



2880 International Circle, Suite 110  
 Colorado Springs, CO 80910  
 Phone 719-520-6300  
 Fax 719-520-6695  
 www.elpasoco.com

**EL PASO COUNTY PLANNING AND  
 COMMUNITY DEVELOPMENT  
 DEPARTMENT**

**STORMWATER MANAGEMENT PLAN CHECKLIST**

Revised: July 2019

		Applicant	PCD
<b>1. STORMWATER MANAGEMENT PLAN (SWMP)</b>			
1	Applicant (owner/designated operator), SWMP Preparer, Qualified Stormwater Manager, and Contractor Information. (On cover/title sheet)	<b>X</b>	
2	Table of Contents	<b>X</b>	
3	Site description and location to include: vicinity map with nearest street/crossroads description.	<b>X</b>	
4	Narrative description of construction activities proposed (e.g., may include clearing and grubbing, temporary stabilization, road grading, utility / storm installation, final grading, final stabilization, and removal of temporary control measures)	<b>X</b>	
5	Phasing plan – may require separate drawings indicating initial, interim, and final site phases for larger projects. Provide “living maps” that can be revised in the field as conditions dictate.	<b>n/a</b>	
6	Proposed sequence for major activities: Provide a construction schedule of anticipated starting and completion dates for each stage of land-disturbing activity depicting conservation measures anticipated, including the expected date on which the final stabilization will be completed.	<b>X</b>	
7	Estimates of the total site area and area to undergo disturbance; current area of disturbance must be updated on the SWMP as changes occur.	<b>X</b>	
8	Soil erosion potential and impacts on discharge that includes a summary of the data used to determine soil erosion potential	<b>X</b>	
9	A description of existing vegetation at the site and percent ground cover and method used to determine ground cover	<b>X</b>	
10	Location and description of all potential pollution sources including but not limited to: disturbed and stored soils; vehicle tracking; management of contaminated soils; loading and unloading operations; outdoor storage of materials; vehicle and equipment maintenance and fueling; significant dust generating process; routine maintenance activities involving fertilizers, pesticides, herbicides, detergents, fuels, solvents, oils, etc.; on-site waste management; concrete truck/equipment washing; dedicated asphalt, concrete batch plants and masonry mixing stations; non-industrial waste such as trash and portable toilets	<b>X</b>	
11	Material handling to include spill prevention and response plan and procedures.	<b>X</b>	
12	Spill prevention and pollution controls for dedicated batch plants	<b>X</b>	
13	Other SW pollutant control measures to include waste disposal and off site soil tracking	<b>X</b>	
14	Location and description of any anticipated allowable non-stormwater discharge (ground water, springs, irrigation, discharge covered by CDPHE Low Risk Guidance, etc.)	<b>X</b>	
15	Name(s) of ultimate receiving waters; size, type and location of stormwater outfall or storm sewer system discharge	<b>X</b>	
16	Description of all stream crossings located within the project area or statement that no streams cross the project area	<b>X</b>	



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17	SWMP Map to include:	<b>X</b>	
17a	construction site boundaries	<b>X</b>	
17b	flow arrows to depict stormwater flow directions	<b>X</b>	
17c	all areas of disturbance	<b>X</b>	
17d	areas of cut and fill	<b>X</b>	
17e	areas used for storage of building materials, soils (stockpiles) or wastes	<b>X</b>	
17f	location of any dedicated asphalt / concrete batch plants	<b>n/a</b>	
17g	location of all structural control measures	<b>X</b>	
17h	location of all non-structural control measures	<b>X</b>	
17i	springs, streams, wetlands and other surface waters, including areas that require maintenance of pre-existing vegetation within 50 feet of a receiving water	<b>X</b>	
18	Narrative description of all structural control measures to be used. Modifications to EPC standard control measures must meet or exceed County-approved details.	<b>X</b>	
19	Description of all non-structural control measures to be used including seeding, mulching, protection of existing vegetation, site watering, sod placement, etc.	<b>X</b>	
20	Technical drawing details for all control measure installation and maintenance; custom or other jurisdiction's details used must meet or exceed EPC standards	<b>X</b>	
21	Procedure describing how the SWMP is to be revised	<b>X</b>	
22	Description of Final Stabilization and Long-term Stormwater Quality (describe nonstructural and structural measures to control SW pollutants after construction operations have been completed, including detention, water quality control measure etc.)	<b>X</b>	
23	Specification that final vegetative cover density is to be 70% of pre-disturbed levels	<b>X</b>	
24	Outline of permit holder inspection procedures to install, maintain, and effectively operate control measures to manage erosion and sediment	<b>X</b>	
25	Record keeping procedures identified to include signature on inspection logs and location of SWMP records on-site	<b>X</b>	
26	If this project relies on control measures owned or operated by another entity, a documented agreement must be included in the SWMP that identifies location, installation and design specifications, and maintenance requirements and responsibility of the control measure(s).	<b>X</b>	
<b>Please note: all items above must be addressed. If not applicable, explain why, simply identifying "not applicable" will not satisfy CDPHE requirement of explanation.</b>			
<b>2. ADDITIONAL REPORTS/PERMITS/DOCUMENTS</b>			
a	Grading and Erosion Control Plan (signed)	<b>X</b>	
b	Erosion and Stormwater Quality Control Permit (ESQCP) (signed)	<b>X</b>	
<b>3. Applicant Comments:</b>			
a	Item 5: Phasing Plan - No grading/EC phasing proposed. Only grading and EC required for the construction of Filing 1 is proposed at this time.		

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		Applicant	PCD
b	Item 17f: No dedicated asphalt or concrete batch plants are proposed on this site.		
c			
<b>4. Checklist Review Certifications:</b>			
a	<p>Engineer of Record: The Stormwater Management 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 and State for Stormwater Management Plans.</p> <div style="border: 1px solid black; width: 150px; height: 40px; margin: 10px 0;">  </div> <p>_____ Engineer of Record Signature                      Date</p>		
b	<p>Review Engineer: The Stormwater Management Plan was reviewed and found to meet the checklist requirements except where otherwise noted or allowed by an approved deviation request.</p> <p>_____ Review Engineer                                      Date</p>		



INNOVATIVE DESIGN. CLASSIC RESULTS.

**STORMWATER MANAGEMENT PLAN  
FOR  
RETREAT AT TIMBERRIDGE FILING NO. 2**

**SF-21-021**

Prepared for:

TIMBERRIDGE DEVELOPMENT GROUP, LLC  
2138 FLYING HORSE CLUB DR.  
COLORADO SPRINGS, CO 80921

Prepared by:

Classic Consulting Engineers & Surveyors  
619 N. Cascade Ave., Suite 200  
Colorado Springs, CO 80903  
(719) 785-0790

Job No. 1185.20

Qualified Stormwater Manager:

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Contractor:

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STORMWATER MANAGEMENT PLAN FOR  
RETREAT AT TIMBERRIDGE FILING NO. 2

COLORADO DISCHARGE PERMIT SYSTEM STATEMENT (CDPS)/  
**EROSION AND STORMWATER QUALITY CONTROL PLAN (ESQCP)**

**Site Inspector**

The following Erosion and Stormwater Quality Control Plan (ESQCP) is a detailed account of the requirements of the City of Colorado Springs El Paso County Drainage Criteria Manual, Volume 2 – Stormwater Quality Policies, Procedures and Best Management Practices as amended by the ECM. The main objective of this plan is to help mitigate the increased soil erosion and subsequent deposition of sediment off-site and other potential stormwater quality impacts during the period of construction from start of earth disturbance until final landscaping and other potential permanent stormwater quality measures are effectively in place.

This document must be kept at the construction site at all times and be made available to the public and any representative of the Colorado Department of Health - Water Quality Control Division, if requested.

This report is also proposed to meet all requirements of the Colorado Discharge Permit System for Construction Activity. If any discrepancies between this report and Volume 2 exist, the City/County Manual will prevail.

STORMWATER MANAGEMENT PLAN FOR  
RETREAT AT TIMBERRIDGE FILING NO. 2

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**APPENDIX**

VICINITY MAP

COPY OF GENERAL PERMIT APPLICATION

CONTRACTOR SEQUENCE OF ACTIVITIES

OPERATION & MAINTENANCE INSPECTION RECORD

STANDARD BMP DETAILS w/ INSTALLATION & MAINTENANCE REQUIREMENTS



## **SITE DESCRIPTION**

Retreat at TimberRidge Filing No. 2 has a total acreage of 75.829 acres located in Sections 27 & 28, Township 12 South, Range 65 West of the Sixth Principal Meridian in the County of El Paso, and State of Colorado. This site is bounded on the north by undeveloped future TimberRidge property (Residential use), on the south and east by undeveloped future Sterling Ranch property (Residential use) and to the west by Vollmer Road. The property is zoned PUD. 90 single family residential lots and associated public roadway are planned within this plat. 12 of the planned lots west of Sand Creek will be 2.5 Ac. min. in size with rural public roads. No overlot grading will take place on these lots, only grading for the public roadway and proposed on-site EDB. The 78 planned lots east of Sand Creek will consist of urban lots (12,000 SF min. in size) and the majority of these lots will be overlot graded along with the public urban roadways and drain to the existing on-site EDB constructed with Filing No. 1.

Based on a field investigation, the property contains primarily field grasses, weeds, cacti and yuccas, with areas of scattered trees along Sand Creek and ponderosa pine trees located across the north west portion of the site. The Natural Resource Conservation Service has mapped the general soil type as coarse sandy loam. More specifically described as Type 71, Pring Coarse Sandy Loam, 3 to 8% slopes. The soils have generally been described to have moderate to moderately rapid permeabilities. Possible hazards with soil erosion are present on-site but can be controlled with vegetation. The majority of the soils have been described to have slight to moderate erosion hazards. (Reference: taken from Soils Report prepared by Entech Engineering, December 2017)

Sand Creek traverses the property north-south. This drainageway corridor is planned to remain undisturbed to the greatest extent possible except for the required drainage improvements per the Sand Creek DBPS. These improvements are being constructed with Filing No. 2. As a requirement by El Paso County, along with Filing No. 1 development, a secondary emergency gravel access road has been constructed east of Sand Creek and north of the Filing No. 1 property up to Arroya Lane. Along the easterly boundary exist several natural ravines and drainageways that required temporary sediment facilities to capture and treat off-site stormwater flows. These facilities are currently in place and will remain with the construction of Filing No. 2. All temporary facilities are also shown on the Grading and Erosion Control Plan and are located on future TimberRidge property. The total disturbance area is shown on the Grading and Erosion Control Plan and totals



43.0 ac. The Sand Creek corridor does contain some wetland areas that will be protected during site grading operations. Any disturbance to these wetland areas with the construction of the creek improvements will be under a 404 permit. No springs, landscape irrigation return flows or construction dewatering is anticipated within the limits of construction of this site. Should any of the above items occur unexpectedly, BMPs shall be implemented immediately. The local regulatory agency shall be notified for approval of the BMPs and methods.

- **RECEIVING WATERS**

Name of Receiving Water(s)	Sand Creek
Size/Type/Location of Outfall(s)	30" RCP Pond outfall from the on-site EDB into existing Sand Creek Channel (Reach SC-9)
Discuss discharge connection to Municipal system (include system name, location, and ultimate receiving water(s):	One proposed EDB to outfall location directly into Sand Creek and ultimately to (Fountain Creek)

- **PROPOSED CONSTRUCTION ACTIVITY**

Proposed construction activities within this project include grading of the proposed roadways, overlot grading for urban lots, stormwater quality ponds, temporary sediment ponds and utility/road installation for the construction of single-family homes. See "Final Stabilization and Long term Storm-water Management" section below for final stabilization activities.

- **PROPOSED SEQUENCE OF ACTIVITY/CONSTRUCTION TIMING**

Proposed construction activities within this project include grading and utility/road construction for the proposed residential subdivision. Sequence of activities will be based upon site contractor timing and scheduling. Upon site contractor selection, contractor to include sequence of activities schedule in the section provided in the Appendix of this report. A standard sequence of events typically includes the following:





- 1) Install perimeter, interior & exterior BMPs (Immediately upon plan approval/permitting – Fall 2021) – **Initial Phase**
- 2) Clear and grub site for proposed lots, roadways and pond areas (After installation of perimeter BMPs - Fall 2021) – **Initial Phase**
- 3) Excavation & installation of utilities (October-January 2022) – **Interim Phase**
- 4) Curb and Gutter, paving, installation of permanent erosion control measures within the sideroad ditches of the rural roadways (March-May 2022) – **Interim Phase**
- 5) Building construction including drilling for individual wells and installation of septic systems for the 2.5 ac. lots west of Sand Creek. (Summer 2022 thru Winter 2022) – **Final Phase**

The anticipated start and completion time period for site grading operations is to start in late Summer 2021 with site final site stabilization by Summer 2022. This time schedule could vary depending on individual home sales and construction schedules.

- **EROSION AND SEDIMENT CONTROL**

Erosion control measures shall be implemented in a manner that will protect properties and public facilities from the adverse effects of erosion and sedimentation as a result of construction and earthwork activities. In order to prevent a net increase of sediment load, Best Management Practices will be implemented during the construction life of this project. A silt fence will be installed per the approved grading and erosion control plan in order to protect undisturbed areas. All roads will be inspected to ensure that sediment from on-site construction activity is not being discharged with the stormwater. Roadways shall be swept as needed for controlling tracking of mud onto public roadways. Vehicle tracking control pads will aid in minimizing soil tracking onto roadways. All disturbed areas, not sodded, will be reseeded with a native seed mix and watered until a mature stand is established. All areas disturbed will be protected with silt fence, diversion swales and temporary sediment traps (as needed basis only) until such time as the site has been re-vegetated. Vegetation and vegetated buffers shall be preserved as much as possible. Wherever feasible, vegetated buffers shall be maintained free from vehicle/equipment parking, storage, stockpiles, or other impacts.

- DEVELOPMENT AREA/AREAS AND VOLUME STATEMENT**

Total Platted Site Area	<u>75.3</u> Acres
Initial Site area to be disturbed	<u>43.0</u> Acres for driveway/BMP const
Percent disturbance	<u>57.1</u> %

The total volume of earthwork cut/fill operations is more than 500 CY.

- SOILS INFORMATION**

The average soil condition reflects Hydrologic Group "B" (Type 71 - Pring coarse sandy loam), as determined by the "Soil Survey of El Paso County Area," prepared by the Soil Conservation Service. The soils have been described to have rapid permeabilities and well suited for homesites. There is possible moderate hazards with soils erosion but able to be controlled by vegetation. Permissible velocities of 4 to 7 ft/sec. allowed with re-established vegetation. Synthetic channel lining materials or small check dams may be utilized if velocities are anticipated to exceed these values. Based upon the current proposed development of this site, the following 100-year runoff coefficients would be realized:

Existing site runoff coefficient =	= <u>.35</u>
Developed site runoff coefficient	= <u>.47</u> landscape / seeded areas
Percent disturbance	= <u>.90</u> driveway / paved areas

- EXISTING SITE CONDITIONS**

This property lies within the upper reach of the Sand Creek Drainage Basin. The existing drainage patterns generally run in a southerly direction in several natural drainage corridors towards Sand Creek.

This site is currently vegetated with native grasses (approximately 85% ground cover) as determined visually during site visit with some sparse pine trees in the northwest portion of the site. Existing slopes range from approximately 2 to 20 percent. Reference the Site Description portion of this report for further site conditions.



## **SITE MAP**

With approval of this report is the approved grading, erosion and stormwater quality control plan for the subject property which will serve as the SWMP site map. This document contains site specific grading and erosion control BMP measures as required and approved by the El Paso County. Limits of disturbance, areas of cuts/fills, proposed stockpile areas, areas used for storage of materials, equipment, soil, or waste, batch plants, minimum and maximum cut/fill slopes, existing limits of significant vegetation, locations of springs, streams, and/or wetlands, and existing facilities (including but not limited to: house, shed and misc. structures, retaining walls, gas main, electric and telecom vaults and fences) will be represented on this plan. The site map will depict locations of specific interim and ultimate stormwater management BMPs throughout the lifetime of the project. Erosion control cost assurances must be posted to the county in the amount listed on Financial Assurance Estimate Form. The site map/grading plan shall be amended to include any additional interim or phased BMPs over and above measures included on the site map, as required by contractor's construction schedule. All construction BMP details will be included in the appendix of this report. Detail sheets include installation and maintenance requirements. Also reference "Drainage Criteria Manual, Volume 2 Stormwater Quality Policies, Procedure, and Best Management Practices" and the El Paso County ECM for additional information and guidance regarding construction BMPs.

## **STORMWATER MANAGEMENT**

- **QUALIFIED STORMWATER MANAGER**

The Qualified Stormwater Manager can be an individual(s), position, or title – this entity is responsible for developing, implementing, maintaining, and revising the SWMP. The Qualified Stormwater Manager is the contact for all SWMP related issues and is the entity responsible for its accuracy, completeness, and implementation. Therefore, the Qualified Stormwater Manager should be a person with authority to adequately manage and direct day to day stormwater quality management activities on the subject site. Reference the Appendix of this report for the SWMP permit application which names the individual/entity applying for the permit and naming the Qualified Stormwater Manager of the SWMP. This individual will be sufficiently qualified for these duties per the ECM Appendix I.5.2.A.

