Construction General Permit Inspections

Provided by Condor Earth
Jenaro Gamez
October 29, 2019

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Why?

- Statewide Construction General Permit
  - "Any construction or demolition activity, including, but not limited to, clearing, grading, grubbing, or excavation, or any other activity that results in a land disturbance of **equal to or greater than one acre**."

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- Risk Level
  - Project Sediment Risk
  - Receiving Water Risk

Table 7 - Combined Risk Level Matrix

Combined Risk Level Matrix				
		Sediment Risk ←		
		Low	Medium	High
Receiving Water Risk ↑	Low	Level 1	Level 2	
	High	Level 2		Level 3

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I. Risk Level 1 Monitoring and Reporting Requirements

Table 1- Summary of Monitoring Requirements

Risk Level	Visual Inspections					Sample Collection	
	Quarterly Non-storm Water Discharge	Pre-storm Event		Daily Storm BMP	Post Storm	Storm Water Discharge	Receiving Water
		Baseline	REAP				
1	X	X		X	X		

I. Risk Level 2 Monitoring and Reporting Requirements

Table 2- Summary of Monitoring Requirements

Risk Level	Visual Inspections					Sample Collection	
	Quarterly Non-storm Water Discharge	Pre-storm Event		Daily Storm BMP	Post Storm	Storm Water Discharge	Receiving Water
		Baseline	REAP				
2	X	X	X	X	X	X	

I. Risk Level 3 Monitoring and Reporting Requirements

Table 2- Summary of Monitoring Requirements

Risk Level	Visual Inspections					Sample Collection	
	Quarterly Non-storm Water Discharge	Pre-storm Event		Daily Storm BMP	Post Storm	Storm Water Discharge	Receiving Water
		Baseline	REAP				
3	X	X	X	X	X	X	X[4]

BMP Inspections

- Dischargers shall perform ***weekly*** inspections and observations, and at least once each 24-hour period during extended ***storm events***, to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended.

Construction General Permit Fact Sheet, Attachment C, Section G

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Best Management Practices (BMPs)

Six Minimum Best Management Practices (BMPs)

- Good Housekeeping
- Preventative Maintenance
- Spill and Leak Prevention and Response
- Erosion & Sediment Controls
- Employee Training
- Quality Assurance & Record Keeping

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Site Inspections

- Know your site…. MAP
  - Flow direction
  - Storm drain locations
    - Connections to MS4
    - Potential discharge locations
  - Potential run-on

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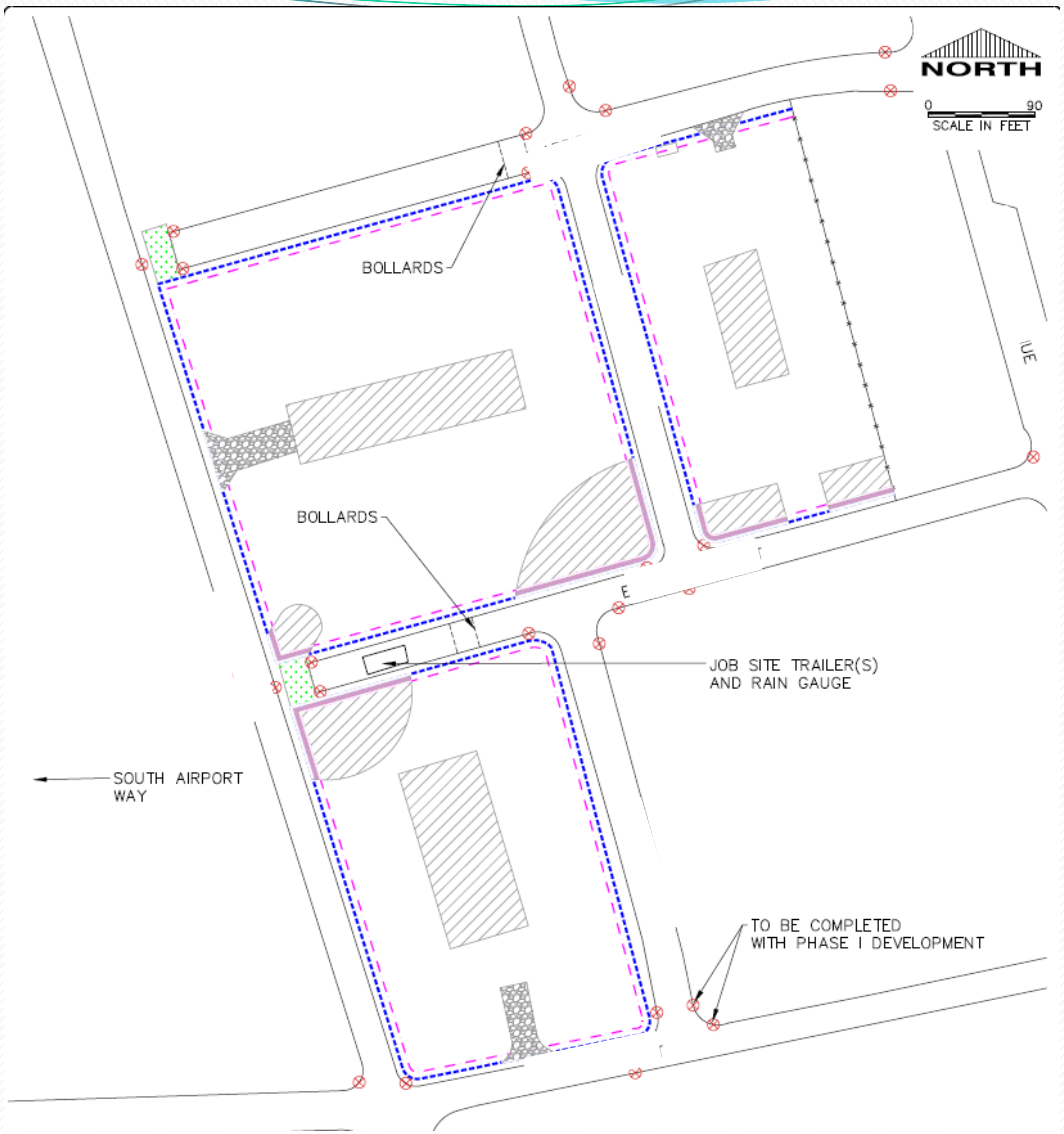
Site Map

