STORMWATER MANAGEMENT PLAN (SWMP)

Prepared for:

J.R. Filanc Construction Company, Inc.

Project:

Security Water Treatment Plant Building Addition

Prepared by:
CMS Environmental Solutions, LLC
5231 South Quebec Street
Greenwood Village, CO 80111
(303) 593-2107

Location:

4140 Lincoln Plaza Dr.

Unincorporated El Paso County, CO 80911

September 2024

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LIST OF SWMP CONTENTS – REFER TO SW²

SW² is a stormwater management software designed and utilized by CMS Environmental Solutions, LLC to digitally maintain SWMPs and inspection records.

TAB A

NARRATIVE

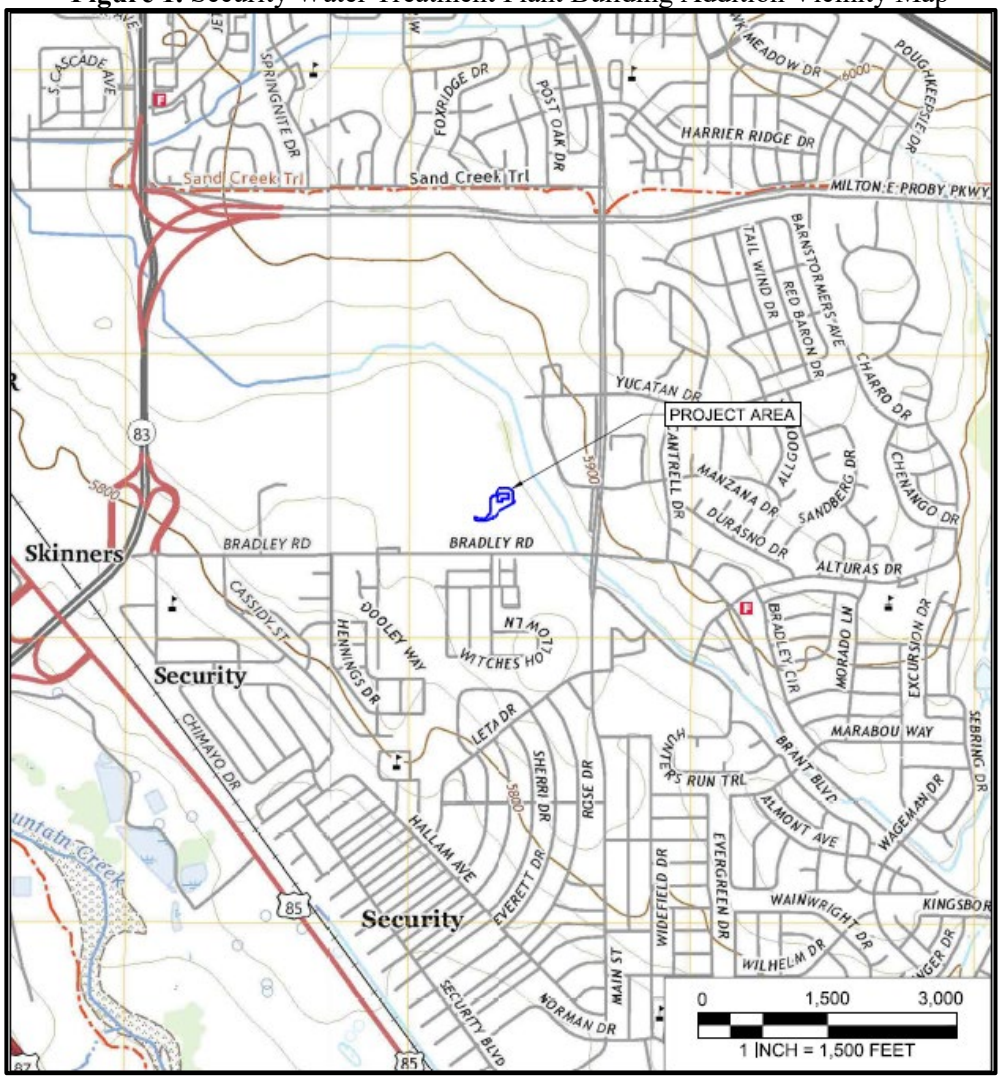
1 INTRODUCTION

1.1 Project Name and Location

Project/Site Name:	Security Water Treatment Plant Building Addition	
Location:	4140 Lincoln Plaza Dr.	
City:	Unincorporated El Paso County	
County:	El Paso County	
Latitude:	39.771831°	Longitude: -104.743136°
Permittee:	J.R. Filanc Construction Company, Inc.	
CDPS Permit #:	COR4-TBD	

Is this project a federal facility? Yes ☐ No ☒
Is this project located on Native American property? Yes ☐ No ☒

Figure 1. Security Water Treatment Plant Building Addition Vicinity Map



1.2 Purpose and Objective of the Stormwater Management Plan

The Colorado Discharge Permit System (CDPS) general permit COR400000 (Permit) requires a stormwater management plan (SWMP) be developed prior to commencement of construction activities. The goal of the SWMP is to identify construction site potential pollutant sources that may contribute pollutants to stormwater, and identify control measures that, when implemented in accordance with good engineering, hydrologic, and pollution control practices, will reduce or eliminate any possible water quality impacts. The Permittee must implement the provisions of the SWMP as written and updated, from commencement of construction activity until final stabilization. A copy of the SWMP must be retained on site or be on site when construction activities are occurring at the site unless the permittee specifies another location and obtains approval from the division. The plan and inspection reports may be prepared, signed, and kept electronically rather than in paper form, if the records are:

I. In a format that can be read in a similar manner as a paper record; and

II. Immediately accessible to the inspector during an inspection to the same extent as a paper copy stored at that site would be.

1.3 Co-Permittees

The Permit requires both the Owner and Operator as defined in the permit to be co-permittees. Both the Owner and Operator (Table 1) will be subject to the same obligations, including implementation of the SWMP. In cases where the duties of the owner and operator are managed by the owner, both signatures may be completed by the owner.

Table 1. Owner and Operator Contact Information

Owner:	Operator:
Roger Sams Project Engineer GMS Consulting Engineers 611 N. Weber St., Ste. 300 Colorado Springs, CO 80903 Phone: (719) 659-4153 Email: rjsams@gmsengr.com	Eric Klopfenstein General Superintendent J.R. Filanc Construction Company, Inc. 455 W. 115th Ave., Ste. 3 Northglenn, CO 80234 Phone: (719) 660-6165 Email: eklopfstein@filanc.com

1.4 Qualified Stormwater Managers and Other Project Contacts

The Permit requires a Qualified Stormwater Manager (QSM) to be designated to be responsible for implementing the SWMP in its entirety and meet the definition of a QSM. A QSM is defined as an individual knowledgeable in the principles and practices of erosion and sediment control and pollution prevention, and with the skills to assess conditions at construction sites that could impact stormwater quality and to assess the effectiveness of stormwater controls implemented to meet the requirements of this permit.

The Permit also requires the stormwater inspector to be a Qualified Stormwater Manager. These roles may be filled by more than one individual, resulting in a Qualified Stormwater Manager team, see Table 2 below:

Table 2. SWMP Qualified Stormwater Managers

(Permittee) Qualified Stormwater Manager:	(Site Contacts) Qualified Stormwater Manager:
Eric Klopfenstein General Superintendent J.R. Filanc Construction Company, Inc. 455 W. 115th Ave., Ste. 3 Northglenn, CO 80234 Phone: (719) 660-6165 Email: eklopfstein@filanc.com	Mario Mendoza Project Engineer J.R. Filanc Construction Company, Inc. 455 W. 115th Ave., Ste. 3 Northglenn, CO 80234 Phone: (602) 725-1834 Email: mario.mendoza@filanc.com

(Stormwater Inspections) Qualified Stormwater Manager:
CMS Environmental Solutions, LLC Environmental Analyst* 5231 South Quebec Street Greenwood Village, CO 80111 Phone: (303) 472-6651 Fax: (303) 923-3416 *Refer to the Inspector Qualifications tab for a complete list of QSMs with CMS.

Table 3. Other Project Contacts

Contact	Area of Responsibility
Developer of SWMP CMS Environmental Solutions, LLC August Horning Staff Scientist 5231 South Quebec Street Greenwood Village, CO 80111 Phone: (720) 672-3071 Fax: (303) 923-3416 Email: ahorning@cmsenviro.com	Develop a SWMP binder to document control measure inspections, correspondence, amendments, training, and other SWMP related items.

Contact	Area of Responsibility
Contractor/Sub-contractor (Erosion and Sediment Controls)	Install, maintain, repair, and replace erosion and sediment controls under the supervision of the Qualified Stormwater Manager.
HAZMAT Emergency Response Contractor Custom Environmental Services 8041 N. I-70 Frontage Rd. Unit 11 Arvada, CO 80002 Emergency Number: 1-800-310-7445 Fax: 303-423-1854	Hazardous materials contractor that is available 24/7 to respond to a significant or major spill. See Spill Prevention and Response Plan in Section 2.
Other:	
Other:	

2 SPILL PREVENTION AND RESPONSE PLAN, OTHER CDPS PERMITS, & MATERIALS HANDLING

2.1 Spill Prevention and Response Plan

The Permittee will take all measures necessary to prevent spills that could impact stormwater. This includes, but is not limited to, the proper storage and handling of materials and chemicals. Bulk storage, individual 55 gallons or greater, for petroleum products and other liquid chemicals will have secondary containment, or equivalent protection, in order to contain spills and to prevent spilled material from entering state waters. See the full Spill Prevention and Response Plan section on SW^2 for further details. Additional spill related contacts are listed below:

Table 4. Spill and Emergency Contact Information

Emergency Local Fire, Police or Ambulance	**911**
EPA National Response Center	**1-800-424-8802**
Colorado Department of Public Health and Environment	**1-877-518-5608**
Colorado Emergency Planning Committee	**303-273-1622**
El Paso County – Stormwater Quality Hotline	**719-520-6460**

2.2 Other CDPS Permits

The SWMP must list the applicable CDPS permits associated with the permitted site and the activities occurring on the permitted site (e.g. a CDPS Dewatering Permit). Per the Fact Sheet, this also includes activities under the Low Risk Discharge Guidance policy and industrial stormwater permits (batch plants, sand & gravel stormwater permits, etc.). The list below summarizes the known permits at the site. Additional space is provided if other permits are obtained during the project:

Table 5. List of Other CDPS Permits

Permit	Permit No. (If Any)	Activities

2.3 Materials Handling

The SWMP must describe and locate all control measures implemented 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 listed in Table 6 below:

Table 6. Materials Handling Control Measures

Material	Control Measure Description
Exposed storage of building material	See Potential Pollutants Table 7, No. 6
Paints and solvents	See Potential Pollutants Table 7, No. 17
Landscape materials	See Potential Pollutants Table 7, No. 15
Fertilizers or chemicals	See Potential Pollutants Table 7, Nos. 6, 9, 15-17
Sanitary waste material	See Potential Pollutants Table 7, No.12
Trash	See Potential Pollutants Table 7, No. 12
Equipment maintenance	See Potential Pollutants Table 7, Nos. 7 and 9
Fueling procedures	See Potential Pollutants Table 7, No. 18

3 POTENTIAL POLLUTANT SOURCES

The SWMP must list all potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges associated with construction activity from the site.

This plan must include the following pollutant sources as these pollutants relate to every construction site:

(a) Disturbed and stored soils;
(b) Vehicle tracking of sediments;
(c) On-site waste management practices (waste piles, liquid wastes, dumpsters);

This plan may include, but is not limited to, the following pollutant sources:

(a) Management of contaminated soils (contaminated soils may also occur from onsite spills or leaks), if known to be present, or if contaminated soils are found during construction;
(b) Loading and unloading operations;
(c) Outdoor storage activities (erodible building materials, fertilizers, chemicals, etc.);
(d) Vehicle and equipment maintenance and fueling;
(e) Significant dust or particulate generating processes (e.g., saw cutting material, including dust);
(f) Routine maintenance activities involving fertilizers, pesticides, herbicides, detergents, fuels, solvents, oils, etc.;
(g) Concrete/masonry truck/equipment washing, including washing of the concrete truck chute and associated fixtures and equipment;
(h) Dedicated asphalt, concrete batch plants and masonry mixing stations;
(i) Non-industrial waste sources such as worker trash and portable toilets; and
(j) Reclaimed water approved for use in construction dust suppression.

Table 7. Potential Pollutants Sources and Planned Control Measures

Potential Pollutant Sources	Project Potential	Associated Activities	Planned Control Measures
1. All disturbed and stored soils	Yes	Land development activities, foundation excavation, backfill, stockpile management, building construction, final stabilization	Perimeter controls, sediment barriers such as silt fence, erosion control blanket, vehicle tracking control measures, inlet protections, phasing, training all workers, and street sweeping. Note: control measures must be implemented downgradient of disturbed and stored soils prior to disturbance.
2. Vehicle tracking of sediments	Yes	Points of ingress and egress	Practices must be implemented for all areas of potential vehicle tracking. Vehicle tracking controls must include a structural control measure (e.g. tracking pad or wash rack) and may include a non-structural control measure (e.g. sweeping or restricting vehicle traffic to paved areas). Additional measure may include graveled parking areas, requiring that vehicles stay on paved areas on site, and contractor education. Tracking control measures will be maintained and monitored regularly for effectiveness. Street sweeping as needed.
3. On-site waste management practices (waste piles, liquid wastes, dumpsters, etc.)	Yes	Building construction, final stabilization	Trash shall be emptied prior to overflow, and all liquid wastes will either be hauled off site and properly disposed of, if materials are on site, they must be stored in a manner where a release of those wastes to stormwater is not likely to occur.
4. Management of contaminated soils (contaminated soils may also occur from onsite spills or leaks), if known to be present, or if contaminated soils are found during construction	Low	**No known contaminated soils exist on this site**	If contaminated soils are encountered work relating to the contamination must stop and a Qualified Stormwater Manager will be notified. Soils should be properly stored in a 55-gallon drum and disposed of. Refer to the Spill Prevention and Response plan. CMS should also be notified to determine if activities can continue or if further site analysis is required.

Potential Pollutant Sources	Project Potential	Associated Activities	Planned Control Measures
5. Loading and unloading operations	Yes	Delivery of materials	It is recommended that when material delivery or loading/unloading occurs, equipment tires do not come in contact with soil or when soil is dry utilize an access point and do not track soil onto streets. Otherwise access through a stabilized construction entrance, parking area, or other control measure as conditions require. If access does occur while wet and mud is tracked onto the roadway, it must be cleaned up immediately.
6. Outdoor storage activities (erodible building materials, fertilizers, chemicals, etc.)	Yes	Delivery of materials, staging	Storage area. Implement perimeter controls and good housekeeping. Also see Nos. 15-17 below.
7. Vehicle and equipment maintenance and fueling	Yes	Off-site fueling shall be conducted whenever it is practical. Some equipment may be fueled on site.	Fueling operations shall be conducted by qualified personnel who are trained in fueling procedures, including the use of drip pans and proper spill cleanup and reporting procedures.
8. Significant dust or particulate generating processes (e.g. saw cutting material, including dust)	Yes	Soil moving activities	Moisture condition soil and/or cease soil disturbing operations during high winds. During land development another option is to slow down scraper or construction traffic speeds to reduce dust generation.
9. Routine maintenance activities involving fertilizers, pesticides, detergents, fuels, solvents, oils, etc.	Yes	Vehicle use and storage, foundation forms, vertical construction, final stabilization	All activities will be conducted by personnel trained in good housekeeping, use of on-site control measures, perimeter controls, and spill response and prevention.
10. Concrete/masonry truck/equipment washing, including washing of the concrete truck chute and associated fixtures and equipment. Mortar, or portable mortar mixers.	Yes	Curb and gutter, inlet construction, foundation construction, flatwork, and brick installation	Concrete, or masonry washout area (see Table 9), and secondary containment (i.e. earthen or synthetic berm) for mortar mixers.

Potential Pollutant Sources	Project Potential	Associated Activities	Planned Control Measures
11. Dedicated asphalt, concrete batch plants, and masonry mixing stations	No	Not anticipated for this project	Not applicable for this site at the time of the SWMP. If such activities are added, then the SWMP shall be amended.
12. Non-industrial waste sources such as worker trash, portable toilets	Yes	All activities	Dumpsters will be provided on site. A licensed company will be contracted to empty the dumpsters, as needed. Portable sanitary facilities will be provided on site. A licensed company will be hired to maintain and clean the units, inspect for any deficiencies, and keep the units in good working order.
13. Reclaimed water approved for use in construction dust suppression	Yes	Soil moving activities, Land development activities, foundation excavation, backfill, stockpile management, building construction, final stabilization	Applied in a manner that will not allow reclaimed water used for dust suppression to leave the site or enter a state water.
14. Other areas or procedures where potential spills can occur	No	None identified at this time	Not applicable for this site at the time of the SWMP. If such activities are added, then the SWMP shall be amended.
15. Fertilizers, pesticides, herbicides, soil amendments, and related landscape materials	Yes	Final stabilization	These materials will typically be in use on site and stored off site. If stored on site, they will be either covered or have secondary containment provided. Trades will remove and properly dispose of all unused products and wastes off site.
16. Glues, adhesives, caulks, and related products	Yes	Utility installation, building construction, final stabilization	These materials will typically be in use on site and stored off site. If stored on site, they will be either covered or have secondary containment provided. Trades will remove and properly dispose of all unused products and wastes off site.
17. Paint, stains, solvents, and related products	Yes	Utility installation, building construction, final stabilization	These materials will typically be in use on site and stored off site. If stored on site, they will be either covered or have secondary containment provided. Trades will remove and properly dispose of all unused products and wastes off site.

Potential Pollutant Sources	Project Potential	Associated Activities	Planned Control Measures
18. Petroleum products: fuels, oils, grease, form oil, and other hydrocarbons	Yes	During all construction activities	These products must be stored with individual trade vehicles and use of these products is to be used by only those individuals who are trained in spill response or are certified mechanics. Any waste or byproducts shall be hauled off site and properly disposed of.
19. Stockpile management	Yes	During land development, over excavation, and foundation installation	Stockpiles must be behind adequate control measures to prevent materials from migrating off site and into the storm sewer system. For temporary stockpiles on the interior portion of a construction site, where other downgradient controls, including perimeter controls are in place, stockpile perimeter controls may not be required.

For specific locations see the Site Map section on SW^2 for most current data.

4 IMPLEMENTATION OF CONTROL MEASURES USED TO MEET EFFLUENT LIMITATIONS

The permittee must implement control measures to minimize the discharge of pollutants from all potential pollutant sources at the site which, if applicable, includes run-on. Control measures used to meet effluent limitations must be installed prior to commencement of construction activities and prior to each phase of construction that introduces new potential pollutant sources. The SWMP must include design specifications that contain information on the implementation of all the structural and nonstructural control measures in use on the site in accordance with good engineering, hydrologic, and pollution control practices; including as applicable drawings, dimensions, installation information, materials, implementation processes, control measure-specific inspection expectations, and maintenance requirements.

If control measures are being used that are outside of the permitted area, then a use agreement between the two parties must be made, ensuring that control measures are being properly designed, installed, inspected, and maintained.

4.1 Control Measures Located Outside Permitted Area

Are there any control measures located outside of the permit boundary being used by this project that are not under control of this permittee? Yes ☐ No ☒

If yes, the SWMP must include a documented use agreement between the permittee and the owner or operator of any control measures located outside of the permitted area that are utilized by the permittee's construction site for compliance with this permit, but are not under direct control of the permittee. The permittee is responsible for ensuring that all control measures located outside of their permitted area, that are being utilized by the permittee's construction site, are properly maintained and in compliance with all terms and conditions of the permit. The SWMP must include all information required of and relevant to any such control measures located outside the permitted area, including location, installation specifications, design specifications, and maintenance requirements.

4.2 Control Measures for Erosion and Sediment Control

The permittee must implement structural and/or nonstructural control measures that effectively minimize erosion, sediment transport, and the release of other pollutants related to construction activity to the maximum extent practicable.

The Site Maps (Section 6) show the locations of all structural and nonstructural control measures. The Control Measure Details section on SW^2 includes the specifications, implementation, and maintenance requirements for each control measure. Control measures will be evaluated, reviewed, and revised on a regular basis in order to maintain compliance and maximize site efficiency. All changes to control measures, including installation and removal, are reflected in the SWMP and documented on the active Site Map.

Part I.B.1.a.i. of the Permit outlines specific control measures requirements which are summarized in Tables 8 and 9 below:

Table 8. Permit-Specific Control Measure Requirements

Requirement	Planned Control Measures
Part I.B.1.a.i.(a). Vehicle tracking controls must be implemented to minimize vehicle tracking of sediment from disturbed areas. Vehicle tracking controls must include a structural measure (e.g. tracking pad or wash rack) and may include a non-structural control measure (e.g. sweeping or restricting vehicle traffic to paved areas).	Vehicle tracking control measures are addressed in Table 7, in Section 3 of the SWMP and shown on the Site Map. Also reference the Control Measure Details section on SW[2].
Part I.B.1.a.i.(b). Stormwater runoff from all disturbed areas must utilize or flow to one or more control measures to minimize sediment in the discharge. This may be accomplished through filtering, settling, or straining. The control measure must be selected, designed, installed, and adequately sized in accordance with good engineering, hydrologic, and pollution control practices for the intended application. The control measure(s) must contain or filter flows in order to prevent the bypass of flows without treatment and must be appropriate for stormwater runoff from disturbed areas and for the expected flow rate, duration, and flow conditions (i.e. sheet or concentrated flow).	The control measures outlined and designed in the Security Water District and El Paso County approved grading, erosion, and sediment control (GESC) plans by GMS, Inc. and updated Site Maps attached to this SWMP consist of one or more control measures that treat flows to minimize sediment in the discharge. Also reference the current Site Map and associated Control Measure Details sections on SW[2].
Part I.B.1.a.i.(c). Selection of control measures should prioritize the use of control measures that minimize the potential for erosion (i.e. covering materials). Selection should also prioritize phasing construction activities to minimize the amount of soil disturbance at any point in time throughout the duration of construction.	The approved GESC plan utilizes measures to minimize the potential for erosion and incorporates phasing to minimize the amount of soil disturbed at any point in time to the maximum extent practicable.
Part I.B.1.a.i.(d). Outlets that withdraw water from or near the surface shall be installed when discharging from basins and impoundments, unless infeasible.	The planned permanent detention pond located in the southwestern corner of the site which discharges directly northwest to existing Security Water District Little Johnson Reservoir will be used as a temporary sediment basin in the initial and interim phases of this plan and has outlets that discharge at or near the surface and conform to El Paso County BMP detail requirements.

Requirement	Planned Control Measures
Part I.B.1.a.i.(e). Maintain pre-existing vegetation for areas within 50 horizontal feet of receiving waters as defined by this permit, unless infeasible. In addition to maintaining 50 horizontal feet of pre-existing vegetation upgradient of a receiving water (unless infeasible), the permittee must install control measures upgradient of the vegetative buffer that meets the requirements of this section.	The project does not have receiving waters or areas within 50 horizontal feet of a receiving water within the project boundary.
Part I.B.1.a.i.(f). Soil compaction must be minimized for areas where infiltration control measures will occur or where final stabilization will be achieved through vegetative cover. If compaction does occur in areas where final stabilization will be achieved through vegetative cover, then decompaction of the soil must be completed prior to planting.	Soil compaction may be minimized by limiting points of ingress and egress within the project. Typical and unavoidable equipment wheels or tracks in contact with soil throughout the site is not considered soil compaction for purposes of this definition**.** If compaction does occur in areas where final stabilization will be achieved through vegetative cover, then decompaction of the soil must be completed prior to planting. Compaction efforts shall be applied in areas deemed necessary by the soils engineer, public works, or building division.
Part I.B.1.a.i.(g). Unless infeasible, topsoil shall be preserved for those areas of a site that will utilize vegetative final stabilization**.** Preserved topsoil can be left in place or stockpiled.	Preserve topsoil for those areas of a site that will utilize vegetative final stabilization, unless infeasible. A common example includes tracts that are to be revegetated. Areas of stockpiled topsoil will be noted on the active Site Map, or if preservation is infeasible, the reasons will be added to the SWMP. Final stabilization for vertical construction will utilize landscaping, sod, and/or hardscaping therefore preserving topsoil does not apply to vertical construction.
Part I.B.1.a.i.(h). Minimize the amount of soil exposed during construction activity, including the disturbance of steep slopes.	The Permit requires minimizing the amount of soil exposed during construction. Phasing is implemented on this project that minimizes disturbance to the extent practicable. Steep slopes are defined as 3:1 or greater where no other definition exists.

Requirement	Planned Control Measures
Part I.B.1.a.i.(i). Diversion control measures used for clean water diversions must minimize soil transport and erosion within the entire diversion, minimize erosion during discharge, and minimize run-on into the diversion. The permittee must minimize the discharge of pollutants throughout the installation, implementation, and removal of the diversion. Diversions must meet one or more of the following conditions: (1) Lined or piped structures that result in no erosion for anticipated flow conditions. (2) Diversion channels, berms, and coffer dams must be lined or composed of a material that minimizes potential for soil loss in the entire wetted perimeter during anticipated flow conditions (e.g. vegetated swale, non-erosive soil substrate). The entire length of the diversion channel must be designed with all of the following considerations: maximum flow velocity for the type of material(s) exposed to the anticipated flows to ensure that the calculated maximum shear stress of flows in the channel is not expected to result in physical damage to the channel or liner and result in discharge of pollutants. Additionally, the conditions relied on to minimize soil loss must be maintained for the projected life of the diversion (i.e. a vegetated swale must be limited to a period of time that ensures vegetative growth, minimizes erosion, and maintains stable conditions). (3) An alternative diversion criteria, approved by the division prior to implementation. The diversion method must be designed to minimize the discharge of pollutants and to prevent the potential for pollution or degradation to state waters as a result of the diverted flow through the diversion structure. In addition, the alternative diversion method must minimize the discharge of pollutants throughout the installation, implementation, and removal of the diversion.	There are no anticipated diversions on this site.

Requirement	Planned Control Measures
Part I.B.1.a.i.(j). Minimize Dust. On areas of exposed soil, minimize dust through the appropriate application of water or other dust suppression techniques. Water application must be conducted in a manner to prevent discharge offsite unless authorized by a separate CDPS or NPDES permit	Dust suppression waters or other dust suppression techniques will be applied in an appropriate manner that will not allow water to leave the site or enter a state water. Also reference the Control Measure Details section.
Part I.B.1.a.i.(k). Control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points	Upgradient straw wattles, inlet protections and a planned permanent detention pond will be installed at discharge locations, both within the project boundary and ultimate discharge points leaving the site, during land development activities throughout vertical completion/landscaping. J. R. Filanc Construction Company, Inc. will be responsible for maintaining upgradient control measures and will inspect and clean/clear as necessary to ensure proper function. The discharge locations will be inspected and cleaned/cleared as necessary to ensure proper functionality.

4.3 Practices for Other Common Pollutants

Table 9. Other Common Pollutants and Control Measures

Requirement	Control Measure Description
Part I.B.1.a.ii.(a). Bulk storage, individual 55 gallons or greater, for petroleum products and other liquid chemicals must have secondary containment, or equivalent protection, in order to contain spills and to prevent spilled material from entering state waters.	During the land development phase of construction, bulk storage of materials are located in the staging area noted on the Site Map. During the vertical phase of construction, bulk storage of materials greater than 55 gallons is not anticipated. Typically, if 55 gallons of material such as concrete curing agent is observed it would be an in-use product and is not to be stored on site. If materials are stored on site, then adequate secondary containment will be utilized and noted on the Site Map.
Part I.B.1.a.ii.(b). Spills and leaks must be minimized. Upon identification, spills and leaks must immediately be contained and mitigated per the spill prevention and response plan, as applicable (i.e. oil, grease, fluids associated with vehicle and equipment maintenance, toxic chemicals, hazardous substances, etc.).	Recommended onsite spill kit to clear onsite spills immediately. If no spill kit is available onsite, immediately clean/remove using appropriate available materials and dispose properly.
Part I.B.1.a.ii.(c). Control measures designed for concrete washout waste, masonry operations, stucco waste, vehicle/equipment washing, and external building washdown must be implemented. This includes washout waste discharged to the ground as authorized under this permit and washout waste from concrete trucks and masonry operations contained on site. The permittee must ensure the washing activities do not contribute pollutants to stormwater runoff, or receiving waters in accordance Part I.A.1.b.ii. Discharges that may reach groundwater must flow through soil that has buffering capacity prior to reaching groundwater, as necessary to meet the effluent limits in this permit, including Part I.B.3.a. The concrete or masonry washout location (including vehicle/equipment and external building washdown water, if applicable) shall not be located in an area where shallow groundwater may be present and would result in buffering capacity not being adequate, such as near natural drainages, springs,	Concrete or masonry washout waste is controlled by use of a concrete washout area (CWA). The CWA is not located near shallow groundwater, drainages, springs, or wetlands. Soil conditions beneath the CWA are expected to have adequate buffering capacity to prevent any impact to groundwater. Concrete, or masonry waste may be temporarily stored on site, prior to being removed, if it does not have the potential to discharge off site in stormwater. Concrete or masonry waste cannot be disposed of on site. While concrete spills may accidentally be discharged onto the ground during construction, it must be cleaned up or contained by the end of the day, or prior to a storm event – whichever is first. Any materials must be cleaned up prior to rough grading or fine grading activities.

Requirement	Control Measure Description
or wetlands. This permit authorizes discharges to the ground of concrete washout waste.	See the CWA Detail in the Control Measure Details section on SW[2].
Part I.B.1.a.ii.(d). In the event that water remains onsite and contains pollutants either from firefighting activities or pickup from the site (i.e. in a gutter, sediment basin, etc.) after active emergency response is complete, the permittee must ensure the remaining water containing pollutants is properly removed and disposed of in order to minimize pollutants from discharging from the site, unless infeasible.	Once site is safe to enter, remove contaminated water and properly dispose of offsite. If contaminants remain, contact certified remediation specialists to properly remove and dispose of remaining polluted waters.
Part I.B.1.a.ii.(e). Minimize the exposure of fertilizers, pesticides, and herbicides to stormwater during storage. Store and apply fertilizers, pesticides, and herbicides per manufacturer's directions	When not in use, store per manufacturer's directions in a manner protected from precipitation events.
Part I.B.1.a.ii.(f). For washing applicators and containers used for paint, form release oils, curing compounds, or other similar construction materials, the wash water must be directed into a leak-proof container or leak-proof and lined pit designed so no discharges to groundwater occur or overflows occur due to inadequate sizing or precipitation. Liquid and hardened wastes must be appropriately disposed.	When washing applicators and containers used for paint, form release oils, curing compounds, or other similar construction materials, the wash water will be directed into a leak-proof container or leak-proof and lined pit designed so no discharges to groundwater or overflows will occur due to inadequate sizing or precipitation. Liquid and hardened wastes will be disposed of appropriately.

4.4 Temporary Stabilization Requirements

Temporary stabilization must be implemented for earth disturbing activities on any portion of the site where ground disturbing construction activity has permanently ceased, or temporarily ceased for more than 14 calendar days. Temporary stabilization methods may include, but are not limited to, tarps, soil tackifier, and hydroseed. The permittee may exceed the 14-day schedule when either the function of the specific area of the site requires it to remain disturbed, or physical characteristics of the terrain and climate prevent stabilization.

The SWMP must document the constraints necessitating an alternative schedule, provide the alternate stabilization schedule, and identify all locations where the alternative schedule is applicable on the Site Map.

Minimum inspection frequency and scope, as directed in Part I.D of the permit, must be followed for temporary stabilized areas.

Other temporary stabilization measures include, but are not limited to, terracing, ripping/grooving (surface roughening), crimp mulching, or other similar practices.

For sites that are conducting land development, it should be understood that a section of disturbed area will remain active until final grades are achieved, at which time final stabilization should be implemented. If final stabilization cannot be implemented within 14 days, then temporary stabilization shall be implemented. If the site is to temporarily cease overall site activities for any reason other than the Winter Conditions Inspections Exclusion for 14 days or more, then temporary stabilization efforts must be implemented, even if final grades have not been achieved.

4.5 Final Stabilization Requirements

Final stabilization must be implemented for all construction sites covered under this permit. Final stabilization is reached when (1), (2), and (3) below are complete:

(1) All construction activities are complete.

(2) Permanent stabilization methods are complete. Permanent stabilization methods include, but are not limited to, permanent pavement or concrete, hardscape, xeriscape, stabilized driving surfaces, vegetative cover, or equivalent permanent alternative stabilization methods. The division may approve alternative final stabilization criteria for specific operations. Vegetative cover must meet the following criteria:

   a. Evenly distributed perennial vegetation, which may include trees and shrubs;
   b. Vegetation coverage, at a minimum, equal to 70 percent of what would have been provided by native vegetation in a local, undisturbed area or adequate reference site; and
   c. If Applicable, adherence to stabilization requirements does not negate the permittee's requirement to comply with the local jurisdiction's plant species requirements.

Final stabilization must be designed and installed as a permanent feature. All control measures must be removed from the construction site, except when the control measure specifications allow the control measure to be left in place (i.e. biodegradable control measures, permanent sedimentation basin, etc.). Final stabilization measures for obtaining a vegetative cover or alternative stabilization methods include, but are not limited to, the following as appropriate:

(1) Seed mix selection and application methods;
(2) Soil preparation and amendments;
(3) Soil stabilization methods (e.g. crimped straw, hydro mulch, rolled erosion control products);
(4) Appropriate sediment control measures as needed until final stabilization is achieved;
(5) Permanent pavement, hardscape, xeriscape, stabilized driving surfaces;
(6) Conversion of construction site back to prior cropland use. The permittee is not required to plant the crop prior to termination.
(7) Other alternative stabilization practices as applicable.

5 SITE DESCRIPTION

5.1 Nature of Construction Activity

J.R. Filanc Construction Company, Inc. plans to perform land development activities and vertical operations for Security Water Treatment Plan Building Addition. Work will consist of land development, installing utilities, installing curb and gutter, paving, installing permanent water quality facilities, and completing vertical construction. Soil disturbing activities include clearing, grubbing, grading, utility work, road construction, foundation excavation and stockpiling, foundation backfill and compaction, and commercial pad building activities and staging, until final stabilization (landscaping) is complete.

Construction Activity:

☐ Single Family Residential ☐ Multi-family residential

☒ Land Development ☒ Vertical Construction

☒ Commercial ☐ Industrial ☒ Road Construction ☒ Utility (Linear)

☐ Other _____

Is this an Emergency Related Project? Yes ☐ No ☒

If yes, document the cause of the public emergency and information sustaining its occurrence.

5.2 Schedule and Sequence of Major Construction Activities and the Planned Implementation of Control Measures for Each Phase

Estimated Project Start Date: 09/2025 Estimated Project Completion Date: 08/2026

The following table describes the sequencing of the project as well as the planned control measures for each phase. Specific locations of control measures are shown on the Site Maps (Section 6). Potential Pollutants for the project are described in Section 3, and installation and maintenance specifications for each control measure are described in Section 4 and the Control Measure Details section on SW^2. It is always important to plan accordingly and minimize disturbed areas to the maximum extent practicable through proper planning.

