

**CONTACT INFORMATION:**

Permittee: Scott Lukach  
Apex Waste Solutions  
11681 Progress Lane  
Parker, CO 80134  
(414) 333-3956

Engineer: Brett Louk, P.E.  
SMH Consultants  
620 N. Tejon Street  
Suite 201  
Colorado Springs, CO 80903  
(719) 465-2145

Qualified Stormwater  
Manager: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contractor: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

---

**SWMP Preparation Date:**  
October 2024

**Estimated Project Dates**  
**Start of Construction:**  
November 2024

**End of Construction:**  
April 2025

EPC STORMWATER REVIEW COMMENTS  
IN ORANGE BOXES WITH BLACK TEXT

Item Numbers refer to SWMP Checklist



**TABLE OF CONTENTS**

**1.0 Site Description..... 1**

**2.0 Construction Activities..... 1**

**3.0 Phasing Plan..... 1**

**4.0 Construction Sequencing..... 1**

**5.0 Disturbed Area..... 2**

**6.0 Soil Properties..... 2**

**7.0 Existing Cover..... 2**

**8.0 Potential Pollution Sources..... 2**

**9.0 Material Handling & Spill Prevention and Response Plan..... 3**

**10.0 Allowable Non-Stormwater Discharge..... 4**

**11.0 Receiving Waters..... 4**

**12.0 Stream Crossings..... 5**

**13.0 Stormwater Management Plan Map..... 5**

**14.0 Structural Control Measures..... 5**

**15.0 Non-Structural Control Measures..... 5**

**16.0 SWMP Revision Procedures..... 5**

**17.0 Final Stabilization & Long-Term Stormwater Quality..... 5**

**18.0 Inspection Procedures..... 6**

**19.0 Record Keeping Procedures..... 6**

**20.0 Offsite Control Measures..... 7**

**Appendix..... 8**

## 1.0 SITE DESCRIPTION

The site is located in the SW and SE ¼ of Section 8, Township 14 South, Range 65 West in El Paso County, State of Colorado. The subject site is approximately 7.6 acres in size and is zoned I-2 CAD-O (light industrial, airport overlay). The site is bordered by Air Lane to the east, State Highways 24 and 94 to the north, and industrial and commercial properties to the west and south. The surrounding properties are zoned CS, I-2 and I-3. All adjacent properties are also in the airport overlay district. Proposed improvements to the site include enlarging the existing asphalt millings parking lot and the addition of two new modular units for office space.

The subject property lies within the Peterson Field Drainage Basin, which was studied in 1985 by URS/NES. The site currently consists of existing asphalt millings parking lot, sand/gravel areas, a modular office unit, and two shipping containers used as storage. Existing vegetation on the site consists of native grasses and a few trees. The subject property lies within the Peterson Field Drainage Basin. Existing runoff travels south offsite towards Peterson Field Detention Ponds #1 and #2, and would then be discharged to Fountain Creek. Proposed runoff generated from the site improvements will now be detained by the proposed sand filter basin located in the southwest corner of the property. No outlet structures are proposed, as runoff will be fully infiltrated into the subsurface within the sand filter basin. The primary soil on the site is *Blakeland Loamy Sand*, which is classified as Hydrologic Soil Group A.

## 2.0 CONSTRUCTION ACTIVITIES

Construction activities for the proposed project include installation of BMPs, construction of the proposed trailer buildings, parking lot, widening of the existing entrance driveway, and construction of the sand filter basin.

## 3.0 PHASING PLAN

The project is not planned to be constructed in phases; therefore, no phasing plan has been provided.

## 4.0 CONSTRUCTION SEQUENCING

Construction activities for this project include installation of the proposed office trailers, parking lot improvements, and construction of the sand filter basin. Ultimately, construction sequencing will be dependent on the contractor selected and their schedule. The selected contractor shall provide their construction sequencing schedule and attach it to the appendix of this report. Typical construction sequencing for a project similar to this is described below.

- 1) Install initial/perimeter BMPs (Fall 2024) – Initial Phase
- 2) Clearing and grubbing (Fall 2024) – Initial Phase
- 3) Building, parking lot, and utility services (Fall 2024) – Interim Phase
- 4) Installation of temporary erosion control BMPs (i.e. temporary seeding, erosion control blankets, etc.) (Fall 2024) – Interim Phase

Item 7. Estimated total disturbance does not match acreage of the limits of disturbance as shown on submitted GEC plans.

## 5) Final Stabilization (Spring 2025) – Final Phase

The anticipated start of construction is Fall 2024, with final stabilization by Spring 2025. This schedule could vary depending on weather and contractor availability.

### 5.0 DISTURBED AREA

The existing site is 7.6 acres in size. Total site disturbance is anticipated to be 1.62 acres. The total volume of earthwork cut/fill operation is expected to be approximately 1,988 CY. The selected contractor is responsible for updating this SWMP, during construction, with disturbed area changes.

### 6.0 SOIL PROPERTIES

Based on information obtained from the Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) website, the site is made up of Blakeland Loamy Sand soils. These soils range in slope from 1% to 9% and are classified as hydrologic soils group A. Group A soils include soils that have a high infiltration rate (low runoff potential), consist of mainly deep, well-drained soil, and have a high rate of water transmission.

### 7.0 EXISTING COVER

The existing site is currently 81% covered in native vegetation based on satellite imagery and a topographic survey created for the site. Existing slopes range from 1% to 6%.

### 8.0 POTENTIAL POLLUTION SOURCES

The following list of potential pollutants, which may reasonably be expected to affect the quality of stormwater discharges associated with construction activity, may be present onsite during construction:

- Disturbed and stored soils;
- Vehicle tracking of sediments;
- Management of contaminated soils, if known to be present, or if contaminated soils are found during construction;
- Loading and unloading operations;
- Outdoor storage activities (erodible building materials, fertilizers, chemical, etc.);
- Vehicle and equipment maintenance and fueling;
- Significant dust or particulate generating processes (e.g., saw cutting material, including dust);
- Routine maintenance activities involving fertilizers, pesticides, herbicides, detergents, fuels, solvents, oils, etc.;
- Onsite waste management practices (waste piles, liquid wastes, dumpsters);
- Concrete truck/equipment washing, including washing of the concrete truck chute and associated fixtures and equipment;
- Dedicated asphalt, concrete batch plants and masonry mixing stations;

Item 10/11. Section 9 (pg.4) states no batch plants are anticipated. Resolve discrepancy.

- Non-industrial waste sources such as worker trash and portable toilets;

Refer to the Grading & Erosion Control Plan/SWMP Map located in the appendix of this report for locations and descriptions.

## **9.0 MATERIAL HANDLING AND SPILL PREVENTION AND RESPONSE PLAN**

The following handling procedures may be implemented as control measures at the site to minimize impacts from handling significant materials that could contribute pollutants to runoff. These handling procedures can include control measures for pollutants and activities such as, exposed storage of building materials, paints and solvents, landscape materials, fertilizers or chemicals, sanitary waste material, trash and equipment maintenance or fueling procedures, and etc.

- **Waste Disposal:** All waste materials will be collected and stored in a securely lidded metal dumpster rented from a local waste hauler. The dumpster will meet all local and state solid waste management regulations. All waste and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied on a periodical basis. No construction waste materials will be buried onsite.
- **Sanitary Waste:** Portable toilets shall be located on site in a location determined by the contractor. All sanitary waste will be collected from portable units on a frequent, periodical basis by a licensed sanitary waste management contractor.
- **Concrete Waste from Concrete Trucks:** Excess concrete and concrete wash water shall be returned to the concrete plant or deposited at a designated containment area onsite. The containment area shall be constructed in a manner that prevents runoff from entering the street, storm water drainage systems, or waterways. Wash water may not be deposited in streets, curbs, gutters, storm drains, or waterways.
- **Hazardous Substances and Hazardous Waste:** All hazardous waste materials will be disposed of in the manner specified by local and state regulation or by the manufacturer. The contractor's site personnel will be instructed in these practices and the contractor's site manager will be responsible for seeing that these practices are followed. All equipment will be kept in good/clean working order to minimize discharge of pollutants. This includes all vehicles and storage containers.
- **Good Housekeeping:**
  - An effort will be made to store only enough products required to do the job.
  - All materials stored onsite will be stored in a neat, orderly manner and, if possible, under a roof or other enclosure.
  - Products will be kept in their original containers with the original manufacturer's label in legible condition.
  - Substances will not be mixed with one another unless recommended by the manufacturer.
  - Whenever possible, all of a product will be used up before disposing of the container.
  - Manufacturer's recommendations for proper use and disposal will be followed.
  - The contractor will be responsible for daily inspections to ensure proper use and disposal of materials.

Item 10/12. List of potential pollution sources provided above includes dedicated asphalt, concrete batch plants, and masonry mixing stations. Resolve discrepancy.

- If surplus product must be disposed of, manufacturer’s or local/state/federal recommended methods for proper disposal will be followed.

All of the product in a container will be used before the container is disposed of. All such containers will be triple-rinsed with water prior to disposal. The rinse water used in these containers will be disposed of in a manner in compliance with state and federal regulations and will not be allowed to mix with storm water discharge.

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff.

1. Manufacturer’s recommended methods for spill cleanup will be clearly posted and site personnel will be trained regarding these procedures and the location of the information and cleanup supplies.
2. Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite in a spill control and containment kit (containing, for example, absorbent such as kitty litter or sawdust, acid neutralizing powder, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.)
3. All spills will be cleaned up immediately after discovery.
4. The spill area will be kept well-ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with hazardous substances.

No batch plants are proposed for this project, so no batch plant spill prevention and pollution control plan has been provided.

### 10.0 ALLOWABLE NON-STORMWATER DISCHARGES

The following are a list of allowable non-stormwater discharges that may be present onsite during, or after, construction.

- Irrigation
- Ground Water
- Springs

Item 14. Per the COR400000 Permit, the discharge of concrete wash water to ground is an allowable non-stormwater discharge and must be identified in the SWMP if anticipated on site.

### 11.0 RECEIVING WATERS

The subject property lies within the Peterson Field Drainage Basin. Existing runoff travels south offsite towards Peterson Field Detention Ponds #1 and #2, and would then be discharged to Fountain Creek. Proposed runoff generated from the site improvements will now be detained by the proposed sand filter basin located in the southwest corner of the property. No outlet structures are proposed, as runoff will be fully infiltrated into the subsurface within the sand filter basin. Onsite erosion control BMPs will be utilized to control erosion leaving the site and to maintain the existing natural drainage corridors, prior to runoff from the site entering Fountain Creek.

