

SCHEDULE-A

(See Clause 10.1)

SITE OF THE FOUR LANE PROJECT HIGHWAY

- 1 **The Site**
 - 1.1 Site of the Project Highway shall include the land and road works as described in Annexure - I of this Schedule-A.
 - 1.2 The dates of handing over the Right of Way to the Contractor are specified in Annex-II of this Schedule-A.
 - 1.3 The alignment plans of the Project Highway are specified in Annex-III. The site of the Two Lane Service Road (7.00 mtr width) project highway will be taken up for construction under EPC Mode. The site will be provided as and where is basis. The EPC Contractor should mandatorily visit the site and take judicious reconnaissance of the same.

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Ranjit Ghosal

Annex – I

(Schedule-A)

Site for Two Lane Service Road

1. The Site

The site of the two-lane service road comprises the section of National Highway 31D (New NH-27) commencing from km 53.900 to km 55.900 RHS, i.e. Goshala More – Paharpur More section in Jalpaiguri district of West Bengal. The land and existing structures on Four lane NH – 31D comprising the site are described below;

2. Land

The site of the project highway comprises the land described below:

Sl. No.	Existing Chainage		Design Chainage		ROW (Total)
	From	To	From	To	
1	Km 53.900 of NH-31D	Km 55.900 of NH-31D	Km 0.000	Km 2.000	60 m varying width

3. Carriageway

The present carriageway of the project highway is Four lane with paved shoulders.

4. Major Bridges

The site includes no major bridge.

5. Railway Over Bridges

The site includes no Railway Over Bridge.

6. Minor Bridges / Box Culvert / Hume Pipe Culvert

The site includes following Minor Bridges / Box Culverts / Hume Pipe Culverts:

S. N.	Design Location (for Service Road) at km	Type of structure	Span/ Opening in m	Remarks
1	0.420	HPC	1.20	
2	0.820	Box Culvert	2 x 2	
3	1.050	Minor Bridge	7.07	
4	1.125	Minor Bridge	7.07	
5	1.670	HPC	1.200	
6	1.910	Box Culvert	2x2	

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Construction of Service Road from Ghosala More to Paharpur More (RHS Side) for smooth entry and exit from NH-31D (new NH-27) to Circuit Bench of Calcutta High Court at Jalpaiguri in the state of West Bengal on EPC basis.

7. At-grade Junctions
i) Major Junctions

Sr. No.	Design Chainage (Km)	Junction Type	Remarks
1	0.000	T	Goshala More
2	2.000	T	Paharpur More

8. Bus Bays
Nil

9. Truck Lay Bays
Nil

10. Road Side Drain
Earthen Drain

11. Utility

(A) The Site includes the following Electrical Utilities:-

High Tension/ Low Tension lines (HT/LT Lines)

S. No.	Chainage (Km) From	HT Line (1 no)	LT Line (2 nos)	33 KV (1 no)
1	Km 0.000 to Km 2.000 RHS	Km 0.000 to Km 2.000 RHS	Km 0.000 to Km 2.000 RHS	Km 0.000 to Km 2.000 RHS

Note :- The lengths mentioned above are tentative.

Construction of Service Road from Ghosala More to Paharpur More (RHS Side) for smooth entry and exit from NH-31D (new NH-27) to Circuit Bench of Calcutta High Court at Jalpaiguri in the state of West Bengal on EPC basis.

Annex- II
(Schedule-A)

Dates for providing Right of Way

RoW of 60 mtr already available.

for road.

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Construction of Service Road from Ghosala More to Paharpur More (RHS Side) for smooth entry and exit from NH-31D (new NH-27) to Circuit Bench of Calcutta High Court at Jalpaiguri in the state of West Bengal on EPC basis.

Annex – III
(Schedule-A)

Alignment Plans

The alignment plan of the Project Highway is enclosed.



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Construction of Service Road from Ghosala More to Paharpur More (RHS Side) for smooth entry and exit from NH-31D (new NH-27) to Circuit Bench of Calcutta High Court at Jalpaiguri in the state of West Bengal on EPC basis.

Annex – IV
(Schedule-A)

Environment Clearances

The Environmental clearance is not required as per latest MoEF guidelines.

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SCHEDULE – B

DEVELOPMENT OF THE PROJECT HIGHWAY

Construction of Service Road from Ghosala More to Paharpur More (RHS Side) for smooth entry and exit from NH-31D (new NH-27) to Circuit Bench of Calcutta High Court at Jalpaiguri in the state of West Bengal on EPC basis.

1 Development of the Project Highway

The Project Highway shall generally follow the horizontal alignment shown in the plan unless otherwise specified by the Authority. Notwithstanding anything to the contrary contained in this Agreement or IRC:SP:84 2019, the proposed plan & profile, locations of different structures/drain, chainages of different structures/drain, length of different structures/drain etc. of the project highway as indicated in the Schedule A, Schedule B, Schedule C and their Annexures shall be treated as minimum requirement. Based on site/design requirement, the Contractor shall finalize their Detailed Designs (Development Stage) including plan & profile of the project road and submit the same to Authority & its Engineer for its Consent/Approval and Safety Audit by Safety Auditor, before the start of the execution of project. The designs so approved shall not be in contradiction with the scope of project. For avoidance of doubt, the provisions mentioned in schedule B & C cannot be changed, only the design of the components is to be submitted for consent/ approval.

1.1.1 Width of Carriageway

1.1.2 Two-Laning service road shall be undertaken. The paved carriageway shall be 7.00m as per standards & specification specified in Schedule-D width and as per the Typical Cross-section drawings /TCS Schedule given in this schedule.

Note:

- In addition to the width of Carriageway mentioned in TCS, Acceleration/Deceleration Lane shall be provided as per this Schedule-B. Any structure falling within these stretches shall be widened to required width.*

1.1.3 Except as otherwise provided in this Agreement, the width shall be adjusted to fit into appropriate plans and cross sections developed in accordance with TCS enclosed.

1.1.4 The entire cross-sectional elements shall be accommodated in the available ROW. If required, suitable retaining structures shall be provided to accommodate the highway cross section within the available/ proposed ROW without any Change of Scope.

1.1.5 Design Chainage corresponding to Existing Chainage

Kilometer stones are existing in entire length of the project highway. It is called the "Existing Chainage". The Existing Chainage and the Design Chainage for the project are different. The relationship between the "Existing Chainage" and the "Design Chainage" as per field surveys of the location of existing Km stones using the total

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station for the "Project Highway" is given below.

Sl. No.	Existing NH-31D (MCW) Chainage	Design Chainage of Service Road (km.)	Remarks, if any
1.	Km. 53.900 (NH-31D)	Km. 0.000	-
2.	Km. 54.900 (NH-31D)	Km. 1.000	-
3.	Km. 55.900 (NH-31D)	Km. 2.000	-

rain plan

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2 Geometric Design and General Features

2.1 General:

Geometric design and general features of the Project Highway shall be in accordance with Section 2 of the manual. Intermediate Sight distance (Desirable Minimum Sight Distance) shall be followed for design of all vertical curves including structures as well as highways.

2.2 Design Speed:

The project road shall be designed for 60 Km/h.

2.2.1 The entire cross-sectional elements shall be accommodated in the available ROW. If required, suitable full height retaining structures shall be provided to accommodate the highway cross section within the available/ proposed ROW

2.2.2 Realignments:

The service road shall be improved to the standards as specified in the manual at the following locations:

Sr. No.	Existing Chainage (Km)		Design Chainage (Km)		Length (Km)
	From	To	From	To	
	NIL				

2.2.3 Bypasses:

The existing road shall be bypassed to the standards as specified in the manual at the following locations:

Sr. No.	Name of bypass	Existing Chainage (Km)		Design Chainage (Km)		Length (Km)
		From	To	From	To	
		NIL				

2.3 Right of Way

Details of the Right of Way along Project Highways and Side Roads are given in Annexure-I of Schedule-A.

2.4 Type of shoulders

2.4.1 The hard shoulder (river bed material) of 0.75 mtr width and 150 mm thick and earthen shoulder of 1 mtr width and 150 mm on shoulder side as per TCS-2 shall be provided. The top 150 mm on earthen shoulder with well graded naturals and morrum gravel crust stones or combination thereof, confirming to Clause 401 of MoRTH specification.

2.4.2 Separator Between Main Carriageway and Service/Slip Road

A separator between main carriageway and service/slip road shall be provided to prevent the pedestrians, local vehicles and animals entering the highway.

Note:

- (i) The Acceleration, deceleration lane, right turning storage lane, entry/exit lanes shall be constructed in addition to length given in above table and shall be deemed to be part of the scope and no Change of Scope shall be considered for the same.

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2.5 Typical Cross Section (TCS) of the Project Highway

The Project Highway shall be constructed to two lane configuration (7 mtr bituminous width). Typical cross sections required to be developed in different sections of the Project Highway are given below.