Table 10. Commercial Land and Vertical Development Sequencing

Phase - Construction Activity and Planned Control Measures	Anticipated Start Date	Anticipated End Date
Pre-Construction - Obtain permits - Pre-construction meeting or equivalent	Permit Issued: Precon: Est. Start Work: 09/2025	10/2025

Phase - Construction Activity and Planned Control Measures	Anticipated Start Date	Anticipated End Date
Phase I – Mobilize Equipment, Install Initial Control Measures, Demo, Clearing & Grubbing - Install vehicle tracking control measures - Install perimeter sediment controls - Install staging areas, dumpsters and portable sanitary facilities - Install inlet protections on existing storm inlets - Install temporary sediment basins - Maintain pre-existing vegetation wherever possible - Preserve topsoil unless infeasible	10/2025	01/2026
Phase II – Grading, Utilities, Infrastructure, Paving, Permanent Water Quality Facilities - Maintain sediment controls throughout site - Maintain existing inlet protections - Implement stockpile management - Surface roughening - Dust control - Concrete washout area must be implemented prior to use of concrete or masonry materials - Once new storm inlets are installed, install inlet protection - Street sweeping - Implement good housekeeping - Install back of curb controls after paving - Implement stabilization measures as appropriate	11/2025	03/2026
Phase III – Vertical Construction **A. - Install Initial Control Measures, Excavation, Foundation Installation and Backfill** - Maintain or install back of curb controls - Install or maintain inlet protections - Install dumpsters and portable sanitary facilities - Implement vehicle tracking control measures - Locate and protect stockpiles as needed - Install or maintain concrete washout area for project - Maintain perimeter controls and inlet protections - Street sweeping - Implement good housekeeping, maintain dumpsters and portable sanitary **B. - Frame, Roof, Exterior Siding and Masonry, Interior Finishes** - Maintain sediment controls as appropriate - Maintain inlet protections - Implement material handling control measures - Use secondary containment for mixing operations. Berms to be used for masonry mixing operations. Tarps, trays, “kiddie pools”, or equivalent to be used when mixing liquids (ex: drywall, paint, stains, etc.) - Street sweeping - Implement good housekeeping, maintain dumpsters and portable sanitary	01/2026	06/2026

Phase - Construction Activity and Planned Control Measures	Anticipated Start Date	Anticipated End Date
Phase IV – Final Stabilization - Provide final stabilization for disturbed areas. Stabilize with seed, mulch, sod, rock, or paving per landscaping plan.	04/2026	07/2026
Post-Construction - Once all areas have been stabilized, remove any remaining sediment control devices and permanently stabilize those areas disturbed by this process - File Notice of Termination with the CDPHE	07/2026	08/2026

5.3 Estimate of Total and Disturbed Acreage

The total area of the project site is ~ 1.4 acres.

Total area of the project disturbance from construction activities is ~ 1.4 acres.

Reference the most recent site inspection report for approximate current acreage disturbed.

5.4 Soils and Potential for Soil Erosion

NRCS soils data was obtained for the site. The existing soils on site are Blakeland loamy sand, 1 to 9 percent slopes.

Table 12. Soil Attributes for this Project

Map symbol and soil name	Pct of AOI	Hydrologic group	Kf	T factor	% Sand	% Silt	% Clay	WEG Rating
8—Blakeland loamy sand, 1 to 9 percent slopes	92.7							2
Blakeland		A	.10	5	85.3	9.2	5.5	
Water	7.3	-	-	-	-	-	-	-

Group A soils are well drained soils. An erosion factor (Kf) of 0.10 represents an extremely low susceptibility to sheet and rill erosion.

For a detailed explanation of the erosive properties of these soils, see the full NRCS report in the Soils section on SW[2].

5.5 Existing Vegetative Ground Cover

Typical vegetation at the site consists of grasses, weeds, and various shrubs. Existing vegetation cover density at the site was determined during a pre-construction site visit performed on 09/18/2025 using visual estimation at a minimum of three representative areas of the site. Pre-existing cover vegetation density is estimated to be approximately 60%.

5.6 Allowable Non-Stormwater Discharges

The following non-stormwater discharges are allowable under the Permit if the discharges are identified in the SWMP in accordance with Part I.C. and if they have appropriate control measures in accordance with Part I.B.1.

Table 13. Allowable Non-Stormwater Discharges

Allowable Non-Stormwater Discharge	Control Measures
i. Discharges from uncontaminated springs that do not originate from an area of land disturbance.	There are no known spring waters on the site.
ii. Discharges to the ground of concrete or masonry washout water associated with the washing of concrete or masonry tools and concrete or masonry mixer chutes. Discharges of concrete or masonry washout water must not leave the site as surface runoff or reach receiving waters as defined by this permit. Concrete or masonry on-site waste disposal is not authorized by this permit except in accordance with Part I.B.1.a.ii (b).	A concrete wash-out area will be utilized to capture wastewater and waste products resulting from the cleaning of concrete and masonry equipment. See Section 4, Table 9 for further details.
iii. Discharges of landscape irrigation return flow.	Downgradient controls will be installed prior to the installation and testing of irrigation lines. These controls include sediment controls. The builder does not have control of private homeowners' irrigation systems once the homes are transferred to them.
iv. Discharges from diversions of state waters within the permitted site.	See description of control measures in Table 8 above if applicable to the site.

Discharges resulting from emergency firefighting activities during the active emergency response are authorized by the Permit.

Part I.B.1.a.ii(c): In the event that water remains on site and contains pollutants either from the firefighting activities or picked up from the site (i.e. in a gutter, sediment basin, etc.) after the active emergency response is complete, the permittee must ensure the remaining water containing pollutants is properly removed and disposed of in order to minimize pollutants from discharging from the site, unless infeasible.

Note: Discharges to the ground from water used to wash vehicles, equipment and external buildings **IS** allowable, however the addition of soaps, solvents, and detergents is prohibited.

5.7 Discharges Under CDPHE Low Risk Discharge Guidance or Other Regulation

There is the potential of other sources of non-stormwater at the site that are not classified as allowable non-stormwater discharges under the Permit but may be managed and conditionally discharged to land in accordance with the CDPHE Water Quality Policy (WQP)-27 Low Risk Discharges or other appropriate regulations.

Table 14. Non-Stormwater Under CDPHE Low Risk Discharge Guidance or Other Regulation

Non-Stormwater Source	WQP Policy or Regulation	Control Measures
Fire hydrant flushing	CDPHE Low Risk Discharge Guidance – Discharges of Potable Water	Flushing is the responsibility of the local municipality. It is important that the local municipality leave in place down gradient control measures prior to flushing. Refer to CDPHE Low Risk Discharge Guidance for further details. Please note the permittee does not have control over the local municipality or permitting authority.
Waters used to wash vehicles or wash down buildings where detergents are not used	CDPHE Low Risk Discharge Guidance – Discharges from Surface Cosmetic Power Washing Operations to Land	Vehicle washing will not be allowed on site; however, the builder does not have control of private homeowners once the homes are transferred to them. If the water will come in contact of any other pollutants other than soil, then the activities are to cease immediately until those other pollutants have been removed. Refer to CDPHE Low Risk Discharge Guidance for further details.
Water used to flush waterlines	CDPHE Low Risk Discharge Guidance – Discharges of Potable Water	Waterlines may be flushed as part of installation. The discharge of potable water from a potable water distribution system must meet the conditions set forth in the low risk guidance. Refer to CDPHE Low Risk Discharge Guidance for further details.
Groundwater dewatering to land and discharges from foundation drains	CDPHE Low Risk Discharge Guidance – Discharges of Uncontaminated Groundwater to Land	The CDPHE Low Risk Discharge Guidance allows groundwater to be discharged to the ground provided that: - The source is groundwater and/or groundwater combined with stormwater that does not contain pollutants in excess of State groundwater standards in Regulations 5 CCR 1002-41 and 42. - The water infiltrates into the soil without leaving the site as surface water or to surface waters. - The source and associated control measures are identified in the SWMP, and control measures are implemented in accordance with the SWMP, such as secondary containment on generators for pumps. - Refer to CDPHE Low Risk Discharge Guidance for further details.

Non-Stormwater Source	WQP Policy or Regulation	Control Measures
		Residential foundation drain discharges will be allowed to infiltrate into the ground. The builder does not have control of private homeowners' foundation drains once the homes are transferred to them. Note: Dewatering of stormwater-only that ponds in excavations or depressions, etc. falls under the stormwater general permit.
Air conditioning condensate	Uncontaminated Non-Potable Water – Discharge to Sanitary	Air conditioning condensate will be discharged into a floor drain in the basement of the completed homes that is connected to sanitary sewer system.
Water used to moisture condition soil	CDPHE Low Risk Discharge Guidance – Discharges of Potable Water	Water will be discharged to the ground within existing perimeter controls of the project site and will not be applied at a rate to cause erosion or to discharge off site.

See Section 2.2 for list of other CDPS permits that may be applicable at the site.

5.8 Receiving Waters

Drainage Patterns:

Stormwater generally drains overland and in sheet flow away from high points at the center of the site, northeast, northwest and southwest, entering planned and existing stormwater sewers, and drainage swales that flow around the perimeter of the site. These planned and existing stormwater sewers and drainage swales discharge southwest to the planned permanent detention pond at the southwestern corner of the site that connects directly north to discharge into the existing Security Water District Little Johnson Reservoir. This planned detention pond and connected existing reservoir discharges southwest to nearby Fountain Creek.

Does the site discharge to a Municipal Separate Storm Sewer System (MS4)?: Yes ☒ No ☐

Is the site within the jurisdiction's MS4 permitted area?: Yes ☒ No ☐

If yes, list the permitted MS4 name and permit number: El Paso County MS4 – COR090011

Immediate Receiving Waters

Name: El Paso County MS4, to Foutain Creek
Proximity to site: on-site, and approximately 1.1 miles southwest respectively

Ultimate Receiving Waters

Name: Arkansas River
Proximity to site: approximately 36.8 miles south

Is the immediate receiving water a designated Outstanding Water? Yes ☐ No ☒

If yes, see inspection frequency in Section 9.

Is the immediate receiving water (excluding the MS4) within the project area? Yes ☐ No ☒

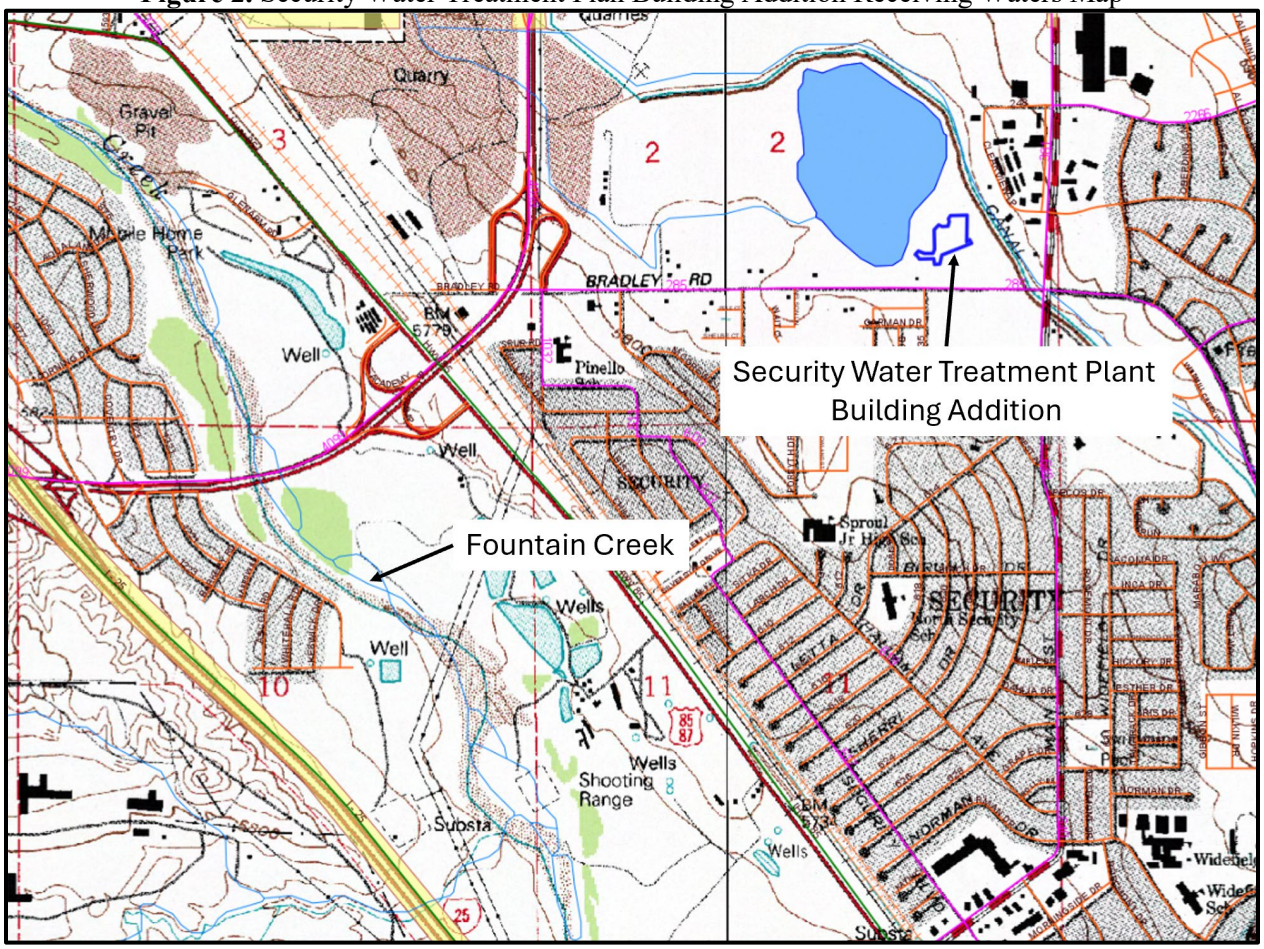
If yes, maintain pre-existing vegetation or equivalent control measures for areas within 50 horizontal feet of the receiving water, unless infeasible. See Section 4.

Are the immediate receiving waters on the 303(d) list of impaired waters: Yes ☒ No ☐

Impaired Receiving Waters
Name: Fountain Creek, all tributaries
Cause of impairment: Escherichia Coli (E. Coli)

Are the immediate receiving waters subject to TMDLs: Yes ☐ No ☒

Figure 2. Security Water Treatment Plan Building Addition Receiving Waters Map



5.9 Stream Crossings

Are any temporary stream crossings associated with this project? Yes ☐ No ☒

If yes, provide a description of all temporary stream crossing(s) located within the construction site and locate on the Site Map.

5.10 Alternate Temporary Stabilization Schedule

Is an alternate temporary stabilization schedule applicable at this site? Yes ☐ No ☒

If yes, describe below and add to the Site Map:

5.11 Federally Endangered and Threatened Species

Are federally listed endangered or threatened species and critical habitats within the project area?

Yes ☐ No ☒

If yes, describe the species and/or critical habitat. (Additional certifications may be necessary and eligibility criterion established.)

Please refer to the attached USFWS IPaC report that may list species, critical habitat, migratory birds, or other natural resources that may potentially be in the project area. Please note the above and IPaC report provides general information obtained only from online resources from the USFWS and does not constitute a site-specific biological assessment or specific clearance from the USFWS.

5.12 Historical Locations

There are no historical properties within the construction boundaries of the project. See the Historical Properties section on SW^2 for all historical sites located in El Paso County, Colorado.

5.13 Effluent Limitations

Refer to tables 8 and 9 for descriptions of any effluent limitations that the permittee determines to be infeasible.

6 SITE MAP

The Site Map is a living document that needs to be routinely updated to reflect site conditions specifically as they are in the field. All potential pollutant sources as well as all pertinent control measures (structural and nonstructural) need to be marked on the map using the symbols found in the control measures legend.

6.1 Site Map Contents

The SWMP must include a site map which includes, at a minimum, the following:

i. Construction site boundaries;
ii. Flow arrows that depict stormwater flow directions on site and runoff direction;
iii. All areas of ground disturbance including areas of borrow and fill;
iv. Areas used for storage of soil;
v. Locations of all waste accumulation areas, including areas for liquid, concrete, masonry, and asphalt;
vi. Locations of dedicated asphalt, concrete batch plants and masonry mixing stations;
vii. Locations of potential sources of pollution not listed in iii. Through vi.
viii. Locations of all structural control measures;
ix. Locations of all nonstructural control measures (e.g. temporary stabilization);
x. Locations and names, as listed in Part I.C.2.c.vii, of springs, streams, wetlands, diversions and other state waters within or bordering the site, including areas that require pre-existing vegetation be maintained within 50 feet of a receiving water, where determined feasible in accordance with Part I.B.1.a.i.(d).; and
xi. Locations of all stream crossings located within the construction site boundary.
xii. Locations where alternative temporary stabilization schedules apply

See the Site Maps section on SW[2].

7 FINAL STABILIZATION REQUIREMENTS & LONG-TERM STORMWATER MANAGEMENT

7.1 Final Stabilization Requirements

Final stabilization is reached when the criteria in section 4.5 has been met. All ground surface disturbing activities at the construction site are complete; and, for all areas of ground surface disturbing activities, either a uniform vegetative cover with an individual plant density of at least 70 percent of pre-disturbance levels is established, or equivalent permanent alternative stabilization methods are implemented. Final stabilization must be designed and installed as a permanent feature.

For Security Water Treatment Plant Building Addition, J. R. Filanc Construction Company, Inc. anticipates to sod, landscape, or hardscape the areas of tracts and ponds after final grade and land development is complete.

It is not anticipated that J. R. Filanc Construction Company, Inc. will disturb areas outside the permitted areas, however, should such a disturbance occur, seed and temporary erosion controls may need to be installed until final stabilization is achieved.

Refer to the Control Measure Details section on SW^2 for seed mix and application rates. Refer to the Site Map for vegetated and non-vegetated final stabilization locations.

The permittee(s) must ensure all temporary control measures are removed from the construction site once final stabilization is achieved, except when the control measure specifications allow the control measure to be left in place (i.e. bio-degradable control measures).

7.2 Long-Term Water Quality Management

Long-term stormwater management for the project will utilize the planned extended detention pond located in the southwestern portion of the site to address permanent water quality and flood attenuation.

8 SWMP REVIEW AND REVISIONS, AVAILABILITY, AND RETENTION OF RECORDS

8.1 SWMP Review and Revisions

Permittees must keep a record of SWMP changes made that includes the date and identification of the changes. The SWMP must be amended when the following occurs:

- a change in design, construction, operation, or maintenance of the site requiring implementation of new or revised control measures;
- the SWMP proves ineffective in controlling pollutants in stormwater runoff in compliance with the permit conditions;
- control measures identified in the SWMP are no longer necessary and are removed;
- corrective actions are taken on site that result in a change to the SWMP; and
- the site or areas of the site qualifying for reduced frequency inspections under part I.D.4.

For SWMP revisions made prior to or following a change(s) on site, including revisions to sections addressing site conditions and control measures, a notation must be included in the SWMP that identifies the date of the site change, the control measure removed, or modified, the location(s) of those control measures, and any changes to the control measure(s). The permittee must ensure the site changes are reflected in the SWMP. The permittee is noncompliant with the permit until the SWMP revisions have been made.

8.2 SWMP Availability

A copy of the SWMP must be provided upon request to the division, EPA, and any local agency with authority for approving sediment and erosion plans, grading plans, or stormwater management plans within the time frame specified in the request. If the SWMP is required to be submitted to any of these entities, the submission must include a signed certification in accordance with Part I.A.3.e., certifying that the SWMP is complete and compliant with all terms and conditions of the permit.

All SWMPs required under this permit are considered reports that must be available to the public under Section 308(b) of the CWA and Section 61.5(4) of the CDPS regulations. The permittee must make plans available to members of the public upon request. However, the permittee may claim any portion of a SWMP as confidential in accordance with 40 CFR Part 2.

8.3 Retention of Records

Post-Expiration or Termination Retention

Copies of documentation required by this permit, including records of all data used to complete the application for permit coverage to be covered by this permit, must be retained for at least three years from the date that permit coverage expires or is terminated. This period may be extended by request of the EPA at any time.

On-site Retention

The permittee must retain an electronic version or hardcopy of the SWMP at the construction site from the date of the initiation of construction activities to the date of expiration or inactivation of permit coverage, unless another location specified by the permittee is approved by the division.

9 INSPECTION FREQUENCY AND SCOPE

9.1 Inspection Frequency

Site inspections shall start within 7 calendar days of the commencement of construction activities on site. Permittees must conduct site inspections in accordance with one of the following minimum frequencies, unless the site meets the requirements of Part I.D.3

- At least one inspection every 7 calendar days. Or,
- At least one inspection every 14 calendar days, if post-storm event inspections are conducted within 24 hours after the end of any precipitation or snowmelt event that causes surface erosion. Post-storm inspections may be used to fulfill the 14-day routine inspection requirement. Or,
- Reduced inspection frequency. Reference Section 9.3.

Inspection frequency for this project is:

7-day ☒ 14-day and post-storm ☐ Once every 30 days* ☐

*Reduced inspection frequency must meet conditions of Part I.D.4. of the permit and is described in Section 9.3 below.

El Paso County allows either 7-day or 14-day and post-storm inspection frequencies.

9.2 Inspection Frequency for Discharges to Outstanding Waters

Permittees must conduct site inspections at least once every 7 calendar days for sites that discharge to a water body designated as an Outstanding Water by the Water Quality Control Commission.

Does the site discharge to Outstanding Waters? Yes ☐ No ☒

Note: Discharges are not authorized by this permit to outstanding waters that are long-term and/or have no or only short-term ecological or water quality benefit or clear public interest.

9.3 Reduced Inspection Frequency

The permittee may perform site inspections at the following reduced frequencies when one of the following conditions exists:

Post-Storm Inspections at Temporarily Idle Sites

For permittees choosing to combine 14-day inspections and post-storm event inspections, if no construction activities will occur following a storm event, post-storm event inspections must be conducted prior to re-commencing construction activities, but no later than 72 hours after the end of any precipitation or snowmelt event that causes surface erosion. The delay of any post-storm event inspection must be documented in the inspection record. Routine inspections must still be conducted at least every 14 calendar days.

Inspections at Completed Sites/Areas

When the site, or portions of a site are awaiting establishment of a vegetative ground cover and final stabilization, the permittee must conduct a thorough inspection of the stormwater management system at least once every 30 days. Post-storm event inspections are not required under this schedule. This reduced inspection schedule is allowed if all of the following criteria are met:

i. all construction activities resulting in ground disturbance are complete;
ii. all activities required for final stabilization, in accordance with the SWMP, have been completed, with the exception of the application of sod or seed that has not occurred due to seasonal conditions or the necessity for additional seed application to augment previous efforts; and
iii. the SWMP has been amended to locate those areas to be inspected in accordance with the reduced schedule allowed for in this paragraph.

Winter Conditions Inspections Exclusion

Typically, this exclusion applies to elevations or locations where snow melt does not occur in the winter months. Inspections are not required for sites that meet all of the following conditions:

i. Construction activities are temporarily halted for the winter season;
ii. Snow cover exists over the entire site for an extended period; and
iii. Melting conditions posing a risk of surface erosion do not exist. This inspection exception is applicable only during the period where melting conditions do not exist, and applies to the routine 7-day, 14-day, and monthly inspections, as well as the post-storm event inspections. When this inspection exclusion is implemented, the following information must be documented in accordance with the requirements in Part I.C.3 and Part I.D.5.c:
    a) dates when snow cover existed;
    b) date when construction activities ceased; and
    c) date melting conditions began.

9.4 Inspection Scope

Areas to be Inspected

When conducting a site inspection, the following areas, if applicable, must be inspected for evidence of, or the potential for, pollutants leaving the construction site boundaries, entering the stormwater drainage system, or discharging to state waters:

i. Construction site perimeter;
ii. All disturbed areas including areas that are temporarily stabilized;
iii. Locations of installed control measures;
iv. Designated haul routes;
v. Material and waste storage areas exposed to precipitation;
vi. Locations of pumped stormwater;
vii. Locations where stormwater has the potential to discharge offsite, including visible erosion and sedimentation; and
viii. Locations where vehicles exit the site.

Inspection Requirements

i. Visually verify whether all implemented control measures are in effective operational condition and are working as designed in their specifications to minimize pollutant discharges;
   For pumped stormwater, assessment may include sediment plume, suspended solids, unusual color, decreased clarity, presence of odor or foam, etc.
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; and
iv. Identify all areas of non–compliance with the permit requirements and, if necessary, implement corrective action in accordance with Part IB.1.c.

Inspection Reports

The permittee must keep a record of all inspections conducted for each permitted site. Inspection reports must identify any incidents of noncompliance with the terms and conditions of this permit. Inspection records must be retained in accordance with Part II.O. and signed in accordance with Part I.A.3.f. At a minimum, the inspection report must include:

i. the inspection date;
ii. name(s) and title(s) of personnel conducting the inspection;
iii. weather conditions at the time of inspection;
iv. phase of construction at the time of inspection;
v. estimated acreage of disturbance at the time of inspection
vi. location(s) and identification of control measures requiring routine maintenance;
vii. location(s) and identification of discharges of sediment or other pollutants from the site;
viii. location(s) and identification of inadequate control measures;
ix. location(s) and identification of additional control measures are needed that were not in place at the time of inspection;
x. description of corrective action(s) for items vii, viii, ix, above, dates corrective action(s) were completed, including requisite changes to the SWMP, as necessary.
xi. description of the minimum inspection frequency (either in accordance with Part I.D.2., I.D.3. or I.D.4.) utilized when conducting each inspection.
xii. deviations from the minimum inspection schedule as required in Part I.D.2. This would include documentation of division approval for an alternate inspection schedule outlined in Part I.D.2.c; and
xiii. after adequate corrective action(s) and maintenance have been taken, or where a report does not identify any incidents requiring corrective action , the report shall contain a statement as required in Part I.A.3.f.

Inspection records are maintained on CMS Environmental Solutions, LLC stormwater management software, SW^2. Inspection reports should also be kept on site. Records for stormwater management facilities must be maintained for at least three years post-construction.

10 LOCAL MUNICIPALITY REQUIREMENTS

10.1 El Paso County Grading, Erosion and Stormwater Quality Requirements

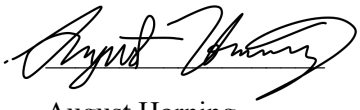
Any land disturbance by any owner, developer, builder, contractor, or other person shall comply with the Basic Grading, Erosion and Stormwater Quality Requirements and General Prohibitions as noted below. In many cases, this will require the design, implementation and maintenance of Best Management Practices (BMPs) as specified in the *Manual*, even if an Erosion and Stormwater Quality Control Plan is not required. A typical example for this requirement would be a home building contractor constructing one or more homes in an area on individual lots where the construction activity on each lot meets the definition of minor earth disturbing activity.

1. Stormwater discharges from construction sites shall not cause or threaten to cause pollution, contamination, or degradation of State Waters.
2. Concrete wash water shall not be discharged to or allowed to runoff to State Waters, including any surface or subsurface storm drainage system or facilities.
3. Building, construction, excavation, or other waste materials shall not be temporarily placed or stored in the street, alley, or other public way, unless in accordance with an approved Traffic Control Plan. BMPs may be required by City Engineering if deemed necessary, based on specific conditions and circumstances (e.g., estimated time of exposure, season of the year, etc.).
4. Vehicle tracking of soils off-site shall be minimized.
5. All wastes composed of building materials must be removed from the construction site for disposal in accordance with local and State regulatory requirements. No building material wastes or unused building materials shall be buried, dumped, or discharged at the site.
6. No chemicals are to be used by the contractor, which have the potential to be released in stormwater unless permission for the use of a specific chemical is granted in writing by the City Engineer. In granting the use of such chemicals, special conditions and monitoring may be required.
7. Bulk storage structures for petroleum products and other chemicals shall have adequate protection so as to contain all spills and prevent any spilled material from entering State Waters, including any surface or subsurface storm drainage system or facilities.
8. All persons engaged in earth disturbance shall implement and maintain acceptable soil erosion and sediment control measures including BMPs in conformance with the erosion control technical standards of the *Manual* and in accordance with the Erosion and Stormwater Quality Control Plan approved by the City of Colorado Springs, if required.
9. All temporary erosion control facilities including BMPs and all permanent facilities intended to control erosion of any earth disturbance operations, shall be installed as defined in the approved plans and the *Manual* and maintained throughout the duration of the earth disturbance operation. The installation of the first level of temporary erosion control facilities and BMPs shall be installed and inspected prior to any earth disturbance operations taking place.
10. Any earth disturbance shall be conducted in such a manner so as to effectively reduce accelerated soil erosion and resulting sedimentation.
11. All earth disturbances shall be designed, constructed, and completed in such a manner so that the exposed area of any disturbed land shall be limited to the shortest practical period of time.

12. All work and earth disturbance shall be done in a manner that minimizes pollution of any on-site or off-site waters, including wetlands.
13. Suspended sediment caused by accelerated soil erosion shall be minimized in runoff water before it leaves the site of the earth disturbance.
14. Any temporary or permanent facility designed and constructed for the conveyance of stormwater around, through, or from the earth disturbance area shall be designed to limit the discharge to a non-erosive velocity.
15. Temporary soil erosion control facilities shall be removed and earth disturbance areas graded and stabilized with permanent soil erosion control measures pursuant to the standards and specifications prescribed in the *Manual*, and in accordance with the permanent erosion control features shown on the Erosion and Stormwater Quality Control Plans approved by the City of Colorado Springs, if required.
16. Soil erosion control measures for all slopes, channels, ditches, or any disturbed land area shall be completed within twenty-one (21) calendar days after final grading, or final earth disturbance, has been completed. Disturbed areas and stockpiles which are not at final grade but will remain dormant for longer than 30 days shall also be mulched within 21 days after interim grading. An area that is going to remain in an interim state for more than 60 days shall also be seeded. All temporary soil erosion control measures and BMPs shall be maintained until permanent soil erosion control measures are implemented.
17. No person shall cause, permit, or contribute to the discharge into the municipal separate storm sewer pollutants that could cause the City of Colorado Springs to be in violation of its Colorado Discharge Permit System Municipal Stormwater Discharge Permit.
18. The owner, site developer, contractor, and/or their authorized agents shall be responsible for the removal of all construction debris, dirt, trash, rock, sediment, and sand that may accumulate in the storm sewer or other drainage conveyance system and stormwater appurtenances as a result of site development.
19. No person shall cause the impediment of stormwater flow in the flow line of the curb and gutter, including the temporary or permanent ramping with materials for vehicle access.
20. Individuals shall comply with the "Colorado Water Quality Control Act" (Title 25, Article 8, CRS), and the "Clean Water Act" (33 USC 1344), regulations promulgated, certifications or permits issued, in addition to the requirements included in the *Manual*. In the event of conflicts between these requirements and water quality control laws, rules, or regulations of other Federal or State agencies, the more restrictive laws, rules, or regulations shall apply.
21. 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. Materials shall not be stored in a location where they may be carried by stormwater runoff into a State Water at any time.
22. Spill prevention and containment measures shall be used at storage, and equipment fueling and servicing areas to prevent the pollution of any State Waters, including wetlands. All spills shall be cleaned up immediately after discovery, or contained until appropriate cleanup methods can be employed. Manufacturer's recommended methods for spill cleanup shall be followed, along with proper disposal methods.

11 SWMP PREPARER STATEMENT

This is to certify that this plan was prepared in accordance with the Clean Water Act. This document was also prepared in accordance with the Colorado Department of Public Health and Environment General Permit for Stormwater Discharges Associated with Construction Activities COR400000. This plan was prepared in accordance with good engineering, hydrologic, and pollution control practices.

Signature:		Date: 09/22/2025
Name:	August Horning	
Title:	Staff Scientist	
Company	CMS Environmental Solutions, LLC	

12 LIMITATIONS

This SWMP was prepared in accordance with applicable stormwater regulations. This document represents a planning tool to assist the client to comply with all applicable stormwater regulations during the construction of the project.

It is the clients' sole responsibility on how to operate the construction site and not CMS Environmental Solutions, LLC. Therefore, CMS Environmental Solutions, LLC is not liable for operational decisions made by the client and for the clients' failure to follow recommendations as outlined in this SWMP.

Client agrees to hold CMS Environmental Solutions, LLC Harmless for any potential violations the client may receive for operational violations brought forth by any regulatory agency including all Federal, State, and local agencies.

By accepting the SWMP the client agrees to this disclaimer and its conditions.

TAB B

SITE MAPS

SECURITY WATER DISTRICT LITTLE JOHNSON RESERVOIR PROPERTY

EXISTING RAW WATER TANK

T.O.C. = 5859.10

TANK DRAIN

SILT FENCING AT OWNER'S DISCRETION – TYP.

EXISTING SANITARY SEWER MANHOLE
RIM EL = 5857.78
FINISHED SURFACE EL = 5857.79

AIR/VAC VAULT

EXISTING BUILDING
F.F. EL. = 5858.70

PROPOSED BUILDING ADDITION
F.F. EL. = 5858.70

RELOCATED FIRE HYDRANT

EXISTING TRANSFORMER

EXISTING ELECTRICAL GEAR

CONC. BOLLARD – TYP.

EXISTING GENERATOR

INLET PROTECTION – TYP.

EXISTING 12" CSP CULVERT

EXISTING 18" CSP CULVERT

INSTALL RIP-RAP, TYPE M, 6" d50 RIPRAP PLACED ON FILTER FABRIC 5' EACH SIDE OF CHANNEL FLOW LINE 10' WIDE, 15' LONG CENTERED ON CULVERT CENTERLINE. KEY TOP AND BOTTOM TERMINATIONS 2' INTO SOIL.

STRAW WATTLES 20' FROM TOE OF SLOPE

MATCH EXISTING ELEVATIONS TO MAINTAIN SECURITY GATE OPERATIONS. CONFIRM WITH ENGINEER.

