

Saint Charles County, Missouri Design Criteria

**Table 60-9 Mulching Materials**

Material	Rate	Requirements	Installation/Uses
Straw	1.5-2.5 tons/ac (3-4 tons, if roller punched)	Dry, unchopped, unweathered; free of weed seeds & rot.	Spread by machine 1.5-2.5 inches deep; must be tacked or tied down.
Compost Blanket	1" thick	Double the application rate for embankments	Follow manufacturer's application method.
Wood fiber, wood cellulose, paper	1-2 tons/ac	Double the application rate in critical areas	Use with power mulcher or hydroseeder; may be used to tack straw on steep slopes. Cannot be used in hot dry weather.

**Table 60-7 Temporary Fall Seeding**

Plant Species	Rate <sup>1</sup> (lb/acre)	Seeding Times
Side-Oats	65	8/16 - 9/30
Winter Rye	50	8/01 - 10/15
Winter Wheat	60	8/01 - 10/15
Orchard Grass	120	8/01 - 10/15
Perennial Ryegrass	80	8/01 - 10/15
Tall fescue, Smooth Brome	80	8/01 - 10/15
K-31 Fescue	120	9/01 - 11/15
Ladino Clover	2 <sup>2</sup>	8/15 - 9/15
Crimson Clover	6 <sup>2</sup>	8/15 - 9/15
Orchard Grass and Oats or Rye	15 <sup>2</sup> / 40 <sup>2</sup>	8/15 - 9/15

<sup>1</sup>If using aerial seeding or other broadcast method to apply seed without rolling or culti-packing, increase seeding rates by 50 percent.

<sup>2</sup>Pure live seed (PLS)

**Table 60-8 Temporary Spring Seeding**

Plant Species	Rate <sup>1</sup> (lb/acre)	Seeding Dates
Winter Rye	50	3/15 - 5/31
Spring Oats	65	3/15 - 5/31
Annual Ryegrass	4 <sup>2</sup>	3/15 - 6/15
Sudangrass	16 <sup>2</sup>	4/15 - 6/15
K-31 Fescue	30 <sup>2</sup>	3/15 - 5/31
Red Clover	2 <sup>2</sup>	3/15 - 5/31
& Oats	30 <sup>2</sup>	3/15 - 5/31

<sup>1</sup>If using aerial seeding or other broadcast method to apply seed without rolling or culti-packing, increase seeding rates by 50 percent.

<sup>2</sup>Pure live seed (PLS)

**Table 60-18 Riprap Size & Apron Dimension**

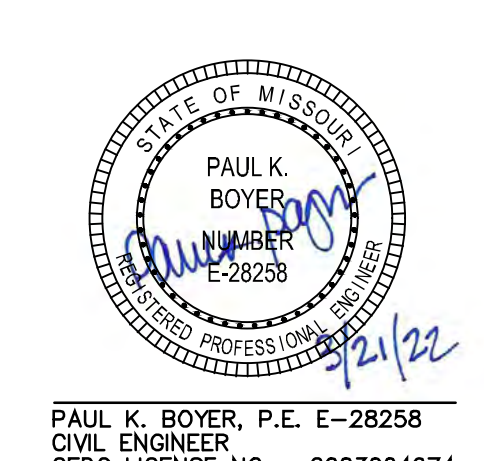
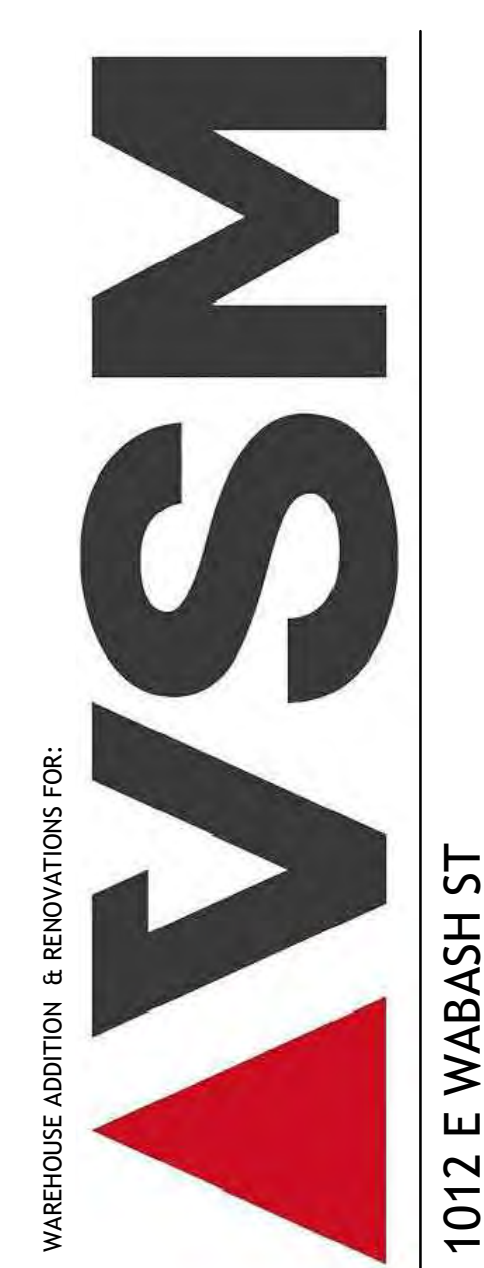
PIPE SIZE	VELOCITY < 5 FPS				VELOCITY < 10 FPS			
	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM
12	5	9	15	12	5	9	15	16
15	5	9	15	14	5	9	15	18
18-24	5	9	15	16	9	14	24	20
27-30	5	9	15	18	9	14	24	22
36-42	9	14	24	22	12	18	27	26
48-54	9	14	24	26	12	18	27	30
60-66	12	18	27	34	15	24	30	38
72-84	15	24	30	42	15	24	30	46
96	18	27	30	50	18	27	30	54

Legend: d<sub>50</sub> - NOMINAL DIAMETER, d<sub>max</sub> - MAXIMUM DIAMETER, T - THICKNESS, L - LENGTH



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 (Design - Build)



**DESCRIPTION:**  
 01/05/22 Construction Site Plan Submittal  
 01/14/22 Permit / Bid Set  
 02/24/22 City comments  
 03/21/22 City comments

Issue Date: 01/14/22  
 Job Number: 1981.1  
 Drawn By: PKB  
 Checked By: PKB  
 Drawing Title:

Storm Water Pollution Prevention Plan Details

C11.1