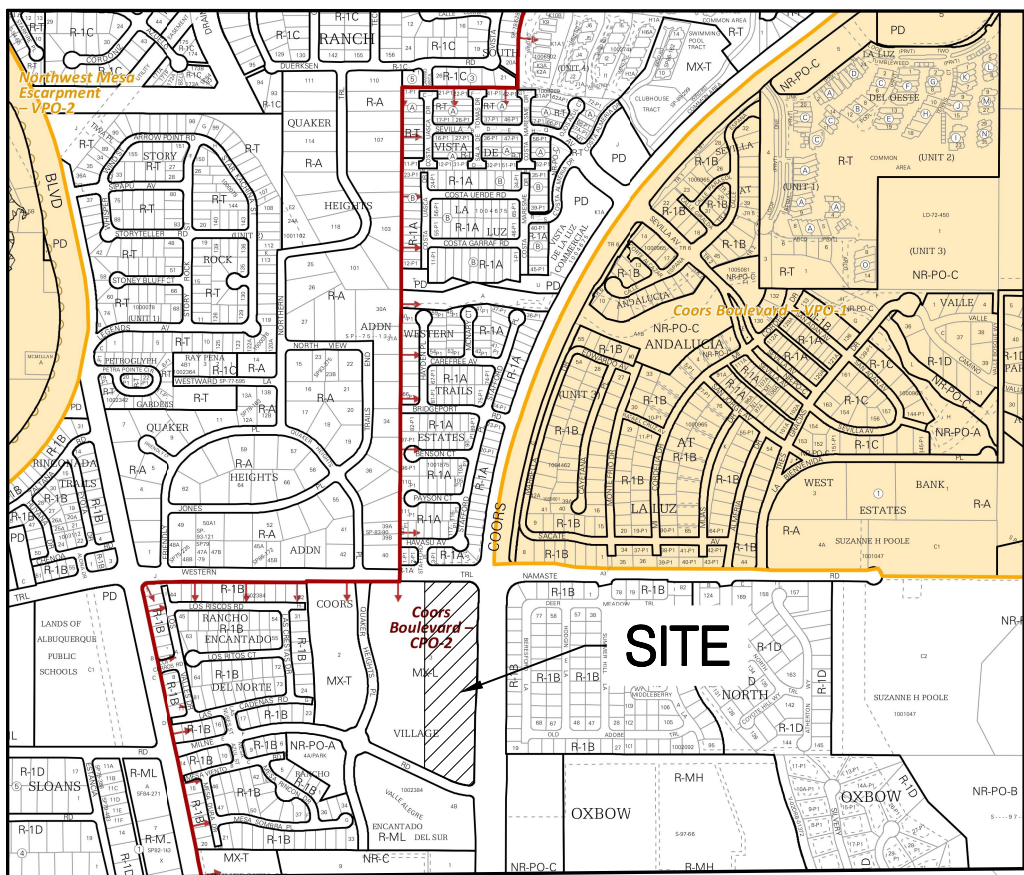


PHS FSED - COORS & WESTERN TRAILS														
Proposed Ultimate Development Conditions Basin Data Table														
This table is based on the DPM Section 22.2, Zone: 1												Storm Water Quality Volume Calculations		
Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100yr) (cfs/ac.)	Q(100yr-6hr) (CFS)	WT E (inches)	V(100yr-6hr) (CF)	V(100yr-10day) CF	Impervious Area (SF)	Precipitation Depth (IN)	Required Volume (CF)
Proposed														
B1A	67708	1.55	0.0%	0.0%	16.2%	83.8%	4.13	6.4	1.81	10222	17175	56765	0.34	1608
B1B	5835	0.13	0.0%	0.0%	0.0%	100.0%	4.37	0.6	1.97	958	1673	5835	0.34	165
B1C	34482	0.79	0.0%	0.0%	22.9%	77.1%	4.03	3.2	1.75	5015	8271	26578	0.34	753
B1D	20905	0.48	0.0%	0.0%	61.3%	38.7%	3.45	1.7	1.37	2385	3377	8091	0.34	229
B1E	9694	0.22	0.0%	0.0%	84.8%	15.2%	3.10	0.7	1.14	920	1100	1471	0.34	42
TOTAL	138624	3.18									31596			2798



