Modified

Schedules

Schedule A

(See Clause 2.1 and 8.1)

SITE OF THE PROJECT

1. The Site

(i) Site of the Foot Track shall include the land, buildings, structures and road works as described in Annex-I of this Schedule-A.

(ii) The dates of handing over the Right of Way to the Contractor are specified in Annex-II of this Schedule-A.

(iii) An inventory of the Site including the land, buildings, structures, road works, trees and any other immovable property on, or attached to, the Site shall be prepared jointly by the Authority Representative and the Contractor, and such inventory shall form part of the memorandum referred to in Clause 8.2 (i) of this Agreement.

(iv) The alignment plans of the Foot Track are specified in Annex-III. The Contractor, shall however, may improve the Foot Track Profile as indicated in Annex-III based on site/design requirement, yet the modified plan must pass within ROW acquired and through the obligatory points of NHIDCL, as per their strategical/ functional requirement.

(v) The status of the environment and forest clearances obtained or awaited is given in Annex-IV.

Annex – I

(Schedule-A)

Site

1. SITE

The Site of the Foot Track comprises the section starting from Basam and Terminating at Tathi..The Project track stretch is the State of Arunachal Pradesh. The starting point at Basam is having of Longitude and Latitude(E- 95°48'54.80" & N - 29°2'21.30"). The termination point at Bisai is having of Longitude and Latitude (E- 95°43'20.02" & N- 29°5'20.02"). The land, carriageway and structures comprising the Site are described below.

2. Land

The Site of the Foot Track comprises the land (sum total of land already in possession and land to be possessed) as described below:

S. No.	Chainage (km)		Already in possession	To be Acquired. ROW (m)	Remarks
	From	To			
1	0+000	32.060	NIL	7 meter for Track, 20 m x 20 m for staging area and 35 m x 35m for helipad	The foot track is to be constructed on new Greenfield alignment.

3. Carriageway

There is no existing carriageway.

4. Culverts and causeway:

The Site has the following exiting culverts:

Sl. No.	Existing Chainage	Type	Size	Remarks
NIL				

5. Track side drains

The details of the existing drains are as follows:

Sr. No.	Location		Type	
	From km	To km	Masonry/cc (Pucca)	Earthen (Kutcha)
NIL				

6. Other structures

Nil

Annex II

(Schedule-A)

Dates for providing Right of Way

The dates on which the Authority shall provide Right of Way to the Contractor on different stretches of the Site are stated below:

Sl. No	Design Chainage		Length (Km)	Proposed ROW Width (m)	Date of Providing proposed ROW
	From	To			
i) 90% of ROW (full width)	0.000	32.060	28.850	5 meter for Track, 20 m x 20 m for staging area and 35 m x 35m for helipad	At Appointment Date
ii) Balance Right of way (width)	0.000	32.060	3.210		Within 150 days after the Appointed Date

Annex – III

(Schedule-A)

Alignment Plans

The alignment of the Foot Track is enclosed in the alignment plan. However, the Contractor may make minor changes / alter / modify the alignment plan as better engineering alternative by meeting codal provisions specified in document. In case of any modifications, the modified alignment must pass within ROW acquired and through the obligatory points in between points of NHIDCL but the start / end points cannot be modified / changed.

Annex – IV

(Schedule-A)

Environment Clearances

1. The environment and forest clearances obtained.

   NIL (Being obtained)

2. Forest diversion is being obtained for required ROW/Land.

Schedule B

Development of the Project Highway

1 Development of the Foot Track

Development of the Foot Track shall include design and construction of the Foot Track as described in this Schedule-B and in Schedule-C.

2 Specifications and Standards

The Foot Track shall be designed and constructed in conformity with the Specifications and Standards specified in Annex-I of Schedule-D.

Annex – I

(Schedule-B)

DESCRIPTION OF FOOT TRACK CONFIGURATION

1. New Foot Track

The Foot Track located in mountainous terrain shall follow the proposed alignment unless otherwise specified by the Authority and shown in the alignment plans specified in Annex III of Schedule-A. Geometric deficiencies, if any, in the existing horizontal and vertical profiles shall be corrected as per the prescribed standards for mountainous terrain to the extent land is available.