S.No	Design Chainage (Km)		Length (Km)	TCS as per Manual	Remarks
	From	To			
1	0.000	1.120	1.120	TCS- 1	
2	1.120	2.000	0.880	TCS- 2	

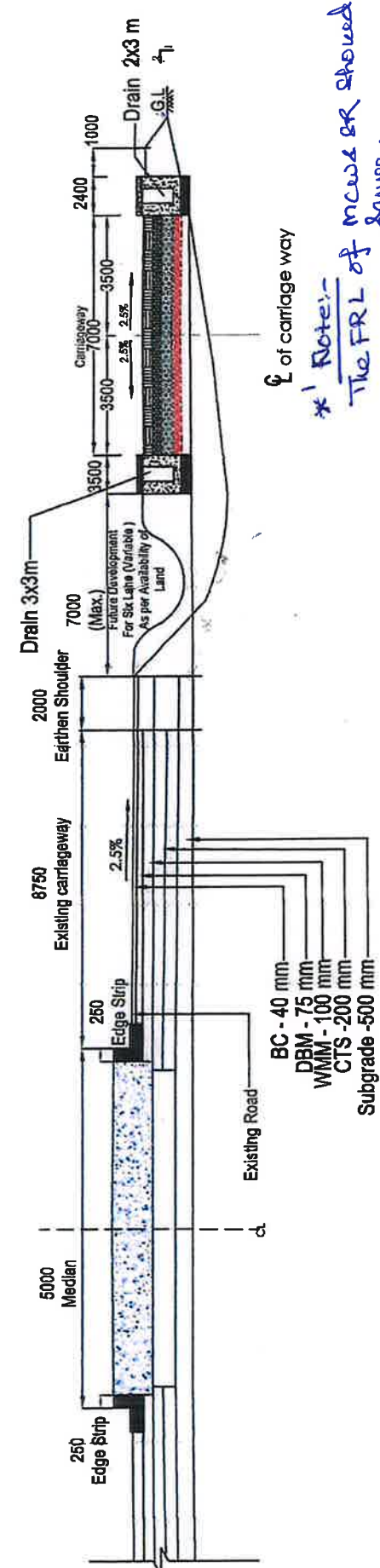
Note:

- (i) Any variations in the lengths specified in the above table shall not constitute a Change of Scope
- (ii) Lengths mentioned in the above list for cross section types concerned to structures are inclusive of structure length.
- (iii) Toe wall to be provided where ROW is restricted and water bodies along the proposed highway.
- (iv) Chainages may be adjusted according to location of structures as per drawings.
- (v) Carriageway width tapering shall be provided 1 in 50 as per manual
- (vi) Intermediate Sight Distance (Desirable Minimum Sight Distance) shall be followed for design of all vertical curves (Summit and Valley Curves) including structures as well as highways.
- (vii) Tentative plan and profile of proposed service road is enclosed as Reference.

Ravi K. S.

S.P.

Name of the Work : Construction of Circuit Bench of Calcutta High Court at Jalpaiguri- Construction of Service Road from Ghosala More to Paharpur More RHS Side for Smooth Entry and Exit from NH31D to Court compound.



* Note:-
The FRL of mews SR should be same.

TYPICAL CROSS SECTION FOR THE PROJECT ROAD FLEXIBLE PAVEMENT (PROPOSED)

Symbol	Layer Thickness	Materials
[Symbol]	40 mm	Bituminous Concrete Gr-II (VG-40)
[Symbol]	60 mm	Dense Bituminous Macadam Gr-II (VG-40)
[Symbol]	200 mm	Wet Mix Macadam
[Symbol]	100 mm	GSB-III
[Symbol]	150 mm	GSB-V

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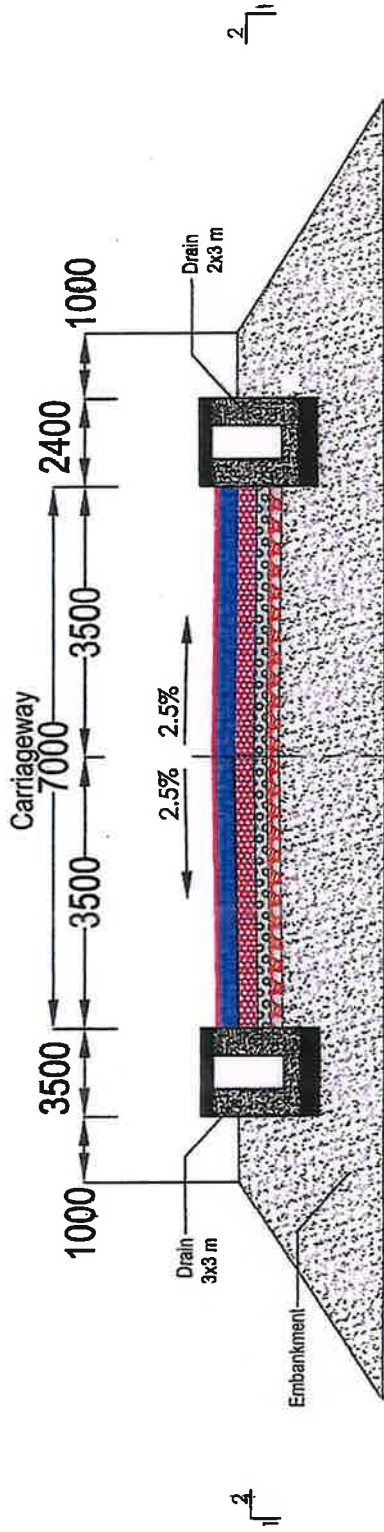
Site Engineer
National Highway Authority of India
PIU-Jalpaiguri (W.B)

Project Director
National Highways Authority of India
Project Director
PIU - Jalpaiguri (W.B)
National Highway of Authority of India
Project Implementation Unit (PIU) Jalpaiguri

[Handwritten Signature]
Executive Engineer (P.W.D.)
Jalpaiguri Division Jalpaiguri

Name of the Work : Construction of Circuit Bench of Calcutta High Court at Jalpaiguri- Construction of Service Road from Ghosala More to Paharpur More RHS Side for Smooth Entry and Exit from NH31D to Court compound.

TCS-1



Symbol	Layer Thickness	Materials
[Red box]	40 mm	Bituminous Concrete Gr-II (VG-40)
[Blue box]	60 mm	Dense Bituminous Macadam Gr-II (VG-40)
[Pink box]	200 mm	Wet Mix Macadam
[Dotted box]	100 mm	GSB-III
[Red box]	150 mm	GSB-V

Note:- FRL of m.c.w & s.r should be same.

TYPICAL CROSS SECTION FOR THE PROJECT ROAD FLEXIBLE PAVEMENT (PROPOSED)
LENGTH=(0-1120) 1120 M

19/12/2024
19/12/24
Site Engineer
National Highway Authority of India
PIU-Jalpaiguri (W.B)

Project Director
National Highways Authority of India
PIU - Jalpaiguri (W.B)

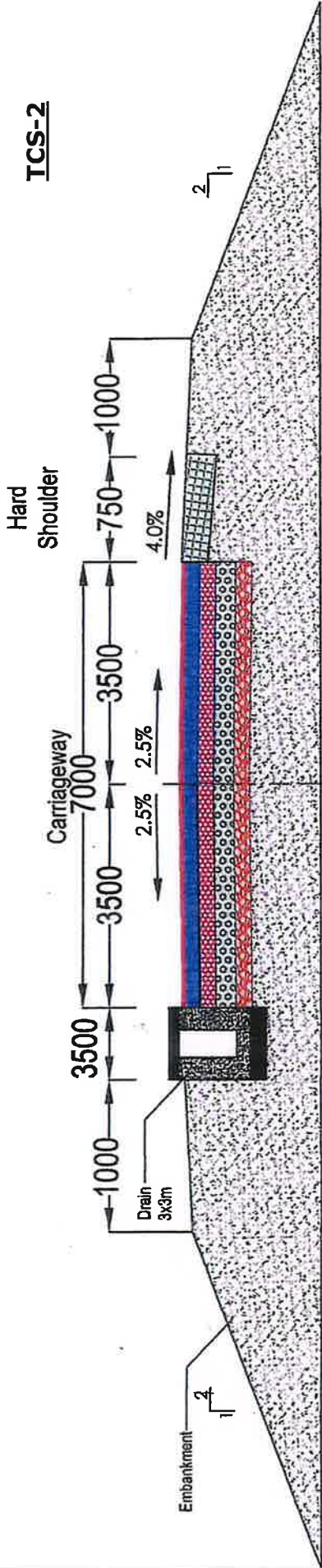
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Name of the Work : Construction of Circuit Bench of Calcutta High Court at Jalpaiguri- Construction of Service Road from Ghosala More to Paharpur More RHS Side for Smooth Entry and Exit from NH31D to Court compound.

ICS-2



Symbol	Layer Thickness	Materials
[Red Box]	40 mm	Bituminous Concrete Gr-II (VG-40)
[Blue Box]	60 mm	Dense Bituminous Macadam Gr-II (VG-40)
[Pink Box]	200 mm	Wet Mix Macadam
[Dotted Box]	100 mm	GSB-III
[Red Box]	150 mm	GSB-V

Hard Shoulder	
Symbol	Layer Thickness
[Cross-hatched Box]	150 mm
Materials River Bed Materials(Hard Shoulder)	

note: FRL of m.c.w & R should be same.

TYPICAL CROSS SECTION FOR THE PROJECT ROAD FLEXIBLE PAVEMENT (PROPOSED)

LENGTH=(1120-2000)880 M

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3 Intersections and Grade Separated Intersections

All at-grade intersections and grade separated intersections shall be as per Section 3 of the manual. Existing at- grade intersections shall be improved to the prescribed standards.

Properly designed intersections shall be provided at the locations and of types and features given in the tables below:

3.1 At-grade intersections

3.1.1 Major Intersections:

Sr. No.	Design Chainage (Km)	Junction Type	Remarks
1	0.000	T	The major junction to be developed to chanzalized the traffic. (MCW and SR)
2.	2.000	T	

Note:

- (i) Type of Junction to be improved as per manual.
- (ii) The Contractor shall take up 'Detailed Engineering study' to ascertain further details of all intersections and treatment of the intersections shall be designed in accordance with the latest guidelines mentioned out in section-3 of the manual. Auxiliary lanes including storage, acceleration, and deceleration lane along with physical islands to be provided. The cross road at the junctions which are having a level difference from the main carriageway, are to be improved at the level of main carriageway for the length of 30 meter and then to be merged with the cross road at the gradient not more than 1:50.
- (iii) For minor / major layout for left-in / left out arrangement with physical islands with hazard marking. Where there is space constraint to provide physical islands, the effect of junction kept wide opened can be avoided by Ghost Island with marking.

