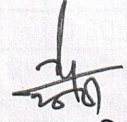


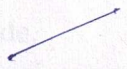
कार्यालय ज्ञाप

एतद् द्वारा उत्तराखण्ड राज्य में लोक निर्माण विभाग उत्तराखण्ड द्वारा निर्मित किए जाने वाले पैदल मार्गों की विशिष्टियाँ जारी की जा रही है। भविष्य में पैदल मार्गों हेतु Cement Concrete Pavements का निर्माण ना कर केवल संलग्न विशिष्टियों के अनुसार Stone Pavements का ही निर्माण किया जायेगा। तीर्थस्थलों हेतु एक आपात काल निकासी मार्ग (Emergency Exit Route) का भी प्राविधान किया जाना अनिवार्य होगा, जिसकी विशिष्टियाँ उपरोक्त विशिष्टियों के अनुरूप ही होंगी।

  
प्रमुख अभियन्ता  
लोक निर्माण विभाग देहरादून

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित :

1. प्रमुख सचिव, वित्त उत्तराखण्ड शासन।
2. प्रमुख सचिव, लोक निर्माण विभाग उत्तराखण्ड शासन।
3. प्रमुख सचिव, नियोजन, उत्तराखण्ड शासन।
4. अपर सचिव, लोक निर्माण विभाग उत्तराखण्ड शासन।
5. मुख्य अभियन्ता ग्रामीण अभियन्त्रण सेवा, देहरादून।
6. मुख्य अभियन्ता/विभागाध्यक्ष सिंचाई विभाग, देहरादून।
7. प्रबंध निदेशक, पेयजल निगम, देहरादून।
8. मुख्य अभियन्ता पी0एम0जी0एस0वाई0/ए0डी0बी0 लो0नि0वि0, पौड़ी/अल्मोड़ा/देहरादून।
9. समस्त अधीक्षण अभियन्ता, सिविल एवं वि0या0 लोक निर्माण विभाग उत्तराखण्ड। अधीक्षण अभियन्ता अपने स्तर से अधिशासी अभियन्ताओं को उपलब्ध कराना सुनिश्चित करें।
10. अधिशासी अभियन्ता टी0ए0सी0 वित्त विभाग, उत्तराखण्ड शासन।
11. वरिष्ठ स्टाफ आफिसर I, II/अधिशासी अभियन्ता I II III IV V VI कार्यालय मुख्य अभियन्ता स्तर-I, लो0नि0वि0 देहरादून।
12. कनिष्ठ अभियन्ता (प्रा0), कार्यालय विभागाध्यक्ष, लोक निर्माण विभाग, देहरादून।

  
प्रमुख अभियन्ता  
लोक निर्माण विभाग देहरादून



## SPECIFICATIONS FOR BRIDLE ROADS

### GEOMETRIC STANDARDS :

S.No.	Items	Specifications	
		Bridle Road (General)	Bridle Road (Pilgrimage)
1	Road land width in open areas	3.0 m	5.0 m
2	Formation width :	1.8 m	3.0 m
3	Radius of curves (Minimum)	5.0 m	5.0 m
4	Widening at sharp curves upto 3m radius	1.0 m	1.0 m
5	Cross slope/Camber	3 to 4%	3 to 4%
6	Minimum radius at H.P. bends	3.0 m	3.0 m
7	Gradients : a. For ghat tracing b. Ruling c. Limiting d. Exceptional (not more than 30m length)	1 in 8 1 in 6 - 1 in 4	1 in 8 1 in 6 - -
8	Drains	0.30 m	0.30m
9	Scuppers	1m span, 3 to 10 Nos per km	1m span, 3 to 10 Nos per km
10	Bridges and culverts : a. Design load b. Clear roadway between kerbs	400kg/sqm 2.0 m	400kg/sqm 4.0 m
11	Surface	Stone paving	Stone paving
12	Shoulders	Earthen shoulders of minimum width 30 cm on valley side	Earthen shoulders of minimum width 30 cm on valley side

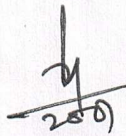
### CONSTRUCTION OPERATIONS:

#### A. SUBGRADE /BASE :

The subgrade shall be prepared to the levels and slopes shown on drawings and compacted with rammers or other means, where required, to have an even bedding. Before laying the stones for pavement construction, the subgrade shall be thoroughly inspected by the Engineer-in-Charge to ensure:

- There are no loose pockets and unfilled depressions left in the subgrade.
- The soil at the subgrade level is properly compacted to the line and level

A crushed stone base or dry kharanja of 10 cm thickness shall be provided over the prepared subgrade.

  
प्रमुख अभियन्ता  
लो. नि. वि.



