

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL NEW MEXICO ONE CALL (811) AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

A CROSS LOT PRIVATE DRAINAGE EASEMENT HAS BEEN DEDICATED ON LOT 9-A-1 BY PLAT (DOCUMENT NO. 2017055412) FOR THE BENEFIT OF LOT 9-A-2 TO BE MAINTAINED BY THE OWNER OF LOT 9-A-1.

Pre-Developed Drainage Calculations												
This table is based on the COA DPM Section 22.2, Zone-3												
BASIN	Area (SQ. FT.)	Area (AC.)	Land Treatment Percentages				Q(100) (cfs/ac.)	Q(100) (CFS)	WTE (inches)	V(100) <sub>360</sub> (CF)	V(100) <sub>1440</sub> (CF)	V(100) <sub>1080</sub> (CF)
A-1	10016	0.23	0.0%	0.0%	8.0%	92.0%	4.89	1.13	2.27	1898	2206	3127
A-2	46761	1.07	0.0%	0.0%	36.0%	64.0%	4.45	4.78	1.97	7695	8693	11686
B	66012	1.52	0.0%	0.0%	22.0%	78.0%	4.67	7.08	2.12	11687	13404	18553
C	1429	0.03	0.0%	0.0%	44.0%	56.0%	4.33	0.14	1.89	225	252	332
TOTAL	124218	2.85						13.13		21506	24554	33697

Post-Developed Drainage Calculations												
Ultimate Development Conditions Basin Data Table												
This table is based on the COA DPM Section 22.2, Zone-3												
BASIN	Area (SQ. FT.)	Area (AC.)	Land Treatment Percentages				Q(100) (cfs/ac.)	Q(100) (CFS)	WTE (inches)	V(100) <sub>360</sub> (CF)	V(100) <sub>1440</sub> (CF)	V(100) <sub>1080</sub> (CF)
A-1	10016	0.23	0.0%	0.0%	47.0%	53.0%	4.28	0.98	1.86	1550	1727	2258
A-2	46761	1.07	0.0%	0.0%	41.0%	59.0%	4.38	4.70	1.92	7487	8406	11165
B	66012	1.52	0.0%	0.0%	27.0%	73.0%	4.50	6.97	2.07	11393	12999	17818
C	1429	0.03	0.0%	0.0%	67.0%	33.0%	3.97	0.13	1.64	196	211	259
TOTAL	124218	2.85						12.78		20626	23344	31500

#### DRAINAGE MANAGEMENT PLAN

##### INTRODUCTION

The purpose of this submittal is to provide a final drainage management plan for the Redevelopment of Lot 9-A-2, Block 10, North Albuquerque Acres, Tr 2, Unit 3. The property address is 7301 Paseo Del Norte NE per the Vicinity Map this sheet. The site is generally located on Paseo Del Norte NE between Louisiana Blvd NE and Wyoming Blvd NE and contains approximately 0.73 acres. The site is located in COA Hydrologic Zone 3.

##### EXISTING HYDROLOGIC CONDITIONS

The currently site consists of an overflow asphalt parking lot serving the New Covenant Church site to the west. This parking lot will be demolished in order to construct the new Weeks building, parking lot, and landscape areas. There are 3 Drainage Basins on site.

Basin A (A-1 and A-2) currently flows from east to west and onto the New Covenant Church site to the west (Lot 7-A-1). These flows traverse the church parking lot west and then north into Holly Ave. Per the Calculations table this sheet, the total existing flow discharging from the site and onto the church site is 5.91 cfs (9,593 CF) during the 100-Yr, 6-Hr Storm Event.

Basin B currently drains from southeast to northwest and into a very small pond located at the northwest corner of the site. The pond overflows into Holly Ave, north across Holly, and then west along Holly Ave in an eastern swale which ultimately drains to a local pond and then north onto the La Cueva High School property. Per the Calculations table this sheet, the total existing flow discharging from the site and onto Holly Ave is 7.08 cfs (11,687 CF) during the 100-Yr, 6-Hr Storm Event.

Basin C is a very small area draining directly onto Holly Ave. Per the Calculations table this sheet, the total existing flow discharging from Basin C is 0.14 cfs (225 CF) during the 100-Yr, 6-Hr Storm Event.