**12.0 STREAM CROSSINGS**

There are no planned stream crossings as part of this project.

**13.0 STORMWATER MANAGEMENT PLAN MAP**

The Grading & Erosion Control Plan (GEC) has been included in the appendix of this report to act as the stormwater management plan (SWMP) map. The GEC indicates all erosion control BMPs to be used on the site during construction of the proposed improvements. Erosion control details have also been included with the GEC in the appendix of this report.

**14.0 STRUCTURAL CONTROL MEASURES**

Structural control measures for the site can include, but are not limited to, silt fence, vehicle tracking control, stabilized staging area, stockpile management, concrete washout area, portable toilet, etc. The attached Grading & Erosion Control Plan indicates locations for the aforementioned structural control measures, as well as, providing details for installation and maintenance.

Item 18. Submitted GEC Plan indicates a TSB will be utilized. Include in structural control measure narrative discussion.

**15.0 NON-STRUCTURAL CONTROL MEASURES**

Non-structural control measures for the site can include, but are not limited to, seeding and mulching, slope tracking, chemical storage following the manufacturer’s recommendations, wind erosion control by watering down disturbed areas, sweeping operations as vehicles leave the site, minimizing disturbed areas, protecting natural flow pathways, protecting existing vegetation, etc.

**16.0 SWMP REVISION PROCEDURES**

Item 22. Discuss permanent sand filter basin.

The selected contractor, and their Qualified Stormwater Manager, are responsible for inspecting and maintaining erosion control BMPs throughout the duration of the project. This includes notation of any additional BMPs or removal of BMPs. These changes shall be reflected on the SWMP map and shall be shown on the map prior to any changes in the field.

**17.0 FINAL STABILIZATION & LONG-TERM STORMWATER QUALITY**

Final stabilization of the site, after completion of construction, shall be achieved via permanent seeding and mulching. Depending on weather, and season, permanent seeding may be delayed until the following growing season for the specified seed. In this case, temporary seeding may be used until the next growing season. Any disturbed areas shall be seeded and mulched within 14 days. Final stabilization is achieved when construction is complete and the disturbed areas have achieved a vegetative cover density of 70% of pre-disturbance levels.

Item 21. Add text stating that the SWMP should be viewed as a “living document” that is continuously being reviewed and modified as a part of the overall process of evaluating and managing SW quality issues at the site. The QSM shall amend the SWMP when there is a change in design, construction, O&M of the site which would require the implementation of new or revised BMPs or if the SWMP proves to be ineffective in achieving the general objectives of controlling pollutants in SW discharges associated with construction activity or when BMPs are no longer necessary and are removed. The QSM shall maintain a record of amendments made to the SWMP that includes the date and identification of the changes.



Item 24. Self-inspection reports are not submitted to El Paso County, however they must be available at any time to County Stormwater staff for review along with the other SWMP documents/components.

## 18.0 INSPECTION PROCEDURES

The Qualified Stormwater Manager, shall, at a minimum, make thorough inspection at least once every 14 calendar days. Also, post-storm event inspections must be conducted within 24 hours following the end of any precipitation or snowmelt event that causes surface erosion. Provided the timing is appropriate, the post-storm inspection may be used to fulfill the 14-day routine inspection requirement. Alternatively, the Qualified Stormwater Manager, may choose to perform self-inspections every 7 calendar days and forego post-storm event inspections. The self-inspection schedule must be identified in the Qualified Stormwater Manager's most recent self-inspection. A more frequent inspection schedule than the minimum described may be necessary to ensure that Control Measures continue to operate as needed to comply with this SWMP and GEC. Site conditions such as steep grades and close proximity to a state water are reasons for increasing the frequency of self-inspections.

The Qualified Stormwater Manager shall submit documentation of the self-inspections to the County of El Paso, CO. Completed self-inspection forms must be submitted within 5 business days of the self-inspection. The self-inspections must also be available either physically or electronically at the construction site at all times throughout the duration of the project. Qualified Stormwater Managers will review self-inspections during County compliance inspections. The use of third-party inspection programs does not remove this requirement. Additionally, the use of third-party inspection programs does not relieve the Permittee of the requirement to comply with all compliance inspections.

Item 24. Clarify that these inspections must occur at least once every 30 days

For sites or portions of sites where construction activities have been completed and final stabilization measures installed but final stabilization has not yet been achieved, the Qualified Stormwater Manager shall make a thorough inspection of their Control Measures at least once every month. Post-storm event inspections must be conducted within 72 hours following the end of any precipitation or snowmelt event that causes surface erosion. The SWMP and SWMP Map must be amended to indicate those areas where construction activities have been completed but final stabilization has not yet been achieved that will be inspected once a month.

When site conditions make the schedule required in this section impractical, the Permittee may petition the County to grant an alternate inspection schedule. The alternative inspection schedule may not be implemented prior to written approval by the County and incorporation into the SWMP.

The permittee is responsible to confirm that the frequency of inspections is sufficient to ensure that Control Measures remain in good working condition at all times.

## 19.0 RECORD KEEPING PROCEDURES

The Qualified Stormwater Manager is responsible for documenting the following items during inspections. This documentation shall be kept onsite at all times with the SWMP, SWMP Map, and Grading & Erosion Control Plan.



- Inspection Date
- Name, title, and signature of personnel performing inspections
- Locations of discharges of sediment and/or pollutants from the site
- Location of BMPs that require maintenance
- Location of BMPs not working properly or inadequate for the location
- Location where additional BMPs are needed
- Alteration from minimum inspection schedule
- Description of corrective actions and date completed
- Signed statement of compliance after corrective actions completed

## **20.0 Offsite Control Measures**

There are no offsite control measures owned and operated by another entity, that are proposed to be used by this project/site.

