

MAJOR BRIDGE

NOTES

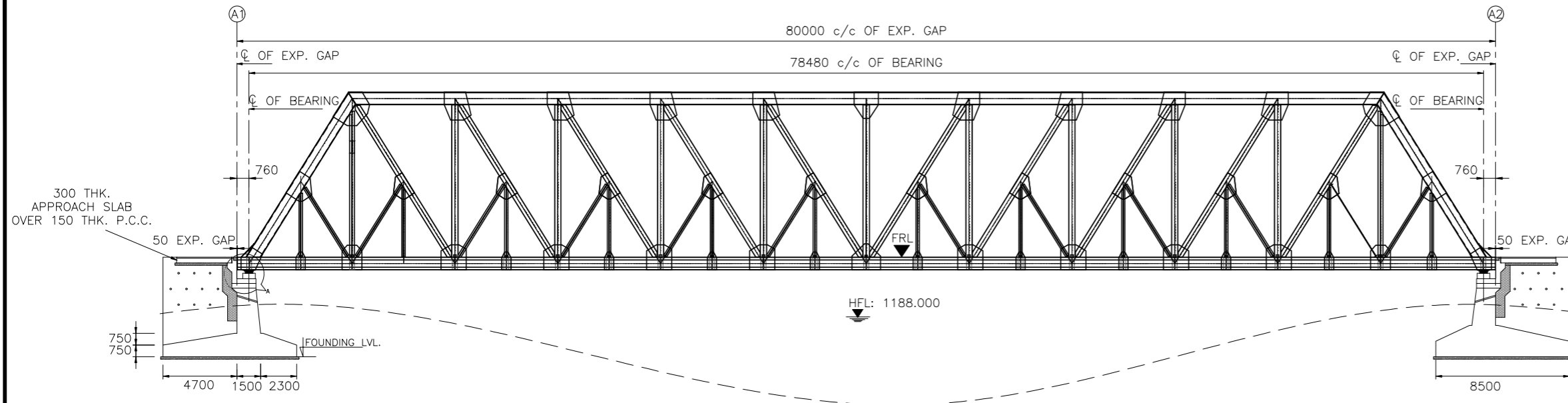
- ALL DIMENSION ARE IN MILLIMETERS, LEVELS IN METERS AND CHAINAGES IN KILOMETERS UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSION TO BE FOLLOWED.
- CONCRETE SHALL BE DESIGN MIX AND SHALL HAVE MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150mm CUBES FOR ALL ELEMENTS OF STRUCTURES AS INDICATED BELOW:-
 - i) CRASH BARRIERM40
 - ii) RCC RAILINGM30
 - iii) PRECAST RCC GIRDERM35
 - iv) CAST-IN-SITU DECK SLABM35
 - v) SUBSTRUCTURE & FOUNDATION.....M35
 - vi) APPROACH SLABM30
 - vii) PCC LEVELING COURSEM15
 - viii) RCC PEDESTALM40
- THE CARRIAGEWAY OF PROPOSED BRIDGE IS DESIGNED FOR 3 LANES OF LOADING AS PER IRC: 6-2017
 - i) THREE LANES OF IRC CLASS A
 - ii) ONE LANE OF IRC CLASS 70R+1 LANES OF CLASS A OR
 - iii) SPV LOADING WHICHEVER GOVERNS
- REINFORCING STEEL SHALL BE OF HYSD BARS.(GRADE DESIGNATION FE-500D) CONFORMING TO IS:1786.
- 75mm THICK CEMENT CONCRETE WEARING COAT SHALL BE PROVIDED AS PER MORTH SPECIFICATION
- CLEAR COVER TO OUTERMOST STEEL SHALL BE AS BELOW:-
 - i) SUPERSTRUCTURE (PRECAST)45mm
 - ii) SUPERSTRUCTURE (CAST IN-SITU).....45mm
 - iii) SUB-STRUCTURE (EARTH FACE)75mm
 - iv) SUB-STRUCTURE (NON-EARTH FACE).....45mm
 - v) FOUNDATION75mm