##### PROPOSED HYDROLOGIC CONDITIONS

Basin A (A-1 and A-2) will continue to flow from east to west and onto the New Covenant Church site to the west (Lot 7-A-1). These flows traverse the church parking lot west and then north into Holly Ave. Per the Calculations table this sheet, the total proposed flow discharging from the site and onto the church site is 5.68 cfs (9,037 CF) during the 100-Yr, 6-Hr Storm Event. This is a reduction of 0.23 cfs (556 CF). In addition, we are proposing a water quality pond at the southwest corner of the new Weeks building that will capture and treat 1,271 CF.

Basin B will continue to drain from southeast to northwest and into a new retention / water quality pond located at the northwest corner of the site. We are providing a retention pond that fully captures the 100-Yr, 6-Hr storm in order to minimize the impact of our site to an existing erosion problem on private property on the north side of Holly Ave. Other than the minor flows from Basin C, there will be a zero contribution from both Lot 9-A-1 and Lot 9-A-2 to this erosion problem. The total reduction of flows to the north side of Holly from our site is 7.08 cfs (11,687 CF).

Basin C is a very small area draining directly onto Holly Ave. Per the Calculations table this sheet, the total proposed flow discharging from Basin C is 0.13 cfs (196 CF) during the 100-Yr, 6-Hr Storm Event. This is a reduction of 0.01 cfs (29 CF). A Water Quality Pond is not being provided for this Basin.

##### CONCLUSION

This drainage management plan provides for grading and drainage elements which reduce the impact to downstream systems; are capable of safely passing the 100 year storm, do not burden downstream systems, and meet city requirements. With this submittal, we are requesting approval of the Grading Permit and Building Permit.

##### FIRST FLUSH CALCULATIONS

###### BASIN A-1

EXISTING SITE CONDITIONS  
PERVIOUS AREA: 789 SF  
IMPERVIOUS AREA: 9,217 SF  
TOTAL AREA: 10,016 SF  
% IMPERVIOUS = 92%

PROPOSED SITE CONDITIONS  
PERVIOUS AREA: 4,710 SF  
IMPERVIOUS AREA: 5,306 SF  
TOTAL AREA: 10,016 SF  
% IMPERVIOUS = 53%

FIRST FLUSH CALCULATION  
TOTAL IMPERVIOUS AREA = 5,306 SF  
FIRST FLUSH =  $5,306 \cdot 0.26^2 / 12 = 115 \text{ CF}$   
PROVIDED = 1,271 CF

###### BASIN B

EXISTING SITE CONDITIONS  
PERVIOUS AREA: 14,237 SF  
IMPERVIOUS AREA: 51,775 SF  
TOTAL AREA: 66,012 SF  
% IMPERVIOUS = 78%

PROPOSED SITE CONDITIONS  
PERVIOUS AREA: 17,592 SF  
IMPERVIOUS AREA: 48,420 SF  
TOTAL AREA: 66,012 SF  
% IMPERVIOUS = 73%

FIRST FLUSH CALCULATION  
TOTAL IMPERVIOUS AREA = 48,420 SF  
FIRST FLUSH =  $48,420 \cdot 0.26^2 / 12 = 1,049 \text{ CF}$   
PROVIDED = 13,468 CF

###### BASIN A-2

EXISTING SITE CONDITIONS  
PERVIOUS AREA: 16,836 SF  
IMPERVIOUS AREA: 29,925 SF  
TOTAL AREA: 46,761 SF  
% IMPERVIOUS = 64%

PROPOSED SITE CONDITIONS  
PERVIOUS AREA: 19,333 SF  
IMPERVIOUS AREA: 27,428 SF  
TOTAL AREA: 46,761 SF  
% IMPERVIOUS = 59%