WATTLE ALONG PERIMETER OF SOUTHERN CHAIN FENCE (A/6)

CHAIN LINK FENCE ON SOUTHERN BOUNDARY

PROPOSED STRAW WATTLES

EXISTING STRAW WATTLES

A/6 WATTLE DETAIL
SCALE: NONE

A. GRASS SEED

1. MAXIMUM WEED CONTENT: 1%
2. NATIVE, NON-IRRIGATED SEED VARIETIES

SPECIES	VARIETY – BOTANICAL SPECIES	SEED SPECIES MIX % BY WEIGHT
SWITCHGRASS	PANICUM VIRGATUM	20
ROCKY MOUNTAIN FESCUE	FESTUCA SAXIMONTANA	10
GREEN NEEDLEGRASS	NASSELLA VIRIDULA	10
SLENDER WHEATGRASS	ELYMU TRACHYCAULUS SSP. TRACHYCAUILUS	10
WESTERN WHEATGRASS	PASCOPYRUM SMITHII	10
INDIAN RICEGRASS	ACHNATHERUM HYMENOIDES	5
SAND DROPSEED	SPOROBOLUS CRYPTANDRUS	5
SANDBERG BLUEGRASS	POA SECUNDA SSP. SANDBERGII	5
BLUEBUNCH WHEATGREASS	PSEUDOROEGNERIA SPICATA SSP. SPICATA	5
SIDEOATS GRAMA	BOUTELOUA CURTIPENDULA	5
BLUE GRAMA	BOUTELOUA GRACILIS	5
LITTLE BLUESTEM	SCHIZACHYRIUYM SCOPARIUM	5
BIG BLUESTEM	ANDROPOGON GERARDII	2
	TOTAL:	100

3. COMPUTATION OF QUANTITY OF SEED REQUIRED IS BASED ON THE PERCENTAGE OF PURITY AND PERCENTAGE OF GERMINATION
   a. DRILL SEED MIX AT 20 LBS PLS PER ACRE
4. IF SEED AVAILABLE ON THE MARKET DOES NOT MEET THE MINIMUM PURE LIVE SEED PERCENTAGES SPECIFIED, THE CONTRACTOR MUST COMPENSATE FOR A LESSER PERCENTAGE BY FURNISHING SUFFICIENT ADDITIONAL SEED TO EQUAL THE SPECIFIED PRODUCT
   a. POUNDS OF SEED X (PURITY X GERMINATION) = POUNDS OF PURE LIVE SEED (PLS)

NOTES:

1. ALL AREAS WITHIN THE SECURITY FENCE WHICH ARE NOT SURFACED WITH HOT MIX ASPHALT PAVEMENT, CONCRETE FLATWORK OR RECLAIMED CONCRETE AGGREGATE SHALL BE LANDSCAPED WITH NON-IRRIGATED GRASSES IN ACCORDANCE WITH SPECIFICATION SECTION 02900. IN ADDITION, AREAS DISTURBED BY CONSTRUCTION AND MANAGEMENT (STOCKPILING) OF EXCESS SOIL MATERIALS FROM THE SECURED SITE SHALL BE LIKEWISE LANDSCAPED.
2. THE SCOPE OF WORK IN LANDSCAPING WITH NON-IRRIGATED GRASSES SHALL INCLUDE SOIL PREPARATION WITH GRADING TO FINAL ELEVATIONS AS DIRECTED BY THE ENGINEER AND OWNER, TILLING, ADDITION OF FERTILIZERS, SEEDING OF GRASSES BY DRILLING, MULCHING AND TEMPORARY MANAGEMENT OF RUNOFF TO MINIMIZE OR ELIMINATE EROSION AND SEDIMENT GENERATION.
3. INSTALLATION OF NON-IRRIGATED GRASSES SHALL BE PLANNED FOR THE WINTER SEASON, 2025–2026, GENERALLY AFTER DECEMBER 1, 2025.
4. THE OWNER MAY INITIATE AN EXTENDED TEMPORARY EROSION AND SEDIMENT CONTROL PLAN (TESCP) AFTER INSTALLATION OF THE NON-IRRIGATED LANDSCAPING SHOULD IT BE DEEMED NECESSARY TO BEST GUARANTEE SUCCESSFUL ESTABLISHMENT OF GROUND COVER.
5. ALL EROSION CONTROL MEASURES SHALL CONFORM TO THE EL PASO COUNTY DRAINAGE CRITERIA MANUAL VOLUME 2 STORMWATER QUALITY POLICIES, PROCEDURES, AND BEST MANAGEMENT PRACTICES (BMPS).
6. STORMWATER DISCHARGES FROM THE CONSTRUCTION SITE SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS
7. CONCRETE WASH WATER SHALL NOT BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
8. VEHICLE TRACKING OF SOILS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
9. ALL PERSONS ENGAGED IN EARTH DISTURBANCE SHALL IMPLEMENT AND MAINTAIN ACCEPTABLE SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BMPS IN CONFORMANCE WITH THE EROSION CONTROL TECHNICAL STANDARDS OF THE MANUAL AND IN ACCORDANCE WITH THE EROSION AND STORMWATER QUALITY CONTROL PLAN APPROVED BY EL PASO COUNTY, IF REQUIRED.
10. ALL TEMPORARY EROSION CONTROL FACILITIES INCLUDING BMPS AND ALL PERMANENT FACILITIES INTENDED TO CONTROL EROSION OF ANY EARTH DISTURBANCE OPERATIONS, SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS AND THE MANUAL AND MAINTAINED THROUGHOUT THE DURATION OF THE EARTH DISTURBANCE OPERATION. THE INSTALLATION OF OF TEMPORARY EROSION CONTROL FACILITIES AND BMPS SHALL BE INSTALLED AND INSPECTED PRIOR TO ANY EARTH DISTURBANCE OPERATIONS TAKING PLACE.
11. ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY REDUCE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION.
12. ALL EARTH DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED IN SUCH A MANNER SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME.
13. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.
14. SUSPENDED SEDIMENT CAUSED BY ACCELERATED SOIL EROSION SHALL BE MINIMIZED IN RUNOFF WATER BEFORE IT LEAVES THE SITE OF THE EARTH DISTURBANCE.
15. TEMPORARY SOIL EROSION CONTROL FACILITIES SHALL BE REMOVED AND EARTH DISTURBANCE AREAS GRADED AND STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES PURSUANT TO THE STANDARDS AND SPECIFICATIONS PRESCRIBED IN THE MANUAL, AND IN ACCORDANCE WITH THE PERMANENT EROSION CONTROL FEATURES SHOWN ON THE EROSION AND STORMWATER QUALITY CONTROL PLANS APPROVED BY EL PASO COUNTY, IF REQUIRED.
16. SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN TWENTY-ONE (21) CALENDAR DAYS AFTER FINAL GRADING, OR FINAL EARTH DISTURBANCE, HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPS SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.
17. EROSION CONTROL BLANKETS SHALL BE INSTALLED IN SWALES WITH SLOPES GREATER THAN 2% BUT LESS THAN 5% AND ON ALL RECENTLY SEEDED SLOPES.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
19. INDIVIDUALS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), REGULATIONS PROMULGATED, CERTIFICATIONS OR PERMITS ISSUED, IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE MANUAL. IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND WATER QUALITY CONTROL LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL OR STATE AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
20. 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. MATERIALS SHALL NOT BE STORED IN A LOCATION WHERE THEY MAY BE CARRIED BY STORMWATER RUNOFF INTO A STATE WATER AT ANY TIME.
21. PRIOR TO ACTUAL CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
22. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT THE APPROVED CONSTRUCTION ACCESS POINTS.
23. SEE EL PASO COUNTY DRAINAGE CRITERIA MANUAL VOLUME 2 FOR CONSTRUCTION DETAILS FOR ALL EROSION BMPs.

LEGEND

- EXISTING HMA PAVEMENT
- NEW HMA PAVEMENT 6" FULL DEPTH ON PREPARED SUBGRADE
- RECLAIMED CONCRETE SHOULDER COMPACTED MATERIAL, 6" DEPTH
- 5857 — EXISTING ELEVATION CONTOUR LINE
- 5858
- 5857 — FINISHED SURFACE ELEVATION CONTOUR LINE
- 5858
- NEW CONVEY WATER DITCH
- EXISTING EDGE OF ABC SURFACING
- SF — SILT FENCE
- VT — VEHICLE TRACKING CONTROL
- IP — INLET PROTECTION
- SW — 9" X 12' LONG STRAW WATTLE, 30' FOOT SPACING
- SM — SEED AND MULCH
- SB — SEDIMENT BASIN
- CW — CONCRETE WASH BASIN

0' 20' 40'
SCALE: HORIZ. 1" = 20'

G:\SECURITY\2023-053\13000\05\2023-053006.dwg, Site Grad Dmg and Lscape Plan, 9/18/2025 8:44:48 AM, jms, DWG To PDF.pc3, 1:1

SCALE VERIFICATION
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

REVISIONS

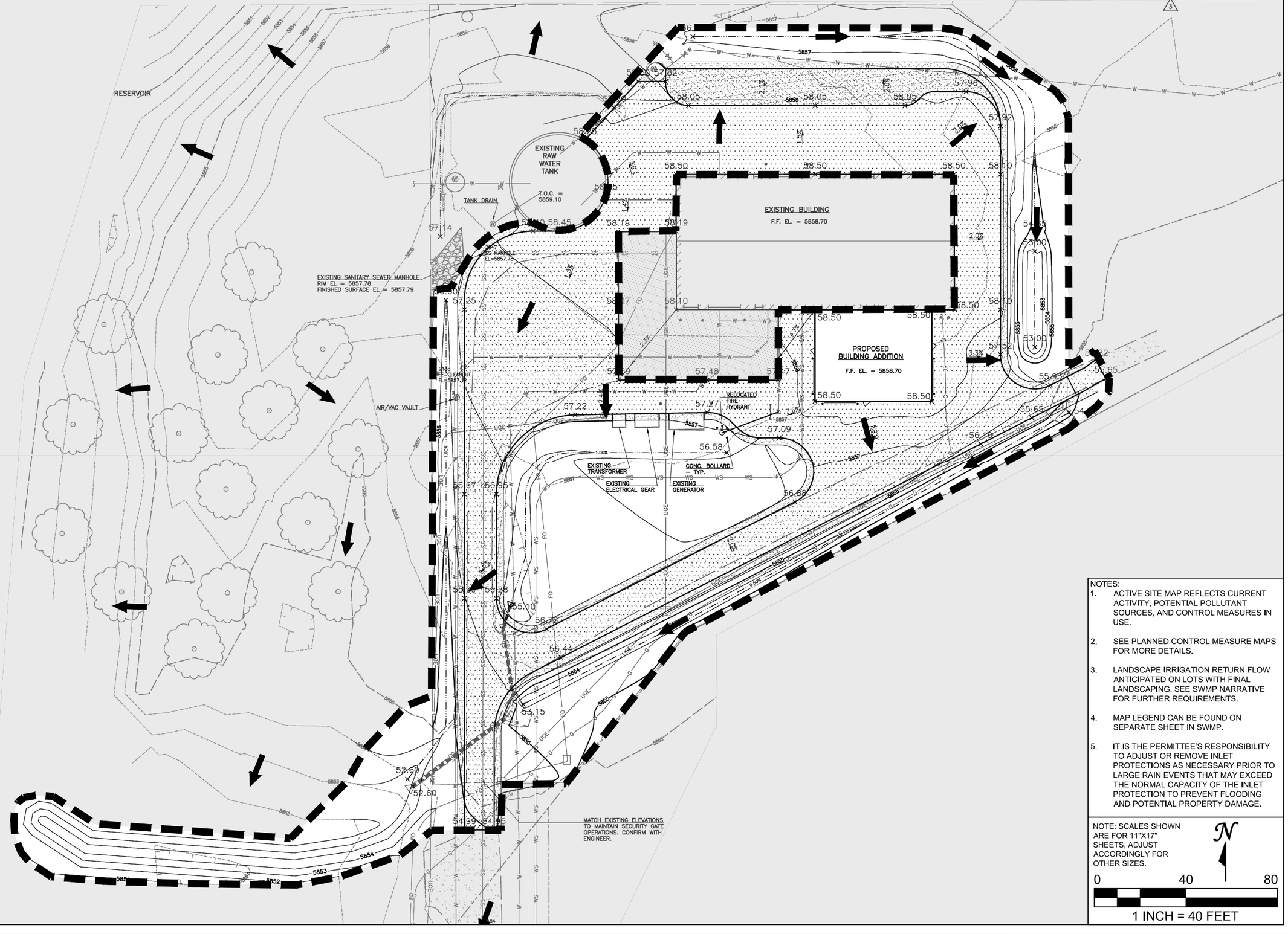
NO.	DATE	DESCRIPTION
1	12/31/2024	ISSUED FOR BIDDING
2	9/17/2025	ADDED BMPs / TESCP

SITE GRADING, DRAINAGE, LANDSCAPING, AND EROSION CONTROL PLAN
WATER TREATMENT PLANT BUILDING ADDITION
SECURITY WATER DISTRICT

GMS INC CONSULTING ENGINEERS
611 N. WEBER, SUITE 300
COLORADO SPRINGS, COLORADO 80903
719-475-2935

DRAWN	SKC
DESIGNED	RJS/SLW/MAL
CHECKED	RJS
DATE	OCTOBER 2024
PROJECT NO.	2023-053.1300
GMS FILE NO.	3800

SHEET 6 OF 7



NOTES:

1. ACTIVE SITE MAP REFLECTS CURRENT ACTIVITY, POTENTIAL POLLUTANT SOURCES, AND CONTROL MEASURES IN USE.
2. SEE PLANNED CONTROL MEASURE MAPS FOR MORE DETAILS.
3. LANDSCAPE IRRIGATION RETURN FLOW ANTICIPATED ON LOTS WITH FINAL LANDSCAPING. SEE SWMP NARRATIVE FOR FURTHER REQUIREMENTS.
4. MAP LEGEND CAN BE FOUND ON SEPARATE SHEET IN SWMP.
5. IT IS THE PERMITTEE'S RESPONSIBILITY TO ADJUST OR REMOVE INLET PROTECTIONS AS NECESSARY PRIOR TO LARGE RAIN EVENTS THAT MAY EXCEED THE NORMAL CAPACITY OF THE INLET PROTECTION TO PREVENT FLOODING AND POTENTIAL PROPERTY DAMAGE.

NOTE: SCALES SHOWN ARE FOR 11"X17" SHEETS, ADJUST ACCORDINGLY FOR OTHER SIZES.

N

0 40 80

1 INCH = 40 FEET

NO.	DATE	REVISIONS	ENG	CAD
0	09/22/2025	ORIGINAL	MG	AH

5231 SOUTH QUEBEC STREET
GREENWOOD VILLAGE, CO 80111
P: (303) 993-2107
F: (303) 923-3416
WWW.CMSENVIRO.COM

CMS ENVIRONMENTAL SOLUTIONS

PROJECT: SECURITY WATER TREATMENT PLANT BUILDING ADDITION

SHEET TITLE: ACTIVE SITE MAP

PERMITTEE: J.R. FILANC CONSTRUCTION COMPANY, INC.
455 W. 115TH AVE., STE. 3, NORTHGLENN, CO 80234, (719) 660-6165

PROJ #:	09-2025
DATE:	09/22/2025
DESIGN ENG:	AH
CHECKED BY:	MG

ASM

TAB C

PERMITS & CERTIFICATIONS

SECURITY WATER TREATMENT PLANT BUILDING ADDITION

4140 LINCOLN PLAZA DR.
UNINCORPORATED EL PASO COUNTY, CO 80911

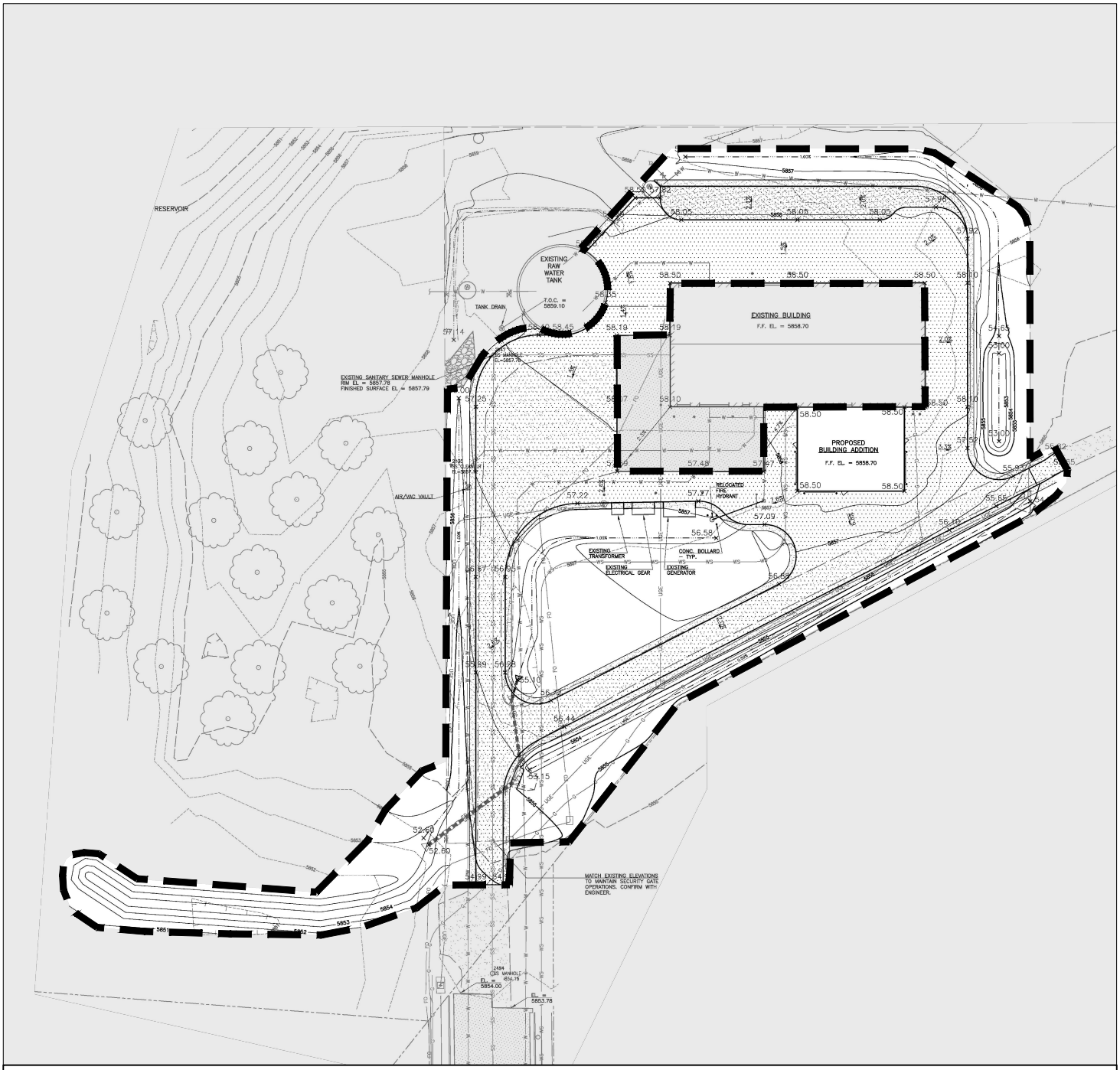
CMS ENVIRONMENTAL SOLUTIONS
5231 SOUTH QUEBEC STREET
GREENWOOD VILLAGE, CO 80111
P: (303) 593-2107
F: (303) 923-3416

OWNER/OPERATOR: J.R. FILANC CONSTRUCTION COMPANY, INC.

LATITUDE: 38.771831°, LONGITUDE: -104.743136°

DATE: 09/22/2025

NOTICE OF INTENT



TOTAL PROJECT AREA/AREA OF PROJECT DISTURBANCE: ~1.4 ACRES

0 70 140

1 INCH = 70 FEET

TAB D

SPILL PREVENTION & RESPONSE

SPILL PREVENTION & RESPONSE PLAN

In case of release that meets or exceeds reportable quantities then contact the CDPHE within a 24-hour period. A written report will be required to be filed within 5 days.

Emergency Local Fire, Police or Ambulance	**911**
CMS Environmental Solutions	**720-343-6561**
EPA National Response Center	**1-800-424-8802**
Colorado Department of Public Health and Environment	**1-877-518-5608**
Colorado Emergency Planning Committee	**303-273-1622**
El Paso County – Stormwater Quality Hotline	**719-520-6460**

Reporting

- Document and record all significant spills, discharges, overflows, upsets, events in the SWMP and on the Map immediately.
- Report significant spills to local agencies, such as the Fire Department; they can assist in cleanup.
- Federal regulations require that any oil spill into a water body or onto an adjoining waterline that results in a sheen be reported to the National Response Center (NRC) at 800-424-8802 (24 hours). Use the following measures related to specific activities:

Description and Purpose

Prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

- Fuels
- Lubricants
- Other petroleum distillates
- Concrete
- Fertilizers

Limitations

- In some cases it may be necessary to use a private spill cleanup company.
- This BMP applies to spills caused by the contractor and subcontractors.
- Procedures and practices presented in this BMP are general. Contractor should identify appropriate practices for the specific materials used or stored onsite

Implementation

The following steps will help reduce the stormwater impacts of leaks and spills:

Education

- Be aware that different materials pollute in different amounts. Make sure that each employee knows what a “significant spill” is for each material they use, and what is the appropriate response for “significant” and “insignificant” spills.
- Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.

- Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).
- Have contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

General Measures

- Store hazardous materials and wastes in covered containers and protect from vandalism.
- Train employees in spill prevention and cleanup.
- Designate responsible individuals to oversee and enforce control measures.
- Spills should be covered and protected from stormwater run-on during rainfall to the extent that it doesn't compromise cleanup activities.
- Do not bury or wash spills with water.
- Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
- Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water.
- Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
- Place proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
- Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.
- Never shall materials be stored in the river or between the tops of the two river banks.
- Store materials so they are protected from stormwater and will not migrate into waters of the US.

Cleanup

- A spill kit is recommended but not mandated once construction activity has commenced and should be located in the Construction office.
- All spills must be documented and properly cleaned up
- Clean up leaks and spills immediately.
- Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials may be hazardous and must be disposed of properly.
- Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly.

Minor Spills (less than 5 gallons)

- Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
- Use absorbent materials on small spills rather than hosing down or burying the spill.
- Absorbent materials should be promptly removed and disposed of properly.
- Follow the practice below for a minor spill:

    - Contain the spread of the spill.
    - Recover spilled materials.
    - Clean the contaminated area and properly dispose of contaminated materials.
- Keep within permitted area
- It must not threaten any stormwater conveyance

Semi-Significant Spills (greater than 5 gallons but less than the reportable quantity [Table 1])

- Semi-significant spills still can be controlled by the first responder along with the aid of other trained personnel. This response may require the cessation of all other activities.
- Spills must be cleaned up immediately:
    - Contain spread of the spill.
    - Notify the project foreman immediately.
    - If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials i.e. oil-dri® and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
    - If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
    - If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills (greater than the reportable quantity [Table 1])

- For significant or hazardous spills that cannot be controlled by personnel in the immediate vicinity, the following steps should be taken:
    - Authorized personnel shall notify the local emergency response by dialing 911. In addition to 911, the contractor will notify the proper county officials. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
    - For spills of federal reportable quantities (see chart below) authorized personnel shall notify the National Response Center at (800) 424-8802.
    - Secure the area
    - Notify CDPHE and the Local Municipality immediately and provide written documentation to the State within 5 days.
    - Notification should first be made by telephone and followed up with a written report.
    - The services of a spill contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.
    - Other agencies which may need to be consulted include, but are not limited to, the Fire Department, and the Public Works Department.

All employees handling materials are to be educated on spill prevention and response procedures:

Spill Prevention: This can be accomplished by using offsite facilities, fueling by trained personnel only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors in proper fueling procedures. Drip Pans should be used whenever possible.
Response Procedures: Should any material spill, a down slope berm or other barrier method should be constructed immediately in order to contain the spill. The spill must be immediately cleaned up

with an absorbent material. That material should then be bagged, taken offsite and properly disposed of. If the material has absorbed into the soil, then the contaminated soil must be collected in drums or appropriate container, taken offsite and disposed of properly. If a spill does occur, an immediate inspection of the site should be conducted documenting the spill and procedures to be taken to prevent spills from re-occurring.

For any spills that are of a reportable quantity, contact the Qualified Stormwater Manager, the EPA, and CDPHE.

Inspection and Maintenance

- Site superintendent or designated personnel will visually inspect and verify that activity–based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect per SWMP.
- Visually inspect BMPs subject to non-stormwater discharge daily while non-stormwater discharges occur.

Table 1. Reportable Quantities of Hazardous Materials

Reportable Quantities		
Material	**Location of Spill**	**Reportable Quantity**
Engine oil, fuel, hydraulic & brake fluid	Land	25 gallons
Engine oil, fuel, hydraulic & brake fluid	Water	Visible layer, sheen
Antifreeze	Land	~540 gallons (5,000 lbs)
Battery Acid	Land	13 gallons

In case of release that meets or exceeds reportable quantities contact the CDPHE within a 24 hour period. A written report will be required to be filed within 5 days:

Recommended On-site Spill Kit

- Spill kit should be kept onsite in the trailer (or in an onsite staff vehicle) and its location documented on the SWMP site map. The spill kit is not mandatory however recommended, relevant subcontractors should be prepared and provide their own spill kits if one is not kept onsite.
- UN and DOT approved 20-gallon over pack
- Compact design with molded grab handles
- Source: CMS Environmental Solutions, LLC
- **Each kit includes:** 1 Emergency Response Guidebook, 4 - 3"x4' socks, 2 - 9" x 15" pillows, 25 - 15" x 19" pads, 1 pair chemical resistant gloves, 1 pair safety goggles, 2 disposal bags/ties, 1 - 20 gallon Over Pack
- Spill kit materials should be refilled if its contents are utilized and depleted in the field.
- Inventory the spill kit contents routinely to check for any depleted items.

SPILL FORM

Date of spill_____ Time of spill _____

Company _____ Address _____

Person Reporting_____ Telephone Number _____

Type of Spill (Fuel Type, chemical, etc.)_____ Name of Chemical _____

Quantity of Spill (gallons) _____

Where did spill occur? _____

Duration of discharge D Batch (a single release, e.g. spilled drum)
D Continuous (approximate duration_____ hours _____ minutes)

Action taken to contain spill _____

_____

_____

Containment: D Contained in immediate vicinity of source
D Contained prior to entry into storm drain
D Contained after entry to storm drain
D Contained in storm system pipe/ditch

Did the spill leave the facility boundary? D Yes D No Was anyone injured? D Yes D No

Other pertinent information/Cause of spill _____

_____

_____

Weather conditions at time of incident:

Rainfall D Rainfall occurred (approximate amount_____ inches over_____ hours)
D Rainfall had occurred within 3 hours of incident
D Rainfall occurred prior to clean-up being completed
D No rainfall occurred

Parties notified of spill

D Fire Department
D State Agency Date _____ Time _____
D National Response Center Date _____ Time _____

In the space provided below, draw a diagram of the location of the spill as it relates to your facility and operations.

Colorado Department of Public Health and Environment

Environmental Spill Reporting

Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80246-1530

http://www.cdphe.state.co.us

January 2009

When a release of a hazardous material or other substance occurs to the environment, there are a number of reporting and notification requirements that must be followed by the company or individual responsible for the release. Most spills are covered by more than one reporting requirement, and **all** requirements must be met. In addition to verbal notification, written reports are generally required. This brochure briefly explains the major requirements. A more detailed description is provided in the "Reporting Environmental Releases in Colorado" Guidance Document, available on the web.

Releases that must be reported to the Colorado Department of Public Health and Environment (CDPHE) may be reported to the Colorado Environmental Release and Incident Reporting Line.

ENVIRONMENTAL SPILL REPORTING

CERCLA, EPCRA and RCRA

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Emergency Planning and Community Right-to-Know Act (EPCRA) require that a release of a reportable quantity or more of a hazardous substance to the environment be reported immediately to the appropriate authorities when the release is discovered.

Under CERCLA, reportable quantities were established for hazardous substances listed or designated under other environmental statutes. These include:

- all hazardous air pollutants (HAPs) listed under Section 112(b) of the Clean Air Act.
- all toxic pollutants designated under Section 307(a) or Section 311(b)(2)(A) of the Clean Water Act.
- all Resource Conservation and Recovery Act (RCRA) characteristic and listed hazardous wastes.
- any element, compound, or substance designated under Section 102 of CERCLA.

EPCRA established a list of extremely hazardous substances (EHS) that could cause serious irreversible health effects from accidental releases. Many substances appear on both the CERCLA and EPCRA lists. EPCRA extremely hazardous substances that are also CERCLA hazardous substances have the same reportable quantity (RQ) as under CERCLA. EPCRA extremely hazardous substances that are not listed under CERCLA have a reportable quantity that is equal to their threshold planning quantity (TPQ). A list of CERCLA reportable quantities is included in 40 CFR Section 302.4. A list of EPCRA threshold planning quantities is included in 40 CFR Part 355 Appendices A & B.

CERCLA-reportable releases must be reported immediately to the National Response Center (NRC), while EPCRA-reportable releases must be reported immediately to the National Response Center, the State Emergency Response Commission (SERC) and the affected Local Emergency Planning Committee (LEPC). If the release is an EPCRA extremely hazardous substance, but not a CERCLA hazardous substance, and there is absolutely no potential to affect off-site persons, then only the State Emergency Planning Commission (represented by CDPHE for reporting purposes) and the Local Emergency Planning Committee need to be notified.

In the case of a release of hazardous waste stored in tanks, RCRA-permitted facilities and large quantity generators must also notify CDPHE within 24 hours of any release to the environment that is greater than one (1) pound.

Radiation Control

Each licensee or registrant must report to the Radiation Incident Reporting Line in the event of lost, stolen or missing licensed or registered radioactive materials or radiation machines, releases of radioactive materials, contamination events, and fires or explosions involving radioactive materials. Releases of radionuclides are reportable under CERCLA.

Clean Water Act

The Clean Water Act requires the person in charge of a facility or vessel to immediately report to the National Response Center all discharges of oil or designated hazardous substances to water. Oil means oil of any kind or form. Designated hazardous substances are included in the CERCLA list.

The Clean Water Act also requires that facilities with a National Pollutant Discharge Elimination System (NPDES) permit report to the National Response Center within 24 hours of becoming aware of any unanticipated bypasses or upsets that cause an exceedance of the effluent limits in their permit and any violations of their maximum daily discharge limits for pollutants listed in their permit.

A release of any chemical, oil, petroleum product, sewage, etc., which may enter waters of the state of Colorado (which include surface water, ground water and dry gullies and storm sewers leading to surface water) must be reported immediately to CDPHE. Any accidental discharge to the sanitary sewer system must be reported immediately to the local sewer authority and the affected wastewater treatment plant. For additional regarding releases to water, please see "Guidance for Reporting Spills under the Colorado Water Quality Control Act and Colorado Discharge Permits" at http://www.cdphe.state.co.us/op/wqcc/Resources/Guidance/spillguidance.pdf.

Clean Air Act

Hazardous air pollutants (HAPs) are designated as hazardous substances under CERCLA. If a facility has an air permit but the permit does not allow for or does not specify the release of a substance, or if the facility does not have an air permit, then all releases in excess of the CERCLA / EPCRA reportable quantity for that substance must be reported to the National Response Center and CDPHE. If the facility releases more of a substance than is allowed under its air permit, the facility must also report the release. Discharges of a substance that are within the allowable limits specified in the facility's permit do not need to be reported.

Regulated Storage Tanks

Owners and operators of regulated storage tank systems must report a release or suspected release of regulated substances to the Division of Oil and Public Safety at the Colorado Department of Labor and Employment within 24 hours. Under this program, the reportable quantity for petroleum releases is 25 gallons or more, or any amount that causes a sheen on nearby surface water. Spills of less than 25 gallons of petroleum must be immediately contained and cleaned up. If cleanup cannot be accomplished within 24 hours, the Division of Oil and Public Safety must be notified immediately.

Spills of hazardous substances from tanks in excess of the CERCLA or EPCRA reportable quantity must be reported immediately to the National Response Center, CDPHE and the local fire authority, and to the Division of Oil and Public Safety within 24 hours.

Transportation and Pipelines

The person in physical possession of a hazardous material must notify the National Response Center as soon as practical, but not to exceed 12 hours after the incident, if as a direct result of the hazardous material, a person is killed or injured, there is an evacuation of the general public lasting more than an hour, a major transportation artery is shut down for an hour or more, the flight pattern of an aircraft is altered, there is fire, spillage or suspected contamination

involving a radioactive or infectious material, or there is a release of a marine pollutant.

Spills and incidents that have or may result in a spill along a highway must be reported to the nearest law enforcement agency immediately. The Colorado State Patrol and CDPHE must also be notified as soon as possible. In the event of a spill of hazardous waste at a transfer facility, the transporter must notify CDPHE within 24 hours if the spill exceeds 55 gallons or if there is a fire or explosion.

The National Response Center should be notified as soon as possible after discovery of a release of a hazardous liquid or carbon dioxide from a pipeline system if a person is killed or injured, there is a fire or explosion, there is property damage of $50,000 or more, or any nearby water body is contaminated.

The National Response Center and the Colorado Public Utilities Commission Gas Pipeline Safety Section must be notified as soon as possible, but not more than two hours after discovery of a release of gas from a natural gas pipeline or liquefied natural gas facility if a person is killed or injured, there is an emergency shutdown of the facility, or there is property damage of $50,000 or more. The Colorado Public Utilities Commission should also be notified if there is a gas leak from a pipeline, liquefied natural gas system, master meter system or a propane system that results in the evacuation of 50 or more people from an occupied building or the closure of a roadway.

Oil and Gas Exploration

All Class I major events on federal lands, including releases of hazardous substances in excess of the CERCLA reportable quantity and spills of more than 100 barrels of fluid and/or 500 MCF of gas released, must be reported to the Bureau of Land Management (BLM) immediately. Spills of oil, gas, salt water, toxic liquids and waste materials must also be reported to the BLM and the surface management agency.

Spills of exploration and production (E&P) waste on state or private lands in excess of 20 barrels, and spills of any size that impact or threaten to impact waters of the state, an occupied structure, or public byway must be reported to the Colorado Oil and Gas Conservation Commission as soon as practicable, but not more than 24 hours after discovery. Spills of any size that impact or threaten to impact waters of the state must be reported to CDPHE immediately. Spills that impact or threaten to impact a surface water intake must be reported to the emergency contact for that facility immediately after discovery. Spills of more than five (5) barrels of E&P waste must be reported in writing to the Oil and Gas Conservation Commission within 10 days of discovery.

REPORTING NUMBERS

National Response Center (24-hour)
1-800-424-8802

CDPHE Colorado Environmental Release and Incident Reporting Line (24-hour)
1-877-518-5608

Radiation Incident Reporting Line (24-hour)
303-877-9757

Colorado State Patrol (24-hour)
303-239-4501

Division of Oil and Public Safety
(business hours)
303-318-8547

Oil and Gas Conservation Commission
(business hours)
303-894-2100

Colorado Public Utilities Commission Gas Pipeline Safety Section (business hours)
303-894-2851

Local Emergency Planning Committees
(to obtain list, business hours)
720-852-6603

Colorado Water Quality Control Division

WATER QUALITY CONTROL DIVISION

Policy No: WQE-10
Initiated By: Dave Akers
Approved By:
Effective Date: 3/1/08
Revision No.:
Revision Date:

Guidance for Reporting Spills under the Colorado Water Quality Control Act and Colorado Discharge Permits

I. Purpose

To provide guidance on applicable Colorado reporting requirements pursuant to § 25-8-601(2), C.R.S., that pertains to spills or discharges that may cause pollution of State waters. This guidance does not relieve an entity of any other statutory or regulatory requirements applicable to a spill. Facilities possessing a Colorado Discharge Permit System (CDPS) permit should follow applicable permit terms and conditions regarding spill reporting and response. This guidance is not intended to supersede or modify such permit terms and conditions or the applicable statute and regulations. This guidance does not limit the existing rights or responsibilities of persons with respect to spill reporting. For example, persons retain the right and responsibility to determine in the first instance whether a particular spill is covered by an existing permit or may cause pollution to State waters (i.e., surface or ground waters).

II. Statutory Requirement Addressed

Colorado Water Quality Control Act - Spill Reporting Requirements - § 25-8-601(2), C.R.S.

> "Any person engaged in any operation or activity which results in a spill or discharge of oil or other substance which may cause pollution of the waters of the state contrary to the provisions of this article as soon as he has knowledge thereof, shall notify the division of such discharge."

State waters means any and all surface and subsurface waters which are contained in or flow in or through this state, but does not include waters in sewage systems, waters in treatment works of disposal systems, waters in potable water distribution systems, and all water withdrawn for use until use and treatment have been completed (§ 25-8-103 (19), C.R.S.).

Examples of State waters include, but are not limited to, perennial streams, intermittent or ephemeral gulches and arroyos, ponds, lakes, reservoirs, irrigation canals or ditches, wetlands, stormwater conveyances (when they discharge to a surface water), and groundwater.

