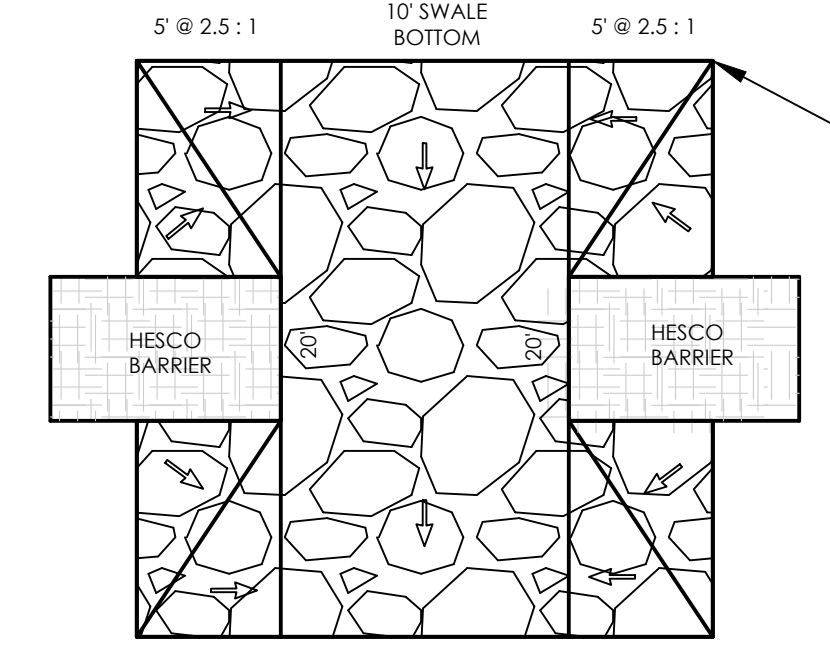
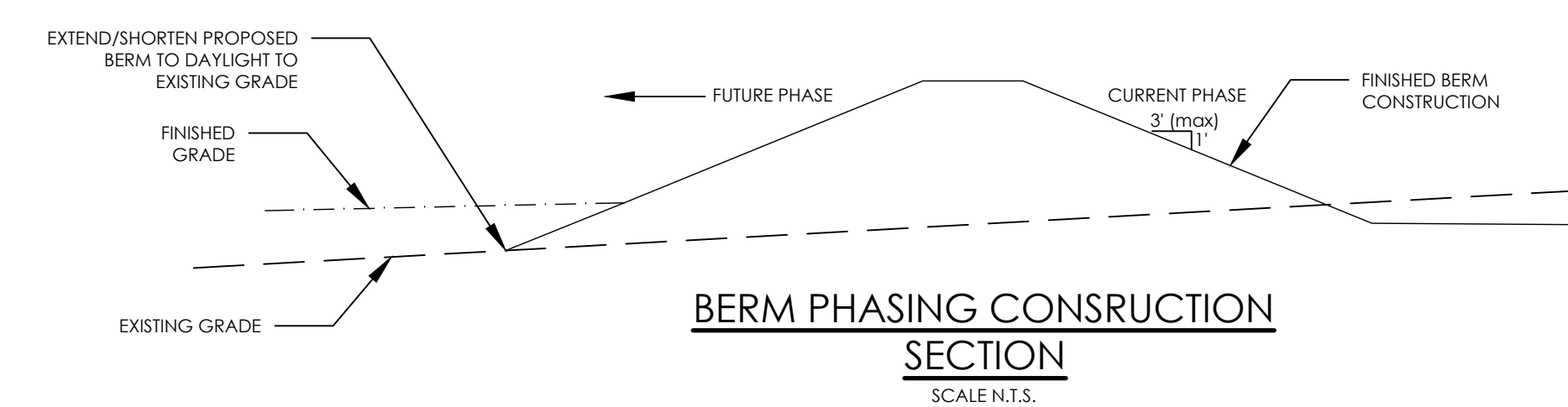
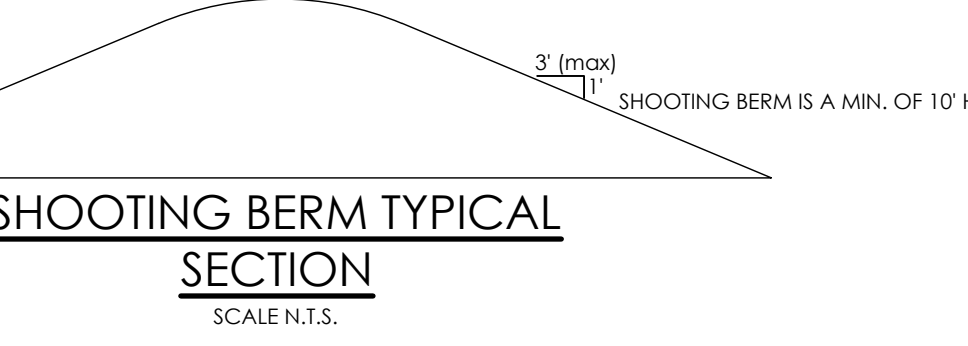
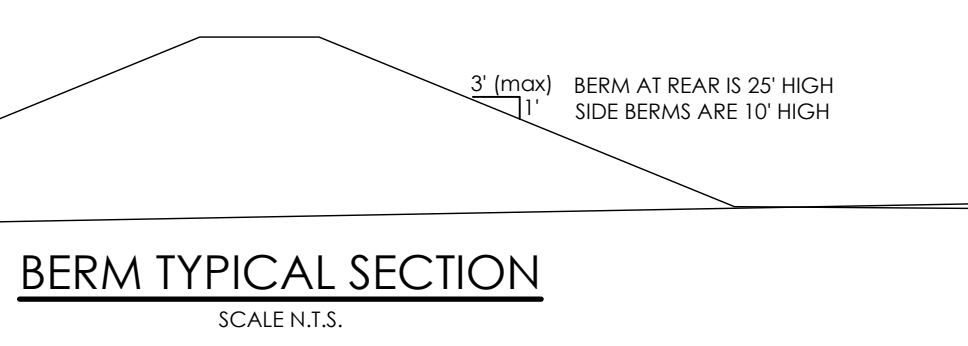
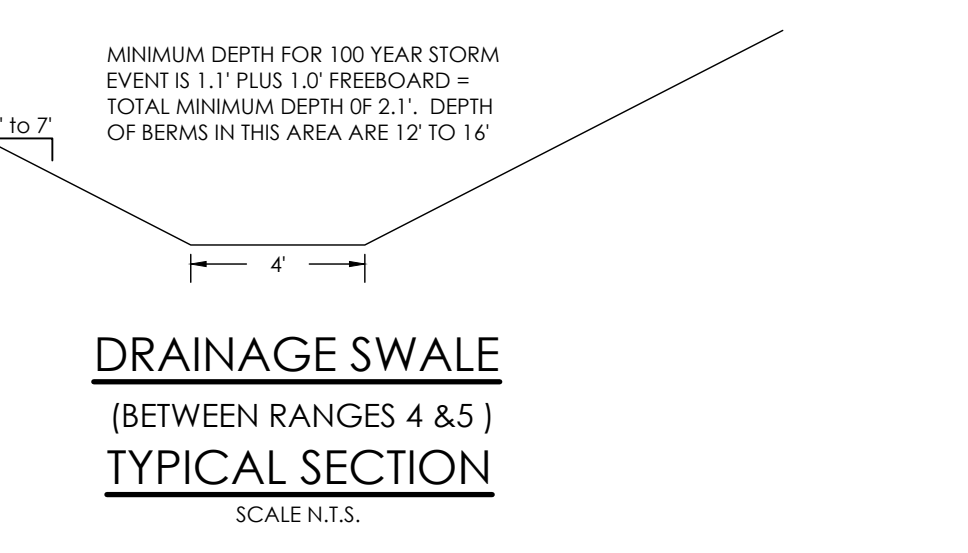


