

SADDLEHORN RANCH - FILING NO. 2

A PARCEL OF LAND LOCATED IN THE SOUTH HALF OF SECTION 3 AND THE NORTH HALF OF SECTION 10
TOWNSHIP 13 SOUTH, RANGE 64 WEST OF THE 6TH P.M.,
EL PASO COUNTY, STATE OF COLORADO

GRADING AND EROSION CONTROL PLANS

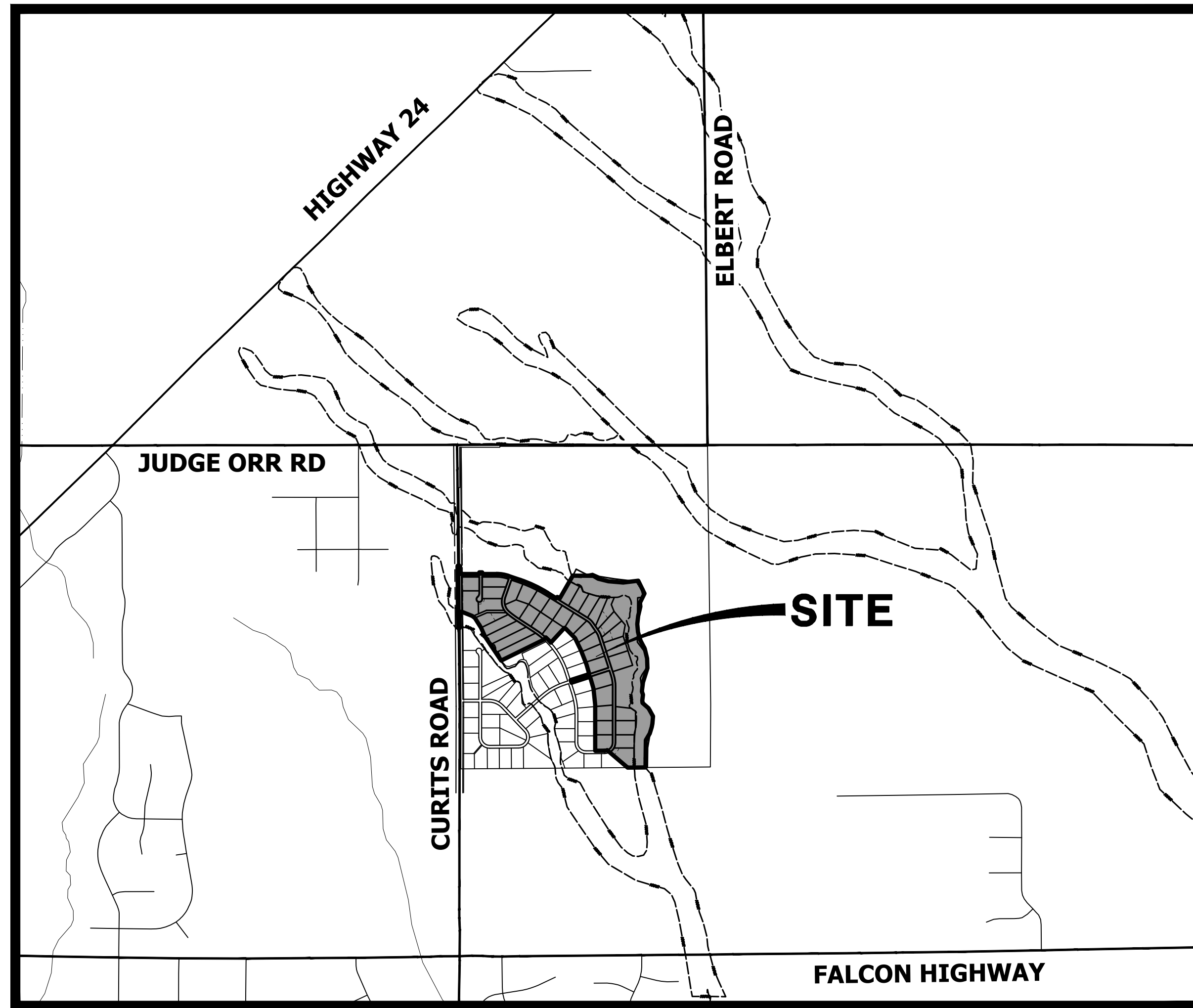


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UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION.

ABBREVIATIONS

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



VICINITY MAP
SCALE: 1" = 2000'

SHEET INDEX

1	-	COVER SHEET
2	-	LEGEND & NOTES
3	-	TYPICAL SECTIONS
4	-	GRADING & EROSION CONTROL SITE PLAN
5	-	EARLY GRADING IMPROVEMENTS
6-8	-	GRADING & EROSION CONTROL PLANS
9-15	-	GRADING & EROSION CONTROL DETAILS

EARTHWORK SUMMARY TABLE	
NET CUT (CY)	50,633
NET FILL (CY)	46,469
NET EXPORT (CY)	4,164
* 1' ROAD CUT	
* 10% COMPACTION	

CONTACTS:

OWNER	GORILLA CAPITAL CO SADDLEHORN RANCH, LLC 1342 HIGH STREET EUGENE, OR 97401 P--541-393-9043
DEVELOPER	ROI PROPERTY GROUP, LLC 2495 RIGDON STREET NAPA, CALIFORNIA 94558 P--707-633-9700
ENGINEER/SURVEYOR	JR ENGINEERING, LLC ATTN: BRYAN LAW 5475 TECH CENTER DRIVE, SUITE 235 COLORADO SPRINGS, CO 80919 P--(303) 267-6254
FIRE PROTECTION DISTRICT	FALCON FIRE PROTECTION 12072 ROYAL COUNTY DOWN ROAD FALCON, CO 80831 P--(719) 495-4050
DISTRICT	SADDLEHORN RANCH METRO DISTRICT



BENCHMARK:

THE VERTICAL DATUM IS BASED OFF AN OPUS SOLUTION RAN ON CONTROL POINT #100 (NO. 4 REBAR) AND IS ADJUSTED TO NGVD 1929, ELEVATION 6754.61.

BASIS OF BEARINGS:

THE WEST LINE OF SECTION 3, T3S, R64W, 6TH P.M., MONUMENTED BY A 3-1/4" ALUMINUM CAP STAMPED "PLS 17496" IN A RANGE BOX AT THE NORTHWEST CORNER OF SECTION 3 AND A NO. 8 REBAR IN A RANGE BOX AT THE SOUTHWEST CORNER OF SECTION 3, BEARING N00°32'28"W AS REFERENCED TO COLORADO STATE PLANE CENTRAL ZONE.

PREPARED FOR
ROI PROPERTY GROUP, LLC
2495 RIGDON STREET
NAPA, CALIFORNIA
(707) 365-6891
BRADY WILLIAMS

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	REVISION

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

ENGINEER'S STATEMENT

THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLANS.

OWNER/DEVELOPER STATEMENT

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

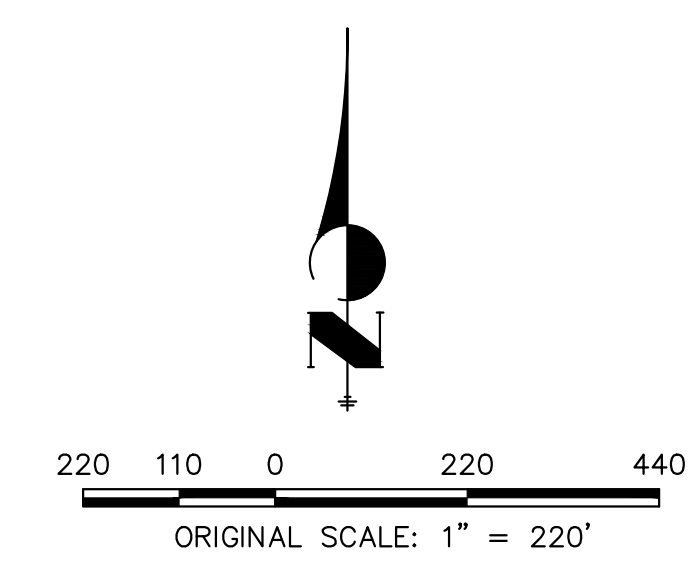
8/8/2022
JOHN HELMICK DATE

1/20/23
BRYAN T. LAW, P.E. DATE
FOR AND ON BEHALF OF JR ENGINEERING, LLC

THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES.

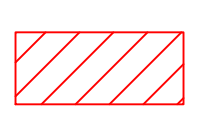
PCD FILE NO. SF2133

SADDLEHORN RANCH - FILING NO. 2
COVER SHEET
SHEET 1 OF 15
JOB NO. 2514204



LEGEND

OFF-SITE GRADING
(CANNOT BE COMPLETED WITH
EARLY GRADING PERMIT)

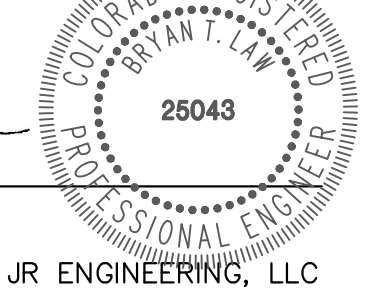


EPC 5/24/23

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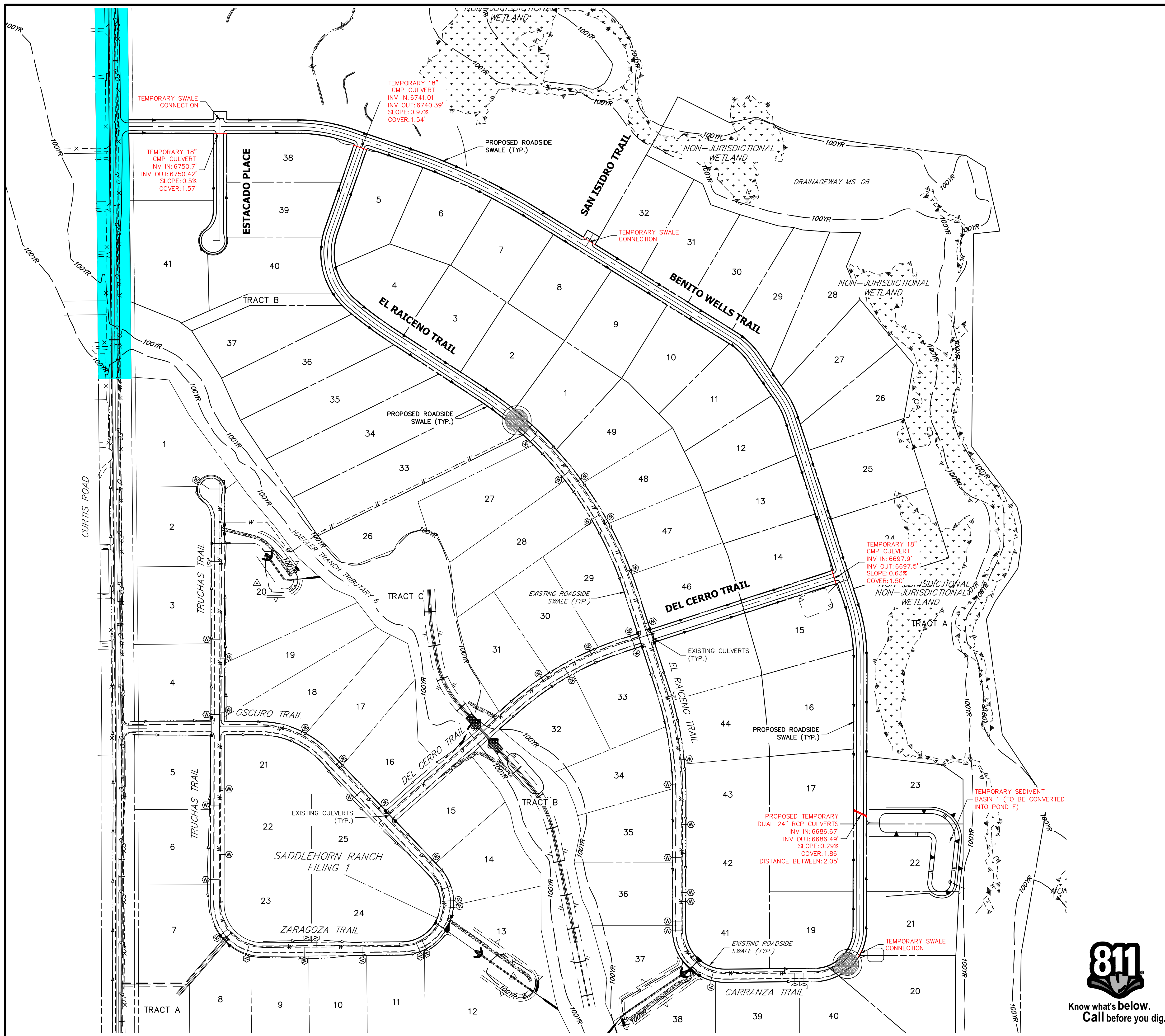
Bryan T. Law
BRYAN T. LAW, P.E.
COLORADO P.E. 25043
FOR AND ON BEHALF OF JR ENGINEERING, LLC



