

El Paso County Stormwater Management Plan

for

Clear View Properties I, LLC Clear View Industrial Park Filing No. 2A

Prepared for:

**El Paso County Planning and
Community Development Department**

2880 International Circle, Suite 110
Colorado Springs, CO 80910
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Sufficient detail is lacking from all sections of this SWMP. Comments have been provided throughout to provide some guidance, but more details are required than just what was commented on.

See PCD Filing EGP201 on EDARP for an example of the level of detail we are looking for in a SWMP.

And follow the SWMP checklist more closely for specific items/details that need to be included



On Behalf of:

Clear View Properties I, LLC

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Prepared by:

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June 2020

PCD Filing No.:
CDR208

Applicant:


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SWMP Administrator

Replace with Qualified Stormwater Manager



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Contractor Information

TBD

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Vicinity Map

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Include:

- a copy of Stormwater Inspection Reports that will be used
- FEMA Flood Hazard Map
- SCS Soils Map (or other source of soils data)

show page numbers
in the Footer
throughout the report

Note that based on FEMA Flood Hazard Map #####, the site is located in a Zone X area of Minimal Flood Hazard and include this map in the appendix.

GENERAL DESCRIPTION AND LOCATION

Site Description

An industrial subdivision, Clear View Industrial Park Filing No. 2A, is in Security, CO, on Clear View Loop, approximately a quarter mile southwest of intersection of Milton E. Proby Parkway and Hancock Expressway.

Being a portion of the eastern half of the east half of the section 2, Township 15 south, range 66 west of the 6th P.M., City of Colorado Springs, County of El Paso, State of Colorado, the vicinity map can be found in the Appendix.

No major drainageways or facilities exist near the site, except for the Fountain Mutual Canal, which is located west of the site.

Fountain
Mutual
Canal



Names of surrounding platted developments:

North – New Sunshine, LLC, a commercial/industrial building

South – Clear View Industrial Park Filing No. 1

East - Clear View Industrial Park Filing No. 1

West – Security Water and Wastewater District, agriculture ground

Where did this data come from? Site source and include in appendix

The 2.7+/- acre site consists of 4 lots. Lot 3A contains an existing building and earthen/gravel storage yard. Lot 4A will contain the water quality pond for lots 1-3 and will not have any structures built on it. Ground cover consists of very few native grasses, lot 3A contains some existing trees and shrubs. General topography directs all storm runoff in a westerly direction, to the Fountain Mutual Canal. General soil is comprised of Blakeland loamy sand with a Hydrologic Soil Group (HSG) of A. No major drainageways exist on-site or adjacent to the property. No irrigation facilities exist on-site, but when lots 1A and 2A develop, they will most likely install irrigation systems for on-site landscaped areas. Lot 3A contains private utility service lines, and there is an existing Security Water and Wastewater District sanitation line running along the western property boundary; however, that line has been abandoned.

explain that lots 1A and 2A currently also consist of earthen/gravel storage yards

Clarify this sentence. The wording and comma placement make it unclear when the lots will be graded.

CONSTRUCTION ACTIVITY

Narrative Description of Construction Activity

The areas that require the water quality pond, storm pipe, and swales will be cleared and grubbed. The water quality pond will be constructed first, then the storm pipe, and lastly, the swales. As soon as the water quality pond and swales are constructed, erosion control blankets will be placed on all slopes greater than 3:1. No road grading will be required. Final grading for lots 1A and 2A will be completed, once the lots are sold the new owners will submit their own grading and erosion control plans. Once the reseeding has been completed and vegetation has been growing for over a month, the silt fence will be removed.

Item 5 - indicate that for this reason (small project), there will not be any phasing. But

and the vegetation has reached 70% of pre-development levels

Phasing Plan you can leave the rest of the paragraph as is.

This is a small project, with an erosion control plan, that will be on-site at all times and will be updated, if any repairs to BMP's are needed, due to a heavy storm event. This project will take only a month to complete. The water quality pond will be constructed first, then the storm pipe, and then the swales.

Proposed Sequence for Major Activities

The following schedule includes all major activity completions for this project:

- Clear and Grub – 1 day;
- Build the pond with forebay, outlet box and spillway – 2 weeks;
- Construct the sewer line and box – 1 week;
- Construct the swales and riprap – 3 days; and
- Finalize all erosion control measures – 2 days.

delineate this area of disturbance on the GEC Plans

Estimate of Total Areas

Clear View Industrial Park Filing No. 2A contains 2.7+/- acres (ac), however the grading, storm, and water quality pond will only disturb approximately 1.1 ac.