- Requirement to obtain WDID as part of the Permit Registration Documents (PRDs)
- "Living" document



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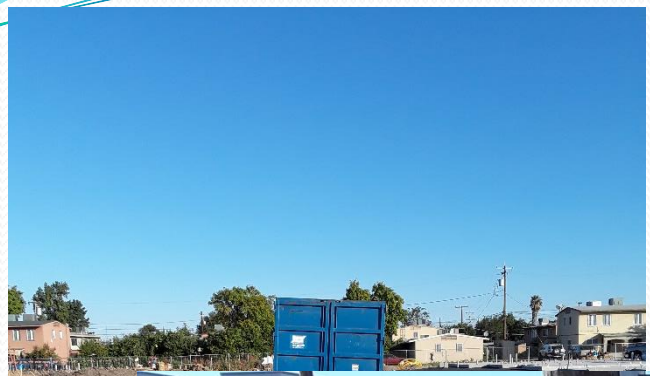

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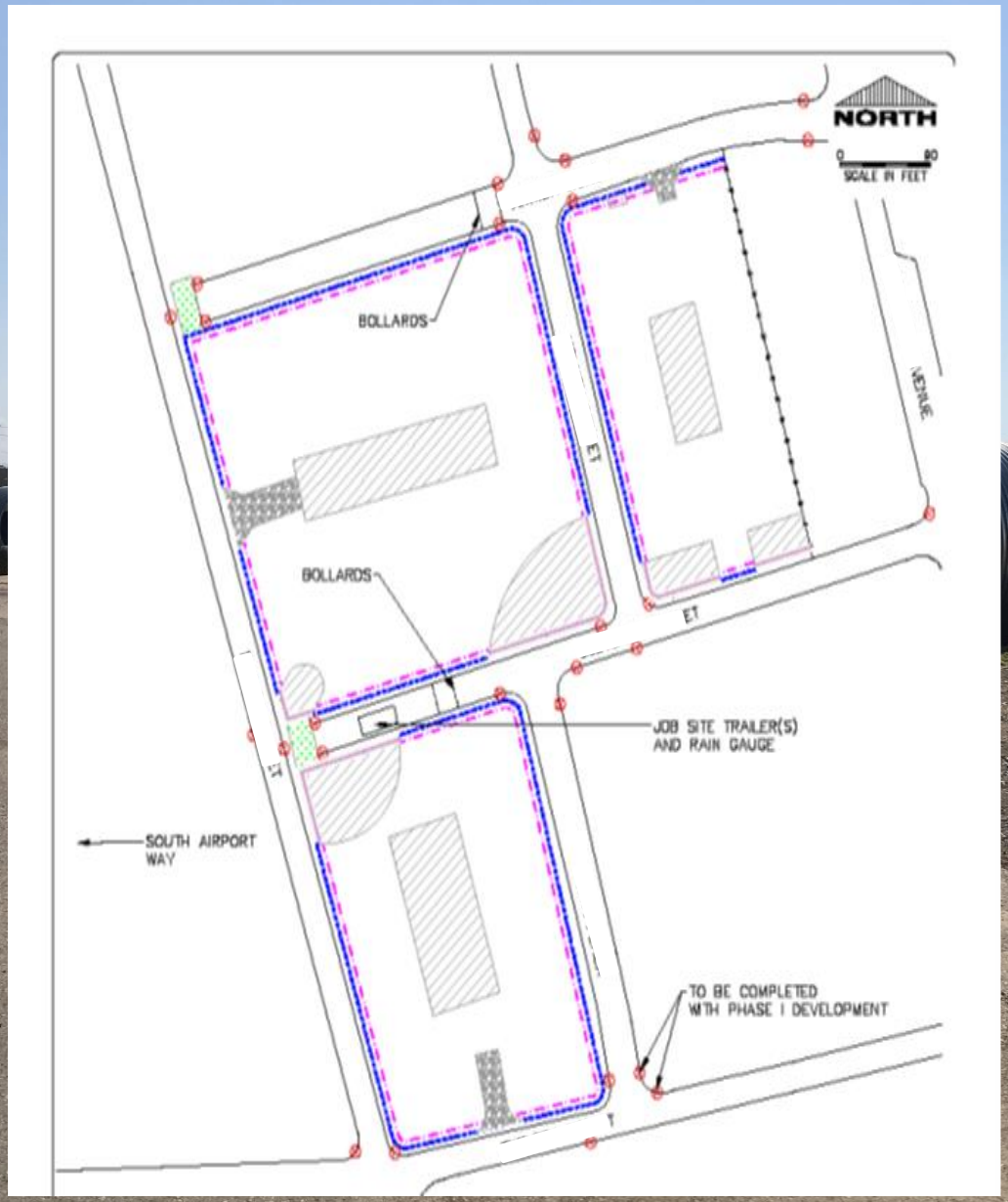