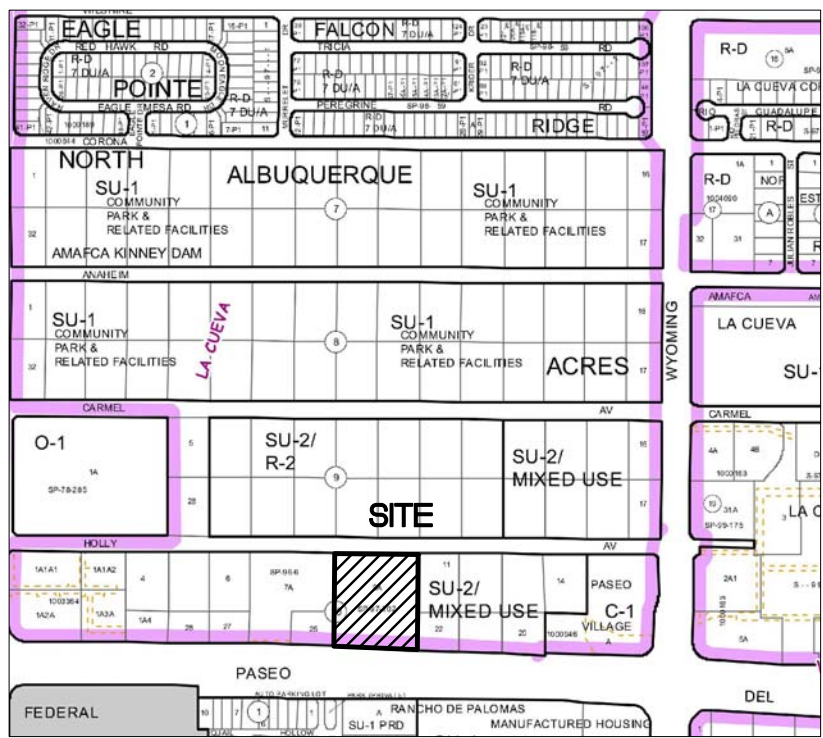
FIRST FLUSH CALCULATION  
TOTAL IMPERVIOUS AREA = 27,428 SF  
FIRST FLUSH = N/A SINCE THIS AREA IS EXISTING

###### BASIN C

EXISTING SITE CONDITIONS  
PERVIOUS AREA: 601 SF  
IMPERVIOUS AREA: 828 SF  
TOTAL AREA: 1,429 SF  
% IMPERVIOUS = 58%

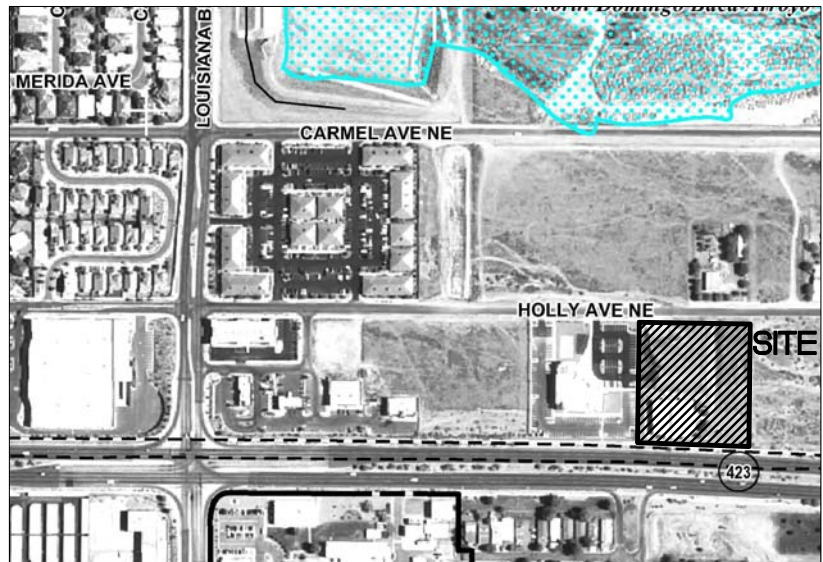
PROPOSED SITE CONDITIONS  
PERVIOUS AREA: 952 SF  
IMPERVIOUS AREA: 477 SF  
TOTAL AREA: 1,429 SF  
% IMPERVIOUS = 33%

FIRST FLUSH CALCULATION  
TOTAL IMPERVIOUS AREA = 477 SF  
FIRST FLUSH = N/A SINCE IMPERVIOUS AREA IS REDUCED



#### VICINITY MAP - Zone Map C-19-Z

Legal Description: Lot 9-A-2, Block 10, NORTH ALBUQUERQUE ACRES, TR 2, UNIT 3



#### FIRM MAP 35001C0109H

Per FIRM Map 35001C0109H, dated August 16, 2012, the site is not located in the Floodplain and determined to be outside the 0.2% chance Annual Floodplain.

