlets
 structures not yet complete.

SHEET INDEX

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99	-	TOTAL SHEETS



VICINITY MAP
 1" = 1000'

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.

EL PASO COUNTY STATEMENT

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

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

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

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

OWNER/DEVELOPER STATEMENT

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

JAMES F. MORLEY _____ DATE _____

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

ENGINEER'S STATEMENT

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



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

DISTRICT APPROVALS

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

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

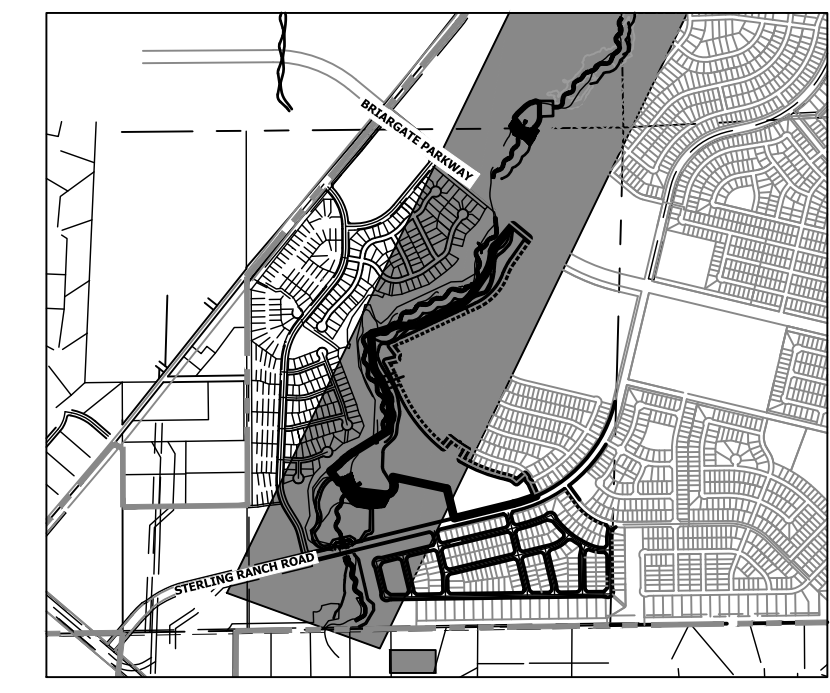
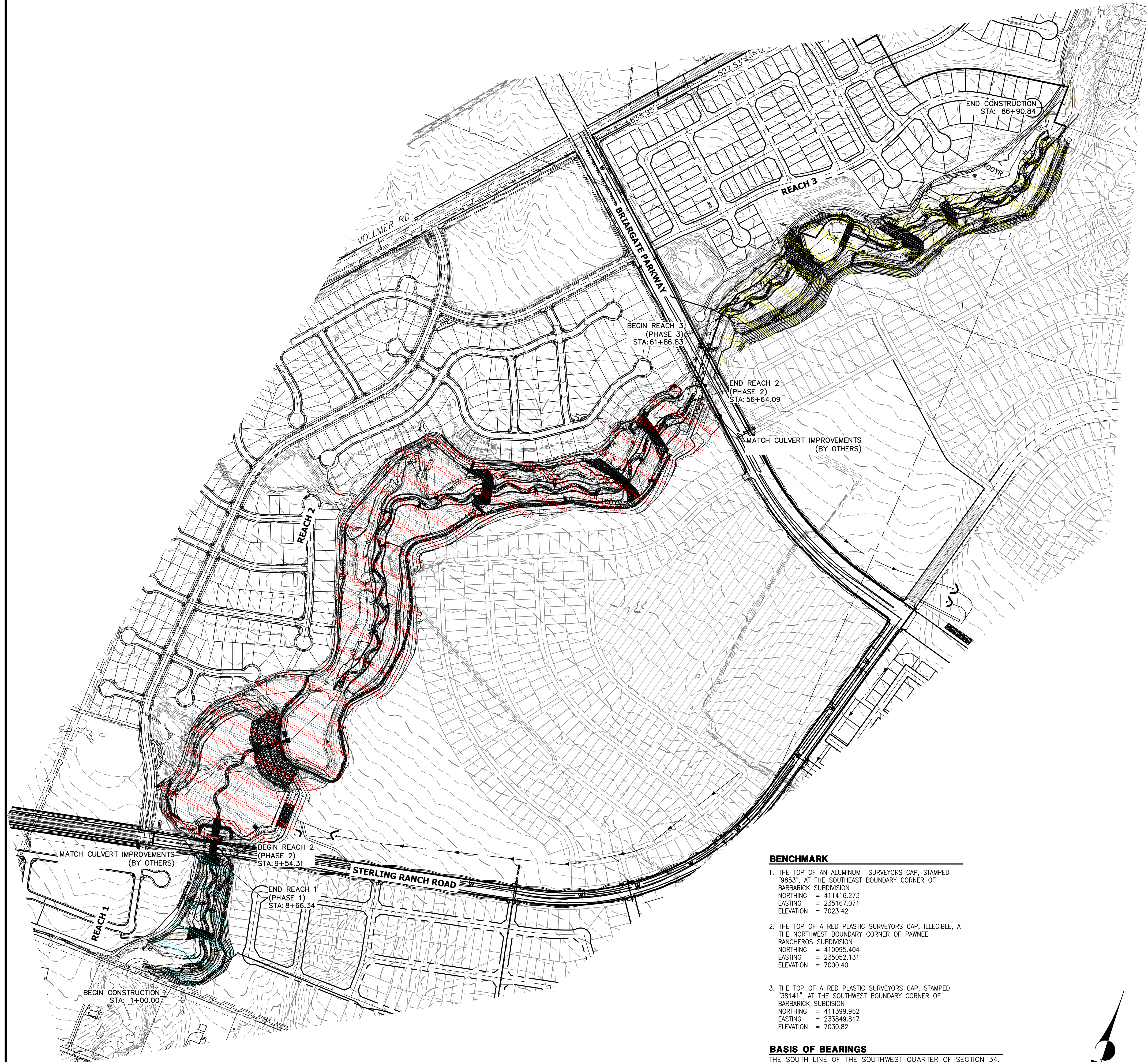


SAND CREEK RESTORATION

COVER SHEET

SHEET 1 OF 99

JOB NO. 25188.04



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

GRADING NOTES:

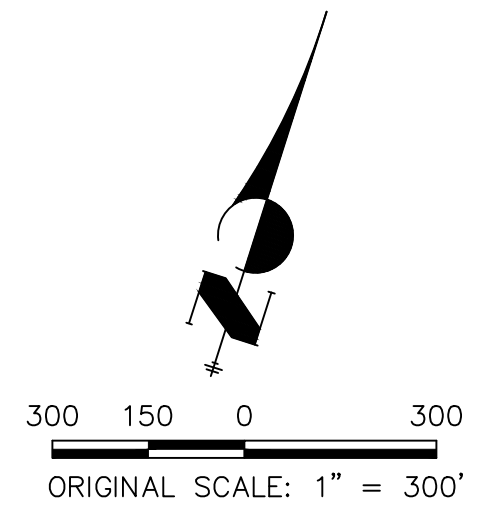
1. SAND CREEK IS AN ACTIVE MAJOR DRAINAGEWAY WITH PERENNIAL BASE FLOWS. CONTRACTOR SHALL ANTICIPATE STORMWATER INFLOWS TO THE SITE DURING CONSTRUCTION AND PROVIDE A MEANS OF CONVEYANCE/REMOVAL OF ANY CONTINUOUS INFLOWS.
2. THERE IS A LIKELIHOOD FOR LARGE FLOW EVENTS IN SAND CREEK WHICH COULD JEOPARDIZE 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.
3. DEWATERING:
 - 3.a. DEWATERING/BYPASS PUMPING OF SAND CREEK SHALL OCCUR IN ADVANCE OF CONSTRUCTION ACTIVITIES.
 - 3.b. THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION DEWATERING (CDW) PERMIT FROM CDPHE 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.
 - 3.c. WATER FROM DEWATERING OPERATIONS SHALL ONLY BE DISCHARGED INTO STATE WATERS IF ALLOWED BY A PERMIT.
4. MUCK EXCAVATION IS NOT ANTICIPATED FOR THIS PROJECT. IF ENCOUNTERED, CONTRACTOR SHALL REMOVE UNSUITABLE ORGANIC MATERIAL TO THE DEPTH AS DETERMINED BY THE ENGINEER AND REPLACE THE EXCAVATED VOLUME WITH SUITABLE APPROVED FILL MATERIAL PRIOR TO CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
5. THE MAXIMUM SLOPE FOR EXCAVATION AND PLACEMENT OF FILL IS 4:1 HORIZONTAL:VERTICAL, UNLESS OTHERWISE SHOWN IN THE PLANS.
6. THE EXISTING DROP STRUCTURE AT BRIARGATE PARKWAY, ANY ASSOCIATED FEATURES, AND DEBRIS SHOULD BE REMOVED FROM THE PROPOSED CONSTRUCTION AREA. EXPOSED SURFACES SHOULD BE FREE OF MOUNDS AND DEPRESSIONS WHICH COULD PREVENT UNIFORM COMPACTION.
7. EXPOSED AREAS WHICH WILL RECEIVE FILL, ONCE PROPERLY CLEARED WHERE NECESSARY, SHOULD BE SCARIFIED TO A MINIMUM DEPTH OF 8 INCHES, CONDITIONED TO NEAR OPTIMUM WATER CONTENT, AND COMPACTED.
8. A GEOTECHNICAL ENGINEER SHALL BE PRESENT FOR OVER-EXCAVATION AND FILL OPERATIONS.
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.
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 - 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.
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18. GRADING CONFLICTS WITH EAST SIDE DEVELOPMENT. TO BE ADDRESSED WITH LOT GRADING AND POTENTIALLY WALLS.

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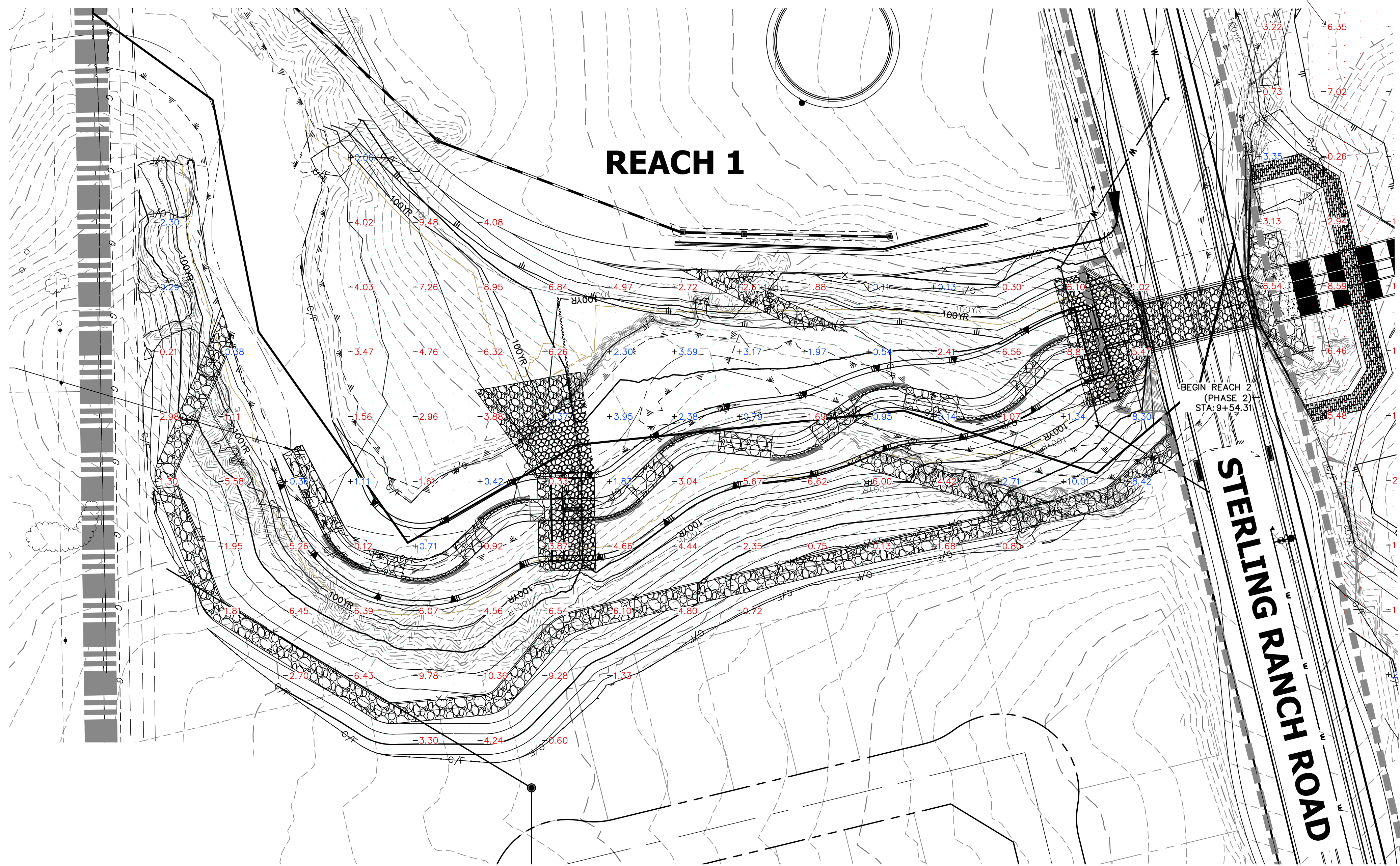
ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND SEAL

**PRELIMINARY
 NOT FOR
 CONSTRUCTION**

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

PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.												
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SHEET 4 OF 99 JOB NO. 25188.04	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>BY</th> <th>DATE</th> <th>REVISION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	BY	DATE	REVISION									
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JR-Addressed, colors have been defined

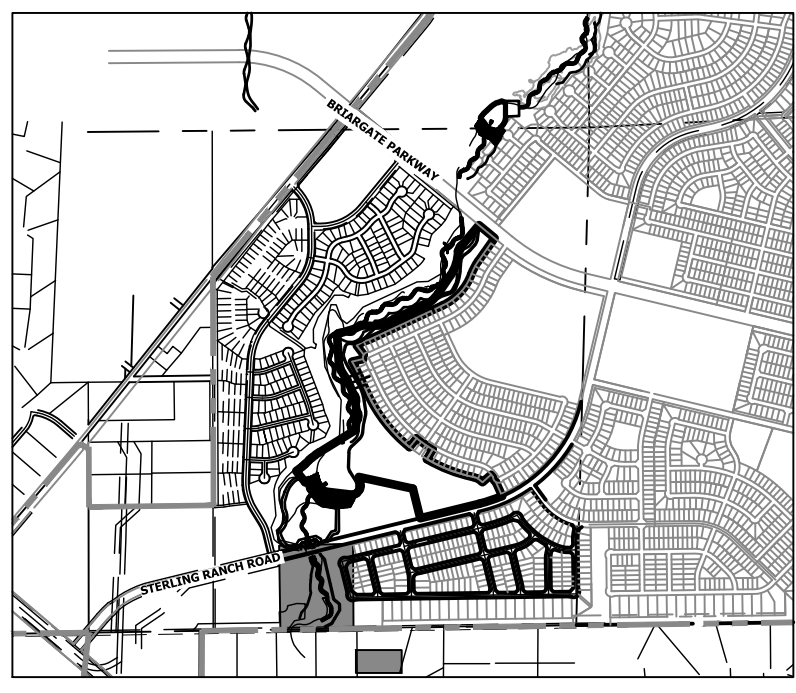
define colors

JR-Addressed, hatching is shown in figure

show on figure

LEGEND

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



GRADING NOTES:

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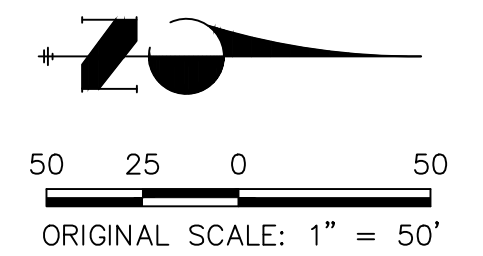
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APPROXIMATE QUANTITY SUMMARY

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

BASIS OF BEARINGS

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



Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMLEY
 COLORADO P.E. NO. 3587
 FOR AND ON BEHALF OF JR ENGINEERING, INC.

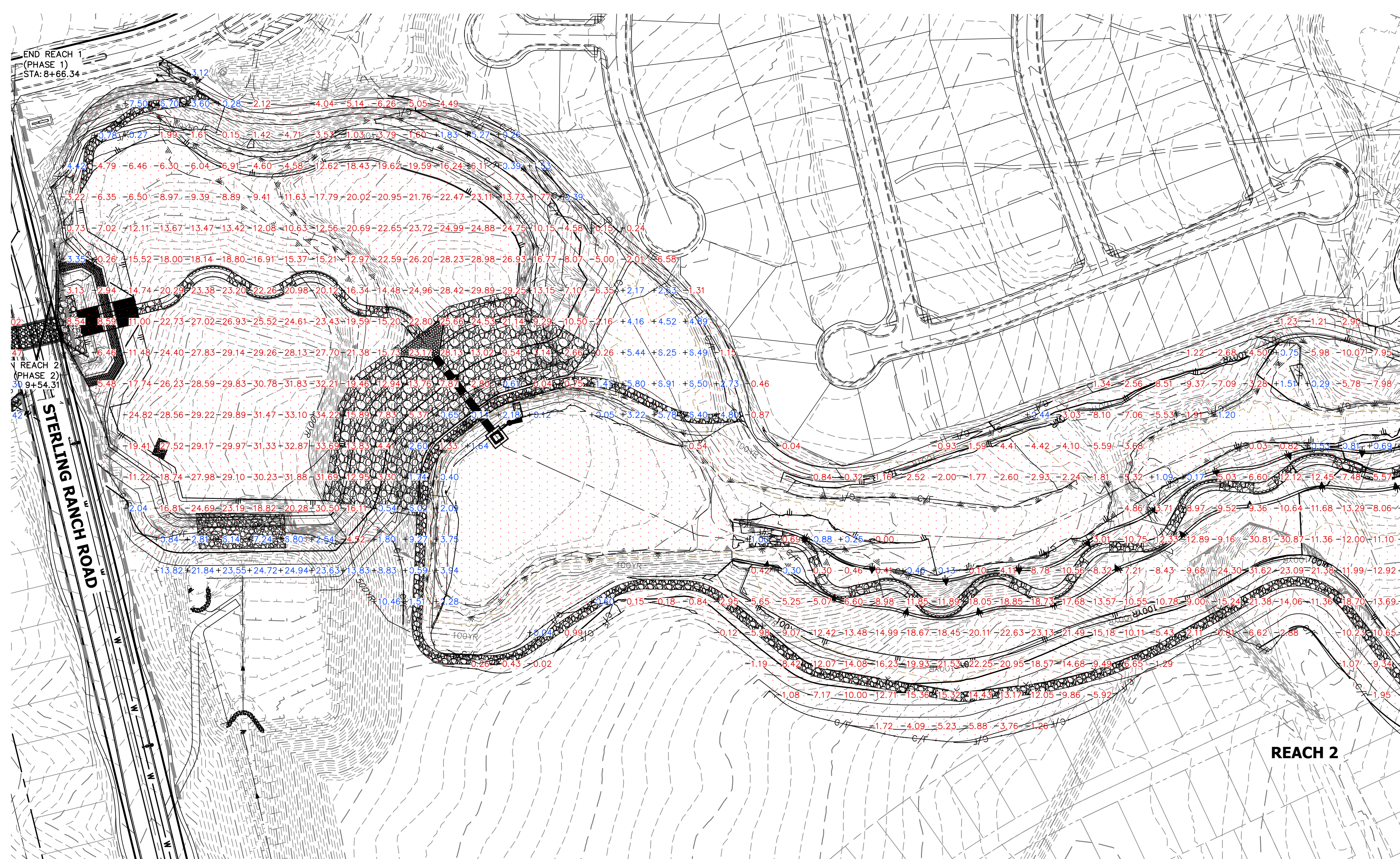
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PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

J.R. ENGINEERING
 A Westman Company

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

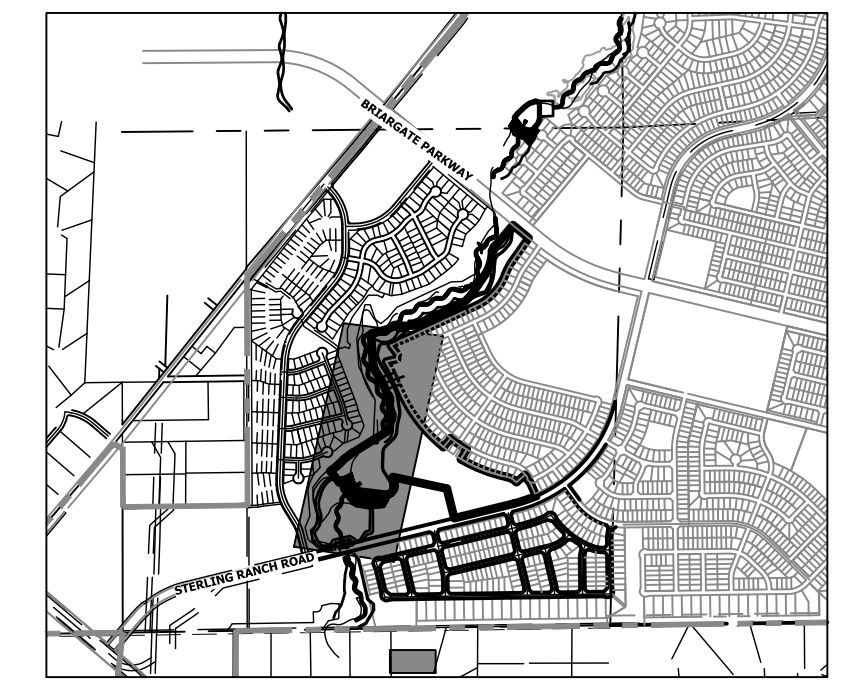
No.	REVISION	BY	DATE	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY



LEGEND

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

- GRADING NOTES:**
1. SAND CREEK IS AN ACTIVE MAJOR DRAINAGEWAY WITH PERENNIAL BASE FLOWS. CONTRACTOR SHALL ANTICIPATE STORMWATER INFLOWS TO THE SITE DURING CONSTRUCTION AND PROVIDE A MEANS OF CONVEYANCE/REMOVAL OF ANY CONTINUOUS INFLOWS.
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 - 3.a. DEWATERING/BYPASS PUMPING OF SAND CREEK SHALL OCCUR IN ADVANCE OF CONSTRUCTION ACTIVITIES.
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 - 3.c. WATER FROM DEWATERING OPERATIONS SHALL ONLY BE DISCHARGED INTO STATE WATERS IF ALLOWED BY A PERMIT.
 4. MUCK EXCAVATION IS NOT ANTICIPATED FOR THIS PROJECT. IF ENCOUNTERED, CONTRACTOR SHALL REMOVE UNSUITABLE ORGANIC MATERIAL TO THE DEPTH AS DETERMINED BY THE ENGINEER AND REPLACE THE EXCAVATED VOLUME WITH SUITABLE APPROVED FILL MATERIAL PRIOR TO CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
 5. THE MAXIMUM SLOPE FOR EXCAVATION AND PLACEMENT OF FILL IS 4:1 HORIZONTAL:VERTICAL, UNLESS OTHERWISE SHOWN IN THE PLANS.
 6. THE EXISTING DROP STRUCTURE AT BRIARGATE PARKWAY, ANY ASSOCIATED FEATURES, AND DEBRIS SHOULD BE REMOVED FROM THE PROPOSED CONSTRUCTION AREA. EXPOSED SURFACES SHOULD BE FREE OF MOUNDS AND DEPRESSIONS WHICH COULD PREVENT UNIFORM COMPACTION.
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KEY MAP
SCALE: 1"=2000'

BENCHMARK

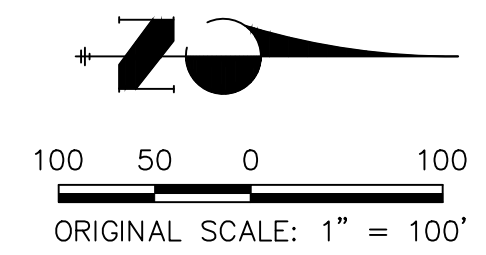
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NORTHING = 411416.273
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ELEVATION = 7023.42
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NORTHING = 411399.962
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APPROXIMATE QUANTITY SUMMARY

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

BASIS OF BEARINGS

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

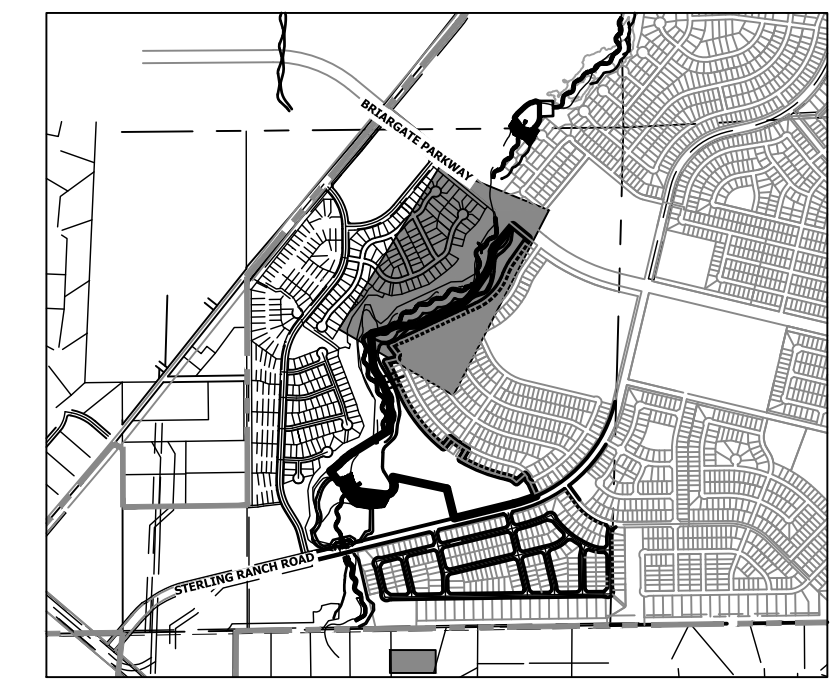


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 SAND CREEK RESTORATION
 EARTHWORK & PHASING PLAN
 SHEET 6 OF 99
 JOB NO. 25188.04

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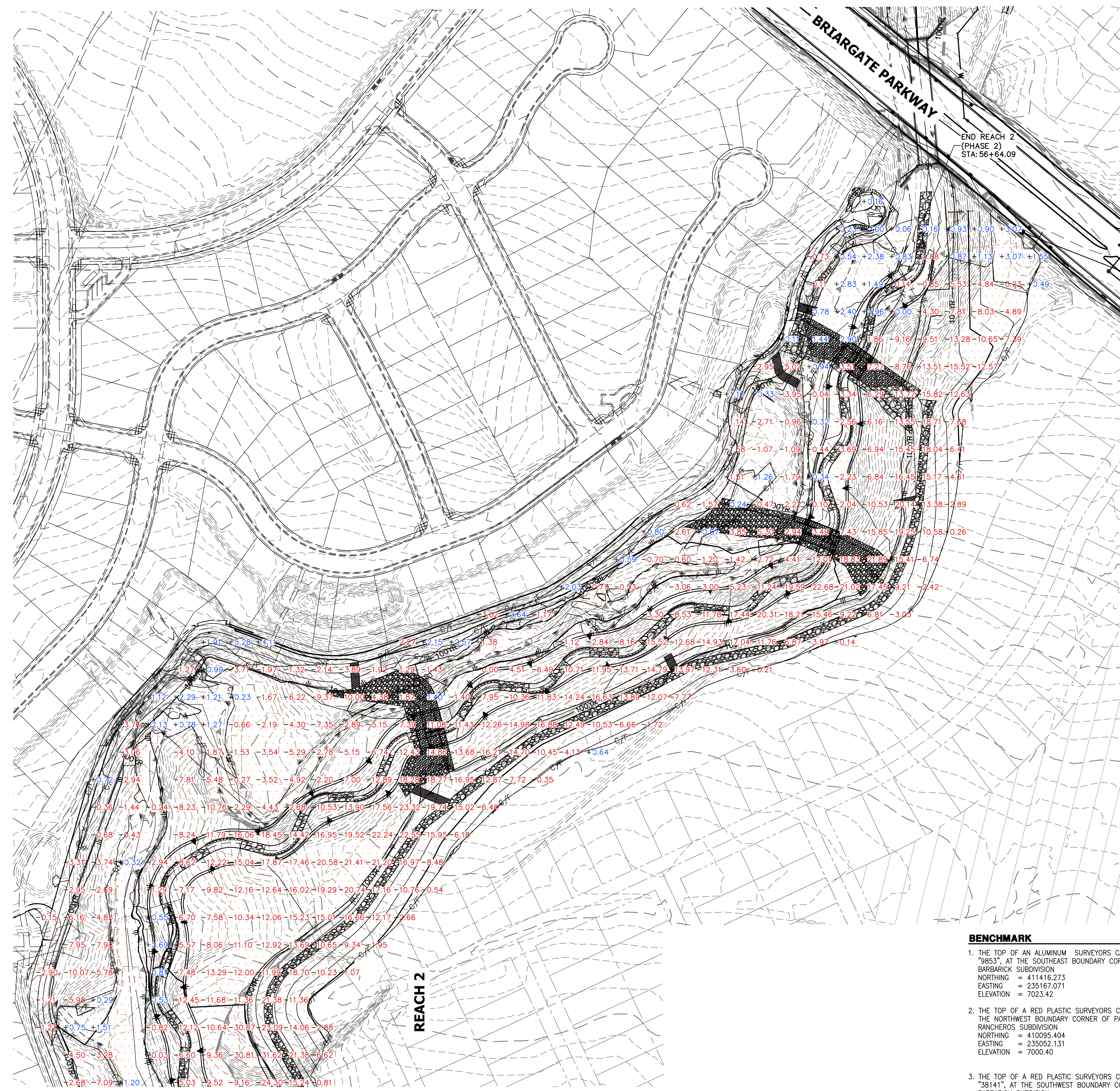
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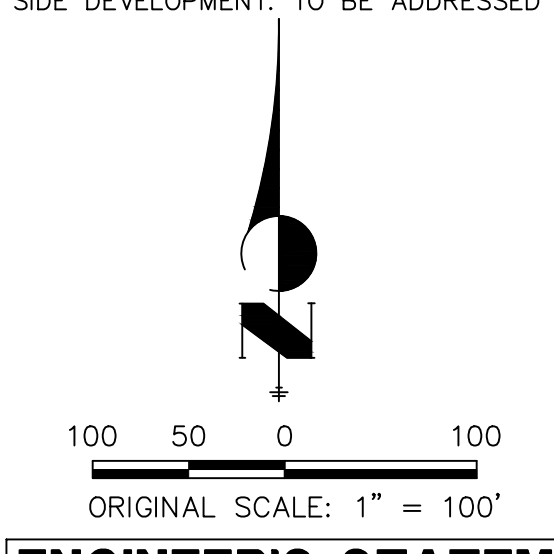
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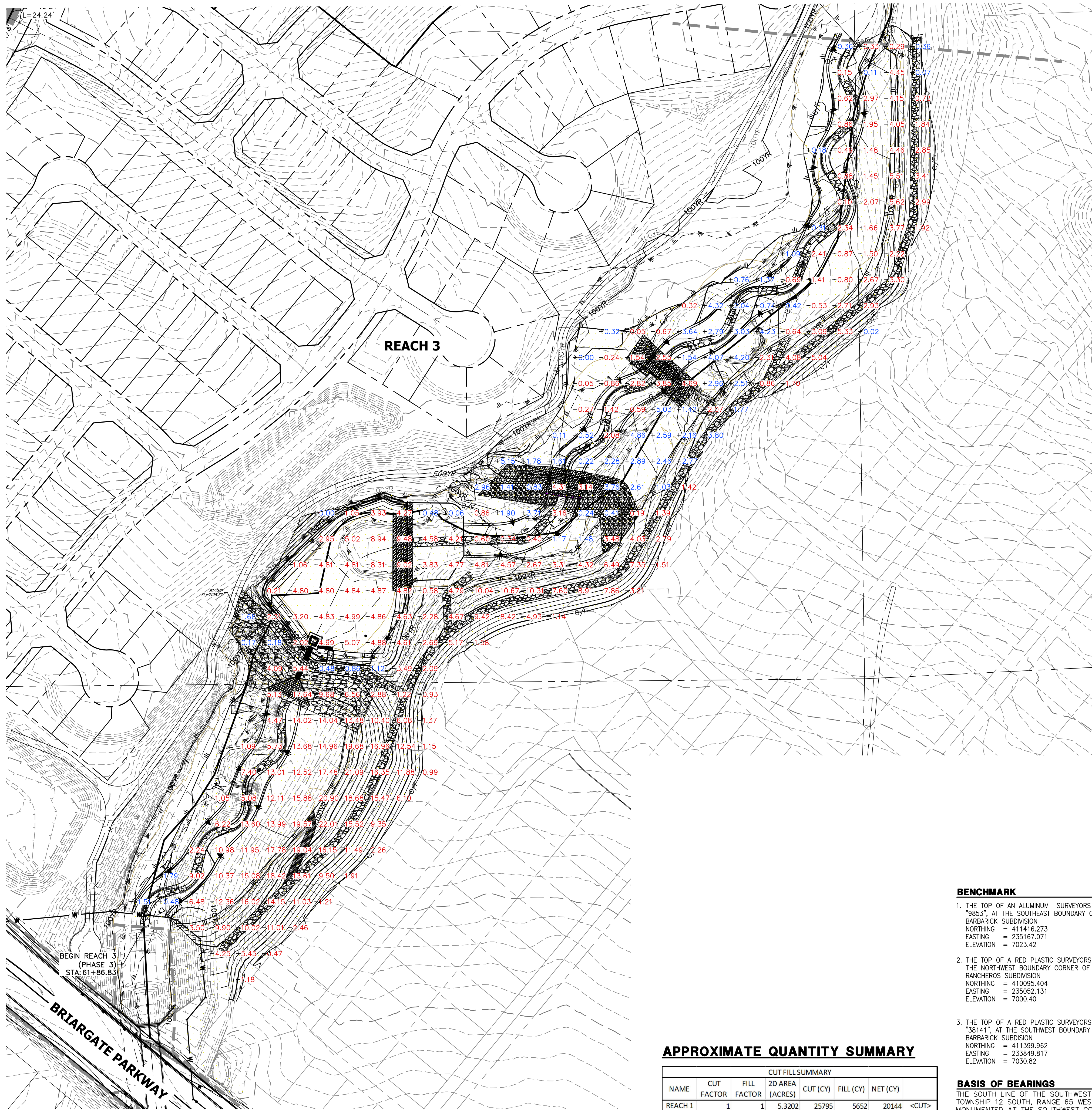
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SAND CREEK RESTORATION
EARTHWORK & PHASING PLAN
 SHEET 7 OF 99
 JOB NO. 25188.04



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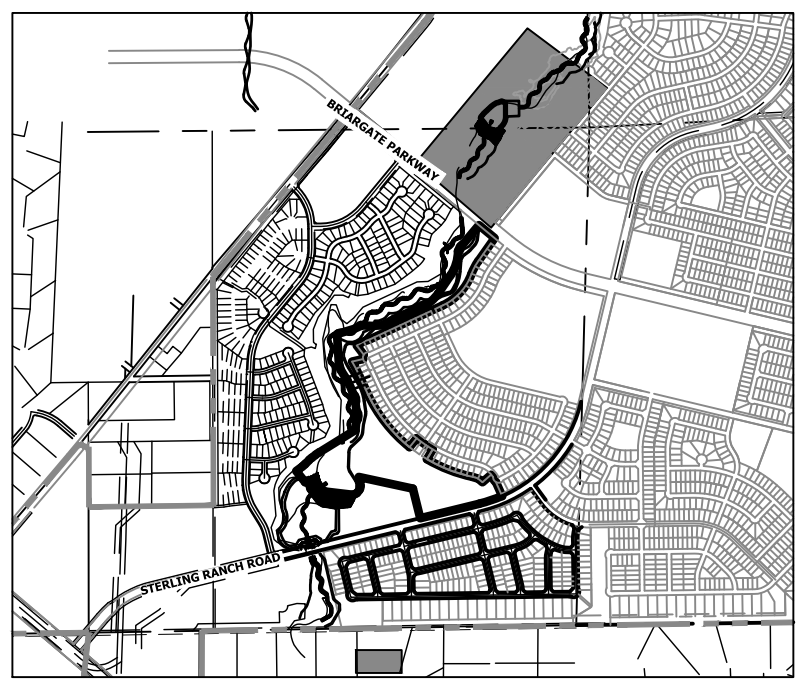
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 NORTHING = 411399.962
 EASTING = 233849.817
 ELEVATION = 7030.82

APPROXIMATE QUANTITY SUMMARY

NAME	CUT/FILL SUMMARY					
	CUT FACTOR	FILL FACTOR	2D AREA (ACRES)	CUT (CY)	FILL (CY)	NET (CY)
REACH 1	1	1	5.3202	25795	5652	20144 <CUT>
REACH 2	1	1	44.4228	625035	38932	586102 <CUT>
REACH 3	1	1	16.0801	114827	10005	104822 <CUT>
TOTAL			65.8231	765567	54589	711068

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

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

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

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

BY	DATE	No.	REVISION	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				1"=300'	N/A	9/1/22	DJV	SCH	

ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

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

PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMBLE
 COLORADO P.E. No. 35477
 FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

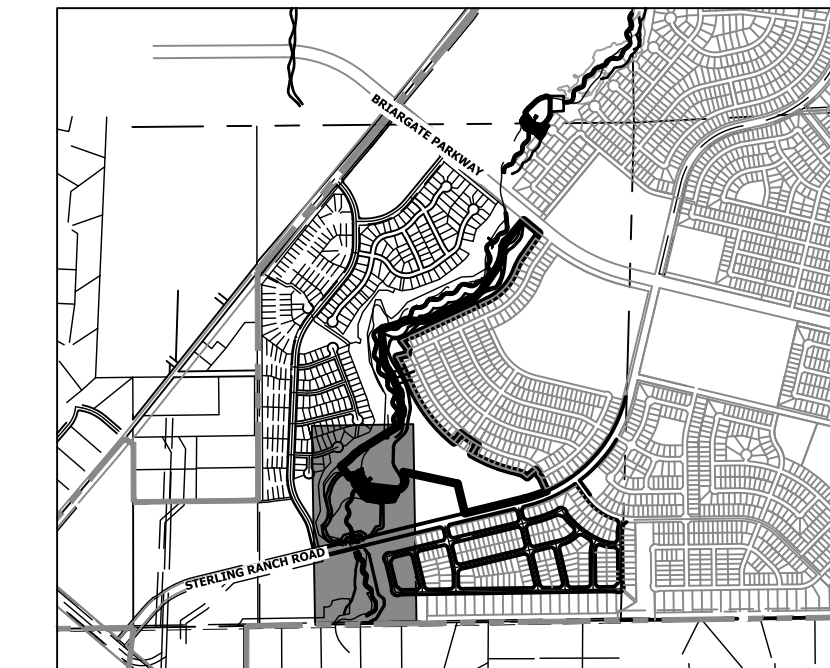
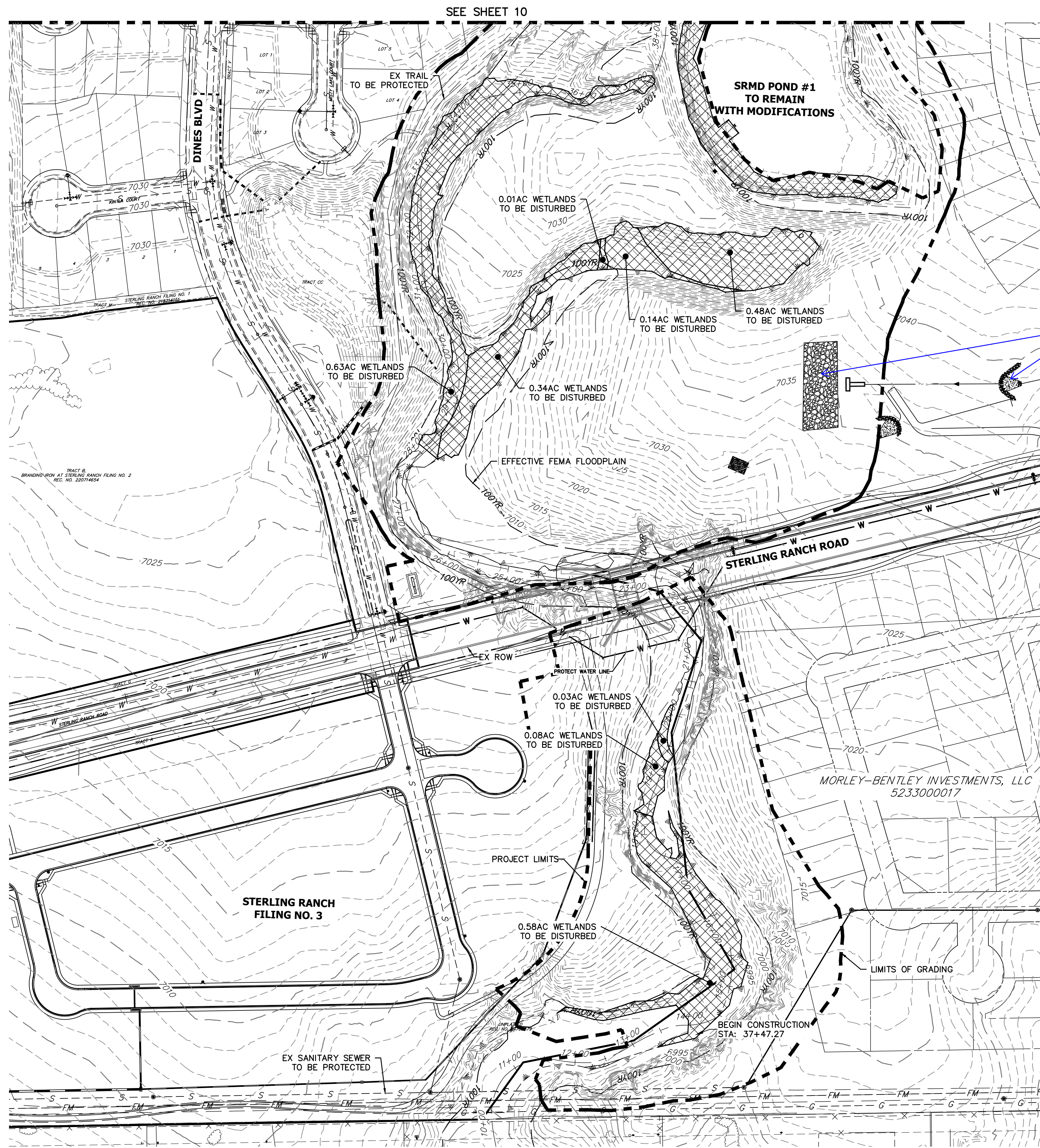
SAND CREEK RESTORATION

EARTHWORK & PHASING PLAN

SHEET 8 OF 99

JOB NO. 25188.04

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KEY MAP
SCALE: 1"=2000'

LEGEND
WETLAND: DISTURBED AREAS

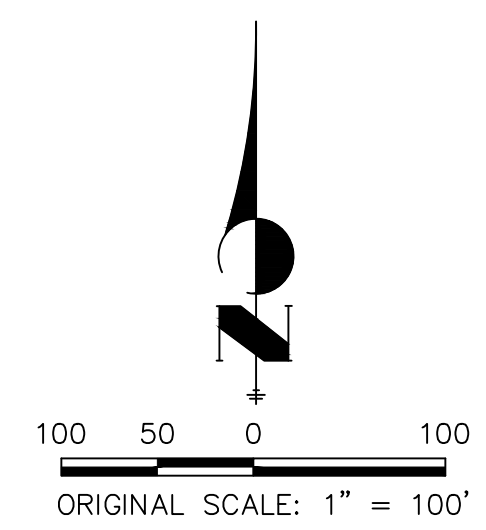
match line types
JR-Addressed, line types have been updated

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

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

- BENCHMARK**
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE 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

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



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 33212
FOR AND ON BEHALF OF JR ENGINEERING

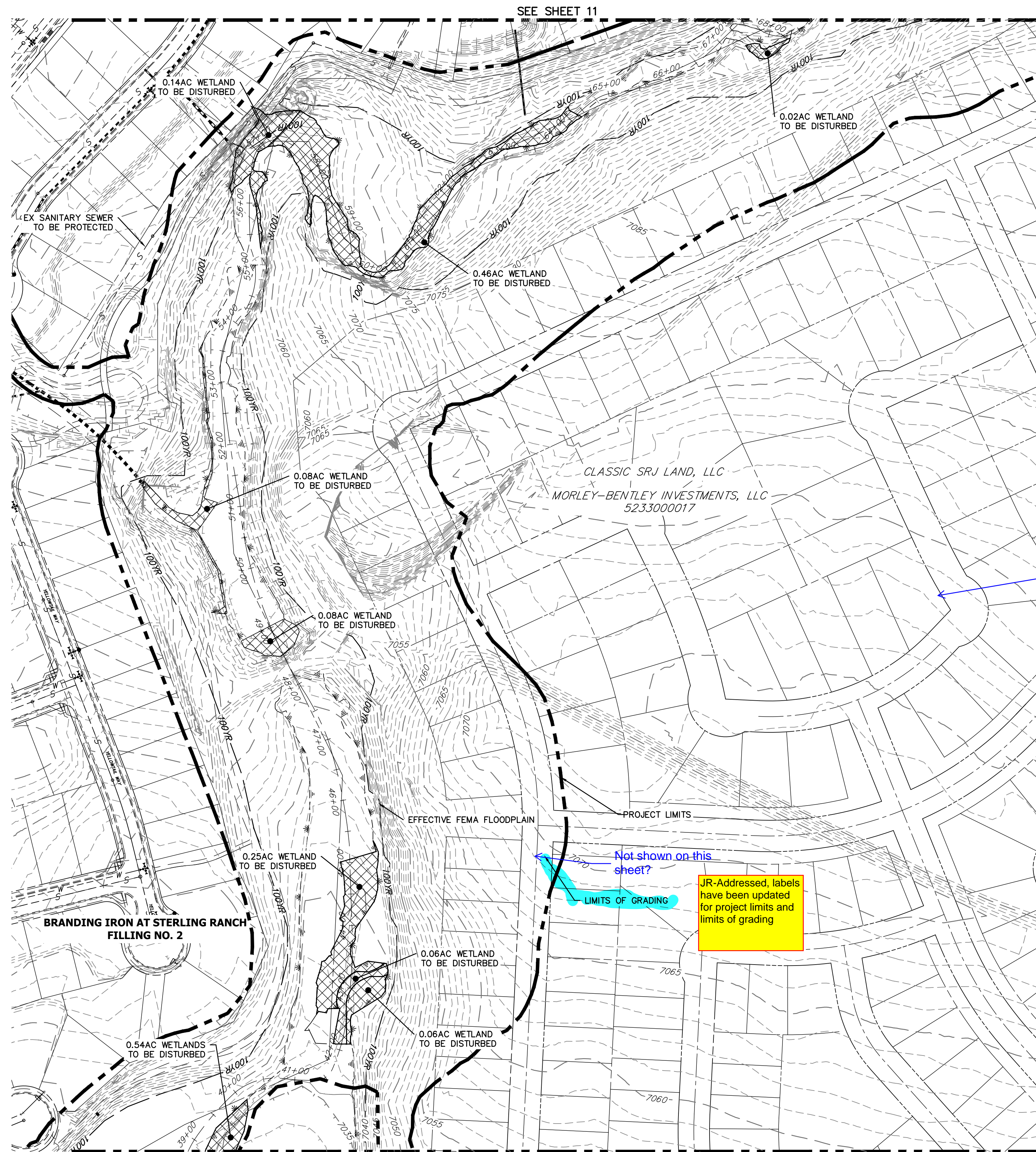
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.
PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

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

No.	REVISION	BY	DATE	1"=100'	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				N/A	9/1/22	DJV	SCH	

SAND CREEK RESTORATION
DEMOLITION PLAN
SHEET 9 OF 99
JOB NO. 25188.04

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SEE SHEET 11

SEE SHEET 9

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

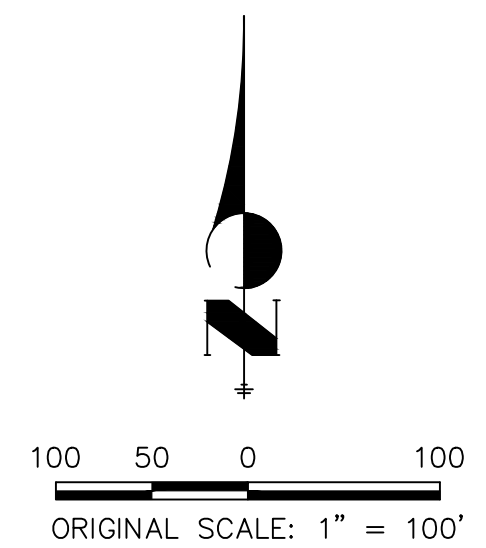
Sand Creek Demolitions		
Totals	Sq Ft	Acres
Reach 1 Permanent Loss	32,636.00	0.74
Reach 2 Permanent Loss	159,695.00	4.28
Reach 3 Permanent Loss	184,711.00	5.44
Total Permanent Loss	377,042.00	10.46

BENCHMARK

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
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EASTING = 235167.071
ELEVATION = 7023.42
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ELEVATION = 7000.40
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NORTHING = 411389.962
EASTING = 233849.817
ELEVATION = 7030.82

BASIS OF BEARINGS

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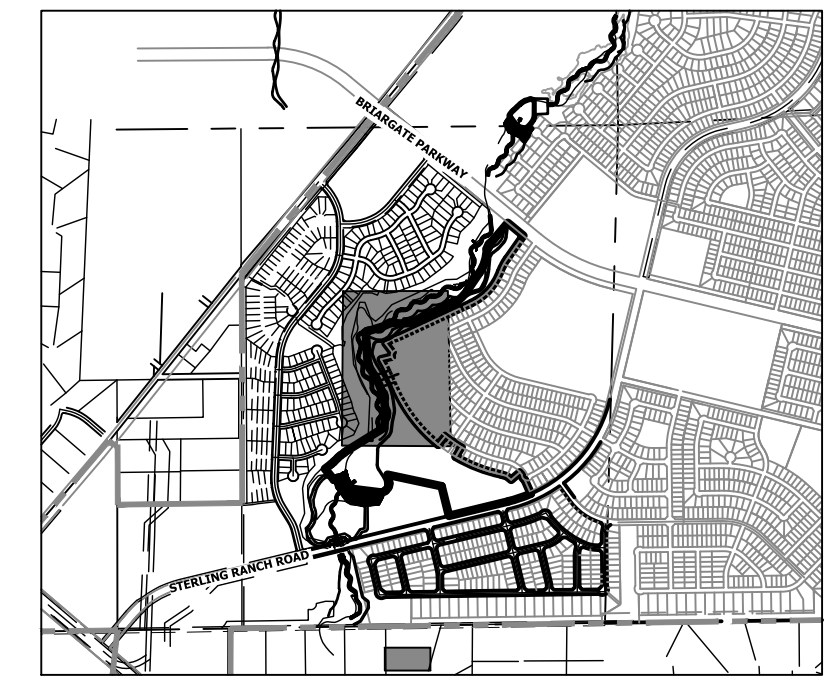


Turn off future lots or label and add a note that these are not approved.

JR-Addressed, note added that future lots have not been approved

JR-Addressed, labels have been updated for project limits and limits of grading

Not shown on this sheet?



KEY MAP
SCALE: 1"=2000'

LEGEND

WETLAND: DISTURBED AREAS



BY	DATE	No.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=100'	N/A	9/1/22	DJV	SCH	

SAND CREEK RESTORATION	DEMOLITION PLAN	SHEET 10 OF 99
	JOB NO. 25188.04	

ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF COLORADO. I HAVE REVIEWED THESE PLANS AND I AM NOT PROVIDING ANY GUARANTEE OR WARRANTY FOR AND ON BEHALF OF JR ENGINEERING, LLC.

PRELIMINARY NOT FOR CONSTRUCTION

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



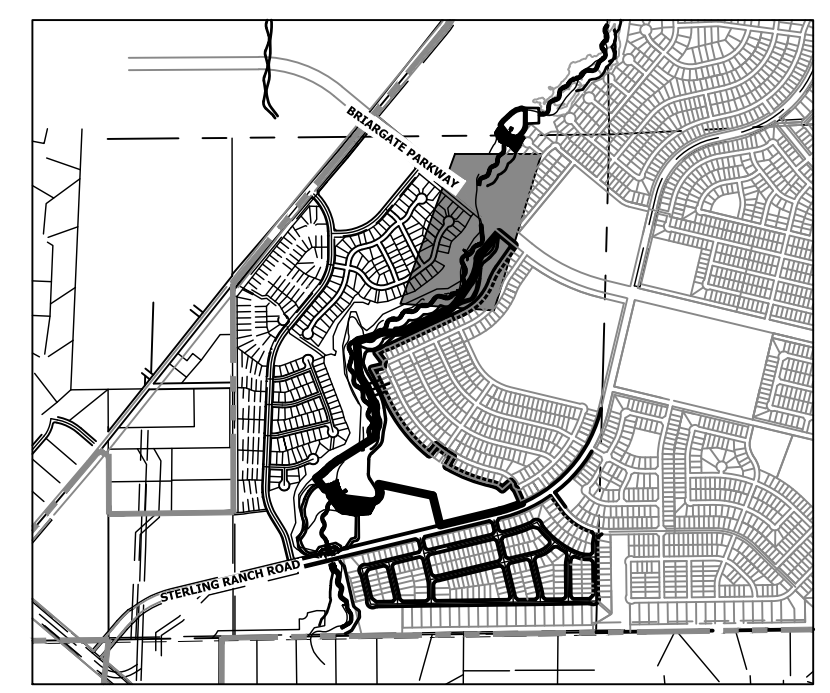
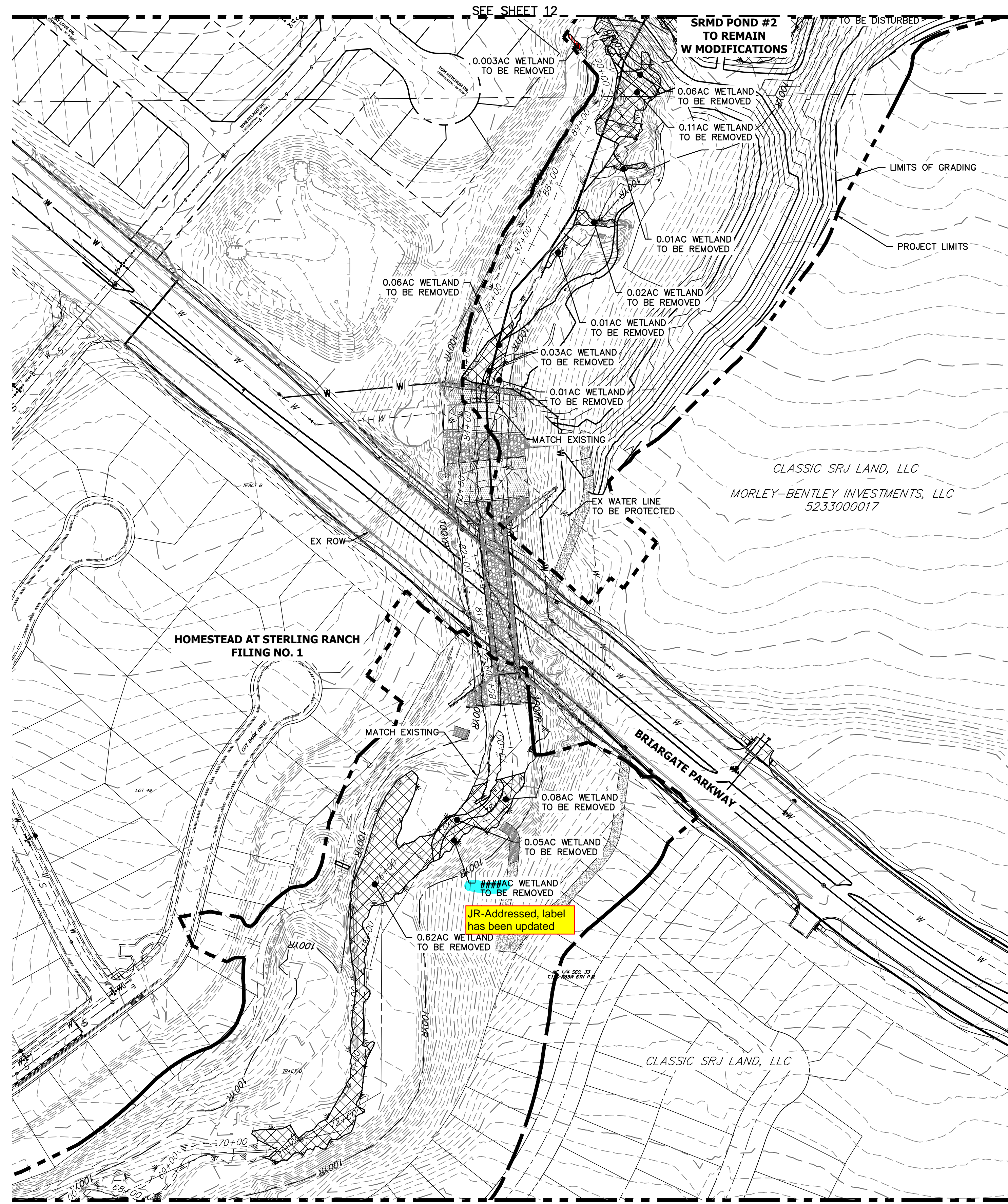
Know what's below.
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UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.

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

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

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KEY MAP
SCALE: 1"=2000'

LEGEND

WETLAND: DISTURBED AREAS

SEE SHEET 10

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

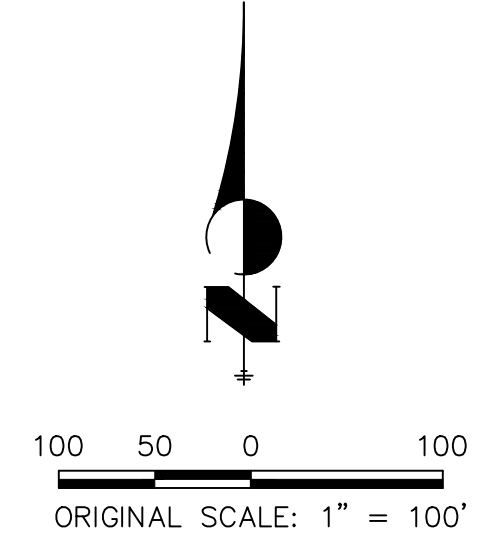
Sand Creek Demolitions		
Totals	Sq Ft	Acres
Reach 1 Permanent Loss	32,636.00	0.74
Reach 2 Permanent Loss	159,695.00	4.28
Reach 3 Permanent Loss	184,711.00	5.44
Total Permanent Loss	377,042.00	10.46

BENCHMARK

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NORTHING = 411416.273
EASTING = 235167.071
ELEVATION = 7023.42
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NORTHING = 410095.404
EASTING = 235052.131
ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411399.962
EASTING = 233849.817
ELEVATION = 7030.82

BASIS OF BEARINGS

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



Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

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

SAND CREEK RESTORATION

DEMOLITION PLAN

SHEET 11 OF 99
JOB NO. 25188.04

BY DATE

No. REVISION

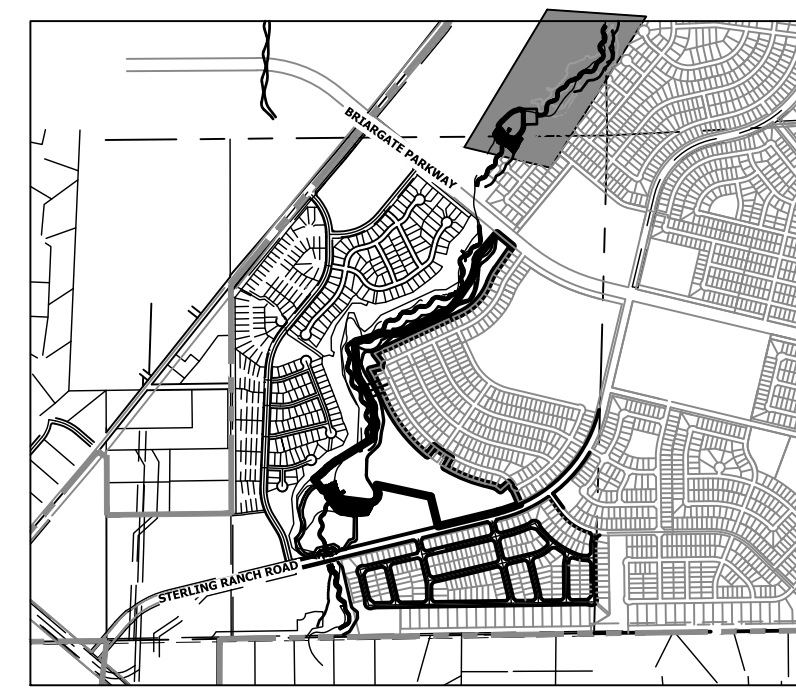
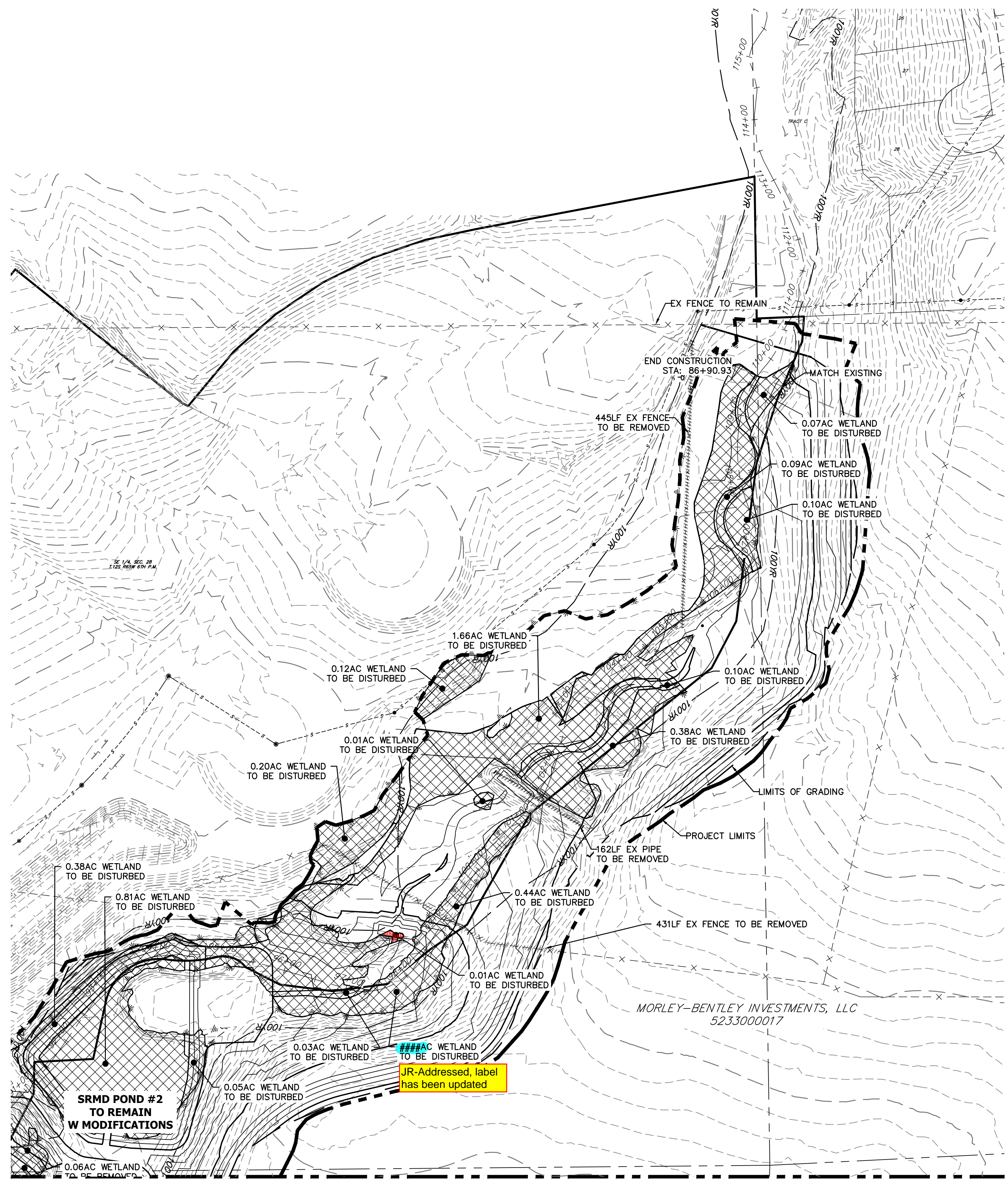
H-SCALE 1"=100'
V-SCALE N/A
DATE 9/1/22
DESIGNED BY DJV
DRAWN BY SCH
CHECKED BY

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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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KEY MAP
SCALE: 1"=2000'

LEGEND

WETLAND: DISTURBED AREAS

SEE SHEET 11

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

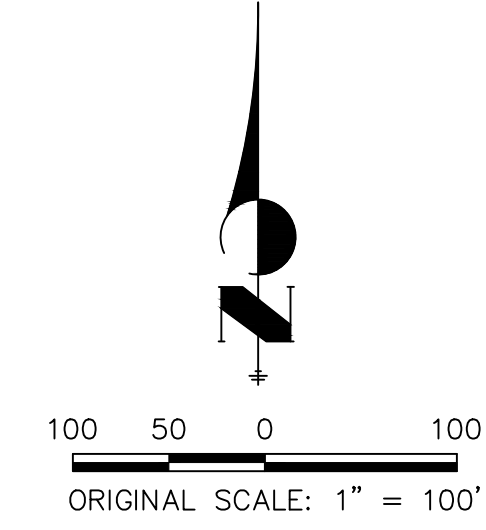
Sand Creek Demolitions		
Totals	Sq Ft	Acres
Reach 1 Permanent Loss	32,636.00	0.74
Reach 2 Permanent Loss	159,695.00	4.28
Reach 3 Permanent Loss	184,711.00	5.44
Total Permanent Loss	377,042.00	10.46

BENCHMARK

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

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ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL BY
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 31247
FOR AND ON BEHALF OF JR ENGINEERING



SAND CREEK RESTORATION

DEMOLITION PLAN

SHEET 12 OF 99

JOB NO. 25188.04

BY DATE

No. REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=100'	N/A	9/1/22	DJV	SCH	

PREPARED FOR

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

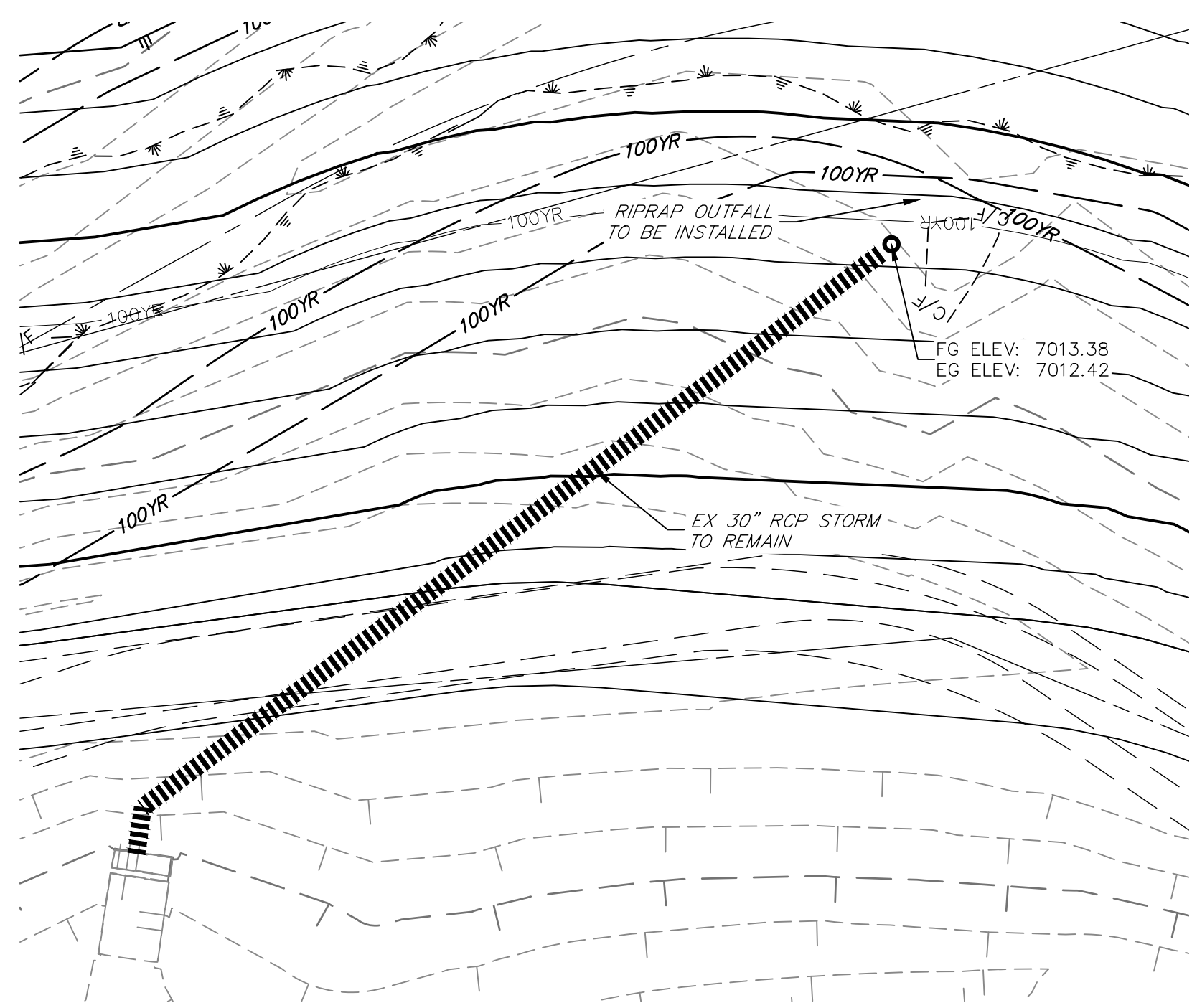
J.R. ENGINEERING
A Westman Company



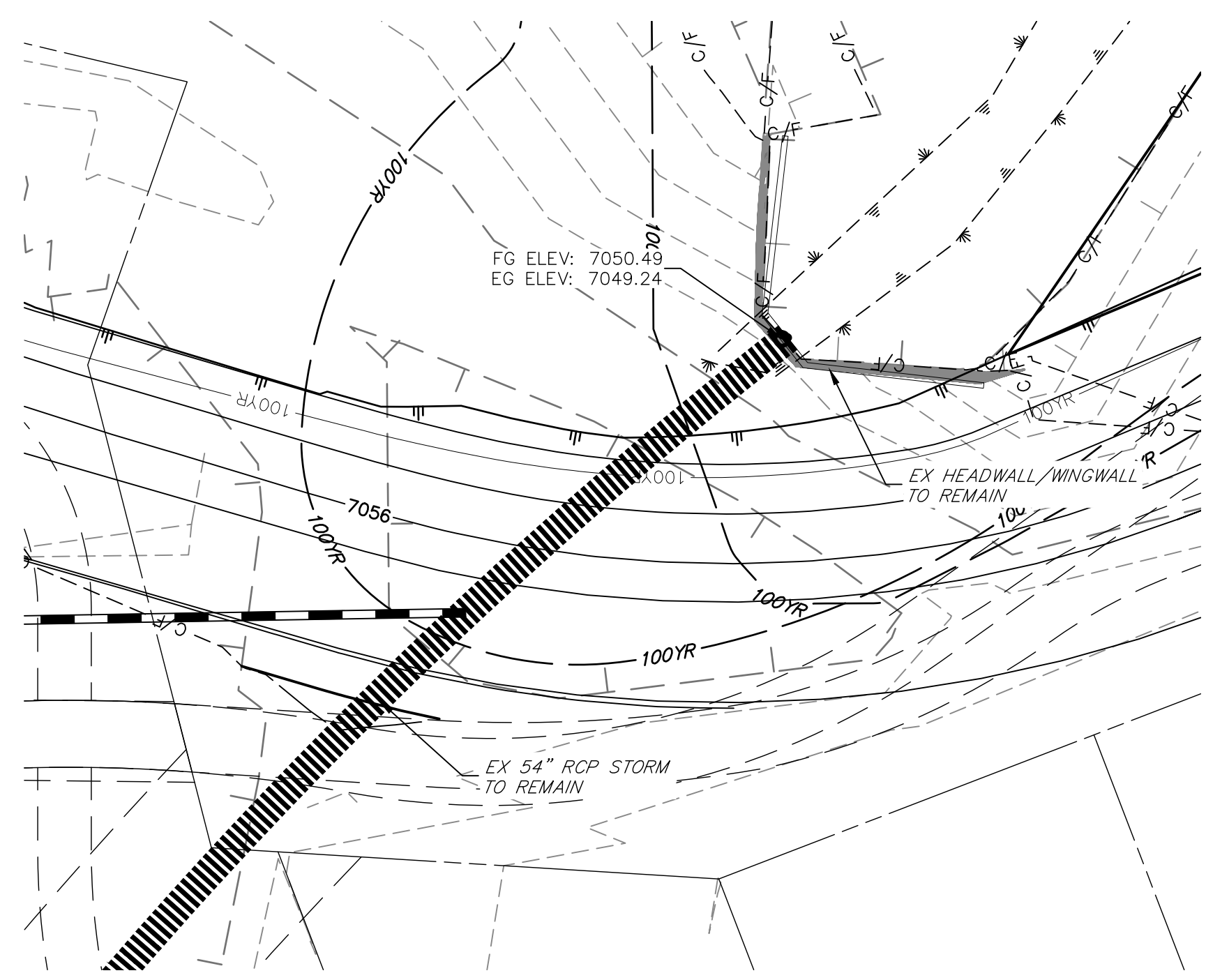
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Fort Collins 970-491-9888 • www.jrengineering.com

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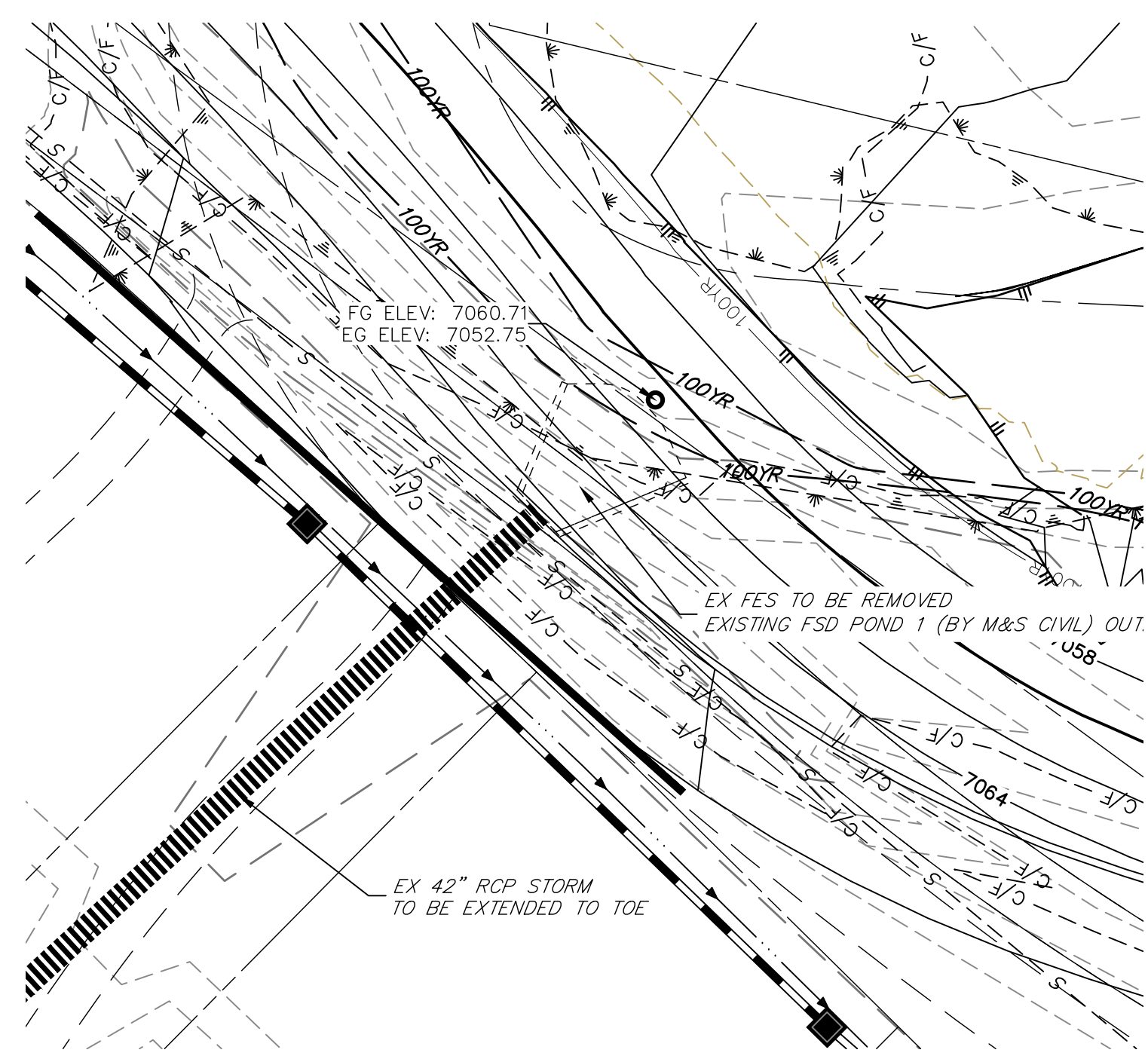
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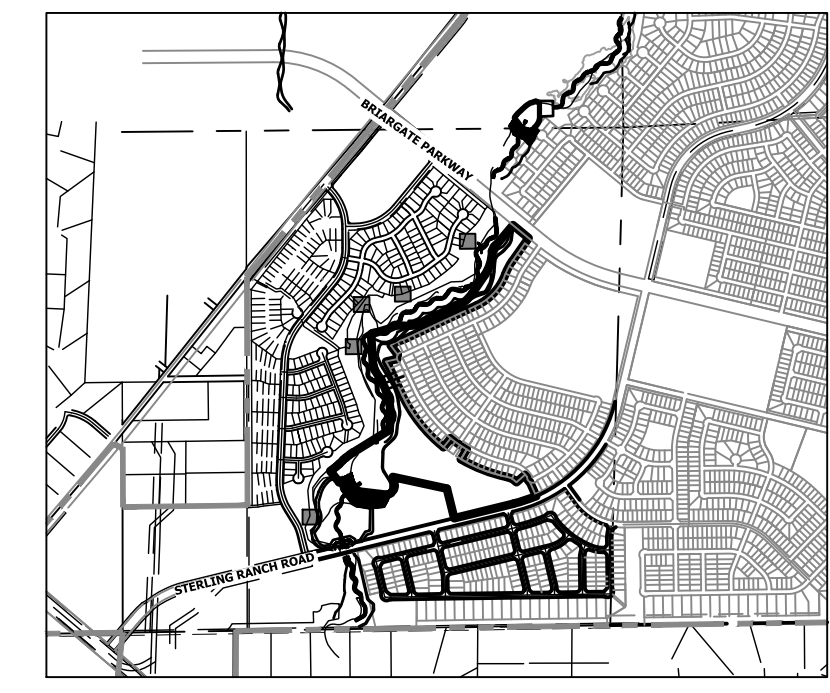
SEE STERLING RANCH FILING NO. 1 PLANS FOR AS BUILTS
(BY M&S CIVIL)



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



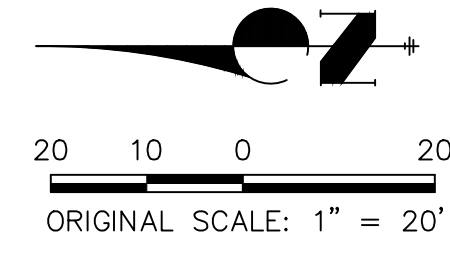
SEE HOMESTEAD AT STERLING RANCH FILING NO. 2 PLANS FOR AS BUILTS
(BY M&S CIVIL)



KEY MAP
SCALE: 1"=2000'

- BENCHMARK**
- THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411416.273
EASTING = 235167.071
ELEVATION = 7023.42
 - THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION
NORTHING = 410095.404
EASTING = 235052.131
ELEVATION = 7000.40
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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 AND CONTROL

**PRELIMINARY
NOT FOR
CONSTRUCTION**

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

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PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
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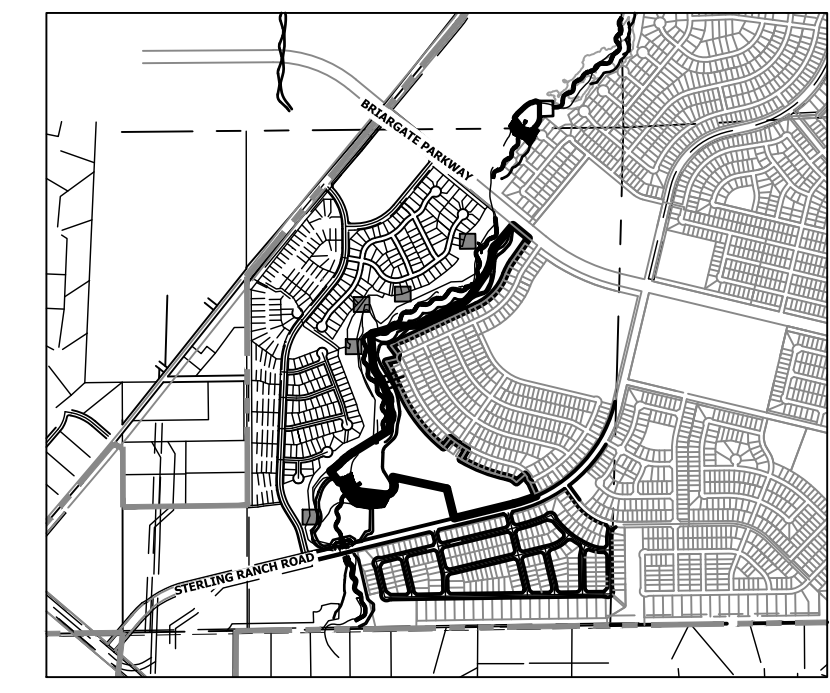
BY	DATE

No.	REVISION	1"=20'	1"=20'	DATE	DESIGNED BY	DRAWN BY	CHECKED BY

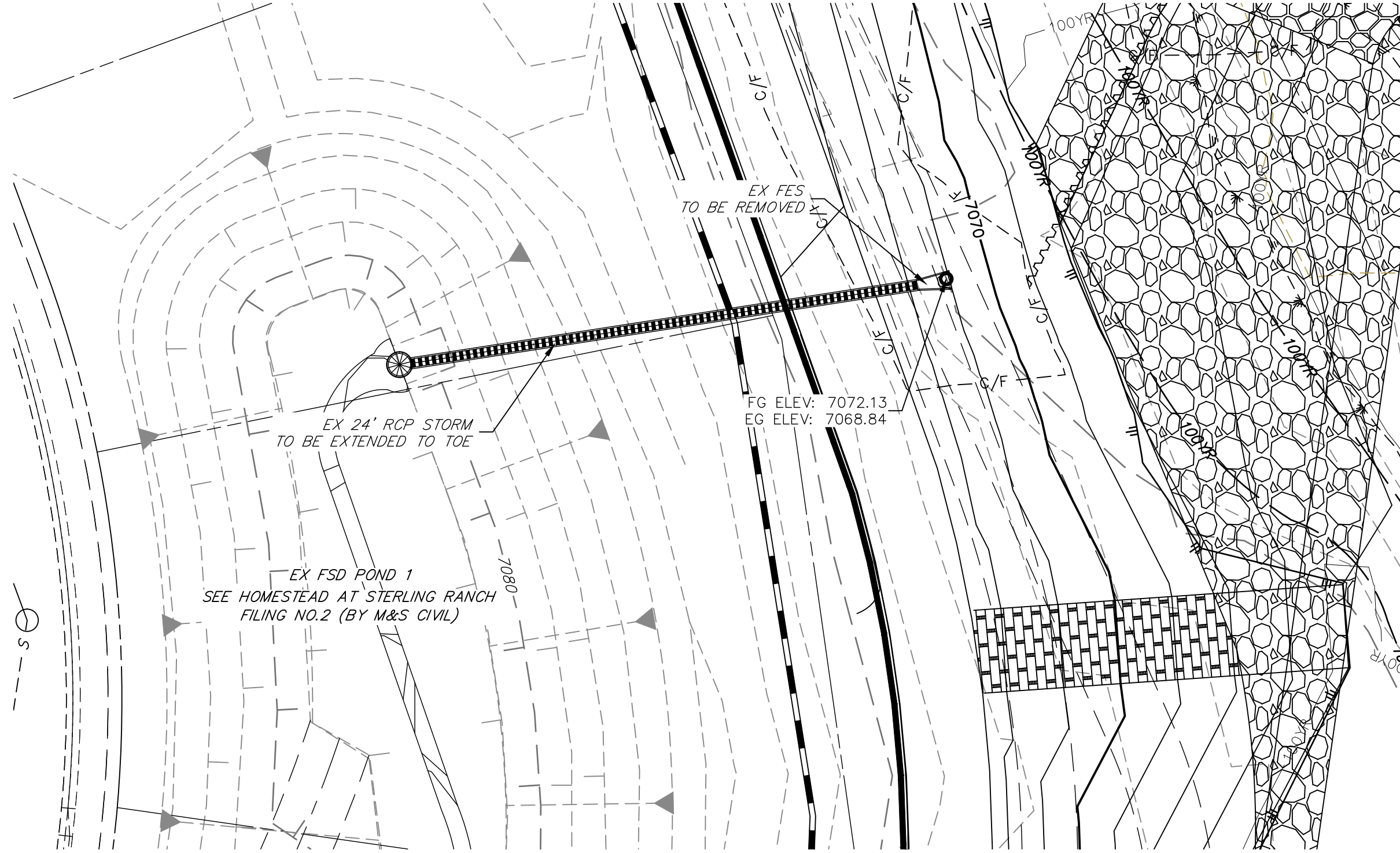
SAND CREEK RESTORATION
DEMOLITION PLAN

SHEET 13 OF 99
JOB NO. 25188.04

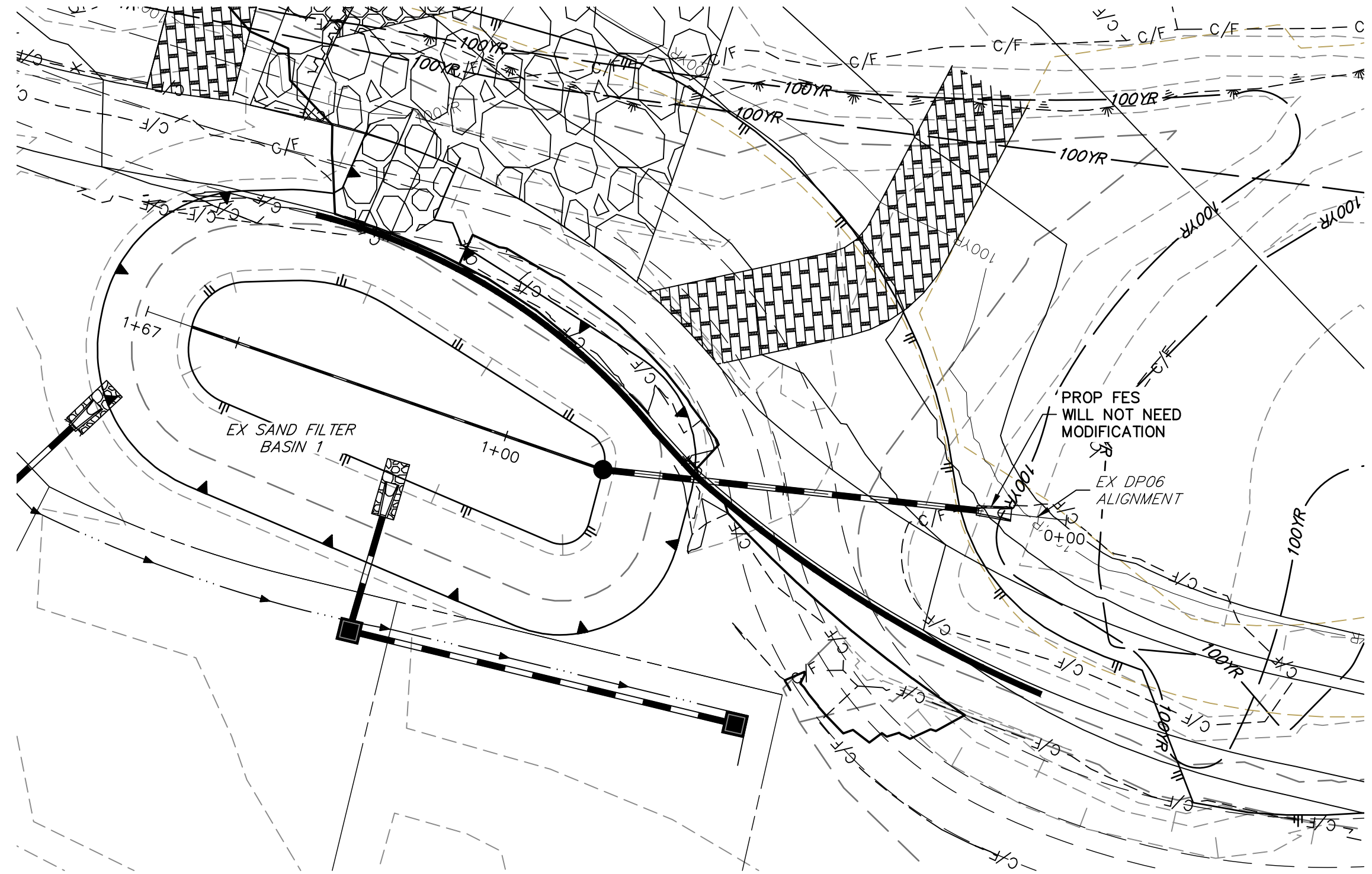
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KEY MAP
SCALE: 1"=2000'

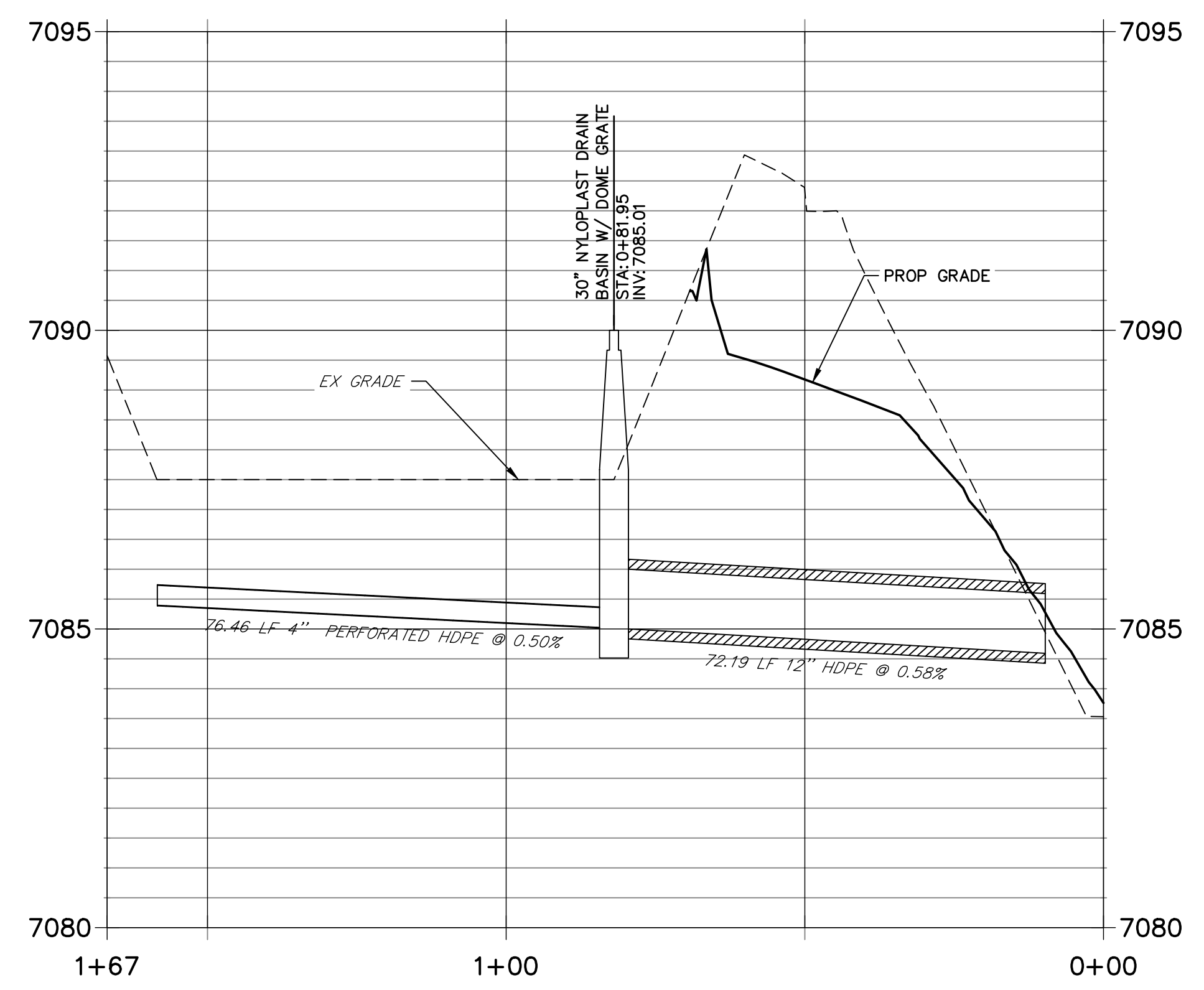


SEE HOMESTEAD AT STERLING RANCH FILING NO. 2 PLANS FOR AS BUILTS (BY M&S CIVIL)



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

DP06
STA 0+00.00 TO 1+66.80

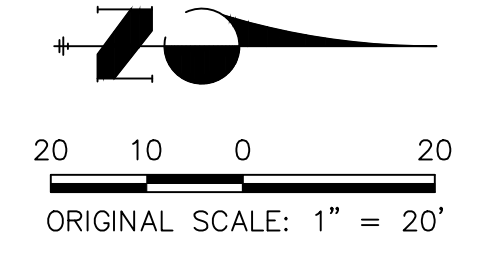


BENCHMARK

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ELEVATION = 7000.40
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EASTING = 233849.817
ELEVATION = 7030.82

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Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY
NOT FOR
CONSTRUCTION

MIKE A. BRAMLEY
COLORADO P.E. 38141
FOR AND ON BEHALF OF JR ENGINEERING, INC.

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

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

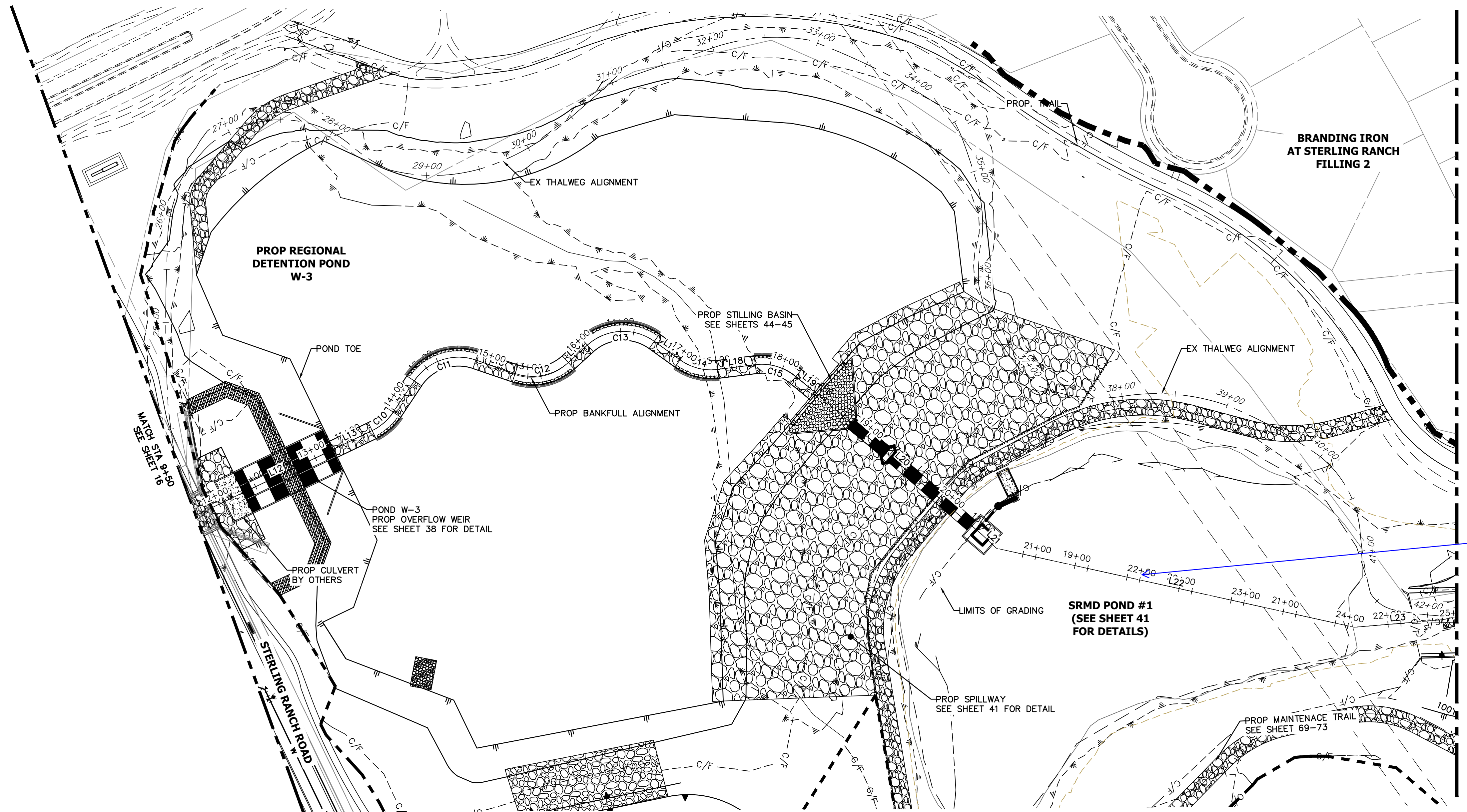
J.R. ENGINEERING
A Westman Company
Central 303-740-9888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=20'	1"=20'	9/1/22	DJV	WLL	

SAND CREEK RESTORATION
DEMOLITION PLAN
SHEET 14 OF 99
JOB NO. 25188.04

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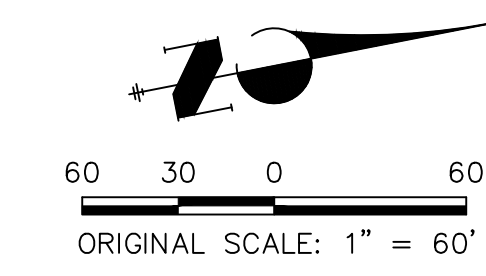


HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL
SCALE: 1"=60'

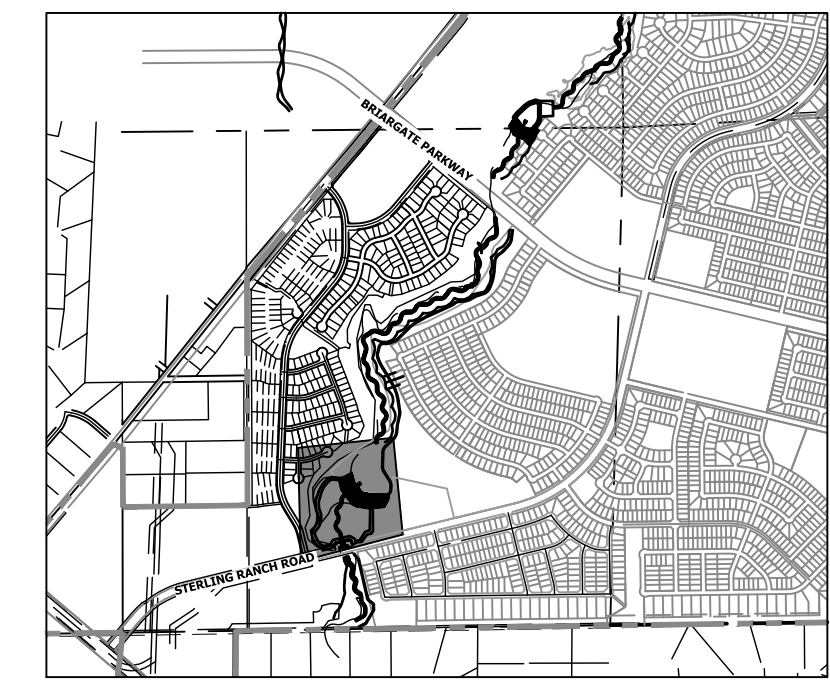
LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL

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



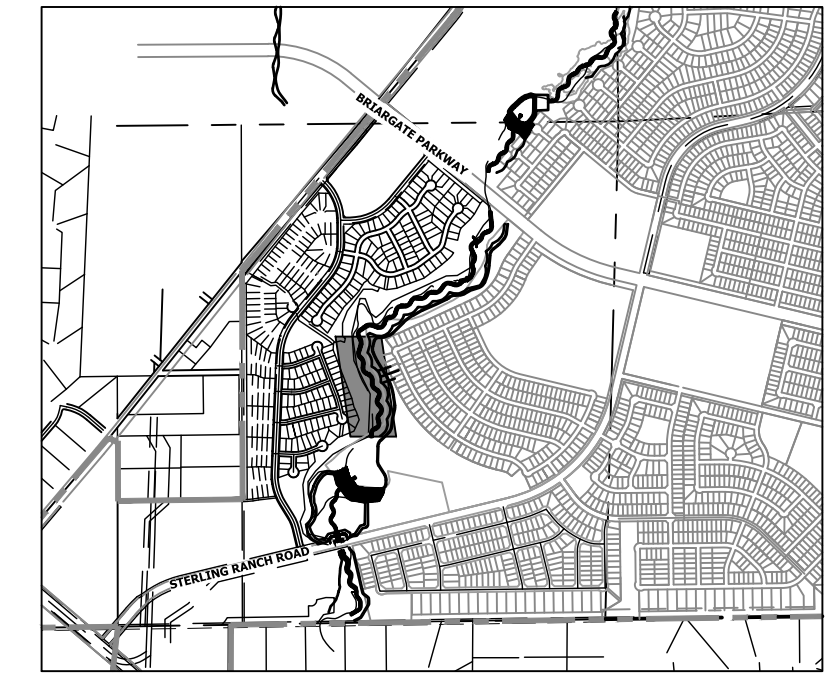
ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. # 30000
FOR AND ON BEHALF OF JR ENGINEERING



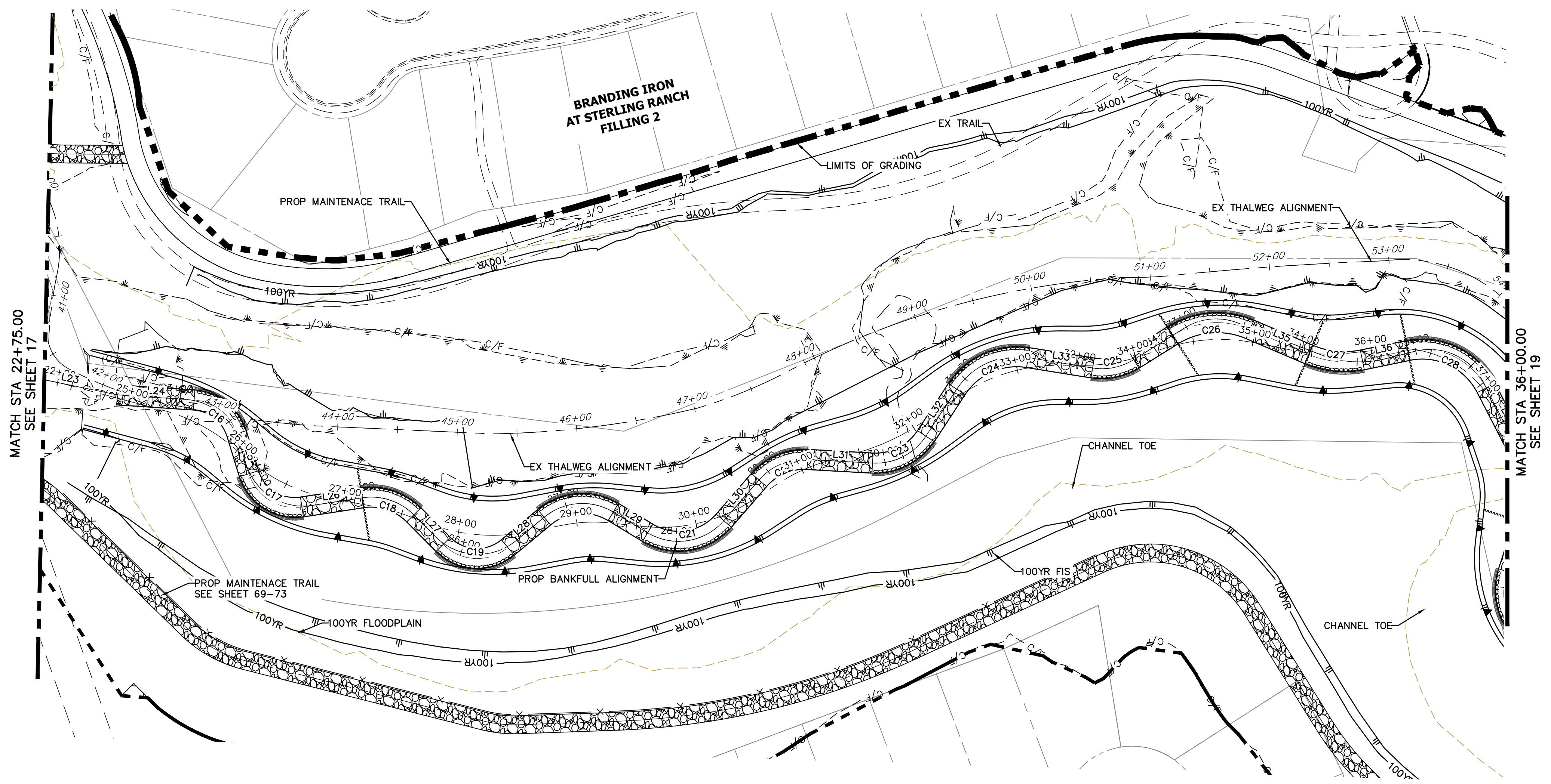
KEY MAP
SCALE: 1"=2000'

2 sets of stations is confusing
JR-Addressed, 1 set of stationing has been removed

SAND CREEK RESTORATION HORIZONTAL CONTROL PLAN	SHEET 17 OF 99
	JOB NO. 25188.04
H-SCALE 1"=60' V-SCALE N/A DATE 9/1/22 DESIGNED BY DJV DRAWN BY SCH 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
J.R. ENGINEERING A Westman Company Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.