- ALL SPACE EXCAVATED AND NOT OCCUPIED BY THE FOUNDATION & OTHER PERMANENT WORK SHALL BE FILLED WITH EARTH UP TO SURFACE OF SURROUNDING GROUND IN ACCORDANCE WITH SECTION 300 OF "MORTH" SPECIFICATION. IN CASE OF EXCAVATION IN ROCK,THE ANNULAR SPACE AROUND FOUNDATION SHALL BE FILLED WITH M15 PCC UP TO THE TOP OF ROCK.
- 600 THICK FILTER MEDIA SHALL BE PROVIDED AS PER IRC 78:2014 (APPENDIX 6) / GEOCOMPOSITE AS PER CLAUSE 704 OF MORTH.
- 100Ø WEEP HOLES SPACED AT 1000 C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN A STAGGERED MANNER IN VERTICAL WALLS.
- 50mm STRIP SEAL TYPE EXPANSION JOINTS SHALL BE PROVIDED AS PER MORTH SPECIFICATIONS FOR ROAD AND BRIDGE WORKS.
- LAP/SPLICES SHALL BE PROVIDED AS PER CLAUSE NO. 15.2.4 & 15.2.5 OF IRC: 112-2020.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT APPROVED HIGHWAY DRAWINGS FOR STRUCTURE ORIENTATION, SKEW FRL & CAMBER/SUPER ELEVATION, ETC IF ANY DISCREPANCY FOUND IT SHALL BE BROUGHT TO THE NOTICE OF DESIGN CONSULTANT/PROOF CHECKING CONSULTANT.
- THE NET SAFE BEARING CAPACITY AT FOUNDING LEVEL OF ABUTMENT 40T/m². THE SAME SHOULD BE VALIDATED AT SITE BEFORE EXECUTION OF WORK BY PLATE LOAD TEST AT FOUNDING LEVEL.(FOR NORMAL FOUNDATION)
- PROPOSED CHAINAGE / FRL SHALL BE CHECKED AND CONFIRMED AS PER APPROVED PLAN & PROFILE.
- THE PROJECT ROAD FALLS WITHIN SEISMIC ZONE-III
- BEARING TYPE SHALL BE POT PTFE BEARING.
- EXPOSURE CONDITION IS SEVERE.
- SIZE & WEIGHT OF STONE PITCHING SHALL BE PROVIDED AS PER IRC-89-1997, TABLE 5.2