- **POTENTIAL POLLUTANT SOURCES**

Potential pollutant sources which shall be evaluated for potential to contribute pollutants to stormwater discharge from the subject site may include the following:

- Disturbed and stored soils
- Vehicle tracking of sediments
- Management of contaminated soils
- Loading and unloading operations
- Outdoor storage activities (building materials, utility piping and appurtenances, etc.)
- Vehicle and equipment maintenance and fueling
- Significant dust or particulate generating processes
- On-site waste management practices (waste piles, liquid wastes, dumpsters)
- Concrete truck/equipment washing, including the concrete truck chute associated fixtures and equipment
- Non-industrial waste sources such as worker trash and portable toilets
- Other areas or procedures where potential spills can occur.

The location and description of these areas are shown on the attached SWMP Site Map.

- **BMPS FOR POLLUTANT PREVENTION**

The following are common practices to mitigate potential pollutants:

Structural Measures

- Sanitary facilities shall be placed at a minimum of 10' from any curblineline and 50' from any inlet. They will be secured on all four corners to prevent overturning, cleaned on a weekly basis and inspected daily for spills. If not feasible for the project, use of a secondary containment shall be implemented.
- Equipment loading/unloading, fueling and Maintenance Services – a designated loading/unloading and fueling area will be established to contain any spill resulting from loading/unloading, fueling, maintenance, or repair of equipment. Contractors will be responsible for containment, cleanup, and disposal of any leak or spill in this designated area and any costs associated with the cleanup and disposal.

- Concrete washout area will be established on site for all concrete truck/equipment washing. Contractor responsible for cleanup and maintenance of this area.
- Outdoor storage activities – a designated storage area for all building materials, utility piping and appurtenances will be established and maintained by the contractors. Contractors responsible for all cleanup and containment of trash/debris in this area.
- Material stockpiles (soils, soil amendments, debris/trash piles) – All construction trash and debris will be deposited in the dumpster. Dumpster inspected daily for leaks and capacity. Dumpster emptied on a weekly basis or when capacity exceeds the top of the dumpster.

Non-Structural Measures

- Chemical products shall be protected from precipitation, free from ground contact, and stored properly to prevent damage from equipment or vehicles.
- Wind erosion shall be controlled by sprinkling the site roadways with water and/or temporary stabilizing stockpiles by spraying with water from water truck. Each dump truck hauling material from the site will be required to be covered with a tarpaulin.
- Sediment and Migration of Sediment – Sweeping operations will take place as needed to keep roadways maintained. The perimeter of the site will be evaluated for any potential impact resulting from trucking operations or sediment migration from the site. Vehicle tracking controls will be placed and daily maintained at each entry/exit of site. BMP devices such as straw bale inlet protection and rock socks will be placed to protect storm system inlets should any roadway tracking or sediment migration occur.
- Snow removal and/or stockpiling will be considered prior to placement at the site. Snow stockpiles must be kept away from any stormwater conveyance system (i.e., inlets, ponds, outfall locations, roadway surfaces, etc.)

● **BMP SELECTION**

Selection of the appropriate BMP will limit the source of the pollutant. Guidance for the selection process can be found by referencing the City of Colorado Springs/El Paso County “Drainage Criteria Manual Volume 2”.

During grading construction activity for the subject site, silt fence will be installed per the approved plan in order to protect undisturbed areas. Check dams will be installed along all permanent and temporary sideroad swales to minimize erosion in areas of concentrated stormwater. These



sideroad swales route the stormwater directly to several proposed sediment basins intended to collect stormwater and filter the sediment before conveyance further downstream. Vehicle tracking control pads will be installed at all access points to the property. Regular maintenance and inspection of these facilities will be necessary throughout driveway construction and until vegetation is reestablished to ensure proper function of the temporary sediment basin outlet structures.

- **MATERIAL HANDLING & SPILL PREVENTION**

Where materials can impact stormwater runoff, existing and planned practices that reduce the potential for pollution must be included in a material handling/spill prevention plan, to be provided by the contractor. Material handling/Spill prevention plans shall include

- Notification procedures to be used in the event of an accident
- Instruction for clean-up procedures, and identification of a spill kit location
- Provisions for absorbents to be made available for use in fuel areas, and for containers to be available for used absorbents
- Procedures for properly washing out concrete truck chutes and other equipment in a manner and location so that the materials and wash water can not discharge from the site and never into a storm sewer system or stream.
- Procedures for properly handling materials and cleanup, identification of material storage areas and associated BMPs such as silt fencing and straw waddles for containment with no discharge from the site will be provided to the Contractor.

- **CONCRETE/ASPHALT BATCH PLANTS**

Where applicable, the SWMP must be amended by the contractor to describe and locate on the Site Map all practices used to control stormwater pollution from dedicated asphalt or concrete batch plants. However, no batch plants are planned for this site.

- **WASTE MANAGEMENT AND DISPOSAL INCLUDING CONCRETE WASHOUT**

Where applicable, the SWMP must be amended by the contractor to describe and locate on the Site Map all practices implemented at the site to control stormwater pollution from all construction site wastes (liquid and solid) including concrete washout activities. The concrete washout area will be located by the contractor and marked-up on the SWMP map kept on-site. Construction site waste

area will also be designated by the Contractor and documented on the SWMP map. Procedures for material handling/spill prevention provided as described above.

- **DOCUMENTING SELECTED BMPS**

As discussed in the SITE MAP section of this report, documentation of the selected BMPs will be included on the site map / overlot grading plan included in this report. The site map/overlot grading plan shall be amended to include any additional interim or phased BMPs over and above measures included on the site map, as required by contractor's construction schedule.

- **NON-STORMWATER DISCHARGES**

The SWMP permit covers only discharges composed entirely of stormwater and does not include the following: fire fighting activities, landscape irrigation return-flow and uncontaminated springs. However, none of the above non-stormwater discharges are anticipated for this site.

- **STORMWATER DEWATERING**

The discharge of pumped water, ONLY from excavations, ponds, depressions, etc., to surface waters or to a municipal separate storm-sewer system is allowed by the Stormwater Dewatering Permit as long as the dewatering activity and associated BMPs are identified in the SWMP (including location of activity), and the BMPs are implemented in accordance with the SWMP. Where applicable, all stormwater and groundwater dewatering practices implemented to control stormwater pollution for dewatering must be amended in the SWMP and Site Map by the contractor.

- **REVISING BMPs AND THE SWMP**

The implemented BMPs will need to be modified and maintained regularly to adapt to changing site conditions and to ensure that all potential stormwater pollutants are properly managed. The BMPs and pollutant sources must be reviewed on an ongoing basis by the Qualified Stormwater Manager as assigned by the Permit. With any construction project, special attention must be paid to construction phasing and therefore revisions to the SWMP to include any additional or modification to the BMPs and SWMP report. The SWMP must be modified or amended to accurately reflect the field conditions. Examples include - but are not limited to – removal of BMPs, identification of new potential pollutant procedures, and changes to information provided in the site map/overlot

grading plan. SWMP revisions must be made prior to changes in site conditions. The SWMP should be viewed as a “living document” throughout the lifetime of the project.

## **FINAL STABILIZATION AND**

### **LONG-TERM STORMWATER MANAGEMENT**

Permanent stabilization of the site includes seeding and mulching the site. Seeding and mulching consists of loosening soil, applying topsoil (if permanent seeding) and drill seeding disturbed areas with grasses and crimping in straw mulch to provide immediate protection from raindrop and wind erosion. As the grass cover becomes established, provide long term stabilization of exposed soils.

Once the construction activity ceases permanently, the area will be stabilized with permanent seed and mulch within 14 days. All areas that will not be impacted by construction of buildings will be seeded and landscaped as feasible. After seeding, each area will be mulched with straw. The straw mulch is to be tacked into place by a disc with blades set nearly straight. Topsoil stockpiles will be stabilized with temporary seed and mulch. Areas of the site that are to be paved will be temporarily stabilized until asphalt is applied. Rough cut street controls will be utilized in these areas to control erosion by minimizing concentration of flow and reducing runoff velocity.

The temporary perimeter controls (silt fence or equivalent) will not be removed until all construction activities at the site are complete and soils have been stabilized and final stabilization has been achieved. Upon completion of construction activities, the site shall be inspected to ensure all equipment, waste materials, and debris have been removed. All other BMPs or other control practices and measure that are to remain after completion of construction will be inspected to ensure they are properly functioning. Final stabilization is reached when all soil disturbing activities at the site have been completed and uniform vegetative cover has been established with a density of at least 70% of pre-disturbance levels. For purposes of the SWMP, establishment of a vegetative cover capable of providing erosion control equivalent to the pre-existing conditions at the site can be considered final stabilized.

Long term stormwater quality management and providing water quality capture volume (WQCV) is not required for a portion of this site per ECM I.7.1.B.5 (exclusion for large lot single family sites). However, as mentioned earlier, existing and proposed temporary sediment basins and existing and proposed permanent



EDB's are being provided to handle the required WQCV for the eastern portion of the site and the proposed impervious areas for the western portion of the site.

### **INSPECTION AND MAINTENANCE PROCEDURES**

All drainage facilities will be monitored using the enclosed "Monitoring and Maintenance Inspection Record" checklist (Appendix II).

- **SWMP QUALIFIED STORMWATER MANAGER INSPECTION PROCEDURES & SCHEDULES**

The Qualified Stormwater Manager shall adhere to the following inspection procedures during the development of the site:

1. Make thorough inspection of the stormwater management system at least every 14 days.
2. Make thorough inspection of the stormwater management system within 24 hrs of each precipitation or snow melt event that creates runoff.
3. If any system deficiencies are noted, corrective actions must begin immediately. Documentation of inspection must be available if requested.
4. Records of the site inspections or facility replacement modifications must be kept at the site within this report.
5. 30-day inspections must take place on this site where construction activity is complete, but vegetative cover is still being established.

In this report's appendix, a site inspection form has been included for use by the Inspector. Upon completion of this form, the document is to be kept in the provided folder also in the rear of this report.

- **BMP MAINTENANCE / REPLACEMENT & FAILED BMPs**

The Stormwater Construction Permit requires that all erosion and sediment control practices and other protective measures identified in the SWMP be maintained in effective and operation condition. A preventative maintenance program should be in place to prevent BMP breakdowns and failures by proactively maintaining or replacing BMPs and equipment. The inspections process should also include procedures to ensure that BMPs are replaced or new BMPs added to adequately manage the pollutant sources at the site. This procedure is part of the ongoing process of revising the BMPs and SWMP as previously discussed, and any changes shall be recorded in the SWMP.



- **RECORD KEEPING AND DOCUMENTING INSPECTIONS**

The following items must be documented by the Qualified Stormwater Manager as part of the site inspections and kept in a notebook located on-site with the approved grading and erosion control plans:

- Inspection date
- Name(s) and title(s) and signature(s) of personnel making inspection
- Location(s) of discharges of sediment or other pollutants from site
- Location(s) of BMPs that need to be maintained
- Location(s) of BMPs that fail to operate as designed or proved inadequate in a particular location
- Location(s) where additional BMPs are needed that were not in place at time of inspection
- Deviations from the minimum inspection schedule
- Descriptions of corrective action for items above including dates and measures taken to prevent future violations
- Signed statement of compliance added to the report after correction action has been taken

## EROSION CONTROL COST OPINION

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
1.	Permanent Seeding	2 AC.	\$828/AC.	\$ 1,656.00
2.	Permanent Mulching	2 AC.	\$777/AC.	\$ 1,554.00
3.	Permanent E.C Blanket	5,100 SY	\$6.00/SY	\$ 30,600.00
4.	Vehicle Tracking Control	4 EACH	\$2,453/EA	\$ 9,812.00
5.	Silt Fence	5,250 LF	\$2.60/LF	\$ 13,650.00
6.	Temporary Seeding	6 AC.	\$650/AC.	\$ 3,900.00
7.	Temporary Mulch	6 AC.	\$777/AC.	\$ 4,662.00
8.	Erosion Bales	32 EACH	\$26.00/EA	\$ 832.00
9.	Inlet Protection	12 EACH	\$173.00/EA	\$ 2,076.00
10.	Sediment Basin	1 EACH	\$1,824/EA	\$ 1,824.00
11.	Concrete Washout	1 EACH	\$932.00/EA	\$ 932.00
	Maintenance (35% of construction BMPs)			\$ 25,024.30
<b>TOTAL</b>				<b><u>\$ 96,522.30</u></b>

Classic Consulting Engineers & Surveyors cannot and does not guarantee that the construction cost will not vary from these opinions of probable construction costs. These opinions represent our best judgment as design professionals familiar with the construction industry and this development in particular.

PREPARED BY:

**Classic Consulting Engineers & Surveyors, LLC**

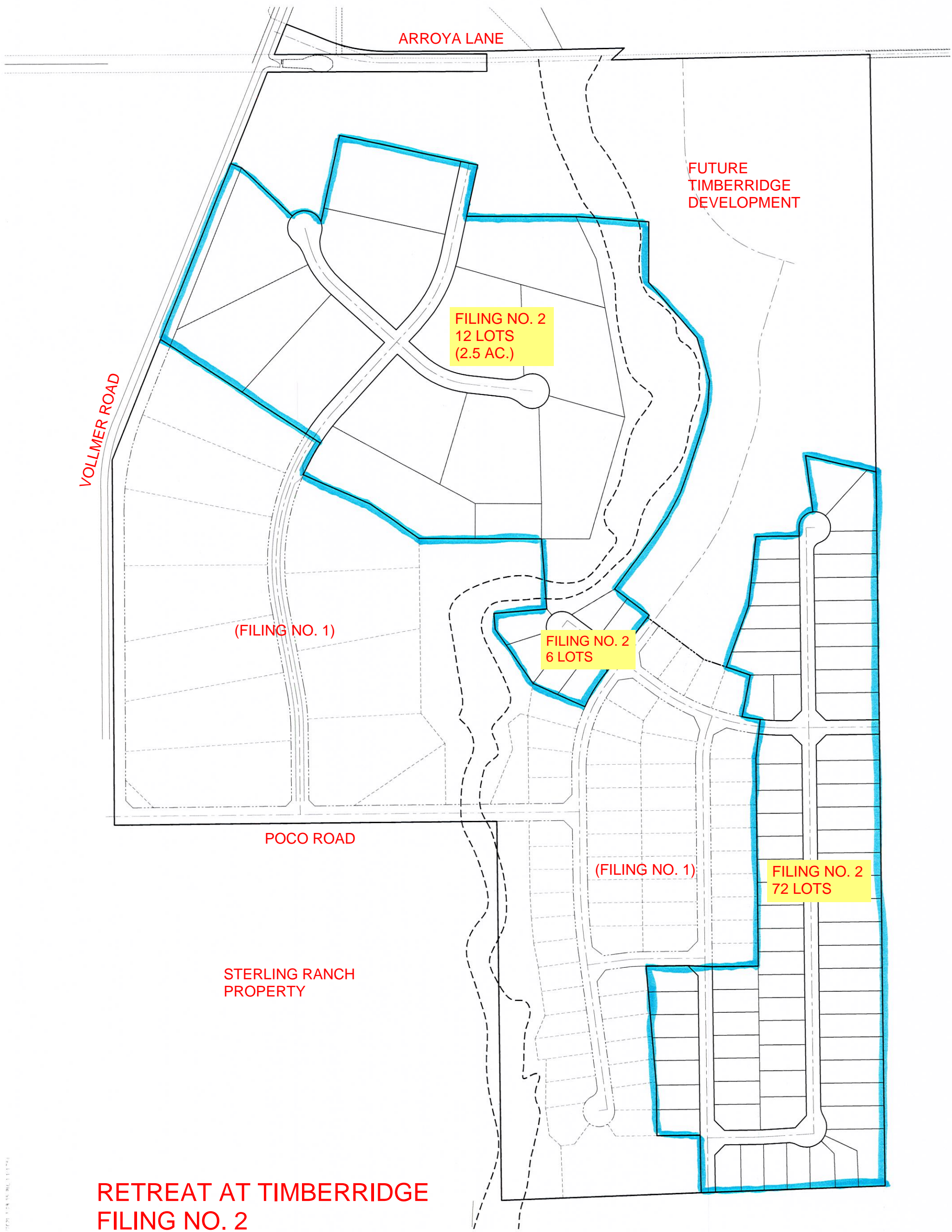


Marc A. Whorton, P.E.  
Project Manager

maw/1185.20/SWMP Report Vol2.doc



**VICINITY MAP**



**RETREAT AT TIMBERRIDGE  
FILING NO. 2**

**VICINITY MAP**

**STERLING RANCH  
PROPERTY**

NO. 148200 08/16 PER. 148200-0000 2/21/2008 1:04:15 PM 1:11:17 PM

**COPY OF PERMIT APPLICATION**

General permit application for stormwater discharges associated with construction activity.





# STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Water Quality Control Division

CDPS GENERAL PERMIT  
STORMWATER DISCHARGES ASSOCIATED WITH  
CONSTRUCTION ACTIVITY  
AUTHORIZATION TO DISCHARGE UNDER THE  
COLORADO DISCHARGE PERMIT SYSTEM (CDPS)

In compliance with the provisions of the Colorado Water Quality Control Act, (25-8-101 et seq., CRS, 1973 as amended) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.; the "Act"), this permit authorizes the discharge of stormwater associated with construction activities (and specific allowable non-stormwater discharges in accordance with Part I.A.1. of the permit) certified under this permit, from those locations specified throughout the State of Colorado to specified waters of the State.

Such discharges shall be in accordance with the conditions of this permit. This permit specifically authorizes the facility listed on the certification to discharge in accordance with permit requirements and conditions set forth in Parts I and II hereof. All discharges authorized herein shall be consistent with the terms and conditions of this permit.

This permit becomes effective on April 1, 2019, and shall expire at midnight March 31, 2024.

Issued and signed this 1st day of November 2018.

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Ellen Howard Kutzer, Permits Section Manager  
Water Quality Control Division

**Permit History**

Originally signed and issued October 31, 2018; effective April 1, 2019.

**CONTRACTOR SEQUENCE OF ACTIVITIES**



**Table CP-1. Typical Phased BMP Installation for Construction Projects**

Project Phase	BMPs
Pre-disturbance, Site Access	<ul style="list-style-type: none"> <li>▪ Install sediment controls downgradient of access point (on paved streets this may consist of inlet protection).</li> <li>▪ Establish vehicle tracking control at entrances to paved streets. Fence as needed.</li> <li>▪ Use construction fencing to define the boundaries of the project and limit access to areas of the site that are not to be disturbed.</li> </ul> <p><b>Note: it may be necessary to protect inlets in the general vicinity of the site, even if not downgradient, if there is a possibility that sediment tracked from the site could contribute to the inlets.</b></p>
Site Clearing and Grubbing	<ul style="list-style-type: none"> <li>▪ Install perimeter controls as needed on downgradient perimeter of site (silt fence, wattles, etc).</li> <li>▪ Limit disturbance to those areas planned for disturbance and protect undisturbed areas within the site (construction fence, flagging, etc).</li> <li>▪ Preserve vegetative buffer at site perimeter.</li> <li>▪ Create stabilized staging area.</li> <li>▪ Locate portable toilets on flat surfaces away from drainage paths. Stake in areas susceptible to high winds.</li> <li>▪ Construct concrete washout area and provide signage.</li> <li>▪ Establish waste disposal areas.</li> <li>▪ Install sediment basins.</li> <li>▪ Create dirt perimeter berms and/or brush barriers during grubbing and clearing.</li> <li>▪ Separate and stockpile topsoil, leave roughened and/or cover.</li> <li>▪ Protect stockpiles with perimeter control BMPs. Stockpiles should be located away from drainage paths and should be accessed from the upgradient side so that perimeter controls can remain in place on the downgradient side. Use erosion control blankets, temporary seeding, and/or mulch for stockpiles that will be inactive for an extended period.</li> <li>▪ Leave disturbed area of site in a roughened condition to limit erosion. Consider temporary revegetation for areas of the site that have been disturbed but that will be inactive for an extended period.</li> <li>▪ Water to minimize dust but not to the point that watering creates runoff.</li> </ul>

Project Phase	BMPs
Utility And Infrastructure Installation	<p><b>In Addition to the Above BMPs:</b></p> <ul style="list-style-type: none"> <li>▪ Close trench as soon as possible (generally at the end of the day).</li> <li>▪ Use rough-cut street control or apply road base for streets that will not be promptly paved.</li> <li>▪ Provide inlet protection as streets are paved and inlets are constructed.</li> <li>▪ Protect and repair BMPs, as necessary.</li> <li>▪ Perform street sweeping as needed.</li> </ul>
Building Construction	<p><b>In Addition to the Above BMPs:</b></p> <ul style="list-style-type: none"> <li>▪ Implement materials management and good housekeeping practices for home building activities.</li> <li>▪ Use perimeter controls for temporary stockpiles from foundation excavations.</li> <li>▪ For lots adjacent to streets, lot-line perimeter controls may be necessary at the back of curb.</li> </ul>
Final Grading	<p><b>In Addition to the Above BMPs:</b></p> <ul style="list-style-type: none"> <li>▪ Remove excess or waste materials.</li> <li>▪ Remove stored materials.</li> </ul>
Final Stabilization	<p><b>In Addition to the Above BMPs:</b></p> <ul style="list-style-type: none"> <li>▪ Seed and mulch/tackify.</li> <li>▪ Seed and install blankets on steep slopes.</li> <li>▪ Remove all temporary BMPs when site has reached final stabilization.</li> </ul>

**COLORADO DISCHARGE PERMIT  
SYSTEM (CDPS) CHECKLIST  
Operation & Maintenance Inspection Record**

The following inspection records are to be used at each bi-monthly stormwater management system inspection and after any precipitation or snowmelt event that causes surface runoff. As a result of these inspections, the SWMP may need to be revised. The inspection records and revised SWMP shall be made available to the division upon request. If the construction activity lasts more than 12 months, a copy of the inspection records and revised SWMP shall be sent to the division by May 1 of each year covering April 1 to March 31.



# CONSTRUCTION STORMWATER SITE INSPECTION REPORT

Facility Name		Permittee					
Date of Inspection		Weather Conditions					
Permit Certification #		Disturbed Acreage					
Phase of Construction		Inspector Title					
Inspector Name							
Is the above inspector a qualified stormwater manager? (permittee is responsible for ensuring that the inspector is a qualified stormwater manager)			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">YES</td> <td style="width: 50%; text-align: center;">NO</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	YES	NO	<input type="checkbox"/>	<input type="checkbox"/>
YES	NO						
<input type="checkbox"/>	<input type="checkbox"/>						

INSPECTION FREQUENCY					
Check the box that describes the minimum inspection frequency utilized when conducting each inspection					
At least one inspection every 7 calendar days	<input type="checkbox"/>				
At least one inspection every 14 calendar days, with post-storm event inspections conducted within 24 hours after the end of any precipitation or snowmelt event that causes surface erosions	<input type="checkbox"/>				
<ul style="list-style-type: none"> <li>• This is this a post-storm event inspection. Event Date: _____</li> </ul>	<input type="checkbox"/>				
Reduced inspection frequency - Include site conditions that warrant reduced inspection frequency	<input type="checkbox"/>				
<ul style="list-style-type: none"> <li>• Post-storm inspections at temporarily idle sites</li> </ul>	<input type="checkbox"/>				
<ul style="list-style-type: none"> <li>• Inspections at completed sites/area</li> </ul>	<input type="checkbox"/>				
<ul style="list-style-type: none"> <li>• Winter conditions exclusion</li> </ul>	<input type="checkbox"/>				
Have there been any deviations from the minimum inspection schedule? If yes, describe below.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">YES</td> <td style="width: 50%; text-align: center;">NO</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	YES	NO	<input type="checkbox"/>	<input type="checkbox"/>
YES	NO				
<input type="checkbox"/>	<input type="checkbox"/>				

INSPECTION REQUIREMENTS*
i. Visually verify all implemented control measures are in effective operational condition and are working as designed in the specifications
ii. Determine if there are new potential sources of pollutants
iii. Assess the adequacy of control measures at the site to identify areas requiring new or modified control measures to minimize pollutant discharges
iv. Identify all areas of non-compliance with the permit requirements, and if necessary, implement corrective action
*Use the attached <b>Control Measures Requiring Routine Maintenance</b> and <b>Inadequate Control Measures Requiring Corrective Action</b> forms to document results of this assessment that trigger either maintenance or corrective actions

AREAS TO BE INSPECTED			
Is there evidence of, or the potential for, pollutants leaving the construction site boundaries, entering the stormwater drainage system or discharging to state waters at the following locations?			
	NO	YES	If "YES" describe discharge or potential for discharge below. Document related maintenance, inadequate control measures and corrective actions <b>Inadequate Control Measures Requiring Corrective Action</b> form
Construction site perimeter	<input type="checkbox"/>	<input type="checkbox"/>	
All disturbed areas	<input type="checkbox"/>	<input type="checkbox"/>	
Designated haul routes	<input type="checkbox"/>	<input type="checkbox"/>	
Material and waste storage areas exposed to precipitation	<input type="checkbox"/>	<input type="checkbox"/>	
Locations where stormwater has the potential to discharge offsite	<input type="checkbox"/>	<input type="checkbox"/>	
Locations where vehicles exit the site	<input type="checkbox"/>	<input type="checkbox"/>	
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	





## REPORTING REQUIREMENTS

The permittee shall report the following circumstances orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances, and shall mail to the division a written report containing the information requested within five (5) working days after becoming aware of the following circumstances. The division may waive the written report required if the oral report has been received within 24 hours.

<b>All Noncompliance Requiring 24-Hour Notification per Part II.L.6 of the Permit</b>		
<b>a. Endangerment to Health or the Environment</b> Circumstances leading to any noncompliance which may endanger health or the environment regardless of the cause of the incident (See Part II.L.6.a of the Permit) <i>This category would primarily result from the discharge of pollutants in violation of the permit</i>		
<b>b. Numeric Effluent Limit Violations</b> <ul style="list-style-type: none"> <li>o Circumstances leading to any unanticipated bypass which exceeds any effluent limitations (See Part II.L.6.b of the Permit)</li> <li>o Circumstances leading to any upset which causes an exceedance of any effluent limitation (See Part II.L.6.c of the Permit)</li> <li>o Daily maximum violations (See Part II.L.6.d of the Permit)</li> </ul> <i>Numeric effluent limits are very uncommon in certifications under the COR400000 general permit. This category of noncompliance only applies if numeric effluent limits are included in a permit certification.</i>		

Has there been an incident of noncompliance requiring 24-hour notification?	NO	YES	
	<input type="checkbox"/>	<input type="checkbox"/>	If "YES" document below

Date and Time of Incident	Location	Description of Noncompliance	Description of Corrective Action	Date and Time of 24 Hour Oral Notification	Date of 5 Day Written Notification *

\*Attach copy of 5 day written notification to report. Indicate if written notification was waived, including the name of the division personnel who granted waiver.

After adequate corrective action(s) and maintenance have been taken, or where a report does not identify any incidents requiring corrective action or maintenance, the individual(s) designated as the Qualified Stormwater Manager, shall sign and certify the below statement:

"I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit."

\_\_\_\_\_  
Name of Qualified Stormwater Manager

\_\_\_\_\_  
Title of Qualified Stormwater Manager

\_\_\_\_\_  
Signature of Qualified Stormwater Manager

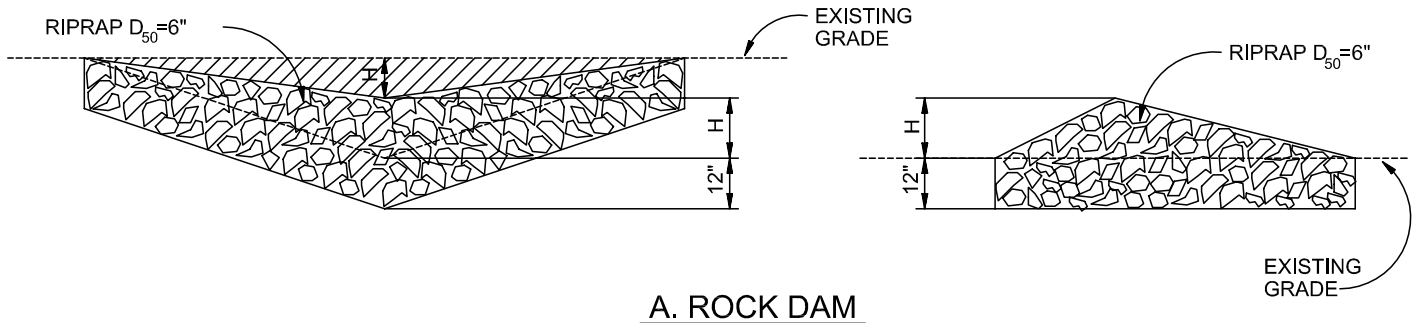
\_\_\_\_\_  
Date

Notes/Comments

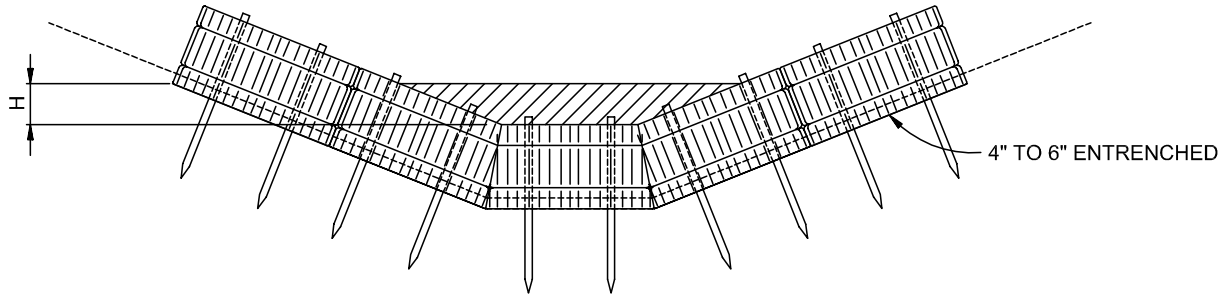


**COMPLETED OPERATION AND  
MAINTENANCE INSPECTION RECORDS**

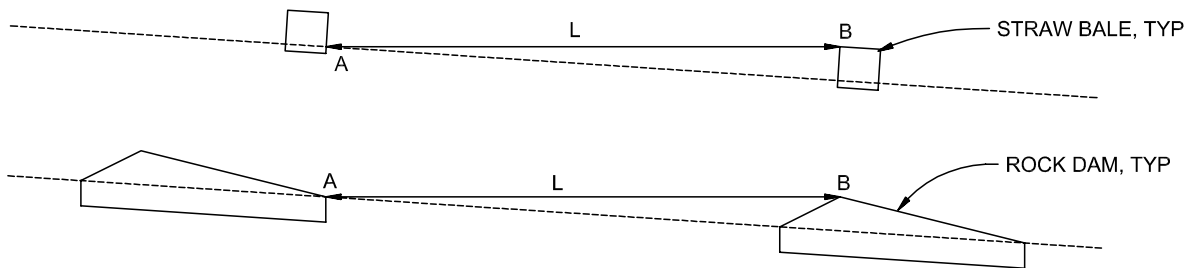
**STANDARD BMP DETAILS**  
**W/ INSTALLATION AND MAINTENANCE REQUIREMENTS**



**A. ROCK DAM**



**B. STRAW BALE CHECK DAM**  
(SEE STRAW BALE BARRIER INSTALLATION)



L= THE DISTANCE SUCH THAT POINTS A AND B ARE AT THE SAME ELEVATION.

**C. SPACING CHECK DAMS**

**CHECK DAM**

NTS

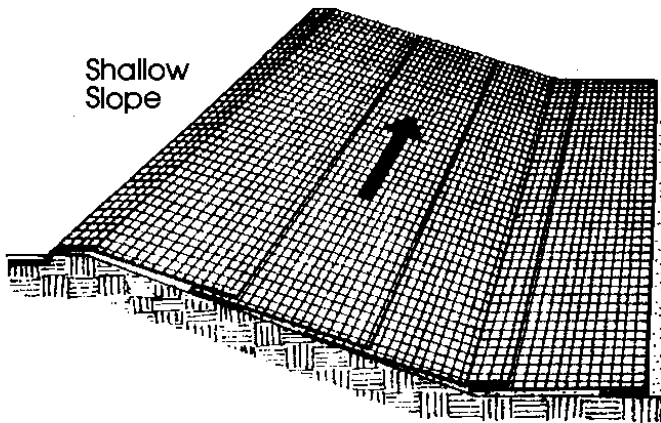
**CHECK DAM NOTES**

**INSTALLATION REQUIREMENTS**

1. STRAW BALES USED AS CHECK DAMS ARE TO MEET THE REQUIREMENTS STATED IN FIGURE SBB-2.
2. THE "H" DIMENSION SHALL BE SELECTED TO PROVIDE WEIR FLOW CONVEYANCE FOR 2-YEAR FLOW OR GREATER.

