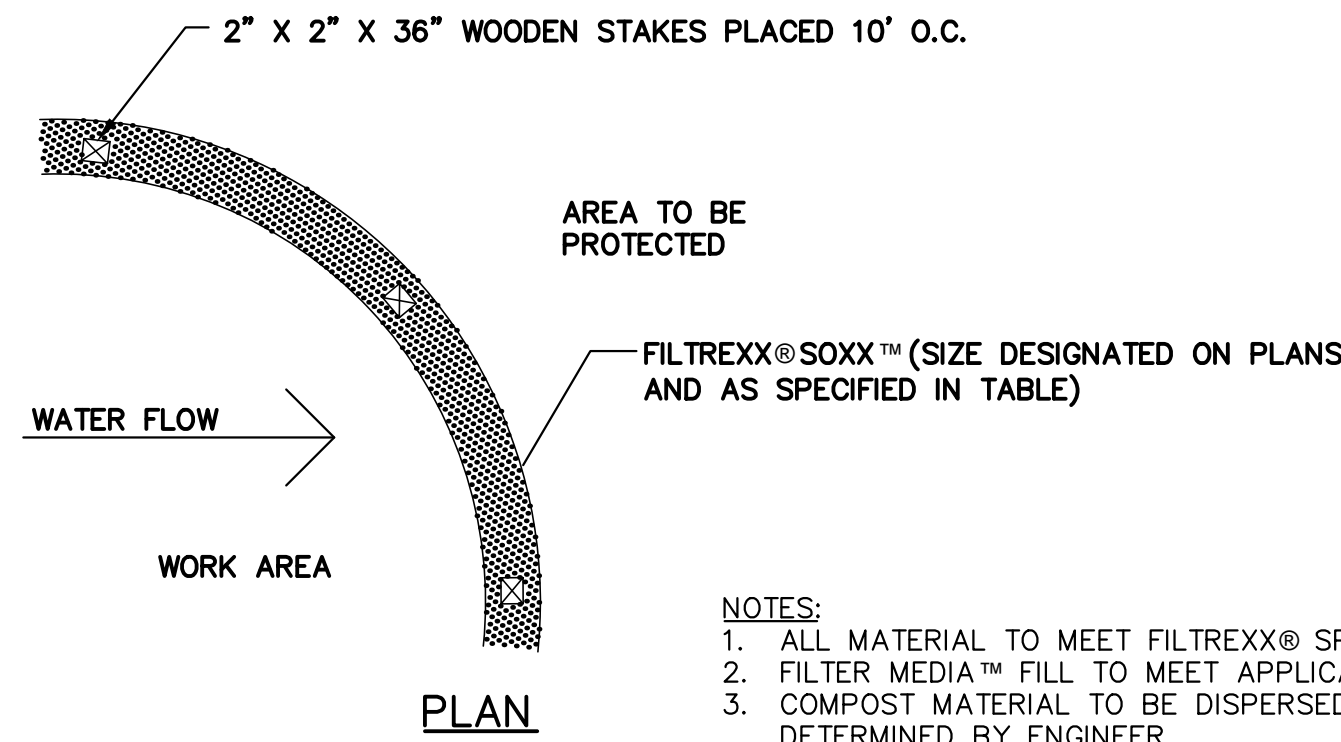
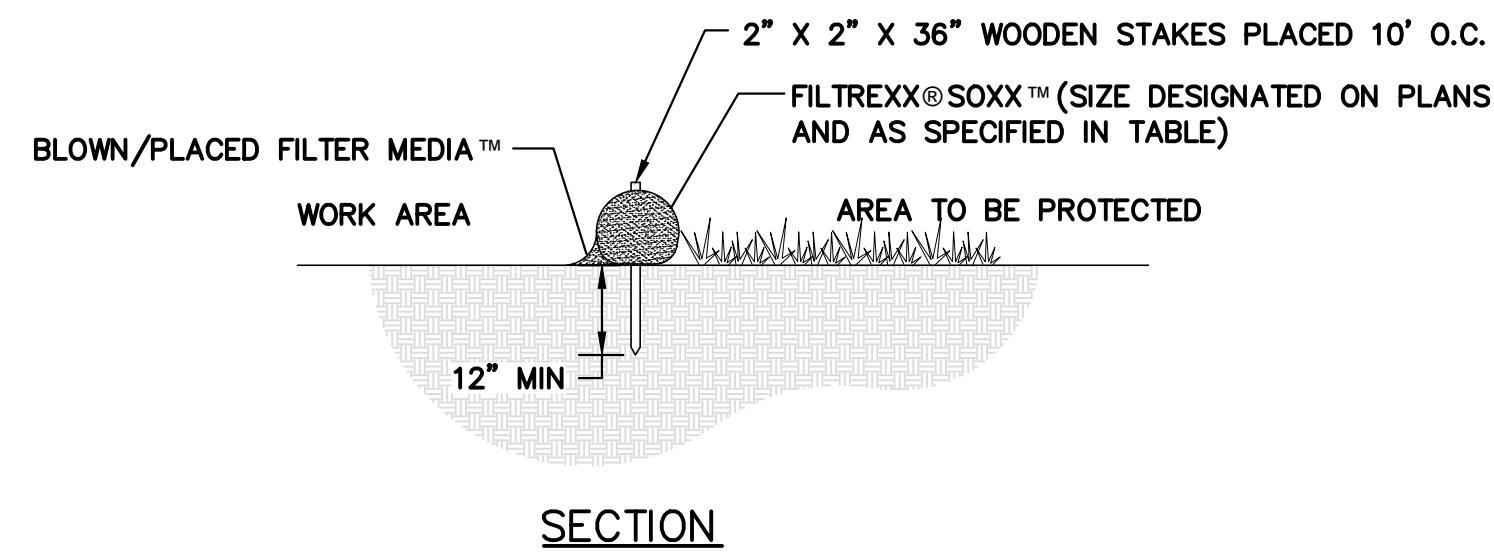