1/20/23
DATE

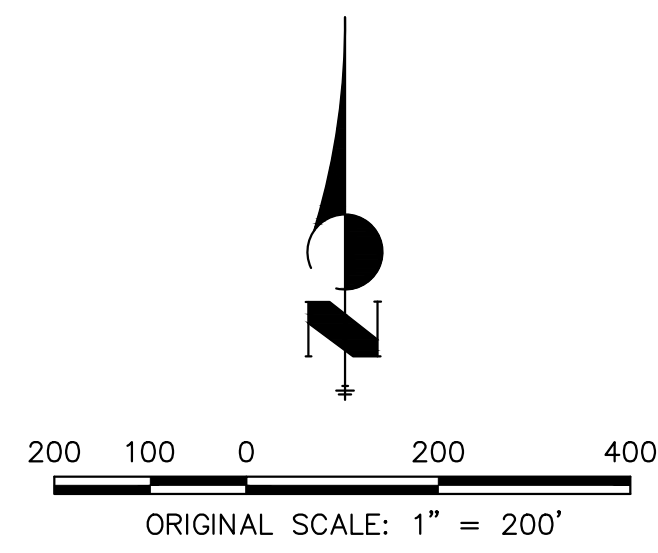
811
Know what's below.
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UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.	
PREPARED FOR	ROI PROPERTY GROUP, LLC 2495 RIGDON STREET NAPA, CALIFORNIA (707) 365-6891 BRADY WILLIAMS
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"=220'
V-SCALE	N/A
DATE	10/14/22
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	
SADDLEHORN RANCH - FILING NO. 2	
GRADING & EROSION CONTROL SITE PLAN	
SHEET 4	OF 15
JOB NO.	2514204



LEGEND

- EARLY GRADING TEMPORARY IMPROVEMENTS
- EARLY GRADING EXCLUDED AREAS



OWNER/DEVELOPER STATEMENT

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

John Helmick 8/8/2022
 JOHN HELMICK DATE

GORILLA CAPITAL CO SADDLEHORN RANCH, LLC
 1342 HIGH STREET
 EUGENE, OR 97401 EPC 52423

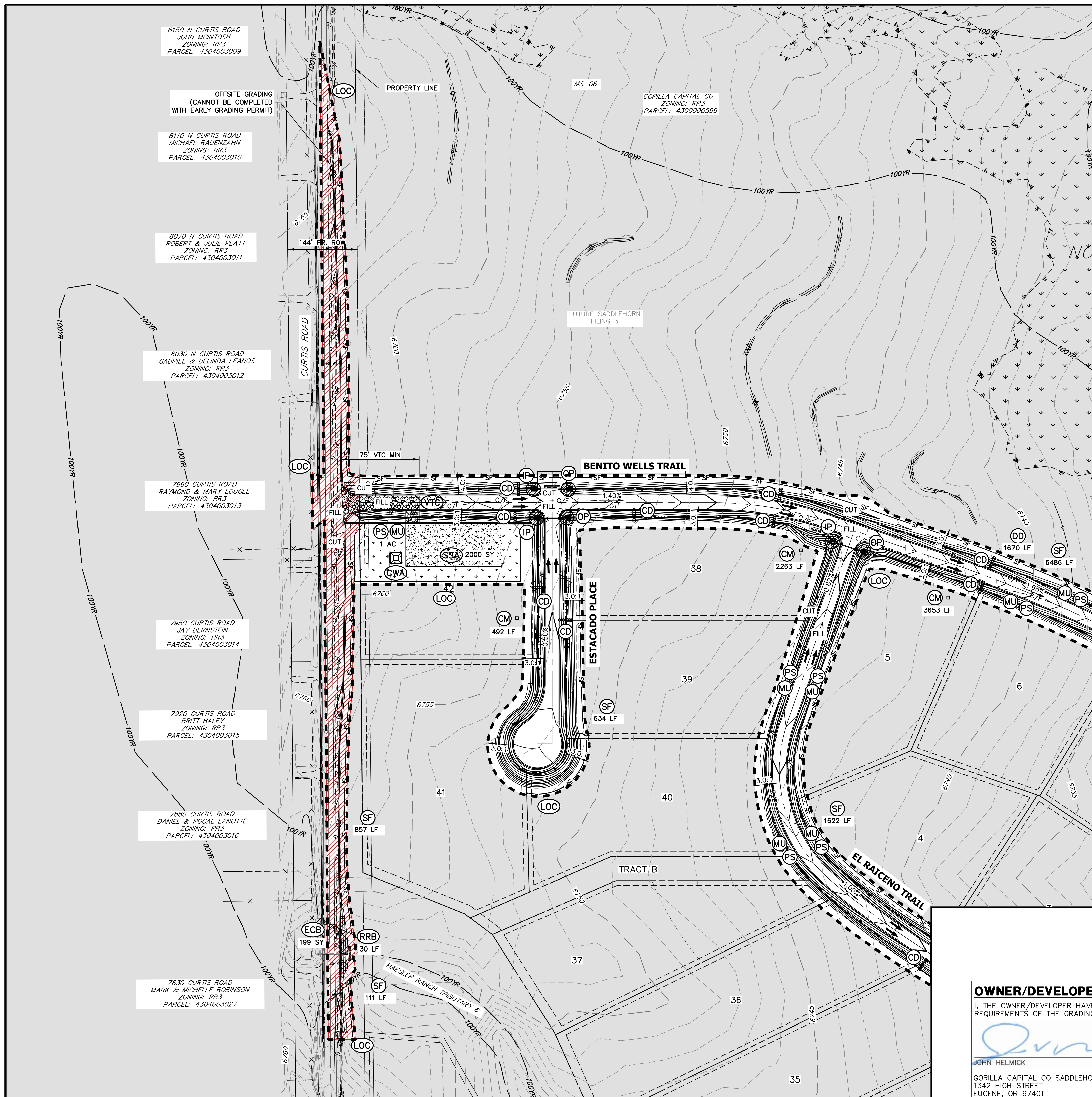
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Bryan T. Law 1/20/23
 BRYAN T. LAW, P.E. DATE
 COLORADO P.E. 25043
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SADDLEHORN RANCH - FILING NO. 2	
EARLY GRADING IMPROVEMENTS	
SHEET	5 OF 15
JOB NO.	2514204



8150 N CURTIS ROAD
JOHN MCINTOSH
ZONING: RR3
PARCEL: 4304003009

OFFSITE GRADING
(CANNOT BE COMPLETED
WITH EARLY GRADING PERMIT)

8110 N CURTIS ROAD
MICHAEL RAUENZAHN
ZONING: RR3
PARCEL: 4304003010

8070 N CURTIS ROAD
ROBERT & JULIE PLATT
ZONING: RR3
PARCEL: 4304003011

8030 N CURTIS ROAD
GABRIEL & BELINDA LEANOS
ZONING: RR3
PARCEL: 4304003012

7990 CURTIS ROAD
RAYMOND & MARY LOUGEE
ZONING: RR3
PARCEL: 4304003013

7950 CURTIS ROAD
JAY BERNSTEIN
ZONING: RR3
PARCEL: 4304003014

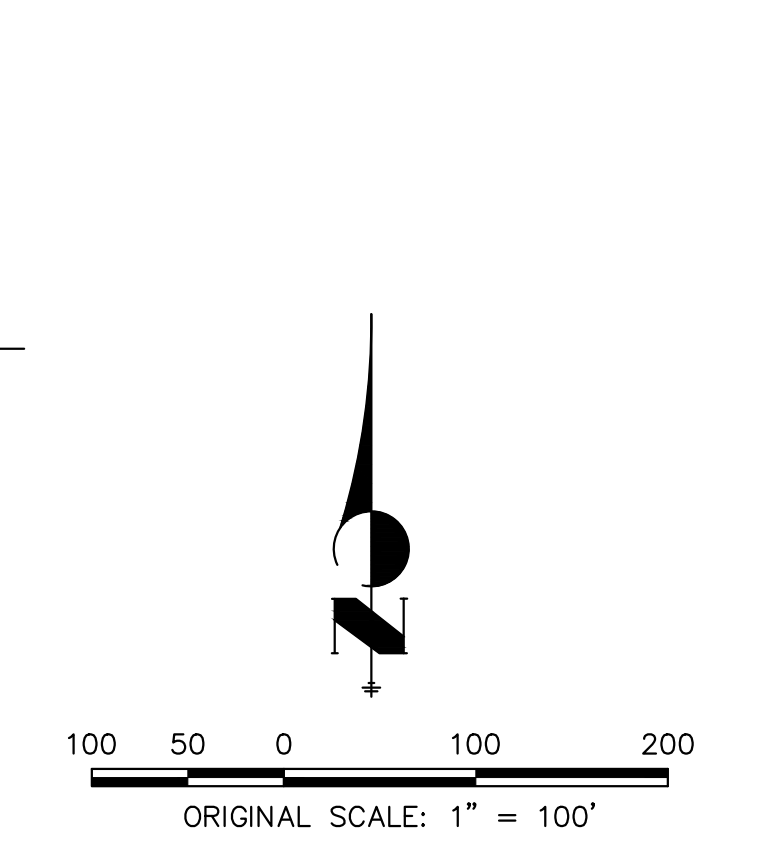
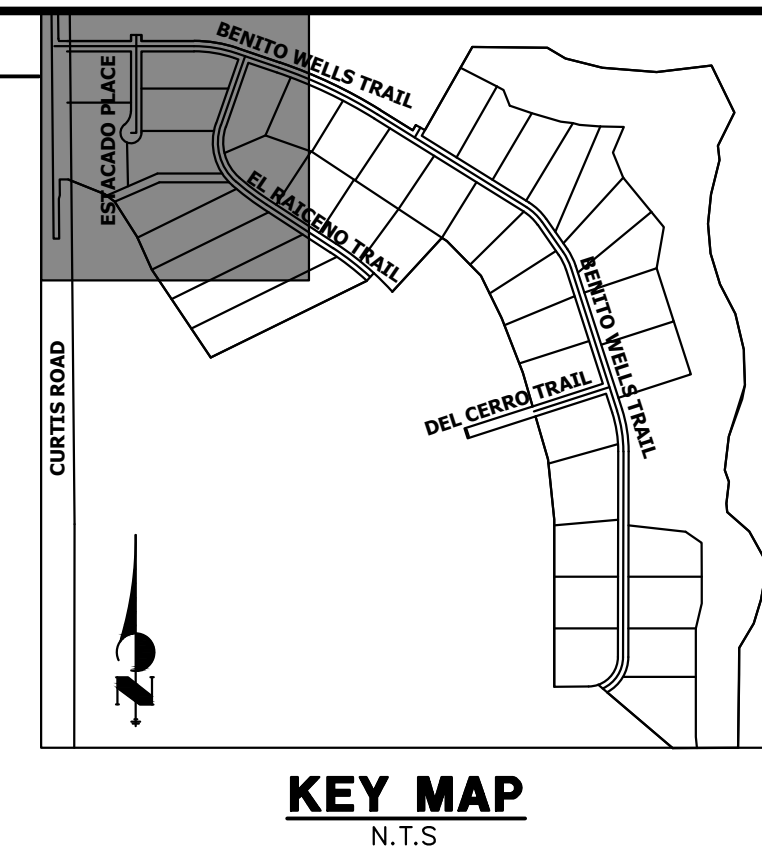
7920 CURTIS ROAD
BRITT HALEY
ZONING: RR3
PARCEL: 4304003015

