

STORMWATER MANAGEMENT PLAN

FOUNDATION LUTHERAN CHURCH

TOWNERS AVE.
TRACT C, PAINT BRUSH HILLS FILING NO. 13A

PREPARED FOR APPLICANT:
COLORADO COMMERCIAL CONSTRUCTION
12325 ORACLE BLVD., SUITE 120
COLORADO SPRINGS, CO 80921

PCD FILING No. PPR2321

OCTOBER 17, 2023

SWMP Checklist Item 1. Add Qualified Stormwater Manager and Contractor information to cover/title sheet. If unknown, add a placeholder to be updated prior to the pre-construction meeting.

Prepared by
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ENGINEER OF RECORD:

The Stormwater Management Plan was prepared under my direction and supervision and is correct to the best of my knowledge and belief. Said Plan has been prepared according to the criteria established by the County and State for Stormwater Management Plans.

D.C. WALKER
Printed Name

10/18/23
Date

D.C. Walker
Signature



REVIEW ENGINEER:

The Stormwater Management Plan was reviewed and found to meet the checklist requirements except where otherwise noted or allowed by an approved deviation request.

Review Engineer

Date

1.0 EXISTING CONDITIONS

SWMP Checklist Item 9 - State the percent ground cover for vegetation and Include method used to determine ground cover (i.e., visual, aerial inspection)

The proposed development of Foundation Lutheran Church is located at the address of Towners Av in Falcon, Colorado in El Paso County within the Paint Brush Hills subdivision. The parcel schedule number is 5225208001 and the legal description is currently Tract C, Paint Brush Hills Filing No. 13A. The parcel is located in the West half of Section 25, Township 12 South, Range 65 West of the 6th P.M. El Paso County, Colorado. The site is bordered to the north by Londonderry Dr, to the east by Towners Ave, and to the south and west by residential/single-family homes.

The project site is approximately 4 acres +/- and consists of undeveloped natural vegetation. There is existing curb and gutter along Londonderry Drive and Towners Avenue.

The existing percent imperviousness is approximately 0 percent on Tract C. The existing vegetation consists of shrubs and native grasses.

The existing topography consists of grades between 1 and 25 percent. Drainage patterns sheet flow south across the parcel to a drainage swale that directs flow to the southwest corner.

The site is not located within a streamside zone.

SWMP Checklist Item 8 - discuss soil erosion potential

The soils indicative to the site are classified as Pring coarse sandy loam by the USDA Soil Conservation Service and are listed as NRCS (National Resources Conservation Service) Hydrologic Soil Group B. These soils have a moderate infiltration rate when thoroughly wet and have a moderate rate of water transmission. The USDA Soil Map is provided in the Appendix.

This parcel is located in the Falcon Drainage Basin.

The project site does not lie within a designated flood plain according to information published in the Federal Emergency Management Agency Floodplain Map No. 08041C0551G, dated December 7, 2018. The FEMA Floodplain map is provided in the Appendix showing it lies within Zone X, a minimal flood hazard area.

There are no known non-stormwater discharges that contribute to the storm water systems on site and downstream, both private and public.

A vicinity map is provided on the following page.