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Housekeeping

- Sweeping
- General site cleanliness
- Waste management

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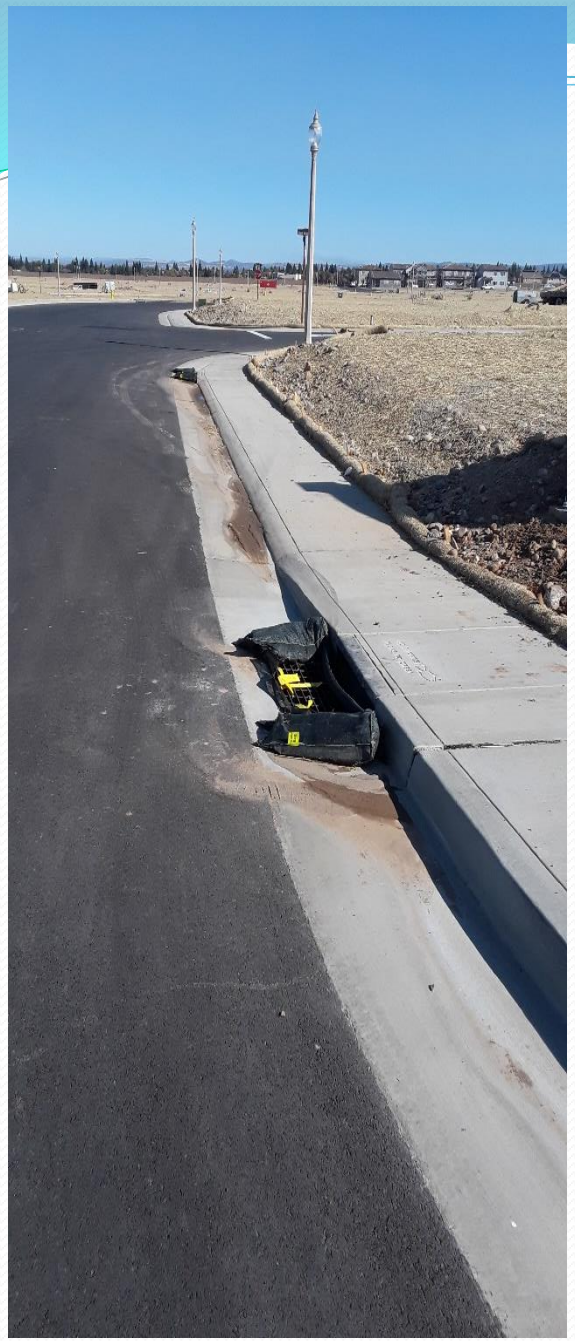
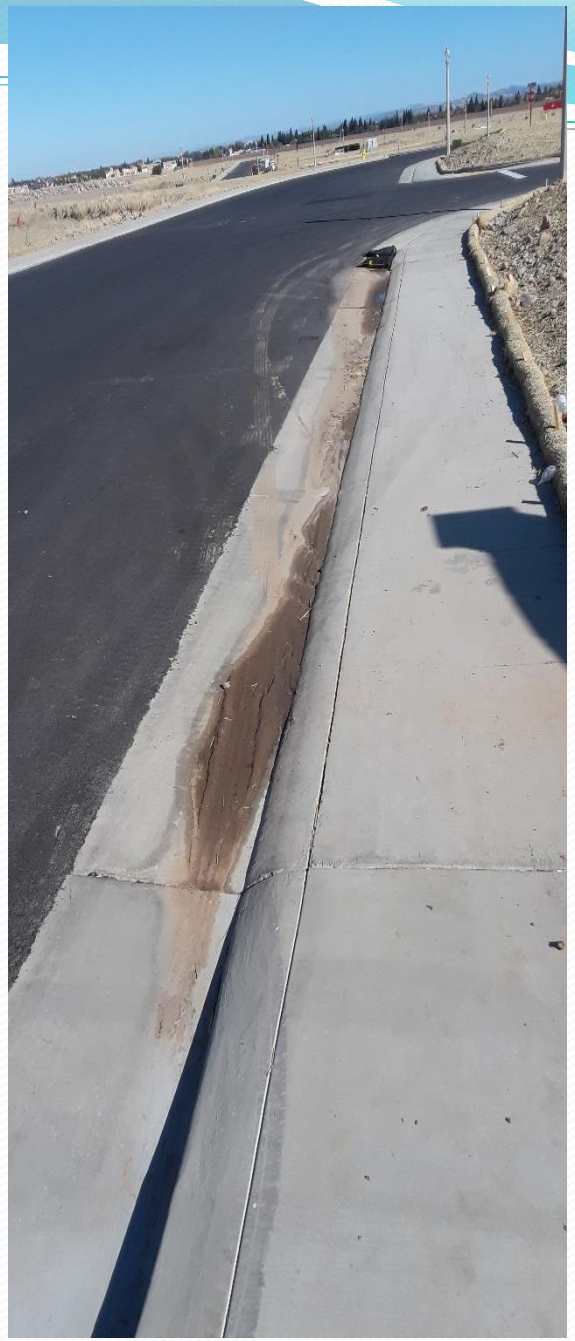
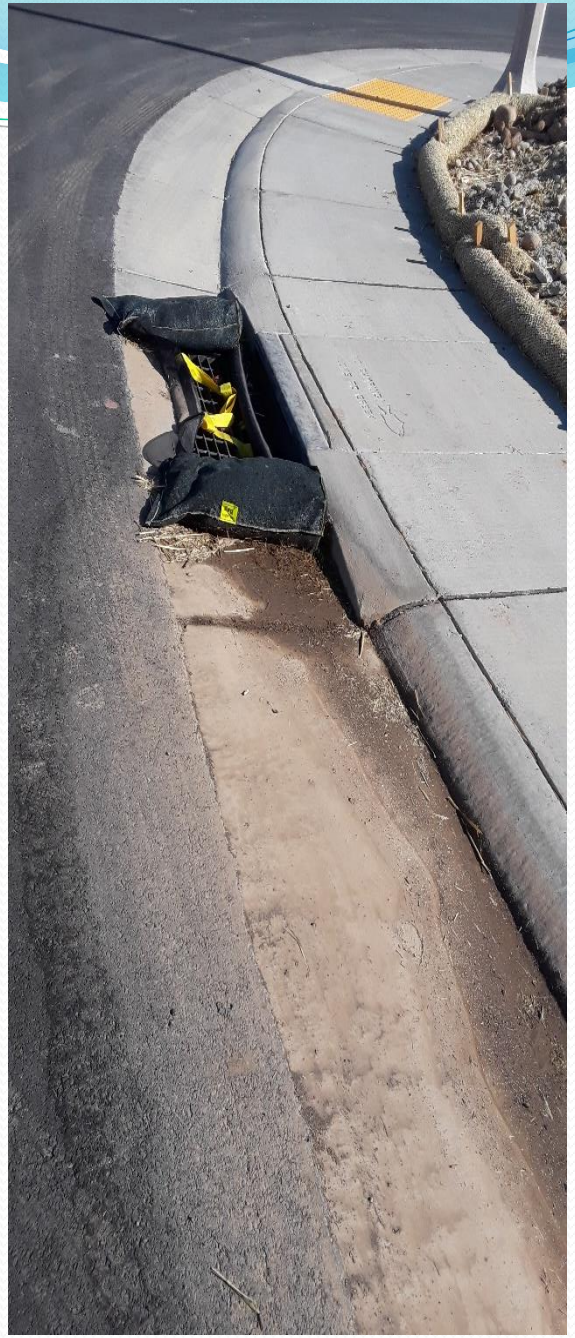
SWEEPING