4 Road Embankment and Cut Section

Construction of road embankment/cuttings shall conform to the Specifications and Standards given in section 4 of the manual. Notwithstanding anything to the contrary contained in this Agreement or Manual, the proposed profile of the project highway as indicated in the Annex-III of Schedule A shall be treated as minimum requirement.

Based on site/design requirement, the Contractor shall design the alignment plans and profiles of the project highway based on site/design requirement mentioned in Schedule B with approval from the Authority Engineer within the available Right of Way.

The side slopes shall not be steeper than 2H:1V. In case, there is a ROW constraint than, suitable soil retaining structures shall be provided.

For stability of slope upto 3 metre height the turfing can be adapted. For the slope from 3-6 metre suitable, geocell, geo- grid, geo-green etc. can be provided with suitable drainage

Rain base



chutes as per IRC 56. For the slope more than 6 metre height, a complete slope stability analysis as per IRC:75 shall be done and the slopes shall be compulsory protected with stone pitching within stone masonry grid structure of 4x4 metre and suitable drains/chutes etc. shall be provided for effective drainage of the water.

5 Pavement design

5.1 Pavement design shall be carried out in accordance with Section 5 of the Manual.

5.2 Type of Pavement and Design requirement

The pavement shall be flexible type for entire length of project road.

5.2.1 Design Period and Strategy Pavement shall be constructed for the entire length of Project Highway including paved shoulders.

Flexible Pavement (service road) shall be designed for a minimum design period of 15 years and maximum CBR of 7%.

5.2.2 The pavement for service road shall be designed for minimum crust composition of section 5.3.1.

5.3 In order to meet the intended functional requirement of respective pavement layers on Service Road, the minimum thickness of respective pavement layers for service road, acceleration/ deceleration lane, right turning lanes shall, however, in no case be less than as given below:

5.3.1 Minimum pavement composition for Service Road, entry/exit locations, acceleration/ deceleration lane, right turning lanes (Flexible) with GSB/WMM are as under:-

Pavement Composition	Minimum Crust Thickness (mm)
Subgrade	500
GSB - V	150
GSB - III	100
WMM	200
DBM (Grade II) with VG-40	60
BC (Grade II) with VG-40	40

6 Roadside Drainage

6.1 Drainage system

Drainage system including surface and subsurface drains for the Project Highway including crossroads shall be provided as per section 6 of the manual. RCC Drain cum footpaths shall conform to the cross- sectional features and other details as given in Annexures to Schedule-B and shall be provided as under:

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Details of RCC Drain cum Footpath

Sr. No.	Design Chainage (Km)		Minimum Length (m)		Clear span of Drain (m)	Total Length (m)	Remarks
	From	To	LHS	RHS			
1	0.000	2.000	1986		3 x 3	1986	TCS-1 & TCS-2
2	0.000	1.120		1120	2 x 3	1120	TCS-1
Total						3106	

Note: The slab and wall of the drain (3m×3m) is to be design for vehicular loading as per IRC and the slab and wall of the drain (2m×3m) is to be design for pedestrian traffic as per IRC

6.2 Unlined Drains

Unlined Drains other than above mentioned locations shall be provided in the entire project length which gets terminated at all crossroad locations. In case, the definite outfall is not available, a rainwater recharge pit shall be constructed by the contractor.

6.3 Drainage arrangement between Existing Carriageway and Service Road

A suitable drainage arrangement for draining storm water of main carriageway shall be provided. Storm water of main carriageway to service road is not permitted.

6.4 Drainage where Embankment Height is more than 3m

Drainage chutes shall be provided at suitable interval on embankment slopes. The drainage arrangement shall include kerb, cement concrete drainage channel at the edge roadway, Cement Concrete Chutes, CC bedding, energy dissipation basin, etc. Mountable Kerb shall be provided beyond the post of MCB to channelize storm water into chute.

6.5 Drainage for Structures

A suitable drainage arrangement for draining storm water from deck slab shall be provided. Water shall not fall on any surface of the structures, or remain standing or flowing over the road below structure. (Clause No. 6.8 IRC: SP:84-2019/ IRC: SP:87-2019)

7 Design of Structures

7.1 General

Project Highway is proposed to be constructed to Two-lane configuration. All widening structures except wherever expansion joints have been provided, the pavement layers WMM, DBM & BC shall be continued over the structures for smooth riding quality of the project highway. These structures shall be designed considering the dead load of pavement (WMM, DBM, BC, etc.) layers.

- 7.1.1** During widening, all bridges, culverts and structures shall be designed for IRC class Special Vehicle (SV) loading as per IRC: 6 and constructed in accordance with section-7 of the manual and shall conform to the cross-sectional features and other details specified therein.

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7.1.2 The overall width of the structures which has to be widened shall be as follows:

S. N.	Location at km	Type of structure	Existing Span/ Opening in m	Proposal	Proposed / Extended width in m	Remarks
1	0.420	HPC	1.20	Extension	10.00	Hume pipe culvert to be extended up to Service Road RHS Drain (2x3)
2	0.820	Box Culvert	2 x 2	Extension	17.00	Box Culvert to be extended up to Service Road RHS Drain (2x3)
3	1.050	Minor Bridge	7.07	Extension	18.00	Minor Bridge to be extended upto Service Road RHS Drain (2x3)
4	1.125	Minor Bridge	7.07	Extension	19.00	Minor Bridge to be extended up to Service Road ROW (RHS)
5	1.400	HPC	0.900	Proposed	12.00	Hume pipe culvert has been considered due to large amount of catchment area water to be drained out
6	1.650	HPC	0.900	Proposed	12.00	Hume pipe culvert has been considered due to large amount of catchment area water to be drained out
7	1.670	HPC	1.20	Extension	7.50	Hume pipe culvert to be extended up to Service Road LHS Drain (3x3)
8	1.910	Box Culvert	2 x 3.8	Extension	17.00	Box Culvert to be extended up to Service Road LHS Drain (3x3)

The proposed width/span given in above table are tentative, contractor had to design the structure as per the site requirement and no Change of Scope for additional width / span shall be considered.

7.2 A summary of Culverts, Bridges and Structures shall be presented as follows:

Sr. No.	Name of the Structure	Total Numbers	Remarks
1	Minor Bridge	2	On existing main carriageway and to be extended
2	Box Culverts	2	
3	Hume Pipe Culverts	2	
4	Hume Pipe Culverts	2	New

8 Traffic Control Devices and Road Safety Works

8.1 Traffic control devices and road safety works shall be provided in accordance with Section

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8.2 Traffic Signs:

Traffic signs shall be provided as per IRC 67 as mentioned in Schedule-C.

8.3 Pavement Marking:

Pavement markings shall be completed as per IRC 35 as mentioned in Schedule-C.

8.4 Safety Barrier:

The safety barriers shall be provided in accordance with Section-9 of the Clause 9.7 of the manual.

The Safety Barrier length proposed are excluding the safety barrier already proposed on Culverts and Minor Bridges as applicable cross sections respectively.

End Treatment of Steel barriers/Rope Barrier shall be specified i.e. MELT or P-4 confirming to EN 1317-4, TT, MBCB barrier to Concrete Barrier

End Treatment to Concrete barrier shall be done as specified in Clause No. 9.7.3 of the manual.

The details of the location are as below:

S.N.	Item	Chainage		Side	Minimum Length (m)
		From	To		
1	W-beam Single faced metal crash barrier	1.250	2.000	RHS	750
2	MS structural work with hollow section (PGR)	0.000	1.235	RHS	1235

Note: The length of the Metal Crash Barrier and PGR as above is bare minimum and shall be finalized in consultation with Authority Engineer/NHAI, as per site requirement.

9 Roadside Furniture

9.1 It shall be provided as per the details mentioned in Schedule-C.

10 Hazardous Locations

10.1 The safety barriers shall be provided at the following hazardous location such as ponds, well, electric sub-station, Electric tower, spilt carriageway, etc.

Sr. No.	Location Stretch		Type of Safety Barrier	LHS/ RHS
	From (Km)	To (Km)		
NIL				

11 Special Requirement:

Retaining Structure and protection works shall be provided at locations as indicated below and as provided in TCS schedule in cl. 2.11 of schedule-B.

Sr. No.	Design Chainage (Km)	Length	Side	Height	Retaining	Type of	Remarks
NIL							

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	From	To	(m)	(m)	Structure / Toe Wall	Safety Barrier
NIL						

12 Open Well within ROW

The Open well shall be identified and appropriate treatment shall be provided.

Sr. No.	Design Chainage	Well Dimension	Well Depth	Filling Material for Well	Slab on Top of Well Yes/No	Remarks
NIL						

13 Shifting of Utilities

Generally, the utilities will be shifted by utility owing department. However, in case it is required to be shifted by the contractor, the cost will be reimbursed to the contractor by the Authority as per the estimate / certification of utility owing department.

14 Work Zone Traffic Management Plans

The traffic diversion plans shall be prepared as per IRC SP 55 for smooth flow of traffic and safety. A diversion plan shall be proposed for construction of Culvert, Grade Separated Structures, Bridges, RoB/RUB, etc. and traffic management plan for widening/reconstruction of carriageway.

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SCHEDULE -C

PROJECT FACILITIES

1. Project Facilities

The Contractor shall construct the project facilities in accordance with the provisions of this agreement. Such Project facilities shall include:

- a) Road side furniture
 - i. Kilometer and Hectometer Stones
 - ii. Traffic Signs
 - iii. Road Marking
 - iv. Road Studs
 - v. Hazard marker
- b) Pedestrian Facilities
- c) Highway Lighting
- d) Environmental Management Plan

1.1 Project Facilities to be completed on or before project completion date have been described in Annexure-II of this Schedule-C.

