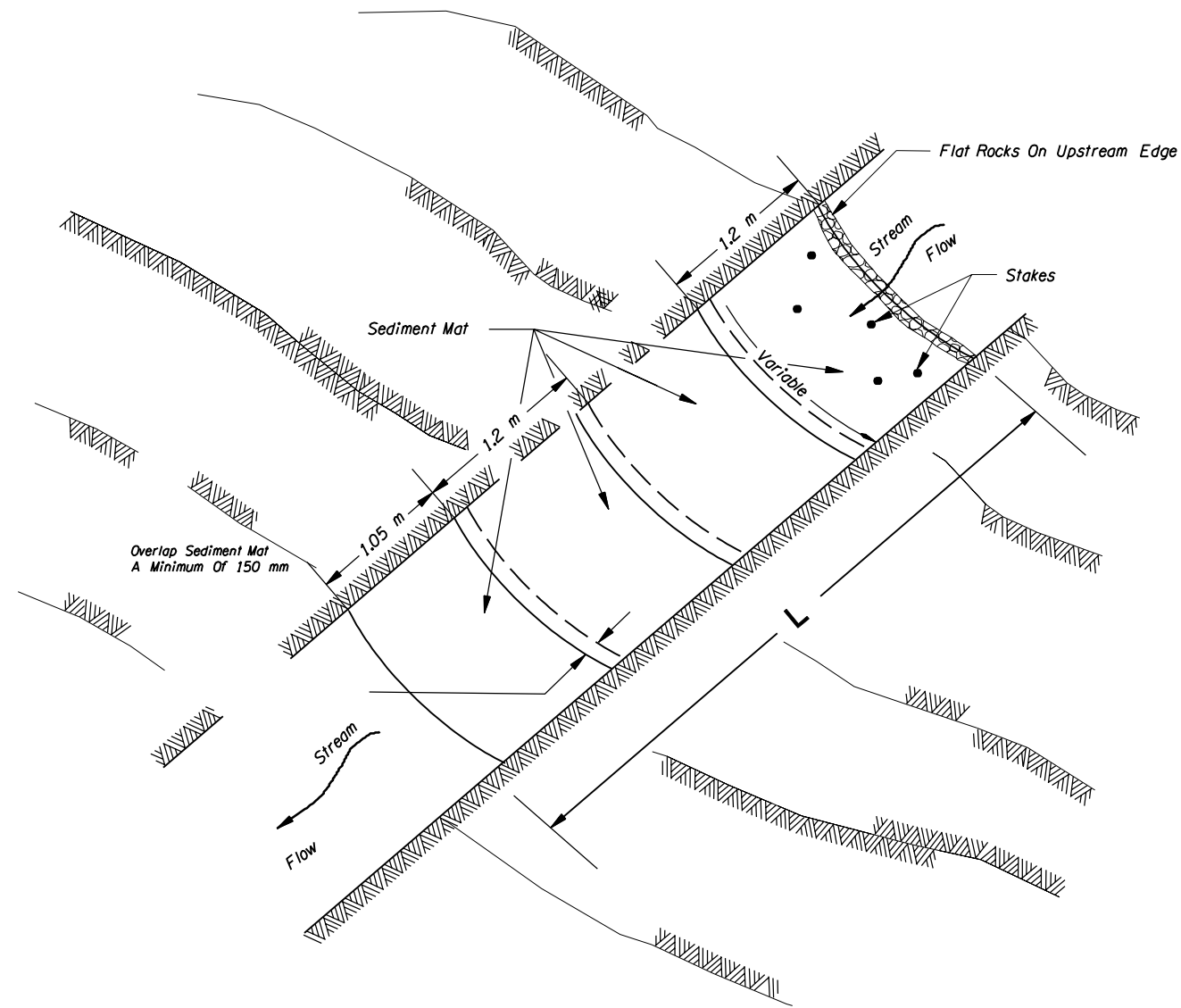


APPENDIX C
Sample Plans



MINIMUM LENGTH OF DOWNSTREAM COVERAGE *(L)

	Water Velocity (Meters Per Second)			
	0.0 - 0.31 mps (0.0 - 1.0 fps)	0.31 - 0.62 mps (1.0 - 2.0 fps)	0.62 - 0.93 mps (2.0 - 3.0 fps)	>0.93 mps (>3.00 fps)
Fines Mostly Sand	1.2 m	2.4 m	3.7 m	4.9 m
Fines Mostly Silt And Clay	2.4 m	4.9 m	7.3 m	9.8 m

* Actual Length Of Downstream Coverage Will Also Depend On Partical Size Distribution Of Sediment Fines And The Amount Of Upstream Disturbance.

NOTES:

1. Securely Stake Upstream Edges And Centers To Streambed With Wooden Or Metal Stakes And Rocks As Needed.
2. Overlap The Trailing Edge Of Upstream Mats Over The Leading Edge Of Downstream Mats By At Least 150 mm, Overlap Sides Of Adjoining Mats A Minimum Of 150 mm.

SEDIMENT MAT

GENERAL NOTES:

The Construction, Adjustment, Maintenance, And Upgrading Of These Erosion Control Measures Is The responsibility Of The Contractor For The Duration Of The Project.

Erosion Control Measures Shown On This Plan Are For Anticipated Site Conditions. Adjust Or Upgrade These Measures For Unexpected Storm Events To Ensure That Sediment And Sediment-Laden Water Does Not Leave The Site.

Develop A Revised Plan Of The Erosion Control Measures Shown As Required By Section 00280, Oregon Standard Specifications For Construction. Implement This Plan For All Clearing And Grading Activities And In Segments Applicable To Each Staging Phase. Construct In Such A Manner So As To Ensure That Sediment And Sediment-Laden Water Does Not Enter The Roadway Or Drainage System, Or Violate Applicable Water Standards.

Install Measures Within The Right Of Way Unless Directed Otherwise.

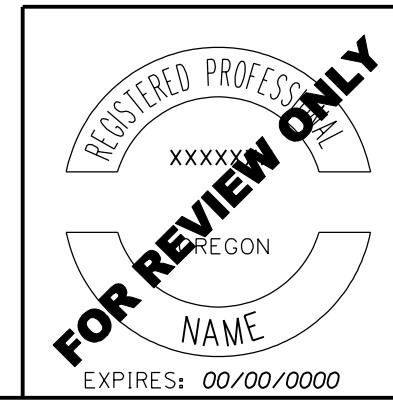
Install Stabilized Construction Entrances At The Beginning Of Construction And Maintain For The Duration Of The Project. Additional Measures May Be Required To Insure That All Paved Areas Are Kept Clean.

Construct Sediment Fence 1.5 Meters (5 Feet) Downslope From The Toe Of Fill Slopes Where Sediment-Laden Water Has A Potential Of Entering Waterways Or Leaving The R/W.

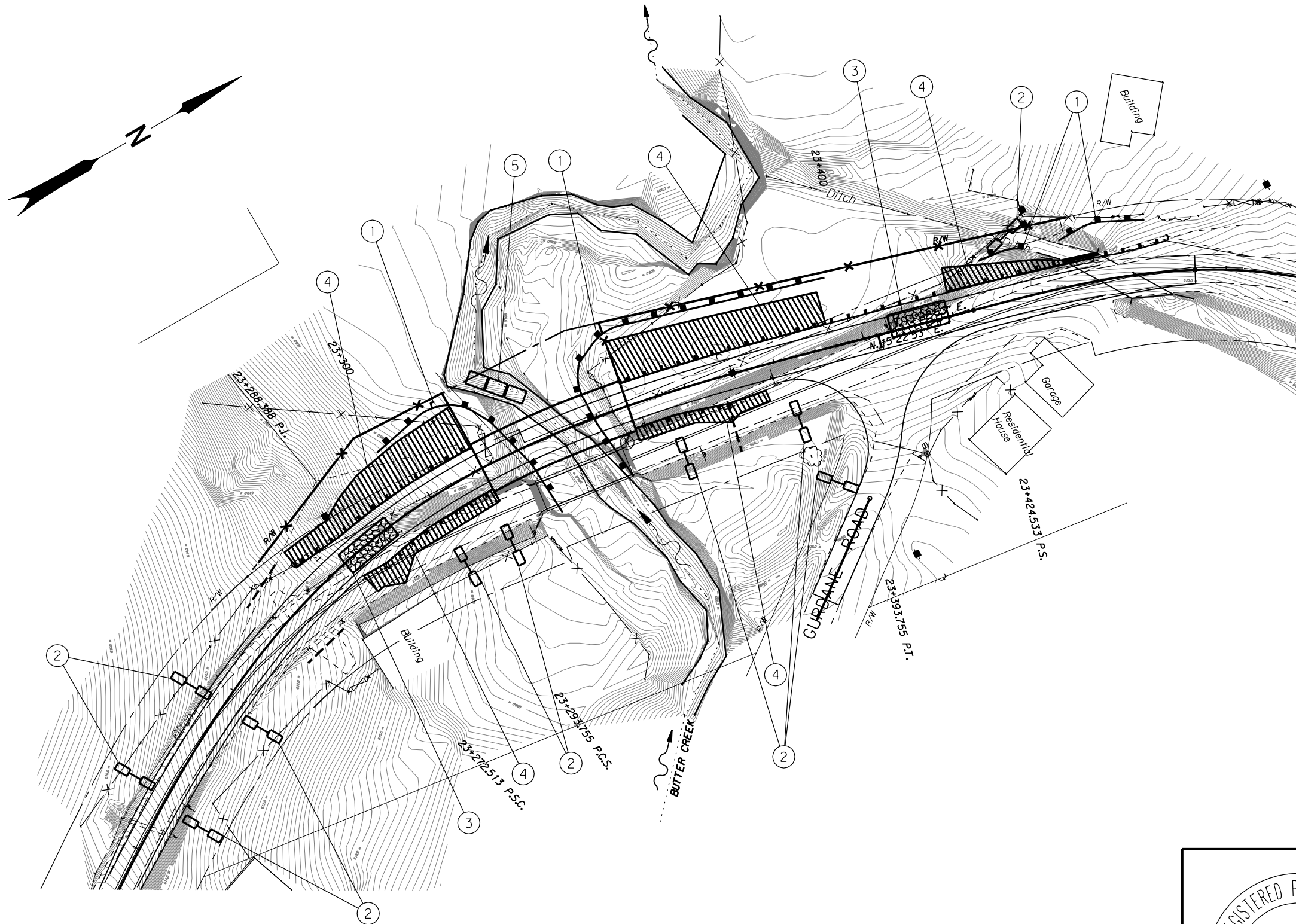
Protect All Inlets During Surface Grinding, Paving, And Earthwork Operations To Prevent Pollutants From Entering Storm Water Systems.

- STANDARD DRAWINGS**
- RD1000 Construction Entrance
 - RD1005 Check Dam
 - RD1010 Inlet Protection Type 1,2,3
 - RD1015 Inlet Protection Type 4
 - RD1020 Inlet Protection Type 5
 - RD1025 Sediment Barrier Type 1
 - RD1030 Sediment Barrier Type 2,4
 - RD1035 Sediment Barrier Type 3
 - RD1040 Sediment Fence Supported/Unsupported
 - RD1045 Temporary Slope Drain
 - RD1050 Temporary Scour Basin
 - RD1055 Matting
 - RD1060 Tire Wash Type 1

Graphic Symbols Are Approximate. Place Erosion Control Measures As Required Or Directed.