KEY MAP
SCALE: 1"=2000'

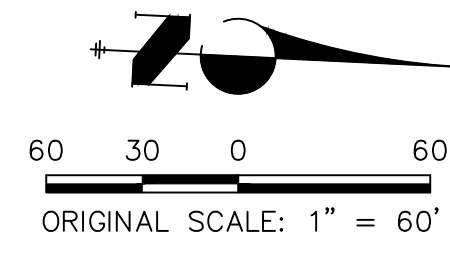


HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL
SCALE: 1"=60'

LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL

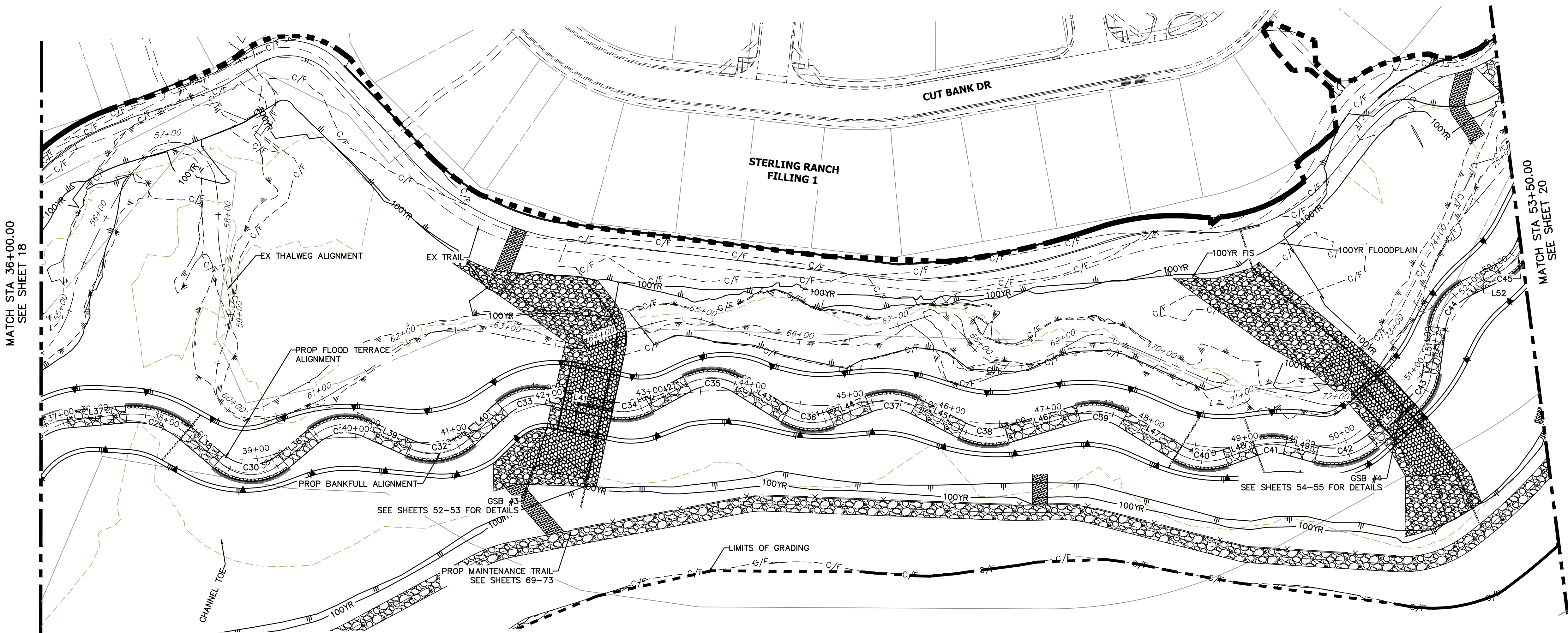
LINE	BEARING	DISTANCE
L23	N07°07'50"E	83.24'
L24	N00°39'41"W	63.90'
L25	N68°26'27"E	35.05'
L26	N13°07'27"W	51.07'
L27	N40°46'05"E	34.86'
L28	N44°15'32"W	39.48'
L29	N26°36'38"E	33.54'
L30	N53°36'32"W	44.94'
L31	N01°16'36"W	54.35'
L32	N61°14'53"W	46.99'
L33	N04°37'48"E	54.56'
L34	N36°27'31"W	38.39'
L35	N18°38'25"E	53.64'
L36	N16°05'42"W	38.89'

CURVE	DELTA	RADIUS	LENGTH
C16	69°06'08"	40.00'	48.24'
C17	79°32'05"	40.00'	55.53'
C18	53°53'33"	50.00'	47.03'
C19	85°01'35"	40.00'	59.36'
C20	70°52'11"	50.00'	61.85'
C21	80°13'10"	50.00'	70.00'
C22	52°19'56"	50.00'	45.67'
C23	59°58'18"	50.00'	52.34'
C24	65°52'41"	60.00'	68.99'
C25	41°05'20"	50.00'	35.86'
C26	55°05'57"	70.00'	67.32'
C27	34°44'08"	75.00'	45.47'
C28	74°20'35"	60.00'	77.85'



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

SAND CREEK RESTORATION HORIZONTAL CONTROL PLAN	H-SCALE: 1"=60' V-SCALE: N/A	No. REVISION BY DATE	PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024
	DATE: 9/1/22 DESIGNED BY: DJV DRAWN BY: SCH CHECKED BY:	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.	J.R. ENGINEERING A Westman Company Centennial 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com

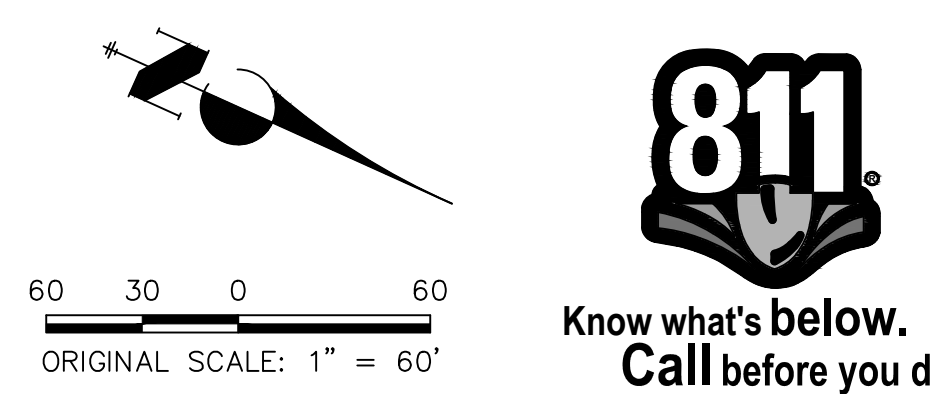


HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL
SCALE: 1"=60'

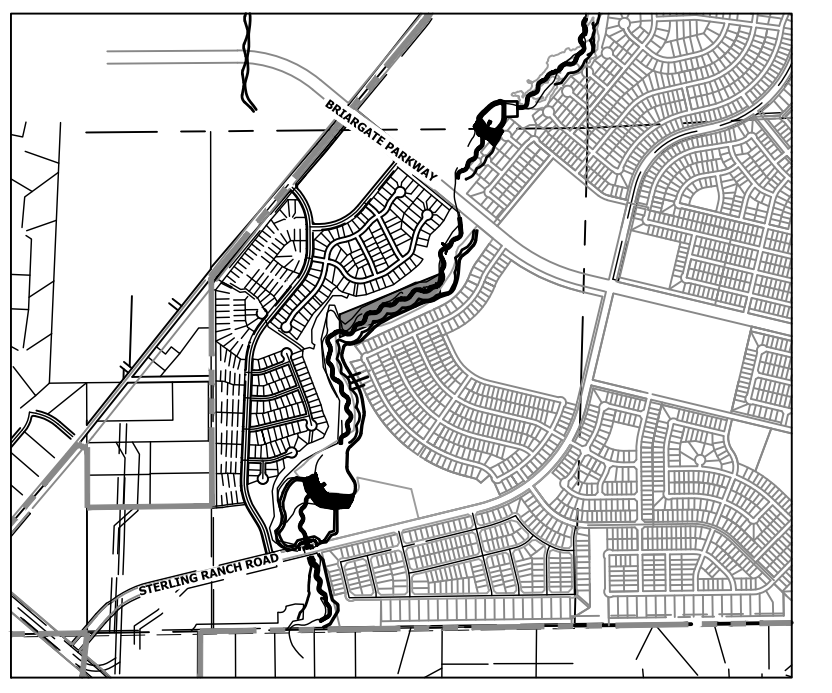
LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL

LINE TABLE		
LINE	BEARING	DISTANCE
L37	N58°14'53"E	58.18'
L38	N23°17'02"E	38.54'
L38	S76°25'16"E	42.80'
L39	N87°41'41"E	45.75'
L40	N21°13'33"E	44.40'
L41	N75°25'05"E	64.51'
L42	N34°33'05"E	42.89'
L43	S84°38'01"E	55.36'
L44	N41°26'25"E	39.80'
L45	S89°25'20"E	52.47'
L46	N46°45'21"E	73.56'
L47	S85°00'28"E	63.14'
L48	N43°19'47"E	30.76'
L49	N78°33'01"E	31.87'
L50	N21°39'45"E	55.35'
L51	N19°00'37"W	45.47'
L52	N37°01'40"E	38.30'

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C29	45°19'51"	80.00'	63.29'
C30	80°17'42"	50.00'	70.07'
C31	64°24'39"	50.00'	56.21'
C32	66°28'07"	55.00'	63.81'
C33	54°11'32"	50.00'	47.29'
C34	40°52'01"	55.00'	39.23'
C35	60°48'54"	50.00'	53.07'
C36	53°55'33"	50.00'	47.06'
C37	49°08'15"	55.00'	47.17'
C38	43°49'19"	60.00'	45.89'
C39	48°14'11"	55.00'	46.30'
C40	51°39'45"	55.00'	49.59'
C41	35°13'13"	50.00'	30.74'
C42	58°17'59"	58.67'	59.70'
C43	40°40'23"	50.00'	35.49'
C44	56°02'17"	50.00'	48.90'
C45	43°02'19"	50.00'	37.56'



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. # 100000000
FOR AND ON BEHALF OF JR ENGINEERING



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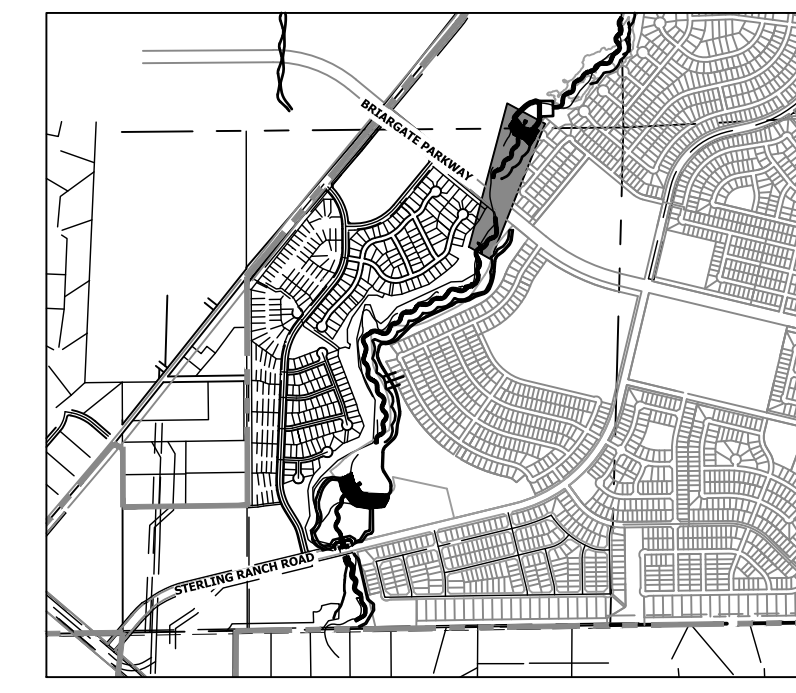
PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
A Westman Company
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No.	REVISION	BY	DATE	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				1"=60'	N/A	9/1/22	DJV	SCH	

SAND CREEK RESTORATION
HORIZONTAL CONTROL PLAN
SHEET 19 OF 99
JOB NO. 25188.04

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KEY MAP
SCALE: 1" = 2000'

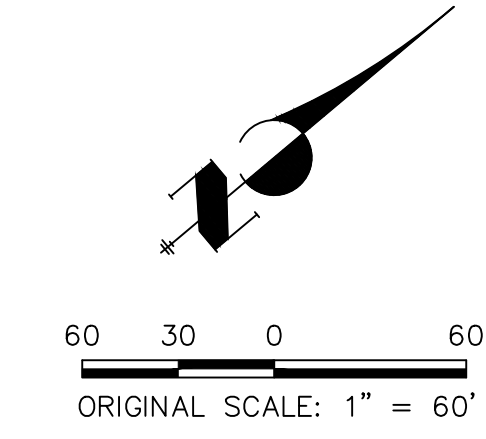


HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL
SCALE: 1" = 60'

LINE AND CURVE TABLES - SAND CREEK FLOOD TERRACE CHANNEL

LINE TABLE		
LINE	BEARING	DISTANCE
L53	N06°00'39"W	66.75'
L54	N36°14'46"E	39.38'
L55	N10°21'29"E	49.36'
L56	N60°54'10"E	43.33'
L57	N05°12'24"E	171.36'
L58	N05°23'49"W	227.79'
L59	N05°23'49"W	100.46'
L60	N00°44'30"E	91.02'
L61	N07°39'00"E	24.57'
L62	N73°38'46"E	29.14'
L63	N14°36'29"E	40.64'
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'

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C46	42°15'20"	55.00'	40.56'
C47	25°52'40"	50.02'	22.59'
C48	50°32'41"	50.00'	44.11'
C49	54°19'17"	50.00'	47.40'
C50	65°59'46"	50.00'	57.59'
C51	58°56'29"	50.19'	51.63'
C52	53°32'09"	50.00'	46.72'
C53	64°10'24"	50.00'	56.00'
C54	47°58'23"	50.00'	41.86'
C55	54°20'55"	50.00'	47.43'
C56	26°43'51"	50.00'	23.33'



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. # 12017
FOR AND ON BEHALF OF JR ENGINEERING

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

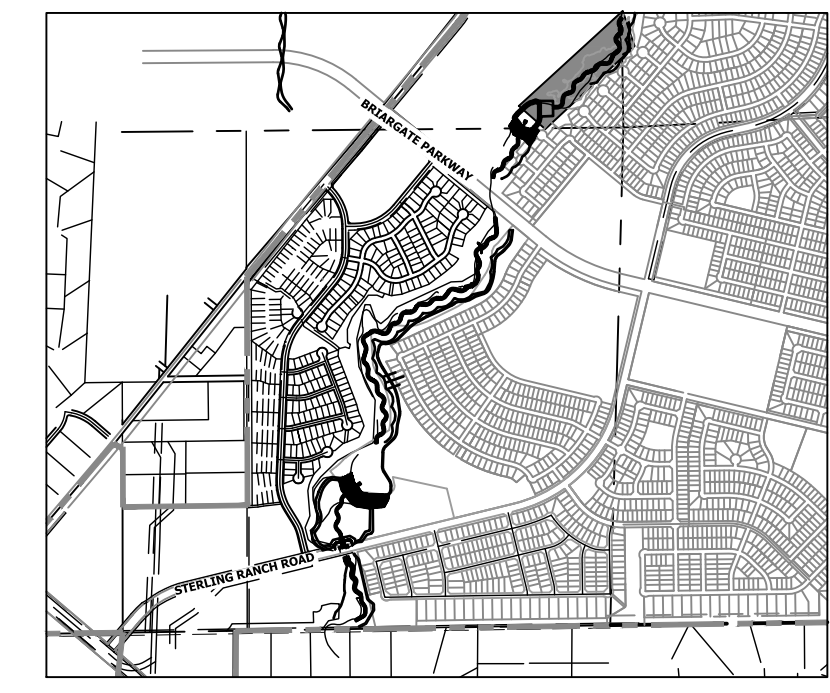
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Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1" = 60'	V-SCALE	N/A	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				9/1/22	DJV	SCH	

SAND CREEK RESTORATION
HORIZONTAL CONTROL PLAN
SHEET 20 OF 99
JOB NO. 25188.04

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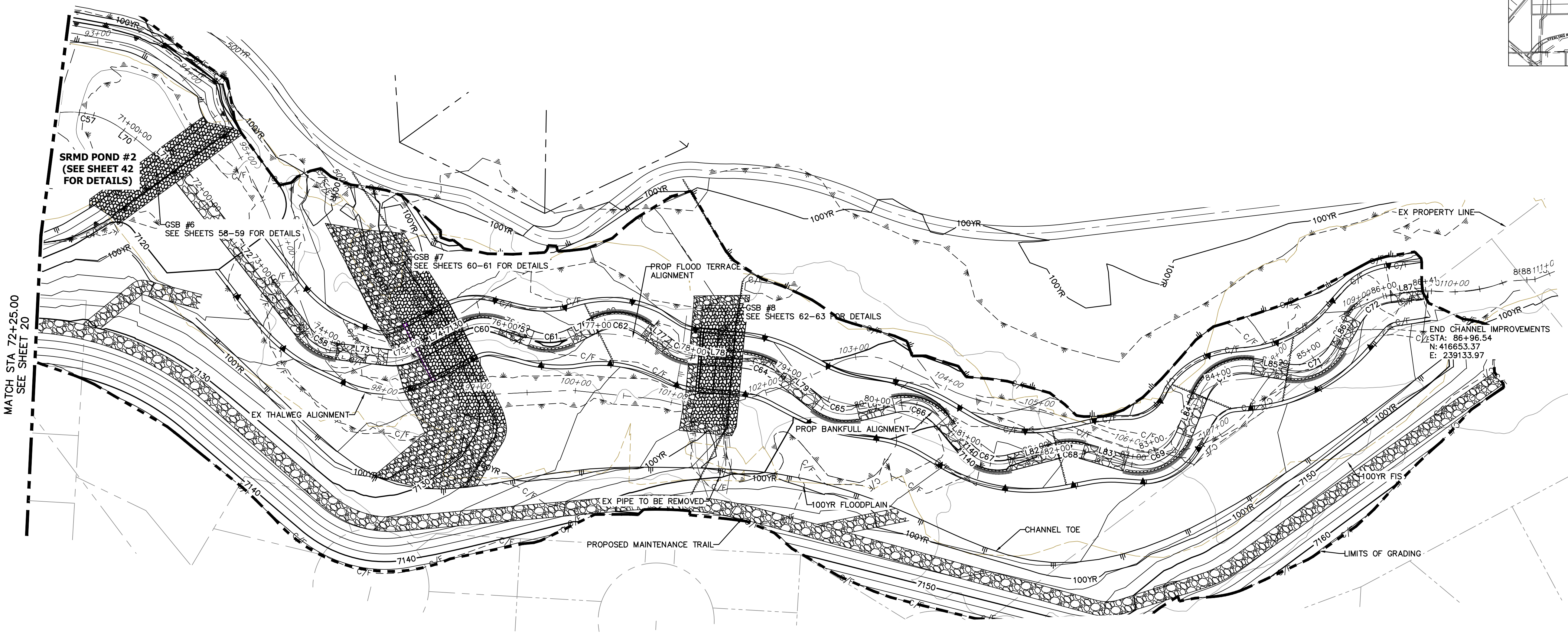


KEY MAP
SCALE: 1"=2000'

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

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

J.R. ENGINEERING
A Westman Company
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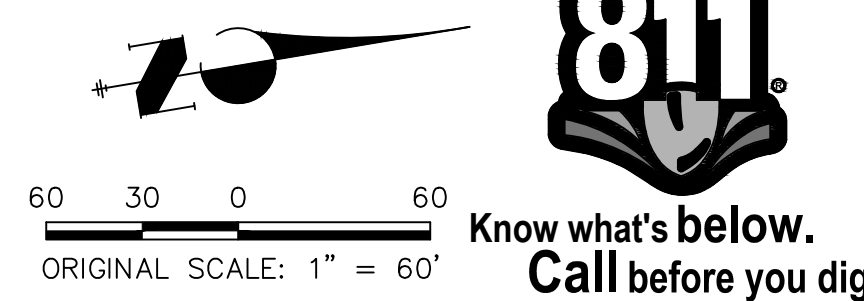


HORIZONTAL CONTROL PLAN - SAND CREEK CHANNEL
SCALE: 1"=50'

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'



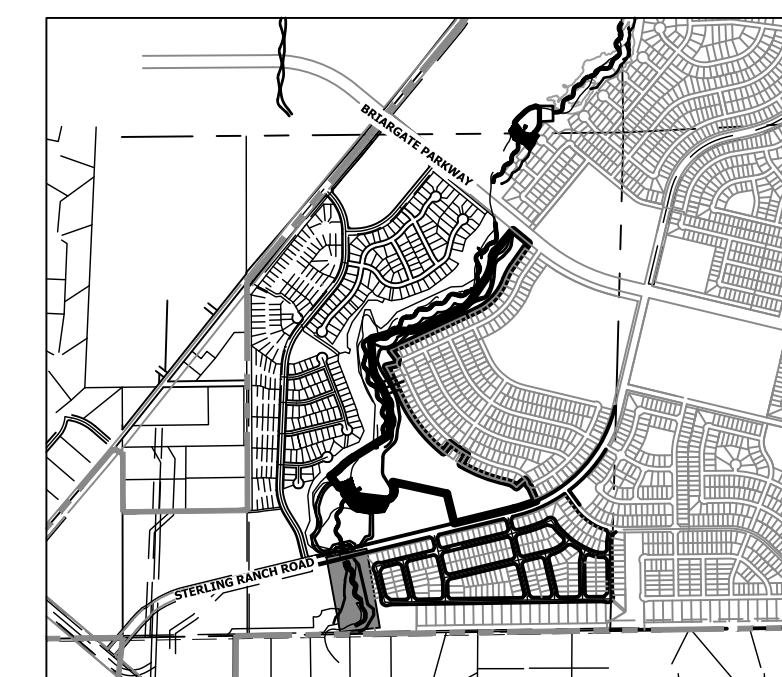
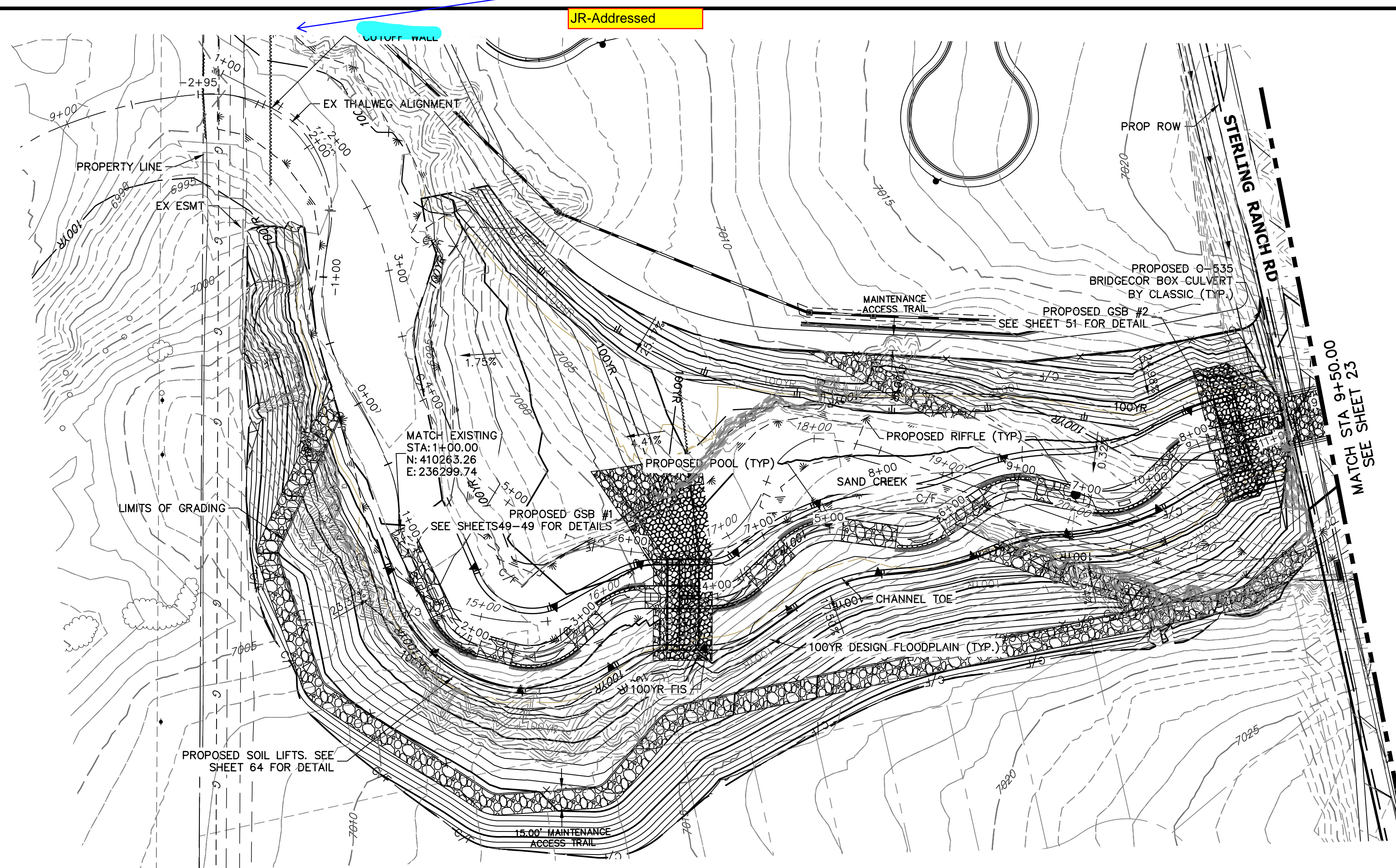
ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 31111
FOR AND ON BEHALF OF JR ENGINEERING

H-SCALE	V-SCALE	DATE	DESIGNED BY		DRAWN BY		CHECKED BY	
			1"=60'	N/A	SCH	SCH	SCH	SCH
		9/1/22						

SAND CREEK RESTORATION
HORIZONTAL CONTROL PLAN
SHEET 21 OF 99
JOB NO. 25188.04

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Adjust viewpoint



KEY MAP SCALE: 1" = 2000'

BENCHMARK

- 1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION... 2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANTEE RANCHEROS SUBDIVISION... 3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION...

BASIS OF BEARINGS

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

LEGEND

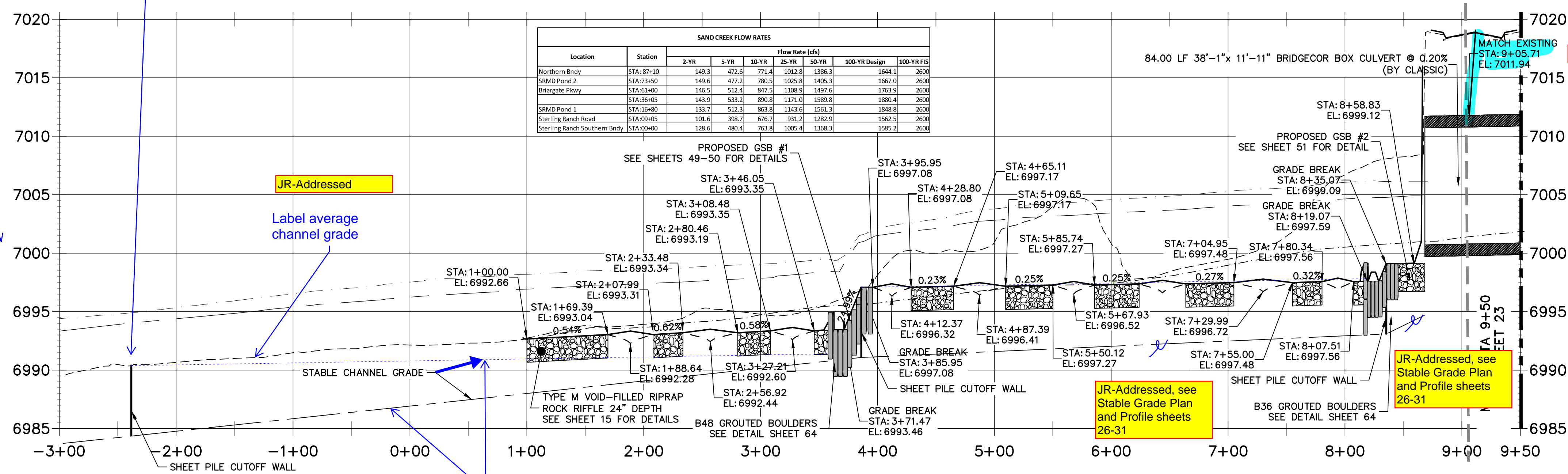
- FINISHED GRADE @ CHANNEL
THALWEG PROFILE
EXISTING GRADE @ CHANNEL
EXISTING THALWEG PROFILE
100-YR HGL PROFILE
100-YR FIS FLOODPLAIN
100-YR DESIGN FLOODPLAIN
STABLE CHANNEL GRADE

JR-Addressed Show property line and utilities

JR-Addressed Label station, elevations

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

JR-Addressed delete gray line?



SAND CREEK FLOW RATES table with columns for Location, Station, and Flow Rate (cfs) for various return periods.

JR-Addressed

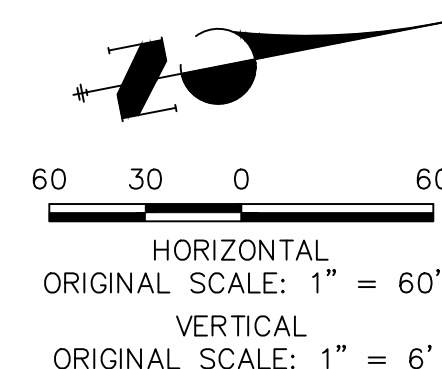
Label average channel grade

JR-Addressed, see Stable Grade Plan and Profile sheets 26-31

This line should be upstream from the top of each downstream grade control structure. Label stable grade. A dotted linetype might be better.

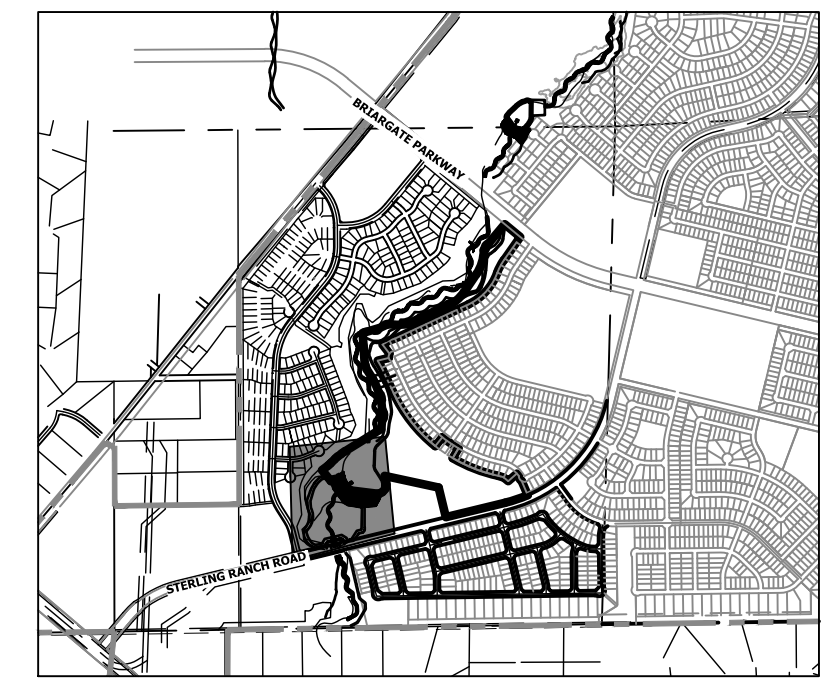
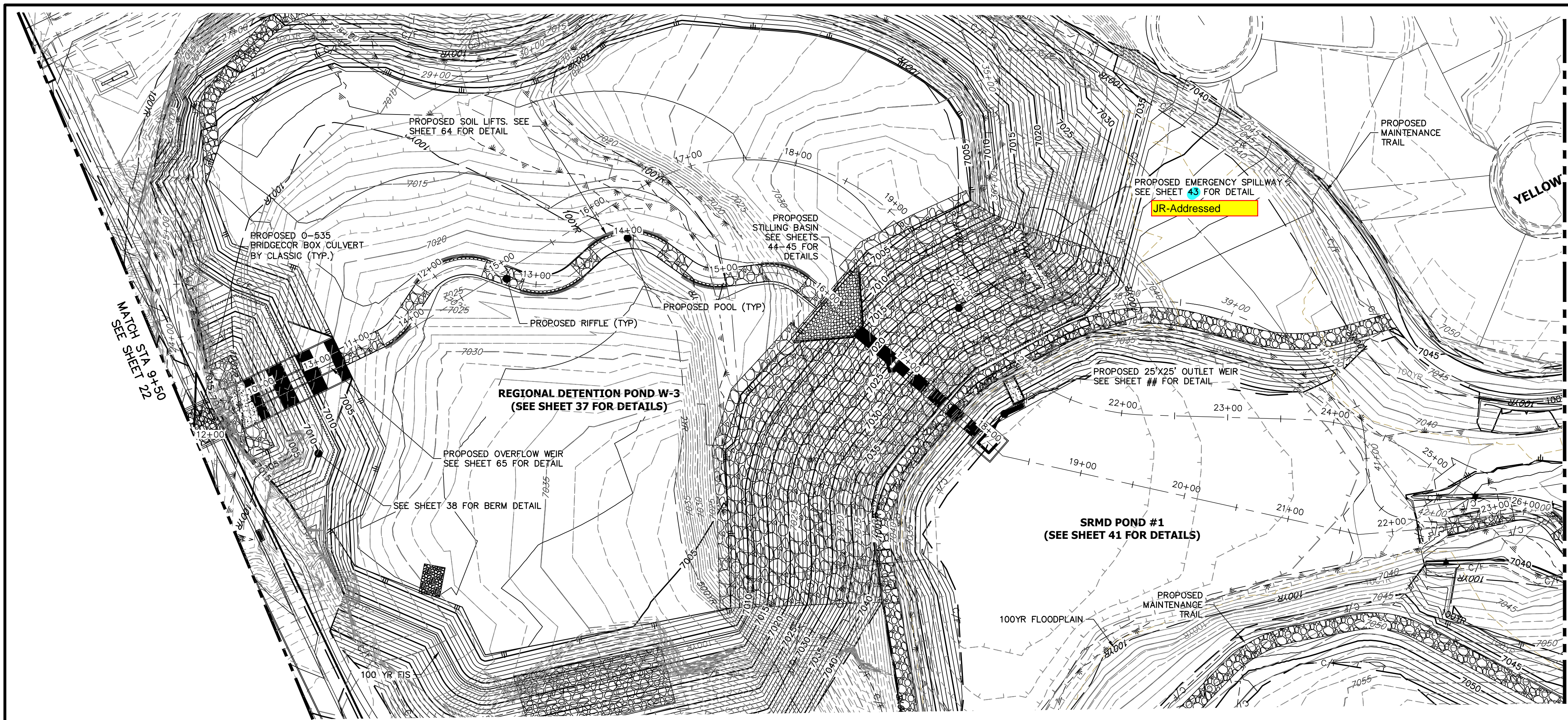
JR-Addressed, see Stable Grade Plan and Profile sheets 26-31

- 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... PRELIMINARY NOT FOR CONSTRUCTION MIKE A. BRAMLEY COLORADO P.E. 3001 FOR AND ON BEHALF OF JR. ENGINEERING

Vertical sidebar containing project title 'SAND CREEK RESTORATION CHANNEL PLAN & PROFILE', sheet number 'SHEET 22 OF 99', job number 'JOB NO. 25188.04', and contact information for JR. ENGINEERING.

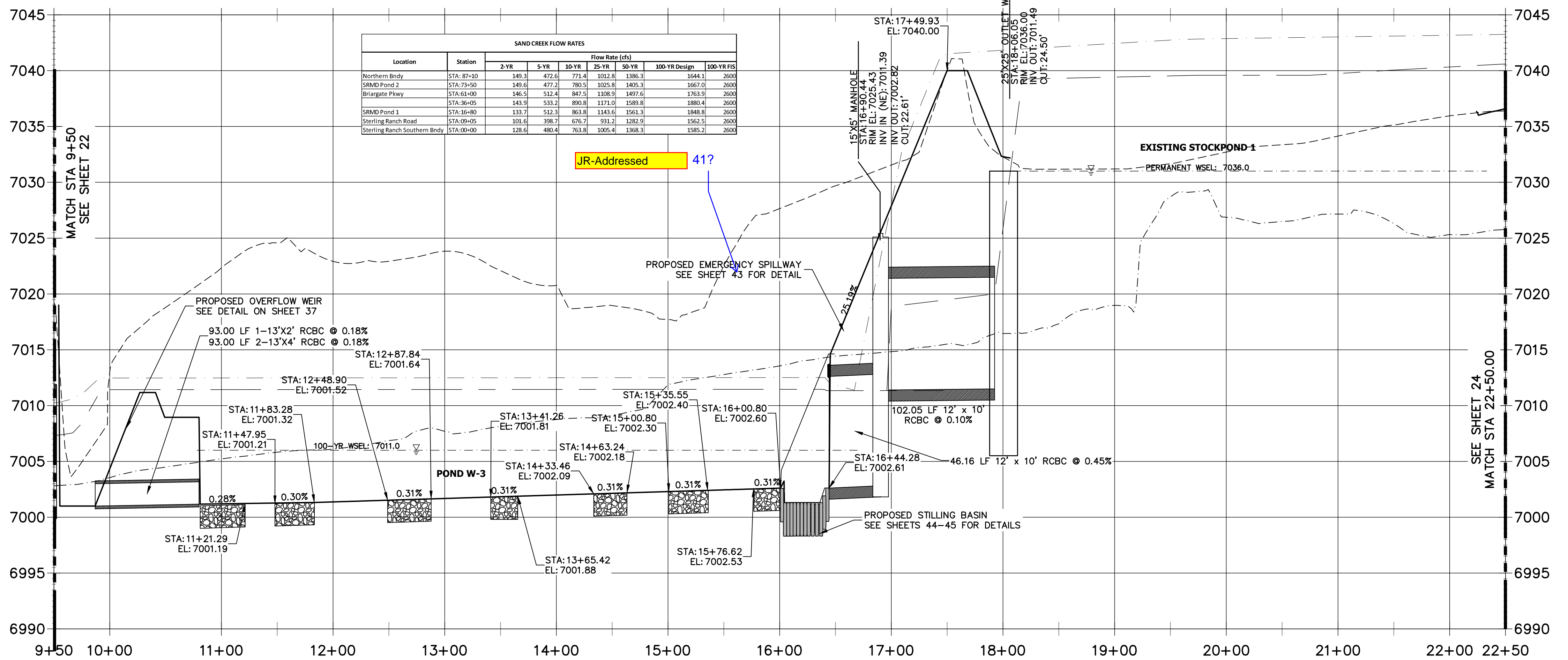


KEY MAP
SCALE: 1"=2000'

LEGEND

---	FINISHED GRADE CHANNEL
- - -	THALWEG PROFILE
---	EXISTING GRADE CHANNEL
- - -	EXISTING THALWEG PROFILE
---	100-YR HGL PROFILE
---	100YR 100-YR FIS FLOODPLAIN
---	100YR 100-YR DESIGN FLOODPLAIN
---	STABLE CHANNEL GRADE

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



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

**PRELIMINARY
NOT FOR
CONSTRUCTION**

MIKE A. BRAMBLE
COLORADO P.E. #12345
FOR AND ON BEHALF OF JR ENGINEERING

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

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

BY	DATE	No.	REVISION

H-SCALE 1"=60'
V-SCALE 1"=6'
DATE 9/1/22
DESIGNED BY DJV
DRAWN BY SCH
CHECKED BY

**SAND CREEK RESTORATION
CHANNEL PLAN & PROFILE**

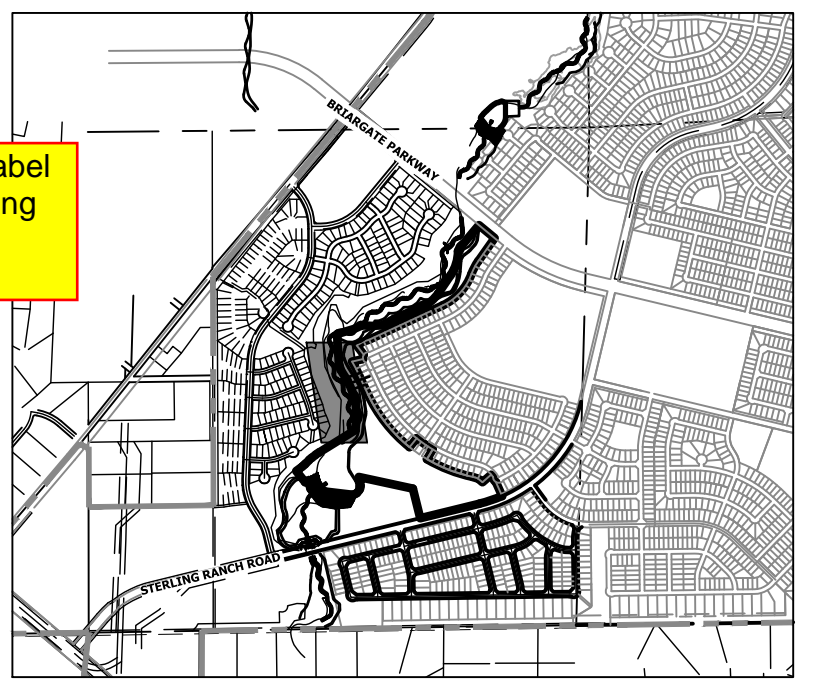
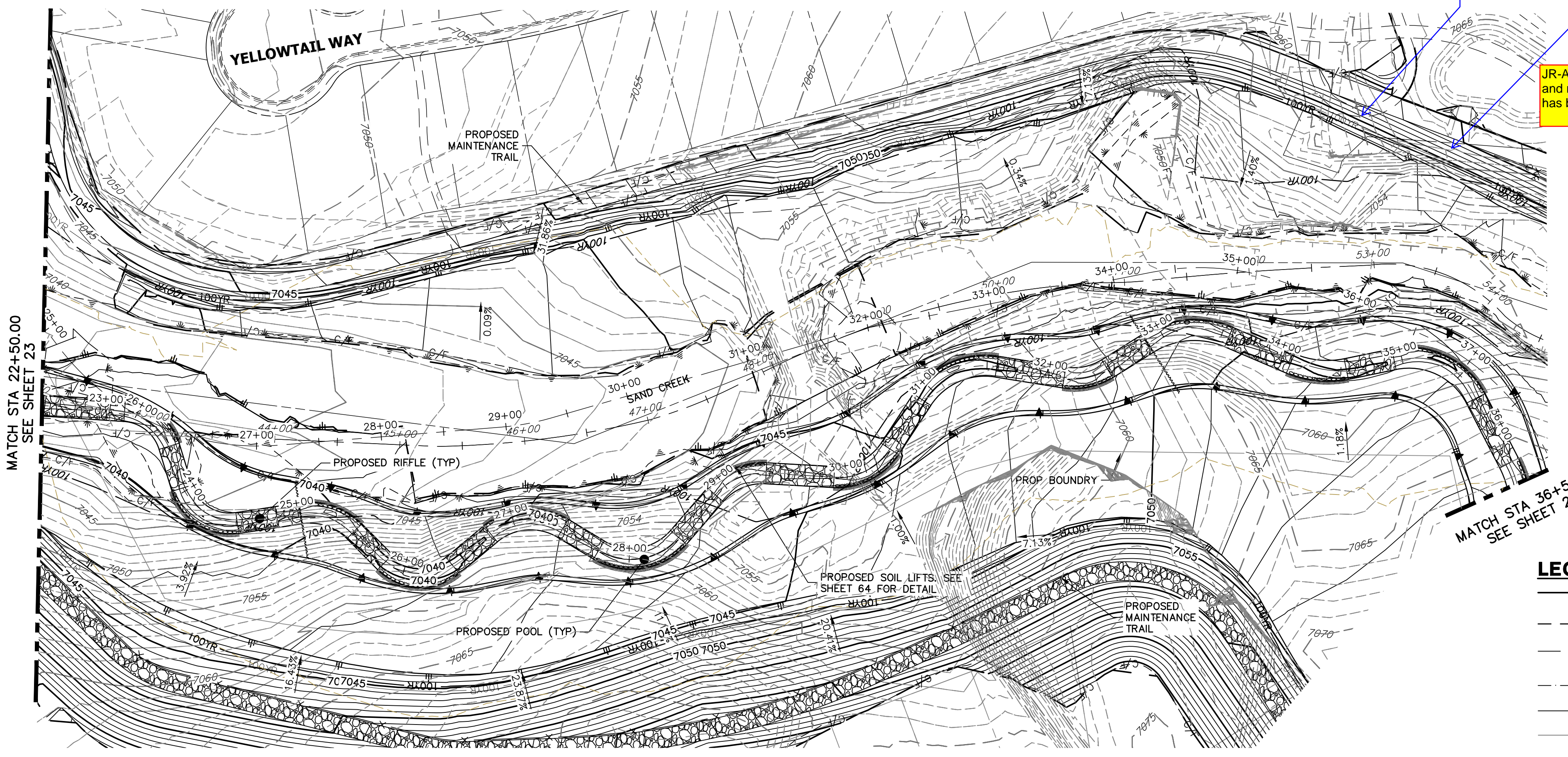
SHEET 23 OF 99
JOB NO. 25188.04

JR-Outdated Homestead linework has been removed.

relocate trail?

label spillway/rundown protection

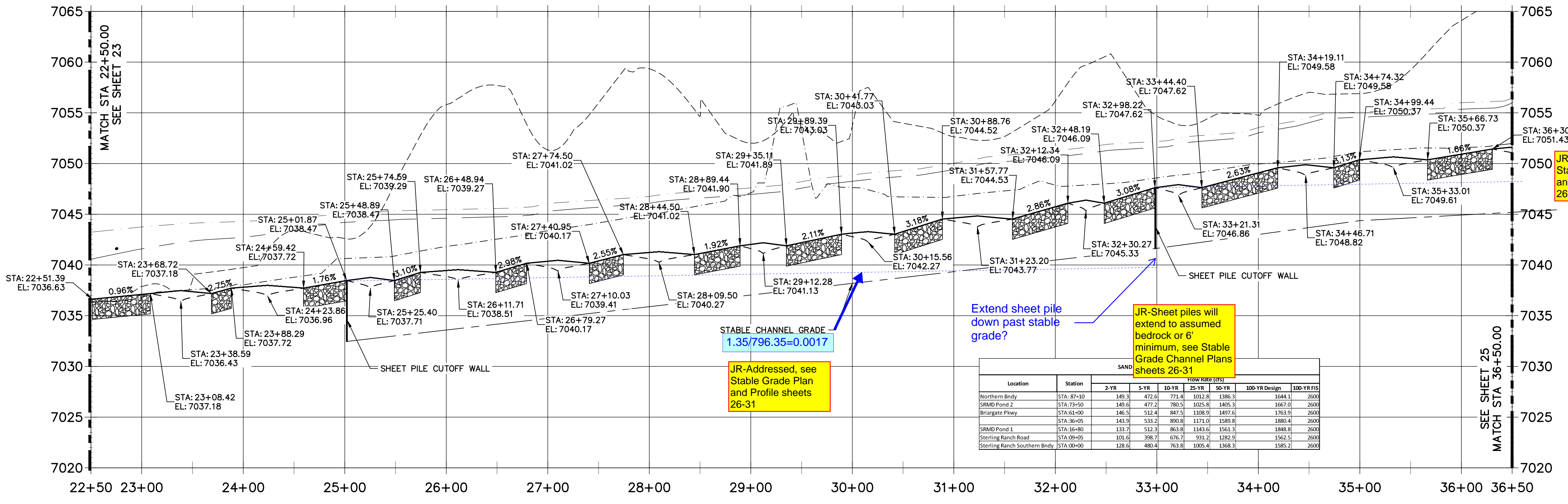
JR-Addressed, label and riprap hatching has been added



LEGEND

- CHANNELED FINISHED GRADE
- THALWEG PROFILE
- EXISTING GRADE
- EXISTING THALWEG PROFILE
- 100-YR HGL PROFILE
- 100-YR FIS FLOODPLAIN
- 100-YR DESIGN FLOODPLAIN
- STABLE CHANNEL GRADE

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



JR-Addressed, see Stable Grade Plan and Profile sheets 26-31

JR-Addressed, see Stable Grade Plan and Profile sheets 26-31

Extend sheet pile down past stable grade?

JR-Sheet piles will extend to assumed bedrock or 6' minimum, see Stable Grade Channel Plans sheets 26-31

Location	Station	Flow Rates (cfs)				
		2-YR	5-YR	10-YR	25-YR	100-YR Design
Northern Binds	STA: 87+10	149.3	472.6	773.4	1032.8	1386.3
SAND Pond 2	STA: 73+50	149.6	472.2	783.5	1025.8	1405.3
Briargate Pkwy	STA: 63+00	146.5	512.4	847.5	1108.9	1497.6
	STA: 36+05	143.8	533.2	890.8	1217.0	1598.8
SAND Pond 1	STA: 16+80	133.7	512.3	863.8	1143.6	1561.3
Sterling Ranch Road	STA: 09+05	103.6	398.7	676.7	931.2	1282.9
Sterling Ranch Southern Binds	STA: 00+00	128.6	480.0	763.8	1005.4	1368.3

ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMBLE
COLORADO P.E. No. 100000000
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. APPROVED BY: JAMES F. MORLEY DESIGNATED BY: WRITTEN AUTHORIZATION.

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

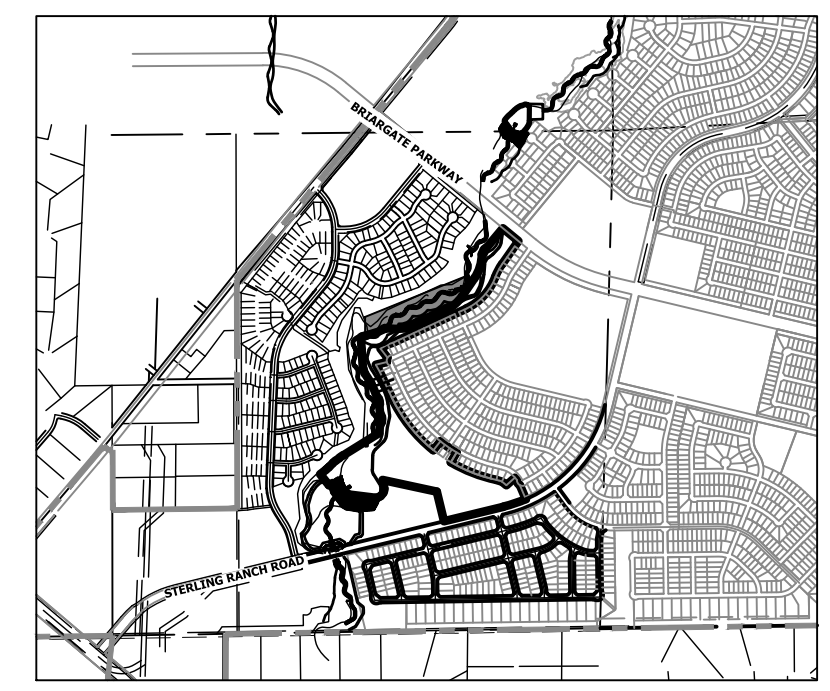
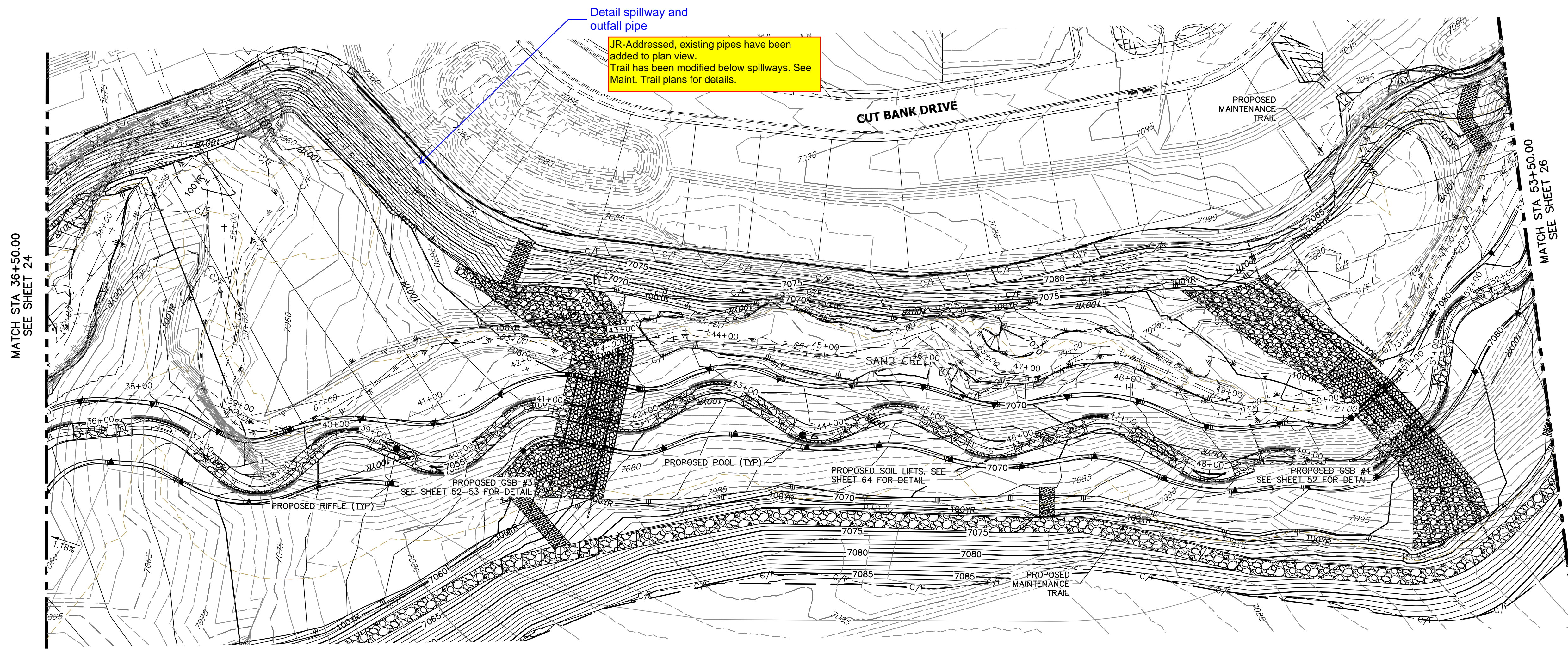
J.R. ENGINEERING
A Westman Company
Central 303-740-9888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

H-SCALE 1"=60'
V-SCALE 1"=6'
DATE 9/1/22
DESIGNED BY DJV
DRAWN BY SCH
CHECKED BY

**SAND CREEK RESTORATION
CHANNEL PLAN & PROFILE**

SHEET 24 OF 99
JOB NO. 25188.04



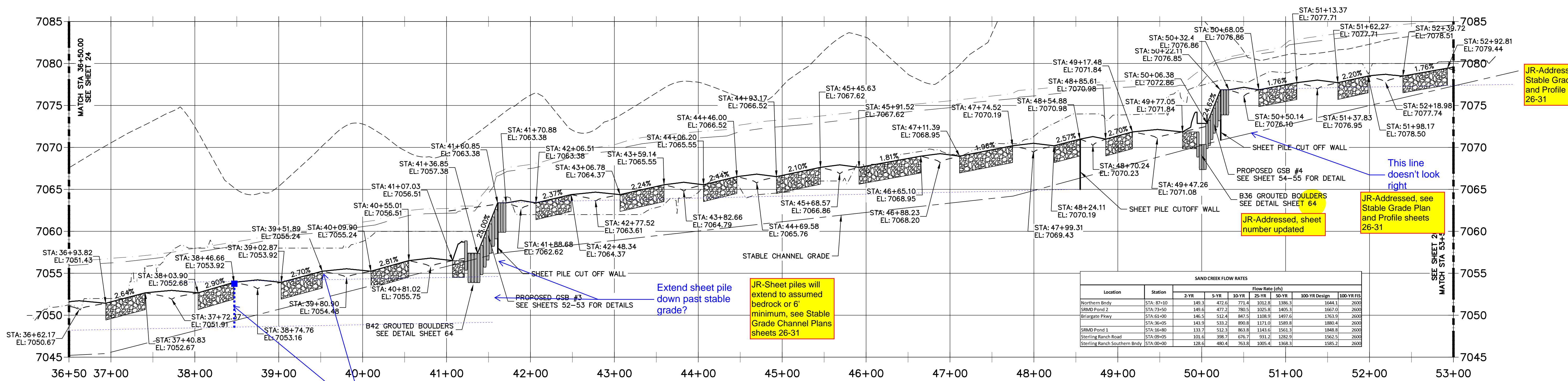
LEGEND

- FINISHED GRADE CHANNEL
- THALWEG PROFILE
- EXISTING GRADE CHANNEL
- EXISTING THALWEG PROFILE
- 100-YR HGL PROFILE
- 100YR 100-YR FIS FLOODPLAIN
- 100YR 100-YR DESIGN FLOODPLAIN
- STABLE CHANNEL GRADE

HORIZONTAL ORIGINAL SCALE: 1" = 60'

VERTICAL ORIGINAL SCALE: 1" = 6'

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



UNLESS 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

JR ENGINEERING
 A Westman Company
 Centennial 300-740-0888 • Colorado Springs 719-588-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	RE.

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=60'	1"=6'	9/1/22	DUV	SCH	

SAND CREEK RESTORATION

CHANNEL PLAN & PROFILE

SHEET 25 OF 99

JOB NO. 25188.04



ENGINEER'S STATEMENT

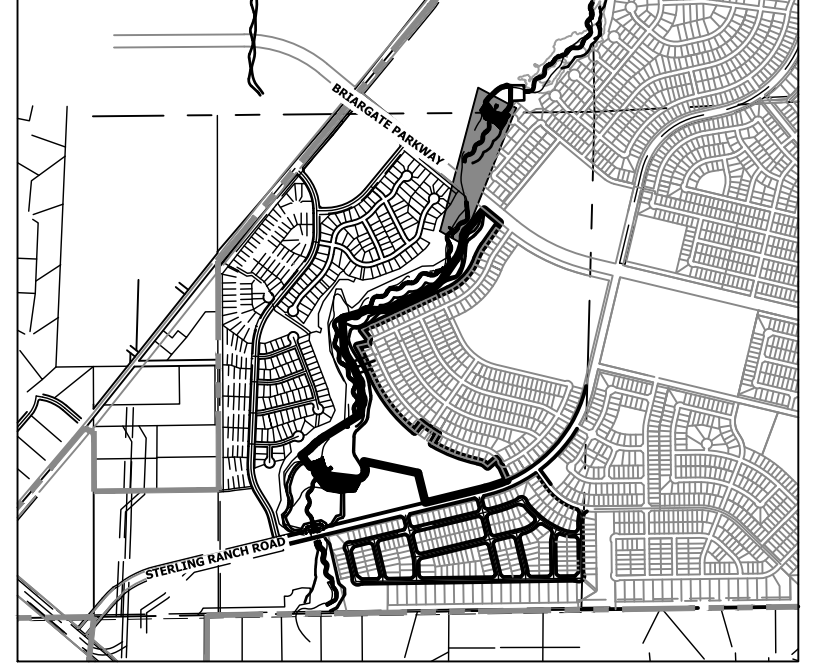
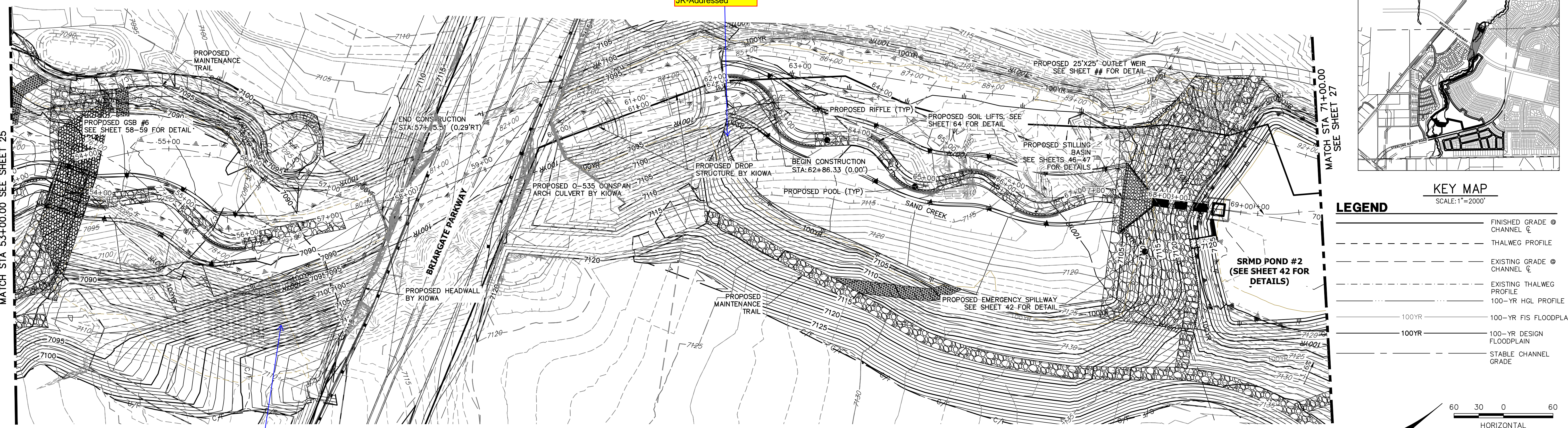
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

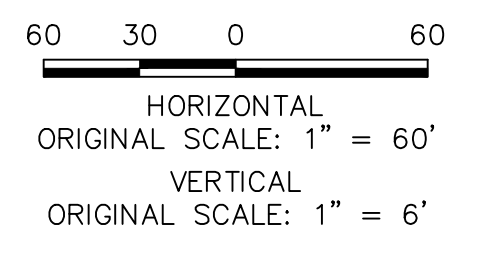
MIKE A. BRAMLEY
 COLORADO P.E. No. 30213
 FOR AND ON BEHALF OF JR ENGINEERING

Too many contours?

JR-Addressed

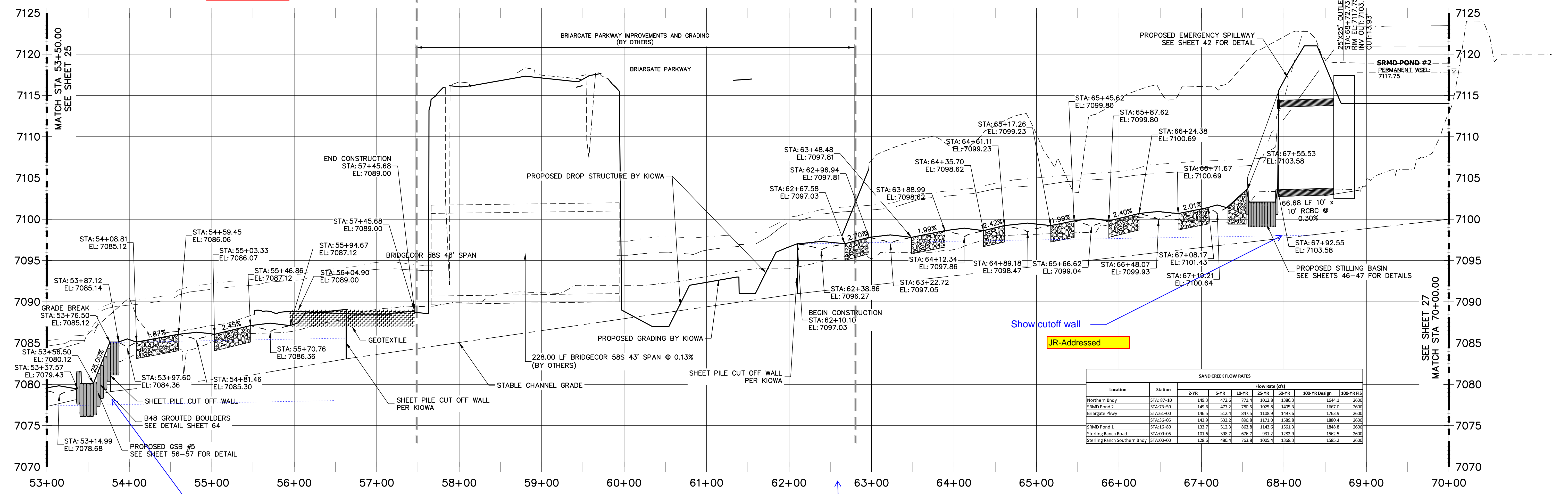


- LEGEND**
- FINISHED GRADE CHANNEL
 - THALWEG PROFILE
 - EXISTING GRADE CHANNEL
 - EXISTING THALWEG PROFILE
 - 100-YR HGL PROFILE
 - 100-YR FIS FLOODPLAIN
 - 100-YR DESIGN FLOODPLAIN
 - STABLE CHANNEL GRADE



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

JR-Addressed



SAND CREEK FLOW RATES

Location	Station	Flow Rate (cfs)					
		2-YR	5-YR	10-YR	25-YR	50-YR	100-YR Design
Northern Bendy	STA: 67+10	149.3	472.6	771.4	1012.8	1380.3	1644.1
SRMD Pond 2	STA: 73+50	149.6	472.7	780.5	1025.8	1405.3	1667.0
Briargate Pkwy	STA: 61+00	146.5	512.4	847.5	1108.9	1499.6	1763.8
	STA: 36+05	143.9	531.2	890.8	1171.0	1589.8	1880.4
SRMD Pond 1	STA: 16+80	133.7	512.3	863.8	1143.6	1561.3	1848.8
Sterling Ranch Road	STA: 09+05	101.6	388.7	676.7	931.2	1283.9	1562.5
Sterling Ranch Southern Bendy	STA: 00+00	128.6	480.4	793.8	1056.4	1398.3	1682.3

Extend sheet pile cut off wall past stable grade?

JR- Sheet piles will extend to assumed bedrock or 6' minimum, see Stable Grade Channel Plans sheets 26-31

Modeling indicates supercritical flows - verify stability.

JR-This area is going supercritical based on the changing geometry as the channel narrows heading into the drop. Soil riprap has been added in this area to reinforce it.



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMBLE
COLORADO P.E. No. 30112
FOR AND ON BEHALF OF JR ENGINEERING

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

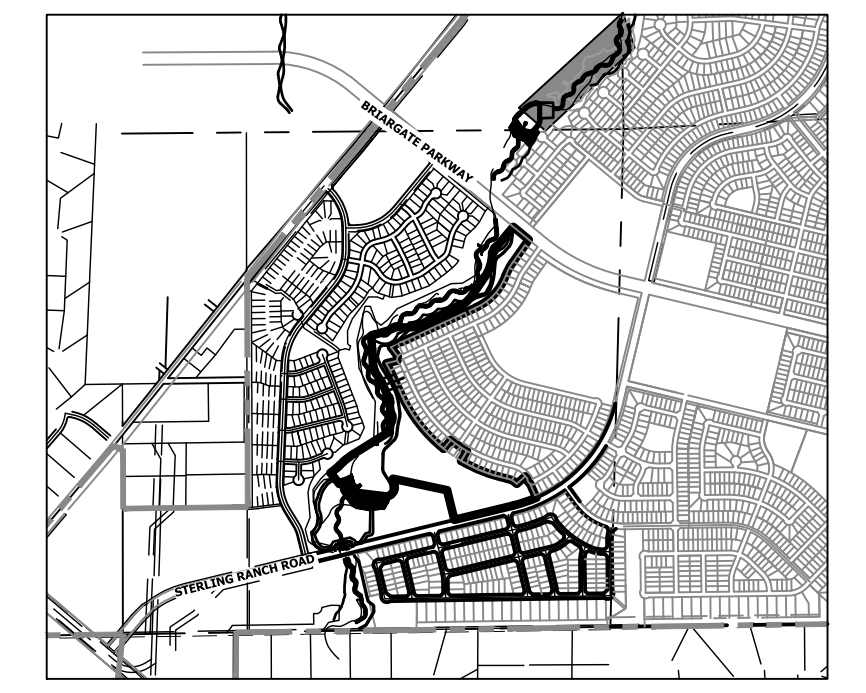
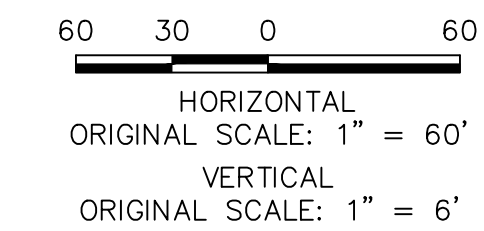
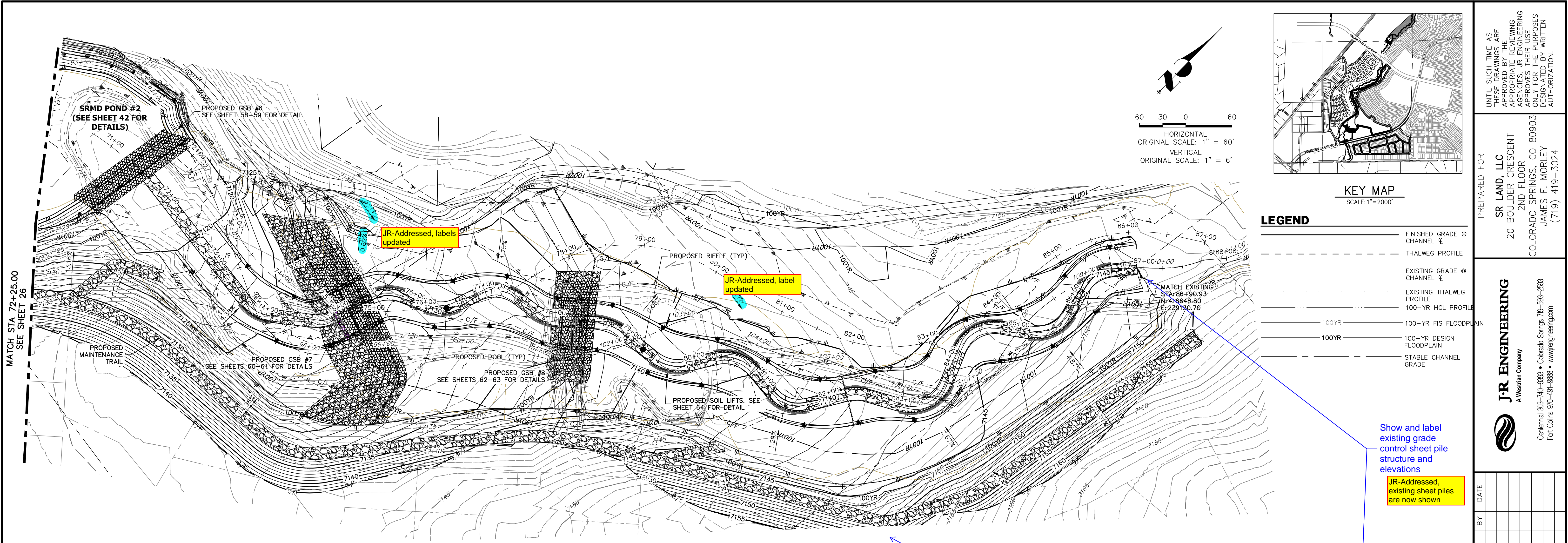
J.R. ENGINEERING
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Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION

H-SCALE 1"=60'
V-SCALE 1"=6'
DATE 9/1/22
DESIGNED BY DJV
DRAWN BY SCH
CHECKED BY

SAND CREEK RESTORATION CHANNEL PLAN & PROFILE

SHEET 26 OF 99
JOB NO. 25188.04



LEGEND

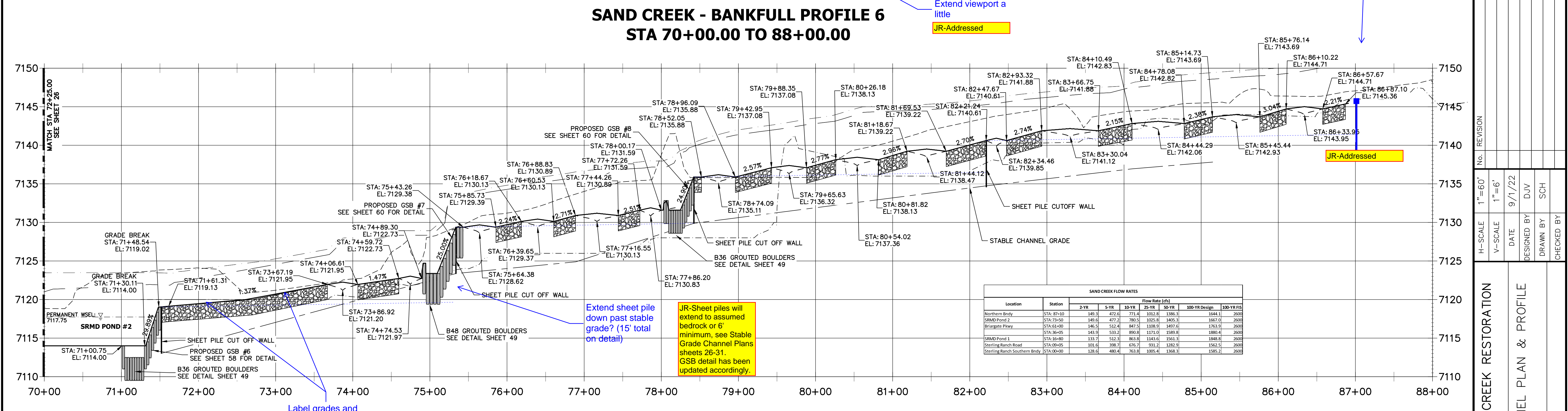
—	FINISHED GRADE CHANNEL
- - -	THALWEG PROFILE
- - -	EXISTING GRADE CHANNEL
- - -	EXISTING THALWEG PROFILE
- - -	100-YR HGL PROFILE
- - -	100-YR FIS FLOODPLAIN
- - -	100-YR DESIGN FLOODPLAIN
- - -	STABLE CHANNEL GRADE

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

No.	REVISION	BY	DATE



SAND CREEK FLOW RATES

Location	Station	Flow Rate (cfs)					
		2-YR	5-YR	10-YR	25-YR	100-YR Design	100-YR FIS
Northern Bendy	STA: 87+10	149.3	472.6	711.4	1022.3	1386.3	1644.1
SRMD Pond 2	STA: 73+50	149.6	477.2	705.5	1025.5	1405.3	1667.0
Broughton Pkwy	STA: 61+00	146.5	512.4	847.5	1108.9	1497.6	1763.9
SRMD Pond 1	STA: 36+05	143.9	533.2	890.8	1171.0	1589.8	1880.4
SRMD Pond 3	STA: 16+00	133.7	512.3	861.8	1148.6	1561.3	1848.8
Sterling Ranch Road	STA: 09+05	101.6	398.7	676.7	931.2	1282.9	1562.5
Sterling Ranch Southern Bendy	STA: 00+00	128.0	480.4	763.8	1065.4	1368.3	1585.2



ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

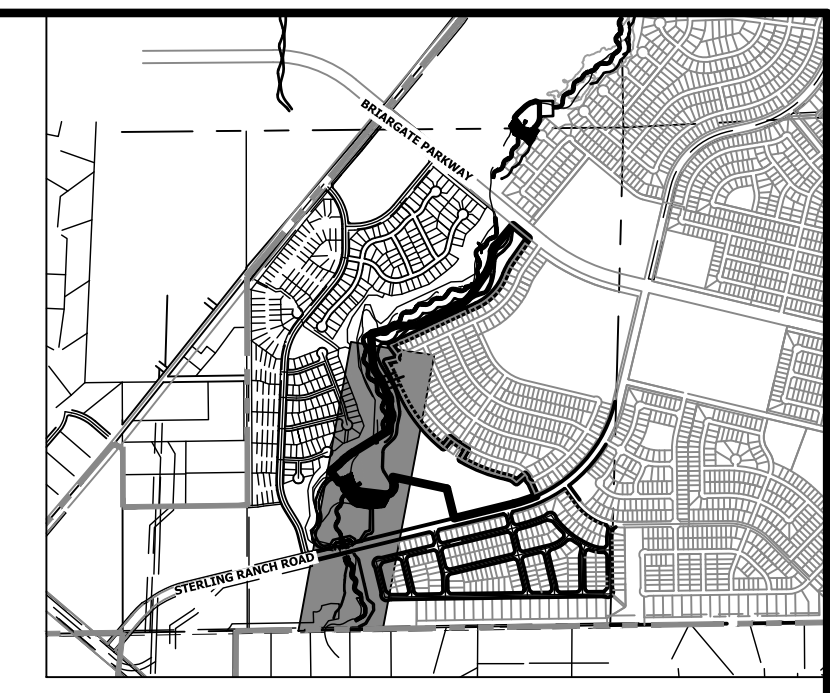
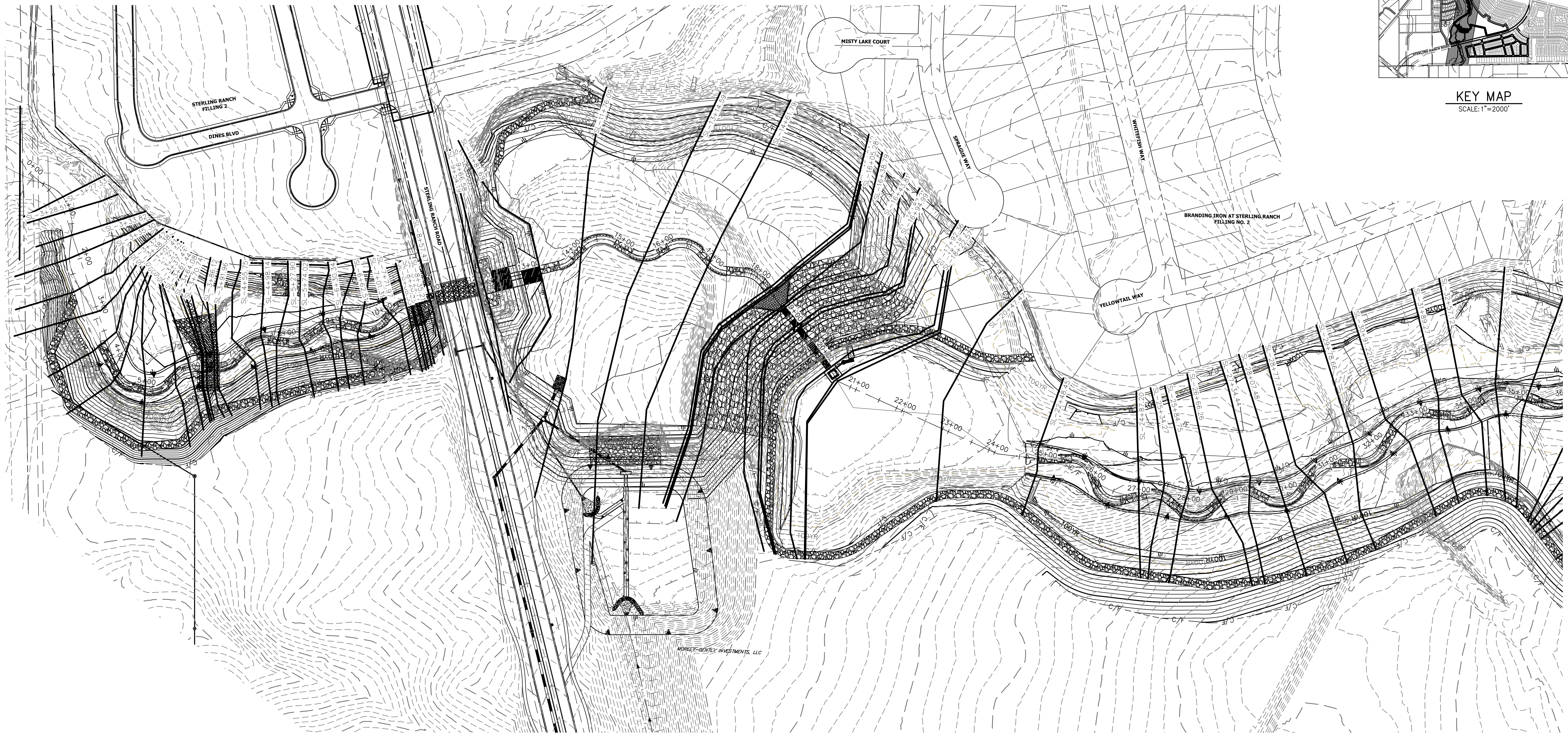
MIKE A. BRAMBLE
 COLORADO P.E. No. 33212
 FOR AND ON BEHALF OF JR ENGINEERING, INC.

SAND CREEK RESTORATION

CHANNEL PLAN & PROFILE

SHEET 27 OF 99

JOB NO. 25188.04



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

BENCHMARK

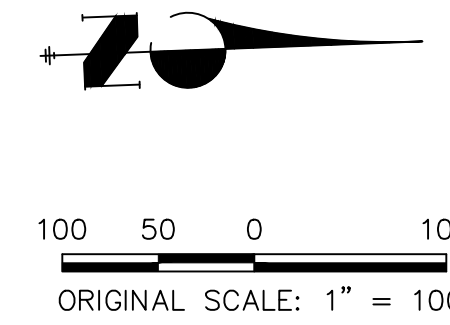
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853" AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411416.273
 EASTING = 235167.071
 ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION
 NORTHING = 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 31-## FOR CROSS SECTIONS


BASIS OF BEARINGS

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



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


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

J.R. ENGINEERING
 A Westman Company

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

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

SAND CREEK RESTORATION
 CROSS SECTIONS
 SHEET 28 OF 99
 JOB NO. 25188.04



ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

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

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

BENCHMARK

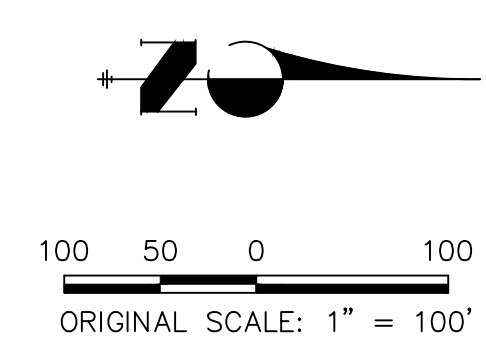
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 EASTING = 235167.071
 ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION
 NORTHING = 410095.404
 EASTING = 235052.131
 ELEVATION = 7000.40
3. THE TOP OF A RED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

NOTE

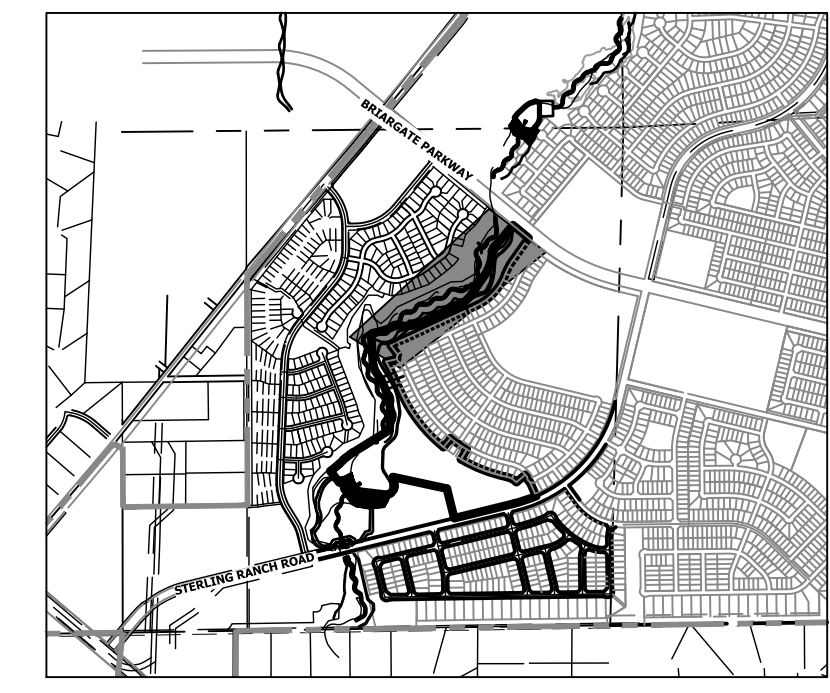
SEE SHEETS 31-## FOR CROSS SECTIONS

BASIS OF BEARINGS

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



ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY
NOT FOR
CONSTRUCTION
 MIKE A. BRAMLEY
 COLORADO P.E. No. 35127
 FOR AND ON BEHALF OF J.R. ENGINEERING, INC.



KEY MAP
 SCALE: 1"=2000'

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

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

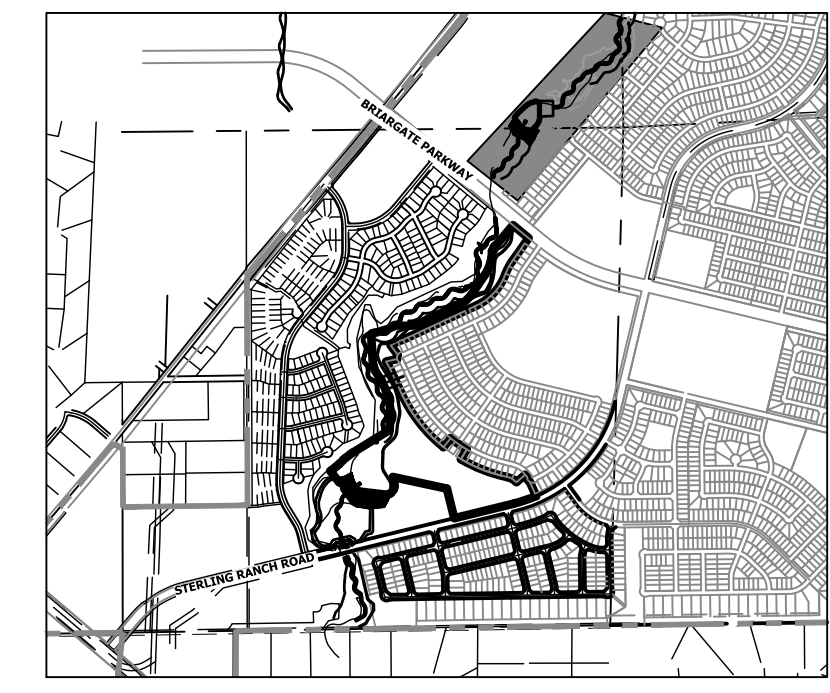
J.R. ENGINEERING
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 Centennial 303-740-9888 • Colorado Springs 719-583-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				1"=100'	N/A	9/1/22	DJV	NEO	

SAND CREEK RESTORATION
 CROSS SECTIONS
 SHEET 29 OF 99
 JOB NO. 25188.04



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



KEY MAP
 SCALE: 1"=2000'

BENCHMARK

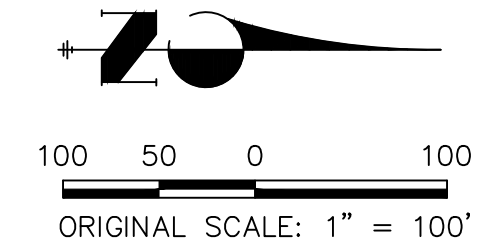
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411416.273
 EASTING = 235167.071
 ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION
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

BASIS OF BEARINGS

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




ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY
 NOT FOR
 CONSTRUCTION

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

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION.	PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	J.R. ENGINEERING A Westman Company  Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE	No.	REVISION	
			H-SCALE	V-SCALE			DATE
SAND CREEK RESTORATION			1"=100'	N/A	9/1/22	DJV	NEO
CROSS SECTIONS							
SHEET 30 OF 99			JOB NO. 25188.04				

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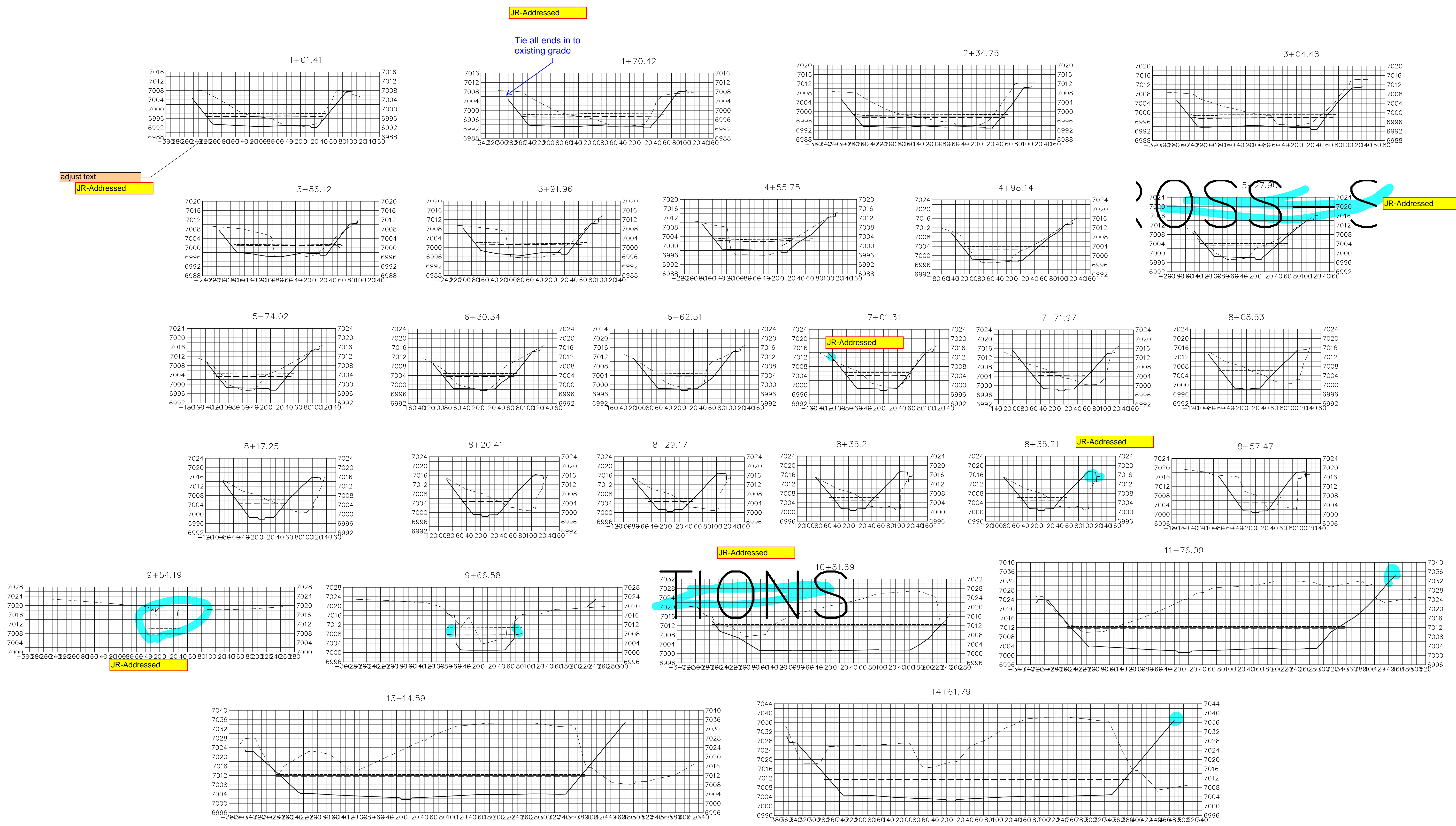
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION.

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

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

No.	REVISION	BY	DATE

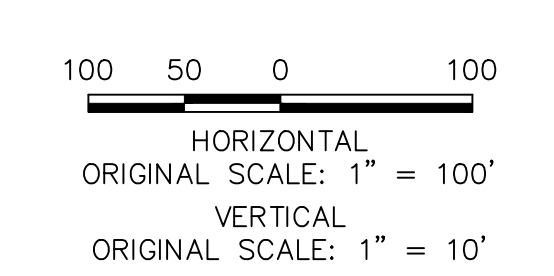
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=100'	1"=10'	9/14/22	DJV	SCH	



NOTATIONS

- 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 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 85 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 7,272.69 FEET.



ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
 MIKE A. BRAMBLE
 COLORADO P.E. 30142
 FOR AND ON BEHALF OF JR ENGINEERING

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

adjust text
 JR-Addressed

JR-Addressed

Tie all ends in to existing grade

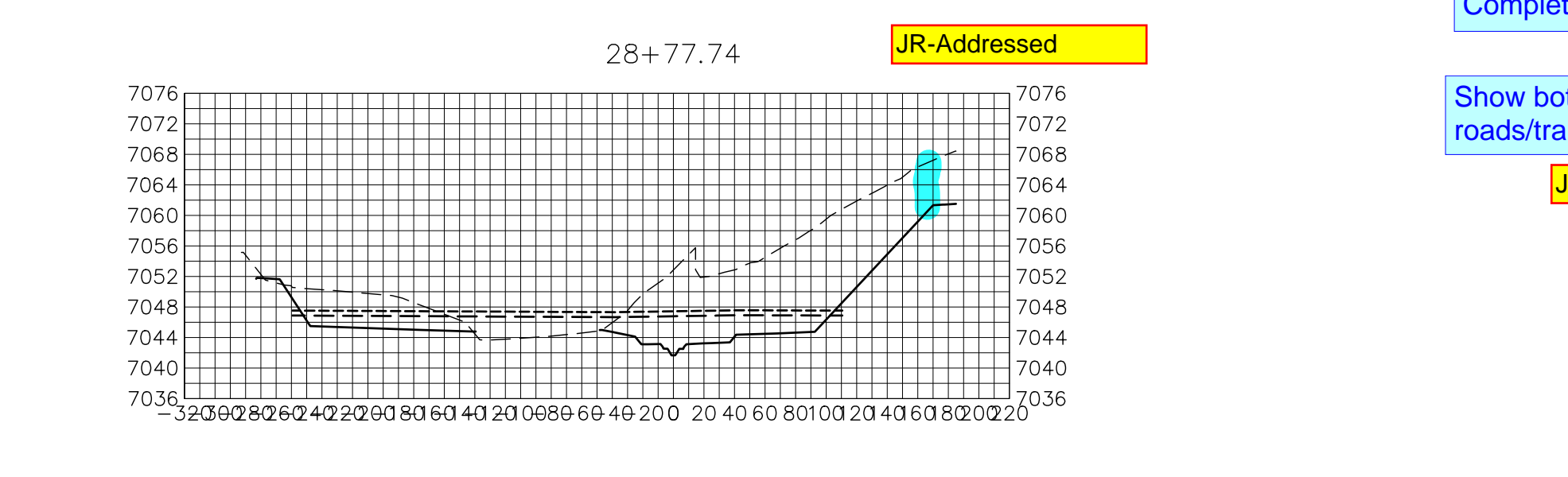
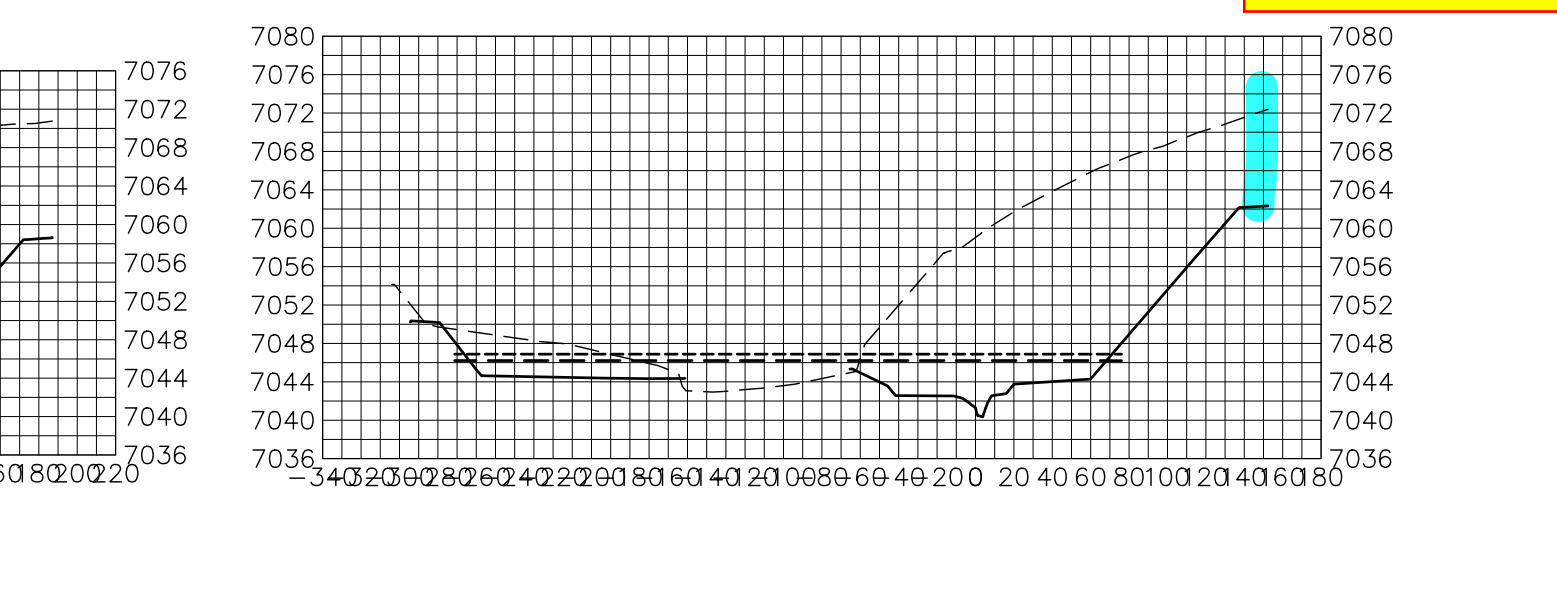
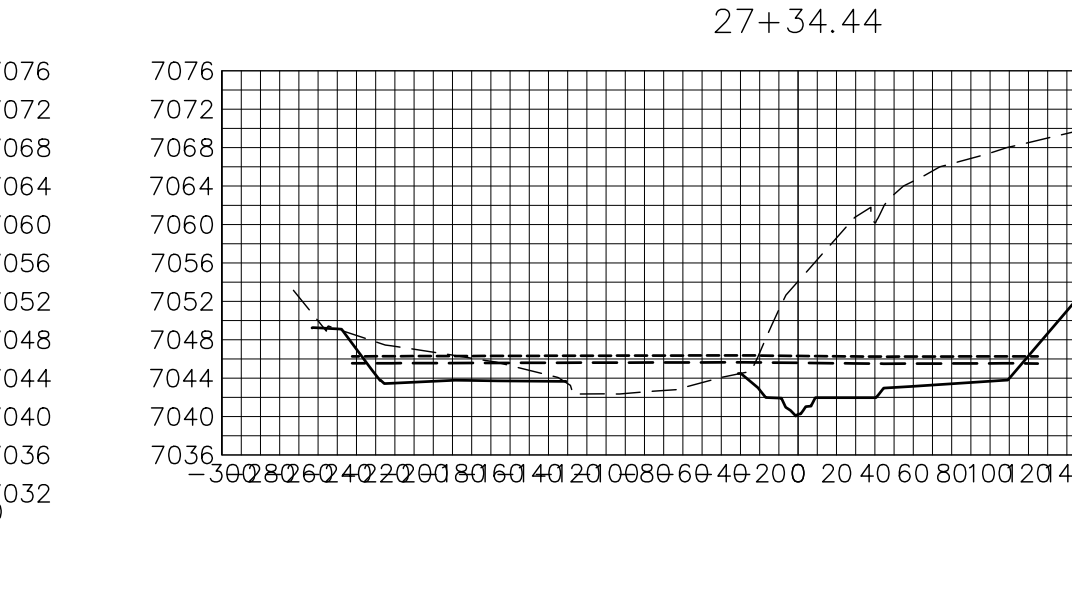
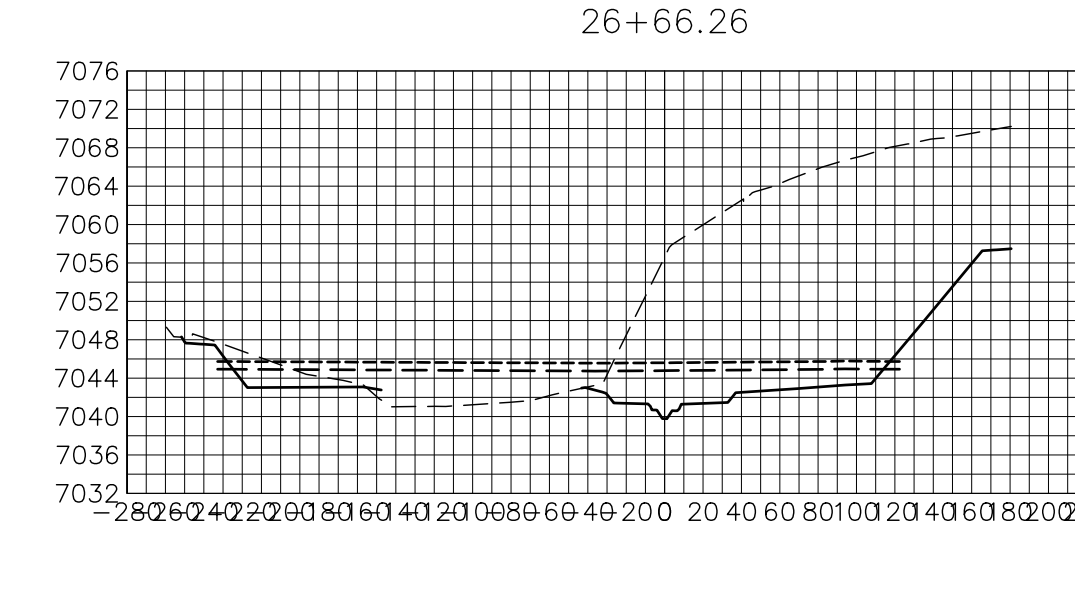
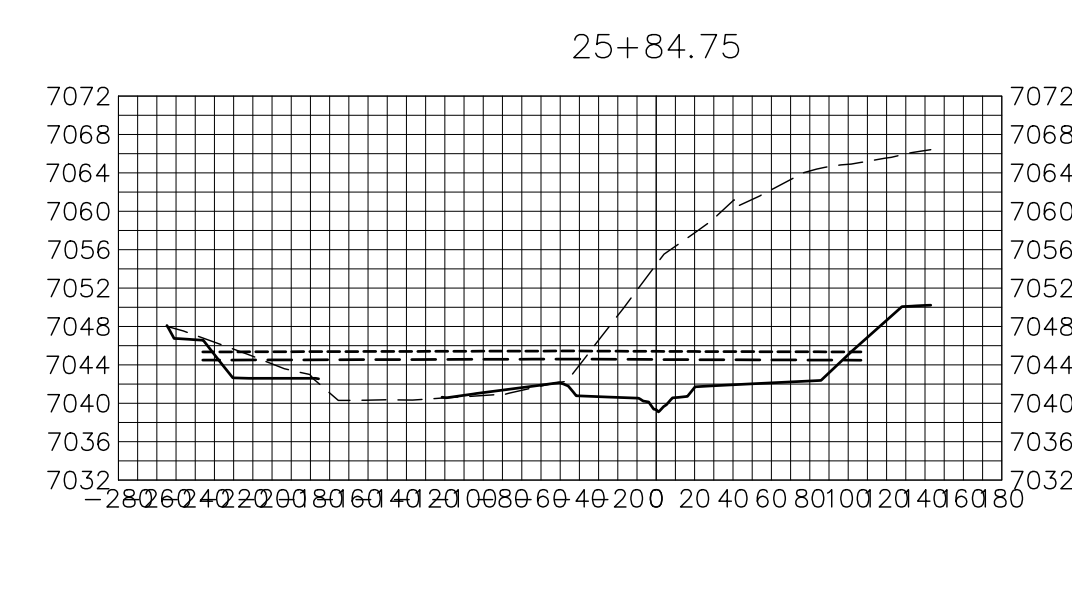
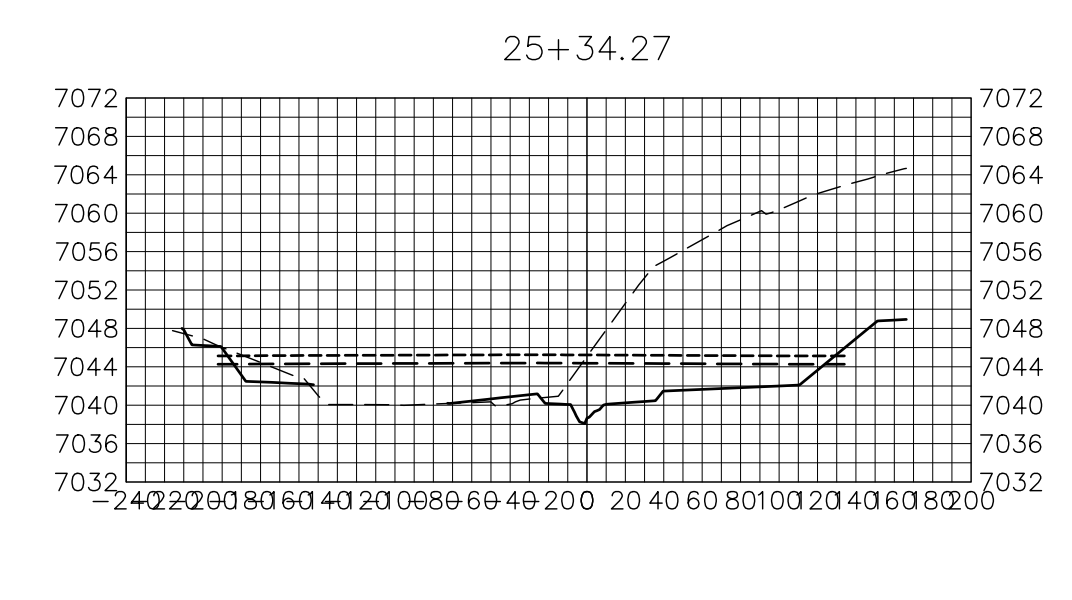
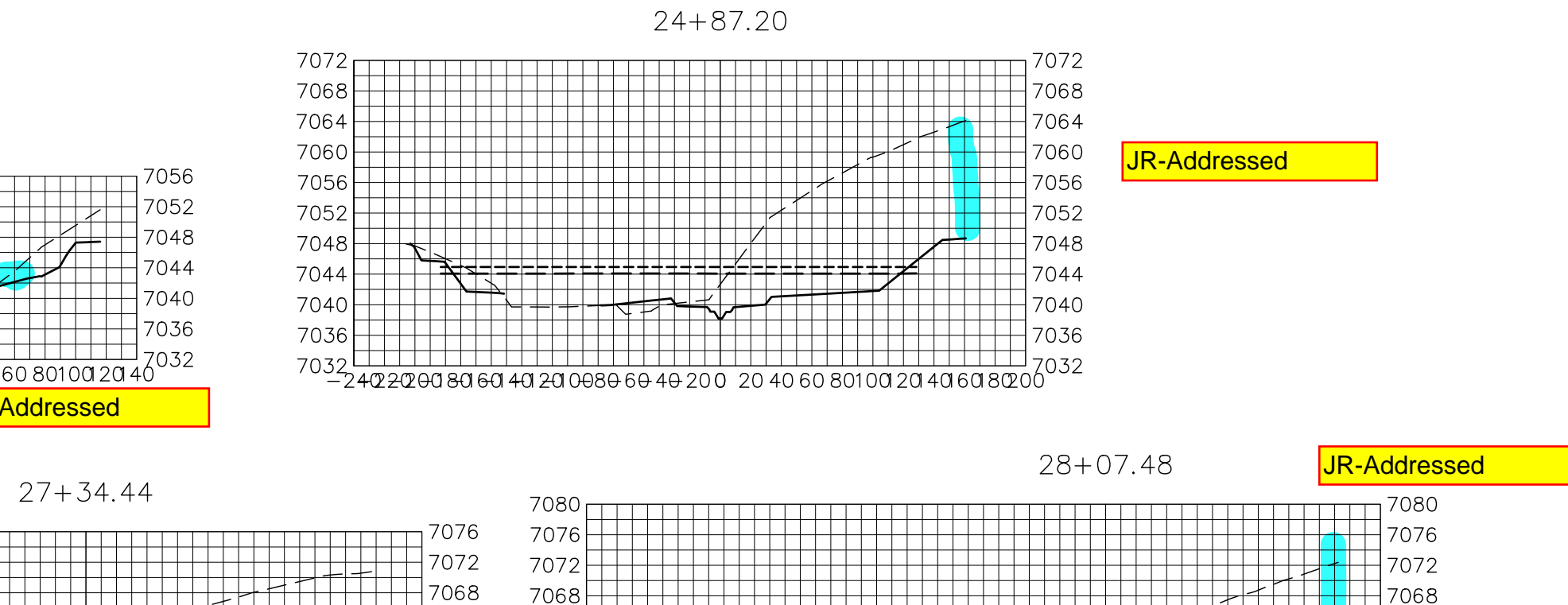
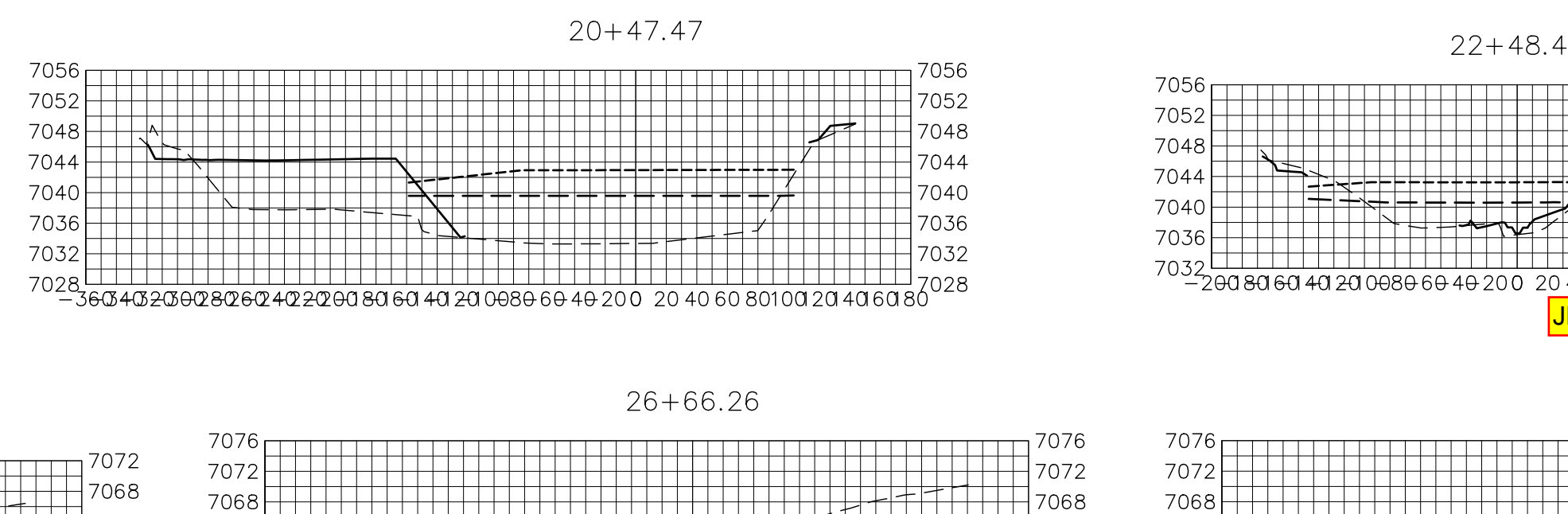
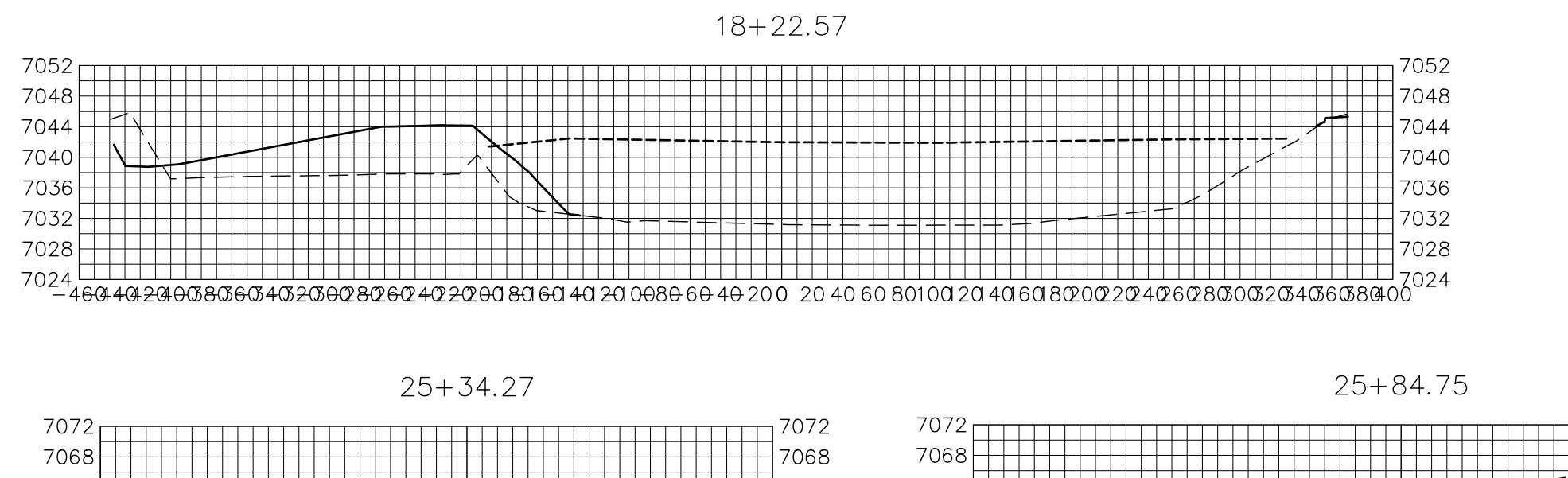
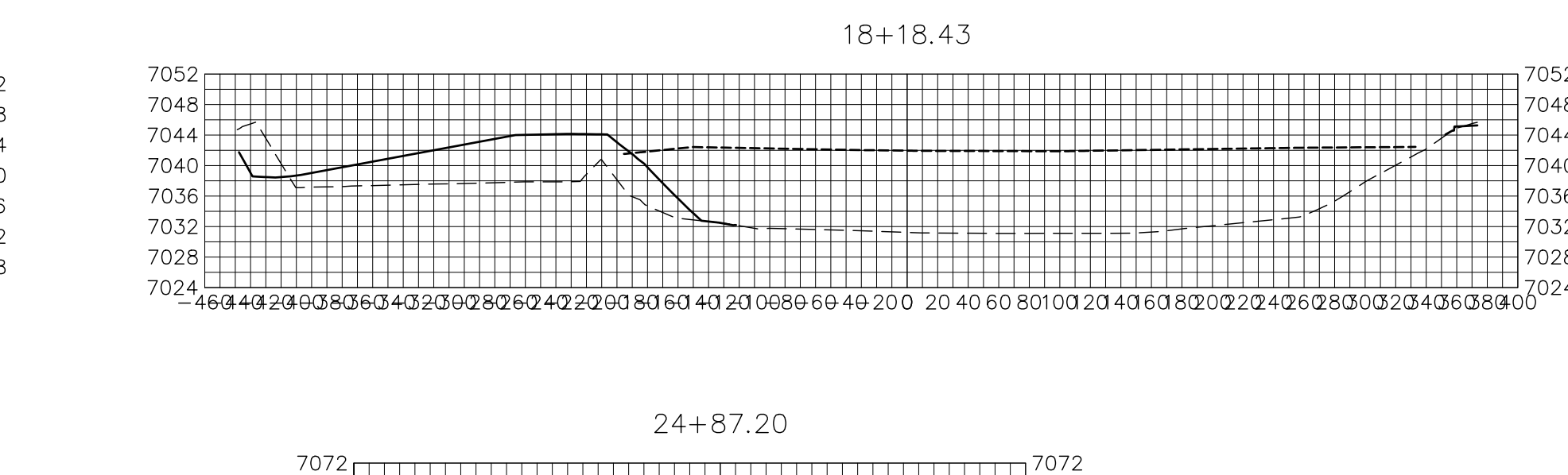
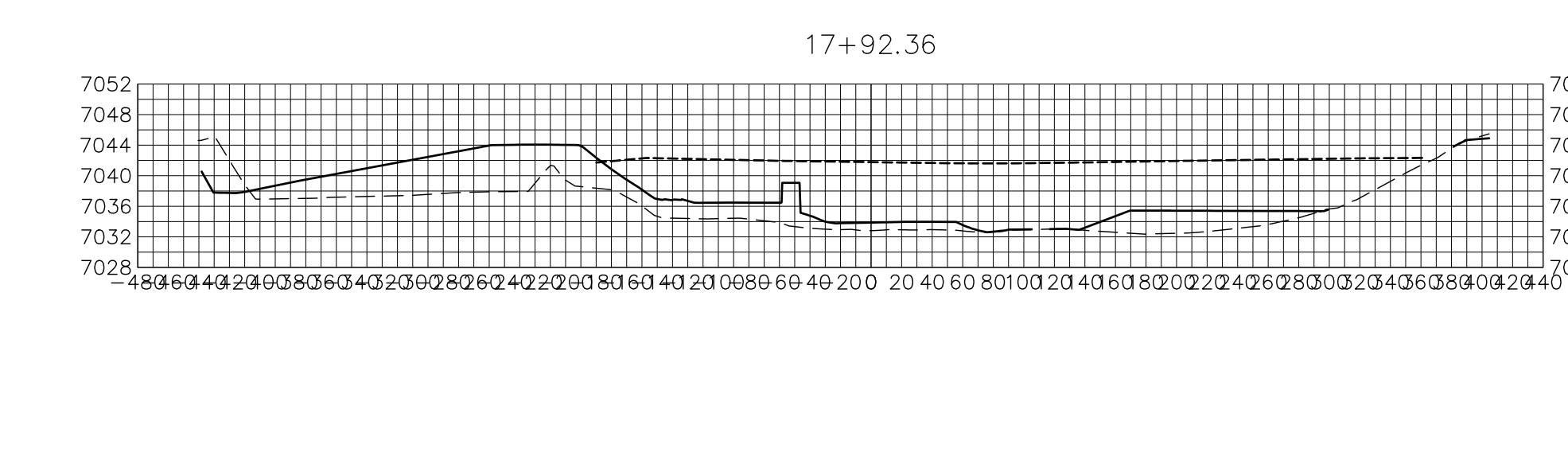
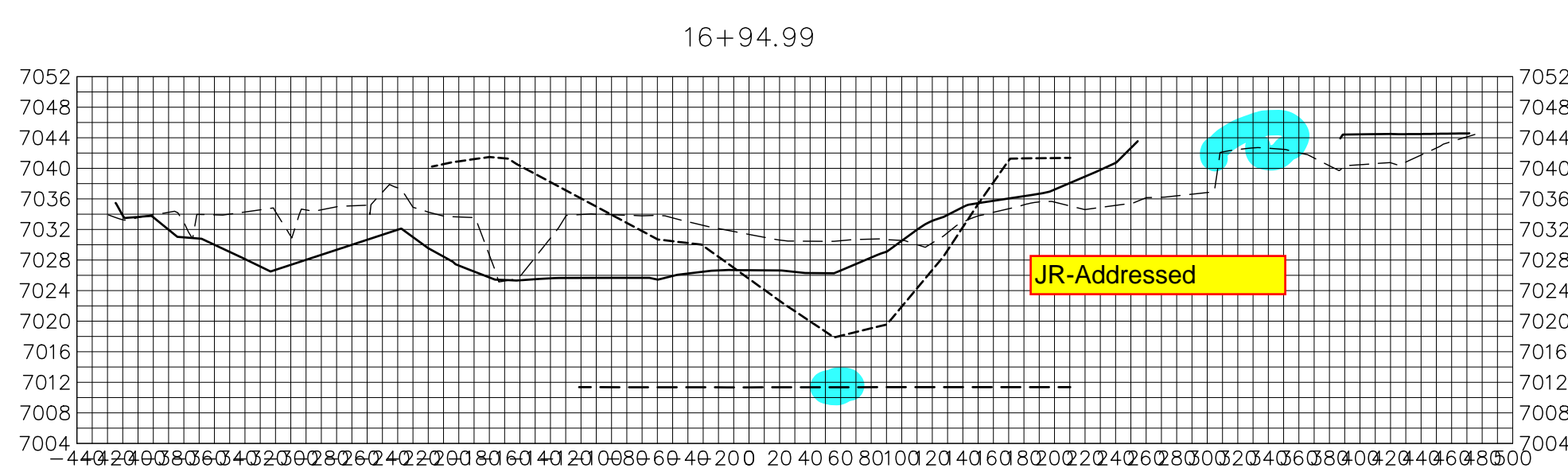
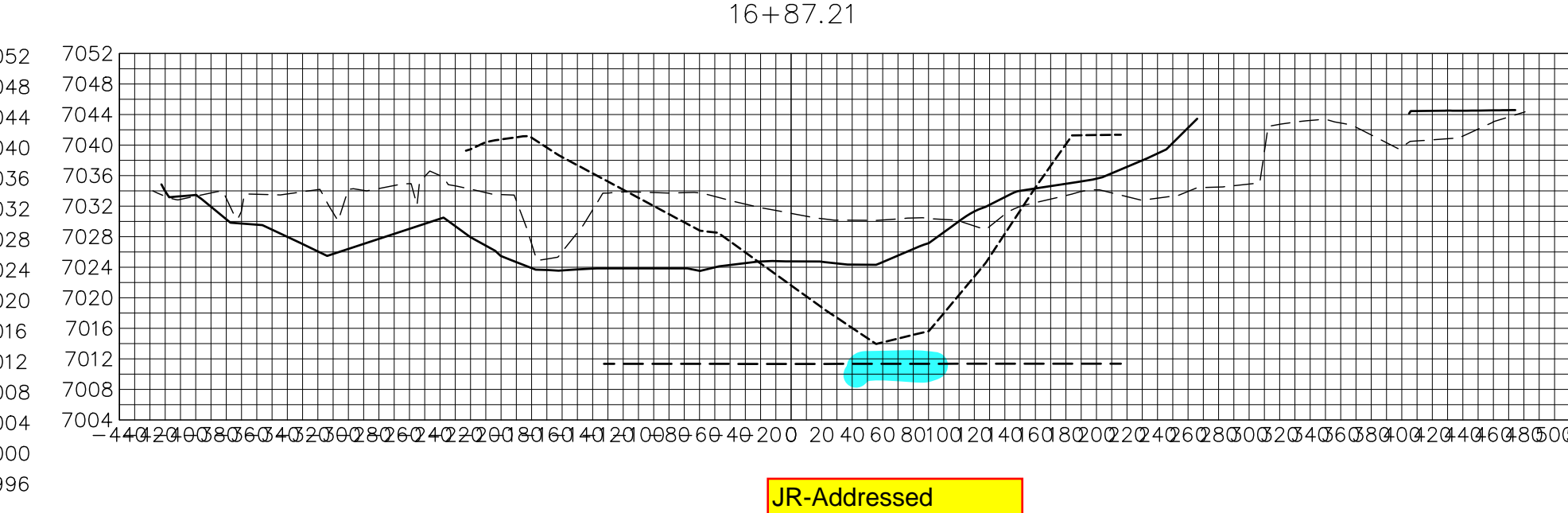
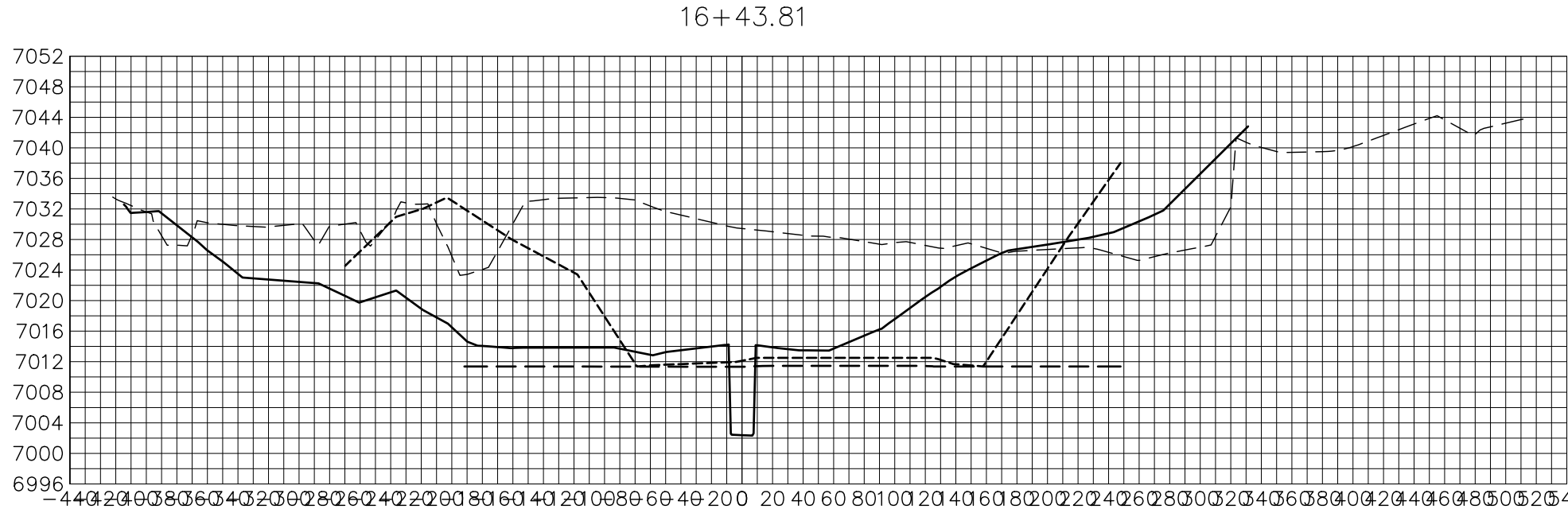
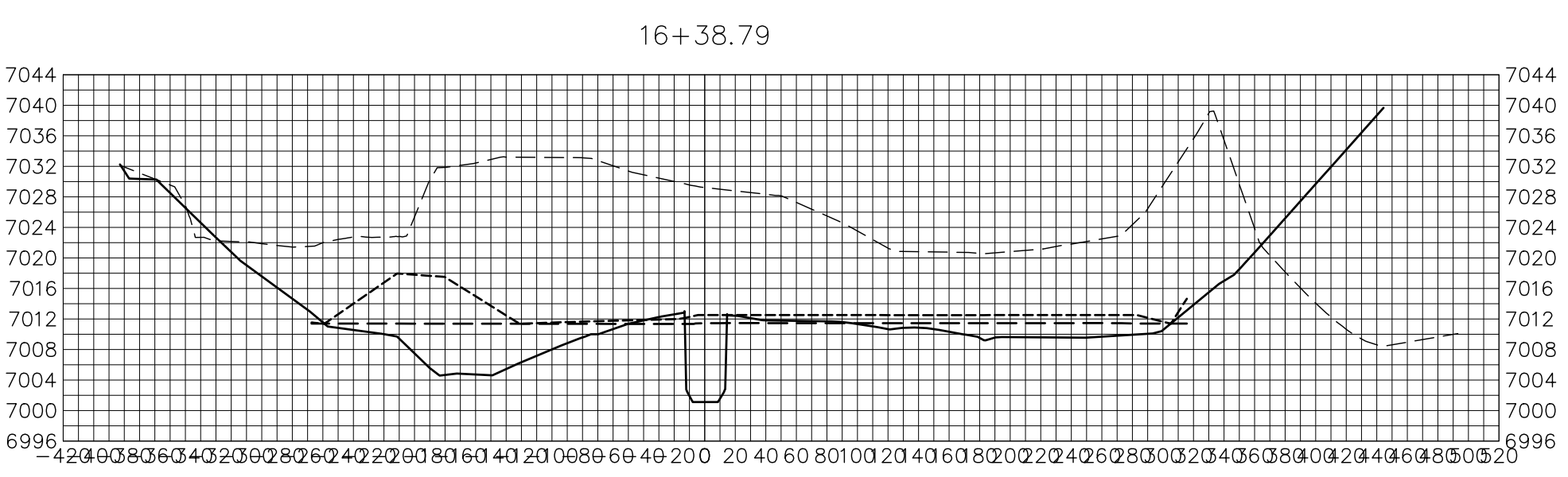
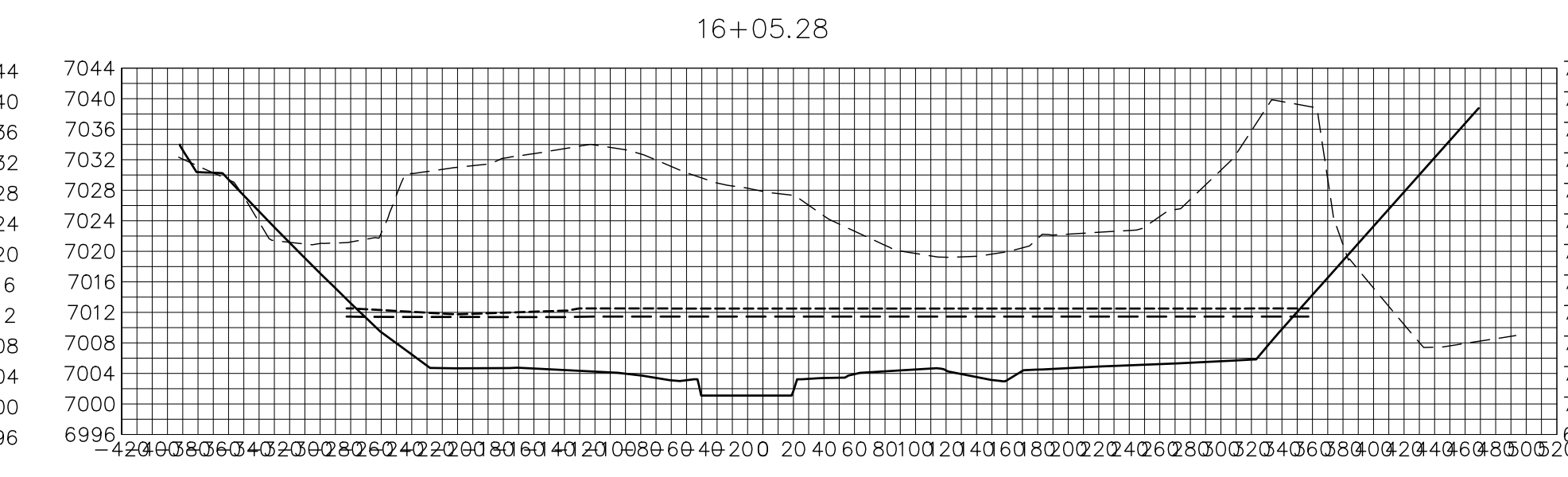
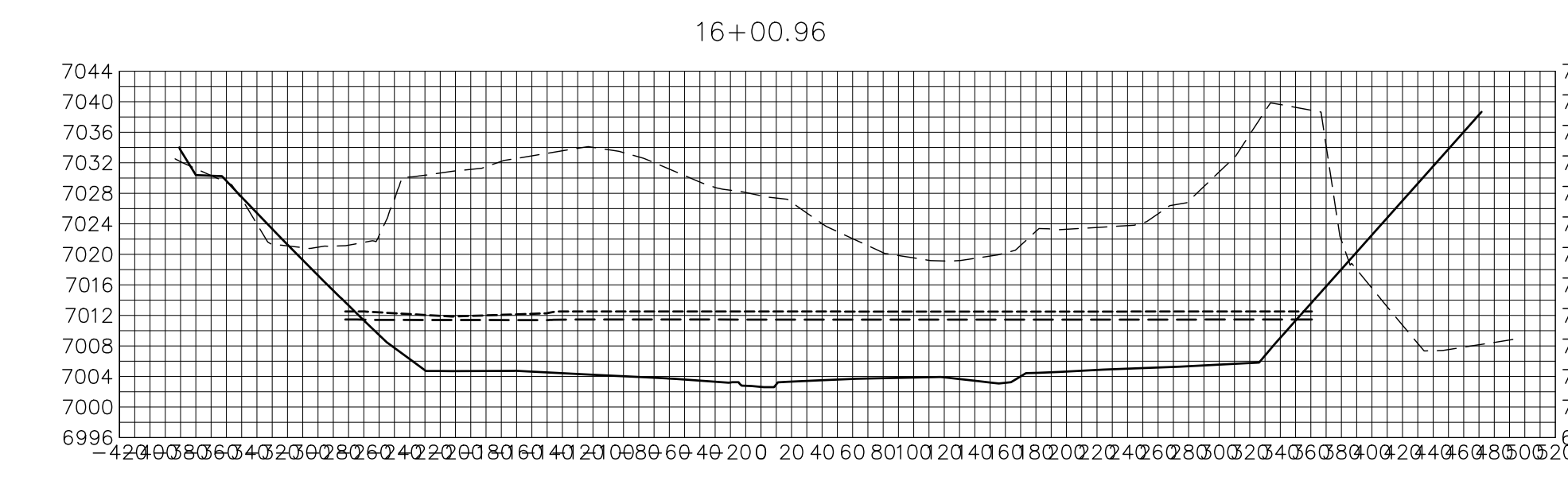
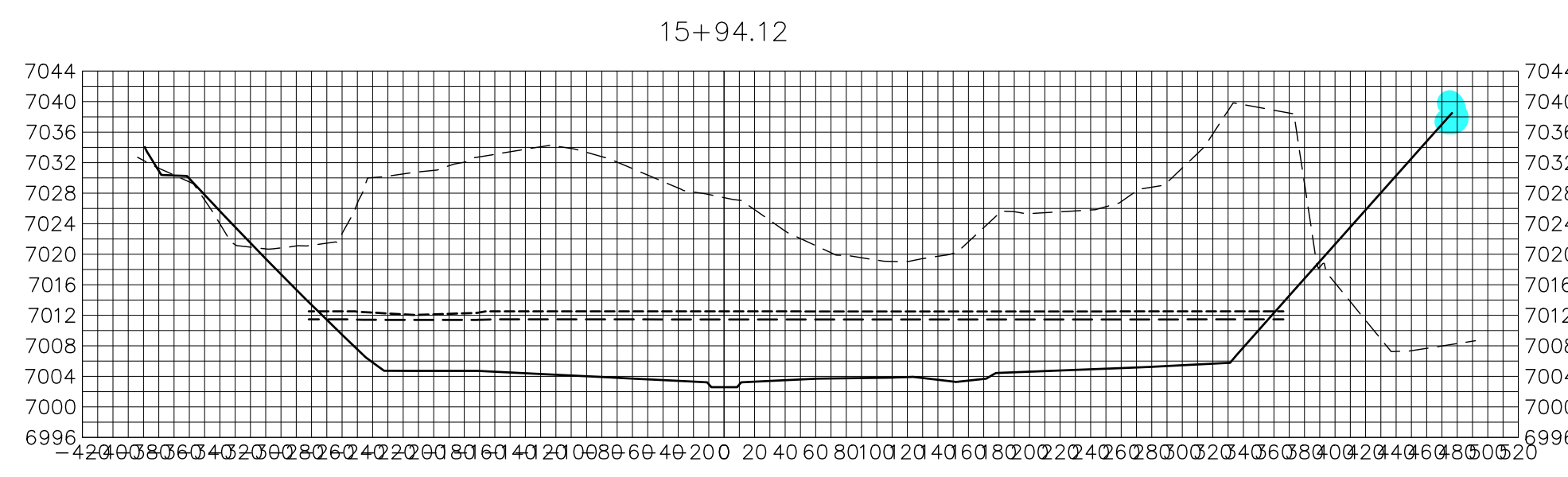
JR-Addressed

JR-Addressed

JR-Addressed

JR-Addressed

JR-Addressed



Complete all cross-sections

Show both maintenance roads/trail and lot lines

JR-Addressed

BENCHMARK

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

BASIS OF BEARINGS

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

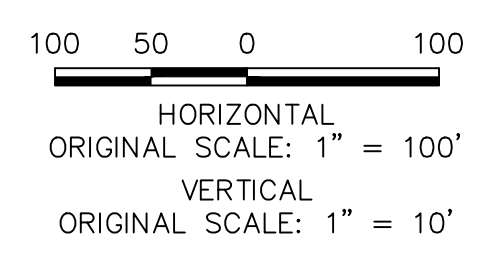
LEGEND

————— PROP GROUND SURFACE

----- EX GROUND SURFACE

----- 100YR FIS WSEL

----- 100YR DESIGN WSEL



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMLEY
COLORADO P.E. 37887
FOR AND ON BEHALF OF JR ENGINEERING

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

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

J.R. ENGINEERING
A Western Company
Central 300-740-9888 • Colorado Springs 719-588-2593
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

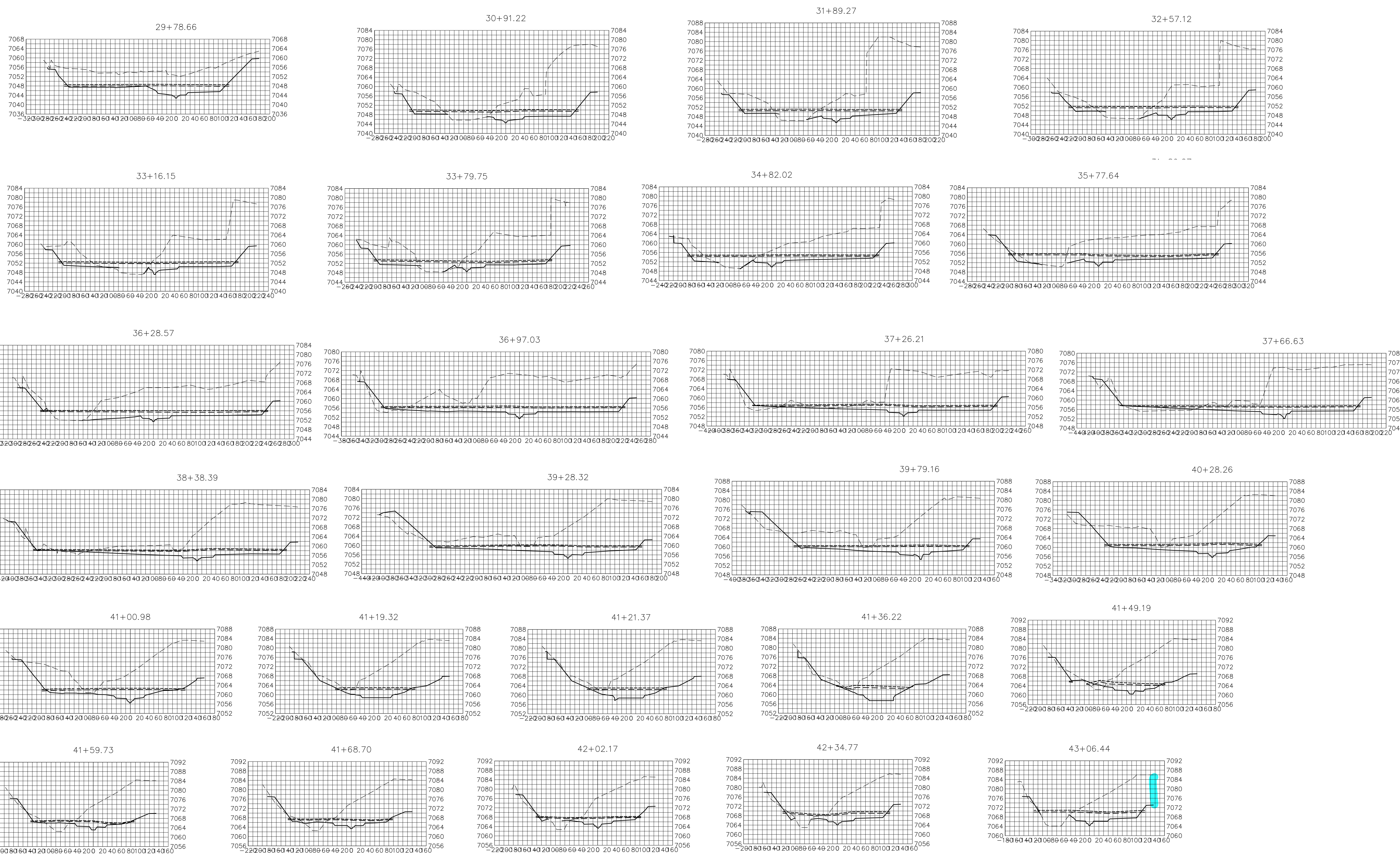
H-SCALE 1"=100'
V-SCALE 1"=10'
DATE 9/1/22
DESIGNED BY DJV
DRAWN BY SCH
CHECKED BY

SAND CREEK RESTORATION

CROSS SECTIONS

SHEET 32 OF 99

JOB NO. 25188.04



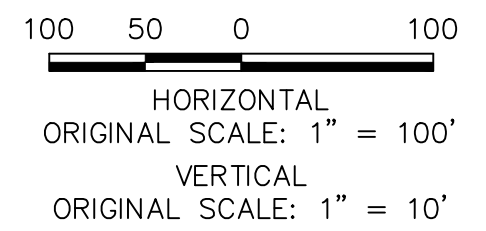
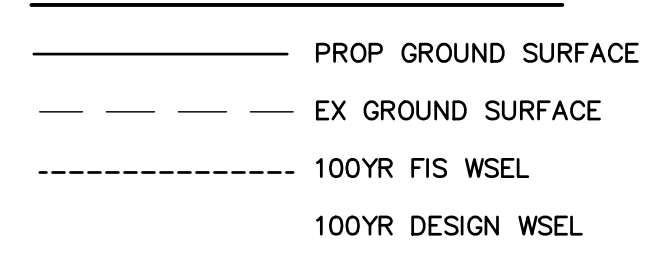
BENCHMARK

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 NORTHING = 411416.273
 EASTING = 235167.071
 ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION
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 ELEVATION = 7030.40
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adjust text
 JR-Addressed



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

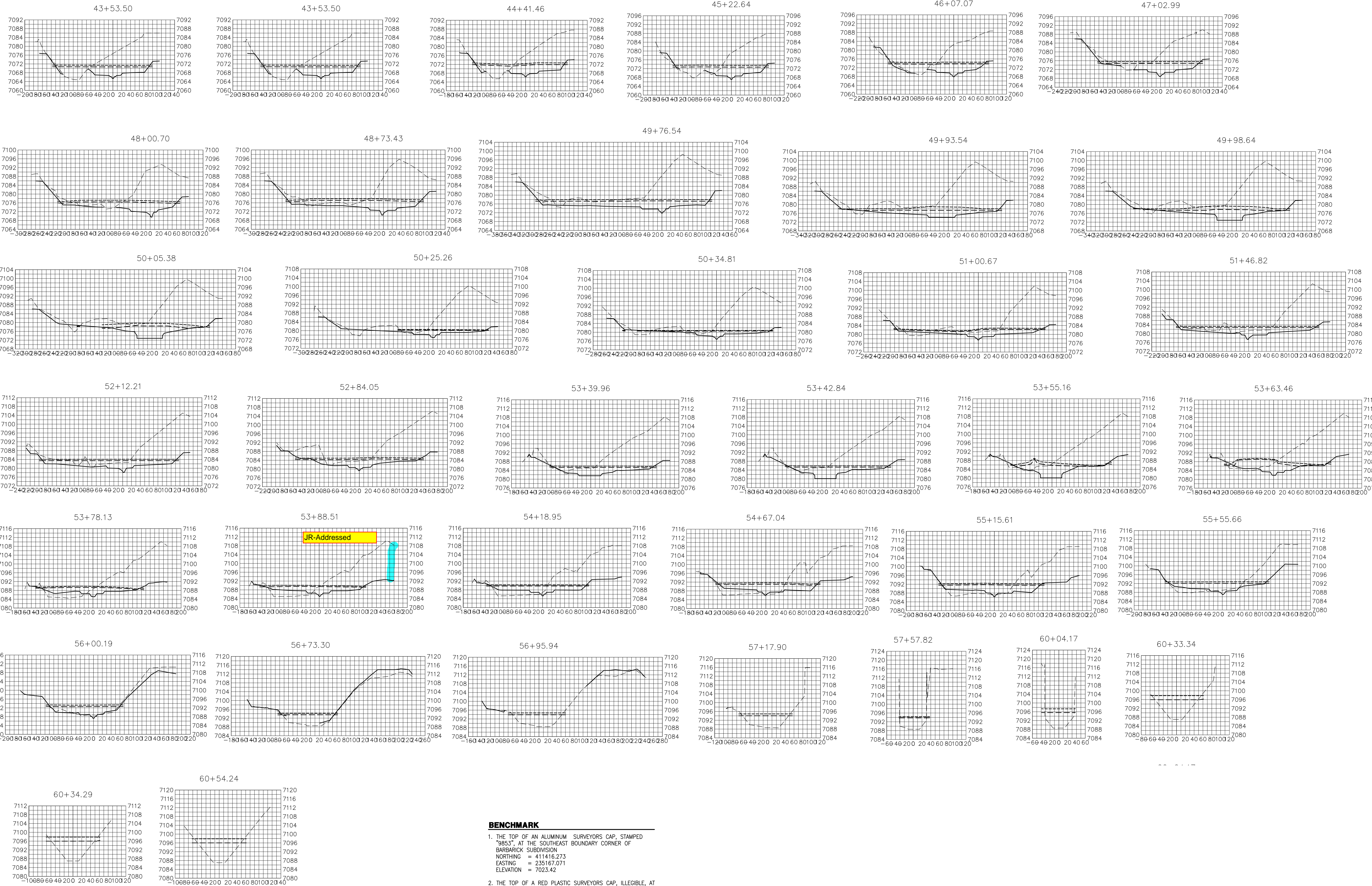
No.	REVISION	BY	DATE

J.R. ENGINEERING
 A Westman Company
 Centennial 300-740-9888 • Colorado Springs 719-588-2593
 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, JR ENGINEERING APPROVES THEIR USE AS DESIGNATED BY WRITTEN AUTHORIZATION.

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LEGEND

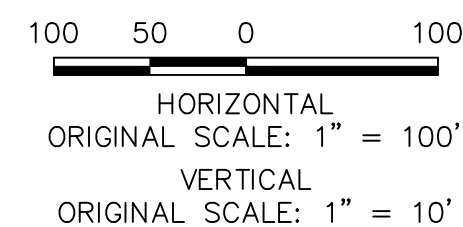
- PROP GROUND SURFACE
- - - - EX GROUND SURFACE
- 100YR FIS WSEL
- - - - 100YR DESIGN WSEL

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 PANTEE RANCHEROS SUBDIVISION
 NORTHING = 410095.404
 EASTING = 235052.131
 ELEVATION = 7000.40
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BASIS OF BEARINGS

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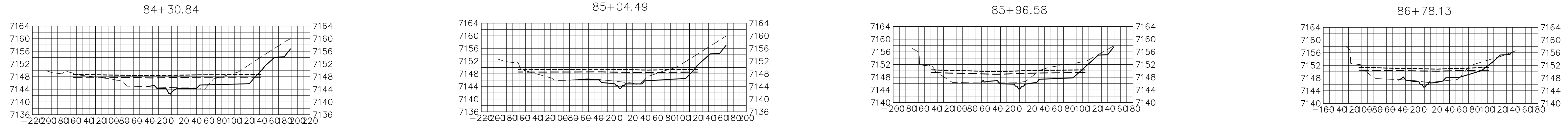
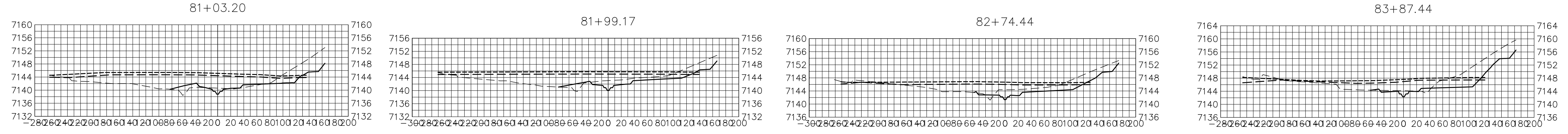
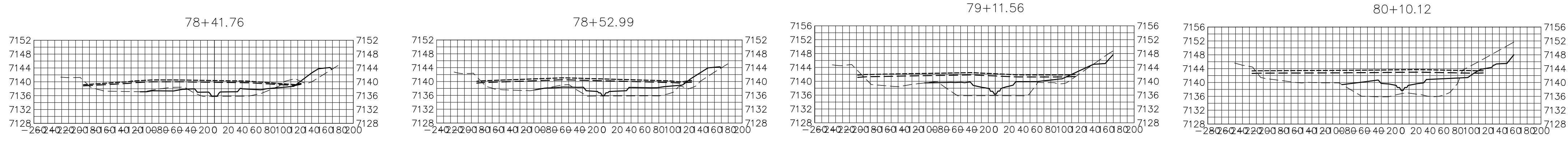
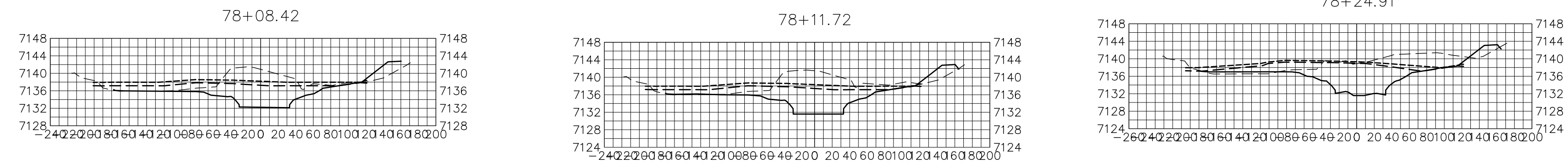
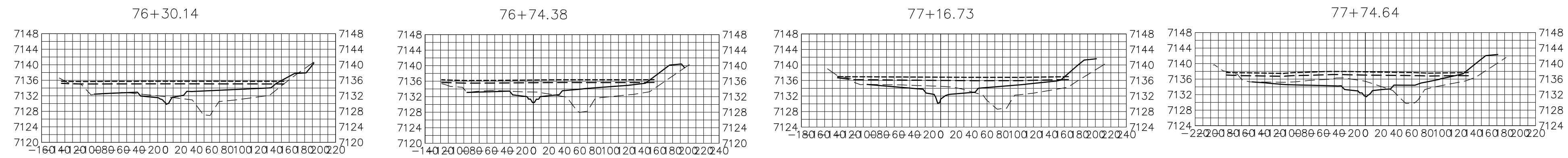
Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND SEAL
PRELIMINARY
NOT FOR
CONSTRUCTION
 MIKE A. BRAMBLE
 COLORADO P.E. 33888
 FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION. PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	BY: _____ DATE: _____ No. REVISION: _____ H-SCALE 1"=100' V-SCALE 1"=10' DATE 9/1/22 DESIGNED BY DJV DRAWN BY SCH CHECKED BY _____

X:\25188\000\all\25188\000\Drawings\Sheet\Drawings\Cross Sections\25188_04.dwg, 34.XS07, 9/16/2022, 4:52:59 PM, VvaughnD



BENCHMARK

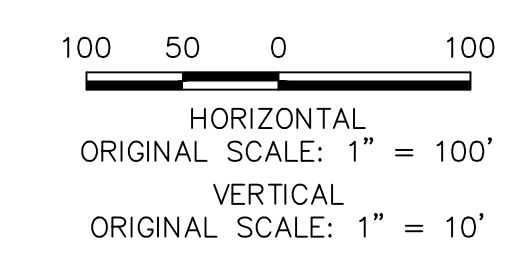
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LEGEND

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

BASIS OF BEARINGS

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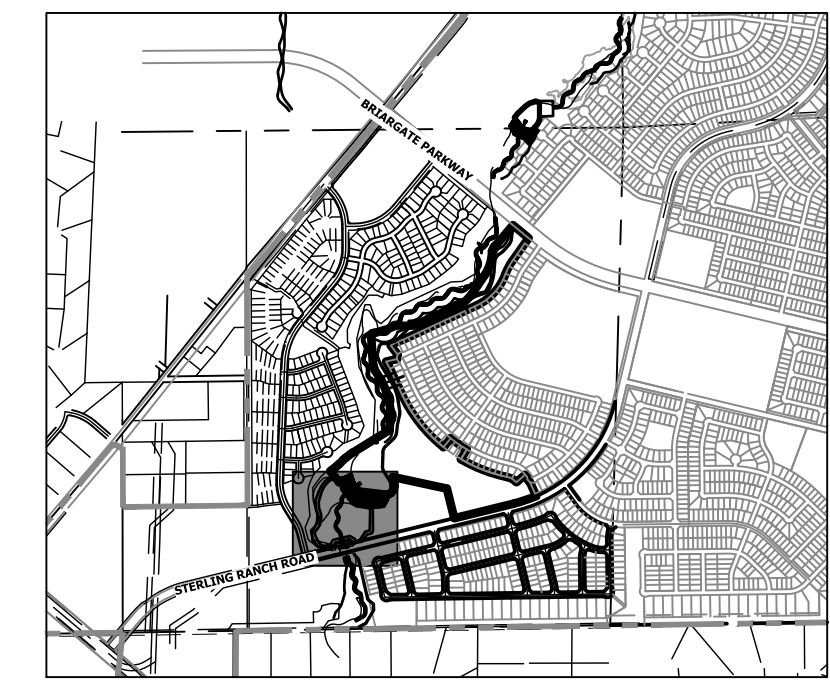
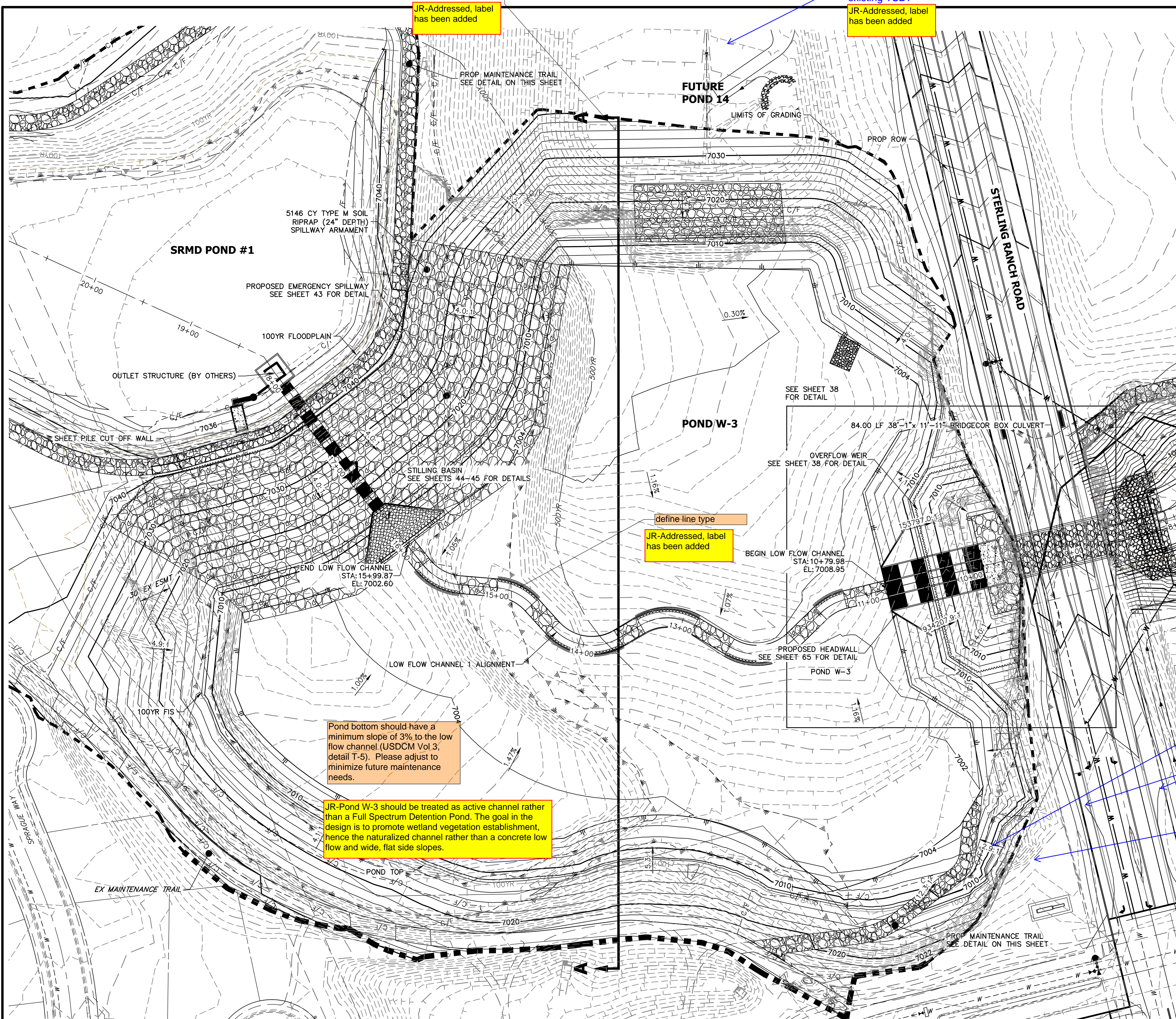
ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

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

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION. PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	J.R. ENGINEERING A Westman Company Centennial 300-740-9888 • Colorado Springs 719-588-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE
SAND CREEK RESTORATION CROSS SECTIONS	H-SCALE 1"=100'	V-SCALE 1"=10'	No. REVISION
	DATE 9/1/22	DESIGNED BY DJV	DRAWN BY NEO
	CHECKED BY	DESIGNED BY	DRAWN BY
	SHEET 36 OF 99	JOB NO. 25188.04	CHECKED BY

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KEY MAP
SCALE: 1"=2000'

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

TRM for slopes >3:1?

JR-Grading has been revised to remove any slopes steeper than 3:1

Pond bottom should have a minimum slope of 3% to the low flow channel (USDCM Vol 3, detail T-5). Please adjust to minimize future maintenance needs.

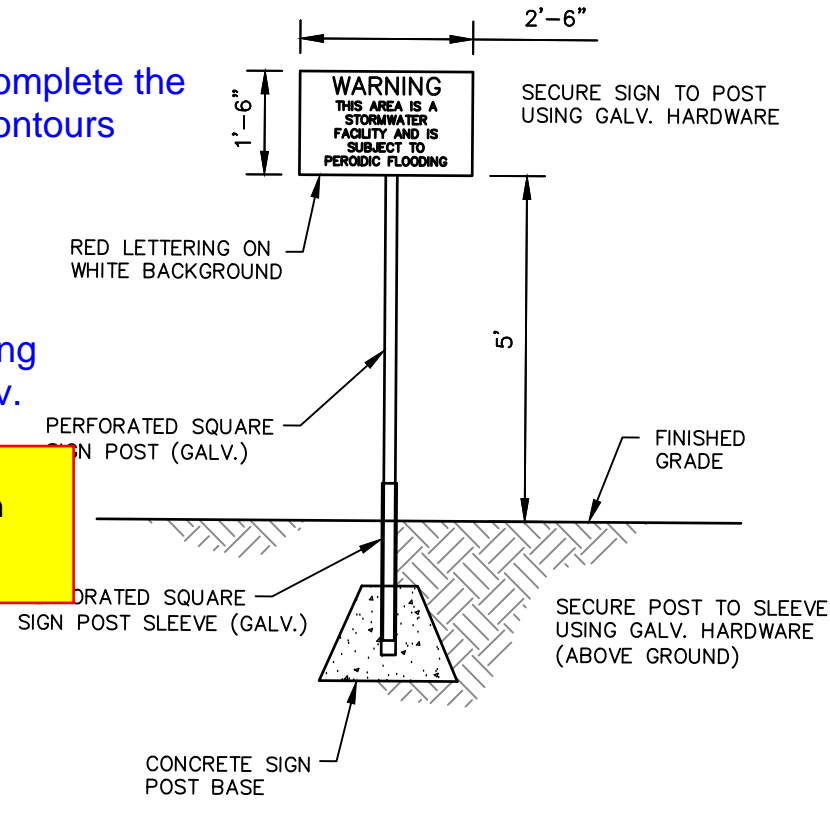
JR-Pond W-3 should be treated as active channel rather than a Full Spectrum Detention Pond. The goal in the design is to promote wetland vegetation establishment, hence the naturalized channel rather than a concrete low flow and wide, flat side slopes.

JR-Since SRR will be built prior to start of construction of the channel, road contours are now shown as existing.

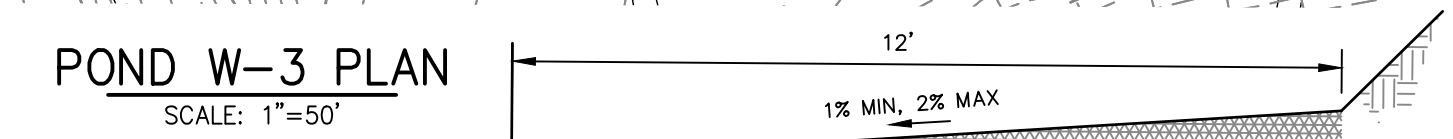
complete the contours

Label existing contour elev.

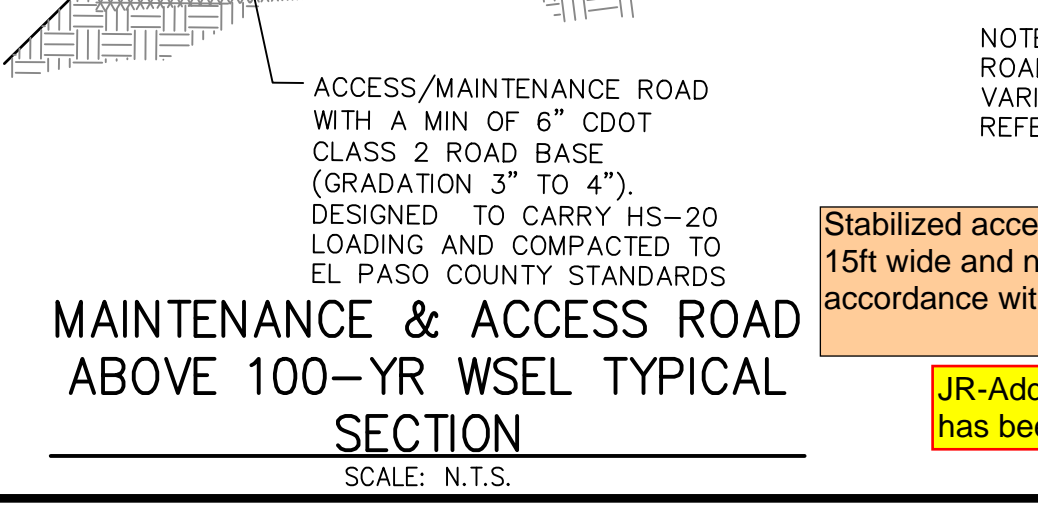
JR-Addressed, existing elevation labels have been added



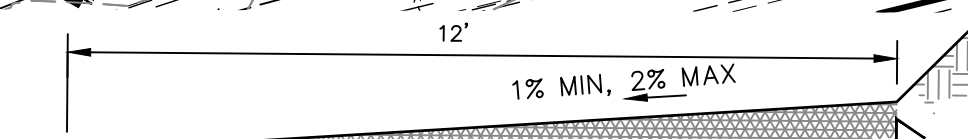
POND WARNING SIGN
SCALE: N.T.S.



POND W-3 PLAN
SCALE: 1"=50'



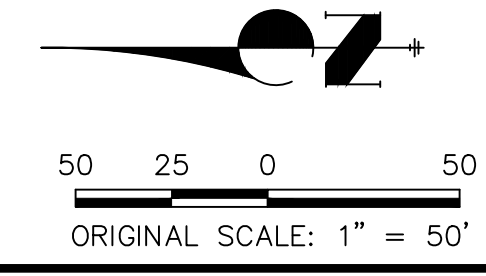
MAINTENANCE & ACCESS ROAD ABOVE 100-YR WSEL TYPICAL SECTION
SCALE: N.T.S.



MAINTENANCE & ACCESS ROAD BELOW 100-YR WSEL TYPICAL SECTION
SCALE: N.T.S.

Stabilized access ramp shall be a minimum of 15ft wide and no greater than 12% slope, in accordance with DCMv1, Chap 11.2.2.

JR-Addressed, detail has been updated



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

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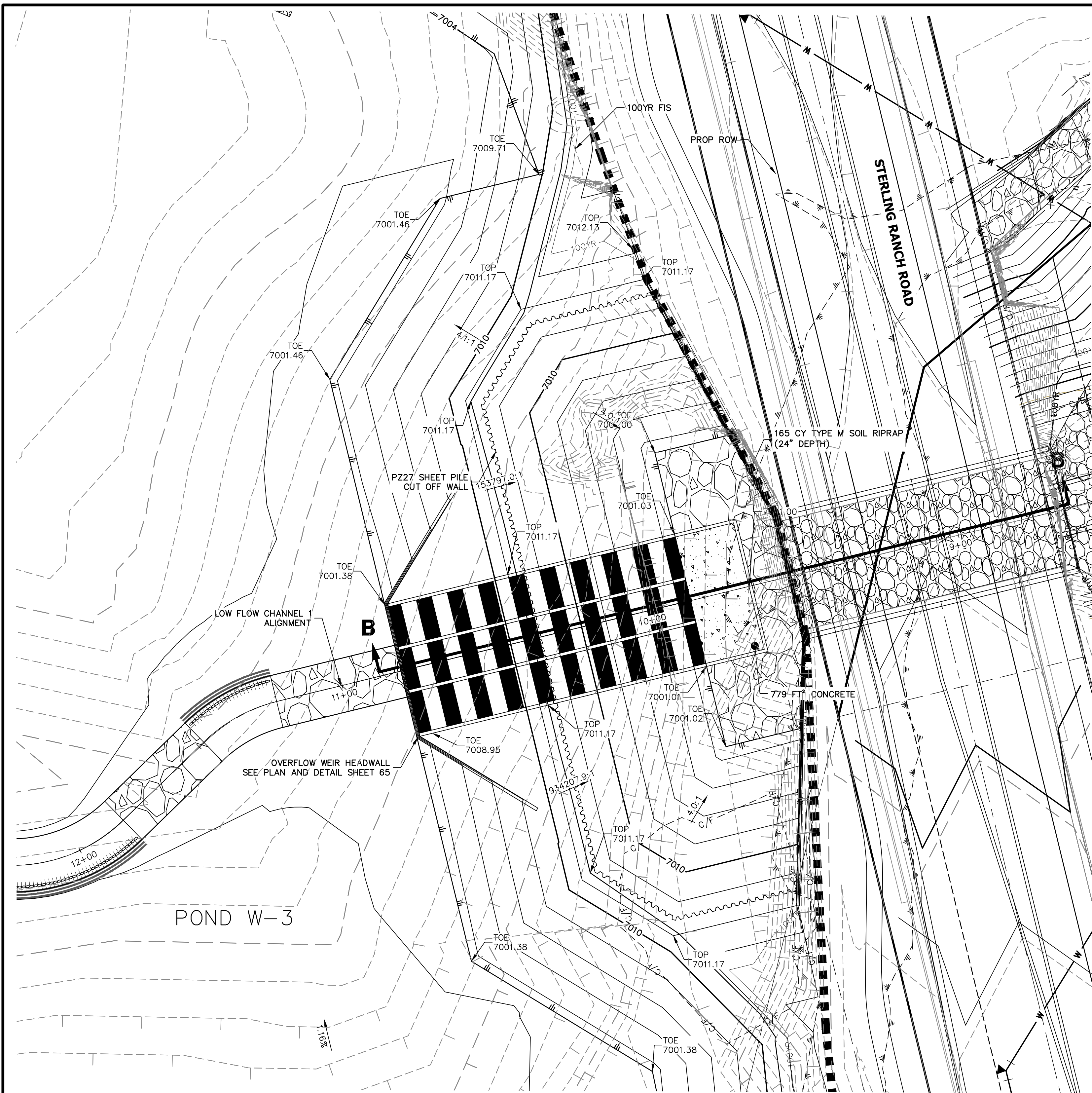
PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

J.R. ENGINEERING
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Central 303-740-0888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

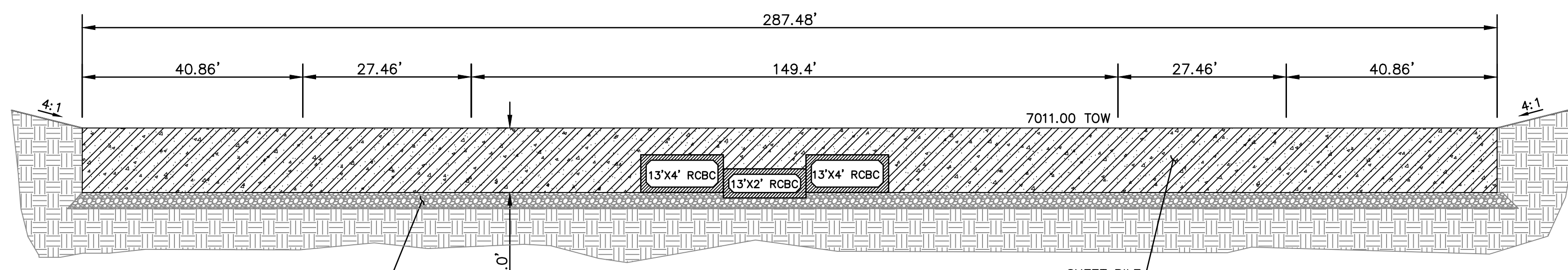
BY	DATE	No.	REVISION

H-SCALE 1"=50'
V-SCALE N/A
DATE 9/1/22
DESIGNED BY DV
DRAWN BY NEO
CHECKED BY

SAND CREEK RESTORATION
POND PLANS
SHEET 37 OF 99
JOB NO. 25188.04

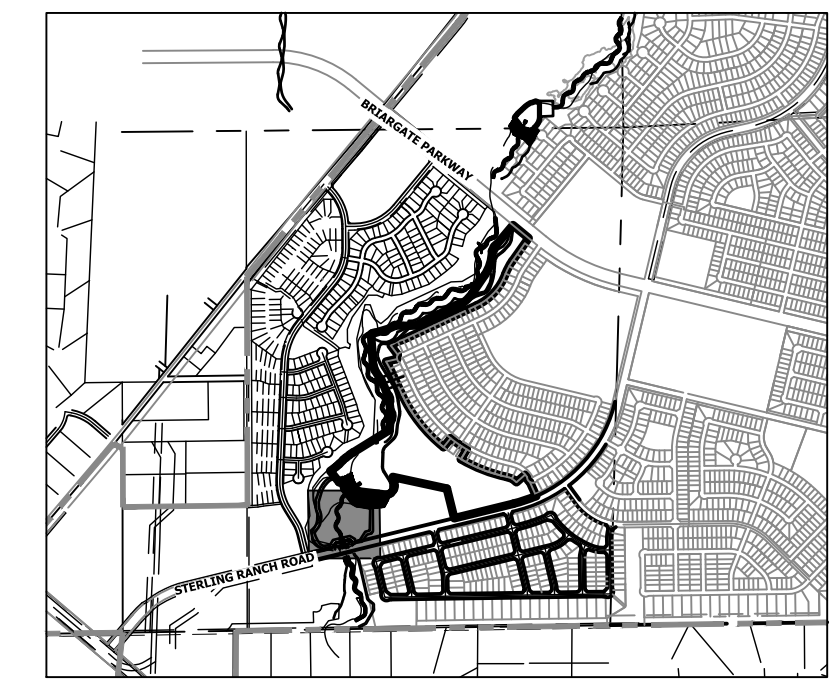


POND W-3 OVERFLOW WEIR
SCALE: 1"=20'



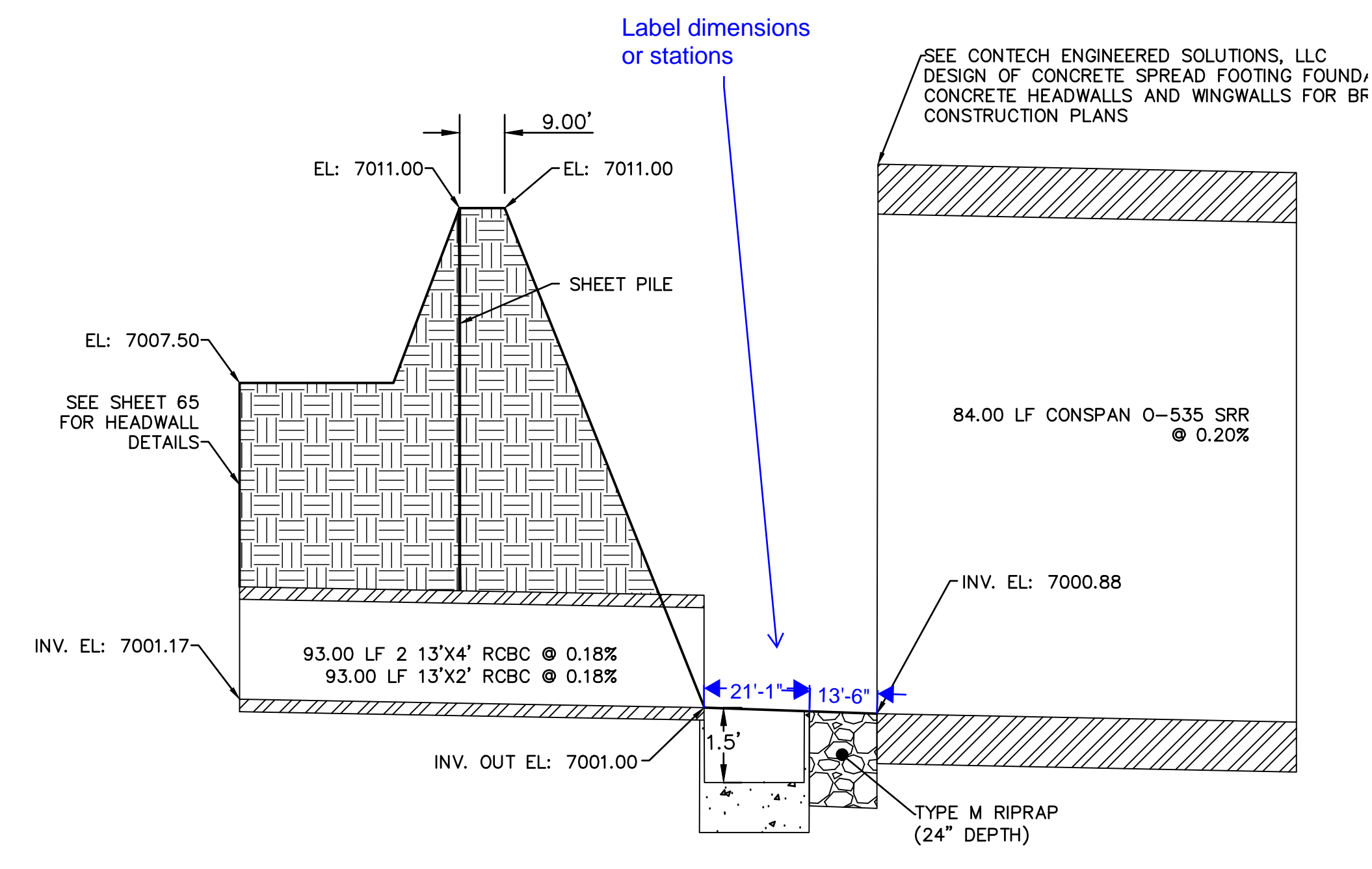
BERM DETAIL
SCALE: N.T.S.

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



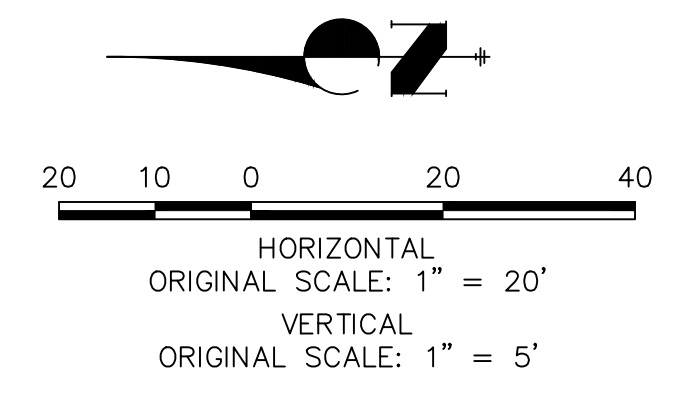
KEY MAP
SCALE: 1"=2000'

JR-
Addressed, dimension
labels have been
added




SECTION B-B
SCALE: N.T.S.

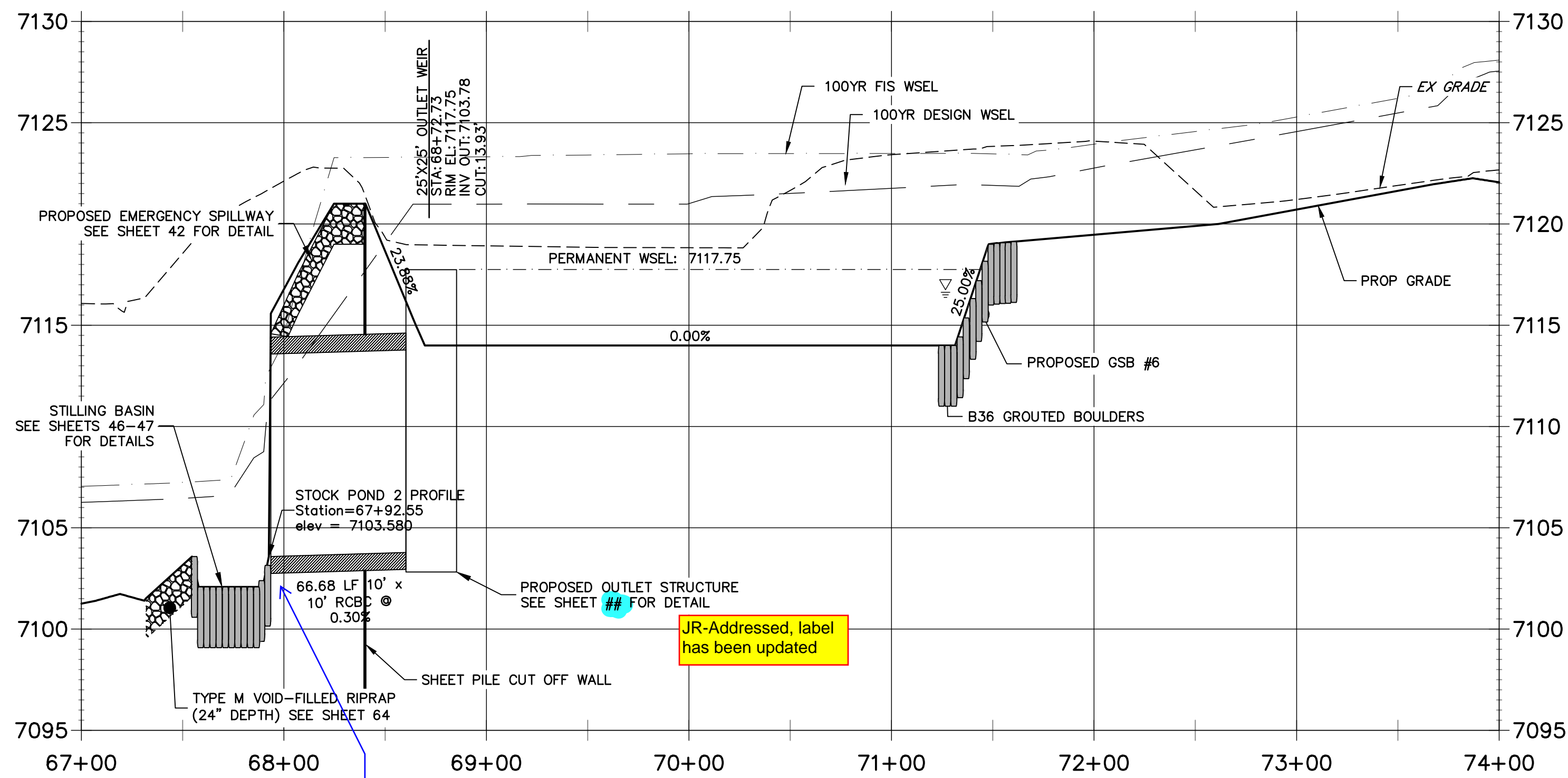
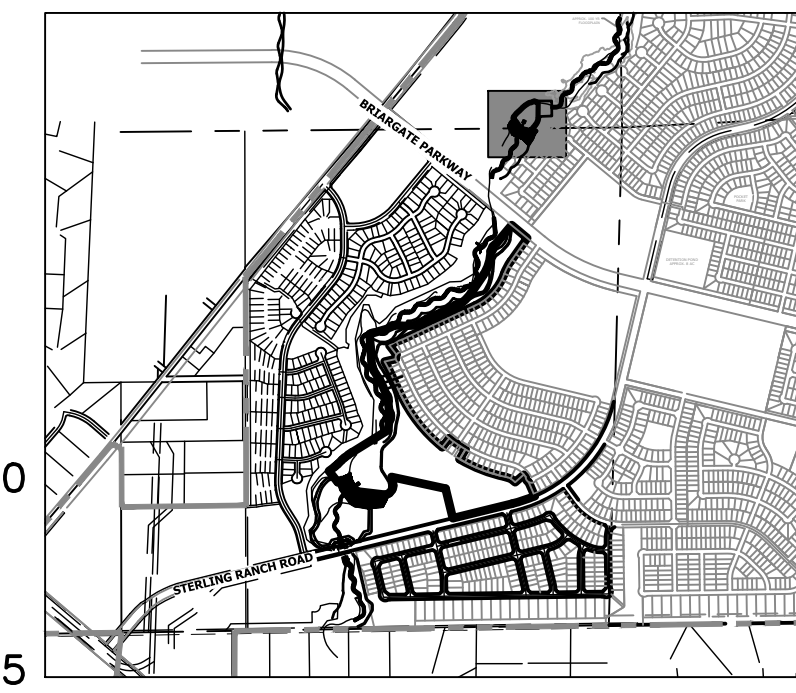
SEE CONTECH ENGINEERED SOLUTIONS, LLC
DESIGN OF CONCRETE SPREAD FOOTING FOUND,
CONCRETE HEADWALLS AND WINGWALLS FOR BF
CONSTRUCTION PLANS



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND
FOR AND ON BEHALF OF JR ENGINEERING
**PRELIMINARY
NOT FOR
CONSTRUCTION**

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"=20'	V-SCALE 1"=5'	DATE 9/1/22	DESIGNED BY DV
SAND CREEK RESTORATION		POND PLANS			
SHEET 38 OF 99		JOB NO. 25188.04			

**STOCK POND 2 PROFILE
STA 67+00.00 TO 74+00.00**



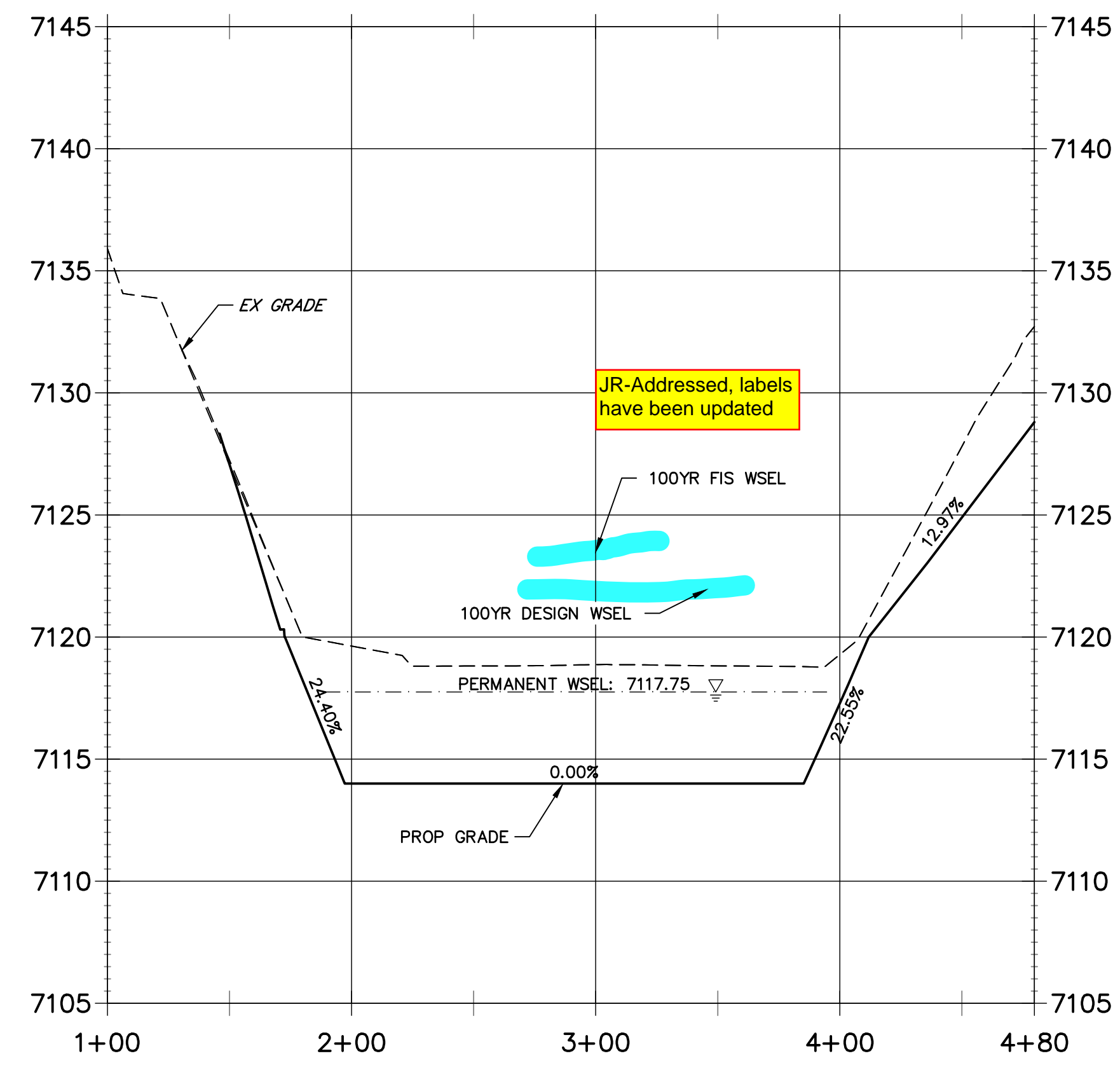
JR-Addressed, label has been updated

JR-Addressed, label has been updated

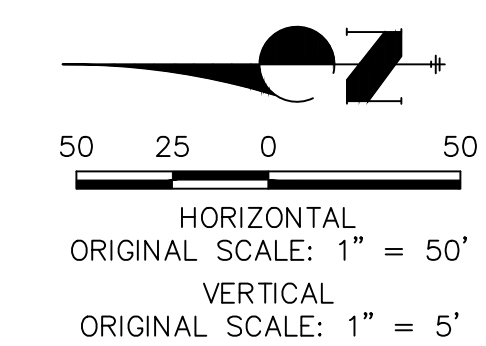
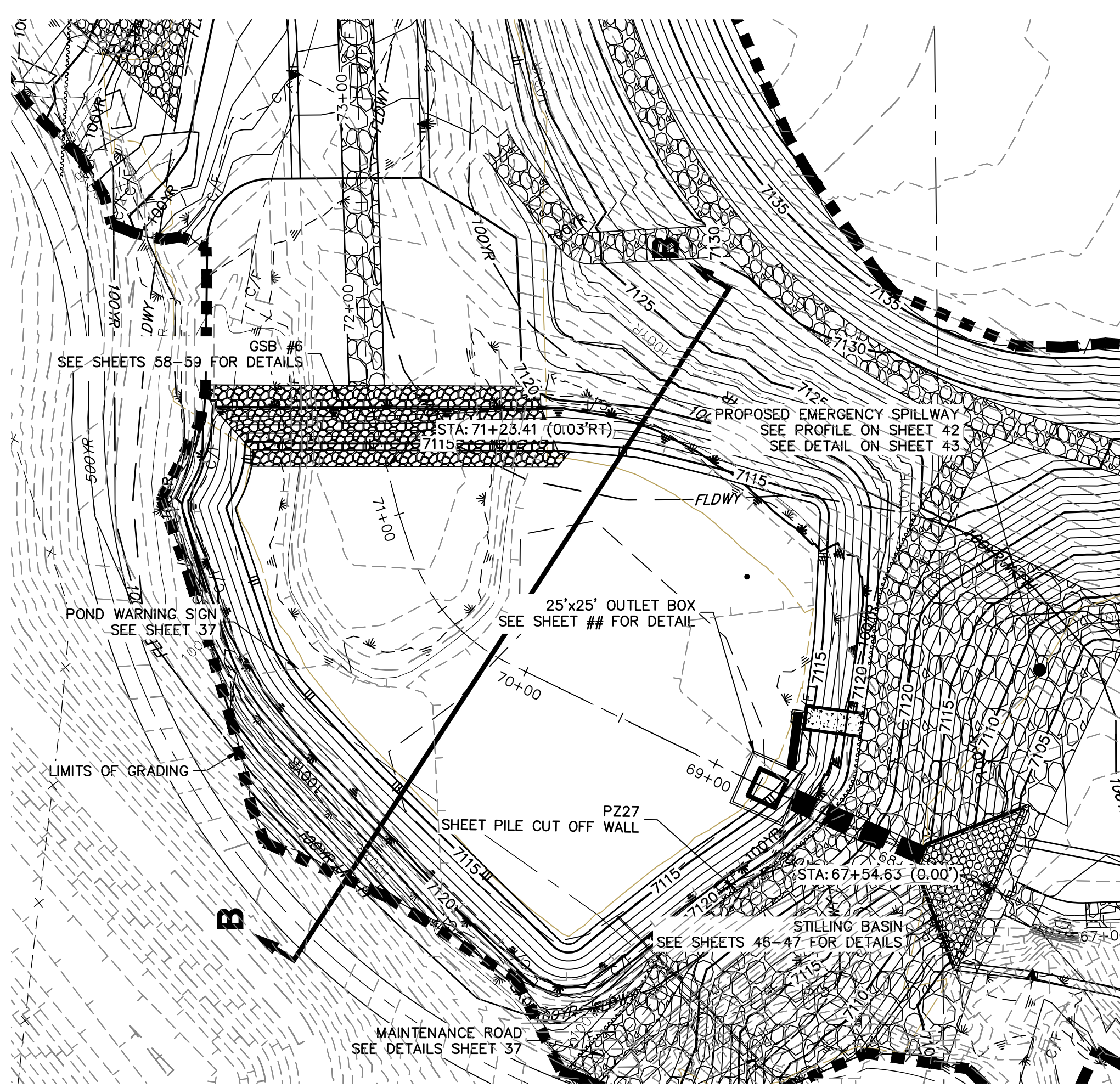
Should bottom cutoff wall be at end of culvert?

JR-Toewall now shown on profile. See Stilling Basin details for further details

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



JR-Addressed, labels have been updated



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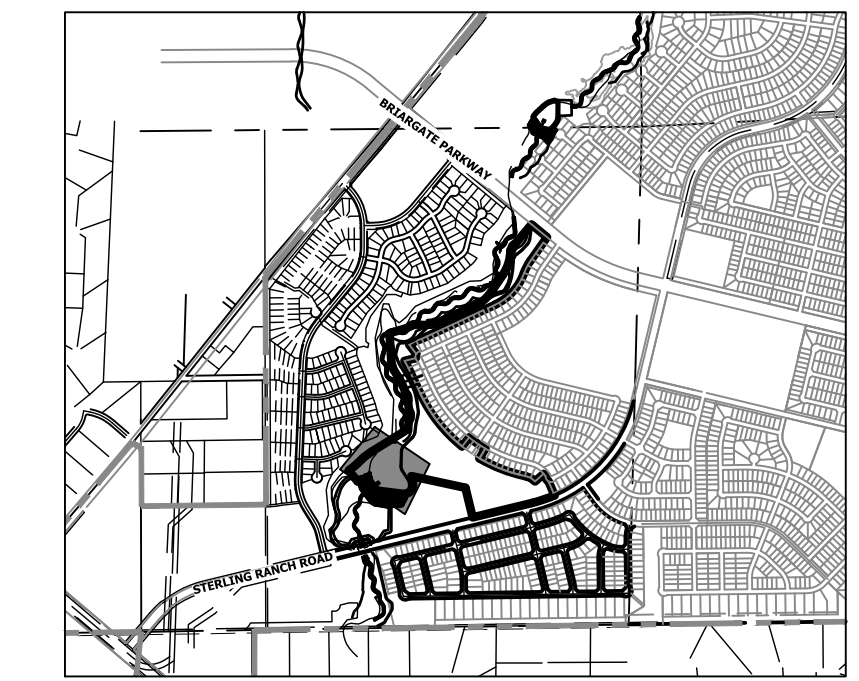
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MIKE A. BRAMLEY
COLORADO P.E.
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION.	PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024
	J.R. ENGINEERING A Westman Company Central 300-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com
SAND CREEK RESTORATION POND PLANS	SHEET 40 OF 99 JOB NO. 25188.04

GRADING NOTES:

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

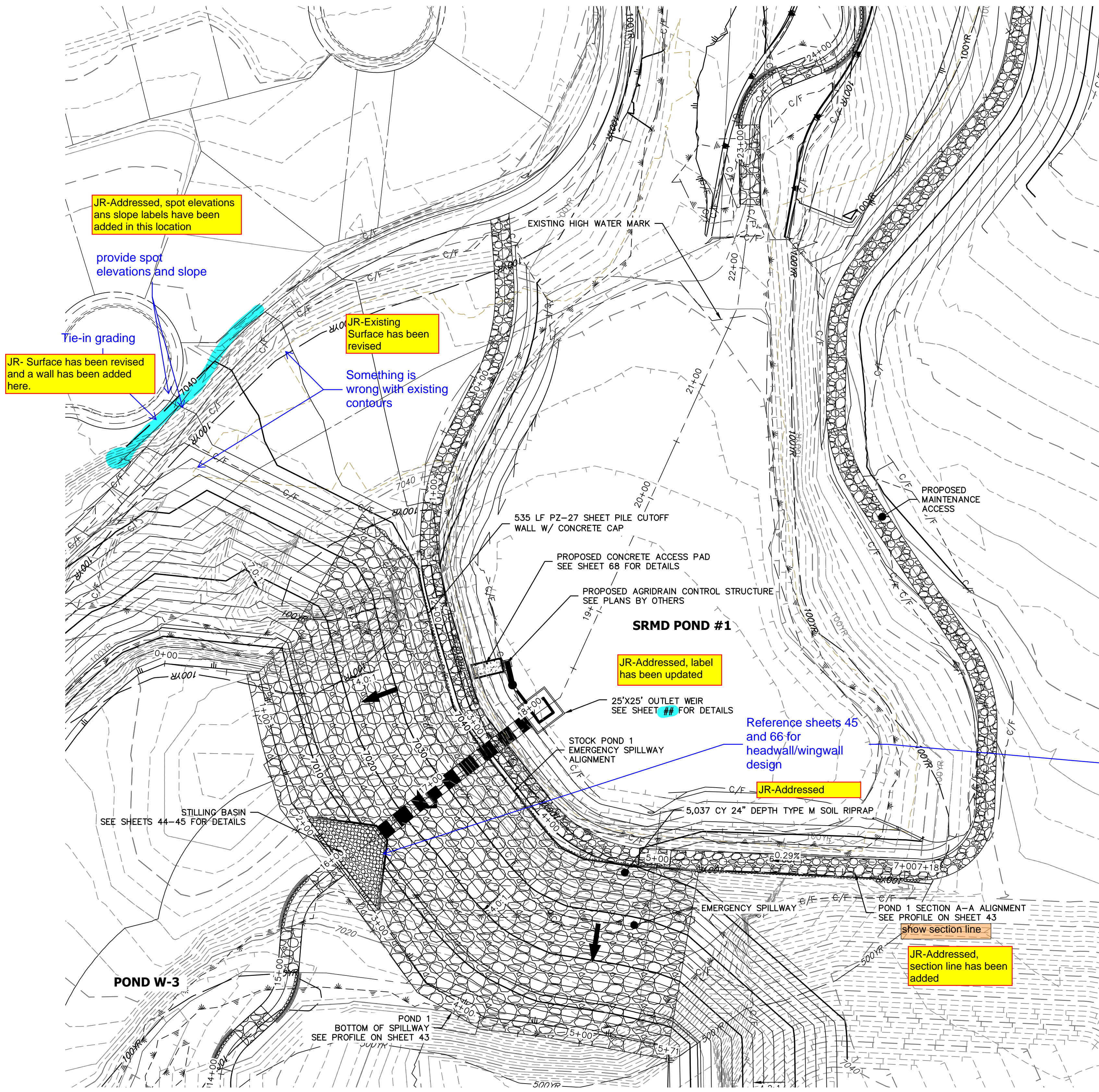


KEY MAP
SCALE: 1"=200'

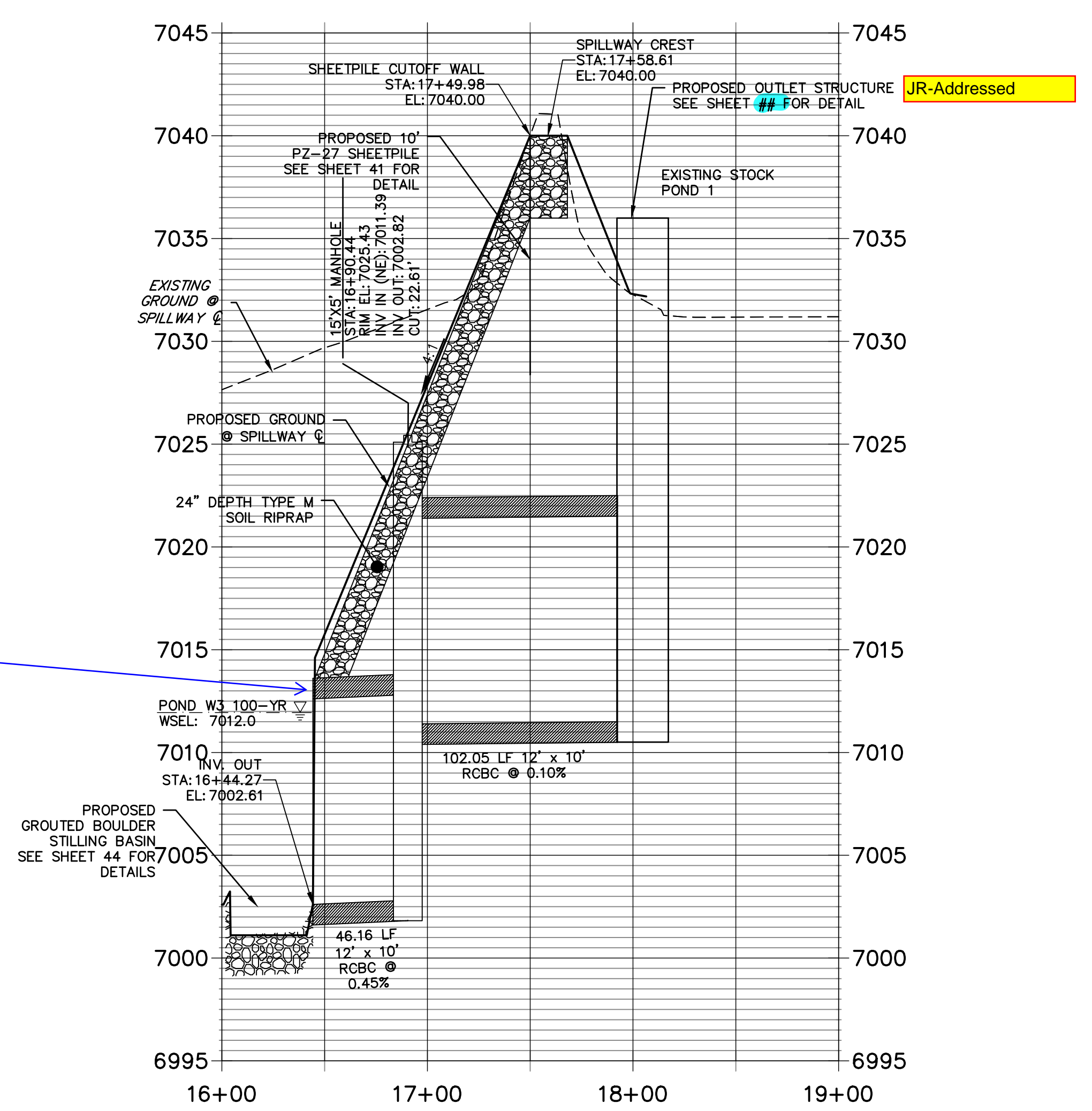
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE. DESIGNED BY: JAMES F. MORLEY DESIGNATED BY: WRITTEN AUTHORIZATION.

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

J.R. ENGINEERING
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**STOCK POND 1 EMERGENCY SPILLWAY PROFILE
STA 16+00.00 TO 19+00.00**

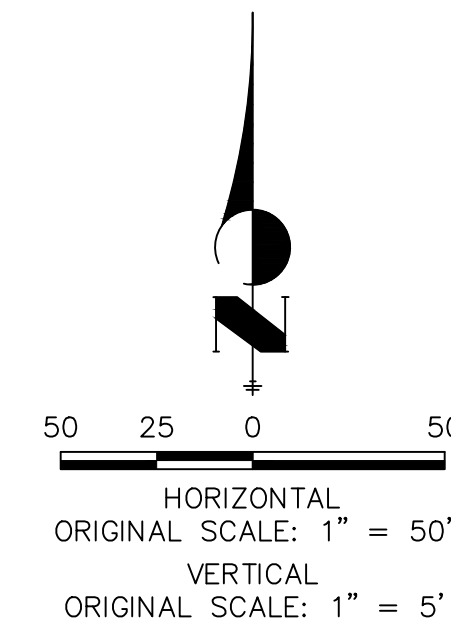


EXISTING STOCK POND EMERGENCY SPILLWAY
SCALE: 1"=50'

STOCK POND 1		
DRAINAGE AREA (AC)	2313.1	
AVERAGE % IMP.	9%	
	5-YR	100-YR
Q ₅₀ (CFS)	511.84	1977.60
Q ₁₀₀ (CFS)	499.73	1819.90
STATIC WSEL (FT)	7036.00	7036.00
MAX WSEL (FT)	7040.00	7040.00
DEPTH (FT)	6.17	8.09
VOLUME (AC-FT)	10.43	36.00
SURFACE AREA (AC)	2.7	4.40



Know what's below.
Call before you dig.