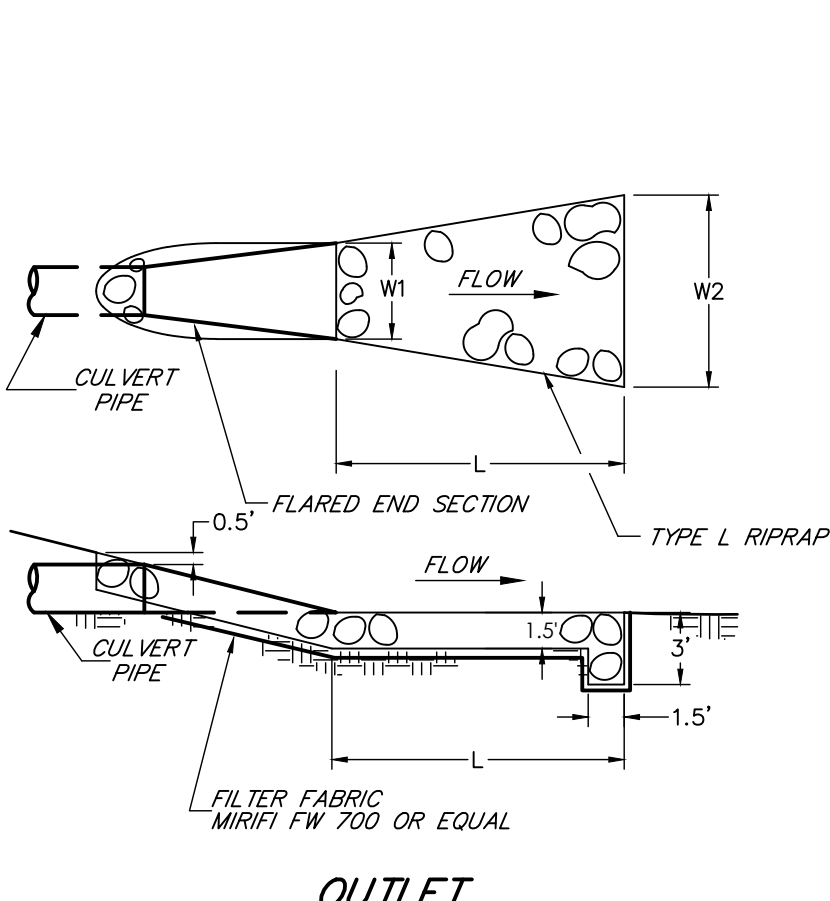
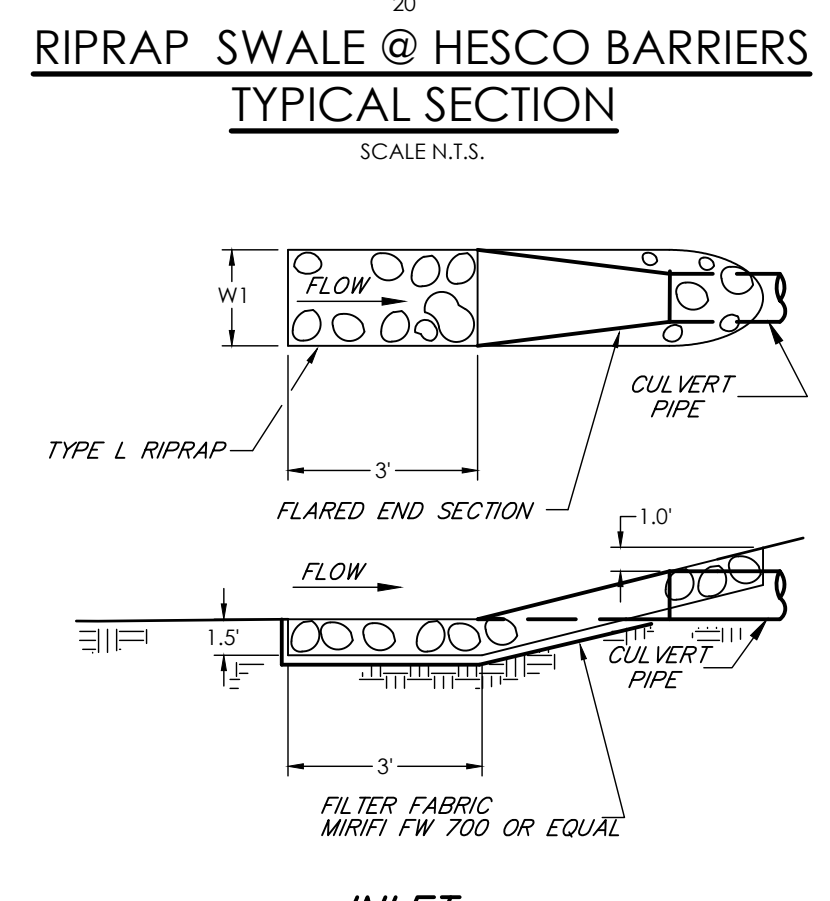
**MVE, INC.**  
ENGINEERS & SURVEYORS

