



DRAWINGS VOLUMES

Road Safety Audit on the Blackspots in the state
of Meghalaya, under the jurisdiction of NHIDCL

1. Ryndang Briew
2. Mawiong Umjapung

PREPARED FOR



**National Highways Infrastructure
Development Corporation Limited,
RO Shillong, PMU-Mylliem**

PREPARED BY



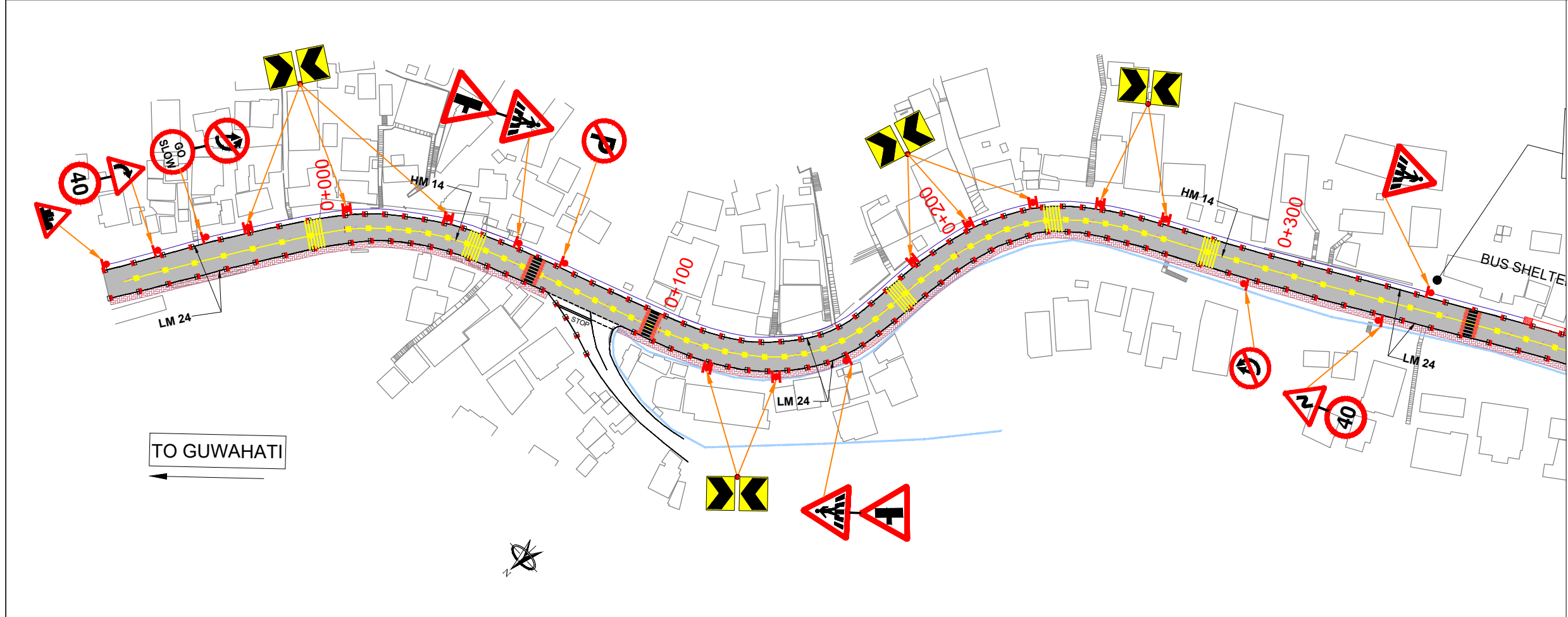
**BTES CONSULTING SERVICES
PRIVATE LIMITED**



ROAD SAFETY AUDIT ON THE BLACK SPOTS IN THE STATE OF MEGHALAYA,
UNDER THE JURISDICTION OF NHIDCL.

DRAWING LIST

DRAWING NO.	DRAWING TITLE	REVISION NO.
PLAN AND PROFILE		
NHIDCL/BTES/RSA/DLP/PLN-01	SIGNAGE & MARKING PLAN	R0
TYPICAL CROSS SECTION		
NHIDCL/BTES/RSA/DLP/TCS-01	TYPICAL CROSS SECTION	R0
STANDARD DRAWING		
NHIDCL/BTES/RSA/DLP/RS-01	TYPICAL DRAWING OF ROAD SIGNAGE	R0
NHIDCL/BTES/RSA/DLP/RM-01 to 02	TYPICAL DRAWING OF TRANSVERSE BAR MARKING	R0
NHIDCL/BTES/RSA/DLP/PGR-01	DETAIL OF PEDESTRIAN GUARD RAIL	R0
NHIDCL/BTES/RSA/DLP/LBD-01	DETAIL OF LOAD BEARING DRAIN	R0
NHIDCL/BTES/RSA/DLP/NLBD-01	DETAIL OF NON-LOAD BEARING DRAIN WITH COVER	R0
NHIDCL/BTES/RSA/DLP/BS-01	DETAIL OF BUS SHELTER	R0