**MAINTENANCE REQUIREMENTS**

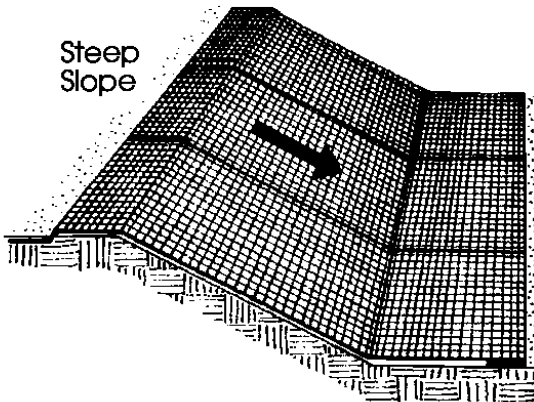
1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL CHECK DAMS, ESPECIALLY AFTER STORM EVENTS.
2. REPLACE STONE AS NECESSARY TO MAINTAIN THE CORRECT HEIGHT OF THE DAM.
3. ACCUMULATED SEDIMENT AND DEBRIS IS TO BE REMOVED FROM BEHIND THE DAMS AFTER EACH STORM OR WHEN 1/2 OF THE ORIGINAL HEIGHT OF THE DAM IS REACHED.
3. CHECK DAMS ARE TO REMAIN IN PLACE AND OPERATIONAL UNTIL THE DRAINAGE AREA AND CHANNEL ARE PERMANENTLY STABILIZED.
4. WHEN CHECK DAMS ARE REMOVED THE CHANNEL LINING OR VEGETATION IS TO BE RESTORED.



Shallow Slope

On shallow slopes, strips of netting may be applied across the slope.

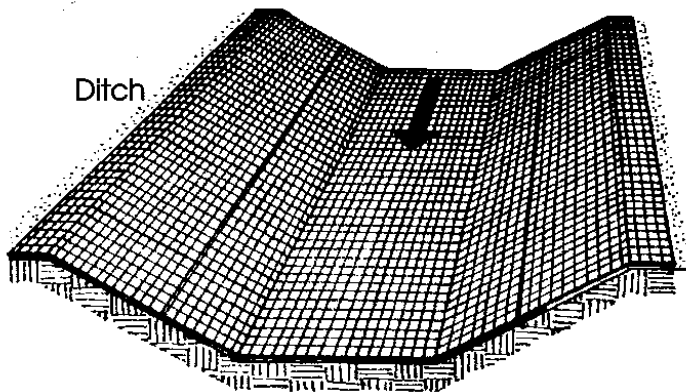
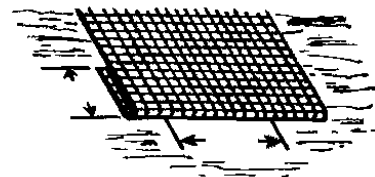
Where there is a berm at the top of the slope, bring the netting over the berm and anchor it behind the berm.



Steep Slope

On steep slopes, apply strips of netting parallel to the direction of flow and anchor securely.

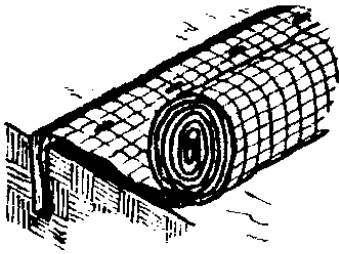
Bring netting down to a level area before terminating the installation. Turn the end under 6" and staple at 12" intervals.



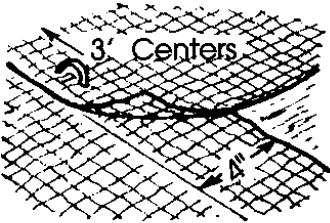
Ditch

In ditches, apply netting parallel to the direction of flow. Use check slots every 15 feet. Do not join strips in the center of the ditch.

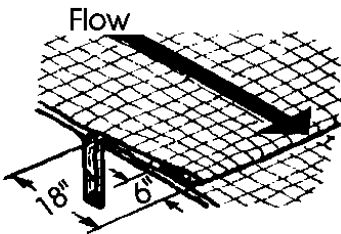
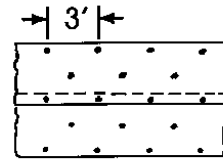
From: Virginia Soil and Water Conservation Commission, 1985



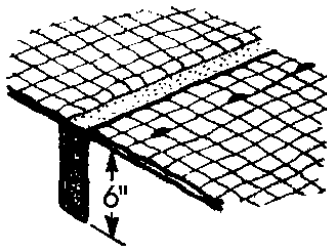
**Anchor Slot:** Bury the up-channel end of the net in a 6" deep trench. Tamp the soil firmly. Staple at 12" intervals across the net.



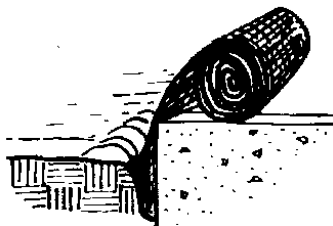
**Overlap:** Overlap edges of the strips at least 4". Staple every 3 feet down the center of the strip.



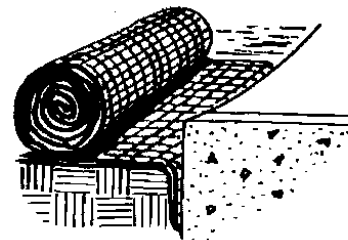
**Joining Strips:** Insert the new roll of net in a trench, as with the Anchor Slot. Overlap the up-channel end of the previous roll 18" and turn the end under 6". Staple the end of the previous roll just below the anchor slot and at the end at 12" intervals.



**Check Slots:** On erodible soils or steep slopes, check slots should be made every 15 feet. Insert a fold of the net into a 6" trench and tamp firmly. Staple at 12" intervals across the net. Lay the net smoothly on the surface of the soil - do not stretch the net, and do not allow wrinkles.



**Anchoring Ends At Structures:** Place the end of the net in a 6" slot on the up-channel side of the structure. Fill the trench and tamp firmly. Roll the net up the channel. Place staples at 12" intervals along the anchor end of the net.



From: Virginia Soil and Water Conservation Commission, 1985

City of Colorado Springs  
Storm Water Quality

Figure ECB-2  
Erosion Control Blanket  
Installation Requirements

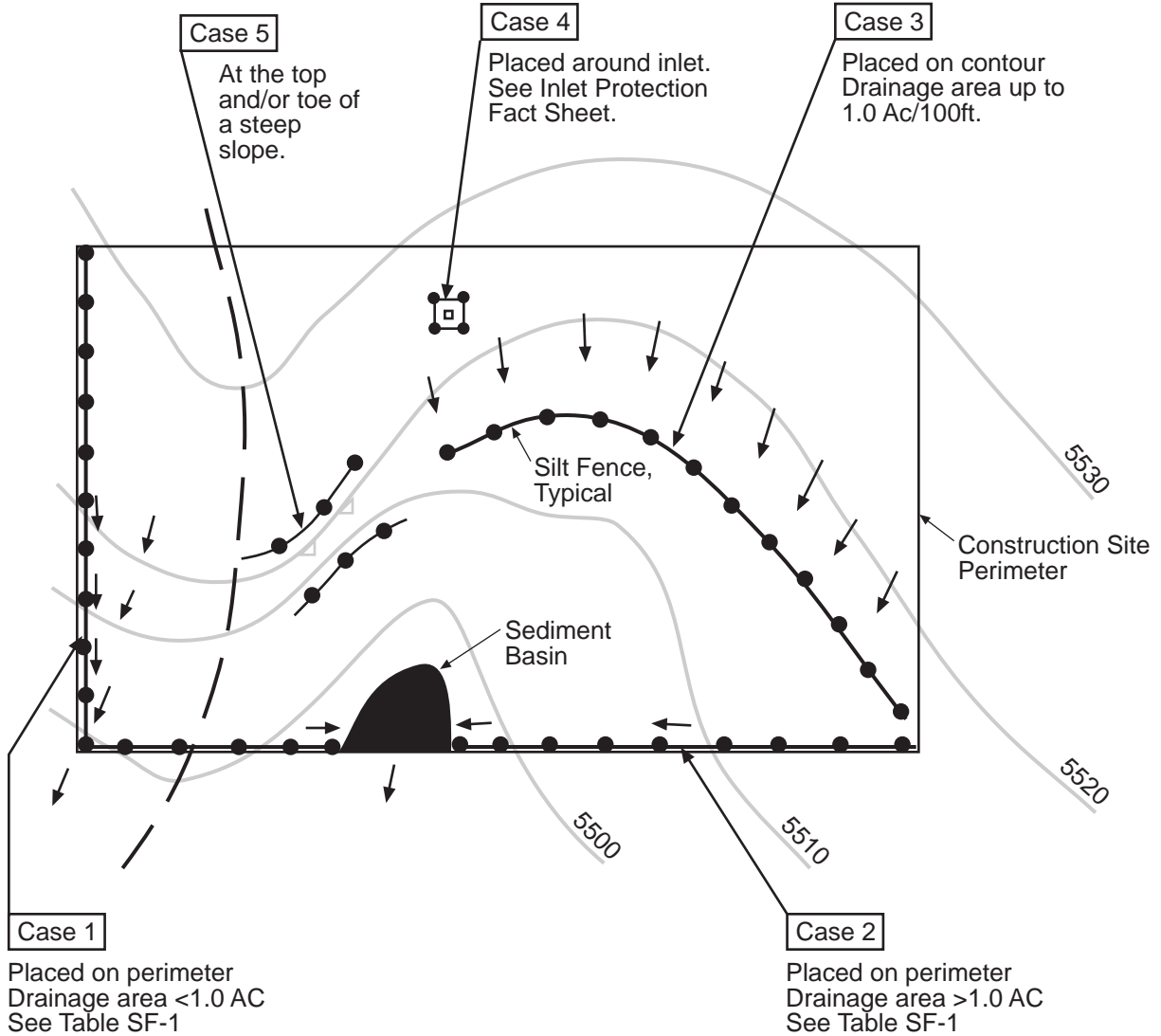


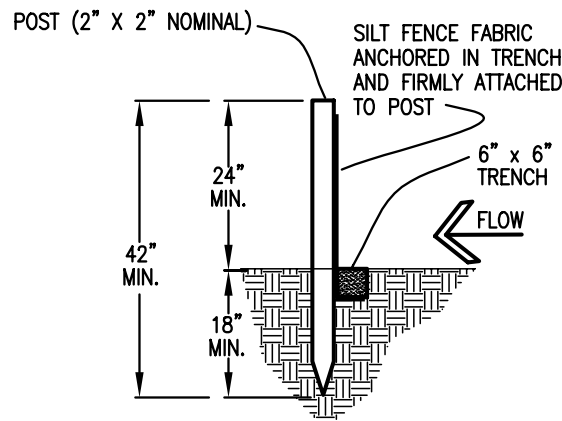
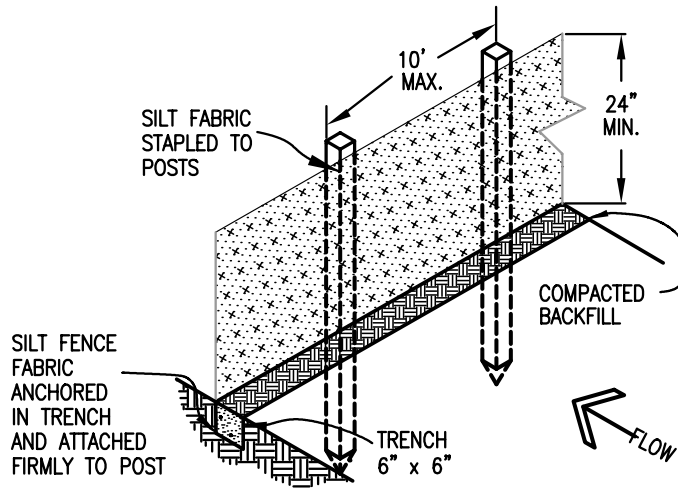
Table SF-1

Silt Fence Used as Perimeter Control	Case 1		Case 2 DA > 1.0 AC
	DA < 0.25 AC	0.25 < DA < 1 AC	
Continuous Grade	OK <sup>(1)</sup>	OK <sup>(1)</sup>	OK <sup>(1)</sup>
Area of Concentrated Flow	OK	NO <sup>(2)</sup>	NO <sup>(3)</sup>

(1) Temporary Swale or Straw Bale Barrier may be used as alternative to a Silt Fence.

(2) Check Dam may also be used as alternative to Silt Fence at low point.

(3) Sediment Basin is required for concentrated flow from drainage areas > 1.0 AC.



SILT FENCE

## SILT FENCE NOTES

### INSTALLATION REQUIREMENTS

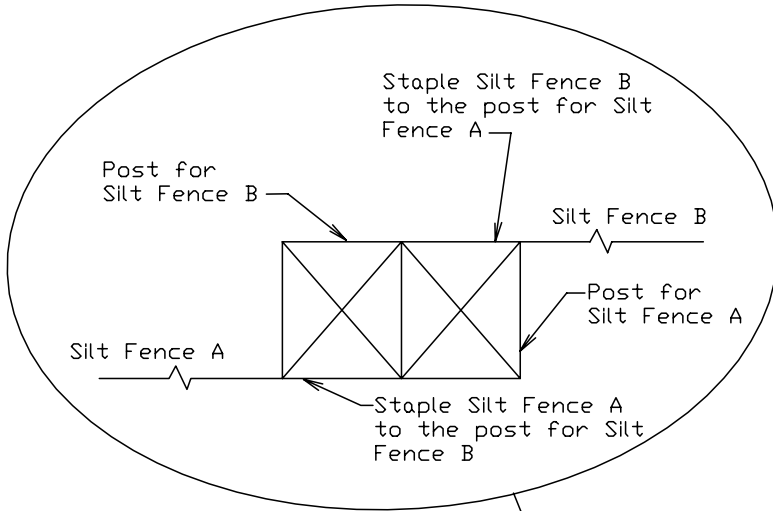
1. SILT FENCES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
2. WHEN JOINTS ARE NECESSARY, SILT FENCE GEOTEXTILE SHALL BE SPLICED TOGETHER ONLY AT SUPPORT POST AND SECURELY SEALED.
3. METAL POSTS SHALL BE "STUDDED TEE" OR "U" TYPE WITH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT. WOOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION DIMENSION OF 2 INCHES.
4. THE FILTER MATERIAL SHALL BE FASTENED SECURELY TO METAL OR WOOD POSTS USING WIRE TIES, OR TO WOOD POSTS WITH 3/4" LONG #9 HEAVY-DUTY STAPLES. THE SILT FENCE GEOTEXTILE SHALL NOT BE STAPLED TO EXISTING TREES.
5. 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, TIE 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.

6. 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.
7. 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.