Annexure – II

PROJECT FACILITIES

1 Project Facilities

The Contractor shall construct the Project Facilities described in this Annexure-II to form part of the Project Highway. The Project Facilities shall include:

- a) Roadside furniture
 - i. Kilometer and Hectometer Stones
 - ii. Traffic Signs
 - iii. Road Marking
 - iv. Road Studs
 - v. Hazard marker
- b) Pedestrian Facilities
- c) Highway Lighting
- d) Environmental Management Plan

Description of Project Facilities

Each of the Project Facilities is briefly described below:

1 Roadside furniture

1.1 Kilometer and Hectometer Stones

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S.No.	Item	Number	Remarks
1	Kilometer Marker/ Stones	3	The KM/ Hectometer stones/ marker can be Concrete/ Stones and shall be placed on both outer side of the earthen shoulder. In case KM/ Hectometer marker are to be fixed on separator between Main Carriageway & Service Road then these should be fixed as reflective signs.
2	Hectometer Marker/ Stones	(4X No. of Km)	In case of Access Control Highway/ Expressway, KM/ Hectometer marker should be fixed as reflective signs. Km/ Hectometer stones are required to provide on main carriageway and Service Road, both if continuous service road is provided throughout project length (Service Road length is more than 1 Km).

1.2 Traffic Signs

Traffic Signs include roadside signs, overhead signs and kerb mounted signs etc. shall be provided along the entire Project Highway and on all Side, Roads joining the main carriageway/service road. A QR code shall be marked on back of each sign as per IRC 67.

All sign shall be of Micro Prismatic Grade Sheeting Corresponding to Class C sheeting as per ASTM D 4956 Type VIII, IX and XI.

All shoulder mounted signs shall be supported on GI Pipes. Overhead Signs shall be placed on a structurally sound gantry or cantilever structure made of GI pipes.

The siting of signs shall confirm to Table 4.1 and Fig 4.1 of IRC 67. (Clause No. 4.7 IRC: SP:84-2019).

The two successive signs shall be placed at a minimum distance of $0.6 \times V$ meter (V is design speed in Kmph).

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The detailed minimum number of signage indicating places, direction, distances, and other features shall be marked on the alignment plan and submitted by the Contractor for approval of Authority Engineer.

- i) **Ordinary kilometer stone (precast):** Reinforced cement concrete M15 grade kilometer stone of standard design as per IRC:8-1980, fixing in position including painting and painting etc.- 3 nos
- ii) **Retro-Reflectorized Traffic Signs**
 - a) 90 cm equilateral triangle-10 nos
 - b) 600 mm Circular – 12 nos
 - c) 80 mm x 60 mm rectangular – 11 nos
 - d) 60 cm x 45 cm rectangular – 12 nos
 - e) 90 cm high octagon -10 nos
 - f) Direction and Place Identification Signs up to 0.9 Sqm Sign Board (6.3 sqm).
 - g) Direction and Place Identification Signs with size more than 0.9 sqm size Board (7.2 sqm).
- iii) **Road marking – from km 0.000 to km 2.000 (centre line, both edge line, curve area, junction area, any other location as specified by Engineer)**
- iv) **Road Stud : from km 0.000 to km 2.000 (centre line, both edge line, curve area, junction area, any other location as specified by Engineer)**
- v) **Hazard marker : 15 nos**

Note: Above are the bare minimum requirement. Actual requirement to be finalized in consultation with Authority Engineer and Authority.

Prin. P. S. S.

S.N.	Road Signs	Number	Remarks
I	Mandatory/Regulatory		Actual requirement to be finalized in consultation with Authority Engineer and Authority as per IRC standard.
II	Cautionary/Warning		
III	Chevron Signs		
IV	Object Hazard Marker Sign		
V	Informatory/Guide		
VI	Facility Information signs		
VII	Other Useful Information Signs		
VIII	Route Maker Signs		

Note: The locations of the placement of signage shall be finalized in consultation with Authority Engineer/ NHAI, as per site requirement.

1.3 Road Marking

Road Markings shall be Hot applied thermoplastic materials with reflectorized beads to achieve visibility confirming to clause 2.7.2 of IRC 35.

The cold applied plastics pavement markings shall be used for School Zone Markings, Audible Raised Profile Edge Lines and Block Markings (BM 01/02/03).

S.No.	Item	Unit (sqm.)	Remarks
1	Road Marking		Actual requirement to be finalized in consultation with Authority Engineer and Authority as per IRC standard.

Note: The locations of the marking shall be finalized in consultation with Authority Engineer/NHAI, as per site requirement.

1.4 Road Delineators

Following Road delineators to be provided as per Clause No. 9.4 IRC: SP: 84-2019

S.No.	Item	Number/ Length (m)	Remarks
1	Roadway Indicators		Actual requirement to be finalized in consultation with Authority Engineer and Authority as per IRC standard.
2	Median Marker on Median/RCC Barrier (Clause 4 of IRC 79 2019)		
3	Object Markers		
4	Flexible Object Markers (Clause 6 of IRC 79 2019) i. On Metal Beam Barrier ii. On Toll Booth/Toll Island iii. On Entry/Exit of Tunnel iv. On Exit from Main carriageway		
5.	Solar Blinkers on Median Opening, on exit from main carriageway and traffic islands of grade separated intersections		

Note: The locations of the Road Delineators shall be finalized in consultation with Authority Engineer/NHAI, as per site requirement.

Rain Pouda

[Signature]

1.5 Reflective Pavement Markers & Solar Studs

The Prismatic Retro-Reflective type conforming to ASTM D-4280 Pavement Markers & Solar Power Studs on Highway shall be provided in accordance with Schedule - D.

S.No.	Item	Number	Location	Remarks
1	White Colour one coloured face Road Studs	Actual requirement to be finalized in consultation with Authority Engineer and Authority as per IRC standard.	Traffic lane line & center of carriageway	Uni- directional carriageway
2	Red Colour one coloured face Road Studs		Left hand edge of the carriageway, entry to truck lay bye / bus bay, start of service road, chevron/diagonal markings on gorge	
3	Yellow / Amber Colour one coloured face Road Studs		Median side edge line, zebra crossing	
4	Green Colour one coloured face Road Studs		Lay byes, left hand side of the carriageway in case of multi-lane divided carriageways, crossable continuous line like in acceleration/deceleration lanes involving lane changing	

Note:- This is bare minimum requirement. Actual requirement to be finalized in consultation with Authority Engineer and Authority.

1.5.1 Providing End Terminals

Provide End Terminals P-4 type conforming to EN 1317-4 to Parapet Walls of Culverts, Structures ends for the safety of approaching traffic etc

S.No.	Item	Number	Remarks
1	Culvert Ends		Actual requirement to be finalized in consultation with Authority Engineer and Authority as per IRC standard.
2	Structures Ends		
3	Any other location which Safety Hazard		

Note: The locations of the End Terminals shall be finalized in consultation with Authority Engineer/NHAI, as per site requirement.

2 Pedestrian Facilities

Pedestrian Facilities shall be provided in accordance with the Manual of Specifications and Standards as referred in Clause 9.8 of Schedule D and IRC 103 2022. This shall consist of footpath (sidewalks), pedestrian guard rails and pedestrian crossing.

The details are as mentioned below:

Sl. No.	Pedestrian facilities	Chainage		Side	Remarks
		From	To		
1	Pedestrian guardrails shall be 150 mm from Carriageway/Paved Shoulder i. Hazardous Locations on Straight Stretches ii. At Junctions/Intersections iii. Schools iv. Bus Stop/Railway Stations v. Overpass, Subway vi. Central Reserve				Actual requirement to be finalized in consultation with Authority Engineer and Authority as per IRC standard.

Rajin Prasad

[Signature]

2	Pedestrian Crossing i. With Zebra Marking ii. With Tabletop Crossing iii. At Intersections iv. At Schools	
---	---	--

3 Highway Lighting

Minimum total street light pole shall be 101 numbers. The street light poles shall be 1 piece, continuous-tapered, Octagonal poles and shall be manufactured from one length of steel sheet, formed in continuous tapered tube, with one continuous arc-welded vertical seam. The minimum wall thickness for lighting poles shall not be less than 4 mm. The Bottom Diameter shall be minimum 175 mm. The Top Diameter shall be minimum 75 mm. The door on window of pole shall be antitheft. All electrical cable should be concealed. All electrical lighting fixtures shall be LED. The fixtures shall be concealed except on poles. Lighting poles shall be fixed on outer side of steel/concrete barrier. The lighting shall be provided throughout the project road (Clause No. 12.5 IRC: SP: 84-2019). The installation and Running / electricity charge cost shall be bear by the contractor upto the contract period (including DLP period)

4 Environmental Management Plan

The Contractor shall implement the Environmental Management plan & action Plan for undertaking possible mitigation measures in accordance with environmental clearance accorded by Ministry of Environment and Forests and climate change. The conditions & directions stipulated by the MOEF shall be complied by the contractor/ Contractor.

Rain Water

Construction of Service Road from Ghosala More to Paharpur More (RHS Side) for smooth entry and exit from NH-31D (new NH-27) to Circuit Bench of Calcutta High Court at Jalpaiguri in the state of West Bengal on EPC basis

SCHEDULE - D
SPECIFICATIONS AND STANDARDS

The Contractor shall comply with IRC: SP:84-2019 : Manual of Specifications and Standards for Four laning of Highways through Public Private Partnership published by Indian Roads Congress and the Specifications and Standards set forth in Annex-I of this Schedule-D for construction of the Four-Lane Project Highway.