1.1 Width of Carriageway

S. No.	Design Chainage		Length	Width
	From	To	(km)	(m)
1	0.000	32.06	32.06	2.5

2. GEOMETRIC DESIGN AND GENERAL FEATURES

2.1 General

Geometric design and general features of the Foot Track shall be in accordance with IRC-52-2019 clause 6.13 & 6.14.

2.2 Right of Way

The Right of Way shall be 7 meter for the entire alignment.

2.3 Typical Cross-Sections of the Foot Track

As per TCS 1 to 5 enclosed.

2.4 Gradients

a) Ruling -10%

b) Maximum - 15%

3.0 TRACK EMBANKMENT AND CUT SECTION

3.1 The entire alignment shall be designed and constructed in such a manner that as far as possible it is in only cut sections, unless otherwise the terrain demands for an embankment construction, to be approved by AE.

4. PAVEMENT :- Pavement shall be provided as under:-

4.1 Pavement with paver block shall be constructed on this track. Notwithstanding anything contrary contained in this Agreement, the pavement shall be provided as given below.

Pavement Composition:-

Paver block (M25)	-	80 mm (minimum)
Sand/stone dust	-	50 mm (minimum)
GSB	-	150 mm (minimum)

Note: Well compacted subgrade, 200mm thick, shall be prepared to the satisfaction of AE.

5. TRACKSIDE DRAINAGE

Lined drain on the hill side and on both sides in box cut (if any) shall be provided along the complete length of the foot track as under:-

(a) Shape- Trapezoidal

(b) Top width- 30 cm

(c) Bottom width -20 cm

(d) Depth – 30 cm

6. DESIGN OF STRUCTURES

6.1 Culverts :

6.1.1 Overall width of all culverts shall be equal to the trackway width of the approaches.

6.1.2 New culverts shall be constructed at the required locations in such a manner that on an average, a minimum of four Slab/box culverts/Hume pipe must be available in each km length of the project. The tentative number of the culverts to be provided are given in the table below:

S. No.	Type of Structure	Minimum Span/ Diameter	Numbers
i	RCC Box/Slab/Hume pipe	1.0 m	128

Note:- Hump pipe: Minimum NP-II Hume pipe to be provided.

6.1.3 Distance between any two culverts shall not be more than 300 m.

6.1.4 The span and location of culverts shall be as per profile/site requirement and shall be approved by AE.

6.2.1 New Bridges

New bridges at the following locations on the Project track shall be constructed

Sl. No.	Design Chainage	Proposed Span (m)	Clear Roadway Width (m	Remarks
1.	0+152	30.0	2.5	As per Design No.4
2.	1+926	90.0	2.5	As per Design No.5
3.	4+729	20.0	2.5	As per Design No.3
4.	7+111	20.0	2.5	As per Design No.3
5.	7+922	8.0	2.5	As per Design No.1
6.	9+275	30.0	2.5	As per Design No.4
7.	13+627	30.0	2.5	As per Design No.4
8.	13+887	15.0	2.5	As per Design No.2
9.	14+658	30.0	2.5	As per Design No.4
10.	14+915	20.0	2.5	As per Design No.3
11.	15+777	20.0	2.5	As per Design No.3
12.	18+050	15.0	2.5	As per Design No.2
13.	19+620	20.0	2.5	As per Design No.3
14.	24+940	30.0	2.5	As per Design No.4
	Total =	**378.0**		

Note 1 :- The number, location i.e. chainage and proposed span mentioned above is approximate. The number of bridges, number of spans in each bridge and total length of each bridge shall be as per site requirement and provided as per approval of AE.

Note 2 :- Increase in the total length of all bridges provided beyond total length shown above shall not constitute a change of scope.

Note 3:- Any reduction in total length of all Bridges constructed at site shall constitute a negative change of scope.

Note 4:- The contractor may adopt any other type or design for construction of the foot bridges, subject to it being designed for load of 500 kg/ sq.m load and Military Load Class 5 and design being proof checked by proof consultant and reviewed by AE.

6.2.2 Drainage system for bridge decks

An effective drainage system for bridge decks shall be provided.