INTRODUCTION:

THE PROJECT IS LOCATED ON THE SOUTHWEST CORNER OF COORS BLVD NW AND WESTERN TRAIL NW. (TRACT 3B COORS VILLAGE). THE PURPOSE OF THIS SUBMITTAL IS TO PROVIDE A DRAINAGE MANAGEMENT PLAN FOR THE PRESBYTERIAN HEALTHCARE SERVICES CLINIC AND EMERGENCY DEPARTMENT FACILITIES. WITH THIS SUBMITTAL WE ARE REQUESTING CITY OF ALBUQUERQUE HYDROLOGY BUILDING PERMIT APPROVAL.

EXISTING CONDITIONS:

TRACT 3B IS A 6.84 ACRE SITE THAT IS CURRENTLY UNDEVELOPED. THE SITE SLOPES TO THE EAST TO RETENTION PONDS AT THE NORTHEAST AND SOUTHEAST CORNERS OF THE SITE. THE PORTION OF THE SITE THAT IS BEING DISTURBED BY THIS DEVELOPMENT IS APPROXIMATELY 2.70 ACRES ON THE NORTH END OF THE TRACT.

A DRAINAGE MASTER PLAN FOR COORS VILLAGE SUBDIVISION DATED FEBRUARY 29, 2000 IS THE BASIS OF THIS DRAINAGE ANALYSIS AND NARRATIVE. THIS MASTER DRAINAGE REPORT SPECIFIES THAT RUNOFF FROM THIS SITE, NOTED AS BASIN 100, WILL BE ROUTED IN A STORM DRAIN TO LADERA POND 16B. THE PEAK DISCHARGE FROM THIS SITE IS BASED ON LAND TREATMENTS OF 10% B, 5% C AND 85% D. THIS EQUATED TO A PEAK RUNOFF FLOW RATE OF 4.12 CFS/ACRE OR 26.4 CFS. THIS SITE IS NOT WITHIN A DEFINED FLOOD ZONE AS SHOWN ON FIRM MAP NUMBER 35001C0114H (THIS SHEET).

SITE HISTORY:

TRACT 3A, LOCATED WEST OF THE SITE, IS BEING DEVELOPED ALONG A SIMILAR TIMELINE AS TRACT 3B. TERRA WEST PREPARED AN APPROVED GRADING & DRAINAGE PLAN AND DRAINAGE REPORT STAMP DATED 8/22/18 THAT INCLUDED ANALYSIS FOR TRACT 3B. THIS DRAINAGE REPORT WAS THE BASIS OF THE DESIGN OF THE PUBLIC INFRASTRUCTURE THAT TRACT 3B WILL DISCHARGE TO. THE TOTAL CALCULATED FLOW FOR TRACT 3B IN THE APPROVED DRAINAGE REPORT IS 26.4 CFS. THIS IS GREATER THAN THE CALCULATED FLOW OF 25.2 CFS IN THE PROPOSED DRAINAGE MANAGEMENT PLAN FOR THE ENTIRETY OF TRACT 3B (F11019, STAMP DATED 1/15/2019).

METHODOLOGY:

THE HYDROLOGIC ANALYSIS PROVIDED WITH THIS DRAINAGE MANAGEMENT PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 22.2 OF THE DPM. THE SITE IS LOCATED WEST OF THE RIO GRANDE WITHIN PRECIPITATION ZONE 1. LAND TREATMENT PERCENTAGES WERE CALCULATED BASED ON THE CURRENT SITE PLAN.

PROPOSED CONDITIONS:

THIS DRAINAGE MANAGEMENT PLAN WAS DEVELOPED BASED ON A FULLY DEVELOPED SITE. THE DISTURBED AREA WAS DIVIDED INTO 5 SUB-BASINS. ALL 5 OF THESE SUB-BASINS ARE WITHIN BASIN 1 AS SHOWN ON THE DRAINAGE MANAGEMENT PLAN FOR THE ENTIRETY OF TRACT 3B. LAND TREATMENT AND PEAK RUNOFF FLOW RATES ARE SHOWN ON THE PROPOSED DEVELOPED CONDITIONS BASIN DATA TABLE. SITE STORM DRAIN WILL CONNECT TO A PROPOSED PUBLIC STORM DRAIN IN THE NORTH-SOUTH ROAD ON THE WESTERN EDGE OF THE SITE. THREE STORM DRAIN STUB OUTS ARE PROPOSED TO SERVE TRACT 3B. THE FURTHEST NORTH STUB WILL BE UTILIZED FOR THE CONSTRUCTION OF THIS PHASE.