LEGEND

EROSION AND SEDIMENT CONTROL PLAN

PROJECT PERIMETER & DISTURBED AREA

PERIMETER BMP- SILT FABRIC WITH MULCH SOCK BASE

MULCH SOCKS

FLOW DIRECTION

STAGING AREA

STABILIZED CONSTRUCTION ENTRANCE

TRASH RECEPTACLE

CHEMICAL TOILET

CONCRETE WASHOUT

RETENTION POND

RIP RAP

CHECK DAM

DROP INLET PROTECTION

OUTFALL

POSTING SIGN

PRESERVED VEGETATION

THIS PLAN SHALL BE USED FOR EROSION AND SEDIMENT CONTROL PURPOSES DURING CONSTRUCTION ONLY. THIS PLAN IS NOT TO BE USED FOR FLOOD CONTROL AND OR GRADING ASPECTS OF THIS SITE. THIS PLAN SHOWS EXCERPTS OF GRADING PLANS PREPARED BY OTHERS. UTILIZATION OF APPROVED GRADING PLANS PREPARED BY OTHERS IS REQUIRED TO SHOW THE INTERIM CONSTRUCTION MEASURES TO ADDRESS THE EROSION AND SEDIMENT CONTROL OF THE SITE PER THE CITY OF ALBUQUERQUE ORDINANCE.



8/28/18

Engineer Stamp

RECEIVING WATERS: ON SITE POND

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

GPS LOCATION: 35.1748, -106.5634

WEEKS RESTAURANT PASEO DEL NORTE

PROJECT TITLE

ALBUQUERQUE, BERNALILLO COUNTY, NM

CITY, COUNTY, STATE

08/27/2018

DATE

C. DURKIN

DRAWN BY



SITE WILL HAVE A TEMPORARY CONSTRUCTION FENCE WITH SILT FABRIC FOR DUST CONTROL AND MULCH SOCKS FOR EROSION CONTROL. MULCH SOCKS TO BE USED WHERE SILT FABRIC CANNOT BE TRENCHED INTO THE GROUND.