III. Policy/Applicability

The Division distinguishes between reporting requirements for spills that occur with respect to activities that result in a discharge that is authorized under a CDPS permit and those that are not. For non-permitted activities, or in the case of an activity where a permit does not address reporting of or response to a given spill, the Division recommends that the responsible person(s) take the following actions:

1. Immediately report spills that may result in a non-permitted discharge of pollutants to State waters to the Environmental Release and Incident Reporting Line at 1-877-518-5608;
2. Include the following information, if available, when notifying the Division of a spill:
   a. The name of the responsible person and, if not reported by that person, the name of the person reporting the spill and the name of the responsible person if known;
   b. An estimate of the date and time that the spill began or the actual date and time, if known;

c. The location of the spill, its source (e.g., manhole, tanker truck), and identification of the type of material spilled (e.g., untreated wastewater, biosolids, specific chemical);

d. The estimated volume of the spill and, if known, the actual date and time the spill was fully controlled/stopped.

e. Whether the spill is ongoing and, if it is, the rate of flow and an estimate of the time that the spill will be fully controlled, if known;

f. Measures that are being or have been taken to contain, reduce, and/or clean up the spill;

g. A list of any potentially affected area and any known downstream water uses (e.g., public water supplies, irrigation diversions, public use areas such as parks or swim beaches) that will be or have been notified; and

h. A phone number and e-mail to contact a representative of the responsible person that is in charge of the response. Where a non-responsible person is reporting the spill, they are encouraged, but not required, to provide contact information.

Reporting and management of spills that occur with respect to activities resulting in a discharge authorized under a permit should be performed in accordance with the specific requirements of that permit. If the permit does not provide specific reporting or management response requirements for a given spill that may pollute State waters, the Division recommends that the responsible person report the spill in accordance with the procedures listed above.

This guidance only addresses reporting requirements under the Division's authority. The person or entity engaged in any operation or activity that results in a spill is responsible for any other applicable reporting requirements associated with the spill to other regulatory agencies.

Section 25-8-601(2), C.R.S. only addresses spill reporting to the Division. Section 25-8-202(7), C.R.S. provides certain water quality responsibilities to other state "implementing agencies." The Division's position is that, where a spill to the ground that may impact ground water only is fully and timely reported to an implementing agency having jurisdiction over that spill, the intent of section 601(2) has been fulfilled, and the spill need not also be reported to the Division. The Division suggests that the responsible person confirm with the implementing agency that a spill falls under the jurisdiction of the implementing agency at the time it is reported in order to avoid possible legal liability should it fall under the Division's jurisdiction.

IV. Division Examples of Non-Reportable Spills

The Division has identified the following examples of types of spills that are considered "non-reportable" under § 25-8-601(2), C.R.S. Documentation of such spills, including the information listed in section III.2.a – III.2.f above, should be maintained by the responsible person for Division review for a period of three years.

1. A spill to a generally impervious surface or structure (e.g., paved street/parking lot, storm sewer, warehouse floor, manhole, vault, concrete basement), or onto soils, that is fully contained in/on the impervious surface/structure or soils, or that is managed in a manner so that it will not reach State waters at the time of the spill or in the future. Such spills that are cleaned up within 24 hours will be considered by the Division to have no potential to reach State waters. However, even if such spills are not cleaned up within 24 hours, the responsible person may be able to "fully contain" or otherwise manage a spill such that it will not reach State waters. Where there is a sump pump present in a basement to which a spill occurred, the responsible person must establish that the pump did not discharge to State waters during the time between the start of the spill and the completion of clean-up in accordance with best management practices.
2. A spill or discharge that is managed consistent with best management practices that are established in accordance with a CDPS discharge permit or any Water Quality Control Commission-adopted control regulation related to spill management or reporting.
3. A spill of potable water from a public water system that does not reach surface waters.

Colorado Department of Public Health and Environment
Water Quality Control Division

Incident / Spill / SSO Release Reporting
Five (5) Day Reporting Form

☐ Field Services – Grand Junction 222 South 6th Street, Room 232 Grand Junction, CO 81501 Telephone: 970-248-7150 Fax: 970-248-7198 Contact email: michelle.thiebaud@state.co.us	☐ Field Services – Pueblo 140 Central Main, Suite 300 Pueblo, CO 81003 Telephone: 719-295-5060 Fax: 719-543-8441 Contact email: carol.keever@state.co.us	☐ Field Services – Denver 4300 Cherry Creek Dr. South, B2 Denver, Colorado 80246-1530 Phone: 303-692-3650 Fax: 303-782-0390 Contact email: annemarie.goolsby@state.co.us

Reporting Form: Incident / Spill / Sanitary Sewer Overflow (SSO)

The Water Quality Control Division distinguishes between reporting requirements for spills that occur with respect to activities that result in a discharge that is authorized under a CDPS permit and those that are not. Reporting and management of spills that occur with respect to activities resulting in a discharge authorized under a permit should be performed in accordance with the specific requirements of that permit. If the permit does not require a 5-day report, please provide the information below in writing. For non-permitted activities, or in the case of an activity where a permit does not address reporting of or response to a given spill, please submit this written response to the Water Quality Control Division within five (5) working days of the date of the event. If sufficient space is not provided, please attach other sheets. Please send the completed form with signature via fax or email to the Division's Field Services office indicated above. If you have any questions please contact the Division's Field Services Engineer at your earliest convenience. The Field Services County list is available at: http://www.colorado.gov/cdphe/wqcd (Contacts, Inspection services contacts, then Field services contacts).

Prior to the five (5) working day deadline, you may request an extension to submit the report if sample analyses justifiably are going to require more time to analyze than the reporting time allows. To request an extension please send an email to the Division's Field Services Engineer for the County that the incident / spill / SSO took place or to the email listed above.

Incident Background Information			
County			
Incident / Spill Number (Division provided) and Spill Date			
Type of Incident / Spill / SSO (check one)	☐ Sanitary Sewer Overflow/Reuse	☐ Petroleum Product	☐ Chemical
	☐ WW Treatment Plant Bypass or Upset (through an authorized outfall point)	☐ Combined Sewer Overflow	☐ Biosolids
	☐ Unplanned potable water release (e.g., water line break)		☐ Other

Contact Information			
Potentially Responsible Party (PRP): Contact Name		Potentially Responsible Party (PRP): Company / Agency	
PRP Phone / Fax	Phone: Fax:	PRP email address	
CDPS Permit Number:		CDPS Permittee Name:	
Reported by (if not PRP): Contact Name		Reported by (if not PRP): Company / Agency	
Reported by (if not PRP): Phone / Fax	Phone: Fax:	Reported by (if not PRP): email address	

Incident Information: Please provide the following information.	
A	Incident / spill / SSO source, cause, and event description. Response:
B	Material released (e.g., untreated wastewater, biosolids, specific chemicals or products) and estimated total quantity (e.g., gallons). Please attach MSDS for any and all chemicals or products involved in spill or release. Response:
C	Actual or estimated dates and times of the event, including duration and actual date and time spill was fully controlled/stopped. If release is still occurring, the date and time the release is expected to be stopped. Response:

D	Location of release (e.g., address, lat/long, road name and mile marker).
	Response:
E	Describe measures taken or planned to contain, reduce, and clean up spill or release.
	Response:
F	Steps taken or planned to prevent reoccurrence of the event.
	Response:
Incident Impact to State Waters (As defined in § 25-8-103(19), C.R.S.). *Examples of State waters include: perennial streams, intermittent or ephemeral gulches, ditches, ponds, lakes, reservoirs, irrigation canals, wetlands, stormwater conveyances (when they discharge to surface water), and groundwater.*	
G	Did flow or materials reach surface waters of the State? If so, please describe the path of flow to State waters and which State water body was impacted (e.g., spill impacted a storm drain which was directly connected to Cherry Creek, Colorado River, etc.). If yes, what quantity of material (e.g., gallons) reached the surface water and what was the resulting impact?
	Response:
H	Were any water quality samples or other samples taken? If so, please describe sampling process and attached results.
	Response:
I	Did flow or materials reach groundwater of the State? If so, please describe the path of flow to State waters and which State water body impacted (e.g, spill soaked into ground and wet soil was not excavated). If yes, what quantity of material (e.g., gallons) reached the ground or groundwater and what was the resulting impact?
	Response:
J	Did the incident include any of the following (check if yes)? If so, please include additional details below.
	☐ Toxic Chemical Release ☐ Fish Kill
	Response:
Incident Impact to Areas or Water Users	
K	Did the incident / spill / SSO impact any areas (e.g., public use areas including parks or swim beaches) or downstream water users (e.g., public water suppliers, irrigation diversions)? Please list impacted areas and/or users, their location, and potential impacts.
	Response:
L	How were the impacted area users (e.g., park patrons) and downstream water users notified (e.g., signs posted, list downstream users contact via phone).
	Response:

I hereby certify that the information presented above is accurate and complete.

Date	Company	Typed Name and Title	Signature

TAB E

SOILS

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for El Paso County Area, Colorado

September 22, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

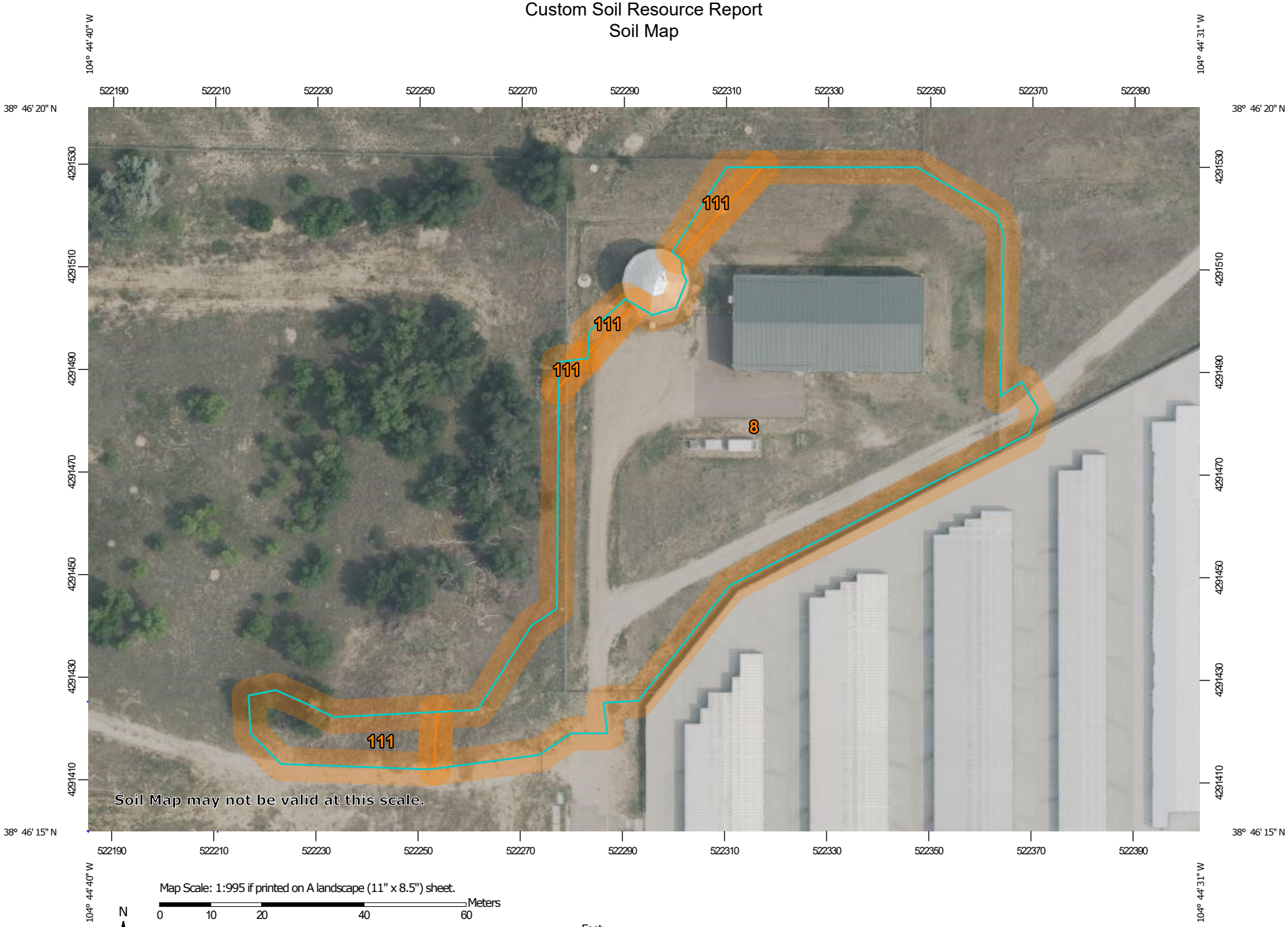
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 22, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 23, 2024—Aug 4, 2024

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
8	Blakeland loamy sand, 1 to 9 percent slopes	1.6	92.7%
111	Water	0.1	7.3%
Totals for Area of Interest		**1.7**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

El Paso County Area, Colorado

8—Blakeland loamy sand, 1 to 9 percent slopes

Map Unit Setting

National map unit symbol: 369v
Elevation: 4,600 to 5,800 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 125 to 145 days
Farmland classification: Not prime farmland

Map Unit Composition

Blakeland and similar soils: 98 percent
Minor components: 2 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blakeland

Setting

Landform: Flats, hills
Landform position (three-dimensional): Side slope, talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock and/or eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 11 inches: loamy sand
AC - 11 to 27 inches: loamy sand
C - 27 to 60 inches: sand

Properties and qualities

Slope: 1 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Available water supply, 0 to 60 inches: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: R049XB210CO - Sandy Foothill
Hydric soil rating: No

Minor Components

Other soils

Percent of map unit: 1 percent

Hydric soil rating: No

Pleasant

Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

111—Water

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Erosion Factors

Soil Erosion Factors are soil properties and interpretations used in evaluating the soil for potential erosion. Example soil erosion factors can include K factor for the whole soil or on a rock free basis, T factor, wind erodibility group and wind erodibility index.

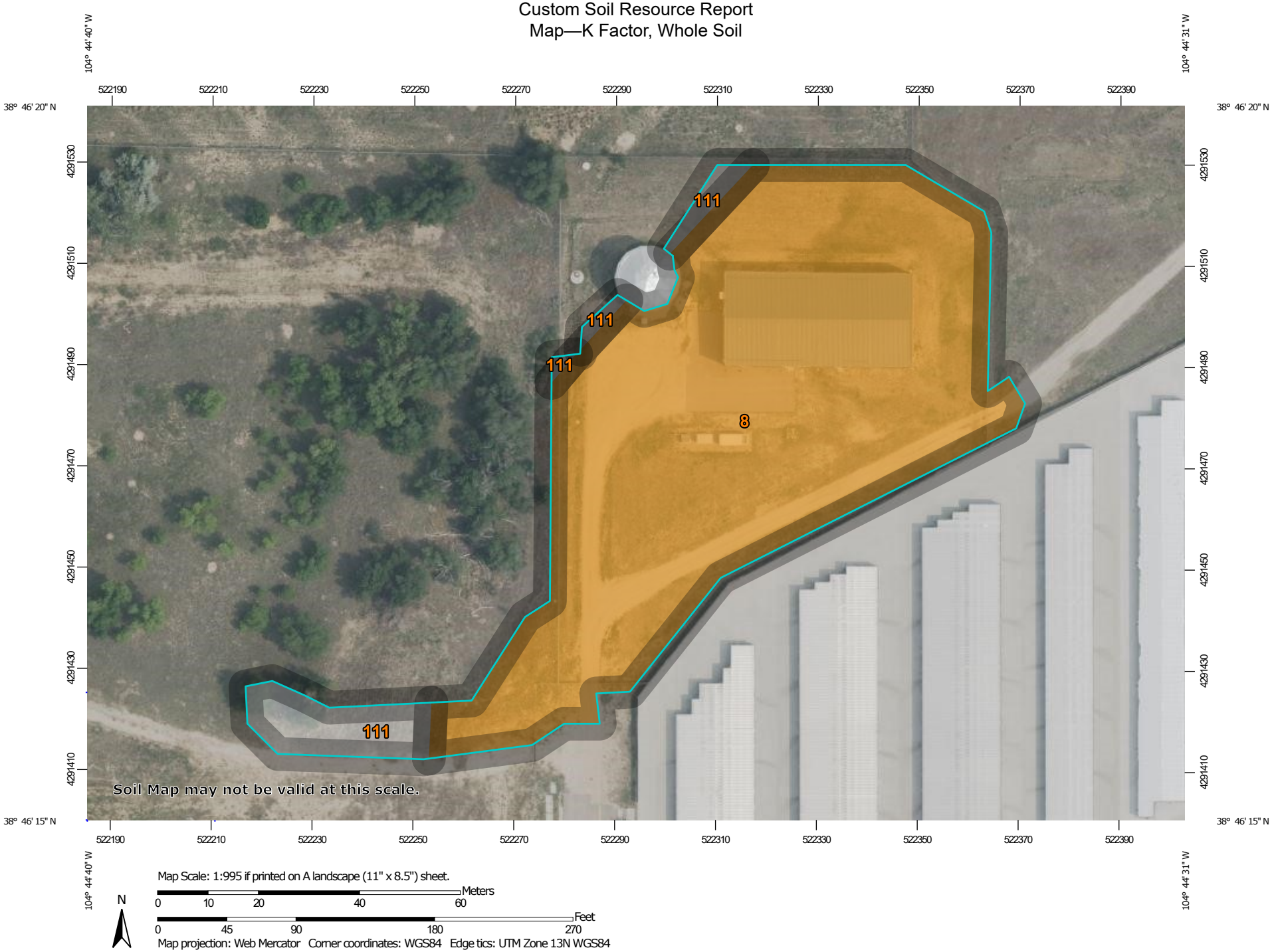
K Factor, Whole Soil

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Factor K does not apply to organic horizons and is not reported for those layers.

Custom Soil Resource Report
Map—K Factor, Whole Soil



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

.02
.05
.10
.15
.17
.20
.24
.28
.32
.37
.43
.49
.55
.64
Not rated or not available

Soil Rating Lines

.02
.05
.10
.15
.17
.20
.24
.28
.32
.37
.43
.49
.55
.64
Not rated or not available

Soil Rating Points

.02
.05
.10
.15
.17
.20
.24
.28
.32
.37
.43
.49
.55
.64
Not rated or not available

Water Features

Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 22, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 23, 2024—Aug 4, 2024

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—K Factor, Whole Soil

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
8	Blakeland loamy sand, 1 to 9 percent slopes	.10	1.6	92.7%
111	Water		0.1	7.3%
Totals for Area of Interest			**1.7**	**100.0%**

Rating Options—K Factor, Whole Soil

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

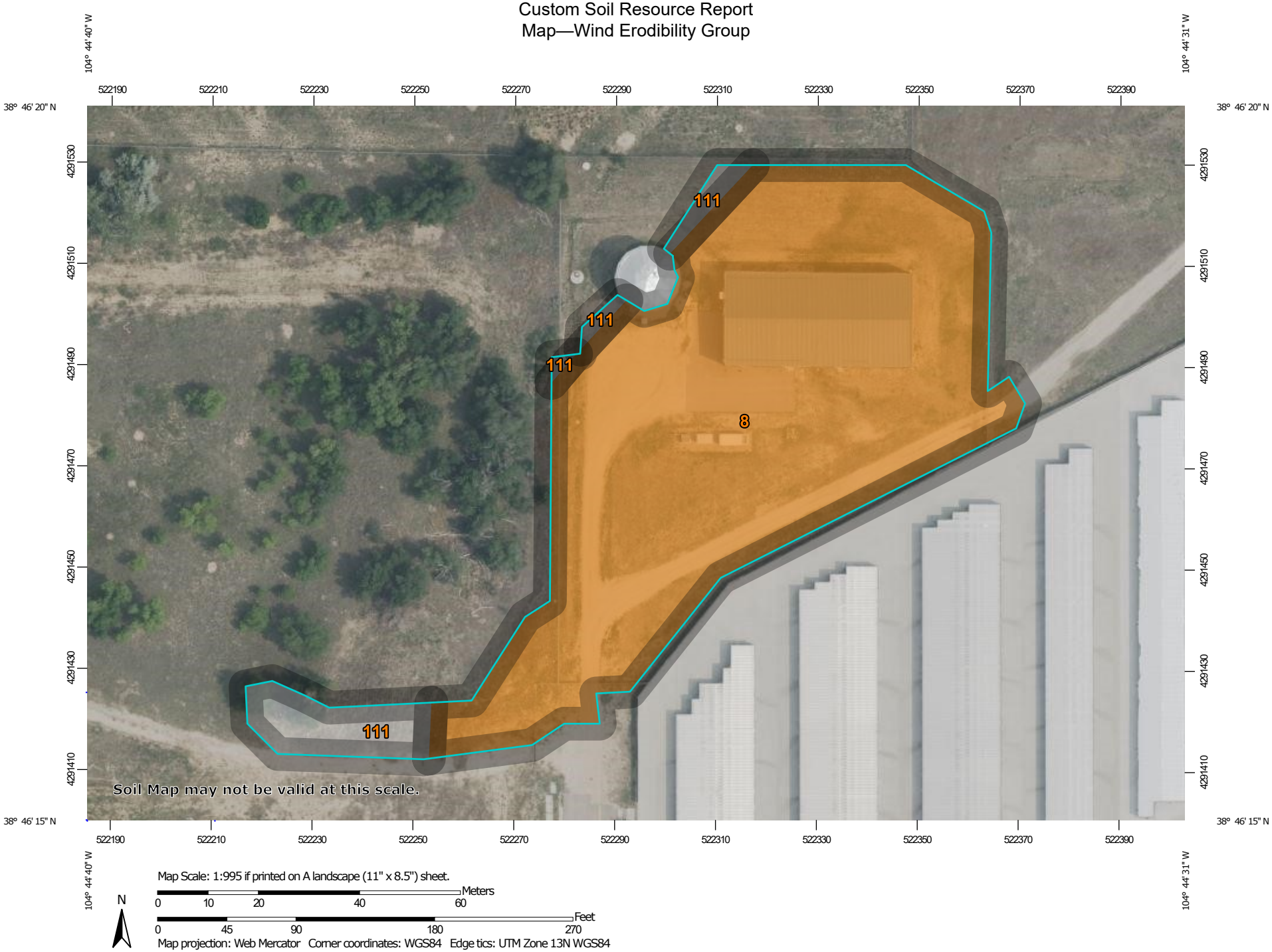
Tie-break Rule: Higher

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

Wind Erodibility Group

A wind erodibility group (WEG) consists of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible.

Map—Wind Erodibility Group



Map Scale: 1:995 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 10 20 40 60

Feet
0 45 90 180 270

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

1
2
3
4
4L
5
6
7
8
Not rated or not available

Soil Rating Lines

1
2
3
4
4L
5
6
7
8
Not rated or not available

Soil Rating Points

1
2
3
4
4L
5
6
7
8
Not rated or not available

Water Features

Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 22, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 23, 2024—Aug 4, 2024

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Wind Erodibility Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
8	Blakeland loamy sand, 1 to 9 percent slopes	2	1.6	92.7%
111	Water		0.1	7.3%
Totals for Area of Interest			**1.7**	**100.0%**

Rating Options—Wind Erodibility Group

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Soil Erosion

This folder contains a collection of tabular reports that present soil erosion factors and groupings. The reports (tables) include all selected map units and components for each map unit. Soil erosion factors are soil properties and interpretations used in evaluating the soil for potential erosion. Example soil erosion factors can include K factor for the whole soil or on a rock free basis, T factor, wind erodibility group and wind erodibility index.

RUSLE2 Related Attributes

This report summarizes those soil attributes used by the Revised Universal Soil Loss Equation Version 2 (RUSLE2) for the map units in the selected area. The report includes the map unit symbol, the component name, and the percent of the component in the map unit. Soil property data for each map unit component include the hydrologic soil group, erosion factor Kf for the surface horizon, erosion factor T, and the representative percentage of sand, silt, and clay in the mineral surface horizon. Missing surface data may indicate the presence of an organic layer.

Report—RUSLE2 Related Attributes

Soil properties and interpretations for erosion runoff calculations. The surface mineral horizon properties are displayed or the first mineral horizon below an organic surface horizon. Organic horizons are not displayed.

RUSLE2 Related Attributes–El Paso County Area, Colorado

Map symbol and soil name	Pct. of map unit	Slope length (ft)	Hydrologic group	Kf	T factor	Representative value		
						% Sand	% Silt	% Clay
8—Blakeland loamy sand, 1 to 9 percent slopes								
Blakeland	98	—	A	.10	5	85.3	9.2	5.5

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United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

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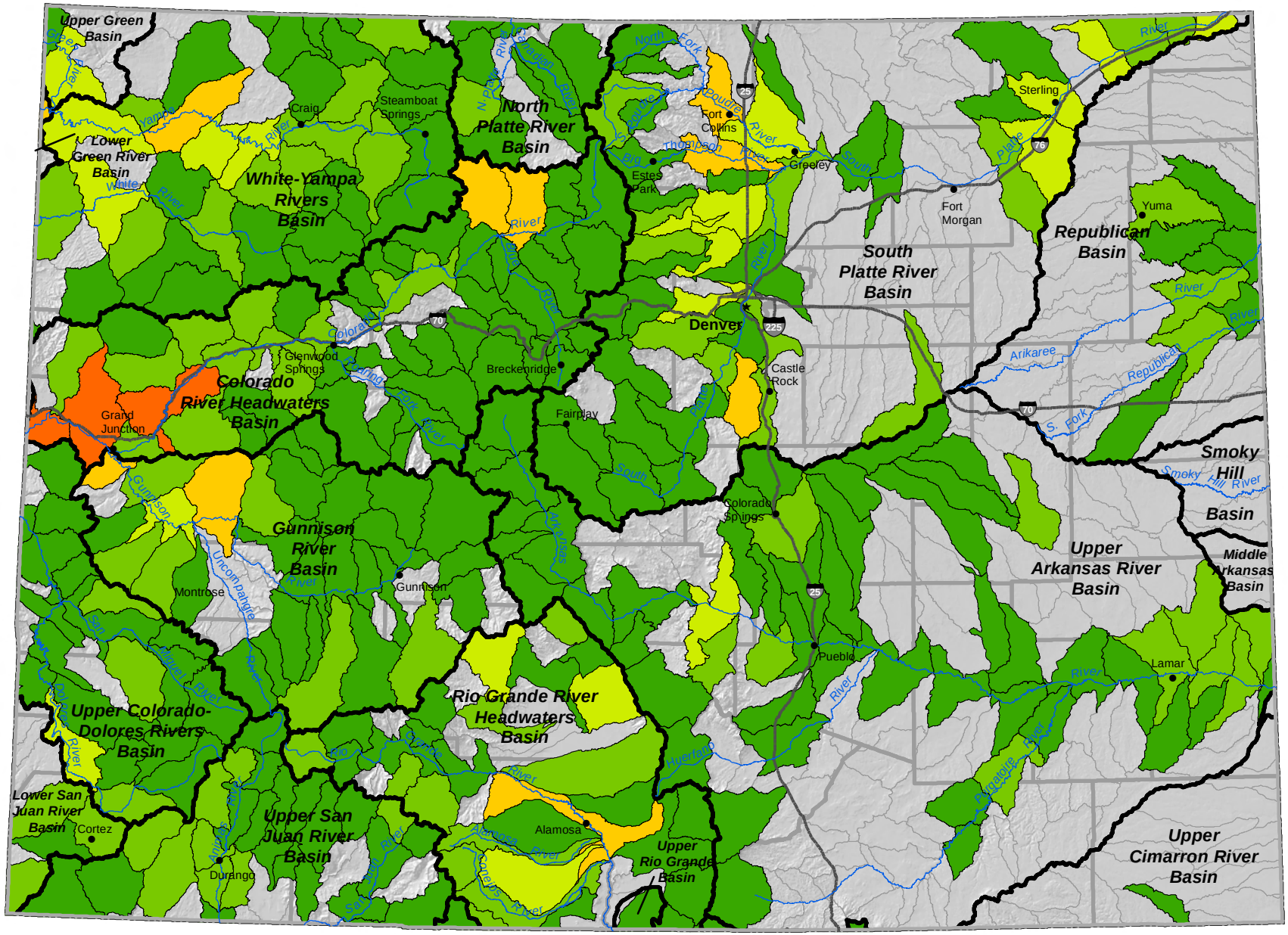
TAB F

ENDANGERED SPECIES & HISTORICAL PROPERTIES

High Priority Colorado Watersheds

Tier 1 Aquatic Species Richness



- Major Rivers
- Interstates
- River Basins (HUC level 6)

Species Richness by Watershed (HUC level 10)

- 0
- 1
- 2
- 3
- 4
- 5

Tier 1 Species

Arkansas Darter
Bonytail Chub
Brassy Minnow
Colorado Pikeminnow
Colorado River Cutthroat Trout
Common Shiner
Greenback Cutthroat Trout
Humpback Chub
Lake Chub
Northern Redbelly Dace
Plains Minnow
Plains Orangethroat Darter
Razorback Sucker
Rio Grande Chub
Rio Grande Cutthroat Trout
Rio Grande Sucker
Roundtail Chub
Southern Redbelly Dace
Suckermouth Minnow

N W E S

WildlifeGIS

0 10 20 40

Miles

GW 6/11, \\DOWHabNE4\Habitat\Projects\SpeciesConservation\CWCS\Aquatic_Tier1Species_HUC10_2011.mxd

U.S. Fish & Wildlife Service

ECOS

Listed species believed to or known to occur in Colorado

Notes:

- **As of 02/13/2015 the data in this report has been updated to use a different set of information. Results are based on where the species is believed to or known to occur. The FWS feels utilizing this data set is a better representation of species occurrence. Note: there may be other federally listed species that are not currently known or expected to occur in this state but are covered by the ESA wherever they are found; Thus if new surveys detected them in this state they are still covered by the ESA. The FWS is using the best information available on this date to generate this list.**
- This report shows listed species or populations believed to or known to occur in Colorado This
- list does not include experimental populations and similarity of appearance listings. This list
- includes species or populations under the sole jurisdiction of the National Marine Fisheries Service.
- Click on the highlighted scientific names below to view a Species Profile for each listing.

Listed species -- 34 listings

Animals -- 17 listings

Status	Species/Listing Name
E	Butterfly, Uncompahgre fritillary Wherever found (*Boloria acrocnema*)
E	Chub, bonytail Wherever found (*Gila elegans*)
E	Chub, humpback Wherever found (*Gila cypha*)
T	Cuckoo, yellow-billed Western U.S. DPS (*Coccyzus americanus*)
E	Ferret, black-footed Wherever found, except where listed as an experimental population (*Mustela nigripes*)
E	Flycatcher, southwestern willow Wherever found (*Empidonax traillii extimus*)
T	Lynx, Canada Wherever Found in Contiguous U.S. (*Lynx canadensis*)
E	Mouse, New Mexico meadow jumping Wherever found (*Zapus hudsonius luteus*)
T	Mouse, Preble's meadow jumping wherever found (*Zapus hudsonius preblei*)
T	Owl, Mexican spotted Wherever found (*Strix occidentalis lucida*)
E	Pikeminnow (=squawfish), Colorado Wherever found, except where listed as an experimental population (*Ptychocheilus lucius*)

Status	Species/Listing Name
T	Plover, piping [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. (*Charadrius melodus*)
T	sage-grouse, Gunnison Wherever found (*Centrocercus minimus*)
T	Skipper, Pawnee montane Wherever found (*Hesperia leonardus montana*)
E	Sucker, razorback Wherever found (*Xyrauchen texanus*)
E	Tern, least interior pop. (*Sterna antillarum*)
T	trout, Greenback Cutthroat Wherever found (*Oncorhynchus clarkii stomias*)

Plants -- 17 listings

Status	Species/Listing Name
T	beardtongue, Parachute (*Penstemon debilis*)
E	Beardtongue, Penland (*Penstemon penlandii*)
T	Bladderpod, Dudley Bluffs (*Lesquerella congesta*)
T	Butterfly plant, Colorado (*Gaura neomexicana var. coloradensis*)
T	Cactus, Colorado hookless (*Sclerocactus glaucus*)
E	Cactus, Knowlton's (*Pediocactus knowltonii*)
T	Cactus, Mesa Verde (*Sclerocactus mesae-verdae*)
T	Ladies'-tresses, Ute (*Spiranthes diluvialis*)
E	Milk-vetch, Mancos (*Astragalus humillimus*)
E	milkvetch, Osterhout (*Astragalus osterhoutii*)
T	Mustard, Penland alpine fen (*Eutrema penlandii*)
T	Orchid, western prairie fringed (*Platanthera praeclara*)
T	Phacelia, DeBeque (*Phacelia submutica*)
E	Phacelia, North Park (*Phacelia formosula*)
E	Skyrocket, Pagosa (*Ipomopsis polyantha*)
T	Twinpod, Dudley Bluffs (*Physaria obcordata*)
E	wild buckwheat, clay-loving (*Eriogonum pelinophilum*)

IPaC U.S. Fish & Wildlife Service

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

El Paso County, Colorado

Local office

Colorado Ecological Services Field Office

(303) 236-4773
(303) 236-4005

MAILING ADDRESS

Denver Federal Center
P.O. Box 25486
Denver, CO 80225-0486

PHYSICAL ADDRESS
1 Denver Federal Center
Bldg 53 Room Fw100}
Denver, CO 80225-0001

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Eastern Black Rail Laterallus jamaicensis ssp. jamaicensis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10477	Threatened
Piping Plover Charadrius melodus This species only needs to be considered if the following condition applies: • Project includes water-related activities and/or use in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6039	Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Suckley's Cuckoo Bumble Bee Bombus suckleyi No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10885	Proposed Endangered

Flowering Plants

NAME	STATUS
Ute Ladies'-tresses Spiranthes diluvialis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2159	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Jul 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental

Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

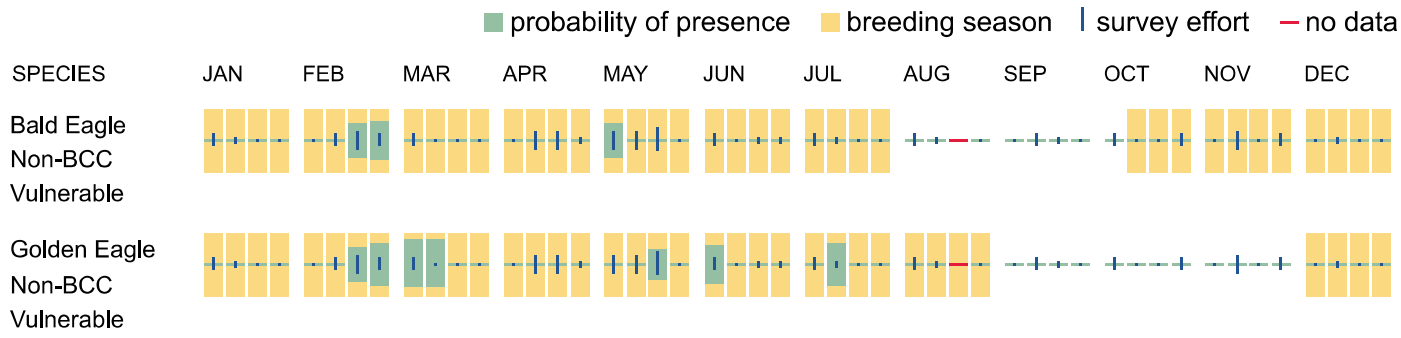
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Jul 31
Broad-tailed Hummingbird Selasphorus platycercus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 25 to Aug 21
Chimney Swift Chaetura pelagica This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Ferruginous Hawk Buteo regalis This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/6038	Breeds Mar 15 to Aug 15

Golden Eagle Aquila chrysaetos — Breeds Dec 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Grasshopper Sparrow Ammodramus savannarum perpallidus — Breeds Jun 1 to Aug 20

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8329

Lewis's Woodpecker Melanerpes lewis — Breeds Apr 20 to Sep 30

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9408

Long-eared Owl asio otus — Breeds Mar 1 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3631

Northern Harrier Circus hudsonius — Breeds Apr 1 to Sep 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8350