THERE ARE NO STORM WATER QUALITY PONDS TO BE CONSTRUCTED IN THIS PHASE. LANDSCAPED AREAS ARE BEING UTILIZED TO THEIR FULLEST EXTENT AND PROVIDE APPROXIMATELY 1,040 CF OF STORM WATER QUALITY VOLUME. THE REMAINDER OF THE REQUIRED VOLUME WILL BE PAID FOR CASH INLETS.

SUB-BASIN 1A IS LOCATED SOUTH OF THE BUILDING. THIS AREA INCORPORATES MOST OF THE SITE'S AVAILABLE PARKING AREA. RUNOFF FROM THIS SUB-BASIN DIRECTLY DISCHARGES TO 2 - TYPE D INLETS THAT ULTIMATELY OUTFALL INTO THE STORM DRAIN STUB PROVIDED IN THE ACCESS DRIVE. THE RUNOFF CONTRIBUTING TO THE INLETS AND STORM DRAIN WITHIN THIS BASIN WAS DETERMINED IN CONJUNCTION WITH THE BASIN LIMITS FROM THE DRAINAGE MANAGEMENT PLAN STAMP DATED 1/15/2019. LAND TREATMENTS WERE DETERMINED AS SUCH.

SUB-BASIN 1B INCLUDES THE WESTERN SIDE OF THE PROPOSED BUILDING. THE RUNOFF FROM THE ROOF DISCHARGES UNDERGROUND INTO 2 ROOF DRAIN PIPES THAT CONTINUE SOUTH PRIOR TO JOINING RUNOFF FROM SUB-BASINS 1A AND 1C.

SUB-BASIN 1C IS LOCATED DIRECTLY EAST OF THE PROPOSED BUILDING. THIS BASIN PROVIDES MOST OF THE STORM WATER QUALITY VOLUME WITHIN ITS LANDSCAPED AREAS. RUNOFF FROM THIS BASIN DISCHARGES TO 1 - TYPE D INLET THAT ULTIMATELY OUTFALLS INTO THE STORM DRAIN WITHIN THE ACCESS DRIVE.

SUB-BASIN 1D CONTAINS THE EASTERN SIDE OF THE PROPOSED BUILDING AND THE LANDSCAPED AREA BORDERING COORS BOULEVARD. THE ROOF AREA DISCHARGES ONTO A RIPRAP PAD EAST OF THE SITE WHERE IT PROCEEDS TO COORS BOULEVARD. THE LANDSCAPED AREAS AND THE ROOF DISCHARGE APPROXIMATELY 1.7 CFS OFFSITE.

SUB-BASIN 1E CONTAINS THE LANDSCAPED AREA BORDERING WESTERN TRAIL. THIS AREA DISCHARGES APPROXIMATELY 0.7 CFS OFFSITE.

THE 2.4 CFS DISCHARGING TO THE PUBLIC STORM DRAIN SYSTEM WITHIN WESTERN TRAIL AND COORS BOULEVARD IS NEGOTIABLE. THE FLOW WITHIN THE SYSTEM WILL PEAK AT DIFFERENT TIMES. THEREFORE THE ADDITIONAL RUNOFF WILL NOT NEGATIVELY EFFECT THE DOWNSTREAM SYSTEM.

THE OVERALL RUNOFF FROM BASIN 1 CONTRIBUTING TO THE ACCESS DRIVE WEST OF THE SITE IS APPROXIMATELY 10.2 CFS. THIS IS LESS THAN THE 13.1 CFS CALCULATED FOR BASIN 1 IN THE DRAINAGE MANAGEMENT PLAN FOR THE ENTIRETY OF TRACT 3B.