7880 CURTIS ROAD
DANIEL & ROCAL LANOTTE
ZONING: RR3
PARCEL: 4304003016

7830 CURTIS ROAD
MARK & MICHELLE ROBINSON
ZONING: RR3
PARCEL: 4304003027

LEGEND

- SEDIMENT BASIN (SB) [Symbol]
- SILT FENCE (SF) [Symbol]
- STABILIZED STAGING AREA (SSA) [Symbol]
- CONSTRUCTION MARKER (CM) [Symbol]
- VEHICLE TRACKING CONTROL (VTC) [Symbol]
- TEMPORARY STOCK PILE (TSP) [Symbol]
- EROSION CONTROL BLANKET (ECB) [Symbol]
- INLET PROTECTION (IP) [Symbol]
- OUTLET PROTECTION (OP) [Symbol]
- DIVERSION DITCH AND DIKE, TEMPORARY (DD) [Symbol]
- CUT AND FILL LINE (C/F) [Symbol]
- LIMITS OF CONSTRUCTION/DISTURBANCE (LOC) [Symbol]
- CONCRETE WASHOUT AREA (CWA) [Symbol]
- MULCHING & PERMANENT SEEDING (MU, PS) [Symbol]
- TEMPORARY SLOPE DRAIN (TSD) [Symbol]
- REINFORCED ROCK BERM (RRB) [Symbol]
- CHECK DAM (CD) [Symbol]
- ROCK SOCK (RS) [Symbol]
- CONSTRUCTION MARKERS (CM) [Symbol]
- OFF-SITE GRADING (CANNOT BE COMPLETED WITH EARLY GRADING PERMIT) [Symbol]



NOTES

- REFER TO THE STORMWATER MANAGEMENT PLAN (SWMP) FOR A DETAILED DESCRIPTION OF THE MAINTENANCE PROGRAMS FOR EROSION CONTROL FACILITIES.
- SEE SHEET 3 FOR SWALE TYPICAL CROSS SECTIONS THAT INCLUDES SWALE LINING DETAIL.
- ALL DISTURBED AREAS NOT TO BE PAVED SHALL BE PERMANENTLY SEEDING PER THE FAWNEE BUTTES SEED INC. - "LOW GROW NATIVE MIX" OR APPROVED EQUAL. SEE SHEET 3 FOR SEED MIX DETAILS. 12.7 TOTAL ACRES OF SEEDING ESTIMATED.
- P.I.E = PUBLIC IMPROVEMENTS EASEMENT
- EXISTING VEGETATION CONSISTS OF NATIVE MEADOW GRASSES (APPROX. 70% COVERAGE) DETERMINED THROUGH A COMBINATION OF FIELD VERIFICATION AND AERIAL INSPECTION.
- NO BATCH PLANTS WILL BE UTILIZED ON SITE.
- NO OFF-SITE GRADING SHALL BE CONDUCTED WITH THE EARLY GRADING PERMIT.
- SILT FENCES THAT ARE NOT PARALLEL TO CONTOURS MUST BE INSTALLED WITH J-HOOKS.

BMP PHASING

- INITIAL (06/2022 - 7/2022):**
- INSTALL VTC
 - INSTALL CWA
 - ESTABLISH SSA
 - INSTALL CONSTRUCTION MARKERS
 - INSTALL SILT FENCE
 - INSTALL SEDIMENT BASINS
 - INSTALL DIVERSION DITCHES
- INTERIM (7/2022 - 10/2022):**
- LOCATE/INSTALL TEMPORARY STOCKPILE
 - MAINTAIN ALL BMPs
 - INSTALL RRBs
 - INSTALL INLET AND OUTLET PROTECTION
 - INSTALL EROSION CONTROL BLANKETS
- FINAL (10/2022 - 12/2022):**
- INSTALL MULCH AND PERMANENT SEEDING IN ALL DISTURBED AREAS
 - REMOVE SILT FENCE AFTER STABILIZED, INLET & OUTLET PROTECTION, RRBs, EROSION CONTROL BLANKETS, VTC, CWA, CONSTRUCTION MARKERS, SEDIMENT BASINS, DIVERSION DITCHES, SSA, AND TEMPORARY STOCKPILES
- FINAL STABILIZATION ANTICIPATED 05/2023.



Know what's below.
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ENGINEER'S STATEMENT

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John Helmick
JOHN HELMICK
DATE: 8/8/2023
GORILLA CAPITAL CO SADDLEHORN RANCH, LLC
1342 HIGH STREET
EUGENE, OR 97401

Bryan T. Law
BRYAN T. LAW, P.E.
COLORADO P.E. 25043
FOR AND ON BEHALF OF JR ENGINEERING, LLC
DATE: 1/20/23

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BRADY WILLIAMS

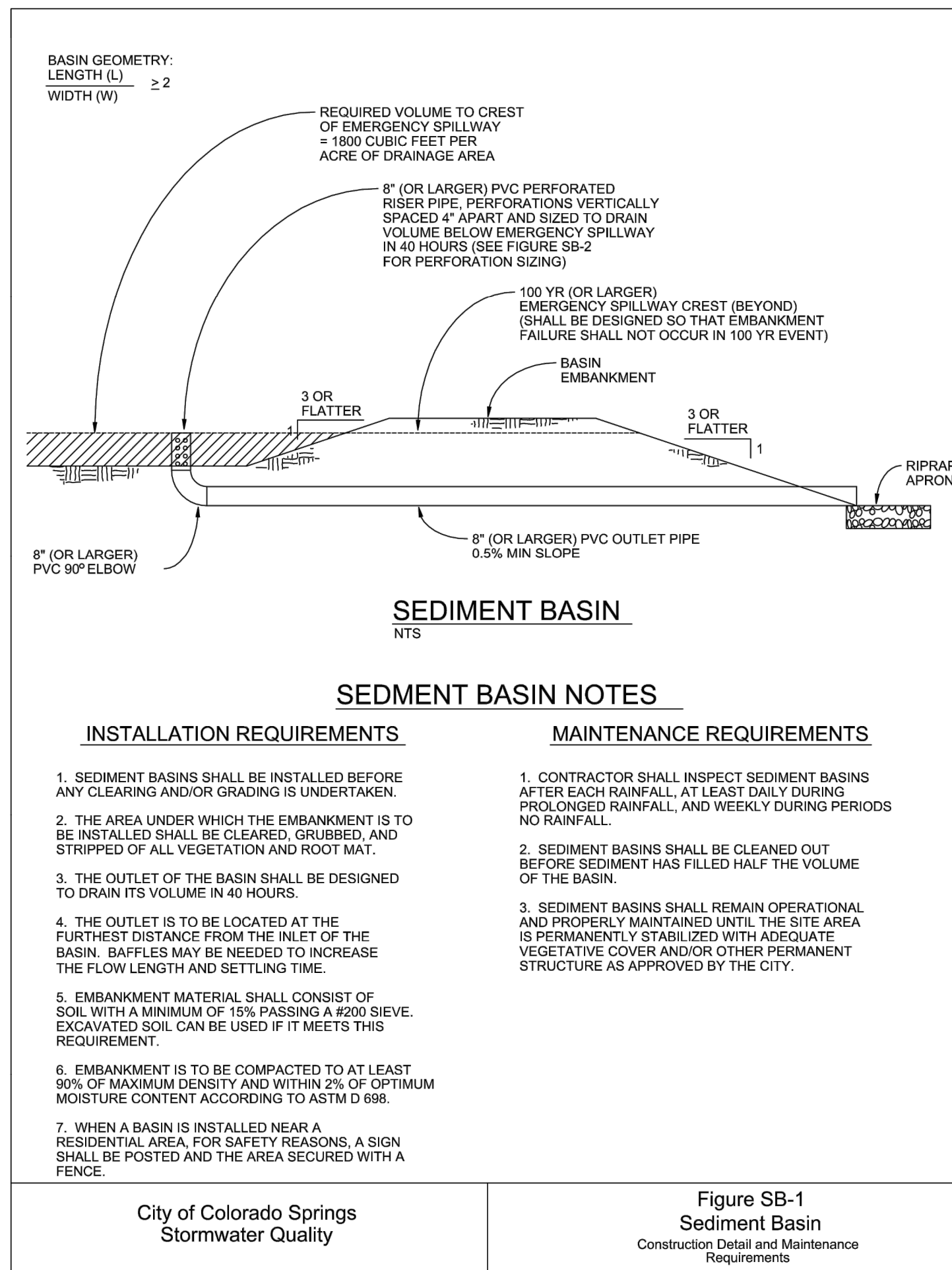
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BY	DATE	REVISION

H-SCALE: 1"=100'
V-SCALE: N/A
DATE: 10/14/22
DESIGNED BY: GVT
DRAWN BY: GVT
CHECKED BY: GVT

SADDLEHORN RANCH - FILING NO. 2
GRADING & EROSION CONTROL PLANS

SHEET 6 OF 15
JOB NO. 2514204



City of Colorado Springs
Stormwater Quality

Figure SB-1
Sediment Basin
Construction Detail and Maintenance
Requirements

3-32

Design Volume (acre-ft)	Required Area per Row (ft ²)							
	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5
2	15.04	7.71	5.10	3.76	2.95	2.41	2.02	1.73
1	7.52	3.86	2.55	1.88	1.48	1.21	1.01	0.87
0.6	4.51	2.31	1.53	1.13	0.89	0.72	0.61	0.52
0.4	3.01	1.54	1.02	0.75	0.59	0.48	0.40	0.35
0.2	1.50	0.77	0.51	0.38	0.30	0.24	0.20	0.17
0.1	0.75	0.39	0.26	0.19	0.15	0.12	0.10	0.09
0.08	0.45	0.23	0.15	0.11	0.09	0.07	0.06	0.05
0.04	0.20	0.10	0.06	0.04	0.03	0.02	0.02	0.02
0.02	0.10	0.05	0.03	0.02	0.01	0.01	0.01	0.01
0.01	0.08	0.04	0.03	0.02	0.01	0.01	0.01	0.01