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

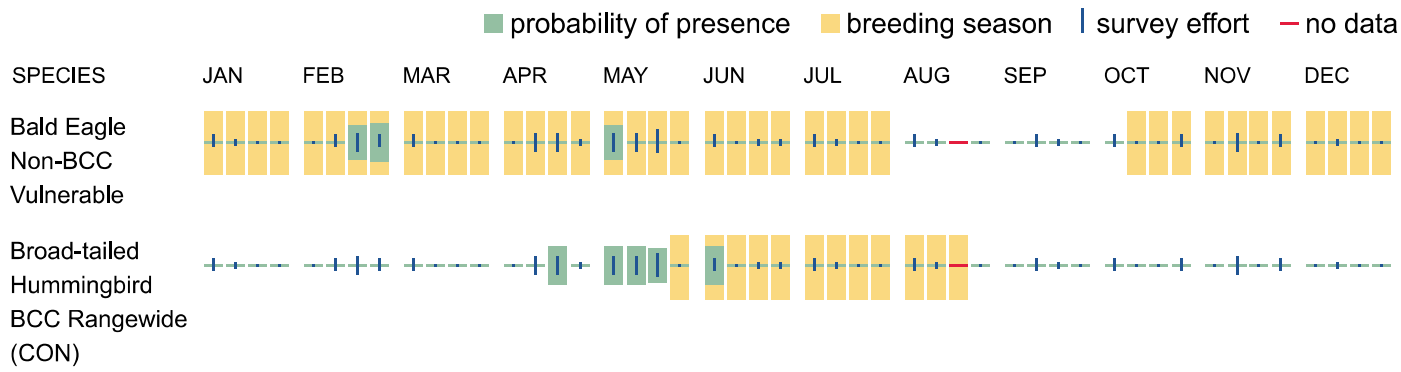
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

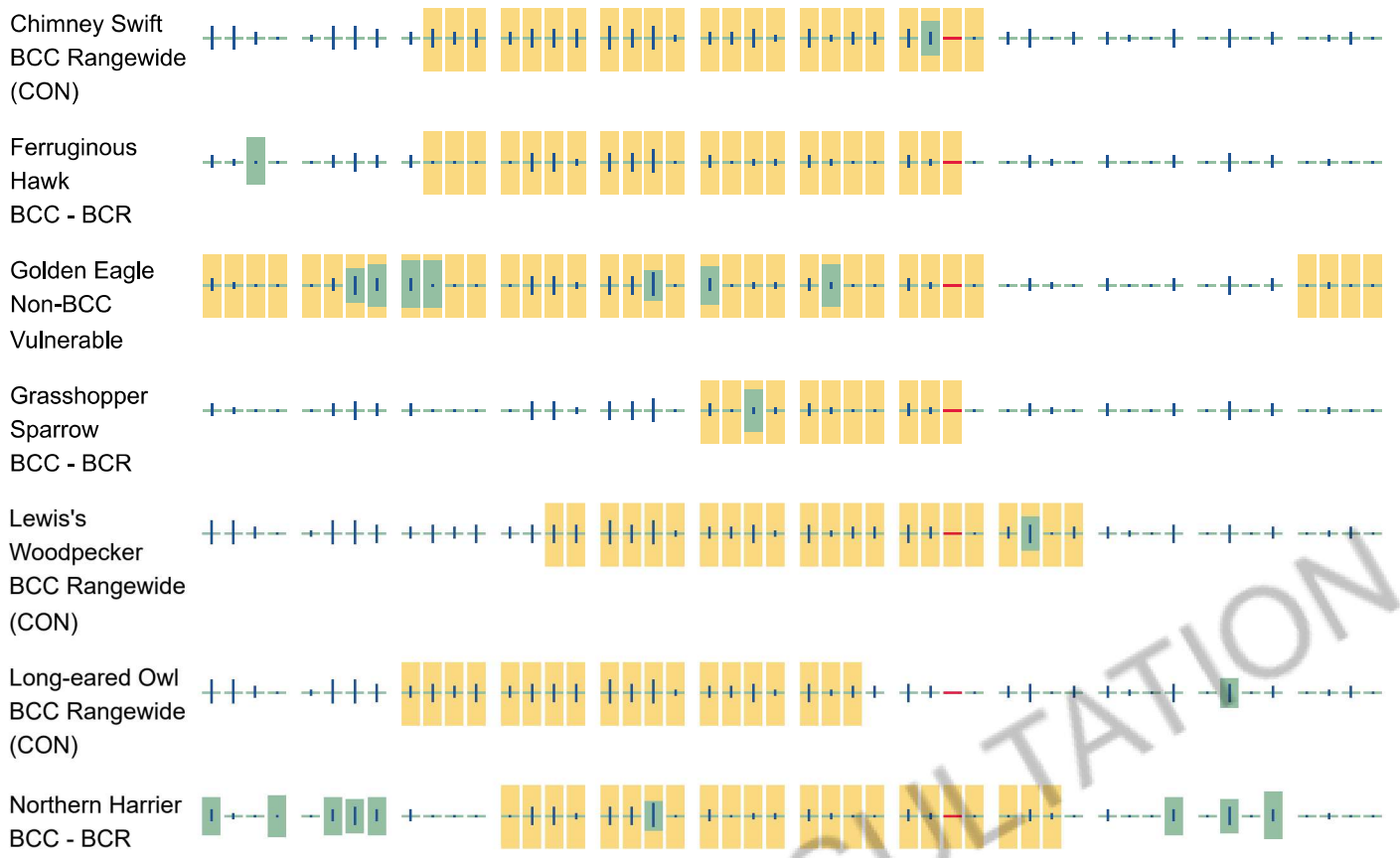
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as “Vulnerable”. See the FAQ “What are the levels of concern for migratory birds?” for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ “Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds”.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs
Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

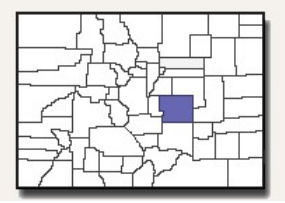
Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

El Paso County



Back to Listings by County
Download Google Earth KML file (What's this?)

Black Forest

Black Forest Community Church
6845 Shoup Road, Black Forest vicinity
State Register 9/29/2016, 5EP.6722

The Black Forest Community Church consists of the original 1940 log church building with bell tower, a good example of the Pioneer Log type, and the 1962 sanctuary building, an example of the Modern Movement style with laminated-wood piers, cross-gabled projecting roof lines, and stained glass windows by local artist Al Wynne. The continually used community-built landmark reflects the identity and history of the Black Forest community. More information (PDF, 626kb)

Black Forest School
6770 Shoup Rd., Black Forest vicinity
National Register 11/3/1992, 5EP.1753

Constructed in 1921, the building is a late example of a log rural schoolhouse. A controversial school consolidation decision closed the school in 1945. Listed under Rural School Buildings in Colorado Multiple Property Submission.

J.G. Evans Barn
Hogden Rd., Black Forest vicinity
National Register 6/22/2004, 5EP.3981

Built circa 1880, the J.G. Evans Barn is one of the last remaining barns from the earliest period of settlement and development in the Black Forest area. Typical of a Midwest three portal barn with its hand hewn logs, three bays, and broken gable roof, the building retains original materials, feed bins and stalls, and a tin-lined grain room. Many of these barns once dotted the landscape across El Paso County; residential growth and a shift away from agricultural practices has resulted in a loss of many farm buildings. The Evans Barn stands as a link to the county's rural past and the homestead era. More information (PDF, 1.23 MB).

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Calhan

Calhan Paint Mines Archaeological District

Calhan vicinity
National Register 7/14/2000, 5EP.3258

The district provides an opportunity to understand how prehistoric peoples processed and transported clays for ceramic production. Predominantly open plains with some areas of colorful clay deposits capped by white sandstone, this archaeological landscape also has the potential to provide a better understanding of subsistence practices, specifically addressing questions of faunal procurement and processing over a span of 10,000 years, from at least 8100 BC through AD 1750.

Calhan Rock Island Railroad Depot

West of Denver St.
National Register 4/20/1995, 5EP.2173

The 1906 depot served the Chicago, Rock Island and Pacific Railroad on its route between Kansas and Colorado Springs. It is one of only three surviving depots of the Rock Island Railroad in Colorado remaining on their original sites. The Rock Island slipped into bankruptcy in the early 1970s, and in 1993 94 the rails were pulled up and sold for scrap. The property is associated with the Railroads in Colorado, 1858-1948 Multiple Property Submission.

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Cascade

Eastholme

4445 Haggerman Ave.
National Register 10/22/1998, 5EP.415

Eliza Marriott Hewlett, an early settler who served as the secretary of the Cascade Town and Improvement Company, built and operated the two-story wood frame boarding house. In operation by 1887, it was a precursor of the larger resort hotels that later dominated the Ute Pass area. It is the only surviving building representing the early railroad period of Cascade's commercial development as a summer resort for the wealthy.

Holy Rosary Chapel

4454 Fountain Blvd.
State Register 12/13/1995, 5EP.2210

The Chapel is architecturally significant as the work of Colorado Springs architect, Charles E. Thomas. Incorporating elements of Mission and Romanesque Revival, Thomas considered this 1930 building to be one of his most outstanding works.

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Colorado Springs

Alamo Hotel

128 S. Tejon St.
National Register 9/14/1977, 5EP.183

Opened for business in 1886, additions were constructed in 1890 and 1899. The hotel was important to tourism until converted to apartments in 1968. The exterior reflects Moorish and Classical influences, but the building is primarily Federalist in style.

All Souls Unitarian Church

730 N. Tejon St.
State Register 8/30/2007, 5EP.626

The 1892 church building is an interesting local expression of the Shingle Style with its wood shingled walls, long sloping gabled roofs and windows grouped into pairs and fours. Undulating or wavy pattern wood shingles, another characteristic of this style, can be seen in the apex of the gables. Other decorative features include paneled vergeboard, eyebrow dormers, and stained glass windows. The raised foundation walls are reddish-greenish sandstone quarried west of Manitou Springs. The tall square tower and its bellcast roof with flared eaves are incorporated into the intersection of two major gables and rises out of the roof rather than from the ground. Walter F. Douglas designed the building, based on a standard plan used by Unitarians in the East. A 1984 addition with lower walls of stucco instead of stone incorporated many of these characteristic elements. (2007 photograph.) More information (PDF, 1.41 MB).

Atchison, Topeka & Santa Fe Depot
555 E. Pikes Peak Ave.
National Register 9/10/1979, 5EP.199

Chicago Architect E.A. Harrison designed the circa 1917 Jacobethan Revival style railroad depot. The building once contained one of the famous Harvey House restaurants that provided meals to passengers across the AT&SF system. The railroad abandoned the depot in the early 1970s. Developers purchased the building in the 1980s and rehabilitated it into a complex of stores and offices. The property is associated with the Railroads in Colorado, 1858-1948 Multiple Property Submission.

Bemis Hall
920 N. Cascade Ave., Colorado College Campus
National Register 3/28/1997, 5EP.3954

Constructed in 1908 as a women's dormitory and dining hall, the building served as a focus of campus social life for women and reflects the early 20th century design philosophies for women's dormitories. The building is also important as an example of architect Maurice Biscoe's application of the Tudor Revival style to collegiate facilities. Listed under Historic Resources of Colorado College Multiple Property Submission.

Bemis House / Hearthstone Inn
506 N. Cascade
National Register 9/14/1979, 5EP.196

Located in a neighborhood of substantial homes, the 1885 Queen Anne style Bemis House was designed by architect W.F. Ellis. Additions were made in 1886 and 1887, and the property was converted to apartments in 1935.

Boulder Crescent Place Historic District
9 & 11 W. Boulder; 312, 318, 320 N. Cascade
National Register 9/10/1987, 5EP.1063

The district contains an important collection of turn-of-the-century wood frame houses the styling of which includes local versions of Queen Anne and Dutch Colonial Revival. Construction dates range from 1894 to 1901, a period during which Colorado Springs grew rapidly as people moved into the Pikes Peak region for their health and to enjoy the natural scenic beauty.

Burgess House
730 N. Nevada Ave.
National Register 9/13/1990, 5EP.789

Completed in 1888, this large Queen Anne style "pattern book" residence was built by Charles H. Burgess, an affluent citizen of Colorado Springs. It is one of the few survivors in its neighborhood dating from the first wave of development in Colorado Springs.

Carlton House
U.S. Air Force Academy, Pine Valley
National Register 11/3/1989, 5EP.1222

The large, rambling residence was designed by San Diego architect Richard S. Requa. It remains virtually intact as an excellent example of the Spanish Colonial Revival style. The property includes a total of nine buildings constructed between 1930 and 1937.

Chadbourn Spanish Gospel Mission
402 S. Conejos St.
National Register 1/14/2009, 5EP.643

The Chadbourn Spanish Gospel Mission is the sole remaining building of a now demolished Hispanic immigrant neighborhood known as the Conejos District. In the early 20th century many Mexican laborers made the Conejos District their home due to its location near the Denver & Rio Grande Railroad switchyard. During this period, the Mission became an integral part of the neighborhood, not only as a religious institution, but also as a community hub, educational center, and refuge for those in need. The Mission is also significant for its architecture. The building began as a modest neighborhood grocery

store, but was later renovated to resemble a traditional Spanish Mission. Through this renovation, the building became an excellent example of the Mission Revival style as applied to non-secular architecture in Colorado Springs. The building's Mission Revival style is exemplified in its square bell tower, curvilinear parapets, overhanging eaves, exposed rafter tails, arches, and stucco finish. (2007 photograph.) More information (PDF, 1.52 MB).

Chambers Ranch / White House (Rock Ledge Ranch)

3202 Chambers Way
National Register 11/29/1979, 5EP.188

After Robert and Elsie Chambers arrived in the Colorado Springs area in 1874, they bought a parcel of land on the wagon road to Denver. Their small vernacular stone farmhouse was stuccoed by later owners. Also on the property is the circa 1900 Orchard House, a Mission style residence with elements of the Western Stick and Spanish Colonial Revival.

City Hall of Colorado City

2902 W. Colorado Ave.
National Register 6/3/1982, 5EP.220

Built in 1888, the building exemplifies the Richardsonian Romanesque style. Although only serving municipal needs for a short time, it has continued to be a local visual landmark.

Claremont / Trianon (The Colorado Springs School)

21 Broadmoor Ave.
National Register 4/13/1977, 5EP.186

The 1906 Claremont, also knows at the Trianon, was built for Charles and Virginia Baldwin. The wealthy couple came to Colorado Springs from New York for health reasons. They hired local architect Thomas MacLaren to create a spacious residence deliberately scaled down from the Grand Trianon at Versailles. MacLaren traveled to France as part of the design process.

Colorado School for the Deaf and the Blind

33 N. Institute St.
State Register 3/11/1998, 5EP.2740

Established on this site in 1876, the school is significant for being the only school in the state dedicated solely to the education of the deaf and the blind. Ten campus buildings, constructed between 1906 and 1952 of Castle Rock rhyolite, exhibit a high degree of craftsmanship and design reflecting an eclectic mix of architectural styles.

Colorado Springs & Cripple Creek District Railway / Corley Mountain Highway

U.S. Forest Service Rd. 370, Colorado Springs vicinity
National Register 3/25/1999, 5EP.385.1 / 5TL.81.1

Constructed in 1900, the route began as the Colorado Springs & Cripple Creek District Railway. Colorado Springs coal mine owner and cattle breeder W.D. Corley converted the abandoned rail line during the early 1920s into an auto toll road known as the Corley Mountain Highway. Referred to as the Gold Camp Road since it was taken over by the U.S. Forest Service in 1939, this scenic route extends into Teller County. The historic origins of the rail line and the toll road are evident along the route, and it continues to be a popular attraction for local residents and tourists.

The Colorado Springs & Interurban Railway (CS&IR) Streetcar No. 48

2333 Steel Dr.
State Register 2/24/2011, 5EP.6740

The Colorado Springs & Interurban Railway (CS&IR) Streetcar No. 48 is the only surviving streetcar from the first batch of streetcars purchased for the Colorado Springs & Suburban Railway by Winfield Scott Stratton, the first millionaire in Cripple Creek after his strike at the Independence Mine in 1901. In terms of engineering, CS&IR No. 48 used the Brill convertible design, which provided six inches of additional passenger space and addressed worries about potential health hazards with the use of retractable windows, an improvement for streetcars as it made opening and closing windows a task that riders could accomplish in transit. The Brill convertibles use of the Narragansett steps - which featured two steps where one was retractable, thus enabling the steps to reach closer to the ground than the original one-step system - also represented the early beginning of the transition from wood-framed streetcars to steel frames. Purchased as a kit and assembled in Colorado Springs, the car originally

contained a bulkhead separating the passenger compartment into two sections; one was used for smokers and one for non-smokers, a rarity on streetcars at that time. The CS&IR No. 48 was also the last streetcar to be used as a legal residence in the city of Colorado Springs, from 1932 or 1933 until 1998.

Colorado Springs City Auditorium

231 E. Kiowa St.
National Register 11/7/1995, 5EP.628

This 1922 building represents the culmination of the city's efforts to create a large, multi-purpose meeting and entertainment facility. A collaborative effort by three of Colorado Springs' most prominent and prolific architects: Charles E. Thomas, Thomas MacLaren, and Thompson D. Hetherington, the auditorium is the last of the classically-inspired civic buildings constructed in the city.

Colorado Springs City Hall

107 Nevada Ave.
National Register 2/19/2002, 5EP.652

The imposing two-story building served as the center of Colorado Springs government and administration from its construction in 1904 until 1980. An important example of the Classical Revival style, reflecting the influence of the City Beautiful movement in Colorado Springs, it is the only known collaborative effort by prominent local architects Thomas MacLaren and Thomas P. Barber. The building is noted for the quality of its stone masonry, utilizing Bare granite from Chaffee County and for its significant interior elements, including scagliola wall treatment.

Colorado Springs Day Nursery

104 E. Rio Grande St.
National Register 2/23/1990, 5EP.1191

The three-story building, constructed in 1922, was designed by William White Stickney for Mrs. F.M.P. Tylor, an important community benefactor. Its Tudor style exterior and interior remain intact.

Colorado Springs Fine Arts Center

30 W. Dale St.
National Register 7/3/1986, 5EP.622

The Center, built in 1936, was designed by John Gaw Meem. Its design is a blend of the regional Santa Fe style and modernism. The founder of the Fine Arts Center was Alice Bemis Taylor, an important local philanthropist.

Colorado Springs & Interurban Car No. 59

Rock Island Roundhouse
State Register 11/9/1994, 5EP.2179.1

This fine early 20th century example of the car builders' art was purchased in 1901 during Winfield Stratton's short but dynamic ownership of the interurban railway company. The car operated between Colorado Springs, Colorado City, and Manitou Springs.

Colorado Springs Post Office & Federal Courthouse

210 Pikes Peak Ave.
National Register 1/22/1986, 5EP.528

Constructed between 1908-1910, the Renaissance Revival / Beaux-Arts style building is a combined post office and federal building. Built during James Know Taylor's tenure as Supervising Architect, it is a good example of the application of the style to government buildings. Listed under U.S. Post Offices in Colorado Thematic Resource.

Colorado Springs Public Library / Carnegie Building

21 W. Kiowa St.
National Register 11/1/1996, 5EP.646

This 1905 Neo-Classical brick building, with terra cotta trim, is an excellent local example of the architecture associated with the City Beautiful Movement. The building is also significant for its association with the efforts of the community to establish a public library and with the nationwide public library movement funded by Andrew Carnegie.

Cossitt Memorial Hall

906 N. Cascade Ave., Colorado College Campus
National Register 3/28/1997, 5EP.3955

Completed in 1914, the building, with its gymnasium, training and locker rooms, and no longer extant outdoor amphitheater, led to the adoption of a 3-year physical education requirement for graduation. Designed by Maurice Biscoe, it is the only representation of Neoclassicism on the campus and is notable for its Modernistic elements. Listed under Historic Resources of Colorado College Multiple Property Submission.

Cottonwood Creek Bridge

On Vincent Dr. over Cottonwood Creek
National Register 10/12/2001, 5EP.972

Completed in 1923, this cantilevered, concrete deck, girder bridge was an integral part of the North-South Highway, a main artery through Colorado during the early decades of the 20th century. Comprised of four 53-foot spans, it is one of four remaining concrete girder bridges the highway department designed and built in the 1920s employing cantilevering to achieve long span lengths, thus distinguishing it from the scores of concrete slab and beam bridges constructed during this period. The bridge's design incorporated hammered concrete treatment on the spandrels and cast concrete balusters forming the guardrails.

Cutler Hall

912 N. Cascade Ave., Colorado College Campus
National Register 7/3/1986, 5EP.3951

Designed in the High Victorian Gothic style, by the Boston architectural firm of Peabody and Sterns, Cutler Hall was constructed between 1877 and 1880, with flanking wings added during 1881-1882. The building sits on the original parcel of land donated to the college by Major Henry McAlister, a director of the Colorado Springs Company. Listed under Colorado College Thematic Resource.

De Graff Building

116-118 N. Tejon
National Register 8/18/1983, 5EP.608

The four story masonry building is located in the heart of the central business district. Constructed in 1897 by Barber and Hastings, it is one of the few remaining commercial buildings dating from the boom period following the Cripple Creek gold strike.

Denver & Rio Grande Western Boxcar No. 60294

2333 Steel St.
State Register 2/26/2009, 5EP.6155

The 1939 Denver & Rio Grande Western (D&RGW) Boxcar No. 60294 is a rare example of railroad rolling stock designed specifically to transport automobiles. From 1941 to 1954 this boxcar was outfitted with special devices that allowed the shipping of automobiles. It was then adapted to general purpose cargo (moving auto parts and appliances) with other damage prevention devices, such as the Evans "Damage Free" or "DF" loaders. The car remained in automobile service until 1954. More information (PDF, 938.2 kb).

Denver & Rio Grande Western Boxcar No. 64084

2333 Steel St.
State Register 2/26/2009, 5EP.6156

As a representative type of rolling stock that illustrated the railroad's experimentation in damage prevention equipment, Denver & Rio Grande Western Railroad Boxcar No. 64084 was innovative for the time with nailable steel flooring. The 64000 series cars reflected several improvements from previous boxcars. It was a longer 50-foot length that allowed for a greater variety of cargo and had a metal roof walkway that reduced maintenance. The car remained in service into the 1980s. More information (PDF, 1.05 MB).

Dick-Trapp House

714 S. Nevada Ave.
State Register 2/22/2007, 5EP.4497

The circa 1907 house is as an excellent example of the Classic Cottage residential type in Colorado Springs. It embodies the distinctive characteristics of this building type: an elongated hipped roof, a full-width front porch, classical column porch supports, a central hipped roof dormer, and windows with architrave lintel trim. Other notable features include a side elevation bay window, leaded glass transom windows, narrow lap siding and a stone foundation. (2006 photograph.) More information (PDF, 1.33 MB).

Dodge-Hamlin House

1148 N. Cascade Avenue/1122 Wood Avenue
National Register 12/03/2014, 5EP.1515

The 1916 Dodge-Hamlin House is an excellent local representation of the Mission architectural style and its surrounding grounds are an intact residential landscape reflecting City Beautiful concepts. Both the house and gardens are the work of master architect Nicolaas van den Arend. In addition to its significance for architecture and landscape architecture, the property is significant in the field of Education, as specified in the Multiple Property Documentation Form (MPDF) Historic Resources of Colorado College, Colorado Springs, Colorado for its association with the growth of the Colorado College campus and its educational programs (1943-64). More information (PDF, 5.4 MB).

Edgeplain

1106 N. Nevada Ave., Colorado College Campus
National Register 11/21/2006, 5EP.5097

Located on the campus of Colorado College, Edgeplain is associated with Chester Alan Arthur II, who owned the house between 1901 and 1922. The son of President Arthur, Alan and his wife purchased the house, remodeling and expanding it to accommodate their extensive calendar of dinners and parties. Alan became deeply involved in the social life of the Pikes Peak region and Edgeplain became one of the outstanding meeting places of the social leaders from Colorado Springs and Denver. The house is an example of the work of prominent Colorado Springs architects Walter Douglas and Thompson Hetherington. While not the original designers of the 1881 home, the firm was responsible for its substantial expansion and alteration. The walls consist of multi-hued sandstone blocks of varying widths and height laid in random work with tinted mortar. Indicative of the work of master stonemasons, the stone displays a variety of dressings (including pecked and vermiculated). The combination of colors and finishes is an unusual and distinguishing characteristic. More information (PDF, 1.19 MB).

El Paso County Courthouse (Pioneers Museum)

215 S. Tejon
National Register 9/29/1972, 5EP.190

This imposing gray granite and ornamental concrete block building served as the center of El Paso County government and administration from its completion in 1903 until 1973. Designed by local architect August J. Smith in the Second Renaissance Revival style, the building exhibits distinct horizontal divisions with each floor possessing different window sizes, shapes and surrounds. An ornate domed clock tower rises above the building, which was reopened in 1979 as the permanent home of the Colorado Springs Pioneers Museum.

El Pomar Estate

1661 Mesa Ave.
National Register 11/22/1995, 5EP.377

El Pomar was the home of Spencer Penrose, a prominent Colorado Springs citizen, who used his mining fortune to establish such enterprises as the Broadmoor Hotel. It is architecturally significant as an example of the Mission Revival style. The design of the buildings and related landscaping evolved from 1910 through the 1916-1939 period when Penrose owned the property. The estate represents the cumulative work of architects Horace Trumbauer, Charles Thomas, Thomas MacLaren, and the Olmsted Brothers.

Emmanuel Presbyterian Church

419 Mesa Rd.
National Register 5/17/1984, 5EP.321

This vernacular church was built in 1903 using local stone and wood. Although there is little distinguishing ornamentation, the building dominates its site and serves as a visual landmark on the west side of Colorado Springs.

Evergreen Cemetery

1005 S. Hancock Ave.
National Register 2/11/1993, 5EP.179

As the oldest operating cemetery in Colorado Springs, Evergreen is significant for its association with the social history of the area during the city's early development. Established in 1871, the 220 acre site was donated in part by the founder of Colorado Springs, General William Jackson Palmer who is interred there.

F.C. Austin Manufacturing Company Sprinkler Wagon

Rock Ledge Ranch
State Register 3/8/2000, 5EP.3500

The circa 1900 sprinkler wagon was an important aspect of city road maintenance, utilized to keep the dust down on the unpaved streets of Colorado Springs. Sprinkler wagons were the primary weapon in the war against dust, which was believed to transmit the deadly disease tuberculosis. Colorado Springs, a mecca for consumptives, could ill afford to have a reputation for dust. The wagon is a rare surviving example of this type of road maintenance vehicle and it is believed to be the only one in the state manufactured by the F.C. Austin Manufacturing Company.

First Baptist Church of Colorado City (Old Colorado City History Center)

1 S. 24th St.
State Register 6/14/1995, 5EP.597

The 1890 church is architecturally significant as an early design by Walter F. Douglas, a locally prominent architect. It is the last remaining, intact example of several churches that were constructed in Colorado City during the early 1890s.

First Congregational Church

20 E. Vrain St.
National Register 10/31/2002, 5EP.631

As one of the best examples of the Richardsonian Romanesque style in Colorado Springs, the 1889 building reflects the style in its broad roof planes, square tower crowned with a pyramidal roof, monumental massing, and rock-faced masonry. Designed by Henry Rutgers Marshall, a prominent eastern architect, high artistic values and skilled craftsmanship are reflected in the variety of stained glass windows, immense stone columns with picked finish, interior trussed ceiling, and ornate lantern tower. Founded in 1874, the early history of the congregation was closely associated with the development of Colorado College.

First Lutheran Church

301 E. Platte Ave.
State Register 7/13/1994, 5EP.636

The First Lutheran Church is an 1895 building with a 1928 Romanesque Revival addition by prominent Colorado Springs architect, Charles E. Thomas.

Fort Collins Municipal Railway No. 22

2333 Steel Dr.
National Register 12/15/2011, 5EP.6891

The Fort Collins Municipal Railway No. 22 streetcar is an excellent example of the engineering advances of the Birney-model streetcars utilized in Colorado. It reduced both procurement and operating costs compared to previous designs and was the first wide use of steel frame and body construction rather than wood in streetcars. It was also the first major application of what commonly became known as "deadman's controls" in a street car. Although these features apply to the over 6,000 Birney cars produced by various companies, this car was the last Birney car to operate in North America and was the last streetcar to operate in revenue service in Colorado. More information (PDF, 48 kb)

Giddings Building

101 N. Tejon St.
National Register 4/21/1983, 5EP.527

At the time of its construction in 1898, this four-story brick building, with rounded arched windows and brick corbelling, was the tallest building in the city. It housed the largest department store in town and remained pre-eminent well into the 1960s. The Giddings family, prominent members in the community, maintained control of the business until 1950.

Glen Eyrie

3820 N. 30th
National Register 4/21/1975, boundary increase and amendment 12/20/2016, 5EP.189

Located in narrow Queen's Canyon just north of the geological formation known as the Garden of the Gods, Glen Eyrie is the estate of General William Jackson Palmer, the founder of the Denver & Rio Grande Railroad (D&RG) and the city of Colorado Springs. What began as a relatively modest clapboard home in 1871 had evolved into the sixty-five room "castle" by 1906, with multiple improvements in between. Both Frederick J. Sterner and Thomas MacLaren, each a prominent architect in Colorado, had a hand in the evolving design of the nearly 50-acre complex. In addition to the Tudor Revivial main house, the district includes a gatekeeper's house, schoolhouse, large carriage house, two power-generating plants, gardener's house, dairy, granary, and many surviving historic landscape features, such as bridges and a rose garden. First listed in the National Register in 1975, the historic district was expanded in 2016 to encompass additional buildings commissioned by Palmer to complete his self-sufficient estate. More info (PDF, 7.1MB).

Grace & Saint Stephen's Episcopal Church

631 N. Tejon St.
National Register 12/15/2011, 5EP.350

Grace and St. Stephen's Episcopal Church is architecturally significant as it embodies the distinctive characteristics of the Gothic Revival style in the 1894 and 1925 building portions, while the 1955 building area displays typical architectural characteristics of the Tudor Revival Style as interpreted by local architects and craftsmen. Each style is a significant representation of liturgical and architectural forms typical of the era across the country, reflecting the traditions and character-defining features of earlier popular architectural styles. The building represents one of the few surviving Gothic/Tudor Revival buildings in the Colorado Springs area. Grace and St. Stephen's Episcopal Church is important as the locus for an Episcopalian tradition that started at Grace and St. Stephen's Church and spread in the form of numerous auxiliary chapels across the City of Colorado Springs. Known under many names throughout its history, this congregation has been in existence since 1872 and in its current location since 1895, helping to shape the local cultural and religious traditions. More information (PDF, 924 kb)

Gwynne-Love House

730 N. Cascade Ave.
National Register 2/5/1987, 5EP.3956

An imposing Victorian era dwelling, its design combines Queen Anne forms with the English detailing that was popular locally when it was built in 1886. Designed by Willard B. Perkins for Edmiston Gwynne, in 1914 the Love family from Indianapolis purchased the house. The residence survives as one of approximately a dozen large, intact historic homes in the center of the city.

Hagerman Mansion

610 N. Cascade Ave.
National Register 9/20/1984, 5EP.548

James John Hagerman built this three-story Victorian mansion in 1885. In 1927, it was converted into luxury apartments. The original house was constructed of pink, rock-faced sandstone, and later sympathetic additions enhanced the architectural value of the whole.

Herschell Ideal Two-Abreast Carousel (Cheyenne Mountain Zoo Carousel)

4250 Cheyenne Mountain Zoo Rd.
State Register 9/10/1997, 5EP.2699.1

This circa 1925, two-abreast, half-and-half, carousel was manufactured by the Allan Herschell Company and arrived at the zoo in 1937. It is an example of the county fair style carousel--a simple, hard-working, portable machine. The horses, constructed of carved wooden heads and bodies with aluminum legs, are an early example of the impending shift in carousel figure manufacturing away from carved wood to cast aluminum.

Jackson House

1029 N. Nevada Ave., Colorado College Campus
State Register 12/8/1999, 5EP.3482

The 1900 Jackson House is associated with the development of the residential neighborhood directly east of Colorado College, an area of wealthy city residents who would became benefactors of the college. The building was donated to Colorado College in 1914 and became its administration building, later serving as a dormitory. During World War II, the college was the site of a Navy-Marine training unit, and the Jackson House was one of the facilities converted to meet Navy housing requirements.

Knights of Columbus Hall

25 W. Kiowa Street
State Register 9/24/2015, 5EP.634

The 1928 Knights of Columbus Hall was the site of numerous social and entertainment activities in Colorado Springs, including fraternal organization meetings and social gatherings, and public assemblies, particularly for young people and high school students. In 1937 it became the first home of the Pioneer Museum, now known as the Colorado Springs Pioneers Museum. The Museum was essential to preserving and interpreting the history of the Colorado Springs community and was visited by residents, tourists, and school children for forty years before relocating to the former County Courthouse (5EP.190) in 1977. In addition, the Hall is a good example of the Mission style and as an example of renowned local architect Thomas MacLaren's work. It is one of MacLaren's last designs built before his death in December 1928. More information (PDF, 5MB)

Lennox House

1001 N. Nevada Ave., Colorado College Campus
State Register 8/11/1999, National Register 10/21/1999, 5EP.3359

Constructed in 1900 for a prominent businessman, the house became part of the Colorado College campus in 1936. It is associated with the development of north Colorado Springs and subsequently played a significant role in the college's history, serving as the Student Union from 1937 to 1959. The building is a good example of the Mission Revival style and is the work of prominent Denver architect Frederick J. Sterner. Listed under Historic Resources of Colorado College Multiple Property Submission.

Lindley-Johnson-Vanderhoof House

1130 N. Cascade Ave.
National Register 12/3/2013, 5EP.6315

The 1892 Lindley-Johnson-Vanderhoof House is significant for its architecture as an excellent example of the Queen Anne style in Colorado Springs executed in stone and brick, as reflected in its steeply pitched gables, asymmetrical façade, use of multiple materials, circular tower and semi-decagonal bay, one-story porch extending into a terrace, and porte cochère. The house features a variety of surface ornamentation, including decorative shingles, panels with ropework, rock-faced red sandstone, and red brick. The reconfiguration of the porch and other changes in the 1920s were in keeping with the original style and reflected its continued use as a residence with an attractively landscaped yard. More information (PDF, 6.13 MB)

Los Angeles Railway Streetcar No. 3101

2333 Steel Dr.
State Register 2/24/2011, 5EP.6739

The Los Angeles Railway (LARy) No.3101's Presidential Conference Committee (PCC) car design represents a major engineering development in rail-based surface street transportation. Additionally, the LARy No. 3101 is one of only two surviving electric passenger rail vehicles built in the US during 1943, at the height of World War II. When it moved to Colorado in 1963, it became the first PCC car to operate in the state and was the last streetcar to operate in Cripple Creek.

Lowell Elementary School

831 S. Nevada Ave.
State Register 3/8/1995, 5EP.3958

The result of an ambitious ten-year community school building program, this impressive 1891 structure, with its 1902 addition, employs an unusual expression of the Romanesque Revival style.

Maytag Aircraft Building

701 S. Cascade Ave.
State Register 12/16/2005, National Register 1/16/2008, 5EP.4542

Described as a "tidy form-meets-function design" and a "little masterpiece of local modernity," the building, designed by local architects Dietz Lusk and James Wallace, is an important example of

Modernism in Colorado Springs. The building is distinguished by its folded plate roof, cantilevered walls of glazed turquoise brick, and an integral exterior courtyard. Constructed in 1957 as offices for a specialized aircraft business, the exposed aluminum trusses in the roof system were designed to imitate aircraft wings. Only a handful of office buildings were built in downtown Colorado Springs during the early post-World War II era, and the Maytag building stands out not only for its unusual design, but also because of its cutting-edge materials. (2005 photograph.) More information (PDF, 2.28 MB).