7. SIGNAGES AND TRACKING SIDE FURNITURE

i. The provisions of the track furniture are given in the applicable TCS drawings. Typical details given in Annexure-II of Schedule-B.

ii. Traffic Signs for Track Users would be provided as directed by AE, in accordance with good engineering practice. Minimum numbers to be provided are as under:-

Sr. No.	Type	Quantity	Remarks
I	Right hand curve	30	The quantities shown are minimum and contractor is required to provide the requisite number of sign board as per site condition and as per approval of AE.
Ii	Left hand curve	30	
Iii	Direction signs	10	
Iv	Rock slide Area	10	
V	Watch for wild life	4	
Vi	5 Km Stone	07	
Vii	Kilo meter Stone	26	
viii	Delineators	150	

8. Rain Shelters cum Staging camps

One staging camp shall be provided between Chainage 27.000 to 32.000 km as per Design attached as Annexure-II to Schedule- C. Each staging camp shall have 2 Nos. of Prefeb Shelters with Puf Panel Type-B3 having minimum outside size 7.5 m x 5.0 m with PUF Insulated Panel of 80 mm including Full length Verandah and without Toilets, as attached in Annexure-II to Schedule-C.

9. Helipad-1 Nos.

One Number of helipad to be constructed of size 25 X 25 m at location to be decided by AE in consultation with local ITBP personal and Air force Authority, having the following details :

(i) Well compacted subgrade 300 mm thick to be prepared as per satisfaction of A.E.

(ii) GSB of 150 mm thick in the whole area of 25 X 25 m.

(iii) Concrete pavement of M25, 150 mm thick in 25X25 m area over the GSB.

10. PARAPET WALL

Complete length of the project shall have parapet wall in Gabion/Plum Concrete/ RRM in CM (1:4) on valley side of the following size.

(i) Size -2m (length) X 0.6 m (high) X 0.5 m (width)

(ii) Gap between walls – 1m.

Note: If the contractor chooses to construct the parapet walls of Gabion, then every 200m length of Parapet wall of Gabion, shall be followed by 50 m length of parapet wall of Plum Concrete/ RRM in CM (1:4)

11. PROTECTION WORK

I. The following minimum protection works shall be provided as tabulated below:

Sr. No.	Items	Unit
1	Breast wall in RRM/Gabion (2-3 m high)	25000 m
2	Retaining Wall in RRM / Gabion (height as per site requirement)	400 m

Note 1- *The Contractor shall be responsible for accurate assessment of the actual requirement as per site situation & prepare designs for slope protection & stabilization and submit the same to the AE for review through the proof consultant and implement it accordingly thereafter.*

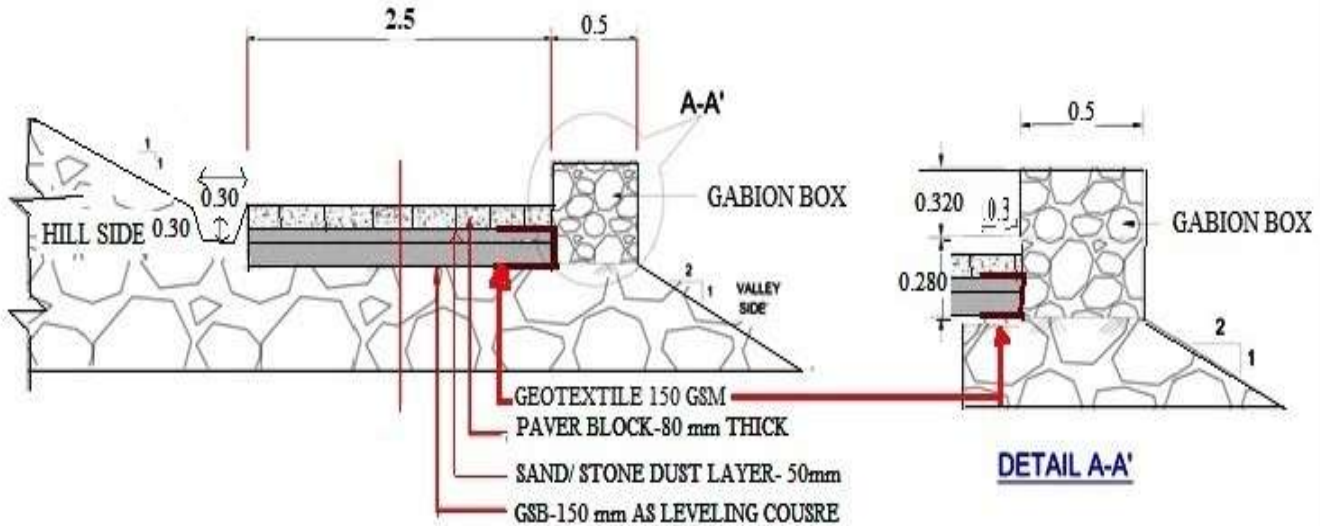
Note 2- **Any increase in quantity over and above the minimum qty.** ***as mentioned in above table or change in specifications will not be considered as change of scope.*** *Therefore, contractor shall make thorough investigation at site and assess the requirement of slope protection and slide prone zone and other safety features at his own before submission of bid.*