1903 Idamay Street, Suite 200 Colorado Springs CO 80909 719.635.5736



OUTSIDE TOP CORNERS ARE 2.0' HIGHER THAN 10' WIDE SWALE BOTTOM. RIPRAP TO BE TYPE VL AND PLACED @ 12" THICKNESS

RIP-RAP GRADATION TABLE	
% SMALLER BY WEIGHT	TYPE VL INTER-ROCK DIM. (INCHES)
70 - 100	d <sub>100</sub> = 12
50 - 70	d <sub>70</sub> = 9
35 - 50	d <sub>50</sub> = 6
2 - 10	d <sub>10</sub> = 2



RIP-RAP GRADATION TABLE		
% SMALLER BY WEIGHT	TYPE L INTER-ROCK DIM. (INCHES)	TYPE M INTER-ROCK DIM. (INCHES)
70 - 100	d <sub>100</sub> = 15	d <sub>100</sub> = 21
50 - 70	d <sub>70</sub> = 12	d <sub>70</sub> = 18
35 - 50	d <sub>50</sub> = 9	d <sub>50</sub> = 12
2 - 10	d <sub>10</sub> = 3	d <sub>10</sub> = 4

CULVERT PIPE DATA						
CULVERT NO.	DESIGN POINT	PIPE DIA.	RC PIPE LENGTH (FT.)	FLARED END SECTION	W1 (FT.)	W2 (FT.)
1	A-1	24"	30	2	6	7
2	C-1	2-24"	2x30	4	9	9

WATER BASIN SUMMARY TABLE FOR WATER QUALITY			
WB	RANGE	AREA(SF)	UPSTREAM DRAINAGE AREA
1	1	28x56=1568 SF	2.7 ACRES
2	2,3,4	36x72=2592 SF	4.5 ACRES
3	5,6	50x100=5000 SF	7.9 ACRES

**OTHER DATA**

**LAT/LONG COORDS:** 38°55'56.38"N / 104°15'31.44"W

**VEGETATION:**  
EXISTING: NATIVE PRAIRIE GRASSES & WEEDS, 75%  
COVERAGE  
PROPOSED: PLANTINGS & RESEEDING PER LANDSCAPE PLAN

**BATCH PLANTS:** NONE

**DEWATERING:** NONE

**DISTURBED AREA:**  
PHASES 1, 2, & 3 = 77.2 ± ACRES  
PHASE 1 = 10.2 ± ACRES

**RECEIVING WATERS:** UPPER BIG SPRINGS CREEK

**SCHEDULE:** SPRING 2025-SUMMER 2025  
FINAL STABILIZATION FALL 2025

**GRADING NOTES**

- ALL AREAS TO BE GRADED SHALL BE STRIPPED OF TOPSOIL AND THE TOP SOIL SHALL BE STOCK PILED AND PROTECTED. THE TOP SOIL STOCK PILE LOCATION SHALL BE SELECTED BY OWNER.
- BERMS
  - AS PHASES ARE CONSTRUCTED, BERM SLOPES SHALL DAYLIGHT INTO THE EXISTING GROUND AS DIRECTED BY OWNER. FINAL GRADING ON BERM SLOPES SHALL BE 3:1.
  - REPLACE TOPSOIL ON FINAL GRADED BERMS.
- THESE GEC PLANS ARE FOR THE CONSTRUCTION OF PHASE 1 AND SUBSEQUENT PHASES WILL REQUIRE A NEW ESQCP AND ALL ASSOCIATED ESQCP DOCUMENTS WILL NEED RESUBMITTAL. THIS PRR2240 ONLY PROVIDES STORMWATER PERMITTING FOR PHASE 1.

**EROSION CONTROL NOTES**

- A STABILIZED STAGING AREA WILL BE DESIGNATED BY THE QUALIFIED STORMWATER MANAGER UPON THE BEGINNING OF CONSTRUCTION ACTIVITIES.
- A STOCKPILE MANAGEMENT PLAN WILL BE IDENTIFIED BY THE QUALIFIED STORMWATER MANAGER UPON THE BEGINNING OF CONSTRUCTION ACTIVITIES.
- THERE ARE NO DEDICATED ASPHALT OR BATCH PLANTS ASSOCIATED WITH THIS PROJECT.

**BMP LEGEND**

MAP SYMBOL	KEY	DESCRIPTION
	VTC	VEHICLE TRACKING CONTROL (Initial BMP)
	SF	SILT FENCE (Initial BMP)
	IP	CULVERT INLET PROTECTION (Initial BMP)
	UNDISTURBED	LIMITS OF CONSTRUCTION/DISTURBANCE
	TSB	TEMPORARY SEDIMENT BASIN w/ TEMPORARY SWALE (INTERIM CM)
	SB	STRAW BALE
	SM	SEEDING & MULCHING (FINAL CM)
	WB	WATER BASIN

SYMBOLS SHOWN IN LEGEND SHALL BE USED BY SWAMP ADMINISTRATOR TO ANNOTATE ANY CHANGES AND/OR ADDITIONS TO THIS PLAN.

Charles C. Crum  
REGISTERED  
2/17/25  
13348  
Professional Engineer  
STATE OF COLORADO