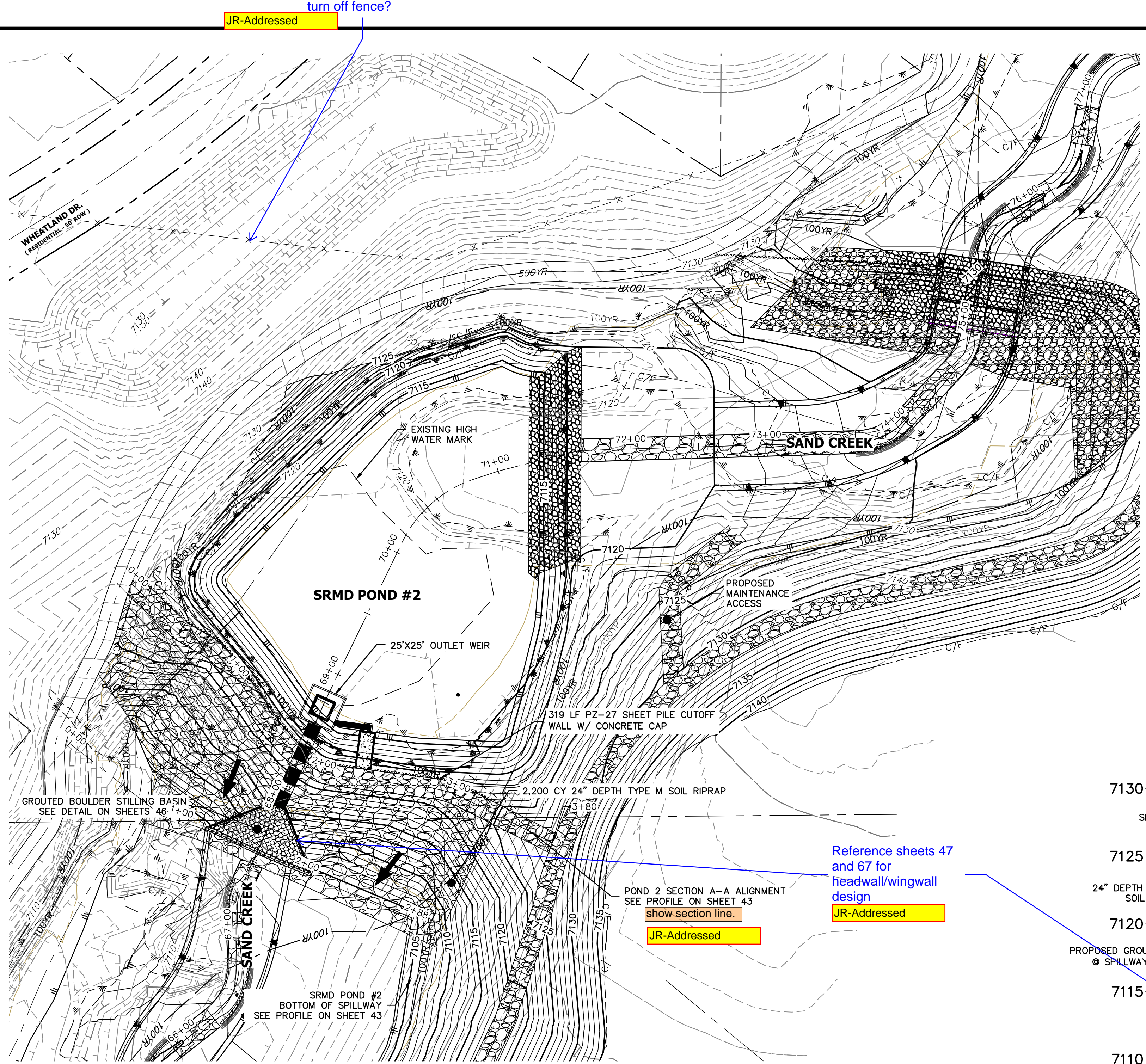


ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. No. 33111
FOR AND ON BEHALF OF JR ENGINEERING

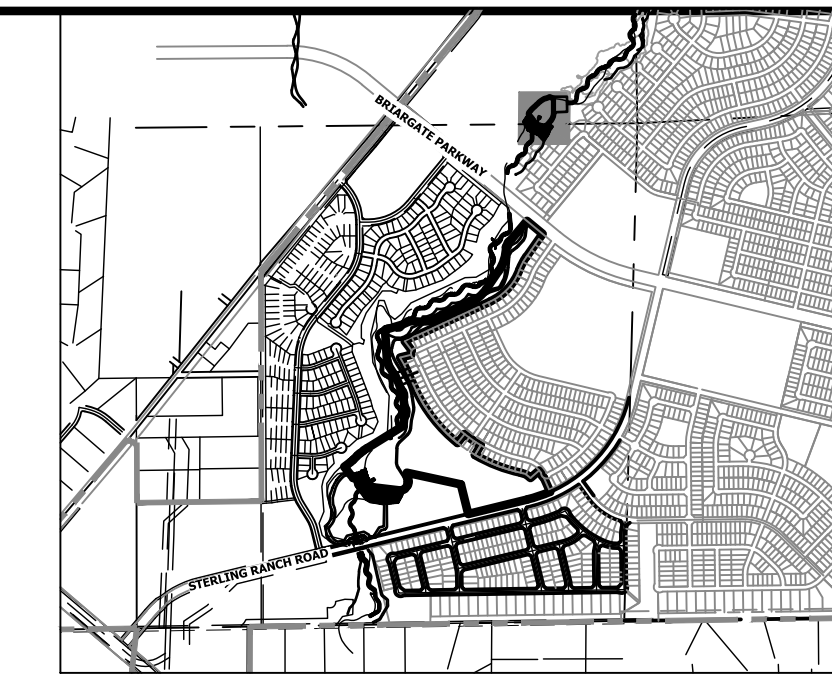
No.	REVISION	BY	DATE	DESIGNED BY		DRAWN BY		CHECKED BY	
				DJV	DJV	DJV	DJV	DJV	DJV

SAND CREEK RESTORATION
POND PLANS
SHEET 41 OF 26
JOB NO. 25188.04



STOCK POND 2		
DRAINAGE AREA (AC)	2003.2	
AVERAGE % IMP.	8%	
	5-YR	100-YR
Q _{un} (CFS)	477.23	1666.90
Q _{un} (CFS)	476.24	1661.20
STATIC WSEL (FT)	7117.75	7117.75
MAX WSEL (FT)	7019.27	7021.00
DEPTH (FT)	5.08	6.81
VOLUME (AC-FT)	6.26	8.70
SURFACE AREA (AC)	1.35	2.10

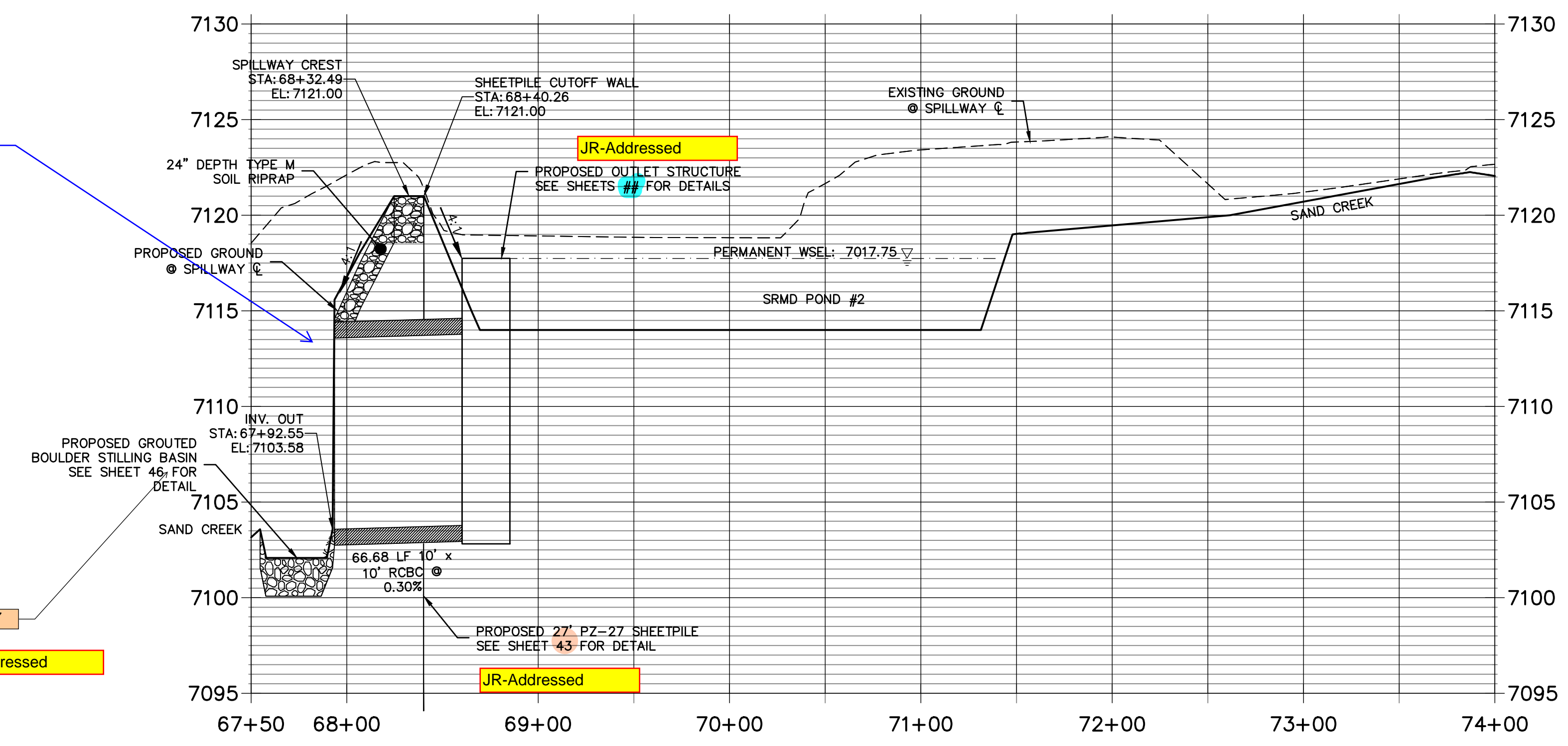
- GRADING NOTES:**
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 - EARTHEN CUT AND FILL SLOPES SHALL BE 3:1 MAXIMUM. SLOPES IN EXCESS OF 4:1 AND AREAS OTHERWISE INDICATED BY WITHIN THESE PLANS, SHALL BE COVERED WITH SOIL RETENTION BLANKET OVER 4" MIN. THICKNESS OF TOPSOIL AND SEED.
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Please be consistent with pond labels. Right now they are labeled SRMD Pond #, Stock Pond #, Existing Stock Pond #, and Pond #

JR-Addressed, Updated to all be labeled as SRMD Pond

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

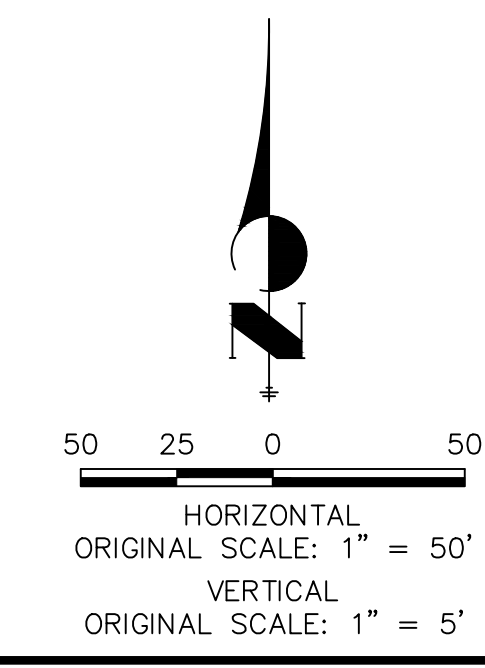


Reference sheets 47 and 67 for headwall/wingwall design
JR-Addressed

POND 2 SECTION A-A ALIGNMENT
SEE PROFILE ON SHEET 43
show section line.
JR-Addressed



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ENGINEER'S STATEMENT

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

PREPARED FOR

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

J.R. ENGINEERING
A Westman Company
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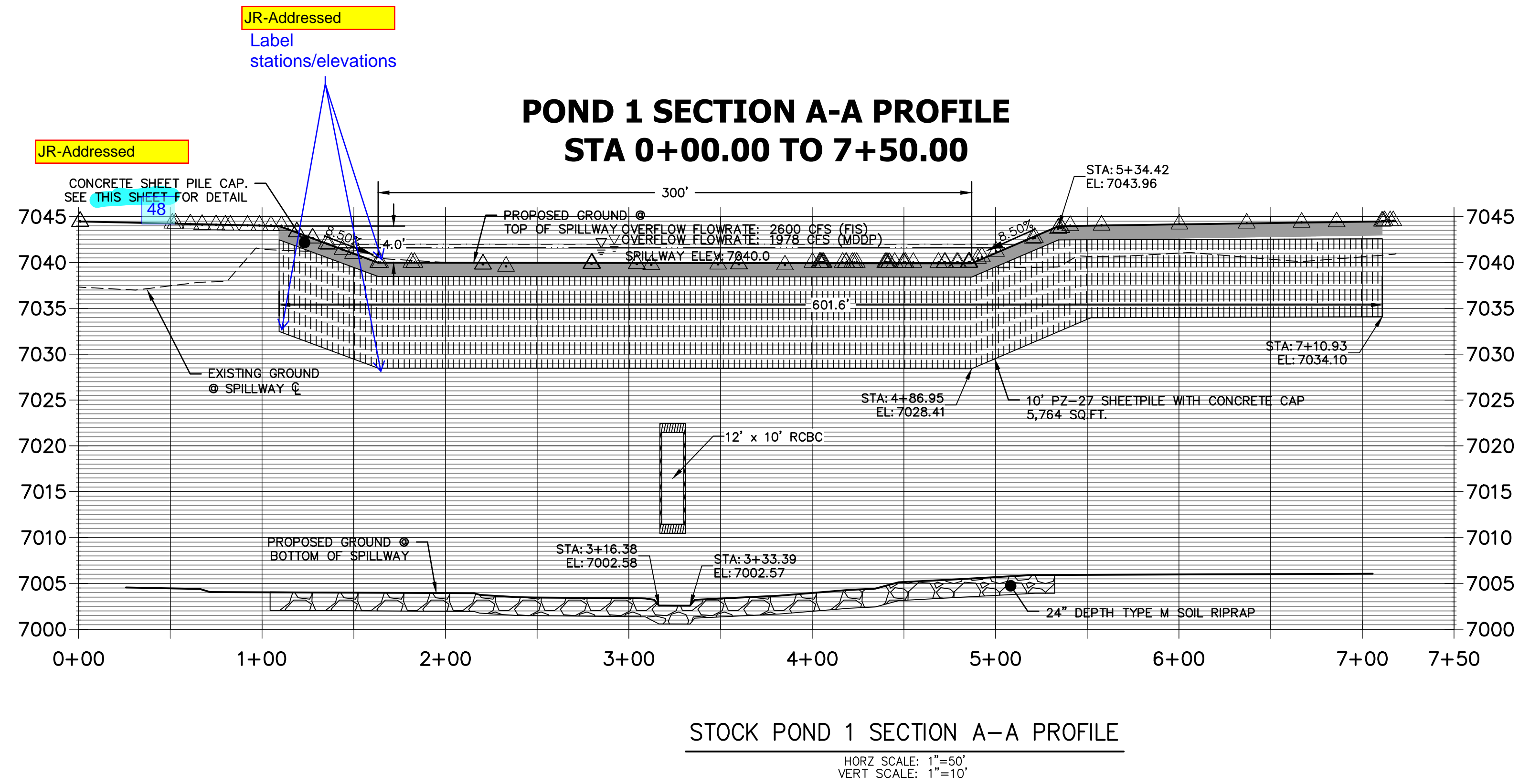
BY DATE

No. REVISION

H-SCALE 1"=50'
V-SCALE 1"=5'
DATE 9/1/22
DESIGNED BY DJV
DRAWN BY DJV
CHECKED BY

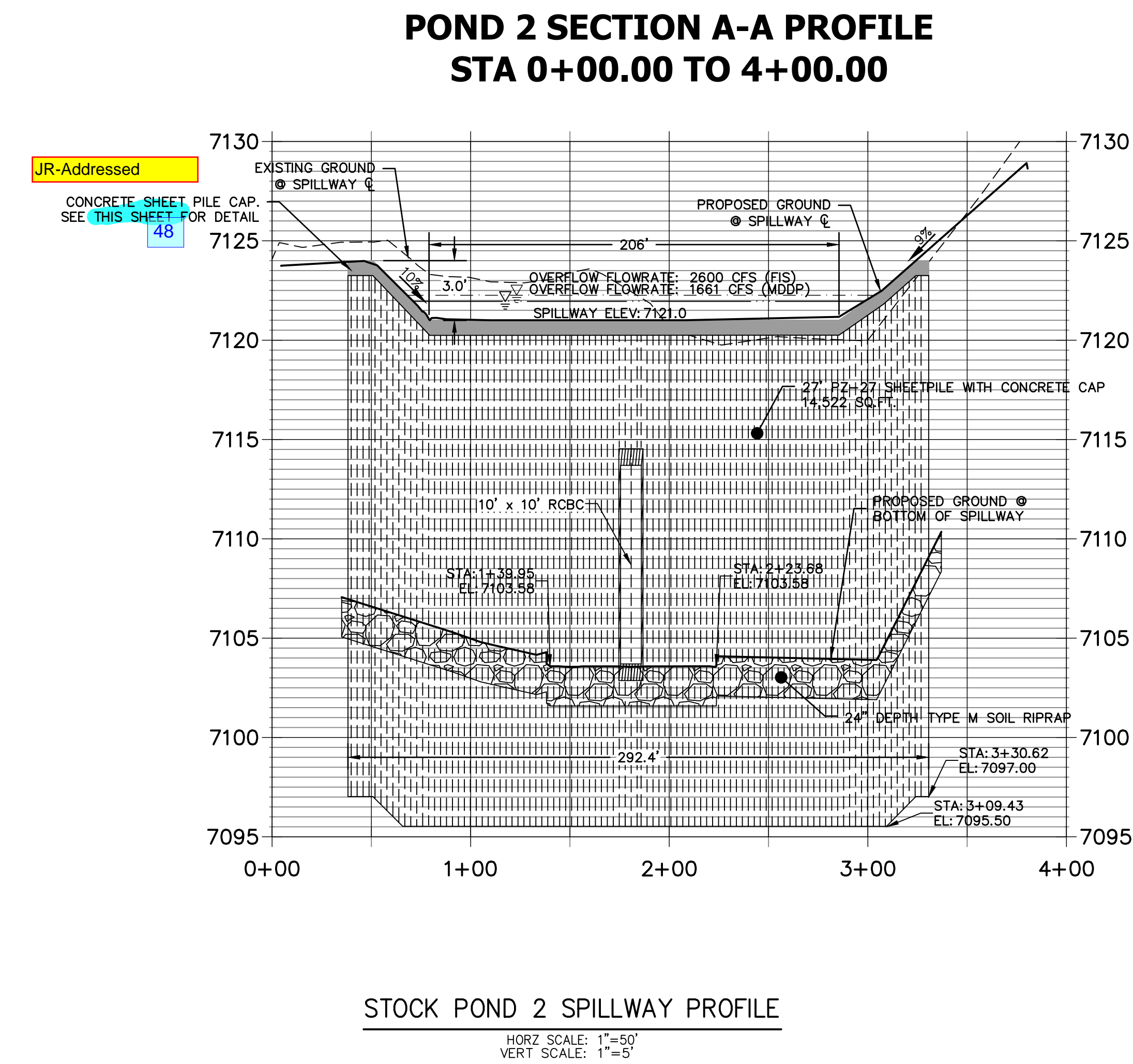
SAND CREEK RESTORATION
POND PLANS

SHEET 42 OF 26
JOB NO. 25188.04



Provide complete structural design for outlet structures

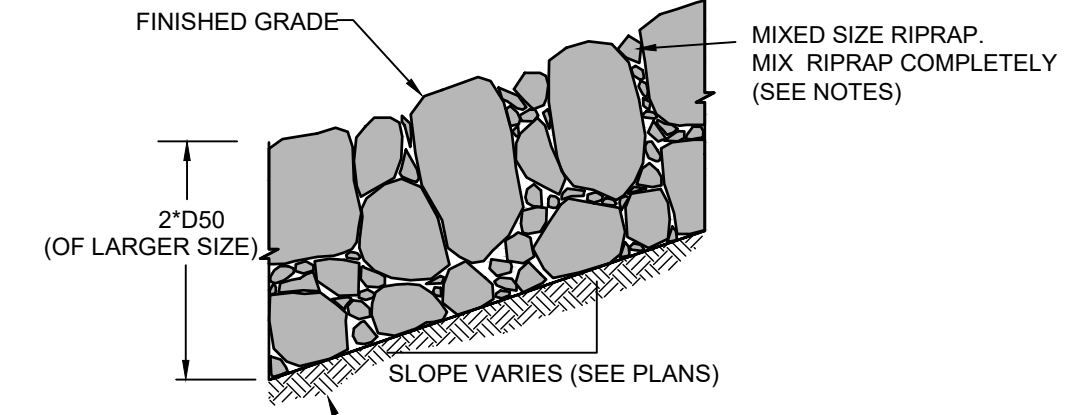
JR-The structural design for the outlet structures will be provided by SAM Engineering, a notes has been added on this sheet to see their plans.



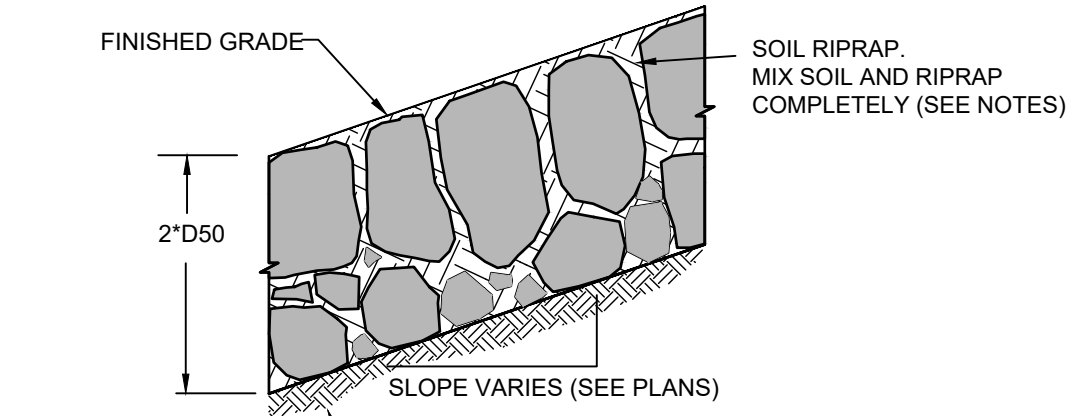
RIPRAP NOTES:

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

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



TYPICAL SECTION - MIXED SIZE RIPRAP



TYPICAL SECTION - SOIL RIPRAP



Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
 MIKE A. BRAMLEY
 COLORADO P.E. No. 31117
 FOR AND ON BEHALF OF JR ENGINEERING

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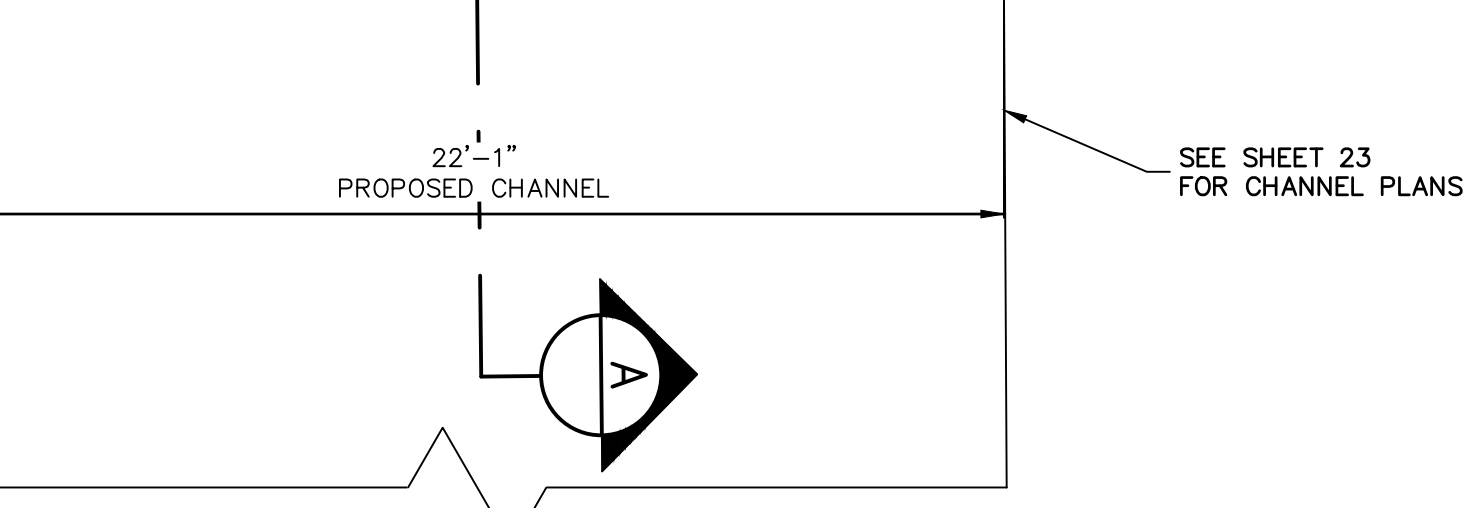
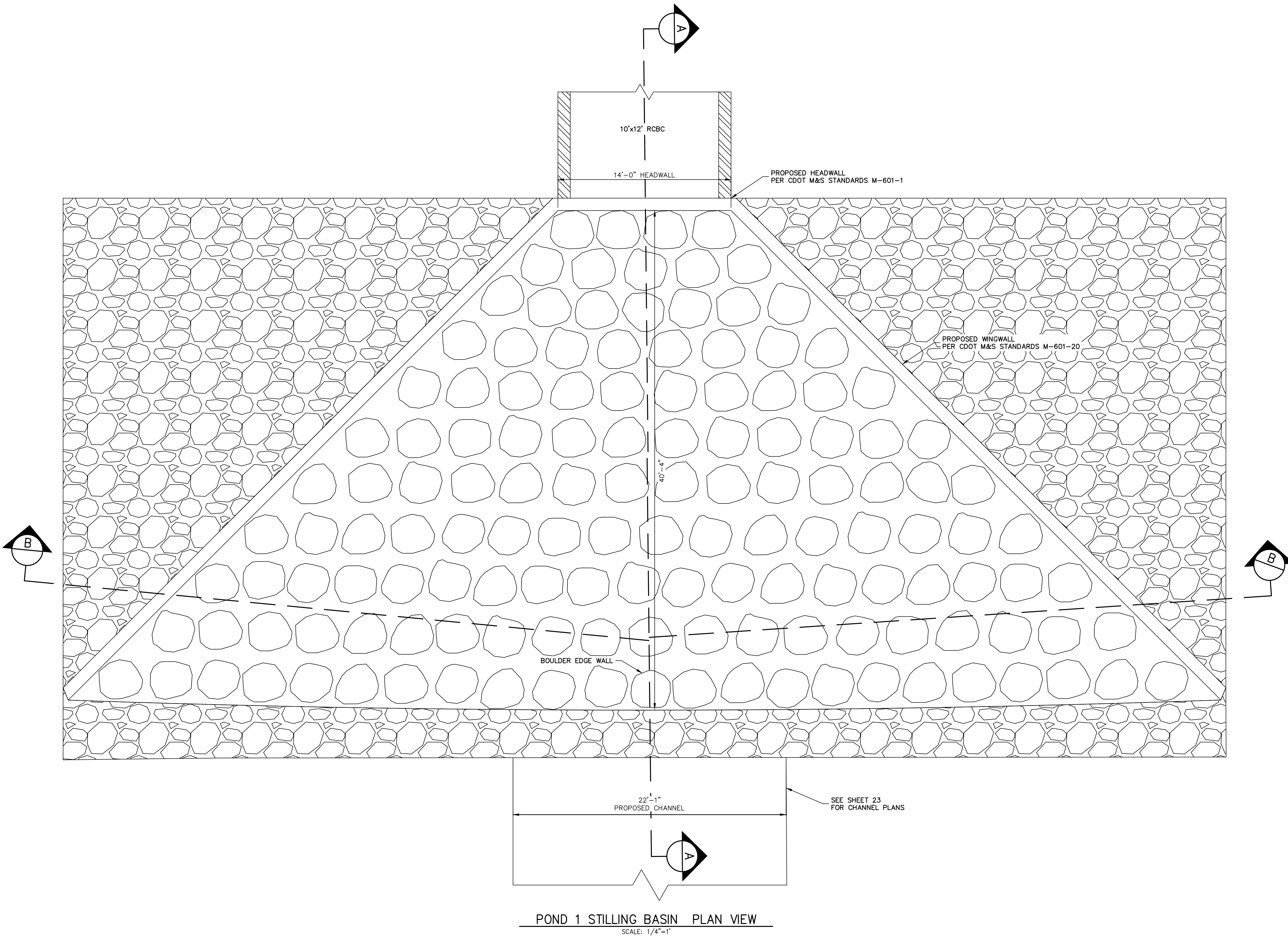
PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

J.R. ENGINEERING
 A Westman Company
 Centennial 300-740-0888 • Colorado Springs 719-588-2688
 Fort Collins 970-491-9888 • www.jrengineering.com

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

SAND CREEK RESTORATION
 POND PLANS

SHEET 43 OF 26
 JOB NO. 25188.04



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

1/4 1/8 0 1/4

 ORIGINAL SCALE: 1" = 1/4'

811

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ENGINEER'S STATEMENT

 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY

NOT FOR

CONSTRUCTION

 MIKE A. BRAMLEY, P.E.

 COLORADO P.E. NO. 39078

 FOR AND ON BEHALF OF J.R. ENGINEERING, LLC

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1/4"=1'	1/4"=1'	9/1/22	DJW	NEO	

No.	REVISION	BY	DATE

SAND CREEK RESTORATION

POND PLANS

SHEET 44 OF 99

JOB NO. 25188.04

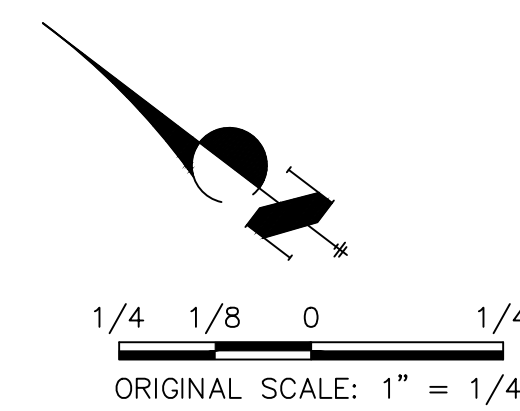
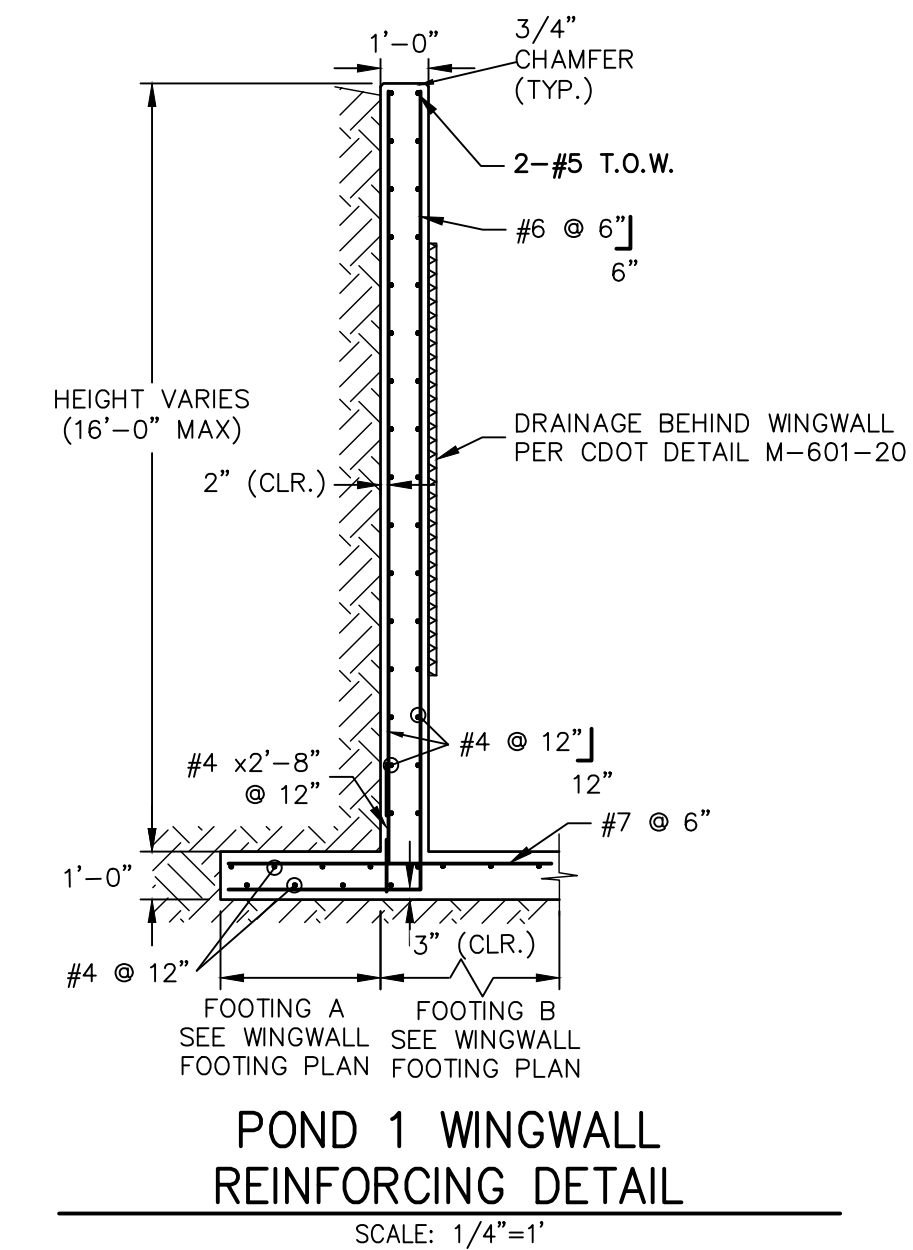
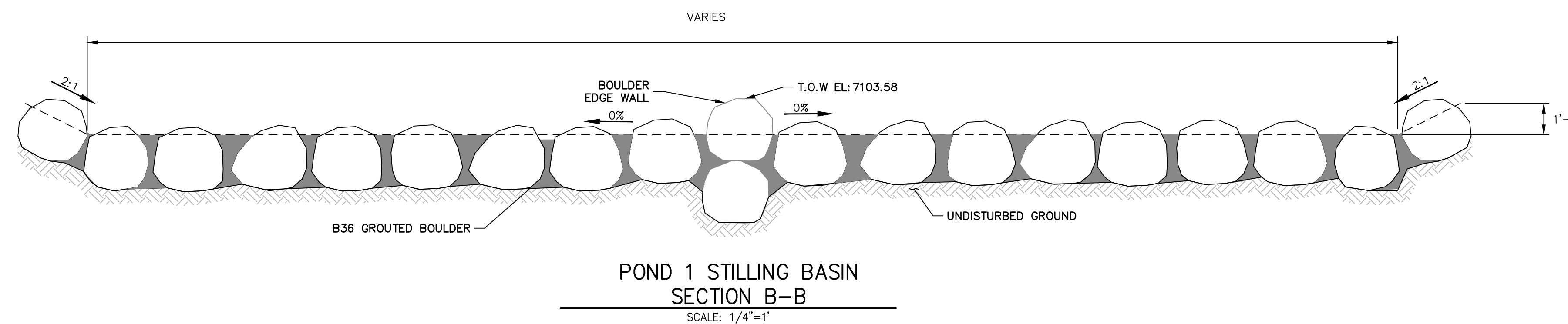
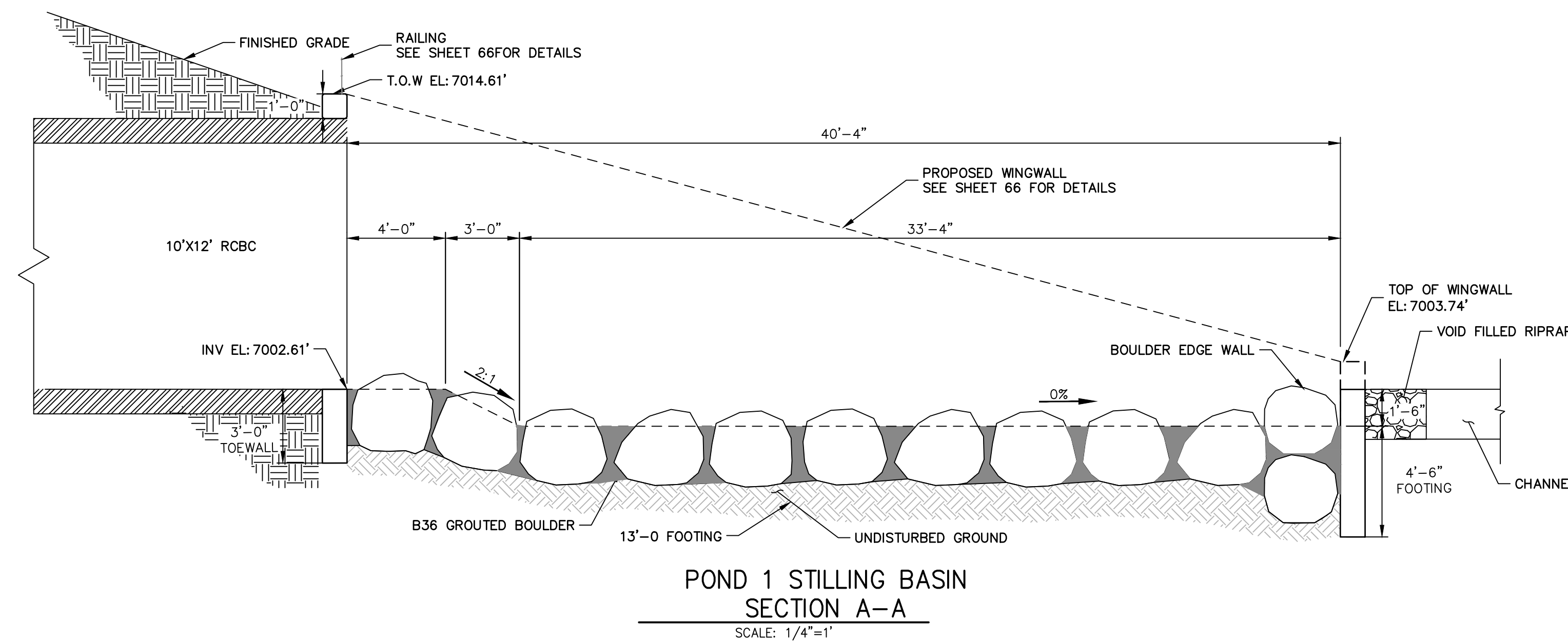
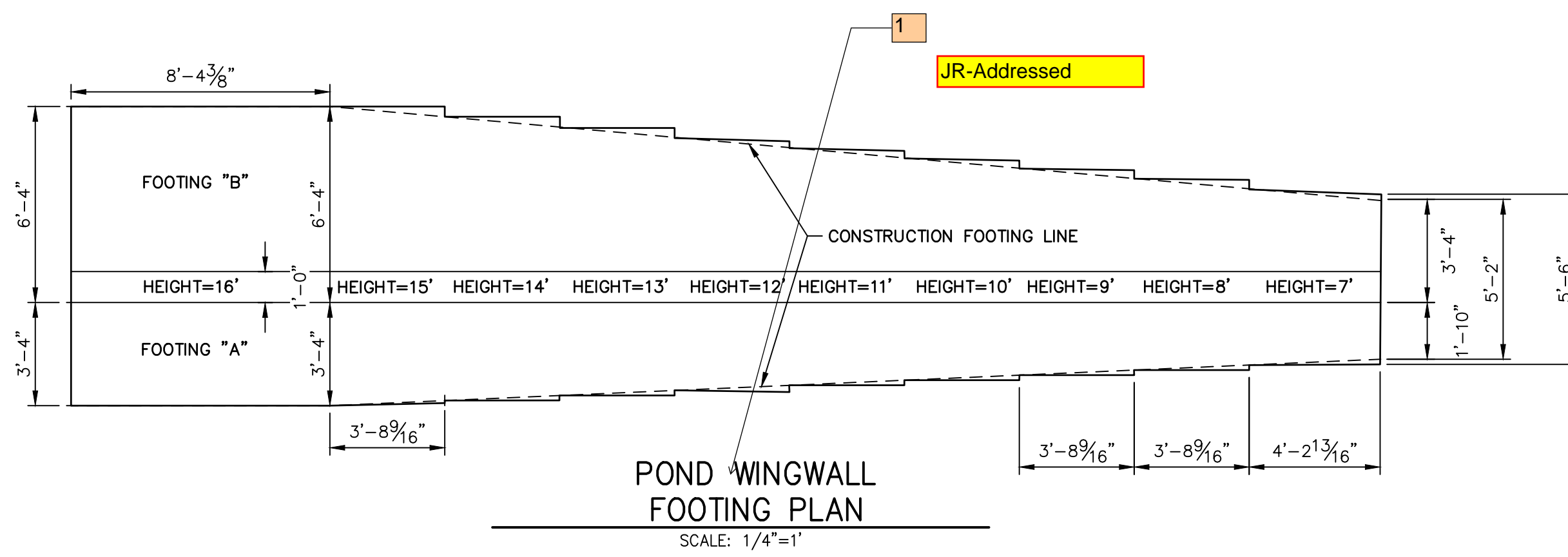
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PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 419-3024

J.R. ENGINEERING
 A Westman Company

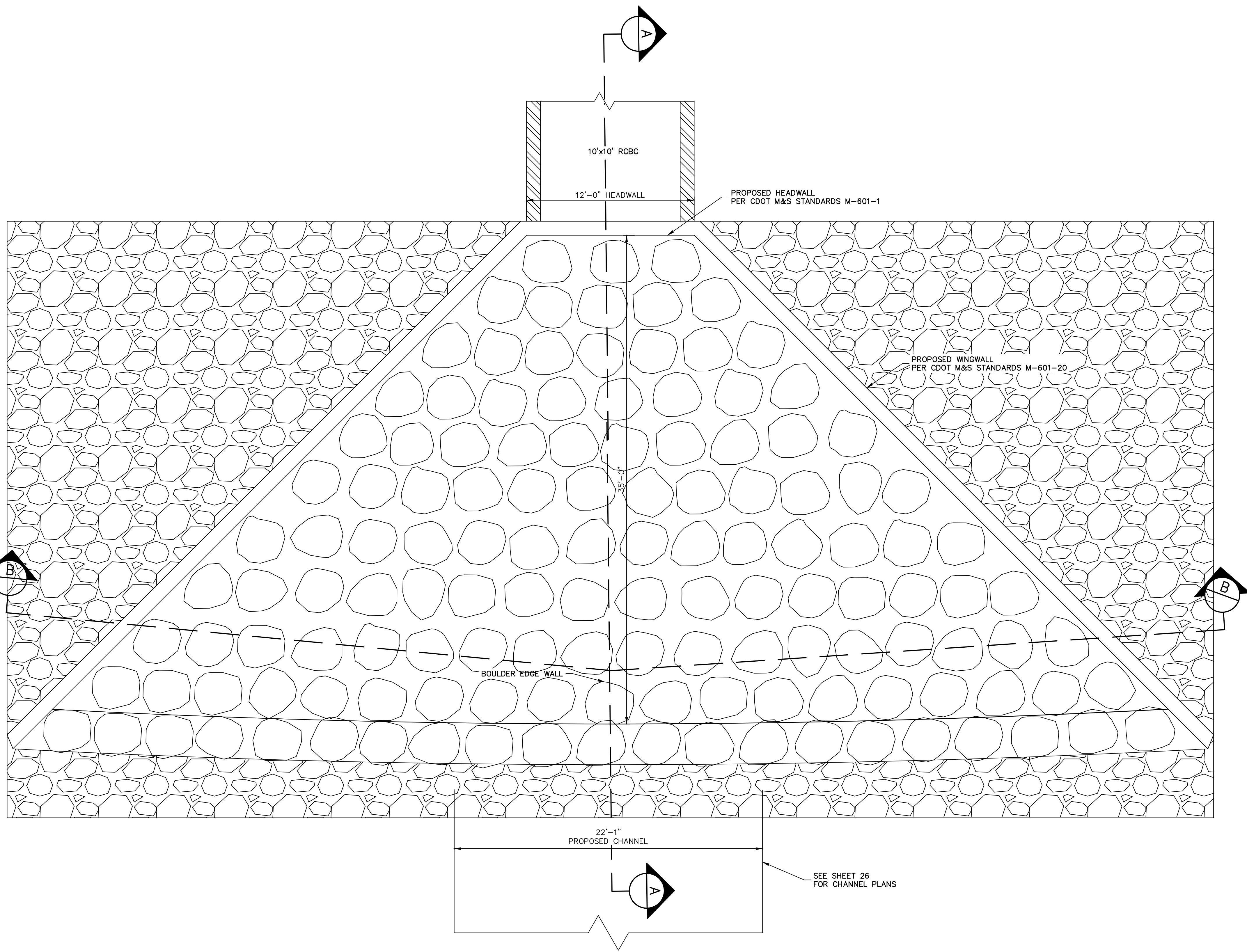
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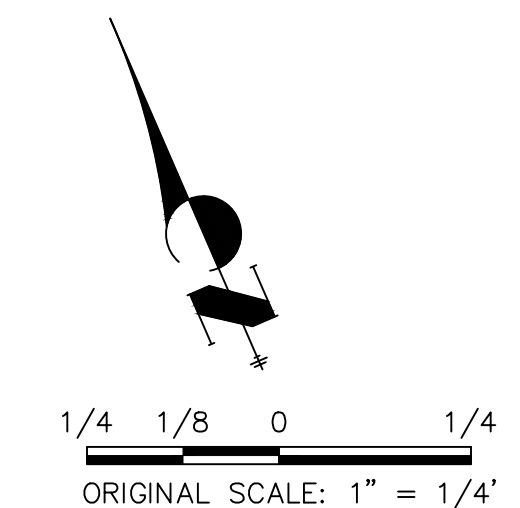


ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
 MIKE A. BRAMLEY
 COLORADO P.E. 30100
 FOR AND ON BEHALF OF J.R. ENGINEERING, L.P.

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PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024
J.R. ENGINEERING A Westman Company	Central 303-740-9888 • Colorado Springs 719-588-2583 Fort Collins 970-491-9888 • www.jrengineering.com
BY	DATE
No.	REVISION
H-SCALE	1/4"=1"
V-SCALE	N/A
DATE	9/1/22
DESIGNED BY	DJV
DRAWN BY	NEO
CHECKED BY	
SAND CREEK RESTORATION	POND PLANS
SHEET 45	OF 99
JOB NO.	25188.04



POND 2 STILLING BASIN PLAN VIEW
SCALE: 1/4"=1'



811
Know what's below.
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ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND REVISION
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 30102
FOR AND ON BEHALF OF J.R. ENGINEERING, LLC

SAND CREEK RESTORATION
POND PLANS
SHEET 46 OF 99
JOB NO. 25188.04

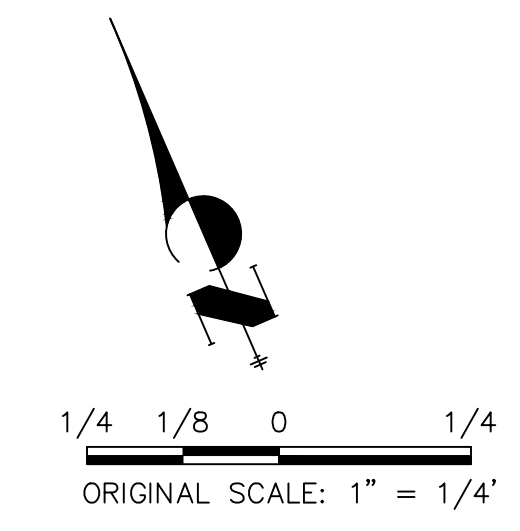
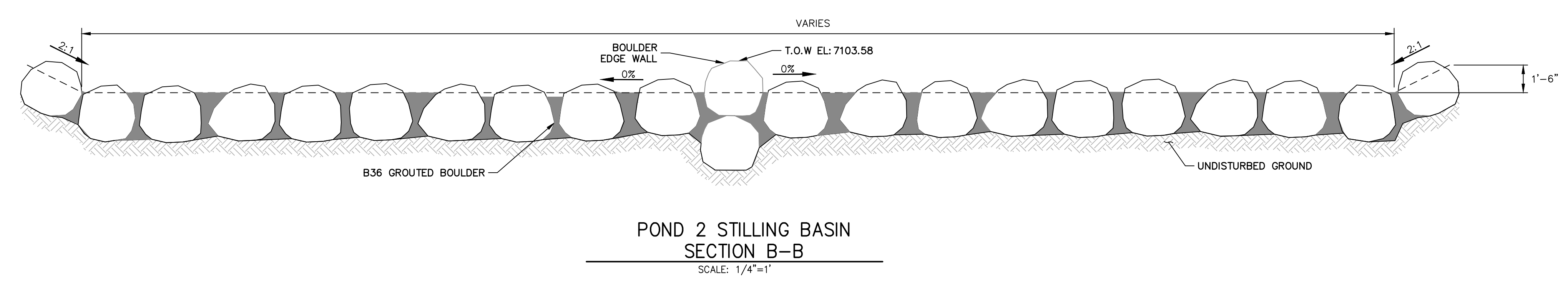
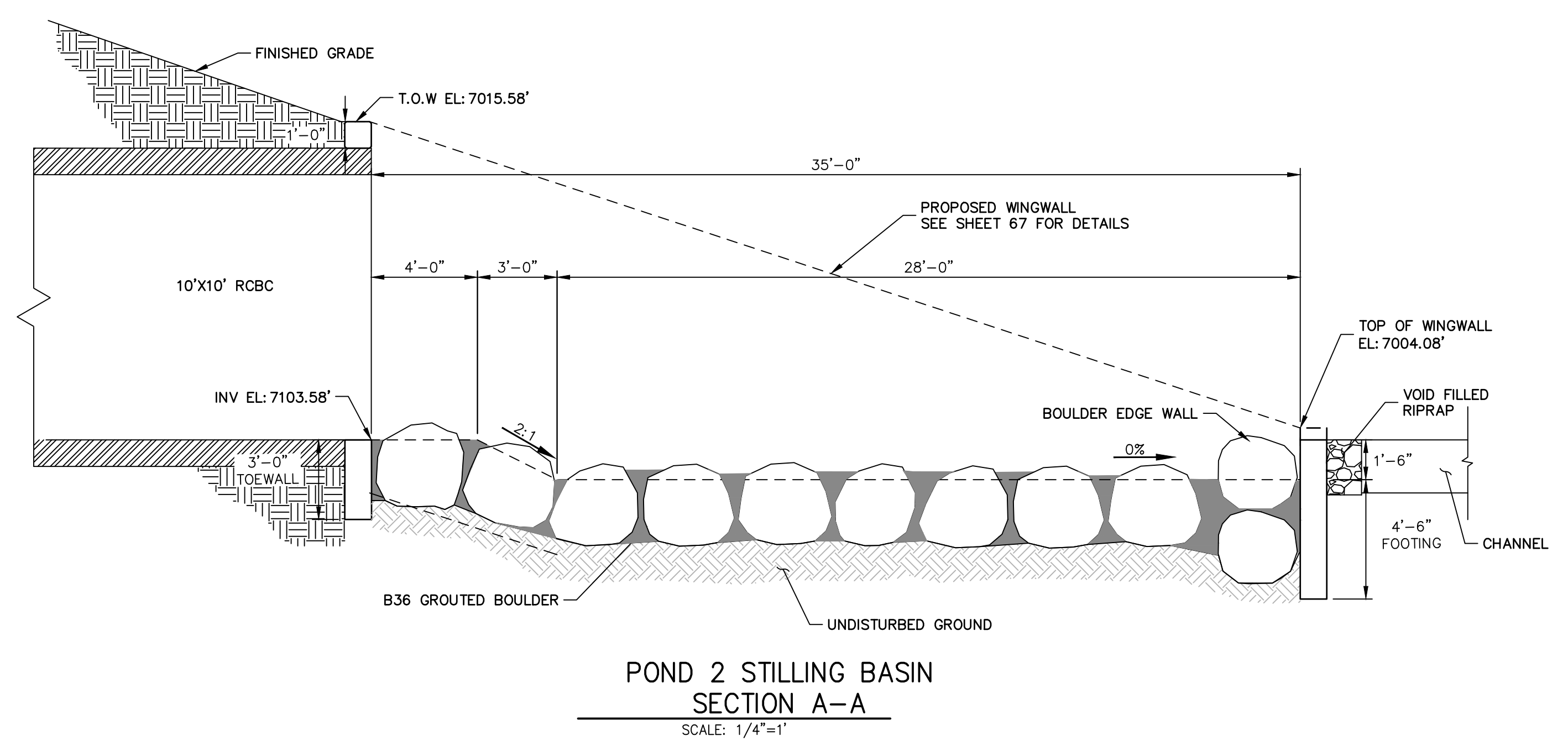
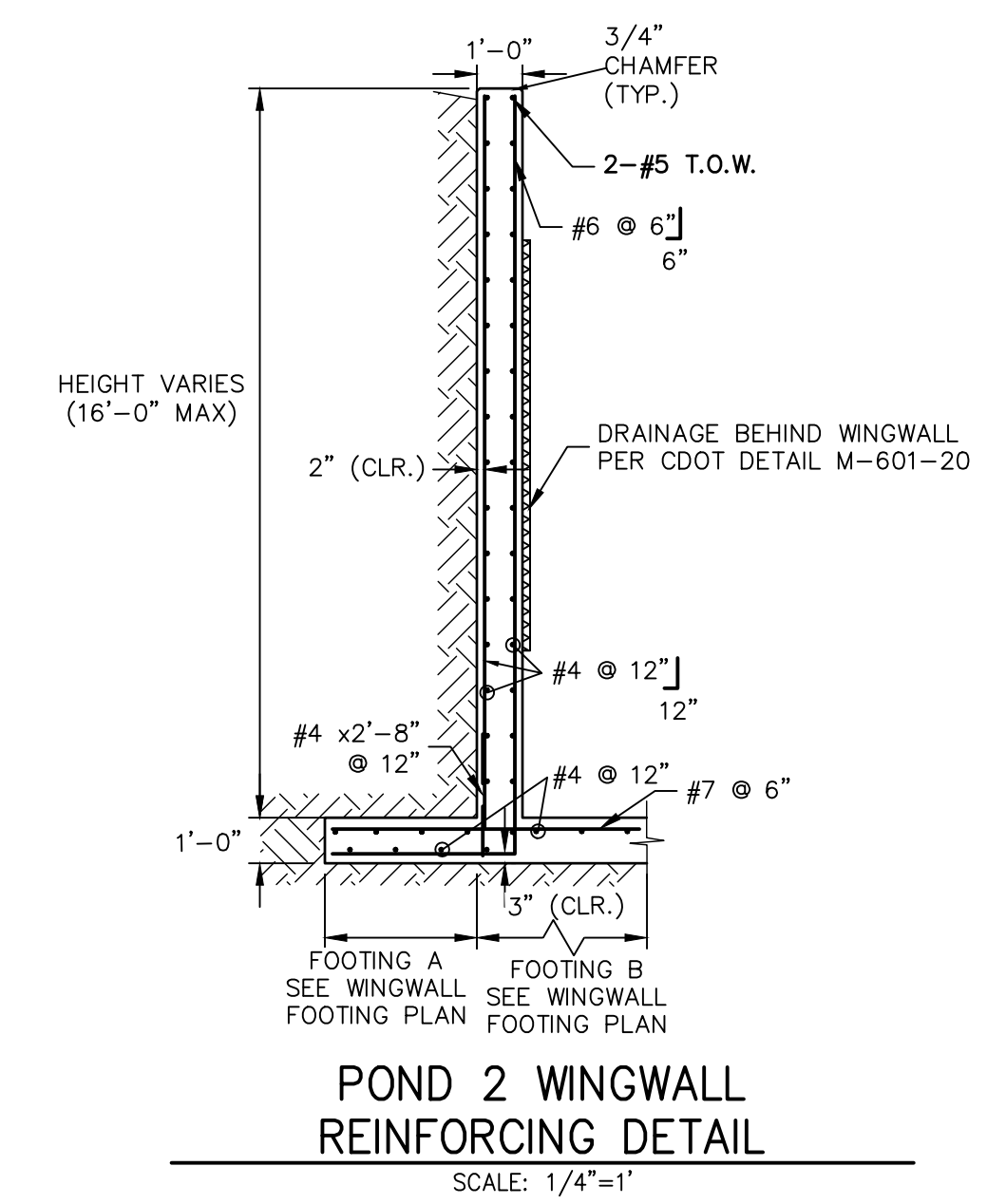
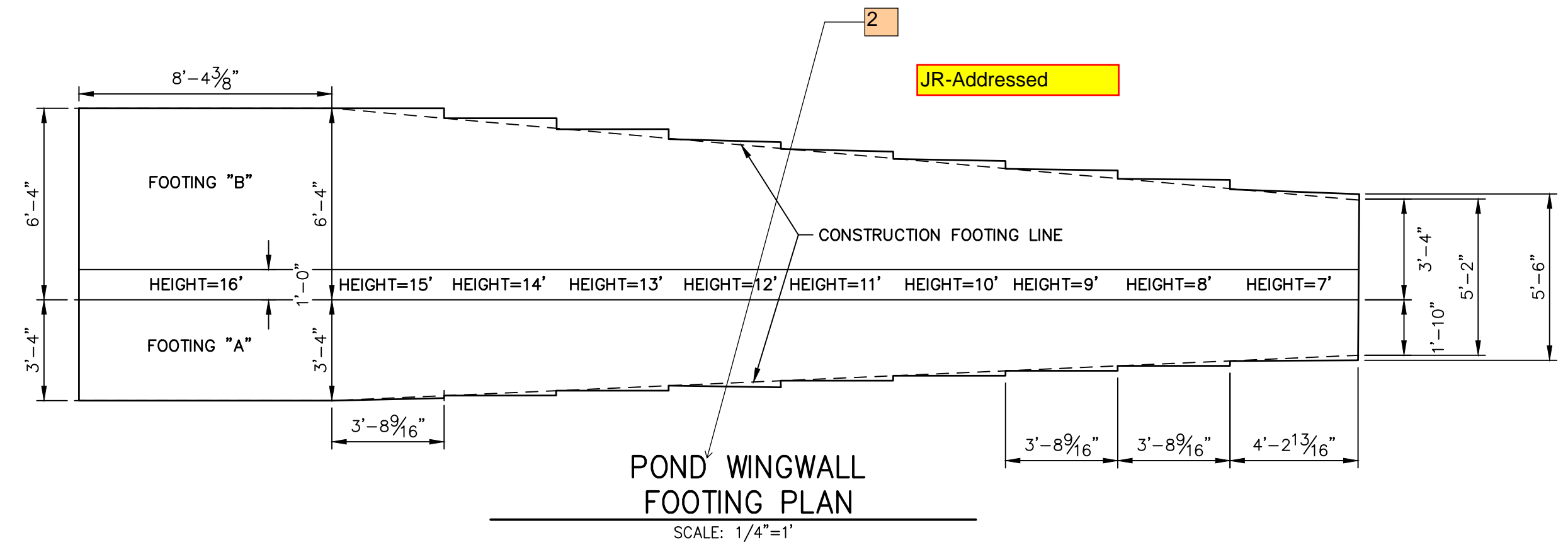
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1/4"=1"	N/A	9/1/22	DJV	NEO	

J.R. ENGINEERING
A Weidman Company
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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

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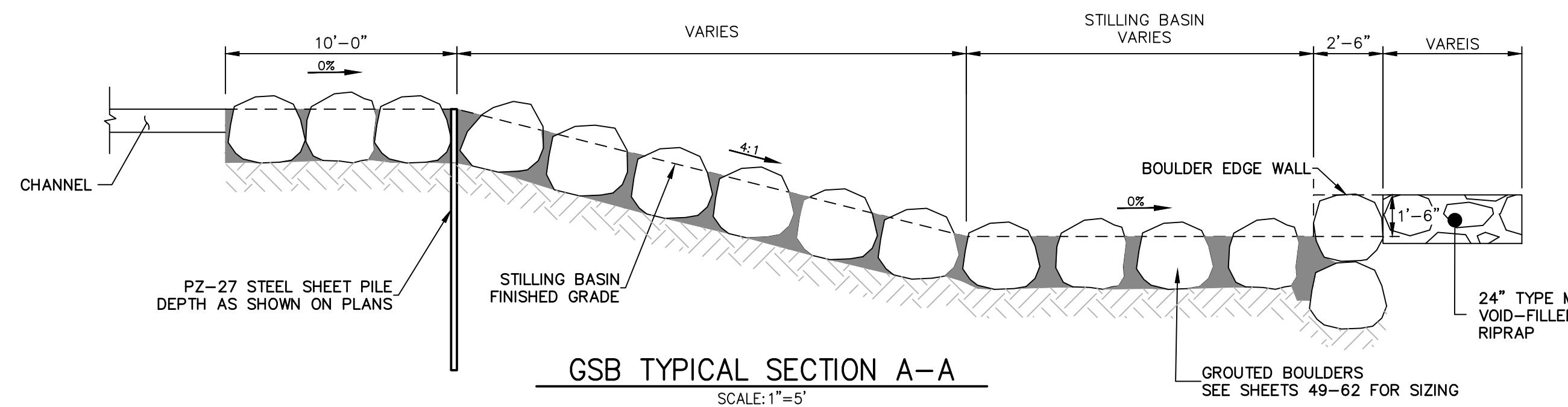
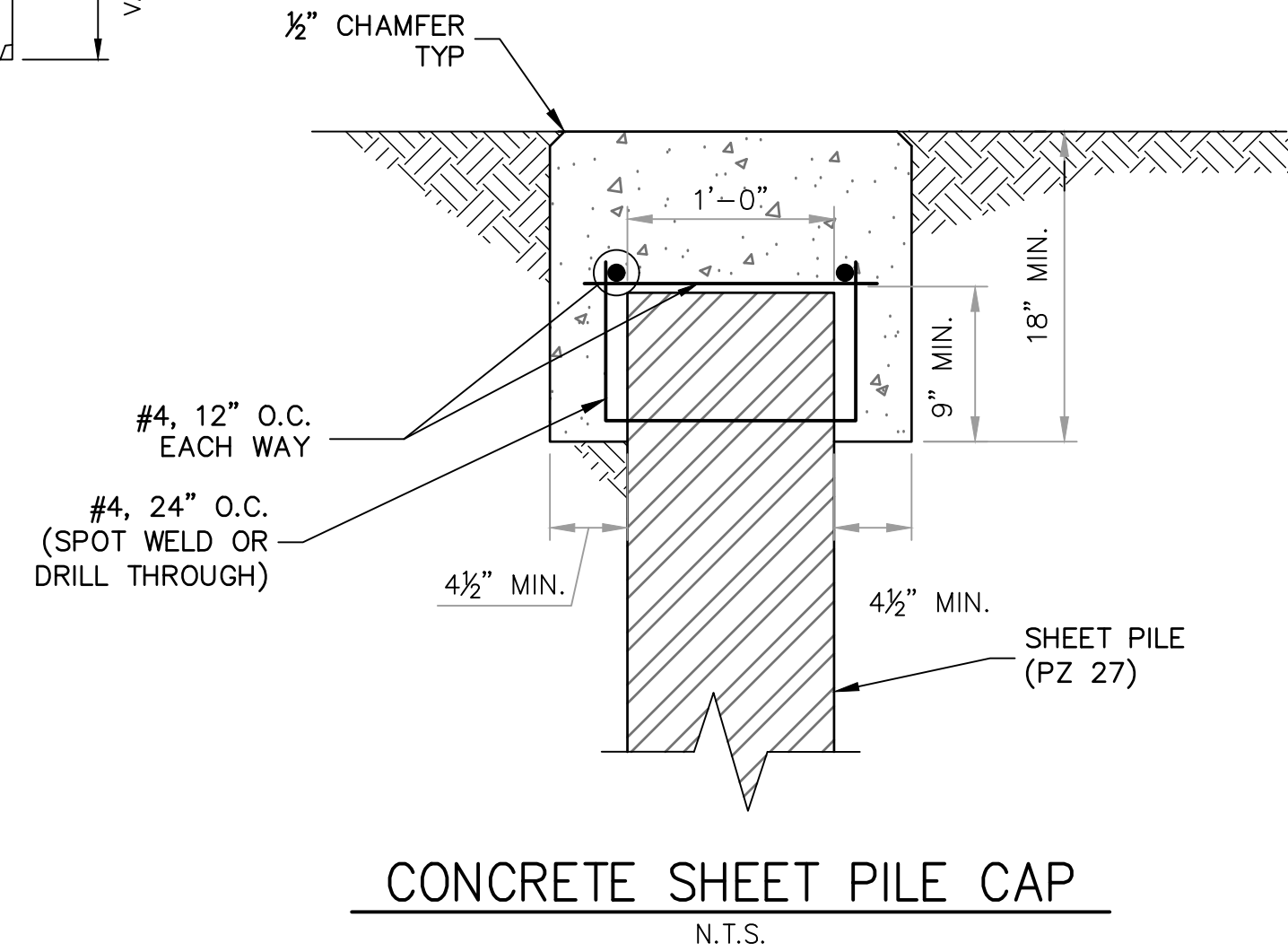
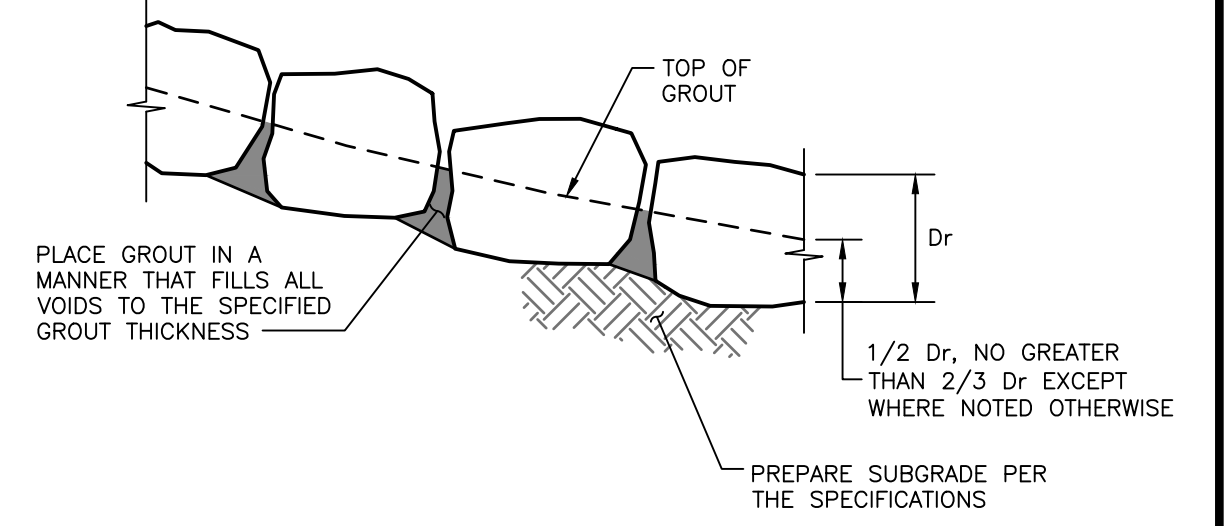
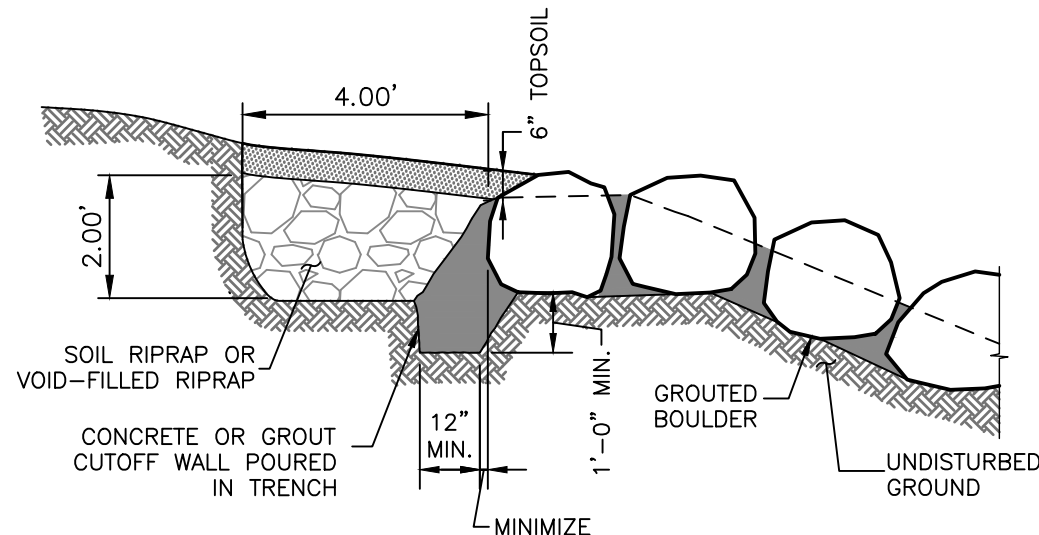
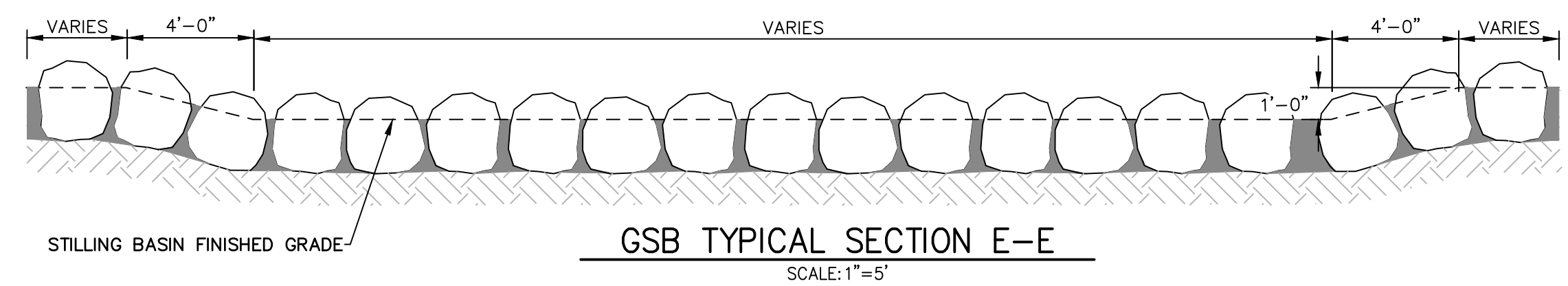
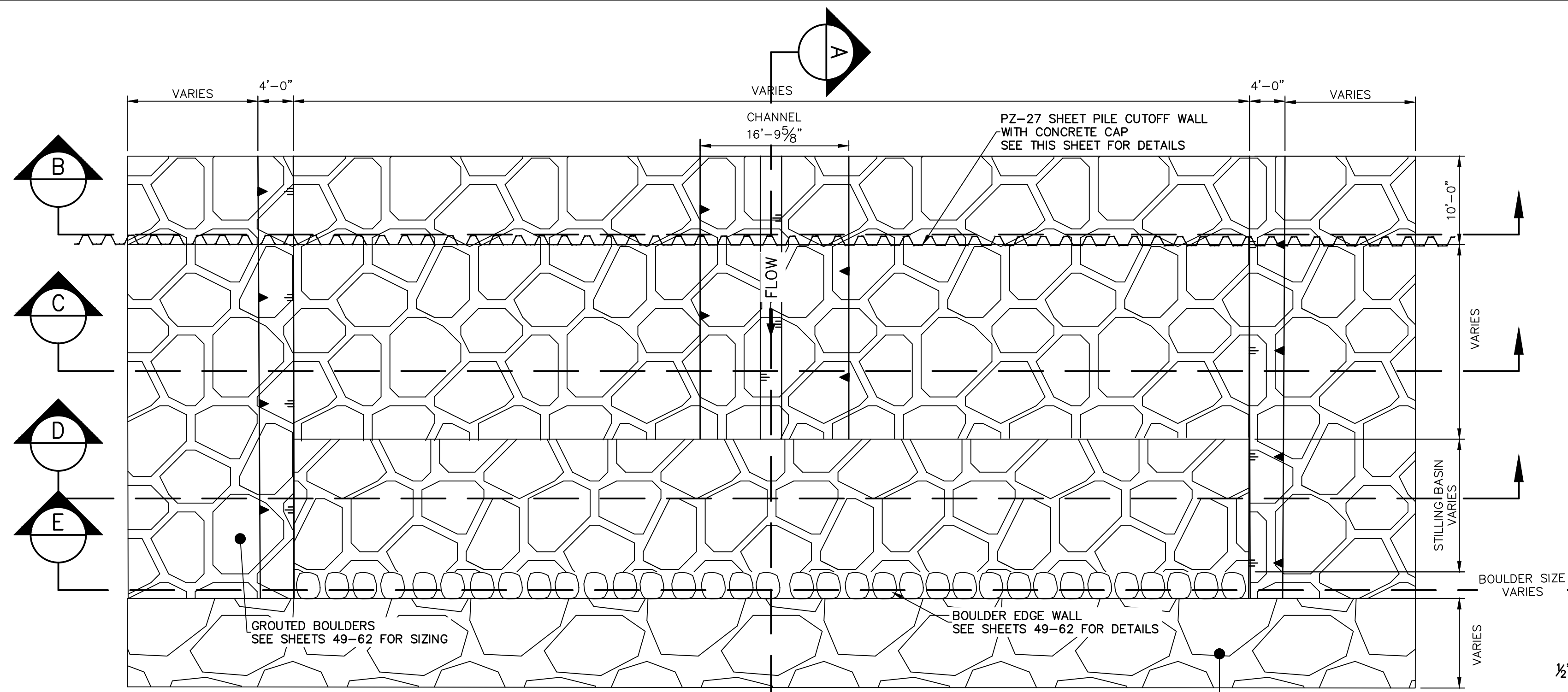
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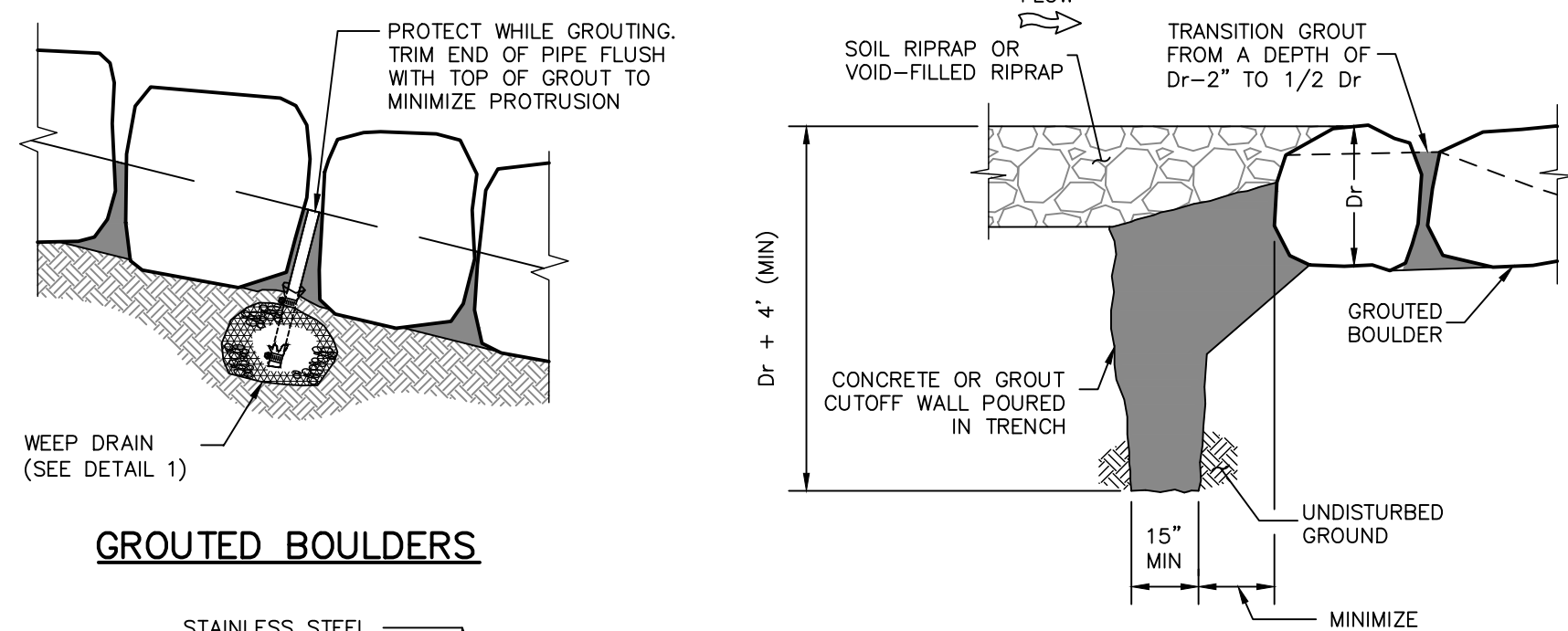
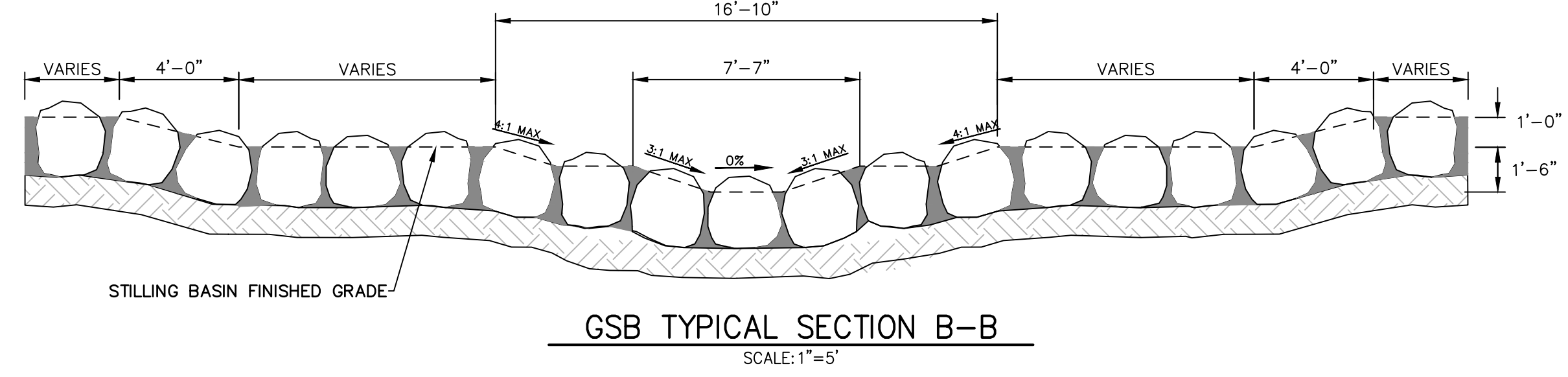
811
Know what's below.
Call before you dig.

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

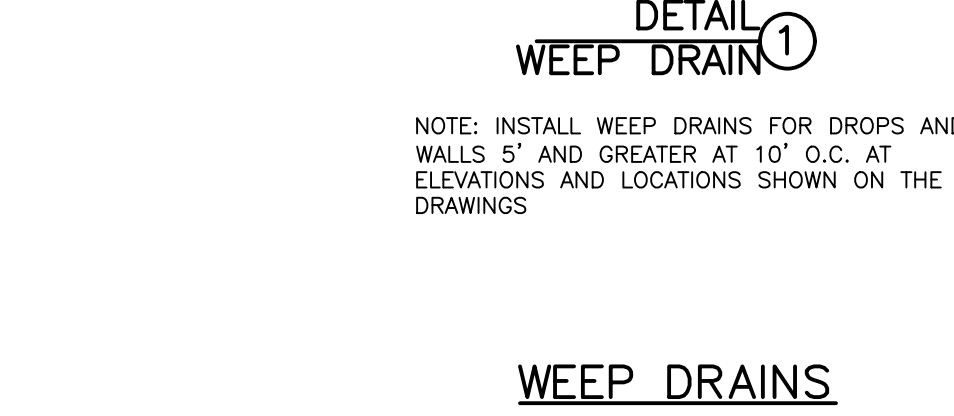
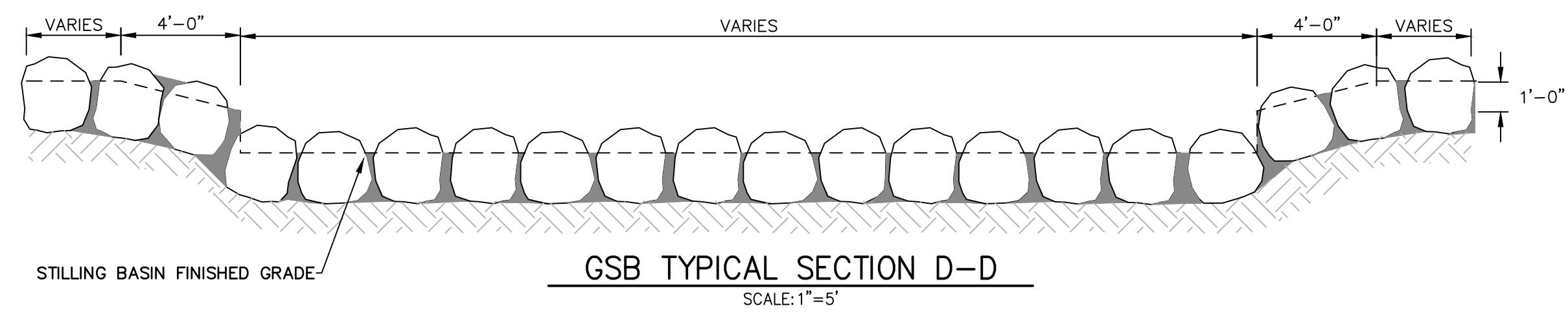
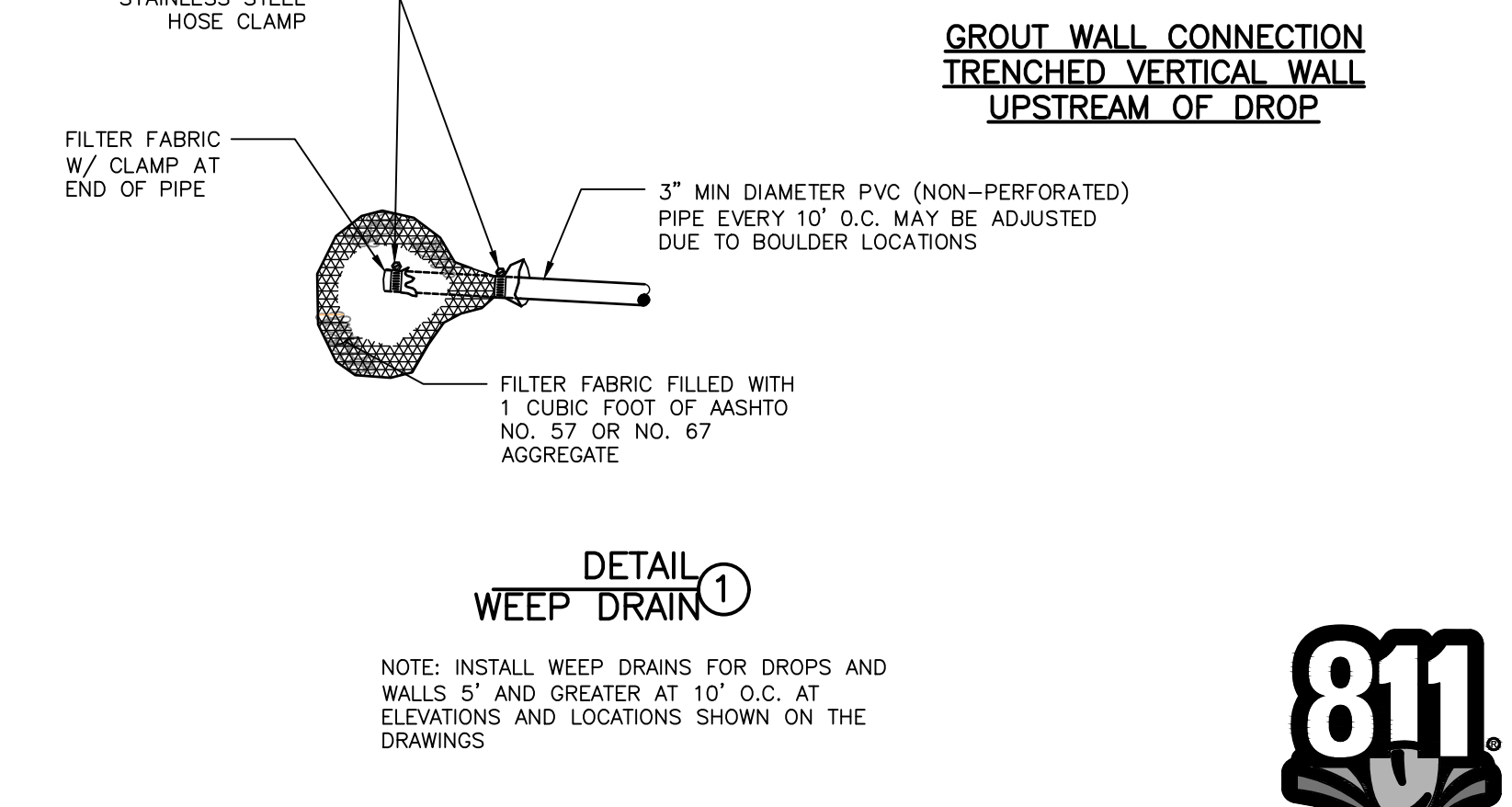
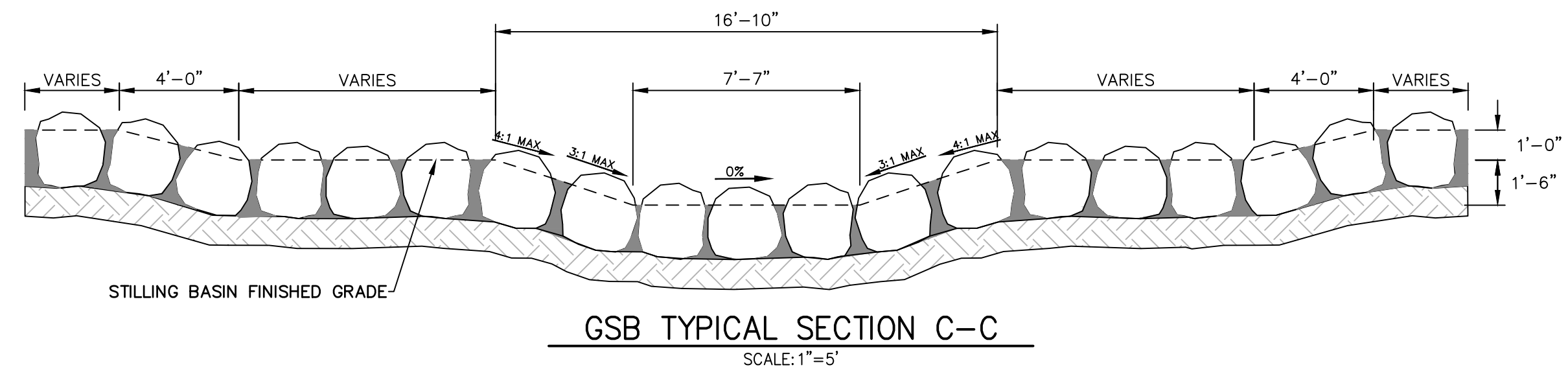
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.	PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024
	BY	DATE
J.R. ENGINEERING A Westman Company Central 303-740-9888 • Colorado Springs 719-588-2583 Fort Collins 970-491-9888 • www.jrengineering.com	No.	REVISION
	H-SCALE	1/4"=1"
V-SCALE	N/A	
DATE	9/1/22	
DESIGNED BY	DJV	
DRAWN BY	NEO	
CHECKED BY		
SAND CREEK RESTORATION	POND PLANS	
SHEET 47 OF 99	JOB NO. 25188.04	



- BOULDER PLACEMENT NOTES:**
1. PLACE BOULDERS WITH THE REQUIRED BOULDER HEIGHT VERTICAL. PLACE BOULDERS AS TIGHTLY TOGETHER AS POSSIBLE (WITHOUT TOUCHING) WHILE PROVIDING ENOUGH ROOM BETWEEN THEM TO THOROUGHLY VIBRATE THE GROUT AND TO ENSURE NO GAPS IN THE GROUT. THE SMALL DIMENSION OF A 244 CAN BE USED AS A GUIDE TO CHECK MINIMUM SPACING.
 2. BEFORE GROUTING, CLEAN ALL DIRT AND MATERIAL FROM ROCK THAT COULD PREVENT THE GROUT FROM BINDING TO THE ROCK. KEEP BOULDERS FROM TOUCHING. AVOID SLIDING BOULDERS AGAINST SUBGRADE TO PROPERLY POSITION.
- MATERIAL SPECIFICATIONS:**
1. ALL GROUT SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH EQUAL TO 3200 PSI.
 2. ONE CUBIC YARD OF GROUT SHALL HAVE A MINIMUM OF SIX (6) SACKS OF TYPE II PORTLAND CEMENT.
 3. A MAXIMUM OF 25% TYPE F FLY ASH MAY BE SUBSTITUTED FOR THE PORTLAND CEMENT.
 4. THE AGGREGATE SHALL BE COMPRISED OF 70% NATURAL SAND (FINES) AND 30% 3/4-INCH ROCK (COARSE).
 5. THE GROUT SLUMP SHALL BE BETWEEN 4-INCHES TO 6-INCHES.
 6. AIR ENTRAINMENT SHALL BE BETWEEN 5.5% AND 7.5%.
 7. TO CONTROL SHRINKAGE AND CRACKING, 1.5 POUNDS OF FIBERMESH, OR EQUIVALENT, SHALL BE USED PER CUBIC YARD OF GROUT.
 8. COLOR ADDITIVE IN REQUIRED AMOUNTS SHALL BE USED WHEN SO SPECIFIED BY CONTRACT.
- GROUT PLACEMENT SPECIFICATIONS:**
1. SPECIAL PROCEDURES SHALL BE REQUIRED FOR GROUT PLACEMENT WHEN THE AIR TEMPERATURES ARE LESS THAN 40°F OR GREATER THAN 90°F. CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FROM THE DESIGN ENGINEER OF THE PROCEDURES TO BE USED FOR PROTECTING THE GROUT.
 2. GROUT SHALL BE DELIVERED BY MEANS OF A LOW PRESSURE (LESS THAN 10 PSI) GROUT PUMP USING A 2-INCH DIAMETER (MAXIMUM) NOZZLE.
 3. FULL DEPTH PENETRATION OF THE GROUT INTO THE BOULDER VOIDS SHALL BE ACHIEVED BY INJECTING GROUT STARTING WITH THE NOZZLE NEAR THE BOTTOM AND RAISING IT AS THE GROUT FILLS, WHILE VIBRATING GROUT INTO PLACE USING A PENCIL VIBRATOR.
 4. ALL GROUT BETWEEN BOULDERS SHALL BE TREATED WITH A BROOM FINISH.
 5. AFTER GROUT PLACEMENT, EXPOSED BOULDER FACES SHALL BE CLEANED AND FREE OF GROUT.
 6. ALL FINISHED GROUT SURFACES SHALL BE SPRAYED WITH A CLEAR LIQUID MEMBRANE CURING COMPOUND AS SPECIFIED IN ASTM C309.

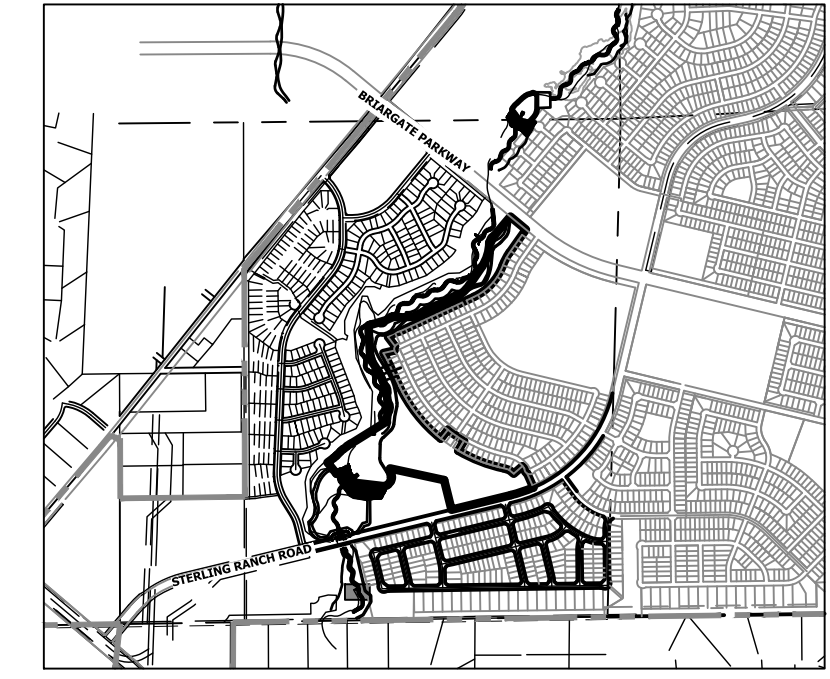
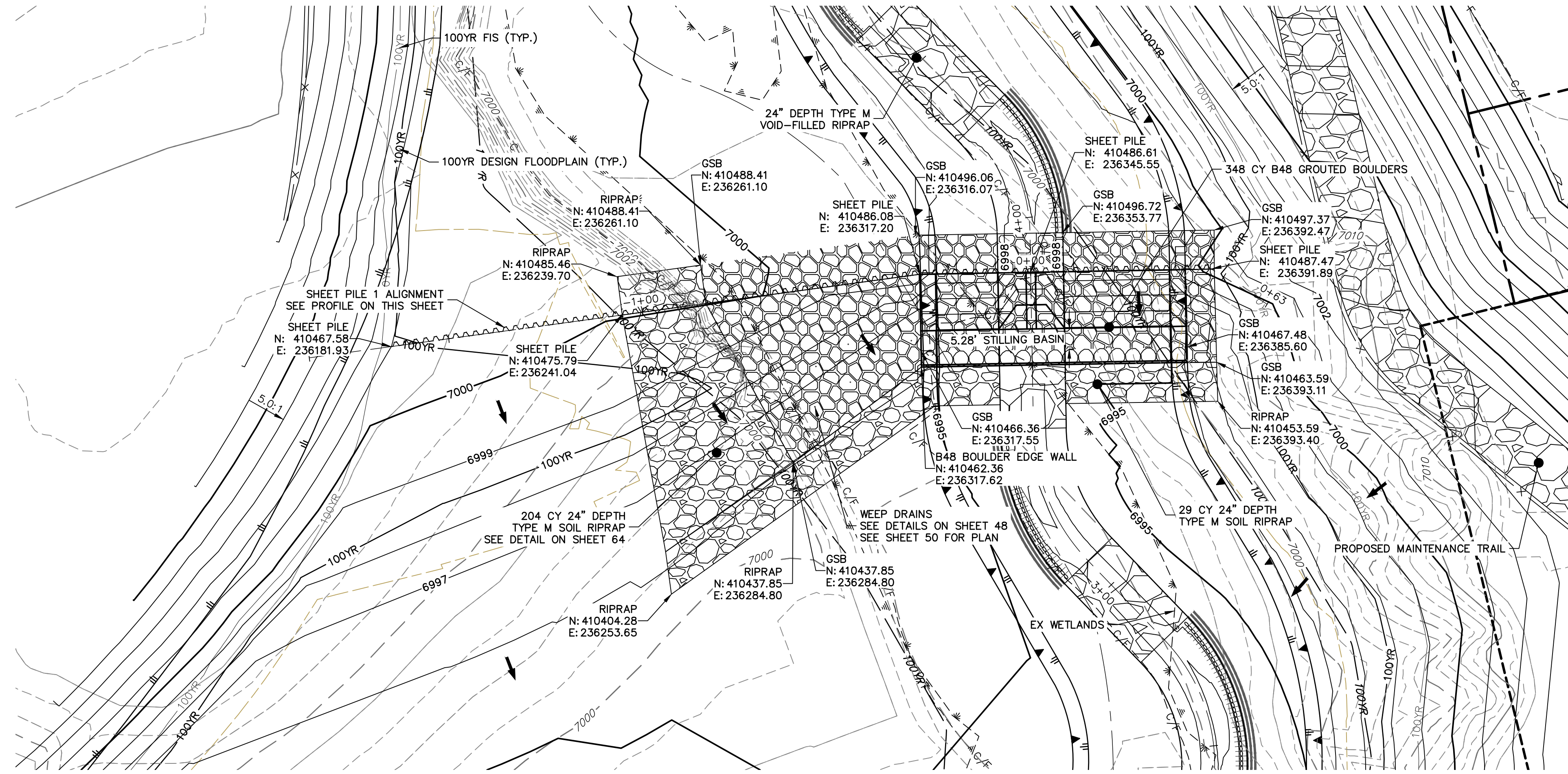


- GROUTED BOULDER NOTES:**
1. BOULDERS USED FOR GROUTING SHOULD MEET ALL THE PROPERTIES OF ROCK FOR ORDINARY RIPRAP, AND ROCK OF UNIFORM SIZE SHOULD BE USED.
 2. ROCK SHALL BE HARD, DURABLE, AND FREE FROM CRACKS, OVERBURDEN, SHALE, AND ORGANIC MATTER.
 3. GROUTED BOULDERS SHALL BE PLACED DIRECTLY ON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



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

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, OR ENGINEERING APPROVES THEIR USE. DESIGNATED BY WRITTEN AUTHORIZATION.	PREPARED FOR	SR LAND, LLC
	APPROVED BY	20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024
J.R. ENGINEERING A Westman Company	BY	DATE
	AS SHOWN	REVISION
SAND CREEK RESTORATION	H-SCALE	V-SCALE
	DATE	DESIGNED BY
GSB DETAILS	DRAWN BY	CHECKED BY
	DESIGNED BY	DATE
SHEET 48	OF 99	
JOB NO.	25188.04	



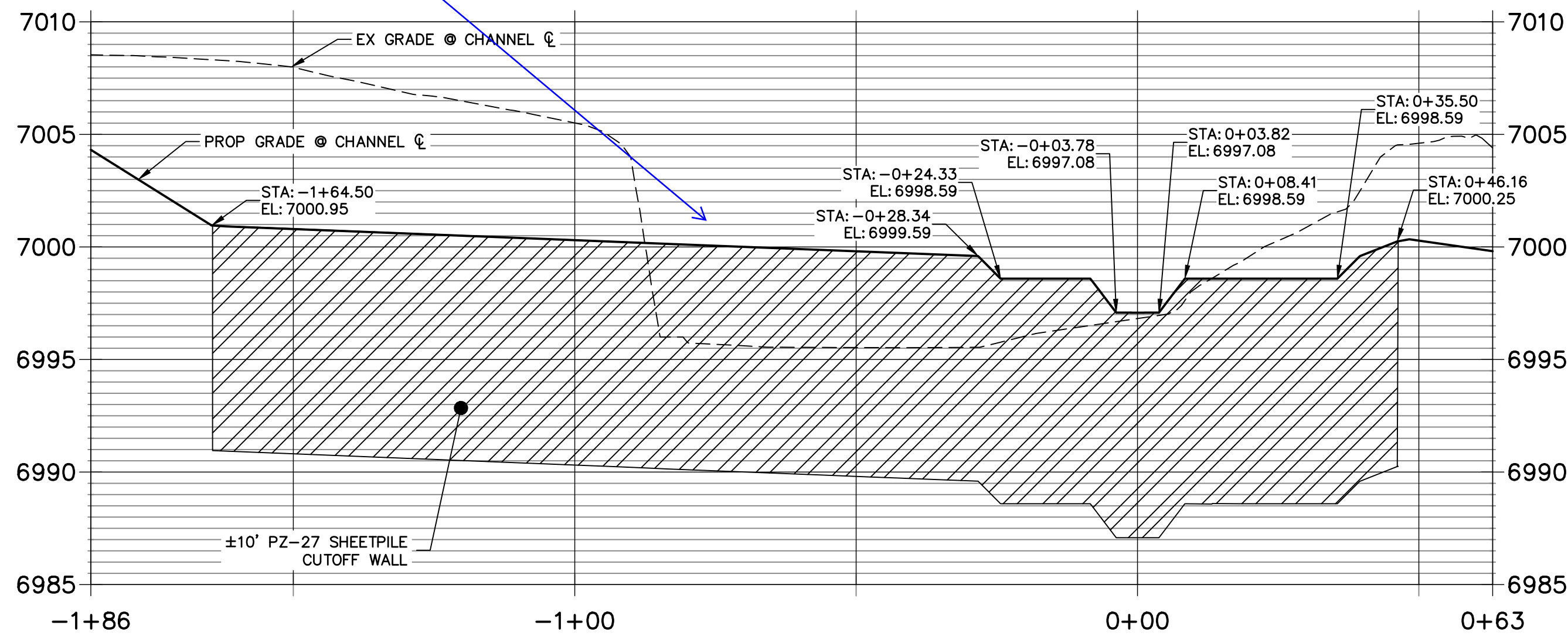
**GRouted STEPPED BOULDER DROP #1 DETAIL
PLAN VIEW**

SCALE: 1"=20'

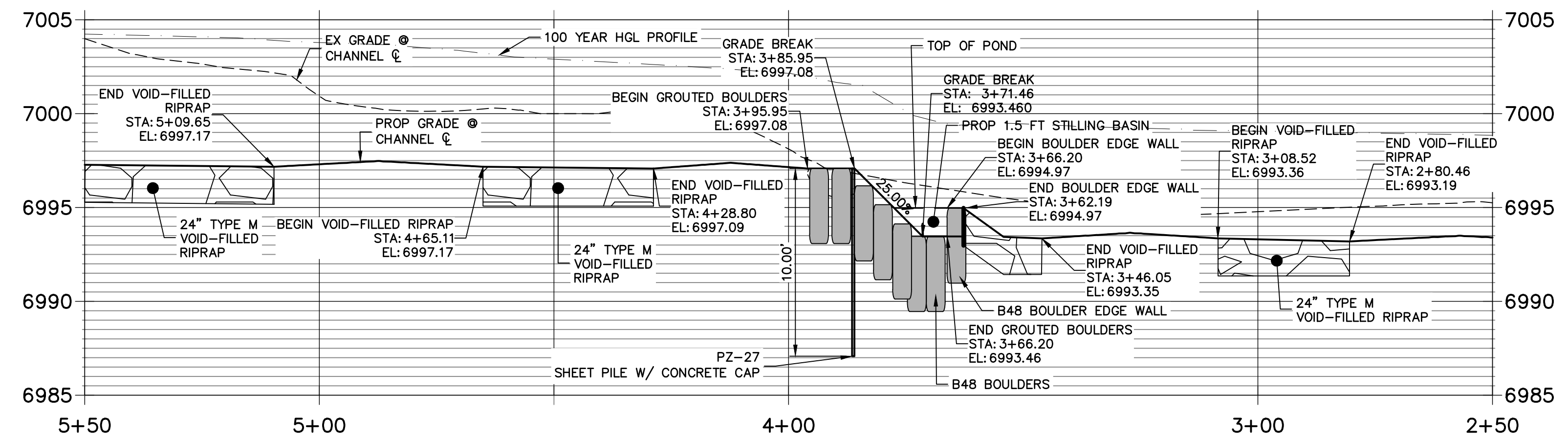
JR-Addressed, 100 year WSE has been added to all cross sections

Please show 100-year WS on all 8 cross-sections

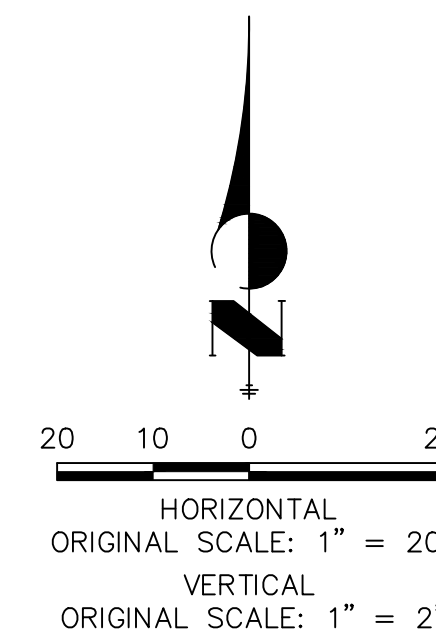
**SHEET PILE 1 PROFILE
STA -1+85.99 TO 0+63.12**



**GSB DETAIL 1
STA 2+50.00 TO 5+50.00**




- NOTE**
- SEE TYPICAL GSB DETAILS ON SHEET 48
 - DRIVE SHEET PILE THROUGH BEDROCK OR MINIMUM OF 6 FEET.
 - SHEET PILE ELEVATIONS ARE AT TOP OF CONCRETE CAP.