TABLE SB-1

Hole Diameter (in)	Hole Diameter (in)	Area per Row (ft ²)		
		n = 1	n = 2	n = 3
1/4	0.250	0.05	0.10	0.15
5/16	0.313	0.08	0.15	0.23
3/8	0.375	0.11	0.22	0.33
7/16	0.438	0.15	0.30	0.45
1/2	0.500	0.20	0.39	0.59
9/16	0.563	0.25	0.50	0.75
5/8	0.625	0.31	0.61	0.92
11/16	0.688	0.37	0.74	1.11
3/4	0.750	0.44	0.88	1.33
7/8	0.875	0.60	1.20	1.80
1	1.000	0.79	1.57	2.36
1 1/8	1.125	0.99	1.99	2.98
1 1/4	1.250	1.23	2.45	3.68
1 3/8	1.375	1.48	2.97	4.45
1 1/2	1.500	1.77	3.53	5.30
1 5/8	1.625	2.07	4.15	6.22
1 3/4	1.750	2.41	4.81	7.22
1 7/8	1.875	2.76	5.52	8.28
2	2.000	3.14	6.28	9.42

n = Number of columns of perforations

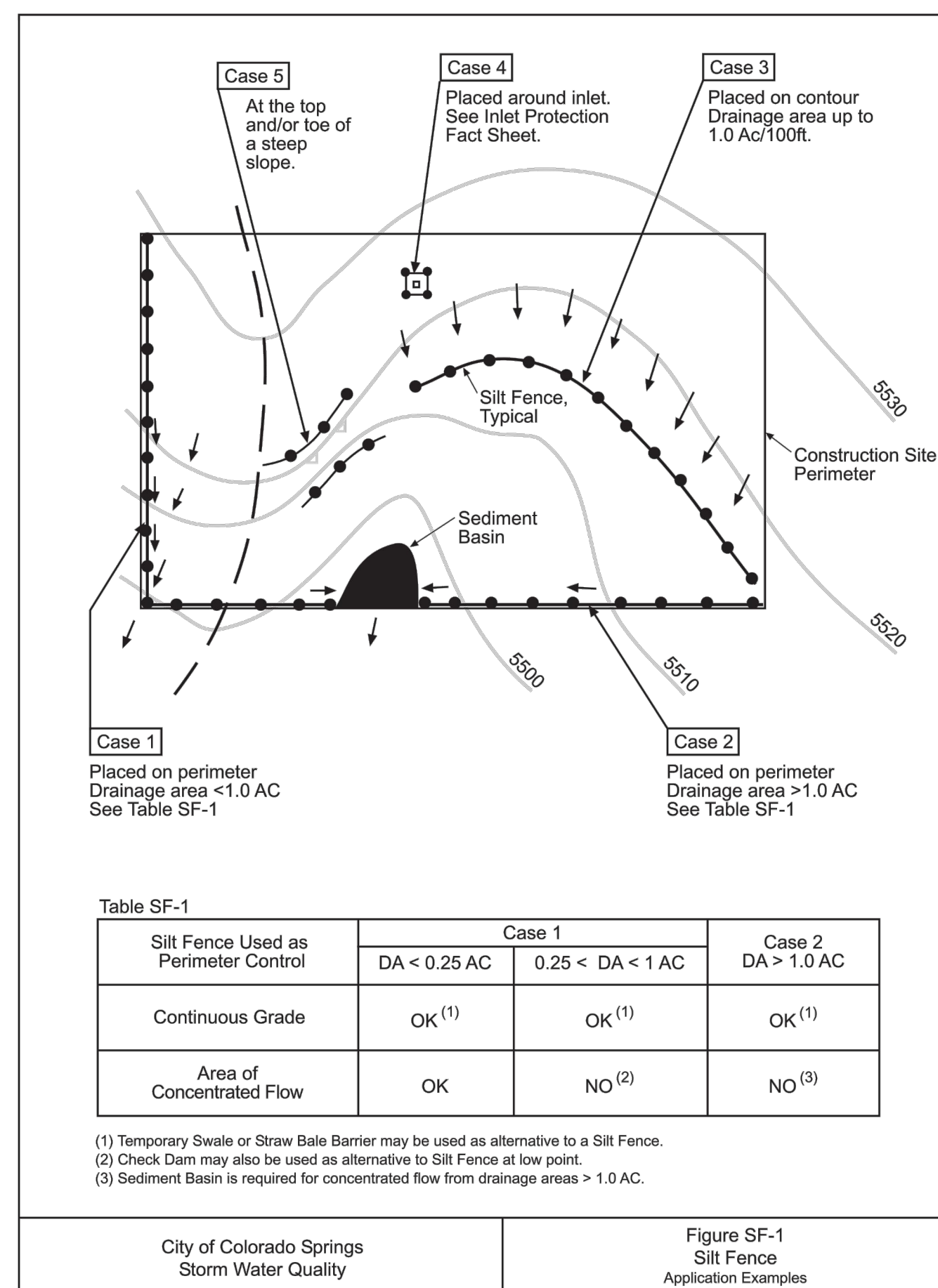
Minimum steel plate thickness: 1/4", 5/16", 3/8"

TABLE SB-2

City of Colorado Springs
Stormwater Quality

Figure SB-2
Outlet Sizing
Application Techniques and Maintenance
Requirements

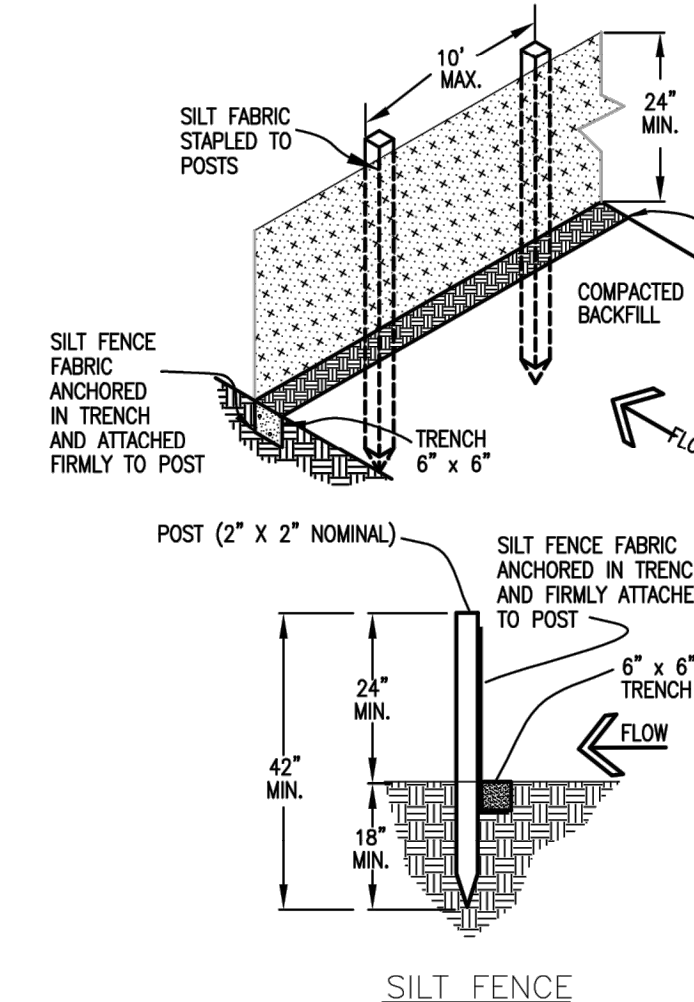
3-33



City of Colorado Springs
Storm Water Quality

Figure SF-1
Silt Fence
Application Examples

3-35



SILT FENCE NOTES

INSTALLATION REQUIREMENTS

- SILT FENCES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- WHEN JOINTS ARE NECESSARY, SILT FENCE GEOTEXTILE SHALL BE SPICED TOGETHER ONLY AT SUPPORT POST AND SECURELY SEALED.
- METAL POSTS SHALL BE "STUDDED TEE" OR "U" TYPE WITH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT. WOOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION DIMENSION OF 2 INCHES.
- THE FILTER MATERIAL SHALL BE FASTENED SECURELY TO METAL OR WOOD POSTS USING WIRE TIES, OR TO WOOD POSTS WITH 3/4" LONG #8 HEAVY-DUTY STAPLES. THE SILT FENCE GEOTEXTILE SHALL NOT BE STAPLED TO EXISTING TREES.
- WHILE NOT REQUIRED, WIRE MESH FENCE MAY BE USED TO SUPPORT THE GEOTEXTILE. WIRE FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 3/4" LONG. THE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 6" AND SHALL NOT EXTEND MORE THAN 3" ABOVE THE ORIGINAL GROUND SURFACE.
- ALONG THE TOE OF FILLS, INSTALL THE SILT FENCE ALONG A LEVEL CONTOUR AND PROVIDE AN AREA BEHIND THE FENCE FOR RUNOFF TO POND AND SEDIMENT TO SETTLE. A MINIMUM DISTANCE OF 5 FEET FROM THE TOE OF THE FILL IS RECOMMENDED.
- THE HEIGHT OF THE SILT FENCE FROM THE GROUND SURFACE SHALL BE MINIMUM OF 24 INCHES AND SHALL NOT EXCEED 36 INCHES. HIGHER FENCES MAY INPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.

MAINTENANCE REQUIREMENTS

- CONTRACTOR SHALL INSPECT SILT FENCES IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS OF NO RAINFALL. DAMAGED, COLLAPSED, UNTRENCHED OR INEFFECTIVE SILT FENCES SHALL BE PROMPTLY REPAIRED OR REPLACED.
- SEDIMENT SHALL BE REMOVED FROM BEHIND SILT FENCE WHEN IT ACCUMULATES TO HALF THE EXPOSED GEOTEXTILE HEIGHT.
- SILT FENCES SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED AS APPROVED BY THE CITY.