Note 3- *The length of Retaining wall shown above indicative and can be converted to Breast wall as per site requirement, with the approval of AE.*

12. CHANGE OF SCOPE

The length of Structures and bridges specified herein above shall be treated as an approximate assessment. The Contractor in accordance with the Specifications and Standards shall determine the actual lengths as required on the basis of detailed investigations. Any variations in the lengths specified in this Schedule- B shall not constitute a Change of Scope, save and except any variations in the length arising out of a Change of Scope expressly undertaken in accordance with the provisions of Article 13.

TCS-1



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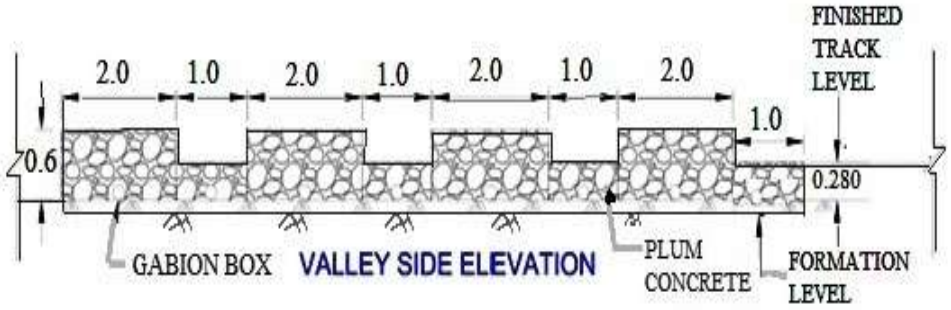
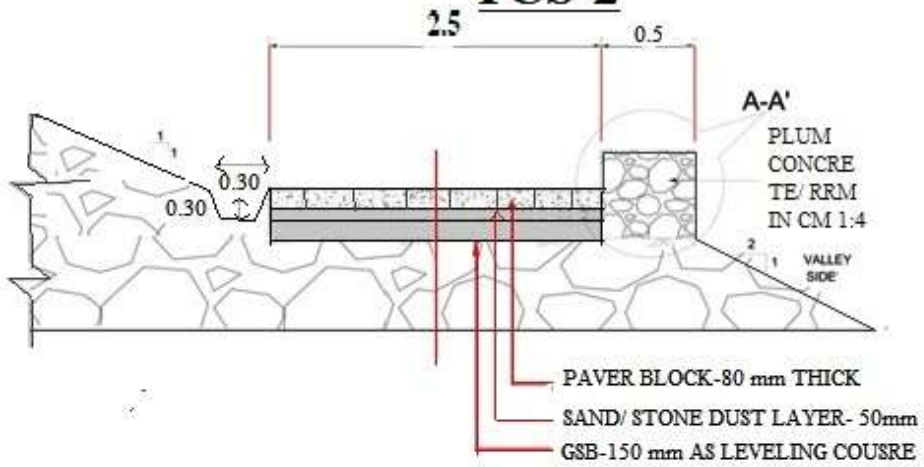


CLIENT	NAME OF THE WORK	TITLE
NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMWNT CORPORATION LIMITED	CONSTRUCTION OF FOOT TRACK IN ARUNACHAL PRADESH	TYPICAL CROSS SECTION OF FOOT TRACK