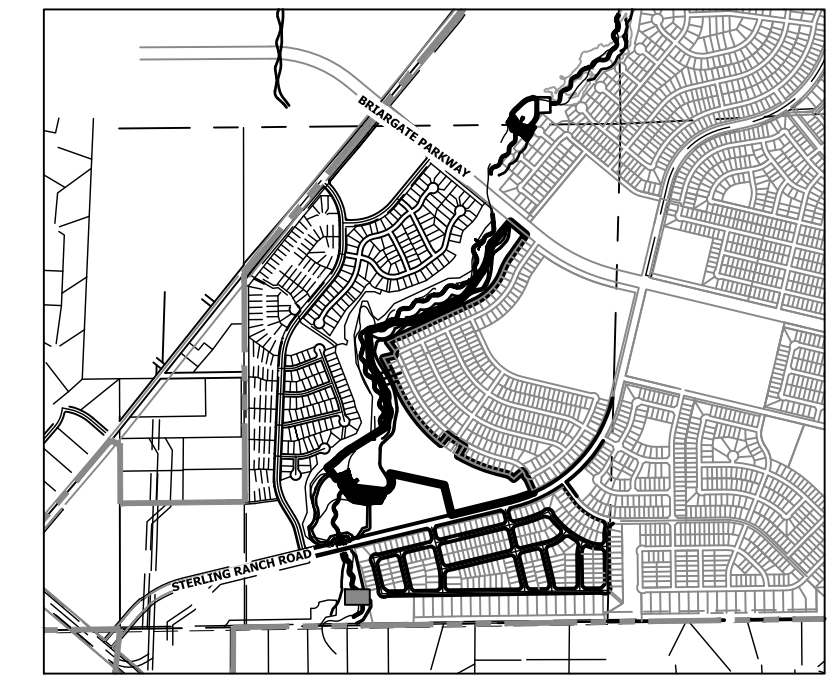
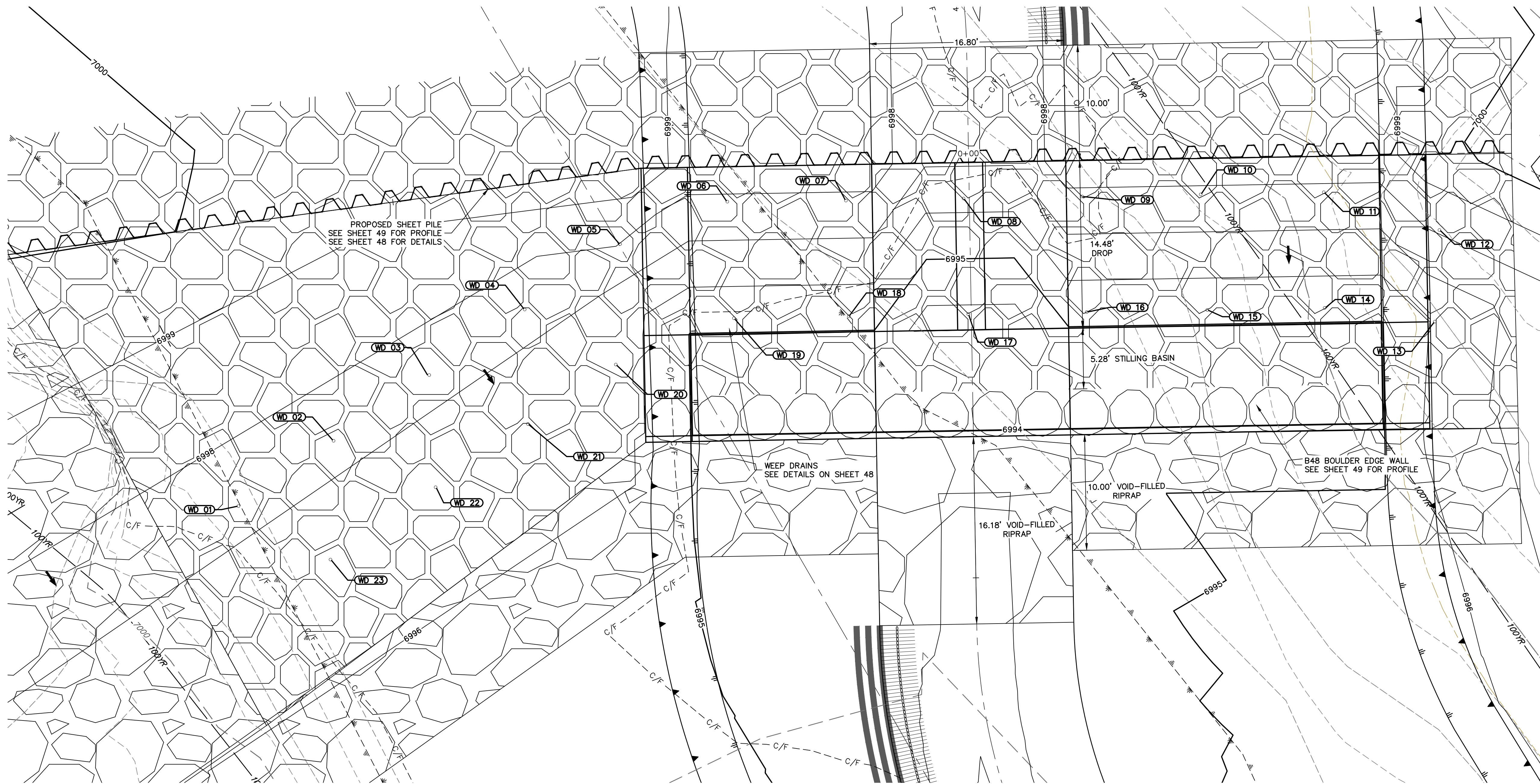


ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

**PRELIMINARY
NOT FOR
CONSTRUCTION**

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

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE FOR PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION. PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	J.R. ENGINEERING A Westman Company  Centennial 303-740-9383 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE
SAND CREEK RESTORATION GSB DETAILS	H-SCALE 1"=20' V-SCALE 1"=4' DATE 9/1/22 DESIGNED BY DV DRAWN BY NEO CHECKED BY	NO.	REVISION
SHEET 49 OF 99 JOB NO. 25188.04			

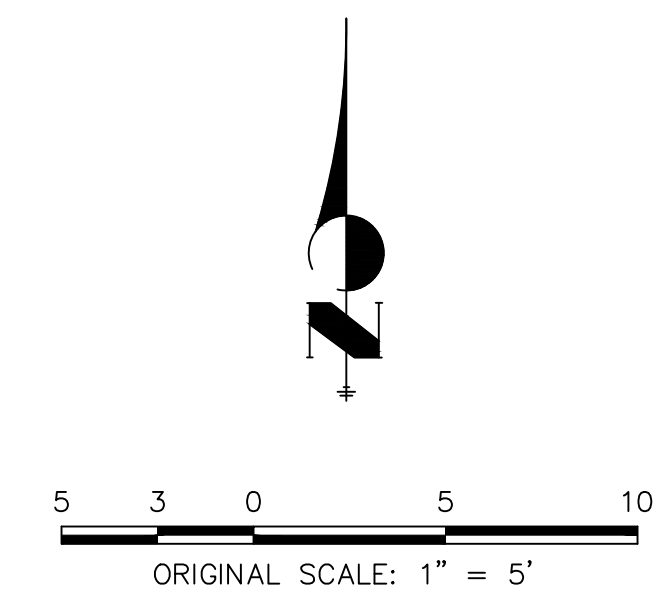


KEY MAP
SCALE: 1"=2000'

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

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

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 13	WEEP DRAIN	N: 410472.80 E: 236385.88	6996.07
WD 14	WEEP DRAIN	N: 410473.99 E: 236376.36	6995.31
WD 15	WEEP DRAIN	N: 410473.81 E: 236366.19	6995.31
WD 16	WEEP DRAIN	N: 410473.63 E: 236355.77	6995.31
WD 17	WEEP DRAIN	N: 410473.45 E: 236345.51	6993.80
WD 18	WEEP DRAIN	N: 410473.27 E: 236335.18	6995.31
WD 19	WEEP DRAIN	N: 410473.10 E: 236325.24	6995.31
WD 20	WEEP DRAIN	N: 410469.09 E: 236315.02	6996.52
WD 21	WEEP DRAIN	N: 410463.95 E: 236307.41	6996.53
WD 22	WEEP DRAIN	N: 410458.47 E: 236299.43	6996.53
WD 23	WEEP DRAIN	N: 410452.21 E: 236290.33	6996.63



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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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H-SCALE	V-SCALE	DATE	DESIGNED BY		DRAWN BY		CHECKED BY	
			N/A	9/1/22	DV	NEO		
1"=5'	N/A	9/1/22						

SAND CREEK RESTORATION
GSB DETAILS
SHEET 50 OF 99
JOB NO. 25188.04



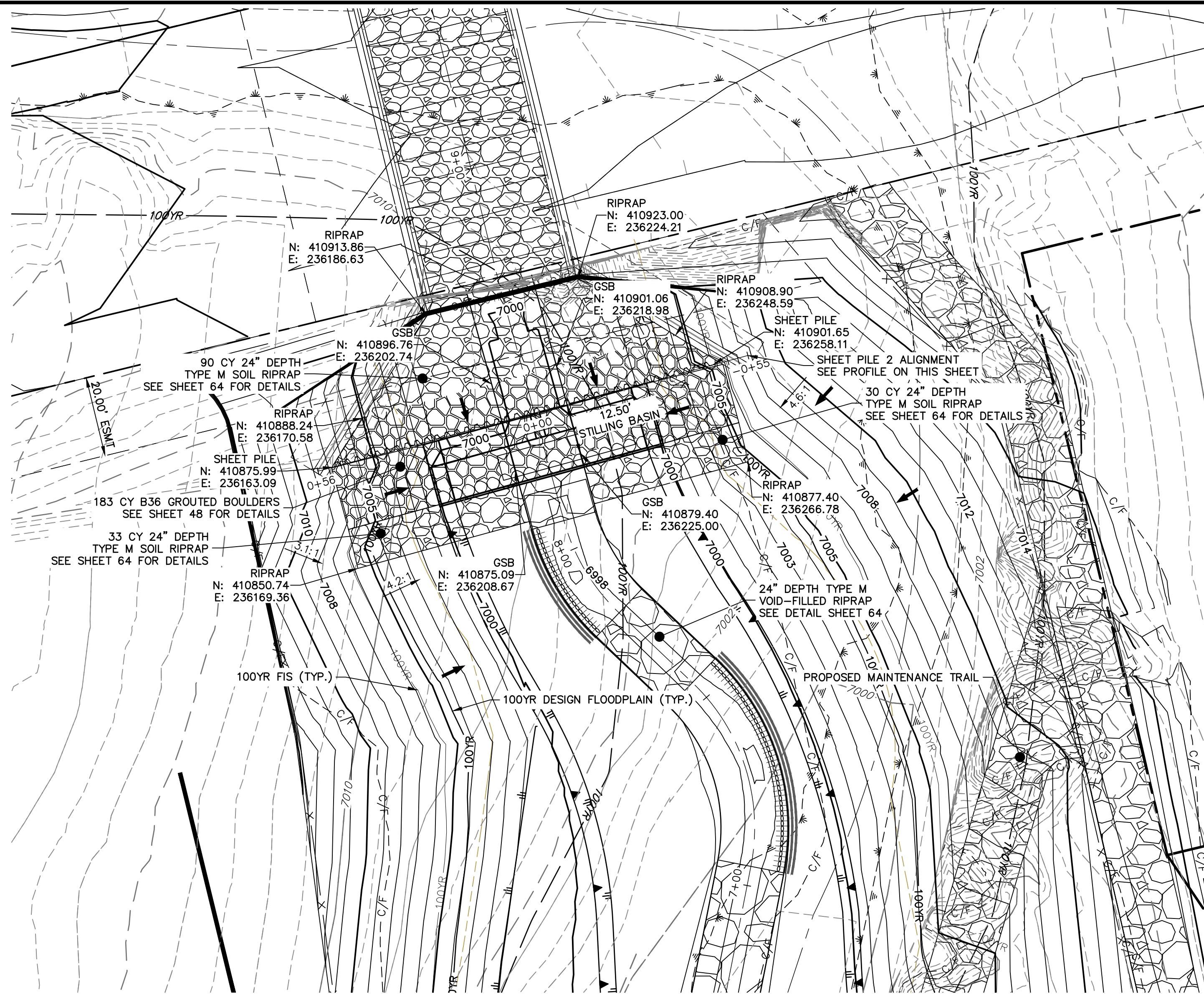
ENGINEER'S STATEMENT

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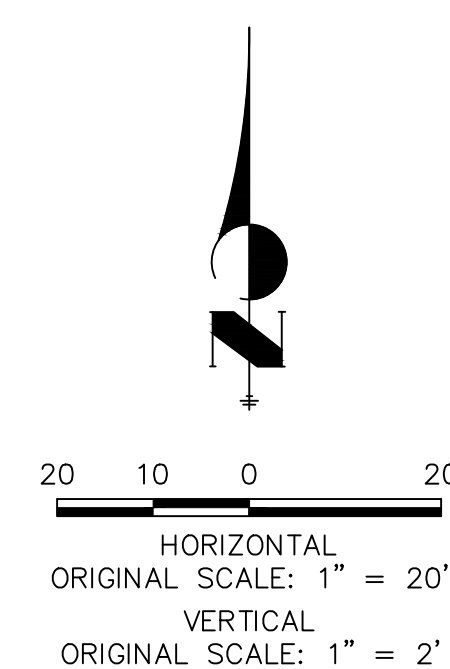
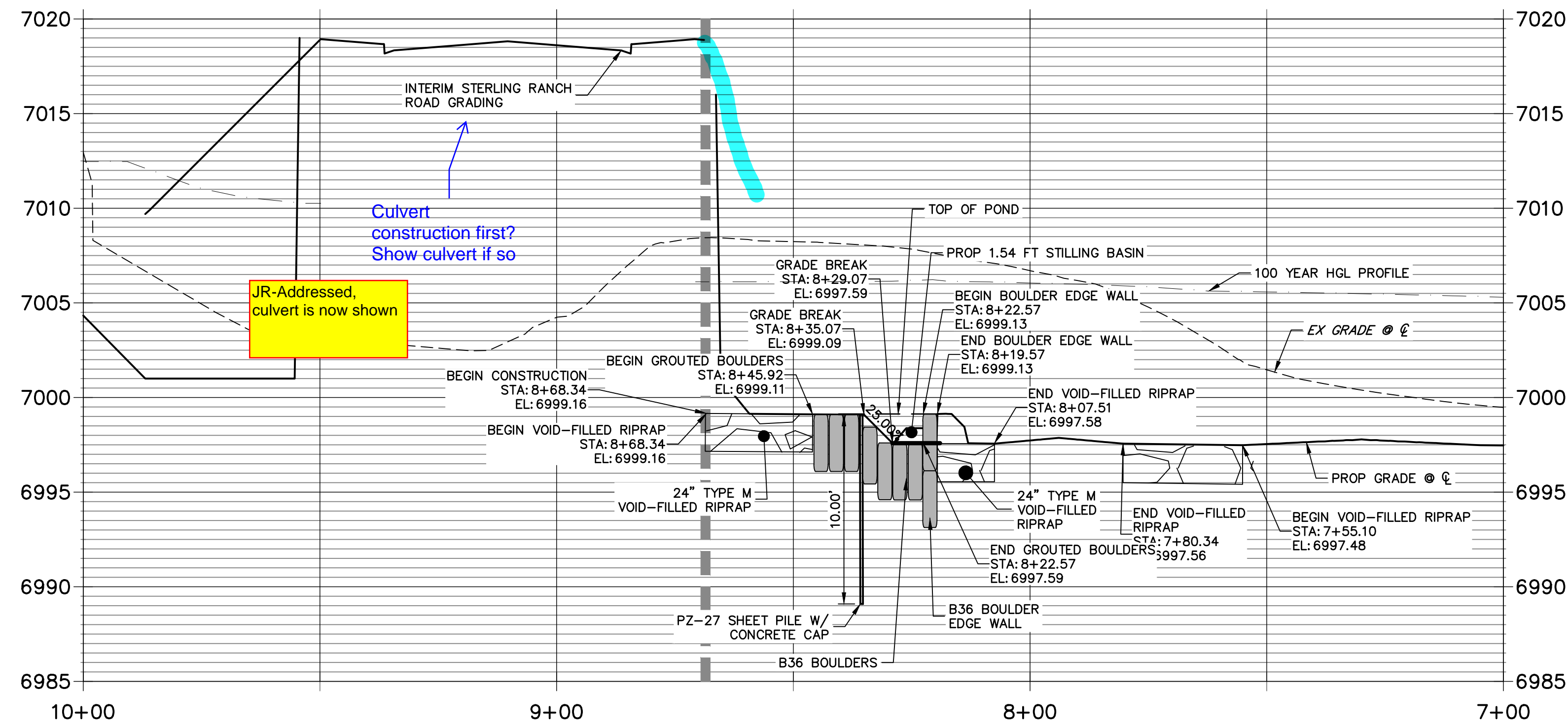
MIKE A. BRAMLEY
COLORADO P.E. 30000
FOR AND ON BEHALF OF JR ENGINEERING

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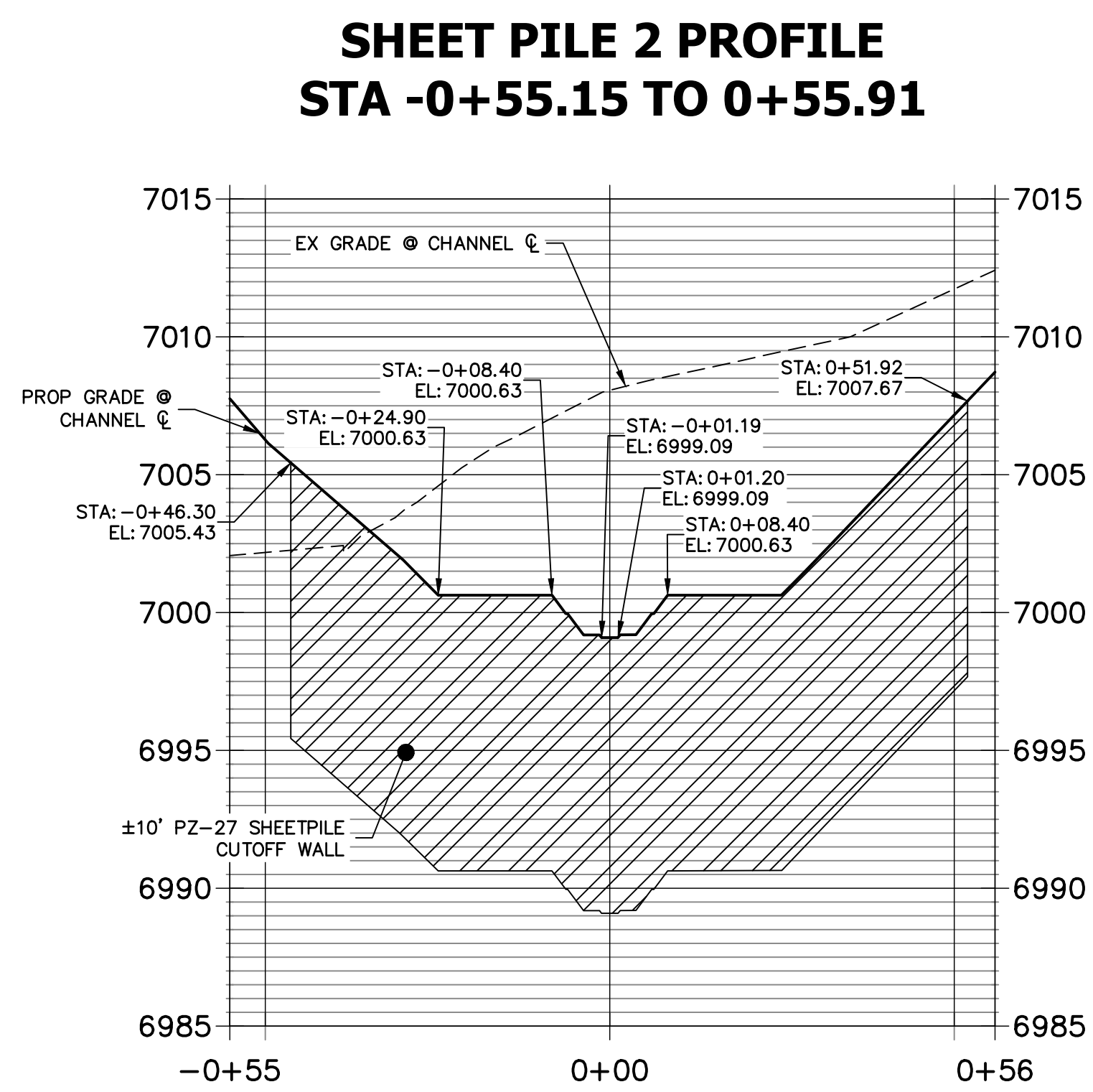


GRouted STEPPED BOULDER DROP #2 DETAIL
PLAN VIEW
SCALE: 1"=20'

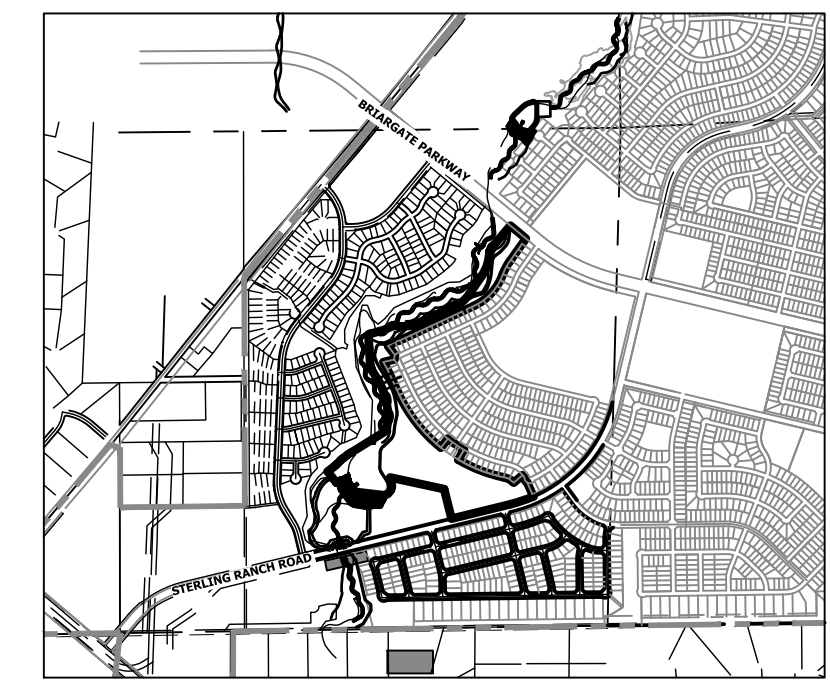
GSB PROFILE 2
STA 7+00.00 TO 10+00.00



ENGINEER'S STATEMENT
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MIKE A. BRAMBLE
COLORADO P.E. No. 30147
FOR AND ON BEHALF OF JR ENGINEERING, INC.

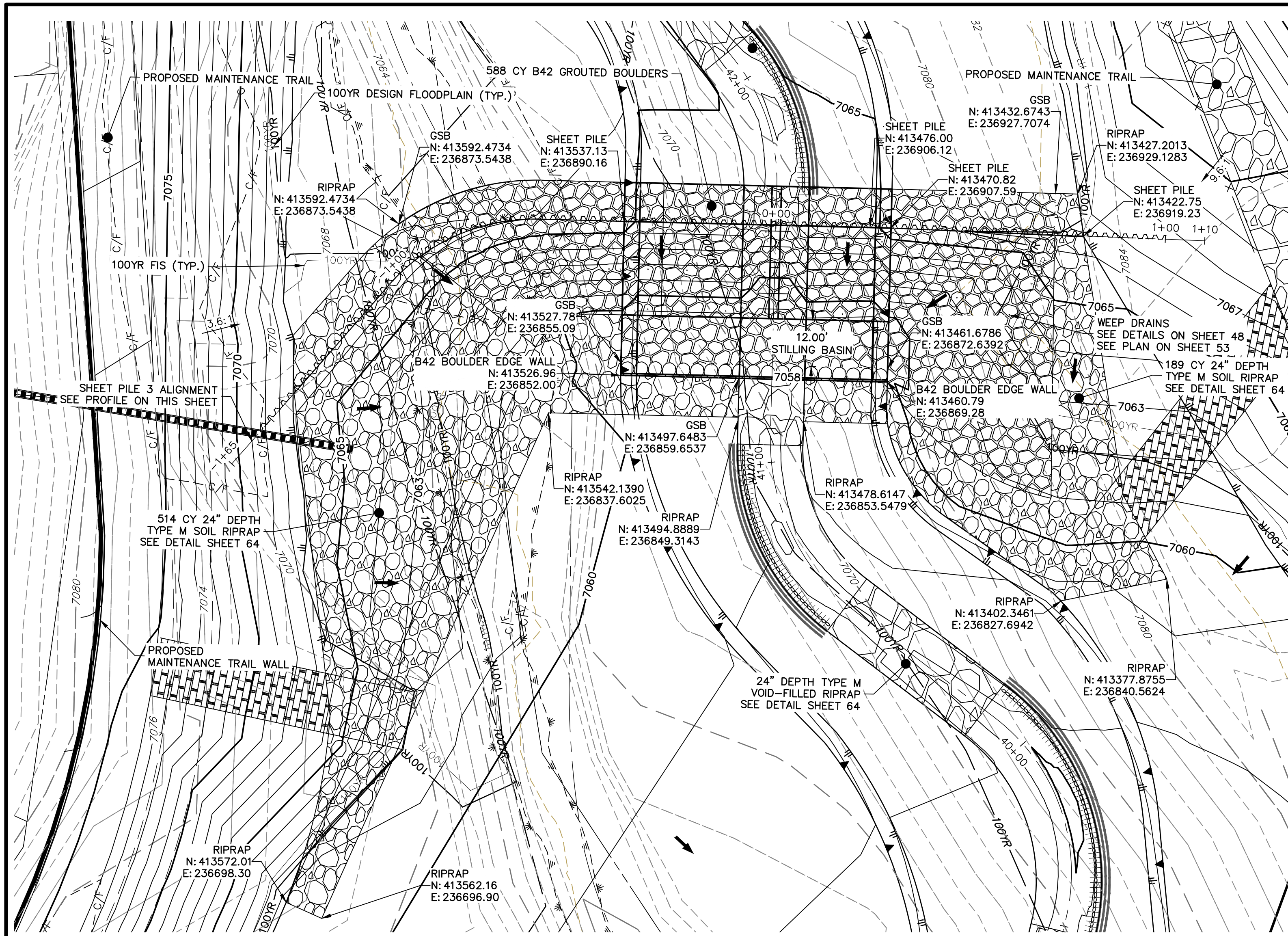


SHEET PILE 2 PROFILE
STA -0+55.15 TO 0+55.91



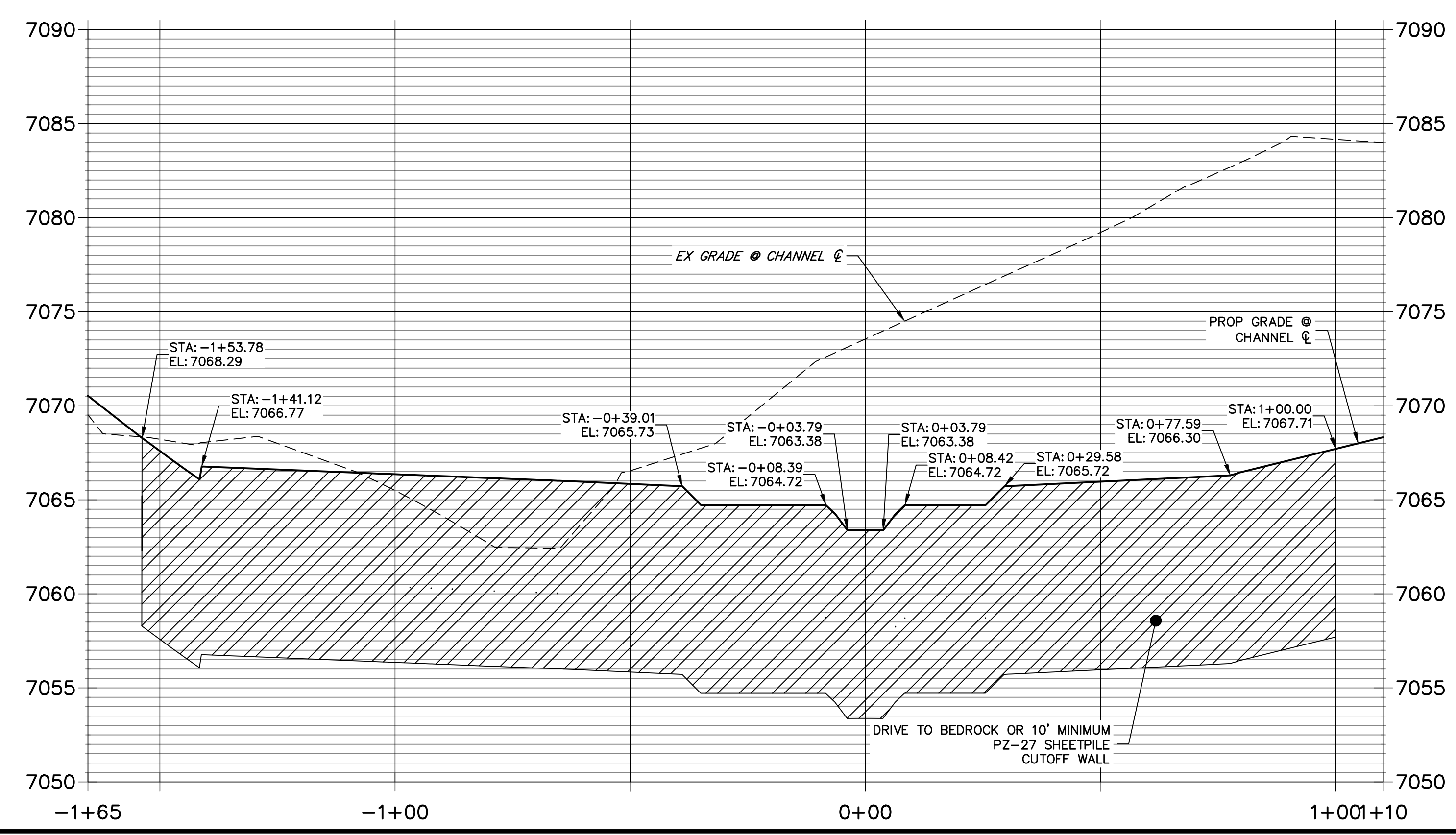
KEY MAP
SCALE: 1"=2000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE AS DESIGNATED BY WRITTEN AUTHORIZATION.	PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	 A Westman Company Central 303-740-9383 • Colorado Springs 719-583-2593 Fort Collins 970-491-9888 • www.jr-engineering.com	BY	DATE	
			No.	REVISION	
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=20'	1"=4'	9/1/22	DV	NEO	
SAND CREEK RESTORATION		GSB DETAILS			
SHEET 51 OF 99		JOB NO. 25188.04			



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

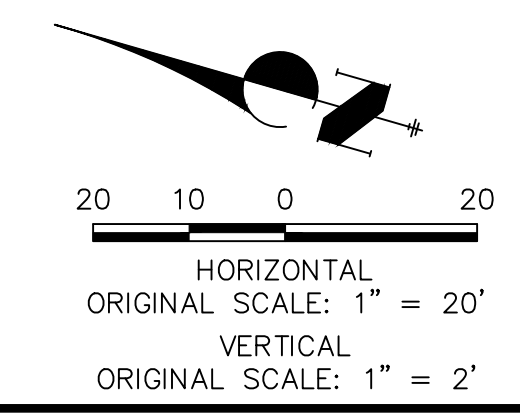
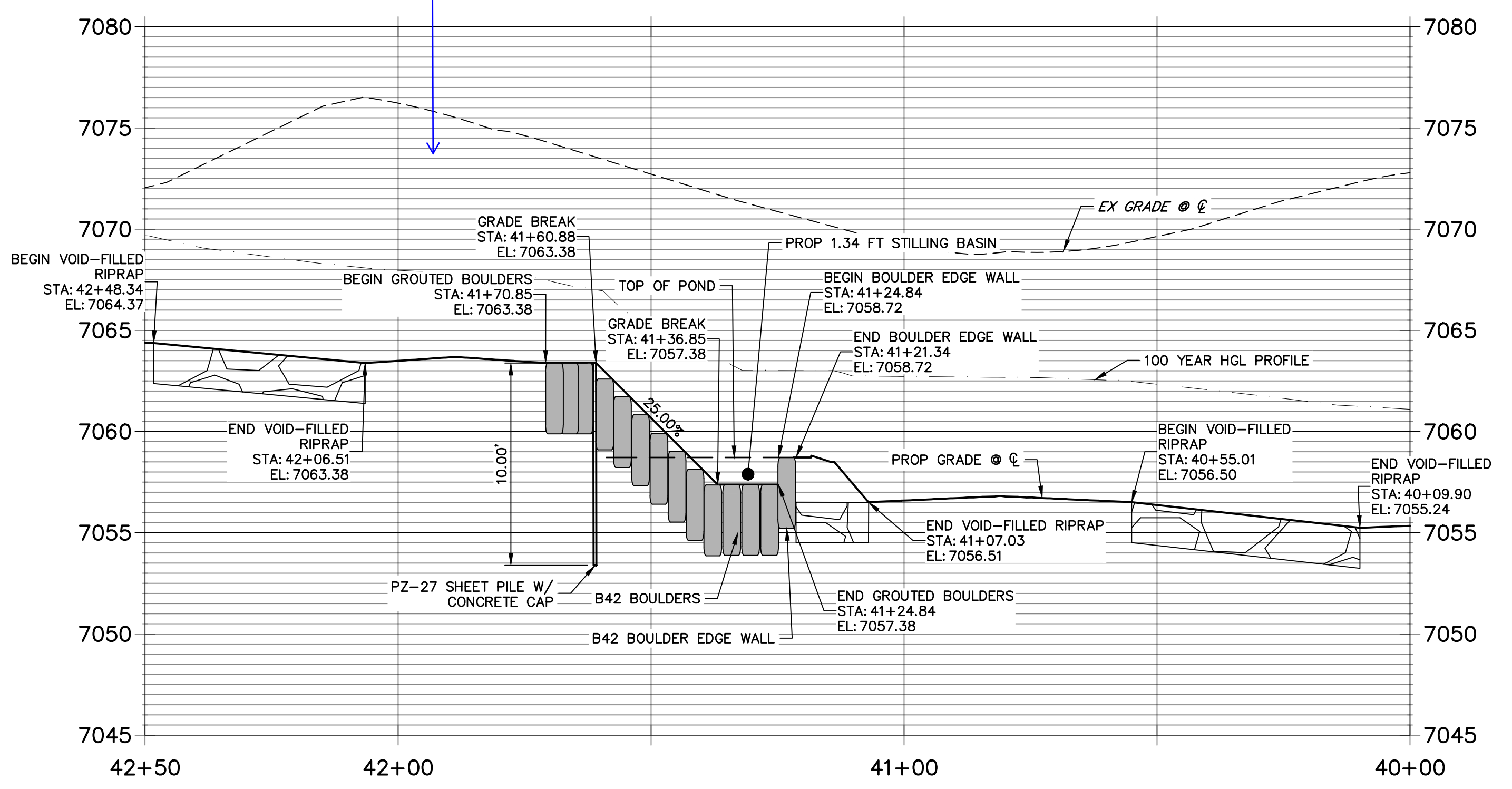
SHEET PILE 3
STA -1+65.30 TO 1+10.11



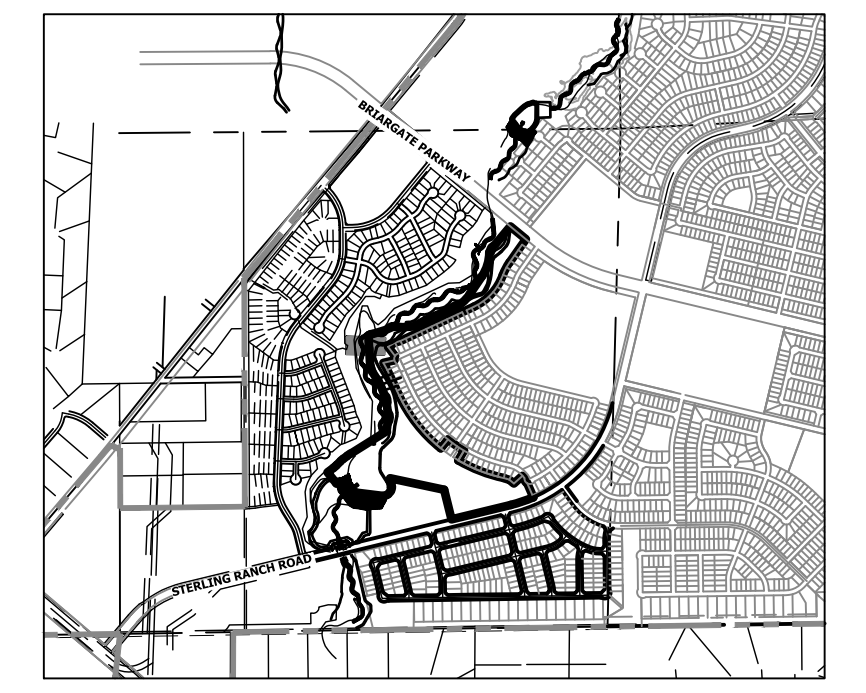
JR-Soil riprap has been added in this area out to the flood terraces to provide protection against erosion from supercritical flows.

Supercritical flows?

GSB PROFILE 3
STA 40+00.00 TO 42+50.00



ENGINEER'S STATEMENT
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MIKE A. BRAMLEY
COLORADO P.E. No. 25188-04
FOR AND ON BEHALF OF JR ENGINEERING



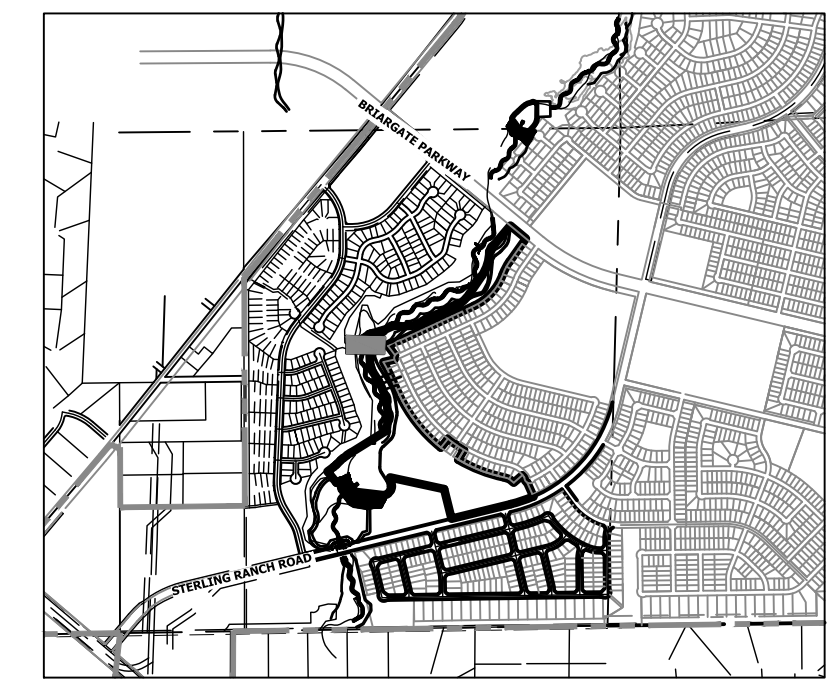
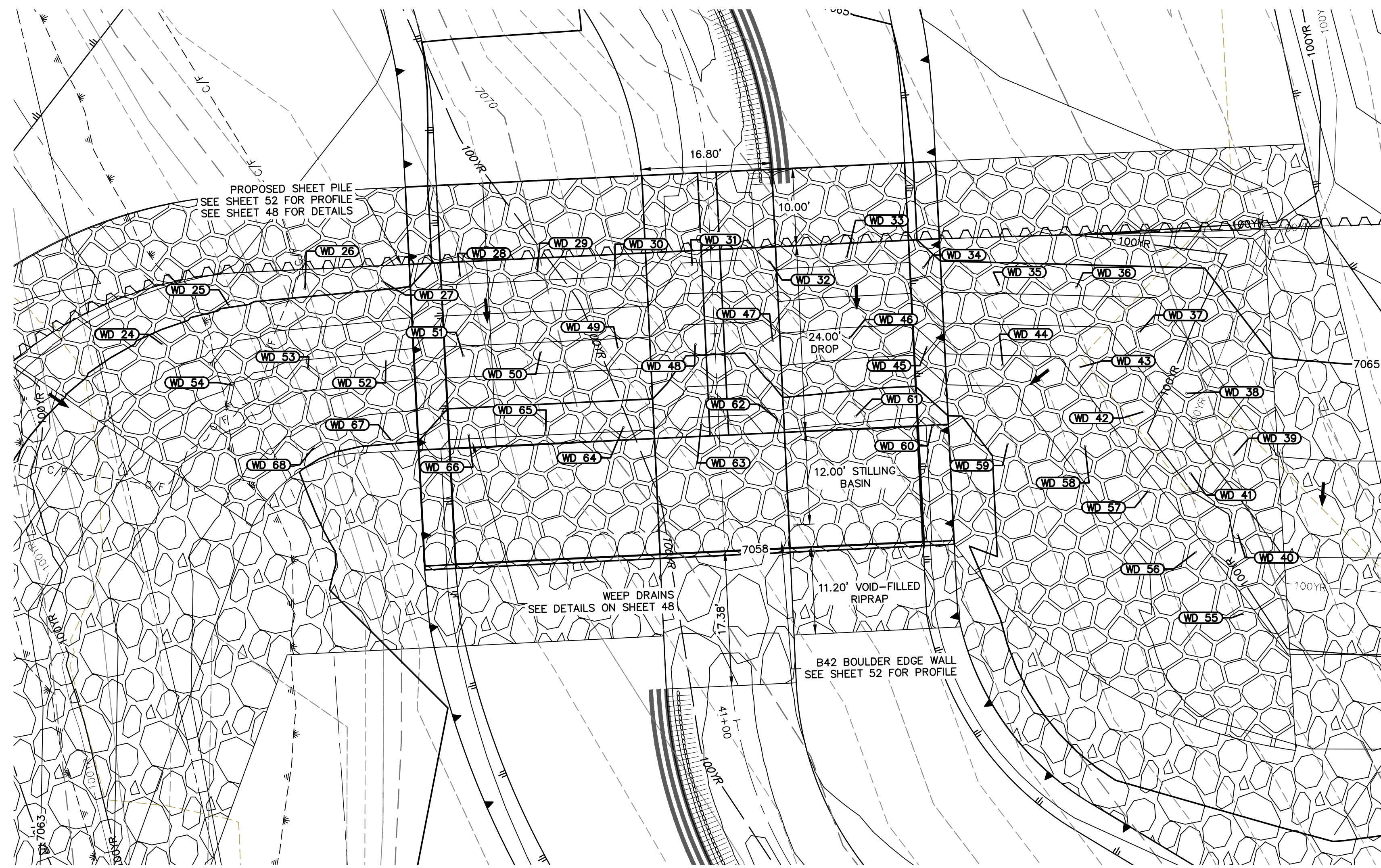
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20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

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BY	DATE				
No.	REVISION				
H-SCALE	V-SCALE	DATE	DESIGNED BY	DV	CHECKED BY
1"=20'	1"=4'	9/14/22			

SAND CREEK RESTORATION
GSB DETAILS
SHEET 52 OF 99
JOB NO. 25188.04

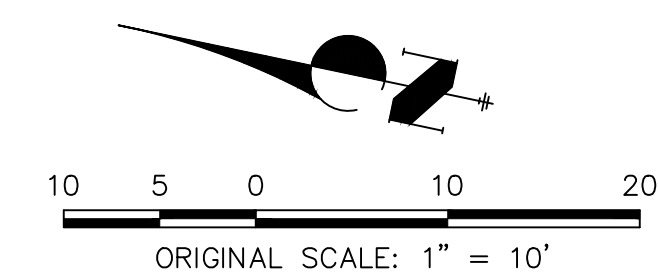


GSB03 WEEP DRAINS PLAN VIEW
SCALE: 1"=10'

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

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

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



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

SAND CREEK RESTORATION
GSB DETAILS
SHEET 53 OF 99
JOB NO. 25188.04

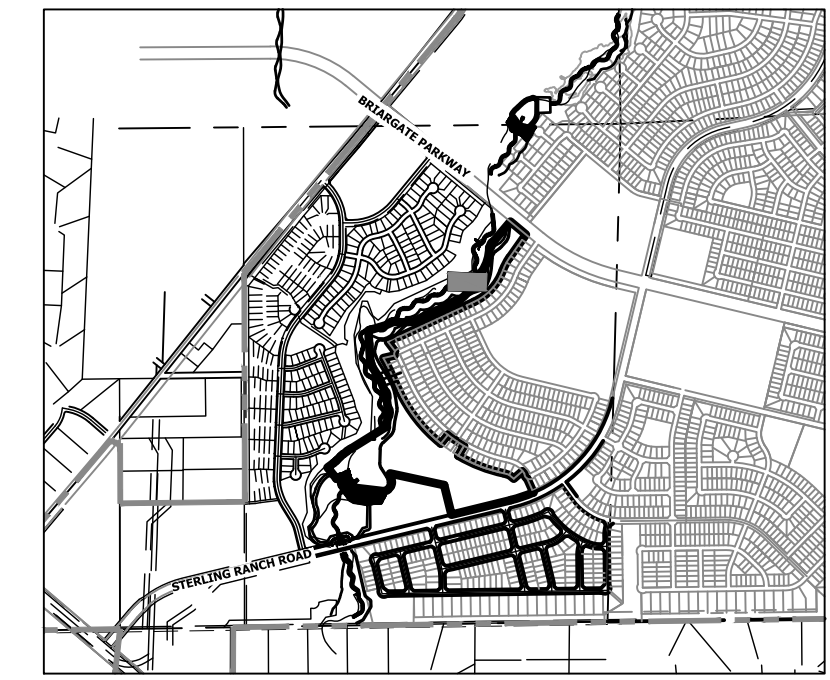
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	No.	REVISION	BY	DATE

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

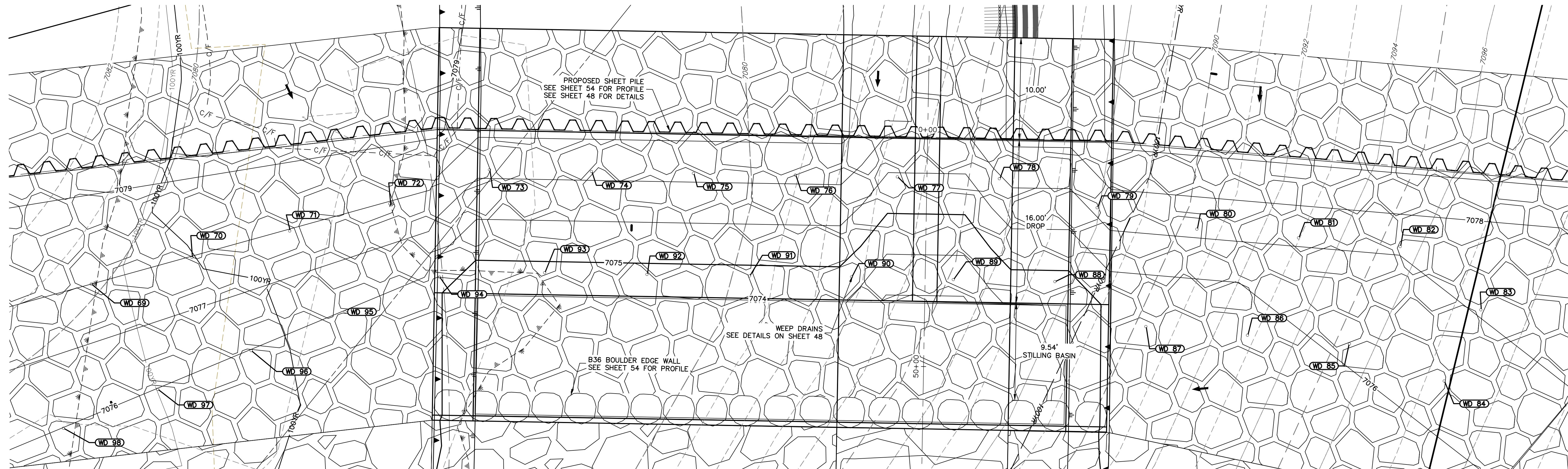
PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 419-3024

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

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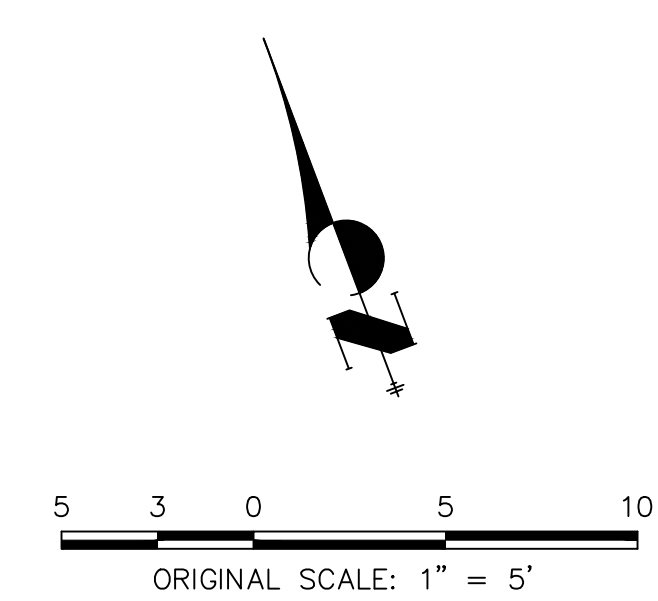
KEY MAP
SCALE: 1"=2000'



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

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

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



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, 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 303-740-9383 • Colorado Springs 719-583-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE				
				1"=5'	N/A	9/1/22	DV

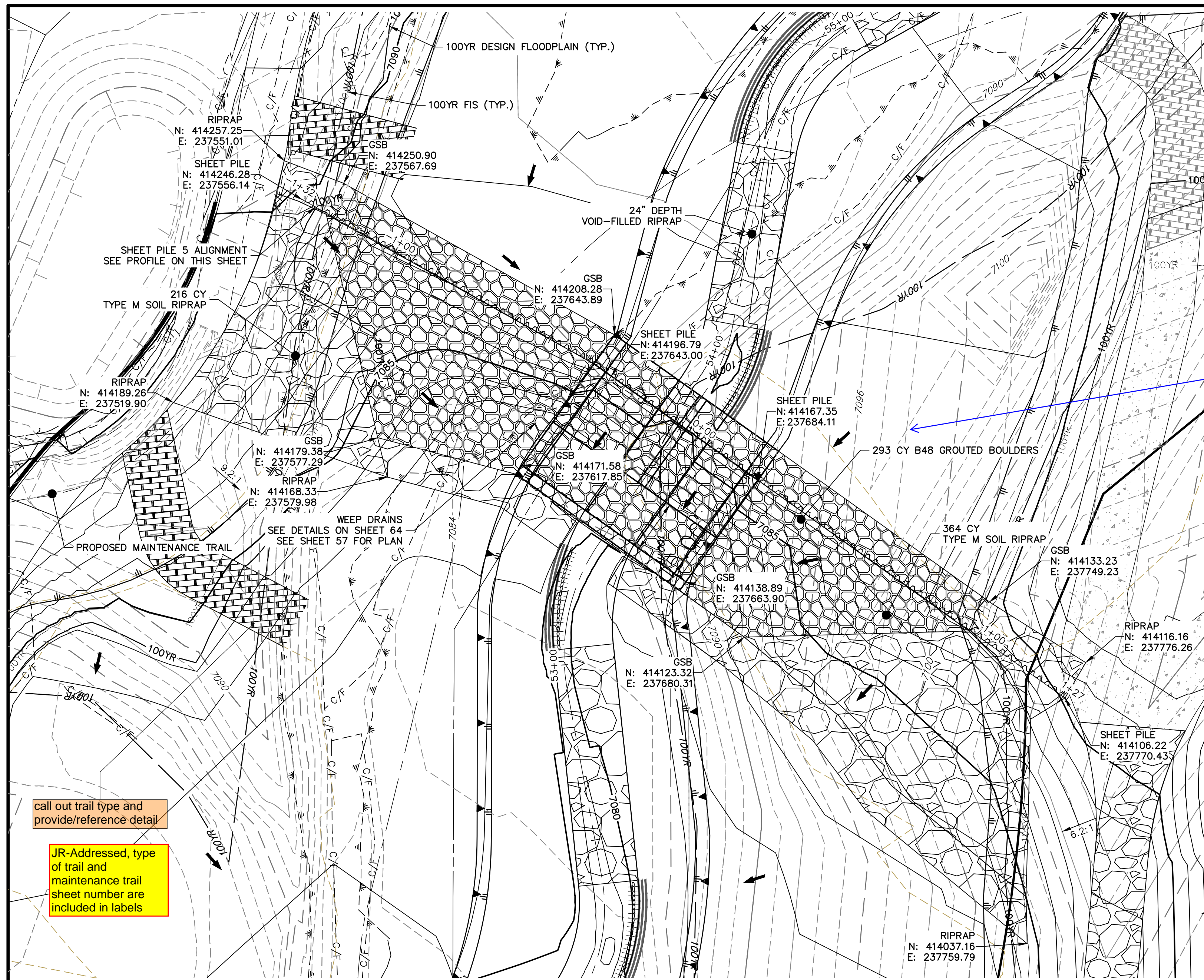
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V-SCALE: N/A
DATE: 9/1/22
DESIGNED BY: DV
DRAWN BY: NEO
CHECKED BY:

SAND CREEK RESTORATION
GSB DETAILS
SHEET 55 OF 99
JOB NO. 25188.04



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

X:\25188\04\25188\Drawings\Sheet\Drawings\GSB Details\GSB Details.dwg, 60 GSB04B, 9/16/2022 4:37:39 PM, vbaug10



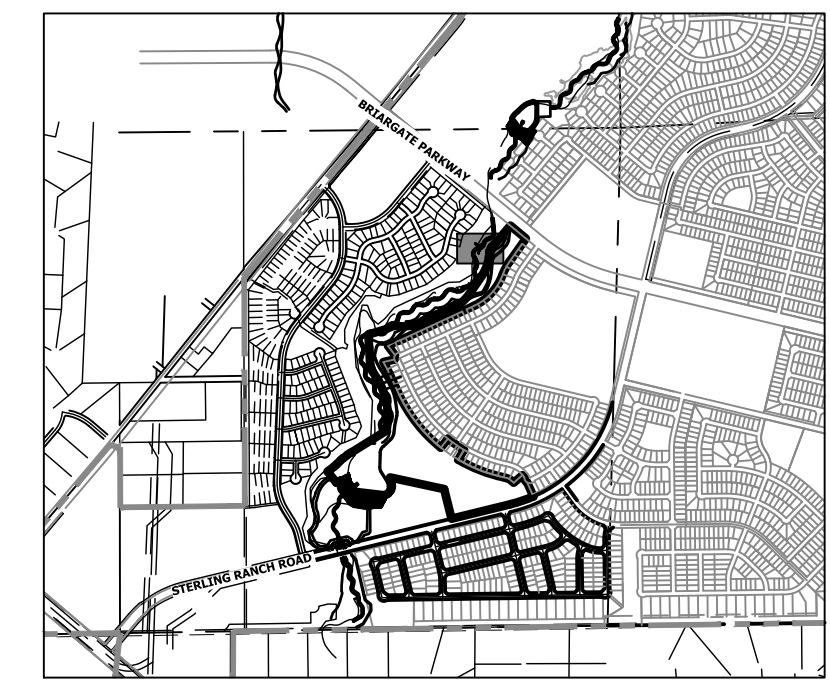
GRouted STEPPED BOULDER DROP #5 DETAIL
PLAN VIEW
STA 53+00.00 TO 55+50.00

call out trail type and provide/reference detail

JR-Addressed, type of trail and maintenance trail sheet number are included in labels

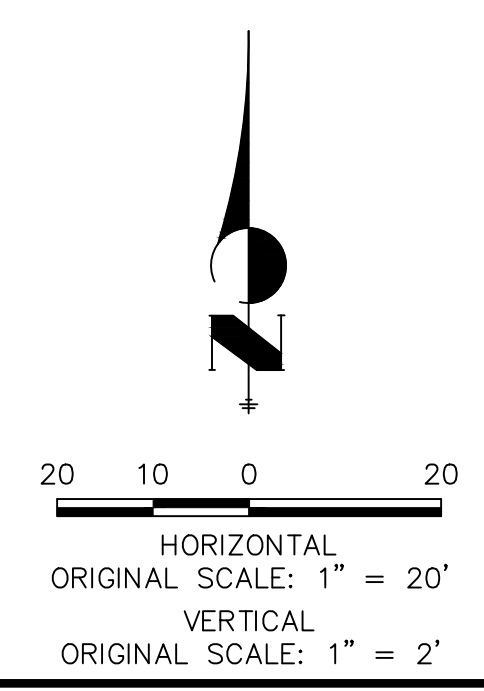
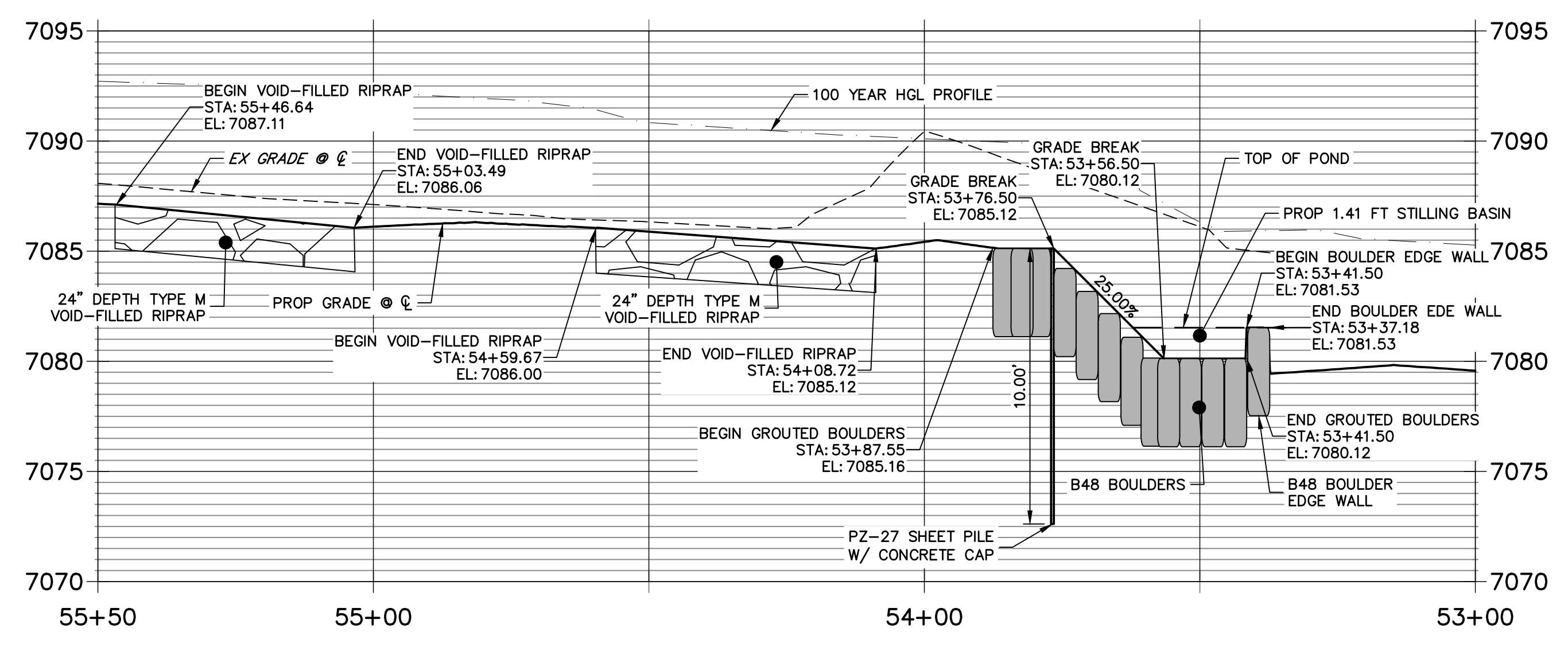
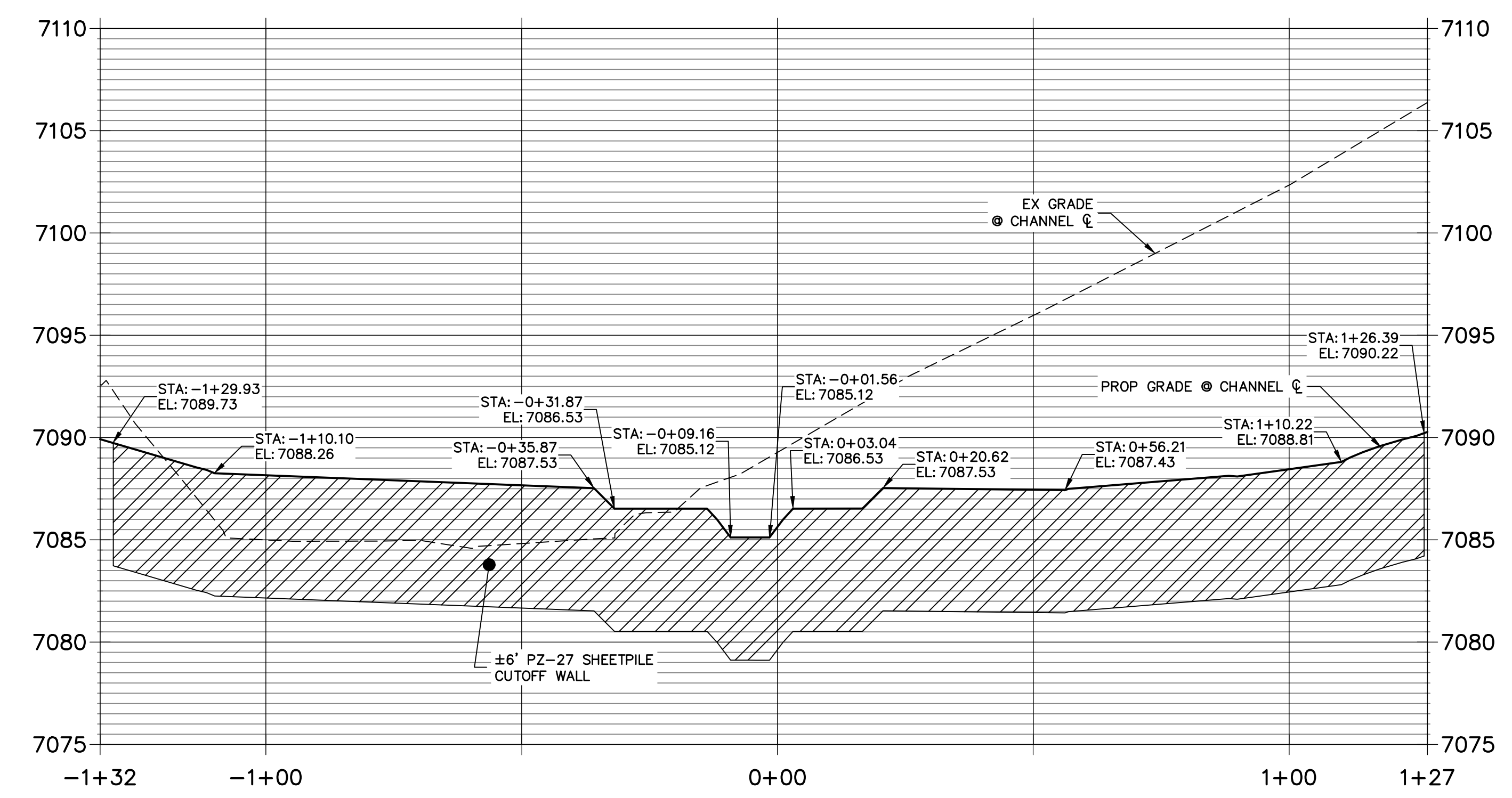
Something is wrong with contours

JR-Addressed



KEY MAP
SCALE: 1"=2000'

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

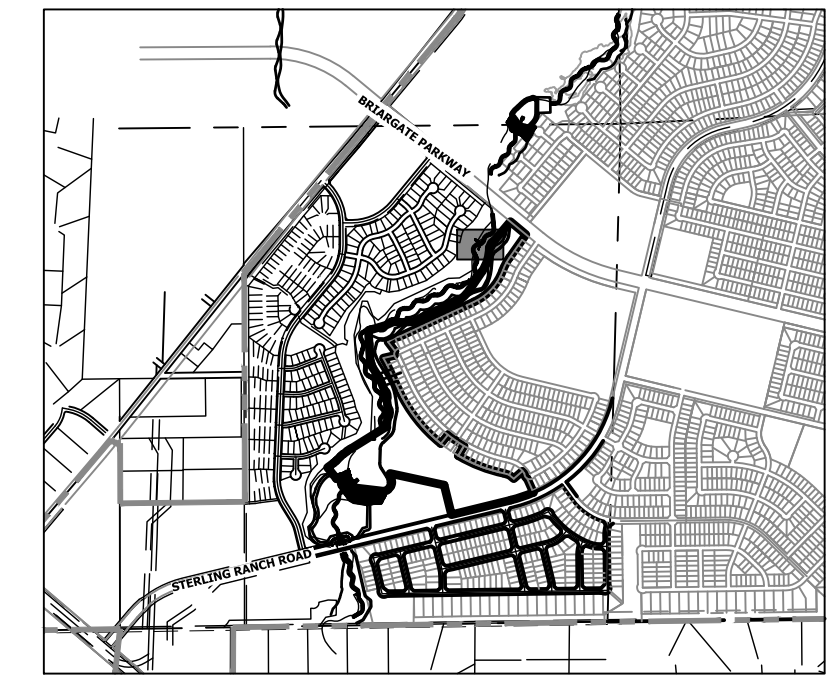


ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

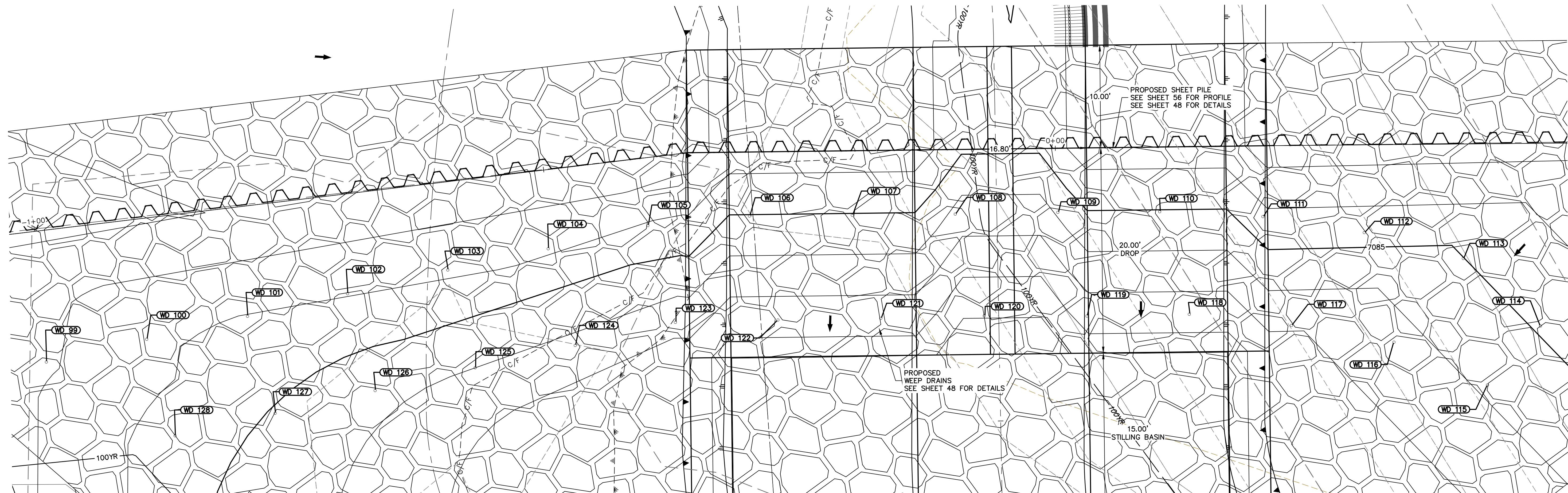
PRELIMINARY NOT FOR CONSTRUCTION

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

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.										
BY DATE											
No. REVISION											
H-SCALE	1"=20'	V-SCALE	1"=4'	DATE	9/14/22	DESIGNED BY	DJV	DRAWN BY	NEO	CHECKED BY	
SAND CREEK RESTORATION											
GSB DETAILS											
SHEET 56 OF 99											
JOB NO. 25188.04											



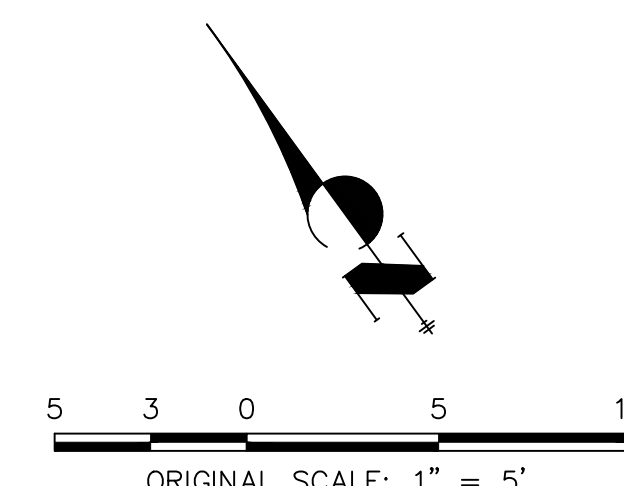
KEY MAP
SCALE: 1"=2000'



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

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

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



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

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

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

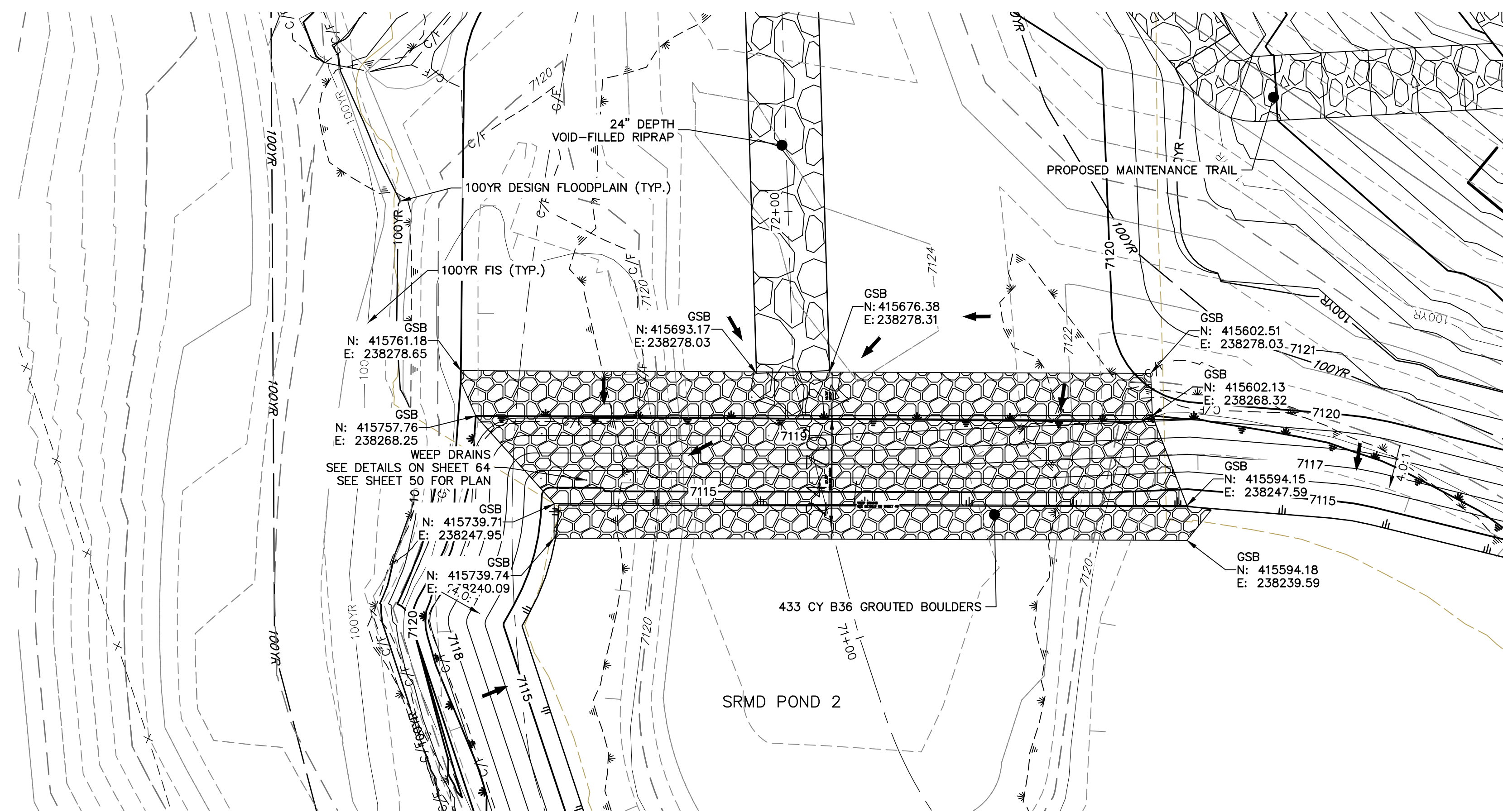
J.R. ENGINEERING
A Westman Company
Central 303-740-9888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY		DATE
		1"=5'	N/A	

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=5'	N/A	9/14/22	DJV	SCH	

SAND CREEK RESTORATION
GSB DETAILS

SHEET 57 OF 99
JOB NO. 25188.04

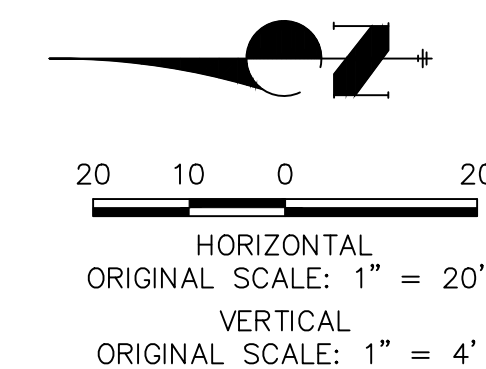
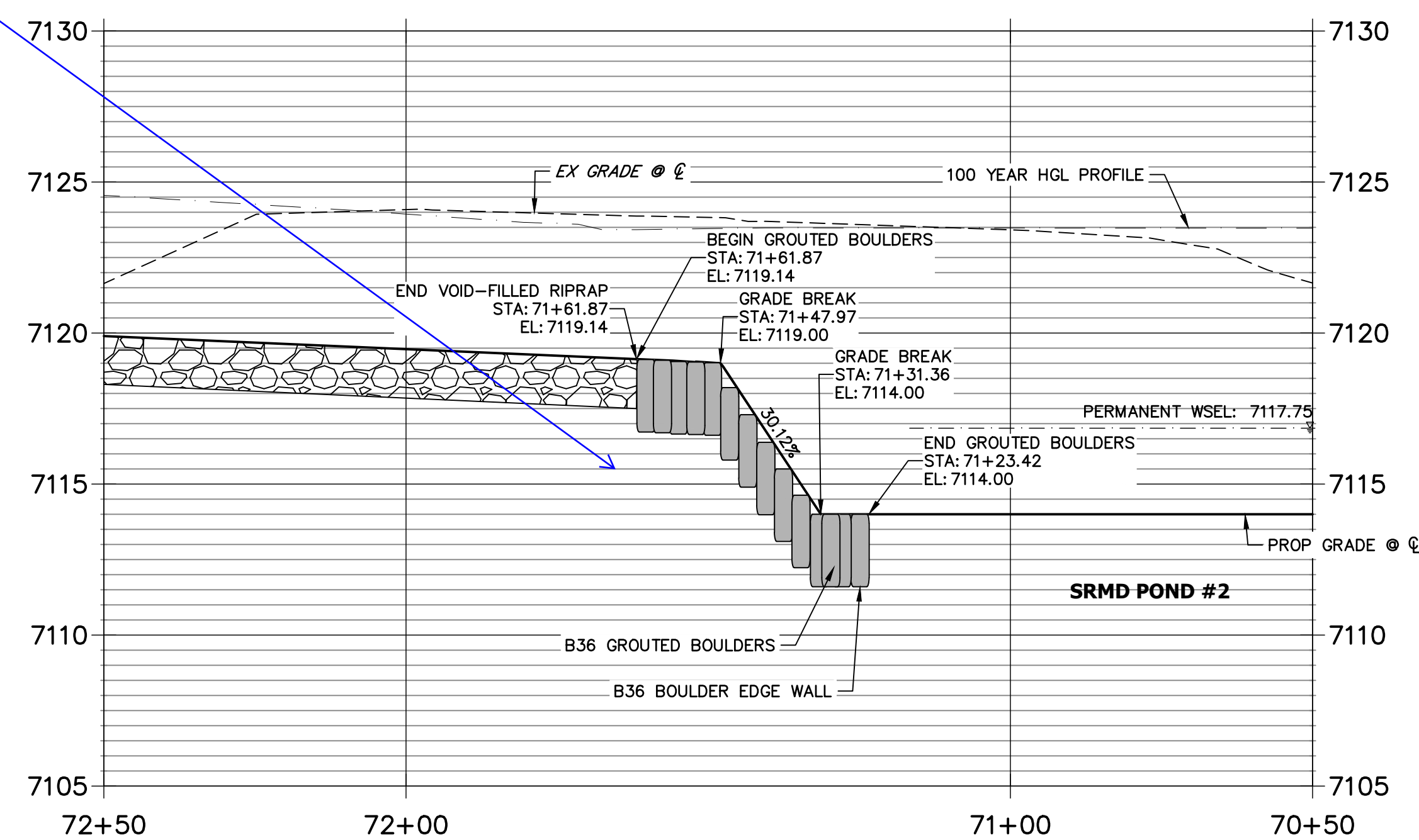


GRouted STEPPED BOULDER DROP #6 DETAIL
PLAN VIEW
SCALE: 1"=20'

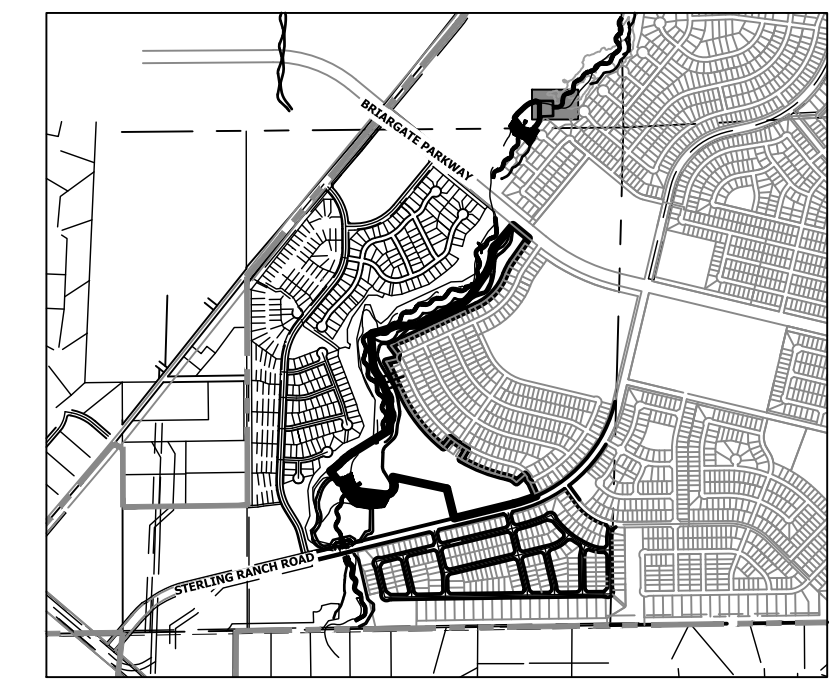
Show sheet pile

JR-Addressed, sheet pile has been added to profile and a sheet pile profile has been added to the sheet

GSB PROFILE 6
STA 70+50.00 TO 72+50.00



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



KEY MAP
SCALE: 1"=2000'

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

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

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

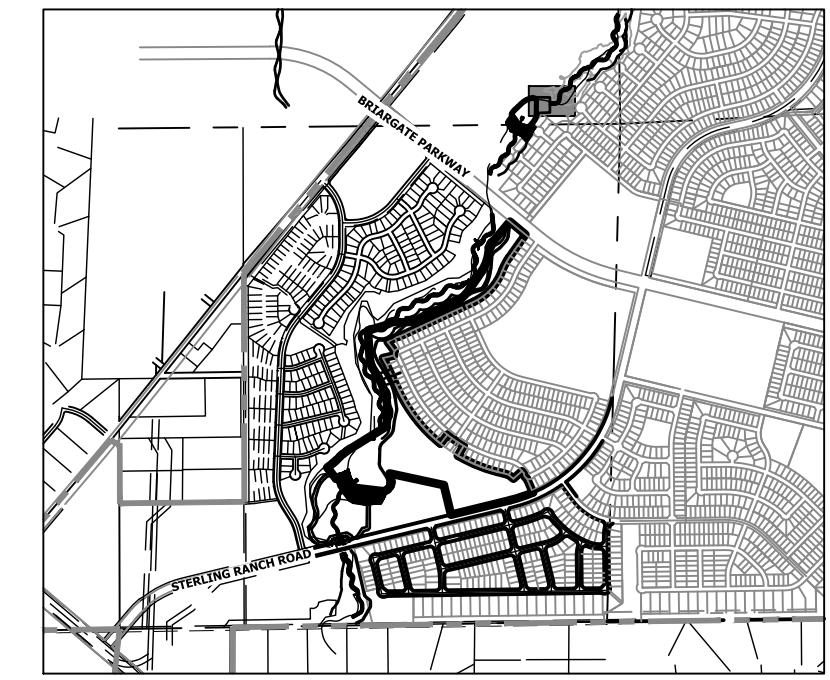
BY	DATE	No.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=20'	1"=4'	9/14/22	DJV	NEO	

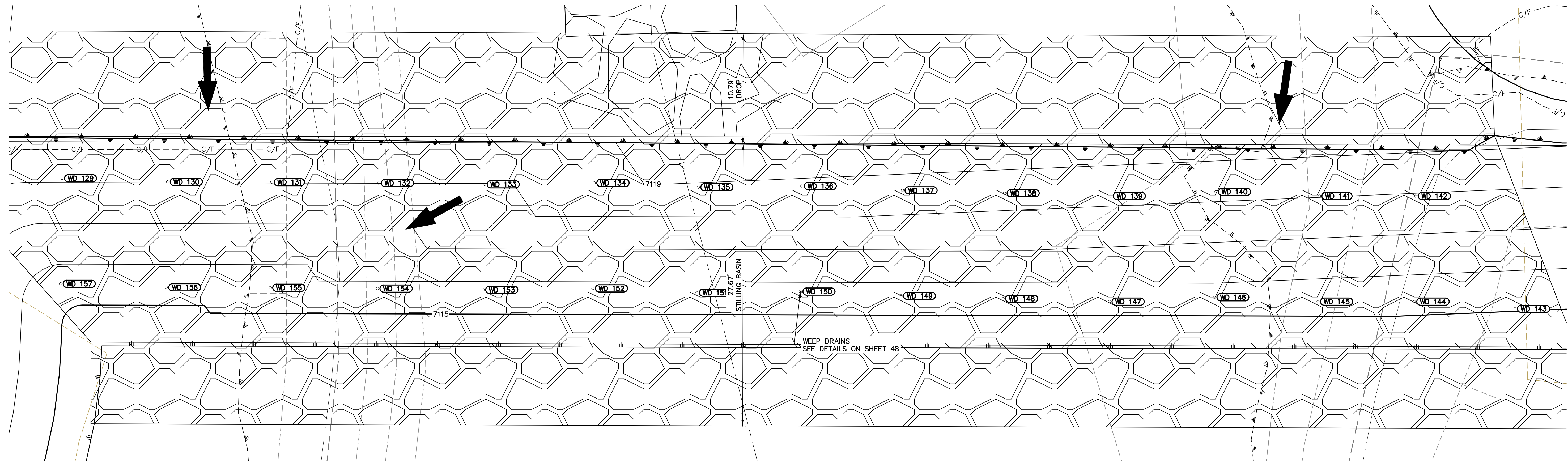
SAND CREEK RESTORATION
GSB DETAILS

SHEET 58 OF 99
JOB NO. 25188.04

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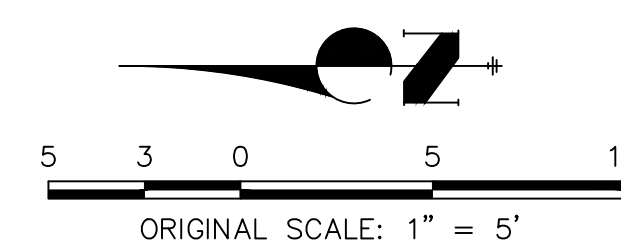
KEY MAP
SCALE: 1"=2000'



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

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

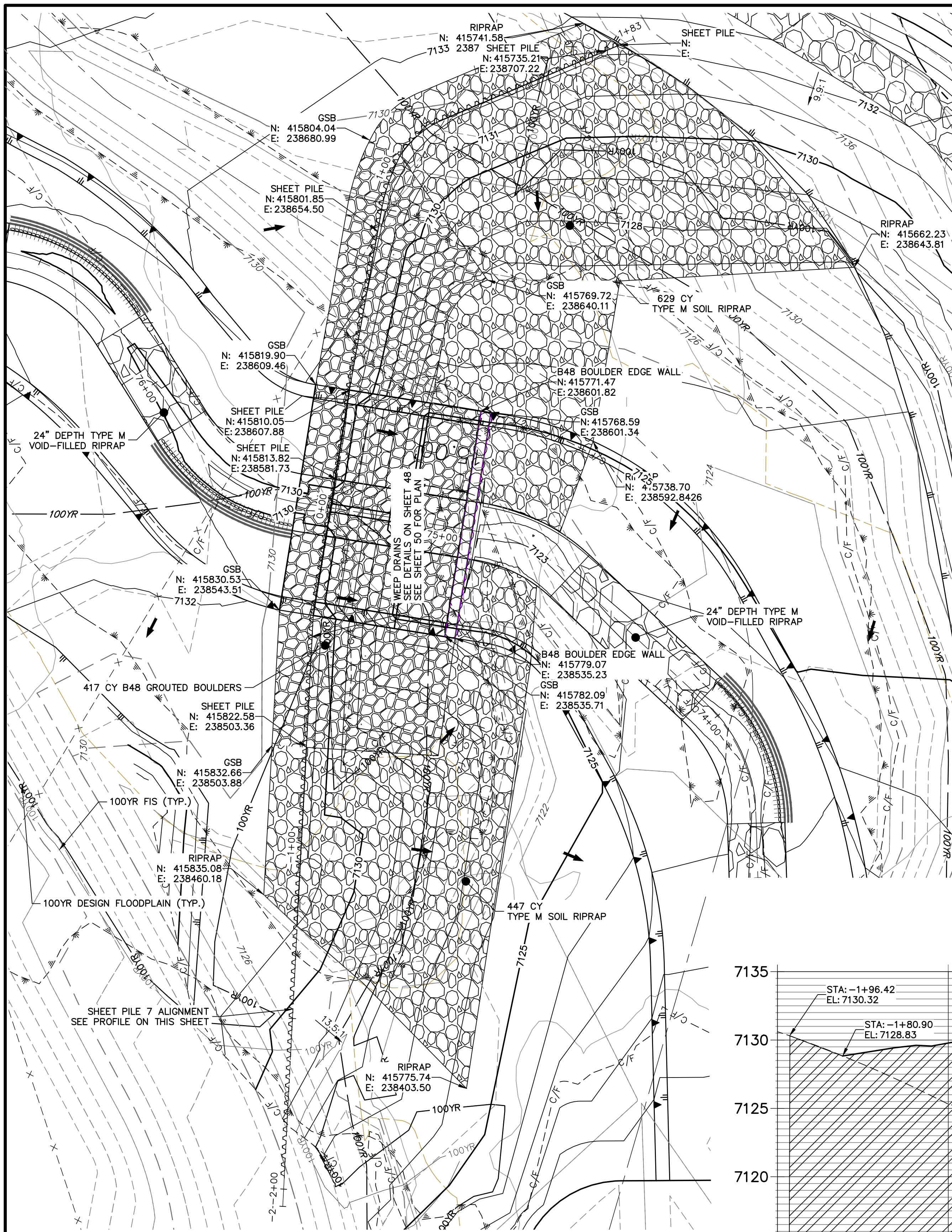
POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEV
WD 144	WEEP DRAIN	N: 415609.99 E: 238252.06	7115.34
WD 145	WEEP DRAIN	N: 415619.43 E: 238252.06	7115.44
WD 146	WEEP DRAIN	N: 415629.58 E: 238252.48	7115.57
WD 147	WEEP DRAIN	N: 415639.87 E: 238252.06	7115.43
WD 148	WEEP DRAIN	N: 415650.30 E: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



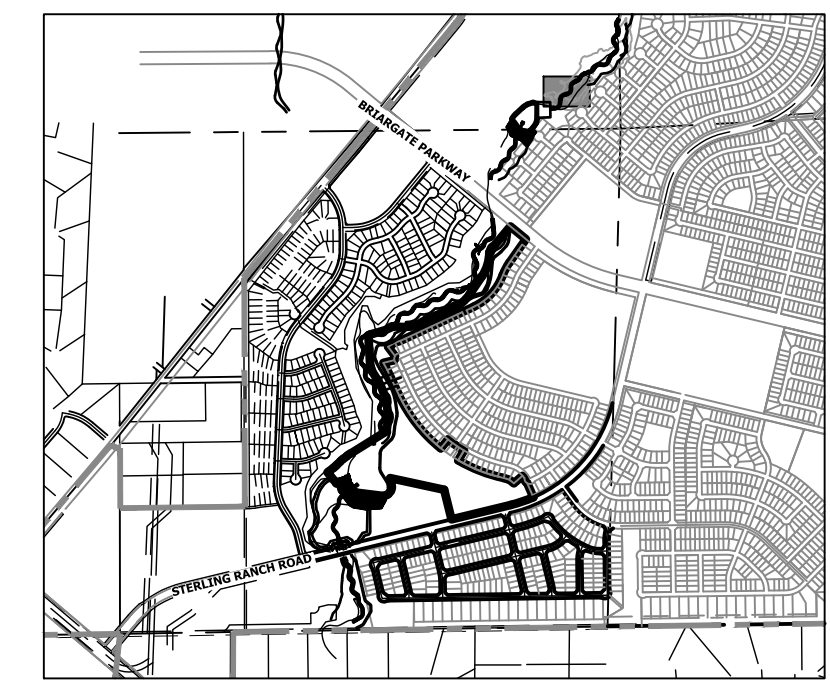
ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMLEY
COLORADO P.E. 30000
FOR AND ON BEHALF OF JR. ENGINEERING, INC.

PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.
J.R. ENGINEERING A Westman Company Centennial 300-740-9383 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	No. REVISION
	H-SCALE 1"=5' V-SCALE N/A DATE 9/14/22 DESIGNED BY DJV DRAWN BY NEO CHECKED BY
SAND CREEK RESTORATION GSB DETAILS	SHEET 59 OF 99 JOB NO. 25188.04

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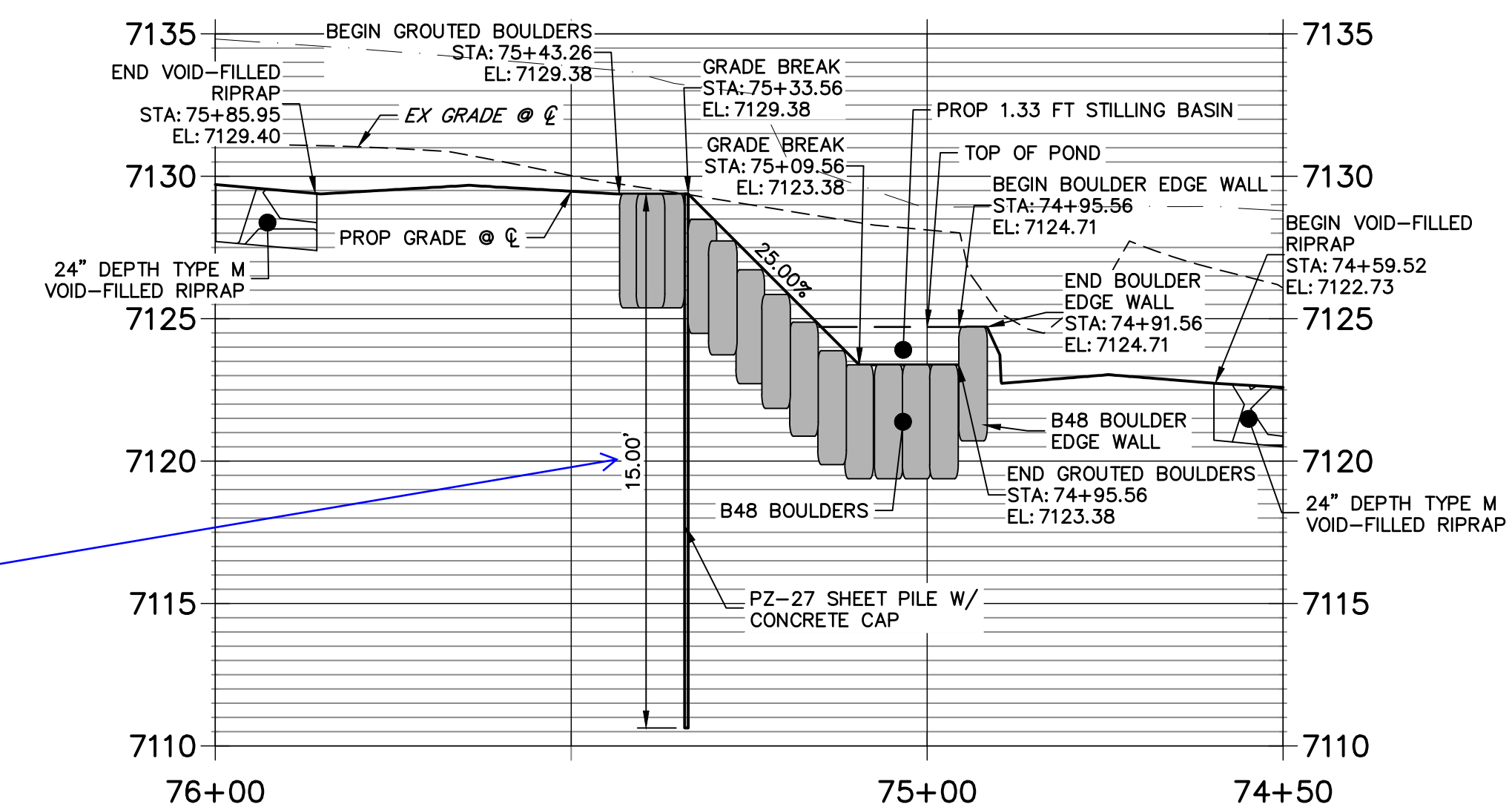


**GRouted STEPPED BOULDER DROP #7 DETAIL
PLAN VIEW**
HORIZONTAL SCALE: 1"=20'



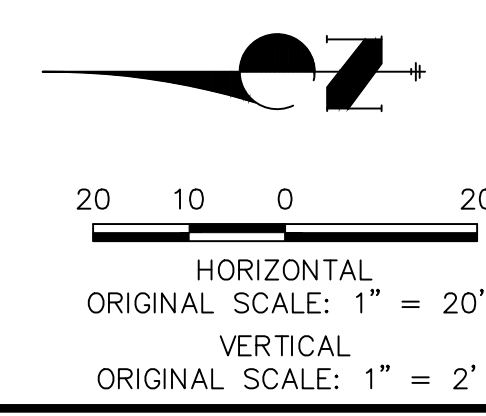
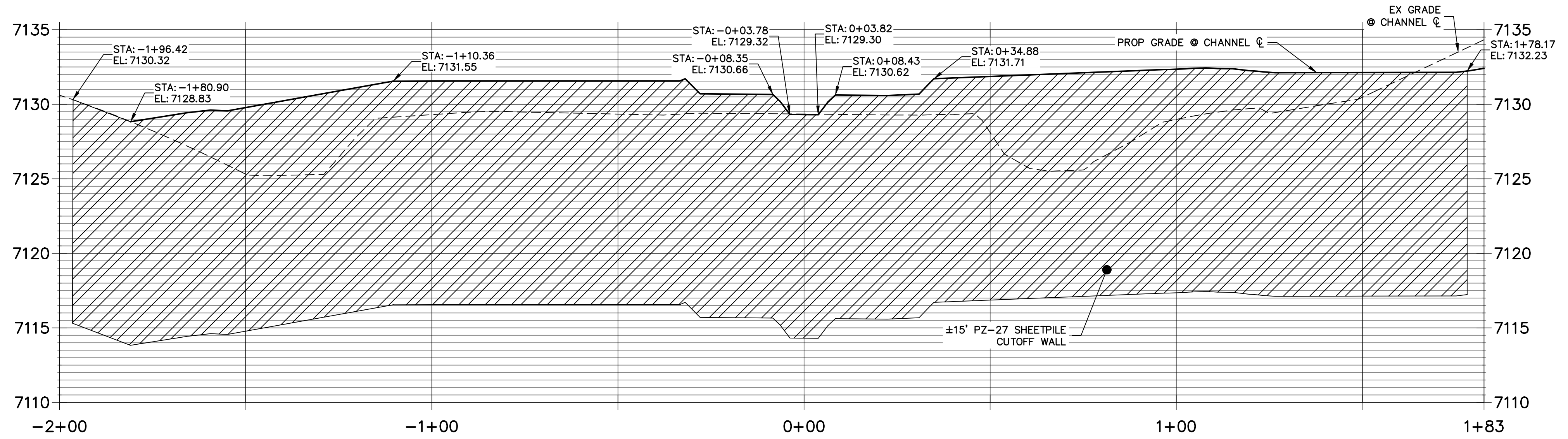
KEY MAP
SCALE: 1"=2000'

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



Verify depth
JR-Sheet piles will extend to assumed bedrock or 6' minimum, see Stable Grade Channel Plans sheets 26-31

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



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

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

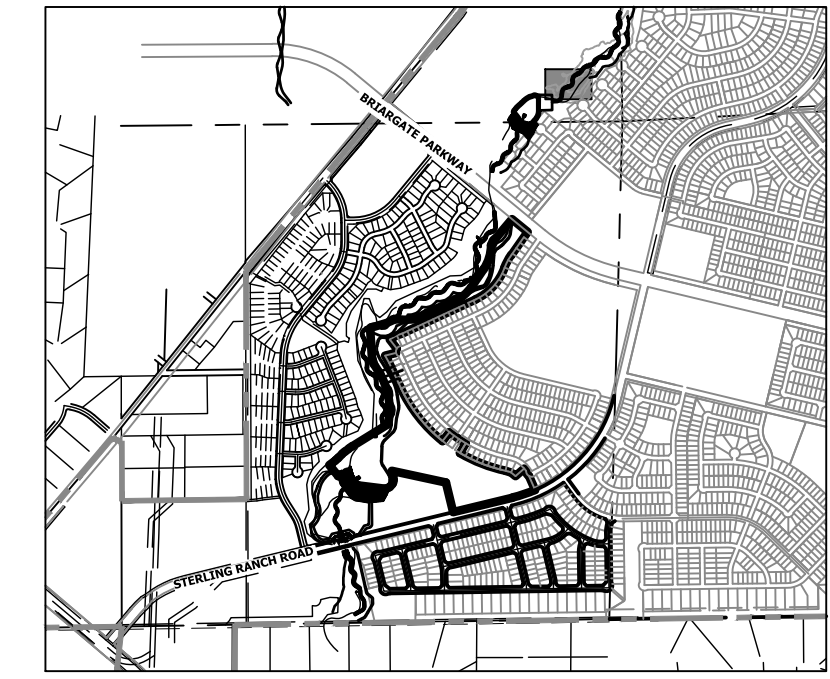
J.R. ENGINEERING
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BY	DATE	REVISION

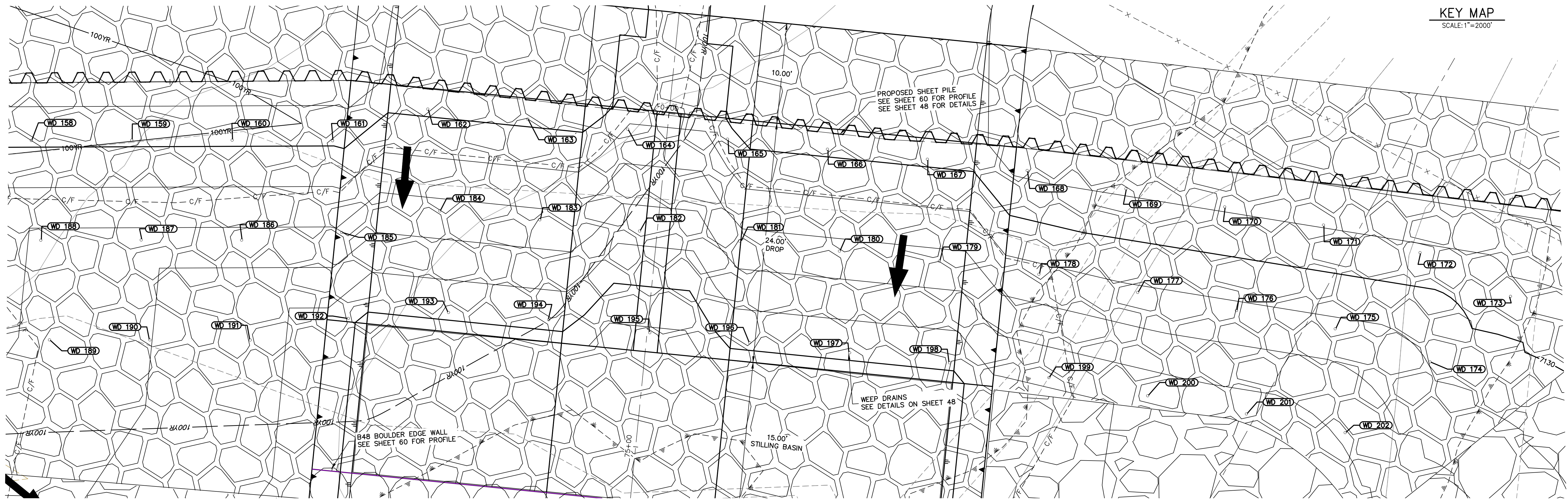
H-SCALE 1"=20'
V-SCALE 1"=4'
DATE 9/1/22
DESIGNED BY DJV
DRAWN BY NEO
CHECKED BY

SAND CREEK RESTORATION
GSB DETAILS

SHEET 60 OF 99
JOB NO. 25188.04



KEY MAP
SCALE: 1"=2000'

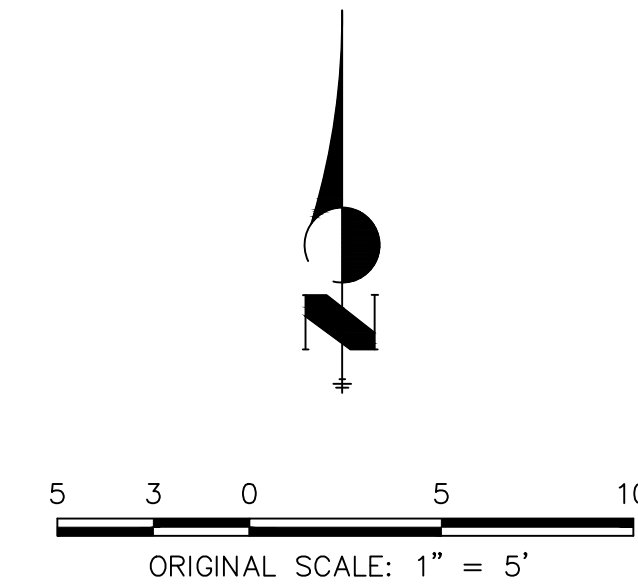


GSB07 WEEP DRAINS PLAN VIEW
SCALE: 1"=5'

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

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

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



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

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

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

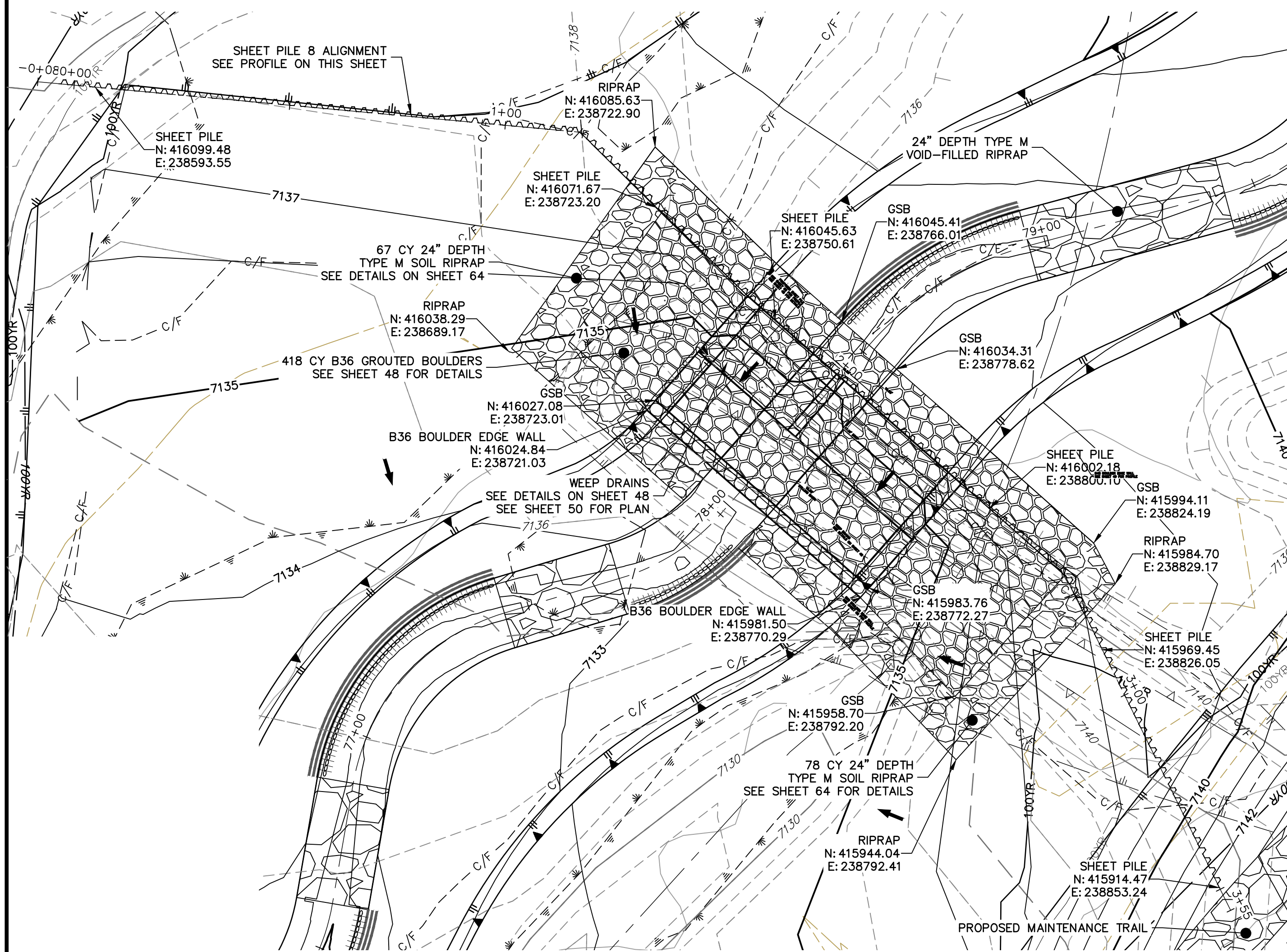
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A Westman Company
Central 303-740-9383 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE 1"=5'
V-SCALE N/A
DATE 9/1/22
DESIGNED BY DJV
DRAWN BY SCH
CHECKED BY

SAND CREEK RESTORATION
GSB DETAILS

SHEET 61 OF 99
JOB NO. 25188.04



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

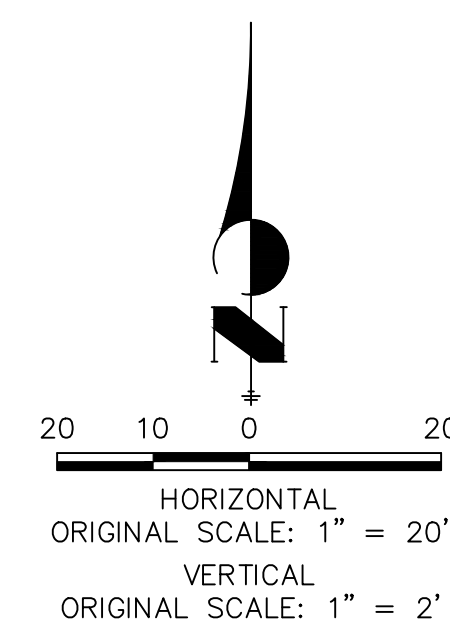
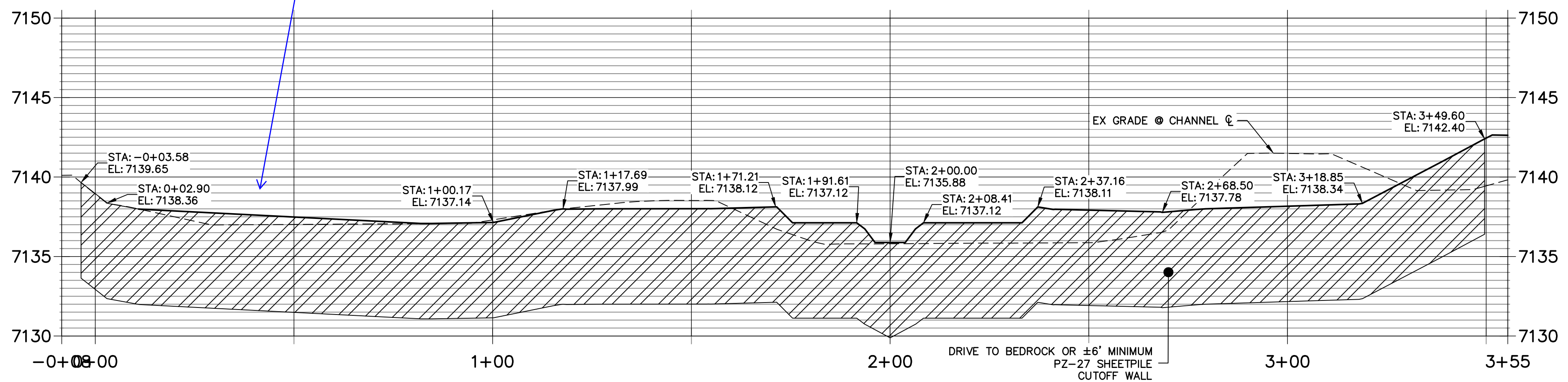
JR-Addressed, 100 year WSE has been added to all cross sections

Please show 100-year WS on all 8 cross-sections

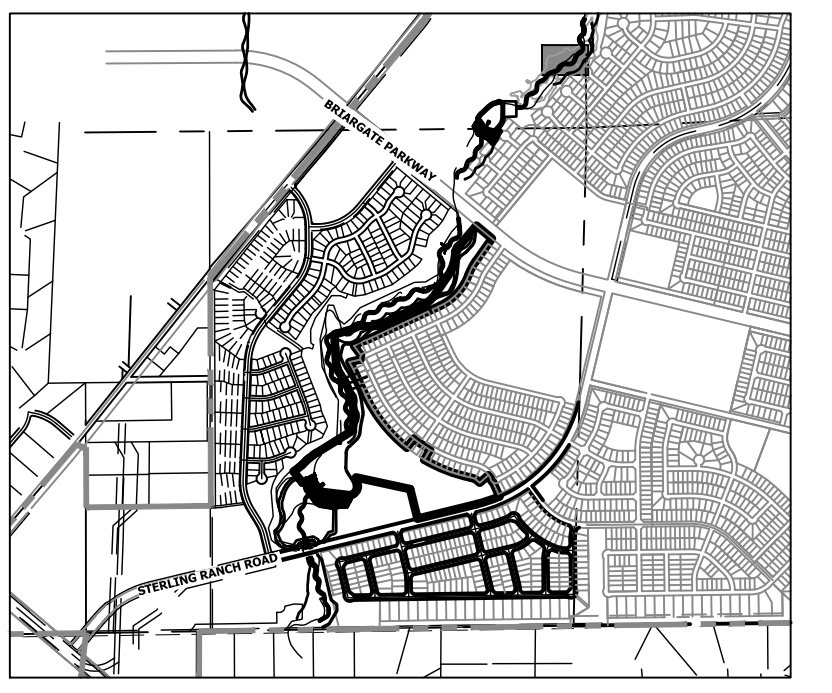
Verify depth per profile sheet comments.