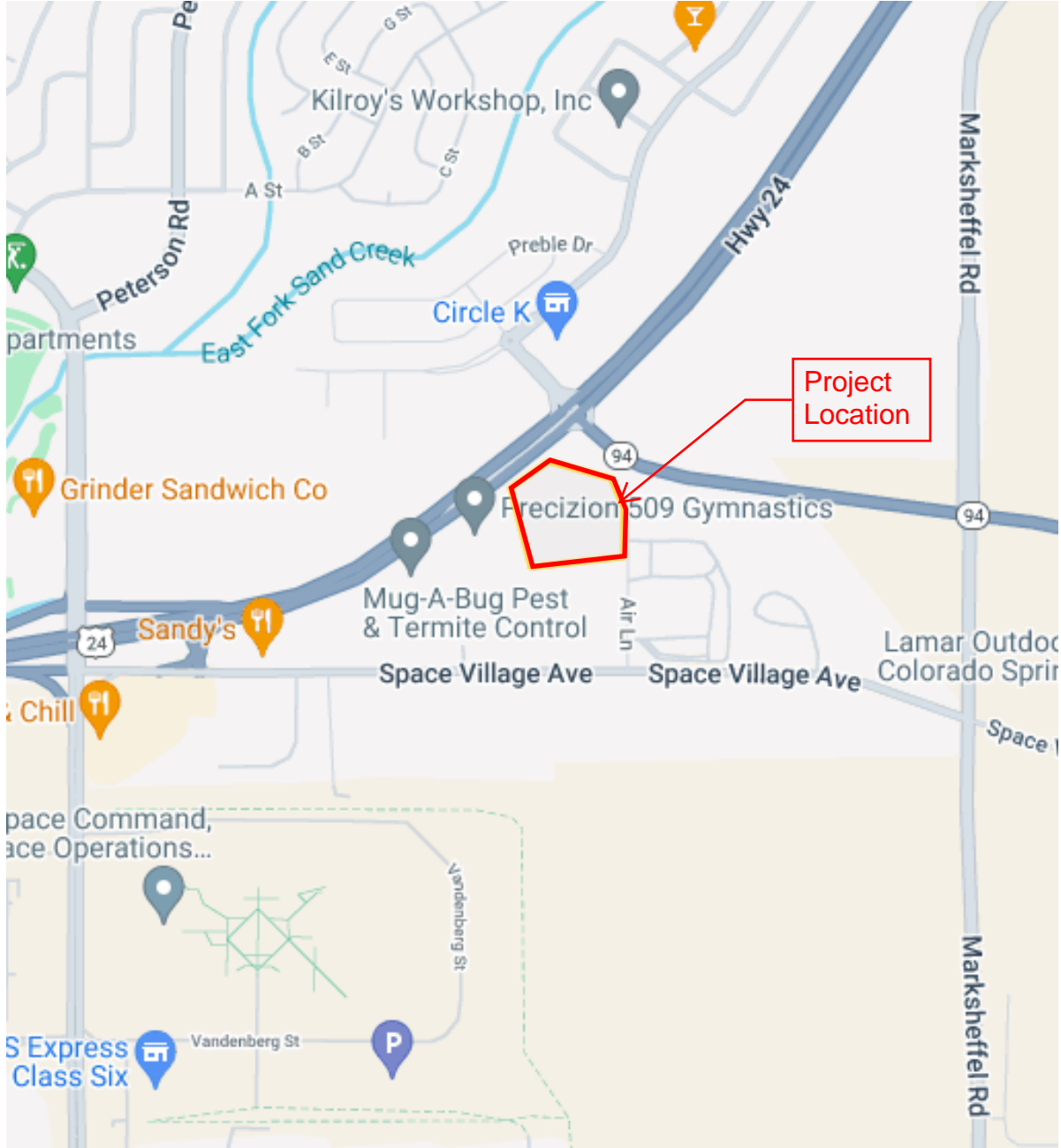
# Appendix

# VICINITY MAP

---

# Vicinity Map

Not to Scale



# PERMIT APPLICATION

---

# CONTRACTOR SEQUENCING

---

**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>

# INSPECTION & MAINTENANCE

---

# 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

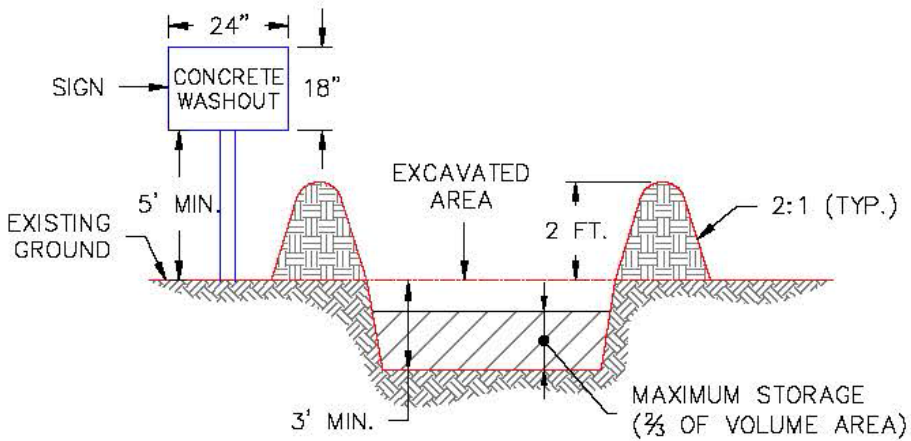
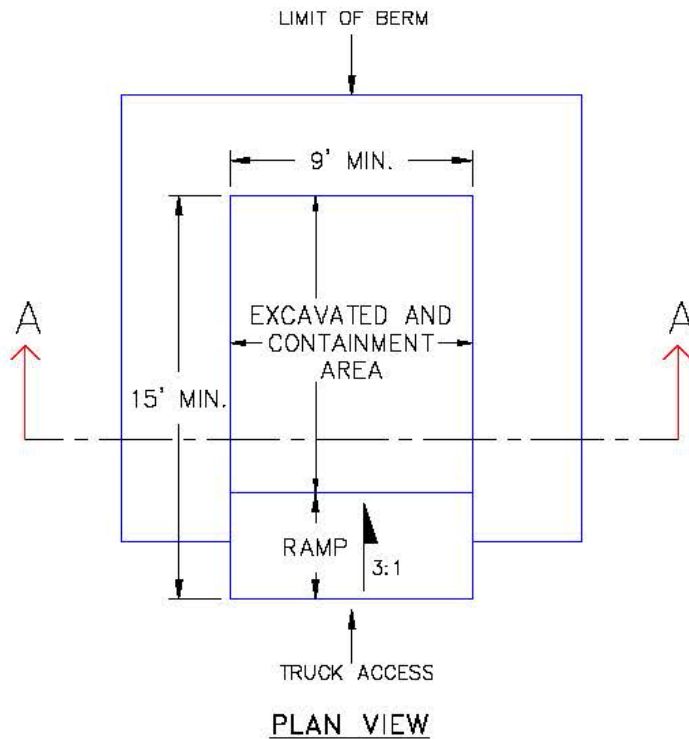


# COMPLETED INSPECTION & MAINTENANCE RECORDS

---

# BMP DETAILS

---



**SECTION A-A**

**NOTES:**

1. SIGN MATERIAL, EXCAVATION, AND RESTORATION ARE INCLUDED IN THE COST OF THE CONCRETE WASHOUT STRUCTURE.
2. EROSION BALES MAY BE USED AS AN ALTERNATIVE FOR THE BERM.

1/1/08

DATE APPROVED:

John A. McCarty

DEPARTMENT OF TRANSPORTATION

Concrete Washout Structure

Standard Drawing

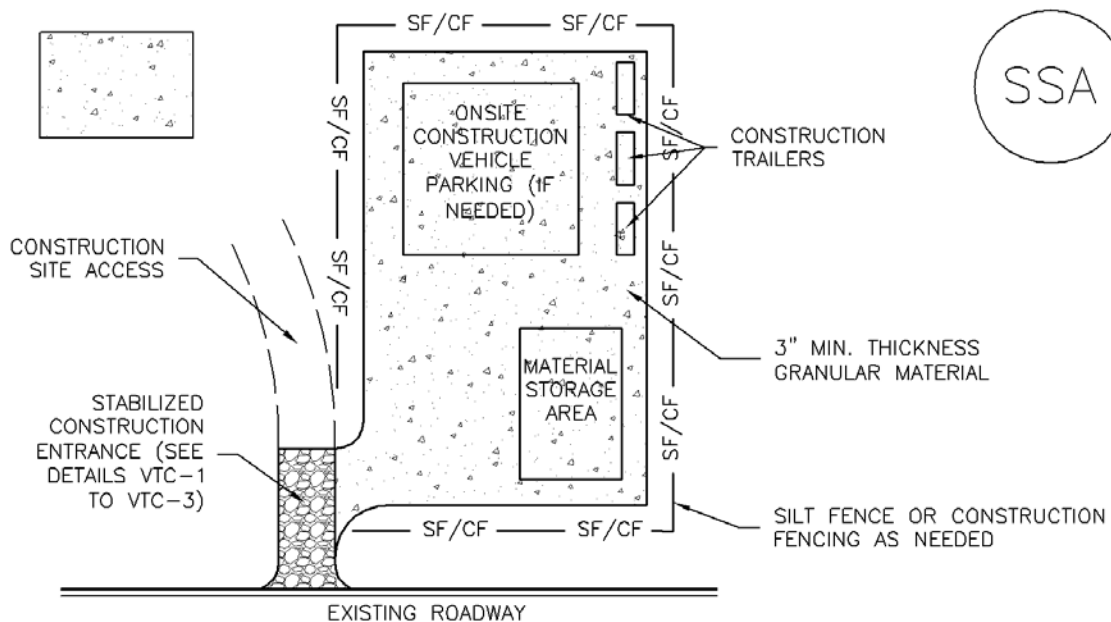
REVISION DATE:

7/17/07

FILE NAME:

SD\_3-84





**SSA-1. STABILIZED STAGING AREA**

STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR
  - LOCATION OF STAGING AREA(S).
  - CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.
3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.
4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.
5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.
6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA 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. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

STABILIZED STAGING AREA MAINTENANCE NOTES

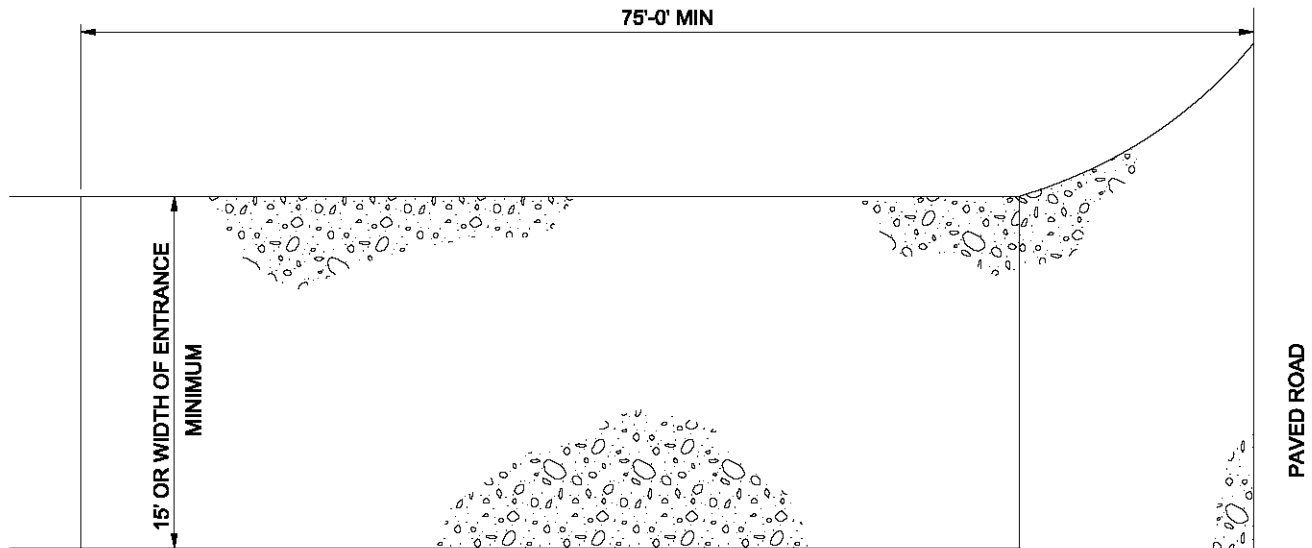
5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.

6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

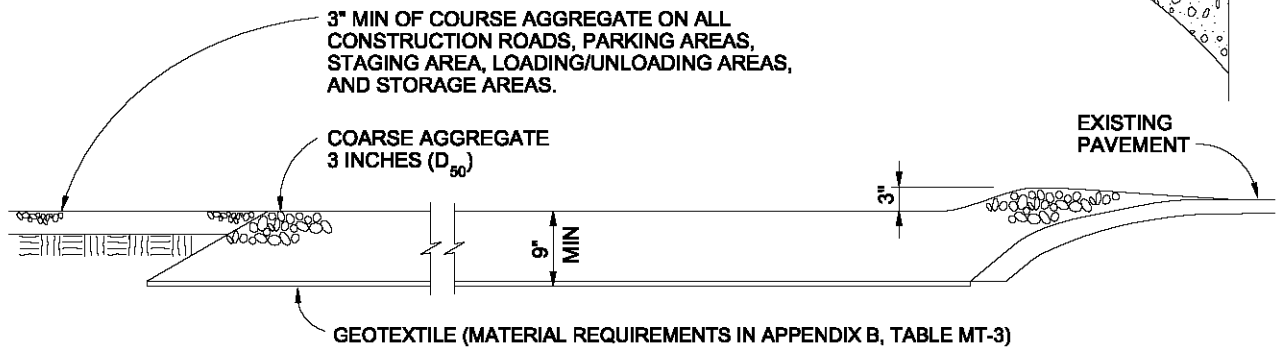
NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

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 DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)