NOTE:-
1. ALL DIMENSIONS ARE IN METER
UNLESS OTHERWISE MENTIONED

LEGENDS:-

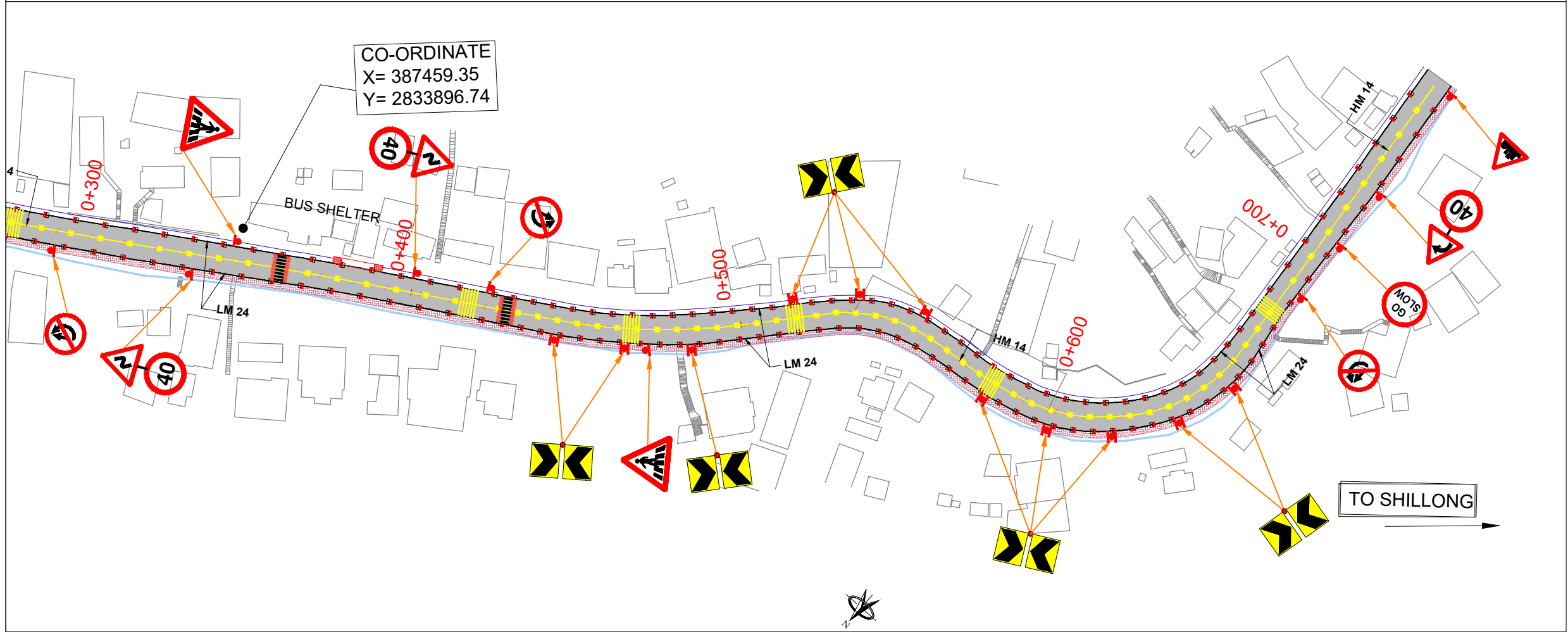
EXISTING ROAD 

TRANSVERSE BAR MARKING 

STUD:-

RED WHITE
ON CARIAGEWAY EDGE 

YELLOW YELLOW
ON LADDER HATCHING 



			APPROVED:		CLIENT:  NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. MINISTRY OF ROAD TRANSPORT & HIGHWAYS, GOVERNMENT OF INDIA	SAFETY CONSULTANT:		PROJECT: ROAD SAFETY AUDIT ON THE BLACK SPOTS IN THE STATE OF MEGHALAYA, UNDER THE JURISDICTION OF NHIDCL. 1. RYNDANG BRIEW 2. MAWIONG UMJAPUNG			
			CHECKED:				 11/1-A, Second Floor, Prem Nagar, Janakpuri , Near Tilak Nagar Metro, New Delhi – 110058	TITLE: DRAWINGS LAYOUT PLAN	DATE: JULY. 2024	SCALE: HOR 1:1000	
			DESIGNED:					DRAWING NO. NHIDCL/BTES/RSA/DLP/01	SHEET SIZE: A2	SHEET: 01 OF 01	REV:
R0	JUL. 2024	FOR SUBMISSION	DRAWN:								
REV.	DATE	DESCRIPTION									

MADATORY AND REGULATORY SIGN



Fig. 14.37 MAXIMUM SPEED LIMIT

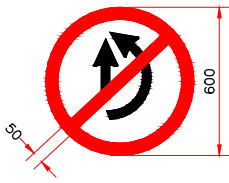


Fig. 14.23 OVERTAKING PROHIBITED



Fig. 14.29 NO PARKING
NO PARKING
DEFINATION PLATE TO Fig. 14.29 (OPTIONAL)



