

**STORMWATER MANAGEMENT PLAN
ESTATES AT ROLLING HILLS RANCH FILING 2
EL PASO COUNTY, COLORADO
CDPHE PERMIT _____**

Prepared For:

GTL DEVELOPMENT, INC.

3575 Kenyon Street
San Diego, CA 92110

March 2020

Prepared By:
Tech Contractors
11886 Stapleton Dr
Falcon, CO 80831
719.495.7444

Qualified Stormwater Manager:

Name: Bret Haycock
Company: Tech Contractors
11886 Stapleton Dr
Falcon, CO 80831

Contractor:

Name: _____
Company: _____

PCD Project No.: PUD-SP-XXX & SF-XX-XXX


SF-20-018

REVISED

Item V - Identify these stages on the GEC Plan as well (via a table like this for example)

ADDED TO SHEET 43

consists of the construction and installation of the underground utilities including the watermain, sanitary sewer system, storm drainage system and other dry utilities and the construction of the surface improvements to include the streets, curb and gutter, and sidewalks. Stage 3 consists of the constructing the single family homes and final landscaping. The individual home builders will be responsible for permitting and the CM associated with each residential lot upon transfer of land title and ownership of said lot(s). Meridian Service Metro District (MSMD) to be named at the time of plat is responsible for all of the open space and landscape tracts throughout the PUD development.

Stage	Description	Control Measures	Begin Date	End Date
Stage 1	Overlot Grading	Perimeter Control Temporary Sed. Basins Swale Checks as needed Surface Roughening	December 2020	March 2021
Stage 2	Underground utilities Surface Improvements	Perimeter Control Inlet Protection	March 2021	June 2021
Stage 3	Home Construction	Inlet Protection Individual Lot Perimeter Control	June 2021	
Final Stabilization	Permit Close	Final Stabilization Permanent Measures	October 2022	

1.1.c. Project Location and Estimates of Area to be Disturbed

The total project site is approximately 120 acres with approximately 48 acres disturbed. Estates at Rolling Hills Ranch Filing 2 is located north of Rex Road, east of the Estates at Rolling Hills Ranch Filing 1, south of Latigo Trails and unplatted vacant land to the east. The project site is approximately 12 miles northeast of the City of Colorado Springs, 3 miles north of the town of Falcon and immediately north of the Falcon High School in an unincorporated portion of El Paso County and State of Colorado. The property is located in Sections 19 and 20, Township 12 South, Range 64 West, of the 6th Principal Meridian.

A general location map is Figure 1.

Latitude: 38°59'45" N Longitude: 104°35'04"W

There are no planned offsite borrow or disposal activities associated with this site.

Should offsite disturbance occur or become necessary, the SWMP and site map shall be amended by the SWMP Administrator.

Offsite Control Measures: may include but are not limited to; curb socks and inlet protection, detention basins, street sweeping etc. Offsite CM are detailed later in this SWMP.

Approximate limits of disturbance are indicated on exhibits found in Appendix B and C of this SWMP.

- Maintain Concrete Washout Area (if installed).

3.1.2 Stage 2

During Stage 2 of construction, the site infrastructure (roads and utilities) will be built and installed. Storm drains and other utilities will be placed under ground prior to the road construction and inlet protection will be required. During road construction, temporary sediment basins, in addition to those specified in the Approved Grading and Erosion Control Plans may be required in areas that encounter high runoff. The location of each erosion control measure is outlined on the Approved Grading and Erosion Control Plans. These sheets are located in Appendix C and will be updated as necessary. Erosion control measures shown on these plans are summarized below. Control Measures may be changed as field conditions warrant (see Section 6.0).

INITIAL INSTALL & REMOVAL OF CM NOT NEEDED

- Seed and mulch open areas , **install erosion control blanket.**
- Install a Concrete Washout Area and Stabilized Staging Area.
- Remove Vehicle Tracking Control after paving of all interior roads is complete.
- Install silt fence or wattles as perimeter control along lot frontage.
- Re-seed all areas disturbed by construction, particularly on graded lots where construction will not commence for a period of 30 days.