## B. STONE PAVING:

The pavement shall be made using stones of size not less than 20 cms x 20 cms and thickness varying from 10 cms to 15 cms. The size of the stones shall be such that they can be lifted and placed by hands. The stones shall be hard, sound, free from cracks, decay, weathering defects like cavities, flaws, sand holes, and patches of loose or soft materials or other similar defects that may adversely affect their strength or appearance. They shall be hammer dressed on all the sides to form an almost rectangular or square shape, except the bottom face which will rest on the subgrade.

The stones shall be bedded on a 2.5 cm thick bedding layer of PCC 1:1.5:3 using a taut string line or a straight edged timber as a guide to line and level. The stones shall be placed leaving 4 to 8 cms wide staggered joints. These joints shall then be filled with 1:1.5:3 (Cement : Fine aggregate : 20 mm Size Coarse Aggregate) Cement Concrete mix in such a way that the level of stones is 3 to 5 mm higher than the level of concrete.

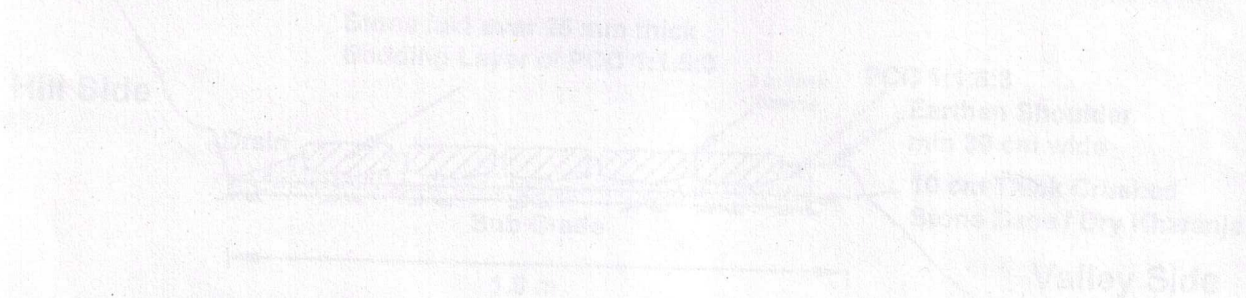
After 24 hours, the curing shall be started for the concrete used in the pavement and shall continue for a period of not less than fourteen days from the date of placing concrete.

## C. DRAINAGE:

30 cms wide drain shall be provided on the hill side throughout the length of the road. 10 cms to 15 cms wide water cutoffs (Pankatta) of PCC 1:1.5:3 and sloping towards the valley side shall be provided at a regular interval of 10 m to 15 m throughout the length of the road.

24/10/01

प्रमुख अभियन्ता  
लो. नि. वि.