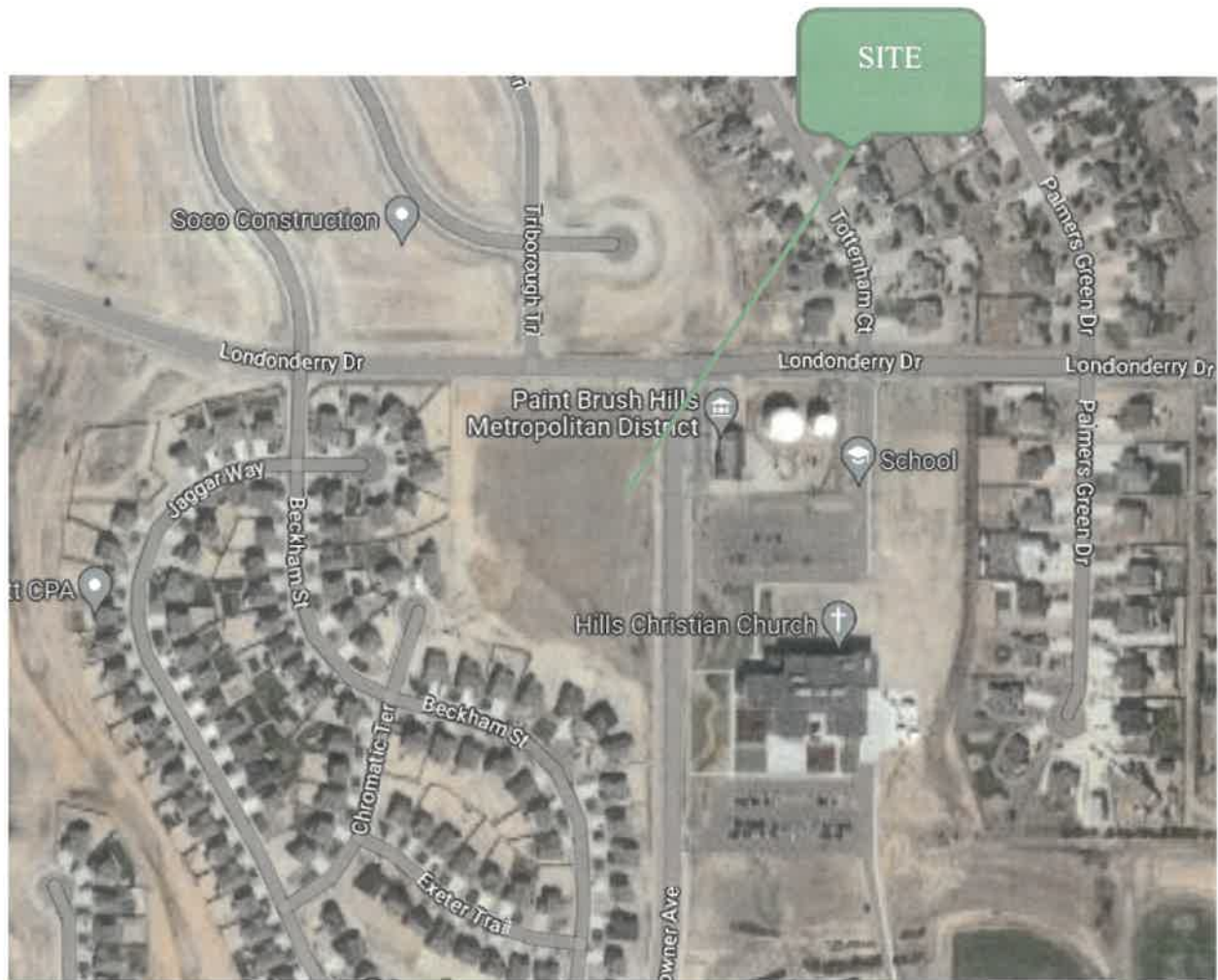


Figure 1: Vicinity Map of project location.

Stormdrain infrastructure is not considered a permanent water quality control measure. If discussing permanent Control Measures - discuss the pond the church is draining to and utilizing

2.0 CONSTRUCTION ACTIVITIES PROPOSED

The proposed project consists of the construction of a church building, surrounding asphalt drive access and parking, and a playing field. Permanent Control Measures with storm infrastructure will include storm inlets/outlets and underground pipes. The proposed project will not impact downstream facilities or neighboring developments.

The limits of disturbance are shown on the plans and noted in the cut and fill table.

State the disturbance in the text and ensure it matches the reported disturbance in the ESQCP

As part of the construction process, proper erosion control measures will be required for development of the site including silt fencing along downstream limits of disturbance to minimize off-site transport of construction sediment. Erosion control blankets will be installed on slopes 3V:1H or greater. Other control measures such as a vehicle tracking pad at the construction entrances to the site and stock pile protection are to be installed in applicable areas. A grading and erosion control plan is provided as a guide to proper control measure placement.

The site construction consists of earthwork of undeveloped land and the construction of a church building with associated hardscapes and pavement. The grading activities include cut and fill to the areas shown on the engineering plan set. Removal of temporary control measures labelled as initial /interim on the grading and erosion control plan are to be removed according to construction phasing activities.

The grading and erosion control is a plan for stormwater quality management by using control measures with labels for initial, interim, and final. The initial phasing is to include erosion and sediment control installation, removing and stockpiling of topsoil. The interim phases include cut/fill activity according to the engineered plan set. The final phase is for final stabilization and permanent seeding.

3.0 TIMING SCHEDULE

The anticipated start time period to begin construction is upon the receipt of the permit, assumed to be in October of 2023. Construction will start with site preparation beginning with the initial erosion control plan.

Final phase construction and landscape will be completed in the spring of 2024. All erosion and sediment control measures are constant throughout the construction phases. The project end date following permanent stabilization is anticipated to be the summer of 2024.

4.0 SITE DISTURBANCE

The proposed project consists of the development of a church building and associated hardscapes and pavement to follow.

The stabilized staging area which includes stockpiling is shown on the plans. However, the contractor shall haul material as often as possible to retain sufficient space on site and decrease sediment runoff whenever possible. Any on-site stockpiling that is to occur over night is to be on an elevated surface relative to the existing ground elevation and not to be within 100 feet of the existing water way displayed on the plan set and FEMA maps. No stockpiling shall exceed 50 feet in height.

5.0 STRUCTURAL EROSION AND SEDIMENT CONTROLS

The project will consist of any clearing and grubbing within the disturbance limits and implementation of perimeter controls at the initial stage. Perimeter controls such as silt fence are to be installed after any clearing and grubbing. At this time, traffic control is to be implemented which may include construction signs, cones, or barriers to allow the flow of traffic within the on-site roadway during mobilization of large construction vehicles. Road grading is not a part of the scope of this project. Final grading and stabilization is to take place as soon as possible after hardscapes and pavement have been installed.

Any waste disposal is to be done off-site at the designation of the contractor. Waste disposal, spill prevention, and response procedures are to be according to CDPHE and El Paso County standards. Site specific plans and procedures are addressed in the following sections.

Inlet protection will be placed during the final phase of construction. Inlet protection reduces sediment deposition in storm drains and culverts and reduces sediment pollution in stormwater by filtering out some of the sediment carried by runoff flowing through the inlet protection. The details for the installation and maintenance of the inlet protection are shown on the plans.

Prior to construction activity, vehicle tracking control will be installed at the designated access points. Vehicle tracking control helps reduce the deposition of sediment, dirt, mud, and debris by vehicles exiting the site onto the adjacent streets.

Before any grading or other significant disturbance activities, silt fence is to be installed along any edge of an area to be disturbed where runoff would otherwise go untreated. Silt fence will be installed along those portions of the site perimeter where potentially sediment-laden runoff may flow into adjacent properties or into nearby private storm sewer grates. Silt fence is also to be installed as a perimeter around the stockpile area, especially on downstream sides. Silt fences help reduce pollution of stormwater by filtering out some of the sediment carried by runoff flowing through the fences and by facilitating deposition of sediment by slowing the runoff. The locations in which to install silt fence are shown on the plans. Silt fences can be installed wherever the contractor deems them to be necessary or helpful and these locations may not be shown on the site plan.

Prior to final stabilization, erosion control blankets are to be installed on slopes greater than 3H:1V. Erosion control blankets are made of natural biodegradable materials that are placed on disturbed areas and are secured to the ground with staples or stakes. They are to be placed over uniform surfaces that have been properly seeded prior to installation with no large rocks or vegetation. The use of erosion control blankets will retain sediment resulting from sheet flow and protect newly seeded areas.