CONCLUSION:

THE CALCULATED PEAK DISCHARGE FROM THE SITE IS IN SUBSTANTIAL COMPLIANCE WITH THE PREVIOUSLY APPROVED DRAINAGE MANAGEMENT PLAN FOR TRACT 3B AND THE MASTER DRAINAGE PLAN. ONSITE DETENTION PONDS WILL NOT BE REQUIRED. THE GRADING AND DRAINAGE PLAN AS PRESENTED IS IN CONFORMANCE WITH THE APPROVED MASTER DRAINAGE PLAN AND CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS. WITH THIS SUBMITTAL WE ARE REQUESTING CITY OF ALBUQUERQUE HYDROLOGY BUILDING PERMIT APPROVAL.

LEGEND

EROSION AND SEDIMENT CONTROL PLAN

PROJECT PERIMETER & DISTURBED AREA

SILT FENCE

MULCH SOCKS

FLOW DIRECTION

STAGING AREA

STABILIZED CONSTRUCTION ENTRANCE

TRASH RECEPTACLE

CHEMICAL TOILET

CONCRETE WASHOUT

SROEMWATER QUALITY AREA

RIP RAP

CHECK DAM

DROP INLET PROTECTION

OUTFALL

POSTING SIGN

PRESERVED VEGETATION

RECEIVING WATERS: RIO GRANDE 2105_51; TIER II WATER WITH IMPAIRMENTS OF PCBs, DISSOLVED OXYGEN, AND TEMPERATURE

CRITICAL HABITAT: CRITERION "A", NO CRITICAL HABITATS WITHIN THE PROJECT AREA

GPS LOCATION: 35.1334, -106.7023

PRESNow COORS

PROJECT TITLE

ALBUQUERQUE, BERNALILLO COUNTY, NM

CITY, COUNTY, STATE

02/20/2019

DATE

C. DURKIN

DRAWN BY



02/20/2019

CPESC Stamp

SITE WILL HAVE A SILT FENCE PERIMETER WITH INLET PROTECTION ONCE STROMDRAIN INLETS ARE ACTIVE.

Curb Storm Inlet Protection with Wattles



Inlet Filter Installation Instructions:



1. Remove sediment, debris, ice and snow from the inlet grate surface and surrounding area.

2. Verify fit by placing filter over inlet grate to ensure that Inlet Filter extends at least one inch beyond the front and both curb ends. The overlap slows water

flow and starts filtering sediment and debris before water drops into the inlet.