**PLAN**



**SECTION**

## VEHICLE TRACKING

NTS

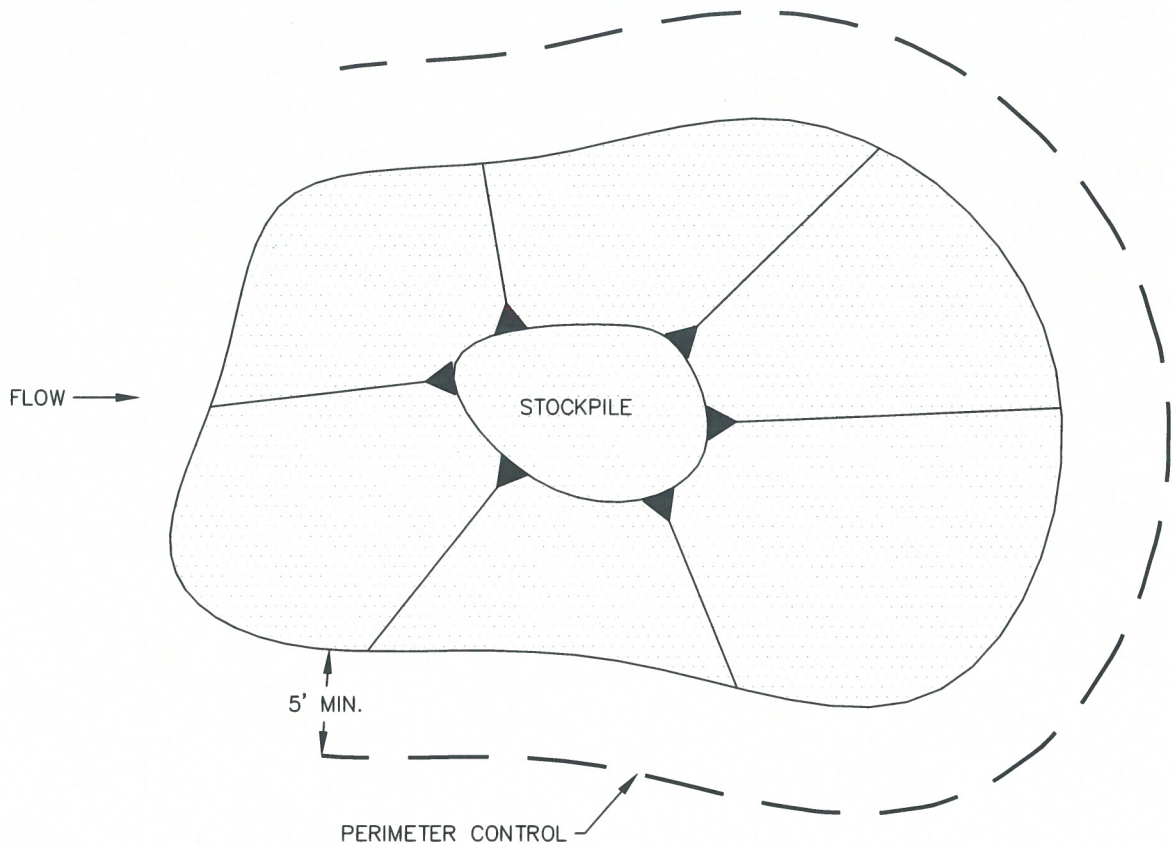
### VEHICLE TRACKING NOTES

#### INSTALLATION REQUIREMENTS

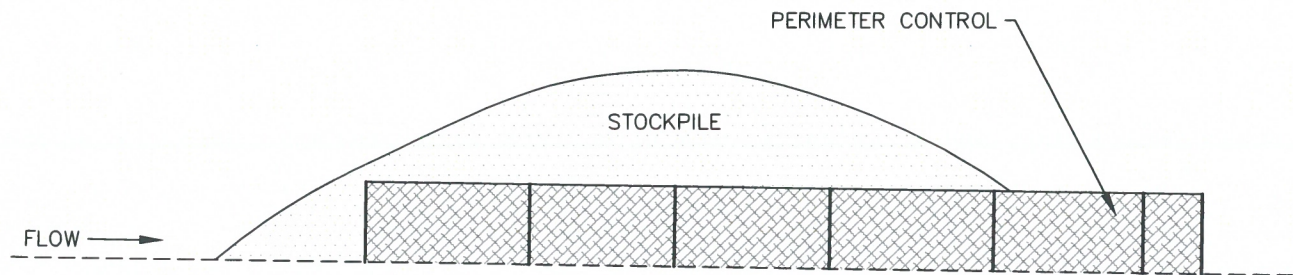
1. ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.
2. CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APRON TO ALLOW FOR TURNING TRAFFIC, BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAP.
3. AREAS TO BE STABILIZED ARE TO BE PROPERLY 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.



**STOCKPILE PROTECTION PLAN**



**STOCKPILE PROTECTION ELEVATION**

**INSTALLATION NOTES**

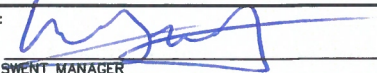
1. INSTALL PERIMETER CONTROL AROUND STOCKPILE ON DOWNGRAIDENT SIDE. PERIMETER CONTROL MUST BE SUITABLE TO SITE CONDITIONS AND INSTALLED ACCORDING TO THE RELEVANT DETAIL.
2. FOR STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRAIDENT CONTROLS INCLUDING PERIMETER CONTROL ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

**MAINTENANCE NOTES**

1. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
2. IF PERIMETER CONTROLS MUST BE MOVED TO ACCESS STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORK DAY.
3. ACCUMULATED SEDIMENT MUST BE REMOVED ACCORDING TO PERIMETER CONTROL DETAIL.



**STOCKPILE PROTECTION**

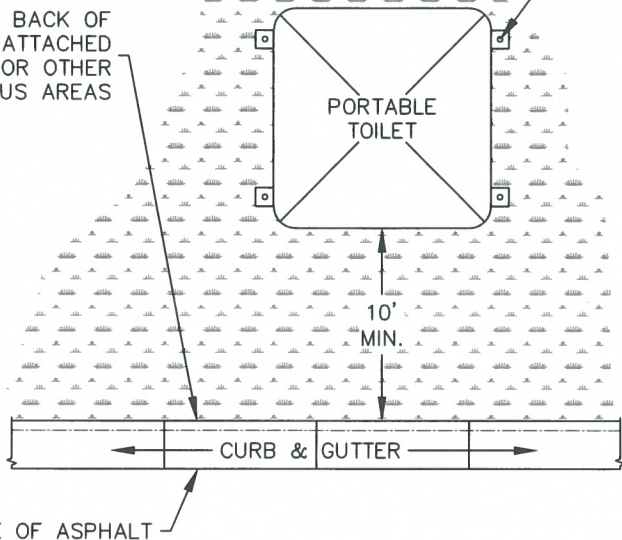
APPROVED:   
SWENT MANAGER

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



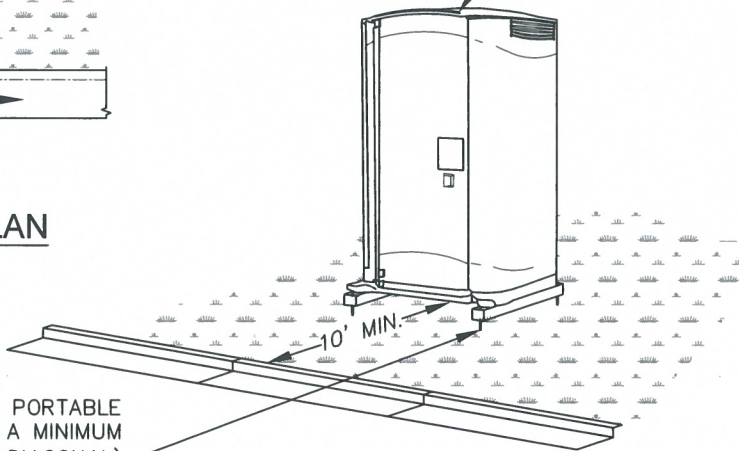
CONTRACTOR SHALL ANCHOR PORTABLE TOILET TO THE GROUND, AT A MINIMUM OF TWO OPPOSING CORNERS (ON A DIAGONAL) USING U-SHAPED REBAR STAKES

TOP BACK OF CURB, ATTACHED SIDEWALK, OR OTHER IMPERVIOUS AREAS



**PORTABLE TOILET PLAN**

PORTABLE TOILET (TYPICAL)



**ISOMETRIC**

CONTRACTOR SHALL ANCHOR PORTABLE TOILET TO THE GROUND, AT A MINIMUM OF TWO OPPOSING CORNERS (ON A DIAGONAL) USING U-SHAPED REBAR STAKES OR OTHER EFFECTIVE ANCHORING

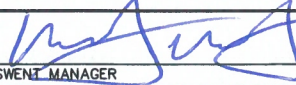
**INSTALLATION NOTES**

1. PORTABLE TOILETS SHALL BE PLACED A MINIMUM OF 10 FEET BEHIND ALL CURBS, SIDEWALKS, AND OTHER IMPERVIOUS AREAS; 50 FEET FROM STORM INLETS, AND 100 FEET FROM WATERWAYS.
2. PORTABLE TOILETS IN THE RIGHT-OF-WAY ARE REQUIRED TO BE PLACED ON MOBILE TRAILERS AND MUST BE ANCHORED OR WEIGHTED DOWN. PORTABLE TOILETS MAY BE INSTALLED IN ACCORDANCE WITH NOTE #1 IN STAGING AREAS/YARDS.
3. PORTABLE TOILETS SHALL BE SECURELY ANCHORED TO THE GROUND USING U-SHAPED REBAR STAKES, OR OTHER EFFECTIVE ANCHORING.
4. ANCHORING SHALL BE POSITIONED ON AT LEAST TWO OPPOSING (DIAGONAL) CORNERS.
5. TOILET CONTAINMENT PANS MAY BE USED IN PLACE OF A TRAILER AT THE GEC INSPECTOR'S DISCRETION. TOILET CONTAINMENT PANS MUST BE ANCHORED IN PLACE AND MUST NOT BE USED WITHIN THE CITY R.O.W.

**MAINTENANCE NOTES**

1. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
2. PORTABLE TOILETS SHALL BE SERVICED AT THE NECESSARY INTERVALS TO ELIMINATE THE POSSIBILITY OF OVERFLOW.
3. WHEN THE PORTABLE TOILETS ARE REMOVED, ANY DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE TOILETS MUST BE PERMANENTLY STABILIZED.