JR-Sheet piles will extend to assumed bedrock or 6' minimum, see Stable Grade Channel Plans sheets 26-31

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



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



KEY MAP
SCALE: 1"=2000'

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

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

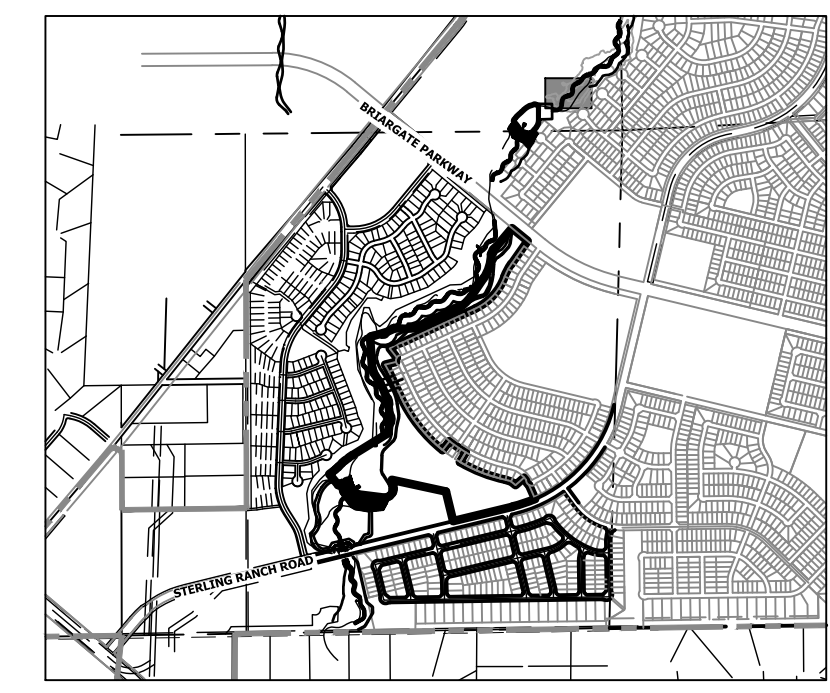
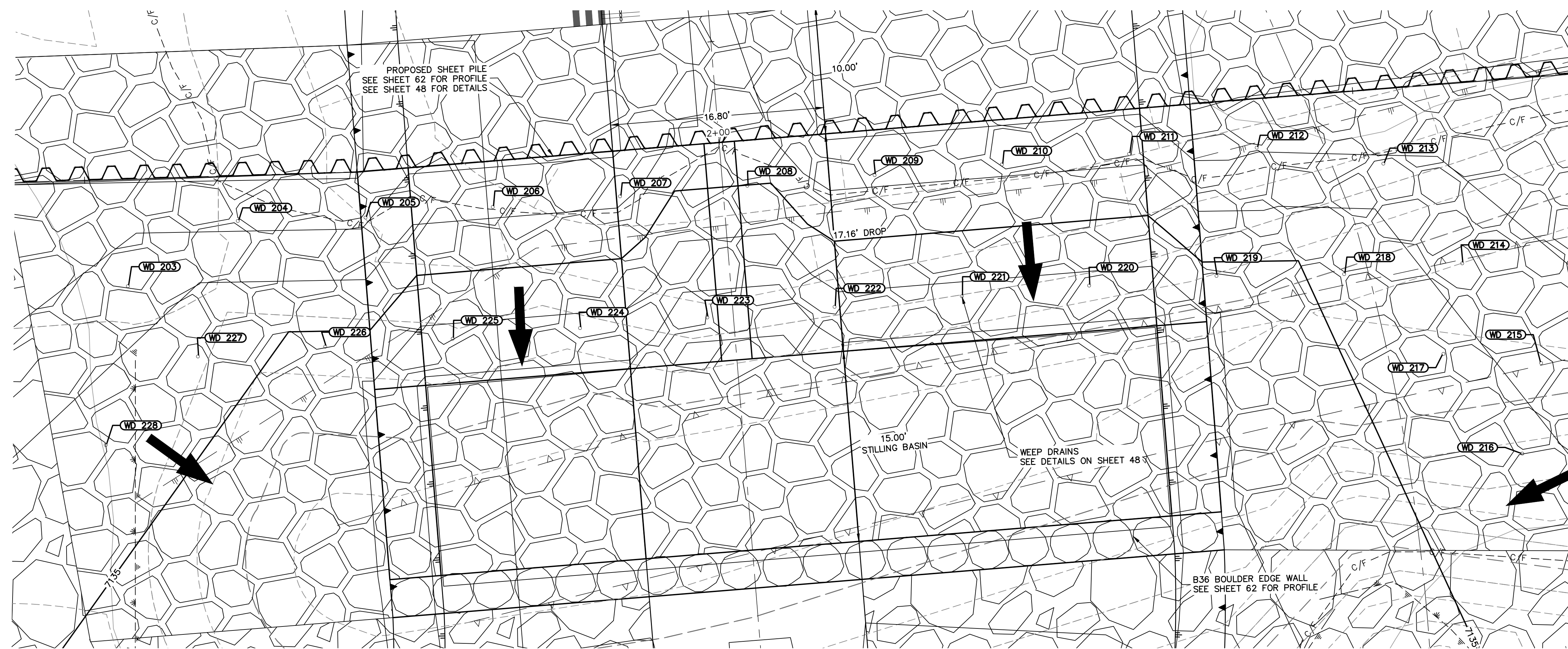
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Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION

H-SCALE 1"=20'	V-SCALE 1"=4'	DATE 9/1/22	DESIGNED BY DJV	DRAWN BY NEO	CHECKED BY
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SAND CREEK RESTORATION
GSB DETAILS
SHEET 62 OF 99
JOB NO. 25188.04

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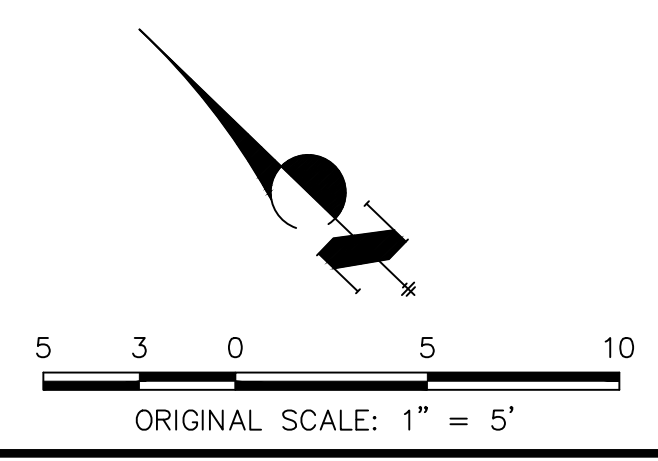


KEY MAP
SCALE: 1"=2000'

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

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

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



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMBLE
COLORADO P.E. 30107
FOR AND ON BEHALF OF JR. ENGINEERING

SAND CREEK RESTORATION
GSB DETAILS

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

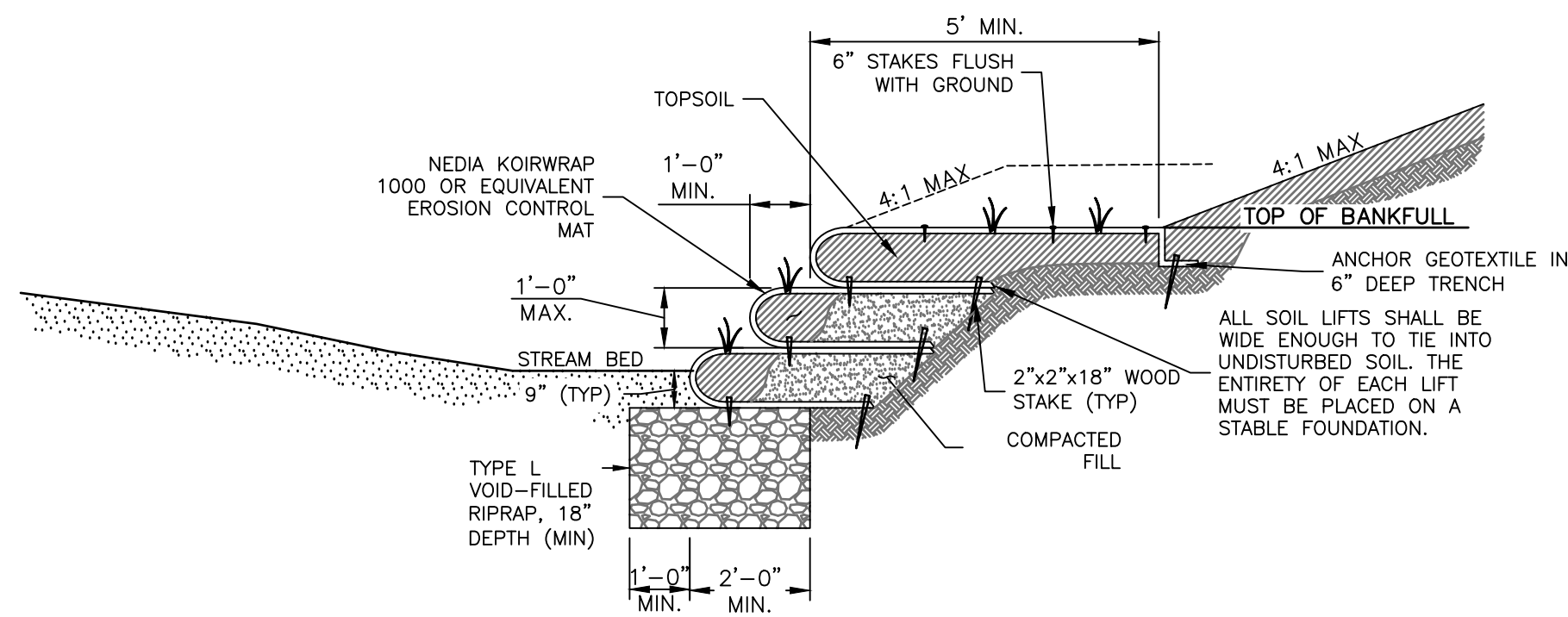
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BY	DATE	REVISION

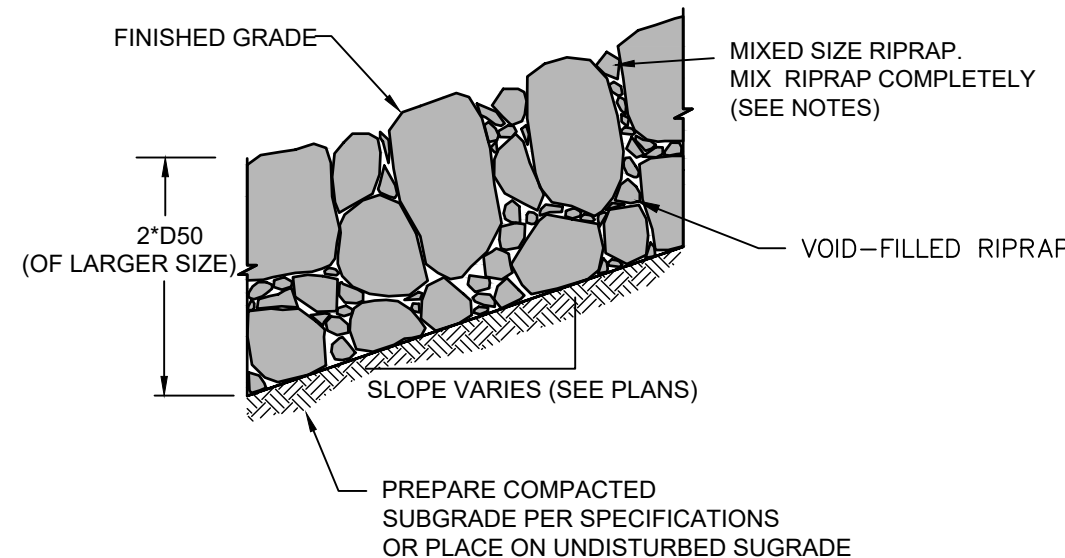
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1"=5'	N/A	9/1/22	DJV	NEO	

SHEET 63 OF 99
JOB NO. 25188.04

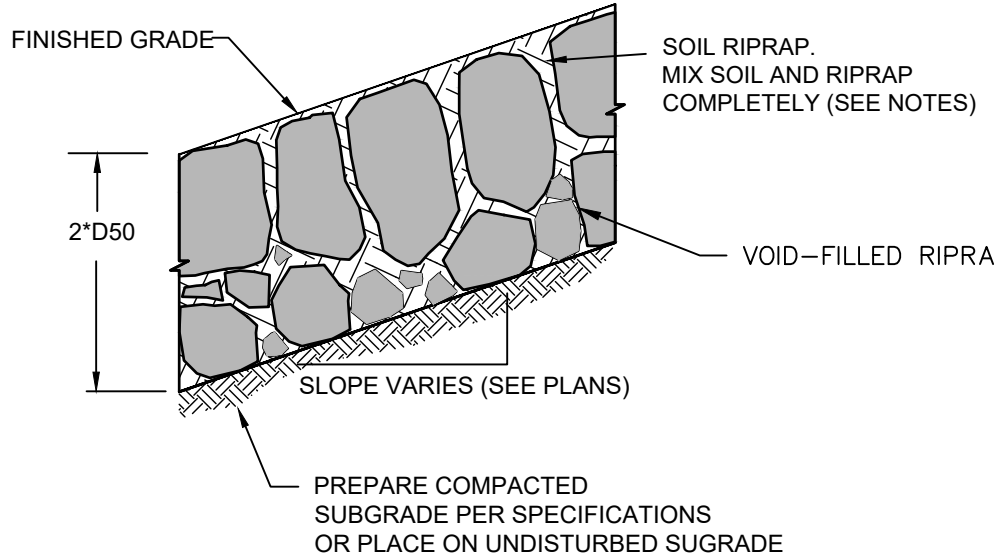
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SOIL LIFT TYPICAL SECTION



TYPICAL SECTION - MIXED SIZE RIPRAP



TYPICAL SECTION - SOIL RIPRAP

RIPRAP NOTES:

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

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

ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY
NOT FOR CONSTRUCTION
 MIKE A. BRAMLEY
 COLORADO P.E. NO. 30000
 FOR AND ON BEHALF OF J.R. ENGINEERING, INC.

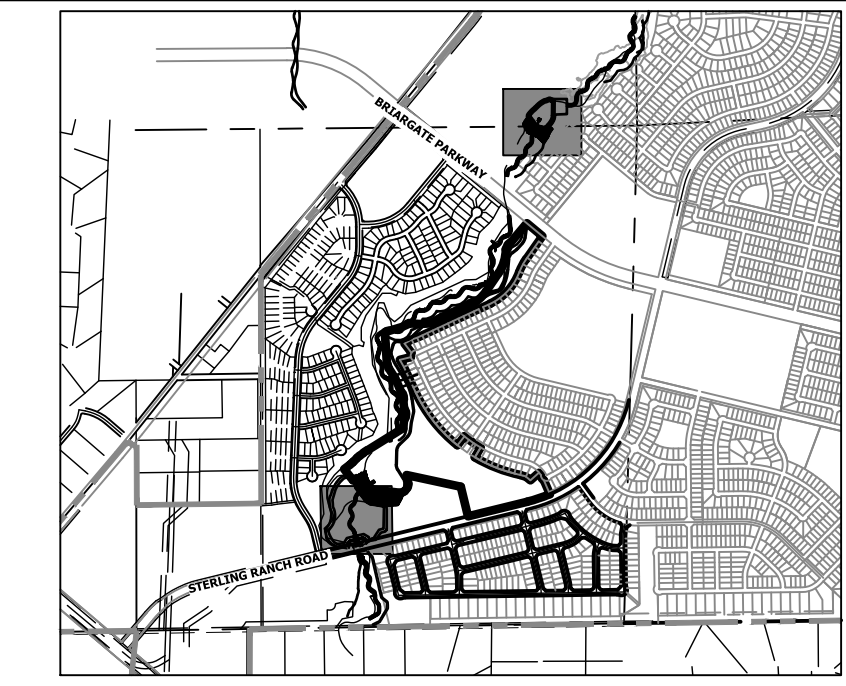
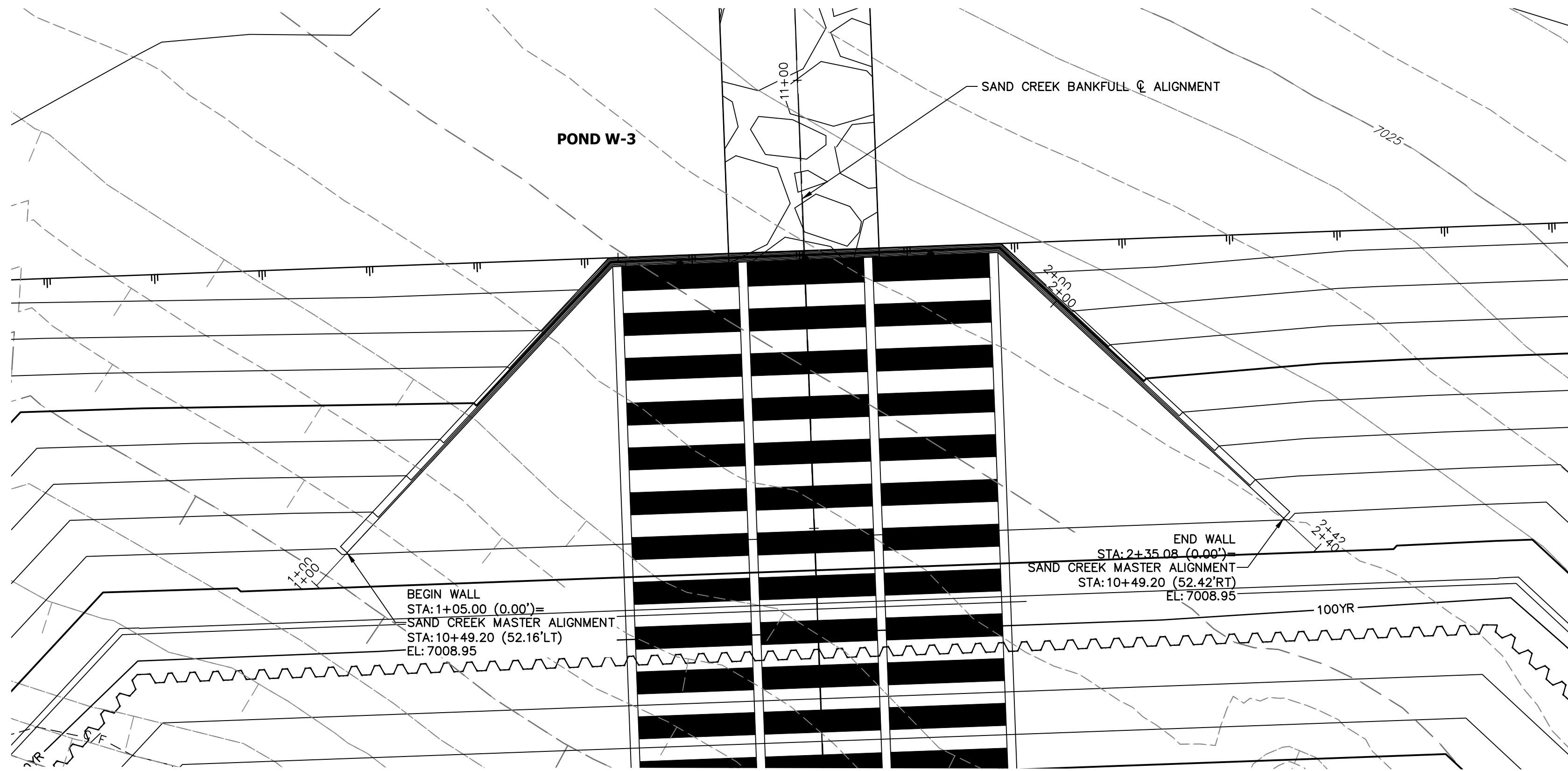
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

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

J.R. ENGINEERING
 A Westman Company
 Centennial 303-740-9383 • Colorado Springs 719-583-2583
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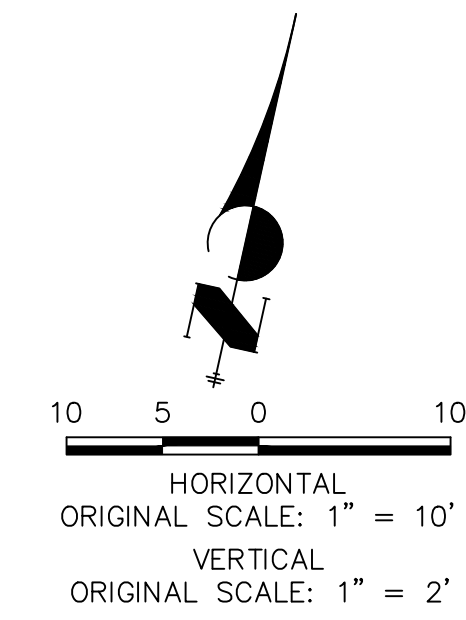
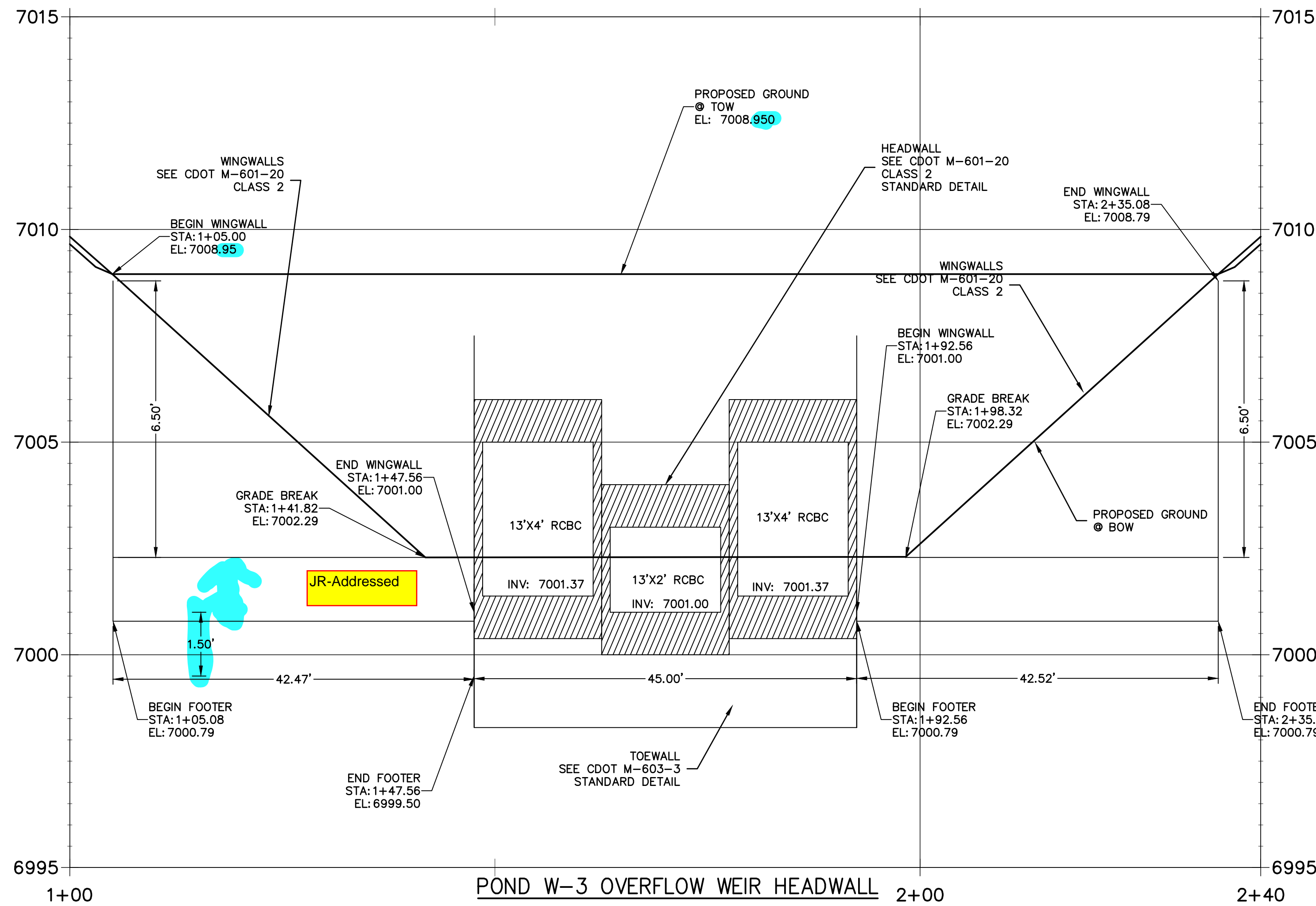
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				H-SCALE	V-SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
						9/1/22		

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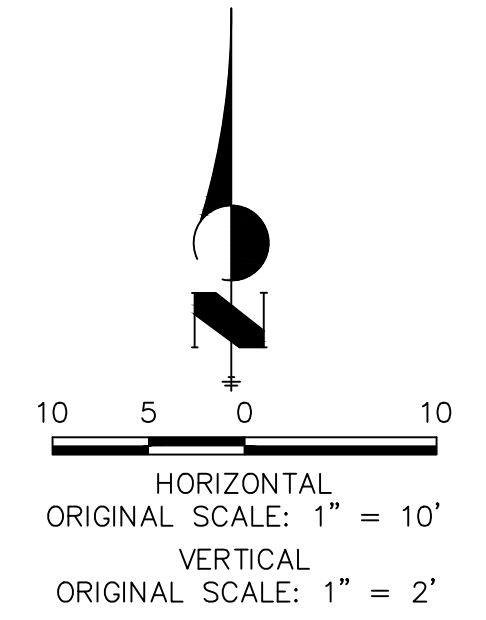
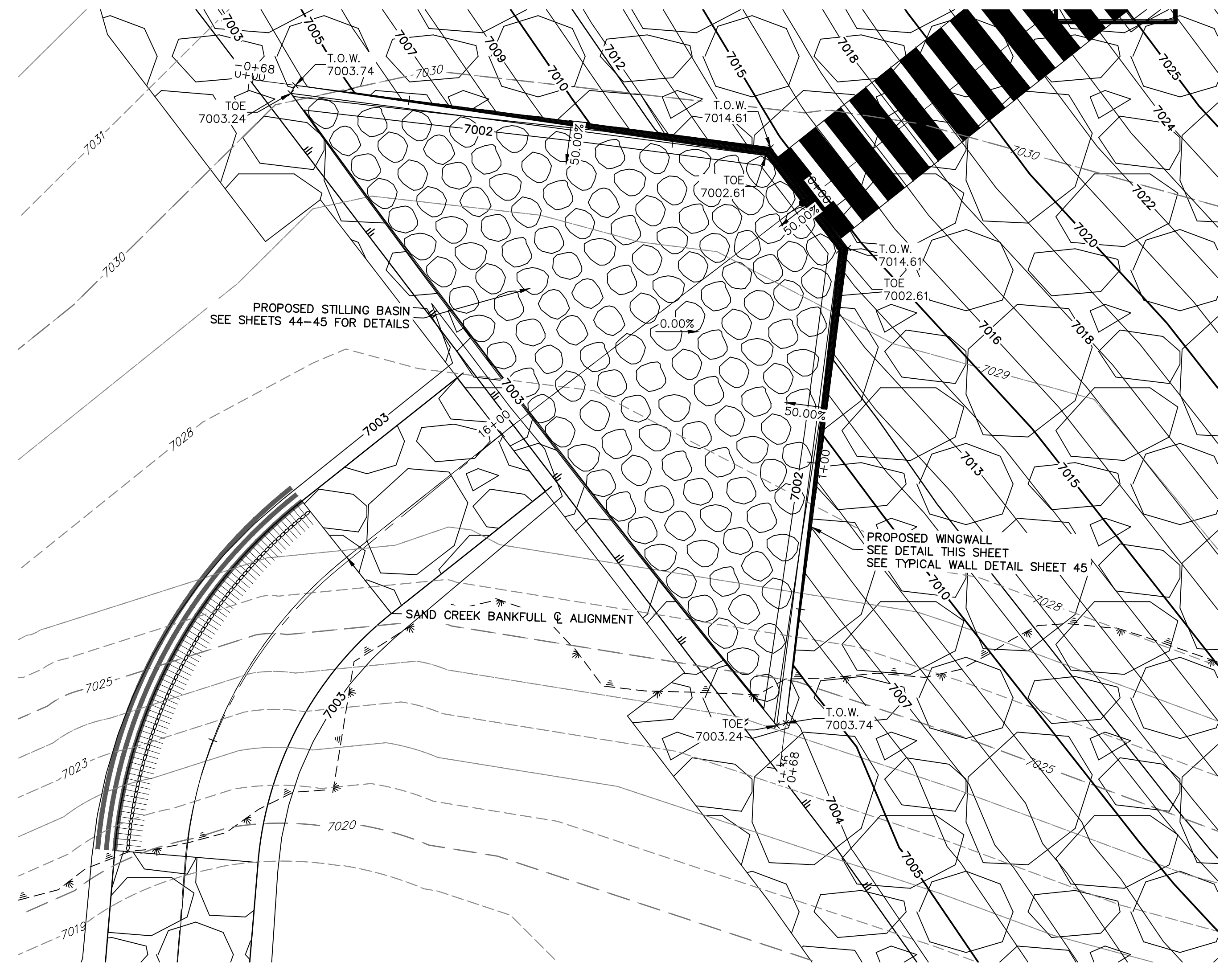
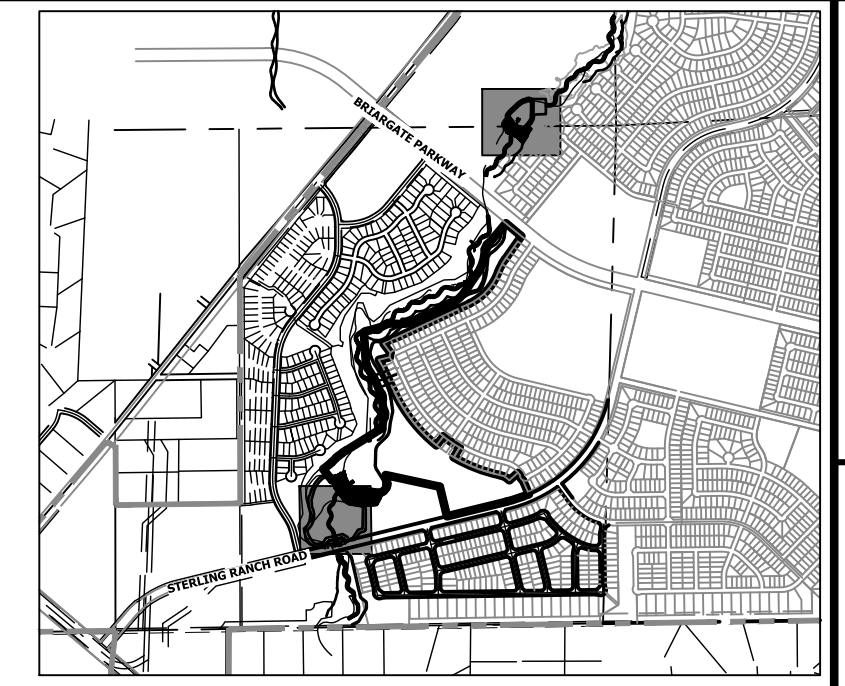
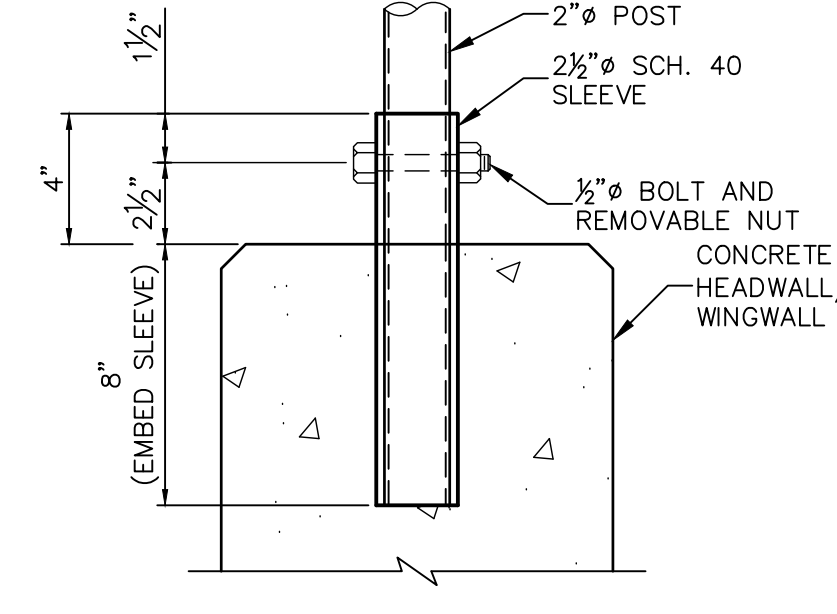
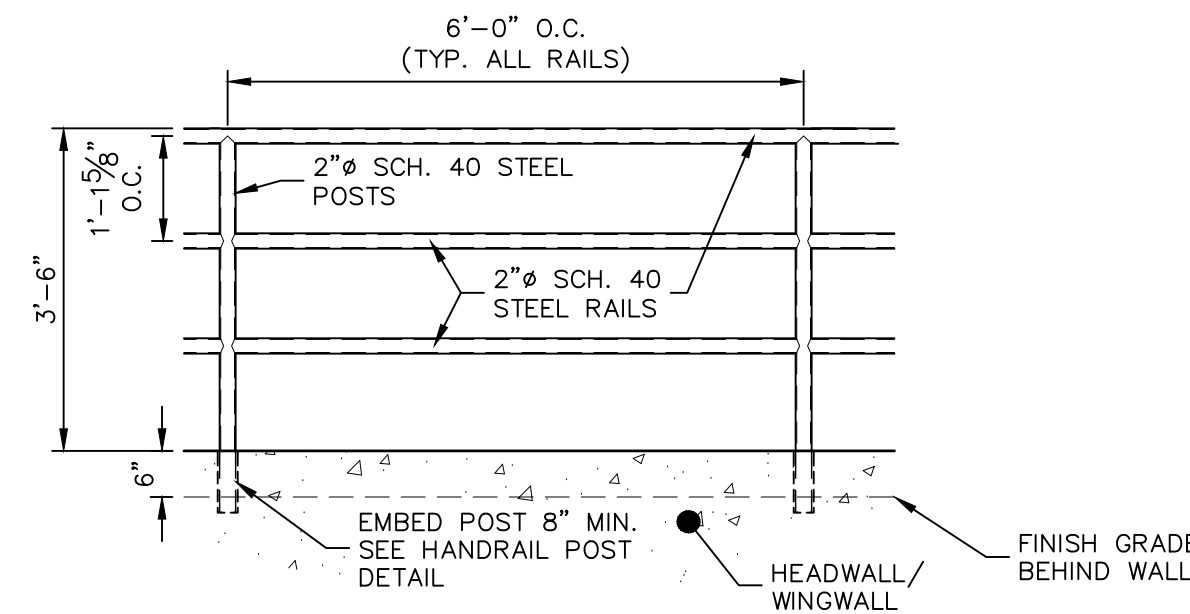
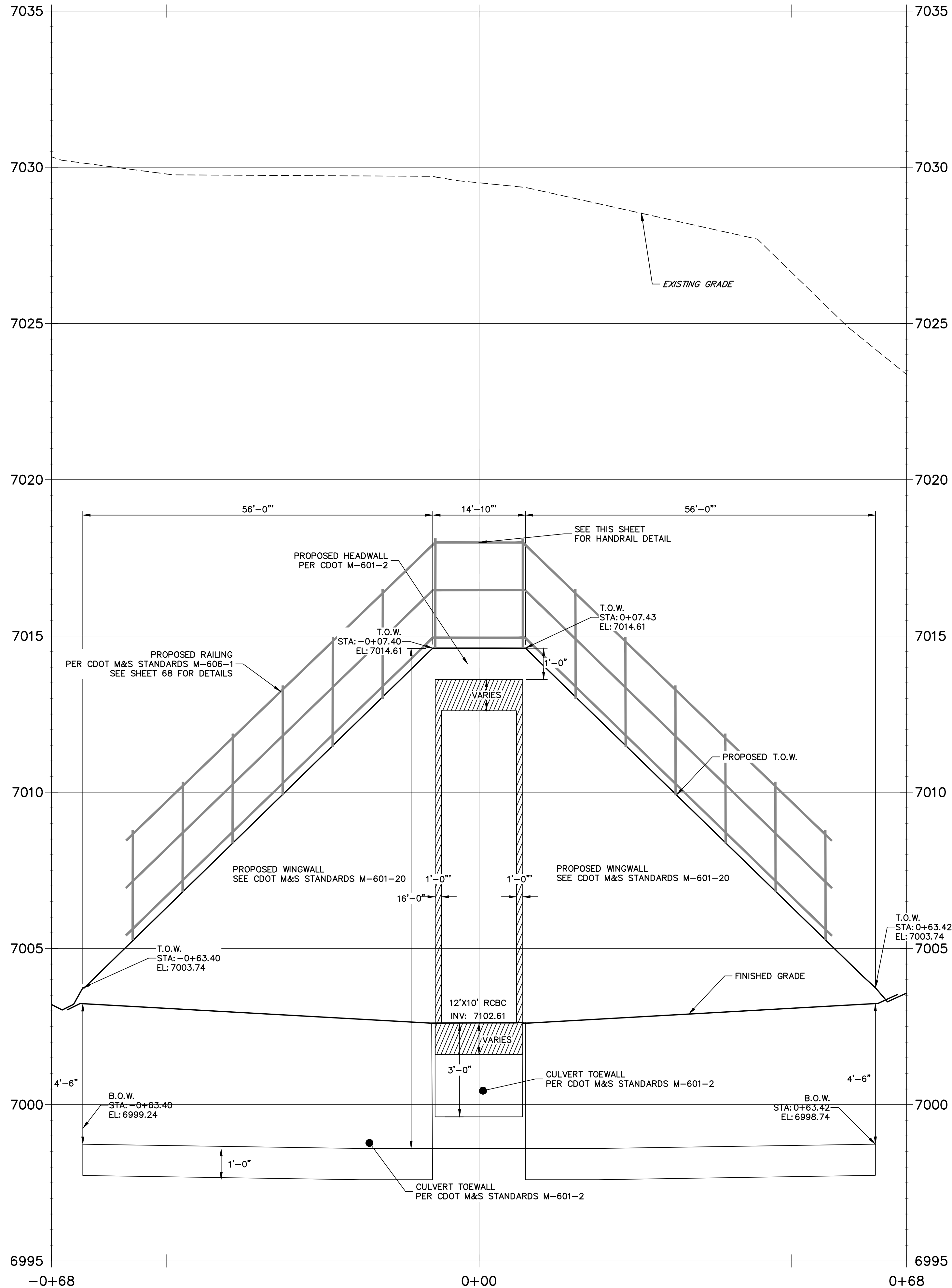
KEY MAP
SCALE: 1"=2000'

HW TOW PROFILE
STA 1+00.00 TO 2+40.08



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION. PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	J.R. ENGINEERING A Westman Company Centennial 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE
		No.	REVISION
H-SCALE VARIES 1"=2'	V-SCALE 1"=2'	DESIGNED BY DATE 9/1/22	DRAWN BY SCH
SAND CREEK RESTORATION STRUCTURAL DETAILS		DESIGNED BY	DRAWN BY
SHEET 65 OF 99 JOB NO. 25188.04		CHECKED BY	

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



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

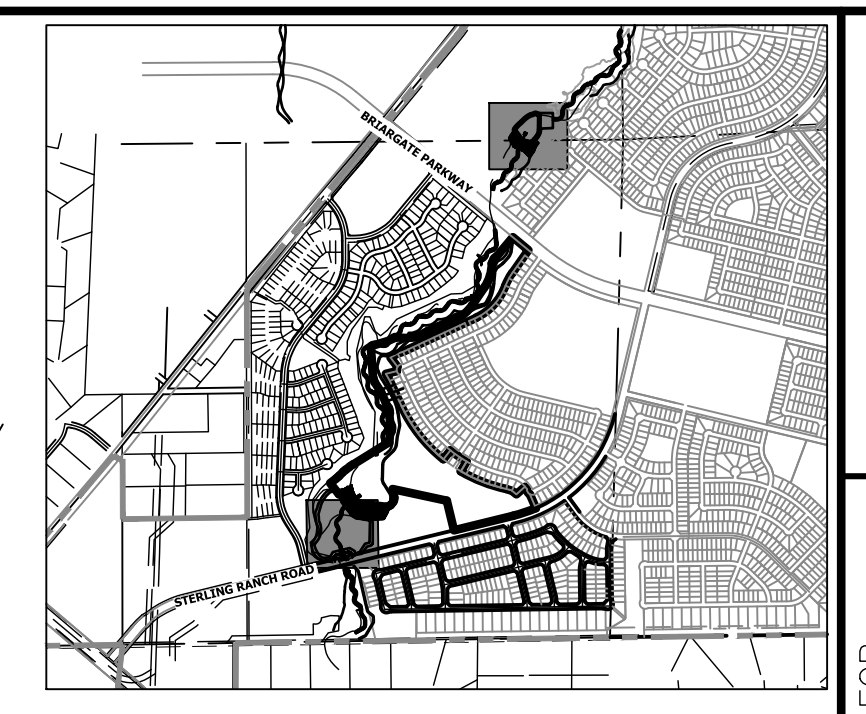
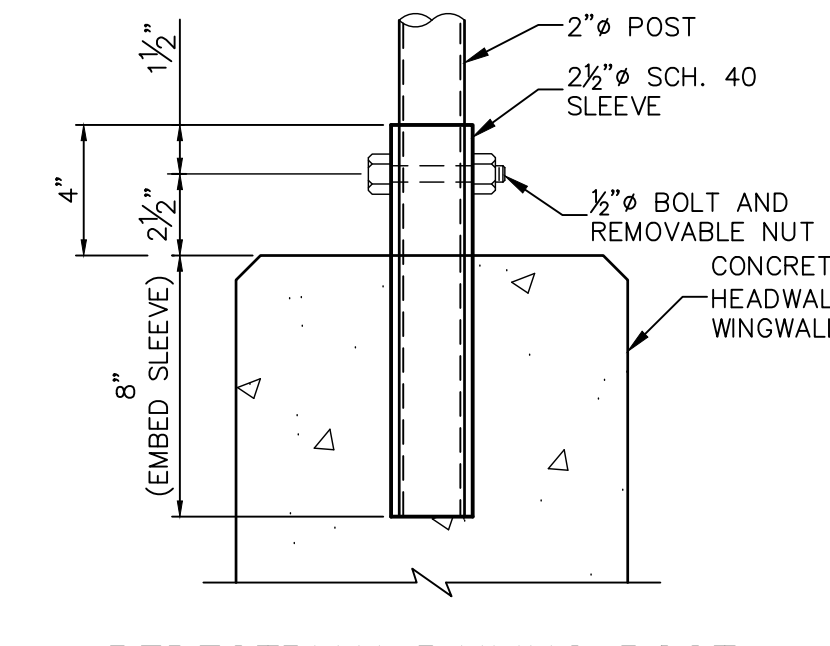
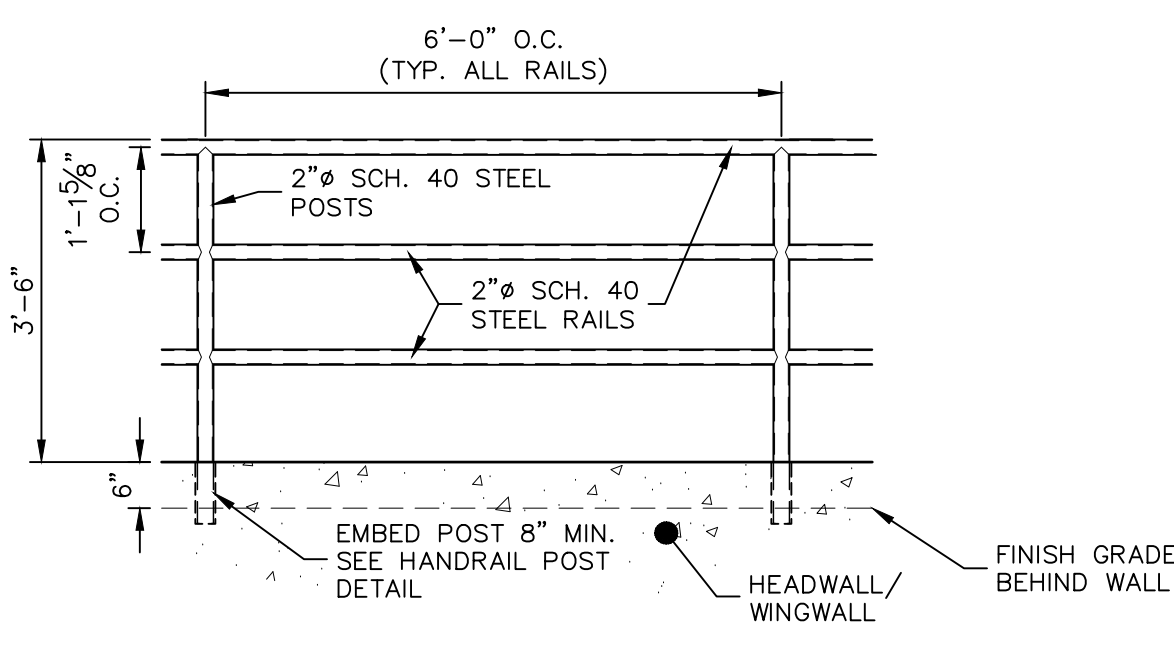
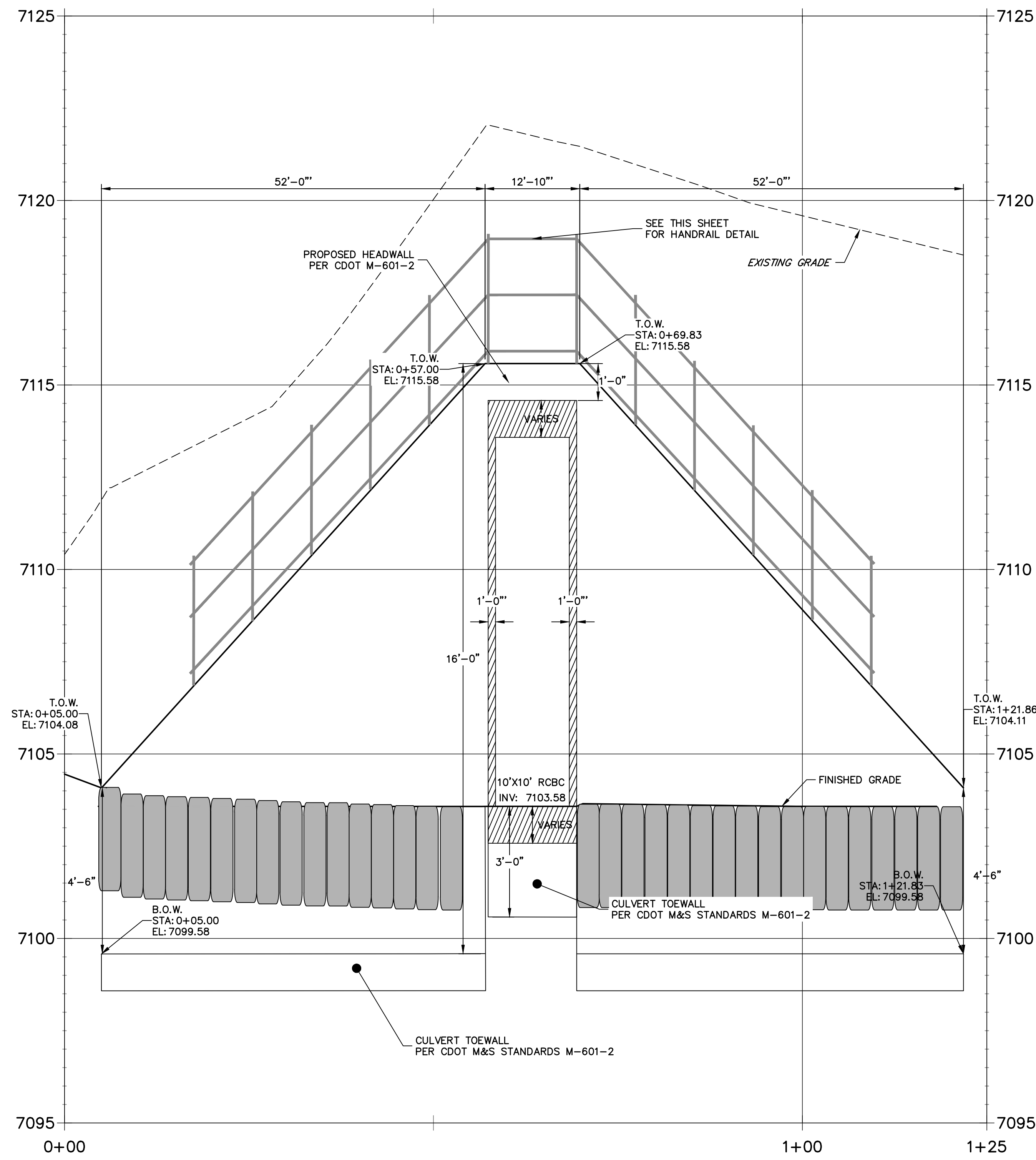
PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
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No.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=10'	1"=2'	9/1/22	DV	NEO	

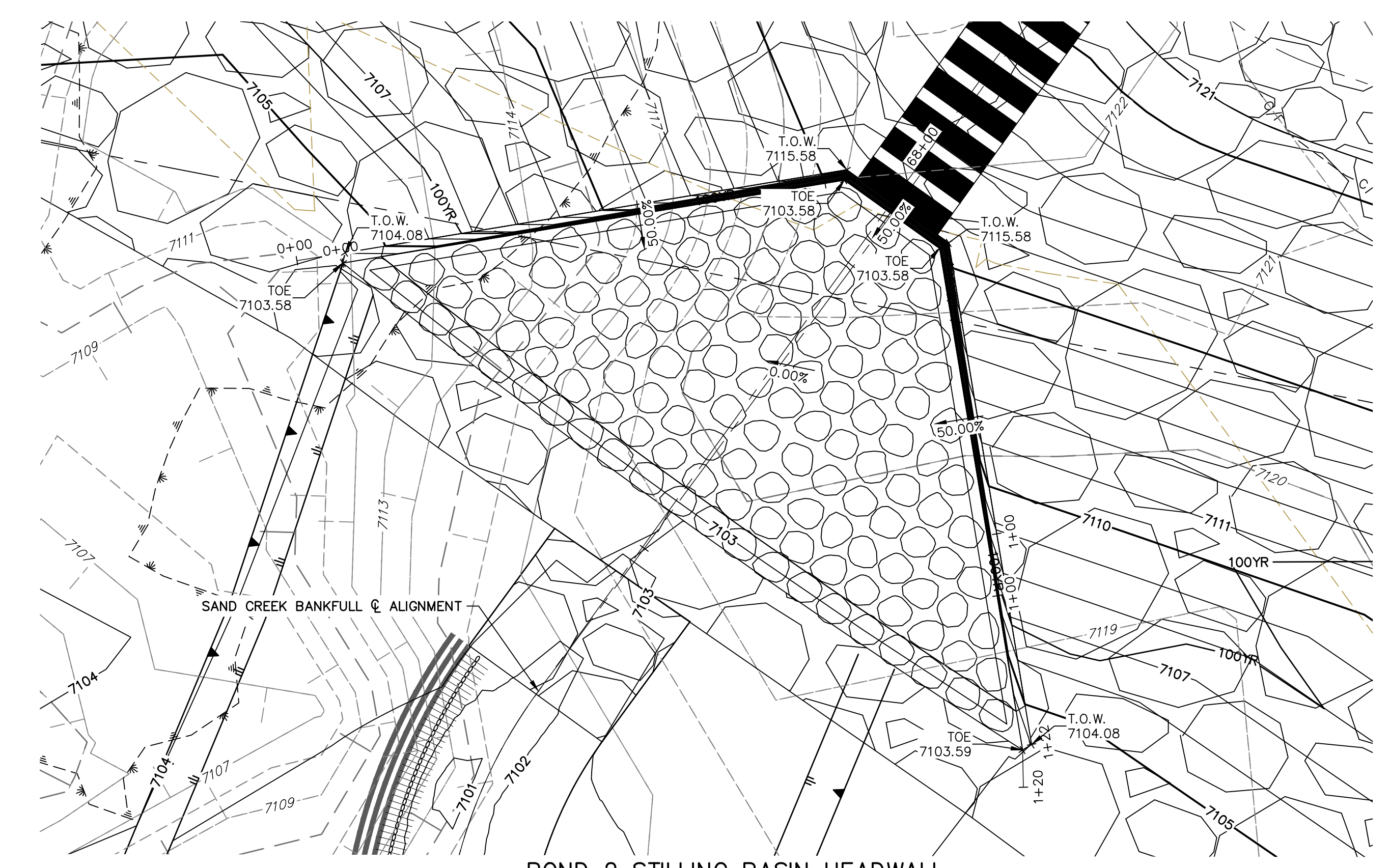
**POND 2 STILLING BASIN WINGWALL PROFILE
STA 0+00.00 TO 1+25.00**



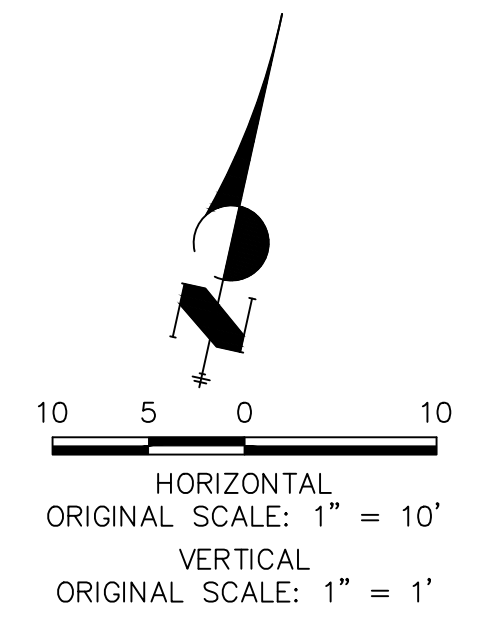
PEDESTRIAN RAILING DETAIL
SCALE: 1/2"=1'

PEDESTRIAN RAILING POST
SCALE: NTS

KEY MAP
SCALE: 1"=2000'



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



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COLORADO SPRINGS, CO 80903
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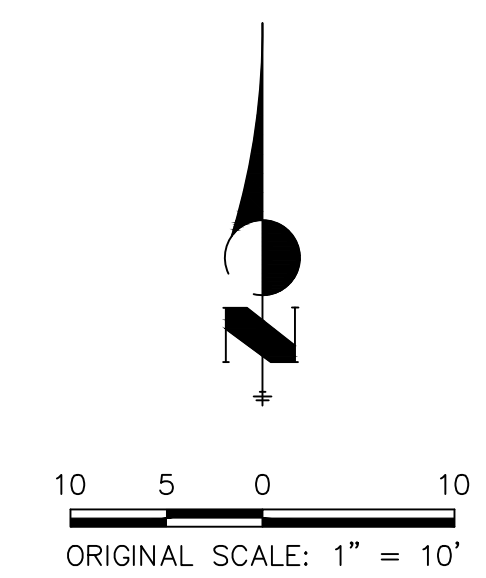
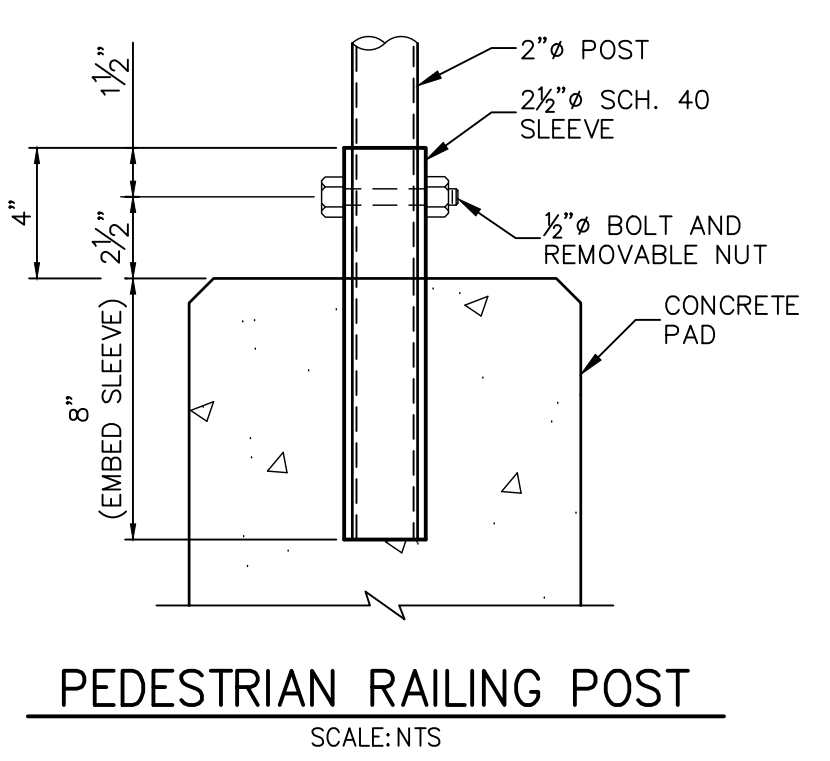
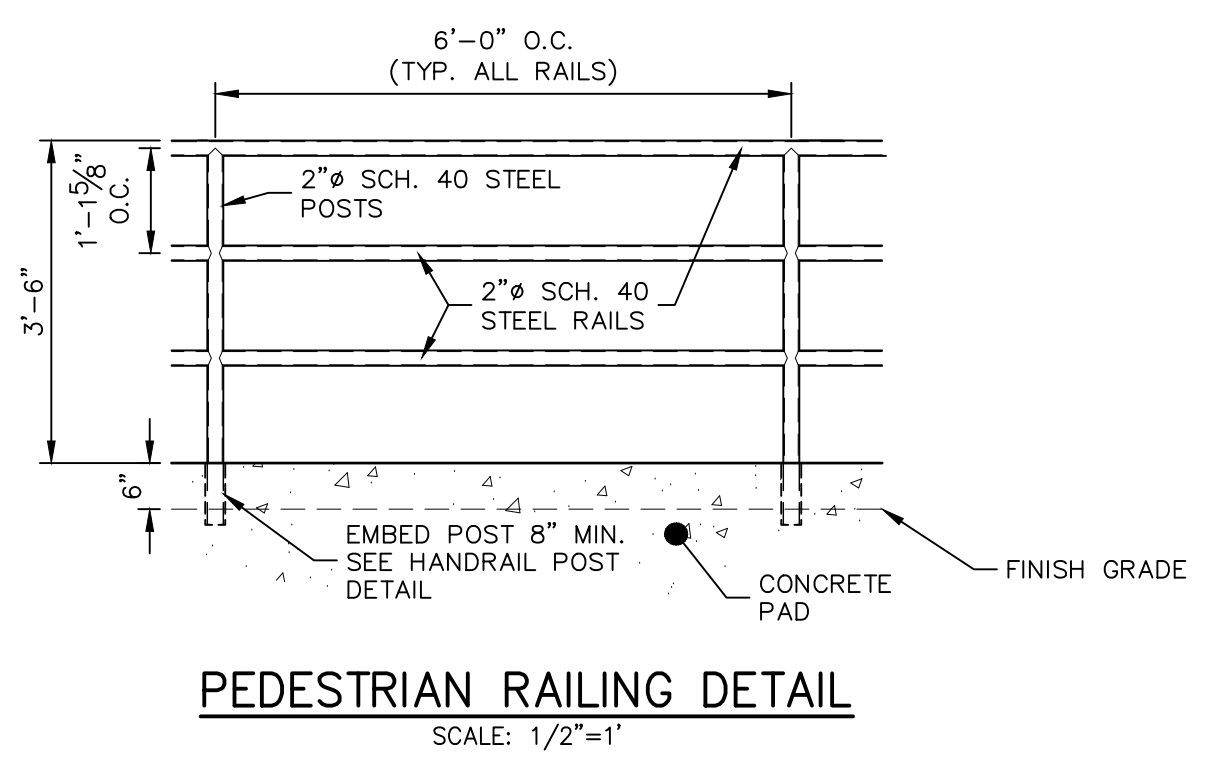
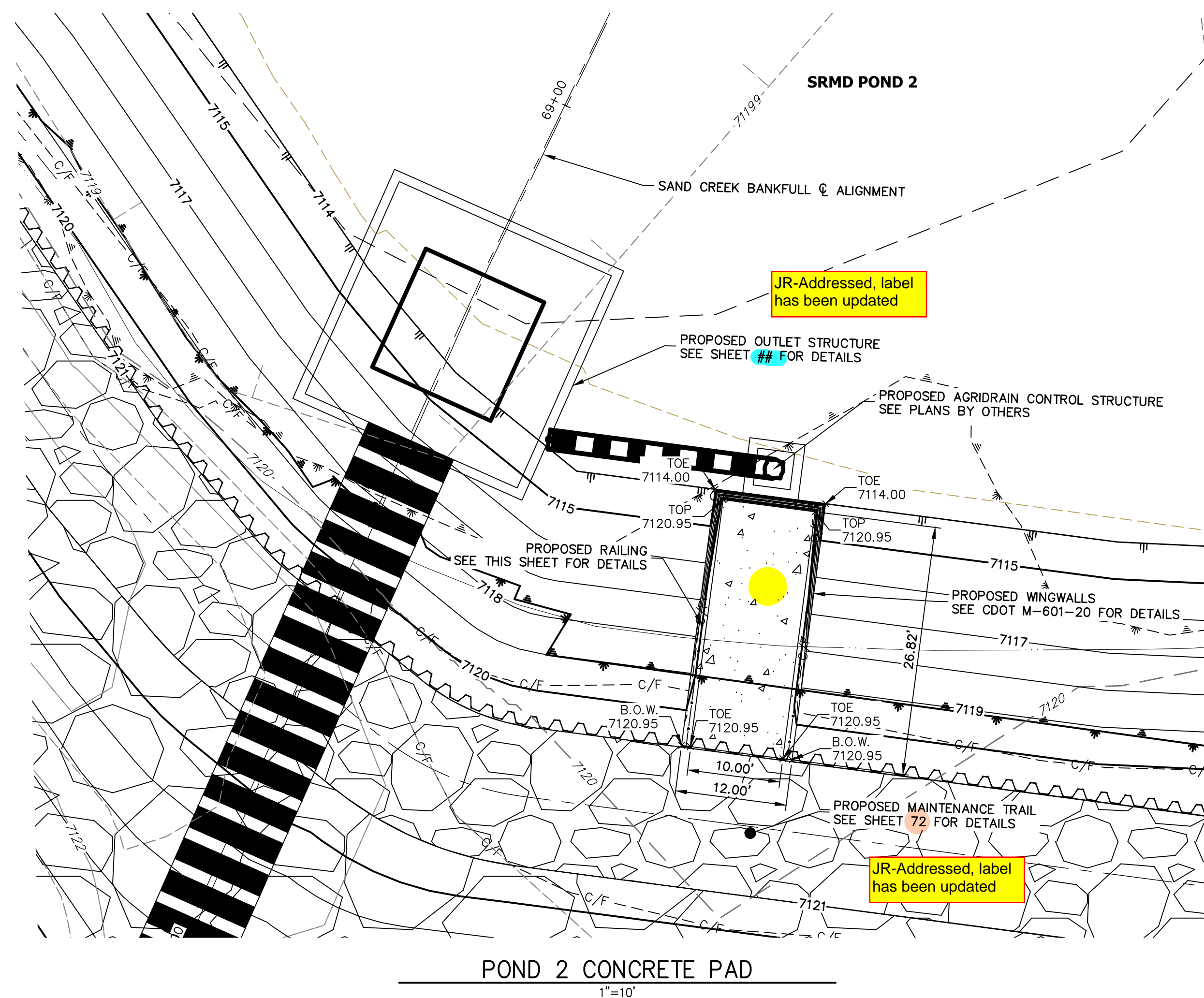
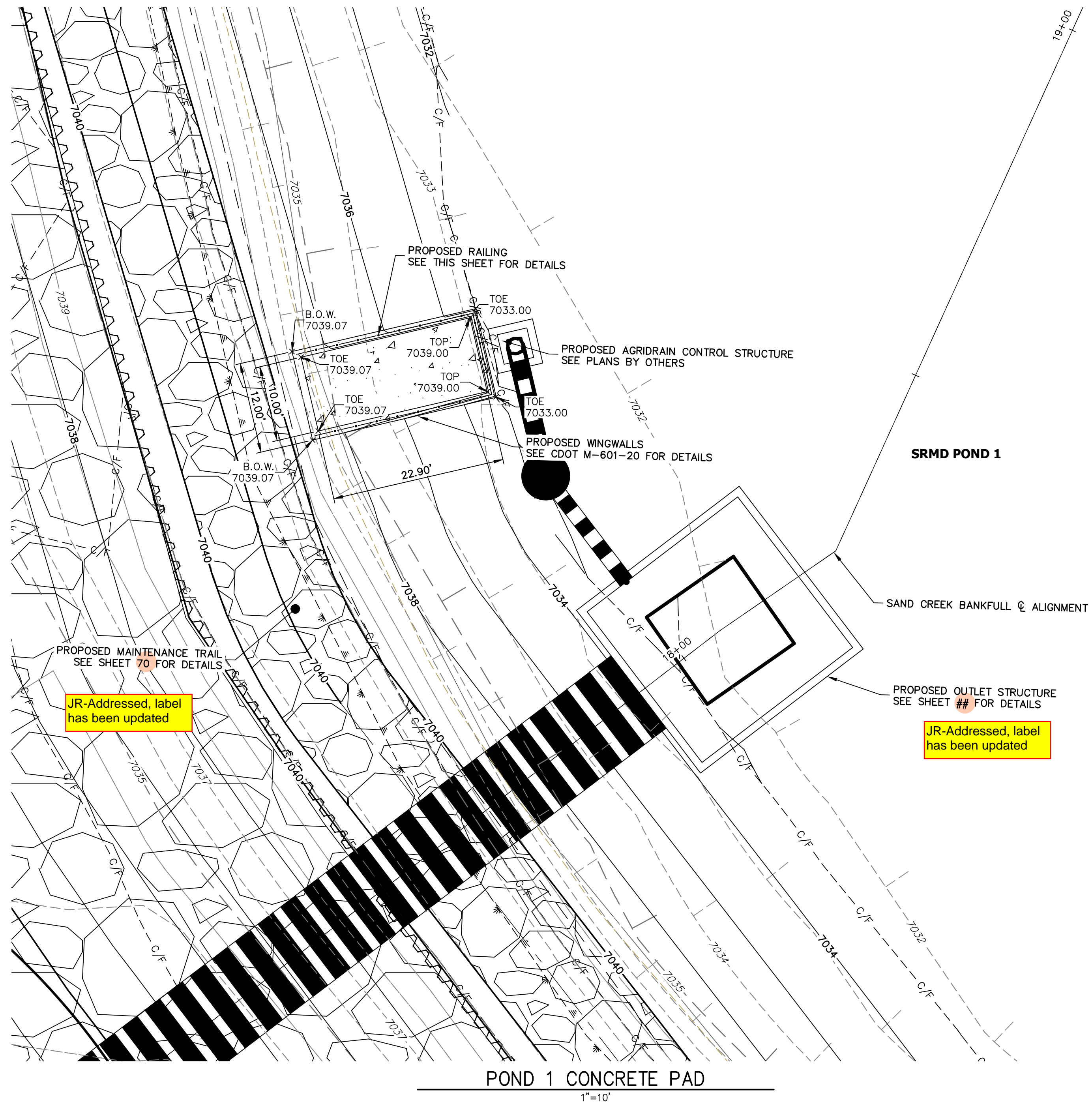
BY	DATE	No.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=10'	1"=1'	9/1/22	DV	SCH	

SAND CREEK RESTORATION

STRUCTURAL DETAILS

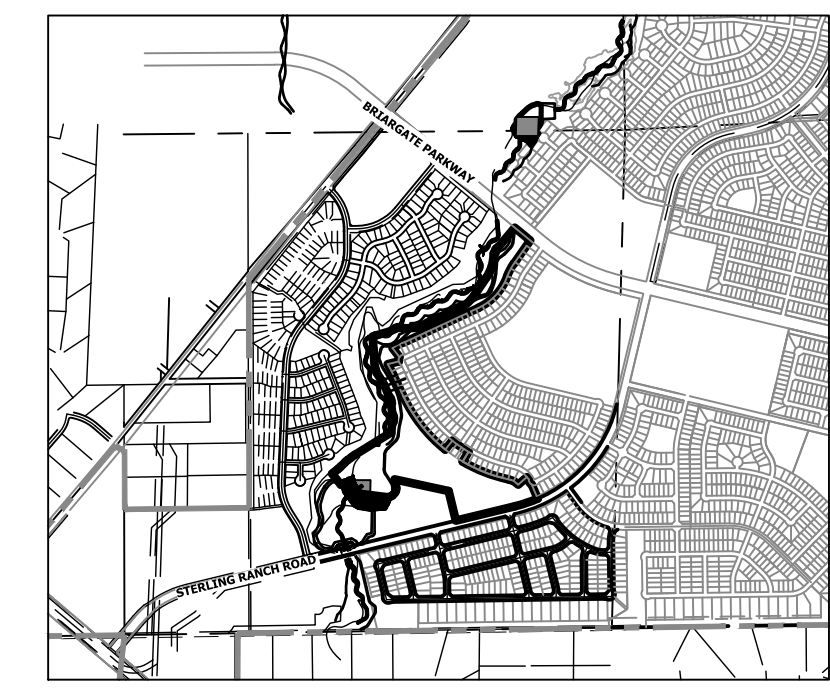




ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMLEY
COLORADO P.E. 30101
FOR AND ON BEHALF OF JR ENGINEERING



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

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

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

NO.	REVISION	BY	DATE

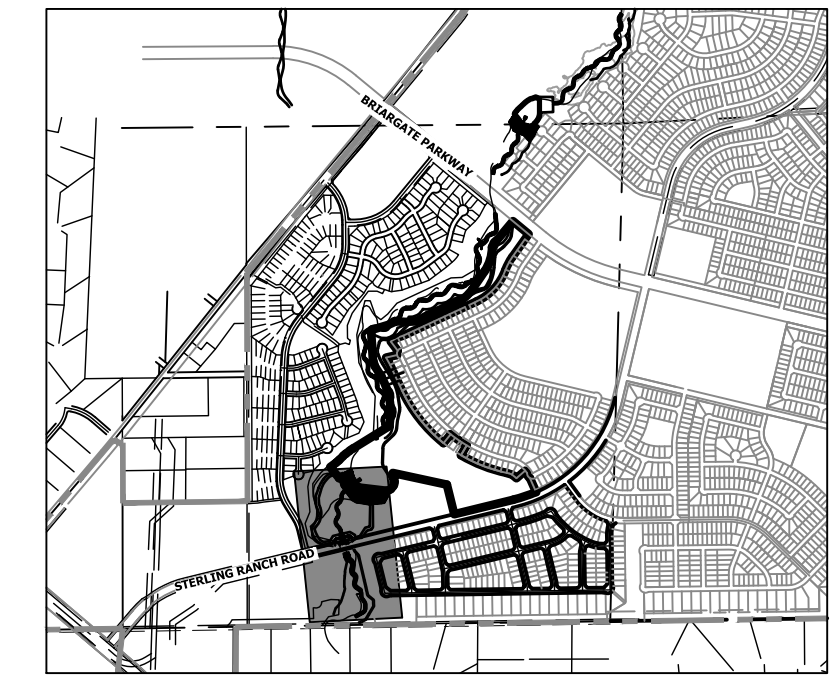
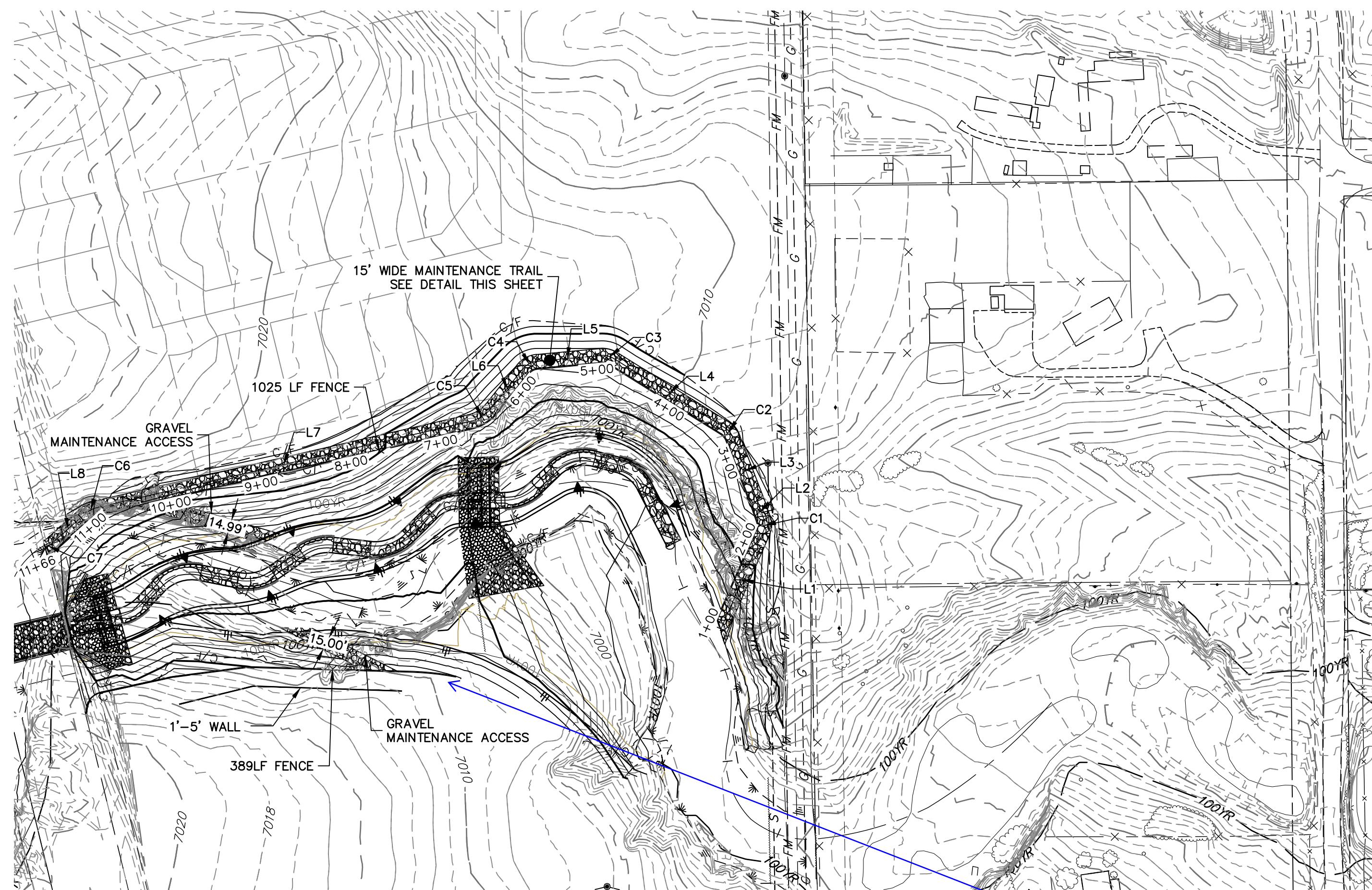
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
VARIES	N/A	9/1/22	DV	NEO	

SAND CREEK RESTORATION

STRUCTURAL DETAILS

SHEET 68 OF 99

JOB NO. 25188.04



KEY MAP
SCALE: 1"=2000'

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

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

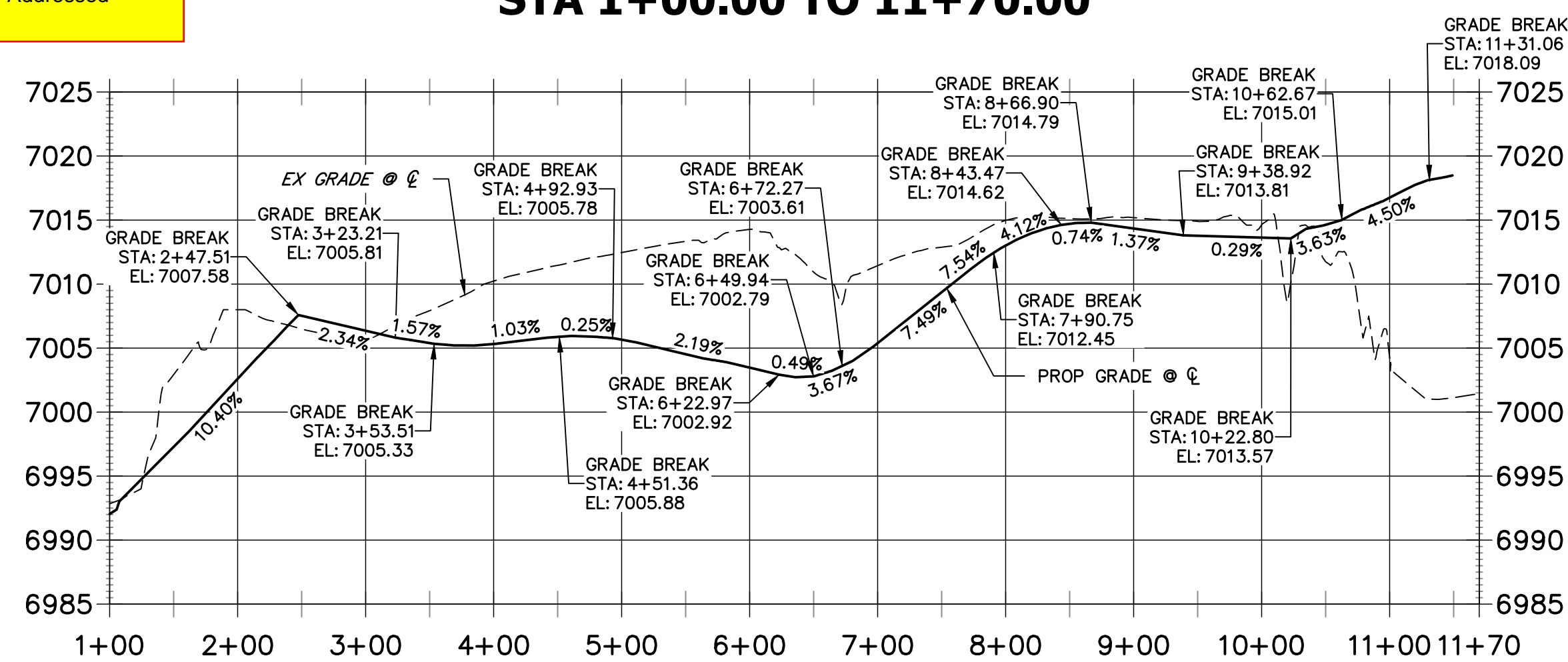
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SECOND CREEK REACH 1 EAST TRAIL & MAINTENANCE ACCESS
STA 1+00.00 TO 11+70.00

JR-Addressed

Provide plan for trail on west side

JR-Trail on the west side will be constructed with Sterling Ranch Filing 2



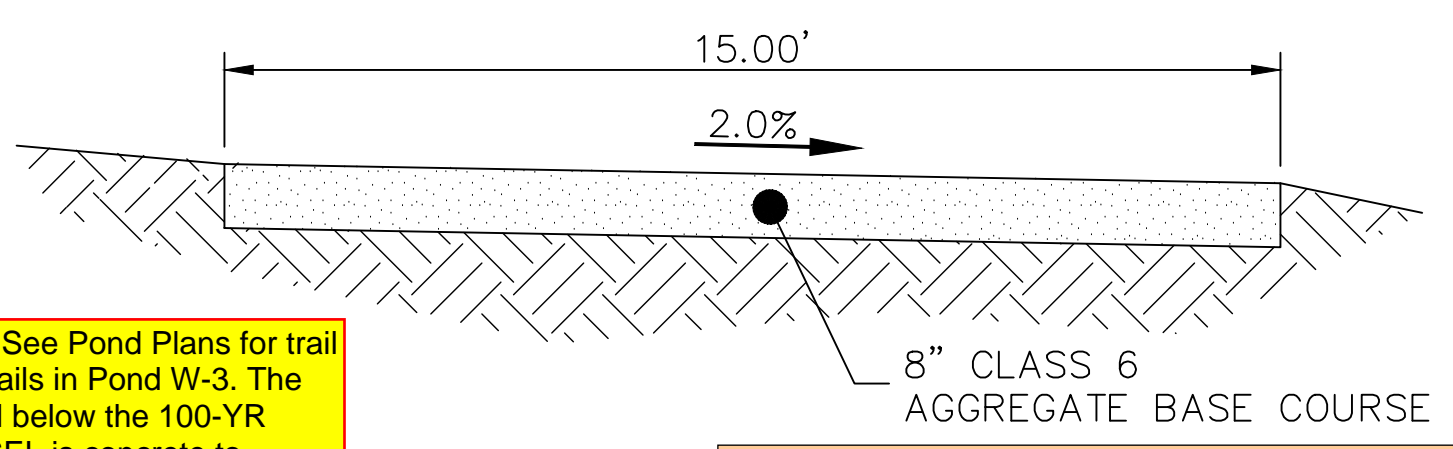
LINE	BEARING	DISTANCE
L1	S66°28'16"E	115.56'
L2	N70°37'22"E	18.85'
L3	N69°00'00"E	75.70'
L4	N31°56'59"E	141.86'
L5	N05°18'50"W	69.68'
L6	N51°23'41"W	53.67'
L7	N12°59'41"W	414.03'
L8	N41°42'42"W	48.15'

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

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

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

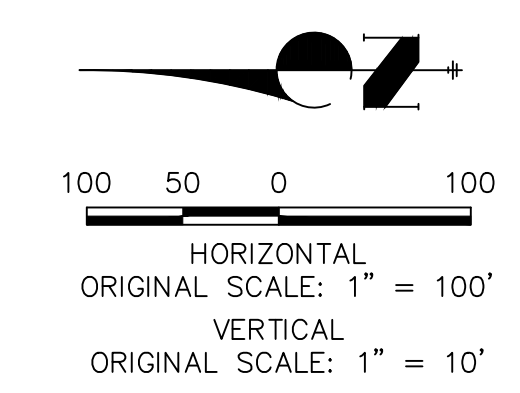
BASIS OF BEARINGS
THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N89°14'41"E, A DISTANCE OF 2,722.69 FEET.



JR-See Pond Plans for trail details in Pond W-3. The trail below the 100-YR WSEL is concrete to prevent migration of fines.

Consider using a base course that will minimize migration of fines when the pond is detaining water.

SAND CREEK MAINTENANCE TRAIL
N.T.S.



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

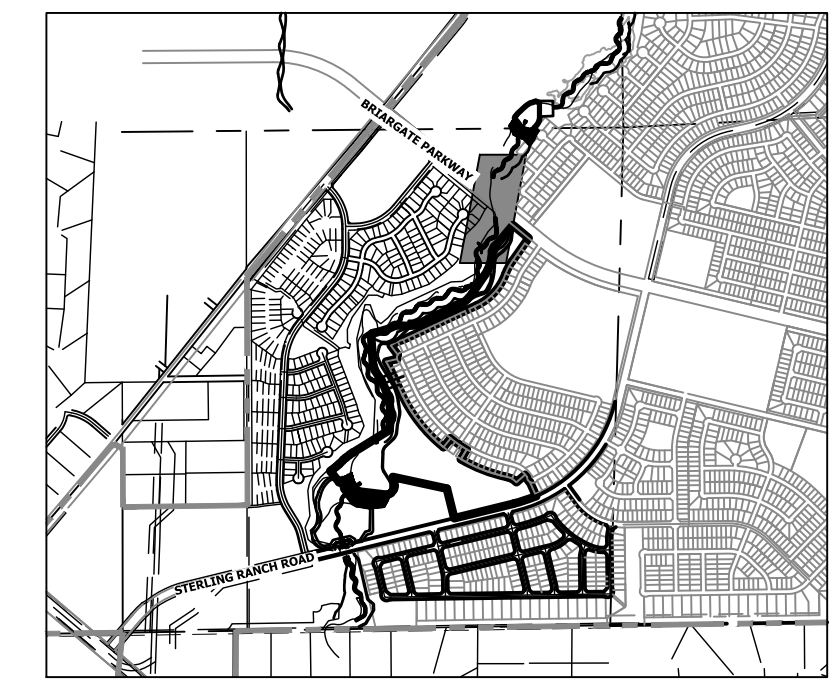
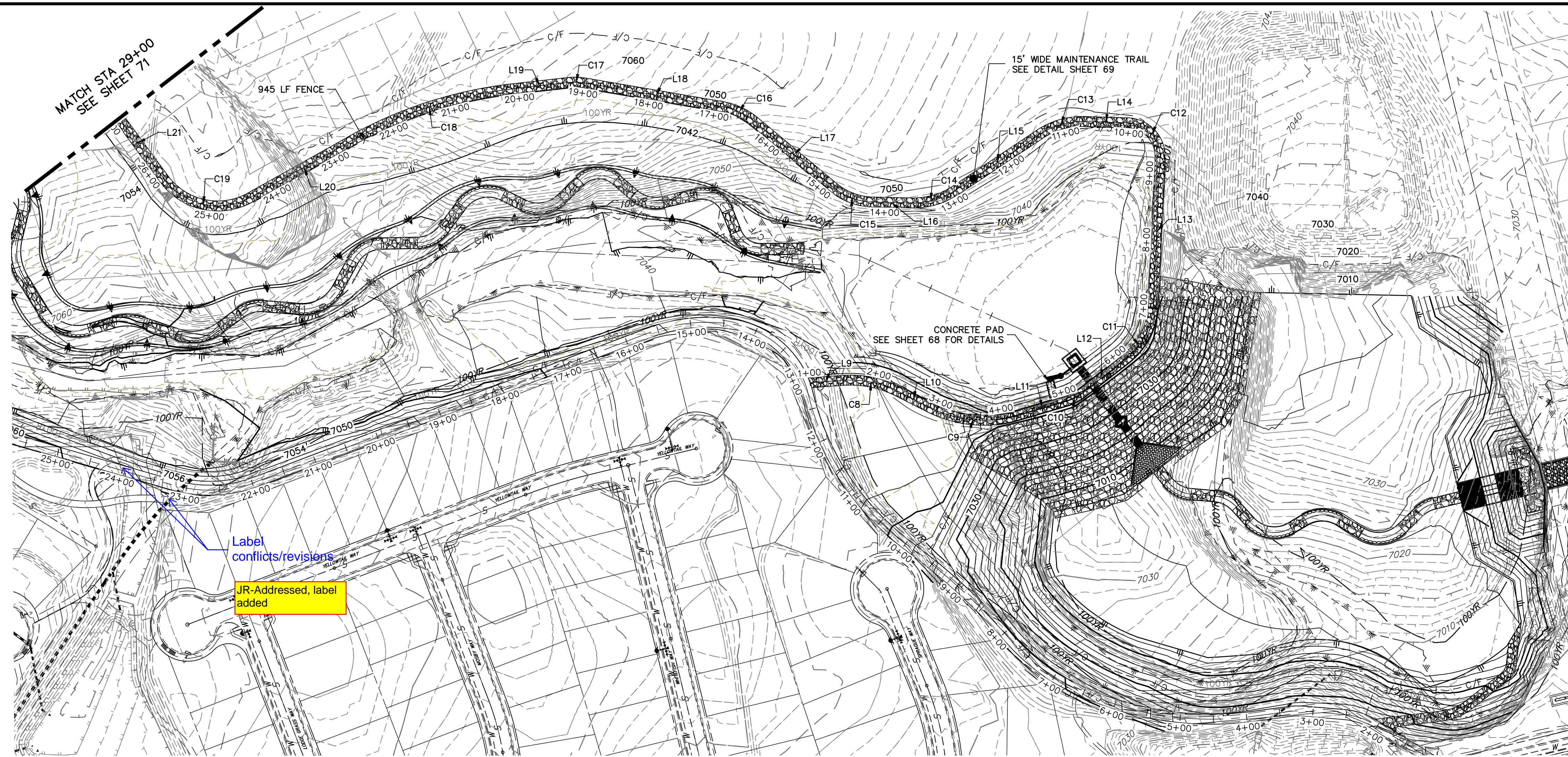
PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMLEY
COLORADO P.E. 30114
FOR AND ON BEHALF OF JR ENGINEERING, INC.

BY	DATE	No.	REVISION	H-SCALE		V-SCALE		DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				1"=100'	1"=50'	1"=50'	1"=10'				
								9/1/22	SCH	SCH	

SAND CREEK RESTORATION
MAINTENANCE ACCESS PLAN & PROFILE

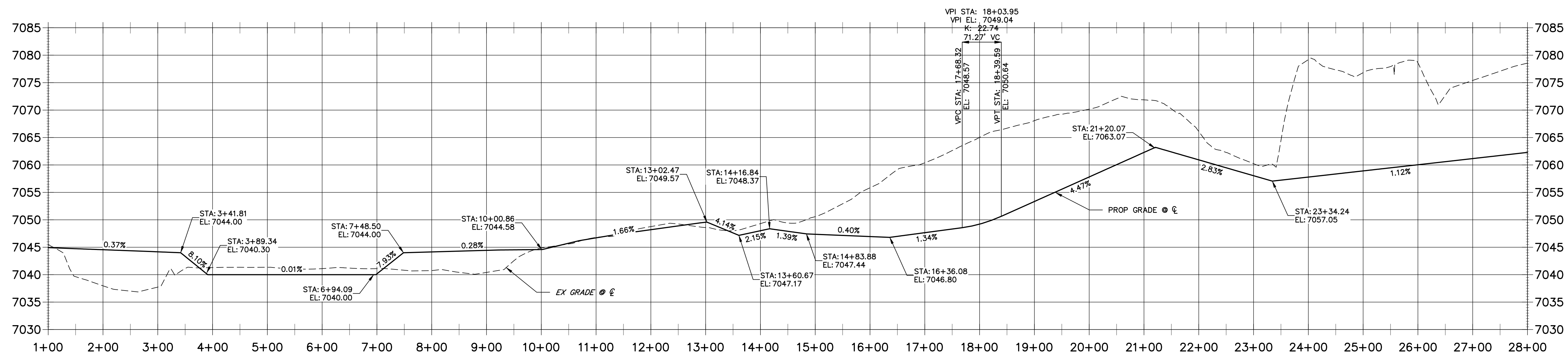
SHEET 69 OF 99
JOB NO. 25188.04



KEY MAP
SCALE: 1"=2000'

LINE TABLE			CURVE TABLE			
LINE	BEARING	DISTANCE	CURVE	DELTA	RADIUS	LENGTH
L9	S04°12'48"E	48.53'	C8	30°40'46"	162.24'	86.87'
L10	S26°54'20"W	51.80'	C9	43°19'59"	180.03'	136.16'
L11	S16°26'06"E	77.36'	C10	21°20'41"	65.00'	24.21'
L12	S37°46'47"E	82.58'	C11	49°35'43"	110.00'	95.22'
L13	S87°22'29"E	221.11'	C12	90°50'11"	50.00'	79.27'
L14	N01°47'20"E	64.75'	C13	35°26'06"	115.00'	71.12'
L15	N33°38'47"W	150.85'	C14	34°54'33"	115.00'	70.07'
L16	N01°15'46"E	58.58'	C15	38°33'29"	95.00'	63.93'
L17	N39°49'15"E	153.65'	C16	29°14'48"	107.92'	55.09'
L18	N09°44'33"E	206.08'	C17	16°14'16"	105.00'	29.76'
L19	N06°29'43"W	81.42'	C18	22°46'14"	645.00'	256.34'
L20	N29°15'57"W	173.11'	C19	82°52'35"	100.00'	144.65'
L21	N53°36'38"E	113.38'	C20	18°33'53"	235.00'	76.14'
L22	N35°02'46"E	136.97'	C21	17°32'07"	140.00'	42.85'
L23	N52°34'53"E	233.05'	C22	12°54'44"	90.00'	20.28'

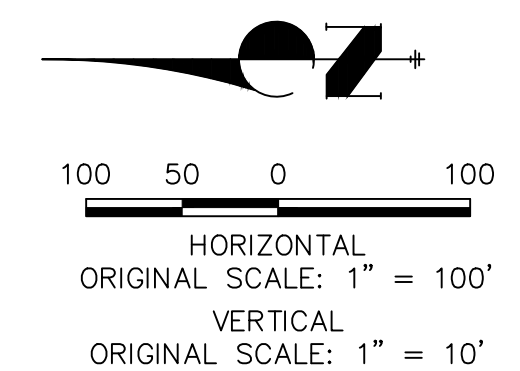
**EAST MAINTENANCE ACCESS TRAIL PROFILE REACH 2
STA 1+00.00 TO 28+00.00**



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

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.

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



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

MIKE A. BRAMLEY
COLORADO P.E. # 30100
FOR AND ON BEHALF OF J.R. ENGINEERING, LLC

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

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

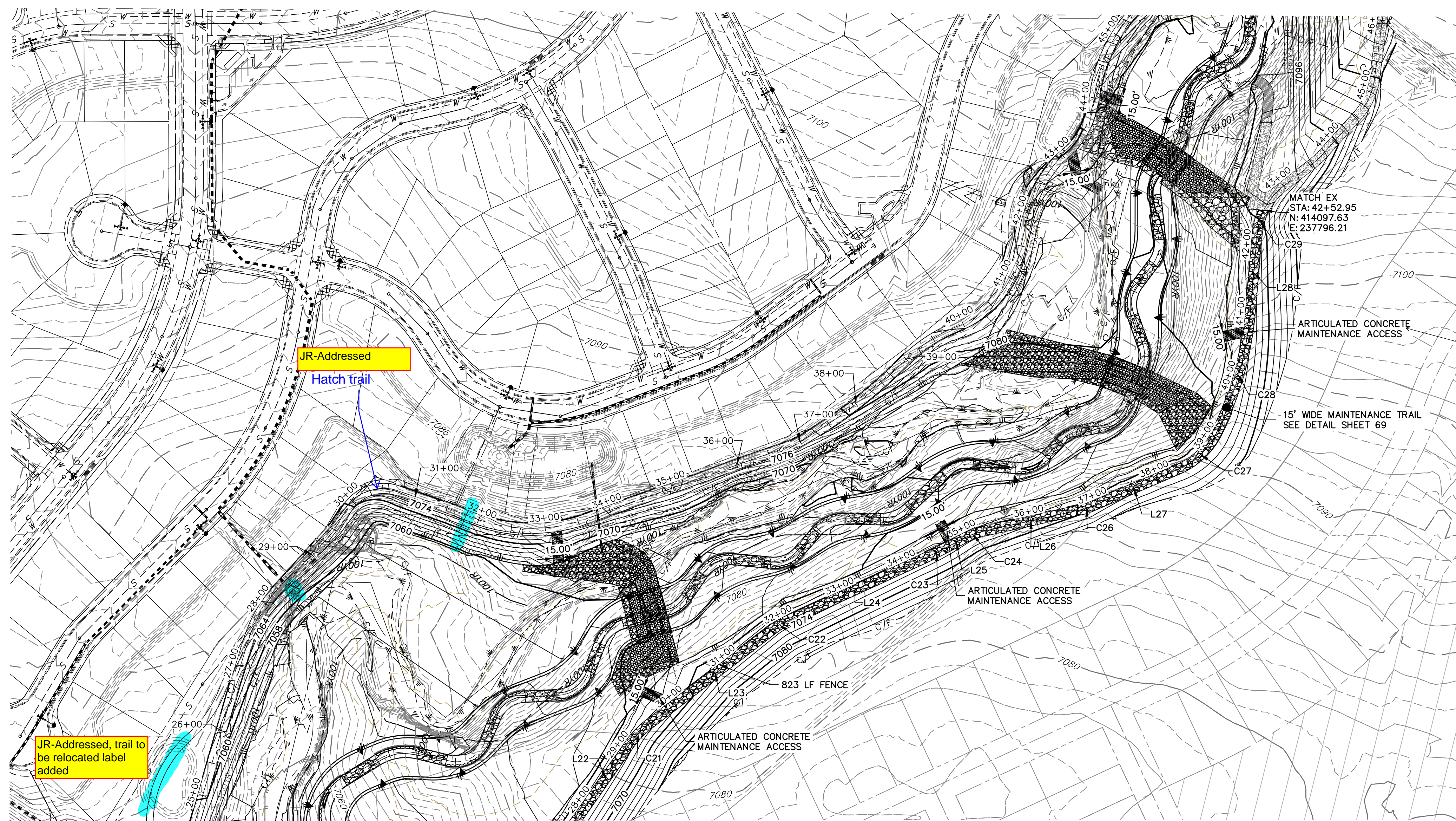
BY	DATE	NO.	REVISION

H-SCALE 1"=100'
V-SCALE 1"=10'
DATE 9/1/22
DESIGNED BY SCH
DRAWN BY SCH
CHECKED BY

SAND CREEK RESTORATION
MAINTENANCE ACCESS PLAN & PROFILE

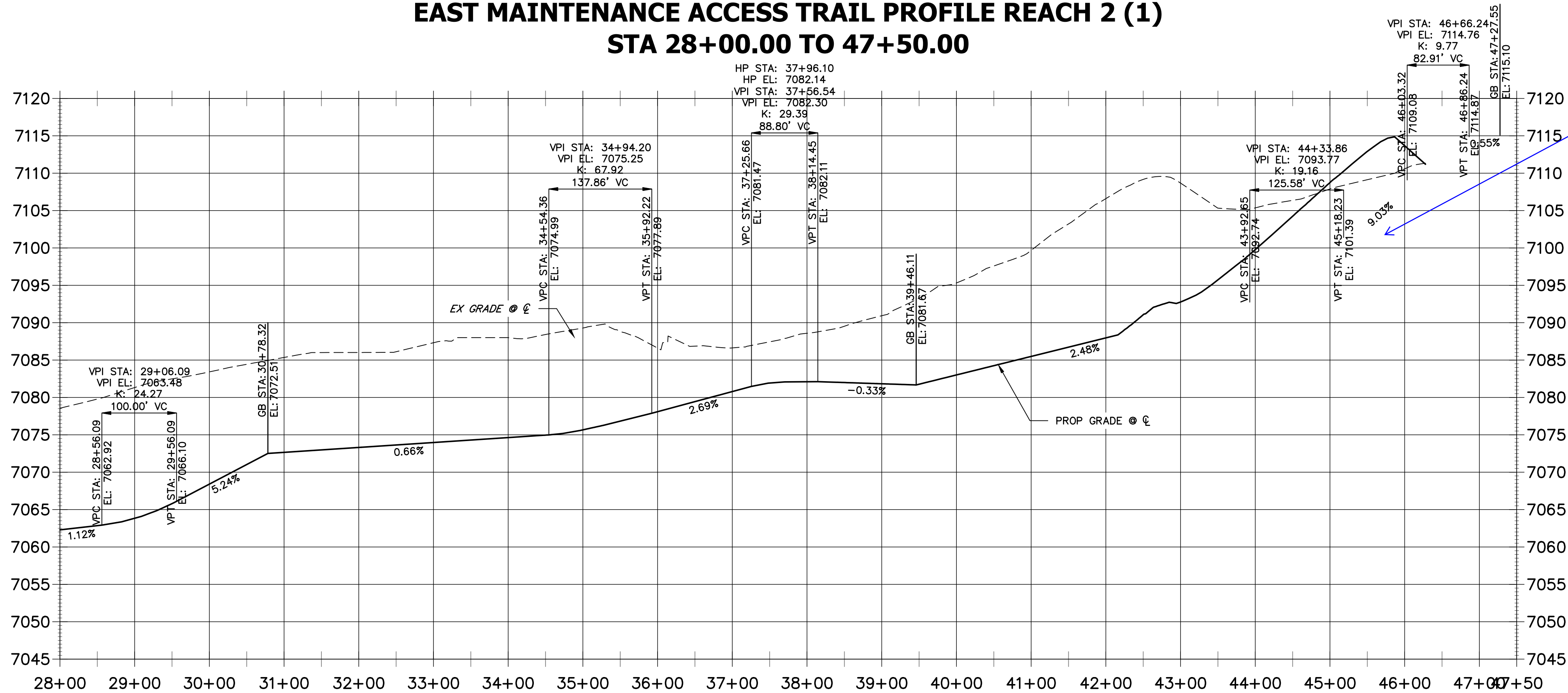
SHEET 70 OF 99
JOB NO. 25188.04

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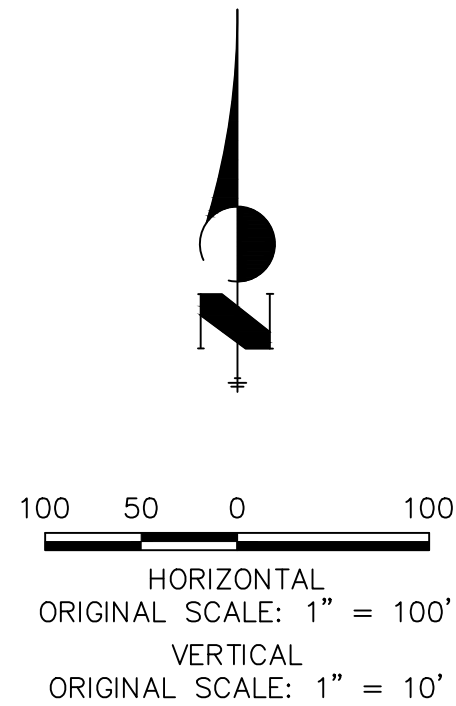
MATCH STA 29+00
SEE SHEET 70

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

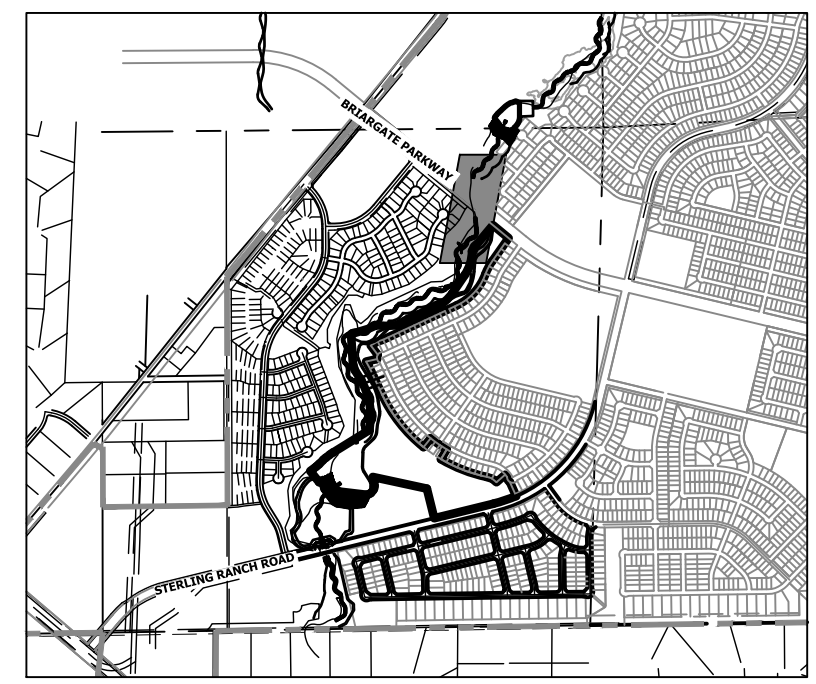


Adjust labels

JR-UPDATED



Know what's below.
Call before you dig.



KEY MAP
SCALE: 1"=2000'

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

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

NOTES.

1. STEEPEST ALLOWABLE GRADE IS 12%.
2. MAINTENANCE ACCESS TRAILS WITH SLOPES GREATER THAN 10% ARTICULATED CONCRETE SHALL BE USED.

BENCHMARK

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

BASIS OF BEARINGS

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

ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL.