DRAINAGE, SOILS AND VEGETATION

Estimate of Runoff Coefficients

Lot 1A and 2A have been estimated at 85% impervious once they are fully developed, with no current impervious surfaces. Lot 3A contains an existing building and a small piece of asphalt with some gravel storage areas. With no further improvements expected, it's imperviousness has been estimated at 70%. Lot 4A will contain nothing but the water quality pond and therefore, has no impervious surface. At a later date, right? Clarify that at the end of this pond, swale, and SW pipe project that the lots will remain mostly pervious

Soil Erosion Potential

The only soil erosion potential will be on the proposed 3:1 slopes, around the water quality pond, and swales. Both will receive erosion blankets and will be monitored for any major erosion after a storm event. If there is any erosion, soil will be replaced and an erosion blanket will be laid over the new soil. All disturbed areas will be seeded as well.

Consider erosion potential of un-vegetated soil that is all over the site.

GEC Plan Details include RECP and Compost Blanket. Specify and clarify where and when each will be used

Existing Vegetation & Vegetative Cover – 70% Pre-Disturbed

This site has been used as a car storage lot for several years, so the majority of the area is dirt, with some various grasses and bushes growing (see attached pictures). There are several trees growing outside the property, along the Fountain Mutual Canal; none of these trees will be impacted by the grading or the construction of the water quality pond. On-site visual inspections conclude that lots 1A, 2A, and 4A have 10% ground cover, with the majority of Lot 3A containing approximately 10% vegetation.



Existing on-site ground cover (Lots 1A and 2A)

Generally needs to be a lot more detail in this section. But some examples and details are provided in comments.

Concrete washout is also a potential pollutant source. Discuss.

Discuss BMP for fuel spills. Drip pans, spill kit, etc

POLLUTION AND SOURCES

Potential Pollution Sources

No pollution sources are proposed for the site. The Contractor is to follow the Best Management Practices (BMP) when fueling construction vehicles, with no on-site storage of oils, fuel, or chemicals. A silt fence will surround the north, south, and west sides where potential construction activity will be. A vehicle tracking pad is designed for this site. No outdoor storage of any material is expected at this time for this small project. The Contractor will utilize a water truck for any dust control.

Item 10 - Revise sentence. The activities listed in the rest of the paragraph (sediment erosion & tracking, and fueling) are potential pollutant sources

to facilitate sedimentation and minimize erosion

Material Handling

All hazardous material, including oils and fuels will be handled in a professional way by the contractor and any spills will be quickly cleaned, removed, and disposed of off-site.

and performing maintenance on

Dedicated Batch Plants

No dedicated batch plants will be required for this small construction project.

specify that this generally in regards to vehicle fueling and maintenance

Item 11 - Detail spill prevention & response plan

Waste Disposal

Provide more detail on why - to prevent offsite sediment migration - and what to do if sediment is tracked offsite (street sweeping)

Discuss other control measure that will be installed to minimize this pollutant source (sediment) - inlet protection, sediment control logs, mulching & seeding, erosion control blankets, and an extended detention basin.

Notate whether or not dewatering activities are anticipated

Toilets: Portable toilets will be located a minimum of 50 feet from state waters. They shall be adequately staked and cleaned on a weekly basis. They will be inspected daily for spills.

All waste products, which will include normal construction products will be removed from the site and disposed of at an offsite waste management site, as needed. The Contractor is to provide a portable toilet and will be responsible for it's routine cleaning. No off-site soil will enter the site, except as fill material, if needed. Any soil that is tracked onto or nearby roadways will be swept up, via a road cleaning machine.

Non-Stormwater Components

No non-stormwater discharges will impact this site or the water quality pond. There are no springs or large irrigation systems existing or proposed on-site.

Ultimate Receiving Waters

All storm runoff flows will be directed to the outfall box within the water quality pond and then into the Fountain Mutual Canal via a storm pipe from the water quality pond. The canal outfalls to Big Thompson Reservoir. Flows from the reservoir are directed through the County and then back again to the Fountain Creek, then into the Arkansas River.