<b>PORTABLE TOILET</b>		
APPROVED: 		
SWENT MANAGER		
ISSUED: 2/19/19	REVISED: 8/19/2020	DRAWING NO. 900-PTM

# MULCHING NOTES

## INSTALLATION REQUIREMENTS

1. ALL DISTURBED AREAS MUST BE MULCHED WITHIN 21 DAYS AFTER FINAL GRADE AND SEEDED AREAS ARE TO BE MULCHED WITHIN 24 HOURS AFTER SEEDING.
2. MATERIAL USED FOR MULCH CAN BE CERTIFIED CLEAN, WEED- AND SEED-FREE LONG STEMMED FIELD OR MARSH HAY, OR STRAW OF OATS, BARLEY, WHEAT, RYE, OR TRITICALE CERTIFIED BY THE COLORADO DEPARTMENT OF AGRICULTURE WEED FREE FORAGE CERTIFICATION PROGRAM.
3. HYDRAULIC MULCHING MATERIAL SHALL CONSIST OF VIRGIN WOOD FIBER MANUFACTURED FROM CLEAN WHOLE WOOD CHIPS. WOOD CHIPS CANNOT CONTAIN ANY GROWTH OR GERMINATION INHIBITORS OR BE PRODUCED FROM RECYCLED MATERIAL. GRAVEL CAN ALSO BE USED.
4. MULCH IS TO BE APPLIED EVENLY AT A RATE OF 2 TONS PER ACRE.
5. MULCH IS TO BE ANCHORED EITHER BY CRIMPING (TUCKING MULCH FIBERS 4 INCHES INTO THE SOIL), USING NETTING (USED ON SMALL AREAS WITH STEEP SLOPES), OR WITH A TACKIFIER.
6. HYDRAULIC MULCHING AND TACKIFIERS ARE NOT TO BE USED IN THE PRESENCE OF FREE SURFACE WATER.

## MAINTENANCE REQUIREMENTS

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL MULCHED AREAS.
2. MULCH IS TO BE REPLACED IMMEDIATELY IN THOSE AREAS IT HAS BEEN REMOVED, AND IF NECESSARY THE AREA SHOULD BE RESEDED.

## RECOMMENDED ANNUAL GRASSES

SPECIES (COMMON NAME)	GROWTH SEASON	SEEDING DATE	POUNDS OF PURE LIVE SEED (PLS) (PLS/ACRE)	PLANTING DEPTH (INCHES)
1. OATS	COOL	MARCH 16 - APRIL 30	35-50	1-2
2. SPRING WHEAT	COOL	MARCH 16 - APRIL 30	25-35	1-2
3. SPRING BARLEY	COOL	MARCH 16 - APRIL 30	25-35	1-2
4. ANNUAL RYEGRASS	COOL	MARCH 16 - JUNE 30	10-15	1/2
5. MILLET	WARM	MAY 16 - JULY 15	3-15	1/2-3/4
6. SUDANGRASS	WARM	MAY 16 - JULY 15	5-10	1/2-3/4
7. SORGHUM	WARM	MAY 16 - JULY 15	5-10	1/2-3/4
8. WINTER WHEAT	COOL	SEPTEMBER 1 - 30	20-35	1-2
9. WINTER BARLEY	COOL	SEPTEMBER 1 - 30	20-35	1-2
10. WINTER RYE	COOL	SEPTEMBER 1 - 30	20-35	1-2
11. TRITICALE	COOL	SEPTEMBER 1 - 30	25-40	1-2

THIS TABLE WAS TAKEN FROM UDFCD FOR RECOMMENDED ANNUAL GRASSES FOR THE DENVER METROPOLITAN AREA. THIS TABLE MAY BE USED UNLESS A SITE-SPECIFIC SEED MIX IS REQUESTED AND APPROVED.

TABLE TS-1

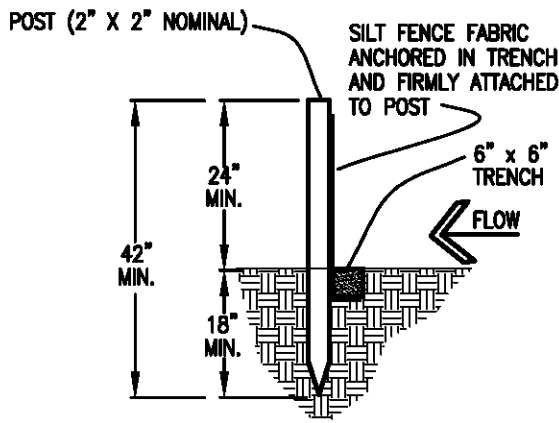
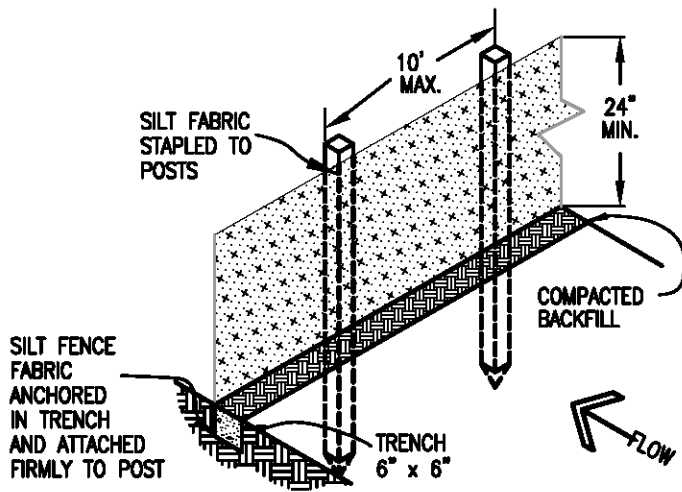
## TEMPORARY SEEDING NOTES

### INSTALLATION REQUIREMENTS

### MAINTENANCE REQUIREMENTS

1. DISTURBED AREAS ARE TO BE SEEDED WITHIN 21 DAYS AFTER CONSTRUCTION ACTIVITY OR GRADING ENDS IF SEASON ALLOWS.
2. IF NECESSARY, SOIL IS TO BE CONDITIONED FOR PLANT GROWTH BY APPLYING TOPSOIL, FERTILIZER, OR LIME.
3. SOIL IS TO BE TILLED IMMEDIATELY PRIOR TO APPLYING SEEDS. COMPACT SOILS ESPECIALLY NEED TO BE LOOSENEED.
4. SEEDBED DEPTH IS TO BE 4 INCHES FOR SLOPES FLATTER THAN 2:1, AND 1 INCH FOR SLOPES STEEPER THAN 2:1.
5. ANNUAL GRASSES LISTED IN TABLE TS-1 ARE TO BE USED FOR TEMPORARY SEEDING. SEED MIXES ARE NOT TO CONTAIN ANY NOXIOUS WEED SEEDS INCLUDING RUSSIAN OR CANADIAN THISTLE, KNAWEED, PURPLE LOOSESTRIPE, EUROPEAN BINDWEED, JOHNSON GRASS, AND LEAFY SPURGE.
6. TABLE TS-1 ALSO PROVIDES REQUIREMENTS FOR SEEDING RATES, SEEDING DATES, AND PLANTING DEPTHS FOR THE APPROVED TYPES OF ANNUAL GRASSES.
7. SEEDING IS TO BE APPLIED USING MECHANICAL TYPE DRILLS EXCEPT WHERE SLOPES ARE STEEP OR ACCESS IS LIMITED THEN HYDRAULIC SEEDING MAY BE USED.
8. ALL SEEDED AREAS ARE TO BE MULCHED (SEE FACTSHEET ON MULCHING).
9. IF HYDRAULIC SEEDING IS USED THEN HYDRAULIC MULCHING SHALL BE DONE SEPARATELY TO AVOID SEEDS BECOMING ENCAPSULATED IN THE MULCH.

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL SEEDED AREAS TO ENSURE GROWTH.
2. AREAS WHERE GROWTH IS NOT OCCURRING QUICKLY OR THE MULCH HAS BEEN REMOVED SHALL BE RE-SEEDED AS SOON AS POSSIBLE AND RE-MULCHED IF NEEDED.
3. SEEDED AREAS ARE NOT TO BE DRIVEN OVER WITH CONSTRUCTION EQUIPMENT OR VEHICLES.



SILT FENCE

## SILT FENCE NOTES

### INSTALLATION REQUIREMENTS

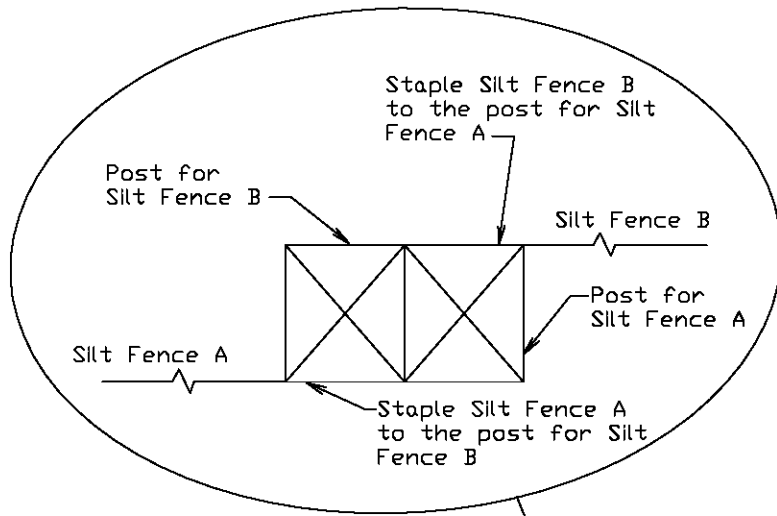
1. SILT FENCES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
2. WHEN JOINTS ARE NECESSARY, SILT FENCE GEOTEXTILE SHALL BE SPLICED TOGETHER ONLY AT SUPPORT POST AND SECURELY SEALED.
3. METAL POSTS SHALL BE "STUDDED TEE" OR "U" TYPE WITH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT. WOOD 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.