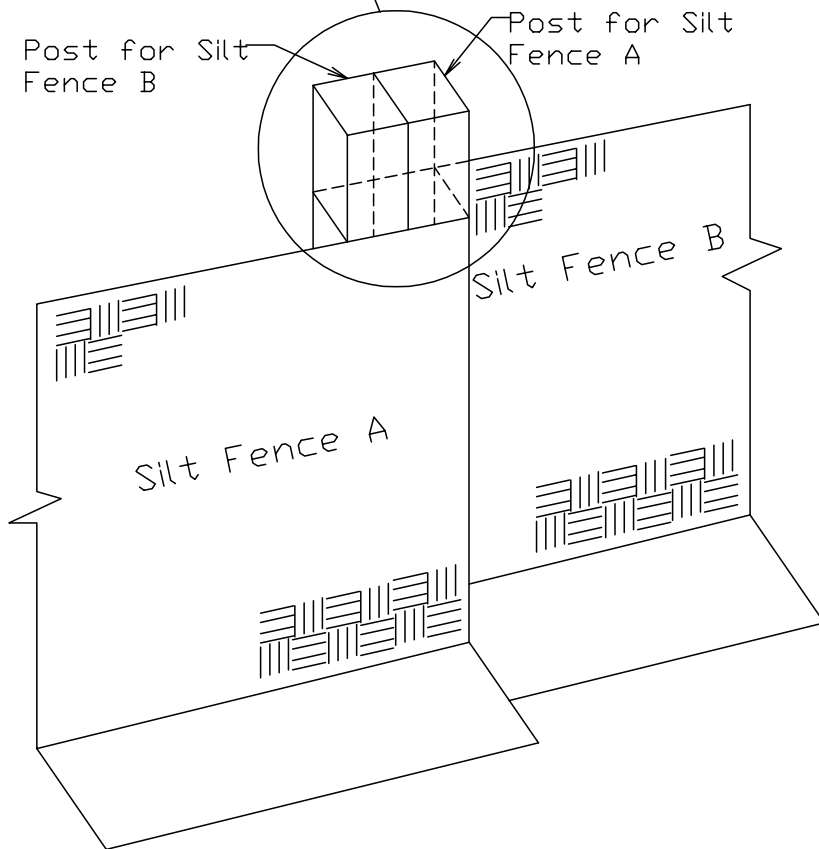
### MAINTENANCE REQUIREMENTS

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

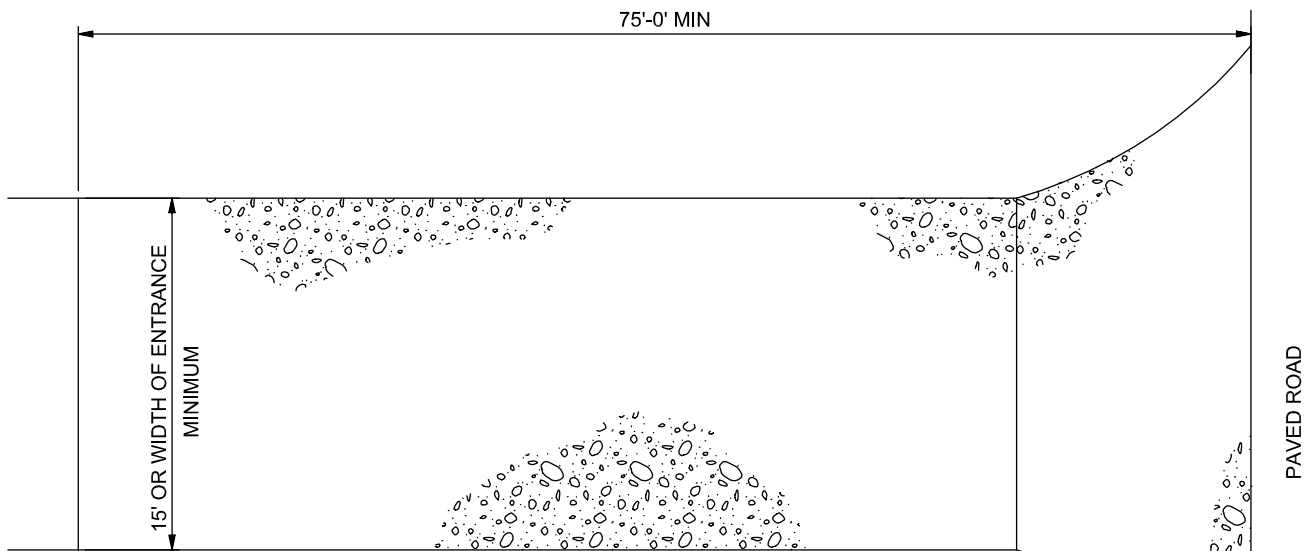
# Top View of Silt Fence Posts Detail



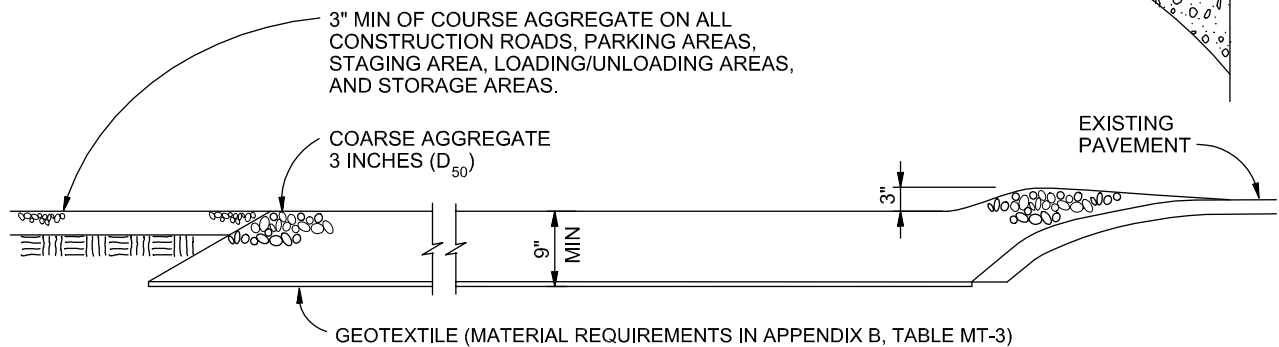
Refer to "Top View of Silt Fence Posts Detail"







**PLAN**



**SECTION**

## VEHICLE TRACKING

NTS

### VEHICLE TRACKING NOTES

#### INSTALLATION REQUIREMENTS

1. ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.
2. CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APRON TO ALLOW FOR TURNING TRAFFIC, BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAP.
3. AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.
4. CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.
5. CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE SIDE SLOPES OR ROAD GRADES THAT ARE EXCESSIVELY STEEP.

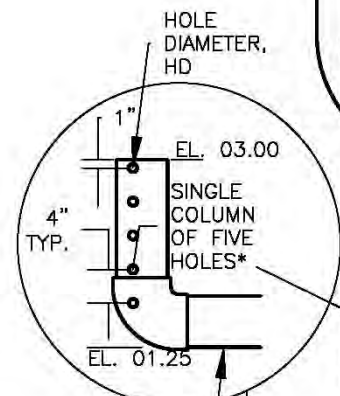
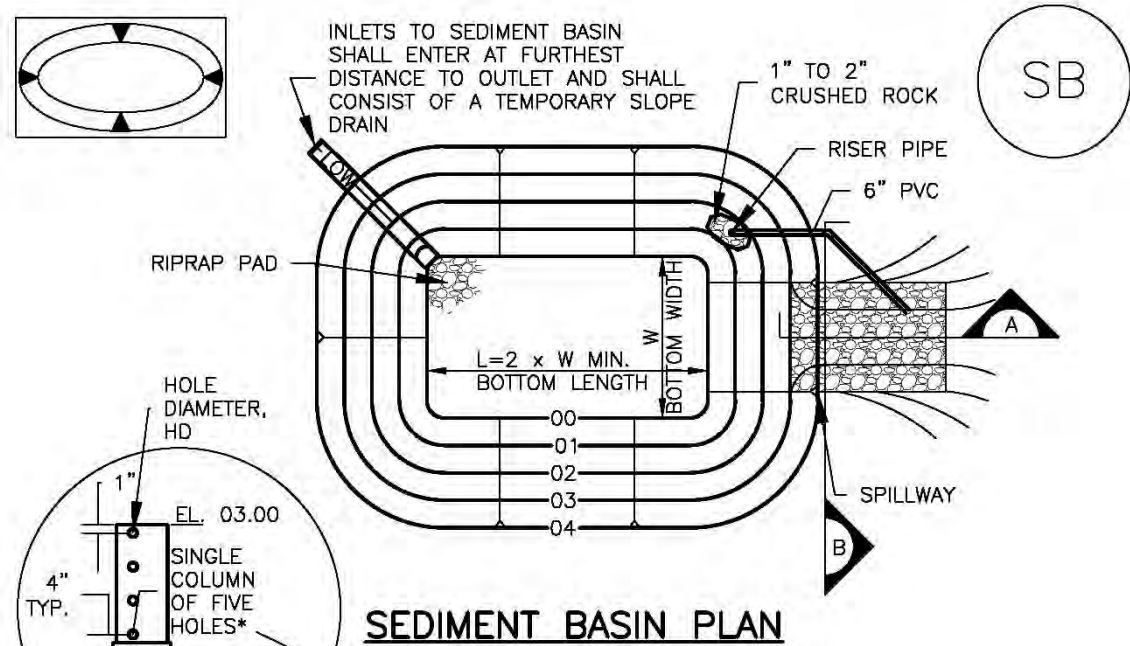
#### MAINTENANCE REQUIREMENTS

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM EVENTS.
2. STONES ARE TO BE REAPPLIED PERIODICALLY AND WHEN REPAIR IS NECESSARY.
3. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM SEWER DRAINS.
4. STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.
5. OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.

City of Colorado Springs  
Stormwater Quality

Figure VT-2  
Vehicle Tracking

Application Examples



\*EXCEPT WHERE THE HOLES EXCEED 1" DIAMETER, THEN UP TO TWO COLUMNS OF SAME SIZED HOLES MAY BE USED

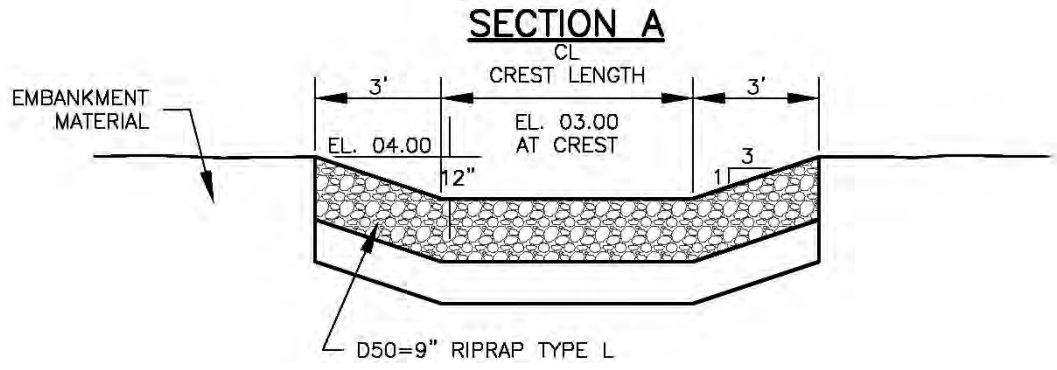
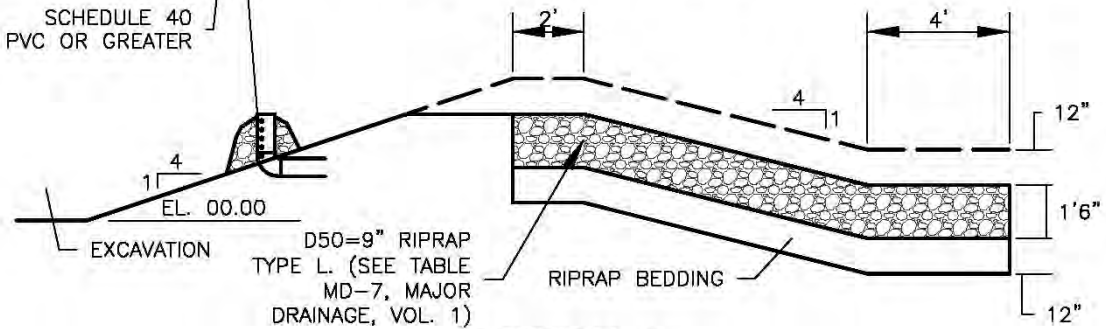


TABLE SB-1. SIZING INFORMATION FOR STANDARD SEDIMENT BASIN			
Upstream Drainage Area (rounded to nearest acre), (ac)	Basin Bottom Width (W), (ft)	Spillway Crest Length (CL), (ft)	Hole Diameter (HD), (in)
1	12 1/2	2	9/32
2	21	3	13/16
3	28	5	1/2
4	33 1/2	6	9/16
5	38 1/2	8	2 1/32
6	43	9	2 1/32
7	47 1/4	11	2 5/32
8	51	12	2 7/32
9	55	13	7/8
10	58 1/4	15	1 5/16
11	61	16	3 1/32
12	64	18	1
13	67 1/2	19	1 1/16
14	70 1/2	21	1 1/8
15	73 1/4	22	1 3/16

SEDIMENT BASIN INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
  - LOCATION OF SEDIMENT BASIN.
  - TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN).
  - FOR STANDARD BASIN, BOTTOM WIDTH W, CREST LENGTH CL, AND HOLE DIAMETER, HD.
  - FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE DIAMETER D.
2. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.
3. SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND-DISTURBING ACTIVITY THAT RELIES ON ON BASINS AS AS A STORMWATER CONTROL.
4. 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.
5. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
6. PIPE SCH 40 OR GREATER SHALL BE USED.
7. 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.

## SEDIMENT BASIN MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E., TWO FEET BELOW THE SPILLWAY CREST).
5. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE LOCAL JURISDICTION.
6. WHEN SEDIMENT BASINS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

CWA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.

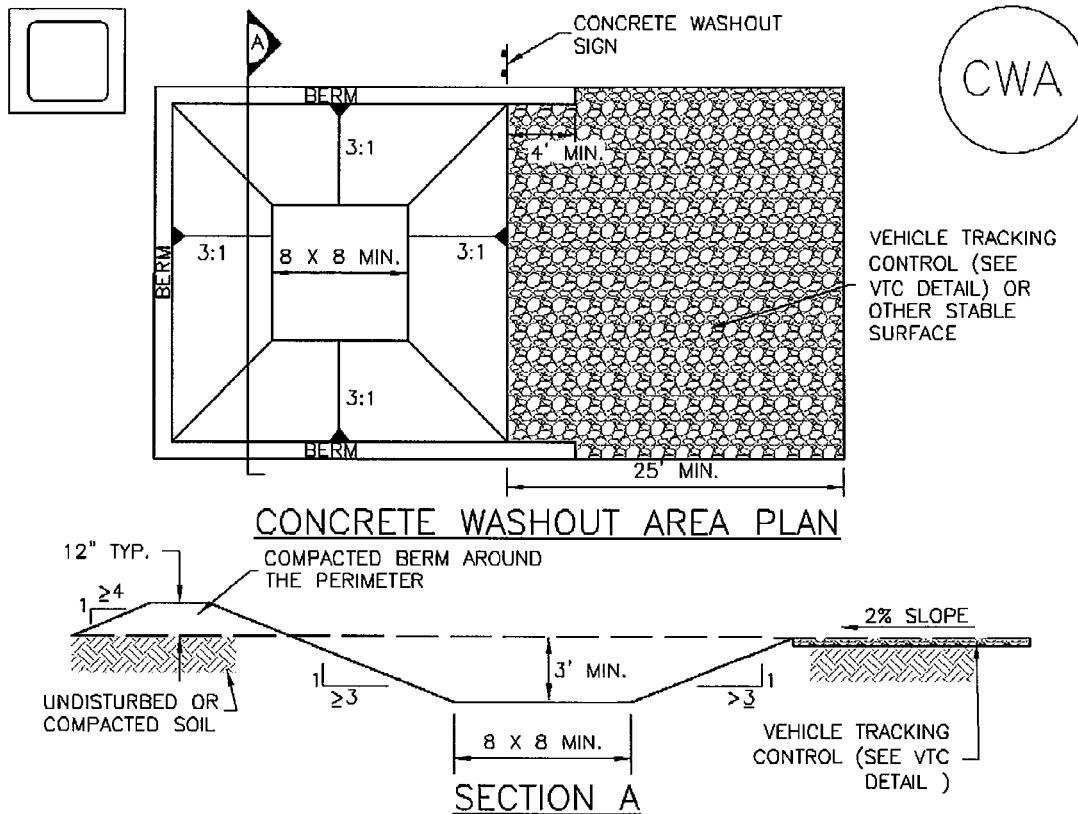
5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY.

6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.

7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD).

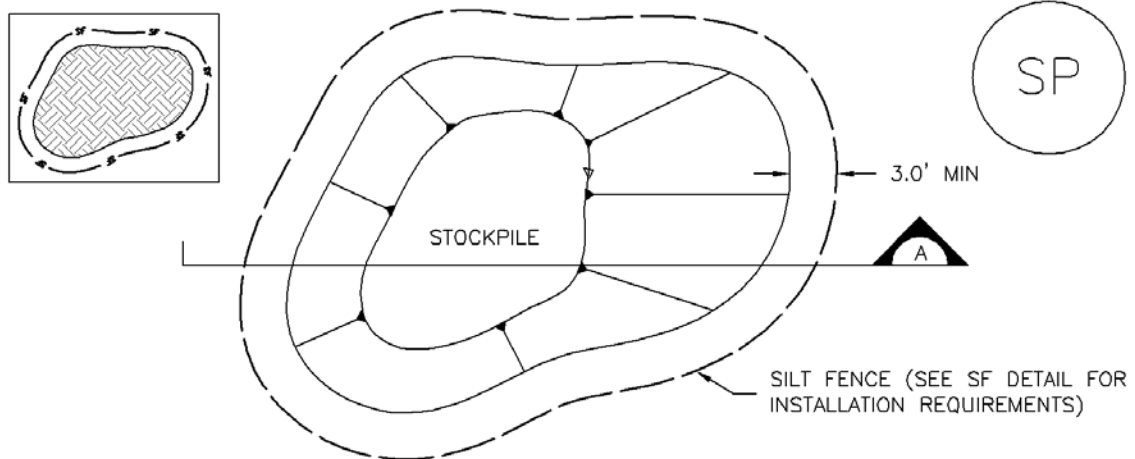
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



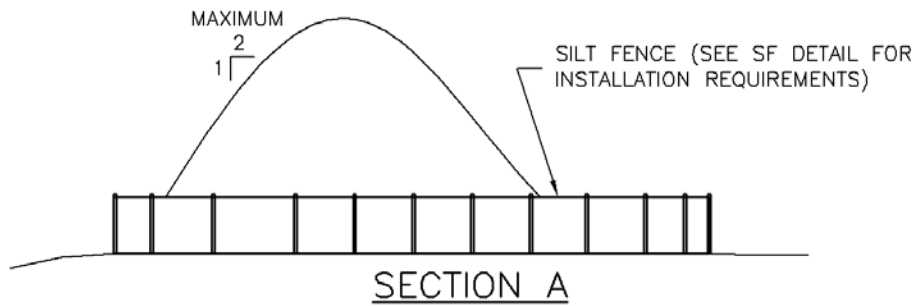
## CWA-1. CONCRETE WASHOUT AREA

### CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:  
-CWA INSTALLATION LOCATION.
2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.
3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.