GO SLOW AHEAD

SIZES AND DIMENSIONS OF MANDATORY/REGULATORY SIGNS

Approach Speed	Size	Mandatory Signs			
		Diameter (mm)	Border (mm)	Oblique bar (mm)	Font Size (mm)
Upto 65 kmph	In Conjunction with traffic light signal	300	35	35	75
	Small	600	50	50	100

CAUTIONARY/ WARNING SIGNS

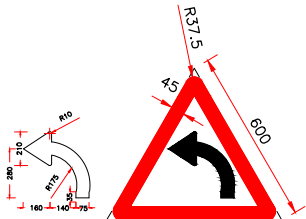


Fig. 15.01 LEFT HAND CURVE

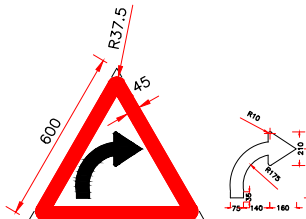


Fig. 15.02 RIGHT HAND CURVE

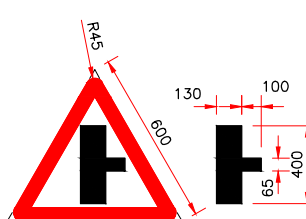


Fig. 15.09 SIDE ROAD RIGHT

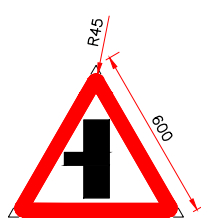


Fig. 15.10 SIDE ROAD LEFT

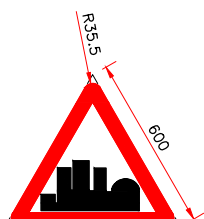


Fig. 15.35 BUILT-UP AREA



Series of Bends (Fig.15.07)

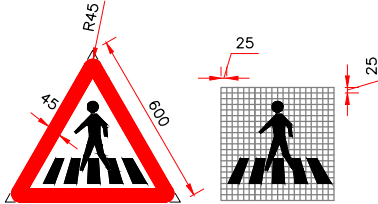


Fig. 15.33 PEDESTRIAN CROSSING

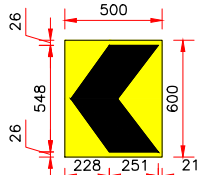
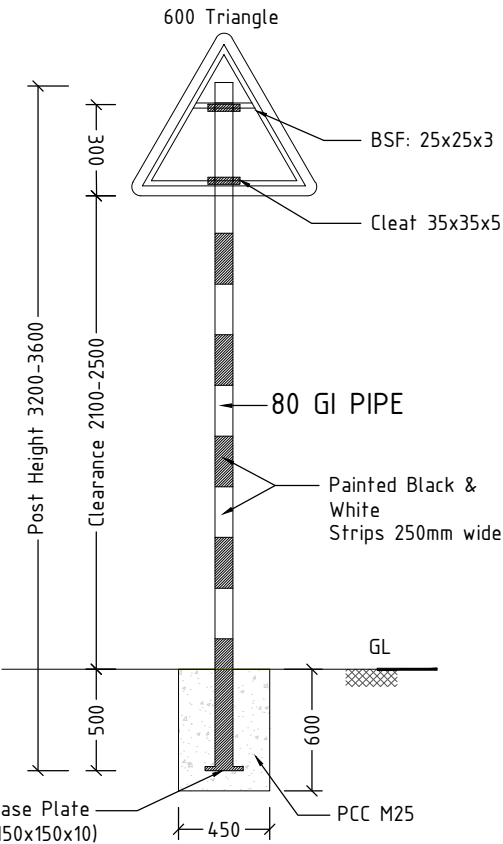
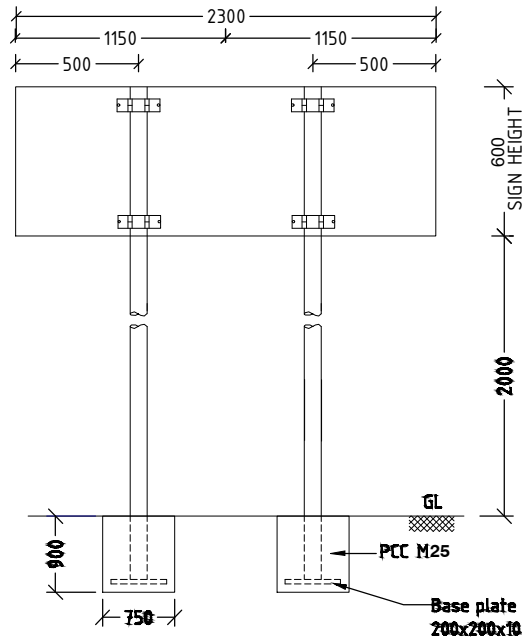


Fig. 15.72 SINGLE CHEVRON (NORMAL)



Fixing Details of Cautionary/ Warning Signs



TRIPLE CHEVRON SIZE 2300X600mm



NOTES:

- DIMENSIONS SHOWN ARE FOR NORMAL SIZED SIGNS.
- ALL DIMENSIONS ARE IN MILLIMETERS.
- FOR ROAD SIGN DETAILS REFER IRC 67-2022
- REFER IRC:30-1968 FOR STANDARD LETTER.