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.**

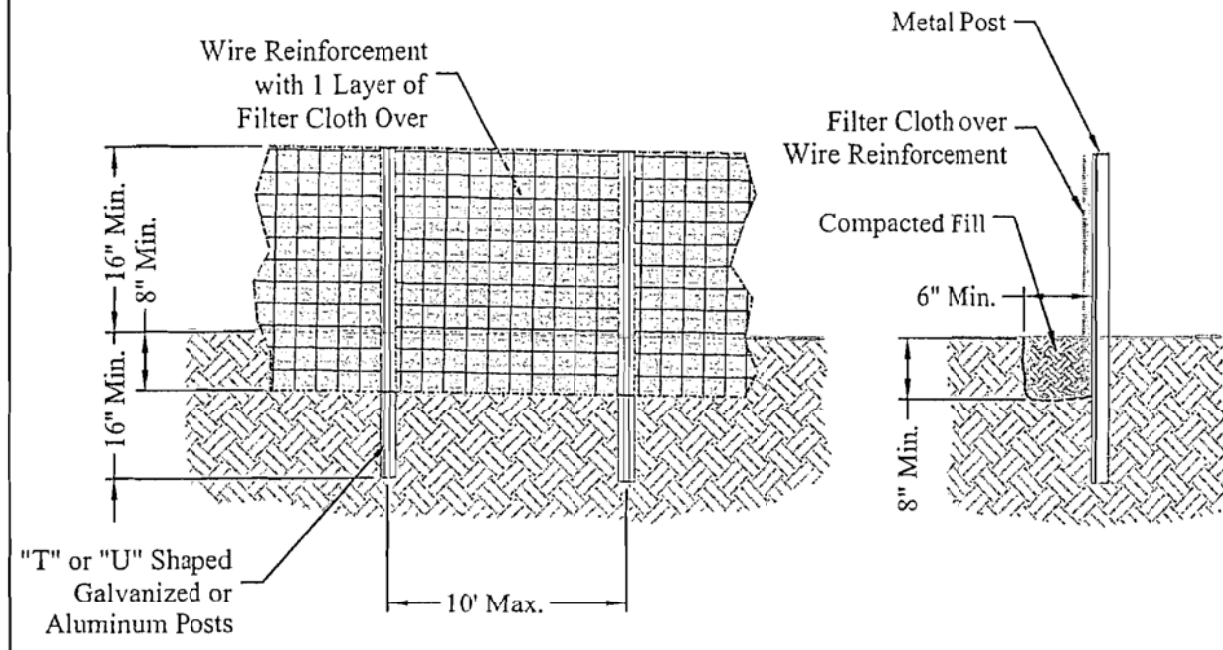


**3. Position the mat. Place Inlet Filter on grate with the net side down, flush to the back edge and extending beyond the grate opening on the front and both sides. The zip ties attach Inlet Filter to the inlet grate cover WITHOUT LIFTING THE GRATE COVER.**

**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 (Ft.) (Maximum)	Silt Fence Length (Ft.) (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
33-50	3:1-2:1	100	500
50 +	2:1 +	50	250

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### 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.

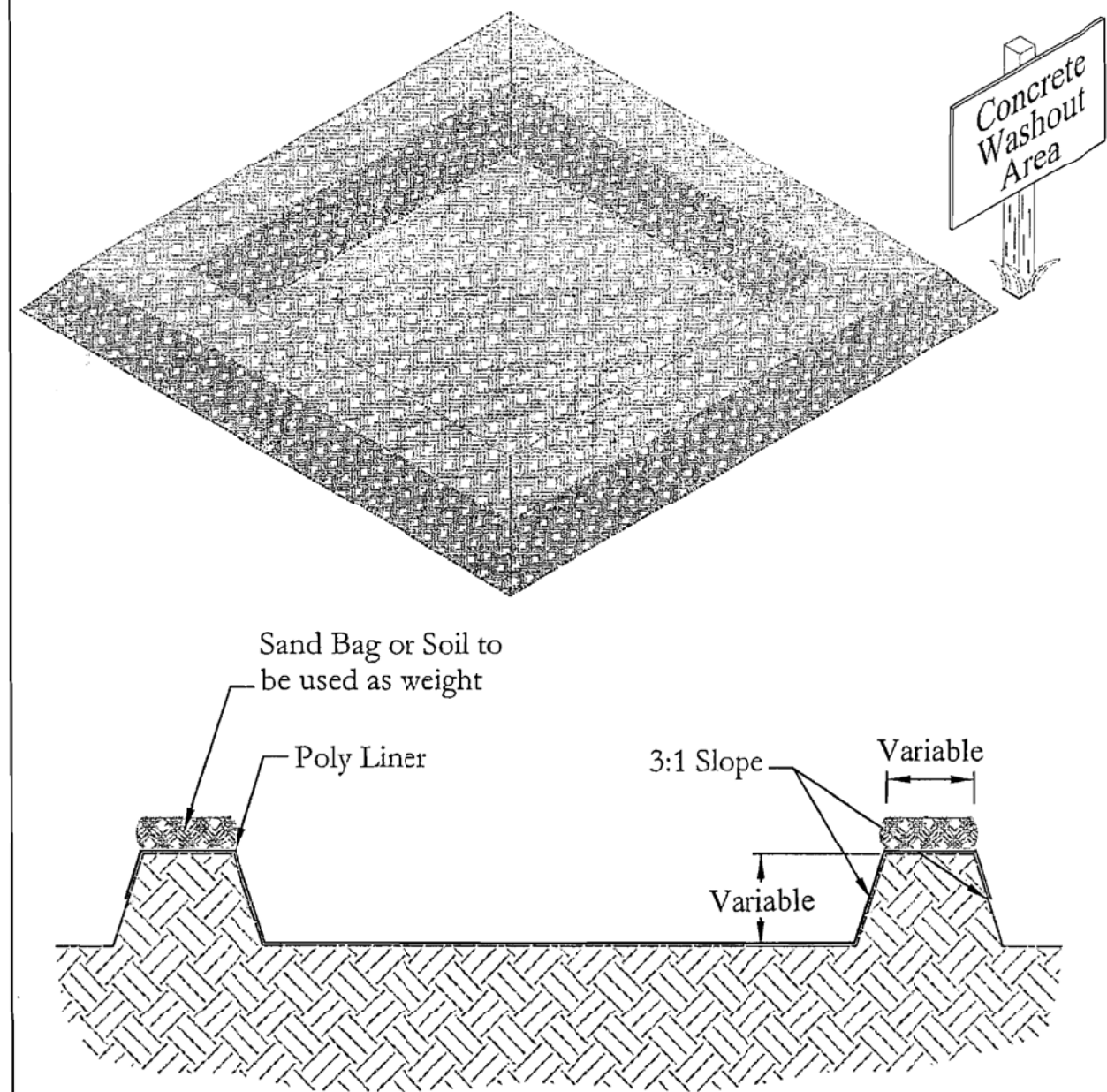
8. Sedimentation and erosion control measures shall be removed following construction or upon permanent stabilization of the disturbed and graded areas, whichever occurs last.