Rain/Case

29/6/24

Annex - I

(Schedule-D)

Specifications and Standards for Four-Laning

1. Manual of Specifications and Standards to apply

Subject to the provisions of Paragraph 2 of this Annex-I, except and otherwise specified in Schedule B, Development of the Project Highway shall conform to IRC:SP:84-2019: Manual of Specifications and Standards for Four Laning of Highways through Public Private Partnership published by **Indian Road Congress.**

2. Deviations from the Manual

Notwithstanding anything to the contrary contained in the aforesaid Manual, the following Specifications and Standards shall apply to the Project Highway, and for purposes of this Agreement, the aforesaid Manual shall be deemed to be amended to the extent set forth below:

S. No.	Clause No.	Details of Item	Description of Deviation
1.	2.17	Typical Cross Section	Typical Cross section shall be as per Schedule-B. (TCS-1 & TCS-2)
2.	2.6.1	Width of Shoulders	The width and type of Earthen shoulder shall be as specified in Schedule B (TCS).
3.	12.2	Road Boundary Walls	Road Boundary wall shall not be provided. In place of Road Boundary Wall, Boundary stones at every 50m c/c distance on either side of the project road shall be provided.
4.	7.1.2 of Schedule-B	Minor Bridge	The opening / cross section of the Minor Bridge (to be extended) shall be minimum 7.07 mtr (i.e. same as that of existing minor bridge)

Pran Basu

df
21/6/21

Schedule-H

(See Clauses 10.1.4 and 19.3) Contract Price Weightages

1.1 The Contract Price for this Agreement is Rs.21,55,26,765/-
(Civil Cost - Rs.21,33,92,836/-/- & 1% Cess - Rs.21,33,928/- & Excluding GST)

1.2 Proportions of the Contract Price for different stages of Construction of the Project Highway shall be as specified below:-

Item	Weightage in % of CP	Stage for Payment	Percentage weightage
1	2	3	4
Road works including Minor Bridge, Culverts and service roads	94.25%	A) Service Road including entry/exit (Flexible pavement)	
		(1) Earthwork up to top of the sub- grade	12.511%
		(2) Sub-base Course (GSB)	4.732%
		(3) (WMM layer)	4.227%
		(4) Bituminous course (DBM, BC) including earthen shoulder	6.973%
		B) Widening of existing Minor Bridge	5.284%
		C) Widening of existing Box Culvert	0.518%
		D) Hume Pipe Culvert (New)	0.296%
		E) Widening of existing Hume Pipe Culvert	0.175%
		RCC Cover Drain (2m x 3m)	21.629%
		RCC Cover Drain (3m x 3m)	43.655%
Other works	5.75%	Retro reflectorized traffic sign, direction signboard, hazard marker, Kilometer Stone	3.518%
		Road marking & Cats eye	8.553%
		Metal beam crash barrier	13.981%
		MS structural work with hollow section	21.395%
		Safety and traffic management during construction	0.861%
		Installation of Highway lighting on service road (101 nos min)	13.813%
		Running cost / electricity charge of Highway lighting on service road (101 nos min)	37.879%
	100.00%		
Maintenance period (DLP period)	0.00%	NIL	

Rain Basan

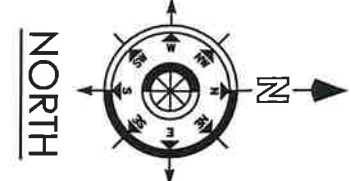
[Signature]

1.3 Procedure of estimating the value of work done				
Item	Weightage in % of CP	Stage for Payment	Percentage weightage	Payment procedure
1		2	3	
Road works including Minor Bridge, Culverts and service roads	97.14%	A) Service Road including entry/exit (Flexible pavement)		
		(1) Earthwork up to top of the sub- grade	12.511%	Unit of measurement is linear length. Payment of each layer (subgrade, GSB, WMM, DBM, BC) shall be made on pro rata basis on completion of a stage in a length of not less than 10 (Ten) percent of the total length.
		(2) Sub-base Course (GSB)	4.732%	
		(3) (WMM layer)	4.227%	
		(4) Bituminous course (DBM, BC) including earthen shoulder	6.973%	
		B) Widening of existing Minor Bridge	5.284%	Cost of completed Minor Bridge shall be determined on pro rata basis with respect to the total number of foundation, sub-structure and super structure. Payment shall be made on the completion of at least one Minor Bridge
		C) Widening of existing Box Culvert	0.518%	Cost of completed culverts shall be determined on pro rata basis with respect to the total number of culverts. Payment shall be made on the completion of at least one culvert.
		D) Hume Pipe Culvert (New)	0.296%	
		E) Widening of existing Hume Pipe Culvert	0.175%	
		RCC Cover Drain (2m x 3m)	21.629%	Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in a length of not less than 10 (ten) percent of the total length.
RCC Cover Drain (3m x 3m)	43.655%			
Other works	2.86%	Retro reflectorized traffic sign, direction signboard, hazard marker, Kilometer Stone	7.282%	Payment shall be made for completed item.
		Road marking & Cats eye	17.706%	Payment shall be made for completed item.
		Metal beam crash barrier	28.942%	Payment shall be made for completed item.
		MS structural work with hollow section	44.288%	Payment shall be made for completed item.
		Safety and traffic management during construction	1.782%	Payment will be made on prorata basis on every three months.
		Installation of Highway lighting on service road (101 nos min)	13.813%	Payment shall be made for completed item.
		Running cost / electricity charge of Highway lighting on service road (101 nos min)	37.879%	Payment will be reimbursed to the contractor periodically as per the Invoice of WBSEDCL
	100.00%			
Maintenance period (DLP period)	0.00%			NIL

Rain/Kasau

*8/10
21/06/21*

SITE PLAN SHOWING PROPOSED CONSTRUCTION OF KOLKATA HIGH COURT COMPLEX AND ADJACENT NH-31D AT JALPAIGURI.



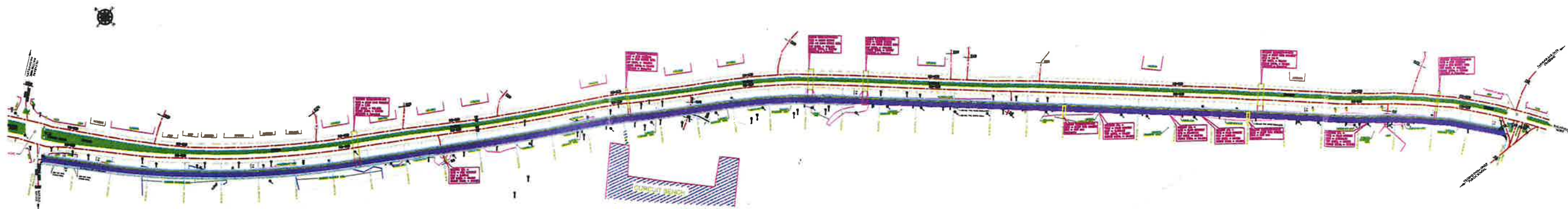
Note : All Dimension are in " Mtr. "

BAZRA PARA

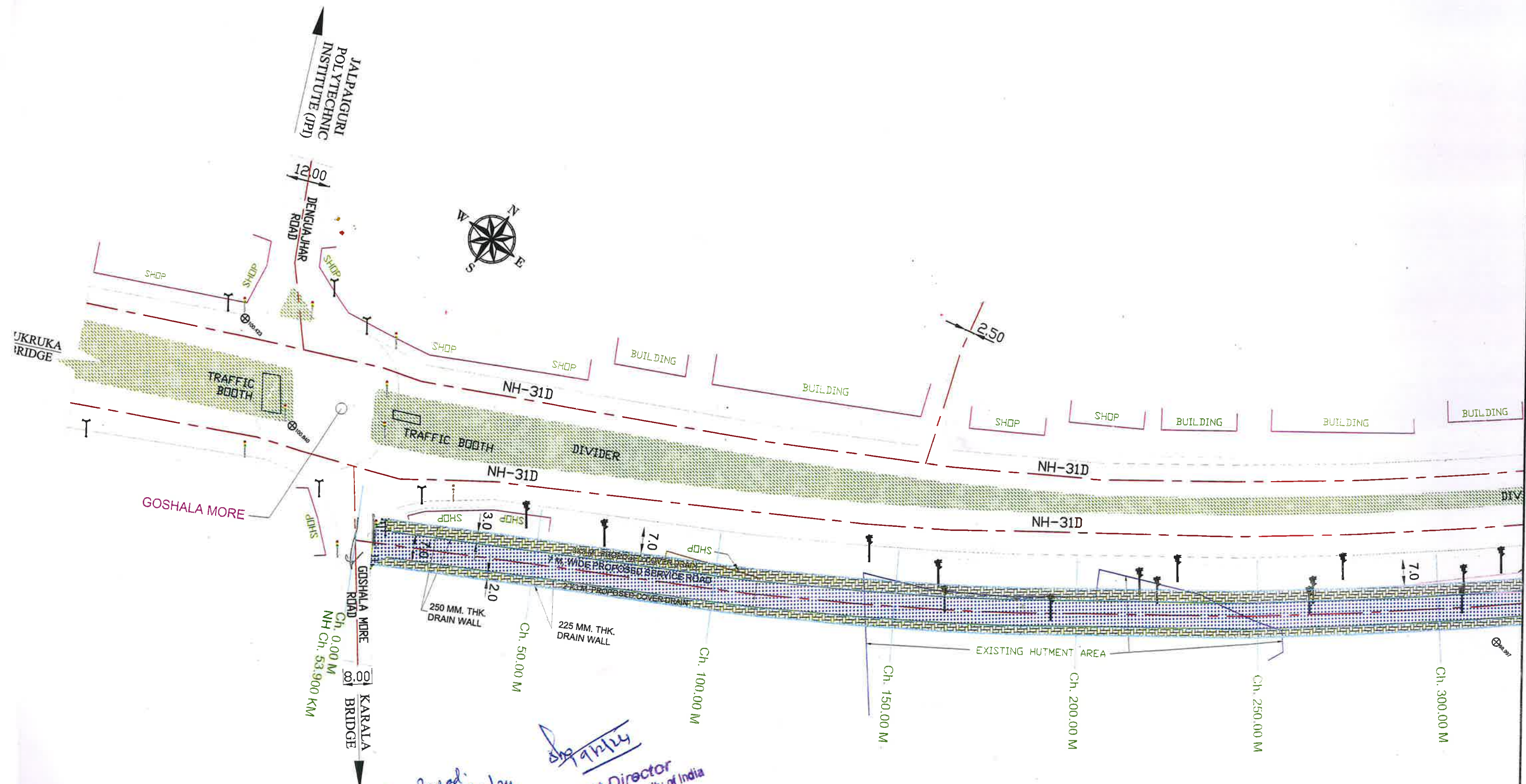


VOLUME II : DRAWINGS

ROAD NAME	: CONSTRUCTION OF CIRCUIT BENCH OF CALCUTTA HIGH COURT AT JALPAIGURI- CONSTRUCTION OF SERVICE ROAD FROM GHOSALA MORE TO PAHARPUR MORE RHS SIDE FOR SMOOTH ENTRY AND EXIT FROM NH31D TO COURT COMPOUND
LENGTH (IN KM.)	: 2.000 KM
DISTRICT	: JALPAIGURI
DIVISION	: JALPAIGURI DIVISION, PWD, JALPAIGURI
DEPARTMENT	: EXECUTIVE ENGINEER , JALPAIGURI DIVISION, PWD, JALPAIGURI