City of Colorado Springs
Stormwater Quality

Figure SF-2
Silt Fence
Construction Detail and Maintenance
Requirements

3-36

ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

BRYAN T. LAW, P.E.
COLORADO P.E. 25043

FOR AND ON BEHALF OF JR ENGINEERING, LLC

EPC 5/24/23

1/20/23
DATE

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SADDLEHORN RANCH -
FILING NO. 2
GRADING AND EROSION
CONTROL DETAILS

SHEET 9 OF 15

JOB NO. 2514204

BY

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No. REVISION

N/A

N/A

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10/14/22

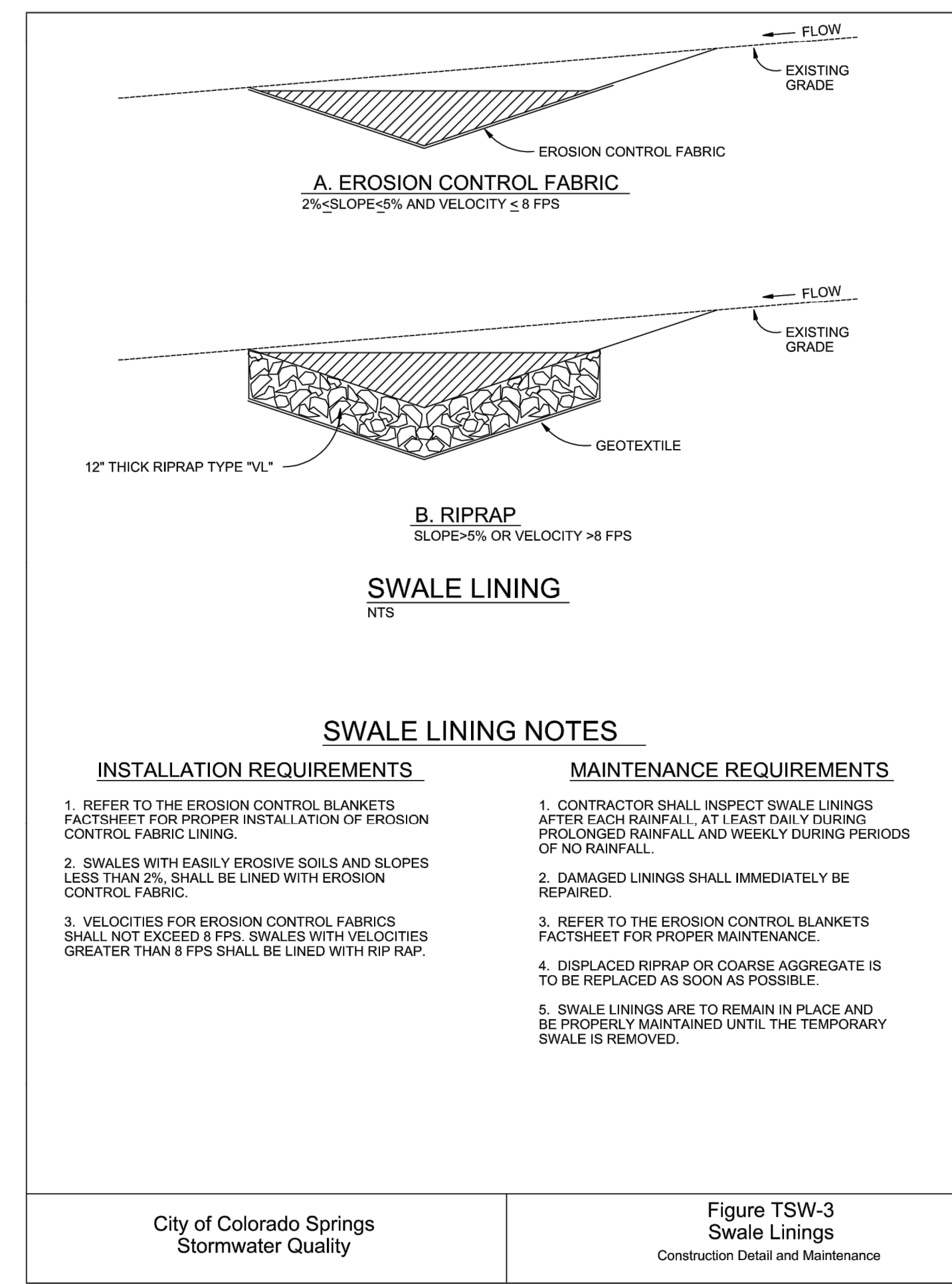
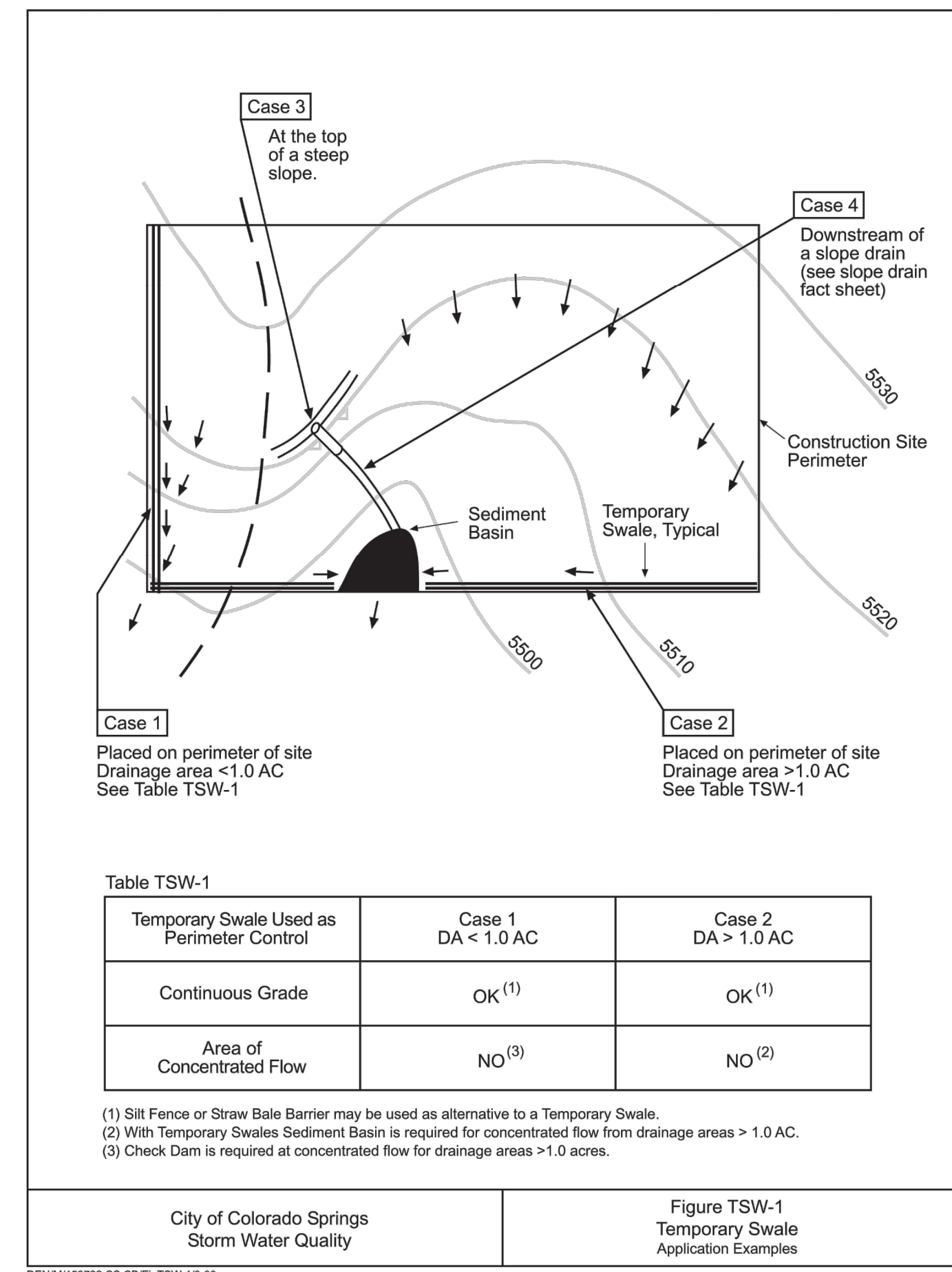
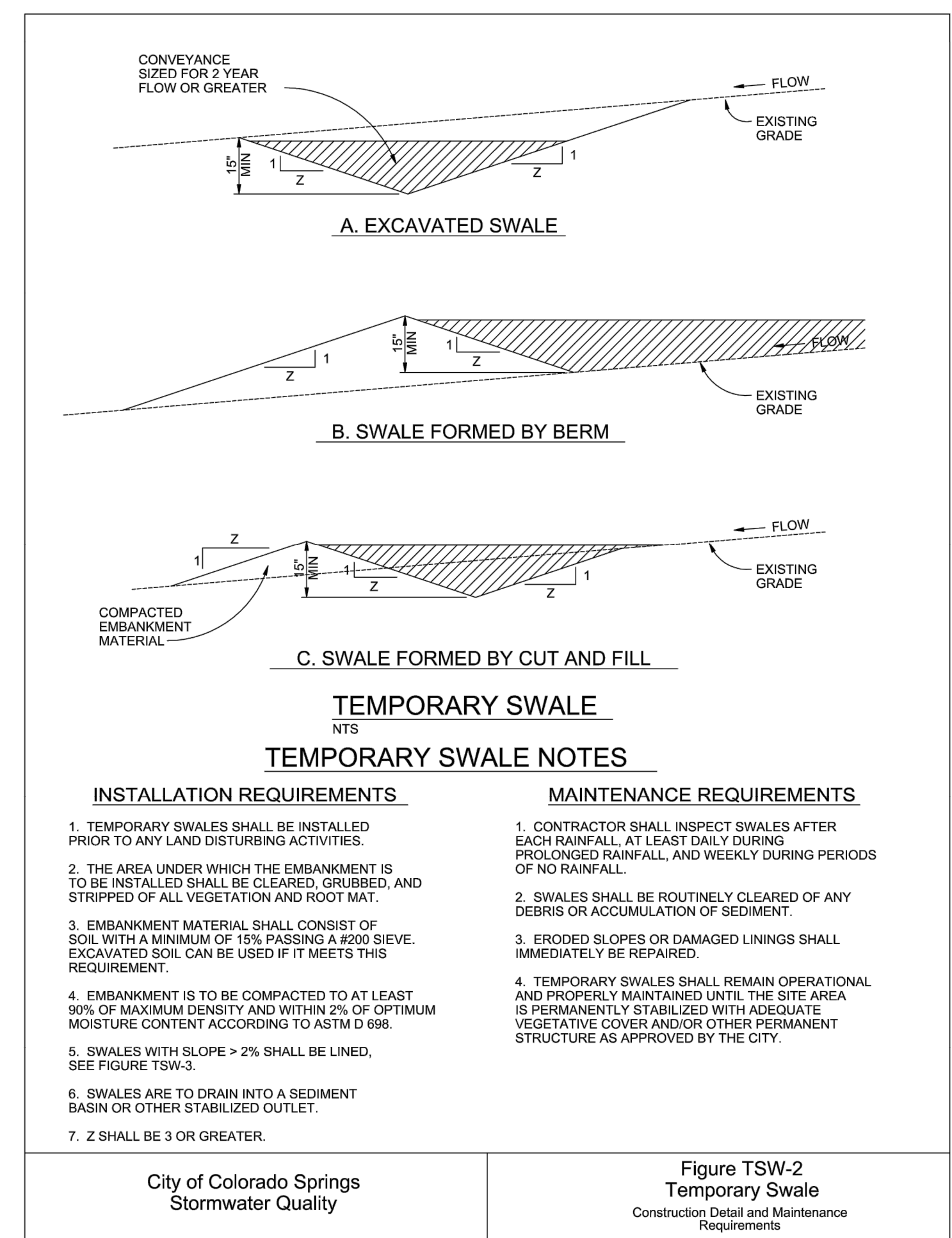
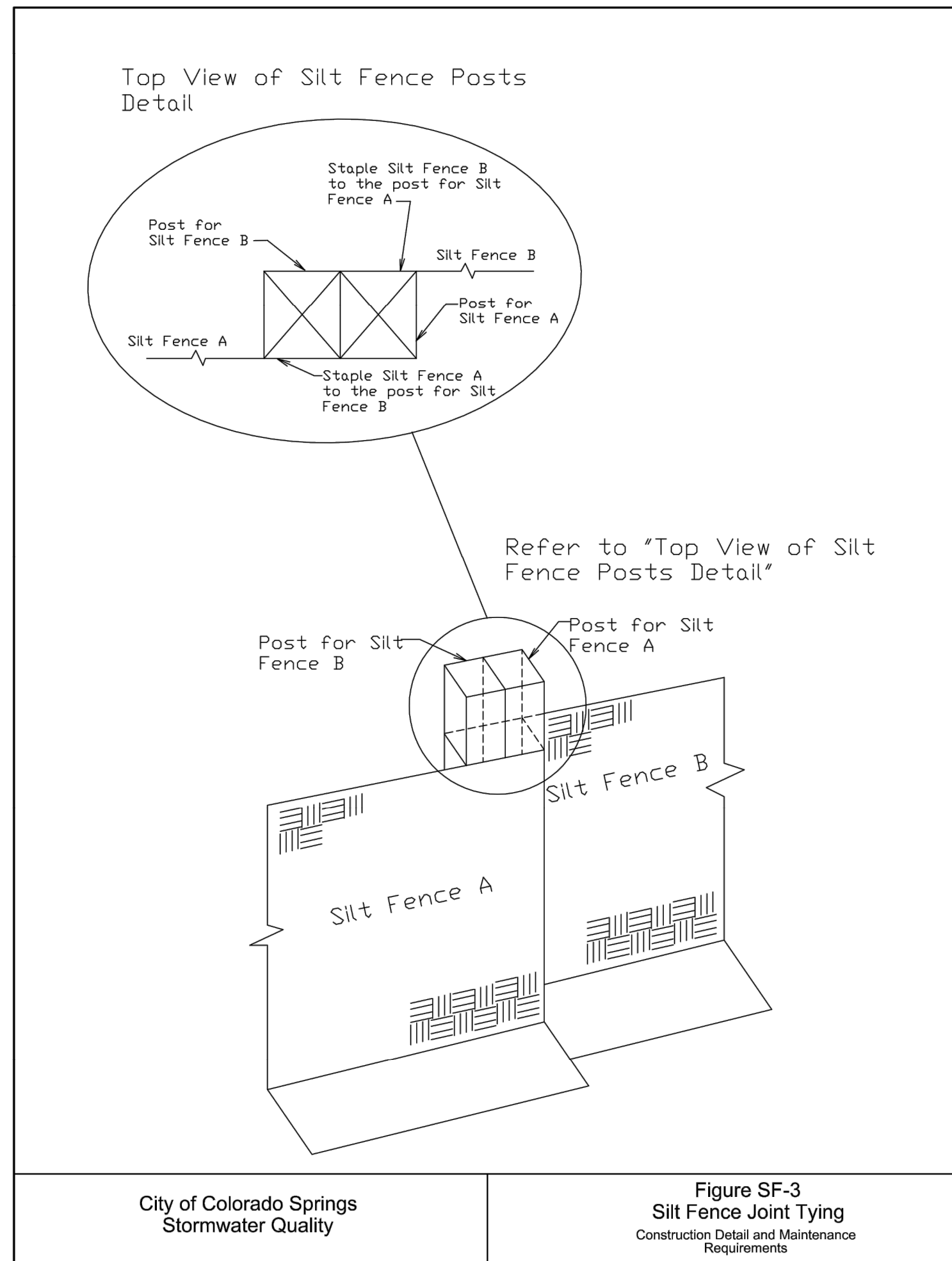
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ENGINEER'S STATEMENT EPC 5/24/23