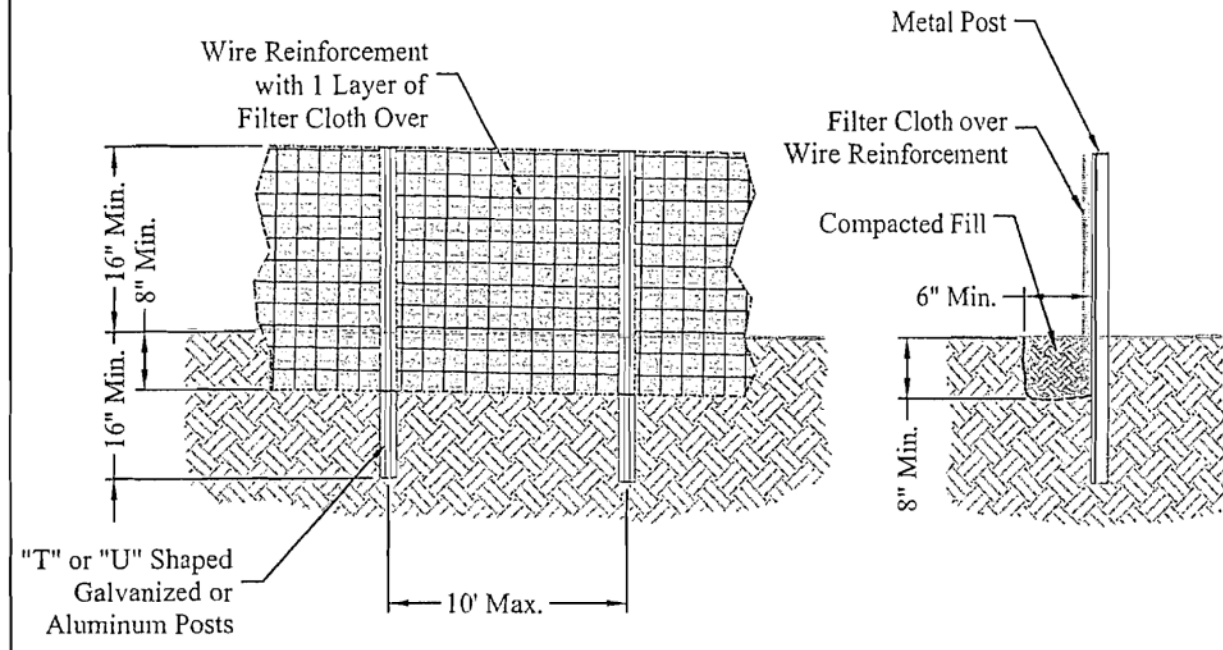


3. Position the mat. Place Inlet Filter on grate with the net side down, flush to the back edge and extending beyond the grate opening on the front and both sides. The zip ties attach Inlet Filter to the inlet grate cover WITHOUT LIFTING THE GRATE COVER.

4. The filter material covering the inlet can be any material that will prevent the sediment and other foreign matter from entering the

storm drain system.

Reinforced Silt Fence



Definition

A temporary barrier of Geotextile Class "F" over wire reinforcement used to intercept sediment laden runoff from small drainage areas.

Purpose

The purpose of silt fence is to reduce runoff where velocity and allow the deposition of transported sediment to occur. Limits imposed by ultraviolet light on the stability of the fabric will dictate the maximum period that the silt fence may be used.

1. Silt fence provides a barrier that can collect and hold debris and soil, preventing the material from entering critical areas, streams, streets, etc.
2. Silt fence can be used where the installation of a dike would destroy sensitive areas; woods, wetlands, etc.

Conditions where the Practice Applies

Silt Fence is limited to intercepting sheet flow runoff from limited distances according to slope. It provides filtering and velocity dissipation to promote gravity settling of sediment.

Design Criteria

Steel posts must be used. Silt fence should be placed as close to the contour as possible. No section of silt fence should exceed a grade of 5 percent for a distance more than 50 feet. Where ends of the geotextile fabric come together, the ends shall be overlapped, folded, and stapled to prevent sediment bypass. The length of the flow contributing to silt fence shall conform to the following limitations.

Slope (%)	Slope Steepness	Slope Length (FL) (Maximum)	Silt Fence Length (FL) (Maximum)
0-10	0-10:1	Unlimited	Unlimited
10-20	10:1-5:1	200	1,500
20-23	5:1-3:1	100	1,000
23-50	3:1-2:1	100	500
50 +	2:1 +	50	250

3

Erosion Control Notes

1. All perimeter erosion and sediment control measures shall be installed prior to the execution of any grading work and maintained by the grading contractor for the duration of the grading project. Failure to install and maintain erosion control is a violation of State Law and subject to fine.

2. The appropriate erosion control devise(s) shall be installed prior to the inception of any land disturbing activity and shall be properly maintained for construction activities.

3. All Erosion Control devices and their installation shall meet the standards prescribed in the current guidelines for storm water management for construction activities.

4. Sediment collected behind the sediment filters and silt fences shall be removed when sediment reaches on third the height of the barrier.

5. **Inspection of erosion and sediment control and other protective measures are required once every 7 days from July 1st to October 31st and once every 14 days from November 1st to June 30th and after a precipitation event of ¼ inch or greater until the site is considered stabilized by the City. Inspection reports are to be kept by the person or entity authorized to direct construction activities on the site**

6. Construction Site Entrance: The contractor shall construct as a minimum one stabilized construction entrance at the location shown on the plans. If additional ingress and egress to the construction site is required, the contractor shall coordinate with the construction manager the location of these additional stabilized construction entrances. Usage of non-stabilized for ingress and egress will not be permitted. The stabilized entrances shall be maintained in a condition which will prevent tracking or flowing of sediment onto public right-of-way and paved driving lanes. This may require periodic top dressing with additional stone as conditions warrant. Repair of the entrances or cleaning of the right-of-way and paved driving lanes that have been soiled shall be performed by the contractor at his own expense satisfactory to the construction manager. When necessary, vehicle wheels and tires shall be cleaned to remove sediment prior to entering onto public right-of-way and public streets. When washing is required, it shall be done on an area stabilized with crushed stone.