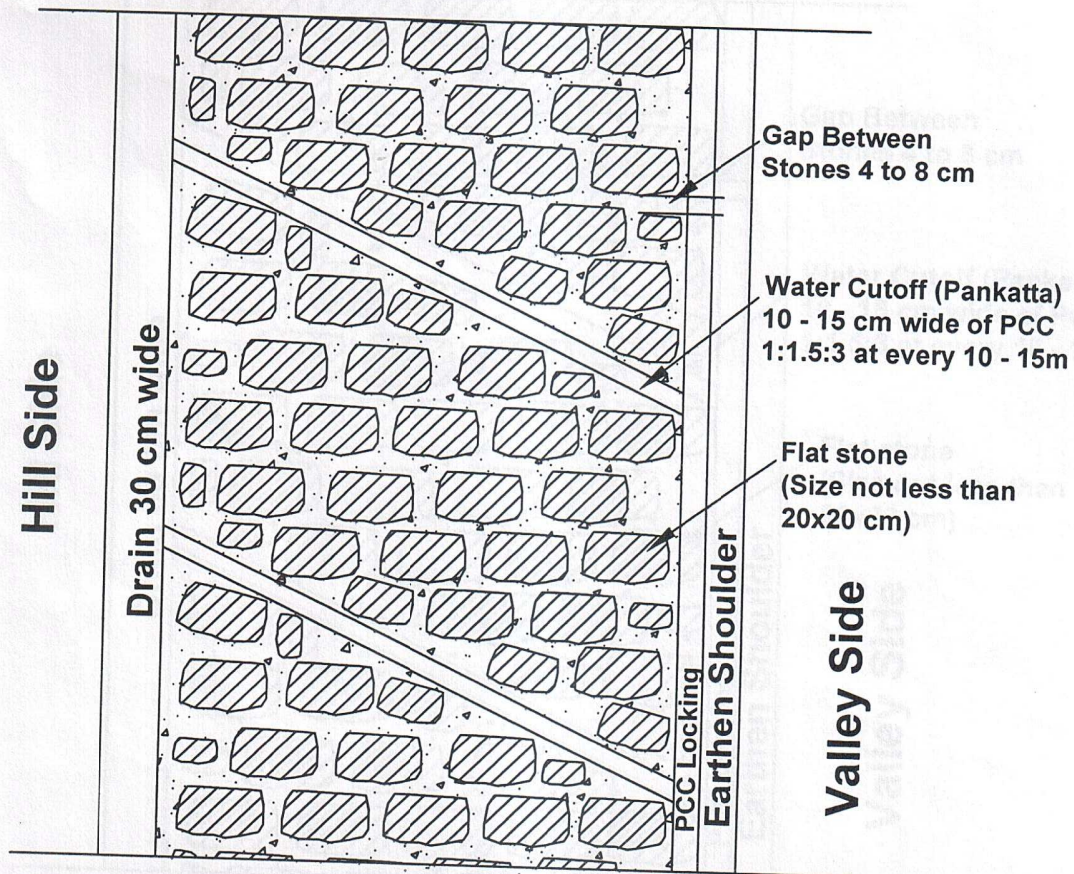


X-Section

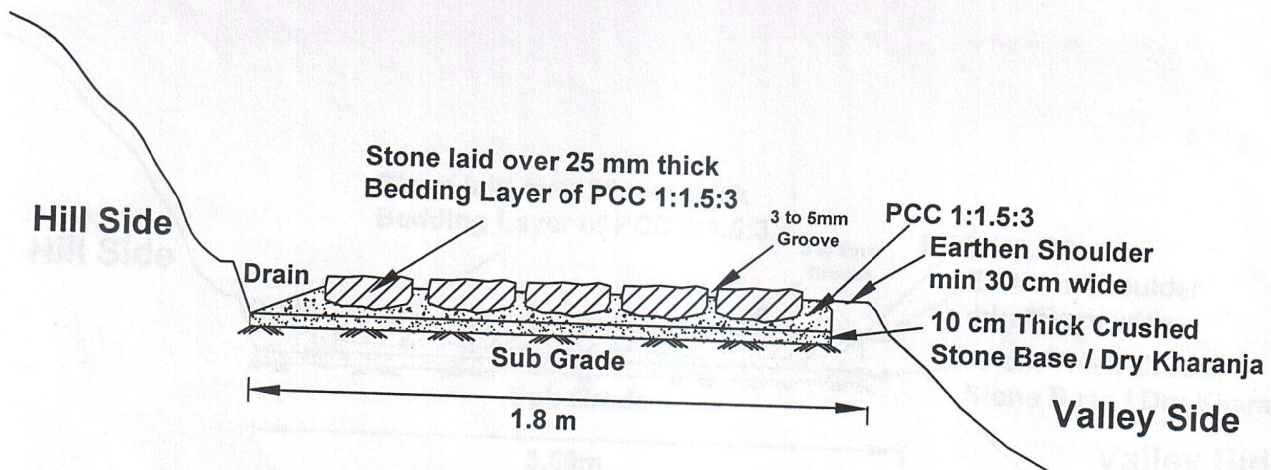
Do. Not to Scale

Typical Drawing For Bridge Road  
(General)