Wednesday, January 3, 2018 4:58:34 PM

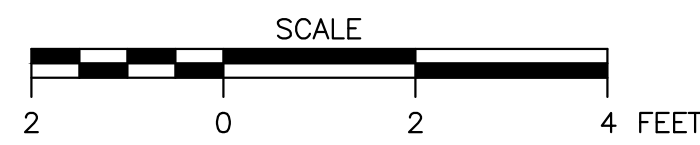
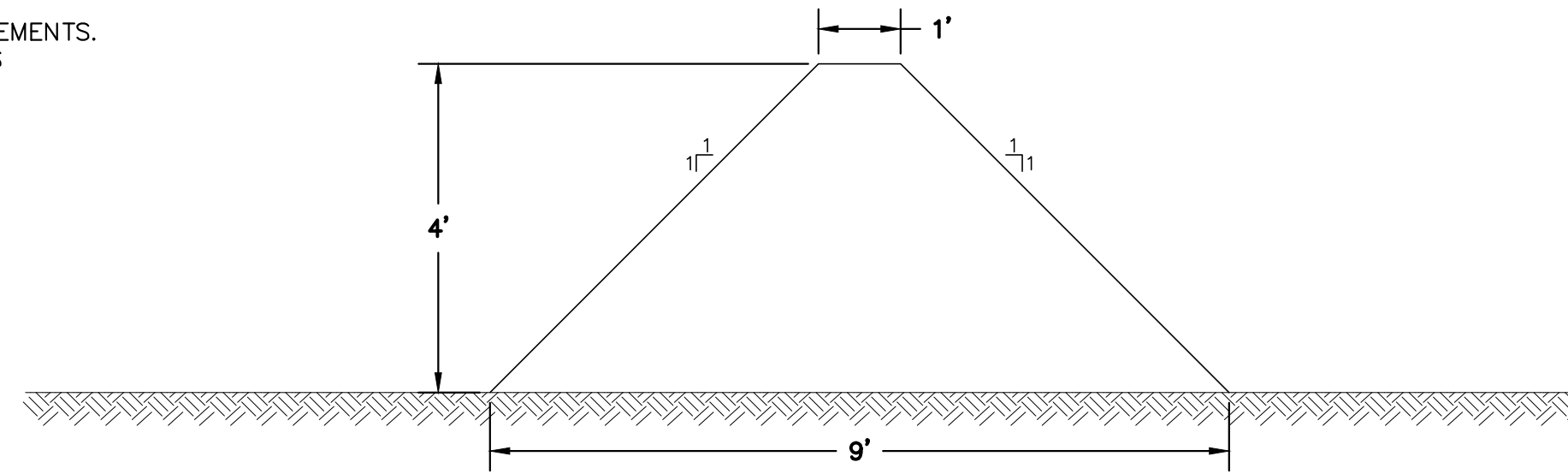