REV.	DATE	DESCRIPTION	APPROVED:	CHECKED:	DESIGNED:	DRAWN:
R0	AUG.2024	FOR SUBMISSION				

CLIENT:



NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
MINISTRY OF ROAD TRANSPORT & HIGHWAYS, GOVERNMENT OF INDIA

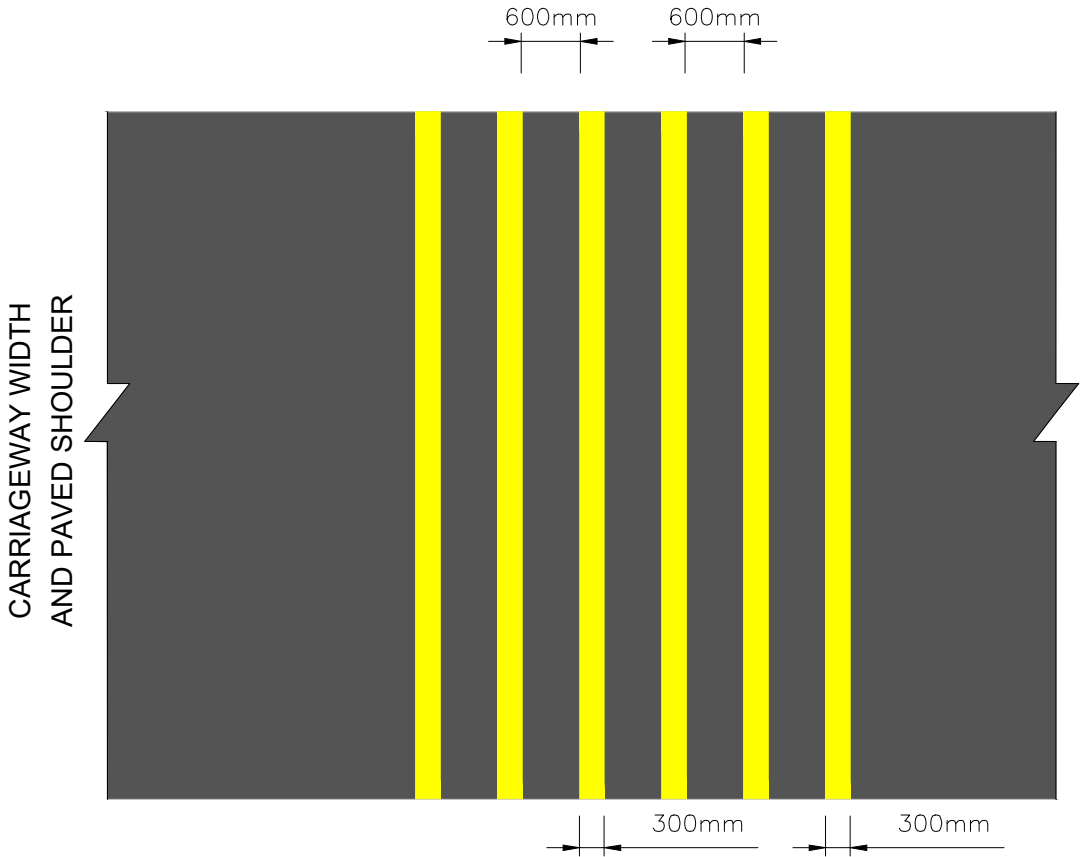
SAFETY CONSULTANT:



11/1-A, Second Floor, Prem Nagar,
Janakpuri , Near Tilak Nagar Metro,
New Delhi - 110058

PROJECT: ROAD SAFETY AUDIT ON THE BLACK SPOTS IN THE STATE OF MEGHALAYA, UNDER THE JURISDICTION OF NHIDCL. 1. RYNDANG BRIEW 2. MAWIONG UMJAPUNG			TITLE: DRAWINGS LAYOUT PLAN (MANDATORY SIGNS)		DATE: AUG. 2024	SCALE: HOR 1:1000
DRAWING NO. NHIDCL/BTES/RSA/DLP/01			SHEET SIZE: A2		SHEET: 01 OF 01	REV: R0

NOTE:-
1. ALL DIMENSION ARE IN MM.
UNLESS OTHERWISE MENTIONED.