1. CENTRE LINE	---	4. EX. SHOULDER		7. BUILDING	—	10. EX. BOUNDARY WALL		13. PROPOSED DRAIN	▨	16. EX. ROAD		19. LIGHT POST	⌵	21. TREE	🌳
2. NATIONAL HIGHWAY		5. PROP. SHOULDER		8. SHOP	—	11. EXISTING NALA	—	14. EXISTING CULVERT	▭	17. EX. LOW LAND	---	20. ELECTRIC POST	⌵	22. TRAFFIC BOOTH	T.B.
3. DIVIDER	▨	6. SERVICE ROAD	▨	9. TRAFFIC BOOTH	▭	12. EXISTING DRAIN	—	15. HUTMENT AREA	▭	18. SIGNAL POST	⌵				



Ran Prasad
 19/02/24
 Site Engineer
 National Highway Authority of India
 PIU-Jalpaiguri (W.B.)

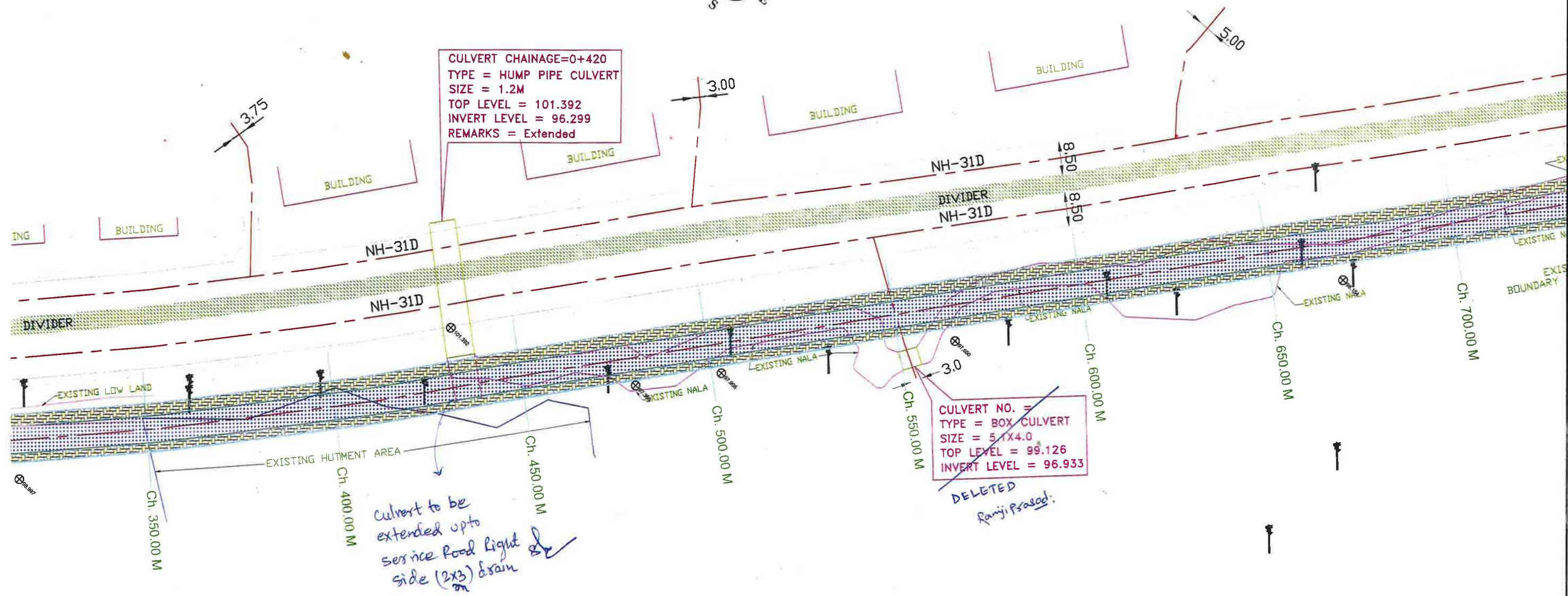
She Anil
 Project Director
 National Highways Authority of India
 PIU - Jalpaiguri (W.B.)

0.000 KM. - 0.300 KM.

1. CENTRE LINE	4. EX. SHOULDER	7. BUILDING	10. EX. BOUNDARY WALL	13. PROPOSED DRAIN	16. EX. ROAD	19. LIGHT POST	21. TREE
2. NATIONAL HIGHWAY	5. PROP. SHOULDER	8. SHOP	11. EXISTING NALA	14. EXISTING CULVERT	17. EX. LOW LAND	20. ELECTRIC POST	22. TRAFFIC BOOTH
3. DIVIDER	6. SERVICE ROAD	9. TRAFFIC BOOTH	12. EXISTING DRAIN	15. HUTMENT AREA	18. SIGNAL POST		T.B.

GOVERNMENT OF W.B.	DISTRICT :	JALPAIGURI	PLAN
	DIVISION :	JALPAIGURI DIVISION, PWD, JALPAIGURI	PROJECT
	REVISION :	0	CONSTRUCTION OF CIRCUIT BENCH OF CALCUTTA HIGH COURT AT JALPAIGURI-CONSTRUCTION OF SERVICE ROAD FROM GHOSALA MORE TO PAHARPUR MORE RHS SIDE FOR SMOOTH ENTRY AND EXIT FROM NH31D TO COURT COMPOUND

PUBLIC WORKS DEPARTMENT
 GOVERNMENT OF WEST BENGAL
 DEPARTMENT EXECUTIVE ENGINEER



CULVERT CHAINAGE=0+420
 TYPE = HUMP PIPE CULVERT
 SIZE = 1.2M
 TOP LEVEL = 101.392
 INVERT LEVEL = 96.299
 REMARKS = Extended

CULVERT NO. =
 TYPE = BOX CULVERT
 SIZE = 5.1X4.0
 TOP LEVEL = 99.126
 INVERT LEVEL = 96.933

DELETED
 Ranji Prasad

Culvert to be extended upto service road right side (2x3) & drain

0.300 KM. - 0.700 KM.

Ranji Prasad
 19/10/14
 Site Engineer
 National Highway Authority of India
 PIU-Jalpaiguri (W.B)

19/10/14
 Project Director
 National Highways Authority of India
 PIU - Jalpaiguri (W.B)

1. CENTRE LINE	4. EX. SHOULDER	7. BUILDING	10. EX. BOUNDARY WALL	13. PROPOSED DRAIN	16. EX. ROAD	19. LIGHT POST	21. TREE
2. NATIONAL HIGHWAY	5. PROP. SHOULDER	8. SHOP	11. EXISTING NALA	14. EXISTING CULVERT	17. EX. LOW LAND	20. ELECTRIC POST	22. TRAFFIC BOOTH
3. DIVIDER	6. SERVICE ROAD	9. TRAFFIC BOOTH	12. EXISTING DRAIN	15. HUTMENT AREA	18. SIGNAL POST		T.B.

GOVERNMENT OF WEST BENGAL
 DISTRICT: JALPAIGURI
 DIVISION: JALPAIGURI DIVISION, PWD, JALPAIGURI
 PLAN
 PROJECT: CONSTRUCTION OF CIRCUIT BENCH OF CALCUTTA HIGH COURT AT JALPAIGURI-CONSTRUCTION OF SERVICE ROAD FROM GHOSALA MORE TO PAHARPUR MORE RHS SIDE FOR SMOOTH ENTRY AND EXIT FROM NH31D TO COURT COMPOUND