① **FILTREXX® SEDIMENT CONTROL**  
NTS

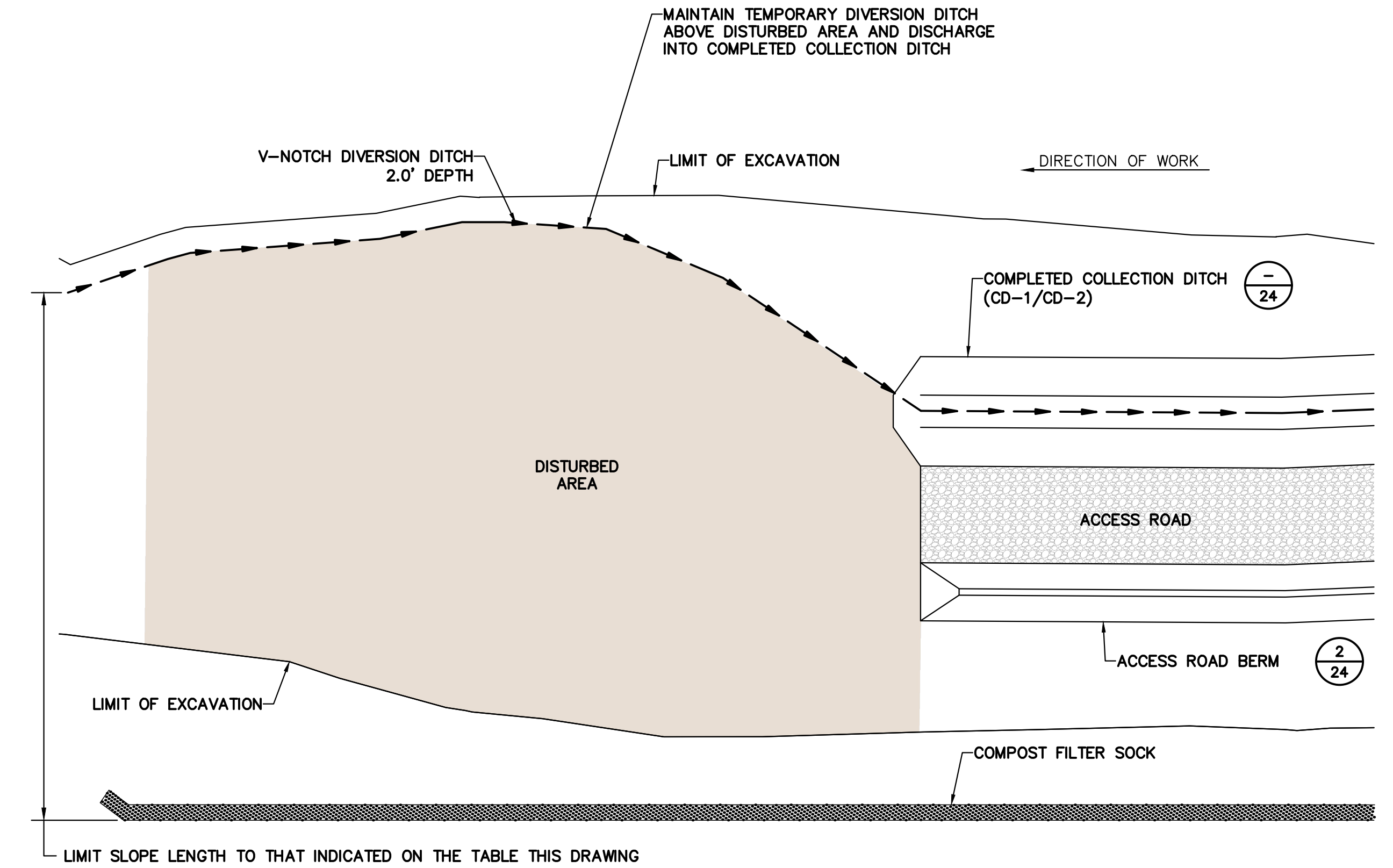
SLOPE PERCENT	MAXIMUM SLOPE LENGTH ABOVE SEDIMENT CONTROL IN FEET (METERS)*				
	8 in (200 mm) SEDIMENT CONTROL	12 in (300 mm) SEDIMENT CONTROL	18 in (450 mm) SEDIMENT CONTROL	24 in (600mm) SEDIMENT CONTROL	32 in (800mm) SEDIMENT CONTROL
	6.5 in (160 mm)**	9.5 in (240 mm)**	14.5 in (360 mm)**	19 in (480 mm)**	26 in (650 mm)**
2 (or less)	600 (180)	750 (225)	1000 (300)	1300 (400)	1650 (500)
5	400 (120)	500 (150)	550 (165)	650 (200)	750 (225)
10	200 (60)	250 (75)	300 (90)	400 (120)	500 (150)
15	140 (40)	170 (50)	200 (60)	325 (100)	450 (140)
20	100 (30)	125 (38)	140 (42)	260 (80)	400 (120)
25	80 (24)	100 (30)	110 (33)	200 (60)	275 (85)
30	60 (18)	75 (23)	90 (27)	130 (40)	200 (60)
35	60 (18)	75 (23)	80 (24)	115 (35)	150 (45)
40	60 (18)	75 (23)	80 (24)	100 (30)	125 (38)
45	40 (12)	50 (15)	60 (18)	80 (24)	100 (30)
50	40 (12)	50 (15)	55 (17)	65 (20)	75 (23)