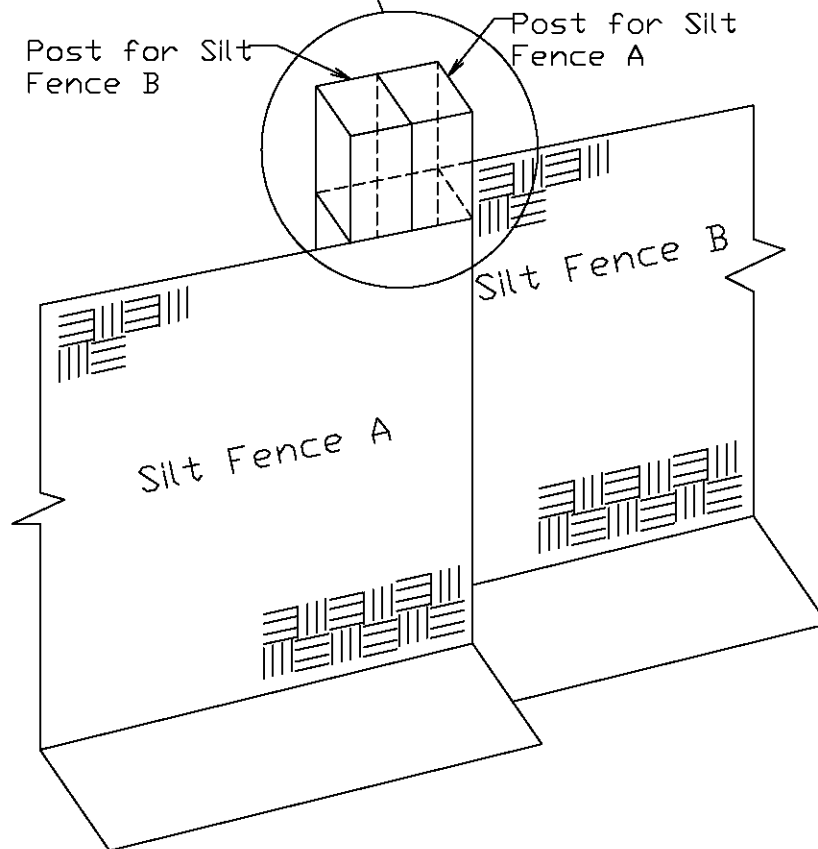
### MAINTENANCE REQUIREMENTS

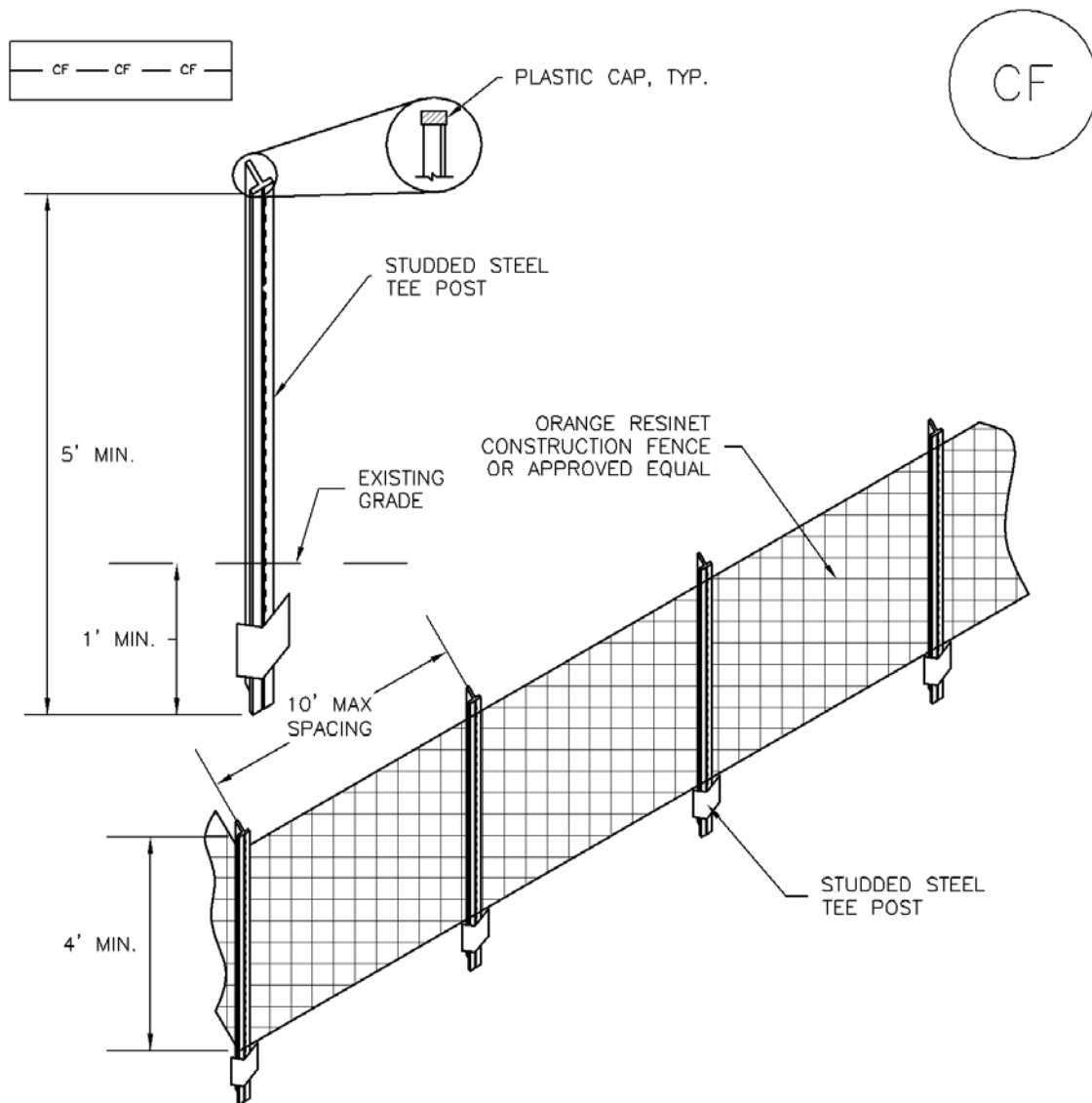
1. CONTRACTOR SHALL INSPECT SILT FENCES IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS OF NO RAINFALL. DAMAGED, COLLAPSED, UNENTRENCHED OR INEFFECTIVE SILT FENCES SHALL BE PROMPTLY REPAIRED OR REPLACED.
2. SEDIMENT SHALL BE REMOVED FROM BEHIND SILT 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"





CF-1. PLASTIC MESH CONSTRUCTION FENCE

CONSTRUCTION FENCE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:  
-LOCATION OF CONSTRUCTION FENCE.
2. CONSTRUCTION FENCE SHOWN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
3. CONSTRUCTION FENCE SHALL BE COMPOSED OF ORANGE, CONTRACTOR-GRADE MATERIAL THAT IS AT LEAST 4' HIGH. METAL POSTS SHOULD HAVE A PLASTIC CAP FOR SAFETY.
4. STUDED STEEL TEE POSTS SHALL BE UTILIZED TO SUPPORT THE CONSTRUCTION FENCE. MAXIMUM SPACING FOR STEEL TEE POSTS SHALL BE 10'.
5. CONSTRUCTION FENCE SHALL BE SECURELY FASTENED TO THE TOP, MIDDLE, AND BOTTOM OF EACH POST.

## CONSTRUCTION FENCE 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. CONSTRUCTION FENCE SHALL BE REPAIRED OR REPLACED WHEN THERE ARE SIGNS OF DAMAGE SUCH AS RIPS OR SAGS. CONSTRUCTION FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
5. WHEN CONSTRUCTION FENCES ARE REMOVED, ALL DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE FENCE SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

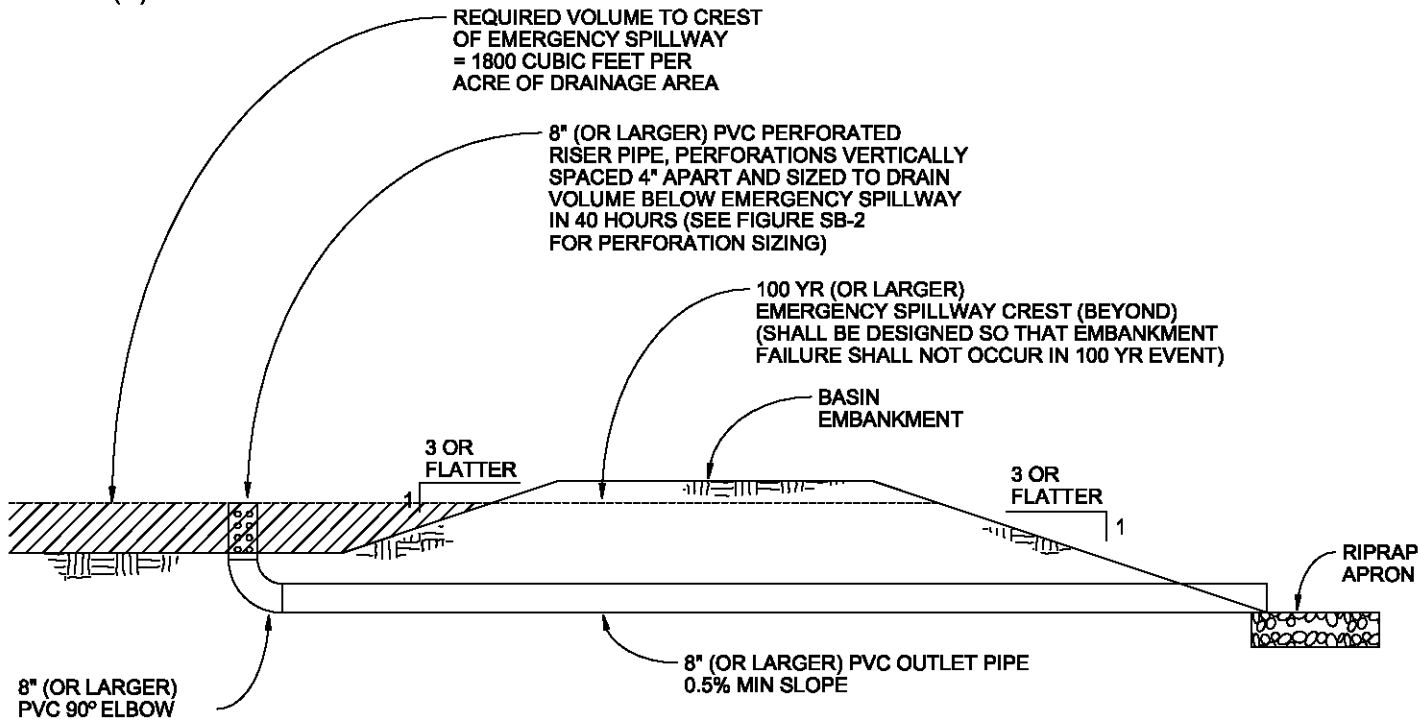
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)