MAINTENANCE

- Maintain perimeter control.
- Maintain any temporary diversion dikes and temporary sediment basins.
- Maintain permanent detention ponds
- Maintain Vehicle Tracking Control until road construction is complete.
- Maintain Inlet Protection and curb checks.
- Maintain controls along lot frontage.
- Maintain Concrete Washout Area.

3.1.3 Stage 3

Stage 3 consists of the constructing the single-family homes and final landscaping such activities may occur simultaneous with those found in Stage 2. The locations of each erosion control measure are the responsibility of the individual home builders and are not to be considered a part of this permit. Erosion control measures provided by the home builders will be monitored by the appropriate governmental agency for adequacy and maintenance. The individual home builders may construct and maintain a joint Concrete Washout Area that will not be the responsibility of the permittee. The Concrete Wash Area shall be placed on property not owned by the permittee. Measures that may be installed by the individual home builder but are not the responsibility of the permittee include:

Include discussion of ECB shown on Sheet 35 of Construction Drawings in appropriate section of SWMP.

- Mark locations for spill clean-up equipment and materials.
- Clean-up of drips and/or leaks from equipment or machinery at the site.
- Refueling activity must occur in the designated area. Following recommended CM is the responsibility of the contractor. Recommended refueling areas include open spaces or park areas near the official site construction entrance.
- Vehicle maintenance should occur over impermeable surfaces, preferably in the refueling area or over drip pans specifically provided for vehicle maintenance. Maintenance, refueling, and waste materials should be stored and disposed of appropriately.
- Minimize the amount of unneeded materials stored on site.
- Fertilizers and other chemicals to be applied in only the quantity required. Storing these materials should be conducted in a safe and appropriate manner.
- Storage containers, drums, and bags are to be stored away from direct traffic routes to prevent accidental spills.
- Containers are to be stored on pallets or similar devices to prevent corrosion of the containers.
- Chemical substances used in the work place are to be listed and the Material Safety Data Sheet (MSDS) obtained for each. The MSDSs will be readily available for use by posting at the locations where the materials are stored and handled.
- Unlabeled chemicals and chemicals with deteriorated labels are often disposed of unnecessarily or improperly. To avoid improper disposal, all containers shall be labeled to show the following information (usually found on the MSDS):
 - Name and type of substance
 - Stock number
 - Expiration date
 - Health hazards, including: Corrosivity, Ignitability, Reactivity, Toxicity
 - Suggestions for handling
 - First aid information
- Portable toilet facilities are to be properly located 3 feet behind the curb and 50 feet away from storm inlets, secured from being tipped over, and regularly maintained.

3.2.2 Training

Training is a constant non structural CM that will be used on this jobsite. Training will be conducted to ensure all employees (personnel, sub-contractors, vendors, suppliers and others) that have an impact on stormwater and erosion control are trained. The training will consist of the following types:

- Orientation-at the beginning of work on the job
- Scheduled-routine training
- After Spill-to recap what went wrong and how to prevent a future spill

Update to be more detailed as follows: 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.

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disturbance levels should be established on all areas that were previously disturbed. The intent of this language is to ensure that vegetative coverage is established on all disturbed areas.

- **Individual Plant Density** - Permit language regarding density of vegetation requires that individual plant density, as opposed to canopy cover, be used in evaluating whether final stabilization efforts have achieved 70 percent of the pre-disturbance levels criteria. Individual plant density data must be collected and documented as a measure of # of plants per unit area.
- **Pre-disturbance levels** – Pre-disturbance levels refers to pre-disturbance vegetation that would represent the naturally supported vegetation density in the area. If information directly related to the pre-disturbance or pre-existing natural vegetation for a site is not known, this information can be based on available information of natural vegetation densities in the area, or on conditions at a similar site in the area that is undisturbed or that has established non-irrigated and stable vegetation.