7. The contractor shall at his own expense, periodically water the site to control dust.

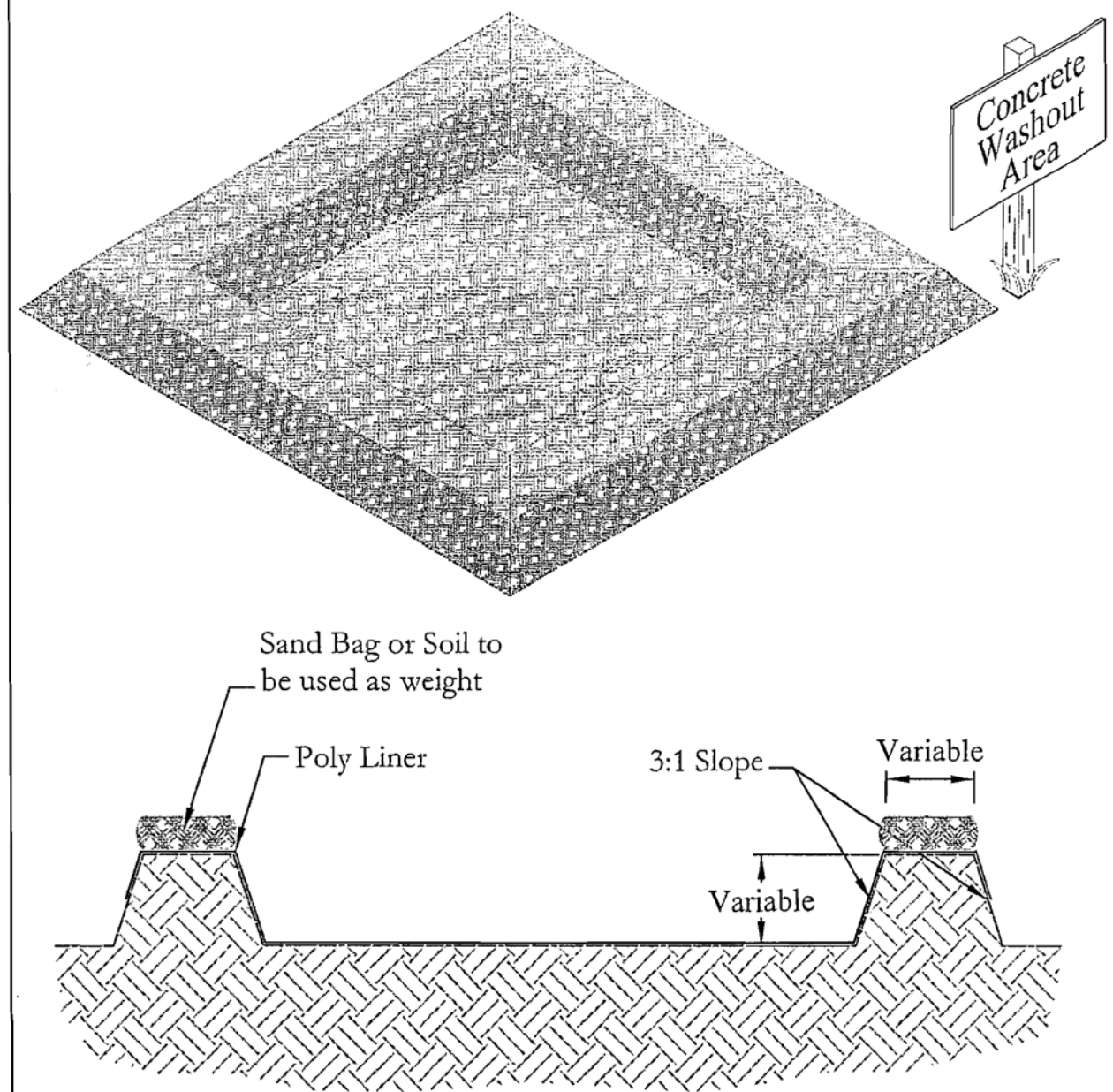
8. Sedimentation and erosion control measures shall be removed following construction or upon permanent stabilization of the disturbed and graded areas, whichever occurs last.

9. All disturbed areas that are not to be paved shall be re-seeded unless noted otherwise.

10. The contractor shall deep the site clean at all times and control dust resulting from the earthwork operation. The contractor shall not track mud onto the public streets.