OREGON DEPARTMENT OF TRANSPORTATION REGION SECTION NAME	
PROJECT TITLE HIGHWAY NAME COUNTY NAME	
Reviewed By - Name Designed By - Name Drafted By - Name	
EROSION CONTROL DETAILS	SHEET NO. GA-1



- ① Const. Sediment Fence Unsupported (See Drg. No. RD1040)
- ② Const. Check Dam (See Drg. No. RD1005)
- ③ Const. Construction Entrance (See Drg. No. RD1000)
- ④ Install Matting (Erosion Control) (See Drg. No. RD1055)
- ⑤ Install Sediment Mat (For Details, See Sht. GA-1)

LEGEND	
	Sediment Fence, Unsupported
	Check Dam In Ditch Section
	Construction Entrance
	Erosion Control Matting
	Sediment Mat

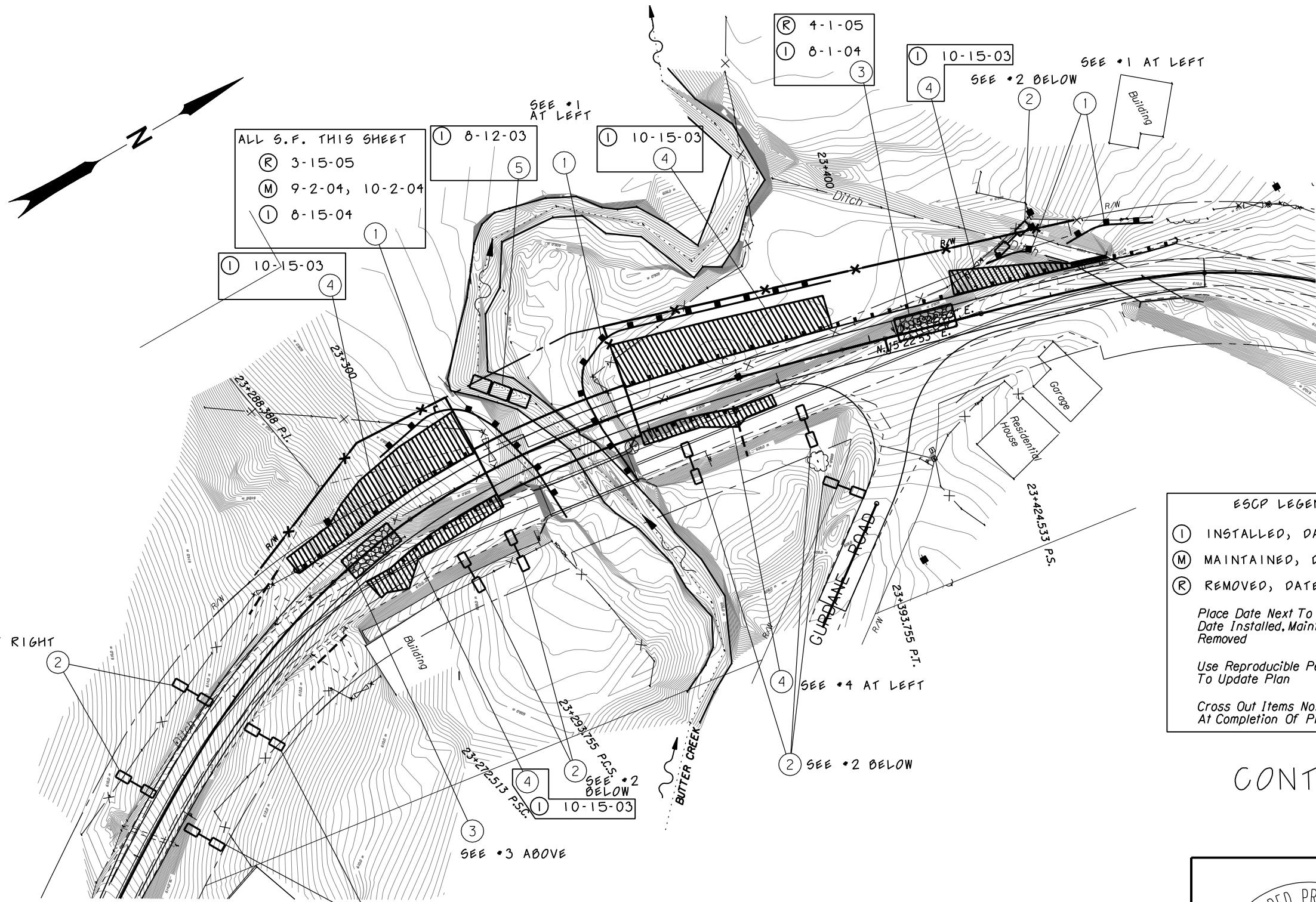
Graphic Symbols Are Approximate. Place Erosion Control Measures As Required Or Directed.

Note: Place Check Dams In Ditch Sections

REGISTERED PROFESSIONAL
XXXXX
REGON
NAME
EXPIRES: 00/00/0000

FOR REVIEW ONLY

OREGON DEPARTMENT OF TRANSPORTATION REGION SECTION NAME	
PROJECT TITLE HIGHWAY NAME COUNTY NAME	
Reviewed By - Name Designed By - Name Drafted By - Name	
EROSION CONTROL PLAN	SHEET NO. GA-2



ALL S.F. THIS SHEET
 (R) 3-15-05
 (M) 9-2-04, 10-2-04
 (I) 8-15-04

(R) 4-1-05
 (I) 8-1-04
 (3)

(I) 10-15-03
 (4)

(I) 8-12-03
 (5)

(I) 10-15-03
 (4)

(I) 10-15-03
 (4)

(4) (2) SEE *2 BELOW
 (I) 10-15-03
 (3) SEE *3 ABOVE

(2) (R) 3-16-05
 (M) 9-4-04, 10-5-04
 (I) 8-20-04

Note: Place Check Dams In Ditch Sections

- ① Const. Sediment Fence Unsupported (See Drg. No. RD1040)
- ② Const. Check Dam (See Drg. No. RD1005)
- ③ Const. Construction Entrance (See Drg. No. RD1000)
- ④ Install Matting (Erosion Control) (See Drg. No. RD1055)
- ⑤ Install Sediment Mat (For Details, See Sht. GA-1)

ESCP LEGEND

- ① INSTALLED, DATE
- (M) MAINTAINED, DATE
- (R) REMOVED, DATE

Place Date Next To Bubble For Date Installed, Maintained, Or Removed

Use Reproducible Pencil Or Pen To Update Plan

Cross Out Items Not Installed At Completion Of Project

LEGEND

- Sediment Fence, Unsupported
- Check Dam In Ditch Section
- Construction Entrance
- Erosion Control Matting
- Sediment Mat

CONTRACTOR'S ESCP

Graphic Symbols Are Approximate. Place Erosion Control Measures As Required Or Directed.

NOTE: THIS ESCP IS REQUIRED TO BE UPDATED REGULARLY, SEE STANDARD SPECIFICATION SECTION 00280.

	OREGON DEPARTMENT OF TRANSPORTATION REGION SECTION NAME	
	PROJECT TITLE HIGHWAY NAME COUNTY NAME	
	Reviewed By - Name Designed By - Name Drafted By - Name	
EROSION CONTROL PLAN		SHEET NO. GA-3

Erosion control plan sheet drafting template ("cache" file).

CONCEPT PLANS
INFORMATION ONLY
SHOULD NOT BE USED

APPROVED DESIGN
INFORMATION ONLY
SHOULD NOT BE USED

PRELIMINARY COPY
INFORMATION ONLY
SHOULD NOT BE USED

ADVANCE COPY
SUBJECT TO CHANGE
SHOULD NOT BE USED

PLANS IN HAND
SUBJECT TO CHANGE
SHOULD NOT BE USED

FINAL REVIEW PLANS
INFORMATION ONLY
SHOULD NOT BE USED

34V-22

General Guidance

Whenever possible include a separate set of erosion control plans - This improves clarity and constructionability, and this set will often be used as a basis for the contractor's required Erosion & Sediment control plan (ESCP).

Use Roadway sheet layout & scale whenever possible.

Show topo lines, cut lines, and fill lines, to graphically show ground disturbance impacts.

See Contract Plans Development Guide for drafting Standards.

See Erosion and Sediment Control Manual for design guidance and a sample project.

The following letters/numbers are reserved for the Geo/Hydro/Environmental technical disciplines:

- GA: Erosion Control
- GB: Geotechnical Data
- GC: Retaining Walls
- GD: Sound Walls
- GE: Culverts
- GF: Fish Passage
- GG: Temporary Water Management
- GH: Streambank Stabilization
- GJ: Stormwater
- GK: Landslide Correction
- GL: HazMat
- GM: Material Source/Disposal Sites
- GN: Roadside Development

Sheets can be stacked numerically in each of the above disciplines, however, do not use the letters "I" and "O". For example, Erosion Control sheets would be GA-1, GA-2, GA-3, and so forth.

This information located:
... \dot_space\Standards\ref\ecv8.cache.dgn

Contact:
Kim Taylor
Senior Drafter
Geo/Environmental Section
503-986-3380
kim.e.taylor@odot.state.or.us

LEGEND

	Fill Slope
	-----	Cut Slope
DET_INLETP		Inlet Protection
		Sediment Fence, Supported
		Sediment Fence, Unsupported
DET_CKDM		Check Dam In Ditch Section
		Sediment Barrier Type 1, Straw Bale
		Sediment Barrier Type 3, Straw Wattle
DET_PREFAB		Sediment Barrier, Prefabricated
DET_BIOBAG		Biofilter Bags
DET_SEDTRAP		Sediment Trap
DET_SCRBSN		Scour Basin
DET_CONSTENT		Construction Entrance
DET_SLOPDR		Temporary Slope Drains
		Temporary Drainage Walls
		Diversion Dike
		Diversion Swale
		Diversion Dike/Swale
PAT_ECMAT		Erosion Control Matting
		Staked Turbidity Barrier
PAT_SEEDMUL		Seeding and Mulching
PAT_COMPB		Compost Blanket
		Filter Berm
		Brush Barrier
DET_SEDMAT		Sediment Mat

CELL NAMES

- SHOW ONLY NOTES AND SYMBOLS ACTUALLY USED
DO NOT SHOW QUANTITIES ON PLAN SHEETS
- 1 Const. Inlet Protection (Type 1,2,3) (See Drg. No. RD1010)
 - 2 Const. Inlet Protection (Type 4, Biofilter Bags) (See Drg. No. RD1015)
 - 3 Const. Inlet Protection (Type 5, Masonry/Aggregate) (See Drg. No. RD1020)
 - 4 Const. Inlet Protection (Type 6) (For Details, See Sht. GA-X)
 - 5 Const. Sediment Fence Supported (See Drg. No. RD1040)
 - 6 Const. Sediment Fence Unsupported (See Drg. No. RD1040)
 - 7 Const. Check Dam (See Drg. No. RD1005)
 - 8 Install Sediment Barrier (Type 1, Straw Bales) (See Drg. No. RD1025)
 - 9 Install Sediment Barrier (Type 2,4, Biofilter Or Sand Bags) (See Drg. No. RD1030)
 - 10 Install Sediment Barrier (Type 3, Straw Wattle) (See Drg. No. RD1035)
 - 11 Const. Sediment Barrier (Type 5, Brush Barrier) (For Details, See Sht. GA-X)
 - 12 Const. Sediment Barrier (Type 6, Filter Berm) (For Details, See Sht. GA-X)
 - 13 Const. Temporary Sediment Trap (For Details, See Sht. GA-X)
 - 14 Const. Temporary Scour Hole (See Drg. No. RD1050)
 - 15 Const. Construction Entrance (See Drg. No. RD1000)
 - 16 Const. Temporary Slope Drains (See Drg. No. RD1020)
 - 17 Const. Temporary Drainage Curb (For Details, See Roadway Detail Sht. 2X-X)
 - 18 Const. Diversion Dike/Swale (Type X) (For Details, See Sht. GA-X)
 - 19 Install Matting (Erosion Control) (See Drg. No. RD1055)
 - 20 Const. Turbidity Barrier (Staked/Floating) (For Details, See Sht. GA-X)
 - 21 Install Compost x" Thick
 - 22 Install Compost/Topsail Blend x" Thick
 - 23 Const. Tire Wash Facility (Type 1) (See Drg. No. RD1060)
 - 24 Install Sediment Mat (For Details, See Sht. GA-X)
 - 25 Const. Temporary Sediment Trap (For Details, See Sht. GA-X)
 - 26 Install Plastic Sheeting (For Details, See Sht. GA-X)
- (The use of Straw Bales is not encouraged.)
- Choose from Types 1-5

Note: Place Check Dams In Ditch Sections

(Extra directions are typically centered directly below the plan view and surrounded by enough white space to bring attention to them).

(Fill box for standard drawings used).

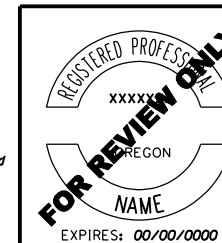
STANDARD DRAWINGS

- RD1000 Construction Entrance
- RD1005 Check Dam
- RD1010 Inlet Protection Type 1,2,3
- RD1015 Inlet Protection Type 4
- RD1020 Inlet Protection Type 5
- RD1025 Sediment Barrier Type 1
- RD1030 Sediment Barrier Type 2,4
- RD1035 Sediment Barrier Type 3
- RD1040 Sediment Fence Supported/Unsupported
- RD1045 Temporary Slope Drain
- RD1050 Temporary Scour Basin
- RD1055 Matting
- RD1060 Tire Wash Type 1

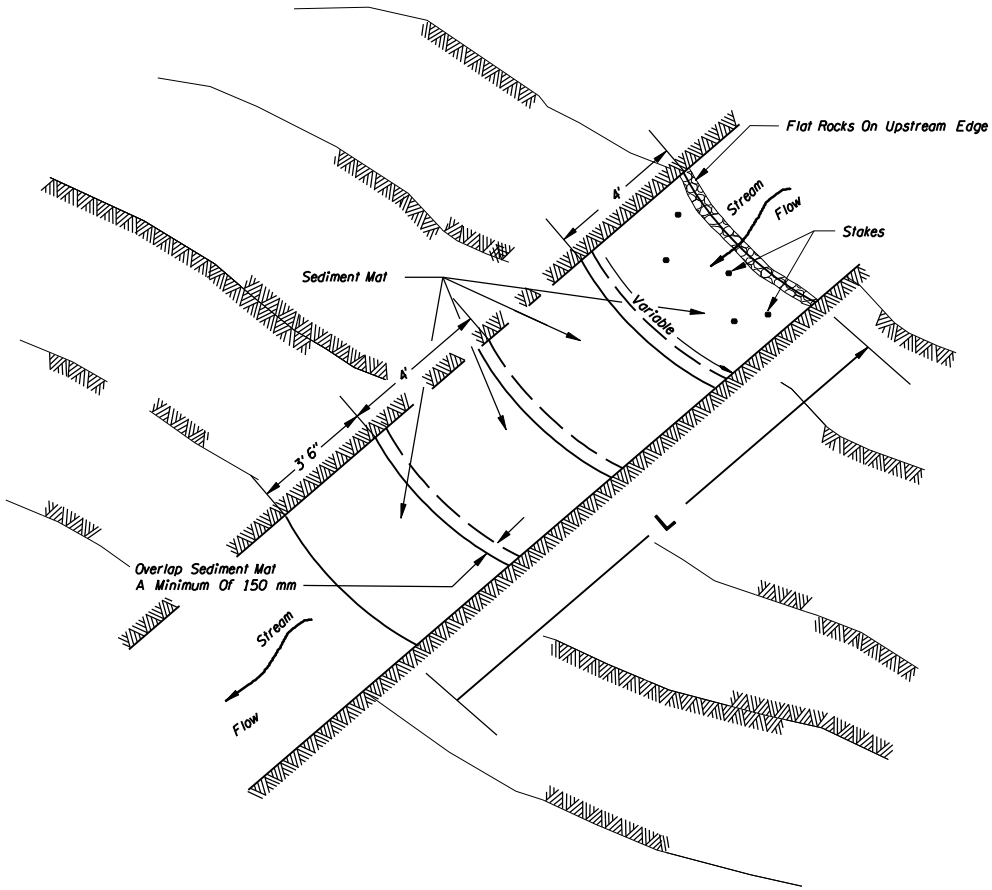
GENERAL NOTES:

- The Construction, Adjustment, Maintenance, And Upgrading Of These Erosion Control Measures Is The responsibility Of The Contractor For The Duration Of The Project.
- Erosion Control Measures Shown On This Plan Are For Anticipated Site Conditions. Adjust Or Upgrade These Measures For Unexpected Storm Events To Ensure That Sediment And Sediment-Laden Water Does Not Leave The Site.
- Develop A Revised Plan Of The Erosion Control Measures Shown As Required By Section 00280, Oregon Standard Specifications For Construction. Implement This Plan For All Clearing And Grading Activities And In Segments Applicable To Each Staging Phase. Construct In Such A Manner So As To Ensure That Sediment And Sediment-Laden Water Does Not Enter The Roadway Or Drainage System, Or Violate Applicable Water Standards.
- Install Measures Within The Right Of Way Unless Directed Otherwise.
- Install Stabilized Construction Entrances At The Beginning Of Construction, And Maintain For The Duration Of The Project. Additional Measures May Be Required To Insure That All Paved Areas Are Kept Clean.
- Construct Sediment Fence 1.5 Meters (5 Feet) Downslope From The Toe Of Fill Slopes Where Sediment-Laden Water Has A Potential Of Entering Waterways Or Leaving The R/W.
- Protect All Inlets During Surface Grinding, Paving, And Earthwork Operations To Prevent Pollutants From Entering Storm Water Systems.

Graphic Symbols Are Approximate. Place Erosion Control Measures As Required Or Directed.



OREGON DEPARTMENT OF TRANSPORTATION REGION SECTION NAME	
PROJECT TITLE HIGHWAY NAME COUNTY NAME	
Reviewed By - Name Designed By - Name Drafted By - Name	
EROSION CONTROL PLAN	SHEET NO. GA-1



SEDIMENT MAT

MINIMUM LENGTH OF DOWNSTREAM COVERAGE * (L)

	Water Velocity (Feet Per Second)			
	(00) - 1.0 fps)	(1.0 - 2.0 fps)	(2.0 - 3.0 fps)	(>3.00 fps)
Fines Mostly Sand	3.9 feet	7.8 feet	12 feet	16 feet
Fines Mostly Silt And Clay	7.8 feet	16 feet	24 feet	32 feet

* Actual Length Of Downstream Coverage Will Also Depend On Partial Size Distribution Of Sediment Fines And The Amount Of Upstream Disturbance.

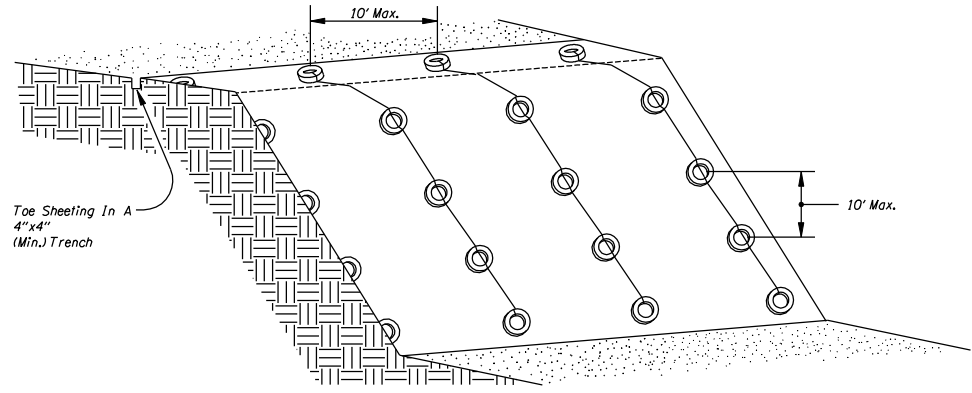
NOTES:

1. Securely Stake Upstream Edges And Centers To Streambed With Wooden Or Metal Stakes And Rocks As Needed.
2. Overlap The Trailing Edge Of Upstream Mats Over The Leading Edge Of Downstream Mats By At Least 6", Overlap Sides Of Adjoining Mats A Minimum Of 6".

Oregon Department of Transportation

This detail is shown for information only. Design use and modification is the responsibility of the user.

SEDIMENT MAT

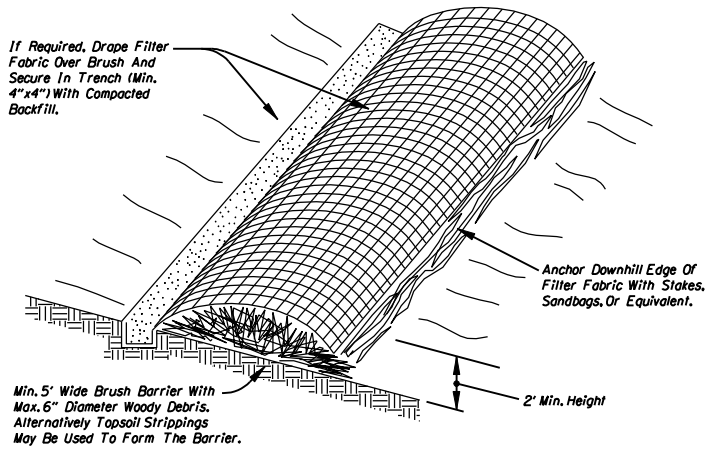


- Notes:
1. Overlap Seams A Minimum of 12" And Weight Down Using Sandbags, Tires, Or Equivalent.
 2. Provide Energy Dissipation At Toe When Needed.

PLASTIC SHEETING

This detail is shown for information only. Design use and modification is the responsibility of the user.

<i>Oregon Department of Transportation</i>
PLASTIC SHEETING



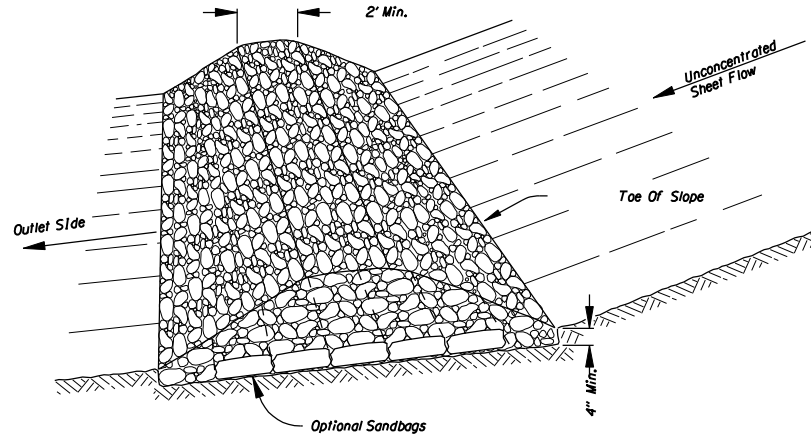
**SEDIMENT BARRIER
TYPE 5, BRUSH**

This detail is shown for information only. Design use and modification is the responsibility of the user.

Oregon Department of Transportation
SEDIMENT BARRIER

NOTES:

- 1. Direct The Outlet Side Of Stone Filter Berms/Dams Onto A Stabilized Area, Such As Vegetation And/Or Stone.
- 2. Embed A Minimum Of 4" Into The Existing Ground/Embankment.
- 3. Use 1:3 Or Flatter Side Slopes. Within The Safety Clear Zone. Use 1:6 Or Flatter Side Slopes.

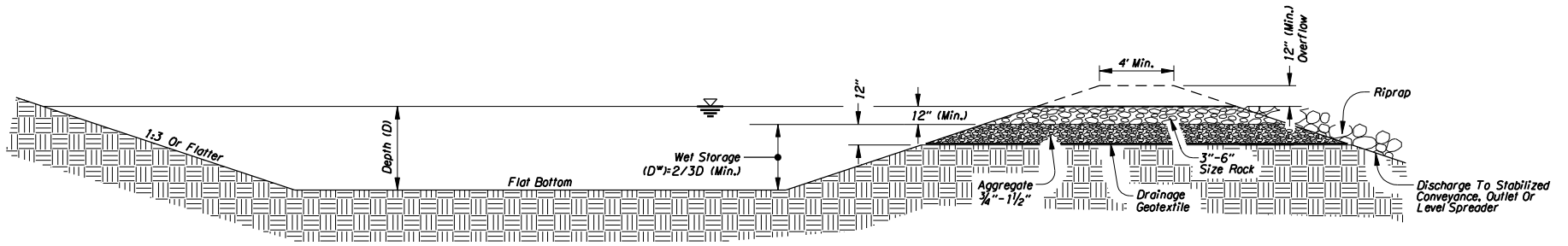


FILTER BERM AT TOE OF SLOPE

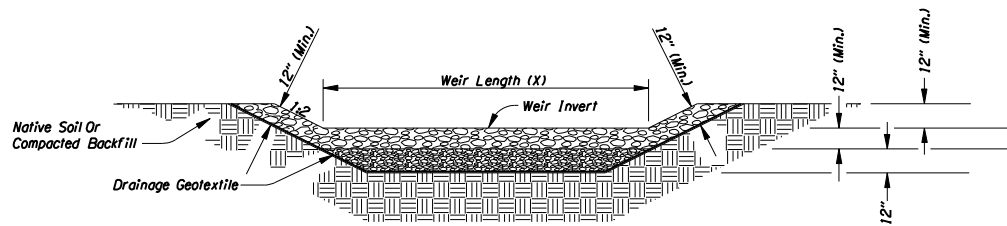
**SEDIMENT BARRIER
TYPE 6, FILTER BERM**

This detail is shown for information only. Design use and modification is the responsibility of the user.

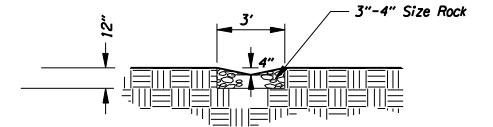
<i>Oregon Department of Transportation</i>
SEDIMENT BARRIER



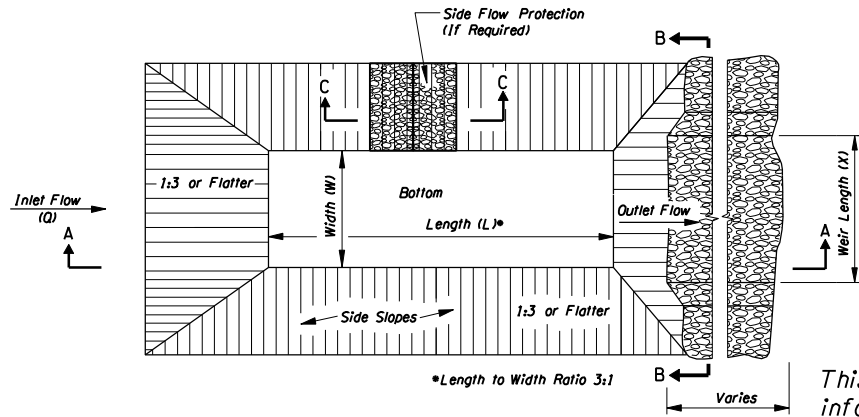
SECTION A-A
No Scale



SECTION B-B
No Scale



SECTION C-C
No Scale



PLAN
No Scale

TEMPORARY SEDIMENT TRAP

NOTES:

Trap May Be Formed By Berm Or By Partial Or Complete Excavation.