DESIGNED BY \_\_\_\_\_  
DRAWN BY \_\_\_\_\_  
CHECKED BY \_\_\_\_\_  
AS-BUILTS BY \_\_\_\_\_  
CHECKED BY \_\_\_\_\_

+158 Acre Parcel  
168 Training Facility

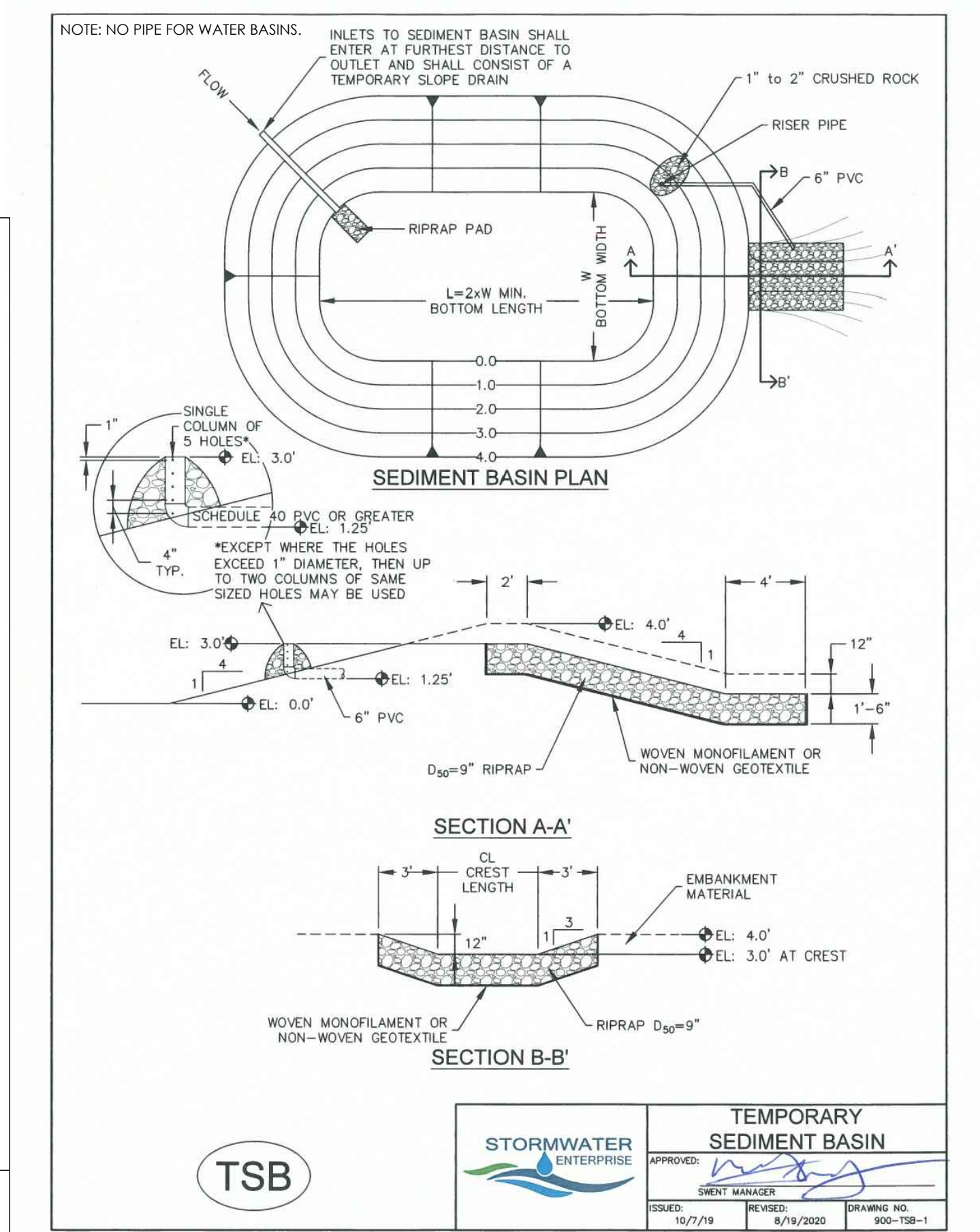
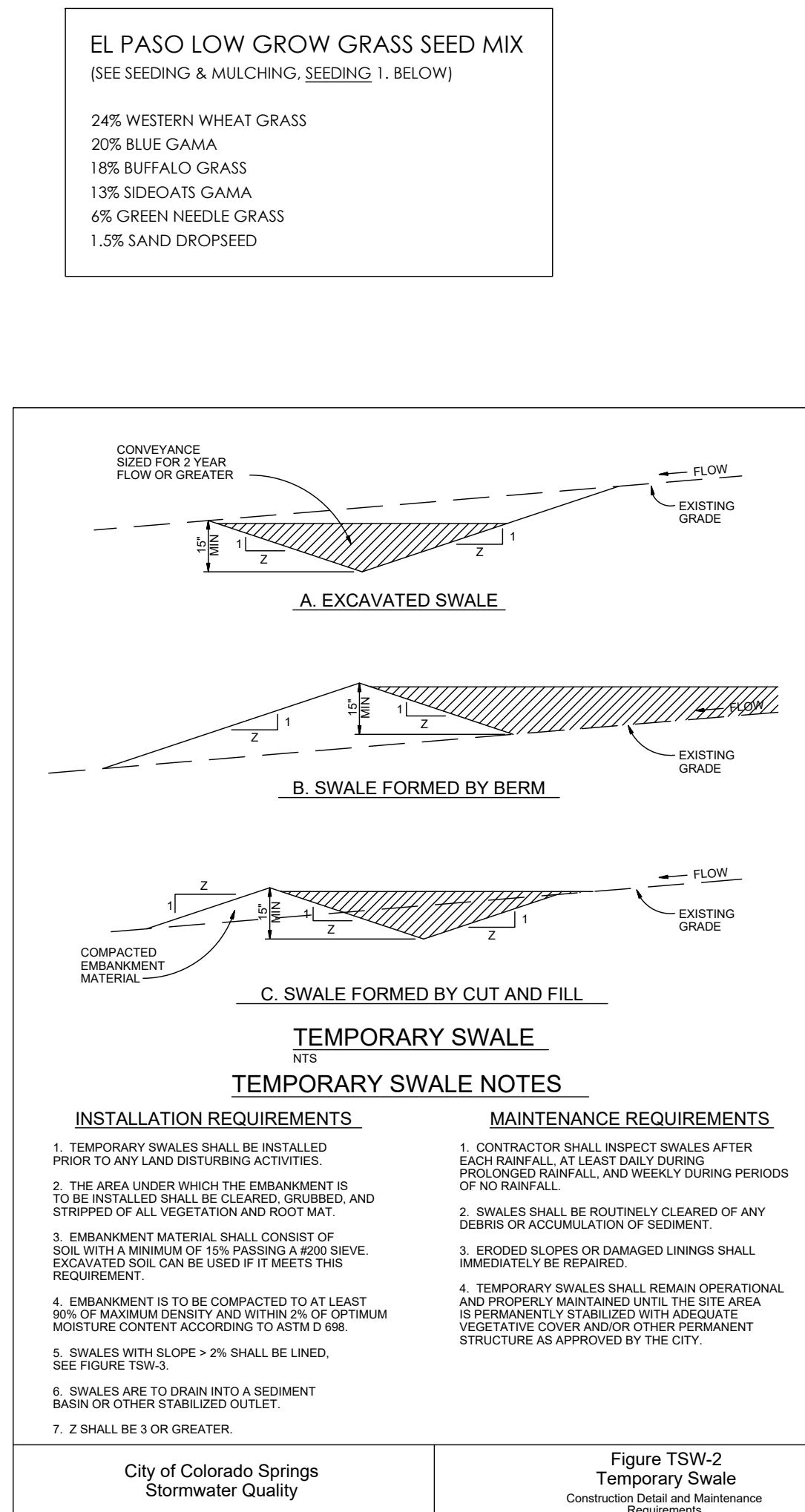
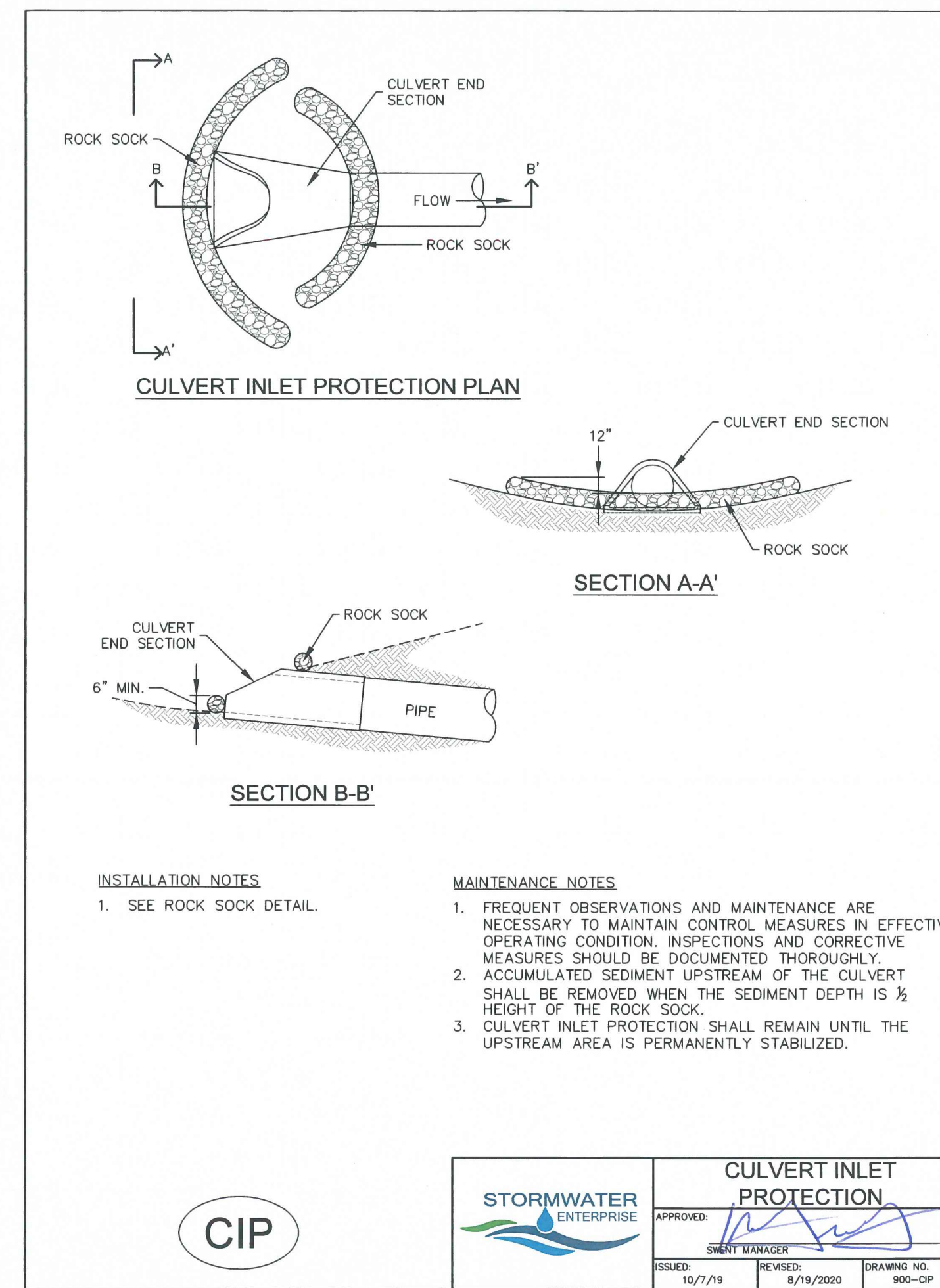
