

RAIN: The Bridge Contractor shall excavate to the limits shown on the Bridge
grade the bottom of the backfill area, place the strip drain, and place the
outlet pipe, the CMP, and the backfill. Guide post and coarse aggregate
is bid item. Guide post and coarse aggregate are not required if the CMP

Perforated pipe shall be placed next to the strip drain. Outside the limits of the strip drain, non-perforated pipe shall be used. Care shall be taken to enclose the perforated pipe with the extension of the filter fabric.

The Abutment Strip Drain material shall meet the requirements of KDOT Specifications.

The CMP end section shall be fitted with a 1/4" galvanized mesh screen to prevent the entrance of rodents. The joint between the outlet pipe and end section shall be sealed with a joint sealer. Coarse aggregate shall be placed at the outlet end as shown.

The outlet pipe shall be placed on the downstream side of structures over streams and as shown or noted on other crossings (See Construction Layout sheet).

Extend filter fabric backing
and lap a minimum of 6" ⊕

DETAIL B

Strip Drain
(Bond to Abutment)

Backfill Compaction
See Standard Specification Limits of Excavation

Cohesive soil
Type C compaction

SECTION A-A *Limits of Bridge Backwall Protection
System (by Bridge Contractor)

KANSAS DEPARTMENT OF TRANSPORTATION

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FHWA APPROVAL		3-16-94	APP'D KENNETH F. HURST
DESIGNED	DETAILED	GFK	QUANTITIES
DESIGN CK.	DETAIL CK.	LRR	QUAN.CK.
			TRACE CK.



Diagram illustrating the connection detail for a side slope. The outlet pipe (4" non-perforated polyethylene tubing) is connected to the 6" x 8'-0" CMP. The connection is secured using a Guide post and Coarse aggregate. The side slope is shown with a minimum depth of 2'-6" and a vertical clearance of 1'-0" from the ground line (FL. CM). The horizontal distance from the CMP to the ground line is 3'-0". The vertical distance from the CMP to the ground line is 6".

[illegible]

7'-0" post

4'-0"

15 1/8"

3 3/8"

3 1/4"

Metal Guide Post Option
(7'-0" at 3.00 Lbs./Ft.)
Flanged channel

† Nominal dimension.

*Note: Wood guide posts shall be given a preservative treatment as provided in the KDOT Specifications.
Reflectorized material will be applied to the post by the State.*

The top 18" of the posts shall be given 2 coats of aluminum paint and the top 12" of the post shall be given one coat of International Orange Enamel paint. Only one type of preservative treatment may be used on a project.

Metal guide posts shall meet the requirements of the KDOT Specifications.

Metal post shall have a galvanized or baked enamel coating and the upper 12" of each post shall receive a coat of International Orange Enamel paint.

See Detail A

Strip Drain
(Bond to Abutment)

Limits of Excavation
 ←
Backfill Compaction
 See Standard Specification

Varies, 6" minimum

Cohesive soil
Type C compaction $\oplus$

SECTION A-A *Limits of Bridge Backwall Protection System (by Bridge Contractor)

SUMMARY OF QUANTITIES		
Abutment Strip Drain	48	Sq. Yds.
Bridge Backwall Protection System	56	Sq. Yds.
Items <u>Subsidiary to Strip Drain</u>		
4"Ø Perforated Pipe	86	Lin. Ft.
4"Ø Outlet Pipe	60	Lin. Ft.
6"Ø CMP	16	Lin. Ft.

ELEVATION

Limits Strip Drain

4" ϕ perforated
tubing

Limits Strip Drain

4" ϕ non-perforated tubing

4"Ø perforated
tubing

PLAN

6" x 6'-0" post

3'-0"

3'-0"

4" (maximum)

3/4" Holes each direction

Wood Guide Post Option
(6" ϕ x 6'-0")

Wood Guide Post Option
(6" ϕ x 6'-0")

4" ϕ non-perforated

Limits Strip Drain

Coupling

PLAN

B