**BASIN GEOMETRY:**

$\frac{\text{LENGTH (L)}}{\text{WIDTH (W)}} \geq 2$



**SEDIMENT BASIN**

NTS

**SEDIMENT BASIN NOTES**

**INSTALLATION REQUIREMENTS**

**MAINTENANCE REQUIREMENTS**

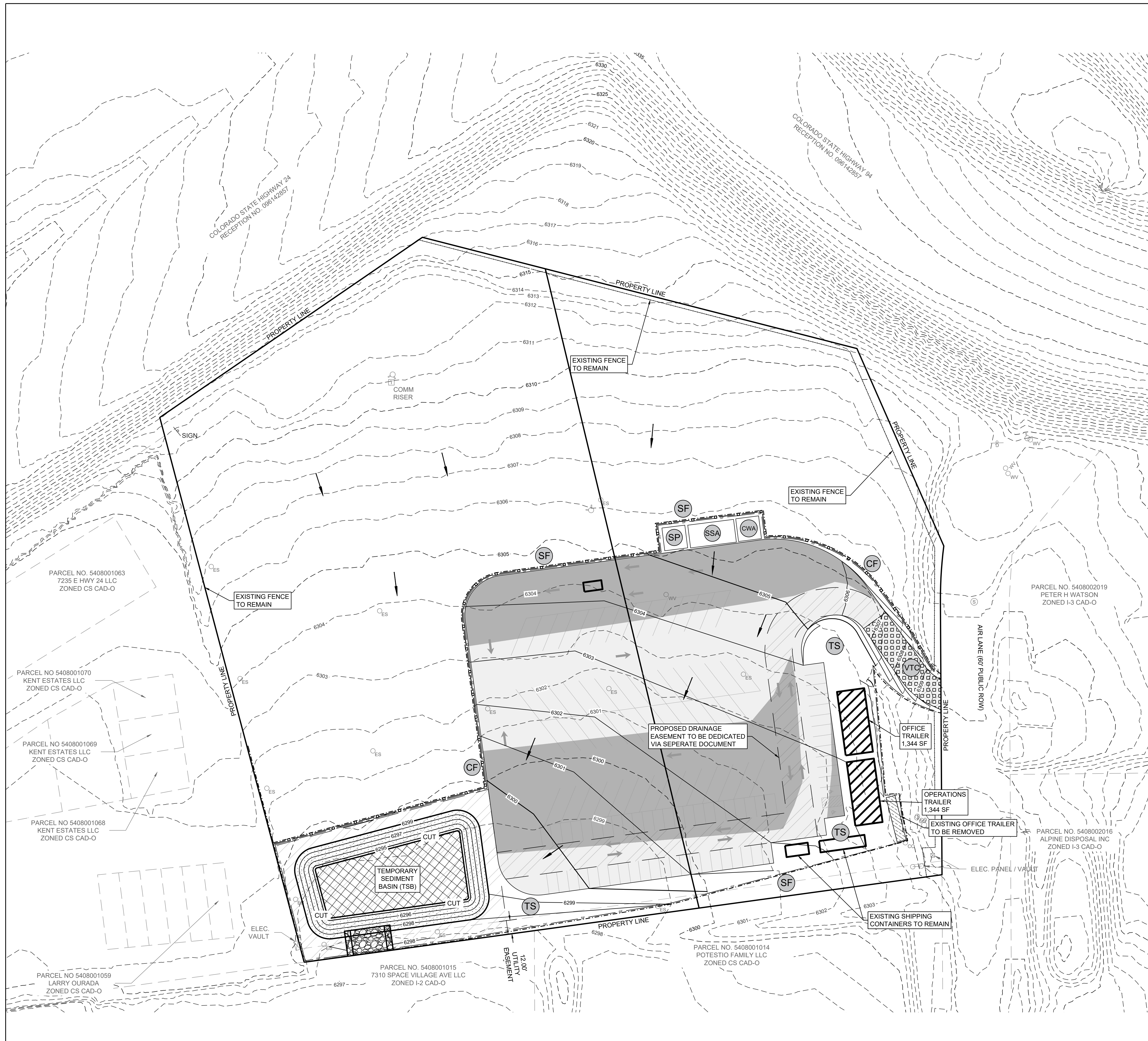
1. SEDIMENT BASINS SHALL BE INSTALLED BEFORE ANY CLEARING AND/OR GRADING IS UNDERTAKEN.
2. THE AREA UNDER WHICH THE EMBANKMENT IS TO BE INSTALLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ALL VEGETATION AND ROOT MAT.
3. THE OUTLET OF THE BASIN SHALL BE DESIGNED TO DRAIN ITS VOLUME IN 40 HOURS.
4. THE OUTLET IS TO BE LOCATED AT THE FURTHEST DISTANCE FROM THE INLET OF THE BASIN. BAFFLES MAY BE NEEDED TO INCREASE THE FLOW LENGTH AND SETTLING TIME.
5. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL WITH A MINIMUM OF 15% PASSING A #200 SIEVE. EXCAVATED SOIL CAN BE USED IF IT MEETS THIS REQUIREMENT.
6. EMBANKMENT IS TO BE COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT ACCORDING TO ASTM D 698.
7. WHEN A BASIN IS INSTALLED NEAR A RESIDENTIAL AREA, FOR SAFETY REASONS, A SIGN SHALL BE POSTED AND THE AREA SECURED WITH A FENCE.

1. CONTRACTOR SHALL INSPECT SEDIMENT BASINS AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS NO RAINFALL.
2. SEDIMENT BASINS SHALL BE CLEANED OUT BEFORE SEDIMENT HAS FILLED HALF THE VOLUME OF THE BASIN.
3. SEDIMENT BASINS SHALL REMAIN OPERATIONAL AND PROPERLY MAINTAINED UNTIL THE SITE AREA IS PERMANENTLY STABILIZED WITH ADEQUATE VEGETATIVE COVER AND/OR OTHER PERMANENT STRUCTURE AS APPROVED BY THE CITY.

# SWMP MAP/EROSION CONTROL PLANS

---





**LEGEND**

---	LIMITS OF DISTURBANCE
CF	CONSTRUCTION FENCE
▨	EXISTING ASPHALT MILLINGS
▩	PROPOSED ASPHALT MILLINGS
▧	PROPOSED OFFICE TRAILER
▧	EXISTING OFFICE TRAILER TO BE REMOVED
VTC	VEHICLE TRACKING CONTROL
▨	PROPOSED SAND FILTER BASIN
▨	SAND FILTER BASIN FILTER AREA
▨	PROPOSED RIPRAP
▨	PROPOSED DRAINAGE EASEMENT
TS	TEMPORARY SEEDING AND MULCHING
PS	PERMANENT SEEDING AND MULCHING
SF	SILT FENCE
CWA	CONCRETE WASHOUT AREA
SSA	STABILIZED STAGING AREA
SP	STOCKPILE PROTECTION
←	FLOW ARROW
---	EXISTING FENCE TO REMAIN
---	EXISTING CONTOURS (1' AND 5')
---	PROPOSED CONTOURS (1' AND 5')

**UTILITY LEGEND**

△	SIGN
+	FIBER OPTIC SIGN
○ <sub>ES</sub>	ELECTRIC SERVICE
⊠	ELECTRIC VAULT / PANEL
⊠ <sub>COMM</sub>	TELEPHONE PEDESTAL
⊙	SANITARY SEWER MANHOLE
⊙ <sub>CD</sub>	SANITARY SEWER CLEANOUT
○ <sub>WV</sub>	WATER VALVE
⊕	FIRE HYDRANT

- GENERAL NOTES:**
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ADJACENT TO THE SITE. THE OMISSION FROM, OR INCLUSION OF, UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NON-EXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES.
  - THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES, BUILDINGS, FENCES, AND ROADWAYS FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE ABOVE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR.
  - GRADING SHALL BE COMPLETED TO A SUBGRADE TOLERANCE OF PLUS OR MINUS 0.2'.
  - CONTRACTOR SHALL OBTAIN COPIES OF THE SOILS REPORT FROM THE GEOTECHNICAL ENGINEER AND THEY SHALL BE KEPT ONSITE DURING ALL EARTHWORK.
  - THE SITE SHALL BE STRIPPED A MINIMUM OF 0.5' BELOW EXISTING GRADE, OR AS RECOMMENDED BY THE GEOTECHNICAL REPORT. ONLY APPLICABLE IN PREVIOUSLY UNDISTURBED AREAS.
  - DUST CONTROL SHALL BE SUPPLIED BY THE GRADING CONTRACTOR THROUGH THE DURATION OF THE PROJECT PER THE COUNTY HEALTH DEPARTMENT SPECIFICATIONS.
  - LOCATION OF STORAGE FOR MAINTENANCE EQUIPMENT AND TEMPORARY DISPOSAL AREAS WILL BE ADDED TO THE GEC/SWMP BY CONTRACTOR.
  - ALL NON-STRUCTURAL CONTROL MEASURES SUCH AS STREET SWEEPING, GOOD HOUSEKEEPING, AND ETC. SHALL BE EMPLOYED BY THE CONTRACTOR AS NECESSARY AND OUTLINED IN THE SWMP.
  - MAXIMUM CUT/FILL SLOPES SHALL NOT EXCEED 4:1.
  - ALL FILL MATERIAL SHALL BE APPROVED BY A LICENSED ENGINEER.
  - ALL STRIPPED TOPSOIL SHALL BE STOCKPILED FOR RE-USE IF POSSIBLE.
  - LOCATION OF PORTABLE TOILET, STABILIZED STAGING AREA, AND SITE (CONTACTS AND PERMITS) AND WASHOUT POSTING TO BE ADDED TO THIS PLAN AND SWMP BY CONTRACTOR.
  - CONSTRUCTION DISTURBANCE LIMITS AND SILT FENCE OFFSET FOR CLARITY, CONTRACTOR TO ENSURE CCM'S ARE PLACED DOWNSTREAM OF DISTURBED AREAS TO PREVENT SEDIMENT FROM LEAVING SITE. NO BATCH PLANTS WILL BE UTILIZED ON SITE.
  - ON-SITE VEGETATION IS NATIVE GRASSES AND WEEDS. THERE IS NO NOTABLE VEGETATION OTHERWISE.
  - CONTRACTOR SHALL PROTECT ALL AREAS OUTSIDE OF THE CONSTRUCTION LIMITS WITH SILT FENCE OR OTHER METHOD TO PROTECT UNDISTURBED AREAS FROM EROSION.
  - THERE ARE NO SPRINGS, STREAMS, WETLANDS AND OTHER SURFACE WATERS, INCLUDING AREAS THAT REQUIRE MAINTENANCE OF PRE-EXISTING VEGETATION WITHIN 50 FEET OF A RECEIVING WATER FOR THIS PROJECT.