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Waste Management

a. Prevent disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system.

b. Ensure the containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water.

c. Clean or replace sanitation facilities and inspecting them regularly for leaks and spills.

d. Cover waste disposal containers at the end of every business day and during a rain event.

e. Prevent discharges from waste disposal containers to the storm water drainage system or receiving water.

f. Contain and securely protect stockpiled waste material from wind and rain at all times unless actively being used.

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Spill and Leak Prevention and Response

- Equipment inspections
- Spill kits
- Construction materials
- Construction activities

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Erosion and Sediment Controls

- Wattles
- Drain inlet protection
- Stabilized Entrance
- Stockpile cover
- Soil stabilization

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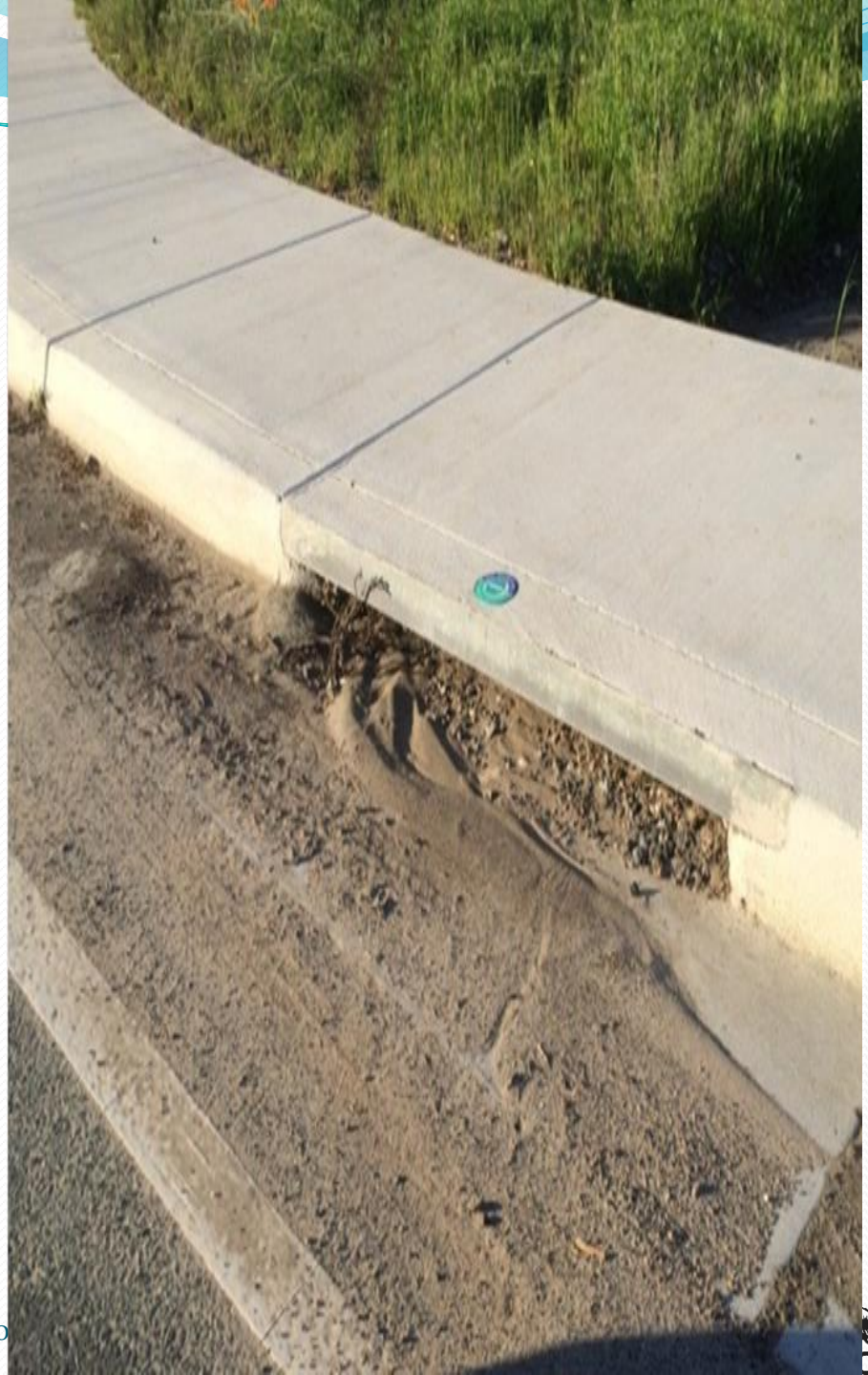