**PRELIMINARY
NOT FOR
CONSTRUCTION**

MIKE A. BRAMLEY
COLORADO P.E. 30080
FOR AND ON BEHALF OF JR ENGINEERING

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

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

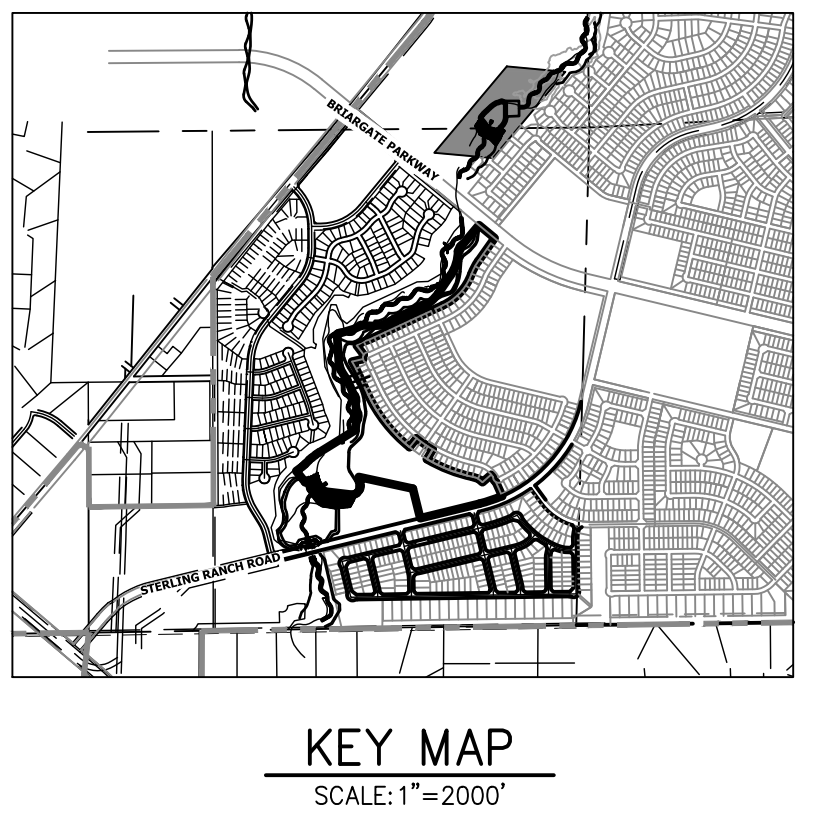
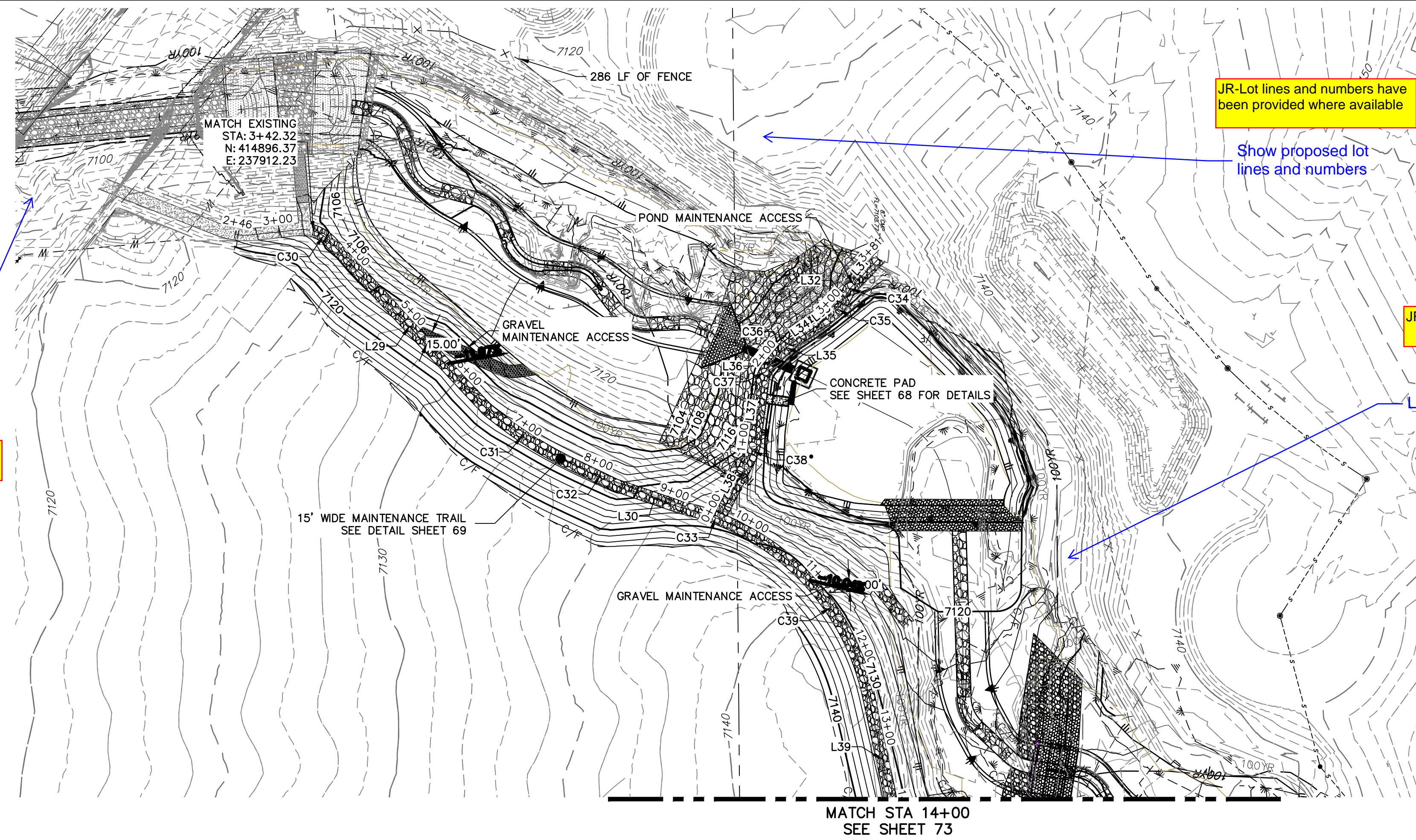
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Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	DATE

H-SCALE 1"=100'
V-SCALE 1"=10'
DATE 9/1/22
DESIGNED BY SCH
DRAWN BY SCH
CHECKED BY

**SAND CREEK RESTORATION
MAINTENANCE ACCESS PLAN
& PROFILE**

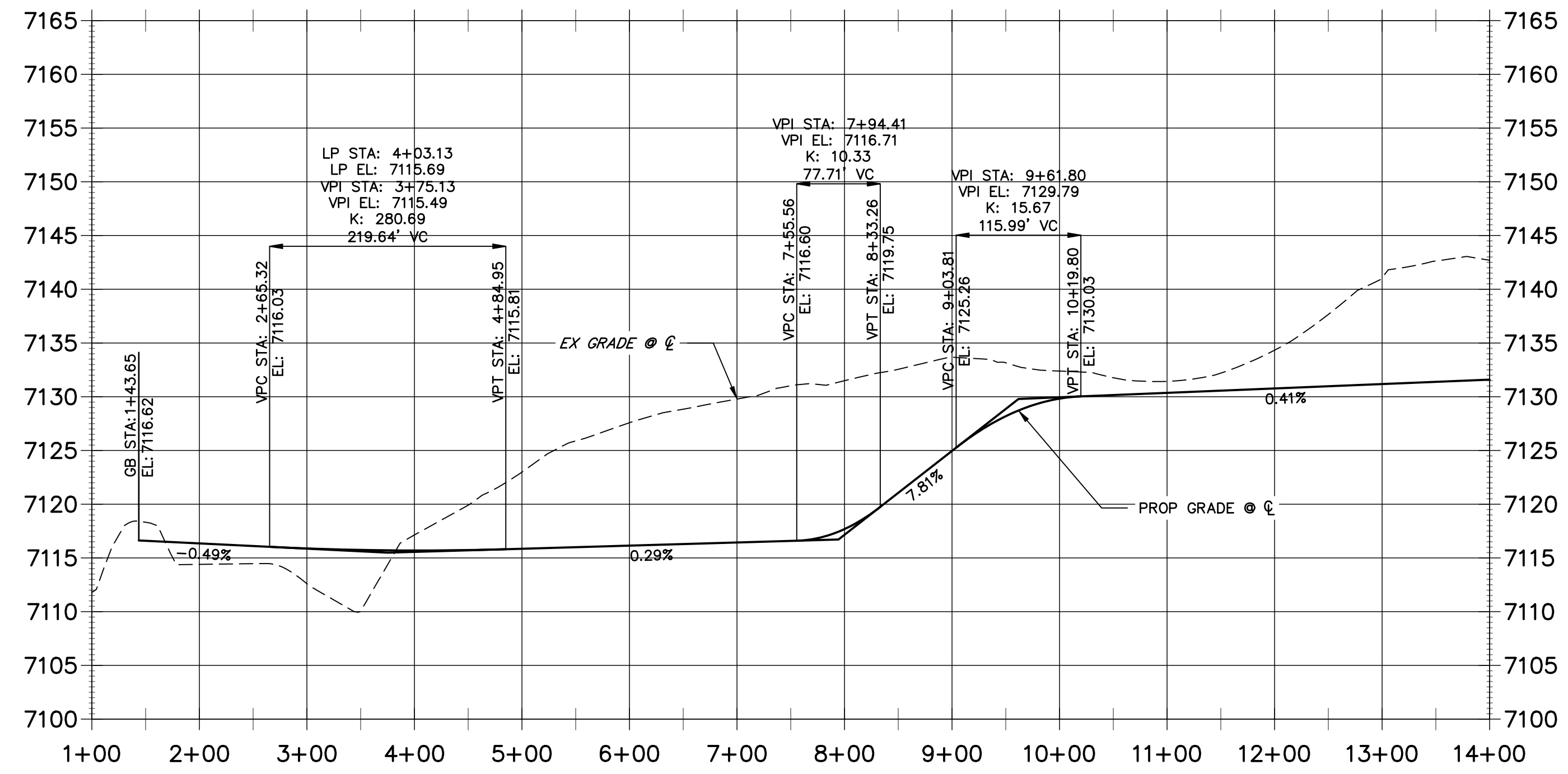
SHEET 71 OF 99
JOB NO. 25188.04



LINE	BEARING	DISTANCE
L29	N46°58'58"E	276.46'
L30	N21°40'00"E	47.11'
L31	N46°08'35"W	46.35'
L32	N59°51'43"W	20.33'
L33	N38°17'54"W	24.47'
L34	N34°31'49"W	39.44'
L35	N39°58'37"W	16.86'
L36	N50°52'33"W	18.31'
L37	N82°29'28"W	77.57'
L38	N63°11'00"W	73.46'
L39	N77°47'23"E	159.50'

CURVE	DELTA	RADIUS	LENGTH
C30	31°36'00"	50.28'	27.73'
C31	12°30'01"	500.00'	109.08'
C32	2°06'20"	2751.68'	101.12'
C33	18°26'25"	299.93'	96.53'
C34	13°43'08"	27.50'	6.58'
C35	21°33'49"	32.50'	12.23'
C36	10°53'57"	31.50'	5.99'
C37	31°39'29"	31.50'	17.40'
C38	17°03'05"	72.50'	21.58'
C39	45°06'36"	300.85'	236.86'

**EAST MAINTENANCE ACCESS TRAIL PROFILE REACH 3
STA 1+00.00 TO 14+00.00**

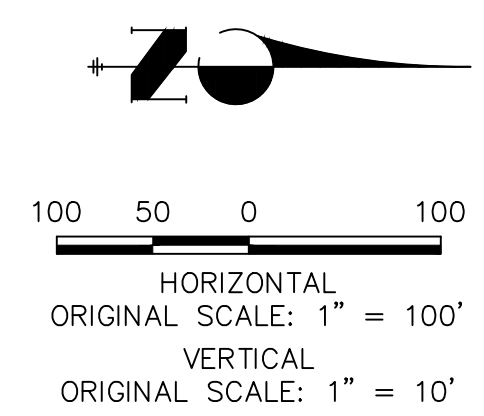
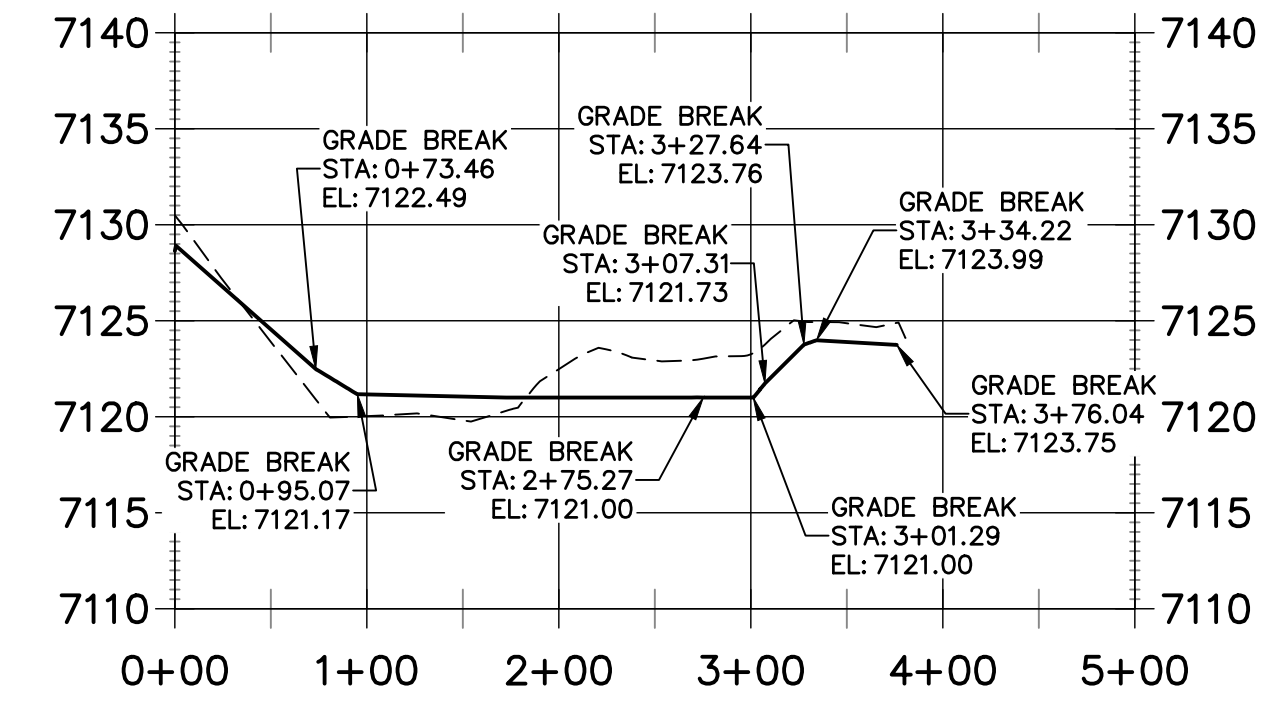


- BENCHMARK**
- THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411416.273
EASTING = 235167.071
ELEVATION = 7023.42
 - THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANNEE RANCHEROS SUBDIVISION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

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

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

**SECOND CREEK REGIONAL TRAIL & MAINTENANCE ACCESS TRAIL
PROFILE REACH 3 (2)
STA 0+00.00 TO 5+00.00**



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMBLE
COLORADO P.E. # 31258
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 USES DESIGNATED BY WRITTEN AUTHORIZATION.

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

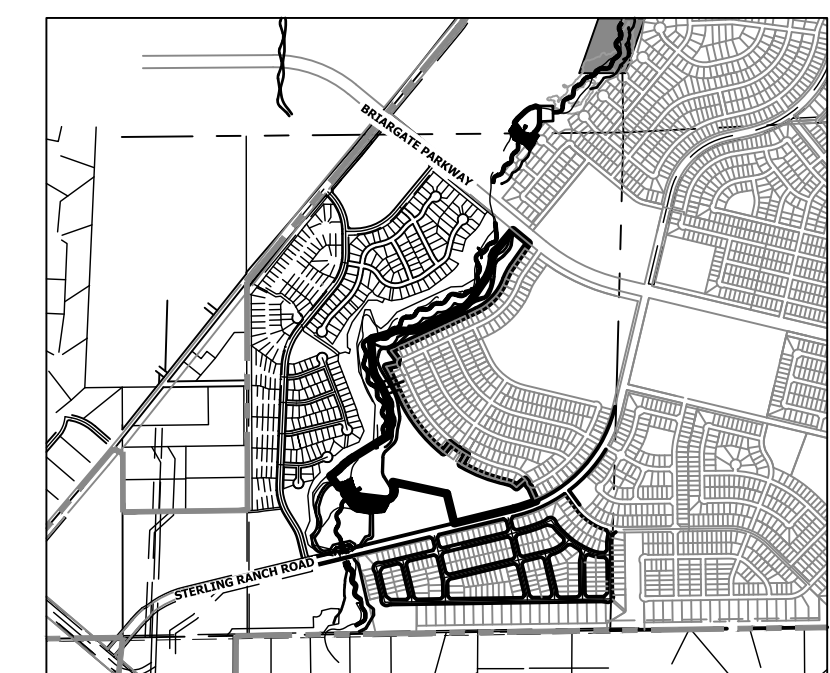
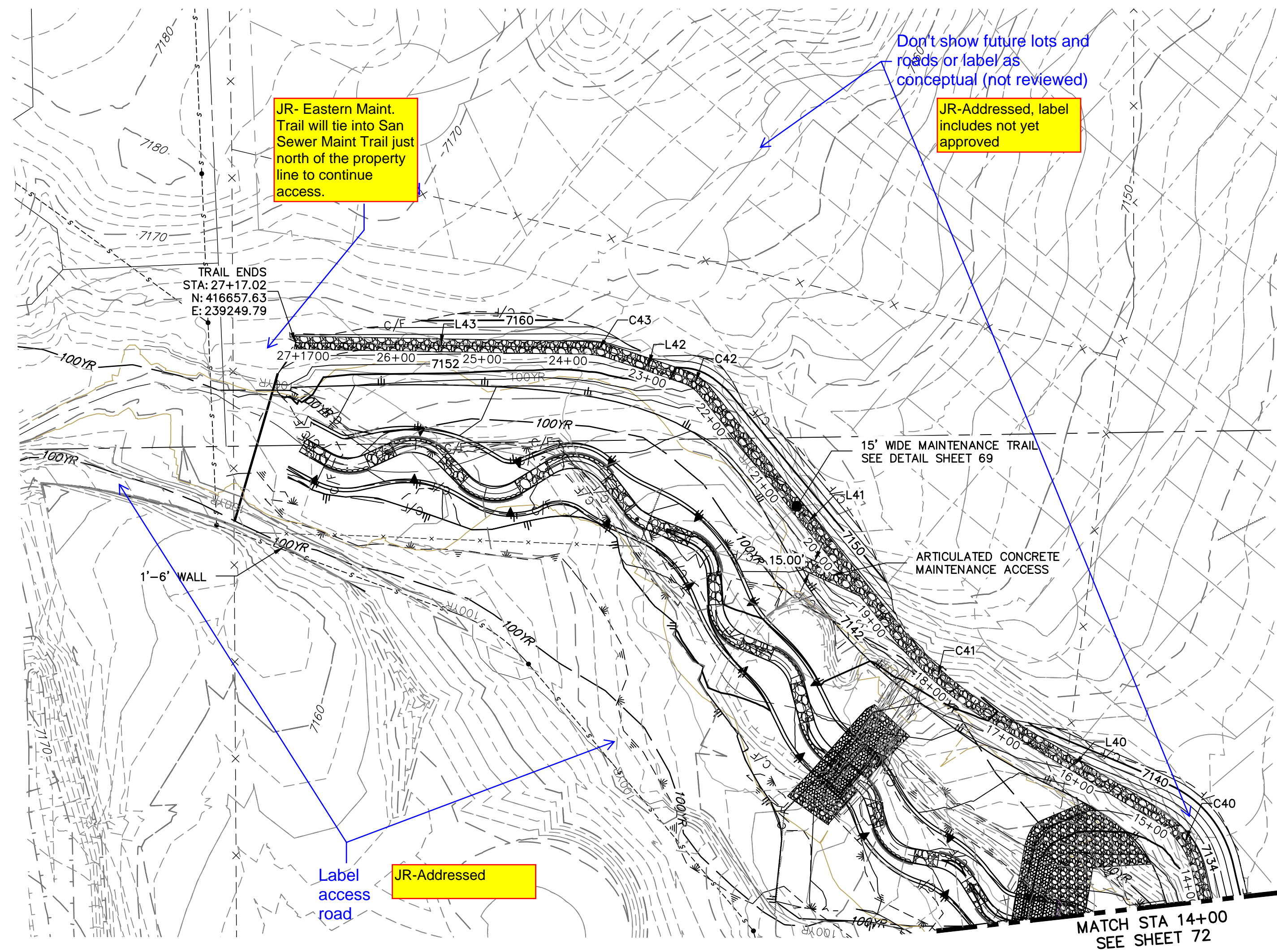
J.R. ENGINEERING
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Central 303-740-9888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

BY DATE

No.	REVISION	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1		1"=100'	1"=10'	9/1/22	SCH	SCH	

SAND CREEK RESTORATION
MAINTENANCE ACCESS PLAN & PROFILE

SHEET 72 OF 99
JOB NO. 25188.04



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

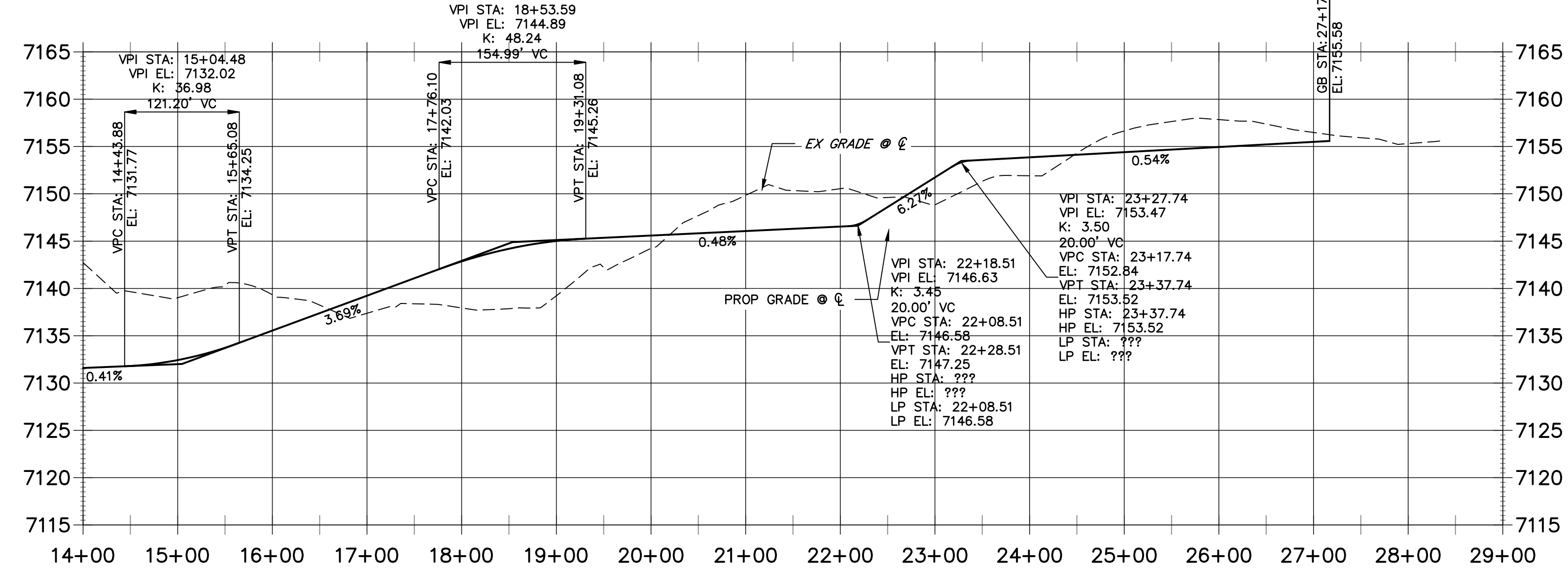
PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 2ND FLOOR
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
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J.R. ENGINEERING
 A Western Company
 Centennial 300-740-9888 • Colorado Springs 719-583-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

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

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

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



- BENCHMARK**
1. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
 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 "S 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "S 11624", SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.69 FEET.

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

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

ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL

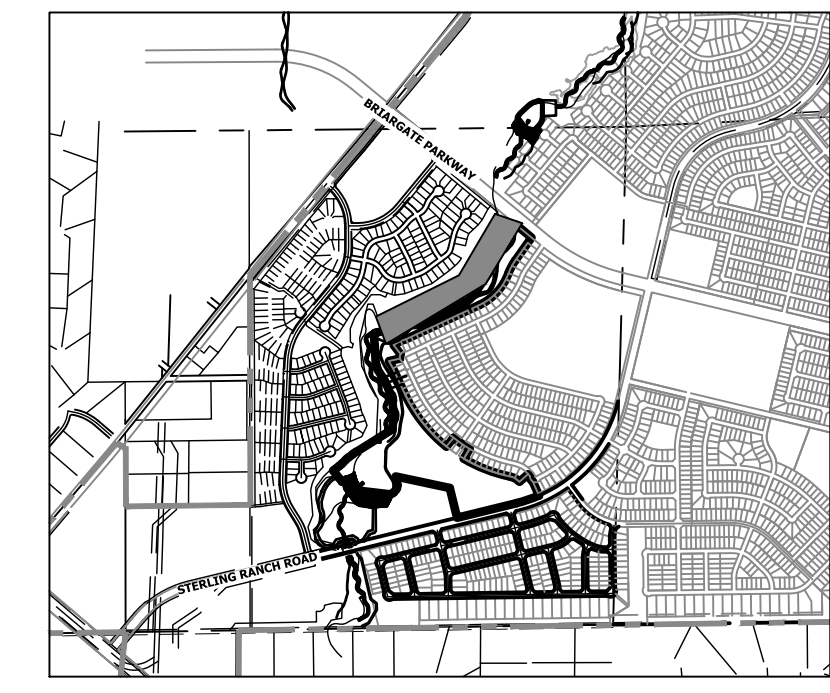
PRELIMINARY NOT FOR CONSTRUCTION

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

BY	DATE	No.	REVISION	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				1"=100'	1"=10'	9/1/22	SCH	SCH	SCH

SAND CREEK RESTORATION
MAINTENANCE ACCESS PLAN & PROFILE

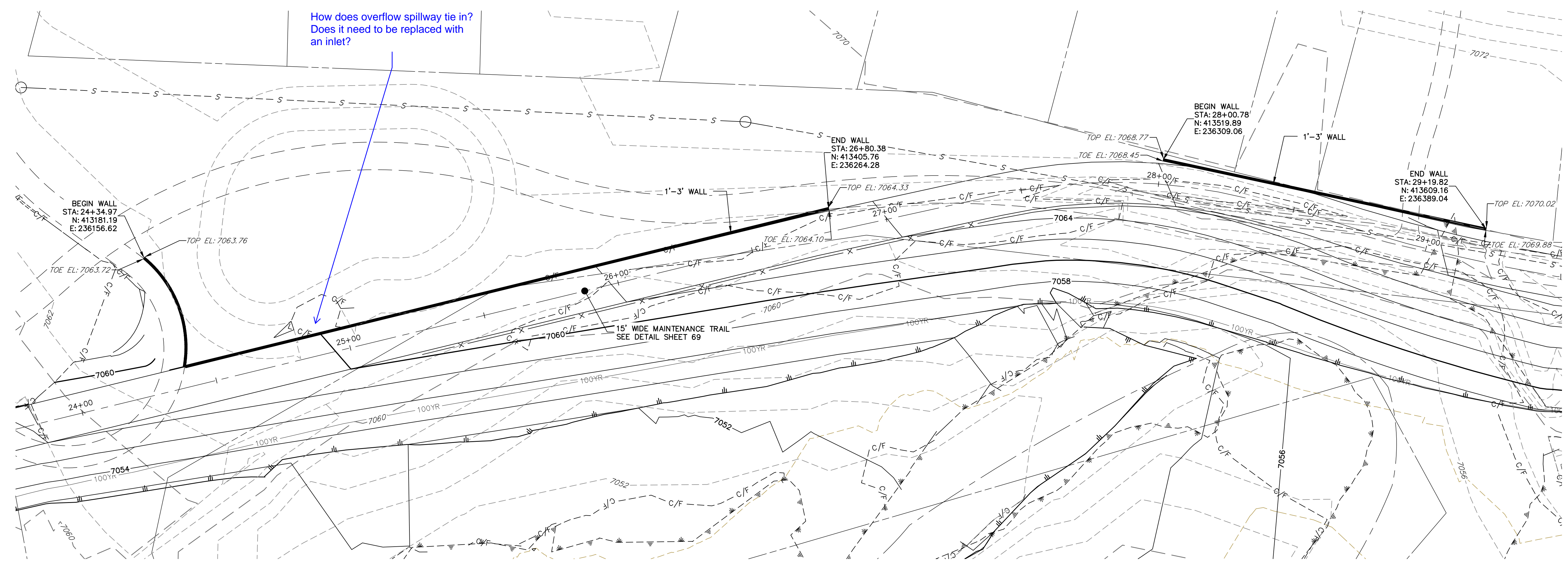
SHEET 73 OF 99
 JOB NO. 25188.04



KEY MAP
SCALE: 1"=2000'

JR-Primary outlet is a pipe that discharges into the existing 60" RCP south of the Sand Filter. The walls have been revised to tie into the sand filter berm and allow the spillway to overflow across the maintenance trail into Sand Creek.

How does overflow spillway tie in? Does it need to be replaced with an inlet?



MAINTENANCE TRAIL WALLS #1 & #2

BENCHMARK

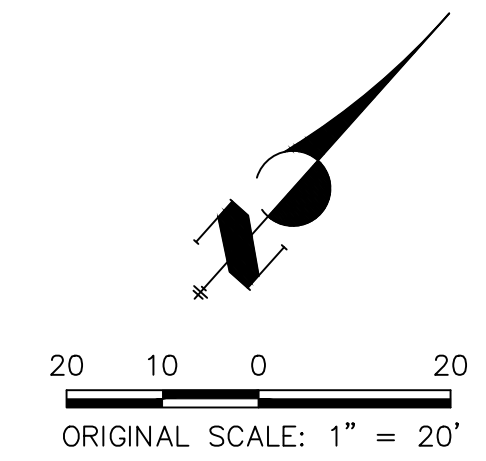
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "5853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411416.273
EASTING = 235167.071
ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION
NORTHING = 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

NOTES:

1. STEEPEST ALLOWABLE GRADE IS 12%.

BASIS OF BEARINGS

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



ENGINEER'S STATEMENT

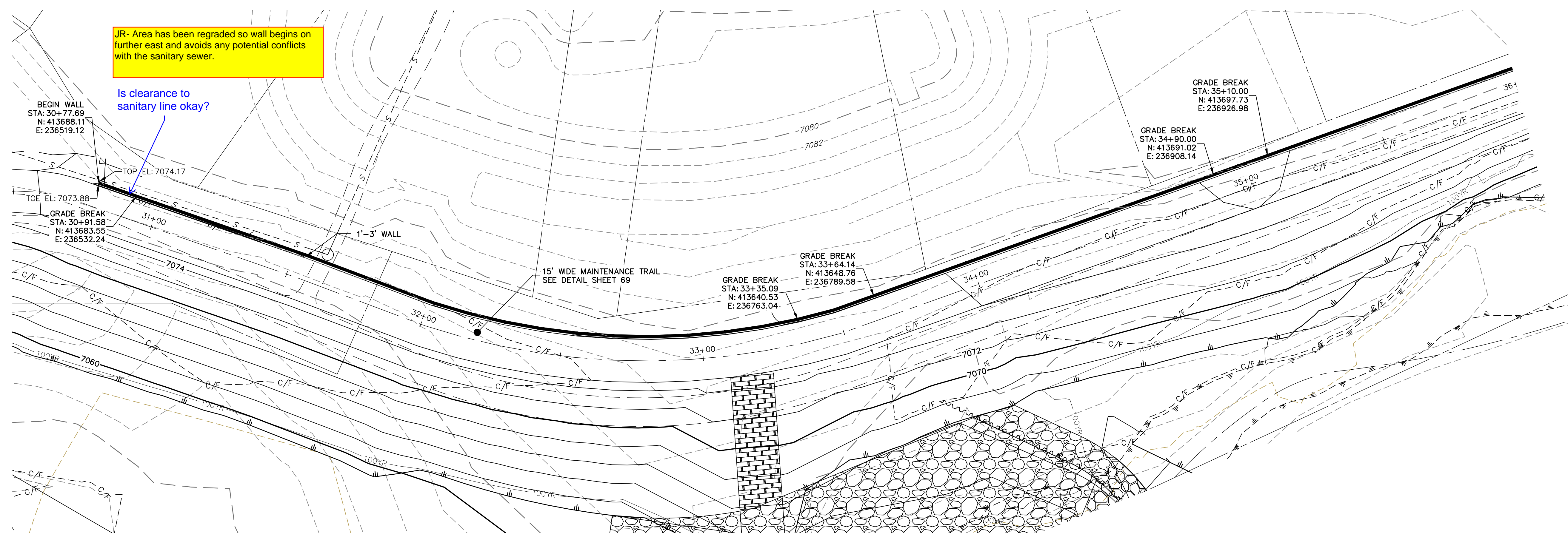
PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL
PRELIMINARY NOT FOR CONSTRUCTION
MIKE A. BRAMBLE
COLORADO P.E. 30110
FOR AND ON BEHALF OF JR ENGINEERING

SAND CREEK RESTORATION MAINTENANCE ACCESS PLAN & PROFILE	H-SCALE 1"=20'	V-SCALE N/A	DATE 9/1/22	DESIGNED BY NEO	DRAWN BY NEO	CHECKED BY
	No. REVISION					
SHEET 76 OF 99						
JOB NO. 25188.04						

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

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

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



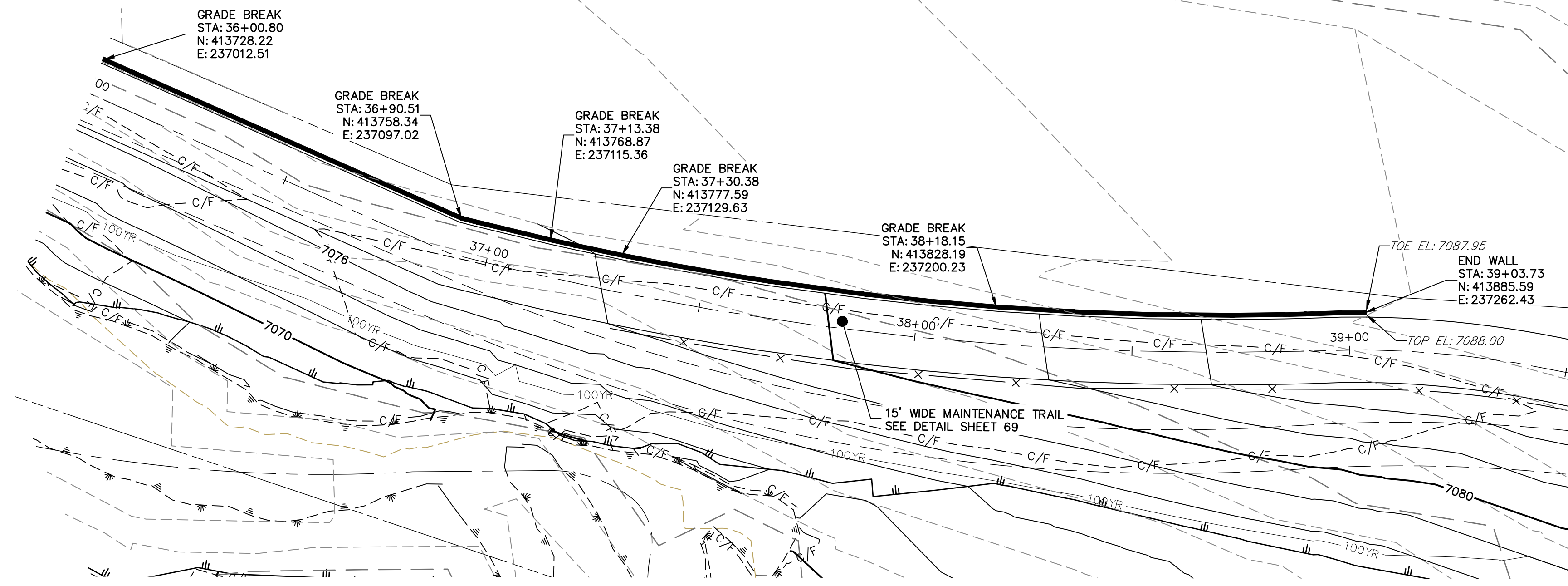
JR- Area has been regraded so wall begins on further east and avoids any potential conflicts with the sanitary sewer.

Is clearance to sanitary line okay?

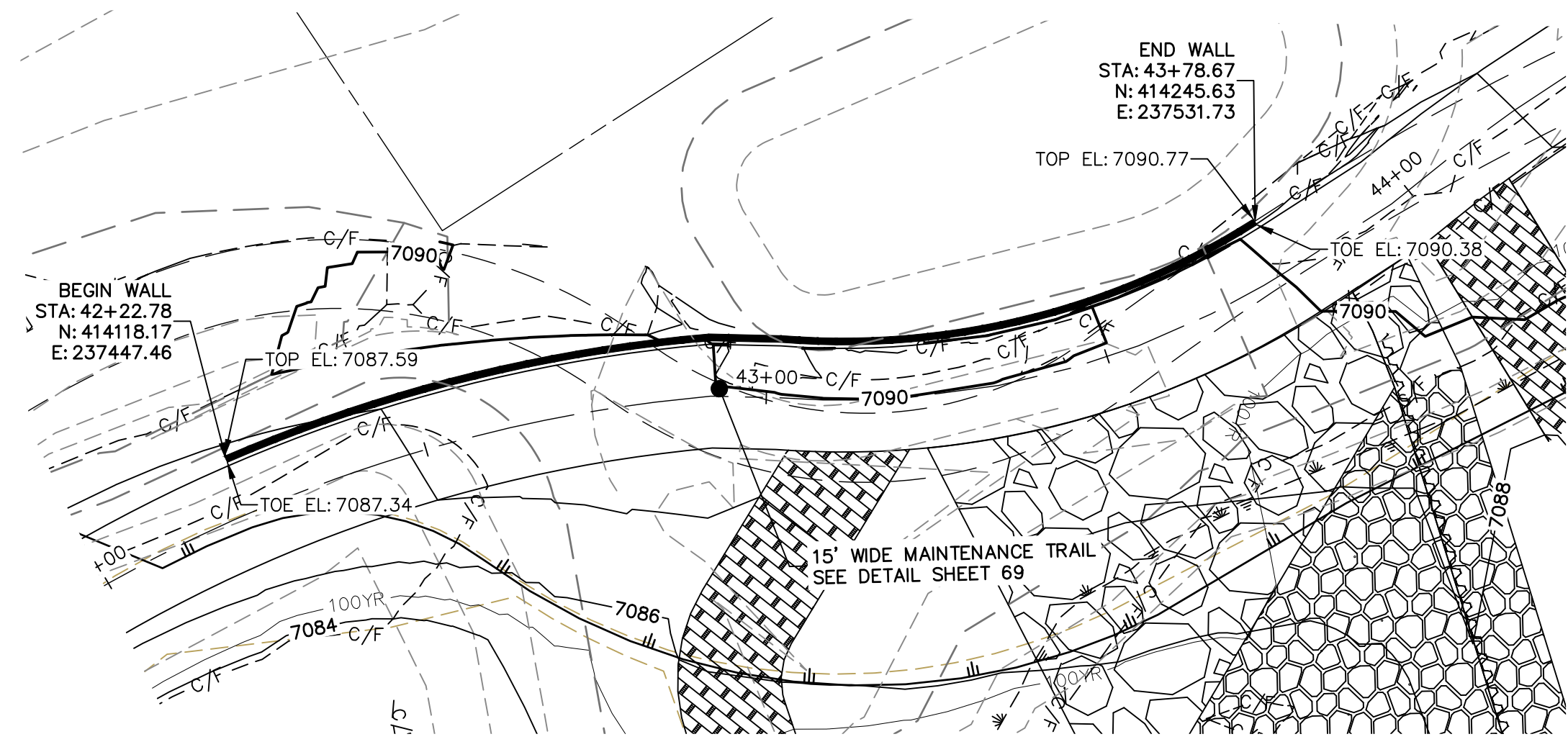
Label wall heights on these sheets

JR-Addressed

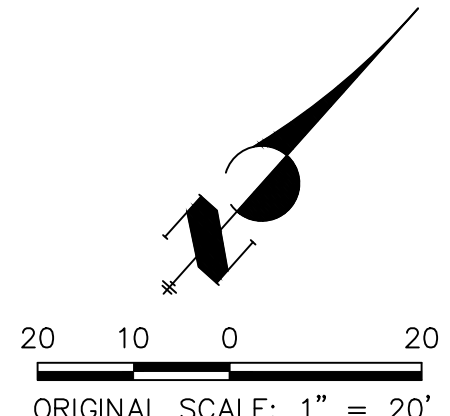
MAINTENANCE TRAIL WALL #3



MAINTENANCE TRAIL WALL #3



MAINTENANCE TRAIL WALL #4

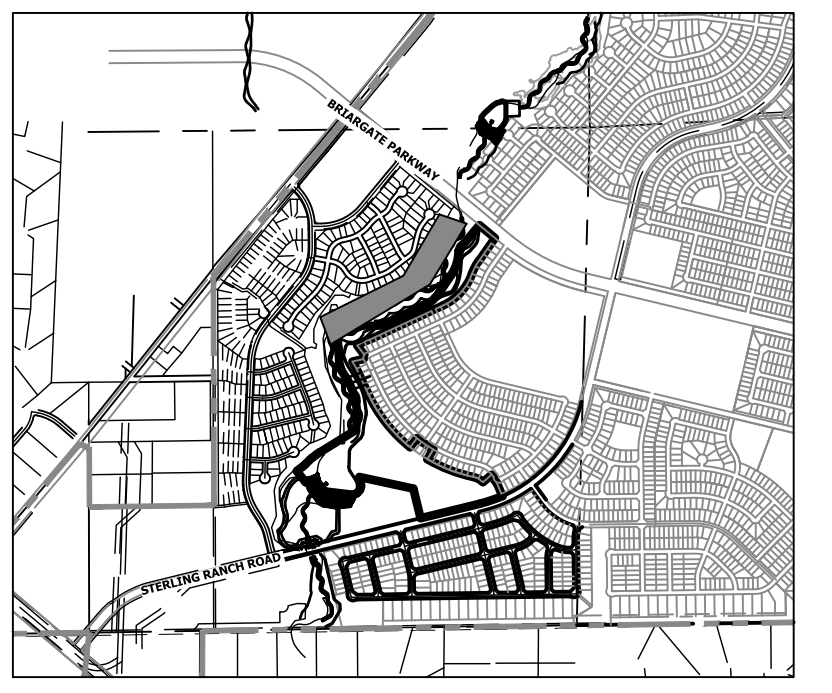


ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND SEAL

**PRELIMINARY
NOT FOR
CONSTRUCTION**

MIKE A. BRAMBLE
COLORADO P.E. 31004
FOR AND ON BEHALF OF JR ENGINEERING



KEY MAP
SCALE: 1" = 2000'

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

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

H-SCALE	1" = 20'
V-SCALE	N/A
DATE	9/1/22
DESIGNED BY	NEO
DRAWN BY	NEO
CHECKED BY	

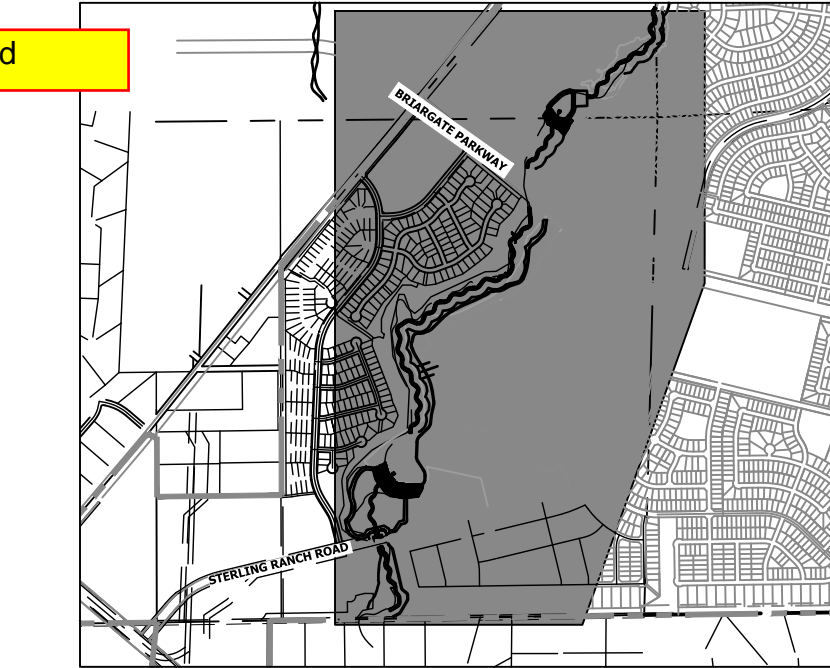
SAND CREEK RESTORATION
MAINTENANCE ACCESS PLAN
& PROFILE

you can remove this since its on front the Cds

STANDARD EPC GRADING AND EROSION CONTROL NOTES:

- STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.
- NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
- A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ASSIGNED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED STORMWATER MANAGER, SHALL BE LOCATED ON SITE AT ALL TIMES AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- ONCE THE ESQCP HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL BMPs AS INDICATED ON THE GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY DSD INSPECTIONS STAFF.
- SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 21 CALENDAR DAYS AFTER FINAL GRADING, OR FINAL EARTH DISTURBANCE, HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPs SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED.
- TEMPORARY SOIL EROSION CONTROL FACILITIES SHALL BE REMOVED AND EARTH DISTURBANCE AREAS GRADED AND STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES PURSUANT TO STANDARDS AND SPECIFICATION PRESCRIBED IN THE DCM VOLUME II AND THE ENGINEERING CRITERIA MANUAL (ECM) APPENDIX X.
- ALL PERSONS ENGAGED IN EARTH DISTURBANCE SHALL IMPLEMENT AND MAINTAIN ACCEPTABLE SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BMPs IN CONFORMANCE WITH THE EROSION CONTROL TECHNICAL STANDARDS OF THE DRAINAGE CRITERIA MANUAL (DCM) VOLUME II AND IN ACCORDANCE WITH THE STORMWATER MANAGEMENT PLAN (SWMP).
- ALL TEMPORARY EROSION CONTROL FACILITIES INCLUDING BMPs AND ALL PERMANENT FACILITIES INTENDED TO CONTROL EROSION OF ANY EARTH DISTURBANCE OPERATIONS, SHALL BE DEFINED IN THE APPROVED PLANS, THE SWMP AND THE DCM VOLUME II AND MAINTAINED THROUGHOUT THE DURATION OF THE EARTH DISTURBANCE OPERATION.
- ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY REDUCE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED AND MAINTAINED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME.
- ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE DESIGNED TO LIMIT THE DISCHARGE TO A NON-EROSIVE VELOCITY.
- CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- EROSION CONTROL BLANKETING IS TO BE USED ON SLOPES STEEPER THAN 3:1.
- BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. BMPs MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
- VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, GRASS, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
- THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
- NO CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN ANY DITCHLINE.
- INDIVIDUALS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- PRIOR TO ACTUAL CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
- THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE AND SHALL BE CONSIDERED A PART OF THESE PLANS.
- ALL PROPOSED CONTOURS ARE TO FINISHED GRADE.
- EARTHEN CUT AND FILL SLOPES SHALL BE 3:1 MAXIMUM. SLOPES IN EXCESS OF 4:1 AND AREAS OTHERWISE INDICATED BY WITHIN THESE PLANS, SHALL BE COVERED WITH SOIL RETENTION BLANKET OVER 4" MIN. THICKNESS OF TOPSOIL AND SEEDED.
- IF THE PROJECT IS CONSTRUCTED DURING THE SUMMER WHEN SEEDING IS NOT ALLOWED, APPLY 1-1/2 TONS OF CERTIFIED WEED FREE MULCH PER ACRE MECHANICALLY CRIMPED INTO THE SOIL IN COMBINATION WITH AN ORGANIC MULCH TACKIFIER.
- PRIOR TO ANY CONSTRUCTION ACTIVITIES THE PROPOSED SILT FENCE SHOWN ON THE EROSION CONTROL SHEET SHALL BE CONSTRUCTED. THE FENCE SHALL BE REMOVED UPON THE LATER OF STABILIZATION OF THE SITE OR COMPLETION OF CONSTRUCTION.
- TO REDUCE THE POTENTIAL FOR CLOGGING OF DEBRIS GRATES, NO STRAW MULCH SHALL BE USED WITHIN THE EURV OR WOCV OF A DETENTION BASIN. INSTEAD, EROSION CONTROL BLANKETS SHALL BE INSTALLED FOR A WIDTH OF AT LEAST 6 FEET ON EITHER SIDE OF CONCRETE LOW-FLOW CHANNELS. THE BLANKETS SHALL COMPLY WITH THE MATERIALS AND INSTALLATION REQUIREMENTS FOR EROSION CONTROL BLANKETS (STRAW COCONUT OR 100 PERCENT COCONUT). SITE-SPECIFIC CONDITIONS MAY REQUIRE ADDITIONAL BLANKET OR OTHER EROSION CONTROL MEASURES.
- AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITIES SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION, OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT: COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT WATER QUALITY CONTROL DIVISION WQCD - PERMITS 4300 CHERRY CREEK DRIVE SOUTH DENVER, CO 80246-1530 ATTN: PERMITS UNIT

JR-Addressed



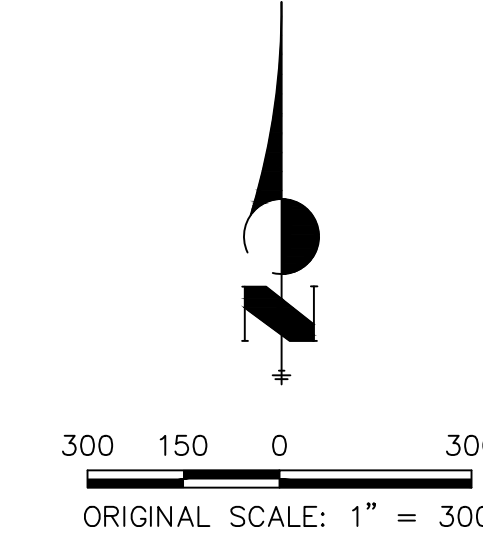
KEY MAP SCALE: 1" = 2000'

BENCHMARK

- THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION NORTHING = 411416.273 EASTING = 235187.071 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.



JR-Signed plans will be submitted upon plan approval.

OWNER/DEVELOPER STATEMENT

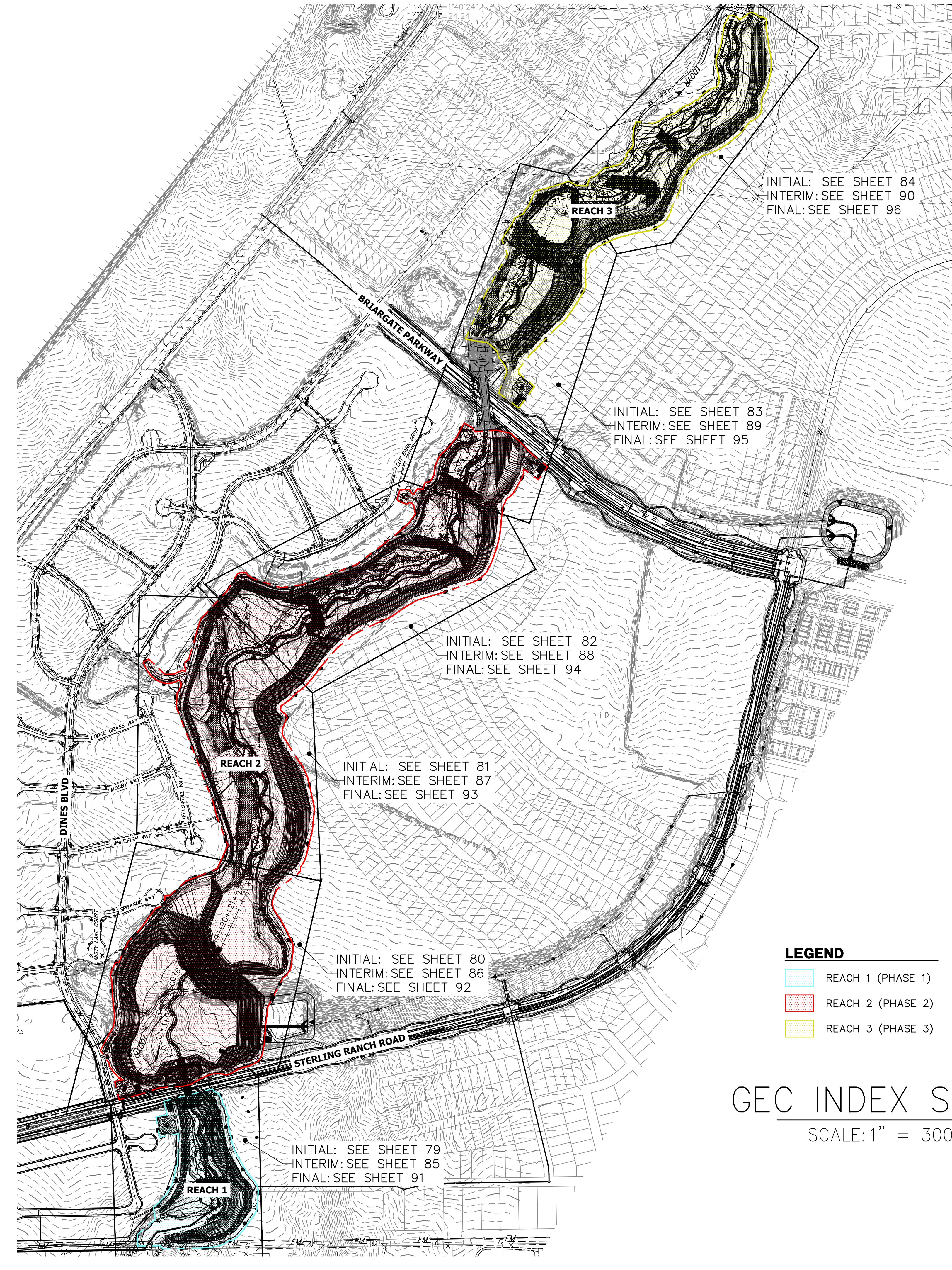
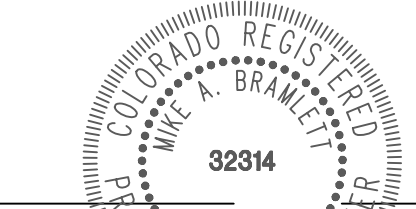
I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN AND ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

JAMES F. MORLEY DATE _____
 SR LAND, LLC
 20 BOULDER CRESCENT, SUITE 201
 COLORADO SPRINGS, CO 80903

ENGINEER'S STATEMENT

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

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



INITIAL: SEE SHEET 84
INTERIM: SEE SHEET 90
FINAL: SEE SHEET 96

INITIAL: SEE SHEET 83
INTERIM: SEE SHEET 89
FINAL: SEE SHEET 95

INITIAL: SEE SHEET 82
INTERIM: SEE SHEET 88
FINAL: SEE SHEET 94

INITIAL: SEE SHEET 81
INTERIM: SEE SHEET 87
FINAL: SEE SHEET 93

INITIAL: SEE SHEET 80
INTERIM: SEE SHEET 86
FINAL: SEE SHEET 92

INITIAL: SEE SHEET 79
INTERIM: SEE SHEET 85
FINAL: SEE SHEET 91

LEGEND

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

GEC INDEX SHEET

SCALE: 1" = 300'

add a note about existing vegetation and percent cover

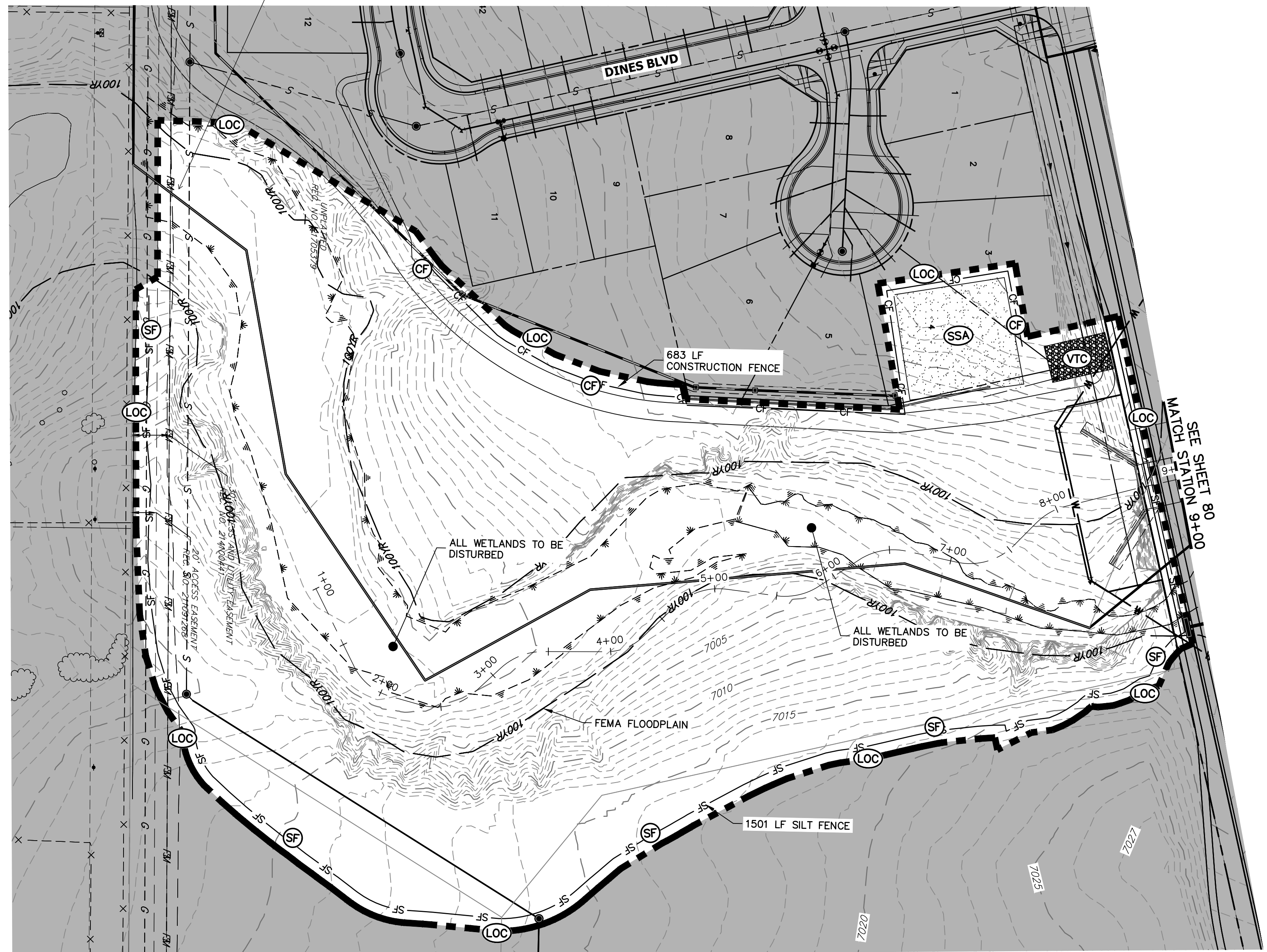
JR-Noted added about existing vegetation and cover



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR 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 (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 1" = 300'	H-SCALE V-SCALE DATE DESIGNED BY DRAWN BY CHECKED BY	BY DATE 9/1/22 DUV WLL
		SAND CREEK RESTORATION GEC PLANS	SHEET 78 OF 99 JOB NO. 25188.04	

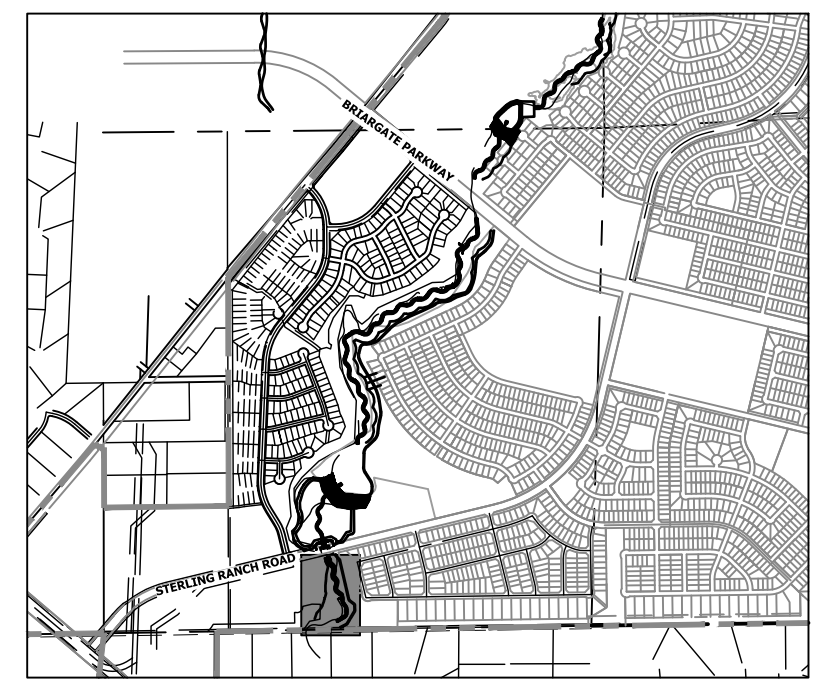
install temporary BMPs to prevent sediment from migrating down stream

JR-Addressed, check dams have been added



label all ponds, roads, and adjacent subdivisions/property owners

JR-Addressed



KEY MAP SCALE: 1"=2000'

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

Table with columns: No., REVISION, 1"=60', 1"=A, DATE, DESIGNED BY, DRAWN BY, CHECKED BY.

Silt fence should be parallel to contours. Placement as shown could channelize runoff. All silt fence not running parallel to contours shall be installed with J-hooks or adjusted as necessary.

JR-Addressed, silt fence has been removed and check dams have been added

show on figure JR-Addressed

LEGEND

Legend table listing symbols for existing contours, proposed contours, fences, staging areas, and other site features.

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.

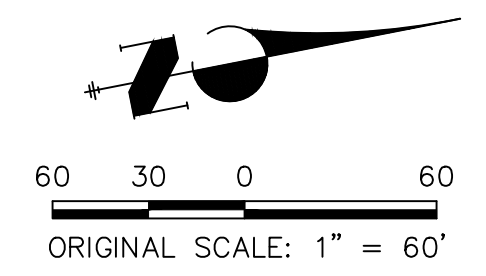
TOTAL INITIAL PHASE SUMMARY OF APPROXIMATE QUANTITIES

Summary table with columns: Quantity, Description, Symbol.

- BENCHMARK 1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9863", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION... 2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PANNEE RANCHEROS SUBDIVISION... 3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION...

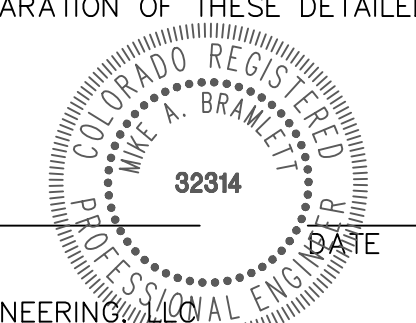


Know what's below. Call before you dig.



ENGINEER'S STATEMENT

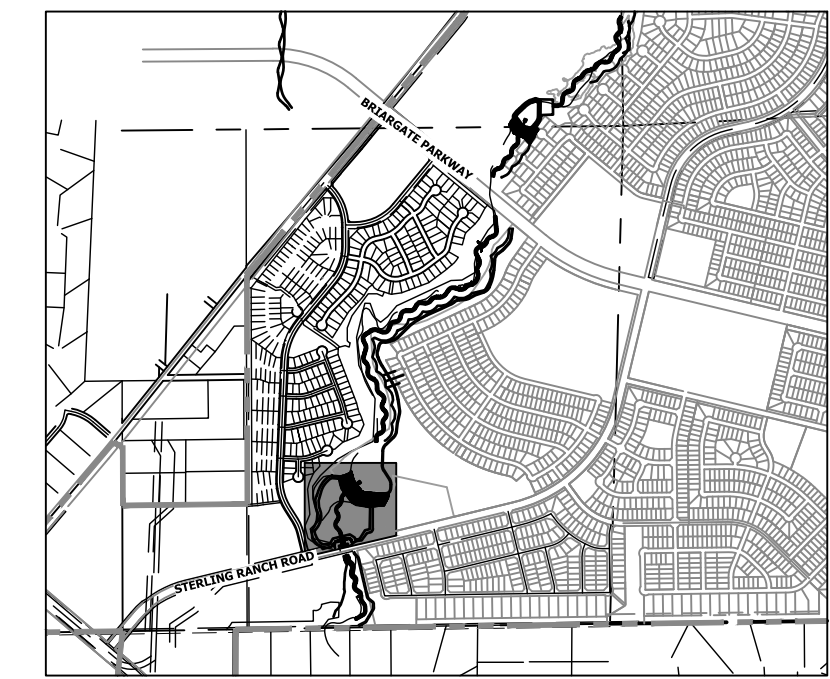
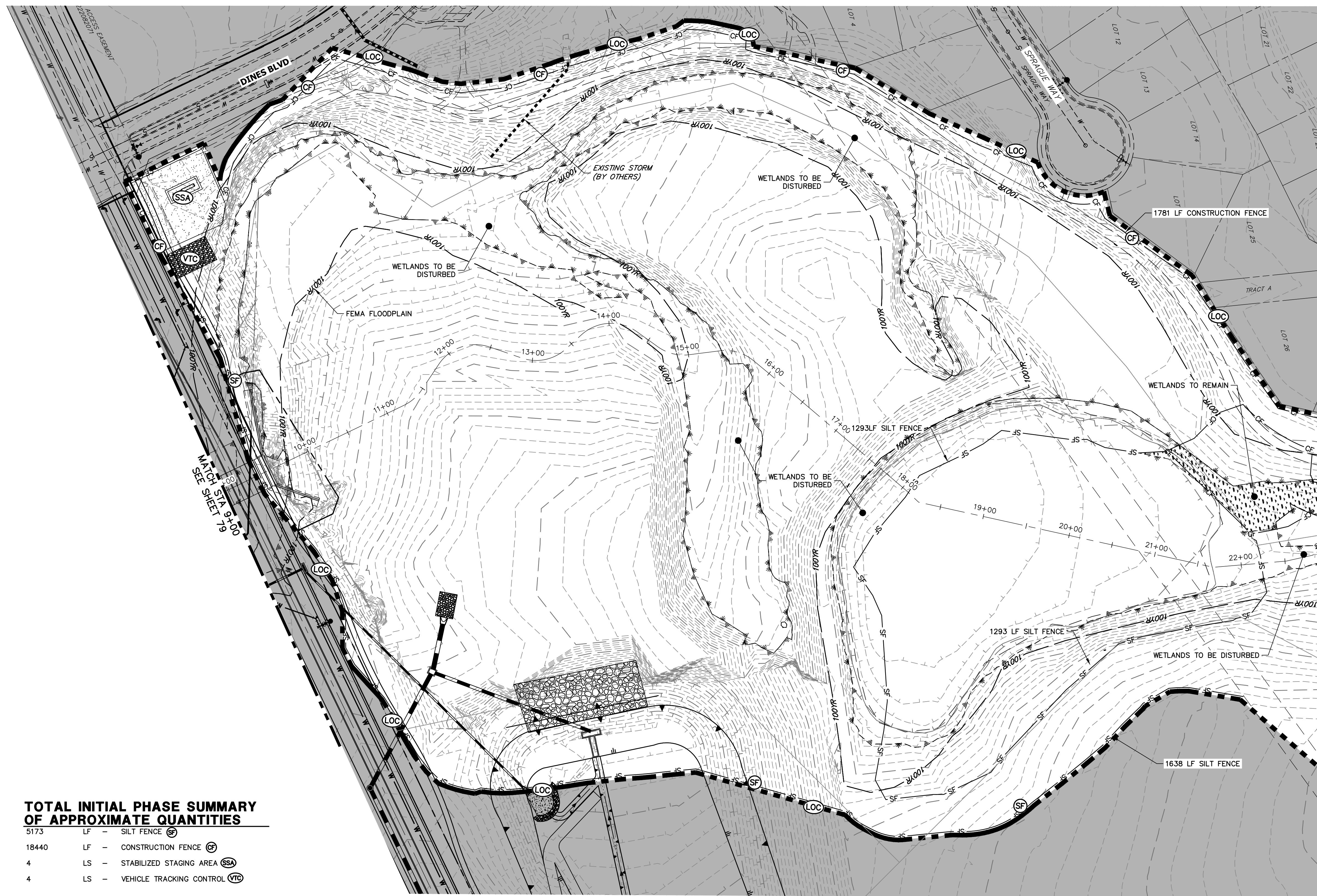
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MIKE A. BRAMLETT, P.E. COLORADO P.E. 32314 FOR AND ON BEHALF OF JR ENGINEERING

SAND CREEK RESTORATION

GEC INITIAL



KEY MAP
SCALE: 1" = 2000'

TOTAL INITIAL PHASE SUMMARY OF APPROXIMATE QUANTITIES

5173	LF - SILT FENCE (SF)
18440	LF - CONSTRUCTION FENCE (CF)
4	LS - STABILIZED STAGING AREA (SSA)
4	LS - VEHICLE TRACKING CONTROL (VTC)

LEGEND

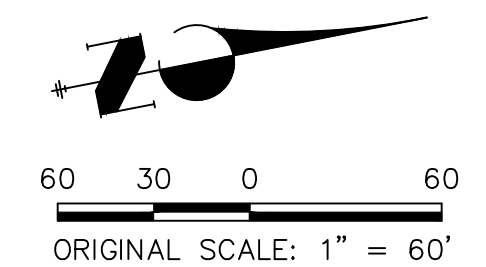
EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	(IP)	DEWATERING	(DW)
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION (LOC)	REINFORCED ROCK BERM FOR CULVERT PROTECTION	(RRB)	TEMPORARY SEDIMENTATION BASIN	(SB)
EXISTING RIGHT OF WAY LINE	DRAINAGE SWALE (DS)	CONSTRUCTION MARKERS	(CM)	CHECK DAM	(CD)
EXISTING EASEMENT	CONSTRUCTION FENCE (CF)	SEDIMENT CONTROL LOG	(SCL)	SURFACE ROUGHENING	(SR)
SECTION LINE	SILT FENCE (SF)	PERMANENT SEEDING AND MULCHING - NATIVE REVEGETATION SEED MIX	(SM)		
EXISTING STORM SEWER	VEHICLE TRACKING CONTROL (VTC)	PERMANENT LANDSCAPING	(LS)		
EXISTING CURB & GUTTER	STABILIZED STAGING AREA (SSA)	GEOTEXTILE	(ECB)		
PROPOSED RIGHT OF WAY LINE	CONCRETE WASHOUT AREA (CWA)	COIR MATTING	(ECB)		
PROPOSED EASEMENT	STOCK PILE (SP)				
PROPOSED STORM SEWER	TEMP DRAINAGE CHANNEL				
PROPOSED CURB & GUTTER					
PROPOSED TOP OF SLOPE					
PROPOSED TOE OF SLOPE					
EXISTING DRAINAGE ARROW					
PROPOSED DRAINAGE ARROW					

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.

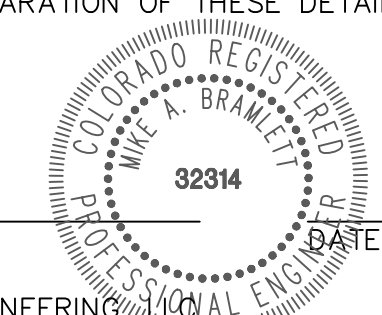
BENCHMARK

- 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 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



ENGINEER'S STATEMENT

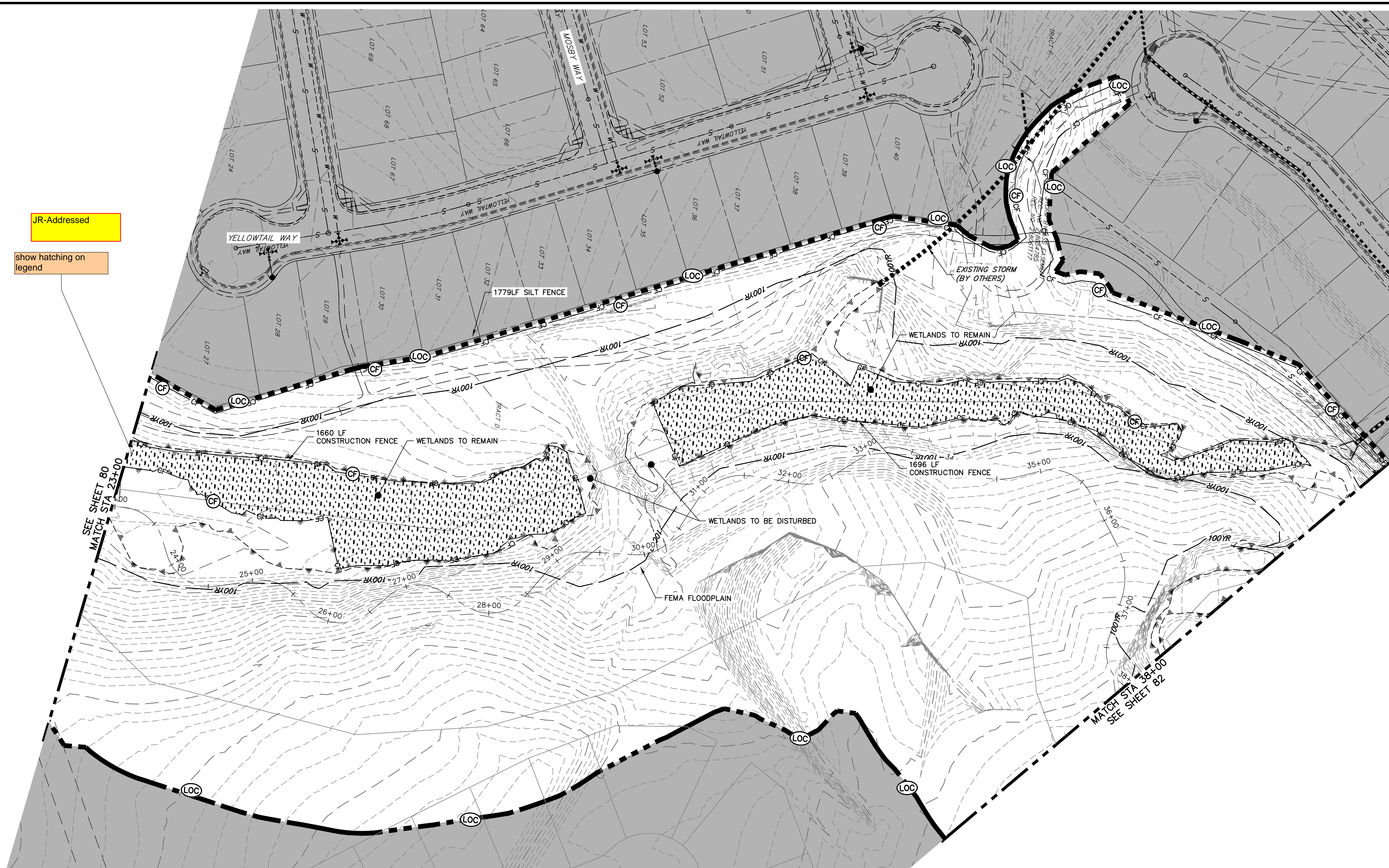
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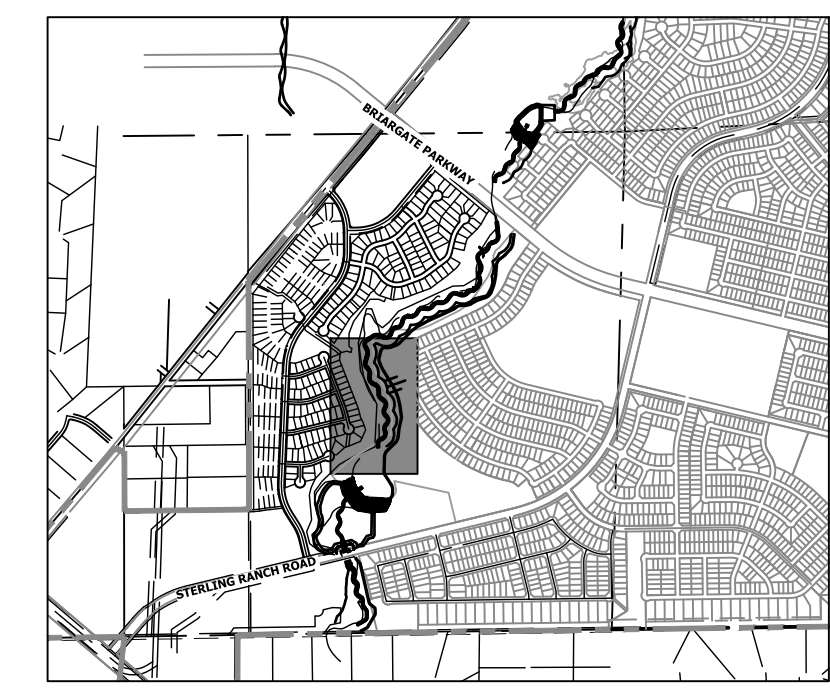
MIKE A. BRAMLETT, P.E.
COLORADO P.E. 32314
FOR AND ON BEHALF OF JR ENGINEERING



PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024						
	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.						
BY	DATE	No.	REVISION	1" = 60'			
					V-SCALE	N/A	DATE
SAND CREEK RESTORATION		GEC INITIAL		SHEET 80 OF 99			
JOB NO. 25188.04							



JR-Addressed
show hatching on legend



KEY MAP
SCALE: 1" = 2000'

LEGEND

EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
EXISTING RIGHT OF WAY LINE	DRAINAGE SWALE	CONSTRUCTION MARKERS	CM	CHECK DAM	CD
EXISTING EASEMENT	CONSTRUCTION FENCE	SEDIMENT CONTROL LOG	SCL	SURFACE ROUGHENING	SR
SECTION LINE	CONSTRUCTION FENCE	PERMANENT SEEDING AND MULCHING - NATIVE REVEGETATION SEED MIX	SM		
EXISTING STORM SEWER	SILT FENCE	PERMANENT LANDSCAPING	LS		
EXISTING CURB & GUTTER	VEHICLE TRACKING CONTROL	GEOTEXTILE	ECB		
PROPOSED RIGHT OF WAY LINE	VEHICLE TRACKING CONTROL	COIR MATTING	ECB		
PROPOSED EASEMENT	STABILIZED STAGING AREA				
PROPOSED STORM SEWER	STABILIZED STAGING AREA				
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PROPOSED TOP OF SLOPE	CONCRETE WASHOUT AREA				
PROPOSED TOE OF SLOPE	STOCK PILE				
EXISTING DRAINAGE ARROW	TEMP DRAINAGE CHANNEL				
PROPOSED DRAINAGE ARROW	TEMP DRAINAGE CHANNEL				

TOTAL INITIAL PHASE SUMMARY OF APPROXIMATE QUANTITIES

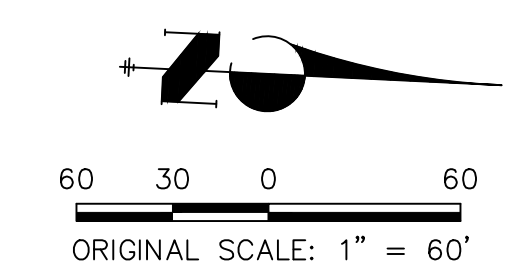
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4	LS - STABILIZED STAGING AREA	SSA
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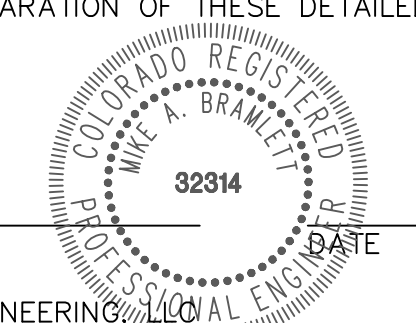
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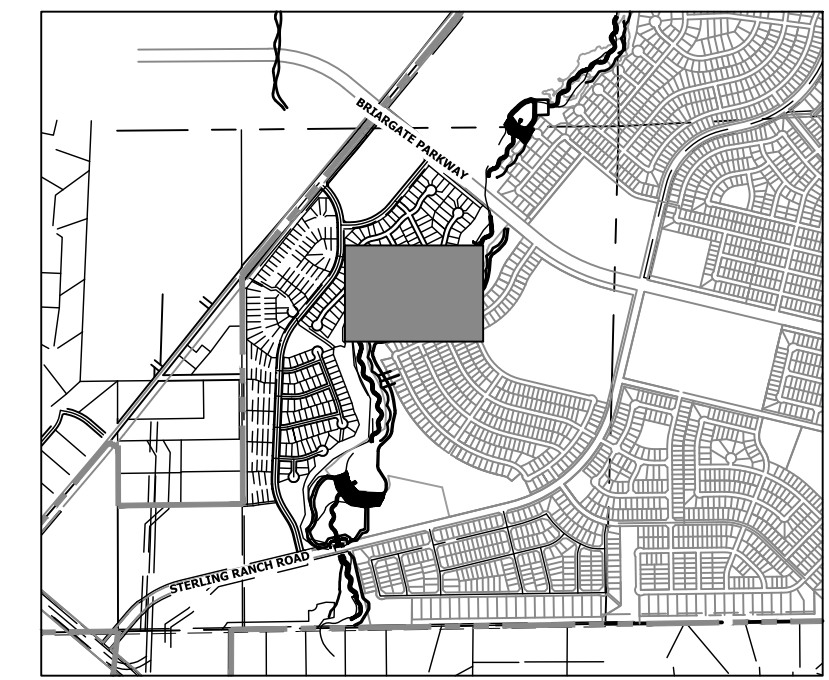
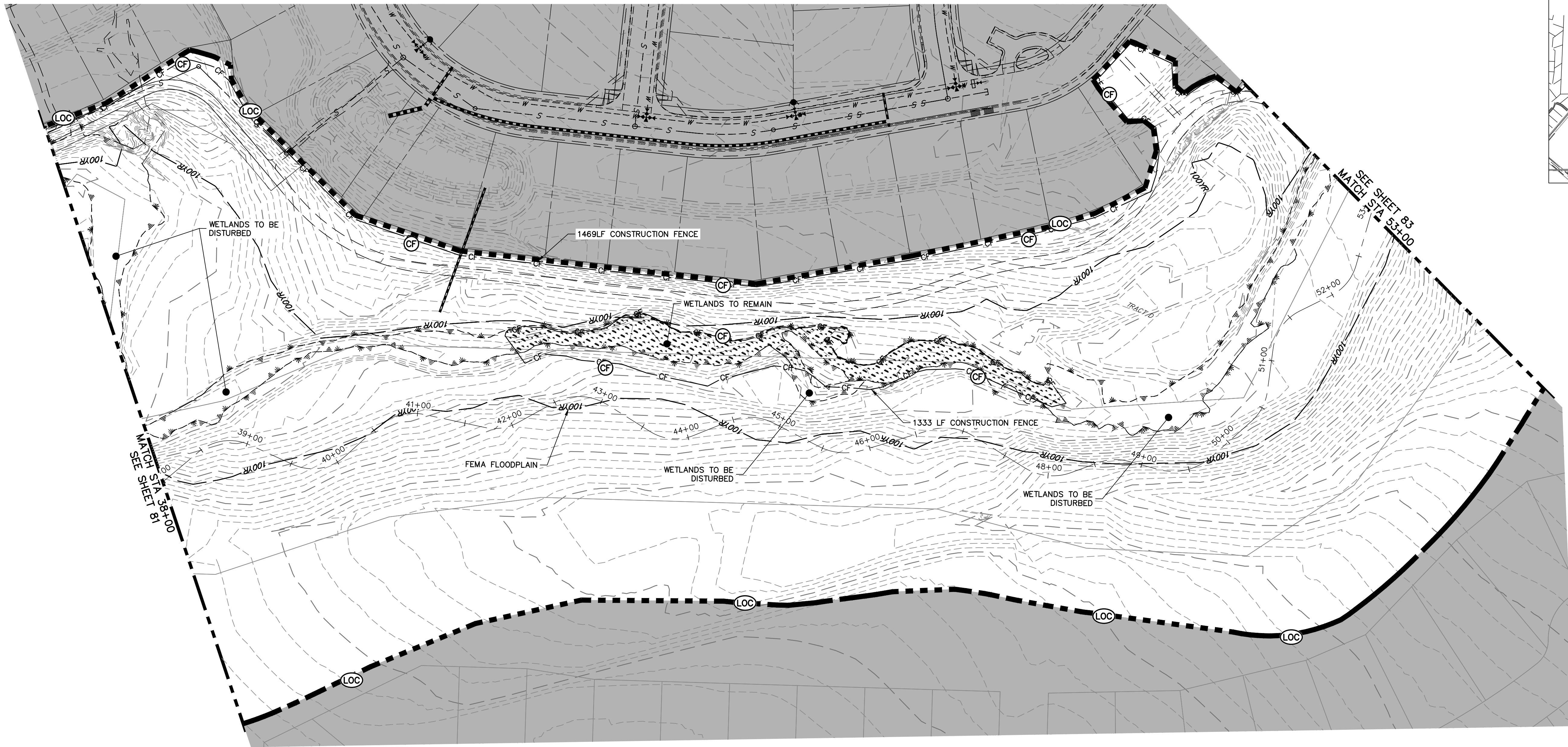
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Central 303-740-9888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

SAND CREEK RESTORATION	GEC INITIAL	H-SCALE	1" = 60'
		V-SCALE	N/A
DESIGNED BY	DJV	DATE	9/1/22
DRAWN BY	WLL	CHECKED BY	
SHEET	81	OF	99
JOB NO.	25188.04		



KEY MAP
SCALE: 1"=2000'

LEGEND

EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
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PROPOSED RIGHT OF WAY LINE	CONCRETE WASHOUT AREA	COIR MATTING	ECB		
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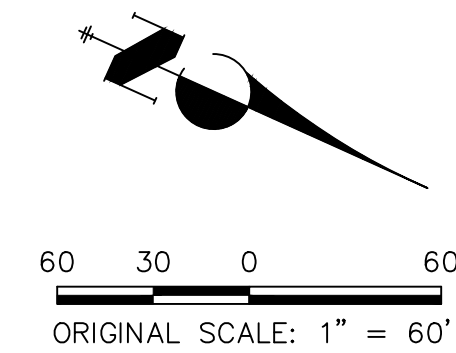
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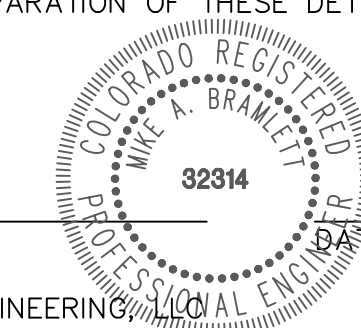
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BY	DATE	NO.	REVISION

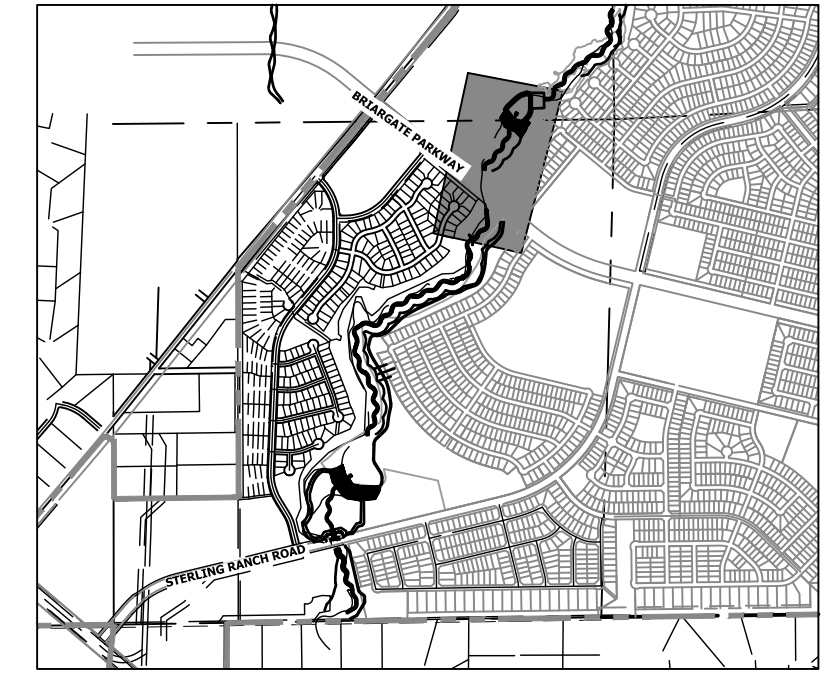
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=60'	N/A	9/1/22	DJV	WLL	

SAND CREEK RESTORATION

GEC INITIAL

SHEET 82 OF 99

JOB NO. 25188.04

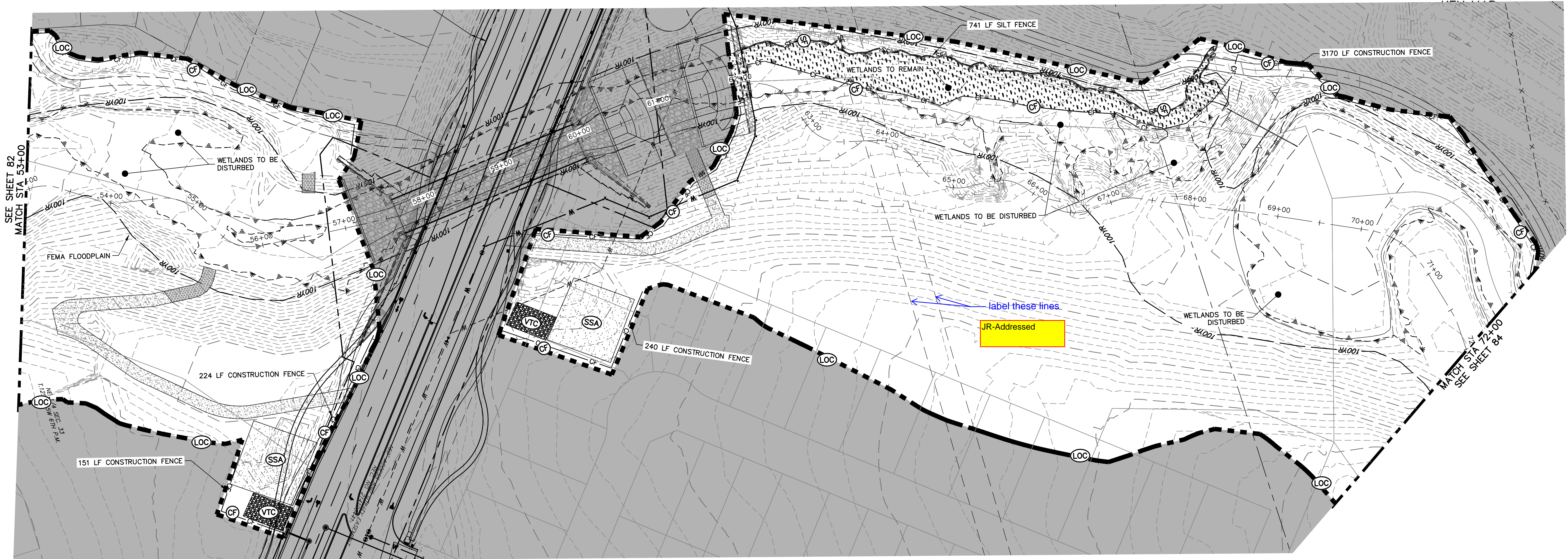


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LEGEND

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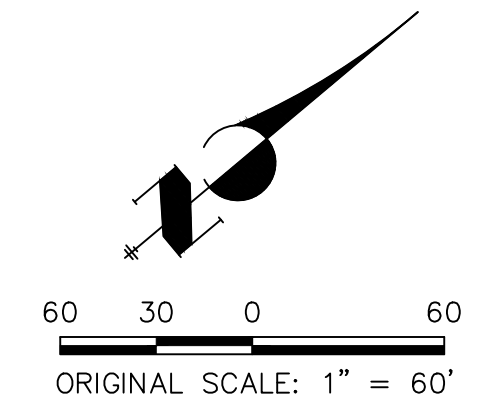
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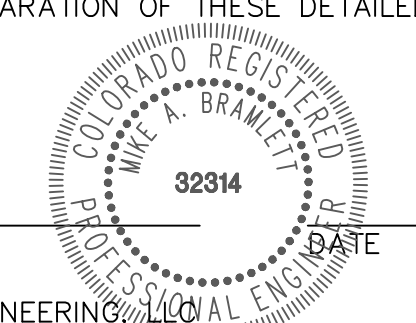
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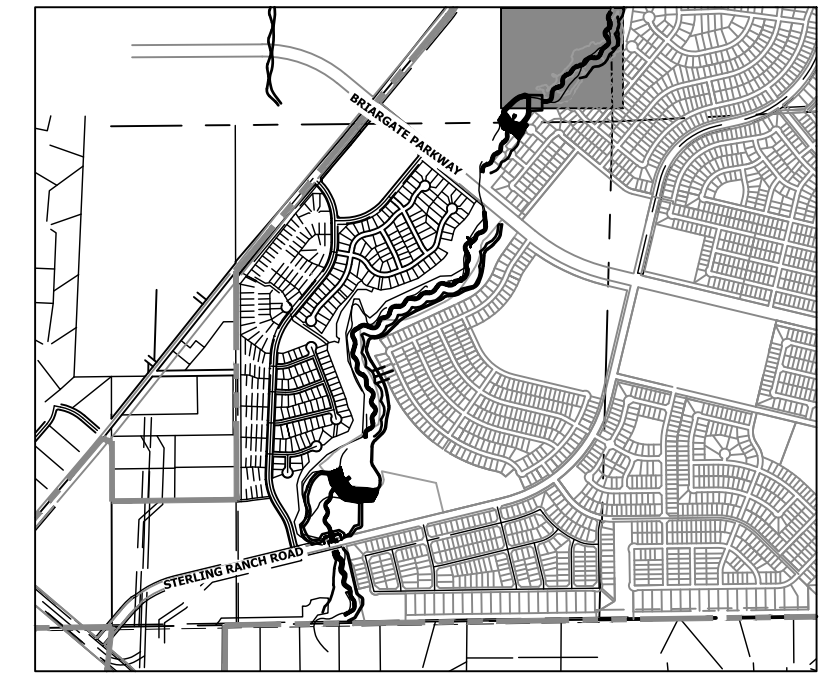
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BY	DATE	No.	REVISION

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DESIGNED BY	DJV
DRAWN BY	WLL
CHECKED BY	

SAND CREEK RESTORATION

GEC INITIAL



KEY MAP
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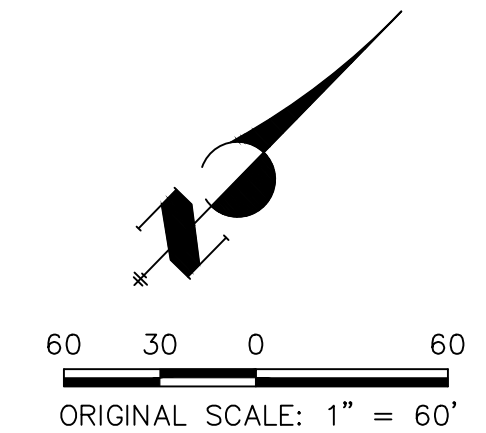
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ELEVATION = 7030.82

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.



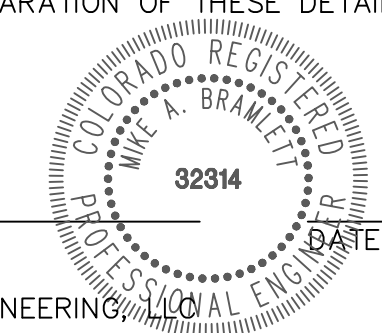
ORIGINAL SCALE: 1" = 60'



Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

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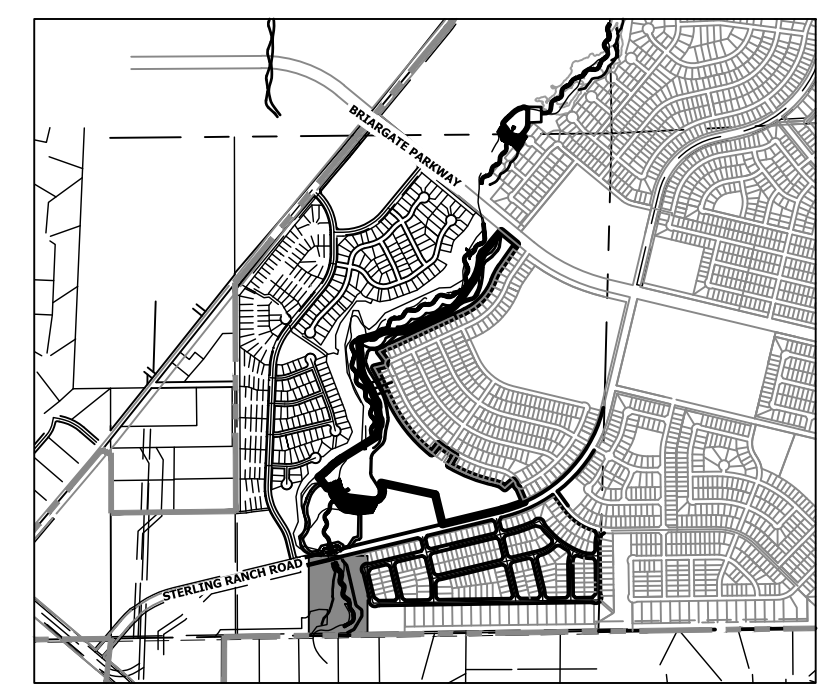
MIKE A. BRAMLETT, P.E.
COLORADO P.E. 32314
FOR AND ON BEHALF OF JR ENGINEERING

SAND CREEK RESTORATION	GEC INITIAL	BY	DATE		
		No.	REVISION		
		H-SCALE	1" = 60'		
		V-SCALE	N/A		
		DATE	9/1/22		
		DESIGNED BY	DJV		
		DRAWN BY	WLL		
		CHECKED BY			
		SHEET	84	OF	99
		JOB NO.	25188.04		

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

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

J.R. ENGINEERING
A Westman Company

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



KEY MAP
SCALE: 1" = 2000'

TOTAL INTERIM PHASE SUMMARY OF APPROXIMATE QUANTITIES

9	EA	-	REINFORCED ROCK BERM FOR CULVERT PROTECTION (RRB)
3	EA	-	CONCRETE WASHOUT AREA (CWA)
2	EA	-	CHECK DAMS (CD)

add TSBs and SCLs

JR-TSB and SCL quantities have been added to interim phase

LEGEND

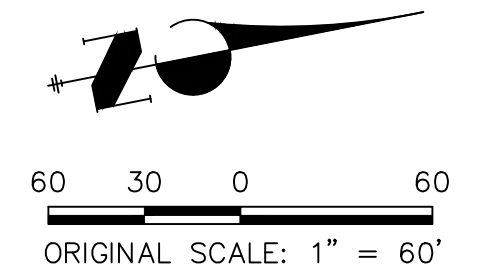
EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	DEWATERING (DW)
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION (LOC)	REINFORCED ROCK BERM FOR CULVERT PROTECTION (RRB)	TEMPORARY SEDIMENTATION BASIN (SB)
EXISTING RIGHT OF WAY LINE	DRAINAGE SWALE (DS)	CONSTRUCTION MARKERS (CM)	CHECK DAM (CD)
EXISTING EASEMENT	CONSTRUCTION FENCE (CF)	SEDIMENT CONTROL LOG (SCL)	SURFACE ROUGHENING (SR)
SECTION LINE	SILT FENCE (SF)	PERMANENT SEEDING AND MULCHING - NATIVE REVEGETATION SEED MIX (SM)	
EXISTING STORM SEWER	VEHICLE TRACKING CONTROL (VTC)	PERMANENT LANDSCAPING (LS)	
EXISTING CURB & GUTTER	STABILIZED STAGING AREA (SSA)	GEOTEXTILE (ECB)	
PROPOSED RIGHT OF WAY LINE	CONCRETE WASHOUT AREA (CWA)	COIR MATTING (ECB)	
PROPOSED EASEMENT	STOCK PILE (SP)		
PROPOSED STORM SEWER	TEMP DRAINAGE CHANNEL		
PROPOSED CURB & GUTTER			
PROPOSED TOP OF SLOPE			
PROPOSED TOE OF SLOPE			
EXISTING DRAINAGE ARROW			
PROPOSED DRAINAGE ARROW			

BENCHMARK

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9863", 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

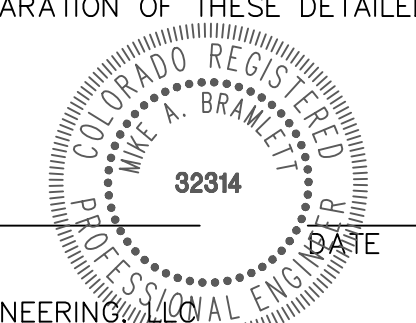
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COLORADO P.E. 32314
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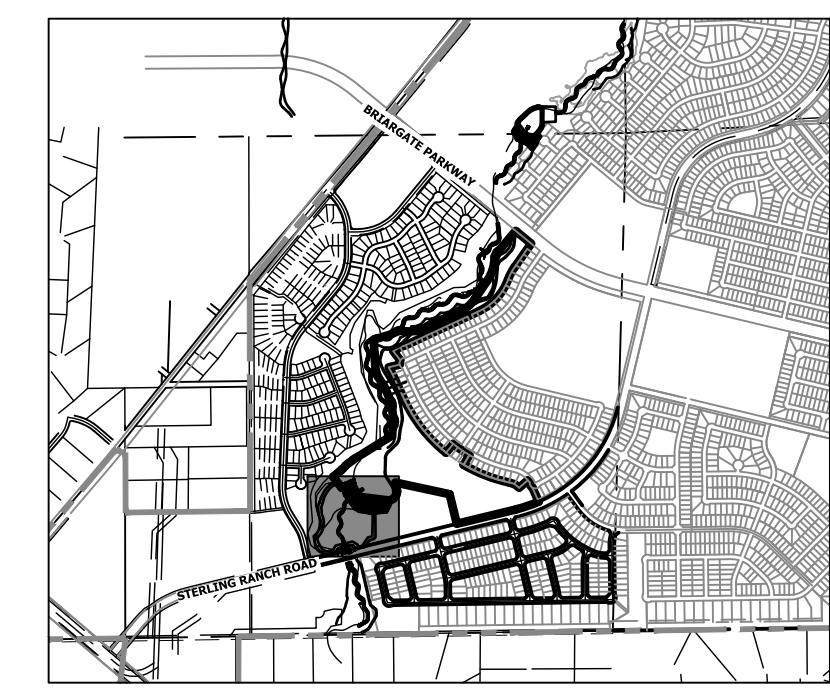
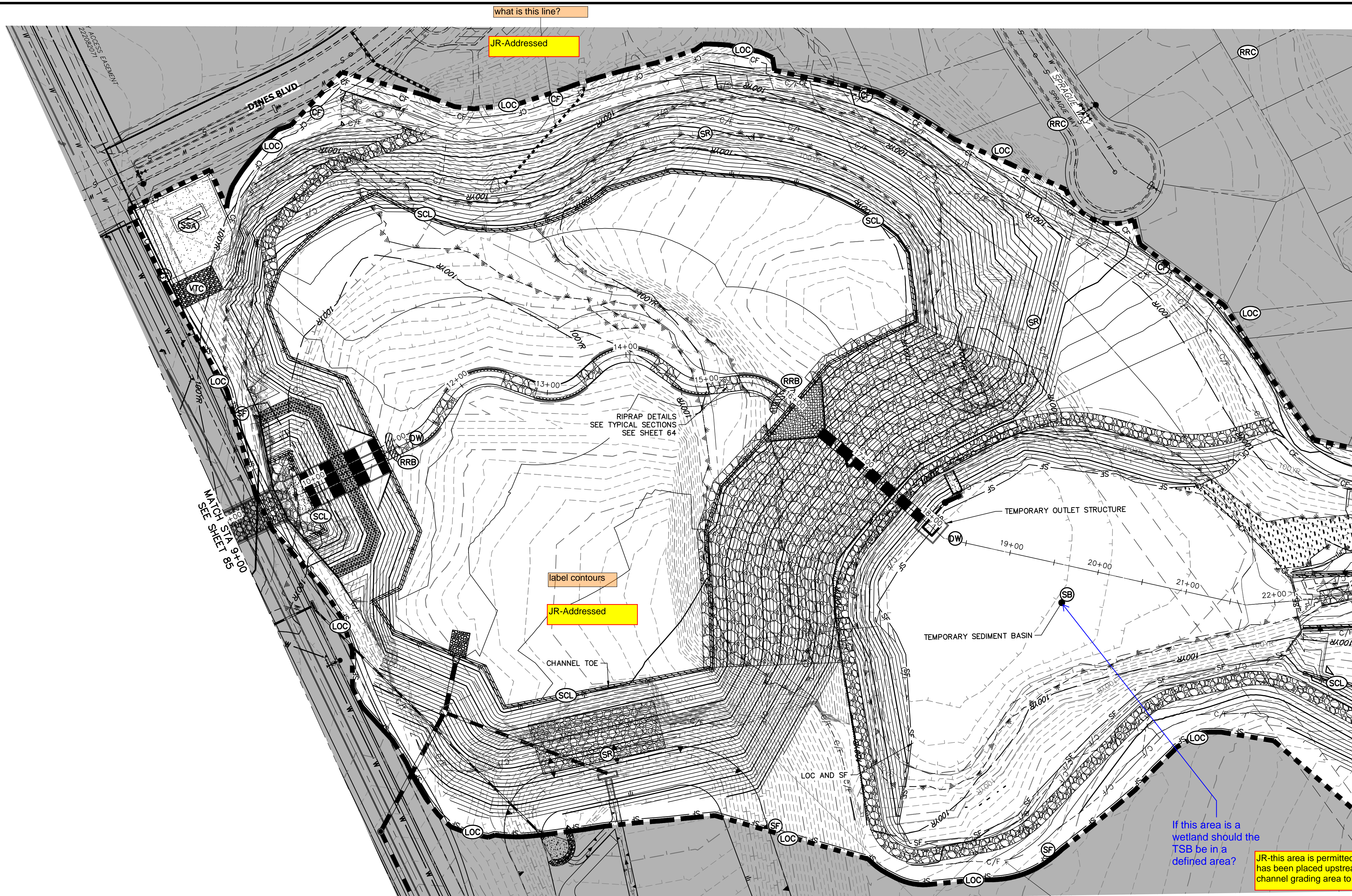


SAND CREEK RESTORATION	GEC INTERIM	BY	DATE				
		No.	REVISION				
H-SCALE	1" = 60'	V-SCALE	N/A	DATE	9/1/22	DESIGNED BY	DJV
				DRAWN BY	WLL	CHECKED BY	
SHEET 85 OF 99		JOB NO. 25188.04					

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20 BOULDER CRESCENT
2ND FLOOR
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JAMES F. MORLEY
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KEY MAP
SCALE: 1"=2000'

JR-TSB details have been provided in interim GESC plans

Provide details of temporary sediment basin including riser pipe diameter and perforation sizing, number of rows of holes, required volume, location of outlet pipe and spillway, and tributary area to the sediment basin. And provide contours for sediment basin.