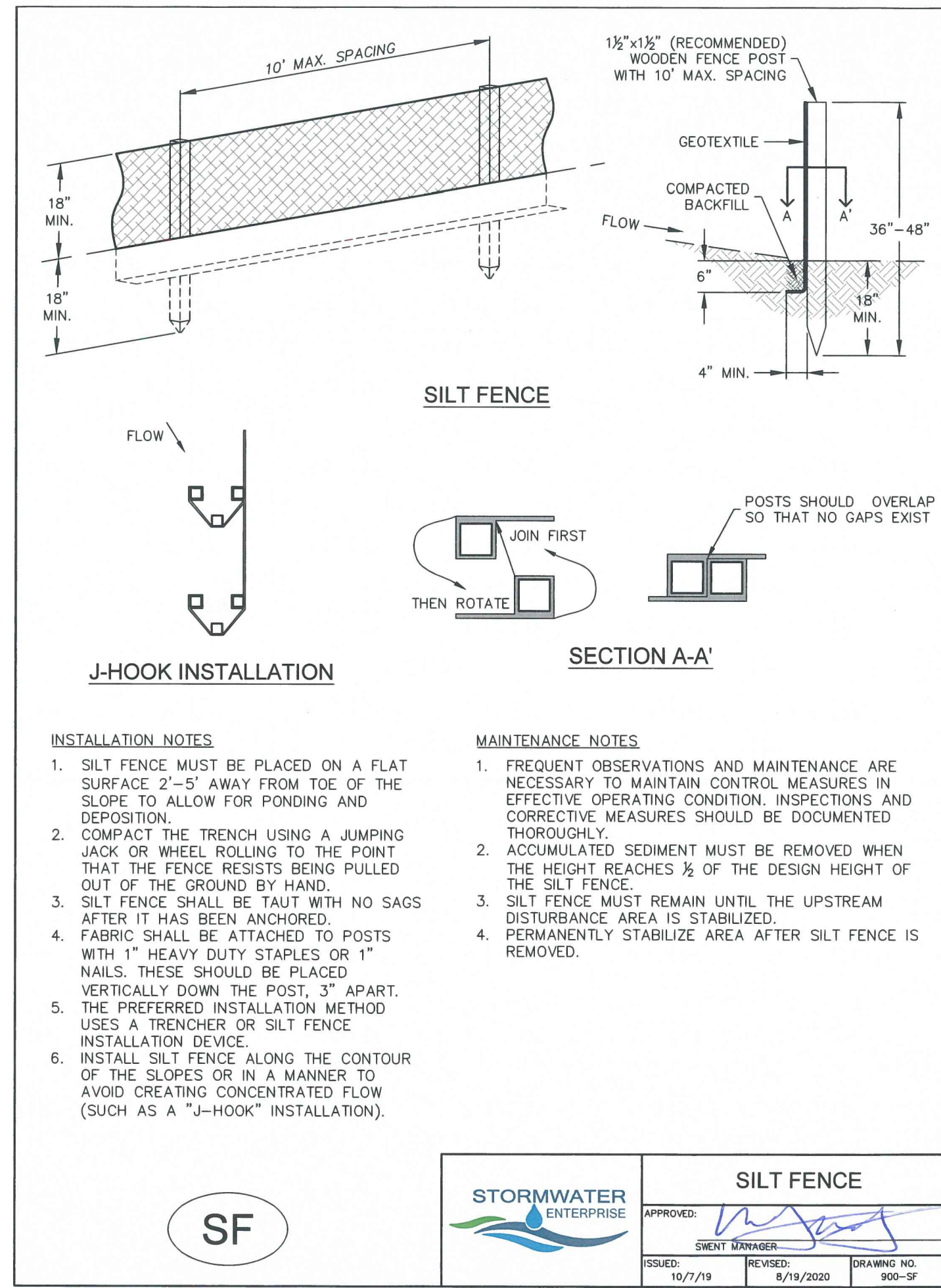
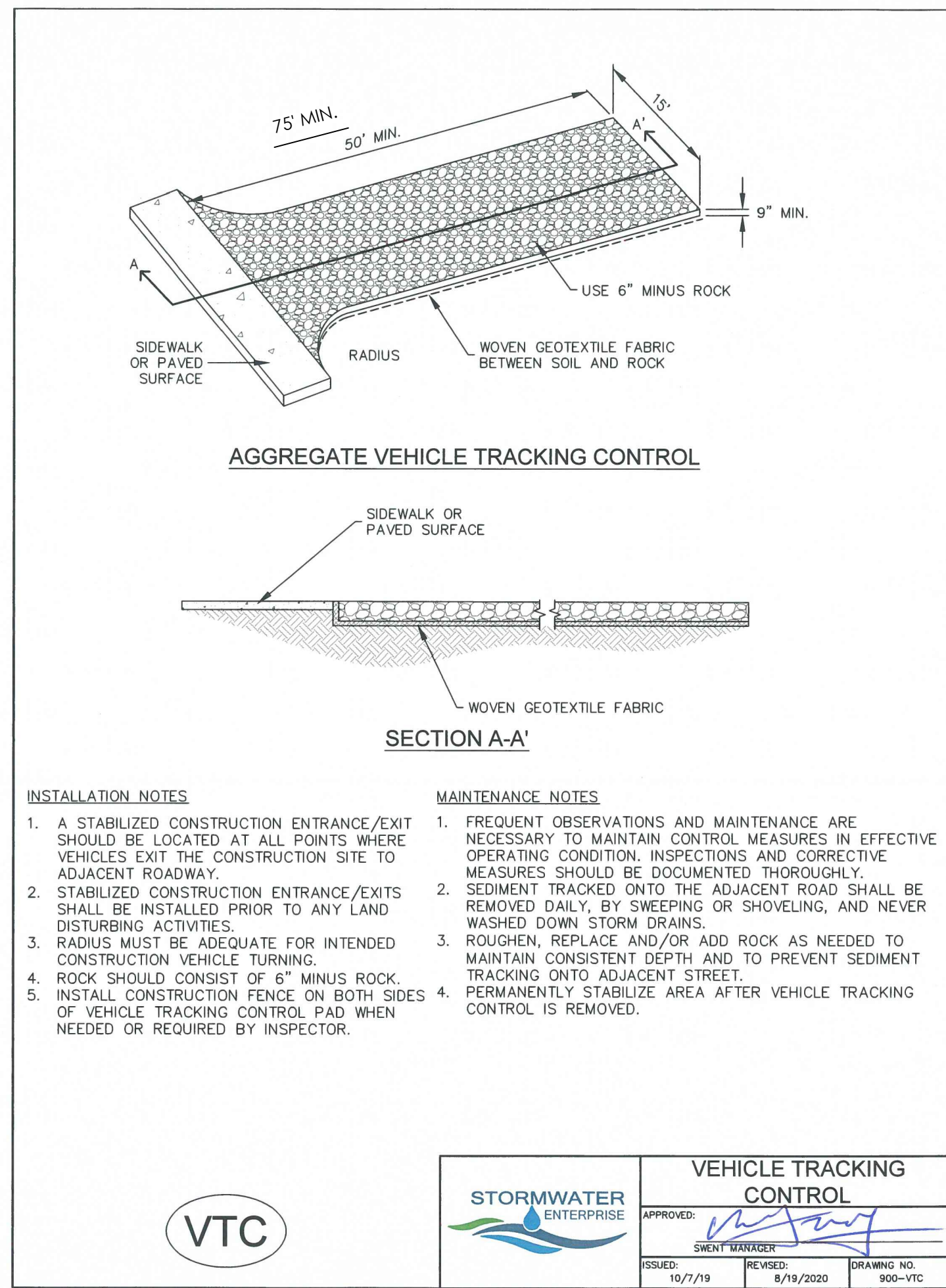
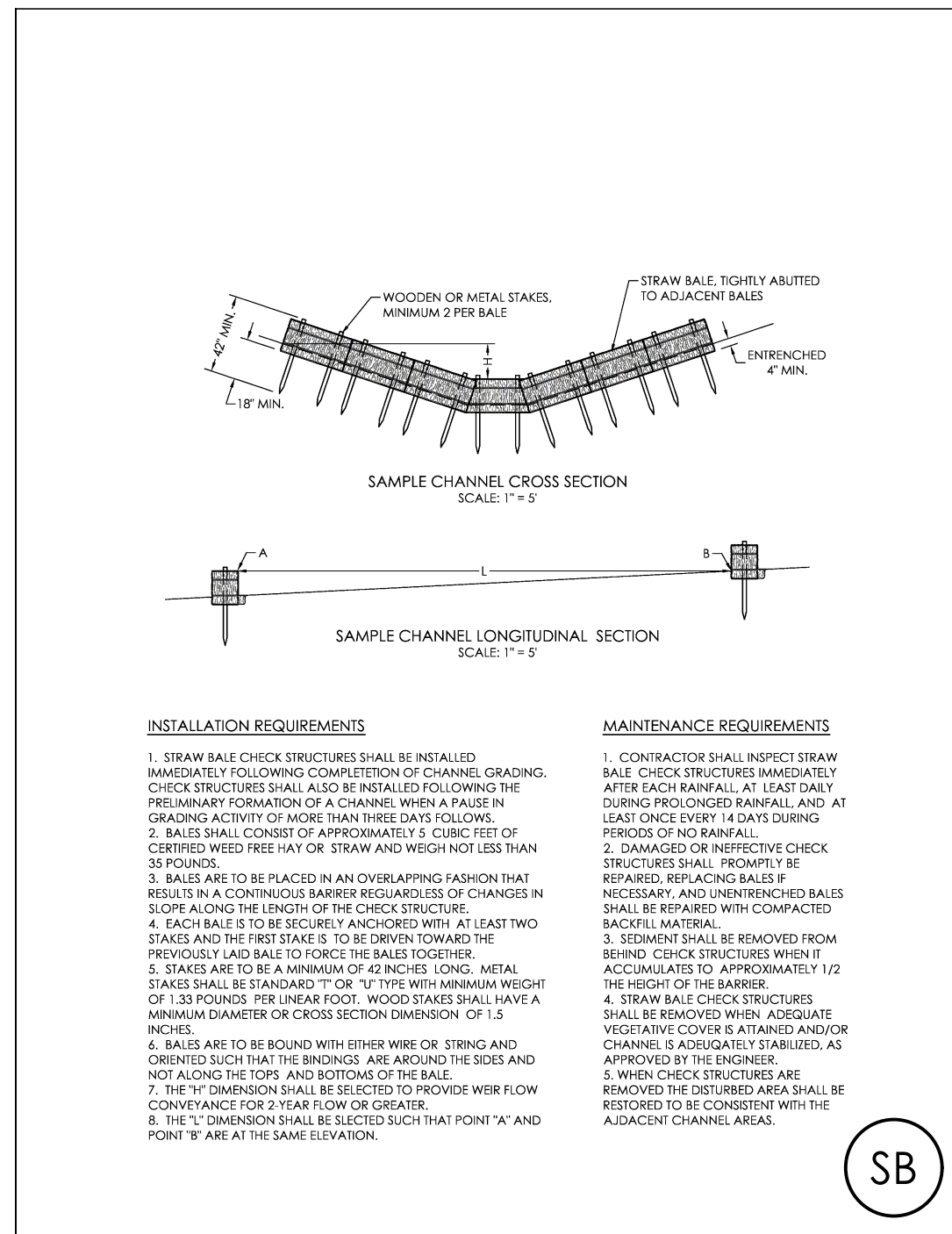
**GRADING & EROSION CONTROL PLAN**