TCS-2



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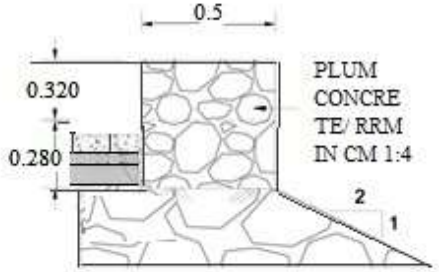
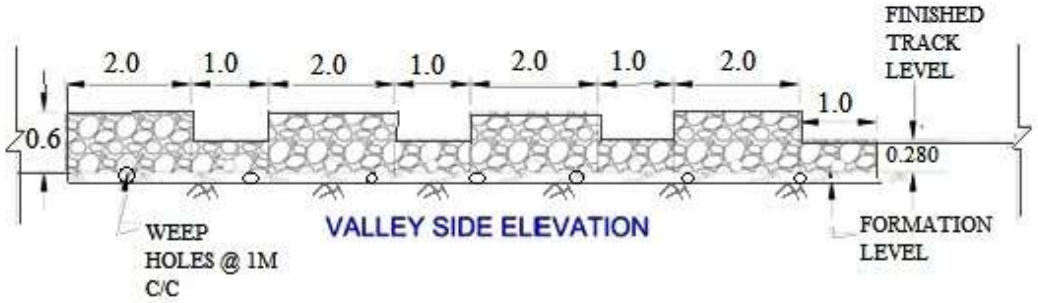


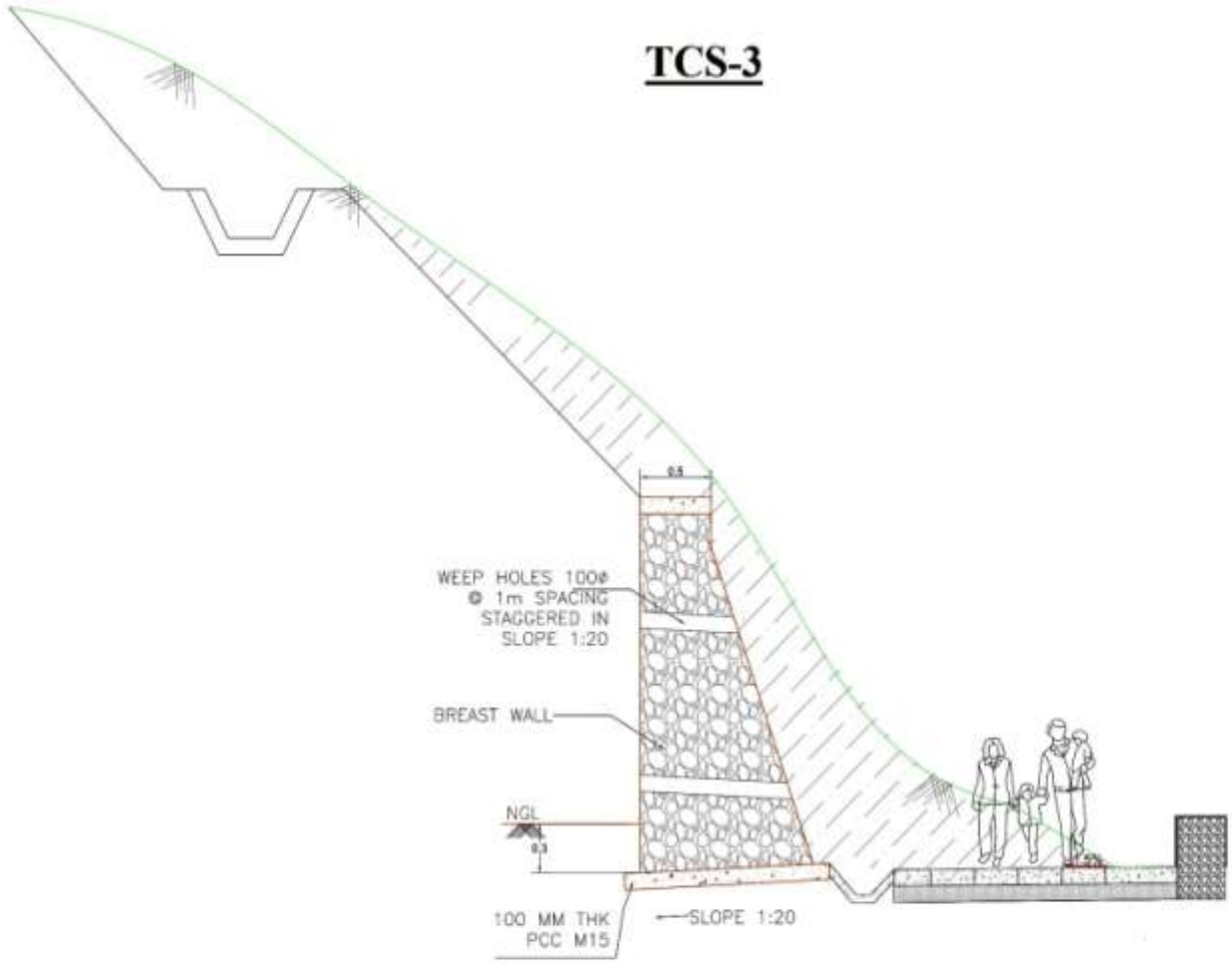
DETAIL A-A'