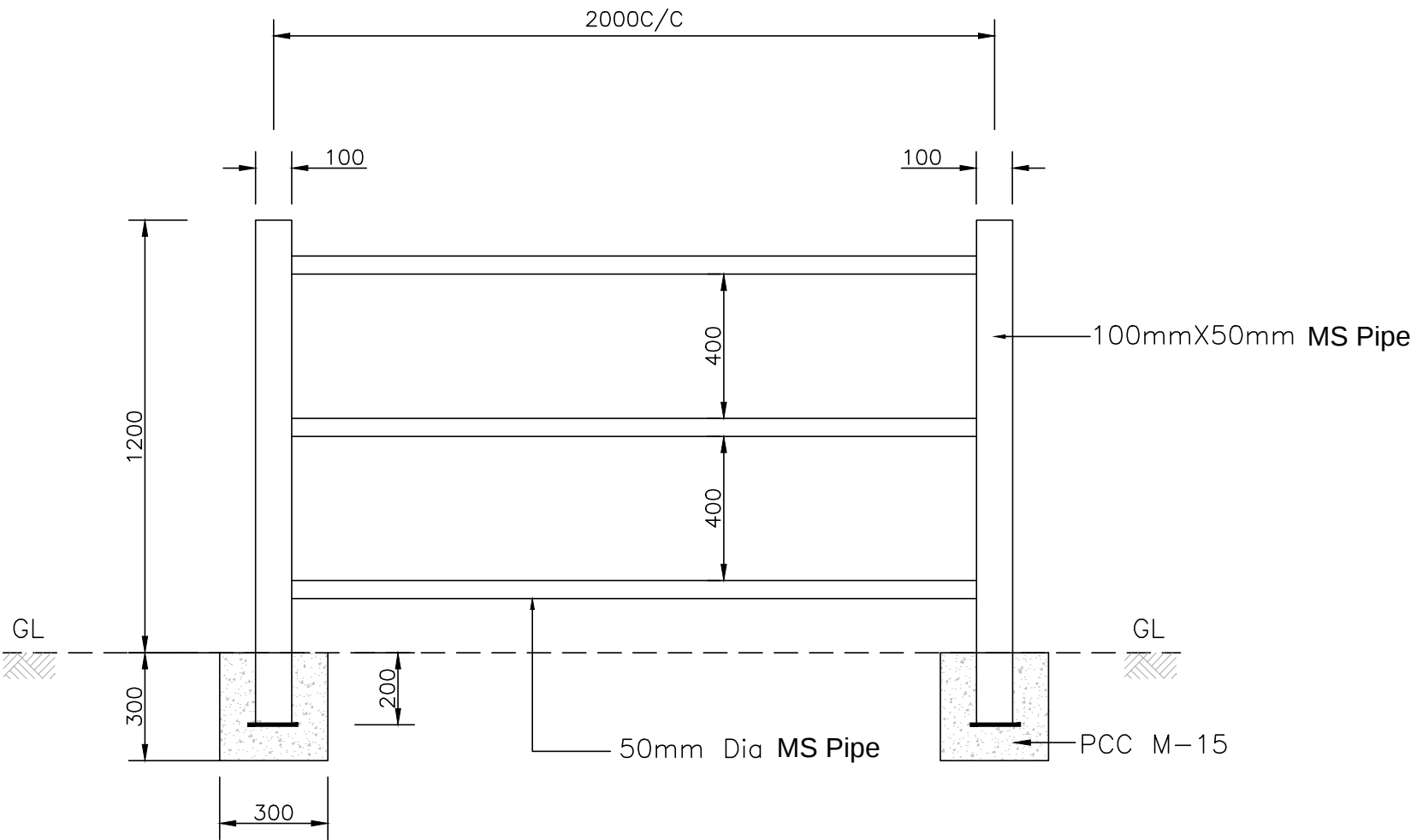
*Thermoplastic marking of 300mm wide and 15mm height at 600m apart (one set is of 6 Strip).