## STOCKPILE PROTECTION PLAN



## SP-1. STOCKPILE PROTECTION

### STOCKPILE PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
  - LOCATION OF STOCKPILES.
  - TYPE OF STOCKPILE PROTECTION.
2. INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.
3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDING AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS).
4. FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

STOCKPILE PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

STOCKPILE PROTECTION MAINTENANCE NOTES

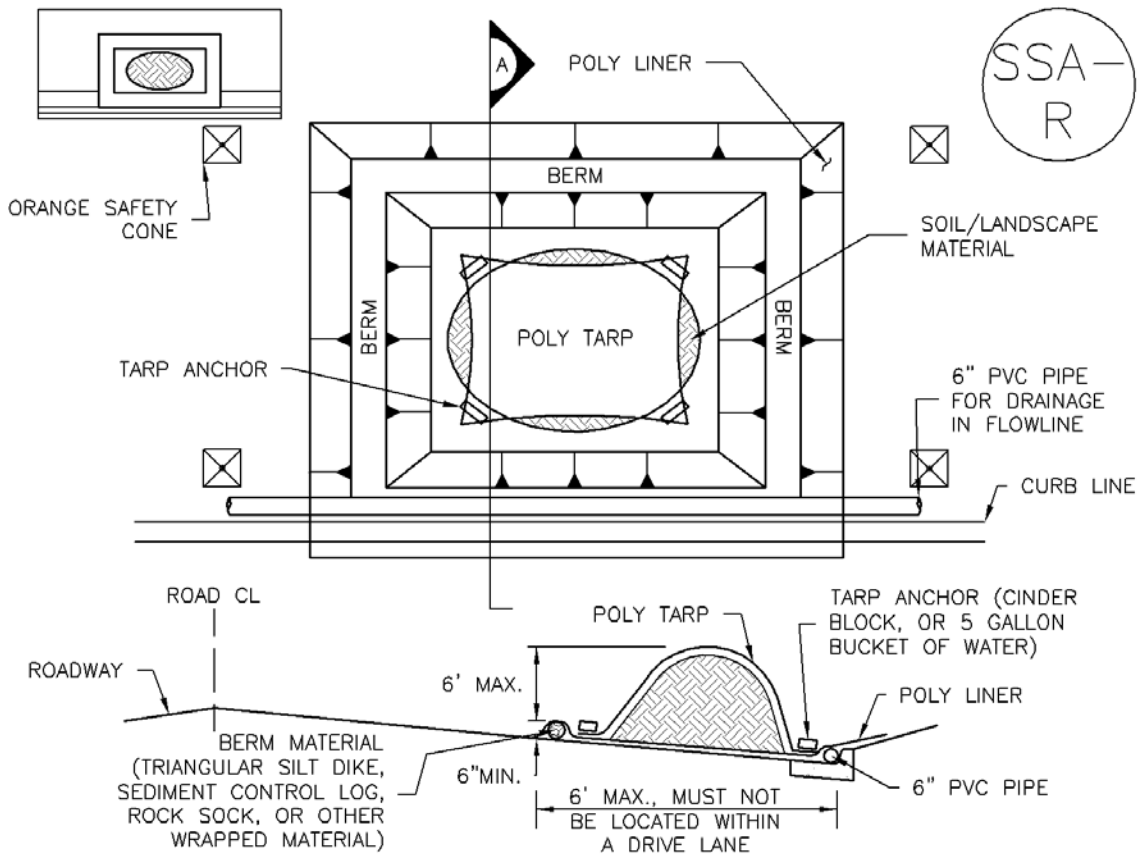
4. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.

5. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.

(DETAILS ADAPTED FROM PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.





## SP-2. MATERIALS STAGING IN ROADWAY

### MATERIALS STAGING IN ROADWAYS INSTALLATION NOTES

1. SEE PLAN VIEW FOR
  - LOCATION OF MATERIAL STAGING AREA(S).
  - CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
2. FEATURE MUST BE INSTALLED PRIOR TO EXCAVATION, EARTHWORK OR DELIVERY OF MATERIALS.
3. MATERIALS MUST BE STATIONED ON THE POLY LINER. ANY INCIDENTAL MATERIALS DEPOSITED ON PAVED SECTION OR ALONG CURB LINE MUST BE CLEANED UP PROMPTLY.
4. POLY LINER AND TARP COVER SHOULD BE OF SIGNIFICANT THICKNESS TO PREVENT DAMAGE OR LOSS OF INTEGRITY.
5. SAND BAGS MAY BE SUBSTITUTED TO ANCHOR THE COVER TARP OR PROVIDE BERMING UNDER THE BASE LINER.
6. FEATURE IS NOT INTENDED FOR USE WITH WET MATERIAL THAT WILL BE DRAINING AND/OR SPREADING OUT ON THE POLY LINER OR FOR DEMOLITION MATERIALS.
7. THIS FEATURE CAN BE USED FOR:
  - UTILITY REPAIRS.
  - WHEN OTHER STAGING LOCATIONS AND OPTIONS ARE LIMITED.
  - OTHER LIMITED APPLICATION AND SHORT DURATION STAGING.

MATERIALS STAGING IN ROADWAY MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. INSPECT PVC PIPE ALONG CURB LINE FOR CLOGGING AND DEBRIS. REMOVE OBSTRUCTIONS PROMPTLY.
5. CLEAN MATERIAL FROM PAVED SURFACES BY SWEEPING OR VACUUMING.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM AURORA, COLORADO)

**SITE MAP/ GRADING, EROSION CONTROL PLAN**

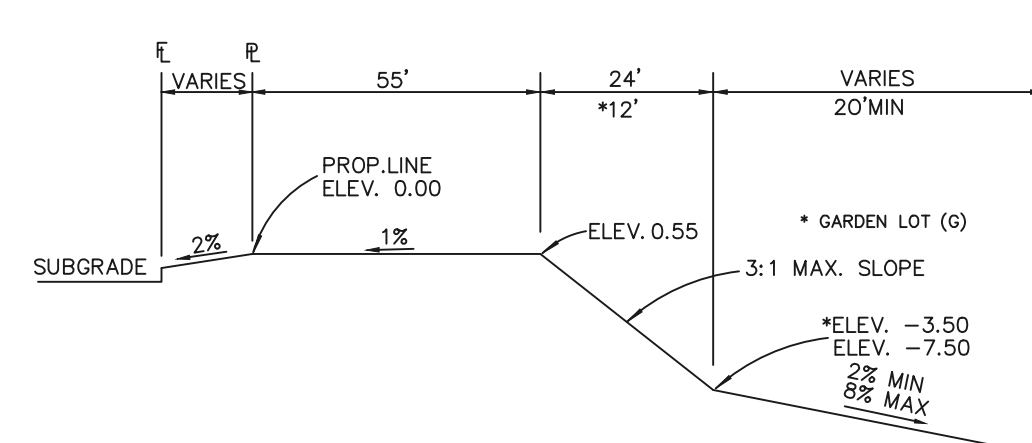
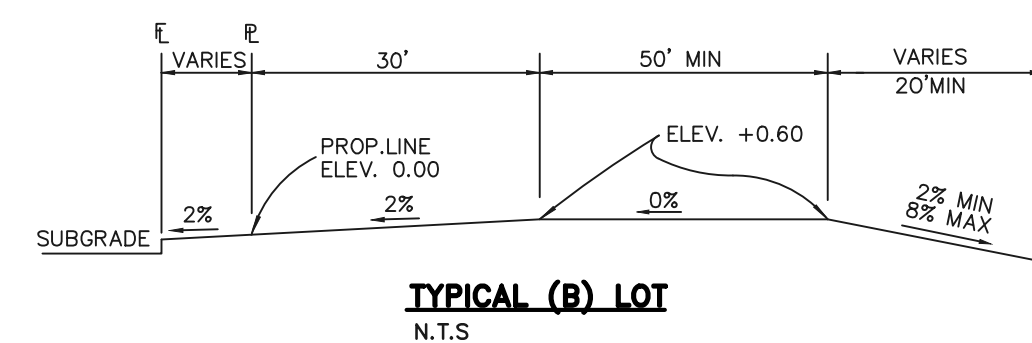
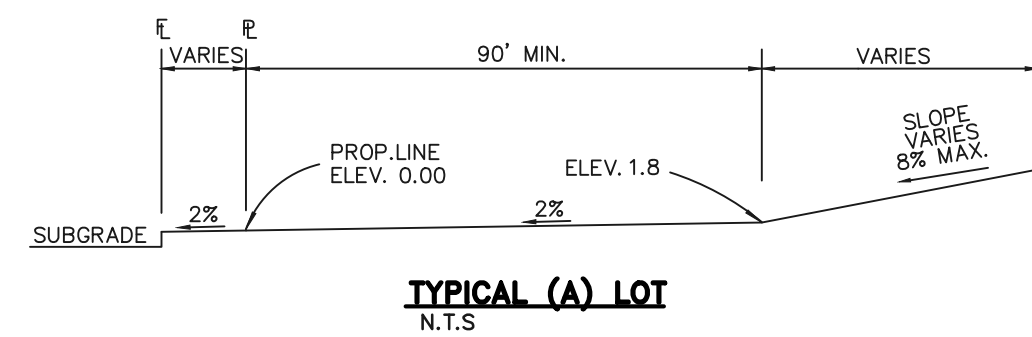
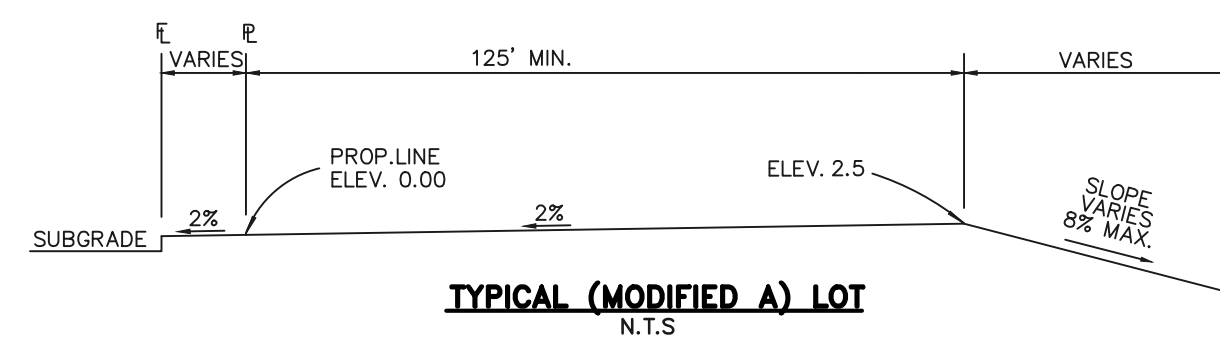
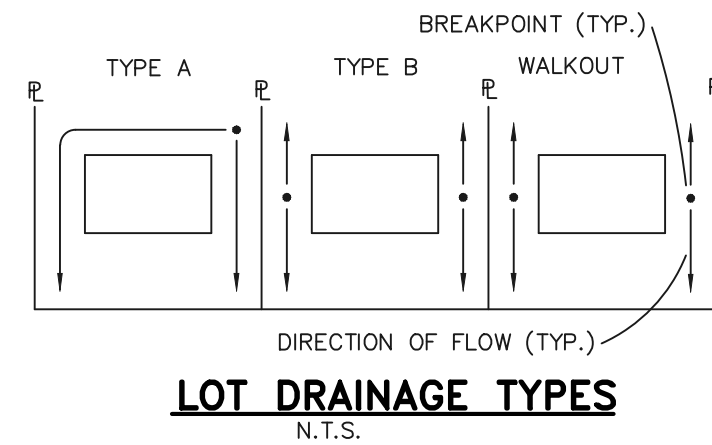
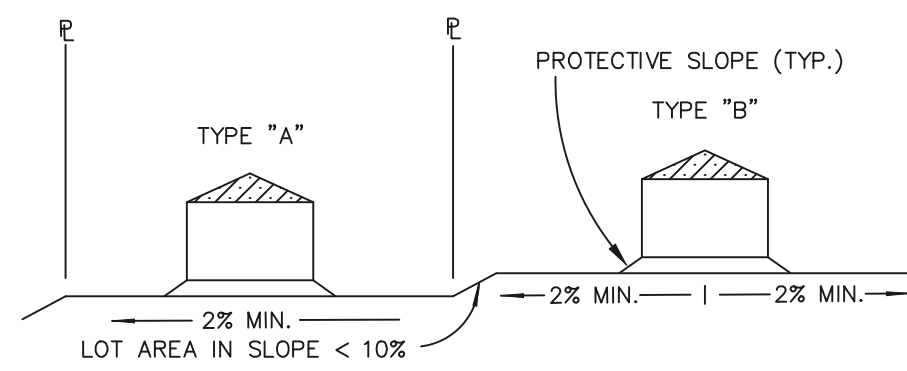




**STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS:**

- 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) ISSUED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR AND SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- ONCE THE ESQCP IS APPROVED AND A (NOTICE TO PROCEED) HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED 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 STAFF.
- CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT MAY CONTRIBUTE POLLUTANTS TO STORMWATER. TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
- ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES IS NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN.
- TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.
- FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLAN DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
- ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT AFFECT THE HYDROLOGY OR HYDRAULICS OF A PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE EGM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
- EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE, UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
- COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENEED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
- ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
- 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. CONCRETE WASHOUTS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK OR STREAM.
- DURING DEWATERING OPERATIONS: UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE.
- EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
- 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.
- WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED IN THE STREET, ALLEY OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
- TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS 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 CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ONSITE UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL(S) IS GRANTED IN WRITING BY THE EGM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ONSITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
- OWNER/DEVELOPER AND THEIR AGENTS 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 OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE EGM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, 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 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 REPORTS FOR THIS SITE HAVE BEEN PREPARED BY ENTECH ENGINEERING, INC. TITLED "SOIL GEOLOGY, GEOLOGIC HAZARD AND WASTEWATER STUDY - THE RETREAT AT TIMBER RIDGE, VOLLMER ROAD AND ARROYA LANE," DATED APRIL 12, 2017, REVISED DECEMBER 1, 2017 AND "SUBSURFACE SOIL INVESTIGATION RETREAT AT TIMBERRIDGE, FILING NO. 1, POCO ROAD SAND CREEK CROSSING, DROP STRUCTURES AND DETENTION PONDS" DATED AUGUST 8, 2019. THESE REPORTS SHALL BE CONSIDERED A PART OF THESE PLANS.
- AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), 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  
 WOOD - PERMITS  
 4300 CHERRY CREEK DRIVE SOUTH  
 DENVER, CO 80246-1530  
 ATTN: PERMITS UNIT

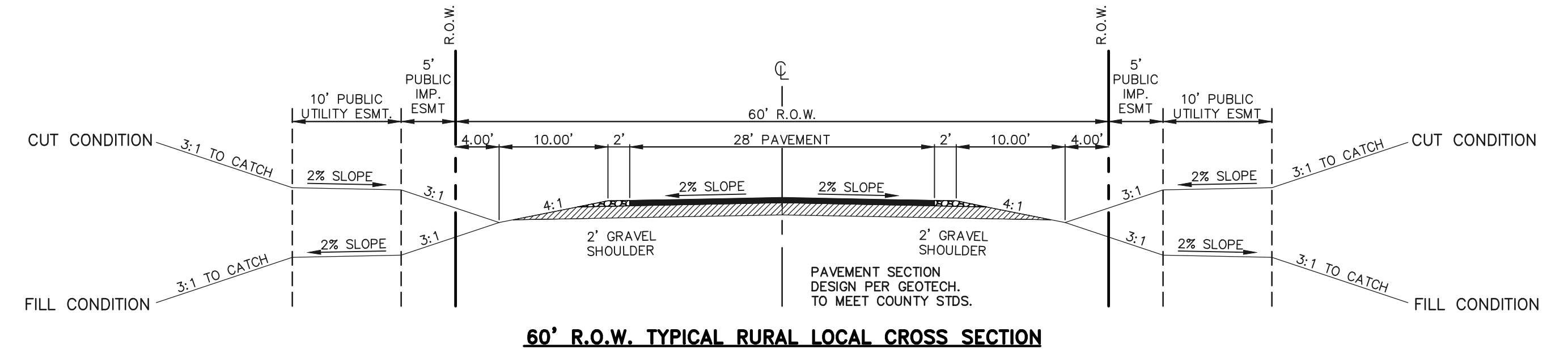


**NOTES:**

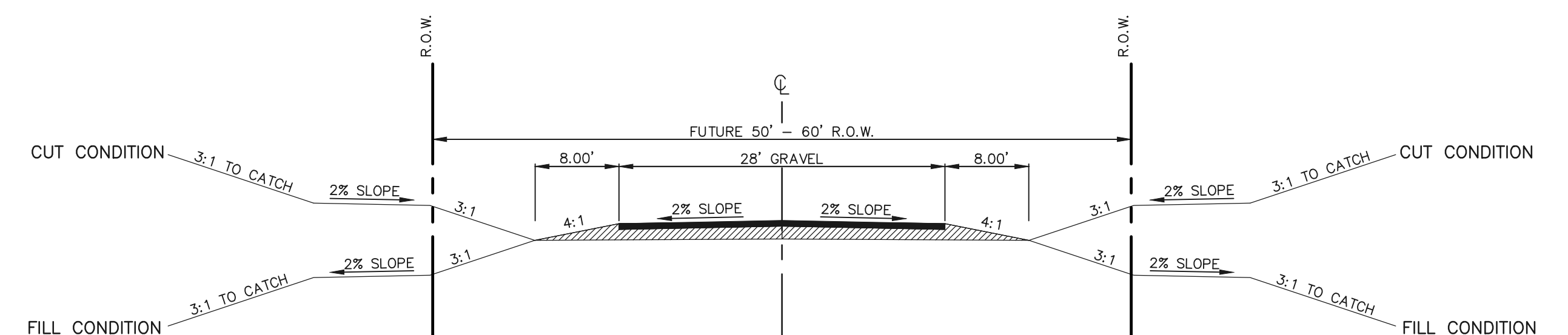
BASED ON GREATER TYPICAL DEPTH OF PROPOSED LOTS, ALL LOT TEMPLATES ADJUSTED AND ADDITIONAL 5'.