There are no offsite stormwater control measures proposed for use by this project.

There may not be temp off-site control measures, but there is the off-site permanent control measure proposed for permanent WQ treatment. Remove this sentence or adjust

6.0 NON-STRUCTURAL EROSION AND SEDIMENT CONTROLS

Prior to commencement of construction activities, the construction vehicle traffic areas to and around the project site including all construction roads, parking areas, loading and unloading zones, storage areas, and staging areas, are to be stabilized through proper grading, compaction, and surfacing. Stabilization of large vehicle traffic areas reduces erosion and vehicle tracking thus helping to eliminate potential pollution of stormwater by sediment. Designated construction ingress and egress with tracking control is to be used as shown on the plans. Should significant soil still be deposited on the surrounding roadways, street sweeping will be utilized to remove the soil from roadways immediately following deposition.

Mulch is to be applied to all disturbed areas that are not otherwise stabilized immediately if possible or within 14 days of completion of final grading. Additionally, mulch is to be applied to

all disturbed areas that are not yet at final grade but will remain dormant or undisturbed for longer than 30 days. Mulch helps prevent erosion by protecting bare soil from rainfall impact, increasing infiltration, and reducing runoff.

When seasonally appropriate, seed is to be applied to all disturbed areas that are not otherwise stabilized immediately if possible or within 14 days of completion of final grading. Additionally, seed is to be applied to all undisturbed areas that are not yet at final grade but will remain dormant or undisturbed for longer than one year. When the season is inappropriate for seed application, surface roughening and mulch is to be applied within 14 days and seed is to be applied as soon as the appropriate seasonality commences.

7.0 POTENTIAL EROSION AND DISCHARGE

Control measures shall be implemented for initial, interim, and final phases of construction to ensure that erosion and sediment runoff is minimized and that there is no negative impact on downstream water quality. There is no anticipated discharge of pollutants from the site as long as the contractor implements control measures appropriately.

Any contaminated soils are to be properly disposed of by the contractor immediately. Loading and unloading operations are to occur on-site and large vehicular mobilization will require traffic control measures. Any waste disposal is to be done off-site at the designation of the contractor at a location approved by the County. Waste disposal, spill prevention, and response procedures are to be according to the Colorado Department of Public Health and Environment (CDPHE), Hazardous Materials and Waste Management Division. Appropriate spill prevention and response measures will be implemented on the site and provided by the contractor. The details and specifications referenced within this section provide general and specific guidelines for spill prevention and response measures relating to the various potential non-sediment pollution sources.

Only chemicals and materials necessary for the described construction activities may be stored on site, and then only in the smallest amounts reasonable and for the shortest time possible. Fueling and minor preventative maintenance of vehicles and equipment may occur only on areas specifically stabilized for construction vehicle traffic. No significant maintenance of vehicles and equipment and no vehicle and equipment washing will be allowed on site.

Batch plants are not anticipated at this site. The contractor is responsible for the cleaning of trash on site and prevention of any loose trash leaving the site at all times during construction. A portable toilet is required on site.

The contractor is responsible for dust control at all times during construction. Sediment runoff is controlled by use of silt fencing on all downstream sides of the disturbance area within the lot and the contractor is to prevent sediment flow off-site at all times.

Portable toilets will be located a minimum of 10 feet from Stormwater inlets and 50 feet from state waters. They will be secured at all four corners to prevent overturning and cleaned on a weekly basis. They will be inspected daily for spills.

The contractor shall not track mud/dirt off-site and project site cleanup including sweeping and waste disposal is to occur at the end of each working day.

No groundwater and/or stormwater dewatering activities are proposed or expected for the proposed construction activities. If groundwater is discovered during construction, all work is to cease and the contractor shall contact the engineer and County to await instructions.

No significant waste generation is expected as a result of the proposed construction activities. Any minor waste that is produced is to be disposed of properly and promptly.

Appropriate spill prevention and response measures will be implemented on the site. The details and specifications referenced above in this section provide general and specific guidelines for spill prevention and response measures relating to the various potential non-sediment pollution sources.

8.0 NON-STORMWATER DISCHARGE

There is no anticipated non-stormwater surface discharge to and from the site.

9.0 RECEIVING WATERS

There is a flared end section (FES) outlet at the southeast corner of the site that is connected to a 24" RCP storm drain pipe that goes easterly under Towners Ave. A swale runs across the site on the south portion towards the southwest corner, where a FES inlet is connected to a 36" RCP storm drain pipe. The 36" storm drain pipe leaves the site in a southerly direction and goes to a regional detention facility located off-site. The detention facility is within a platted tract of land with ownership and maintenance by the Paint Brush Hills Metropolitan District.

SWMP Checklist Item 26 - If the project relies on control measures owned and operated by another entity, a documented agreement must be included in the SWMP that identifies location, installation and design specifications, and maintenance requirements and responsibility of the control measure(s)

10.0 PERMANENT STABILIZATION

All drainage measures are to be implemented according to the engineering plan set. Final stabilization will include seeding of drilled seeding and hydro mulch to revegetate the landscape of the lot and improve the site drainage and aesthetics.

The site will be stabilized at final grades as indicated by the engineering plan set with compaction to the standards according to El Paso County Engineering Criteria Manual. Final stabilization will include seeding of hydro seed and hydro mulch to revegetate the landscape of the lot and improve the site drainage.

Final stabilization is reached when all soil disturbing activities at the site have been completed, and uniform vegetative cover has been established with a density of at least 70 percent of pre-disturbance levels or equivalent permanent, physical erosion reduction methods have been employed. This vegetative cover is to be established within one year of completion of construction activities on all disturbed areas not otherwise stabilized.

Clearly state that the detention facility will provide long-term stormwater quality and state the filling the facility was built with.