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COLORADO P.E. 25043

FOR AND ON BEHALF OF JR ENGINEERING, LLC

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								10/14/22					

SADDLEHORN RANCH - FILING NO. 2

GRADING AND EROSION CONTROL DETAILS

ENGINEER'S STATEMENT

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BRYAN T. LAW, P.E. 25043

COLORADO P.E. 25043

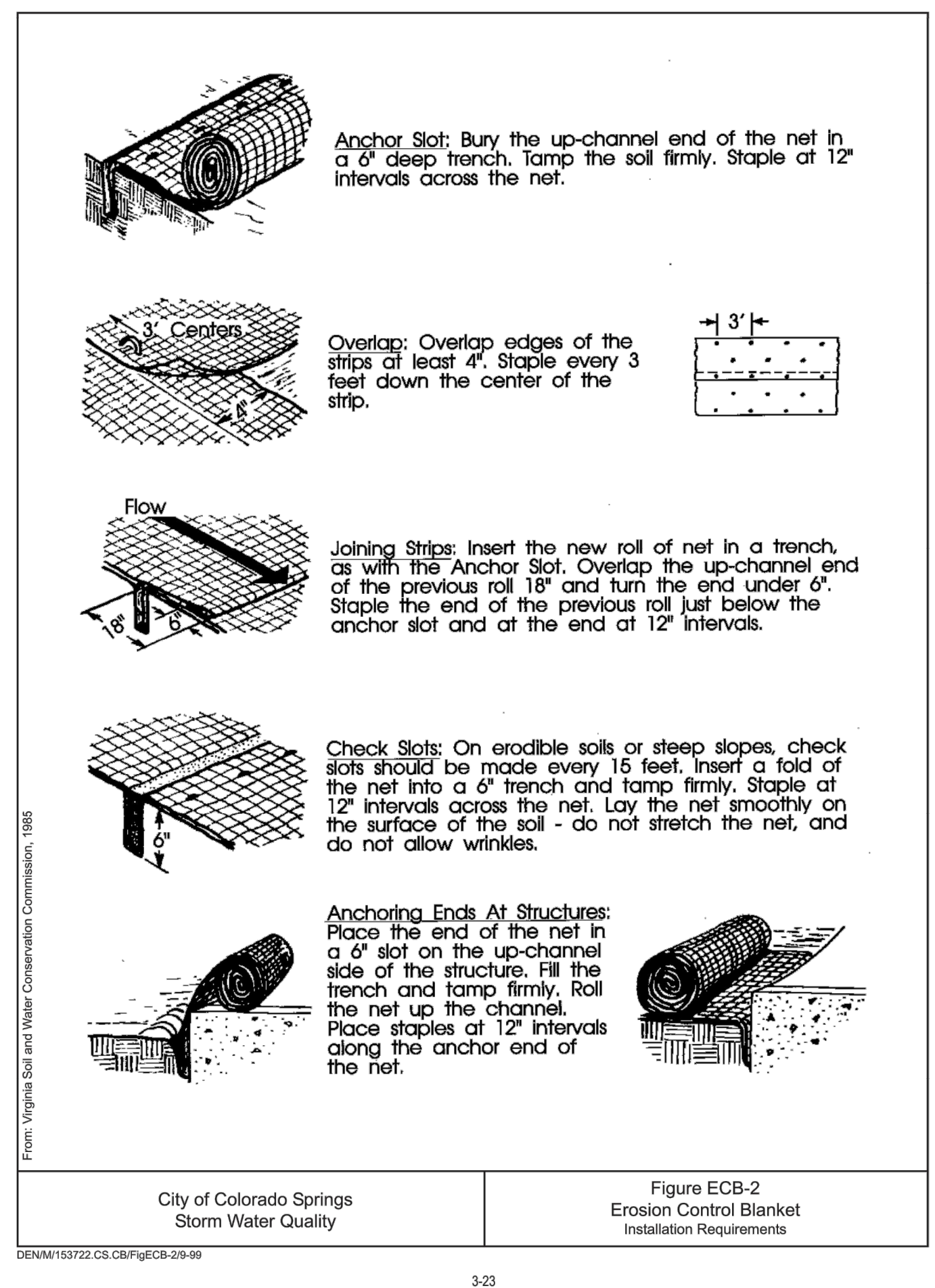