In the event that the permit holder no longer has control of a specific portion of a permitted site, through either ownership or contract, and wishes to transfer coverage of that portion of the site to a second party that does not currently have coverage under the Construction General Permit, a "Notice of Transfer and Acceptance of Terms of a Stormwater Discharge General Permit Certification," should be completed and submitted to the CDPHE (Appendix H). If both parties involved currently have permit coverage, then a "Notice of Reassignment of Permit Coverage for a Portion of a Permitted Area and General Permit Application," should be completed and submitted to the CDPHE (Appendix H). Upon completion of construction and once vegetation has been reestablished at 70 percent of original vegetation for the disturbed acreage or upon transfer of ownership has been completed, an "Inactivation Notice for Construction Stormwater Discharge General Permit Certification" should be submitted to the CDPHE to inactivate the existing permit (Appendix H).

During Stage 2 of construction activity as noted in section 3.1.2 the open areas of the site will be surface roughen, drill seeded and crimp mulch.

5.0 INSPECTIONS AND PREVENTATIVE MAINTENANCE

These subsections discuss inspections and implementation of a preventative maintenance program.

5.1 INSPECTIONS

The purpose of regular inspections is to document compliance with the plans, specifications, and the CDPHE construction stormwater regulations. The intent of the construction stormwater regulations is to protect receiving streams from sedimentation and other potential pollutants during construction activities.

The Qualified Stormwater Manager is responsible for ensuring that CM are installed as specified and are installed in accordance with the plans and specifications, and that adequate and compliant inspections of the erosion control and materials management are conducted. This must be documented, and documentation may consist of and/or conform to the Environmental Compliance Site Inspection Report Form provided as Appendix F. Signed copies of the inspection forms must be kept onsite with this SWMP. The Qualified Stormwater Manager shall perform a thorough inspection of

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ECM Appendix I.5 - Self-Monitoring Inspections - QSMs need to be identified in the SWMP and provide documentation of their credentials. Provide QSM credentials and/or state:

"The QSM will be sufficiently qualified for the required duties per the ECM Appendix I.5"

provides note pages for additional notes and recordkeeping. This report with all signed inspection forms, photographs and plan markups shall be kept for a minimum of three years after final stabilization is complete.

6.0 DEVIATIONS FROM THE PLAN

All major deviations from this SWMP must be documented and provided with the plan. Deviations generally include the implementation of CM that are different from the plans and specifications or details provided in the CM Specification Sheets (Appendix D). Any deviations in CM should also be documented on the Erosion Control Plan drawings (Appendix B). Deviations may include a relocation or addition of erosion control structures, such as rough-cut grading or outlet protection. Additional sedimentation ponds may need to be added at the contractor's discretion to prevent high sediment loads from entering receiving waters of the state and would be deemed a deviation of the plan. The contractor may also choose to implement a different form of CM, such as straw bales instead of rough-cut grading. These changes may be considered to be a violation of this plan unless they are documented and added to the plan.

Appendix K contains a template form that may be used to document any deviations from this plan. This form may be completed at the construction site by the contractor or after the completion of regularly-scheduled inspections. The deviations need not be typed or formal; hand written legible notes are sufficient. These forms may be attached to Appendix K to document changes to the SWMP to comply with these recording procedures.

7.0 REFERENCES

Colorado Department of Public Health and Environment (CDPHE). 2005. Colorado Discharge Permit Construction Permitting. On-line address: <http://www.colorado.gov/cs/Satellite/CDPHE-WQ/CBON/1251596875260>

City of Colorado Springs and El Paso County Drainage Criteria Manual Volume

ADDED

Item 21 - Add text in appropriate section of SWMP above, 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.

Item 26 - Add a note stating that this project does not rely on control measures owned or operated by another entity.

As stated above the SWMP is a living document and so is the project. When lots are sold they are technically under thier own SWMP but because they are within this SWMP boundary we are still subject to them maintaining their control measures. So this statement does not apply and will not be added.

CONSTRUCTION CAs:

- Check Dam
- Erosion Control Blankets
- Inlet Protection
- Mulching
- Sediment Basin
- Silt Fence
- Straw Bale Barriers
- Street Wash Water Associated with Construction Activities
- Surface Roughening
- Temporary Seeding
- Temporary Swale
- Vehicle Tracking
- Concrete Washout
- Straw Waddle

Consider including detail in GEC Plans if it is anticipated that a Sed Basin will be constructed

Not anticipated.