11.0 OWNER INSPECTIONS AND MAINTENANCE

The contractor is to be familiar with all requirements of the erosion and sediment control plans and notes. The contractor shall protect the existing structures and reroute any runoff as necessary during construction activities to prevent erosion and damage. All exposed and unworked soils shall be stabilized by suitable application of best management practices such as vegetative cover, mulching, plastic covering or application of gravel surfaces in areas to be graveled. No exposed and unworked soils shall remain un-stabilized. Once construction activity is completed, permanent seeding shall be installed. All temporary and permanent erosion and sediment control facilities shall be inspected, maintained, and repaired by the contractor as needed to assure continued performance of their intended use. All on-site erosion and control measures shall be inspected at least once every seven days and within 24 hours of any storm event equal to or greater than 0.25" of rain per 24-hour period or snowmelt event that causes surface erosion. An inspection report file shall be maintained by the contractor and kept on site. The owner is responsible for inspection and maintenance after final stabilization.

The Stormwater Construction Permit requires that a thorough inspection of the stormwater management system be performed and documented at least every 14 days and after any precipitation or snowmelt event that results in stormwater running across the ground according to CDPHE App. A Section C.6 (a).

The regular inspections of the site are to include observation of the construction site perimeter and all stormwater discharge points including storm drain system inlets and culverts that may be downstream.

The regular inspections of the site will also include observation of all disturbed areas and all stabilized and revegetated areas. Inspection of these areas should be given special attention to identify any potential erosion issues.

The regular inspections of the site will also include observation of material storage areas including waste collection areas and topsoil stockpiles. Inspection of these areas require special attention for potential leaks and spills. The topsoil stockpile is to be inspected for any potential runoff.

An Inspection Log is to be maintained on site and include a record of all stormwater management system inspections along with all maintenance and repair activities. All inspection, maintenance, and repair requirements outlined in the details, will be performed as specified and will be recorded in the Inspection Log.

The Inspection Log will also include a description of any incidence of non-compliance, such as uncontrolled releases of pollutants including mud, muddy water or measurable quantities of sediment found off the site along with a description of measures to be taken to prevent future discharges. Records of any spills, leaks, or overflows of non-sediment potential pollutants, whether or not such a spill, leak, or overflow results in pollution of stormwater, will be included.

Following an inspection that does not reveal any incidents of non-compliance, or following the completion of measures taken to correct any non-compliance issues, A Certification indicating the site is in compliance will be signed and dated.

Should this project rely on control measures owned or operated by another entity other than the owner or its representative, a documented agreement must be submitted to El Paso County identifying location, installation and design specifications, and maintenance requirements and responsibility of the control measures.

12.0 RECORD KEEPING PROCEDURES

The contractor and/or qualified stormwater manager (QSM), shall keep a log of all inspections as well as revisions during all construction phases. The QSM will be sufficiently qualified for the required duties per the El Paso County Engineering Criteria Manual, Appendix I.5. The records shall be kept at the job trailer or a designated location on site such as a foreman's vehicle, a specified on site lockbox, etc. This designated location is to be communicated to the County and Owner. The inspections and revisions records are to include the date, description, and the signature of the qualified stormwater manager for each respective inspection or revision. An appendix document of the logs that may be utilized for the project is provided.

This document should be viewed as a living document that is continuously being reviewed and modified as a part of the overall process of evaluating and managing Stormwater quality issues at the site.

This document shall be amended when there is a change in design, construction, operation or maintenance of the site which would require the implementation of new or revised control measures or if this document proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with the construction activity.

GEC Administrator: Robert Maunton

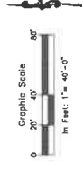
Address: 12325 Oracle Blvd, Suite 120

Colorado Springs, CO 80921

Phone: 719-339-2890

Appendix A – Grading and Erosion Control Plan

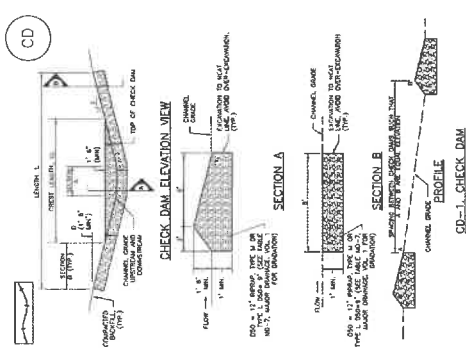
Update per comments on the GEC Plan



Elevations Table				
Number	Minimum Elevation	Maximum Elevation	Color	Volume
1	-4.58	-0.05	Light Blue	2857.06 CU. YD.
2	-0.05	7.00	Light Green	6871.33 CU. YD.

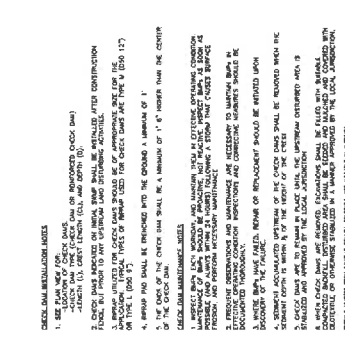


EC-12



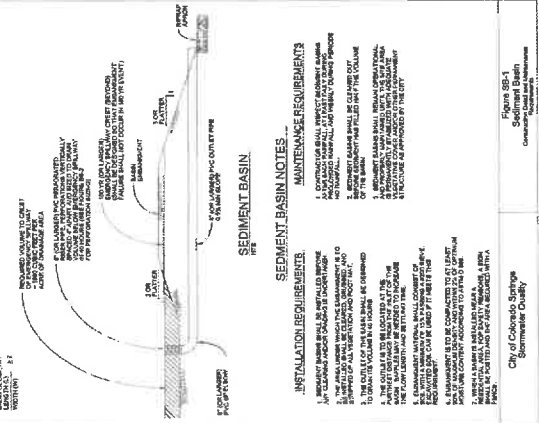
November 2010 Urban Drainage and Flood Control District CD-3
Urban Storm Drainage Criteria Manual Volume 3