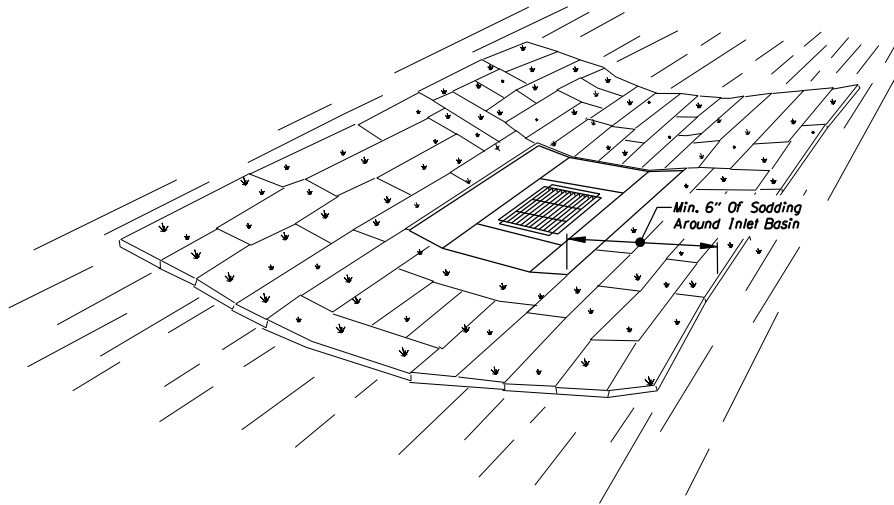
Remove Accumated Sediment When Collected Material depth = $D/3$

Replace Aggregate And Rock When Filtering Capacity Is Reduced by $1/2$

This detail is shown for information only. Design use and modification is the responsibility of the user.

Oregon Department of Transportation

TEMPORARY SEDIMENT TRAP

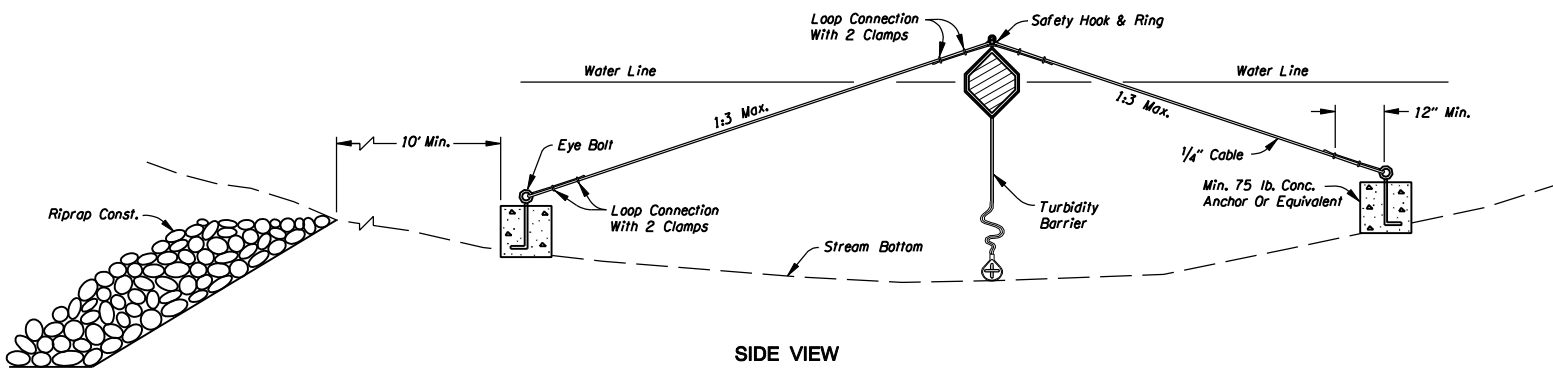


**INLET PROTECTION
TYPE 6**

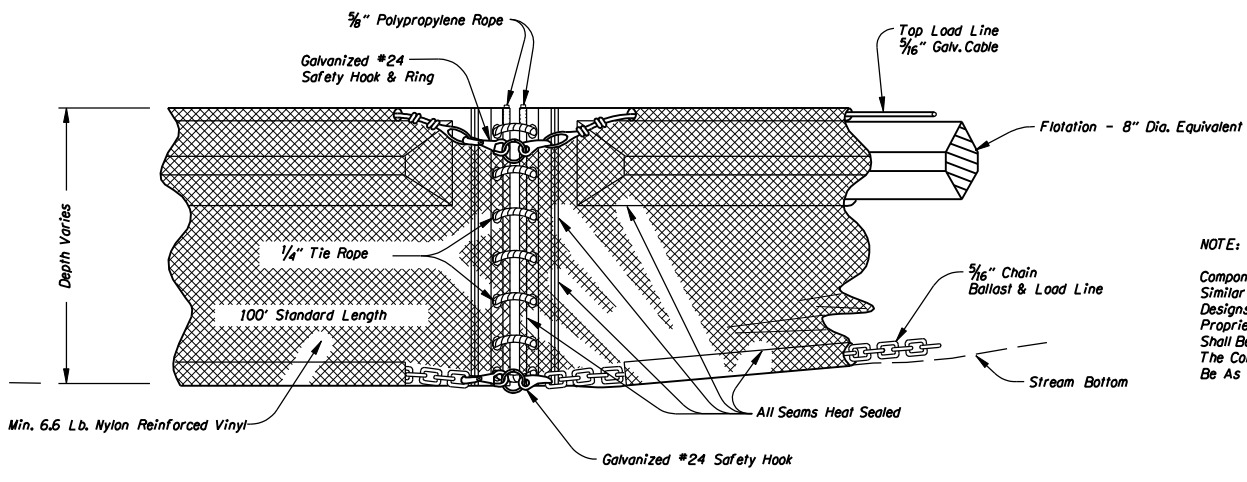
This detail is shown for information only. Design use and modification is the responsibility of the user.

Oregon Department of Transportation
INLET PROTECTION

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SIDE VIEW



ELEVATION

ANCHOR ASSEMBLY
TURBIDITY BARRIER, FLOATING

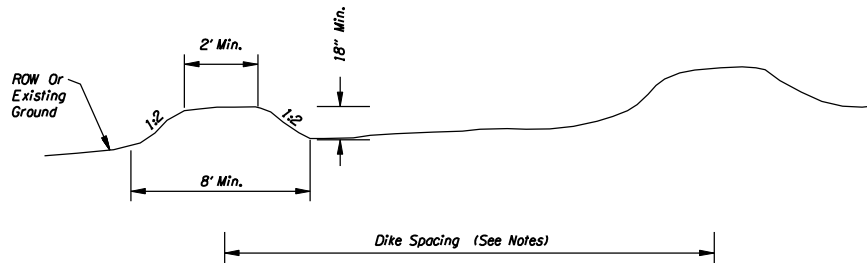
NOTE:
 Components Of This Barrier May Be Similar Or Identical To Proprietary Designs. Any Infringement On The Proprietary Rights Of The Designer Shall Be The Sole Responsibility Of The Contractor. Substitutions Shall Be As Approved By The Engineer.

This detail is shown for information only. Design use and modification is the responsibility of the user.

Oregon Department of Transportation
TURBIDITY BARRIER

DET 433

3-15-05
e_detail\434.dgn



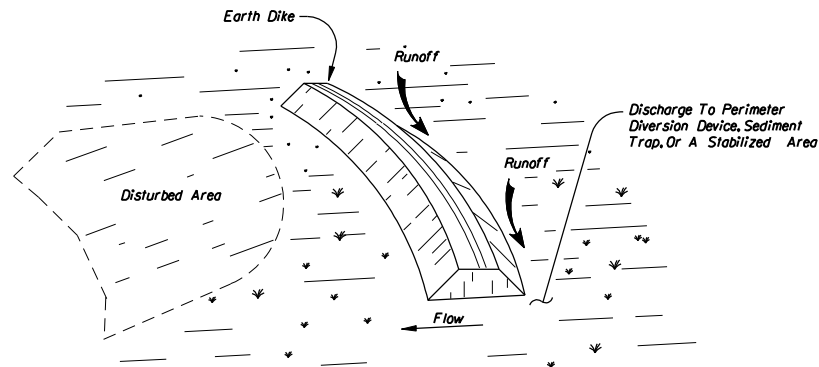
SECTION

Notes:

1. Compact Dike Material To 95% Modified Proctor.
2. Maximum 5% Grade With Positive Drainage To A Suitable Outlet (Such As A Sedimentation Trap).

Dike Spacing

Slope	Spacing
3-5%	300'
5-10%	200'
10-25%	100'
25-50%	50'



DIVERSION DIKE

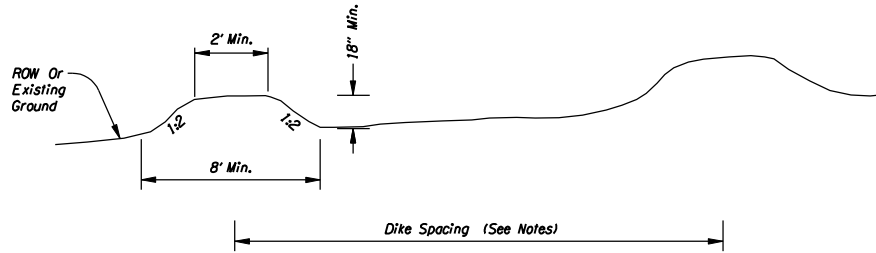
**TEMPORARY DIVERSION DIKE
TYPE 1**

This detail is shown for information only. Design use and modification is the responsibility of the user.

Oregon Department of Transportation

TEMPORARY DIVERSION DIKE/SWALE

e:\det\435.dgn 3-15-05



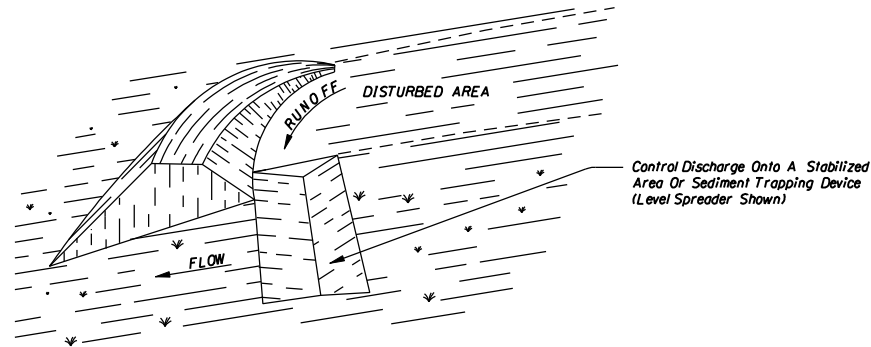
SECTION

Notes:

- 1. Compact Dike Material to 95% Modified Proctor.
- 2. Maximum 5% Grade With Positive Drainage To A Suitable Outlet (Such As A Sedimentation Trap).

Dike Spacing

Slope	Spacing
3-5%	300'
5-10%	200'
10-25%	100'
25-50%	50'

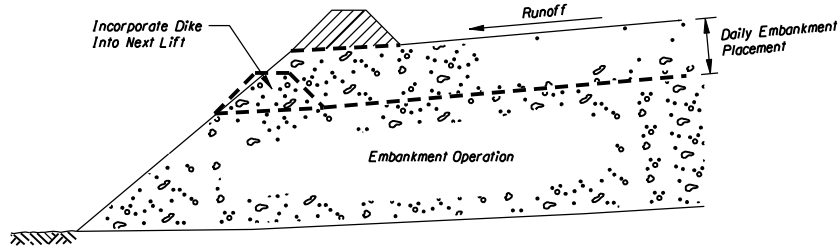


PERIMETER DIKE

**TEMPORARY DIVERSION DIKE
TYPE 2**

This detail is shown for information only. Design use and modification is the responsibility of the user.

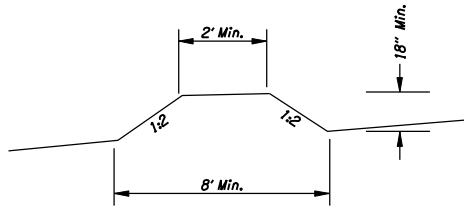
Oregon Department of Transportation
TEMPORARY DIVERSION DIKE/SWALE



EMBANKMENT SECTION

Notes:

- 1. Compact dike material to 95% Modified Proctor. (90% Of Standard Proctor.)



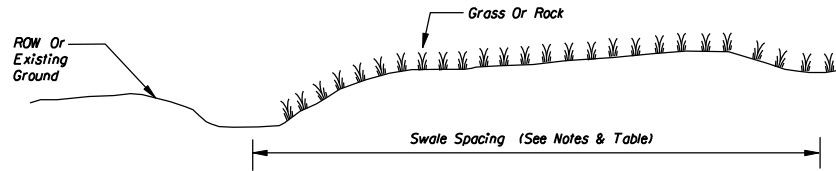
DIKE SECTION

TEMPORARY DIVERSION DIKE TYPE 3

Oregon Department of Transportation

This detail is shown for information only. Design use and modification is the responsibility of the user.

TEMPORARY DIVERSION DIKE



SECTION

Swale Spacing

Slope	Spacing
3-5%	300'
5-10%	200'
10-25%	100'
25-50%	50'

Notes:

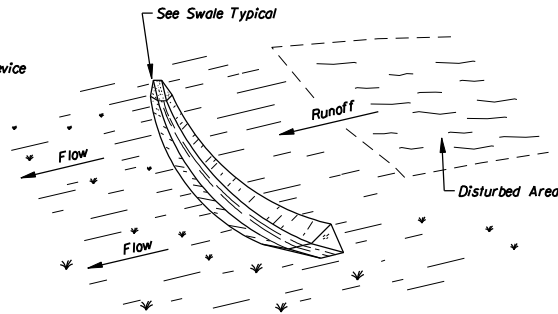
Bottom Width = 24" Minimum at a 0% grade.