Plan of Thermoplastic Bar Marking
15mm Height and Gap width 600mm

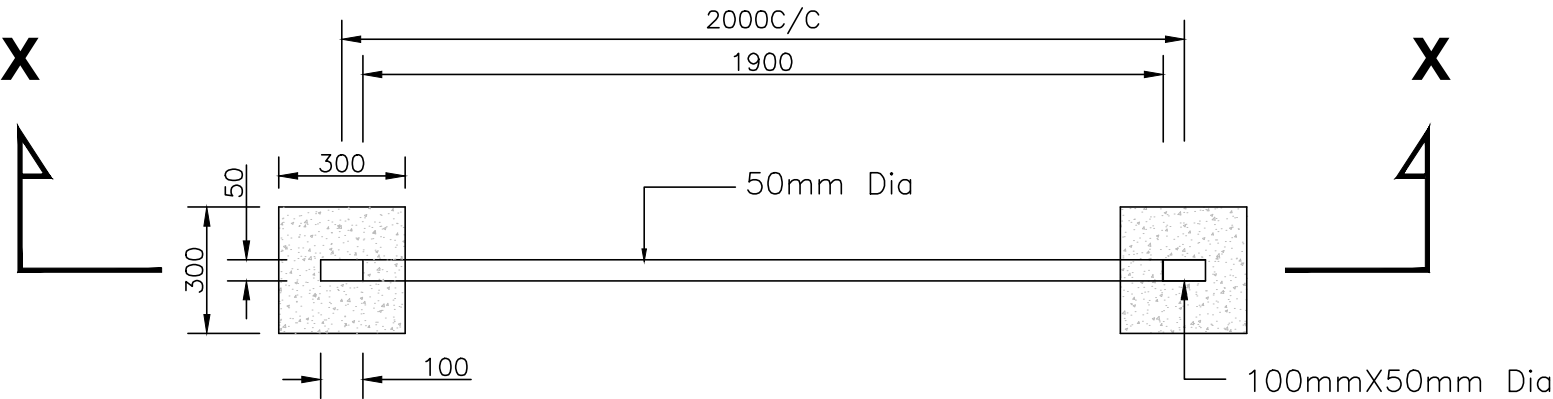


			APPROVED:		CLIENT:  NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. MINISTRY OF ROAD TRANSPORT & HIGHWAYS, GOVERNMENT OF INDIA	SAFETY CONSULTANT:  11/1-A, Second Floor, Prem Nagar, Janakpuri , Near Tilak Nagar Metro, New Delhi – 110058	PROJECT: ROAD SAFETY AUDIT ON THE BLACK SPOTS IN THE STATE OF MEGHALAYA, UNDER THE JURISDICTION OF NHIDCL. 1. RYNDANG BRIEW 2. MAWIONG UMJAPUNG		
			CHECKED:				TITLE: TYPICAL DRAWINGS LAYOUT FOR TRANSVERSE BAR MARKING	DATE: AUG. 2024	SCALE: HOR 1:1000
			DESIGNED:						
	R0	AUG.2024	FOR SUBMISSION						
	REV.	DATE	DESCRIPTION				DRAWING NO. NHIDCL/BTES/RSA/MISC/TBM-01	SHEET SIZE: A2	SHEET: 01 OF 01 REV: R0

NOTE:
1) ALL DIMENSIONS ARE IN 'MM' UNLESS OTHERWISE SPECIFIED.
2) PEDESTRIAN GUARD RAIL SHALL BE CONSTRUCTED AT BUILT UP LOCATIONS.



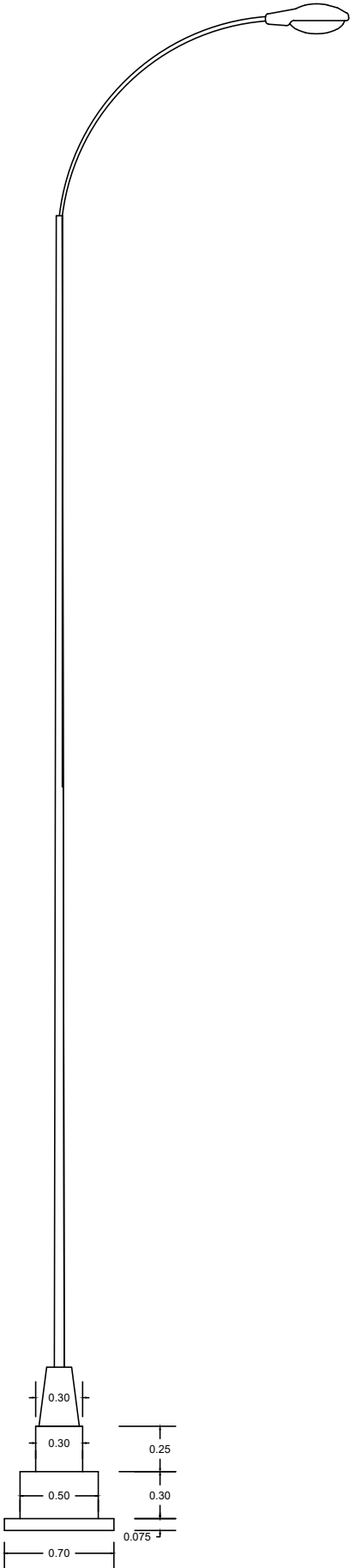
SECTION X-X



PLAN



				APPROVED:		CLIENT:  NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. MINISTRY OF ROAD TRANSPORT & HIGHWAYS, GOVERNMENT OF INDIA	SAFETY CONSULTANT:  11/1-A, Second Floor, Prem Nagar, Janakpuri , Near Tilak Nagar Metro, New Delhi – 110058	PROJECT: ROAD SAFETY AUDIT ON THE BLACK SPOTS IN THE STATE OF MEGHALAYA, UNDER THE JURISDICTION OF NHIDCL. 1. RYNDANG BRIEW 2. MAWIONG UMJAPUNG			
				CHECKED:				TITLE: TYPICAL DETAILS OF PEDESTRIAN RAILING	DATE: AUG. 2024	SCALE: H0R 1:1000	
R0	AUG.2024	FOR SUBMISSION		DESIGNED:				DRAWING NO. NHIDCL/BTES/RSA/MISC/RAILING/01	SHEET SIZE: A2	SHEET: 01 OF 01	REV: R0
REV.	DATE	DESCRIPTION		DRAWN:							