EC-11



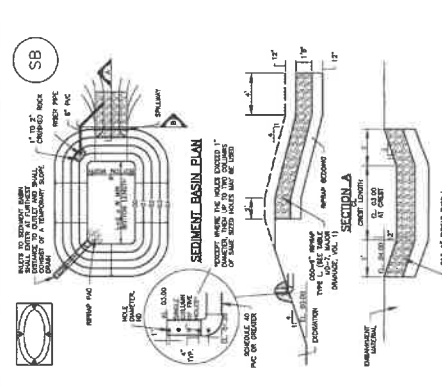
November 2010 Urban Drainage and Flood Control District CD-3
Urban Storm Drainage Criteria Manual Volume 3

SC-7



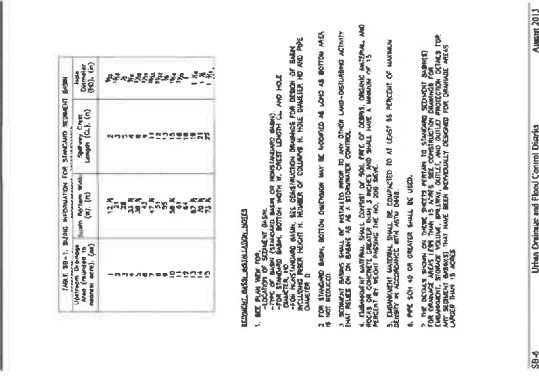
August 2013 Urban Storm Drainage Criteria Manual Volume 3

SC-7



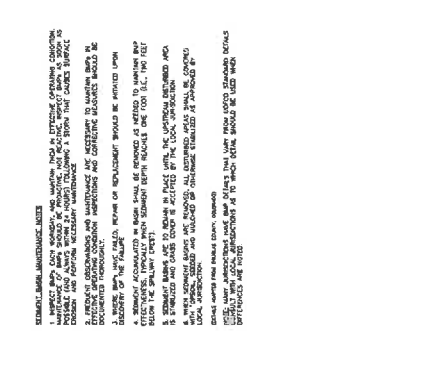
August 2013 Urban Storm Drainage Criteria Manual Volume 3

SC-7



August 2013 Urban Storm Drainage Criteria Manual Volume 3

SC-7



August 2013 Urban Storm Drainage Criteria Manual Volume 3



Appendix B – FEMA Floodplain Map

National Flood Hazard Layer FIRMette

104°37'40"W 38°58'52"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS



Without Base Flood Elevation (BFE)
Zone A, V, AE, AH, VE, AR
With BFE or Depth
Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD



0.2% Annual Chance Flood Hazard. Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile (Zone X)
Future Conditions 1% Annual Chance Flood Hazard (Zone X)
Area with Reduced Flood Risk due to Levee. See Notes, Zone X
Area with Flood Risk due to Levee (Zone D)

OTHER AREAS



NO SCREEN
Area of Minimal Flood Hazard (Zone X)
Effective LOMRS
Area of Undetermined Flood Hazard (Zone X)

GENERAL STRUCTURES



Channel, Culvert, or Storm Sewer
Levee, Dike, or Floodwall

OTHER FEATURES



Cross Sections with 1% Annual Chance Water Surface Elevation
Coastal Transect
Base Flood Elevation Line (BFE)
Limit of Study
Jurisdiction Boundary
Coastal Transect Baseline
Profile Baseline
Hydrographic Feature

MAP PANELS



Digital Data Available
No Digital Data Available
Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/14/2023 at 1:11 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