Depth = 12" Minimum

Side Slope = 1:2 Or Flatter

Grade = Maximum 5 Percent With Positive Drainage To A Suitable Outlet (Such As Sedimentation Pond)

Notes:
Discharge Onto Undisturbed Area
Or Alternate Sediment Trapping Device



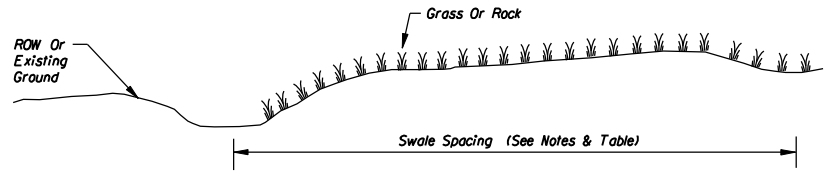
DIVERSION SWALE

**TEMPORARY DIVERSION SWALE
TYPE 4**

This detail is shown for information only. Design use and modification is the responsibility of the user.

Oregon Department of Transportation
TEMPORARY DIVERSION DIKE/SWALE

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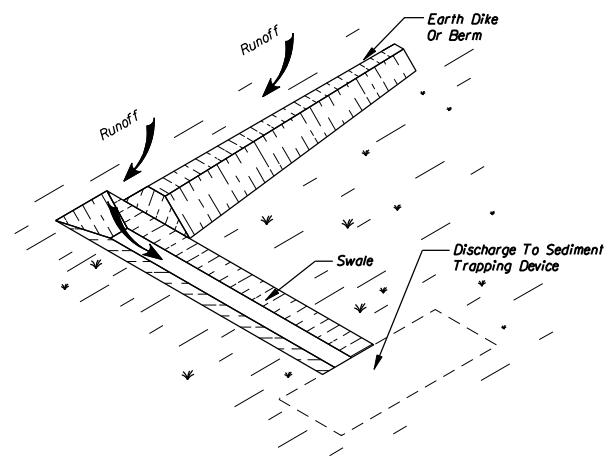


SECTION

- Notes:
- Bottom Width = 24" Minimum at a 0% grade.
 - Depth = 12" Minimum
 - Side Slope = 1:2 Or Flatter
 - Grade = Maximum 5 Percent With Positive Drainage To A Suitable Outlet (Such As Sedimentation Pond)

Swale Spacing

Slope	Spacing
3-5%	300'
5-10%	200'
10-25%	100'
25-50%	50'



DIVERSION SWALE

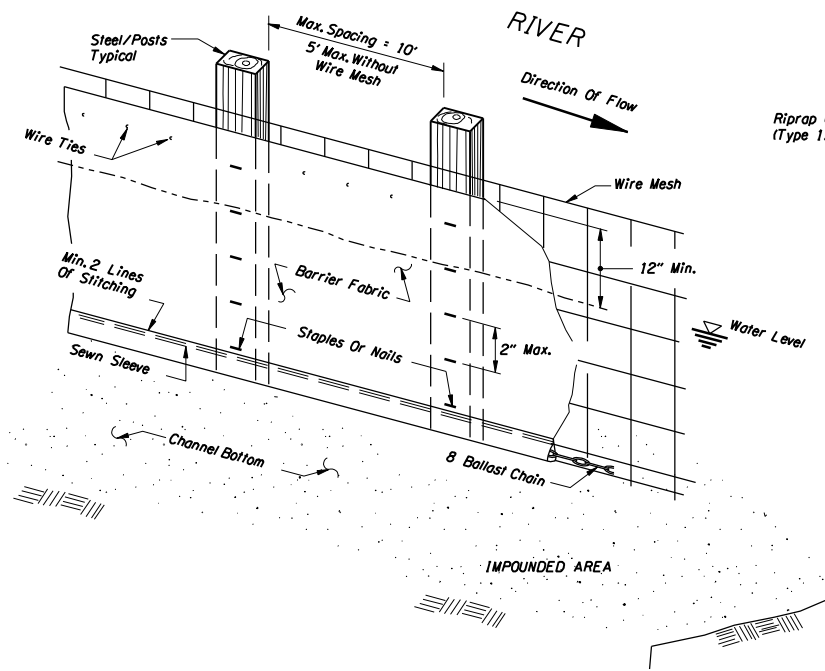
TEMPORARY DIVERSION SWALE
TYPE 5

This detail is shown for information only. Design use and modification is the responsibility of the user.

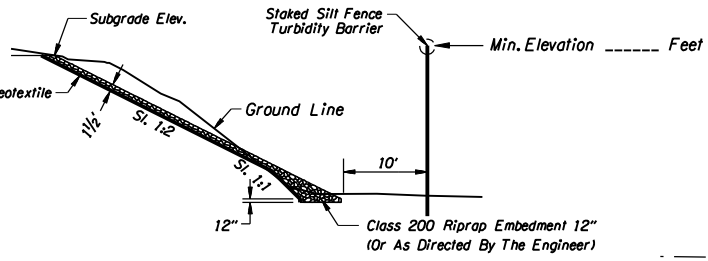
Oregon Department of Transportation

TEMPORARY DIVERSION DIKE/SWALE

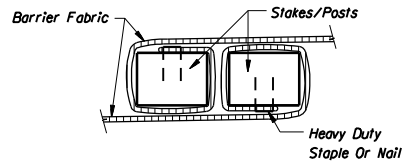
3-15-05
e_detail460.dgn



TYPICAL CONSTRUCTION OF A STAKED SILT BARRIER
Not to scale

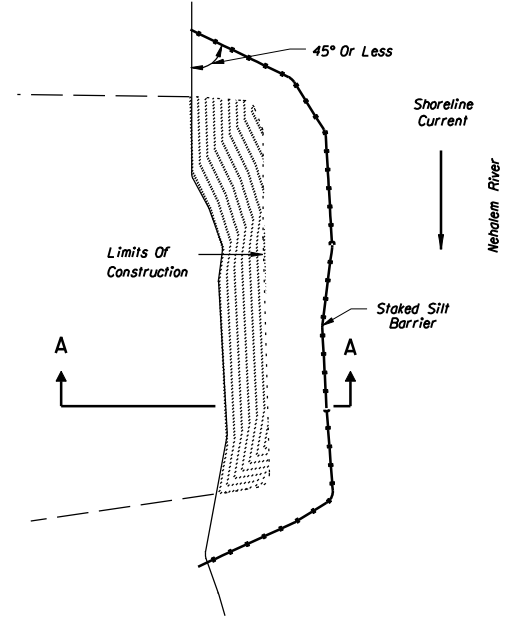


SECTION A-A



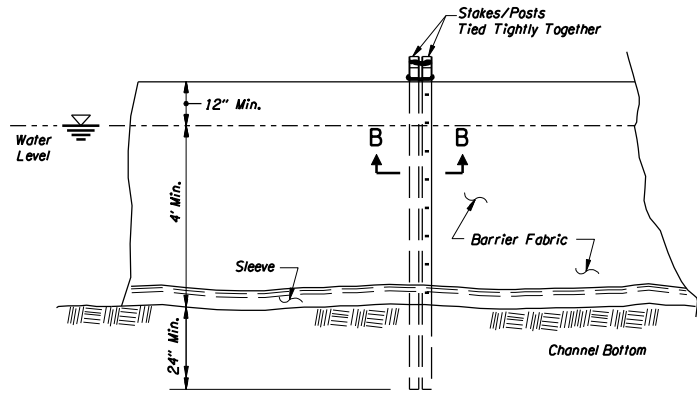
SECTION B-B

RECOMMENDED METHOD OF JOINING SECTIONS OF THE STAKED BARRIER
Not to scale



PLAN VIEW

EFFECTIVE STAKED SILT BARRIER DEPLOYMENT CONFIGURATION



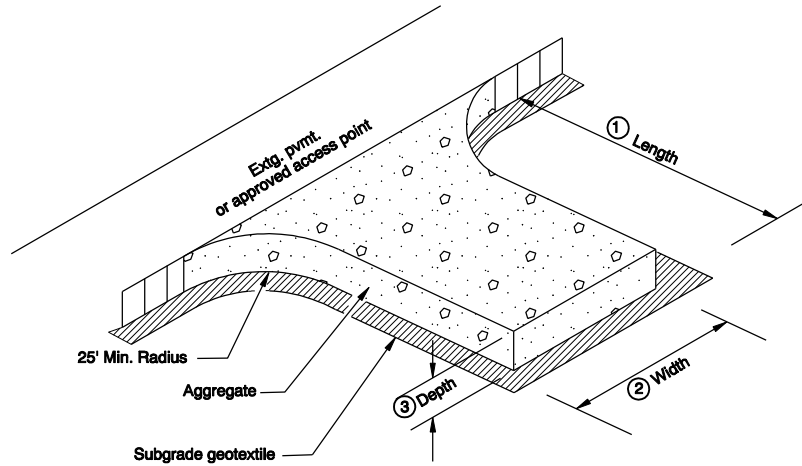
ELEVATION

TURBIDITY BARRIER, STAKED

This detail is shown for information only. Design use and modification is the responsibility of the user.

Oregon Department of Transportation

TURBIDITY BARRIER



Notes:

- ① Length:
50' min. - for less than 1 acre exposed soil
100' min. - for greater than 1 acre exposed soil
- ② Width:
20' - or width of extg. approach, whichever
is greater.
- ③ Depth:
8" min

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

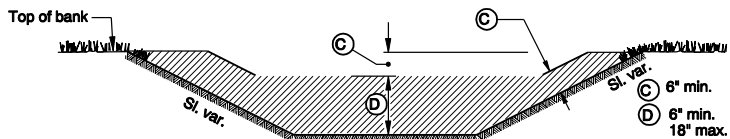
CONSTRUCTION ENTRANCES

2002

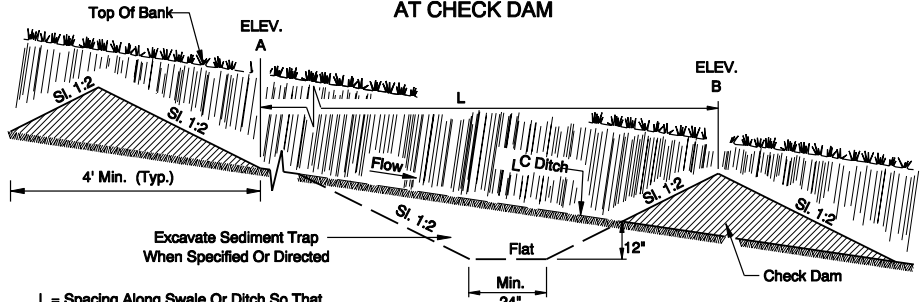
REVISIONS	
DATE	DESCRIPTION

end1005.dgn 12-6-02

RD1005



DITCH X-SECTION AT CHECK DAM



DITCH PROFILE SECTION WITH CHECK DAMS

Note:
When bid item is "Check Dams" the following materials may be used, as appropriate to meet the functional requirements of the control.

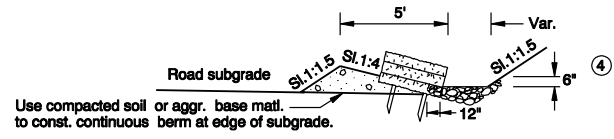
- Type 1. aggregate
- Type 2. straw bales with aggregate weir
- Type 3. biofilter bags
- Type 4. sand bags
- Type 5. prefab. check dam system

- Notes:**
- ① Type 2 only ----
Entrench bales and aggr. a min. of 4" into the soil. Toe of last bale is highest water control point.
 - ② Type 2 only ----
Place bales so wire/twine binding mat. is not in contact with the soil.
 - ③ Type 2 or 3 ----
Drive 2 stakes min. per bale or bag flush with top and into undisturbed ground a min. of 4". Stakes may be omitted if placed over paved surfaces.
 - ④ Type 2, 3 or 4 ----
Const. top of aggr. a min. of 6" lower than the toe of last bale or bag.
 - ⑤ Type 2 or 4 ----
Tightly abut or overlap ends of bales or bags at each joint.
 - ⑥ Type 3 ----
Overlap bags 6" min. at each joint.