McAllister House
423 N. Cascade Ave.
National Register 8/14/1973, 5EP.191

Major Henry McAllister, close associate of William J. Palmer, hired Philadelphia architect George Sommers to design and build this large red brick residence during 1873-1874. The property is open to the public as a museum.

McGregor Hall
930 N. Cascade Ave., Colorado College Campus
National Register 1/27/2000, 5EP.3481

Built in 1903, the style building, designed by the architectural firm of Douglas and Hetherington, is notable for its Colorado Springs red sandstone construction. It was the college's third dormitory for women and reflects the increasing number of female students at the college during the early 20th century. The building also housed the first women's athletic facility on the campus and was the location of the women's physical education department after its completion. Listed under Historic Resources of Colorado College Multiple Property Submission.

Clark Mellen Apartments
218-232½ E. Fountain Blvd.
State Register 8/11/1993, 5EP.3957

Built in 1902 for Clark Mellen, the one-story Terrace style building helped meet the housing needs of working families. Apartments of this type provided affordable housing for those flocking to Colorado Springs in the early 20th century and were profitable for the landlord.

Midland Terminal Railroad Roundhouse (Van Briggle Art Pottery)
600 S. 21st St.
National Register 7/10/1979, 5EP.194

The Colorado Midland Railroad constructed the stone fourteen-stall roundhouse in 1889 for the maintenance of its steam locomotives. The facility served the railroad until the abandonment of the successor Midland Terminal line in 1949. Once common along railroad rights-of-way, surviving roundhouses are extremely rare in Colorado. Listed under Railroads in Colorado, 1858-1948 Multiple Property Submission.

Montgomery Hall
1030 N. Cascade Ave., Colorado College campus
National Register 9/13/1990, 5EP.3952

Constructed in 1891, as one of the original buildings on the Colorado College campus, the design by Colorado Springs architect Walter F. Douglas has a distinctive English feel. The property is associated with the Historic Resources of Colorado College Thematic Resource.

Monument Valley Park
Approximately bounded by Monroe, Culebra, Westview and Bejou Sts., the BNSF railroad tracks, and the west edge of the north-south trail, north of Del Norte, Colorado Springs
National Register 1/25/2007, 5EP.613

This two-mile long ribbon of public park land green is the most significant component of the open spaces donated by city founder William Jackson Palmer that formed the nucleus of the public park system. Palmer envisioned its creation, acquired the land, provided direction for its development, and paid the immense cost of its initial improvement. He selected the original landscape architect and worked closely with the engineer to insure that the design and plantings proceeded according his exacting specifications. Monument Valley Park is considered the most significant of Palmer's park donations, and it was the most extensively planned and improved. It most represents his philosophies of park use and development, including an emphasis on preserving and utilizing existing topography, enframing scenic views, employing native materials and vegetation, and most notably excluding motorized vehicles. Creation of this park was one of the largest local employment projects in the city during 1904-07. The park has served as a place of quiet contemplation as well as for active recreation.

The park exhibits the work of landscape architects and planners Charles W. Leavitt, Jr. and Charles Mulford Robinson, as well as that of engineer Edmond C. van Diest. Architecturally, the Rustic style is

displayed in early 20th century park resources and translated by the WPA in the 1930s into a number of native stone park features (such as bridges, ditches, seating areas, retaining walls, entrances, monuments and overlooks). Following the 1935 Memorial Day flood, the Works Progress Administration focused major efforts on the park. Flood debris cleanup, creek re-channeling, building and structure restoration, and the erection of new monuments and structures, all provided a major source of local employment during the Great Depression. More information (PDF, 3.38 MB).

Navajo Hogan
2817 N. Nevada Ave.
National Register 9/13/1990, 5EP.1179

Built in 1935 to house a bar and restaurant, the one-story polygonal building, topped with a massive neon sign, is a good example of 1930s roadside architecture.

North Cheyenne Cañon Park
2120 Cheyenne Cañon Road
National Register 7/8/2009, 5EP.5968

North Cheyenne Cañon Park reflects the rising interest in conservation in the late nineteenth and early twentieth centuries and the subsequent growth of tourism and recreation in the American West. The idea of setting aside wilderness areas as parks as a way of preserving them began in the middle to late nineteenth century. In 1885 the City of Colorado Springs purchased the initial six hundred acres, forming the core of the park. The city sought to set aside and preserve the canon as a place where the public could experience the natural splendor. With the coming of the railroad in the last decades of the nineteenth century, travel to the West became easier and the park became an important Colorado tourist attraction. To accommodate visitors early in the park's history, park managers established hiking trails, some of which followed existing footpaths.

Old North End Historic District
Bounded by Lilac & Uintah Sts., Monument Valley Park, and alley between Nevada & Weber Sts.
National Register 12/17/1982, boundary increase and amendment 9/14/2015, 5EP.333

The Old North End neighborhood is a substantial collection of intact late-nineteenth to mid-twentieth century residential buildings, combined with a small number of intact commercial and institutional buildings from the same period that have historically served a supporting role in the district. The majority of the district's buildings has remained relatively unchanged and serve as excellent examples of the wide variety of house types and architectural styles that were popular from 1885-1965, including Georgian Revival, Mission, Spanish Colonial Revival, Bungalow, International Style, and other Modern Movement styles and types. The architectural character of the district is also indicative of the various periods of growth in Colorado Springs, from the late-nineteenth century gold boom through the post-World War II population influx. In addition, a number of the district's homes were designed by well-known, influential architects of the day and are significant examples of their interpretations of these styles for middle and upper class housing in Colorado Springs. First listed in the National Register in 1982, the historic district was expanded in 2015. More info (PDF)

North Weber Street-Wahsatch Avenue Residential District
North Weber Between Boulder & Del Norte
National Register 2/8/1985, 5EP.348

This district is significant as an intact middle-class neighborhood dating from the late 19th and early 20th century. Its design and setting reflect the early planning principles and philosophies that guided the initial development of the community.

Old Colorado City Historic Commercial District
North side of Colorado Ave. from 24th St. to 2611 Colorado Ave., also includes 115 S. 26th St. and 2418 W. Pikes Peak Ave.
National Register 11/2/1982, 5EP.332

Located on the west side of what is now Colorado Springs, Colorado City, the first permanent settlement in the Pike's Peak region, was formally organized on August 13, 1859. It served for a time as the Territorial capital and was annexed by Colorado Springs in 1917. Examples of the Queen Anne, Italianate, and Romanesque Revival can be found among the 27 properties within the district.

Original Colorado Springs Municipal Airport
Peterson Air & Space Museum)
150 E. Ent Ave. Peterson Air Force Base, Colorado Springs
National Register 11/15/1996, 5EP.774

The airport is associated with the pioneering era of commercial air travel and the circa 1926 development of airmail service in Colorado. Buildings within the district illustrate the architecture, physical layout, and internal organization of 1920s and 1930s airports. Architectural styles represented include Spanish Colonial Revival, Art Moderne, and Art Deco. The facility now serves as an aviation museum with a mission to preserve and portray the aviation and space history of Colorado Springs and Peterson Air Force Base.

Palmer Hall

116 E. San Rafael St., Colorado College campus
National Register 7/3/1986, 5EP.3953

Constructed in 1904, Palmer Hall is located on the eastern portion of the campus where it dominates the north edge of a large open square. Designed by Andrews, Jacques, and Rantoul of Boston in the Romanesque Revival style, it is a massive two-story building of rock-faced, peachblow sandstone. Listed under Historic Resources of Colorado College Thematic Resource.

Pauline Chapel

2 Park Ave.
National Register 2/26/2001, 5EP.3182

Designed by the prominent Colorado Springs architectural firm of MacLaren and Hetherington, the 1918 chapel is an important example of the Spanish Colonial Revival style, which is not well represented in Colorado. While the architectural partnership designed several Mission style buildings, the chapel appears to be the firm's only foray into the more ornate Spanish Colonial Revival style. Pauline Chapel was built under the direct supervision of local philanthropist Julie Penrose, who remained connected to the chapel for the rest of her life, collecting many of the beautiful art and antiques that fill the chapel. The 1925 Mission-inspired rectory and garage complement the chapel.

People's Methodist Episcopal Church

527 E. St. Vrain St.
National Register 7/25/2014, 5EP.7321

The 1904 church served its African-American congregation until 1965, when the congregation relocated. Embodying distinctive Queen Anne and Gothic Revival style elements, it is one of Colorado Springs' oldest wood-framed and clad churches. It served as the local headquarters for the Universal Negro Improvement Association (UNIA). Marcus Garvey established the UNIA in 1914; it became one of the largest black empowerment movements in the world. Garvey visited the church in 1922 and with his second wife, Amy Jacques Garvey, in 1924. Amy's important role within the organization was undeniable. In 1924 she delivered the sole address to the Colorado Springs division at the church. More information (PDF, 1.59 MB).

Pikes Peak

Pike National Forest, 15 miles west of Colorado Springs
National Historic Landmark 7/4/1961, National Register 10/15/1966, 5EP.193

First observed by Zebulon Montgomery Pike in 1806, Pike's Peak has become one of the best known and most visited mountains in the United States. Exploited for timber during the Cripple Creek mining days, efforts of the U.S. Forest Service during the 1920s and 1930s helped to reforest the mountainside. It is one of over 30 Colorado mountains exceeding 14,000 feet in elevation. A road and cog railway run to the top, and modern facilities accommodate the many tourists.

Pioneer Cabin

U.S. Air Force Academy
National Register 1/27/1975, 5EP.182

Built by William Alexander Burgess between 1871 and 1877, the cabin is one of the oldest standing structures in the Douglas Valley. It survives as a good local representative of the heritage of the early pioneers.

Plaza Hotel

830 N. Tejon St.
National Register 9/1/1983, 5EP.331

Built in 1901, the hotel is a four story, H-plan structure of cream colored pressed brick. It is Renaissance Revival in its overall massing, while Spanish influences are evident in its detailing. Listed under Colorado College Thematic Resource.

Ponderosa Lodge

La Foret Conference and Retreat Center
6145 Shoup Rd., Colorado Springs vicinity
National Register 8/29/2008, 5EP.5887

The Lodge is an excellent representation of the master craftsmanship of prominent Denver architect Jules Jacques Benois Benedict. Designed in his "Colorado Alpine" or Rustic style, the 1928 building originally served as the summer home of Alice Bemis Taylor. The planning of large urban and mountain residences constituted the major source of commissions for Benedict throughout his career. His mountain homes represent a blending of the formality he displayed in his urban residences combined with his extensive work in the Denver Mountain Parks. Known for his attention to detail, Benedict's mountain homes and lodges employed native construction material and displayed the finest craftsmanship. Ponderosa Lodge utilized ponderosa pine lumber cut from the western slope of Pike's Peak. The lighting fixtures and fireplace screens throughout the Lodge were constructed of custom hammered iron featuring various western and nature motifs. The elaborate fireplace and outstanding staircase in the main hall form signature elements of Benedict's design. The property is associated with the Architecture of Jules Jacques Benois Benedict in Colorado Multiple Property Submission. (2008 photograph.) More information (PDF, 6.19 MB).
See other Rustic properties.

Reynolds Ranch

225 N. Gate Rd., Colorado Springs vicinity
State Register 9/10/1997, 5EP.2223

The well-preserved 1894 farmhouse, with its noteworthy gable trim, is a good example of a Queen Anne in a rural setting. The architecturally significant complex of buildings represents a typical farmstead and is one of just a handful of farmsteads remaining in northern El Paso County.

Ida M. Rice House

1196 N. Cascade Ave., Colorado College Campus
National Register 11/21/2006, 5EP.5098

The Rice House is one of the finest examples of Colonial Revival design in Colorado Springs. The style is reflected in the rectangular massing, symmetrical façade , side-gabled roof, vertically aligned windows, and a central front door accentuated with sidelights, columns and an arched pediment. Georgian influences are seen in the decorative moldings of the cornice, the pedimented dormers, and the pilasters and elaborate entablature around the entrance. The 1927 house is brick, while most of the Colonial Revival residences erected in the city during this period were frame. The Rice House represents the movement toward historically correct proportions and detailing. The design represents the work of master architect Thomas P. Barber. No other Colonial Revival style residences have been attributed to Barber, and this is his last documented work in Colorado. More information (PDF, 798.65 kb).

Denver & Rio Grande Western Locomotive No. 168

National Register 8/10/1979, 5CN.1650 (formerly 5EP.203)

The locomotive was moved, with prior approval of the Keeper of the National Register, to the Cumbres & Toltec Scenic Railroad's rail yard in Antonito, Conejos County in September 2015.

S.A. Wilson Elementary School

930 Leta Dr. National Register 5/1/2017, 5EP.7894

Located in Security-Widefield, an unincorporated area south of Colorado Springs, the S. A. Wilson Elementary School was constructed in 1959 and expanded in 1961. A predominantly agricultural area until the mid-1950s, Security-Widefield quickly developed with the expansion of nearby Fort Carson. Between 1954 and 1961, the school district grew from 125 students to more than 3,500. The S.A. Wilson Elementary School was one of six new schools constructed by the local architectural firm of Francis & Guy. The S.A. Wilson Elementary is an excellent example of mid-twentieth century school design

featuring a flat-roofed, single-story design, U-shaped plan with a central courtyard, steel-frame construction with brick facing, large bands of windows, exterior doors to classrooms, and covered exterior walkways. The school is locally significant for Education, Community Planning and Development, and Architecture. The property meets the registration requirements outlined in the Colorado's Mid-Century Schools, 1945-1970 Multiple Property Documentation Form. More information (PDF, 3.5 MB)

Second Midland School / Old Midland School

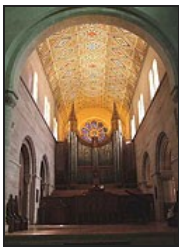
815 S. 25th St.
National Register 9/12/1980, 5EP.201

The 1902 three-story building, of red sandstone and brick, reflects the height, massing, and classical architectural elements typical of turn of the century urban schools.

Shove Memorial Chapel

1010 N. Nevada Ave., Colorado College
National Register 5/22/2005, 5EP.4711

Erected in 1930-31, the chapel has been described as "one of the foremost examples of Norman Romanesque architecture in America." Inspired by historic churches in England and Normandy, this original composition includes traditional components of Romanesque churches, including monumental size, masonry walls, limited exterior ornamentation, semi-circular arches, wall arcades, and a substantial tower. The chapel was the first major building architect John Gray designed after establishing his own practice, and it is regarded as his most important work. His all-encompassing design ranged from the planning of the door hinges to the creation of the print on the memorial tablets. Despite the Depression, the donor and architect were of one mind to create a building that combined the finest materials, artistry, and craftsmanship. Gray utilized artists and craftsmen from around the country to complete his carefully planned, meticulously detailed design. The stonework of the walls required exacting skill, as each piece of Bedford limestone was cut in Indiana to precisely fit a certain location on the building. Master stone carver John Bruce executed the ornamental work based on designs provided by the sculptor. Robert Garrison, considered Denver's first important 20th century sculptor, designed the exterior carvings, including the gargoyles and carved heads. An authority on design and painting of church interiors, Robert E. Wade planned and painted the ceilings. Joseph Reynolds, Jr. of the nationally recognized Boston firm of Reynolds, Francis, and Rohnstock, designed all the stained glass windows. The east wall of the Morning/Pilgrim Chapel is embedded with ancient stones from buildings in England important to the Shove family. The property is associated with the Colorado College Historic Resources of Colorado College Multiple Property Submission.



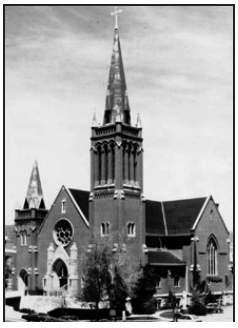
Shrine of the Sun (Will Rogers Shrine)

4250 Cheyenne Mountain Zoo Rd.
National Register 11/3/1994, 5EP.2175

Designed as the burial site for Spencer and Julie Penrose, the 100-foot high tower has been a local landmark since its construction in 1937. Colorado Springs architect Charles E. Thomas incorporated native materials into the Romanesque Revival structure, including locally quarried granite. The interior walls are adorned with murals by Randall Davey depicting the evolution of the Pikes Peak region.

St. Mary's Catholic Church

26 W. Kiowa
National Register 6/3/1982, 5EP.208



The construction of the church spanned the decade from 1891 to 1902. Designed by the Colorado Springs architectural firm of Pease and Barber, elements of Neo-Gothic design were used in conjunction with modern materials to meet contemporary needs

Stockbridge House (Amarillo Motel)

2801 W. Colorado Ave.
National Register 9/11/1980, 5EP.166

Completed in 1891, architect Walter F. Douglas designed the Richardsonian Romanesque style building to be fire-proof. The brick and stone walls are eighteen inches thick. The site is the former location of the first building constructed in Colorado City.

Taylor Memorial Chapel

6145 Shoup Rd., Colorado Springs vicinity
National Register 4/15/1999, 5EP.1297

The 1929 Pueblo style building was designed by noted southwestern architect John Gaw Meem, for prominent Colorado Springs resident Alice Bemis Taylor, as a memorial to her husband. Its walled courtyard enhances the sculptural quality of the building. The chapel now functions as part of the La Foret Conference and Retreat Center.

Ticknor Hall

926 N. Cascade Ave., Colorado College Campus
National Register 1/27/2000, 5EP.3480

Erected in 1897-98 and designed by the architectural firm of Douglas and Hetherington, the building was the second women's dormitory to be built on the campus and continues to serve in that capacity. It is notable for its Colorado red and green dolostone construction and represents Late Victorian residential design adapted to collegiate architecture. Its home-like appearance reflects then popular philosophies of collegiate housing for women. Listed under Historic Resources of Colorado College Multiple Property Submission.

United States Air Force Academy, Cadet Area

Roughly between Cadet Dr. and Faculty Dr., U.S. Air Force Academy
National Historic Landmark 4/1/2004, National Register 4/1/2004, 5EP.4680

A product of the Cold War, the Cadet Area made important contributions to America's military and architectural heritage. The United States Air Force Academy was created in 1954 to serve as the primary undergraduate educational institution for the newly created service and temporary facilities were established in Denver. In September 1958, following the near completion of the cadet area, the cadets moved to the campus north of Colorado Springs. The Cadet Area ranks among the most significant collection of modernist buildings commissioned by a federal agency during the post-World War II era. Designed by Skidmore, Owings and Merrill, the architectural firm utilized many technological advances developed specifically by the military during the war. The buildings, especially the Chapel, stirred a national debate in Congress, professional journals, and the media.

Van Briggle Pottery Company

1125 Glen Avenue / 231 West Uintah Street
Colorado College campus
National Register 4/29/2009, 5EP.614

The 1908 Van Briggle Pottery Company building is a remarkable expression of early 20th century pottery factory architecture, as an excellent example of the work of Colorado Springs architect Nicolaas van den Arend, and as a building displaying high artistic values exhibited in thousands of artistic tiles and terra cotta architectural features adorning its walls. The architect created a visually stimulating building that would attract visitors, provide a canvass for the display of its decorative products, and incorporate beauty that would inspire its workers. Anne Van Briggle played a significant role in the establishment of the pottery; she secured the financing and the site for the building, planned the building with the architect and engineer, designed and fabricated most the ornamental elements on the interior and exterior, and headed the company when the building opened in 1908. The Van Briggle Pottery, operating in this building from 1908 to 1968 and still producing pottery to the present day, is the longest-lived producer of art pottery in Colorado and one of the longest-operating of such businesses in the nation. The company's importance in the art pottery industry is reflected in the recognition and awards bestowed at national and international exhibitions, becoming one of the most awarded potteries in the country. The building is listed at the national level of significance. More information (PDF, 835kb).

Verner Z. Reed Memorial Library

502 South Tejon Street
State Register 5/28/2009, 5EP.647

Designed by noted Colorado Springs architect Thompson Duncan Hetherington, the Verner Z. Reed Memorial Library was constructed in 1926 as a good example of a small scale Classical Revival style building in the South End neighborhood. The Reed building exhibits the key elements of the style such as a pedimented entry, dentil molding, Tuscan columns, and arched windows with keystones. Hetherington added an interesting twist with the commercial influence through the flat roof, parapet with coping, brick walls, and single story. Built to provide a library for the working class citizens of the South End area, the building is important as it represents the effort to construct infrastructure for the neighborhood while providing an important service to the local community. Additionally, the building served as a meeting place for the Verner Z. Reed Hose Company No. 6 as well as various social groups over the years. More information (PDF, 1.88 MB).

John Wolfe House
905 W. Cheyenne Rd.
National Register 1/23/2013, 5EP.392

The 1887 John Wolfe House property illustrates the evolution of the local area from agriculture and ranching to a residential neighborhood. John Wolfe originally homesteaded land for agricultural use, transitioned from rancher to miner, and then in 1887 began selling parcels of his property for residential development. This district, with the house, yard, brick garage and driveway layout, represents that evolution. The stone dugout, built circa 1887, is a significant example of its type and construction. The Wolfe House, built circa 1896, is an excellent example of a vernacular Victorian residence using locally produced brick. More information (PDF, 849 kb).

YWCA Building / Colorado Springs Company
130 E. Kiowa St.
National Register 9/10/1979, 5EP.198

Completed in 1913, the five and one-half story red brick building, with a somewhat Mediterranean feel, reflects the eclectic interests of the architect, Nicholas Van den Arend. The Young Women's Christian Movement did not arrive in Colorado Springs until 1899. A fundraising campaign for this new building began in 1909. The YWCA Building served as a center for social, cultural and humanitarian activities.

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Ellicott

Drennan School
20500 Drennan Rd., Ellicott vicinity
State Register 8/30/2007, National Register 4/16/2008, 5EP.4967

The circa 1917 schoolhouse and its ancillary buildings provide physical evidence about the conditions of rural education prevailing in Colorado well into the mid-20th century. Drennan School contained two classrooms and a stage in which four teachers taught grades one through twelve until dwindling enrollment forced its closure in 1955. Like most rural schools, it also served as a focus of community life hosting a wide variety of social activities. In addition, the building housed a post office and the switchboard for the first area-wide telephone system in El Paso County. The community continues to use the building for various social gatherings. The property is associated with the Rural School Buildings in Colorado Multiple Property Submission. (2007 photograph.) More information (PDF, 1.6 MB).

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Falcon

Denver & New Orleans Railroad Segment
Along Elbert Rd., north of Falcon
State Register 12/13/1995, 5EP.868.1 / 5EL.299.1

The Denver and New Orleans Railroad operated over this now abandoned grade between 1881 and 1936. The Denver and New Orleans was the first standard gauge railroad to operate between Denver, Colorado Springs and Pueblo.

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Fountain

Old Livery Stable
217 W. Missouri
National Register 3/2/1979, 5EP.202

The stable was built in 1893 as part of a small hotel complex and fell into disuse after the advent of the automobile. A one and a half story building with thick stone walls, its vernacular design reflects utilitarian values.

Joseph and Rosa Wilson Farmstead
11190 Old Pueblo Rd.
State Register 2/24/2011, 5EP.6384

The Joseph and Rosa C. Wilson Farmstead is a good example of one of the few remaining farming complexes in the area that contain the farmhouse, outbuildings, and rural landscape that typified early-twentieth-century agriculture in the region. Built in 1914, the farmhouse is significant as a rare example of the "Westly Modern Home" model kit home available through mail order from the Sears, Roebuck &

Co. between 1908 and 1934. The Farmstead also contains a number of agricultural buildings dating from circa 1900 to circa 1980, most dating from around the time of the construction of the farmhouse. (ca. 1919 photograph.)

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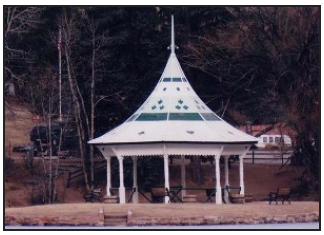
Green Mountain Falls

Green Mountain Falls Gazebo

Lake St. and Ute Pass Ave., Green Mountain Falls
State Register 8/31/2006, 5EP.439



The Gazebo stands on a small island in the middle of a man-made lake. Designed as a scenic attraction for visitors arriving by train and a complement to a nearby resort hotel, the gazebo was built in about 1888 when the area was being developed as a summer resort. The Gazebo is a good example of a type of structure popular during the late Victorian period. Variously called belvederes, pavilions, summer houses and garden houses, gazebos sprang up across America in the 1880s decorating public parks and private grounds. Open on all sides, these picturesque constructions offered rest and repose while promoting a feeling of harmony with nature. One of the most frequently photographed structures in the Ute Pass area, it is the signature building for the town. The Gazebo is an easily recognized visual landmark for the town of Green Mountain Falls and a popular site for community and private events. More information (PDF, 572 kb).

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Manitou Springs

Barker House / Navajo Apartment

819 Manitou Ave.
National Register 10/11/1979, 5EP.197

Built in the 1870s, the hotel incorporates features found in resort hotels of the late 19th century. The wood frame building rests on a stone foundation. The property is associated with Charles W. Barker, an important Manitou politician.

Briarhurst / William A. Bell House

404 Manitou Ave.
National Register 4/23/1973, 5EP.184

The residence was designed for William A. Bell by the New York and Denver architectural firm of Varian and Sterner. Completed in 1888, the Gothic Revival style building was constructed with native peachblow granite.

Bridge Over Fountain Creek

US Business Rt. 24
National Register 2/4/1985, 5EP.395

Reportedly the last bridge by the prolific Pueblo Bridge Company, this 1932 two-ribbed, reinforced concrete, open spandrel deck arch in Fountain Canyon was designed by King Burghardt. It functioned as a significant crossing on the automobile route built along the old Ute Trail. Listed under Highway Bridges in Colorado Multiple Property Submission.

Cliff House

306 Cañon Ave.
National Register 3/27/1980, 5EP.192

The Cliff House was built in the winter of 1873, with additions constructed during the subsequent thirty years. The large wood frame structure, on a stone foundation, occupies approximately one half acre of a two and one half acre lot in downtown Manitou Springs and includes many Victorian details.

Crystal Valley Cemetery

Plainview Ave.
National Register 11/18/1982, 5EP.336

This cemetery began operation at its present location during the late 1800s. The approximately twenty acre site includes green stone walls and gate posts with a wrought iron gate. Listed under Manitou Springs Multiple Resource Area.

First Congregational Church
101 Pawnee Ave.
National Register 10/16/1979, 5EP.185

Gothic in flavor, the church, completed in 1882 of locally quarried stone, has a two-story tower at the northwest corner. Although evidence is inconclusive, it is thought that the architect was Robert S. Roeschlaub.

Keithly Log Cabin Development District
Bounded by Santa Fe Pl., Crystal Rd., Spur Rd.
National Register 11/18/1982, 5EP.334

The architectural character of the 27 properties within the district reflects the "picturesque" mode popular in the late 19th century. Listed under Manitou Springs Multiple Resource Area.

Manitou Bath House
934 Manitou Ave.
National Register 8/1/1979, 5EP.187

The circa 1920 bath house, constructed above a mineral springs, is a three-story building with a tower. Its Spanish flavor is reminiscent of the Mission style.

Manitou Springs Bridge, Cañon Avenue
Over Fountain Creek
National Register 6/24/1985, 5EP.530.69

In 1906, the city contracted with local masons to construct this semicircular, stone ashlar filled arch bridge to replace an existing timber structure. Listed under Highway Bridges in Colorado Multiple Property Submission.

Manitou Springs Bridge, Park Avenue
Over Fountain Creek
National Register 6/24/1985, 5EP.530.70

This 1907 bridge is nearly identical to the Canon Avenue Bridge. Still in service, both are considered excellent examples of rubble arch construction. Listed under Highway Bridges in Colorado Multiple Property Submission.

Manitou Springs Historic District
Bounded by El Paso Blvd., Ruxton Ave., US 24 & Iron Mt. Ave.
National Register 10/7/1983, 5EP.530

The Manitou Springs Historic District, which encompasses almost the entire city limits, is representative of late 19th and early 20th century resort communities. Located five miles from Colorado Springs, it was founded by General William Jackson Palmer of the Denver & Rio Grande Railroad. Platted by his Colorado Springs Company in 1876, Manitou Springs retains its winding roads, spa, and many of its grand hotels and residences. Of the approximately 1001 buildings, 752 are considered to be contributing to the district's significance. From its beginning, the local economy depended almost exclusively on tourism. Listed under Manitou Springs Multiple Resource Area.

Manitou Springs Post Office
307 Cañon Ave.
National Register 1/24/1986, 5EP.530.71

Constructed in 1940, the building is a well executed interpretation of American Colonial Revival design. The use of stone distinguishes the building from other examples in Colorado and symbolizes the success of local citizens in obtaining authorization for its use. Listed under U.S. Post Offices in Colorado Thematic Resource.

Miramount / Francolon's Castle
9 Capitol Hill
National Register 4/11/1977, 5EP.204

Completed in 1897, the castle includes an eclectic mix of Late Victorian architectural styles. Built from memory, by Father Jean Baptiste Francolon, as a replica of the family chateau in France, the walls are of sandstone and granite. For a time, it housed a sanitarium operated by the Sisters of Mercy. During World War II, the interior was divided into apartments for Camp Carson families. In 1975, it was purchased for use as a museum by the Manitou Springs Historical Society.

Wheeler Bank
717-719 Manitou Ave.
National Register 9/12/1980, 5EP.200

This impressive 1888 building constructed for Jerome B. Wheeler, one of the great financiers and mining barons of the late 19th century, reflects the influence of both the Italianate and Romanesque Revival styles.

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Monument

Inez Johnson Lewis School
146 Jefferson St.
National Register 11/3/1988, 5EP.1106

The original 1920 portion of this two-story brick Mission style building was designed by Colorado Springs architects MacLaren and Hetherington. It was one of the first schools constructed in the region for the purpose of consolidating the student population.

Monument Nursery
Off I-25, two miles west of Monument
State Register 6/12/1996, 5EP.593

Monument Nursery, on the eastern edge of Pike National Forest, is associated with the evolving management philosophy of the United States Forest Service. From 1907 until 1965, the nursery produced and shipped an average of two million trees annually for planting in National Forests throughout the Rocky Mountain West. The site includes remains of the original 1907-09 headquarters and a Memorial Grove established in 1920. The existing headquarters complex was constructed by the Civilian Conservation Corps between 1934 and 1942.&nbps; (1996 photographs.)

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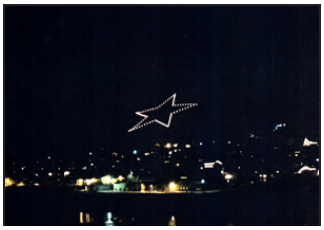
Palmer Lake

Palmer Lake Star
500 Highland Rd.
State Register 1/18/2013, 5EP.7092



The Palmer Lake Star sits on a 1.5-acre site on Sundance Mountain. The mountainside, which has a 58 percent slope, provides the ideal location to provide maximum exposure for the five-point star. Thirty galvanized steel posts hold the electrical wiring, the 91, 40-watt light bulbs light bulbs, support cables, and connectors. Depending on the terrain, the posts range from 3 feet to 8 feet tall. The star, built over a three month period, was initially designed using surveyor transits and measuring devices. Once complete, it did not appear as a symmetric five-point star when viewed from a distance, instead it had a somewhat oblong appearance. The builders discovered that altering the height of the bulbs helped to provide the appearance of straight lines. Although there were alterations in 2002, the appearance of the star is the effectively the same since construction. The material changes are in keeping with nature of a structure that requires maintenance to ensure longevity and meet electrical codes. The Palmer Lake Star is eligible at the local level in the area of geography /community identity for the period of 1935-1976. This site is a focal point within the community of Palmer

Lake and has become the most identifiable landmark for those inside and outside of the town. It has served as the distinctive holiday season feature identified with Palmer Lake since 1935. More information (PDF, 201 kb)

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Peyton

Black Squirrel Creek Bridge
US Hwy. 24, Falcon vicinity
National Register 10/15/2002, 5EP.3561

The 226-foot long bridge features a 150-foot long steel rigid connected Parker through truss as its main span. Erected in 1935 by bridge contractors Charles B. Owen and A.S. Horner, the Colorado Department of Highways designed structure fabricated by Minneapolis-Moline Power Implement Company, remains virtually intact as a rare surviving example of a once important long span truss type. Listed under Highway Bridges in Colorado Multiple Property Submission.

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Ramah

First Presbyterian Church of Ramah
113 S. Commercial St.
National Register 7/7/1988, 5EP.1046

The 1916 Mission style church is a one-story stuccoed building designed by architect George M. Bryson.

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Widefield

Little Fountain Creek Bridge
Colo. Hwy. 115, Widefield vicinity
National Register 10/15/2002, 5EP.3603

The steel multiplate structure fabricated by Thompson Manufacturing Company supports two barrel arches, each spanning 15 feet. Faced with well crafted stonework, including cut stone voussoirs and keystones, the bridge appears as a true stone arch structure. Constructed in 1936, in conjunction with improvements to the highway in a rural area between Colorado Springs and Cañon City, it continues to function as a good example of a bridge built by the Works Progress Administration during the years of the Great Depression. Listed under Highway Bridges in Colorado Multiple Property Submission.

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TAB G

CONTROL MEASURE DETAILS

Street Sweeping and Vacuuming (SS) SM-7

Description

Street sweeping and vacuuming remove sediment that has been tracked onto roadways to reduce sediment transport into storm drain systems or a surface waterway.

Photograph SS-1. A street sweeper removes sediment and potential pollutants along the curb line at a construction site. Photo courtesy of Tom Gore.

Appropriate Uses

Use this practice at construction sites where vehicles may track sediment offsite onto paved roadways.

Design and Installation

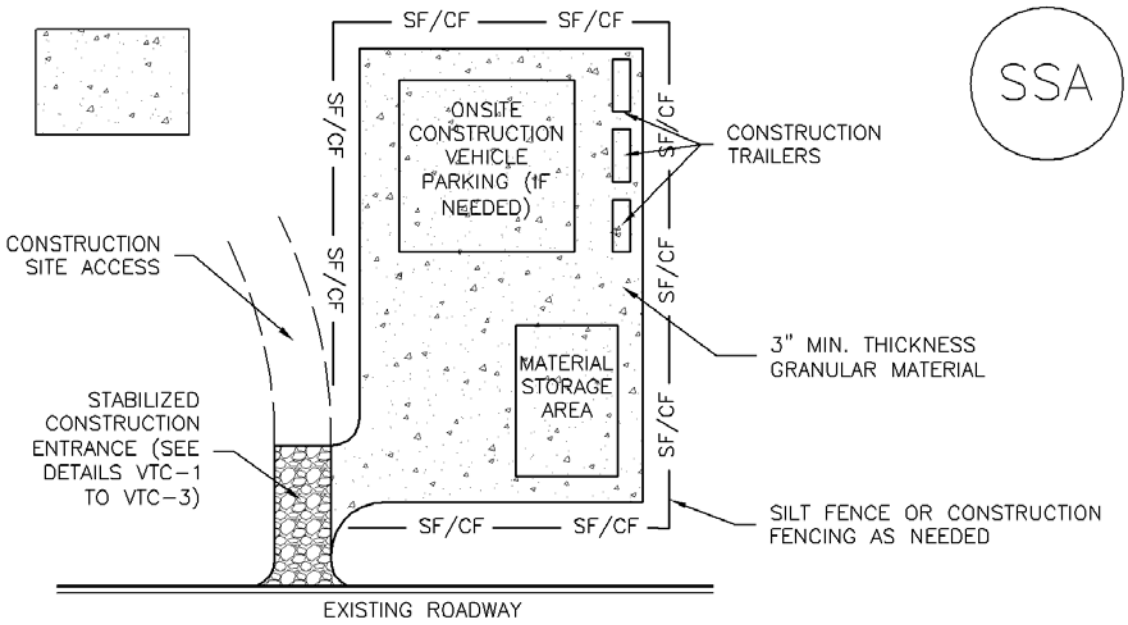
Street sweeping or vacuuming should be conducted when there is noticeable sediment accumulation on roadways adjacent to the construction site. Typically, this will be concentrated at the entrance/exit to the construction site. Well-maintained stabilized construction entrances, vehicle tracking controls and tire wash facilities can help reduce the necessary frequency of street sweeping and vacuuming.