Stream Crossings

No stream crossings are located on this property.

Each BMP should have it's own sub-section with details regarding upkeep & maintenance, when & where they will be used, etc

BEST MANAGEMENT PRACTICES (BMP'S)

Structural BMP's

Structural BMPs that will be used with this project include: 1.) concrete forebay, 2.) concrete outlet box that will release storm flows over a 40-hour period, 3.) concrete micro pool, 4.) silt fence, 5.) drainage swales to direct water to the storm pipe system, and 6.) riprap to prevent erosion from the swales to the storm pipe flared-end section.

add inlet protection to this section

Non-Structural BMP's

All disturbed areas will be seeded and mulched. No site watering will be used as the seeding mix will be native grasses and plants. Erosion blankets for 3:1 slopes and erosion logs will be laid, within the swales.

Technical Drawings

See the Appendix of this report for technical drawings.

Procedure for SWMP

Any modification to erosion control measures will be noted and dated on the plans. Any site changes will also be noted and dated on the plans.

GEC Plan Details include RECP and Compost Blanket. Specify and clarify where and when each will be used

Final Stabilization and Long-Term Stormwater Quality

Final stabilization will occur by placing erosion blankets, seeding, and mulching. Lot 3A is already developed, lot 4A will contain only the water quality pond and lots 1A and 2A will develop once they are sold. Long-term stormwater management will be achieved by the development of lots 1A and 2A and by following the IM Plan for the Extended Detention Basin Water Quality Pond.

Item 21 - Add text stating that the SWMP should be viewed as a "living document" that is continuously being reviewed and modified as a part of the overall process of evaluating and managing stormwater quality issues at the site. The Qualified Stormwater Manager shall amend the SWMP when there is a change in design, construction, operation or maintenance of the site which would require the implementation of new or revised BMPs or if the SWMP proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity or when BMPs are no longer necessary and are removed.

INSPECTIONS AND RECORDS

Inspection Procedures

Owner shall schedule construction activities to minimize the total amount of soil exposed at any given time, in order to reduce the period of soil erosion. Topsoil shall not be disturbed to expose bare ground for more than 30 days. All Disturbed Areas that remain exposed and/or inactive for longer than fourteen (14) days shall be stabilized to protect the soils from erosion. Within 14 days after construction activity has temporarily or permanently ceased, Owners shall plant temporary and, where applicable, permanent vegetative cover on disturbed areas. All temporary and permanent erosion control and sediment control features will be self-inspected, maintained, and repaired as needed by the Contractor/Owner. A thorough self-inspection shall be completed at least once every 14 calendar days. In addition, post-storm event inspections must be performed within 24 hours after the end of any precipitation or snowmelt event that causes surface erosion. El Paso County Engineer may inspect and direct said contractor as needed. Where self-inspections note that there is a need for BMP maintenance activities, actions should be taken by the contractor as soon as possible. Specify how this individual is qualified per the ECM req's. See ECM Appendix I, Section I.5

In addition to self-inspections being performed by the owner or contractor, County Engineering inspections are also required for the construction site. These County Engineering inspections can be of any of the following types: initial inspections, compliance inspections, reconnaissance inspections, compliant response inspections, follow-up inspections, and final inspections, as described in the El Paso County Drainage Criteria Manual Volume 2. Along with initial and final inspections, compliance inspections are performed by County Engineering Inspectors and are performed at least once every 30-60 days. Where County inspections identify the need for BMP maintenance, the County Engineering Inspector will notify the owner and/or contractor and will perform a follow-up inspection within 5 business days.

Specify where specifically the SWMP will be kept onsite

Record Keeping

The stormwater manager shall ensure that, at a minimum, the following is recorded for each inspection and kept on-site for reference:

and signature

- Inspection Date
- Name(s) and Title(s) of Inspection Personnel
- Location of Discharges of Sediment and Other Pollutants from the Site
- Location of BMPs Requiring Maintenance
- Location of Failed BMPs
- Location of Additional Required BMPs
- Description of Corrective Actions

The use and maintenance of log books, photographs, field notebooks, drawings or maps should also be included in the records, when appropriate.

Control Measures

No control measures are owned or operated by others. Only the Fountain Mutual Canal is owned and operated by the Fountain Mutual Ditch Company. Approval to discharge into the canal will be obtained before approval to begin construction.

Appendix