MVE PROJECT 61224  
MVE DRAWING GRADING PLAN

**FEBRUARY 14, 2025**  
**SHEET 2 OF 3**

PPR2440





**TABLE SB-1, SIZING INFORMATION FOR STANDARD SEDIMENT BASIN**

UPSTREAM DRAINAGE AREA (ROUNDED TO NEAREST ACRE), (AC)	BASIN BOTTOM WIDTH (W), (FT)	SPILLWAY CREST LENGTH (CL), (FT)	HOLE DIAMETER (HD), (IN)
1	12 1/2	2	3/2
2	21	3	1 1/2
3	28	5	2
4	33 1/2	6	2 1/2
5	39 1/2	8	3
6	43	9	3 1/2
8	47 1/2	11	4
9	51	12	4 1/2
10	56 1/2	15	5
11	61	16	5 1/2
12	64	18	6
13	67 1/2	19	6 1/2
14	70 1/2	21	7
15	73 1/2	22	7 1/2

**INSTALLATION NOTES**

1. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.
2. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 3 INCHES, AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE No. 200 SIEVE.
3. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-698.
4. PIPE SCHEDULE 40 OR GREATER SHALL BE USED.
5. THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S) FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES. DESIGN CALCULATIONS MUST BE APPROVED PRIOR TO IMPLEMENTATION.