"T" LOTS OR "TRANSITION" LOTS OCCUR IN PLACES WHERE BOTH PROPERTY LINES CANNOT BE GRADED AS THE TYPICAL STANDARD LOT TEMPLATES SHOWN. THESE LOTS WILL STILL BE GRADED TO CREATE POSITIVE DRAINAGE AWAY FROM THE STRUCTURE.

SIDE LOT SWALES ARE REQUIRED ON THE DOWNHILL LOTS, EITHER BY BUILDER OR GRADING CONTRACTOR.



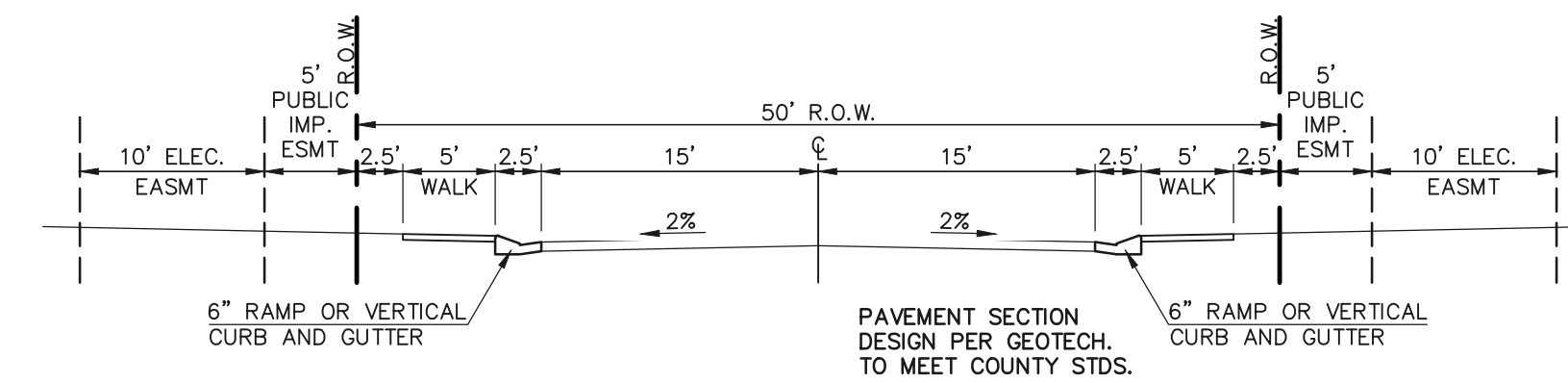
SIGN PLACEMENT PER 2009 MUTCD FIG. 2A-2 A AND LOCATED 8' BEHIND GRAVEL SHOULDER - ASPEN VALLEY ROAD AND FALCON NEST COURT



SECONDARY EMERGENCY ACCESS UP TO ARROYA LANE

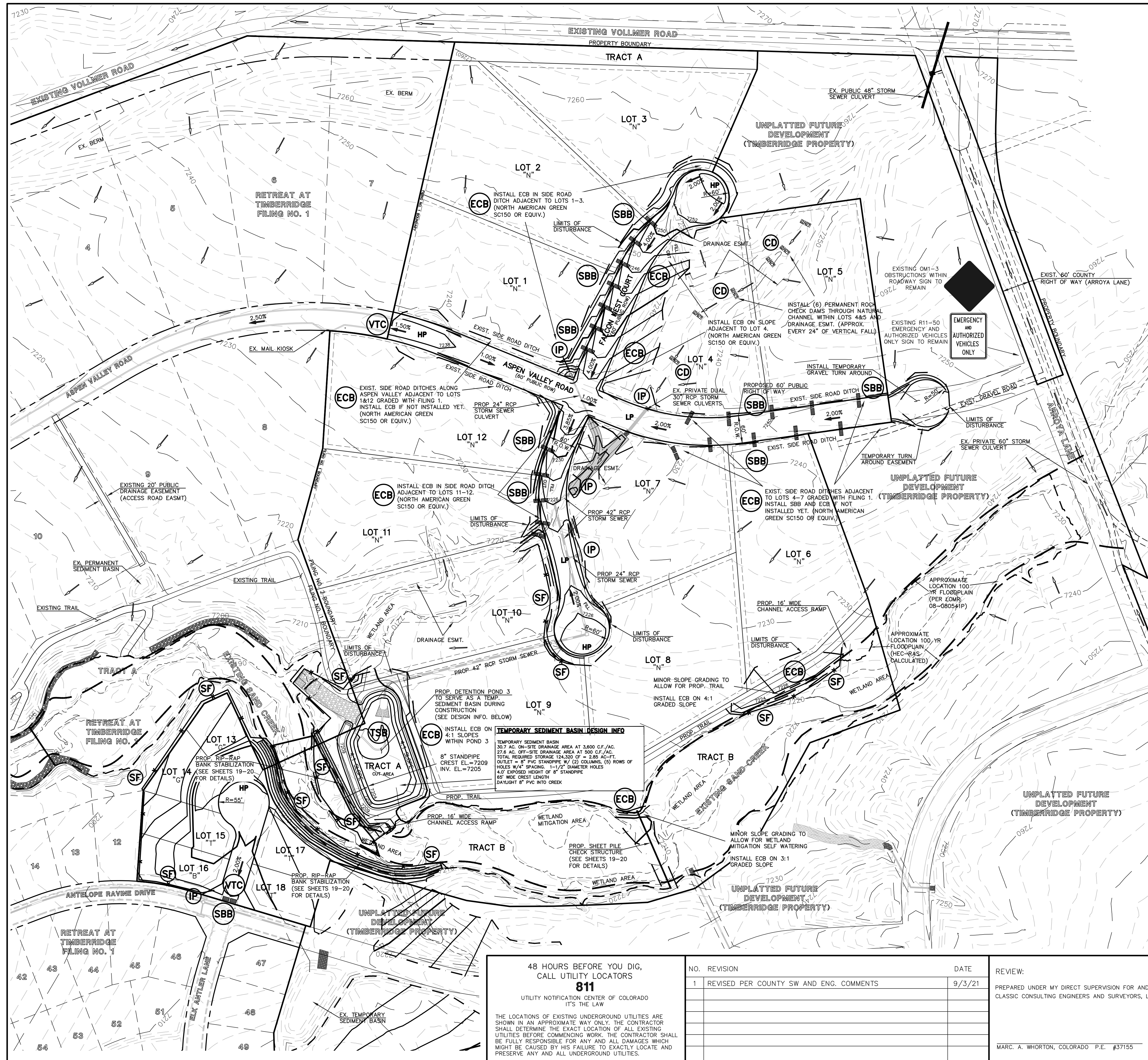
SIGN PLACEMENT PER 2009 MUTCD FIG. 2A-2 A AND LOCATED 8' BEHIND GRAVEL SHOULDER

NO ADDITIONAL IMPROVEMENTS REQUIRED AT THIS TIME ON THE EXISTING ARROYA LANE AS IT CURRENTLY FUNCTIONS AS A VIABLE EMERGENCY ACCESS DRIVE PER BLACK FOREST FIRE DISTRICT. FUTURE PLANTING ADJACENT TO ARROYA LANE WILL REQUIRE ADDITIONAL IMPROVEMENTS TO THIS ROADWAY.



-BISON VALLEY TRAIL, ELK ANTLER LANE AND OWL PERCH LOOP

<p>48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS</p> <p><b>811</b></p> <p>UTILITY NOTIFICATION CENTER OF COLORADO IT'S THE LAW</p> <p>THE LOCATIONS OF EXISTING 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 UNDERGROUND UTILITIES.</p>	<p>NO. REVISION</p> <table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>																					<p>DATE</p> <table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>																					<p>REVIEW:</p> <p>PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC</p> <p>MARC A. WHORTON, COLORADO P.E. #37155 DATE</p>	<p>619 N. Cascade Avenue, Suite 200 Colorado Springs, Colorado 80903 (719) 785-0790 (719) 785-0799 (Fax)</p>	<p>RETREAT AT TIMBERRIDGE FILING NO. 2 CONSTRUCTION DRAWINGS STREET SECTIONS / EROSION CONTROL NOTES</p> <table border="1"> <tr> <td>DESIGNED BY</td> <td>PRA</td> <td>SCALE</td> <td>DATE</td> <td>02-25-21</td> </tr> <tr> <td>DRAWN BY</td> <td>PRA</td> <td>(H) 1" = N/A</td> <td>SHEET</td> <td>2 OF 24</td> </tr> <tr> <td>CHECKED BY</td> <td> </td> <td>(V) 1" = N/A</td> <td>JOB NO.</td> <td>1185.20</td> </tr> </table>	DESIGNED BY	PRA	SCALE	DATE	02-25-21	DRAWN BY	PRA	(H) 1" = N/A	SHEET	2 OF 24	CHECKED BY		(V) 1" = N/A	JOB NO.	1185.20
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**LEGEND**

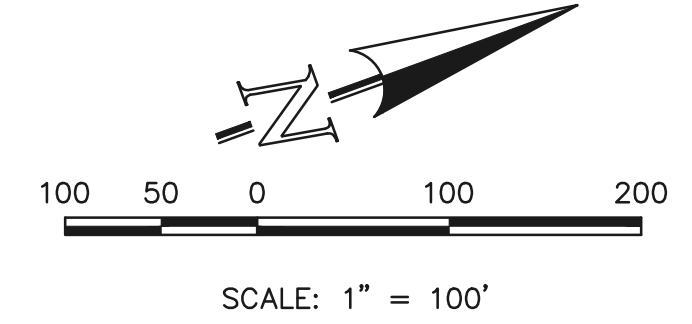
- LIMIT OF GRADING
- WETLAND DELINEATION LINE
- PROPOSED CONTOUR-10
- PROPOSED CONTOUR-2
- EXISTING CONTOUR-10
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- SILT FENCE
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- ROCK CHECK DAM
- VEHICLE TRACKING CONTROL
- STRAW BALES
- INLET PROTECTION
- EROSION CONTROL BLANKET
- TEMPORARY SEDIMENT BASIN
- EXIST. DIRECTION OF FLOW
- DIRECTION OF FLOW
- HIGH POINT
- LOW POINT
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EXISTING VEGETATION: THE MAJORITY OF THE SITE IS COVERED WITH NATIVE GRASSES, YUCCA AND SPARSE PINE TREES.

NOTE: NO BATCH PLANTS ARE PROPOSED ON-SITE.

**BMP PHASING**

- (INSTALLED PRIOR TO INITIAL PHASE WITH CONTINUED MAINTENANCE DURING INTERIM AND VERTICAL PHASES)
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NO.	REVISION	DATE
1	REVISED PER COUNTY SW AND ENG. COMMENTS	9/3/21

REVIEW:  
 PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

MARC. A. WHORTON, COLORADO P.E. #37155 DATE



**RETREAT AT TIMBERRIDGE FILING NO. 2**  
 CONSTRUCTION PLANS  
 GRADING & EROSION CONTROL PLAN

DESIGNED BY: PRA SCALE: DATE: 02-25-21  
 DRAWN BY: PRA (H) 1" = 100' SHEET 3 OF 24  
 CHECKED BY: (V) 1" = N/A JOB NO. 1185.20

N:\118520\DRAWINGS\CONSTRUCTION\03-118520-GR-02.dwg, 10/25/2021 9:53:33 AM, 1:1

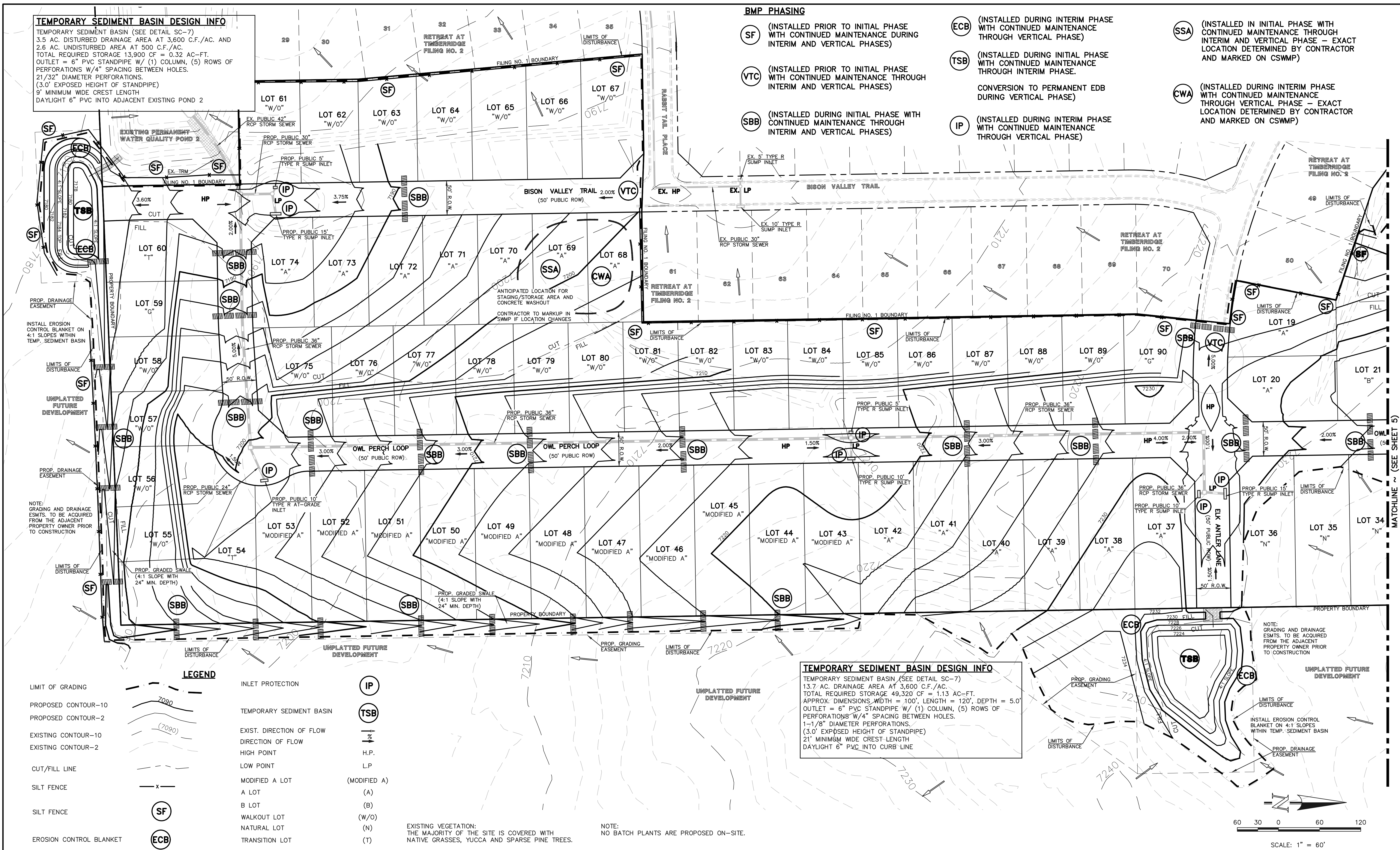
**TEMPORARY SEDIMENT BASIN DESIGN INFO**  
 TEMPORARY SEDIMENT BASIN (SEE DETAIL SC-7)  
 3.5 AC. DISTURBED DRAINAGE AREA AT 3,600 C.F./AC. AND  
 2.6 AC. UNDISTURBED AREA AT 500 C.F./AC.  
 TOTAL REQUIRED STORAGE 13,900 CF = 0.32 AC.-FT.  
 OUTLET = 6" PVC STANDPIPE W/ (1) COLUMN, (5) ROWS OF  
 PERFORATIONS W/4" SPACING BETWEEN HOLES.  
 21/32" DIAMETER PERFORATIONS.  
 (3.0' EXPOSED HEIGHT OF STANDPIPE)  
 9" MINIMUM WIDE CREST LENGTH  
 DAYLIGHT 6" PVC INTO ADJACENT EXISTING POND 2