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.

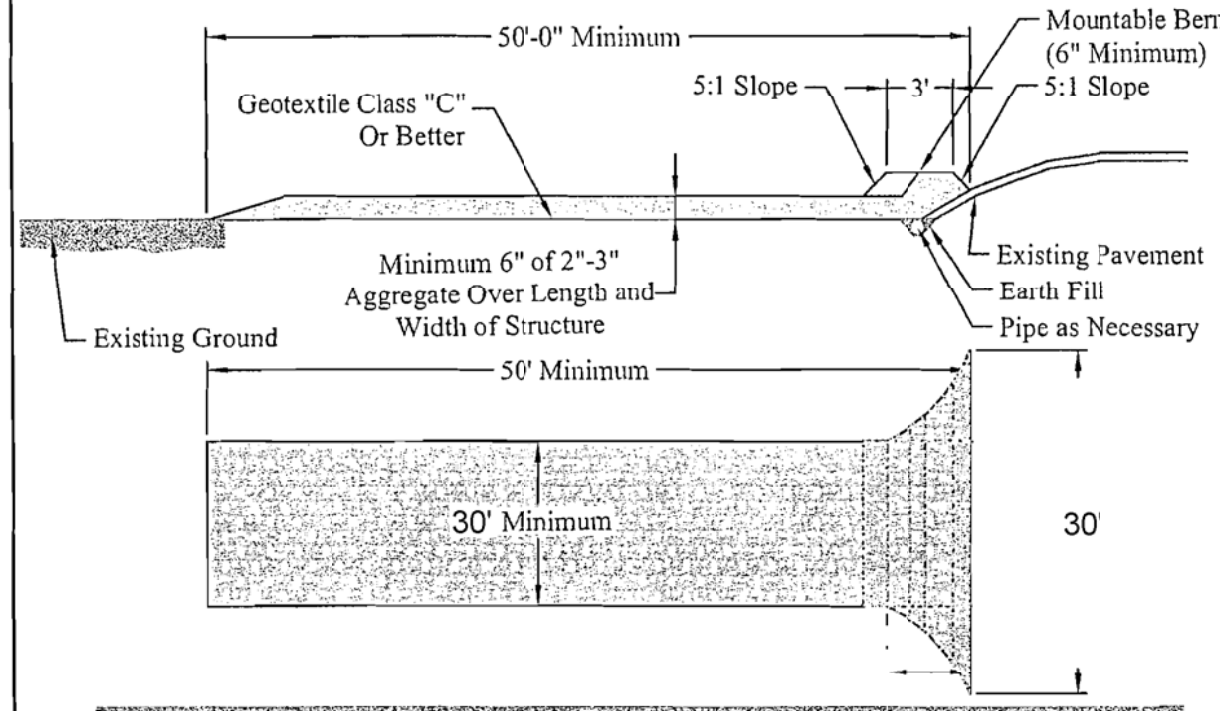
## Concrete Washout Area

For use in High Water Table Areas



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## 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.