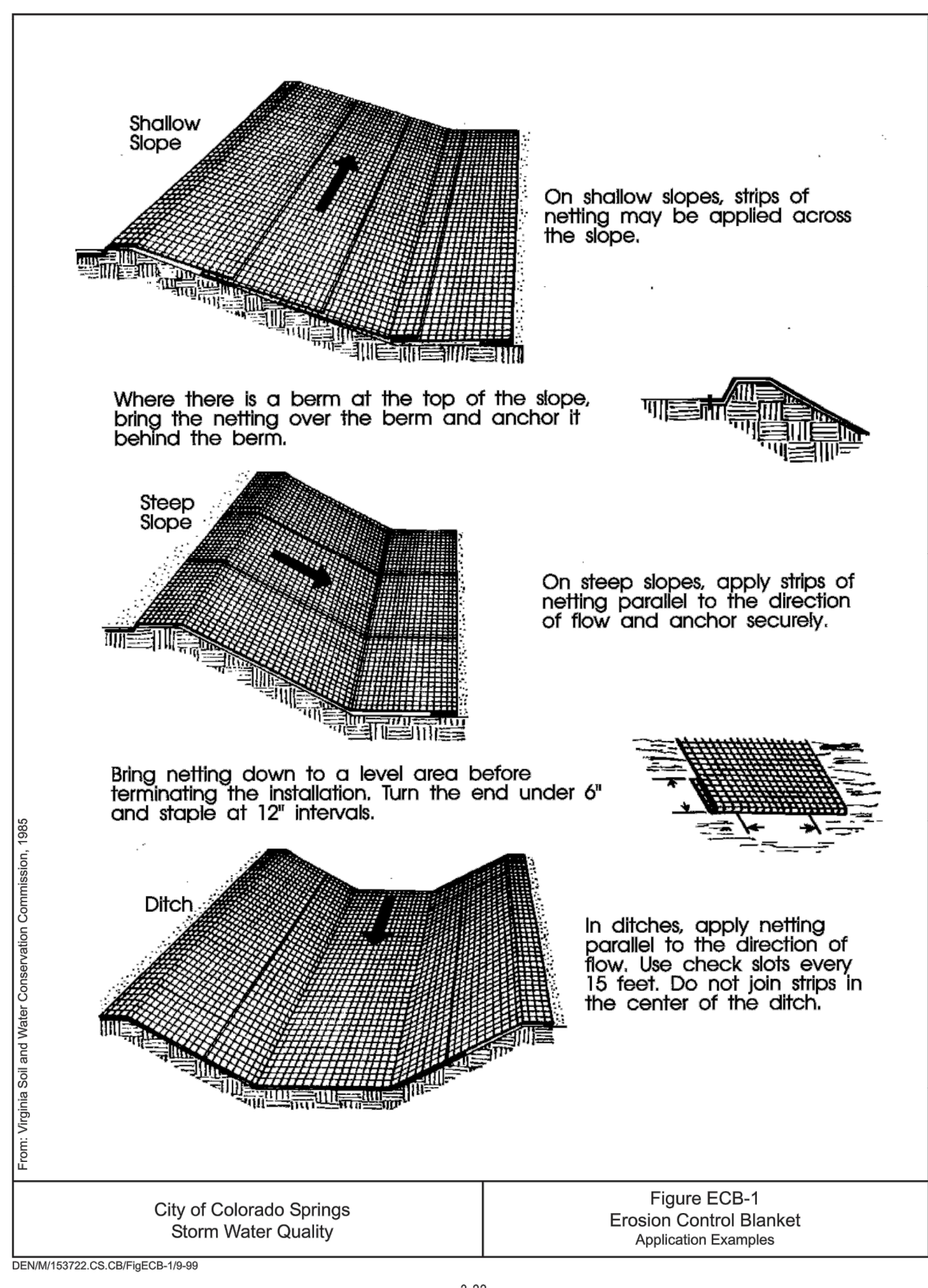
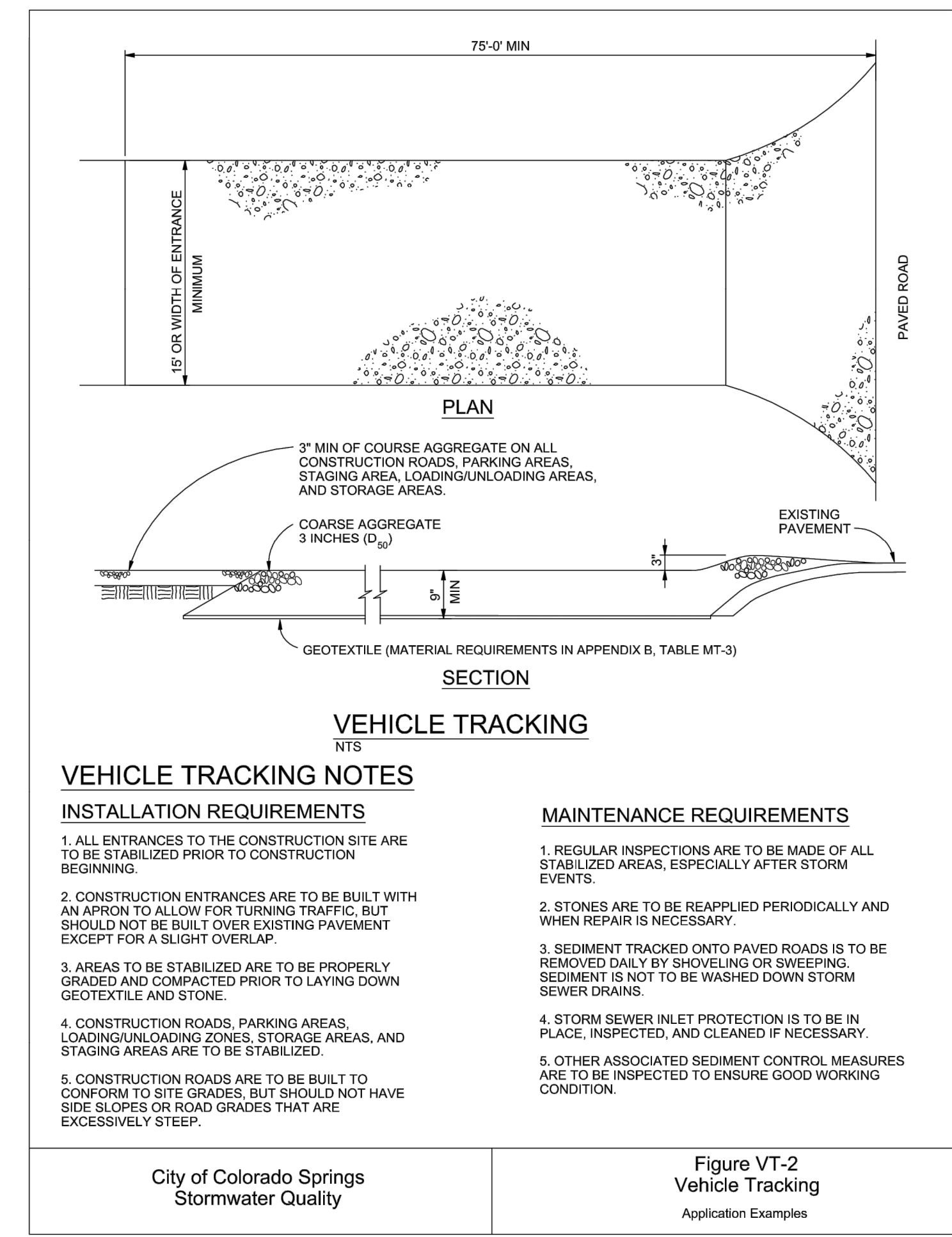
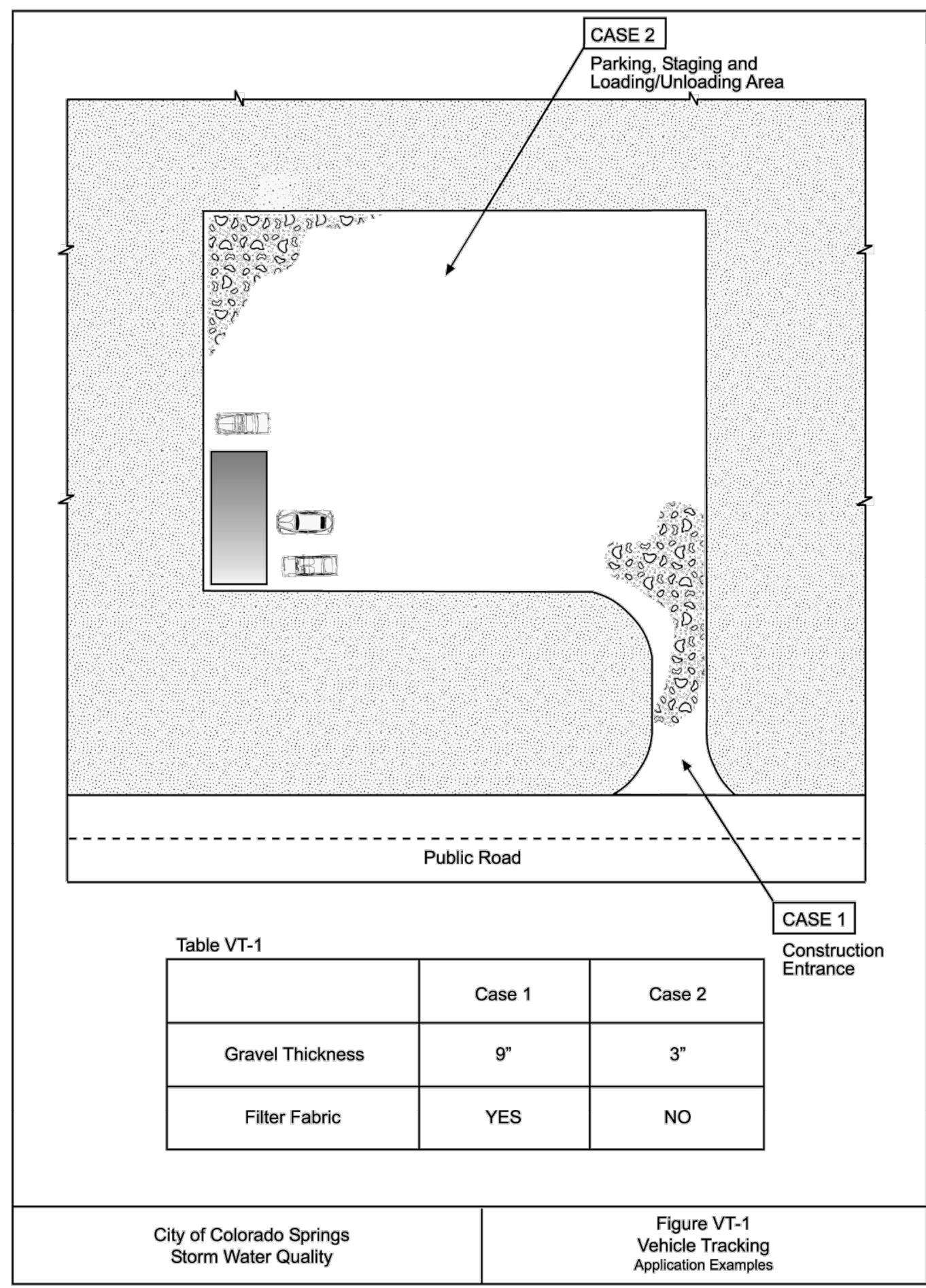
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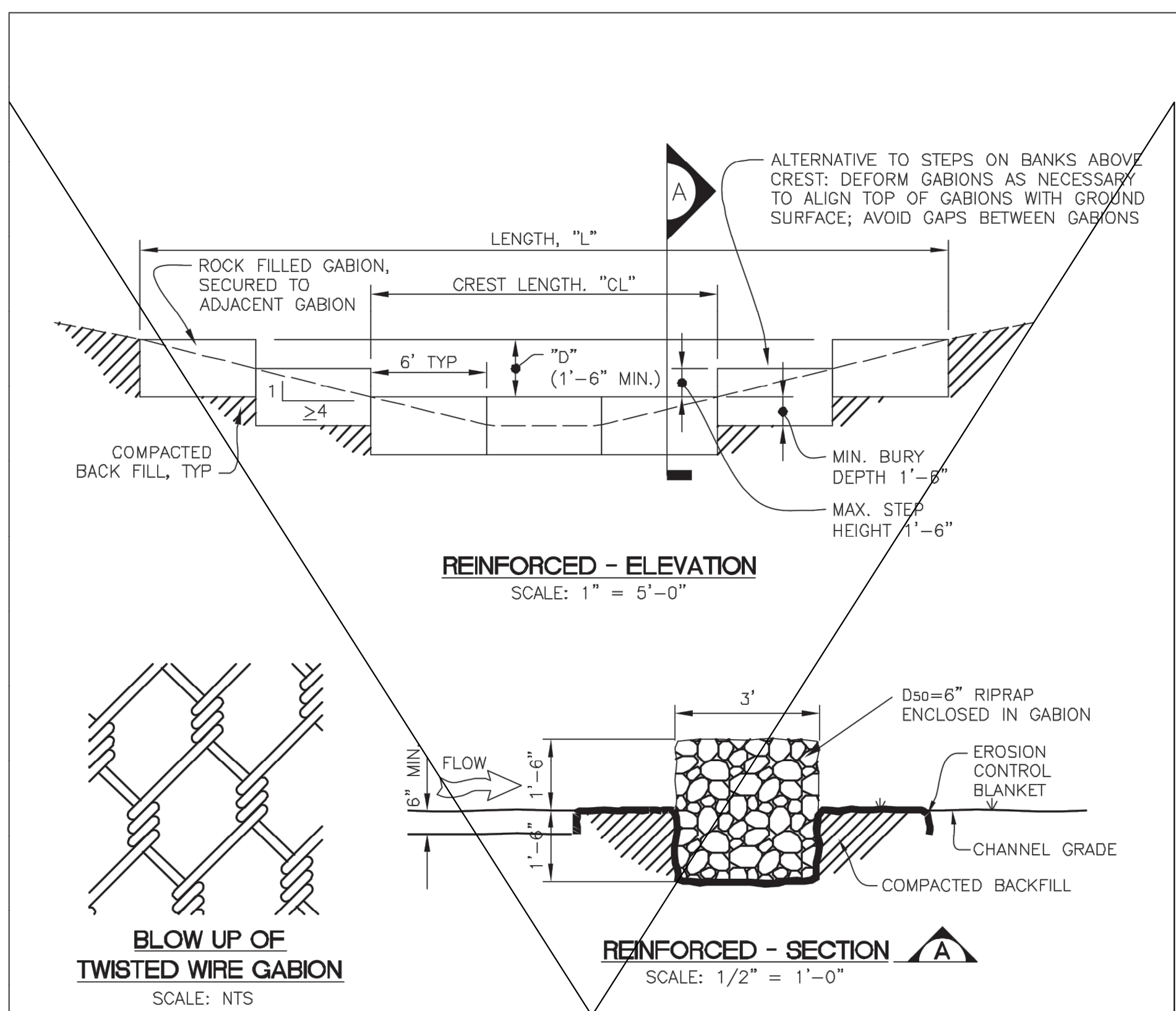
Bryan T. Law 25043

BRYAN T. LAW, P.E. 25043
 COLORADO P.E. 25043
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1/20/23
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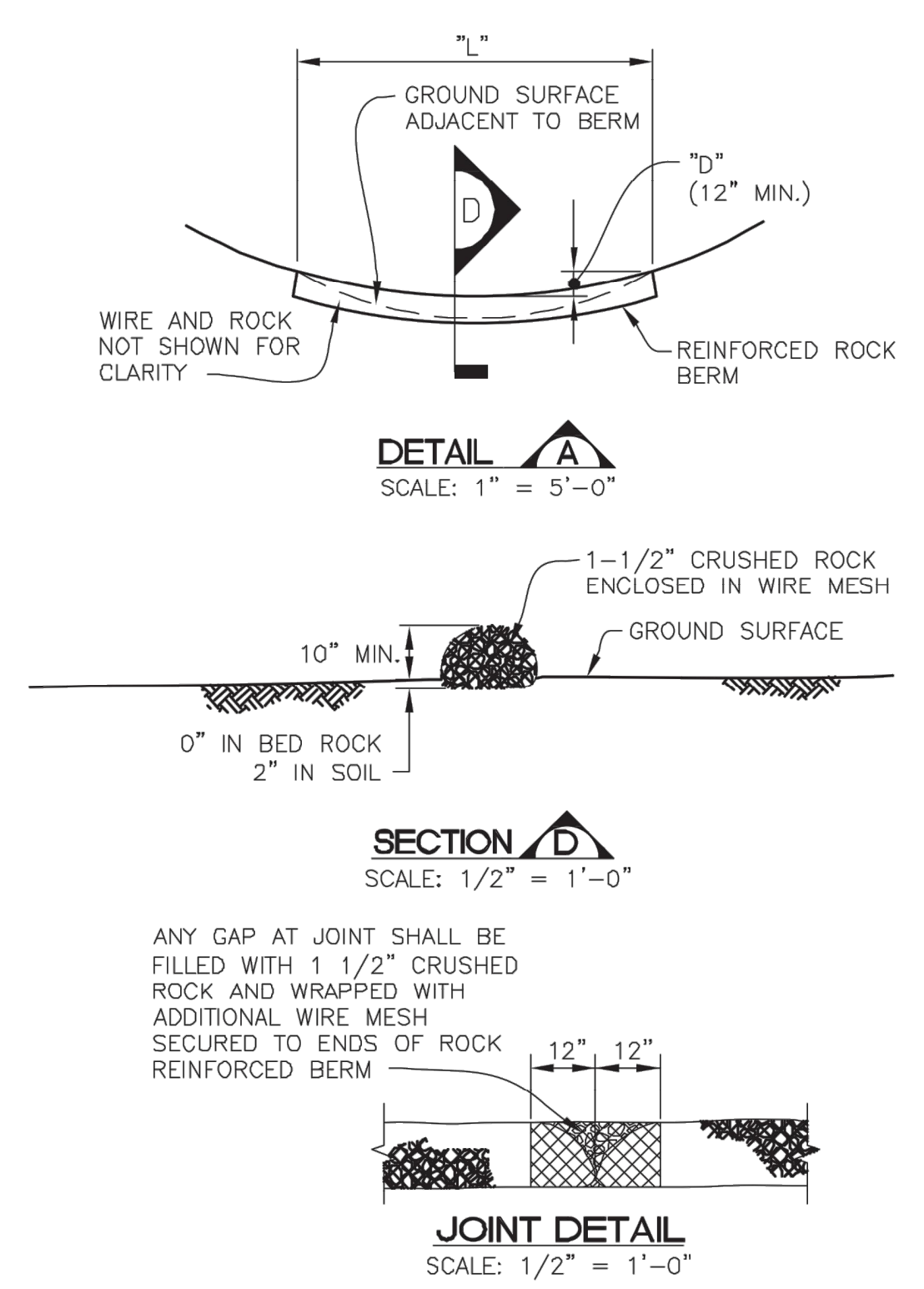