JR-this area is permitted as a preservation area. TSB has been placed upstream of the pond in the proposed channel grading area to avoid disturbing any wetlands.

If this area is a wetland should the TSB be in a defined area?

is CF necessary here if you have SF along the LOC perimeter

JR-this is the cut/fill line, a label has been added to plan view

LEGEND

EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
EXISTING RIGHT OF WAY LINE	DRAINAGE SWALE	CONSTRUCTION MARKERS	CM	CHECK DAM	CD
EXISTING EASEMENT	CONSTRUCTION FENCE	SEDIMENT CONTROL LOG	SCL	SURFACE ROUGHENING	SR
SECTION LINE	SILT FENCE	PERMANENT SEEDING AND MULCHING - NATIVE REVEGETATION SEED MIX	SM		
EXISTING STORM SEWER	VEHICLE TRACKING CONTROL	PERMANENT LANDSCAPING	LS		
EXISTING CURB & GUTTER	STABILIZED STAGING AREA	GEOTEXTILE	ECB		
PROPOSED RIGHT OF WAY LINE	CONCRETE WASHOUT AREA	COIR MATTING	ECB		
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PROPOSED TOP OF SLOPE					
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TOTAL INTERIM PHASE SUMMARY OF APPROXIMATE QUANTITIES

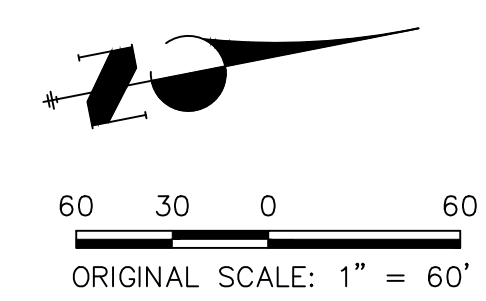
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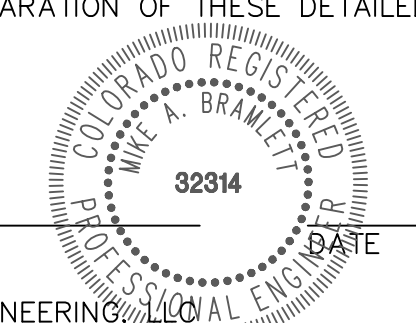
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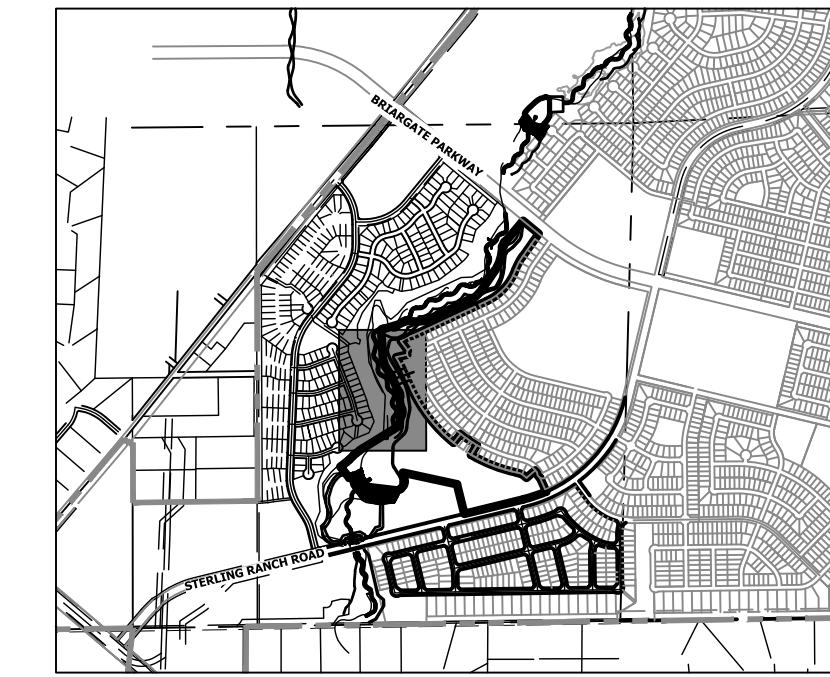
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BY	DATE	No.	REVISION

H-SCALE 1"=60'
V-SCALE N/A
DATE 9/1/22
DESIGNED BY DJV
DRAWN BY WLL
CHECKED BY

SAND CREEK RESTORATION
GEC INTERIM

SHEET 86 OF 99
JOB NO. 25188.04



KEY MAP
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BY	DATE	NO.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=60'	N/A	9/1/22	DJV	WLL	

LEGEND

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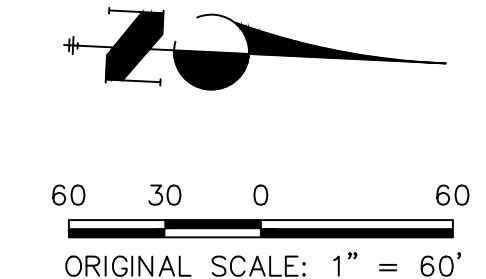
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BENCHMARK

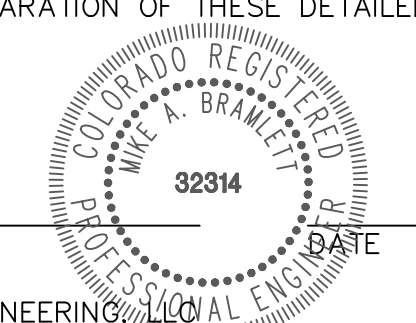
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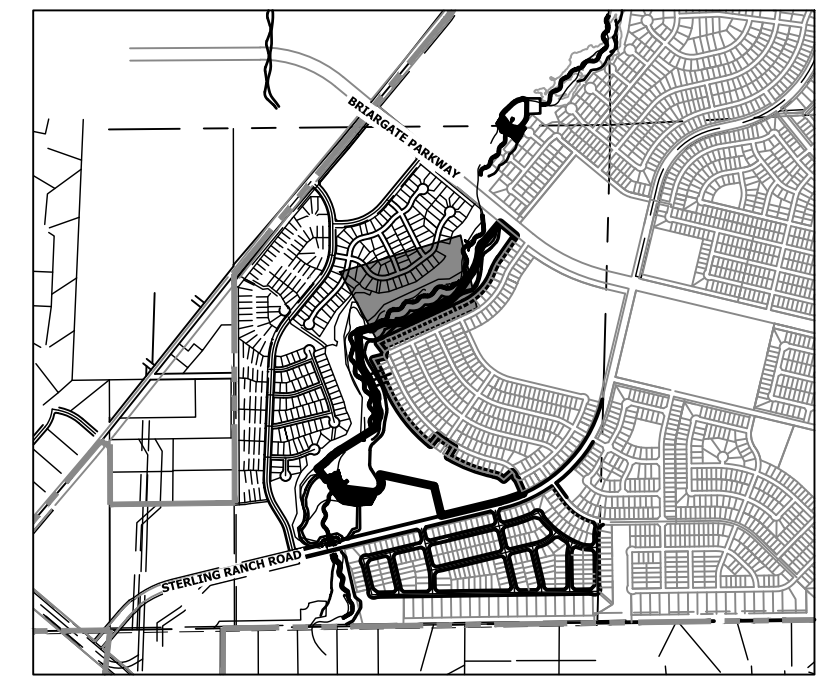
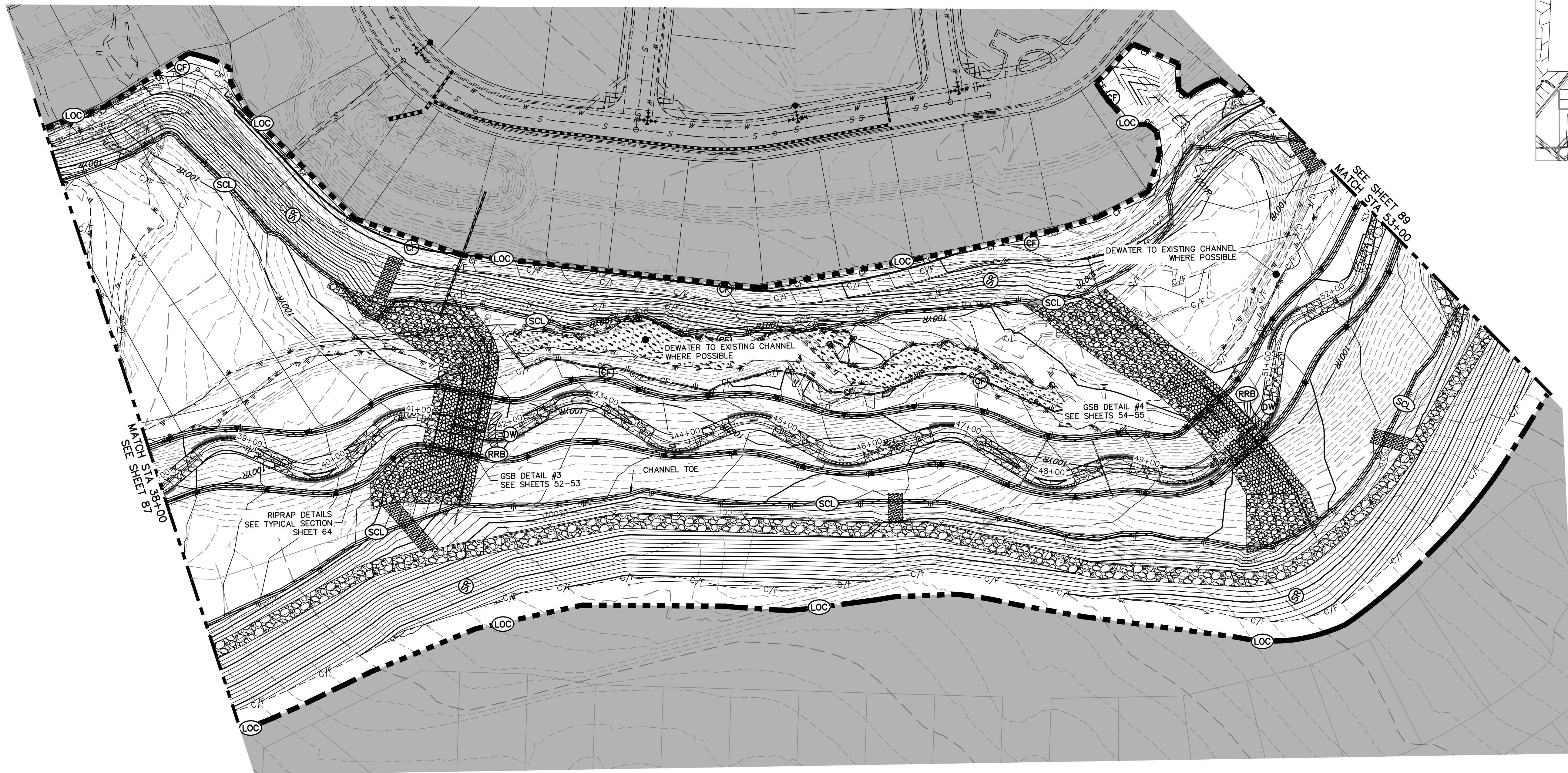


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BY	DATE	No.	REVISION

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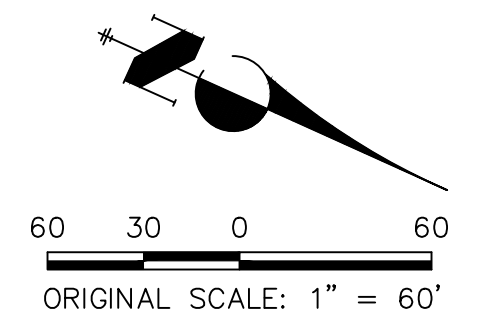
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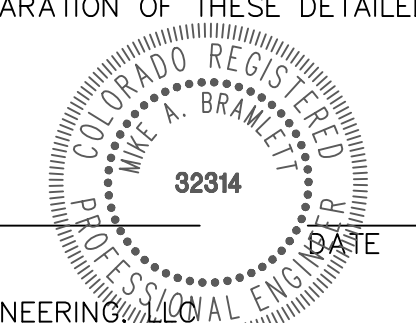
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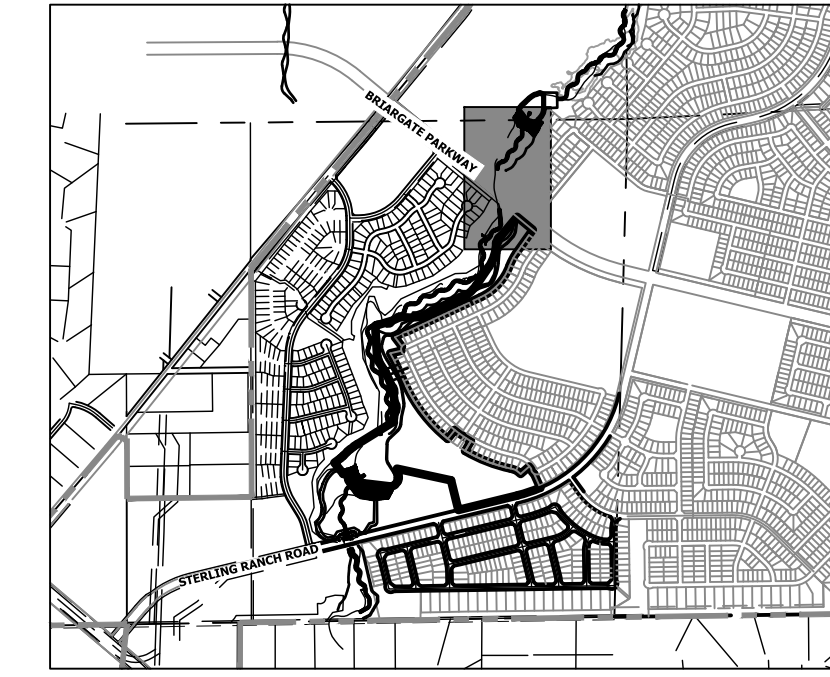
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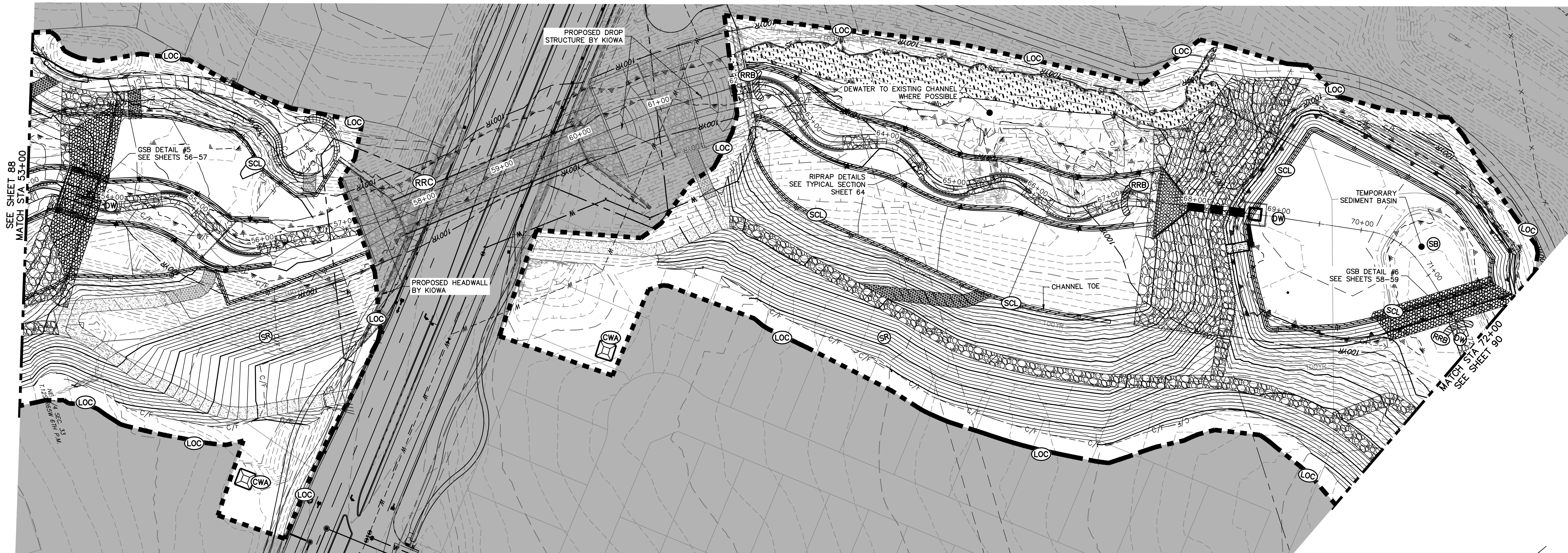


MIKE A. BRAMLETT, P.E.
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KEY MAP
SCALE: 1"=2000'



LEGEND

EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
EXISTING RIGHT OF WAY LINE	DRAINAGE SWALE	CONSTRUCTION MARKERS	CM	CHECK DAM	CD
EXISTING EASEMENT	CONSTRUCTION FENCE	SEDIMENT CONTROL LOG	SCL	SURFACE ROUGHENING	SR
SECTION LINE	SILT FENCE	PERMANENT SEEDING AND MULCHING - NATIVE REVEGETATION SEED MIX	SM		
EXISTING STORM SEWER	VEHICLE TRACKING CONTROL	PERMANENT LANDSCAPING	LS		
EXISTING CURB & GUTTER	STABILIZED STAGING AREA	GEOTEXTILE	ECB		
PROPOSED RIGHT OF WAY LINE	CONCRETE WASHOUT AREA	COIR MATTING	ECB		
PROPOSED EASEMENT	STOCK PILE				
PROPOSED STORM SEWER	TEMP DRAINAGE CHANNEL				
PROPOSED CURB & GUTTER					
PROPOSED TOP OF SLOPE					
PROPOSED TOE OF SLOPE					
EXISTING DRAINAGE ARROW					
PROPOSED DRAINAGE ARROW					

TOTAL INTERIM PHASE SUMMARY OF APPROXIMATE QUANTITIES

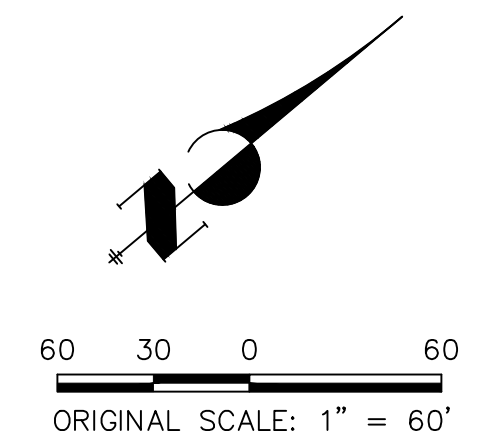
9	EA	-	REINFORCED ROCK BERM FOR CULVERT PROTECTION	(RRB)
3	EA	-	CONCRETE WASHOUT AREA	(CWA)
2	EA	-	CHECK DAMS	(CD)

BENCHMARK

- THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "3863", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411416.273
EASTING = 235167.071
ELEVATION = 7023.42
- THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION
NORTHING = 410095.404
EASTING = 235052.131
ELEVATION = 7000.40
- THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 411399.962
EASTING = 233849.817
ELEVATION = 7030.82

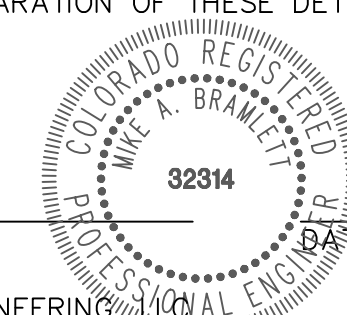
BASIS OF BEARINGS

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

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

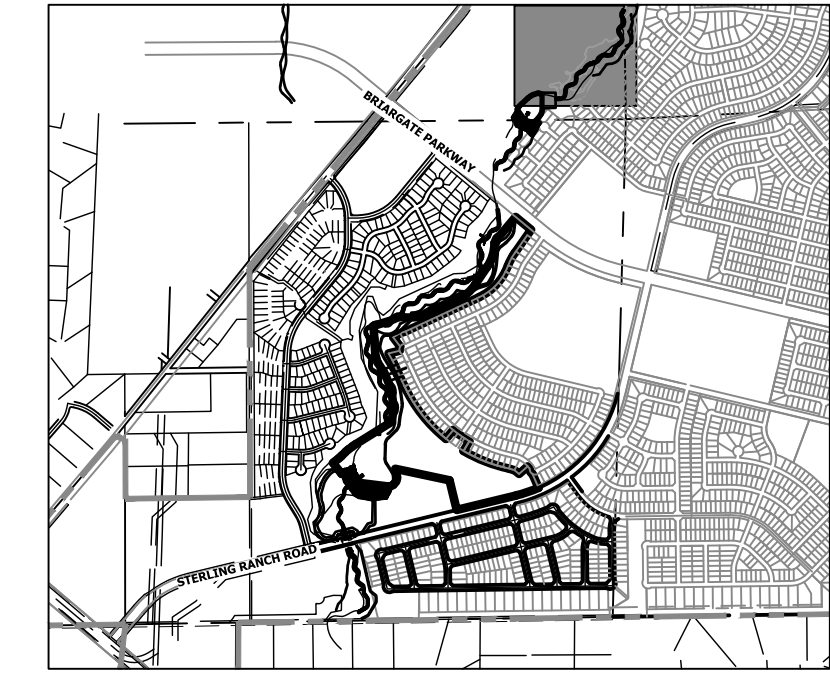
BY	DATE	No.	REVISION

SAND CREEK RESTORATION	GEC INTERIM	H-SCALE	1"=60'
		V-SCALE	N/A
DESIGNED BY	DJV	DATE	9/1/22
DRAWN BY	WLL	CHECKED BY	
SHEET	89	OF	99
JOB NO.	25188.04		

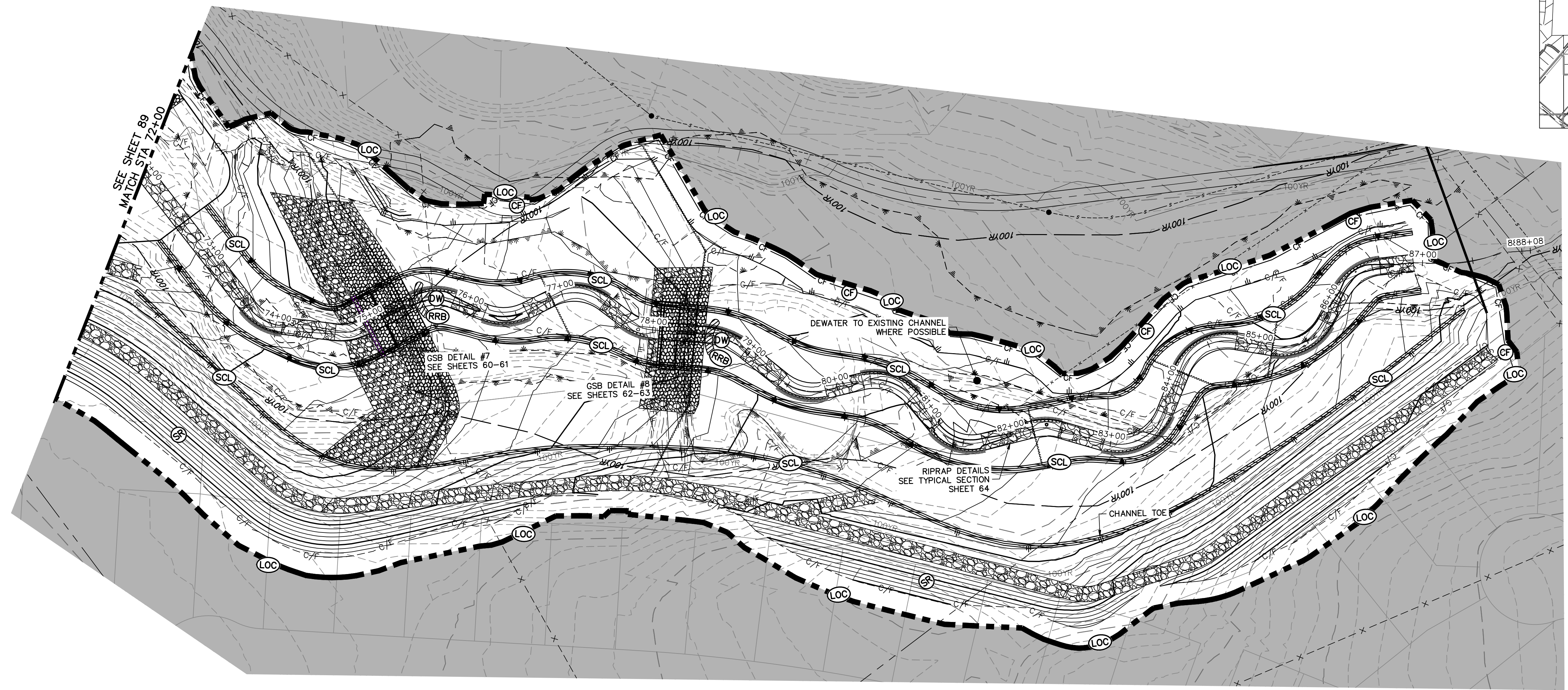
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 Fort Collins 970-491-9888 • www.jrengineering.com



KEY MAP
 SCALE: 1"=200'



LEGEND

EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
EXISTING RIGHT OF WAY LINE	DRAINAGE SWALE	CONSTRUCTION MARKERS	CM	CHECK DAM	CD
EXISTING EASEMENT	CONSTRUCTION FENCE	SEDIMENT CONTROL LOG	SCL	SURFACE ROUGHENING	SR
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EXISTING STORM SEWER	VEHICLE TRACKING CONTROL	PERMANENT LANDSCAPING	LS		
EXISTING CURB & GUTTER	STABILIZED STAGING AREA	GEOTEXTILE	ECB		
PROPOSED RIGHT OF WAY LINE	CONCRETE WASHOUT AREA	COIR MATTING	ECB		
PROPOSED EASEMENT	STOCK PILE				
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PROPOSED CURB & GUTTER					
PROPOSED TOP OF SLOPE					
PROPOSED TOE OF SLOPE					
EXISTING DRAINAGE ARROW					
PROPOSED DRAINAGE ARROW					

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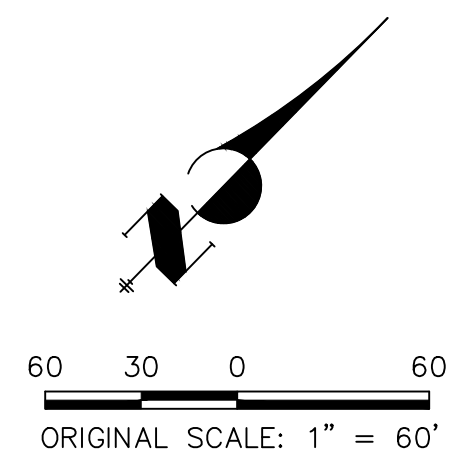
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3	EA	-	CONCRETE WASHOUT AREA	(CWA)
2	EA	-	CHECK DAMS	(CD)

BENCHMARK

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 ELEVATION = 7030.82

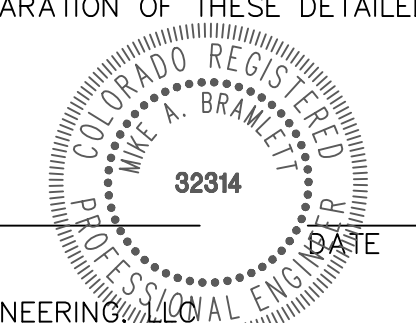
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ENGINEER'S STATEMENT

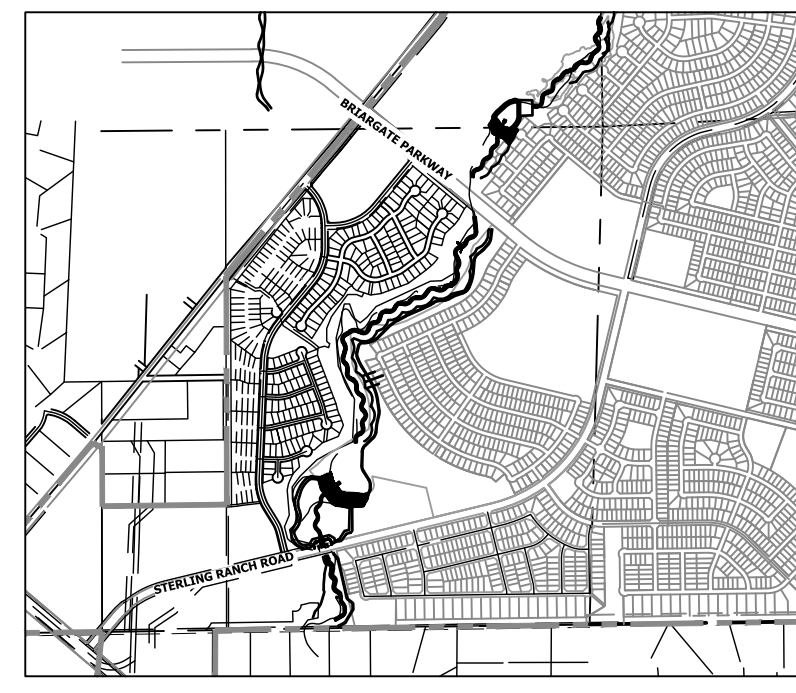
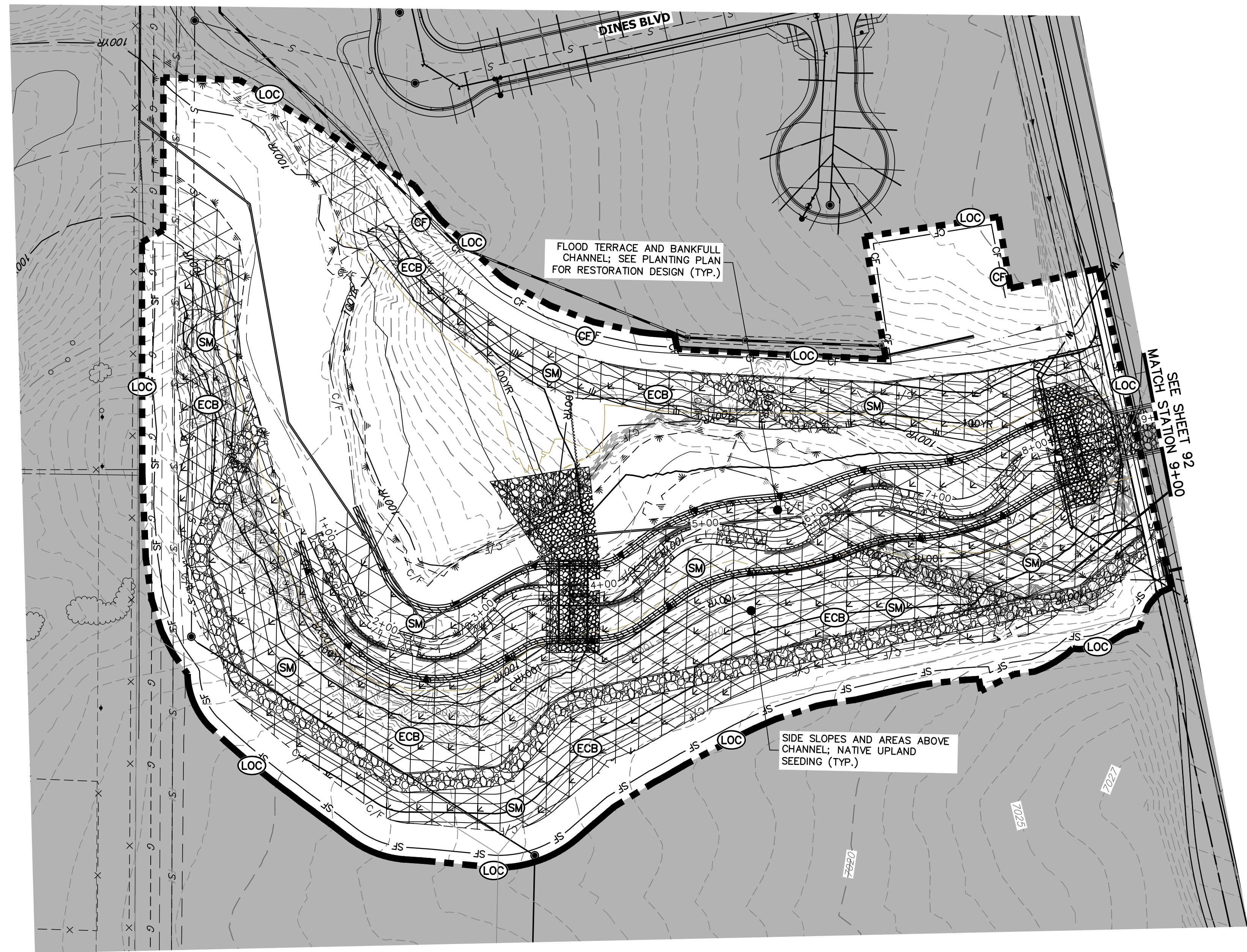
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 COLORADO P.E. 32314
 FOR AND ON BEHALF OF JR ENGINEERING



SAND CREEK RESTORATION	GEC INTERIM	BY	DATE		
		No.	REVISION		
H-SCALE	1"=60'				
V-SCALE	N/A				
DATE	9/1/22	DESIGNED BY	DJV		
		DRAWN BY	WLL		
		CHECKED BY			
SHEET 90 OF 99		JOB NO. 25188.04			



final should have all temporary BMPs removed (or grayed out) from the figures

JR-Addressed, temporary BMPs are now grayed out.

include quantities for ECB, seeding/mulching

JR-Addressed

LEGEND

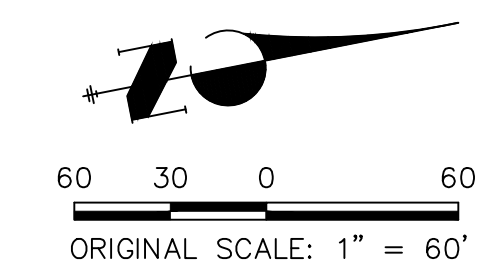
EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
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SECTION LINE	SILT FENCE	PERMANENT SEEDING AND MULCHING - NATIVE REVEGETATION SEED MIX	SM		
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BASIS OF BEARINGS

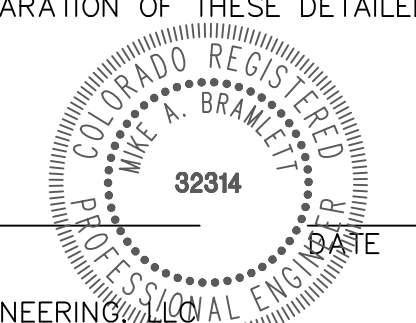
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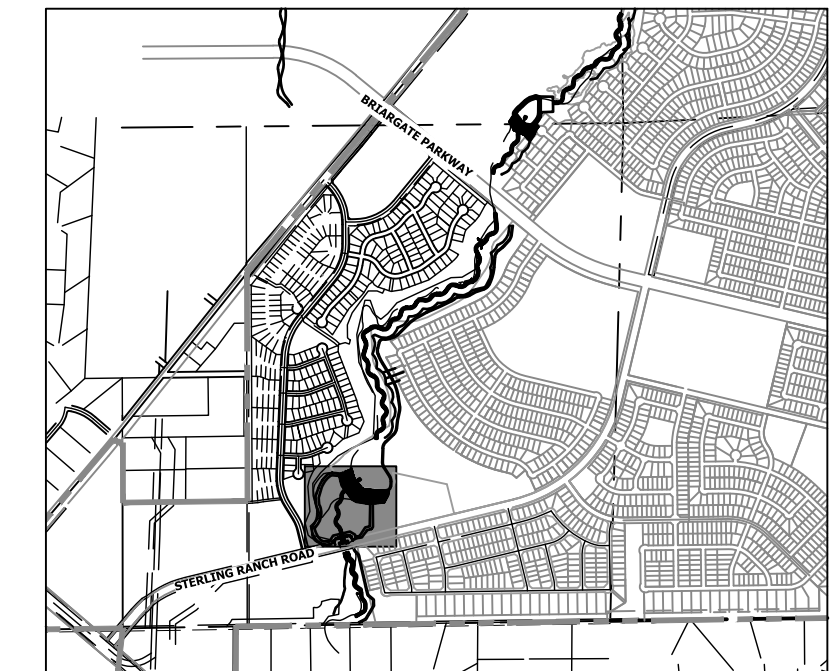
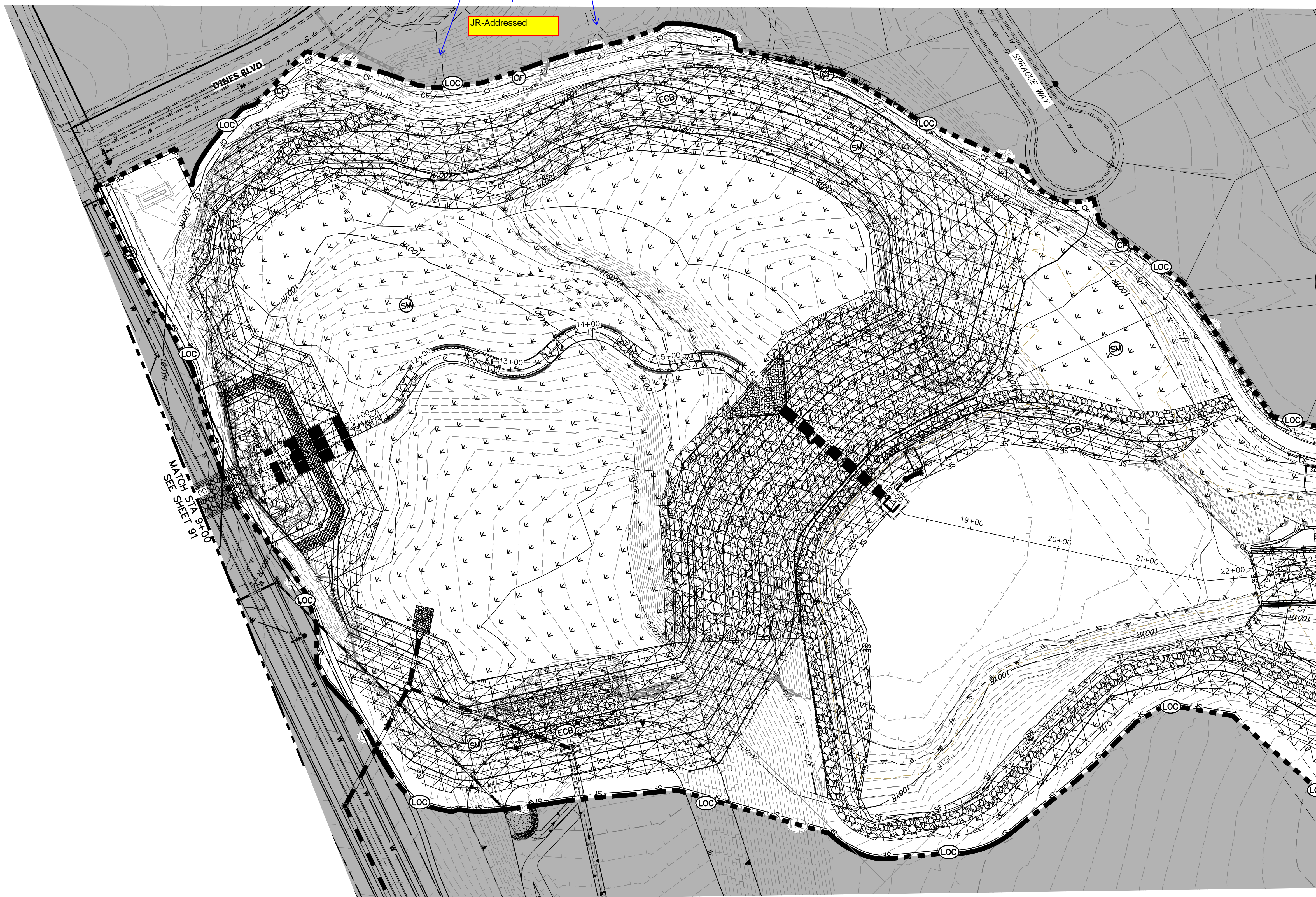
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MIKE A. BRAMLETT, P.E.
 COLORADO P.E. 32314
 FOR AND ON BEHALF OF JR ENGINEERING



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

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. THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.
SAND CREEK RESTORATION GEC FINAL	SHEET 91 OF 99 JOB NO. 25188.04



KEY MAP
SCALE: 1" = 2000'

LEGEND

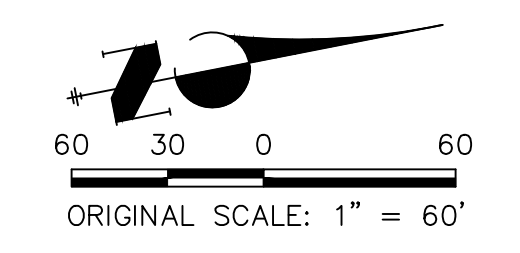
EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
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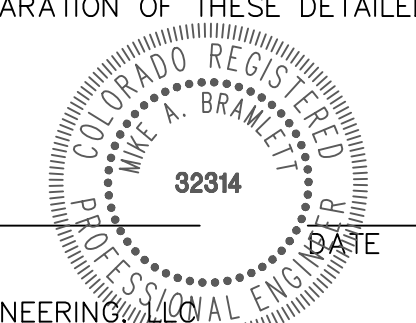
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MIKE A. BRAMLETT, P.E.
COLORADO P.E. 32314
FOR AND ON BEHALF OF JR ENGINEERING

PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT 2ND FLOOR COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 419-3024	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE AS DESIGNATED BY WRITTEN AUTHORIZATION.	
	BY DATE	No. REVISION
J.R. ENGINEERING A Westman Company Centennial 303-740-9888 • Colorado Springs 719-583-2683 Fort Collins 970-491-9888 • www.jrengineering.com	H-SCALE 1" = 60' V-SCALE N/A DATE 9/1/22 DESIGNED BY DJV DRAWN BY WLL CHECKED BY	SAND CREEK RESTORATION GEC FINAL
	SHEET 92 OF 99 JOB NO. 25188.04	

Label lot numbers
(all sheets)

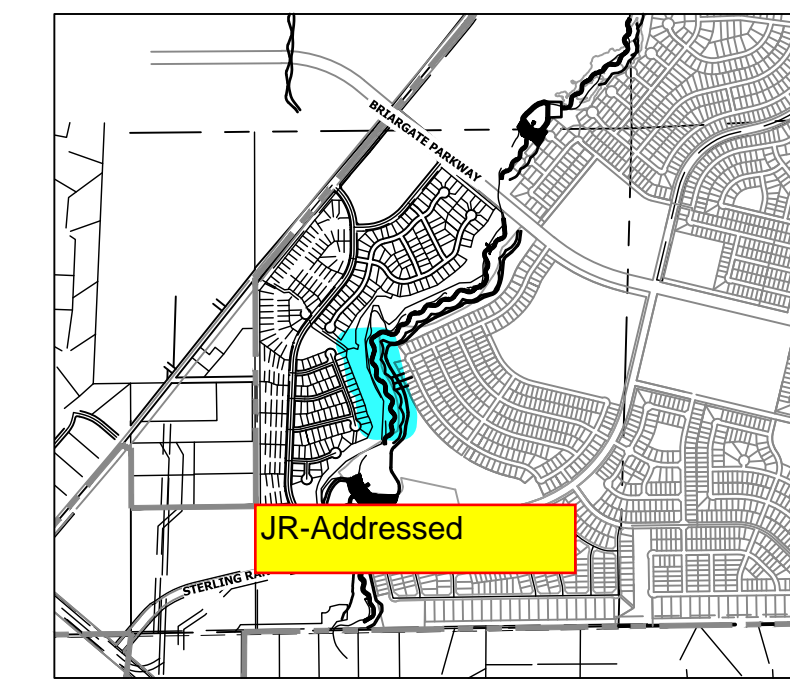
JR-Addressed

clarify or delete
these paths

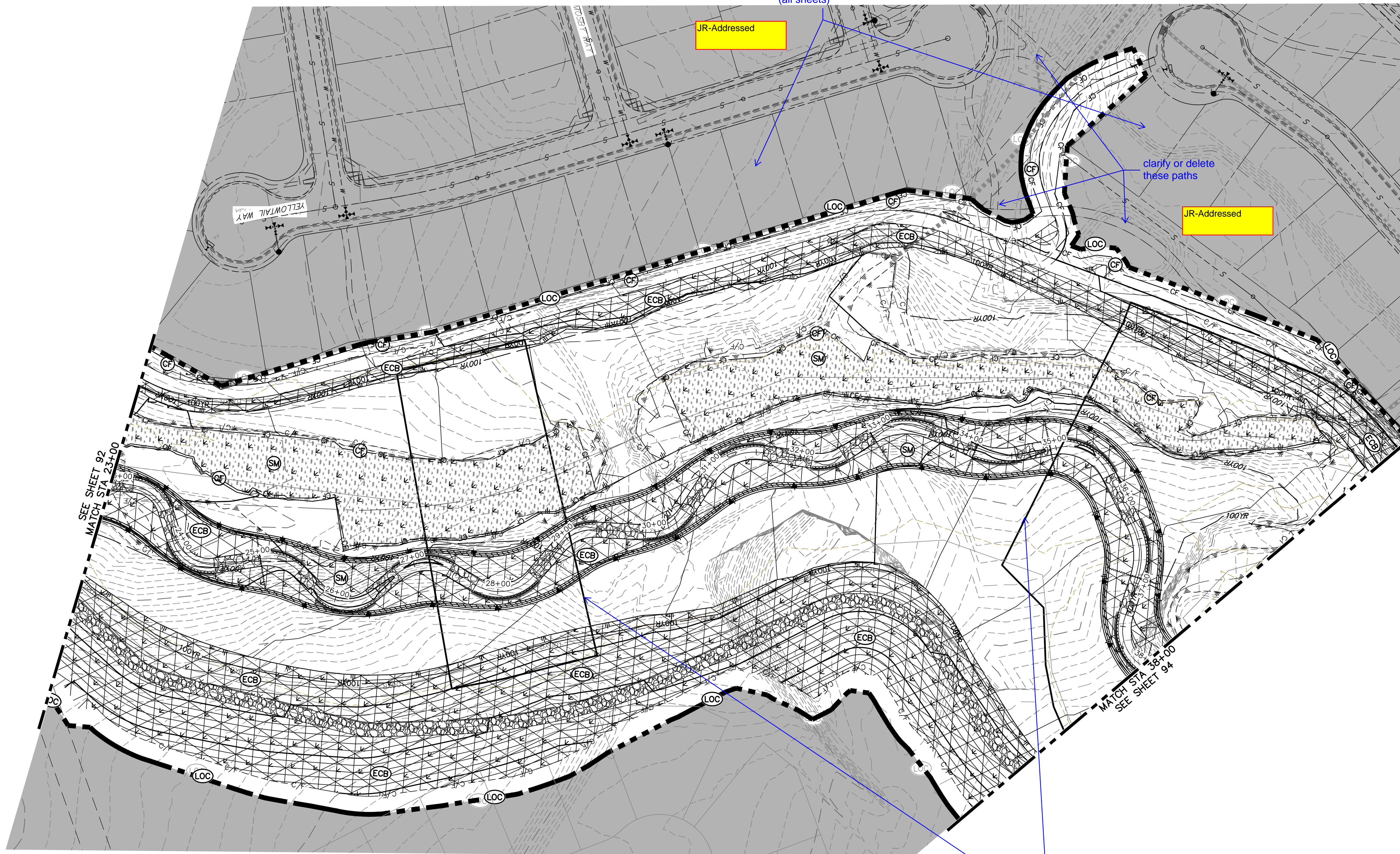
JR-Addressed

Delete any
unnecessary lines,
label if needed

JR-Addressed



KEY MAP
SCALE: 1" = 2000'



LEGEND

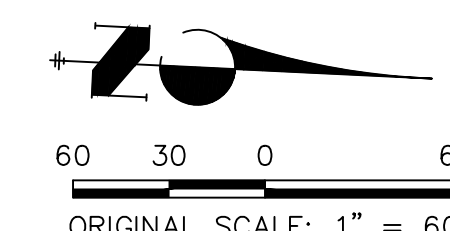
EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
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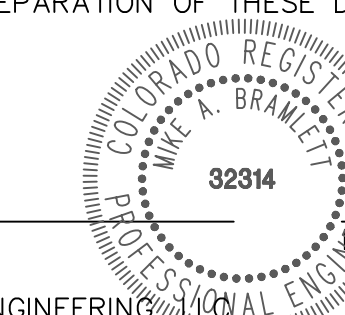
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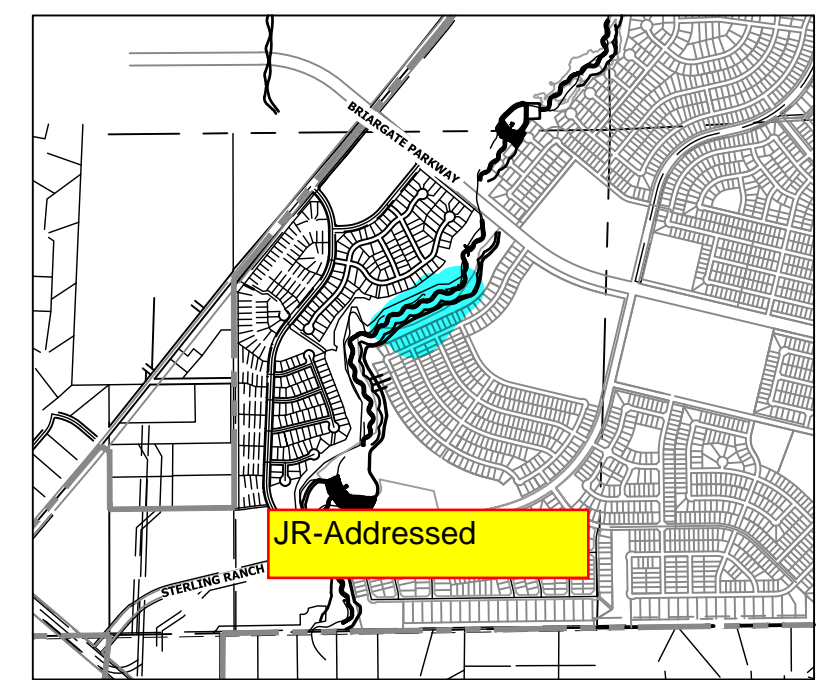
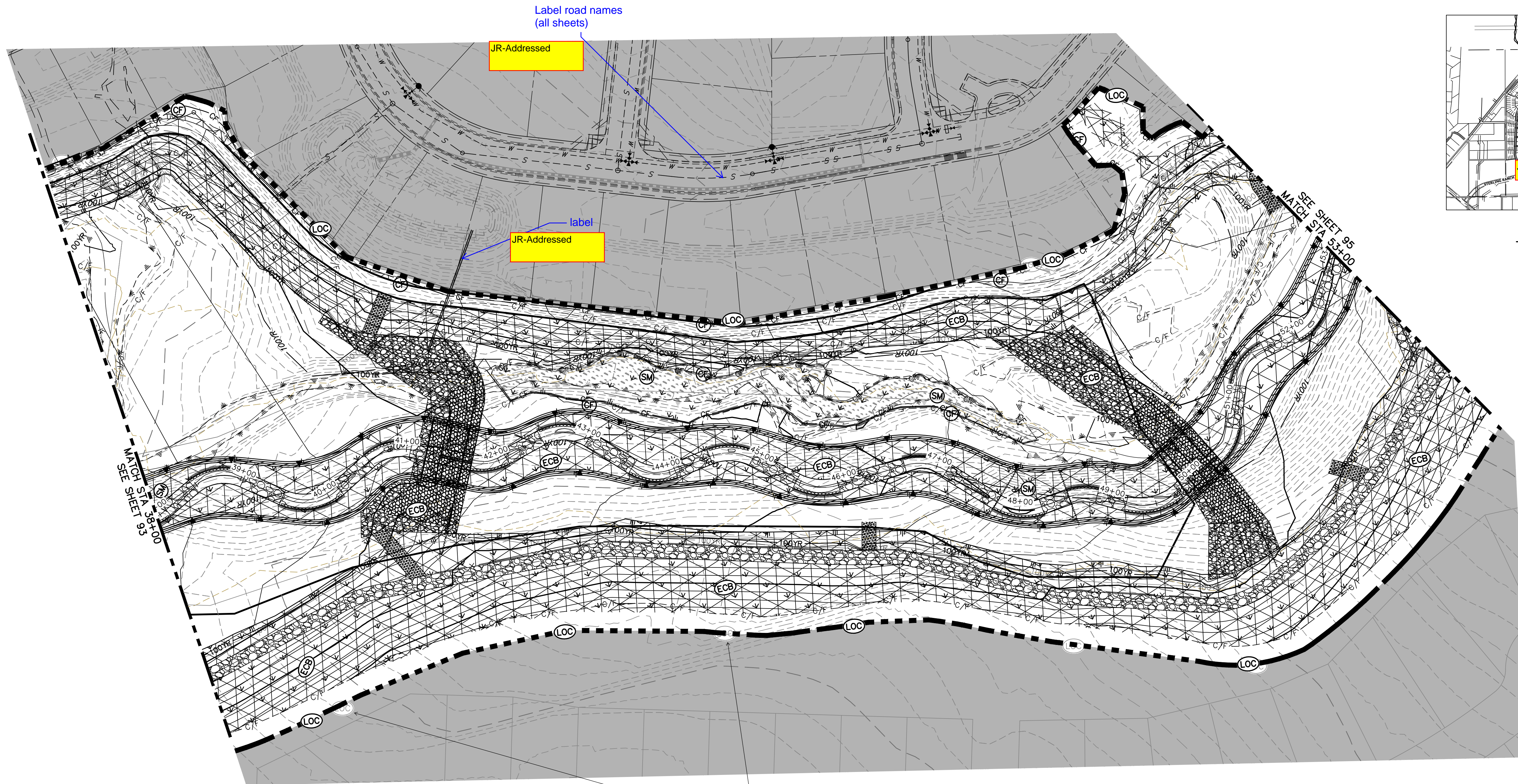
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COLORADO P.E. 32314
FOR AND ON BEHALF OF JR ENGINEERING

UNLESS 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
	JR ENGINEERING A Westman Company	Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com
BY	DATE	
No.	REVISION	
H-SCALE	1" = 60'	
V-SCALE	N/A	
DATE	DESIGNED BY	9/1/22 DJV
	DRAWN BY	WLL
	CHECKED BY	
SAND CREEK RESTORATION	GEC FINAL	
SHEET 93	OF 99	
JOB NO.	25188.04	



KEY MAP
SCALE: 1" = 200'

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

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

J.R. ENGINEERING
A Westman Company
Central 300-740-9888 • Colorado Springs 719-583-2583
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BY	DATE	No.	REVISION

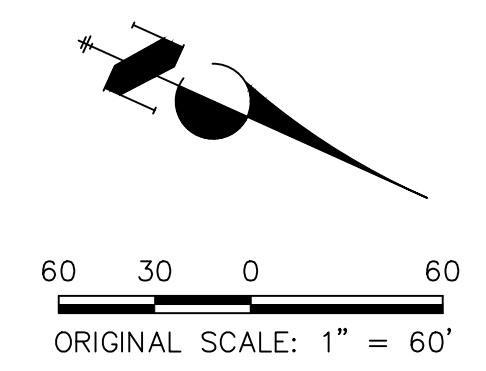
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1" = 60'	N/A	9/1/22	DJV	WLL	

LEGEND

EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
EXISTING RIGHT OF WAY LINE	DRAINAGE SWALE	CONSTRUCTION MARKERS	CM	CHECK DAM	CD
EXISTING EASEMENT	CONSTRUCTION FENCE	SEDIMENT CONTROL LOG	SCL	SURFACE ROUGHENING	SR
SECTION LINE	SILT FENCE	PERMANENT SEEDING AND MULCHING - NATIVE REVEGETATION SEED MIX	SM	PERMANENT LANDSCAPING	LS
EXISTING STORM SEWER	VEHICLE TRACKING CONTROL	PERMANENT LANDSCAPING	LS	GEOTEXTILE	ECB
EXISTING CURB & GUTTER	STABILIZED STAGING AREA	COIR MATTING	ECB		
PROPOSED RIGHT OF WAY LINE	CONCRETE WASHOUT AREA				
PROPOSED EASEMENT	STOCK PILE				
PROPOSED STORM SEWER	TEMP DRAINAGE CHANNEL				
PROPOSED CURB & GUTTER					
PROPOSED TOP OF SLOPE					
PROPOSED TOE OF SLOPE					
EXISTING DRAINAGE ARROW					
PROPOSED DRAINAGE ARROW					

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

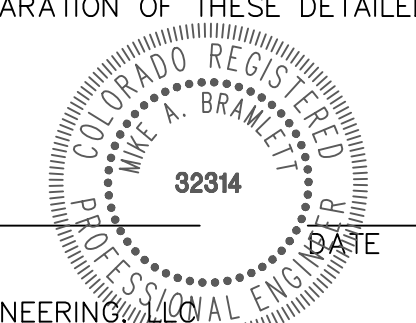


60 30 0 60
ORIGINAL SCALE: 1" = 60'



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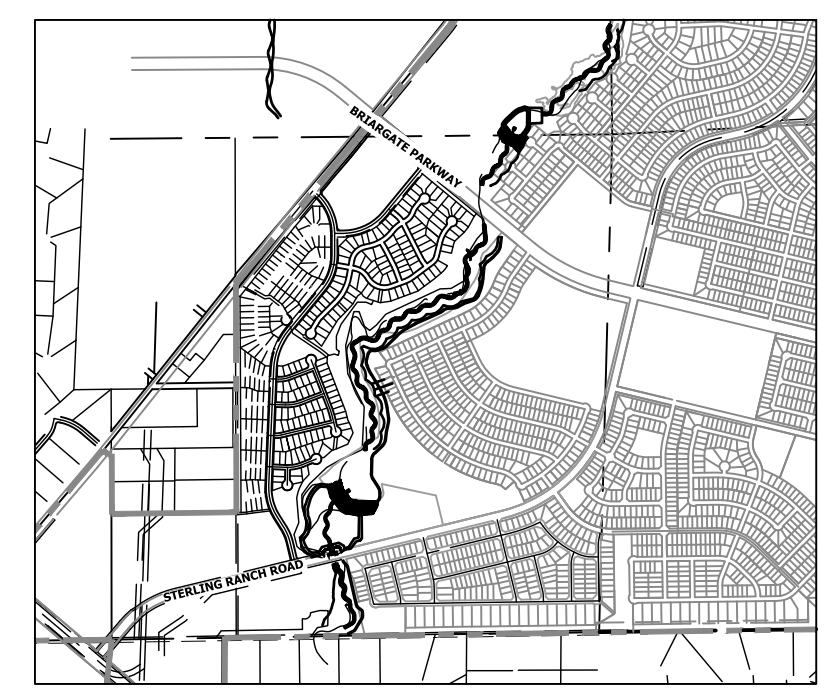
MIKE A. BRAMLETT, P.E.
COLORADO P.E. 32314
FOR AND ON BEHALF OF JR ENGINEERING



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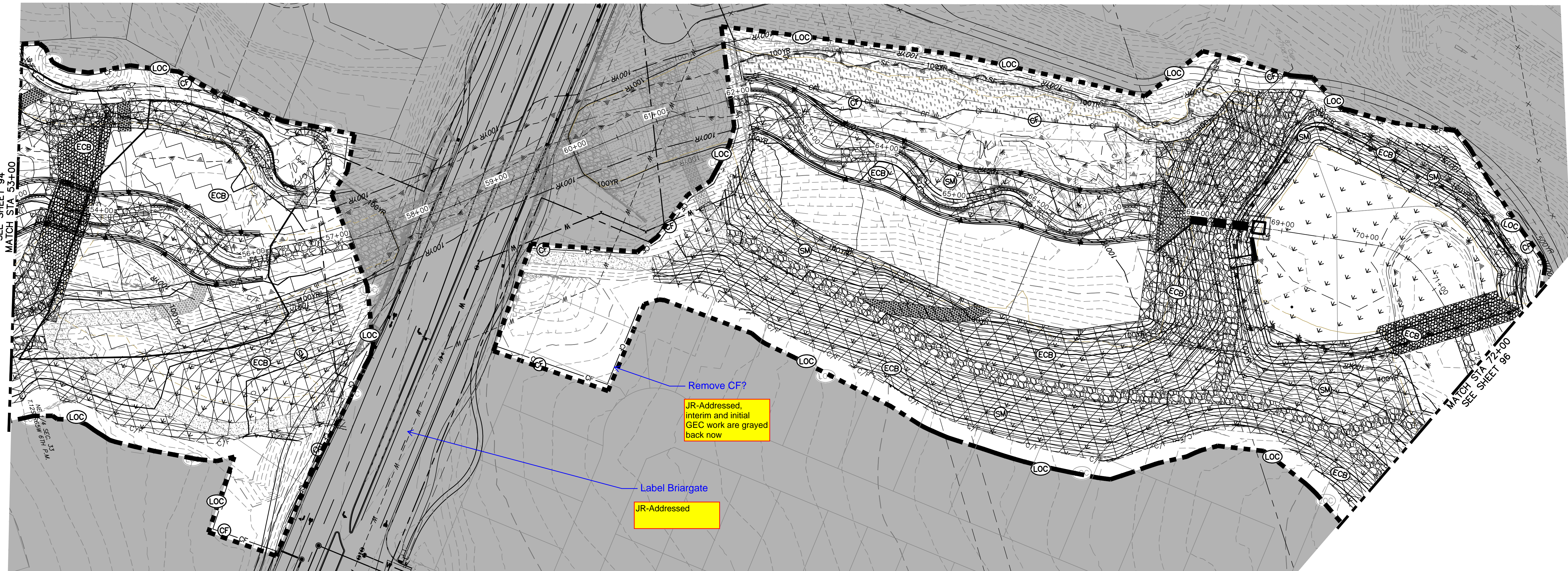
PREPARED FOR
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show location on key

JR-Addressed



Remove CF?

JR-Addressed, interim and initial GEC work are grayed back now

Label Briargate

JR-Addressed

LEGEND

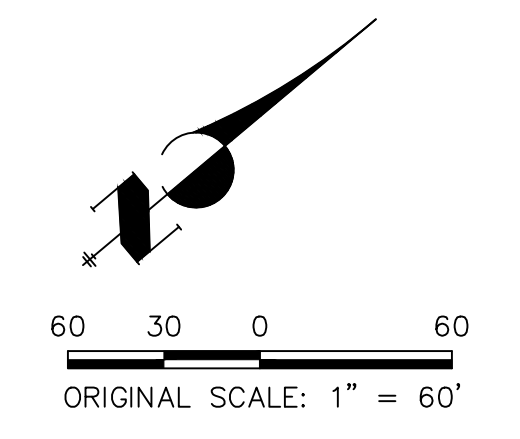
EXISTING CONTOUR	PROPOSED CONTOUR	CONTINUOUS GRADE INLET PROTECTION	IP	DEWATERING	DW
EXISTING PROPERTY LINE	LIMITS OF CONSTRUCTION	REINFORCED ROCK BERM FOR CULVERT PROTECTION	RRB	TEMPORARY SEDIMENTATION BASIN	SB
EXISTING RIGHT OF WAY LINE	DRAINAGE SWALE	CONSTRUCTION MARKERS	CM	CHECK DAM	CD
EXISTING EASEMENT	CONSTRUCTION FENCE	SEDIMENT CONTROL LOG	SCL	SURFACE ROUGHENING	SR
SECTION LINE	SILT FENCE	PERMANENT SEEDING AND MULCHING - NATIVE REVEGETATION SEED MIX	SM		
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PROPOSED DRAINAGE ARROW					

BENCHMARK

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 ELEVATION = 7030.82

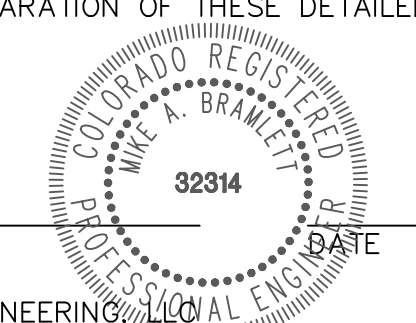
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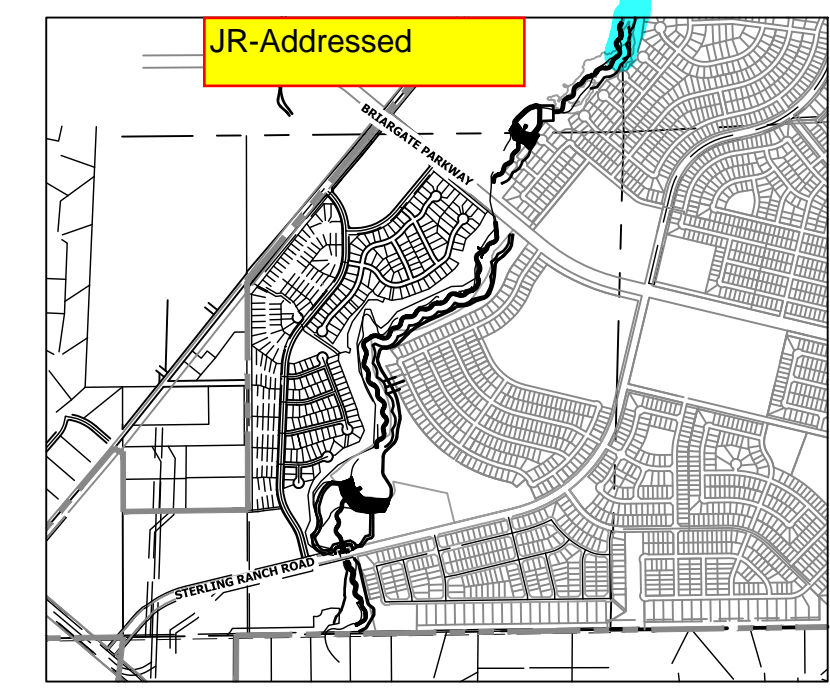
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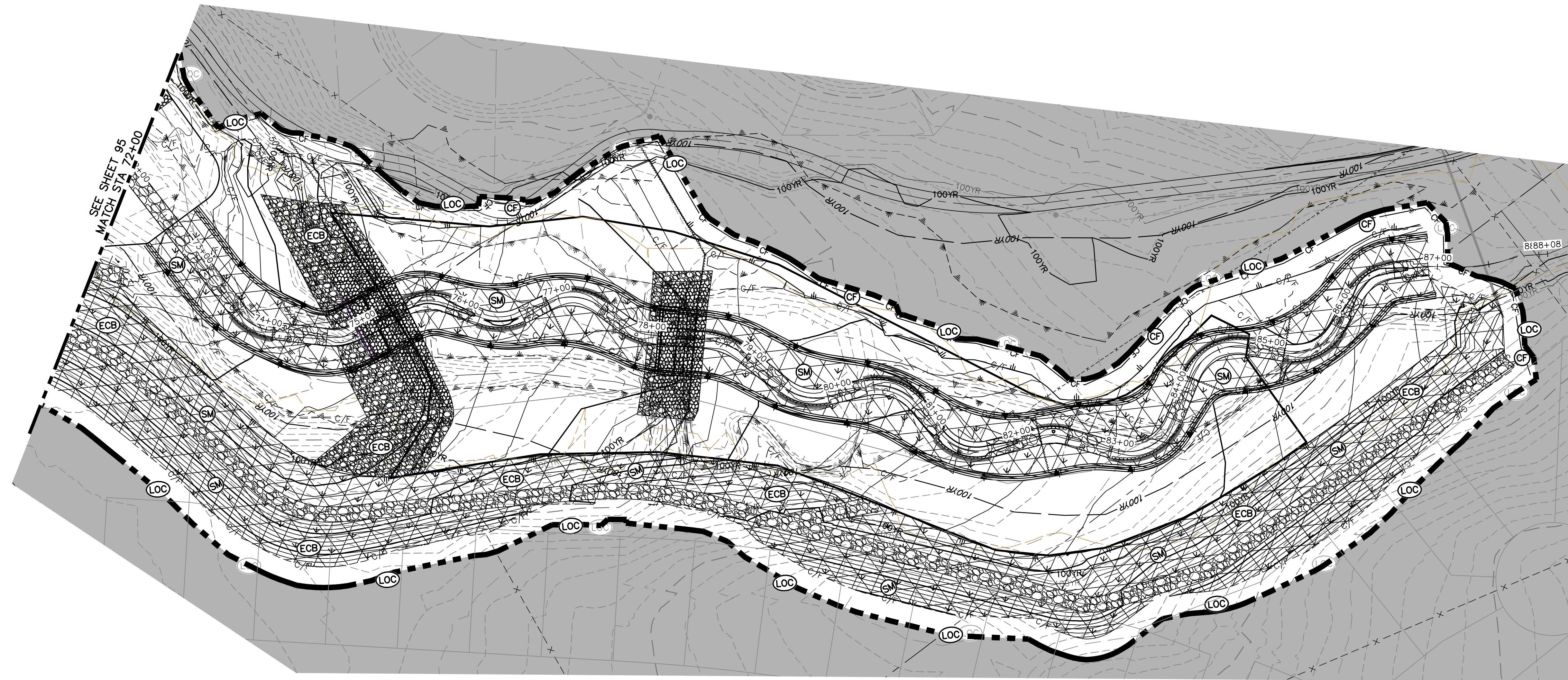


MIKE A. BRAMLETT, P.E.
 COLORADO P.E. 32314
 FOR AND ON BEHALF OF JR ENGINEERING

SAND CREEK RESTORATION	GEC FINAL	DESIGNED BY	DJV	WLL
		DRAWN BY		
		CHECKED BY		
SHEET 95 OF 99		JOB NO. 25188.04		



KEY MAP
SCALE: 1" = 2000'



LEGEND

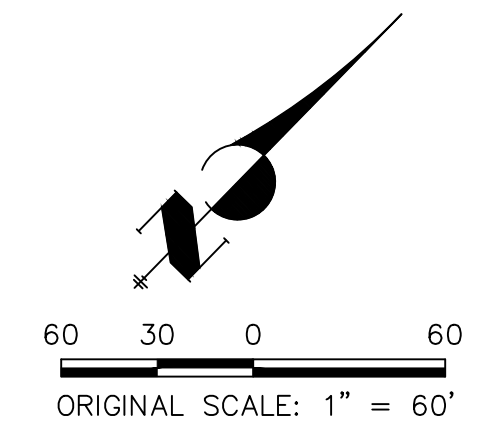
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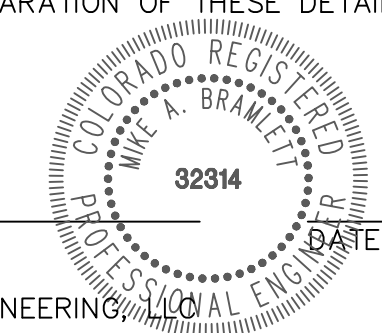
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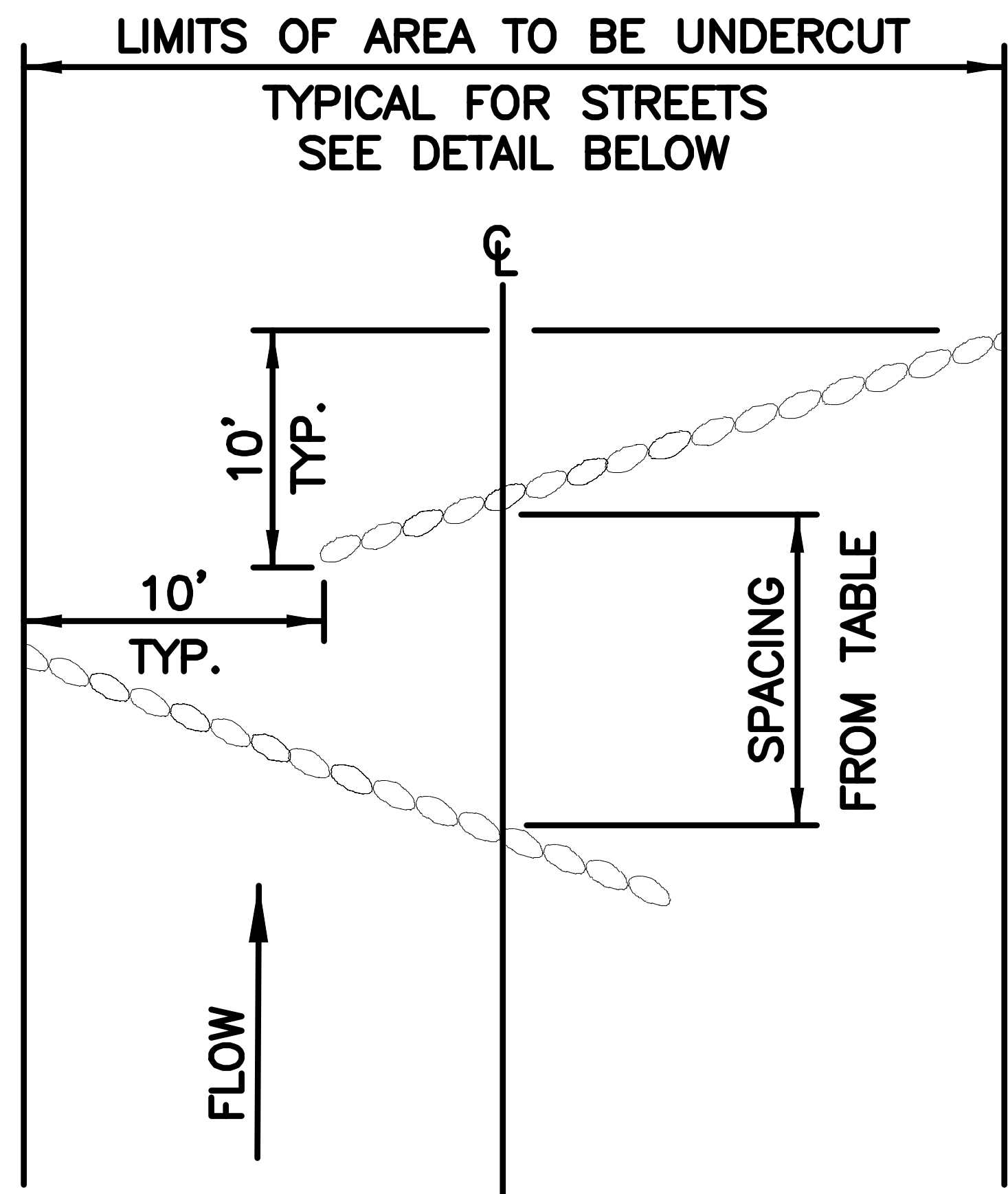
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PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
2ND FLOOR
COLORADO SPRINGS, CO 80903
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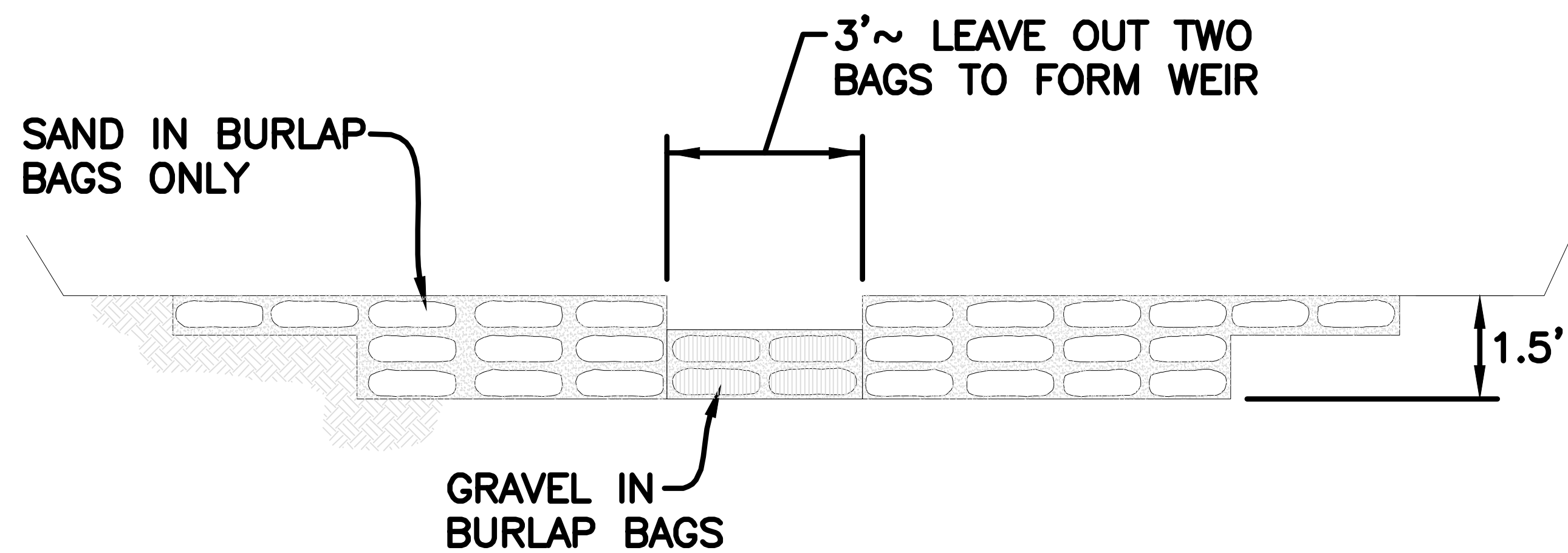
BY	DATE	No.	REVISION

SAND CREEK RESTORATION	H-SCALE	1" = 60'	DESIGNED BY	DJV	SHEET 96 OF 99
	V-SCALE	N/A	DRAWN BY	WLL	
GEC FINAL		DATE	9/1/22	CHECKED BY	
JOB NO. 25188.04					



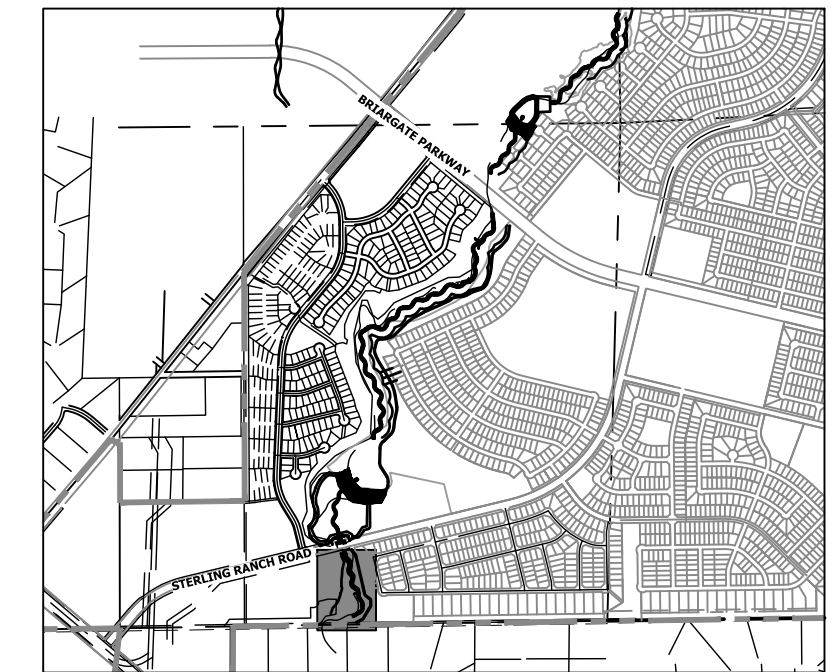
SANDBAG ROW SPACING TABLE

STREET GRADE %	INTERVAL (FT)
0-2	500
2-4	200
4-6	120
6-8	90
8-10	70
10-12	50
12-15	35



JR-Details have been added

Provide all applicable details including RRB and rock check dam detail for channel



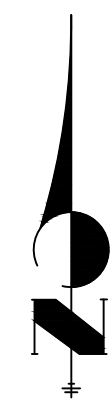
KEY MAP
SCALE: 1"=2000'

BASIS OF BEARINGS

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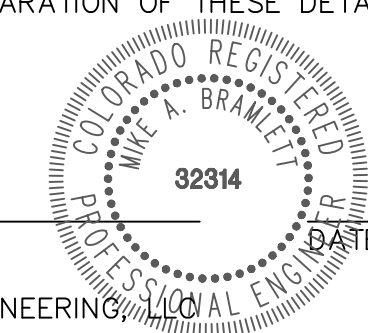
BENCHMARK

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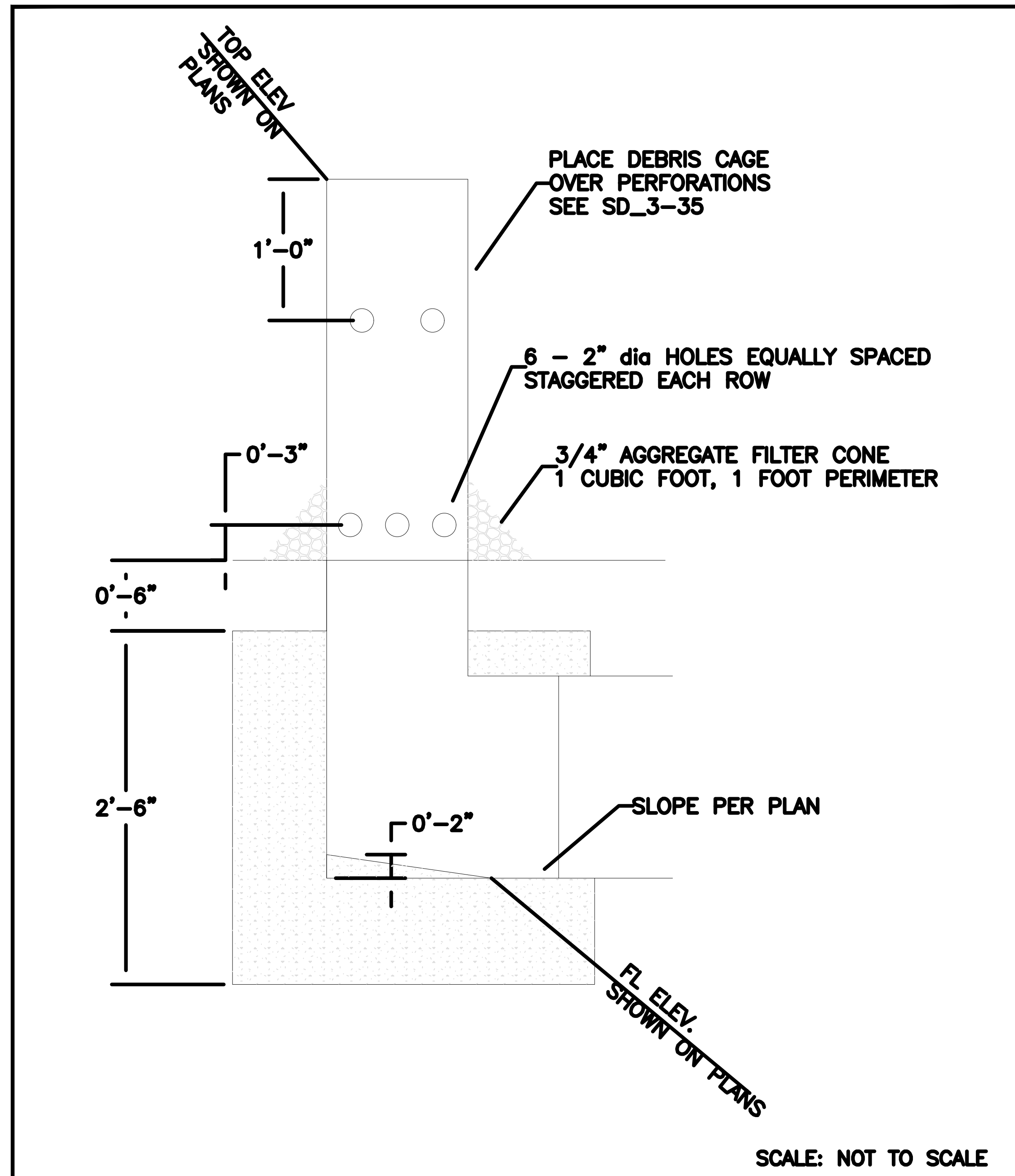
MIKE A. BRAMLETT, P.E.
COLORADO P.E. 32314
FOR AND ON BEHALF OF JR ENGINEERING



Know what's below.
Call before you dig.

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.	
	J.R. ENGINEERING A Westman Company Centennial 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY: _____ DATE: _____ No. REVISION: _____ H-SCALE: N/A V-SCALE: N/A DATE: 9/1/22 DESIGNED BY: SCH DRAWN BY: SCH CHECKED BY: _____
SHEET 97 OF 99 JOB NO. 25188.04		

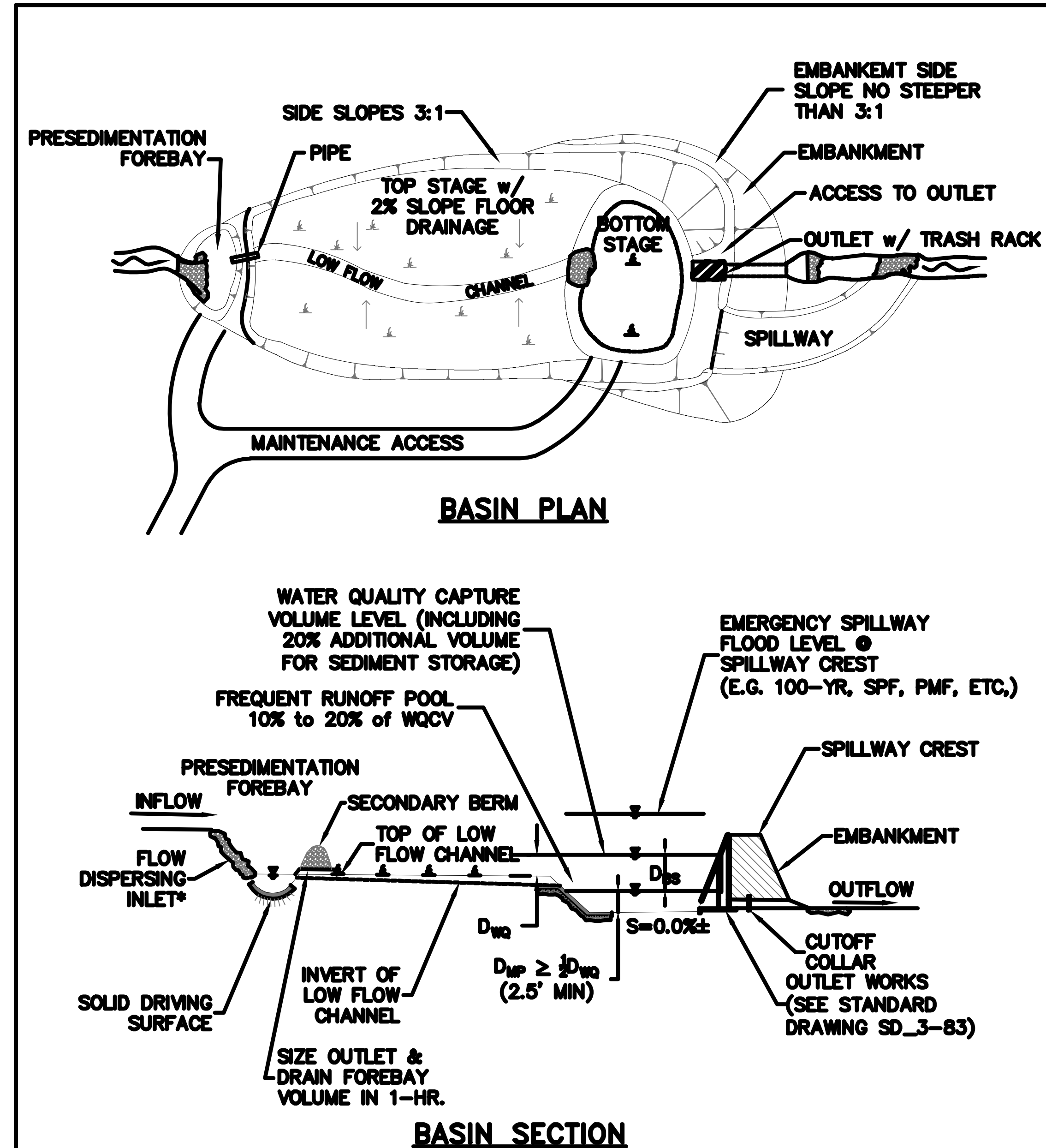
X:\25188\04\25188\04\Drawings\Sheet\Drawings\GEC\25188_04_GEC_Details.dwg, 10/14/2022, 7:06:11 PM, VaughnD




8/11/11
DATE APPROVED: André P. Brackin
DEPARTMENT OF TRANSPORTATION

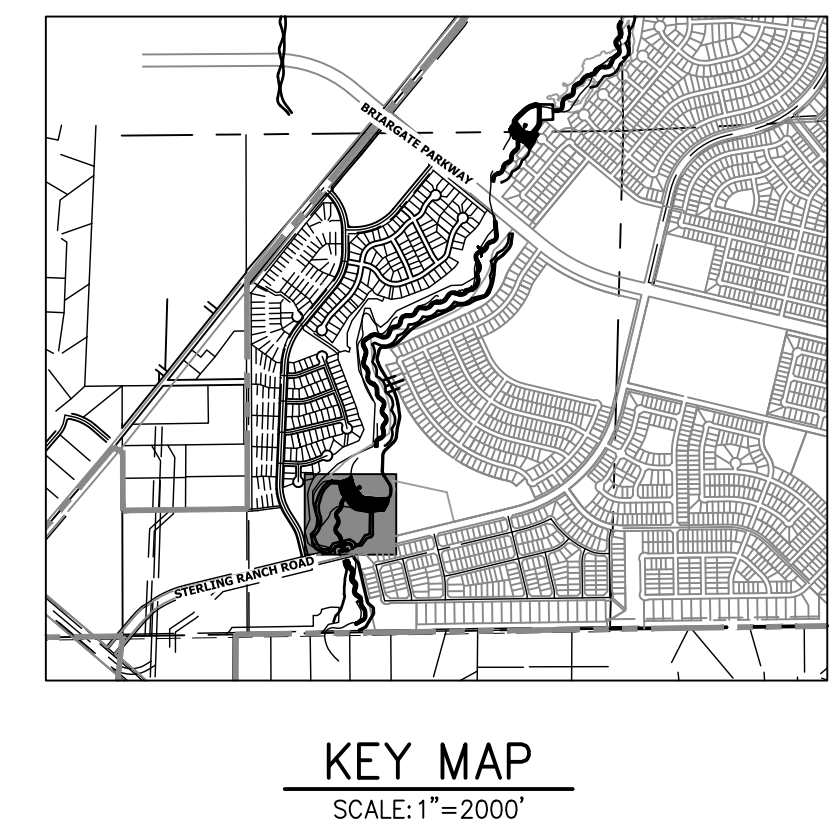
Desilting Basin Riser Detail Standard Drawing

REVISION DATE: 11/10/04 FILE NAME: SD_3-36

*COULD BE IMPACT BASIN, GSB DROP, CONCRETE RUNDOWN, OTHER HARDENED RUNDOWN

DATE APPROVED: 1/1/08	Plan & Section of an Extended Detention Basin Sedimentation Facility	
John A. McCarty	Standard Drawing	
REVISION DATE: 7/16/07	FILE NAME: SD_3-82	



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.

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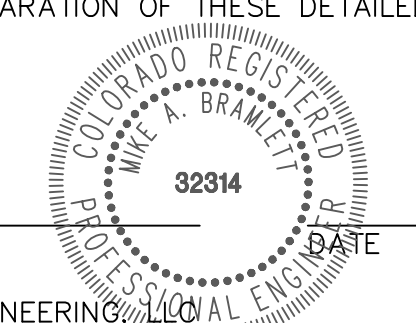
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BY	DATE	NO.	REVISION

H-SCALE	N/A	N/A	N/A	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				9/1/22	SCH	SCH	

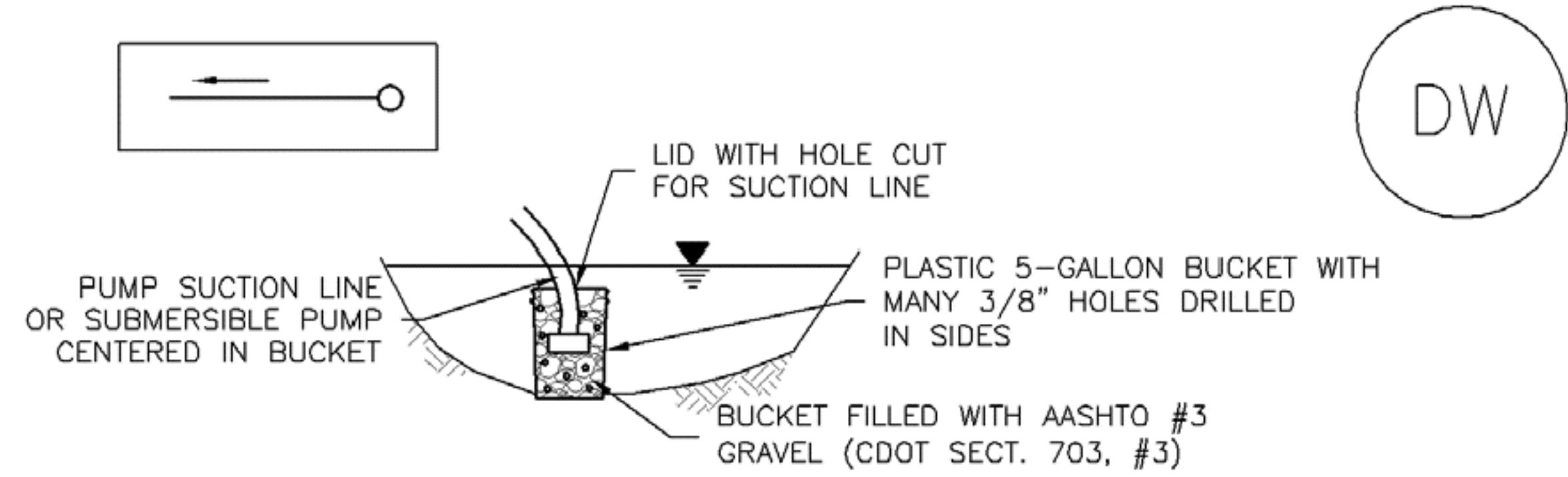
SAND CREEK RESTORATION
GEC DETAILS

SHEET 98 OF 99
JOB NO. 25188.04

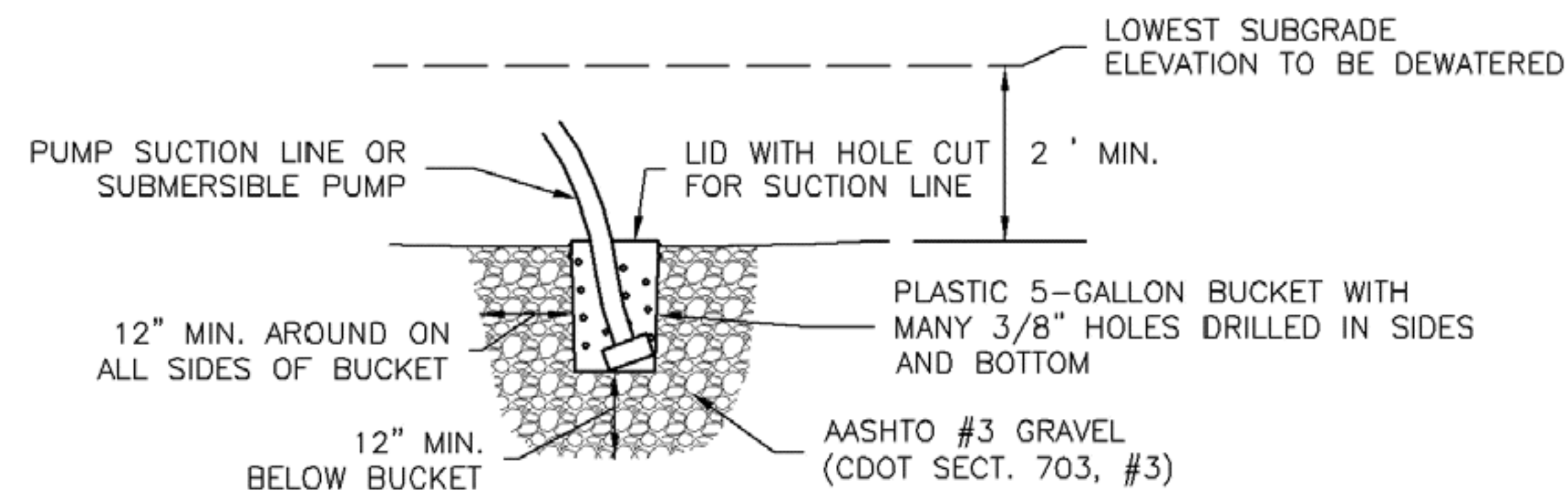


Dewatering Operations (DW)

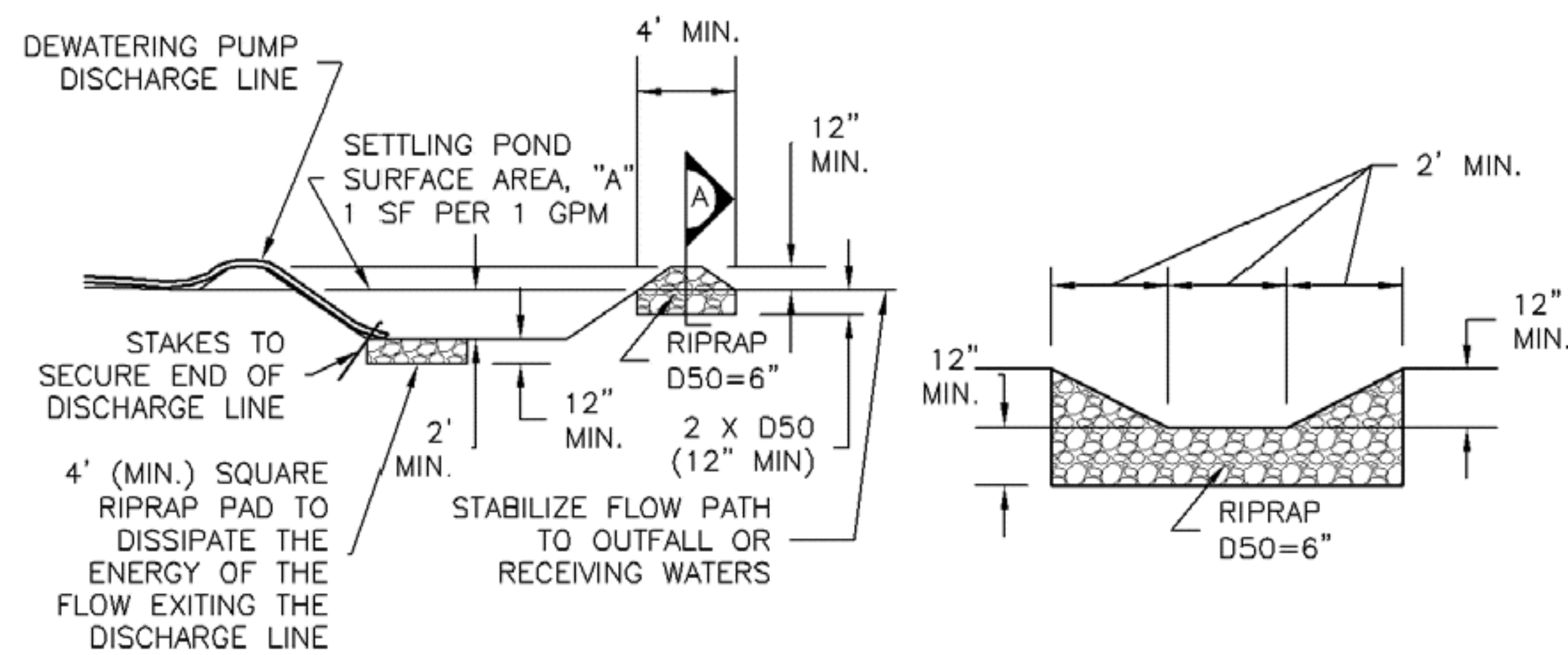
SM-9



DW-1. DEWATERING POND ALREADY FILLED WITH WATER

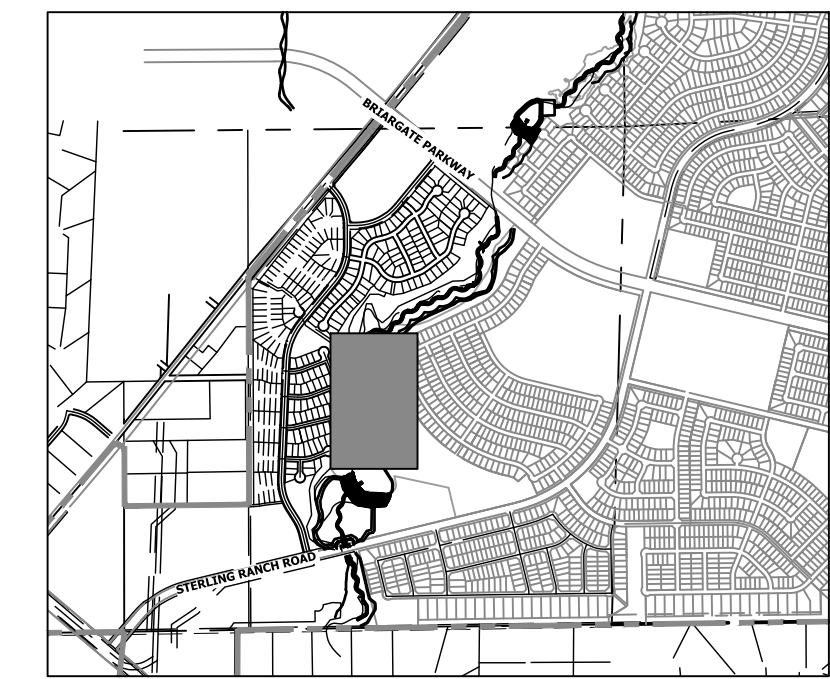


DW-2. DEWATERING SUMP FOR SUBMERSED PUMP



DW-3. SUMP DISCHARGE
SETTLING BASIN

SETTLING BASIN
SECTION A



KEY MAP
SCALE: 1"=2000'

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

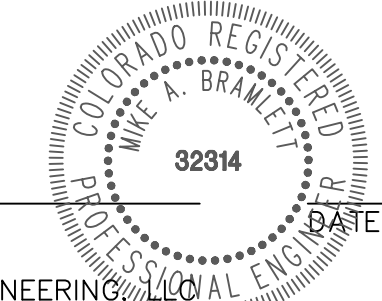
J.R. ENGINEERING
A Westman Company
Central 303-740-9888 • Colorado Springs 719-588-2583
Fort Collins 970-491-9888 • www.jrengineering.com

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

BENCHMARK

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
NORTHING = 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 = 23502.131
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

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



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

BY	DATE	REVISION

H-SCALE	AS SHOWN	No.	REVISION

V-SCALE	AS SHOWN	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
		9/1/22	SCH	SCH	

SAND CREEK RESTORATION	
GEC DETAILS	

SHEET	99	OF	99
JOB NO.	25188.04		