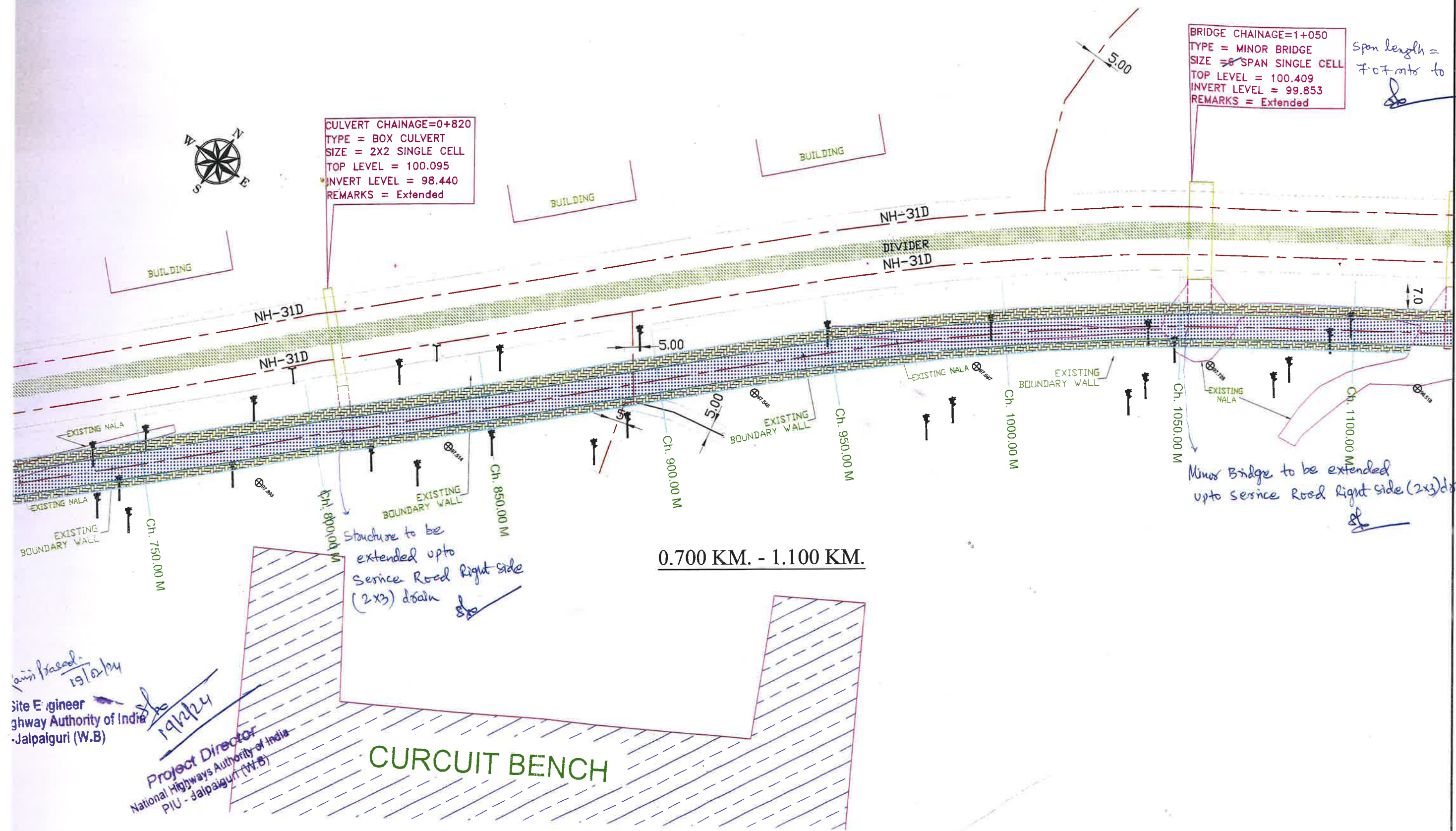
PUBLIC WORKS DEPARTMENT
 GOVERNMENT OF WEST BENGAL
 DEPARTMENT
 EXECUTIVE ENGINEER
 JALPAIGURI DIVISION, PWD, JALPAIGURI



CULVERT CHAINAGE=0+820
 TYPE = BOX CULVERT
 SIZE = 2X2 SINGLE CELL
 TOP LEVEL = 100.095
 INVERT LEVEL = 98.440
 REMARKS = Extended

BRIDGE CHAINAGE=1+050
 TYPE = MINOR BRIDGE
 SIZE = 6 SPAN SINGLE CELL
 TOP LEVEL = 100.409
 INVERT LEVEL = 99.853
 REMARKS = Extended

Span length = 70.7 mts to be considered.



0.700 KM. - 1.100 KM.

CURCUIT BENCH

Site Engineer
 Highway Authority of India
 Jalpaiguri (W.B.)
 19/12/24

Project Director
 National Highways Authority of India
 PIU - Jalpaiguri (W.B.)

1. CENTRE LINE	4. EX. SHOULDER	7. BUILDING	10. EX. BOUNDARY WALL	13. PROPOSED DRAIN	16. EX. ROAD	19. LIGHT POST	21. TREE
2. NATIONAL HIGHWAY	5. PROP. SHOULDER	8. SHOP	11. EXISTING NALA	14. EXISTING CULVERT	17. EX. LOW LAND	20. ELECTRIC POST	22. TRAFFIC BOOTH
3. DIVIDER	6. SERVICE ROAD	9. TRAFFIC BOOTH	12. EXISTING DRAIN	15. HUTMENT AREA	18. SIGNAL POST		T.B.

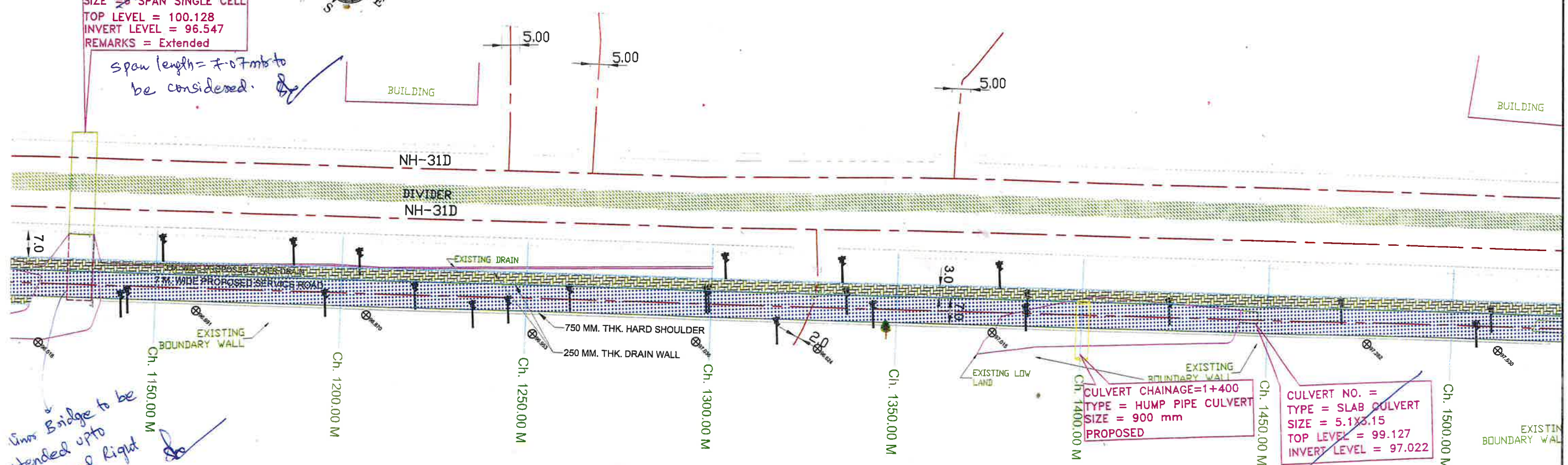
GOVERNMENT OF W. B.	DISTRICT: JALPAIGURI	PLAN	CONSTRUCTION OF CIRCUIT BENCH OF CALCUTTA HIGH COURT AT JALPAIGURI-CONSTRUCTION OF SERVICE ROAD FROM GHOSALA MORE TO PAHARPUR MORE RHS SIDE FOR SMOOTH ENTRY AND EXIT FROM NH31D TO COURT COMPOUND
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PUBLIC WORKS DEPARTMENT GOVERNMENT OF WEST BENGAL	
DEPARTMENT	EXECUTIVE ENGINEER JALPAIGURI DIVISION PWD, JALPAIGURI

BRIDGE CHAINAGE=1+125
 TYPE = MINOR BRIDGE
 SIZE = 8 SPAN SINGLE CELL
 TOP LEVEL = 100.128
 INVERT LEVEL = 96.547
 REMARKS = Extended



Span length = 7.07 m to be considered.



Minor Bridge to be extended upto service Road right side (2x3) down

CULVERT CHAINAGE=1+400
 TYPE = HUMP PIPE CULVERT
 SIZE = 900 mm
 PROPOSED

CULVERT NO. =
 TYPE = SLAB CULVERT
 SIZE = 5.1X3.15
 TOP LEVEL = 99.127
 INVERT LEVEL = 97.022

DELETED
 Ranji Prasad

1.100 KM. - 1.500 KM.

Rain Basak
 19/12/24

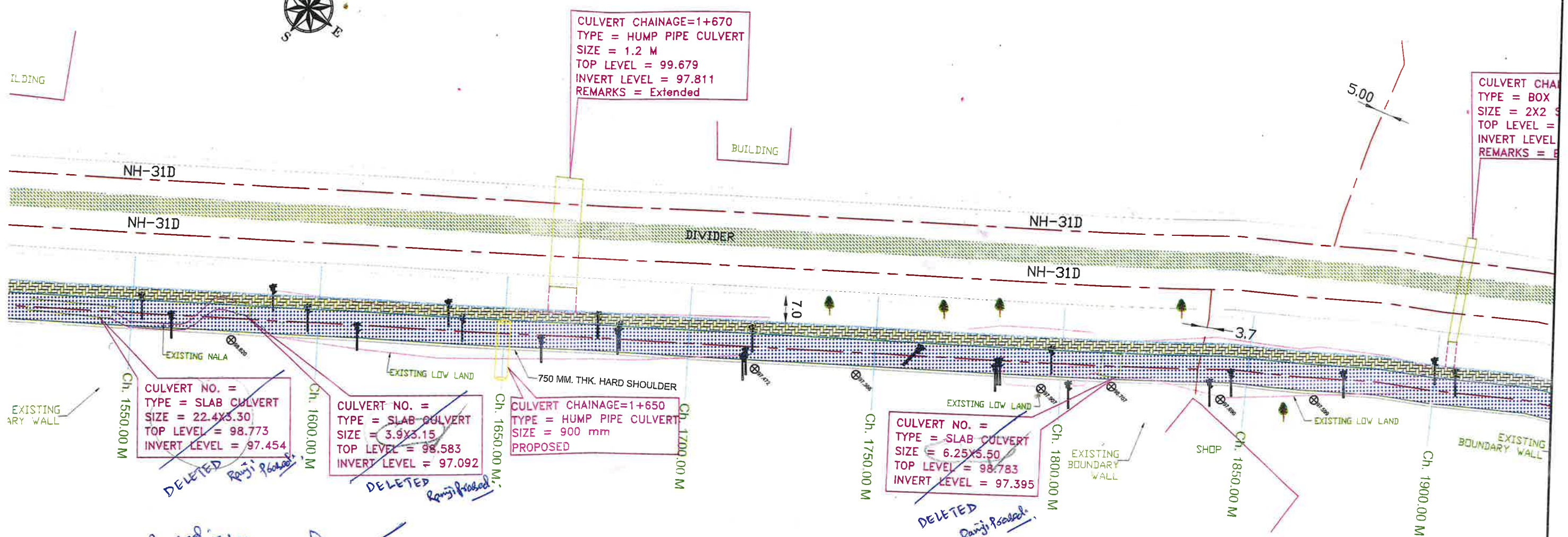
Project Director
 National Highways Authority of India
 PIU - Jalpaiguri (W.B.)