Wattles and drain inlet protection

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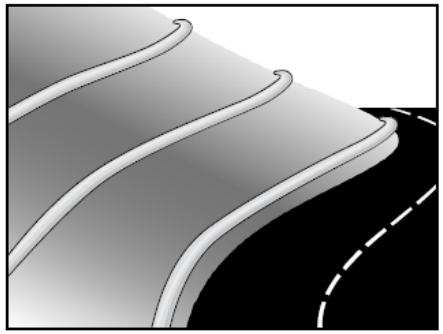
Fiber Rolls SE-5



Description and Purpose

A fiber roll consists of straw, coir, or other biodegradable materials bound into a tight tubular roll wrapped by netting, which can be photodegradable or natural. Additionally, gravel core fiber rolls are available, which contain an imbedded ballast material such as gravel or sand for additional weight when staking the rolls are not feasible (such as use as inlet protection). When fiber rolls are placed at the toe and on the face of slopes along the contours, they intercept runoff, reduce its flow velocity, release the runoff as sheet flow, and provide removal of sediment from the runoff (through sedimentation). By interrupting the length of a slope, fiber rolls can also reduce sheet and rill erosion until vegetation is established.

Suitable Applications

Fiber rolls may be suitable:

- Along the toe, top, face, and at grade breaks of exposed and erodible slopes to shorten slope length and spread runoff as sheet flow.
- At the end of a downward slope where it transitions to a steeper slope.
- Along the perimeter of a project.
- As check dams in unlined ditches with minimal grade.
- Down-slope of exposed soil areas.
- At operational storm drains as a form of inlet protection.

Categories

EC	Erosion Control	☒
SE	Sediment Control	☑
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

Legend:
☑ Primary Category
☒ Secondary Category

Targeted Constituents

Sediment	☑
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

SE-1 Silt Fence
SE-6 Gravel Bag Berm
SE-8 Sandbag Barrier
SE-12 Manufactured Linear Sediment Controls
SE-14 Biofilter Bags

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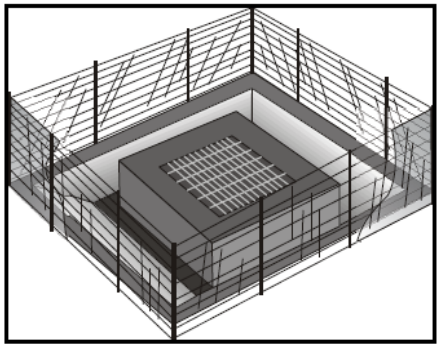
Storm Drain Inlet Protection SE-10



Description and Purpose

Storm drain inlet protection consists of a sediment filter or an impounding area in, around or upstream of a storm drain, drop inlet, or curb inlet. Storm drain inlet protection measures temporarily pond runoff before it enters the storm drain, allowing sediment to settle. Some filter configurations also remove sediment by filtering, but usually the ponding action results in the greatest sediment reduction. Temporary geotextile storm drain inserts attach underneath storm drain grates to capture and filter storm water.

Suitable Applications

- Every storm drain inlet receiving runoff from unstabilized or otherwise active work areas should be protected. Inlet protection should be used in conjunction with other erosion and sediment controls to prevent sediment-laden stormwater and non-stormwater discharges from entering the storm drain system.

Limitations

- Drainage area should not exceed 1 acre.
- In general straw bales should not be used as inlet protection.
- Requires an adequate area for water to pond without encroaching into portions of the roadway subject to traffic.
- Sediment removal may be inadequate to prevent sediment discharges in high flow conditions or if runoff is heavily sediment laden. If high flow conditions are expected, use

Categories

EC	Erosion Control	
SE	Sediment Control	☑
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

Legend:
☑ Primary Category
☒ Secondary Category

Targeted Constituents

Sediment	☑
Nutrients	
Trash	☒
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

SE-1 Silt Fence
SE-5 Fiber Rolls
SE-6 Gravel Bag Berm
SE-8 Sandbag Barrier
SE-14 Biofilter Bags
SE-13 Compost Socks and Berms