VALLEY SIDE ELEVATION

CLIENT	NAME OF THE WORK	TITLE
NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMWNT CORPORATION LIMITED	CONSTRUCTION OF FOOT TRACK IN ARUNACHAL PRADESH	TYPICAL CROSS SECTION OF FOOT TRACK

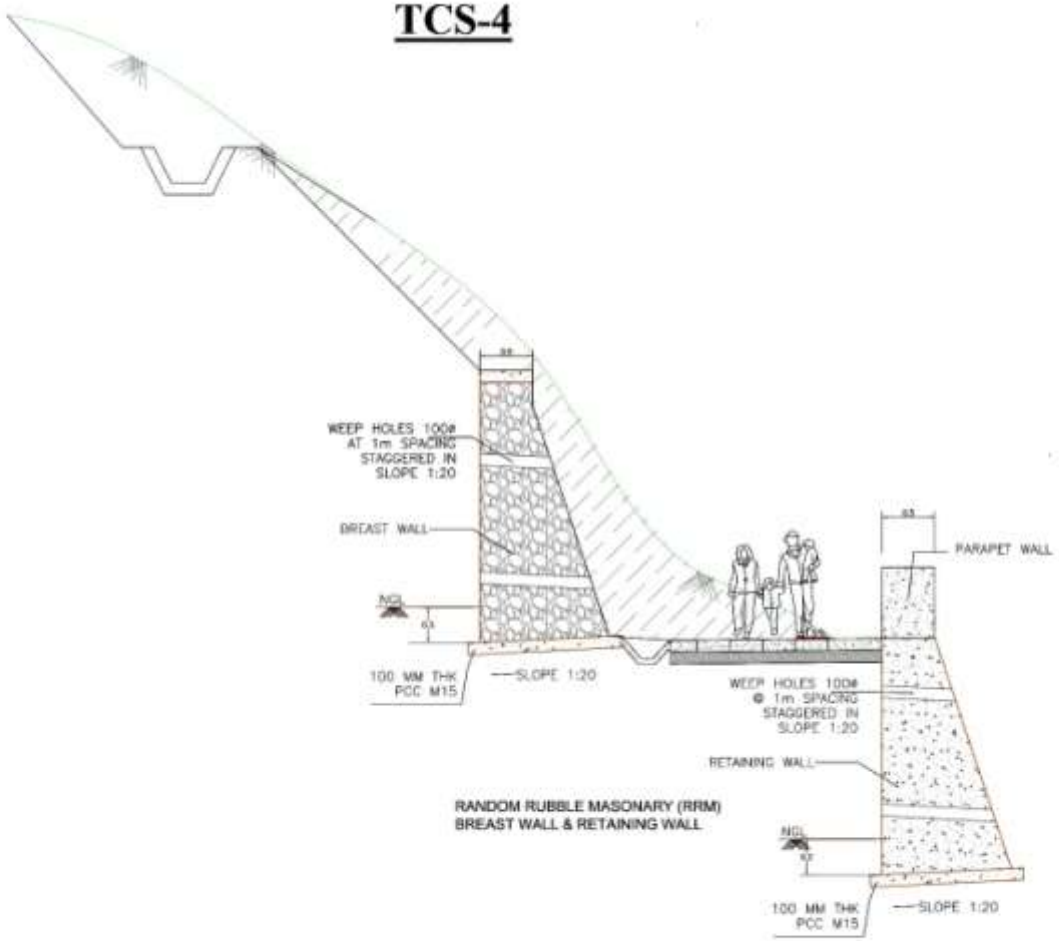
TCS-3



RANDOM RUBBLE MASONARY (RRM) BREAST WALL

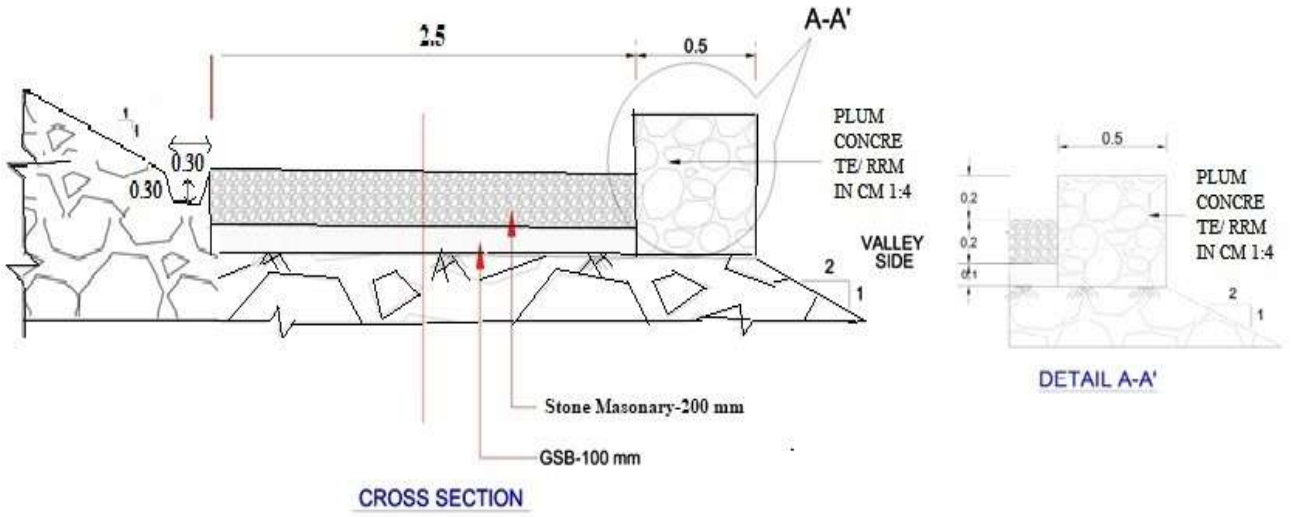
CLIENT	NAME OF THE WORK	TITLE
NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMWNT CORPORATION LIMITED	CONSTRUCTION OF FOOT TRACK IN ARUNACHAL PRADESH	TYPICAL CROSS SECTION OF FOOT TRACK