AREA OF MINIMAL FLOOD HAZARD
Zone X

EL PASO COUNTY
080059
08041C0551G
12/7/2018
Not Printed

T12S, R65W S026
08041C0535G
eff. 12/7/2018

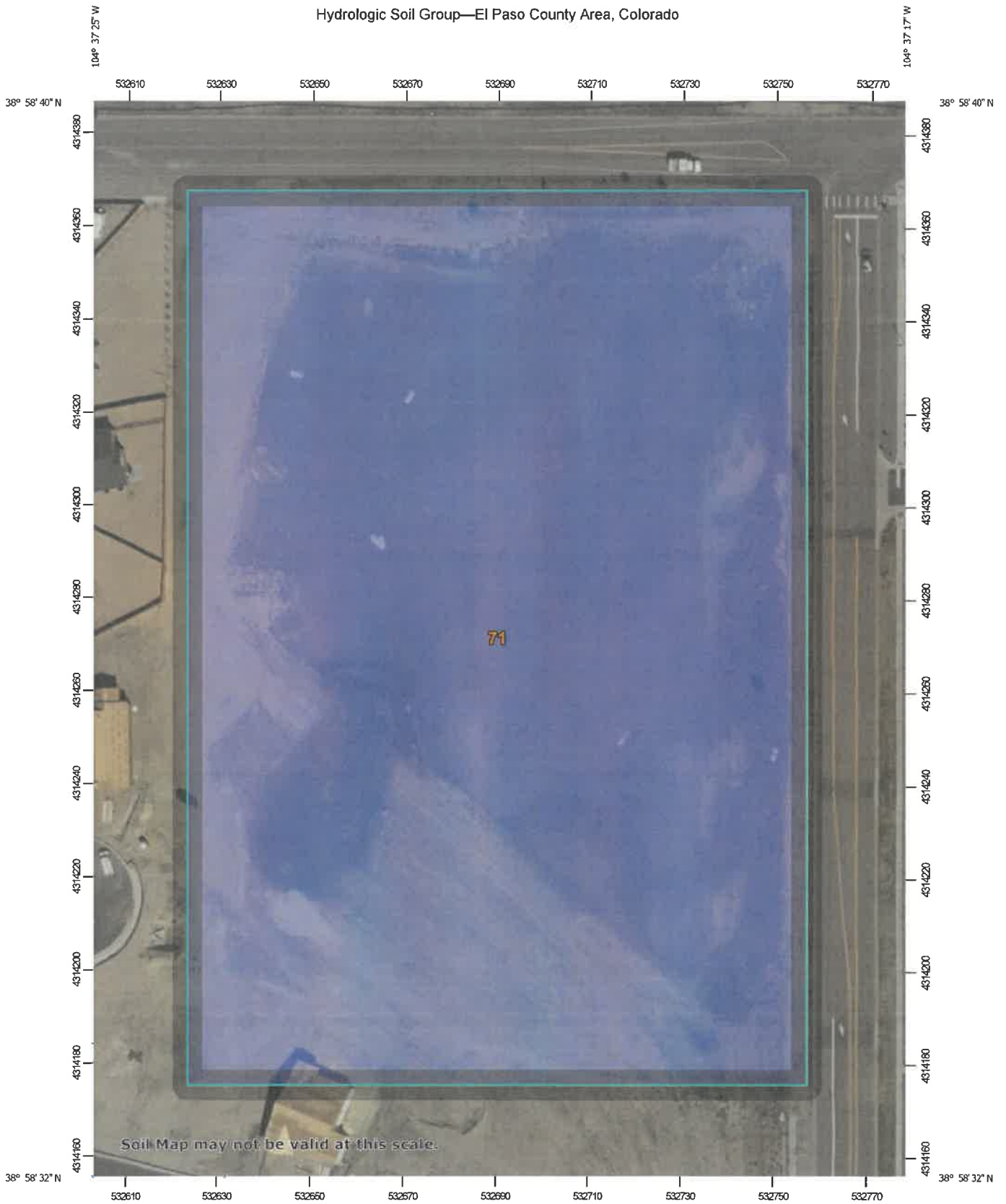
T12S, R65W S025



104°37'2"W 38°58'24"N

Appendix C – USDA Soil Survey Map

Hydrologic Soil Group—El Paso County Area, Colorado

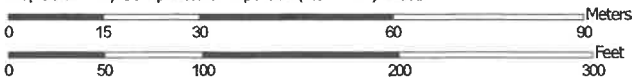


Soil Map may not be valid at this scale.

104° 37' 25\"/>



Map Scale: 1:1,130 if printed on A portrait (8.5\"/>




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











Hydrologic Soil Group—El Paso County Area, Colorado

MAP LEGEND









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

Soils





Soil Rating Polygons

-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available


Soil Rating Lines

-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available






Soil Rating Points

-  A
-  A/D
-  B
-  B/D


Water Features

-  Streams and Canals





Transportation

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

Background

-  Aerial Photography

Soil Rating Legend:

-  C
-  C/D
-  D
-  Not rated or not available

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 20, Sep 2, 2022

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

Date(s) aerial images were photographed: Sep 11, 2018—Oct 20, 2018

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.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
71	Pring coarse sandy loam, 3 to 8 percent slopes	B	6.4	100.0%
Totals for Area of Interest			6.4	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Appendix D – CDPHE Reference Brochure

REPORTING CHEMICAL SPILLS AND RELEASES IN COLORADO

General

For all hazardous substance incidents, local emergency response agencies must be notified.

Releases from Fixed Facilities

The Superfund Amendments and Reauthorization Act (SARA) Title III, requires reporting releases from fixed facilities

Refer to the SARA Title III List of Lists, available from the Environmental Protection Agency (EPA), for the reportable quantity.

The party that owns the spilled material must immediately notify the following agencies or organizations:

- National Response Center (NRC) 1-800-424-8802;
- Colorado Emergency Planning Committee (CEPC), represented by the Colorado Department of Public Health and Environment (CDPHE) 1-877-518-5608; and
- Local Emergency Planning Committee (LEPC) 1-720-852-6600.

In addition to telephone notification, the responsible party must also send written notification describing the release and associated emergency response to both the CEPC (in this case, CDPHE) and the LEPC.

Releases from RCRA Facilities

Emergency releases from facilities permitted under the Resource Conservation and Recovery Act (RCRA) are reportable according to the permit requirements.

The permit often requires reporting to CDPHE, even if the amount of the release is less than a reportable quantity under SARA Title III (6 CCR 1007-3 Part 264).

Permitted facilities and large quantity generators (LQGs) of hazardous waste are required to have and implement a contingency plan that describes the actions facility personnel must take in response to fires, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface or ground water at the facility (6 CCR 1007-3 Sections 264.52/265.52).

Whenever there is an imminent or actual emergency situation, appropriate state or local agencies, with designated response roles as described in the contingency plan, must be notified immediately.

The National Response Center or government official designated as the regional on-scene coordinator must be notified immediately if it is determined that the facility has had a release, fire or explosion that could threaten human health or the environment outside the facility (6 CCR 1007-3 Sections 264.56/265.56).

CDPHE and local authorities must be notified when the facility is back in compliance and ready to resume operations. In addition, the facility must send a written report to CDPHE within 15 days of any incident that requires implementation of the contingency plan. The contingency plan should include current contact information for notification and submittal of written reports.

Permitted facilities and LQGs that store hazardous waste in tanks must notify CDPHE within 24 hours of any release to the environment that is greater than one (1) pound and must submit a written report to CDPHE within 30 days of the release (6 CCR 1007-3 Section 264.196 (d)/265.196(d)).

Transportation Accidents

Transportation accidents that require reporting:

- Result in a spill or release of a hazardous substance in excess of the reportable quantity (40 CFR Part 302.6)
- Cause injury or death or cause estimated property damage exceeding \$50,000.

- Cause an evacuation of the general public lasting one or more hours.