**MAINTENANCE NOTES**

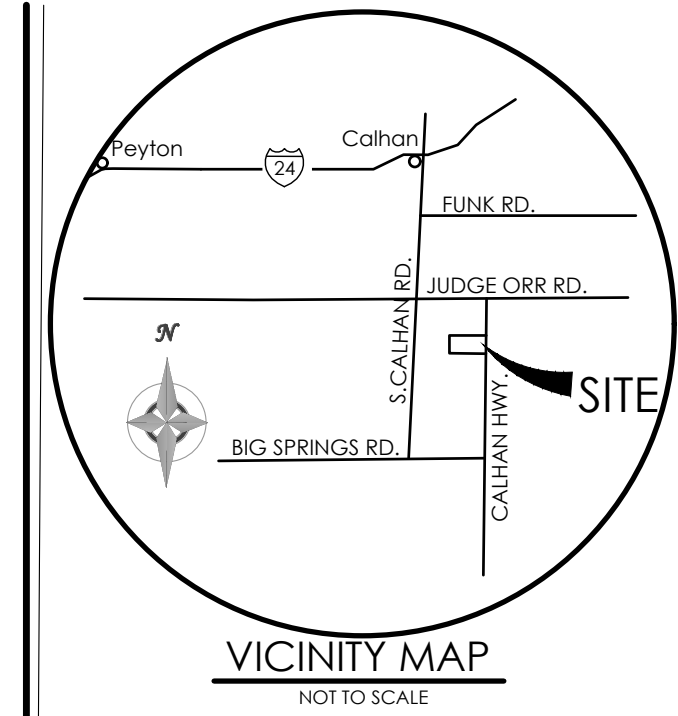
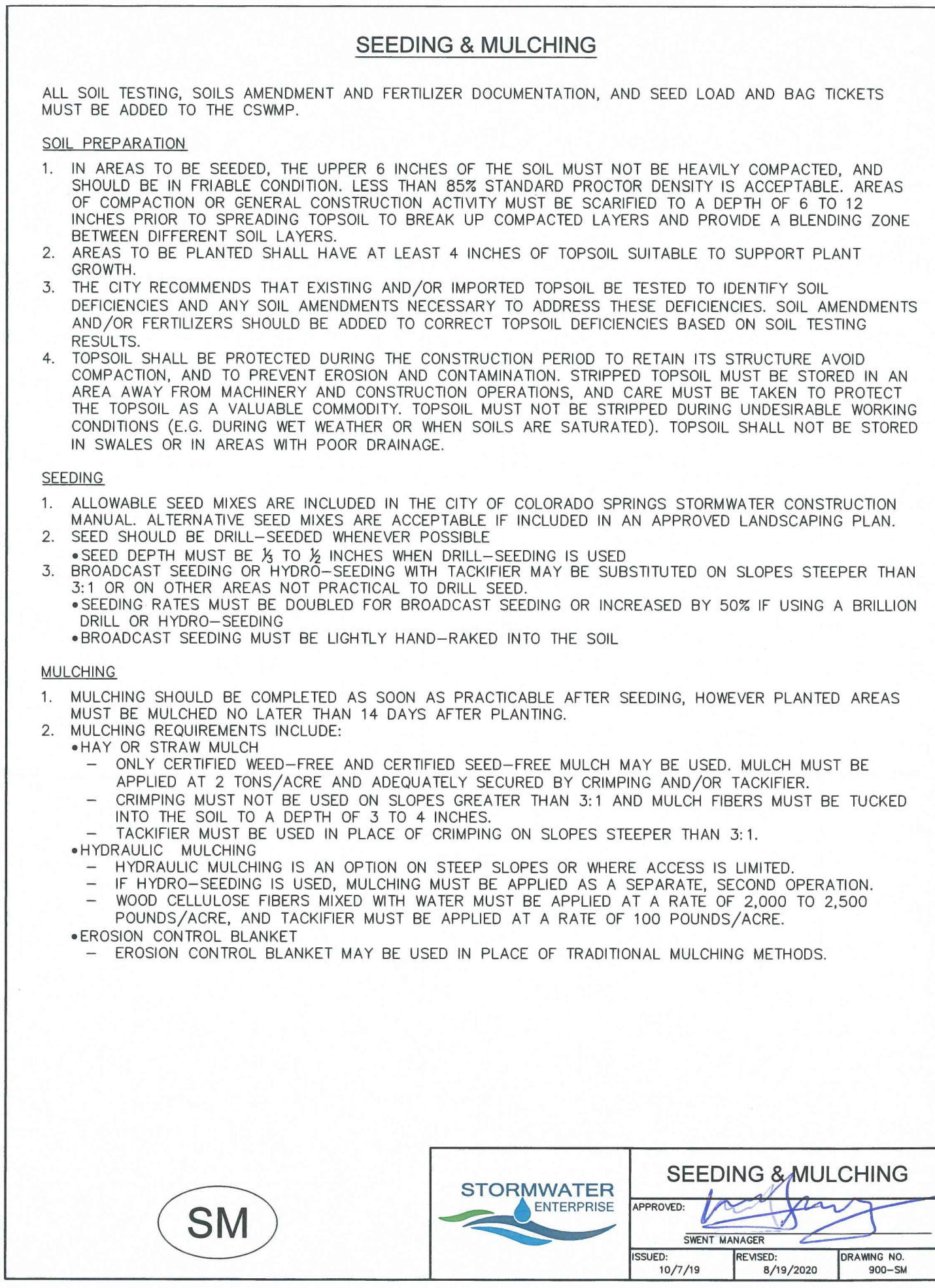
1. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
2. SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN CONTROL MEASURE EFFECTIVENESS, TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E. TWO FEET BELOW SPILLWAY CREST).
3. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED.
4. PERMANENTLY STABILIZE AREA AFTER SEDIMENT BASIN REMOVAL.

**STORMWATER ENTERPRISE**

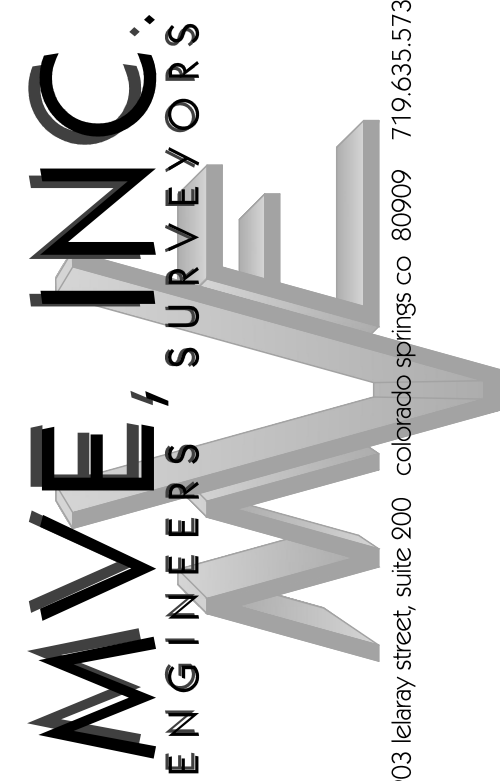
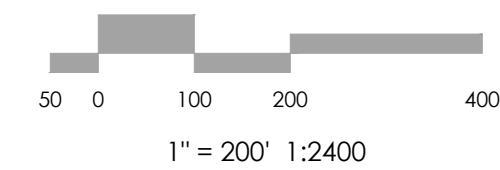
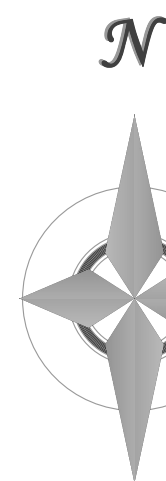
**TEMPORARY SEDIMENT BASIN**

APPROVED: [Signature]

ISSUED: 10/7/19 REVISED: 8/19/2020 DRAWING NO. 900-TSB-2



BENCHMARK



REVISIONS

DESIGNED BY  
DRAWN BY  
CHECKED BY  
AS-BUILT BY  
CHECKED BY

+158 Acre Parcel  
168 Training Facility

GRADING & EROSION  
CONTROL PLAN  
EROSION DETAILS

MVE PROJECT 61224  
MVE DRAWING GRADING PLAN

FEBRUARY 14, 2025  
SHEET 3 OF 3

PR2440