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SADDLEHORN RANCH - FILING NO. 2			GRADING AND EROSION CONTROL DETAILS	
SHEET 11 OF 15			JOB NO. 2514204	



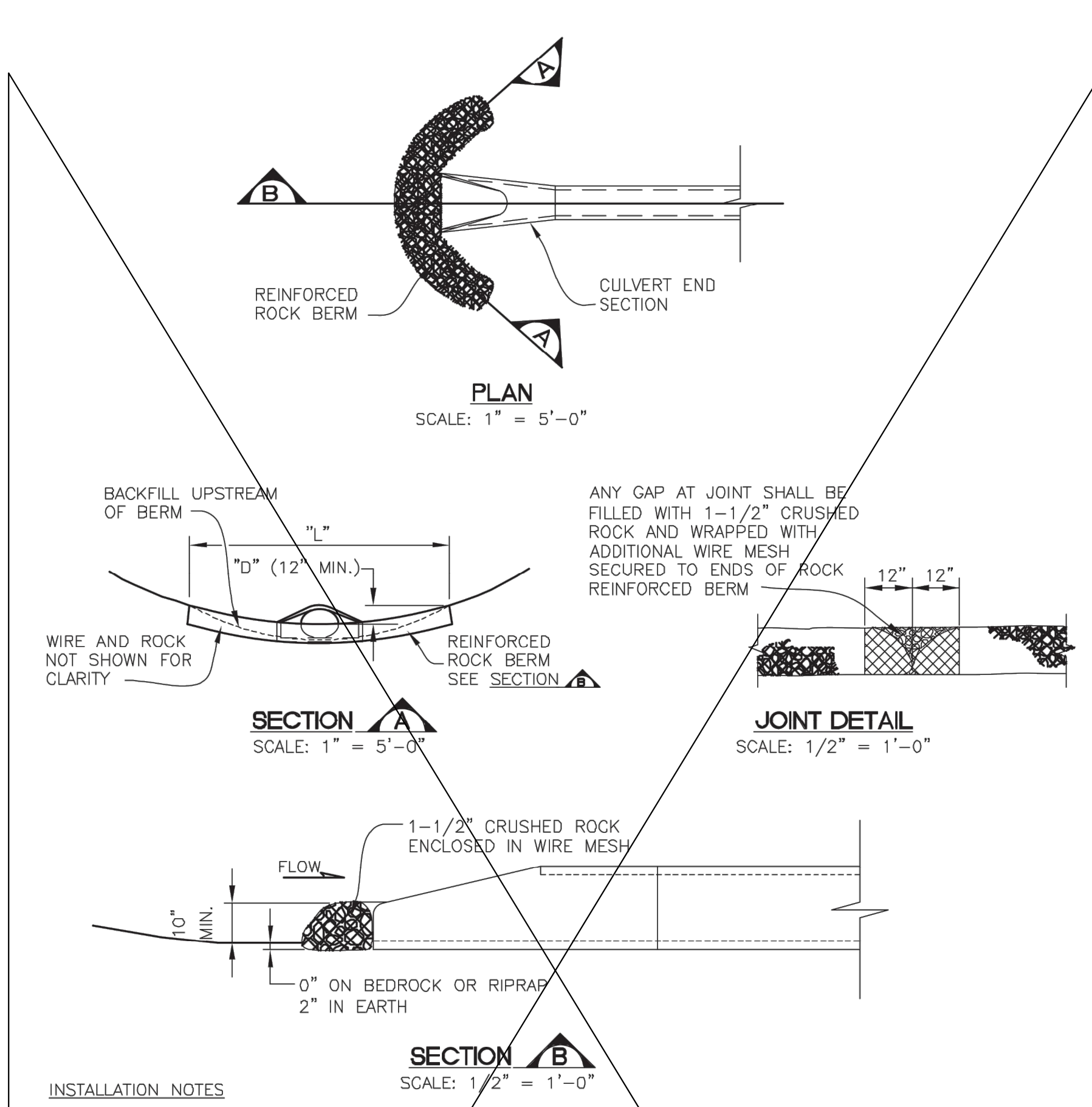
- REINFORCED CHECK DAM INSTALLATION NOTES**
- SEE PLAN VIEW FOR:
 - LOCATIONS OF CHECK DAMS.
 - CHECK DAM TYPE (CHECK DAM OR REINFORCED CHECK DAM).
 - LENGTH, "L", CREST LENGTH, "CL", AND DEPTH, "D".
 - CHECK DAMS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND-DISTURBING ACTIVITIES.
 - REINFORCED CHECK DAMS, GABIONS SHALL HAVE GALVANIZED TWISTED WIRE NETTING WITH A MAXIMUM OPENING DIMENSION OF 4-1/2" AND A MINIMUM WIRE THICKNESS OF 0.10". WIRE "HOG RINGS" AT 4" SPACING OR OTHER APPROVED MEANS SHALL BE USED AT ALL GABION SEAMS AND TO SECURE THE GABION TO THE ADJACENT GABION.
 - RIPRAP UTILIZED FOR CHECK DAMS SHALL HAVE A D₅₀ MEDIAN STONE SIZE OF 6".
 - THE CHECK DAM SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1'-6".
 - EROSION BLANKET SHALL BE PLACED IN THE REINFORCED CHECK DAM TRENCH EXTENDING A MINIMUM OF 1'-6" ON BOTH THE UPSTREAM AND DOWNSTREAM SIDES OF THE REINFORCED CHECK DAM.

- REINFORCED CHECK DAM MAINTENANCE NOTES**
- THE GESC MANAGER SHALL INSPECT CHECK DAMS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
 - SEDIMENT ACCUMULATED UPSTREAM OF CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF CHECK DAM IS WITHIN 1/2 OF THE HEIGHT OF THE CREST.
 - CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE TOWN.
 - WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACK FILL. ANY DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED AND COVERED WITH EROSION CONTROL BLANKET OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE TOWN.



- REINFORCED ROCK BERM INSTALLATION NOTES**
- SEE PLAN VIEW FOR:
 - LOCATIONS OF REINFORCED ROCK BERMS.
 - LENGTH, "L", AND DEPTH, "D" DIMENSIONS.
 - REINFORCED ROCK BERM SECTION APPLIES TO CULVERT INLET FILTER AND INLET PROTECTION.
 - CRUSHED ROCK SHALL BE FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON SHEET 14 (1-1/2" MINUS). RECYCLED CONCRETE MEETING THIS GRADATION MAY BE USED.
 - WIRE MESH SHALL BE FABRICATED OF 10 GAUGE WIRE TWISTED INTO A MESH WITH A MAXIMUM OPENING OF 1.0 INCH (COMMONLY TERMED "CHICKEN WIRE"). ROLL WIDTH SHALL BE 48-INCHES.
 - WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6-INCH CENTERS ALONG ALL JOINTS AND AT 2-INCH CENTERS ON ENDS OF BERM.
 - FOR CONCENTRATED FLOW AREAS THE ENDS OF THE REINFORCED ROCK BERM SHALL BE 12" HIGHER THAN THE CENTER OF THE BERM.

- REINFORCED ROCK BERM MAINTENANCE NOTES**
- THE GESC MANAGER SHALL INSPECT REINFORCED ROCK BERM WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
 - SEDIMENT ACCUMULATED UPSTREAM OF REINFORCED ROCK BERM SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF FILTER IS WITHIN 5 INCHES OF THE CREST.
 - REINFORCED ROCK BERMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED.
 - WHEN REINFORCED ROCK BERMS ARE REMOVED, ANY DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE TOWN.



- INSTALLATION NOTES**
- SEE PLAN VIEW FOR:
 - LOCATIONS OF CULVERT INLET FILTERS.
 - LENGTH, "L", AND DEPTH, "D".
 - CRUSHED ROCK SHALL BE FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON SHEET 14 (1-1/2" MINUS). RECYCLED CONCRETE MEETING THIS GRADATION MAY BE USED.
 - WIRE MESH SHALL BE FABRICATED OF 10 GAUGE WIRE TWISTED INTO A MESH WITH A MAXIMUM OPENING OF 1.0 INCH (COMMONLY TERMED "CHICKEN WIRE").
 - WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6-INCH CENTERS ALONG ALL JOINTS AND AT 2-INCH CENTERS ON ENDS OF BERM.
 - THE ENDS OF THE REINFORCED ROCK BERM SHALL BE 12" HIGHER THAN THE CENTER OF THE BERM.

- MAINTENANCE NOTES**
- THE GESC MANAGER SHALL INSPECT CULVERT INLET FILTER WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
 - SEDIMENT ACCUMULATED UPSTREAM OF CULVERT INLET FILTER SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF FILTER IS 1/2 THE HEIGHT OF THE REINFORCED ROCK BERM.
 - RRB FOR CULVERT PROTECTION ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE TOWN.
 - WHEN CULVERT INLET FILTERS ARE REMOVED, ANY DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE TOWN.

RCD REINFORCED CHECK DAM		11
RRB REINFORCED ROCK BERM		12
RRC RRB FOR CULVERT PROTECTION		13

Sheet Revisions			
CR1	3/11	GESC MANUAL UPDATES	DVD
CR2	5/15	GESC MANUAL UPDATES	DVD

NOTE: SCALES SHOWN ARE FOR 22"x34" SHEETS; ADJUST ACCORDINGLY FOR 11"x17" SHEETS.

UTILITIES DEPARTMENT
Stormwater Engineering Division

GESC GRADING, EROSION, AND SEDIMENT CONTROL

GESC PLAN
STANDARD NOTES AND DETAILS

SHEET
7 OF 14

811
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ENGINEER'S STATEMENT
EPC 52423
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING
BRYAN T. LAW, P.E.
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FOR AND ON BEHALF OF JR ENGINEERING, LLC

1/20/23
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SADDLEHORN RANCH - FILING NO. 2
GRADING AND EROSION CONTROL DETAILS

SHEET 15 OF 15
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