On smaller construction sites, street sweeping can be conducted manually using a shovel and broom. Never wash accumulated sediment on roadways into storm drains.

Maintenance and Removal

- Inspect paved roads around the perimeter of the construction site on a daily basis and more frequently, as needed. Remove accumulated sediment, as needed.
- Following street sweeping, check inlet protection that may have been displaced during street sweeping.
- Inspect area to be swept for materials that may be hazardous prior to beginning sweeping operations.

Street Sweeping/ Vacuuming	
Functions	
Erosion Control	No
Sediment Control	Yes
Site/Material Management	Yes



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.

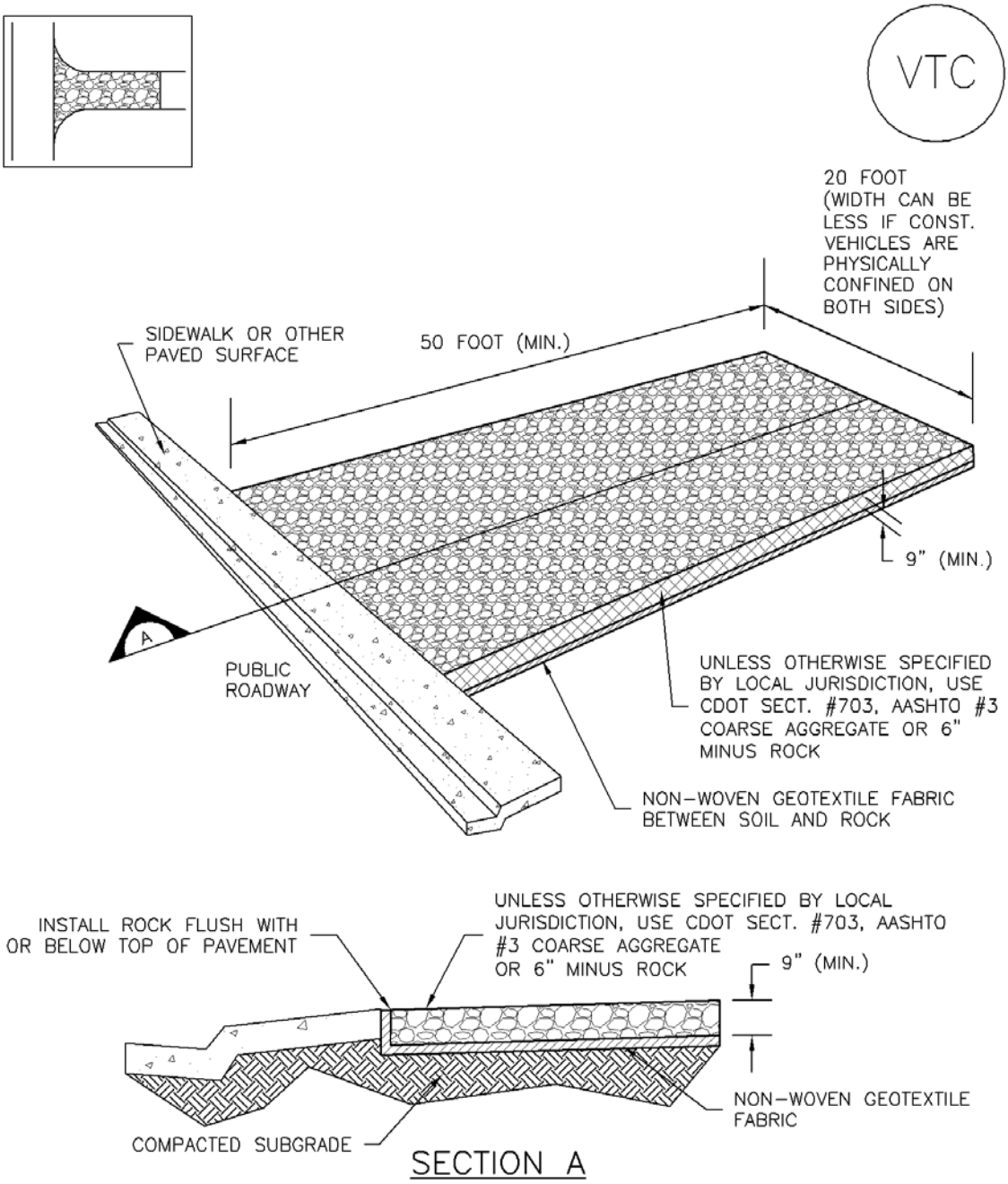
STABILIZED STAGING AREA MAINTENANCE NOTES

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.

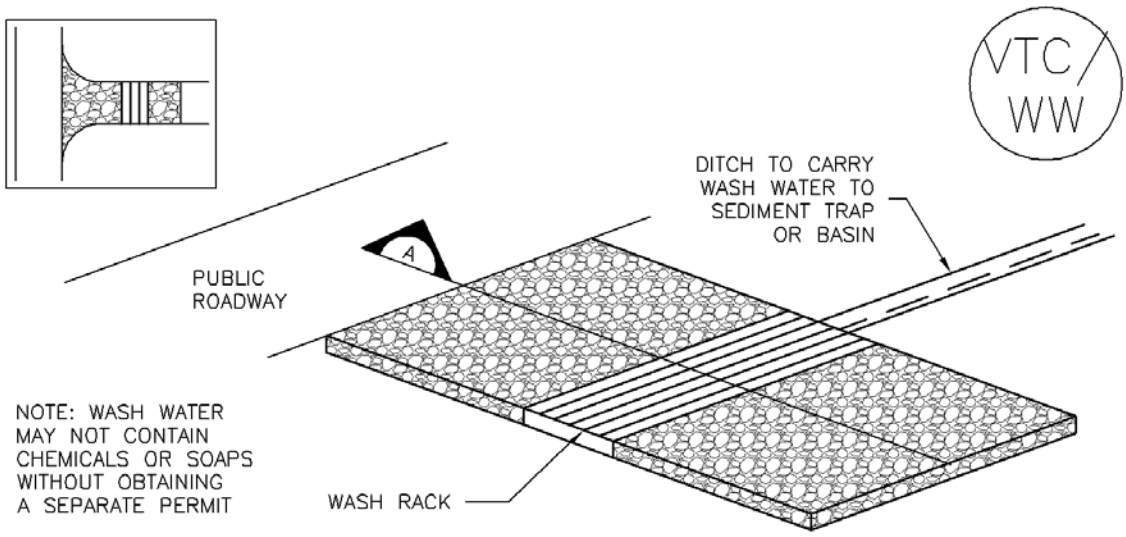
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

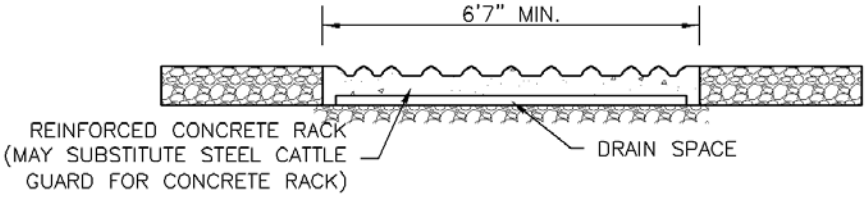
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

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



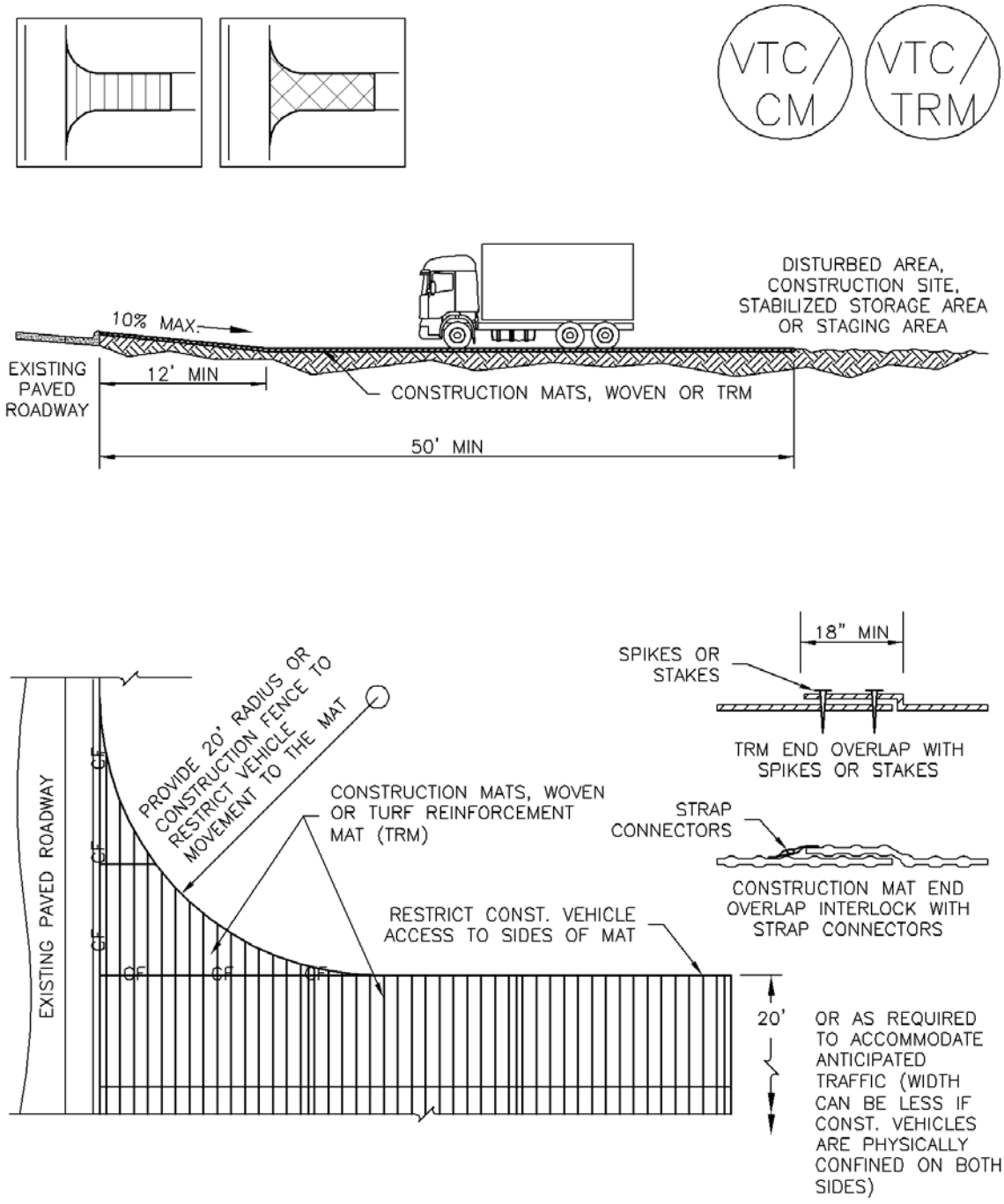
VTC-1. AGGREGATE VEHICLE TRACKING CONTROL



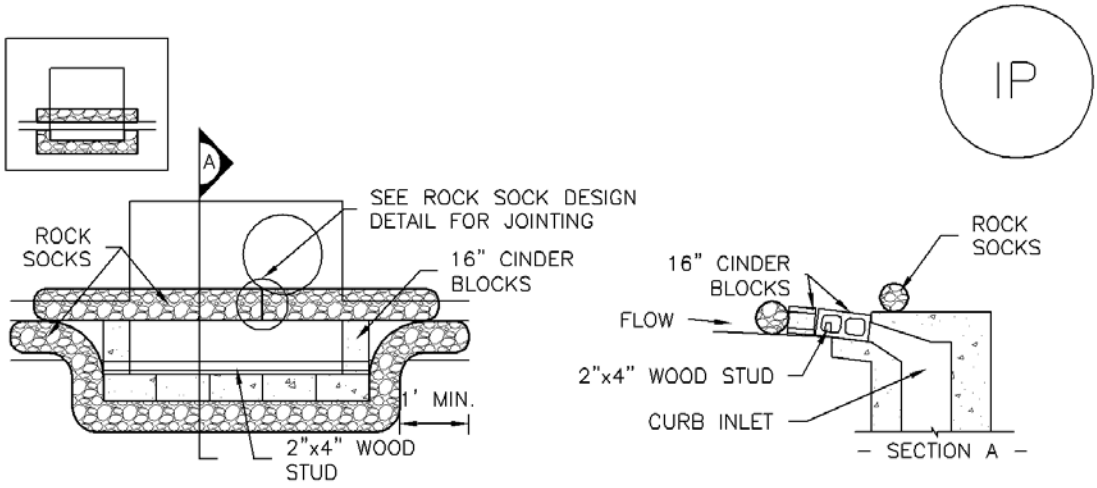


SECTION A

VTC–2. AGGREGATE VEHICLE TRACKING CONTROL WITH WASH RACK



VTC–3. VEHICLE TRACKING CONTROL W/ CONSTRUCTION MAT OR TURF REINFORCEMENT MAT (TRM)



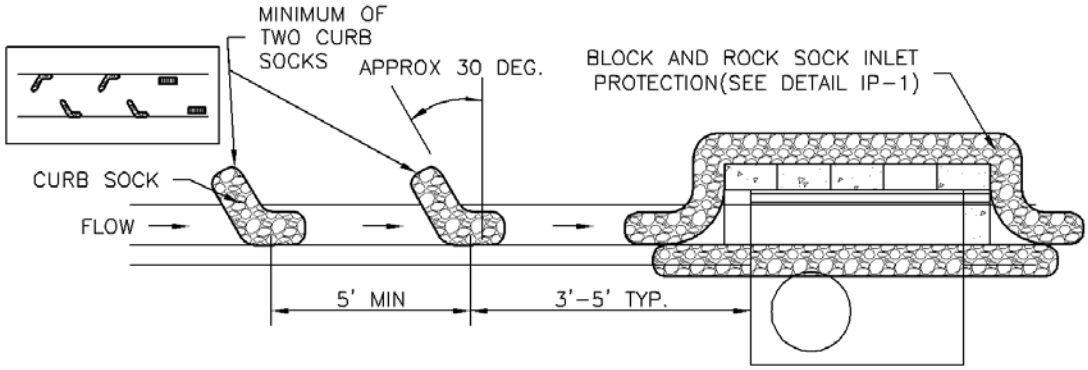
IP–1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION

BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.

3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.



IP–2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

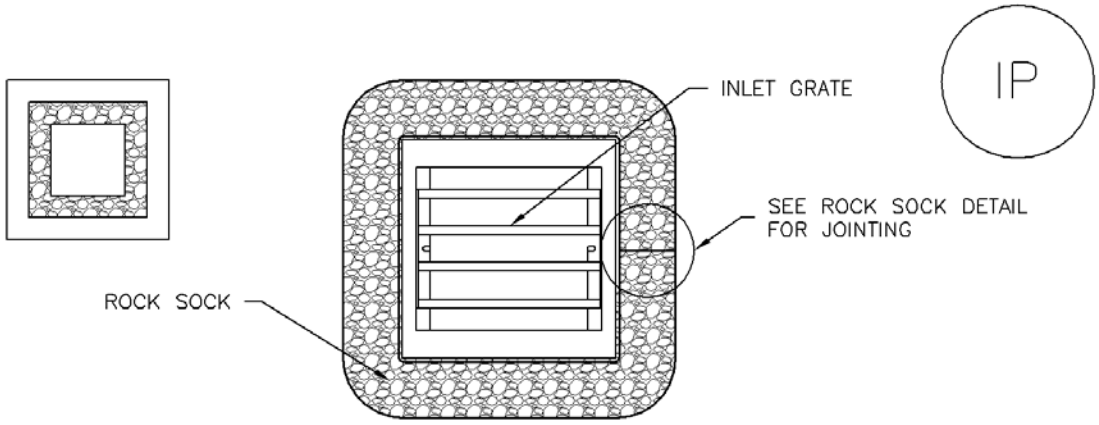
CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.

2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.

3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.

4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON–GRADE INLETS.

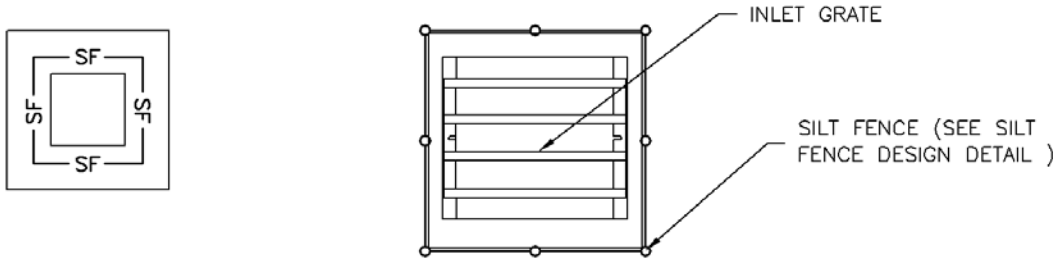


IP–3. ROCK SOCK SUMP/AREA INLET PROTECTION

ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



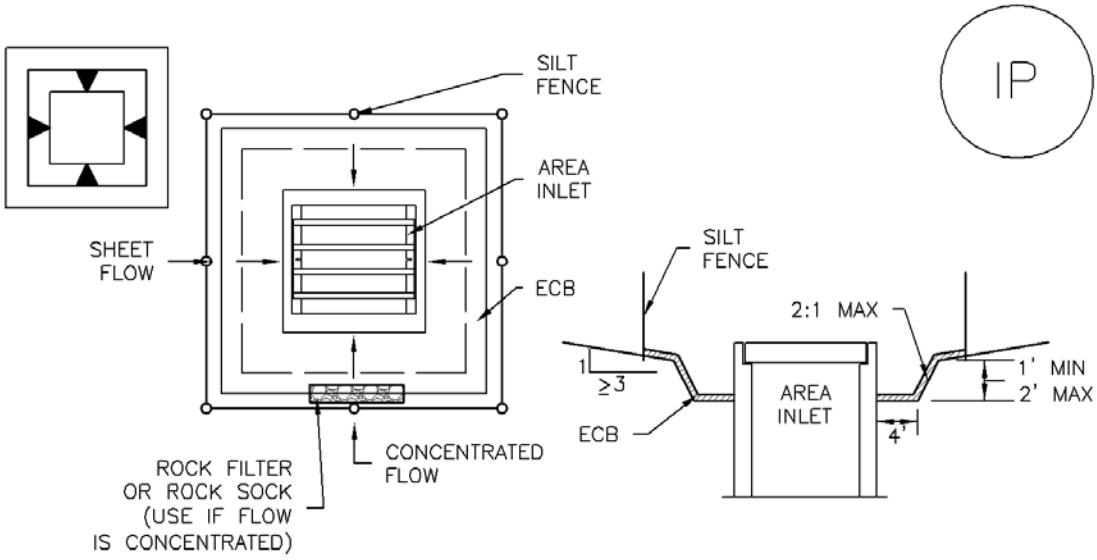
IP–4. SILT FENCE FOR SUMP INLET PROTECTION

SILT FENCE INLET PROTECTION INSTALLATION NOTES

1. SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.

3. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



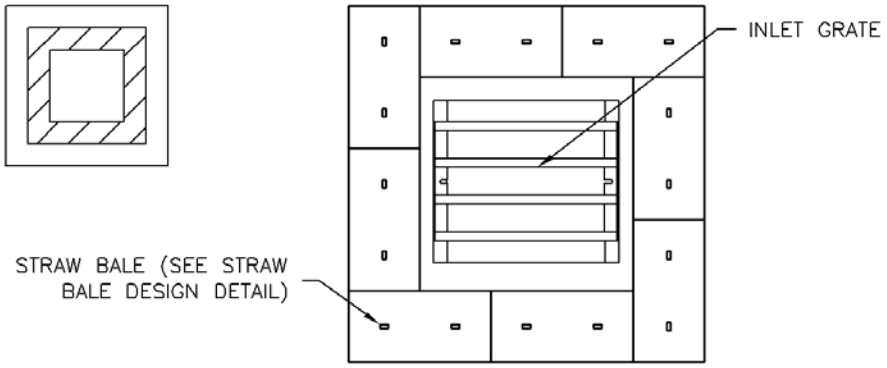
IP–5. OVEREXCAVATION INLET PROTECTION

OVEREXCAVATION INLET PROTECTION INSTALLATION NOTES

1. THIS FORM OF INLET PROTECTION IS PRIMARILY APPLICABLE FOR SITES THAT HAVE NOT YET REACHED FINAL GRADE AND SHOULD BE USED ONLY FOR INLETS WITH A RELATIVELY SMALL CONTRIBUTING DRAINAGE AREA.

2. WHEN USING FOR CONCENTRATED FLOWS, SHAPE BASIN IN 2:1 RATIO WITH LENGTH ORIENTED TOWARDS DIRECTION OF FLOW.

3. SEDIMENT MUST BE PERIODICALLY REMOVED FROM THE OVEREXCAVATED AREA.

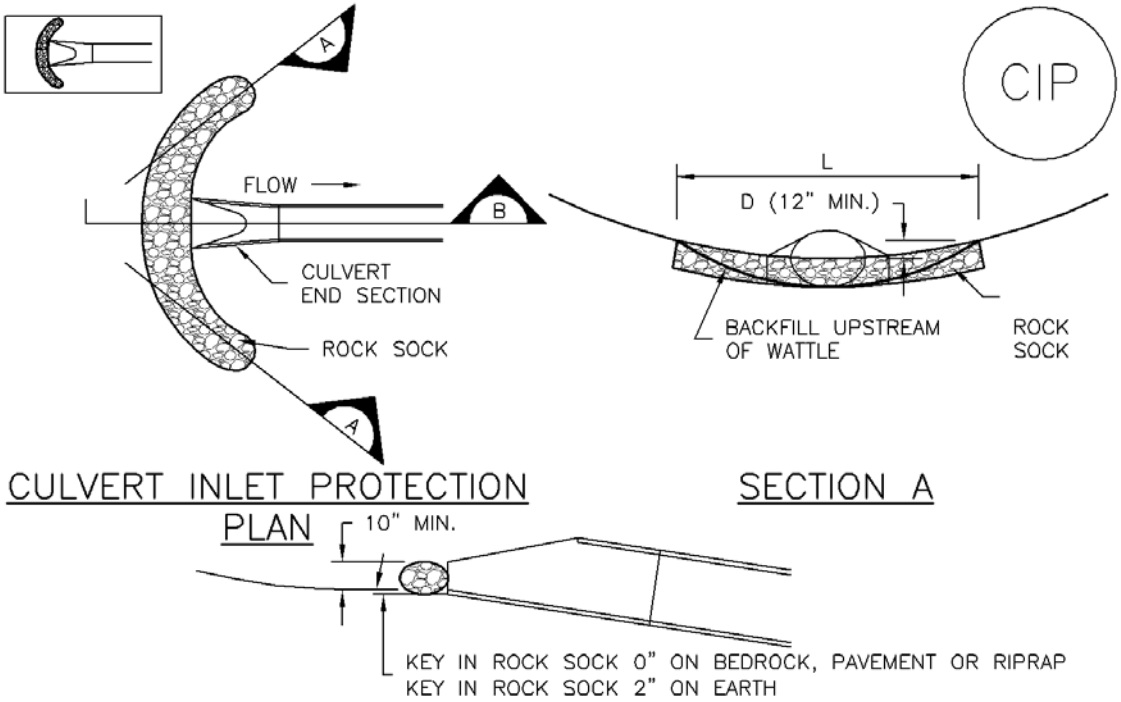


IP–6. STRAW BALE FOR SUMP INLET PROTECTION

STRAW BALE BARRIER INLET PROTECTION INSTALLATION NOTES

1. SEE STRAW BALE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. BALES SHALL BE PLACED IN A SINGLE ROW AROUND THE INLET WITH ENDS OF BALES TIGHTLY ABUTTING ONE ANOTHER.



CIP–1. CULVERT INLET PROTECTION

CULVERT INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF CULVERT INLET PROTECTION.

2. SEE ROCK SOCK DESIGN DETAIL FOR ROCK GRADATION REQUIREMENTS AND JOINTING DETAIL.

CULVERT INLET 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.

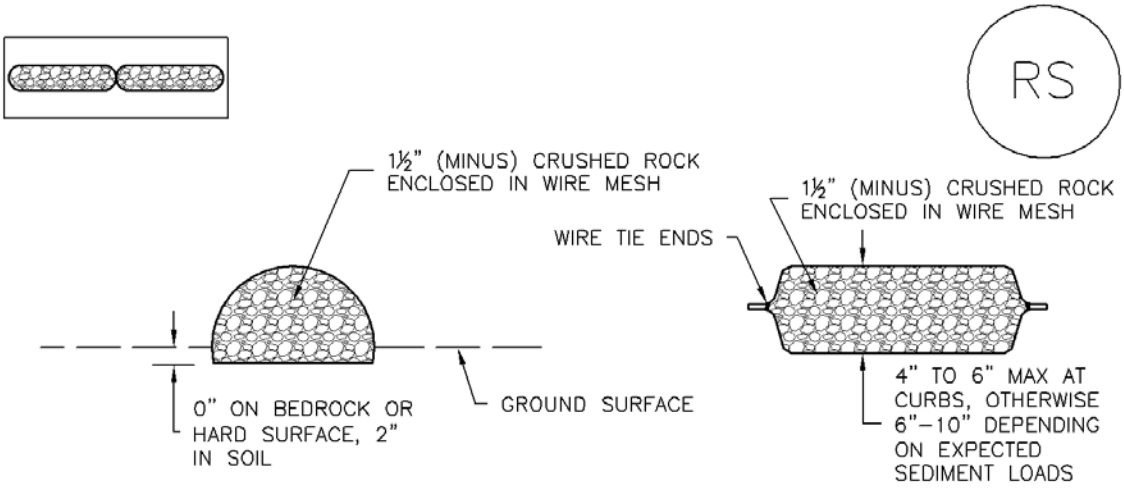
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE CULVERT SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS ½ THE HEIGHT OF THE ROCK SOCK.

5. CULVERT INLET PROTECTION SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

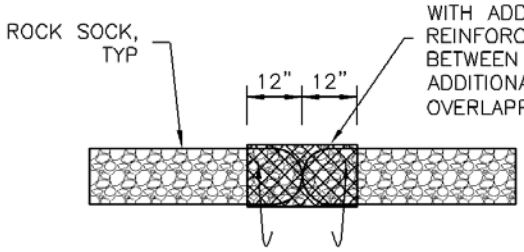
(DETAILS ADAPTED FROM AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

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.



ROCK SOCK SECTION

ROCK SOCK PLAN



ANY GAP AT JOINT SHALL BE FILLED WITH AN ADEQUATE AMOUNT OF 1½" (MINUS) CRUSHED ROCK AND WRAPPED WITH ADDITIONAL WIRE MESH SECURED TO ENDS OF ROCK REINFORCED SOCK. AS AN ALTERNATIVE TO FILLING JOINTS BETWEEN ADJOINING ROCK SOCKS WITH CRUSHED ROCK AND ADDITIONAL WIRE WRAPPING, ROCK SOCKS CAN BE OVERLAPPED (TYPICALLY 12–INCH OVERLAP) TO AVOID GAPS.

ROCK SOCK JOINTING

GRADATION TABLE	
SIEVE SIZE	MASS PERCENT PASSING SQUARE MESH SIEVES
	NO. 4
2"	100
1½"	90 – 100
1"	20 – 55
¾"	0 – 15
⅜"	0 – 5
MATCHES SPECIFICATIONS FOR NO. 4 COARSE AGGREGATE FOR CONCRETE PER AASHTO M43. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES.	

ROCK SOCK INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION(S) OF ROCK SOCKS.

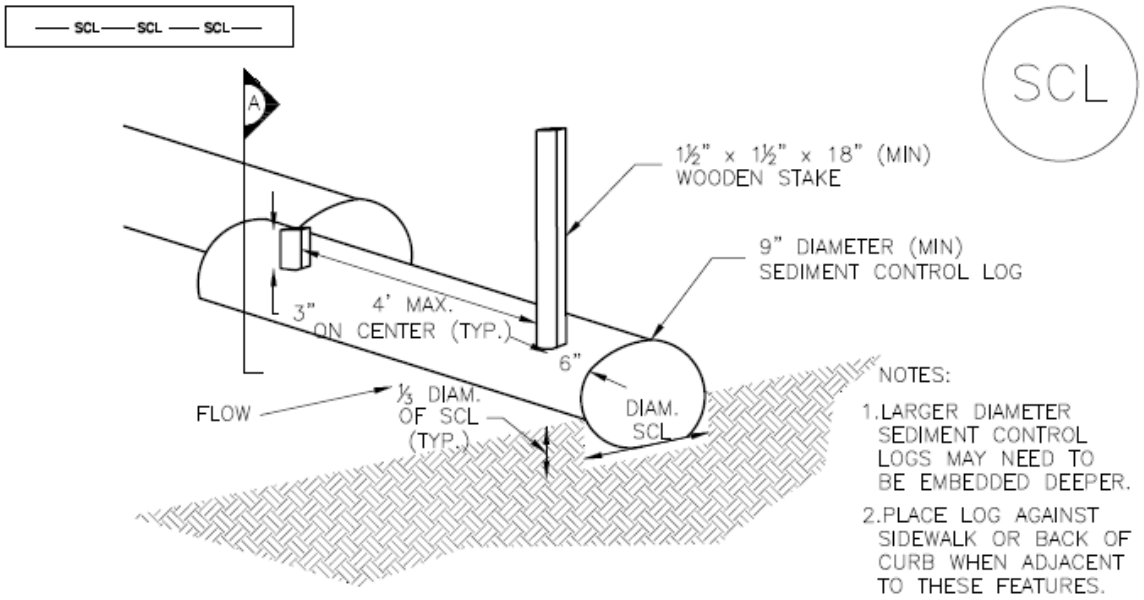
2. CRUSHED ROCK SHALL BE 1½" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET (1½" MINUS).

3. WIRE MESH SHALL BE FABRICATED OF 10 GAGE POULTRY MESH, OR EQUIVALENT, WITH A MAXIMUM OPENING OF ½", RECOMMENDED MINIMUM ROLL WIDTH OF 48"

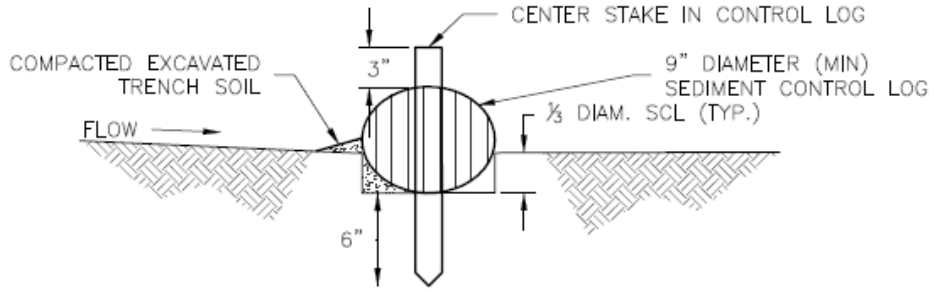
4. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6" CENTERS ALONG ALL JOINTS AND AT 2" CENTERS ON ENDS OF SOCKS.

5. SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROCK ENCLOSURE.

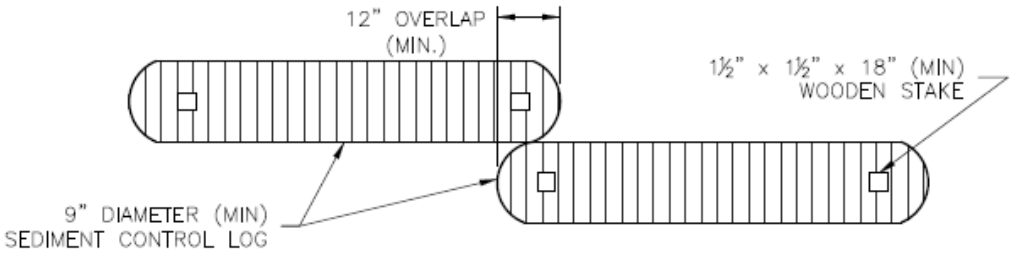
RS–1. ROCK SOCK PERIMETER CONTROL



TRENCHED SEDIMENT CONTROL LOG

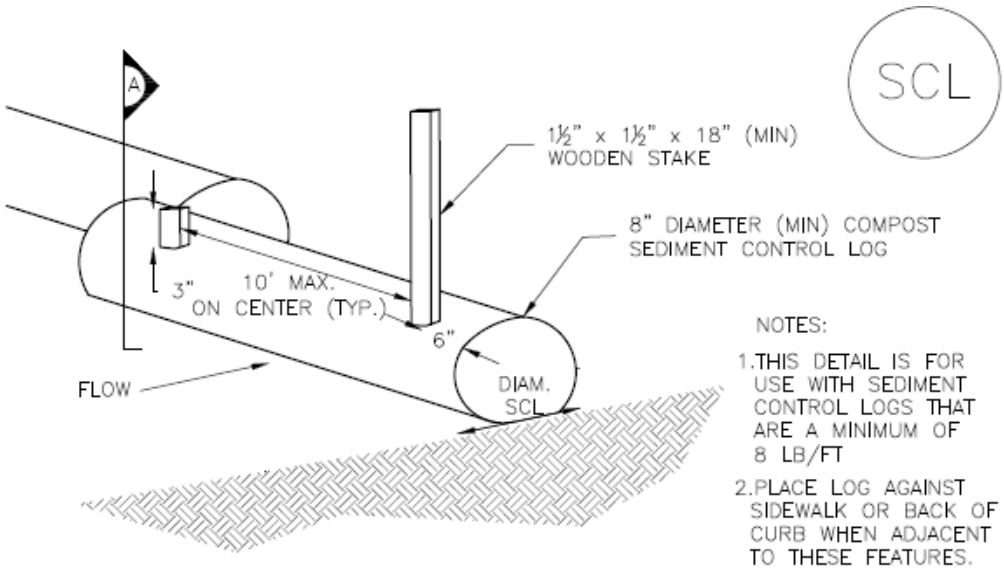


SECTION Ⓐ
TRENCHED SEDIMENT CONTROL LOG

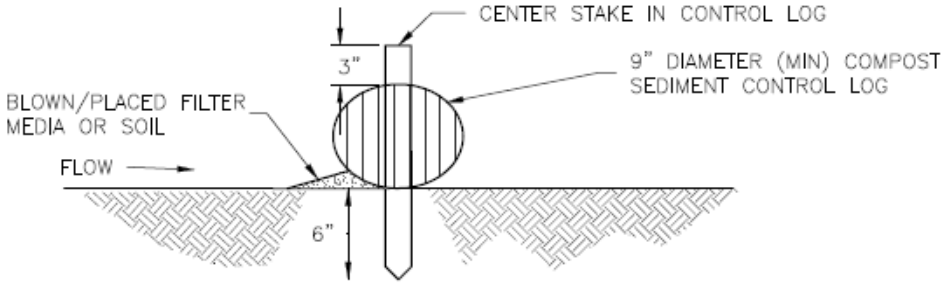


LOG JOINTS

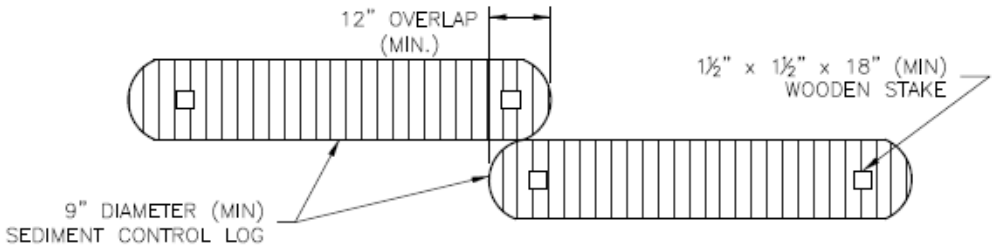
SCL–1. TRENCHED SEDIMENT CONTROL LOG



COMPOST SEDIMENT CONTROL LOG (WEIGHTED)

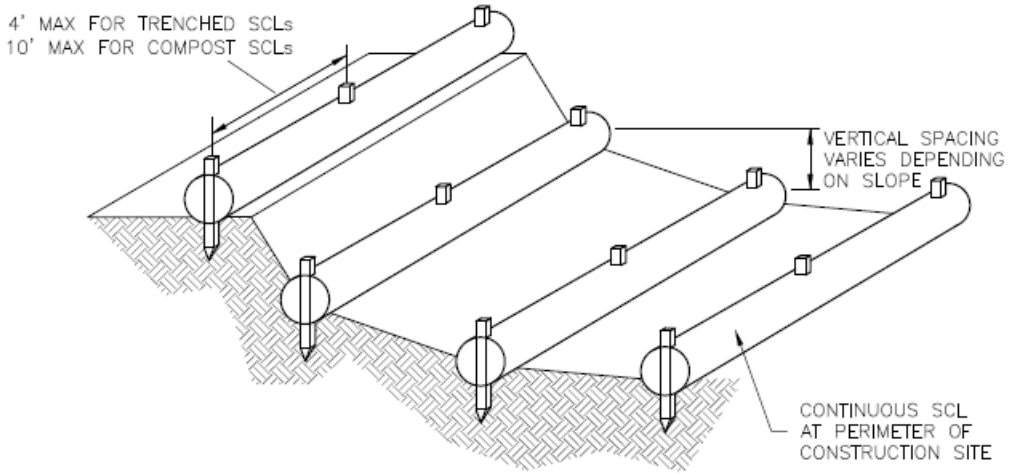


SECTION (A)
COMPOST SEDIMENT CONTROL LOG

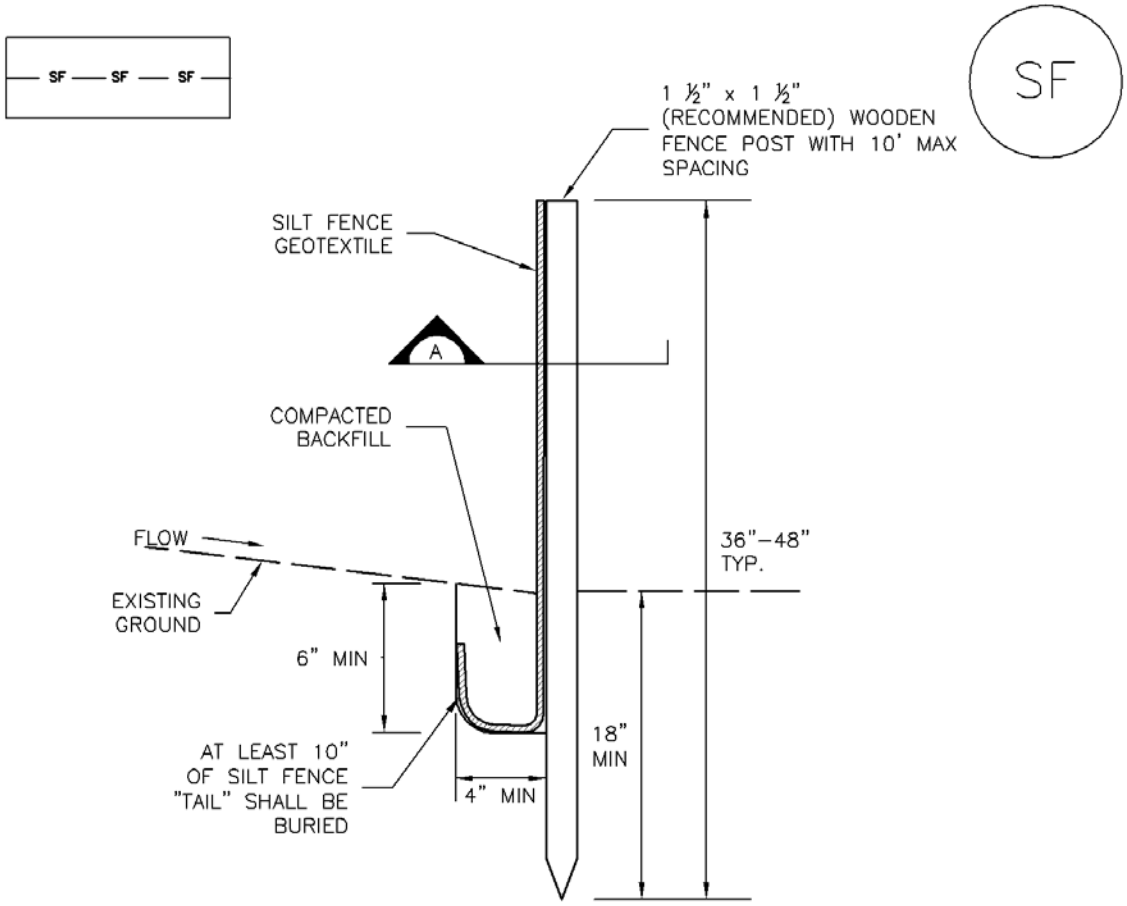


LOG JOINTS

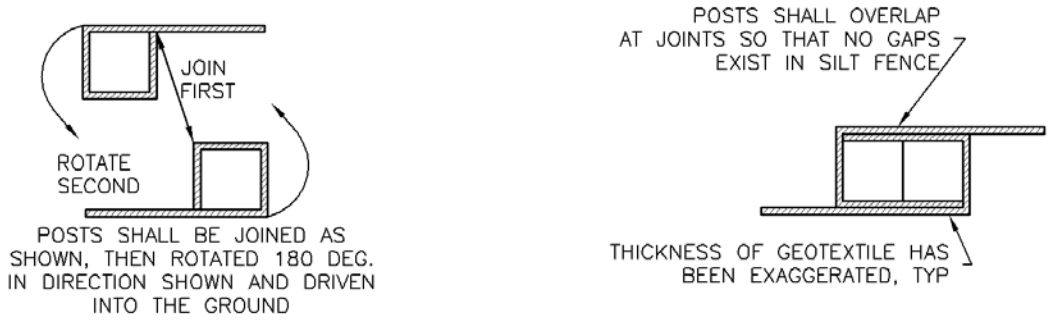
SCL–2. COMPOST SEDIMENT CONTROL LOG (WEIGHTED)



SCL–3. SEDIMENT CONTROL LOGS TO CONTROL SLOPE LENGTH



SILT FENCE



SECTION A

SF–1. SILT FENCE

SILT FENCE INSTALLATION NOTES

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2–5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.

2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.

3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.

4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.

5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J–HOOK." THE "J–HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' – 20').

7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT 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. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".

5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.

6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.

7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, 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.

Good Housekeeping Practices (GH) MM-3

Description

Implement construction site good housekeeping practices to prevent pollution associated with solid, liquid and hazardous construction-related materials and wastes. Stormwater Management Plans (SWMPs) should clearly specify BMPs including these good housekeeping practices:

- Provide for waste management.
- Establish proper building material staging areas.
- Designate paint and concrete washout areas.
- Establish proper equipment/vehicle fueling and maintenance practices.
- Control equipment/vehicle washing and allowable non-stormwater discharges.
- Develop a spill prevention and response plan.

Acknowledgement: This Fact Sheet is based directly on EPA guidance provided in *Developing Your Stormwater Pollution Prevent Plan* (EPA 2007).

Photographs GH-1 and GH-2. Proper materials storage and secondary containment for fuel tanks are important good housekeeping practices. Photos courtesy of CDOT and City of Aurora.

Appropriate Uses

Good housekeeping practices are necessary at all construction sites.

Design and Installation

The following principles and actions should be addressed in SWMPs:

- **Provide for Waste Management.** Implement management procedures and practices to prevent or reduce the exposure and transport of pollutants in stormwater from solid, liquid and sanitary wastes that will be generated at the site. Practices such as trash disposal, recycling, proper material handling, and cleanup measures can reduce the potential for stormwater runoff to pick up construction site wastes and discharge them to surface waters. Implement a comprehensive set of waste-management practices for hazardous or toxic materials, such as paints, solvents, petroleum products, pesticides, wood preservatives, acids, roofing tar, and other materials. Practices should include storage, handling, inventory, and cleanup procedures, in case of spills. Specific practices that should be considered include:

  Solid or Construction Waste

  - Designate trash and bulk waste-collection areas on-site.

Good Housekeeping	
Functions	
Erosion Control	No
Sediment Control	No
Site/Material Management	Yes

- Recycle materials whenever possible (e.g., paper, wood, concrete, oil).
- Segregate and provide proper disposal options for hazardous material wastes.
- Clean up litter and debris from the construction site daily.
- Locate waste-collection areas away from streets, gutters, watercourses, and storm drains. Waste-collection areas (dumpsters, and such) are often best located near construction site entrances to minimize traffic on disturbed soils. Consider secondary containment around waste collection areas to minimize the likelihood of contaminated discharges.
- Empty waste containers before they are full and overflowing.

Sanitary and Septic Waste

- Provide convenient, well-maintained, and properly located toilet facilities on-site.
- Locate toilet facilities away from storm drain inlets and waterways to prevent accidental spills and contamination of stormwater.
- Maintain clean restroom facilities and empty portable toilets regularly.
- Where possible, provide secondary containment pans under portable toilets.
- Provide tie-downs or stake-downs for portable toilets.
- Educate employees, subcontractors, and suppliers on locations of facilities.
- Treat or dispose of sanitary and septic waste in accordance with state or local regulations. Do not discharge or bury wastewater at the construction site.
- Inspect facilities for leaks. If found, repair or replace immediately.
- Special care is necessary during maintenance (pump out) to ensure that waste and/or biocide are not spilled on the ground.

Hazardous Materials and Wastes

- Develop and implement employee and subcontractor education, as needed, on hazardous and toxic waste handling, storage, disposal, and cleanup.
- Designate hazardous waste-collection areas on-site.
- Place all hazardous and toxic material wastes in secondary containment.

Photograph GH-3. Locate portable toilet facilities on level surfaces away from waterways and storm drains. Photo courtesy of WWE.

- Hazardous waste containers should be inspected to ensure that all containers are labeled properly and that no leaks are present.

- **Establish Proper Building Material Handling and Staging Areas**. The SWMP should include comprehensive handling and management procedures for building materials, especially those that are hazardous or toxic. Paints, solvents, pesticides, fuels and oils, other hazardous materials or building materials that have the potential to contaminate stormwater should be stored indoors or under cover whenever possible or in areas with secondary containment. Secondary containment measures prevent a spill from spreading across the site and may include dikes, berms, curbing, or other containment methods. Secondary containment techniques should also ensure the protection of groundwater. Designate staging areas for activities such as fueling vehicles, mixing paints, plaster, mortar, and other potential pollutants. Designated staging areas enable easier monitoring of the use of materials and clean up of spills. Training employees and subcontractors is essential to the success of this pollution prevention principle. Consider the following specific materials handling and staging practices:

  - Train employees and subcontractors in proper handling and storage practices.

  - Clearly designate site areas for staging and storage with signs and on construction drawings. Staging areas should be located in areas central to the construction site. Segment the staging area into sub-areas designated for vehicles, equipment, or stockpiles. Construction entrances and exits should be clearly marked so that delivery vehicles enter/exit through stabilized areas with vehicle tracking controls (See Vehicle Tracking Control Fact Sheet).

  - Provide storage in accordance with Spill Protection, Control and Countermeasures (SPCC) requirements and plans and provide cover and impermeable perimeter control, as necessary, for hazardous materials and contaminated soils that must be stored on site.

  - Ensure that storage containers are regularly inspected for leaks, corrosion, support or foundation failure, or other signs of deterioration and tested for soundness.

  - Reuse and recycle construction materials when possible.

- **Designate Concrete Washout Areas**. Concrete contractors should be encouraged to use the washout facilities at their own plants or dispatch facilities when feasible; however, concrete washout commonly occurs on construction sites. If it is necessary to provide for concrete washout areas on-site, designate specific washout areas and design facilities to handle anticipated washout water. Washout areas should also be provided for paint and stucco operations. Because washout areas can be a source of pollutants from leaks or spills, care must be taken with regard to their placement and proper use. See the Concrete Washout Area Fact Sheet for detailed guidance.

  Both self-constructed and prefabricated washout containers can fill up quickly when concrete, paint, and stucco work are occurring on large portions of the site. Be sure to check for evidence that contractors are using the washout areas and not dumping materials onto the ground or into drainage facilities. If the washout areas are not being used regularly, consider posting additional signage, relocating the facilities to more convenient locations, or providing training to workers and contractors.

  When concrete, paint, or stucco is part of the construction process, consider these practices which will help prevent contamination of stormwater. Include the locations of these areas and the maintenance and inspection procedures in the SWMP.

- Do not washout concrete trucks or equipment into storm drains, streets, gutters, uncontained areas, or streams. Only use designated washout areas.

- Establish washout areas and advertise their locations with signs. Ensure that signage remains in good repair.

- Provide adequate containment for the amount of wash water that will be used.

- Inspect washout structures daily to detect leaks or tears and to identify when materials need to be removed.

- Dispose of materials properly. The preferred method is to allow the water to evaporate and to recycle the hardened concrete. Full service companies may provide dewatering services and should dispose of wastewater properly. Concrete wash water can be highly polluted. It should not be discharged to any surface water, storm sewer system, or allowed to infiltrate into the ground in the vicinity of waterbodies. Washwater should not be discharged to a sanitary sewer system without first receiving written permission from the system operator.

- **Establish Proper Equipment/Vehicle Fueling and Maintenance Practices**. Create a clearly designated on-site fueling and maintenance area that is clean and dry. The on-site fueling area should have a spill kit, and staff should know how to use it. If possible, conduct vehicle fueling and maintenance activities in a covered area. Consider the following practices to help prevent the discharge of pollutants to stormwater from equipment/vehicle fueling and maintenance. Include the locations of designated fueling and maintenance areas and inspection and maintenance procedures in the SWMP.

  - Train employees and subcontractors in proper fueling procedures (stay with vehicles during fueling, proper use of pumps, emergency shutoff valves, etc.).

  - Inspect on-site vehicles and equipment regularly for leaks, equipment damage, and other service problems.

  - Clearly designate vehicle/equipment service areas away from drainage facilities and watercourses to prevent stormwater run-on and runoff.

  - Use drip pans, drip cloths, or absorbent pads when replacing spent fluids.

  - Collect all spent fluids, store in appropriate labeled containers in the proper storage areas, and recycle fluids whenever possible.

- **Control Equipment/Vehicle Washing and Allowable Non-Stormwater Discharges.** Implement practices to prevent contamination of surface and groundwater from equipment and vehicle wash water. Representative practices include:

  - Educate employees and subcontractors on proper washing procedures.

  - Use off-site washing facilities, when available.

  - Clearly mark the washing areas and inform workers that all washing must occur in this area.

  - Contain wash water and treat it using BMPs. Infiltrate washwater when possible, but maintain separation from drainage paths and waterbodies.

- Use high-pressure water spray at vehicle washing facilities without detergents. Water alone can remove most dirt adequately.

- Do not conduct other activities, such as vehicle repairs, in the wash area.

- Include the location of the washing facilities and the inspection and maintenance procedures in the SWMP.

- **Develop a Spill Prevention and Response Plan.** Spill prevention and response procedures must be identified in the SWMP. Representative procedures include identifying ways to reduce the chance of spills, stop the source of spills, contain and clean up spills, dispose of materials contaminated by spills, and train personnel responsible for spill prevention and response. The plan should also specify material handling procedures and storage requirements and ensure that clear and concise spill cleanup procedures are provided and posted for areas in which spills may potentially occur. When developing a spill prevention plan, include the following:

  - Note the locations of chemical storage areas, storm drains, tributary drainage areas, surface waterbodies on or near the site, and measures to stop spills from leaving the site.

  - Provide proper handling and safety procedures for each type of waste. Keep Material Safety Data Sheets (MSDSs) for chemical used on site with the SWMP.

  - Establish an education program for employees and subcontractors on the potential hazards to humans and the environment from spills and leaks.

  - Specify how to notify appropriate authorities, such as police and fire departments, hospitals, or municipal sewage treatment facilities to request assistance. Emergency procedures and contact numbers should be provided in the SWMP and posted at storage locations.

  - Describe the procedures, equipment and materials for immediate cleanup of spills and proper disposal.

  - Identify personnel responsible for implementing the plan in the event of a spill. Update the spill prevention plan and clean up materials as changes occur to the types of chemicals stored and used at the facility.

Spill Prevention, Control, and Countermeasure (SPCC) Plan

Construction sites may be subject to 40 CFR Part 112 regulations that require the preparation and implementation of a SPCC Plan to prevent oil spills from aboveground and underground storage tanks. The facility is subject to this rule if it is a non-transportation-related facility that:

- Has a total storage capacity greater than 1,320 gallons or a completely buried storage capacity greater than 42,000 gallons.
- Could reasonably be expected to discharge oil in quantities that may be harmful to navigable waters of the United States and adjoining shorelines.

Furthermore, if the facility is subject to 40 CFR Part 112, the SWMP should reference the SPCC Plan. To find out more about SPCC Plans, see EPA's website on SPPC at www.epa.gov/oilspill/spcc.htm.

Reporting Oil Spills

In the event of an oil spill, contact the National Response Center toll free at 1-800-424- 8802 for assistance, or for more details, visit their website: www.nrc.uscg.mil.

Maintenance and Removal

Effective implementation of good housekeeping practices is dependent on clear designation of personnel responsible for supervising and implementing good housekeeping programs, such as site cleanup and disposal of trash and debris, hazardous material management and disposal, vehicle and equipment maintenance, and other practices. Emergency response "drills" may aid in emergency preparedness.

Checklists may be helpful in good housekeeping efforts.

Staging and storage areas require permanent stabilization when the areas are no longer being used for construction-related activities.

Construction-related materials, debris and waste must be removed from the construction site once construction is complete.

Design Details

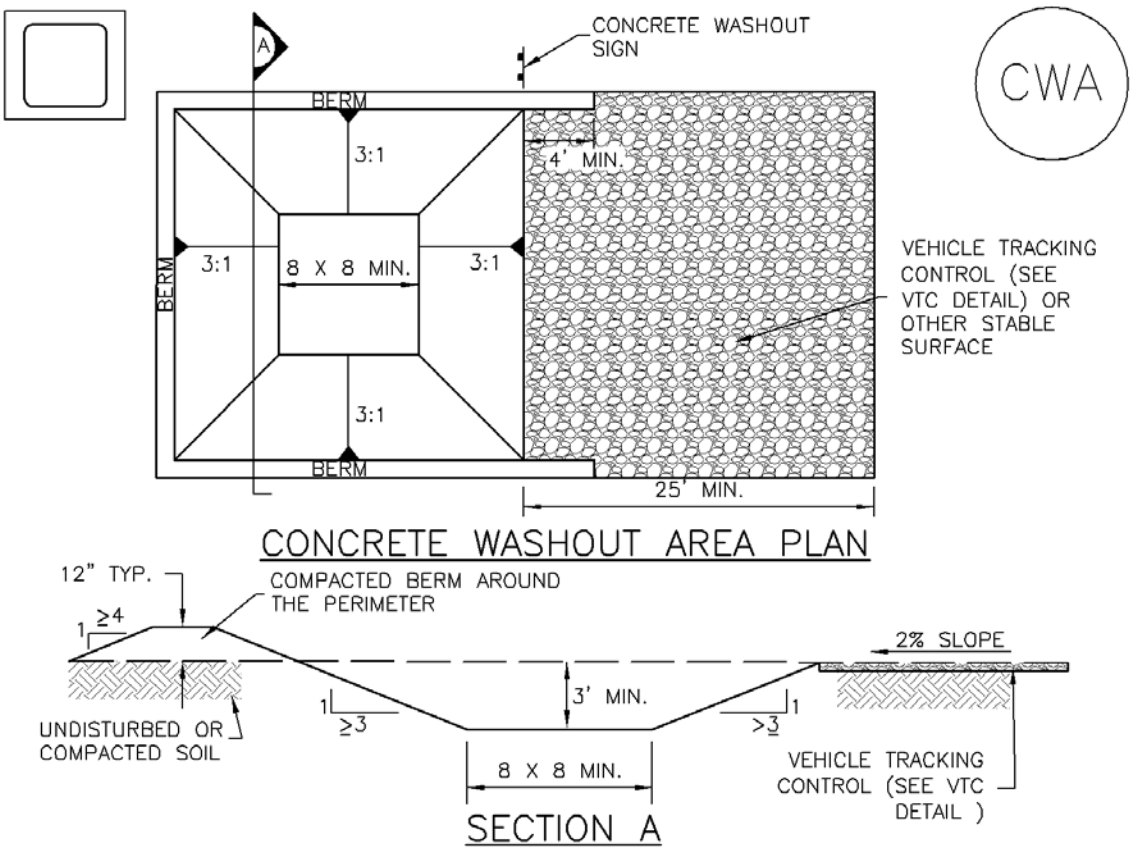
See the following Fact Sheets for related Design Details:

MM-1 Concrete Washout Area

MM-2 Stockpile Management

SM-4 Vehicle Tracking Control

Design details are not necessary for other good housekeeping practices; however, be sure to designate where specific practices will occur on the appropriate construction drawings.



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.

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'.

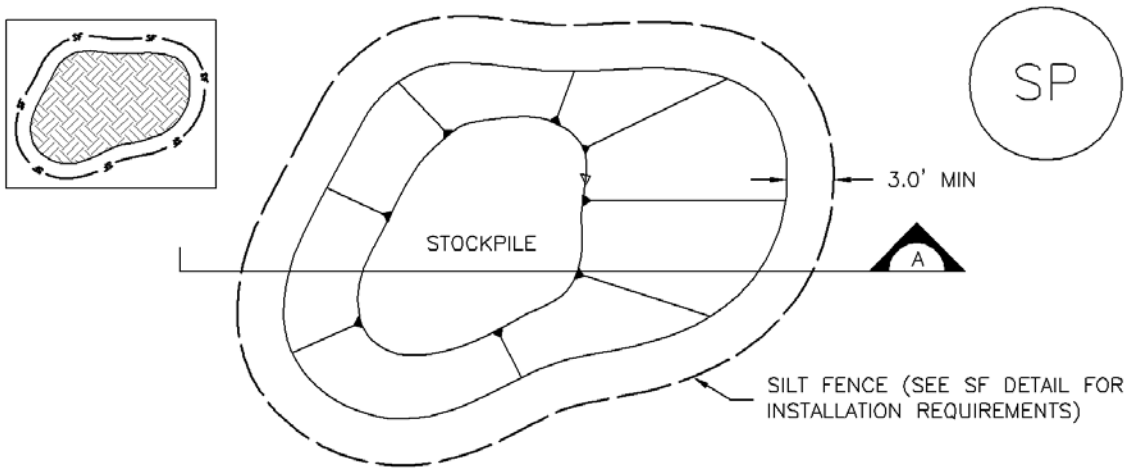
5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER–TIGHT CONTAINER AND DISPOSED OF PROPERLY.

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

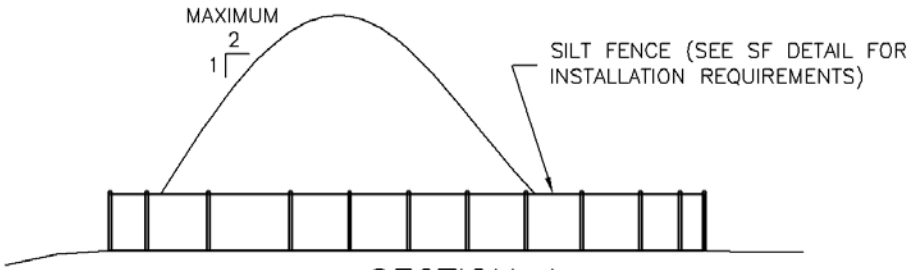
7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(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.



STOCKPILE PROTECTION PLAN



SECTION A

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 SEEDED 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.

TAB H

INSPECTION REPORTS

Facility Name:		**SWMP FIELD INSPECTION REPORT**	
Contractor/Developer:		**Date of Inspection:**	
CMS Inspector:		**Reason for Inspection:**	
Existing Weather Conditions:		**Municipality:**	
Phase(s) of construction:		**Estimated acreage of disturbance:**	
Storm Event:	**Date Began:**	**Duration (Hours):**	**Amount (inches):**

SWMP Information	**YES**	**NO**	**N/A**	**Comments**
1. Does a copy of the SWMP and accompanying sediment and erosion control drawings exist at the facility site?				
- Is the discharge permit & acknowledgement letter at the facility site?				
- Are the SWMP and/or accompanying sediment and erosion control drawings updated and documented?				
2. Do inspection records exist at the facility site?				
- Has there been any deviations from the minimum inspection frequency as specified in SWMP?				
- Have all previous inspection items been addressed and documented?				
Inspection Scope	**YES**	**NO**	**N/A**	
3. Areas to be inspected: When conducting a site inspection, the following areas, if applicable, must be inspected for evidence of, or potential for pollutants leaving the construction site boundaries, entering the stormwater drainage system or discharging to state waters:				
a. Construction site perimeter;				If no, the inspection is not complete.
b. All disturbed areas;				If no, the inspection is not complete.
c. All implemented sediment and erosion control practices,				If no, the inspection is not complete.
d. Designated haul routes;				If no, the inspection is not complete.
e. Materials and waste storage areas exposed to precipitation;				If no, the inspection is not complete.
f. Locations where stormwater has the potential to discharge offsite;				If no, the inspection is not complete.
g. Locations where vehicles exit the site.				If no, the inspection is not complete.
h. Have all inspection requirements been followed to in accordance of Part 1.D.5.b.i-iv of the General Permit COR400000.				If no, the inspection is not complete.
Inspection Reports	**YES**	**NO**	**N/A**	
i. Is there evidence of the presence of floating materials, visible oil sheen, discoloration, turbidity, odor, etc. in the storm water discharge(s)? If yes provide location and notify the SWMP manager immediately.				If yes, see attached detail report
j. Is their evidence of illicit discharges of sediment or other non-permitted pollutants from the site? If yes provide location and notify the SWMP manager immediately.				If yes, see attached detail report
k. Are there locations of control measures needing maintenance?				If yes, see attached detail report
l. Are there locations where control measures are identified as inadequate?				If yes, see attached detail report
m. Are there locations where additional control measures are needed that were not in place at the time of the inspection?				If yes, see attached detail report

CMS ENVIRONMENTAL SOLUTIONS

		SITE NOTES & CORRECTIVE ACTION LOG	
Facility Name:		**Date of Inspection:**	

SPECIFIC SITE NOTES – INFORMATION ITEMS:		
M: Maintenance; C: Corrective Action		
CORRECTIVE ACTIONS - Detailed Report: Identify the problem and its location.	**Mark X if carry over item**	**Date done (with initials) by contractor**
Corrective actions taken**: It should be assumed that corrective actions are reflective of repairs as suggested above. Refer to the Site BMP map for further details of actions that may have been taken. See below for measures taken to prevent future violations including requisite changes to the SMWP as necessary.**		

Certification and Compliance Statement

Below is the qualified stormwater managers certification verifying that the inspection was conducted in accordance with Part I.D.1-5 of the Construction General Permit COR400000.

(Print Inspector Name)	(Signature)	(Date)

Title/Qualification of the Inspector: _____

Compliance Document Signature Requirement:

"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"

(Print Name)	(Signature)	(Date)

Qualified Stormwater Manager Title or Position: _____

TAB I

INSPECTOR QUALIFICATIONS

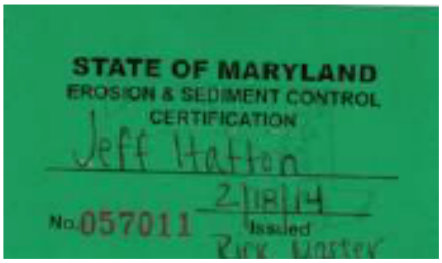
CMS Inspector Qualifications/Certifications:

Josh Downey: President

- Certified Inspector in Sediment and Erosion Control (CISEC)
- CDOT Erosion Control Supervisor
- CO State Stormwater Inspector Training
- CDOT BMP Academy
- Construction Dewatering
- Best Management Practices for Working in Waterways

Jeff Hatton

- CDOT Erosion Control Supervisor
- CO State Stormwater Inspector Training
- Stormwater Inspector Training Course: CMSCIT-0250
- MDE RPC State Stormwater Inspector Training
- Florida Stormwater Erosion and Sedimentation Control Inspector
- Certified Inspector in Sediment and Erosion Control (CISEC)
- Construction Dewatering
- Advanced Stormwater Managers Course (CSEP)
- MDE Green Card #027011



Jake Foster: Field Operations Manager

- Certified Inspector in Sediment and Erosion Control (CISEC)
- Stormwater Inspector Training Course: CMSCIT-0250
- CDOT Transportation Erosion Control Supervisor Certification (TECS)
- State Stormwater Inspector Training
- Construction Dewatering
- Best Management Practices for Working Waterways

Julie Amazeen: Senior Area Manager

- Certified Inspector in Sediment and Erosion Control (CISEC)
- Stormwater Inspector Training Course: CMSCIT-0250
- CDOT Transportation Erosion Control Supervisor Certification (TECS)
- State Stormwater Inspector Training
- Construction Dewatering
- Best Management Practices for Working Waterways
- Advanced Stormwater Managers Course (CSEP)

- Stormwater Management and Erosion Control During Construction – GEC Administrator
- Fort Carson Stormwater Management at Construction Sites Training

Thomas Boyle: Project Engineer

- CDOT Erosion Control Supervisor
- Certified Inspector in Sediment and Erosion Control (CISEC)
- Stormwater Inspector Training Course: CMSCIT-0250
- State Stormwater Inspector Training
- Construction Dewatering
- Best Management Practices for Working in Waterways

Kyle Anderson: East Area Manager

- Certified Inspector in Sediment and Erosion Control (CISEC)
- Stormwater Inspector Training Course: CMSCIT-0250
- CDOT Transportation Erosion Control Supervisor Certification (TECS)
- State Stormwater Inspector Training
- Construction Dewatering
- Best Management Practices for Working in Waterways

Evan Oliver: Central Area Manager

- Certified Inspector in Sediment and Erosion Control (CISEC)
- Stormwater Inspector Training Course: CMSCIT-0250
- State Stormwater Inspector Training
- Construction Dewatering
- Best Management Practices for Working in Waterways
- CDOT Transportation Erosion Control Supervisor Certification (TECS)

Lacey Kruger: North Area Manager

- Certified Inspector in Sediment and Erosion Control (CISEC)
- CDOT Transportation Erosion Control Supervisor Certification (TECS)
- Stormwater Inspector Training Course: CMSCIT-0250

Valerie Spies: Assistant Area Manager

- Certified Inspector in Sediment and Erosion Control (CISEC)
- Stormwater Inspector Training Course: CMSCIT-0250
- CDOT Transportation Erosion Control Supervisor Certification (TECS)

Connor Brown: Account Manager

- Certified Inspector in Sediment and Erosion Control (CISEC)

- Stormwater Inspector Training Course: CMSCIT-0250

Chase Attwood: Assistant Area Manager

- Certified Inspector in Sediment and Erosion Control (CISEC)
- Stormwater Inspector Training Course: CMSCIT-0250

Zachary Smith: Assistant Area Manager

- Stormwater Inspector Training Course: CMSCIT-0250
- Certified Inspector in Sediment and Erosion Control (CISEC-IT)
- CDOT Transportation Erosion Control Supervisor Certification (TECS)

Sydney Tankersley: Senior Environmental Analyst

- Stormwater Inspector Training Course: CMSCIT-0250
- Certified Inspector in Sediment and Erosion Control (CISEC-IT)
- CDOT Transportation Erosion Control Supervisor Certification (TECS)

Arielle Leen: Environmental Analyst

- Stormwater Inspector Training Course: CMSCIT-0250
- Certified Inspector in Sediment and Erosion Control (CISEC-IT)

Julia Keeler: Environmental Analyst

- Stormwater Inspector Training Course: CMSCIT-0250
- Certified Inspector in Sediment and Erosion Control (CISEC-IT)

Rabie Barka: Environmental Analyst

- Stormwater Inspector Training Course: CMSCIT-0250
- Certified Inspector in Sediment and Erosion Control (CISEC-IT)

Derek Cunningham: Environmental Analyst

- Stormwater Inspector Training Course: CMSCIT-0250
- Certified Inspector in Sediment and Erosion Control (CISEC-IT)

Eric Hunt: Environmental Analyst

- Stormwater Inspector Training Course: CMSCIT-0250
- Certified Inspector in Sediment and Erosion Control (CISEC-IT)

Christian Martinez: Environmental Analyst

- Stormwater Inspector Training Course: CMSCIT-0250
- Certified Inspector in Sediment and Erosion Control (CISEC-IT)

Tim Pignato: Senior Environmental Analyst

- Stormwater Inspector Training Course: CMSCIT-0250
- Certified Inspector in Sediment and Erosion Control (CISEC-IT)

Taylor Rose: Environmental Analyst

- Stormwater Inspector Training Course: CMSCIT-0250
- Certified Inspector in Sediment and Erosion Control (CISEC-IT)

Madeline Egger: Environmental Analyst

- Stormwater Inspector Training Course: CMSCIT-0250
- Certified Inspector in Sediment and Erosion Control (CISEC-IT)

AJ Williams: Environmental Analyst

- CMSCIT - 0250

Kevin Ziznewski: Environmental Analyst

- CMSCIT - 0250

Rhys Daniels: Environmental Analyst

- CMSCIT - 0250

TJ Hackett: Environmental Analyst

- CMSCIT - 0250

Zach LaCross: Environmental Analyst

- CMSCIT - 0250

Cecelia Krause: Environmental Analyst

- CMSCIT - 0250

Jordan Cranford: Environmental Analyst

- CMSCIT - 0250

Sofia Bates: Environmental Analyst

- CMSCIT - 0250

Clara Schroeder: Environmental Analyst

- CMSCIT - 0250

Candace Allen: Environmental Analyst

- CMSCIT – 0250

Kathryn Nowak: Environmental Analyst

- CMSCIT – 0250

Taylor Sweat: Environmental Analyst

- CMSCIT – 0250

Julia Walker: Environmental Analyst

- CMSCIT – 0250

LaRae Chamblin-Torres: Environmental Analyst

- CMSCIT – 0250

TAB J

DELEGATION LETTER

Colorado Department of Public Health and Environment
Water Quality Control Division
WCED-P-B2
4300 Cherry Creek Drive South
Denver, CO 80246-1530

Dear Sir or Madam:

This letter serves to designate the specifically described person or position as an authorized representative for signing reports and performing certain activities requested by the Director or required by State Discharge Permit Number COR400000 until further notice is provided in writing. This authorization cannot be used for signing a General Permit Application, Inactivation Notice, or SWMP certification.

A Qualified Storm Water Inspector employed by CMS Environmental Solutions, LLC

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Company Name: _____

Project or Site: _____

Signature: _____

Printed Name: _____

Title: _____

Date: _____