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NO DUMPING!
FLOWS TO RIVER

NO PARKING FIRE LANE

NO DUMPING!
FLOWS TO RIVER

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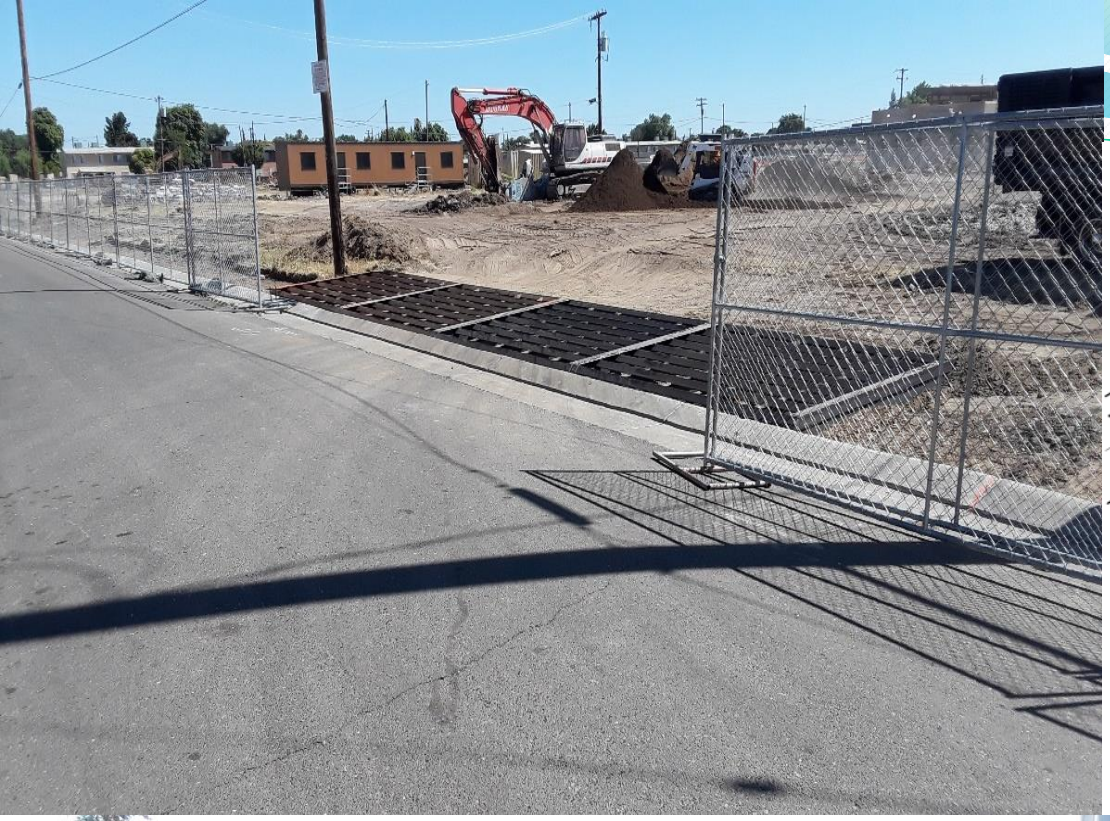
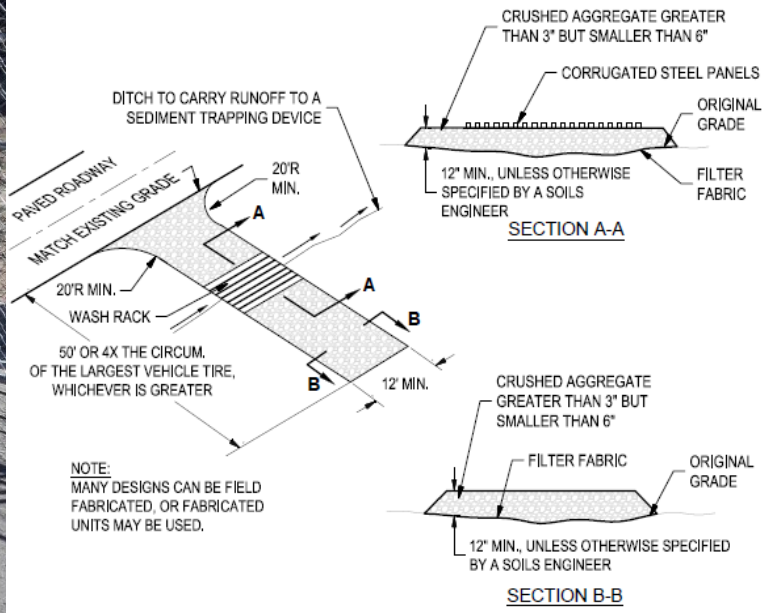
Wet season adjustments

What does your SWPPP say??