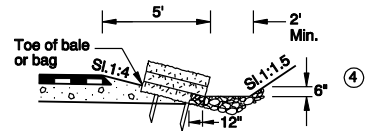
CHECK DAM
Approximate Spacing

Ditch Grade	D = Dimension		
	6"	12"	18"
6%	**	15' O.C.	25' O.C.
5%	**	20'	30'
4%	**	25'	40'
3%	15'	30'	50'
2%	25'	50'	80'

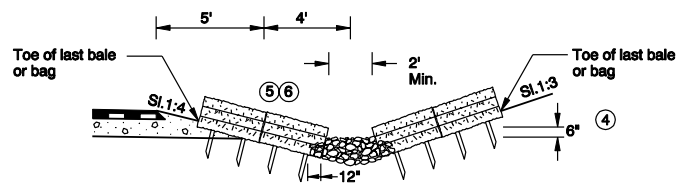
** Not Allowed



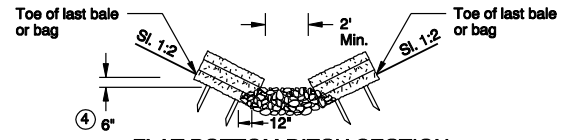
SUBGRADE SECTION



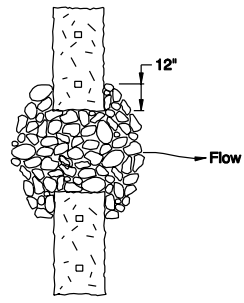
STEEP BACKSLOPE SECTION



VARIABLE BACKSLOPE SECTION - 1:3 TO 1:6



FLAT BOTTOM DITCH SECTION CHECK DAM TYPE 2, 3 & 4



TOP VIEW TYPE 2, 3 & 4

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

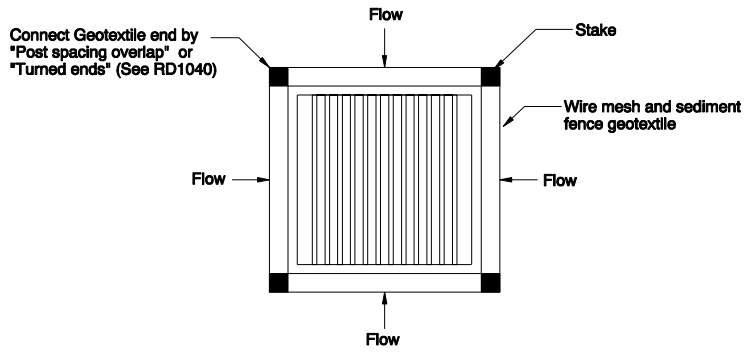
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

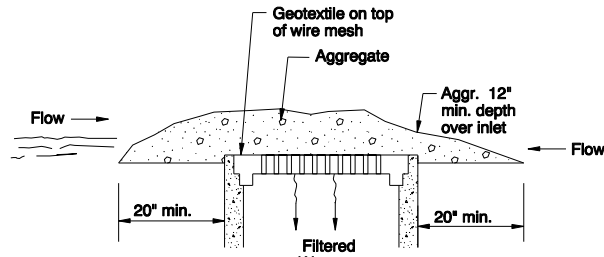
CHECK DAMS

2002

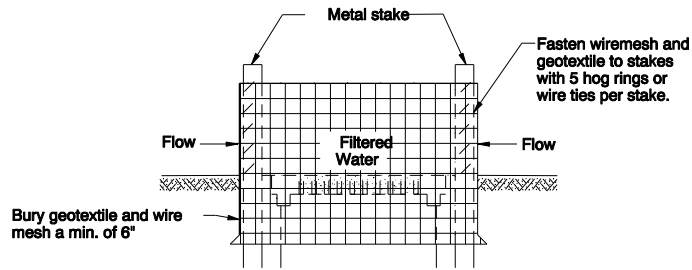
REVISIONS	
DATE	DESCRIPTION
12-02	REVISE NOTE



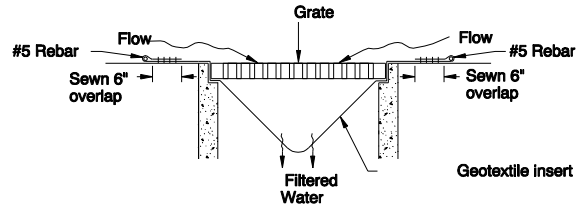
PLAN



GEOTEXTILE/WIREMESH/AGGREGATE
TYPE 2



ELEVATION
SEDIMENT FENCE
TYPE 1



PREFABRICATED FILTER INSERT
TYPE 3

- Note:
- Type 1 Sediment Fence
 - Type 2 Geotextile/wire mesh/aggregate
 - Type 3 Prefabricated filter insert.
 - Type 4 Biofilter bags
 - Type 5 Masonry/aggregate
 - Type 6 Sod

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

INLET PROTECTION						
Site Conditions Where Types Are Appropriate	TYPE					
	1	2	3	4	5	6
Area Drain, Soil	Y	Y	Y	Y	Y	Y
Area Drain, Pavement	N	Y	Y	Y	Y	N
Ditch Inlet, Soil	Y	N	Y	Y	N	Y
Ditch Inlet, Pavement	N	N	Y	Y	N	N
Grate Inlet Along Curb, Soil	N	Y	Y	Y	Y	Y
Grate Inlet Along Curb, Pavement	N	Y	Y	Y	Y	N
Curb Opening Inlet, Soil	N	N	N	Y	Y	Y
Curb Opening Inlet, Pavement	N	N	N	Y	Y	N

For Inlet Protection Types 4 and 5 see RD1015 and RD1020.

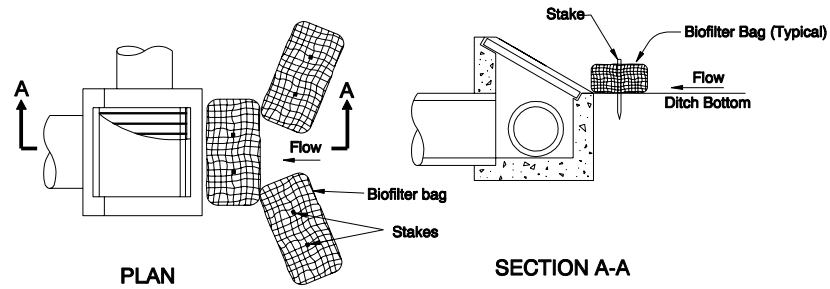
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

INLET PROTECTION
(TYPE 1, 2 & 3)

2002

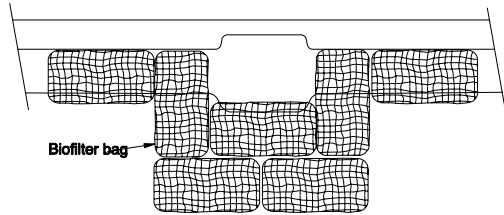
REVISIONS	
DATE	DESCRIPTION
12-02	REVISE NOTE



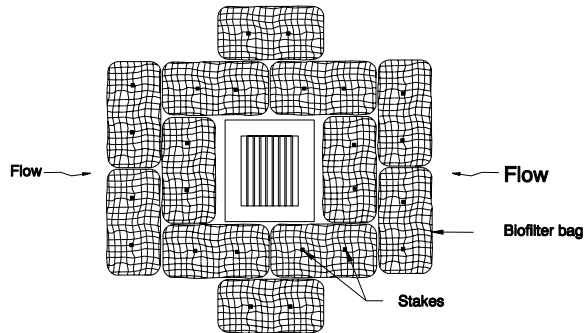
DITCH INLET

Note:

1. Use 2 stakes per bag. Stakes may be omitted if bags are placed on pavement surface.
2. Overlap all bag joints 6".



PLAN
CATCH BASIN



AREA DRAIN

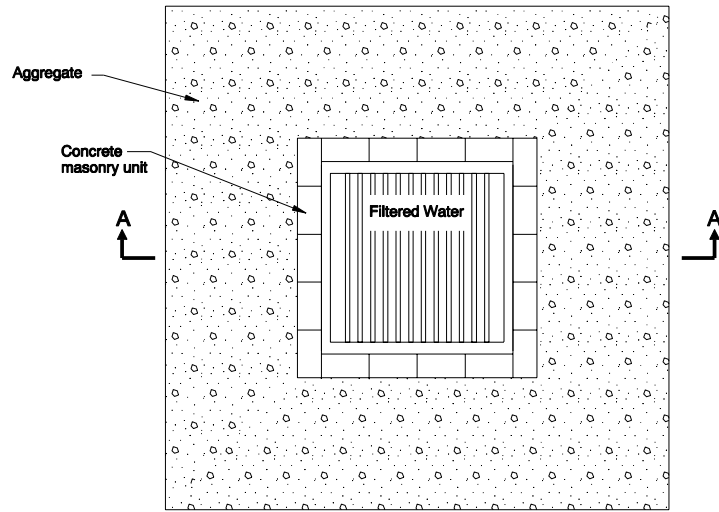
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

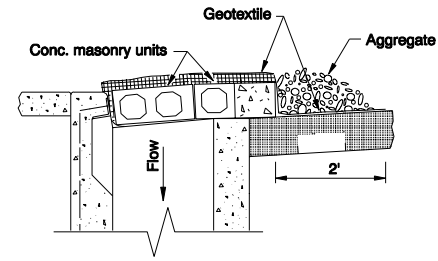
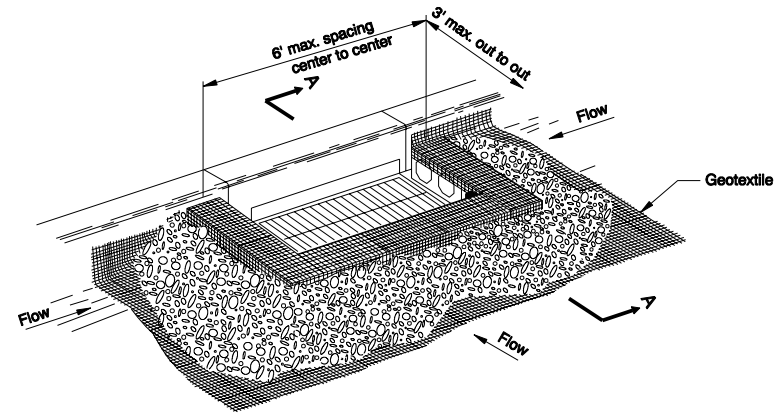
OREGON STANDARD DRAWINGS

INLET PROTECTION
(TYPE 4)
BIOFILTER BAGS
2002

REVISIONS	
DATE	DESCRIPTION

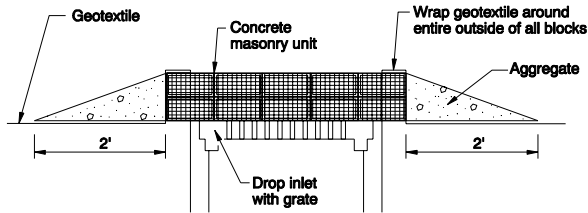


Plan

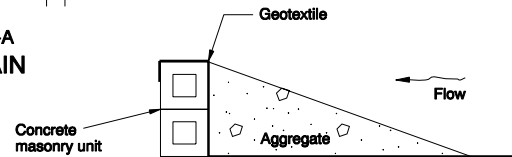


SECTION A-A
CURB PROTECTION

- Notes:
1. Tightly abut ends of masonry units.
 2. Overlap geotextile seams 10" min.



SECTION A-A
AREA DRAIN



The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

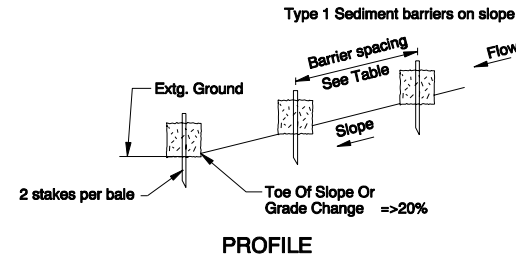
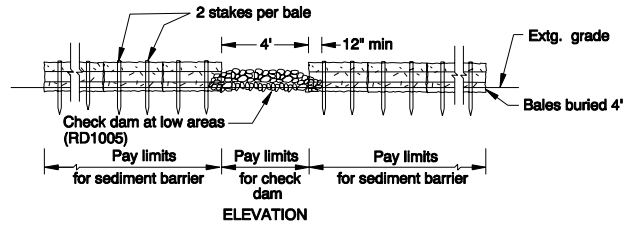
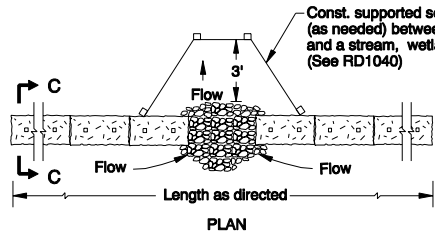
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

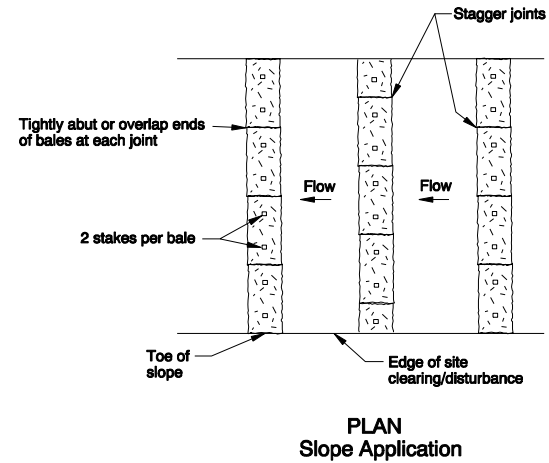
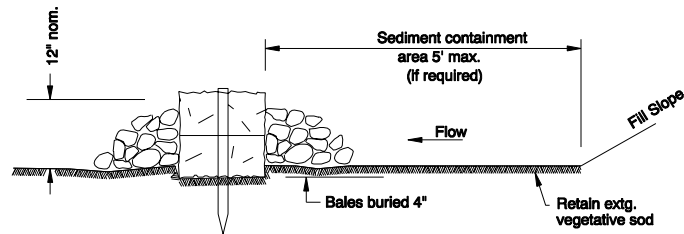
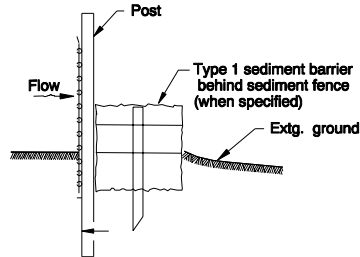
INLET PROTECTION
(TYPE 5)
MASONRY/AGGREGATE

2002

REVISIONS	
DATE	DESCRIPTION



GENERAL APPLICATION
(Perimeter and overland flow)



SEDIMENT FENCE AND BARRIER
(Sediment Barrier when used as structural backing for Sediment Fence)

NOTES: Sediment Barrier (Type 1)

1. Entrench bales and agr. a min. of 4" into the soil. Toe of last bale is highest water control point.
2. Place bales so wire/twine binding mat. is not in contact with the soil.
3. Drive stakes flush with top of bale and into undisturbed ground a min. of 12"
4. Const. top of agr. a min. of 6" lower than the toe of last bale.
5. Sediment fence and check dam paid for separately or per special provisions.