Those that close or shut down one or more major transportation arteries or facilities or result in fire, breakage, spillage, or suspected contamination from radioactive or infectious substances must immediately be reported to the National Response Center.

Refer to the EPA SARA Title III List of Lists for those substances that have reportable quantities.

In addition to the NRC being notified, the local emergency number (9-1-1) must be called and CDPHE should be notified.

Written notification of any transportation accident involving a release of hazardous materials must be provided to the U.S. Department of Transportation within 30 days (49 CFR Part 171.16)

Since hazardous waste is a subset of hazardous materials, transporters who have discharged hazardous waste must notify the NRC and provide a written report to the US Department of Transportation as noted in the above reporting requirements.

The transporter must give immediate notice to the nearest Colorado State Patrol office (8 CCR 1507-8 HMP 5) and the nearest law enforcement agency if the accident or spill involved a vehicle (42-20-113(3) CRS).

Notification and a written report detailing the ultimate disposition of the discharge of hazardous waste must also be provided to CDPHE (6 CCR 1007-2 Section 263.30). This may be a duplicate copy of the US Department of Transportation report

In the event of a spill or discharge 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.

Within 15 days of a reportable incident, the transporter must submit a written report of the incident to CDPHE, including the final disposition of the material (6 CCR 1007-2 Section 263.40).

Releases of hazardous waste at a transfer facility may also require notification to the National Response Center and a written report to the U.S. Department of Transportation.

Releases to Water

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 or storm sewers leading to surface water) must be reported to CDPHE immediately (25-8-601 CRS).

Written notification to CDPHE must follow within five (5) days (5 CCR 1002-61, Section 61.8(5)(d)).

Any accidental discharge to the sanitary sewer system must be reported immediately to the local sewer authority and the affected wastewater treatment plant.

Releases of petroleum products and certain hazardous substances listed under the Federal Clean Water Act (40 CFR Part 116) must be reported to the National Response Center as well as to CDPHE (1-877-518-5608) as required under the Clean Water Act and the Oil Pollution Act.

Releases to Air

Any unpredictable failure of air pollution control or process equipment that results in the violation of emission control regulations should be reported CDPHE by 10 a.m. of the following working day, followed by a written notice explaining the cause of the occurrence and describing action that has been or is being taken to correct the condition causing the violation and to prevent such excess emissions in the future (5 CCR 1001-2 Common Provisions Regulations Section II.E).

If emergency conditions cause excess emissions at a permitted facility, the owner/operator must provide notice to CDPHE no later than noon of the next working day following the emergency, and follow by written notice within one month of the time when emission limitations were exceeded due to the emergency (5 CCR 1001-5, Regulation 3 Part C, Section VII.C.4).

Releases from Oil and Gas Wells

All spills and releases of exploration and production wastes or produced fluids which meet the reporting thresholds of the Colorado Oil and Gas Conservation Commission (COGCC) Rule 906 shall be reported verbally to the COGCC within 24 hours of discovery and on the COGCC Spill/Release Report Form 19 within 72 hours of discovery.

Spills are reportable to the COGCC in the following circumstances:

- 1) the spill or release impacts or threatens to impact any waters of the state, a residence or occupied structure, livestock or a public byway;
- 2) a spill or release in which 1 barrel or more is released outside of berms or other secondary containment; or
- 3) any spill or release of 5 barrels or more. If the spill impacts or threatens to impact waters of the state (which include surface water, ground water and dry gullies or storm sewers leading to surface water), it must also be reported immediately to CDPHE (25-8-601 CRS).

COGCC also requires reportable spills be reported to the surface owner and local government. Whether or not they are reportable, spills or releases of any size must be cleaned up as soon as practicable.

Releases from Storage Tanks

Petroleum releases of 25 gallons or more (or that cause a sheen on nearby surface waters) from regulated aboveground and underground fuel storage tanks must be reported to the State Oil Inspector within 24 hours (after-hours contact CDPHE Emergency and Incident Reporting Line). This includes spills from fuel pumps.

Spills or releases of hazardous substances from regulated storage tanks in excess of the reportable quantity (40 CFR Part 302.6) must be reported to the National Response Center and the local fire authority

immediately, and to the State Oil Inspector within 24 hours. (8-20.5-208 CRS and 7 CCR 1101-14 Article 4).

Owners/operators of regulated storage tanks must contain and immediately clean up a spill or overfill of less than 25 gallons of petroleum and a spill or overfill of a hazardous substance that is less than the reportable quantity.

If cleanup cannot be accomplished within 24 hours, the State Inspector of Oils must be notified immediately (7 CCR 1101-14 Article 4-4).

CDPHE should also be notified in the case of hazardous substance releases as cleanup activities may be covered by state solid or hazardous waste requirements (6 CCR 1007-2, 6 CCR 1007-3).

Any release that has or may impact waters of the state (which include surface water, ground water and dry gullies or storm sewers leading to surface water), no matter how small, must be reported immediately to CDPHE (25-8-601 CRS).

Releases from Pipelines

Releases of five or more gallons of hazardous liquids or carbon dioxide from a pipeline that result in explosion or fire, cause injury or death or cause estimated property damage (including cost of clean-up and recovery, value of lost product and property damage) exceeding \$50,000 must be reported immediately to the US Department of Transportation Office of Pipeline Safety (49 CFR Part 195 Subpart B) and the National Response Center.

Releases of five or more gallons of hazardous liquids or carbon dioxide from interstate pipelines that do not involve explosion or fire, injury or death or property damage exceeding \$50,000 should be reported to the US Department of Transportation Office of Pipeline Safety within 30 days after the incident.

Releases of natural gas from intrastate pipelines that cause injury or death, property damage in excess of \$50,000 (including the cost of lost product), closure of a public road, or evacuation of 50 or more people must be reported immediately to the Colorado Public Utilities Commission, Pipeline Safety Group (4 CCR 723-11-2).