\* BASED ON A FAILURE POINT OF 36 IN (0.9 M) SUPER SILT FENCE (WIRE REINFORCED) AT 1000 FT (303 M) OF SLOPE, WATERSHED WIDTH EQUIVALENT TO RECEIVING LENGTH OF SEDIMENT CONTROL DEVICE, 1 IN/24 HR (25 MM/24 HR) RAIN EVENT.

\*\* EFFECTIVE HEIGHT OF SEDIMENT CONTROL AFTER INSTALLATION AND WITH CONSTANT HEAD FROM RUNOFF AS DETERMINED BY OHIO STATE UNIVERSITY.

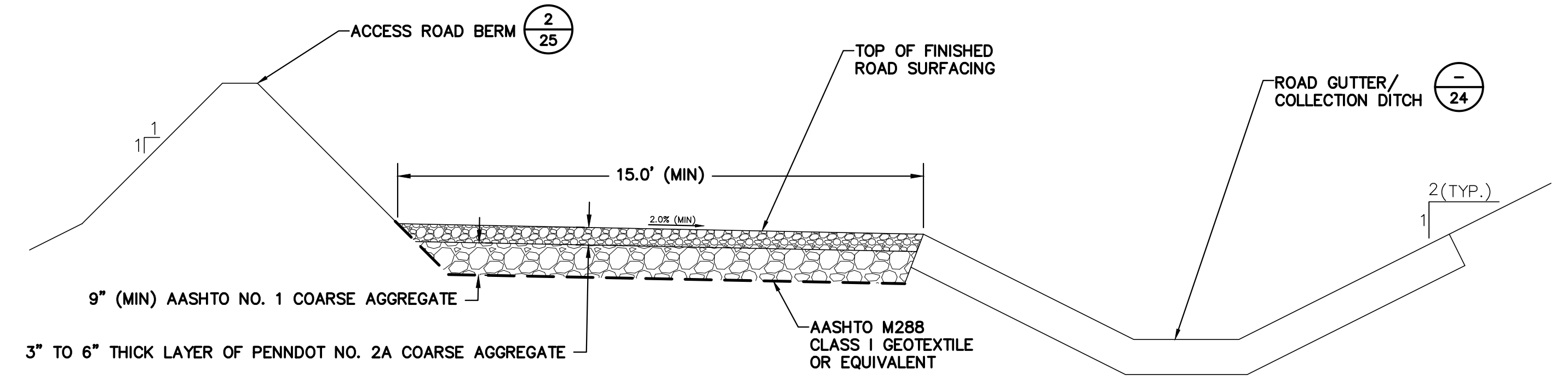
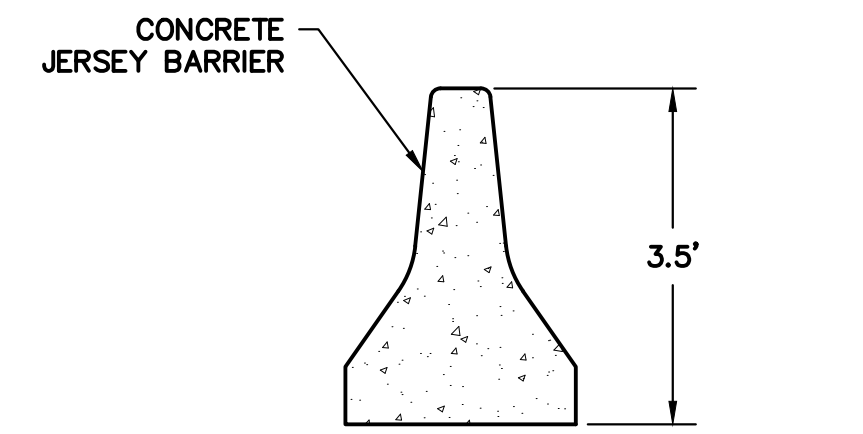
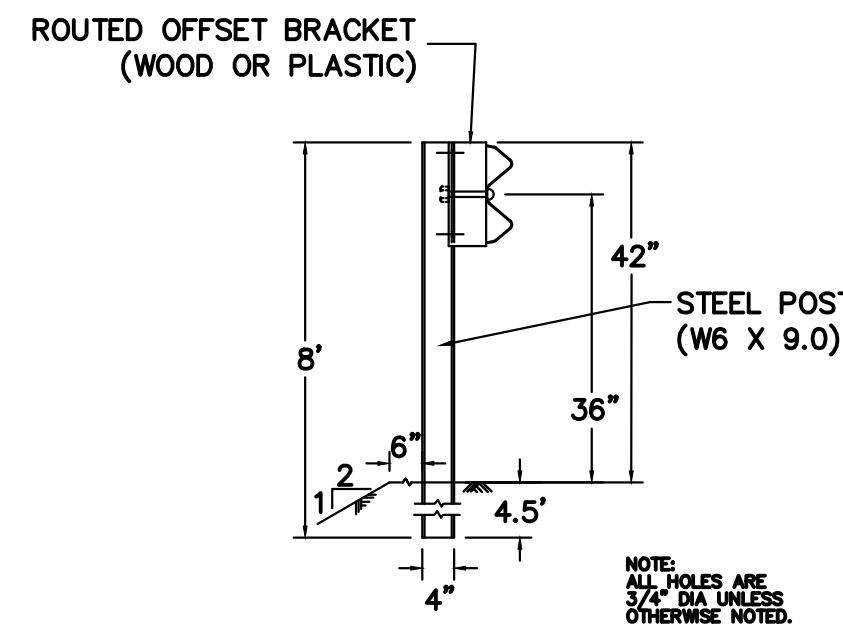
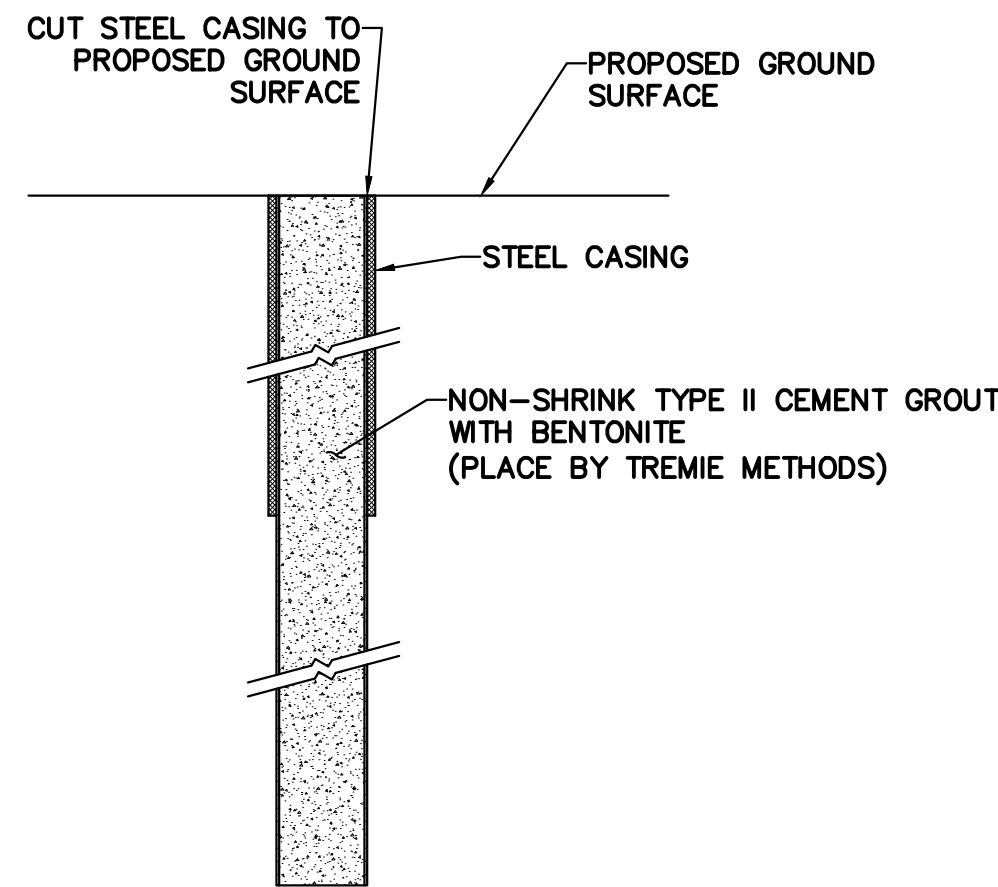