BARRIER SPACING FOR GENERAL APPLICATION
INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS

% SLOPE	% SLOPE	MAXIMUM SPACING ON SLOPE
10% Flatter	1:10 or Flatter	300'
10 > % ≥ 15	10 > X ≥ 7.5	150'
15 > % ≥ 20	7.5 > X ≥ 5	100'
20 > % ≥ 30	5 > X ≥ 3	50'
Steeper than 30%	Steeper than 1:3	25'

NOTES:

- Type 1 Straw Bales
- Type 2 Biofilter Bags
- Type 3 Wattles
- Type 4 Sand Bags
- Type 5 Brush Barrier
- Type 6 Filter Berm
- Type 7 Prefabricated Barrier System
- Type 8 Compost Filter Berm

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

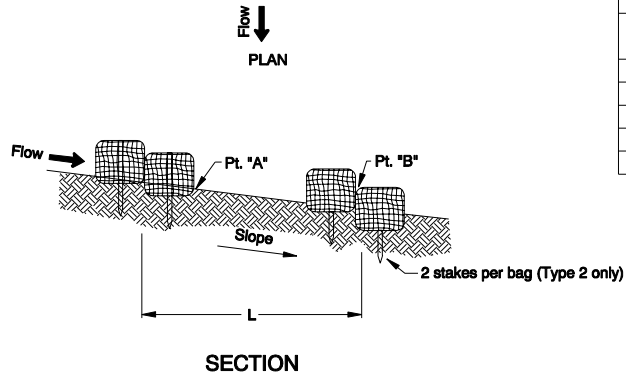
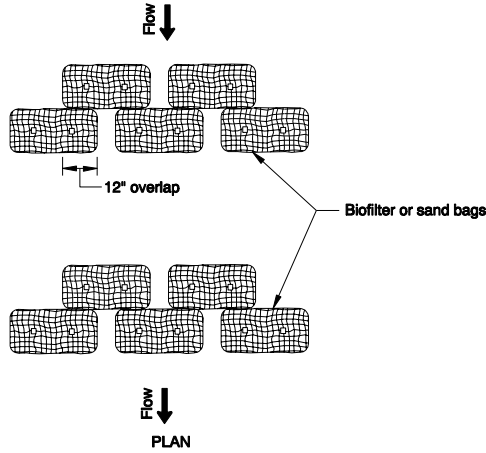
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

SEDIMENT BARRIER (TYPE 1)

2002

REVISIONS	
DATE	DESCRIPTION
12-02	REVISE NOTE



Notes:

1. Drive stakes flush with top of bag and into undisturbed ground a min. of 12". (Type 2 only). State may be omitted if bags are placed on paved surface.
2. Space bags (L) so Points "A" and "B" are of equal elevation.
3. Type 2 uses Biofilter Bags
Type 4 uses Sandbags

**BARRIER SPACING
FOR GENERAL APPLICATION
INSTALL PARALLEL ALONG
CONTOURS AS FOLLOWS**

% SLOPE	% SLOPE	MAXIMUM SPACING ON SLOPE
10% Flatter	1:10 or Flatter	300'
10 > % ≥ 15	10 > X ≥ 7.5	150'
15 > % ≥ 20	7.5 > X ≥ 5	100'
20 > % ≥ 30	5 > X ≥ 3	50'
Steeper than 30%	Steeper than 1:3	25'

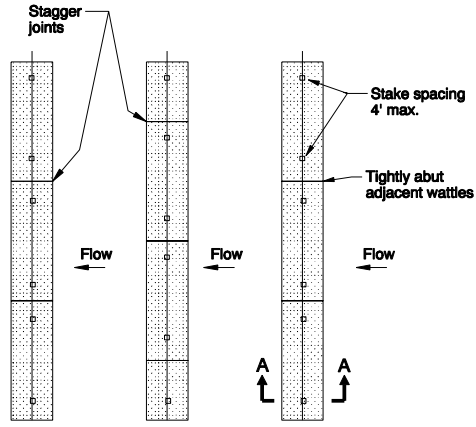
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

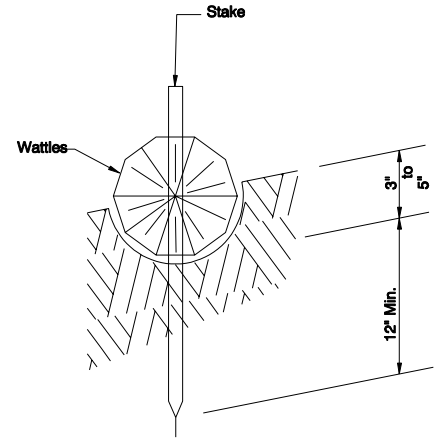
**OREGON STANDARD DRAWINGS
SEDIMENT BARRIER
(TYPE 2 & 4)
BIOFILTER OR SANDBAGS**

2002

REVISIONS	
DATE	DESCRIPTION



PLAN

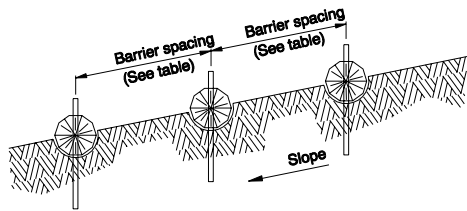


SECTION A-A

BARRIER SPACING FOR GENERAL APPLICATION

INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS

% SLOPE	% SLOPE	MAXIMUM SPACING ON SLOPE
10% Flatter	1:10 or Flatter	300'
10 > % ≥ 15	10 > X ≥ 7.5	150'
15 > % ≥ 20	7.5 > X ≥ 5	100'
20 > % ≥ 30	5 > X ≥ 3	50'
Steeper than 30%	Steeper than 1:3	25'



PROFILE

Place wattles along slope contours.

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OREGON STANDARD DRAWINGS

SEDIMENT BARRIER (TYPE 3)

2002

REVISIONS

DATE	REVISION	DESCRIPTION
12-02		

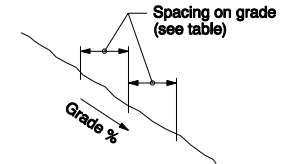
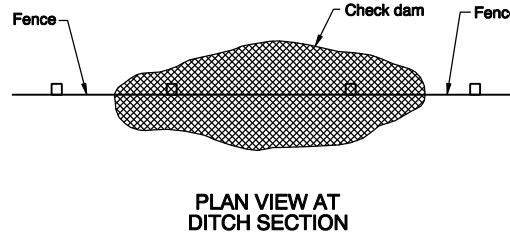
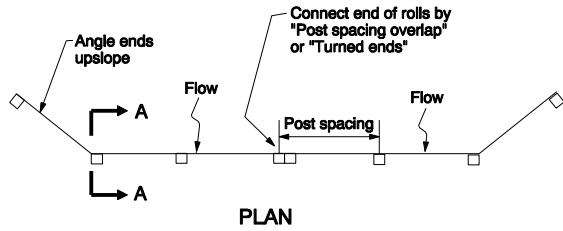


TABLE 1
FENCE SPACING FOR GENERAL APPLICATION

INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS

GRADE	MAXIMUM SPACING ON GRADE
Grade < 10%	300'
10% ≤ Grade < 15%	150'
15% ≤ Grade < 20%	100'
20% ≤ Grade < 30%	50'
30% ≤ Grade	25'

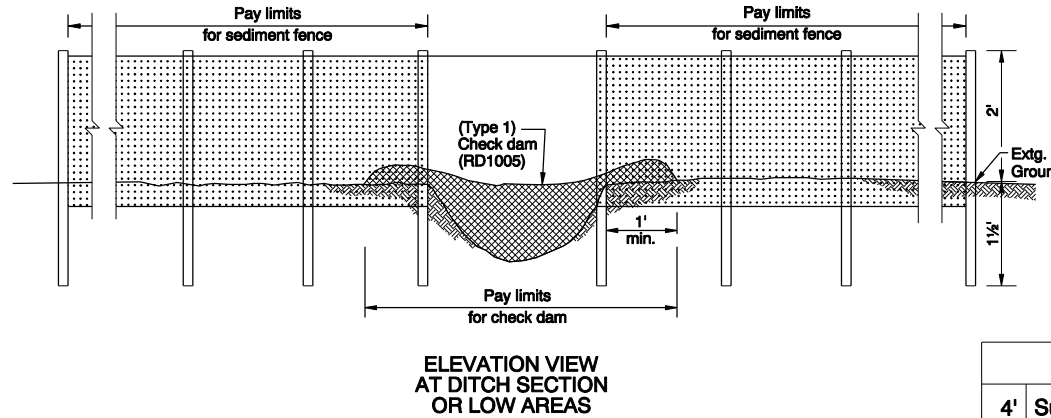
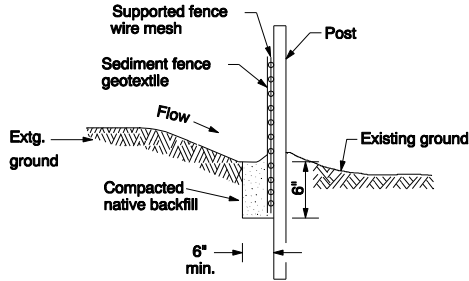
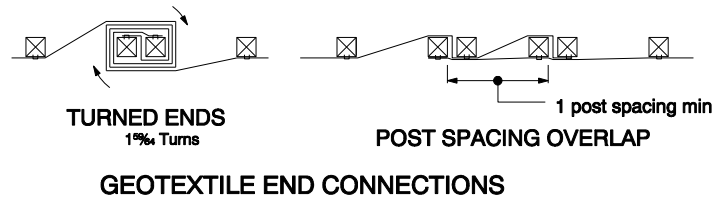
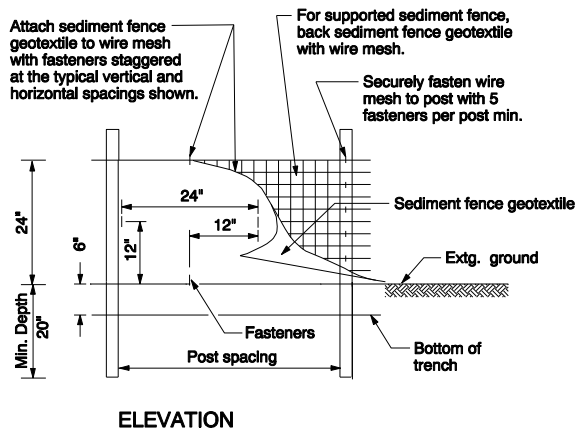


TABLE 2
POST SPACING

4'	Supported Sediment Fence
6'	Unsupported Sediment Fence with Geotextile elongation *less than 50%
4'	Unsupported Sediment Fence with Geotextile elongation *more than 50%

* Geotextile grab elongation value as documented by "Level B" manufacturer's documentation (See Standard Specifications).