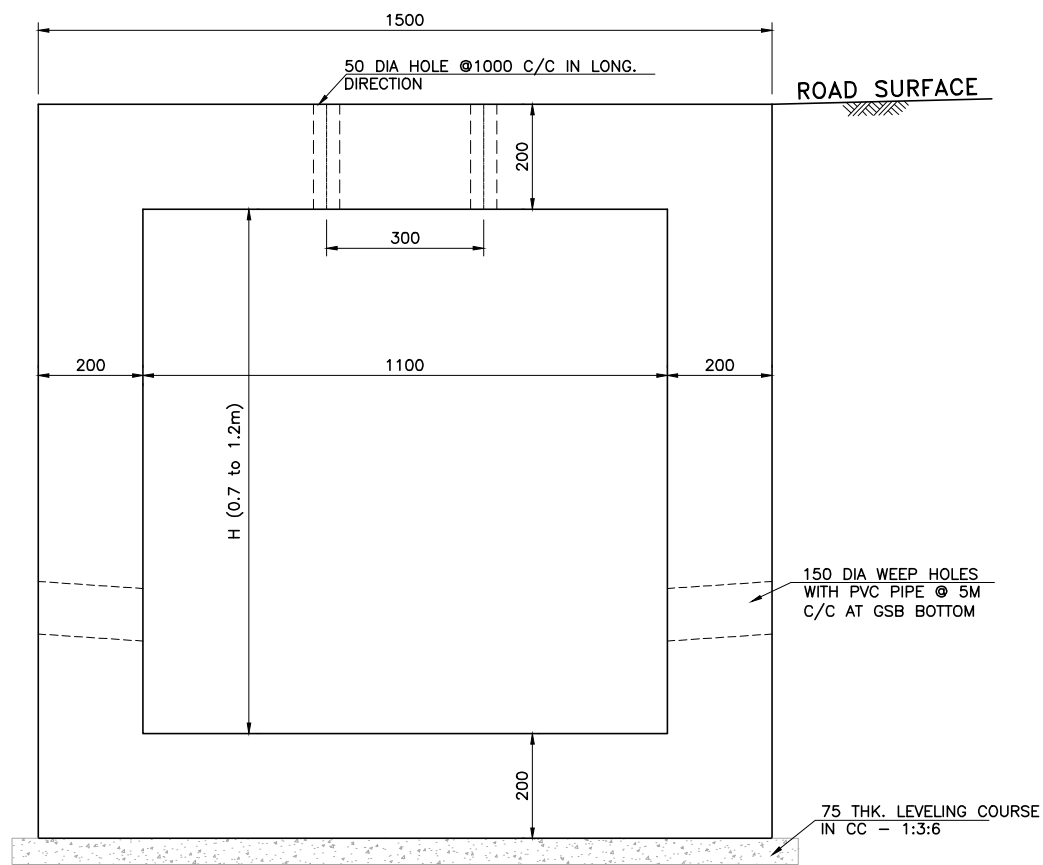


DETAILS OF LIGHT POLE

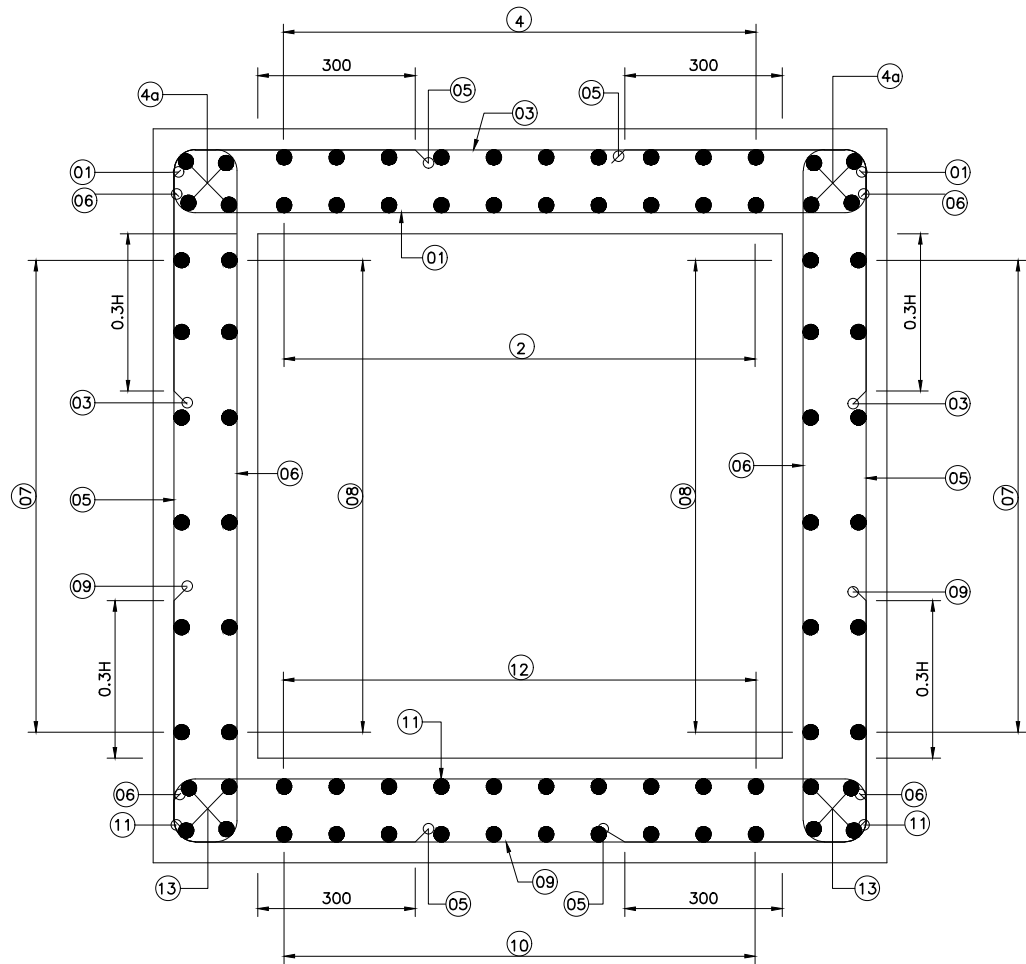
NOTES-
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE MENTIONED.