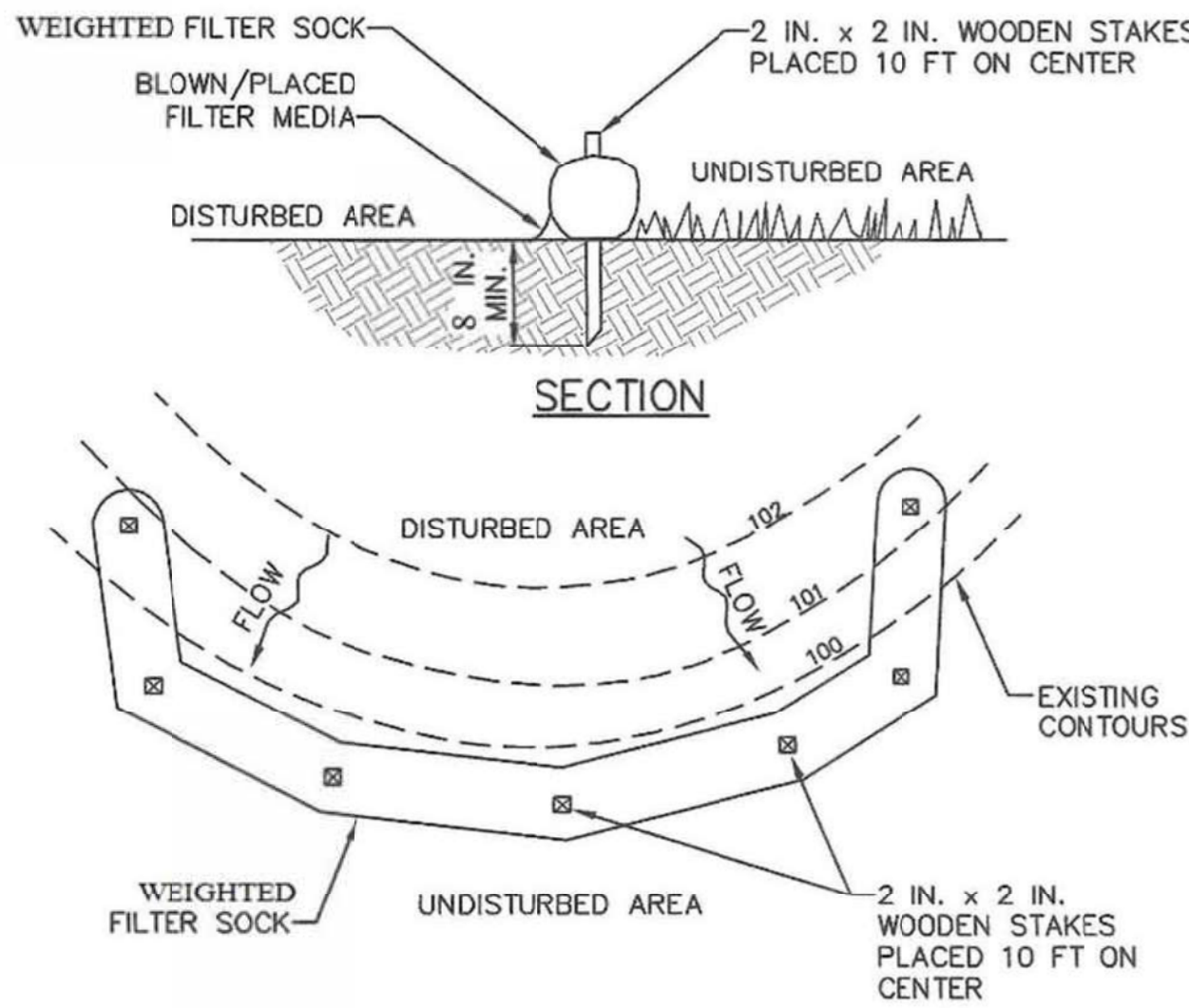
### Conditions where the Practice Applies

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.

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