Site Engineer
 National Highway Authority of India
 PIU-Jalpaiguri (W.B.)

1. CENTRE LINE	---	4. EX. SHOULDER		7. BUILDING	---	10. EX. BOUNDARY WALL		13. PROPOSED DRAIN		16. EX. ROAD		19. LIGHT POST		21. TREE	
2. NATIONAL HIGHWAY		5. PROP. SHOULDER		8. SHOP	---	11. EXISTING NALA	---	14. EXISTING CULVERT		17. EX. LOW LAND		20. ELECTRIC POST		22. TRAFFIC BOOTH	T.B.
3. DIVIDER		6. SERVICE ROAD		9. TRAFFIC BOOTH		12. EXISTING DRAIN	---	15. HUTMENT AREA	---	18. SIGNAL POST					

GOVERNMENT OF WEST BENGAL
 DISTRICT: JALPAIGURI
 DIVISION: JALPAIGURI DIVISION, PWD, JALPAIGURI
 PLAN
 PROJECT: CONSTRUCTION OF CIRCUIT BENCH OF CALCUTTA HIGH COURT AT JALPAIGURI-CONSTRUCTION OF SERVICE ROAD FROM GHOSALA MORE TO PAHARPUR MORE RHS SIDE FOR SMOOTH ENTRY AND EXIT FROM NH31D TO COURT COMPOUND

PUBLIC WORKS DEPARTMENT
 GOVERNMENT OF WEST BENGAL
 DEPARTMENT
 EXECUTIVE ENGINEER
 JALPAIGURI DIVISION PWD, JALPAIGURI



1.500 KM. - 1.900 KM.

Ranji Prasad
 Site Engineer
 National Highway Authority of India
 PIU-Jalpaiguri (W.B.)

Ranji Prasad
 Project Director
 National Highway Authority of India
 PIU - Jalpaiguri (W.B.)

1. CENTRE LINE	4. EX. SHOULDER	7. BUILDING	10. EX. BOUNDARY WALL	13. PROPOSED DRAIN	16. EX. ROAD	19. LIGHT POST	21. TREE
2. NATIONAL HIGHWAY	5. PROP. SHOULDER	8. SHOP	11. EXISTING NALA	14. EXISTING CULVERT	17. EX. LOW LAND	20. ELECTRIC POST	22. TRAFFIC BOOTH
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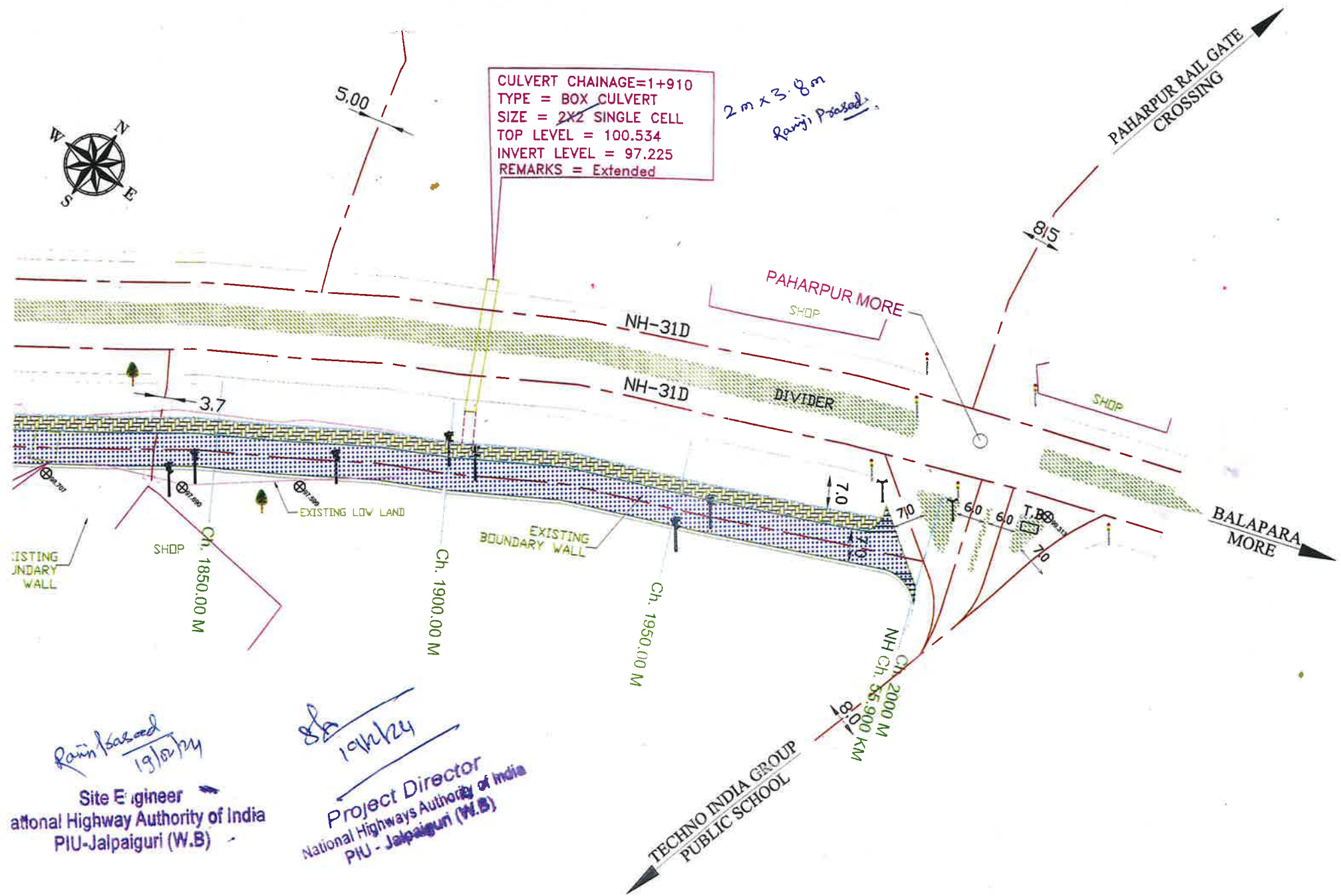
GOVERNMENT OF W. B.	DISTRICT : JALPAIGURI	PLAN	CONSTRUCTION OF SERVICE ROAD FROM GHOSALA MORE TO PAHARPUR MORE RHS SIDE FOR SMOOTH ENTRY AND EXIT FROM NH31D TO COURT COMPOUND
	DIVISION : JALPAIGURI DIVISION, PWD, JALPAIGURI	PROJECT	TC/CONS/JALPAIGURI DIV./PWD/
	RIVISION : 0	DWG NO	SCALE H-1:2000

PUBLIC WORKS DEPARTMENT
GOVERNMENT OF WEST BENGAL
 DEPARTMENT EXECUTIVE ENGINEER



CULVERT CHAINAGE=1+910
 TYPE = BOX CULVERT
 SIZE = 2X2 SINGLE CELL
 TOP LEVEL = 100.534
 INVERT LEVEL = 97.225
 REMARKS = Extended

2m x 3.8m
 Rainy Season



1.900 KM. - 2.000 KM.

1. CENTRE LINE	4. EX. SHOULDER	7. BUILDING	10. EX. BOUNDARY WALL	13. PROPOSED DRAIN	16. EX. ROAD	19. LIGHT POST	21. TREE
2. NATIONAL HIGHWAY	5. PROP. SHOULDER	8. SHOP	11. EXISTING NALA	14. EXISTING CULVERT	17. EX. LOW LAND	20. ELECTRIC POST	22. TRAFFIC BOOTH
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GOVERNMENT OF W. B.	DISTRICT:	JALPAIGURI	PLAN	
	DIVISION:	JALPAIGURI DIVISION, PWD, JALPAIGURI	PROJECT	CONSTRUCTION OF CIRCUIT BENCH OF CALCUTTA HIGH COURT AT JALPAIGURI-CONSTRUCTION OF SERVICE ROAD FROM GHOSALA MORE TO PAHARPUR MORE RHS SIDE FOR SMOOTH ENTRY AND EXIT FROM NH31D TO COURT COMPOUND
	REVISION:	0	DWG NO.	TC/CONS/JALPAIGURI DIV./PWD/

PUBLIC WORKS DEPARTMENT GOVERNMENT OF WEST BENGAL	
DEPARTMENT	EXECUTIVE ENGINEER JALPAIGURI DIVISION, PWD, JALPAIGURI

SCALE H-1:2000 / V-1:200 SHEET A3