**SMH CONSULTANTS**  
 www.smhconsultants.com  
 Civil Engineering • Land Surveying  
 Landscape Architecture  
 Manhattan, KS - HQ  
 (785) 776-0541  
 Dodge City, KS  
 (620) 255-1952  
 Kansas City  
 (913) 444-9615  
 Colorado Springs, CO  
 (719) 465-2145

**APEX WASTE SOLUTIONS**  
 PROGRESS DOCUMENTS - NOT FOR CONSTRUCTION  
 EL PASO COUNTY, CO

**INITIAL-INTERIM GRADING & EROSION CONTROL PLAN**

REVISION	DESCRIPTION
1	(DESCRIPTION)
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	

REVISION DATE: 08/08/2024

NORTH

SCALE: 1" = 40'

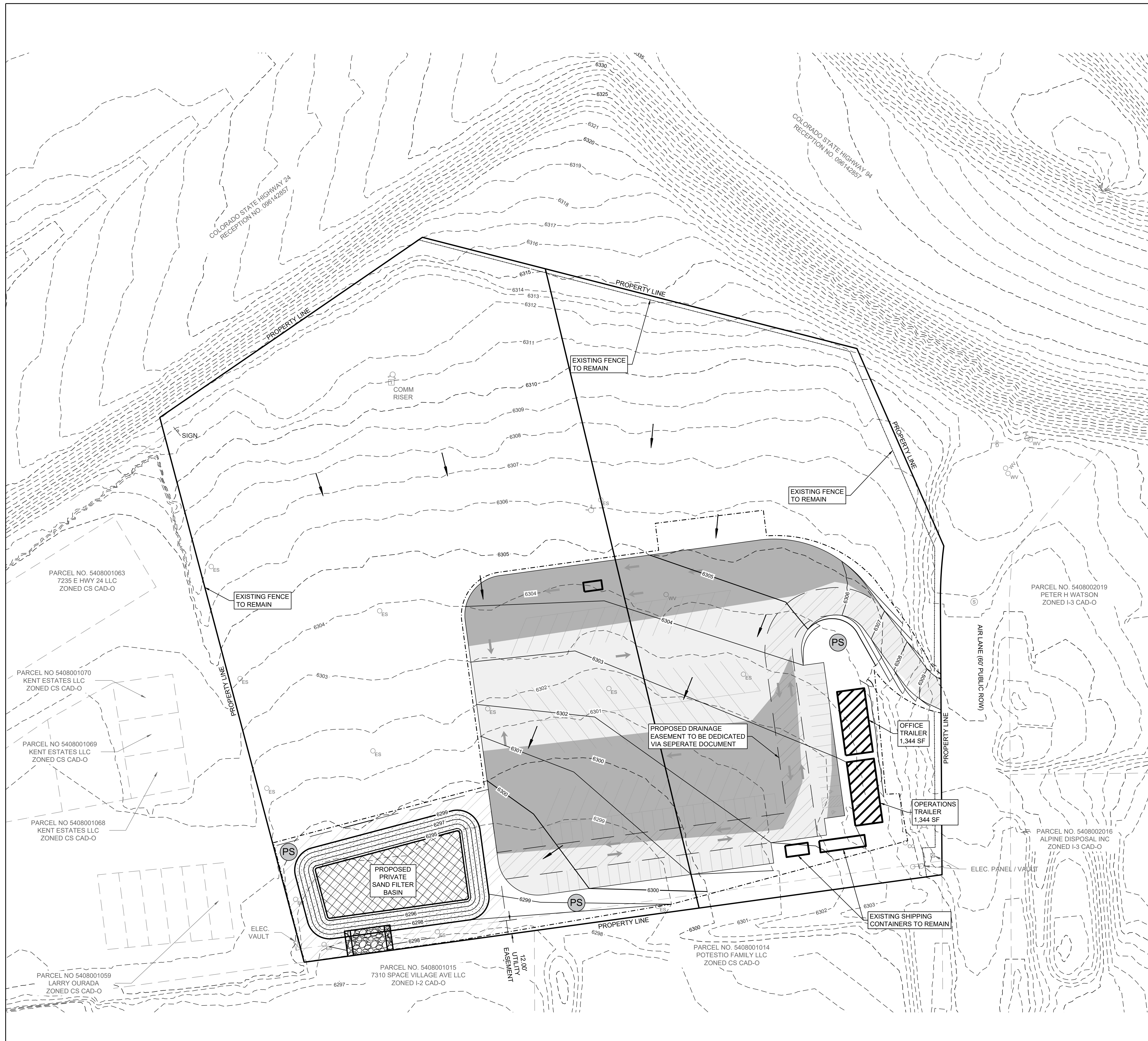
PROJECT #: 2403-0094  
 CHECKED BY: BML  
 DRAWN BY: EDM

DATE: 10/02/2024

SHEET # **G.2**

TOTAL SHEETS 7





**LEGEND**

- LIMITS OF DISTURBANCE
- EXISTING ASPHALT MILLINGS
- PROPOSED ASPHALT MILLINGS
- PROPOSED OFFICE TRAILER
- PROPOSED SAND FILTER BASIN
- SAND FILTER BASIN FILTER AREA
- PROPOSED RIPRAP
- PROPOSED DRAINAGE EASEMENT
- PERMANENT SEEDING AND MULCHING (PS)
- FLOW ARROW
- EXISTING FENCE TO REMAIN
- EXISTING CONTOURS (1' AND 5')
- PROPOSED CONTOURS (1' AND 5')

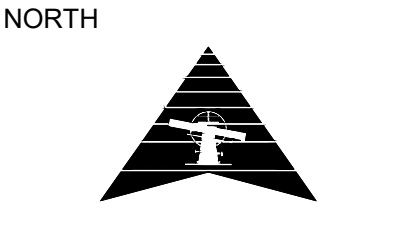
**UTILITY LEGEND**

- SIGN
- FIBER OPTIC SIGN
- ELECTRIC SERVICE
- ELECTRIC VAULT / PANEL
- TELEPHONE PEDESTAL
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- WATER VALVE
- FIRE HYDRANT

**GENERAL NOTES:**

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ADJACENT TO THE SITE. THE OMISSION FROM, OR INCLUSION OF, UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NON-EXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES.
2. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES, BUILDINGS, FENCES, AND ROADWAYS FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE ABOVE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR.
3. GRADING SHALL BE COMPLETED TO A SUBGRADE TOLERANCE OF PLUS OR MINUS 0.2'.
4. CONTRACTOR SHALL OBTAIN COPIES OF THE SOILS REPORT FROM THE GEOTECHNICAL ENGINEER AND THEY SHALL BE KEPT ONSITE DURING ALL EARTHWORK.
5. THE SITE SHALL BE STRIPPED A MINIMUM OF 0.5' BELOW EXISTING GRADE, OR AS RECOMMENDED BY THE GEOTECHNICAL REPORT, ONLY APPLICABLE IN PREVIOUSLY UNDISTURBED AREAS.
6. DUST CONTROL SHALL BE SUPPLIED BY THE GRADING CONTRACTOR THROUGH THE DURATION OF THE PROJECT PER THE COUNTY HEALTH DEPARTMENT SPECIFICATIONS.
7. STOCKPILE LOCATION FOR THIS PROJECT TO BE LOCATED BY CONTRACTOR AND ADDED TO THE SWMP/GEC UPON DETERMINATION.
8. LOCATION OF STORAGE FOR MAINTENANCE EQUIPMENT AND TEMPORARY DISPOSAL AREAS WILL BE ADDED TO THE GEC/SWMP BY CONTRACTOR.
9. ALL NON-STRUCTURAL CONTROL MEASURES SUCH AS STREET SWEEPING, GOOD HOUSEKEEPING, AND ETC. SHALL BE EMPLOYED BY THE CONTRACTOR AS NECESSARY AND OUTLINED IN THE SWMP. MAXIMUM CUT/FILL SLOPES SHALL NOT EXCEED 4:1.
10. ALL FILL MATERIAL SHALL BE APPROVED BY A LICENSED ENGINEER.
11. ALL STRIPPED TOPSOIL SHALL BE STOCKPILED FOR RE-USE IF POSSIBLE.
12. LOCATION OF PORTABLE TOILET, STABILIZED STAGING AREA, AND SITE (CONTACTS AND PERMITS) AND WASHOUT POSTING TO BE ADDED TO THIS PLAN AND SWMP BY CONTRACTOR.
13. CONSTRUCTION DISTURBANCE LIMITS AND SILT FENCE OFFSET FOR CLARITY, CONTRACTOR TO ENSURE CCM'S ARE PLACED DOWNSTREAM OF DISTURBED AREAS TO PREVENT SEDIMENT FROM LEAVING SITE. NO BATCH PLANTS WILL BE UTILIZED ON SITE.
14. ON-SITE VEGETATION IS NATIVE GRASSES AND WEEDS. THERE IS NO NOTABLE VEGETATION OTHERWISE.
15. CONTRACTOR SHALL PROTECT ALL AREAS OUTSIDE OF THE CONSTRUCTION LIMITS WITH SILT FENCE OR OTHER METHOD TO PROTECT UNDISTURBED AREAS FROM EROSION.
16. THERE ARE NO SPRINGS, STREAMS, WETLANDS AND OTHER SURFACE WATERS, INCLUDING AREAS THAT REQUIRE MAINTENANCE OF PRE-EXISTING VEGETATION WITHIN 50 FEET OF A RECEIVING WATER FOR THIS PROJECT.

REVISION	DATE	DESCRIPTION
1	02/02/2024	ISSUED FOR PERMIT



SCALE: 1" = 40'

PROJECT #: 2403-0094  
CHECKED BY: BML  
DRAWN BY: EDM

DATE: 10/02/2024

SHEET # **G.3**

TOTAL SHEETS 7