TCS-4



CLIENT	NAME OF THE WORK	TITLE
NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMWNT CORPORATION LIMITED	CONSTRUCTION OF FOOT TRACK IN ARUNACHAL PRADESH	TYPICAL CROSS SECTION OF FOOT TRACK

TCS-5



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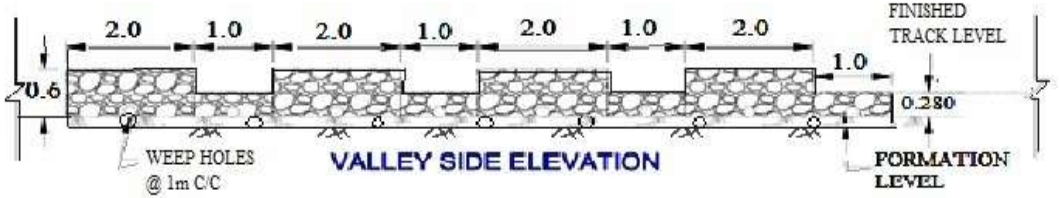

CLIENT	NAME OF THE WORK	TITLE
NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMWNT CORPORATION LIMITED	CONSTRUCTION OF FOOT TRACK IN ARUNACHAL PRADESH	TYPICAL CROSS SECTION OF FOOT TRACK