- NOTES:
- BERM HEIGHT MAY BE ADJUSTED BASED UPON EQUIPMENT TO TRAVEL ON ADJACENT ROAD/CORRIDOR. MINIMUM BERM HEIGHT SHALL BE THE MID-AXLE HEIGHT OF THE LARGEST VEHICLE TO TRAVEL THE ROAD/CORRIDOR.



**PHASE 1 SITE DEVELOPMENT INSTALLATION**

- NOTES:
- CONSTRUCTION OF THE ACCESS ROAD, COLLECTION DITCH, AND BERM SHALL START AT THE DOWNSTREAM END AND WORK UPSTREAM.
  - COMPLETE INITIAL TREE CLEARING AS NEEDED TO FACILITATE EQUIPMENT ACCESS FOR FILTER SOCK PLACEMENT.
  - INSTALL COMPOST FILTER SOCK BELOW AREA TO BE DISTURBED.
  - AS WORK PROGRESSES UPSTREAM, PRIOR TO OVERBURDEN SOIL STRIPPING, A V-NOTCH DIVERSION DITCH WITH 2.0' DEPTH SHALL BE INSTALLED UPSLOPE OF THE DISTURBED AREA AND DIRECTED TO THE FINISHED GRADE COLLECTION DITCH TO LIMIT RUNOFF TO THE COMPOST FILTER SOCK.
  - COMPLETE TREE CLEARING AND GRUBBING; STRIP OVERBURDEN SOIL; AND COMPLETE EARTHWORK ACTIVITIES WITHIN LIMITS OF DIVERSION DITCH AND COMPOST FILTER SOCK.



- NOTES:
- ROAD SURFACING SHALL BE IMPLEMENTED AS NEEDED TO STABILIZE THE AREA TO ALLOW FOR VEHICLE ACCESS AND TO PREVENT EROSION. WHERE ROADS ARE ESTABLISHED ON STABLE FOUNDATION AREAS (I.E. ROCK SUBGRADE), ROAD SURFACING IS NOT REQUIRED.
  - THE AGGREGATE TYPE, THICKNESS, AND SIZE MAY BE MODIFIED AT THE OWNER'S DISCRETION PROVIDED THAT THE ROAD SURFACING CAN SERVE ITS INTENDED PURPOSE.

NOTES / REVISIONS		ISSUED FOR	DATE	REV.	REVISION DESCRIPTION	MADE BY	CHKD BY	DATE
4								
3								
2								
1								

SEAL:

ROBERT M. SHUSKO  
REGISTERED PROFESSIONAL ENGINEER  
12-32-17

**D'APPOLONIA**  
701 RODI ROAD, FLOOR 2  
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(412) 856-8440 FAX (412) 856-8532

SKELLY AND LOY  
ENGINEERING/ENVIRONMENTAL CONSULTANTS

PROJECT NUMBER: 152596A  
FILE NAME: ES Details-R0.dwg

SGI

DRAWN BY: AJM  
CHECKED BY: RMS/MDW

DATE: 1/28/2016  
DATE: 12/22/2017

**SPECIALTY GRANULES LLC**  
**CHARMIAN - NORTHERN TRACT QUARRY**

EXHIBIT 12  
DETAILS

SCALE: AS SHOWN  
DRAWING NO. 25  
REV 0

R: 2015\52596 - SGI Disposal Embankment Drawings (Northern Tract) ES Details-R0.dwg