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CONSTRUCTION AREA
KEEP OUT
DANGER

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Washouts

- *Ensure the containment of concrete washout areas and other washout areas that may contain additional pollutants so there is no discharge into the **underlying** soil and onto the **surrounding areas***

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CONCRETE WASHOUT
CWPM

Be aware of Contractor activities and procedures

Be aware of Contractor activities and procedures

Washout Control Maintenance

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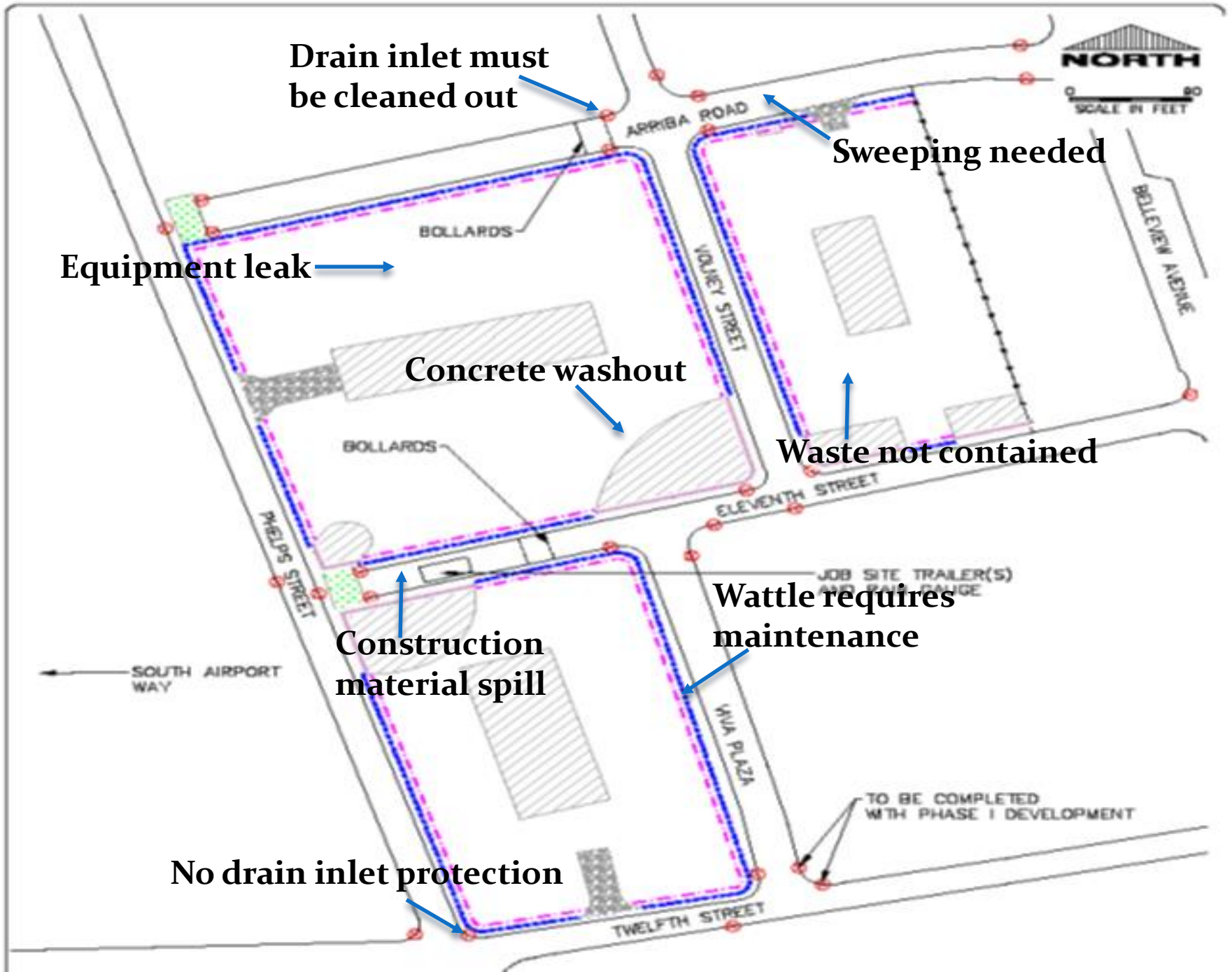
Drain inlet must be cleaned out
Sweeping needed
Equipment leak
Concrete washout
Waste not contained
Wattle requires maintenance
Construction material spill
No drain inlet protection
NORTH
SCALE IN FEET
ARRIBA ROAD
BOLLARDS
VOLNEY STREET
BELLEVIEW AVENUE
ELEVENTH STREET
PHELPS STREET
JOB SITE TRAILER(S)
SOUTH AIRPORT WAY
VIVA PLAZA
TO BE COMPLETED WITH PHASE I DEVELOPMENT
TWELFTH STREET

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