**BMP PHASING**

- (SF) (INSTALLED PRIOR TO INITIAL PHASE WITH CONTINUED MAINTENANCE DURING INTERIM AND VERTICAL PHASES)
- (VTC) (INSTALLED PRIOR TO INITIAL PHASE WITH CONTINUED MAINTENANCE THROUGH INTERIM AND VERTICAL PHASES)
- (SBB) (INSTALLED DURING INITIAL PHASE WITH CONTINUED MAINTENANCE THROUGH INTERIM AND VERTICAL PHASES)

- (ECB) (INSTALLED DURING INTERIM PHASE WITH CONTINUED MAINTENANCE THROUGH VERTICAL PHASE)
- (TSB) (INSTALLED DURING INITIAL PHASE WITH CONTINUED MAINTENANCE THROUGH INTERIM PHASE.  
CONVERSION TO PERMANENT EDB DURING VERTICAL PHASE)
- (IP) (INSTALLED DURING INTERIM PHASE WITH CONTINUED MAINTENANCE THROUGH VERTICAL PHASE)

- (SSA) (INSTALLED IN INITIAL PHASE WITH CONTINUED MAINTENANCE THROUGH INTERIM AND VERTICAL PHASE - EXACT LOCATION DETERMINED BY CONTRACTOR AND MARKED ON CSWMP)
- (CWA) (INSTALLED DURING INTERIM PHASE WITH CONTINUED MAINTENANCE THROUGH VERTICAL PHASE - EXACT LOCATION DETERMINED BY CONTRACTOR AND MARKED ON CSWMP)



NOTE: GRADING AND DRAINAGE ESMTS. TO BE ACQUIRED FROM THE ADJACENT PROPERTY OWNER PRIOR TO CONSTRUCTION

NOTE: GRADING AND DRAINAGE ESMTS. TO BE ACQUIRED FROM THE ADJACENT PROPERTY OWNER PRIOR TO CONSTRUCTION

**LEGEND**

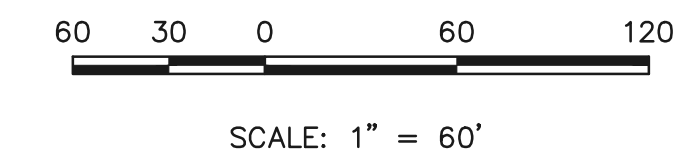
- |                          |                                                                                                                   |              |
|--------------------------|-------------------------------------------------------------------------------------------------------------------|--------------|
| LIMIT OF GRADING         | INLET PROTECTION                                                                                                  | (IP)         |
| PROPOSED CONTOUR-10      | TEMPORARY SEDIMENT BASIN                                                                                          | (TSB)        |
| PROPOSED CONTOUR-2       | EXIST. DIRECTION OF FLOW                                                                                          | →            |
| EXISTING CONTOUR-10      | DIRECTION OF FLOW                                                                                                 | →            |
| EXISTING CONTOUR-2       | HIGH POINT                                                                                                        | H.P.         |
| CUT/FILL LINE            | LOW POINT                                                                                                         | L.P.         |
| SILT FENCE               | MODIFIED A LOT                                                                                                    | (MODIFIED A) |
| SILT FENCE               | A LOT                                                                                                             | (A)          |
| EROSION CONTROL BLANKET  | B LOT                                                                                                             | (B)          |
| VEHICLE TRACKING CONTROL | WALKOUT LOT                                                                                                       | (W/O)        |
| STRAW BALES              | NATURAL LOT                                                                                                       | (N)          |
|                          | TRANSITION LOT                                                                                                    | (T)          |
|                          | GARDEN LOT                                                                                                        | (G)          |
|                          | EROSION CONTROL BLANKET (NORTH AMERICAN GREEN - SC150 OR EQUIVALENT) TO BE INSTALLED ON ALL 3:1 SLOPES OR GREATER |              |

EXISTING VEGETATION: THE MAJORITY OF THE SITE IS COVERED WITH NATIVE GRASSES, YUCCA AND SPARSE PINE TREES.

NOTE: NO BATCH PLANTS ARE PROPOSED ON-SITE.

**TEMPORARY SEDIMENT BASIN DESIGN INFO**

TEMPORARY SEDIMENT BASIN (SEE DETAIL SC-7)  
 13.7 AC. DRAINAGE AREA AT 3,600 C.F./AC.  
 TOTAL REQUIRED STORAGE 49,320 CF = 1.13 AC.-FT.  
 APPROX. DIMENSIONS WIDTH = 100', LENGTH = 120', DEPTH = 5.0'  
 OUTLET = 6" PVC STANDPIPE W/ (1) COLUMN, (5) ROWS OF PERFORATIONS W/4" SPACING BETWEEN HOLES.  
 1-1/8" DIAMETER PERFORATIONS.  
 (3.0' EXPOSED HEIGHT OF STANDPIPE)  
 21" MINIMUM WIDE CREST LENGTH  
 DAYLIGHT 6" PVC INTO CURB LINE



SCALE: 1" = 60'

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NO.	REVISION	DATE
1	REVISED PER COUNTY SW AND ENG. COMMENTS	9/2/21

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MARC. A. WHORTON, COLORADO P.E. #37155 DATE



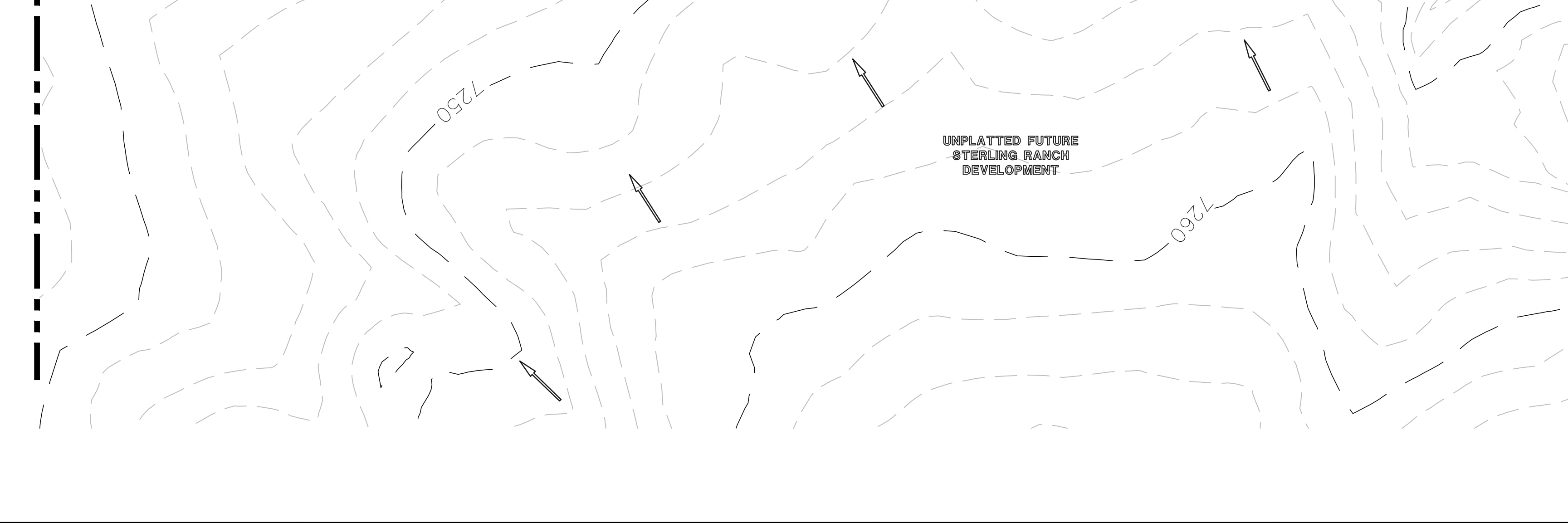
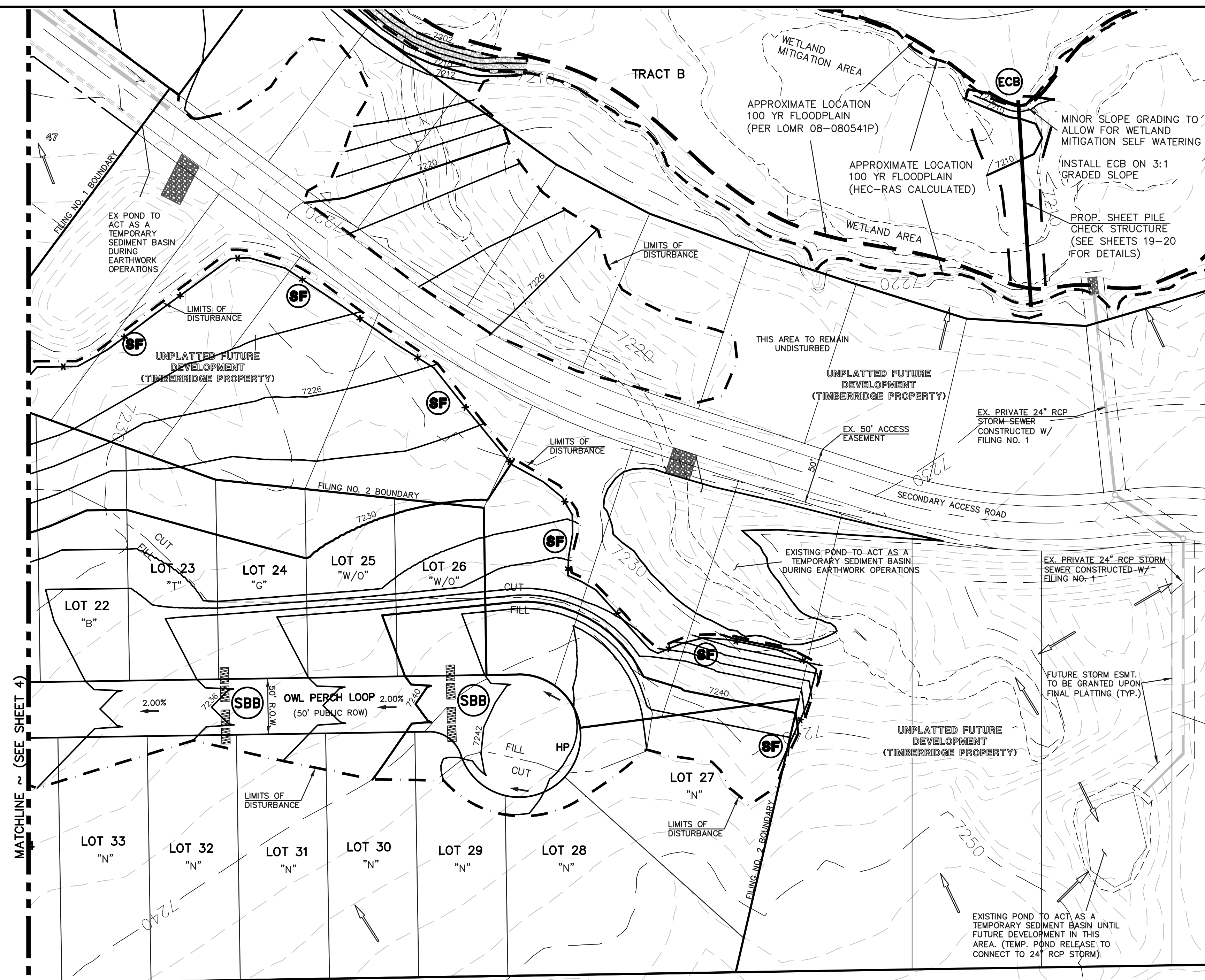
RETREAT AT TIMBERIDGE FILING NO. 2  
 CONSTRUCTION PLANS  
 GRADING & EROSION CONTROL PLAN

DESIGNED BY	PRA	SCALE	DATE	02-25-21
DRAWN BY	PRA	(H) 1" = 60'	SHEET	4 OF 24
CHECKED BY	(V) 1" = N/A	JOB NO.	1185.20	

CLASSIC CONSULTING

- BMP PHASING**
- SILT FENCE OR COMPACT BERM — x — (SF) (INSTALLED PRIOR TO INITIAL PHASE WITH CONTINUED MAINTENANCE DURING INTERIM AND VERTICAL PHASES)
  - VEHICLE TRACKING CONTROL (VTC) (INSTALLED PRIOR TO INITIAL PHASE WITH CONTINUED MAINTENANCE THROUGH INTERIM AND VERTICAL PHASES)
  - ROCK CHECK DAM (CD) (INSTALLED DURING INITIAL PHASE WITH CONTINUED MAINTENANCE THROUGH INTERIM AND VERTICAL PHASES)
  - STABILIZED STORAGE AREA (SSA) (INSTALLED IN INITIAL PHASE WITH CONTINUED MAINTENANCE THROUGH INTERIM AND VERTICAL PHASE — EXACT LOCATION DETERMINED BY CONTRACTOR AND MARKED ON CSWMP)
  - INLET PROTECTION (IP) (INSTALLED DURING INTERIM PHASE WITH CONTINUED MAINTENANCE THROUGH VERTICAL PHASE)
  - EROSION CONTROL BLANKET (ECB) (INSTALLED DURING INTERIM PHASE WITH CONTINUED MAINTENANCE THROUGH VERTICAL PHASE)
  - TEMPORARY SEDIMENT BASIN (TSB-1) (INITIAL AND INTERIM PHASE WITH CONVERSION TO PERMANENT EDB DURING INTERIM PHASE)
  - CONCRETE WASHOUT AREA (CWA) (INSTALLED DURING INTERIM PHASE WITH CONTINUED MAINTENANCE THROUGH VERTICAL PHASE — EXACT LOCATION DETERMINED BY CONTRACTOR AND MARKED ON CSWMP)

- LEGEND**
- LIMIT OF GRADING
  - CUT/FILL LINE
  - PROPOSED CONTOUR-10
  - PROPOSED CONTOUR-2
  - EXISTING CONTOUR-10
  - EXISTING CONTOUR-2
  - CUT/FILL LINE
  - SILT FENCE
  - SILT FENCE (SF)
  - SEEDING/MULCHING (SM)
  - ROCK CHECK DAM (CD)
  - VEHICLE TRACKING CONTROL (VTC)
  - STRAW BALES (SBB)
  - INLET PROTECTION (IP)
  - EROSION CONTROL BLANKET (ECB)
  - TURF REINFORCEMENT MAT (NORTH AMERICAN GREEN — ROLLMAX P300 OR EQUIV.) (TRM)
  - TEMPORARY SEDIMENT BASIN (TSB)
  - EXIST. DIRECTION OF FLOW
  - DIRECTION OF FLOW
  - HIGH POINT (H.P.)
  - LOW POINT (L.P.)
  - MODIFIED A LOT (MODIFIED A)
  - A LOT (A)
  - B LOT (B)
  - WALKOUT LOT (W/O)
  - NATURAL LOT (N)
  - TRANSITION LOT (T)
  - GARDEN LOT (G)
  - EROSION CONTROL BLANKET (NORTH AMERICAN GREEN — SC150 OR EQUIVALENT) TO BE INSTALLED ON ALL 3:1 SLOPES OR GREATER
  - SEEDING/MULCHING NOTE: SEEDING AND MULCHING SHALL BE INSTALLED INSIDE ENTIRE LIMITS OF GRADING EXCLUDING ROADWAY SURFACES, SIDEWALK AREAS AND RIP-RAP AREAS.



<p>48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS <b>811</b> UTILITY NOTIFICATION CENTER OF COLORADO IT'S THE LAW</p> <p>THE LOCATIONS OF EXISTING 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 UNDERGROUND UTILITIES.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>REVISION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>REVISED PER COUNTY SW AND ENG. COMMENTS</td> <td>9/3/21</td> </tr> </tbody> </table>	NO.	REVISION	DATE	1	REVISED PER COUNTY SW AND ENG. COMMENTS	9/3/21	<p>REVIEW:</p> <p>PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC</p> <p>MARC A. WHORTON, COLORADO P.E. #37155      DATE</p>		<p><b>RETREAT AT TIMBERRIDGE FILING NO. 2</b> <b>CONSTRUCTION PLANS</b> GRADING &amp; EROSION CONTROL PLAN</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>DESIGNED BY</td> <td>PRA</td> <td>SCALE</td> <td>DATE</td> <td>02-25-21</td> </tr> <tr> <td>DRAWN BY</td> <td>PRA</td> <td>(H) 1" = 60'</td> <td>SHEET</td> <td>5 OF 24</td> </tr> <tr> <td>CHECKED BY</td> <td>(V)</td> <td>1" = N/A</td> <td>JOB NO.</td> <td>1185.20</td> </tr> </table>	DESIGNED BY	PRA	SCALE	DATE	02-25-21	DRAWN BY	PRA	(H) 1" = 60'	SHEET	5 OF 24	CHECKED BY	(V)	1" = N/A	JOB NO.	1185.20
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