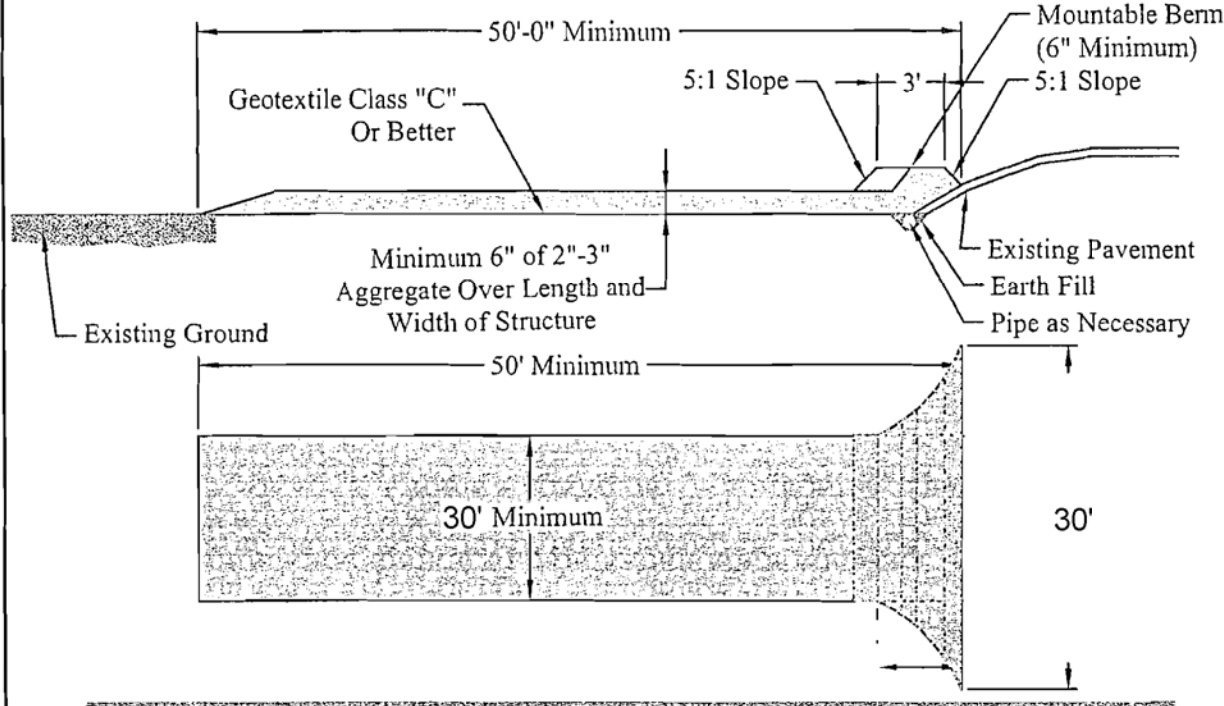
Concrete Washout Area

For use in High Water Table Areas



51

Stabilized Construction Entrance



Definition

A stabilized layer of aggregate that is underlain with Geotextile Class "C" (See Standards for Geotextile). Stabilized entrances are located at any point where traffic enters or leaves a construction site.

Purpose

The purpose of the stabilized construction entrance is to reduce tracking of sediment onto streets or public rights-of-way and provide a stable area for entrance or exit from the construction site.