Releases of natural gas or liquefied natural gas (LNG) from interstate pipelines that cause injury or death,

property damage in excess of \$50,000 (including the cost of lost product), or results in an emergency shutdown of the facility must be reported immediately to the National Response Center and the US Dept of Transportation Office of Pipeline Safety.

Releases of oil, petroleum products or other hazardous liquids from interstate and intrastate pipelines that have or may enter waters of the State of Colorado (which include surface water, ground water and dry gullies or storm sewers leading to surface water) must be reported to CDPHE immediately (25-8-601 CRS). CDPHE should also be notified of releases to soil as cleanup activities may be covered by state solid or hazardous waste requirements (6 CCR 1007-2, 6 CCR 1007-3).

Radiological Accidents, Incidents, and Events

CDPHE must be notified of any condition that has caused or threatens to cause an event, which meets or exceeds the criteria specified in (6 CCR 1007-1) RH 4.51 and RH 4.52 of the State of Colorado *Rules and Regulations Pertaining to Radiation Control*. Reportable events include lost radioactive materials, lost radiation producing machines, over-exposures to persons, contamination events and fires or explosions involving radioactive materials.

Depending upon the severity of the event, notification may be required immediately, within 24 hours, or within 30 days. In most cases, a written follow-up report is also required.

If you are unsure of the proper notification requirement, please contact CDPHE immediately. During normal business hours, the Laboratory and Radiation Services Division is available to receive telephone notifications at (303) 692-3300. After hours contact the CDPHE Emergency and Incident Reporting Line **1-877- 518-5608**.

NOTIFICATION NUMBERS

Colorado Department of Public Health and Environment toll-free 24-hour environmental emergency and incident reporting line: **(877) 518-5608 (24-hour)**

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

State Oil Inspector (Colorado Division of Oil & Public Safety-Above & Underground Storage Tank Regulators)
(303) 318-8547



Colorado Department of Public Health and Environment

Office of Emergency
Preparedness & Response

Environmental Spill Reporting

**24– Hour Emergency and
Incident Reporting Line
1-877-518-5608**

Updated February 2017

Appendix E – Inspection Log Template

Appendix F – GEC Administrator Certification

Altitude Training Associates

Awards this Certificate of Completion to

Robert Maunton

Who on February 14, 2023 Successfully Completed
The Following Instructor Led Online Training Class:

**Stormwater Management and Erosion Control During
Construction - GEC Administrator**

Certificate Number: 275



Instructor
Altitude Training Associates





3275 Akers Drive
 Colorado Springs, CO 80922
 Phone 719-520-6460
 Fax 719-520-6879
 www.elpasoco.com

EL PASO COUNTY STORMWATER MANAGEMENT PLAN CHECKLIST

EPC Project Number: PPR2321

Revised: October 2021

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



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EPC Project Number: PPR2321

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		Applicant	EPC
17	SWMP Map to include:		
17a	construction site boundaries	X	
17b	flow arrows to depict stormwater flow directions	X	
17c	all areas of disturbance	X	
17d	areas of cut and fill	X	
17e	areas used for storage of building materials, soils (stockpiles) or wastes	X	
17f	location of any dedicated asphalt / concrete batch plants	N/A	
17g	location of all structural control measures	X	
17h	location of all non-structural control measures	X	
17i	springs, streams, wetlands and other surface waters, including areas that require maintenance of pre-existing vegetation within 50 feet of a receiving water	N/A	
18	Narrative description of all structural control measures to be used. Modifications to EPC standard control measures must meet or exceed County-approved details	X	
19	Description of all non-structural control measures to be used including seeding, mulching, protection of existing vegetation, site watering, sod placement, etc.	X	
20	Technical drawing details for all control measure installation and maintenance; custom or other jurisdiction's details used must meet or exceed EPC standards	X	
21	Procedure describing how the SWMP is to be revised	X	
22	Description of Final Stabilization and Long-term Stormwater Quality (describe nonstructural and structural measures to control SW pollutants after construction operations have been completed, including detention, water quality control measure etc.)	X	
23	Specification that final vegetative cover density is to be 70% of pre-disturbed levels	X	
24	Outline of permit holder inspection procedures to install, maintain, and effectively operate control measures to manage erosion and sediment	X	
25	Record keeping procedures identified to include signature on inspection logs and location of SWMP records on-site	X	
26	If this project relies on control measures owned or operated by another entity, a documented agreement must be included in the SWMP that identifies location, installation and design specifications, and maintenance requirements and responsibility of the control measure(s)	N/A	
Please note: all items above must be addressed. If not applicable, explain why, simply identifying "not applicable" will not satisfy CDPHE requirement of explanation.			
2. ADDITIONAL REPORTS/PERMITS/DOCUMENTS			
a	Grading and Erosion Control Plan (signed)	X	
b	Erosion and Stormwater Quality Control Permit (ESQCP) (signed)	X	



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EPC Project Number: PPR2321

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		Applicant	EPC
3. APPLICANT COMMENTS			
a	There are no batch plants on site. There are no stream crossings on site	X	
b	There are no control measures owned or operated by another entity.	X	
c	There is no anticipated allowable non-stormwater discharge	X	
4. CHECKLIST REVIEW CERTIFICATIONS			
a	Applicant: The Stormwater Management Plan was prepared under my direction and supervision and is correct to the best of my knowledge and belief. Said Plan has been prepared according to the criteria established by the County and State for Stormwater Management Plans. <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> _____ Engineer of Record and/or Qualified Stormwater Manager Signature </div> <div style="text-align: center;"> 10/18/23 _____ Date </div> </div>		
b	Review Engineer: The Stormwater Management Plan was reviewed and found to meet the checklist requirements except where otherwise noted or allowed by an approved deviation request. <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> _____ Review Engineer </div> <div style="text-align: center;"> _____ Date </div> </div>		