**Plan**



**X- Section**

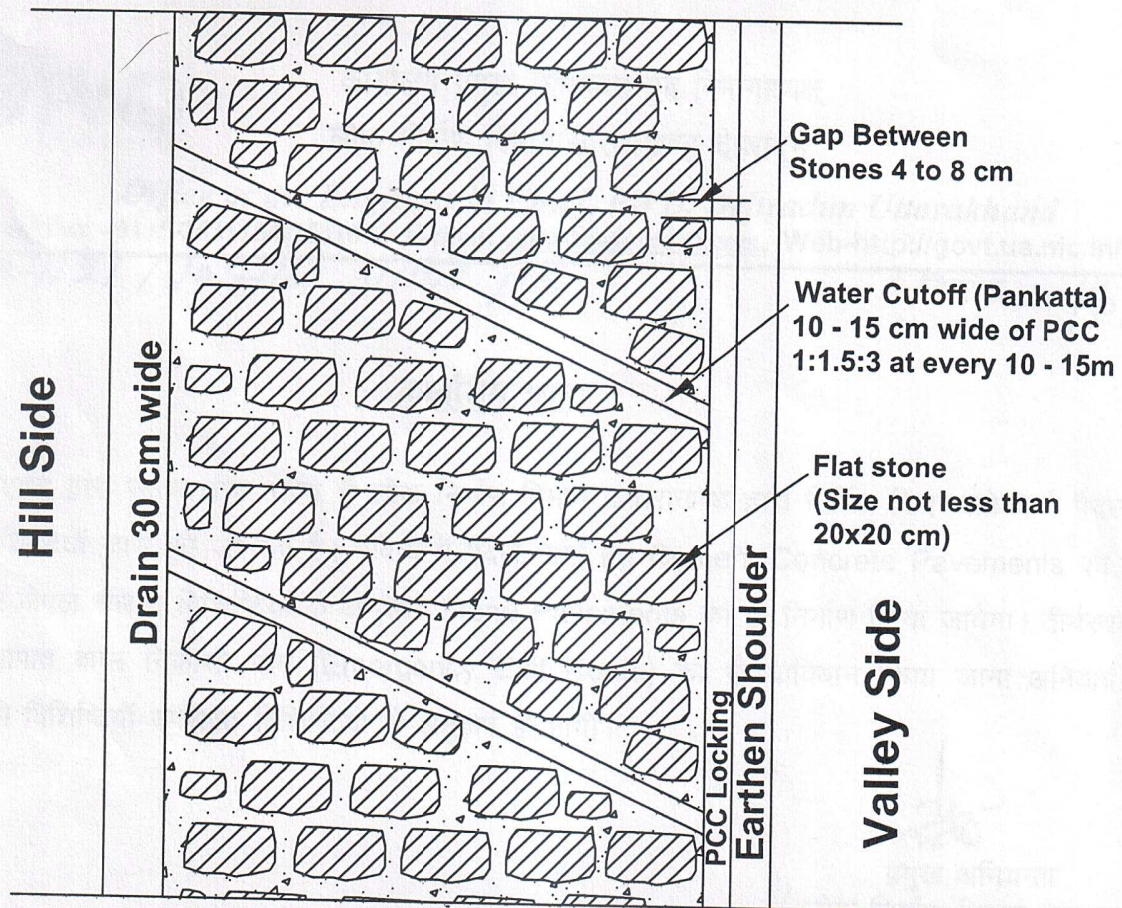
*Drg. Not to Scale*

**Typical Drawing For Bridle Road**  
**(General)**

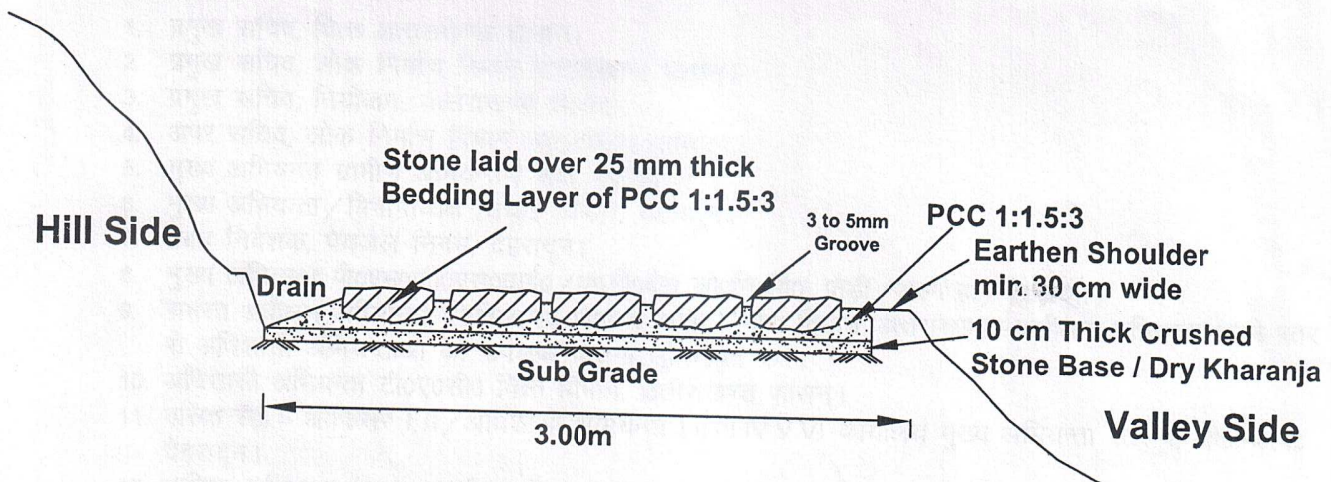
*Handwritten signature and date*

*Handwritten text in Hindi*





**Plan**



**X- Section**

*Drg. Not to Scale*

**Typical Drawing For Bridle Road  
(Pilgrimage)**

*[Signature]*  
प्रमुख अभियन्ता  
लो. नि. वि.