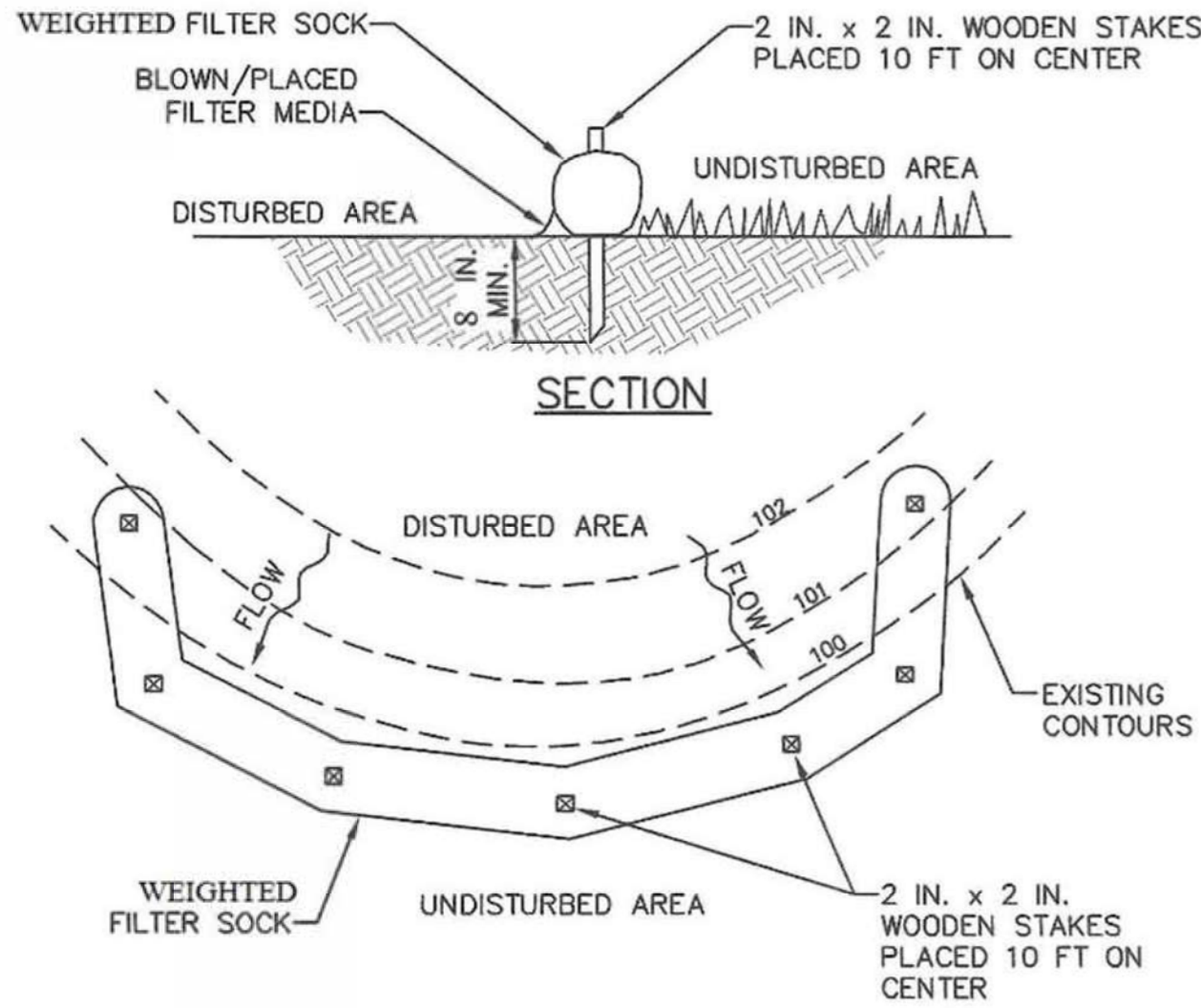
Conditions where the Practice Applies

1. Stabilized construction entrances shall be located at points of construction ingress and egress.
2. For single family residences, the entrance should be located at the permanent driveway.
3. Stabilized construction entrances should not be used on existing pavement.

Design Criteria

1. Length - Minimum of 50'-0"
2. Width - Minimum of 30'-0", should be flared at the existing road to provide a turning radius.
3. Geotextile Class "C" shall be placed over the existing ground prior to placing stone. The Plan approval authority may not require geotextile fabric for single family residence.
4. Stone-crushed aggregate 2"-3" (See Standards for Geotextile and Rock). Recycled concrete equivalent may be used also. The rock should be placed at least 6" deep over the length and width of the entrance.
5. Surface Water - All the surface water flowing to or diverted toward construction entrances shall be piped under the entrance to maintain positive drainage. Pipe installed under the construction entrance shall be protected with a mountable berm. The pipe shall be sized according to the drainage, with the minimum diameter being 6".
6. Location - A stabilized construction entrance shall be located at every point where construction traffic enter of leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

10



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PROJECT TITLE

ALBUQUERQUE, BERNALILLO COUNTY, NM

CITY, COUNTY, STATE

02/20/2019

DATE

C. DURKIN

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