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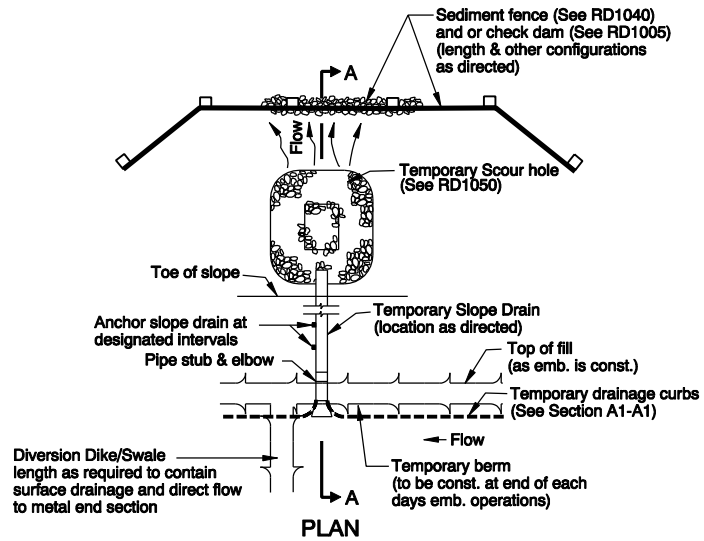
OREGON STANDARD DRAWINGS

SEDIMENT FENCE, SUPPORTED

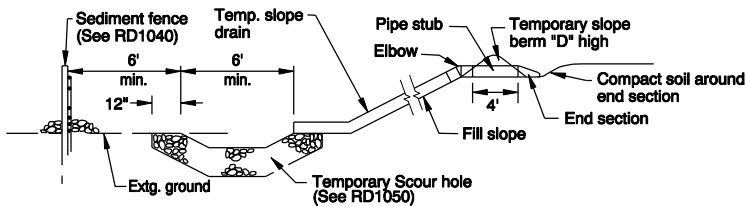
SEDIMENT FENCE, UNSUPPORTED

2002

REVISIONS		DESCRIPTION
DATE	REVISIONS	DESCRIPTION
12-02	REVISED NOTE	
01-05	REVISE TABLE 2	



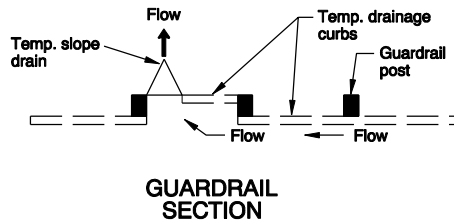
PLAN



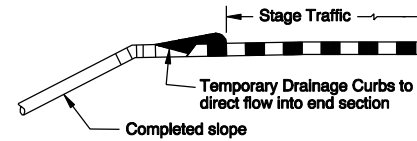
SECTION A-A

Notes:

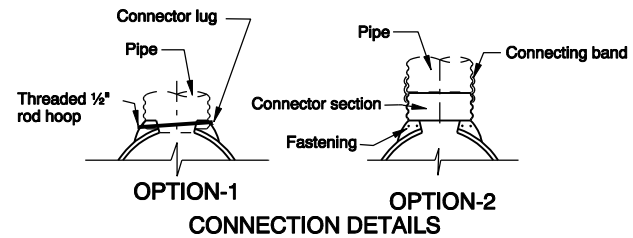
1. Temporary Slope Drains shall be used at the top of fill slopes as the embankment is constructed to prevent erosion
2. Temporary Drainage Curbs shall be used in conjunction with Temporary Slope Drains to prevent erosion on completed slopes.
3. All dimensions not indicated will be as directed.



GUARDRAIL SECTION

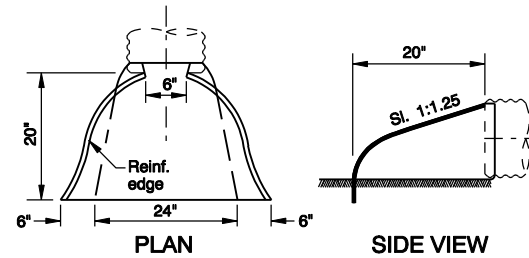


SECTION A1-A1



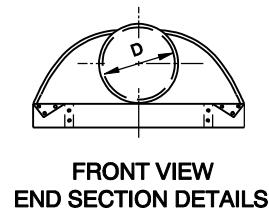
OPTION-1
OPTION-2
CONNECTION DETAILS

TABLE FOR PIPE SIZE		
PIPE		CONTRIBUTING AREA TO SLOPE DRAIN (sqft)
Slope (min.)	D In. (min.)	
3.8%	6	A < 200
2.5%	8	200 ≤ A < 500
1.9%	10	500 ≤ A < 850
1.5%	12	850 ≤ A < 1400
-	SPECIAL DESIGN REQD.	1400 ≤ A



PLAN

SIDE VIEW



FRONT VIEW
END SECTION DETAILS

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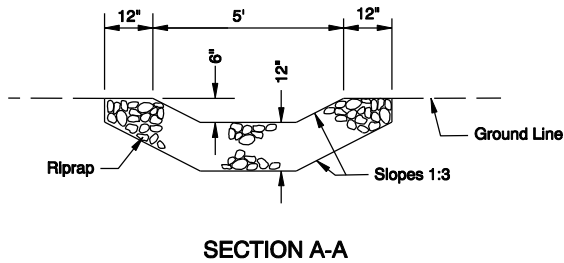
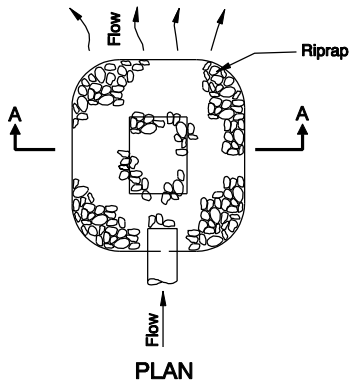
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

TEMPORARY SLOPE DRAINS

2002

REVISIONS	
DATE	DESCRIPTION



NOTES:
All dimensions not indicated
will be as directed.

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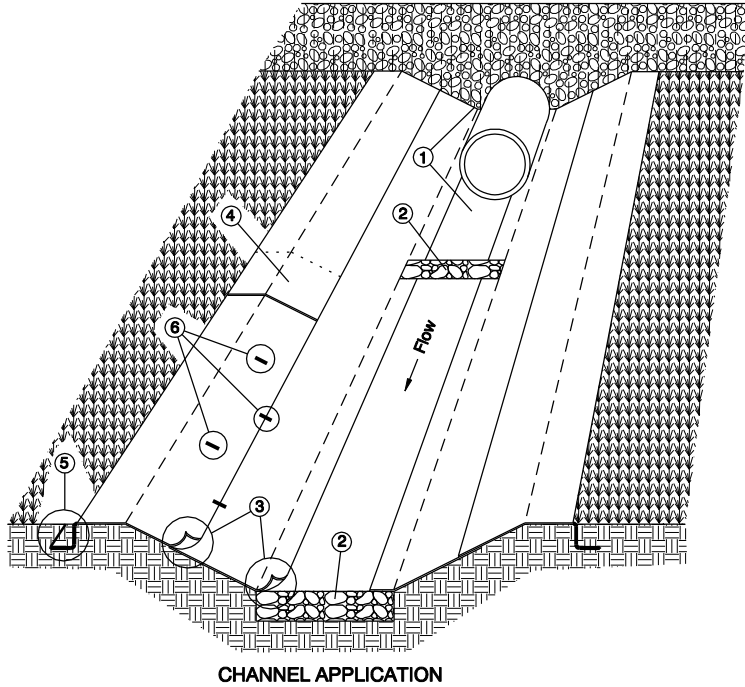
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

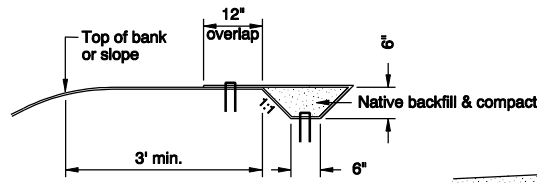
TEMPORARY SCOUR HOLE

2002

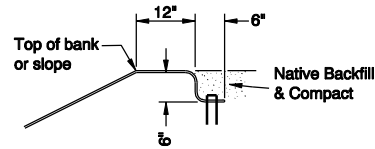
REVISIONS	
DATE	DESCRIPTION



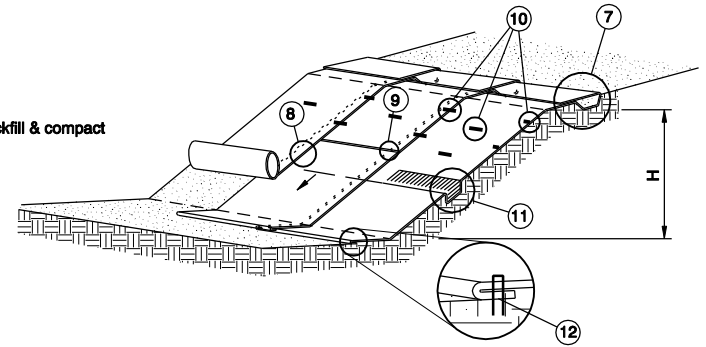
CHANNEL APPLICATION



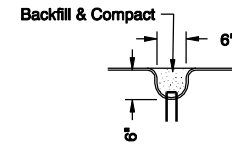
(TRENCH, H > 3')
FIGURE A1



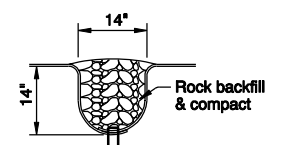
(TRENCH, H ≤ 3')
FIGURE A2



SLOPE APPLICATION



(CHECK SLOT, SLOPE)
FIGURE A3



(CHECK SLOT, CHANNEL)
FIGURE A4

All applications

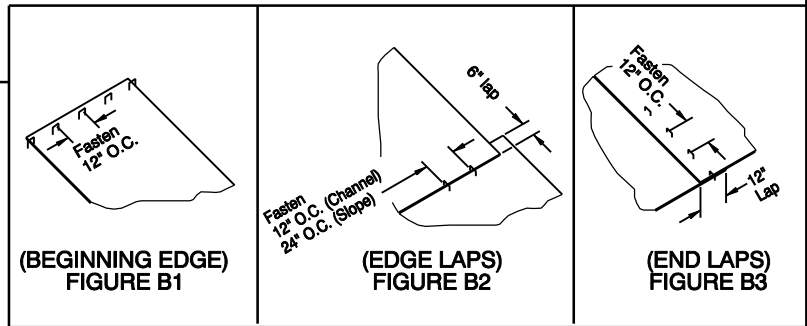
All information shown is minimum criteria for matting installation. All manufacturer's recommendations which are more stringent must be applied.

Channel application:

- ① Install mat in center of channel, in the direction of water flow. Anchor upstream end of mat with check slot (Fig. B1 & A4). Backfill check slot with rock. For culvert outfalls, place mat under pipe 12" minimum upstream from pipe outlet.
- ② Construct check slots across channel bottom at 50' spacings and at the end of each mat (Fig. A4). Fasten mat at bottom of check slot (Fig. A4 & B1). Backfill check slot with rock.
- ③ Overlap side channel mat edges 6" over the center channel mat and fasten edges 12" O.C. (Fig. B2). Continue overlap and stapling pattern for each additional side mat.
- ④ Lap upstream mat end 12" over beginning edge of downstream mat. fasten 12" O.C. (Fig. B3).
- ⑤ Anchor top edge of side channel mats in trench and fasten 12" O.C. (Fig. A2 & B1)
- ⑥ Fasten mat interior at 24" O.C. staggered spacing.

Slope application:

- ⑦ Anchor matting at top of slope (Fig. A1 & A2) Fasten in trench and at overlap 12" O.C. (Fig. B1)
- ⑧ Overlap mat edges 6" and fasten (Fig. B2). Install matting so edge overlaps are shingled away from prevailing winds. Fasten edges 24" O.C.
- ⑨ Overlap mat ends 12", upper mat over lower mat, and fasten (Fig. B3).
- ⑩ Stagger alternate rows of fasteners placed at 24" O.C.
- ⑪ Construct check slot when specified or as recommended by the manufacturer (Fig A3). Fasten mat in bottom of check slot (Fig. A3 & B1)
- ⑫ Extend mat 24" beyond toe of slope; fold mat back under 4" and fasten (Fig. B1)



The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

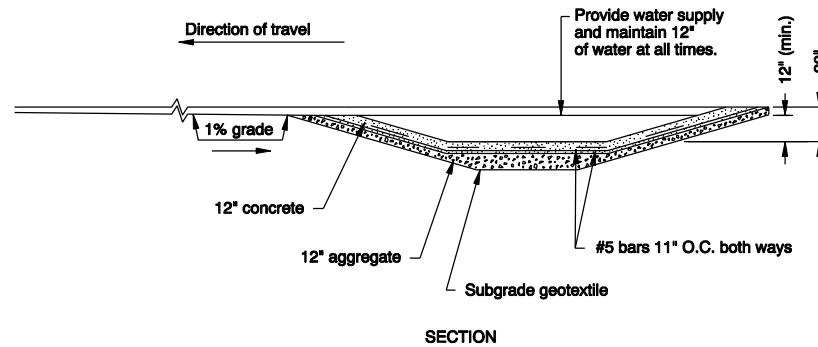
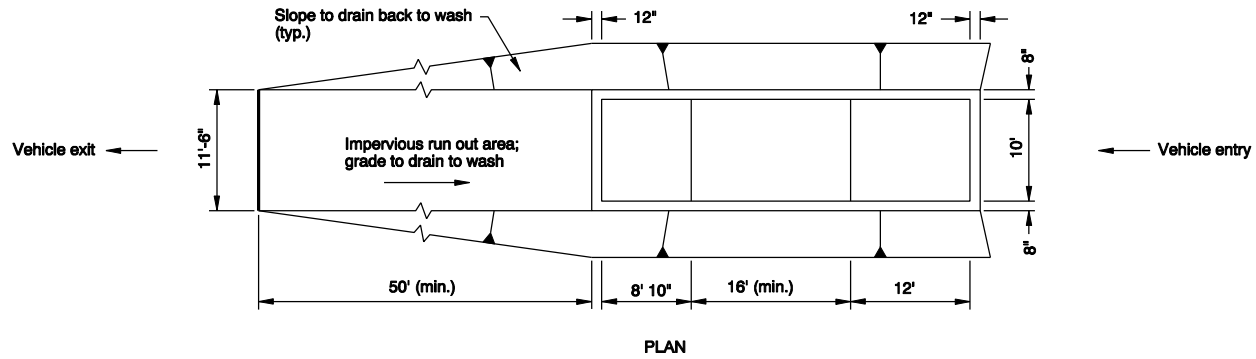
OREGON STANDARD DRAWINGS

MATTING

2002

REVISIONS
DESCRIPTION

DATE	DESCRIPTION



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OREGON STANDARD DRAWINGS

TIRE WASH FACILITY
(TYPE 1)

2002

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