			APPROVED:		CLIENT:  NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. MINISTRY OF ROAD TRANSPORT & HIGHWAYS, GOVERNMENT OF INDIA	SAFETY CONSULTANT:  11/1-A, Second Floor, Prem Nagar, Janakpuri , Near Tilak Nagar Metro, New Delhi – 110058	PROJECT: ROAD SAFETY AUDIT ON THE BLACK SPOTS IN THE STATE OF MEGHALAYA, UNDER THE JURISDICTION OF NHIDCL. 1. RYNDANG BRIEW 2. MAWIONG UMJAPUNG				
			CHECKED:				TITLE: DETAILS OF LIGHT POLE		DATE: AUG. 2024	SCALE: HOR 1:1000	
R0	AUG.2024	FOR SUBMISSION		DESIGNED:				DRAWING NO. NHIDCL/BTES/RSA/MISC/LP/01		SHEET SIZE: A2	SHEET: 01 OF 01 REV: R0
REV.	DATE	DESCRIPTION		DRAWN:							



DIMENSION DETAILS OF DRAIN



REINFORCEMENT DETAILS OF DRAIN



NOTES

- ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED. NO DIMENSION SHALL BE SCALED.
- CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM CHARACTERISTIC STRENGTH OF 25 MPa.
- MIN. CLEAR COVER TO OUTER MOST STEEL SHALL BE AS BELOW:-
 - (I) FOUNDATION - 40mm
 - (II) SIDE WALL - 40mm
 - (III) TOP SLAB - 40mm
- REINFORCEMENT STEEL SHALL BE HYSD DEFORMED BARS (GRADE DESIGNATION Fe-500D) CONFORMING TO IS:1786 STANDARDS..

REINFORCEMENT TABLE:				
	BAR MKD.	SHAPE OF BARS (NOT TO SCALE)	BAR DIA IN mm	SPACING OR NO. OF BAR
TOP SLAB	01		12	225
	02		8	200
	03		10	250
	04		8	200
	4a		10	4 NOS.
VERTICAL WALL	05		10	250
	06		10	250
	07		8	200
	08		8	200
BOTTOM SLAB	09		10	250
	10		8	200
	11		12	225
	12		8	200
	13		10	4 NOS.

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			CHECKED:				TITLE: DIMENSION AND REINFORCEMENT DETAIL OF LOAD BEARING DRAIN		DATE: JULY. 2024	SCALE: HOR 1:1000	
R0	JUL 2024	FOR SUBMISSION	DESIGNED:				DRAWING NO. NHIDCL/BTES/RSA/MISC/LBD/01		SHEET SIZE: A2	SHEET: 01 OF 01	REV: R0
REV.	DATE	DESCRIPTION	DRAWN:								



PROJECT: ROAD SAFETY AUDIT ON THE BLACK SPOTS IN THE STATE OF MEGHALAYA, UNDER THE JURISDICTION OF NHIDCL.

1. RYNDANG BRIEW
2. MAWIONG UMJAPUNG

TITLE: TYPICAL DETAILS OF BUS SHELTER LAYOUT

DATE:	SCALE:
JULY. 2024	HOR 1:1000

DRAWING NO. NHIDCL/BTES/RSA/BS/01

SHEET SIZE:		
A2	SHEET: 01 OF 01	REV: R0

			APPROVED:	CLIENT:  NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. MINISTRY OF ROAD TRANSPORT & HIGHWAYS, GOVERNMENT OF INDIA
			CHECKED:	
			DESIGNED:	
			DRAWN:	
R0	JUL.2024	FOR SUBMISSION		
REV.	DATE	DESCRIPTION		