REFERENCE DRAWINGS:-

- i) GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE NHIDCL/PONGO-JORGING/STC/MJB/GAD/DDE-101 (SHEETS 2 OF 2)
- ii) FOR DETAIL OF RCC CRASH BARRIER, APPROACH SLAB, RAILING AND DRAIN PIPE, REFER SEPARATE DRAWING.

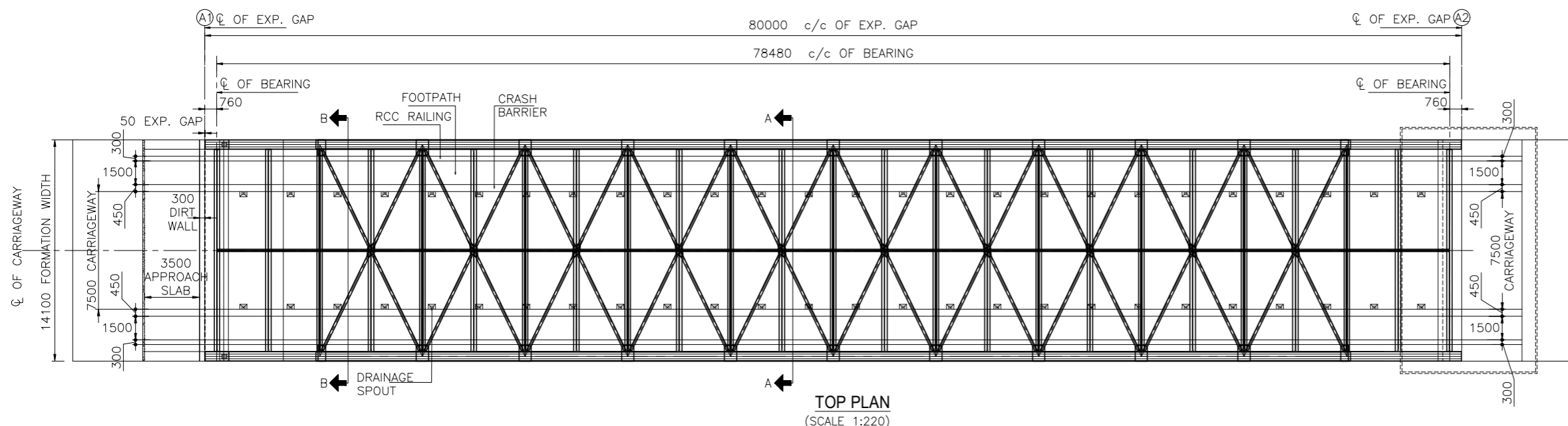
LEGEND

FRL	FINISHED ROAD LEVEL
HFL	HIGH FLOOD LEVEL
CL	CENTER LINE
V	VERTICAL
H	HORIZONTAL




SECTIONAL ELEVATION
(SCALE 1:220)

FRL IN m	1197.000	1197.000	1197.000
BED LEVEL IN m	1194.228	1185.161	1194.172
FDN LEVEL	1190.672		1190.672



TOP PLAN
(SCALE 1:220)

REV.	DATE	DESCRIPTION OF REVISIONS
R7	AUG 2023	FINAL DPR
R6	JAN 2023	MODIFIED DPR INCORPORATION OBSERVATION
R5	JULY 2022	MODIFIED DPR INCORPORATION OBSERVATION
R4	AUG 2019	MODIFIED DPR
R3	JULY 2018	DPR

CLIENT:

National Highways & Infrastructure Development Corporation Limited.
 3rd Floor, PTI building, 4-Parliament Street, New Delhi-110001

PROJECT:
Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two Lining of Pango to Jorging Road (Length: 90 km) for execution on EPC Mode in the State of Arunachal Pradesh under SARDP-NE Phase'B'

DPR CONSULTANTS:

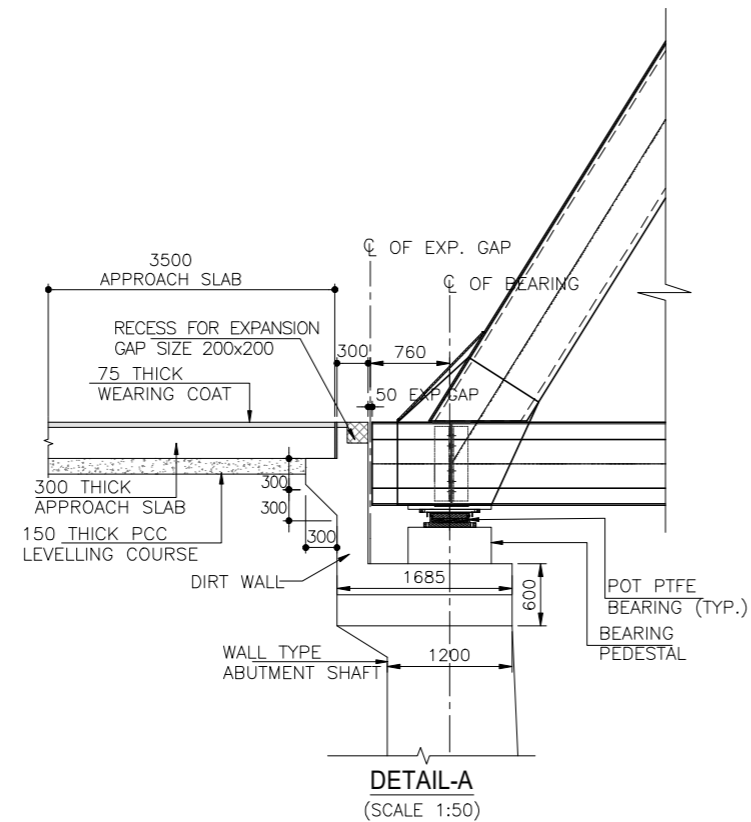
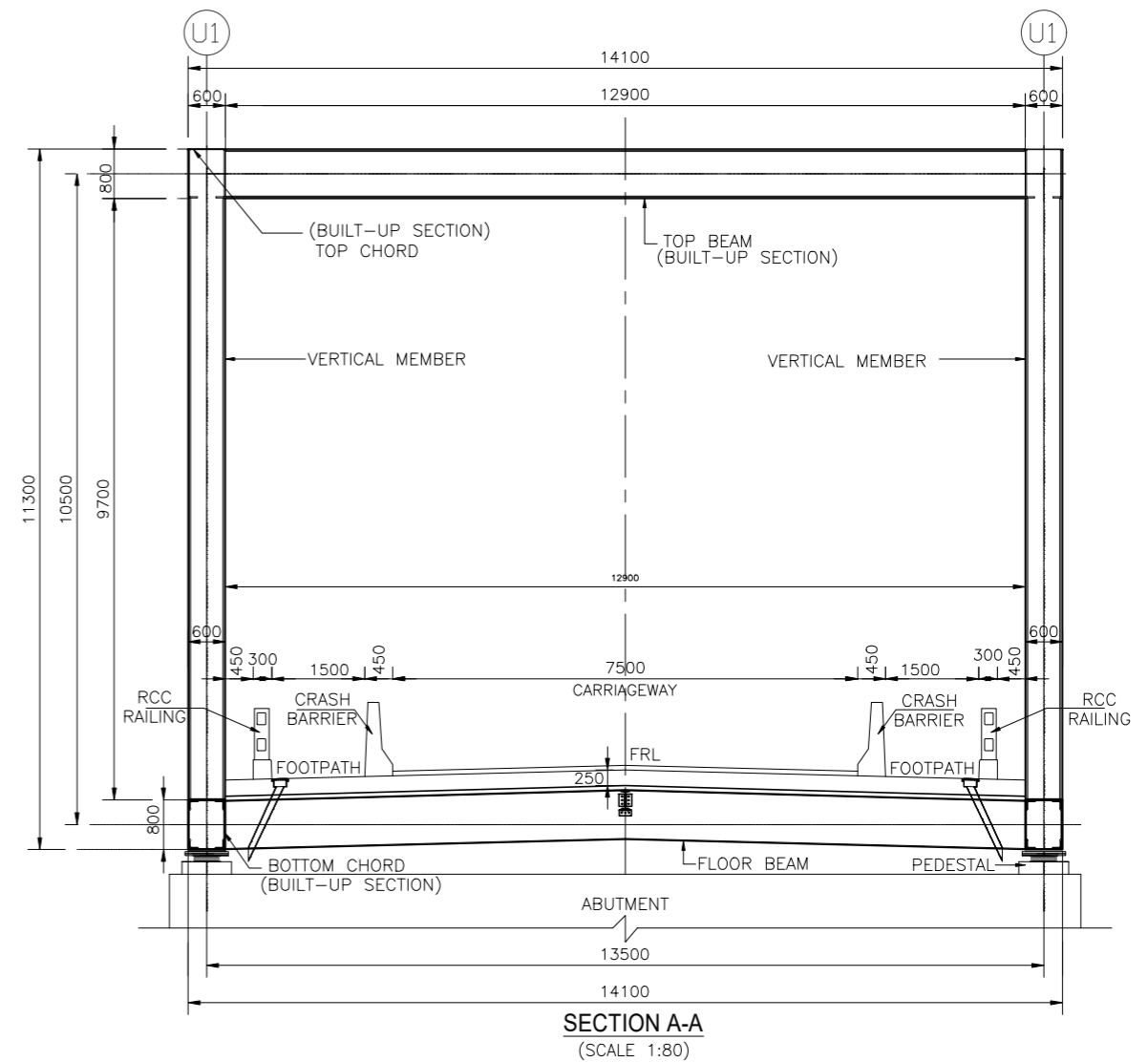
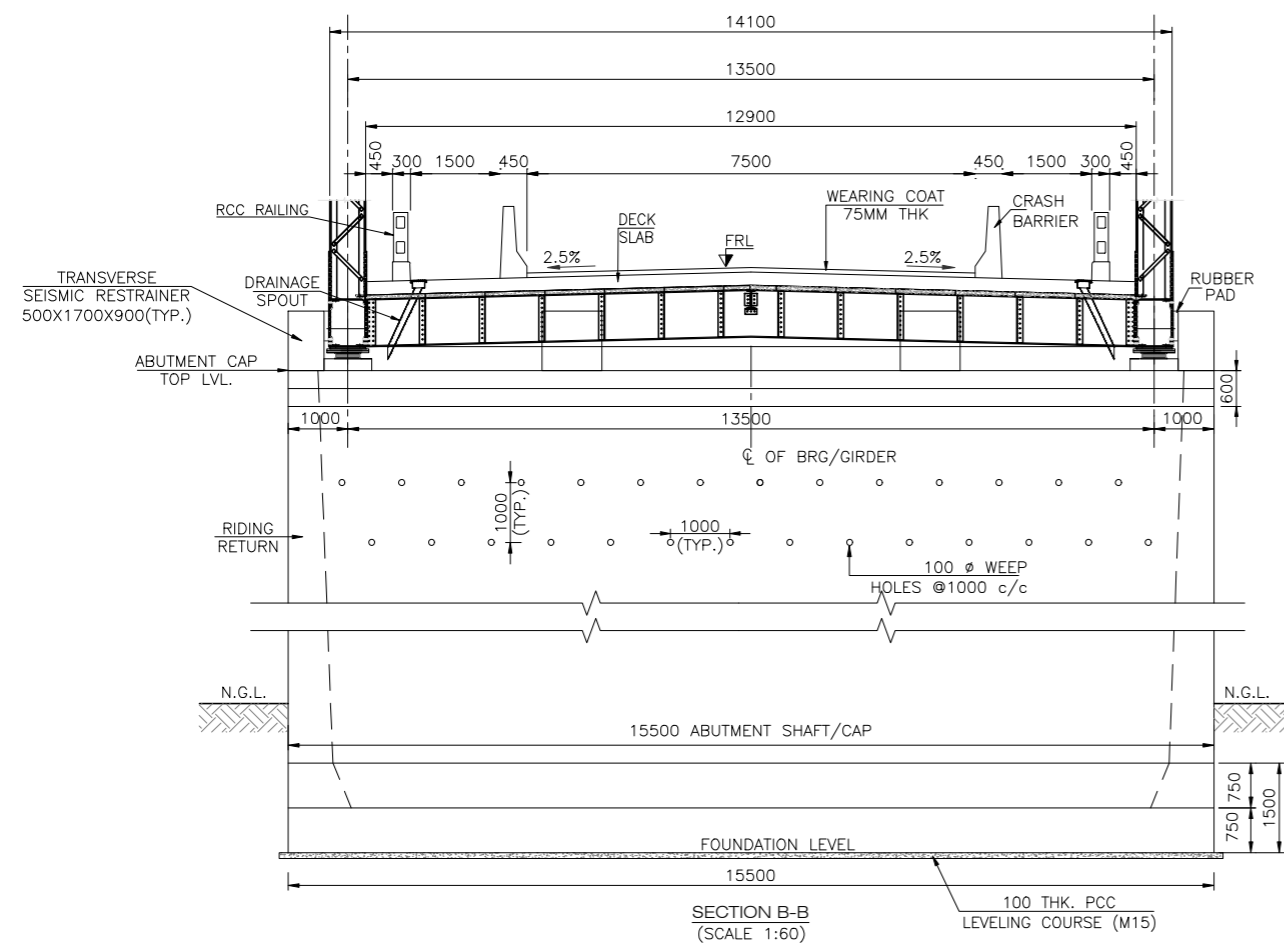
Shweta Technophile Consultants Pvt.Ltd.
 (222-223, 313, Rajhans Plaza, Ahinsa Khand-1, Indirapuram, Ghaziabad-201014)

DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:
GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-40+677 SPAN (1 X 80 M)


DRAWING NO.
 NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 01 of 02

A3




REFERENCE DRAWINGS:-
 1) GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE NHIDCL/PONGO-JORGING/STC/MJB/GAD/DDE-101 (SHEETS 1 OF 2)

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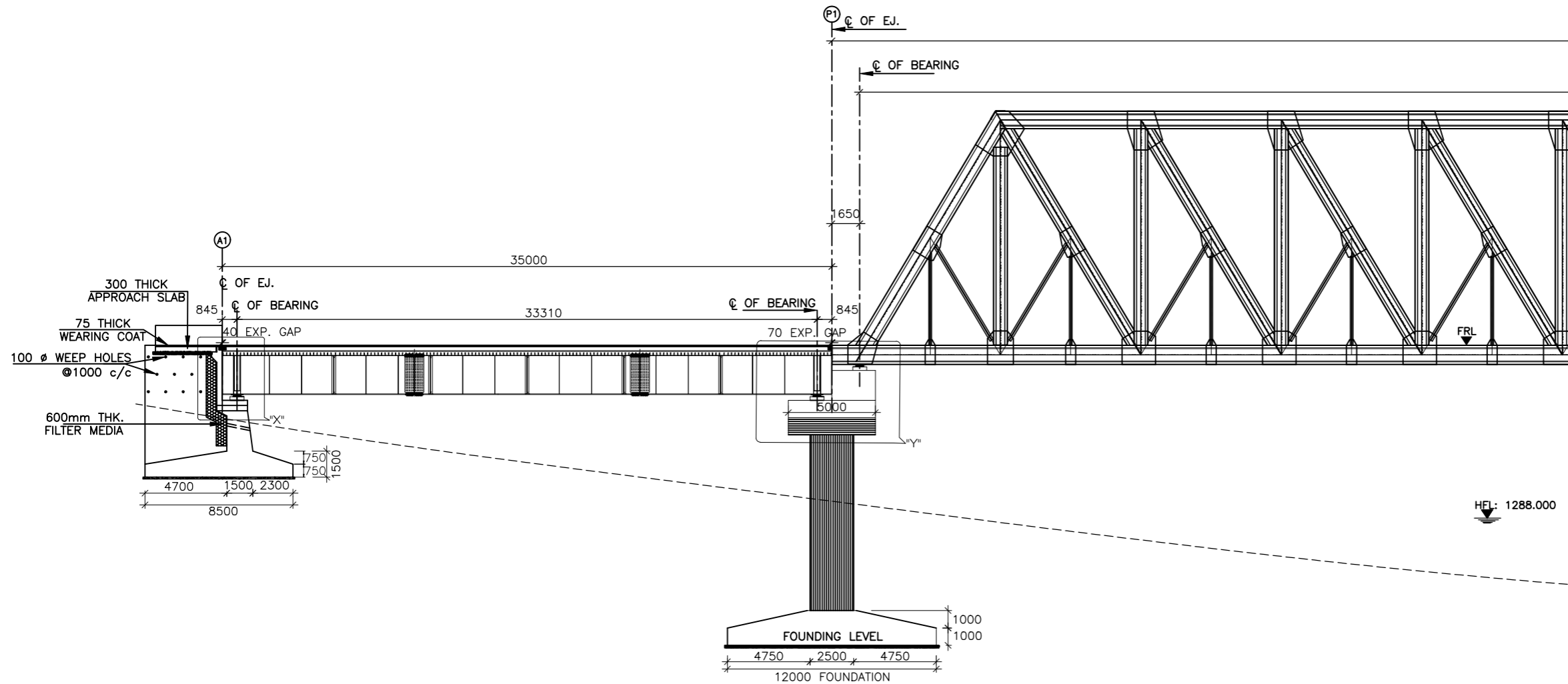
DRAWING NO.
 NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 02 OF 02

A3

NOTES

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- THE CARRIAGEWAY OF PROPOSED BRIDGE IS DESIGNED FOR 3 LANES OF LOADING AS PER IRC: 6-2017
 - THREE LANES OF IRC CLASS A
 - ONE LANE OF IRC CLASS 70R+1 LANES OF CLASS A OR
 - SPV LOADING WHICHEVER GOVERNS
- CONCRETE DETAILS:

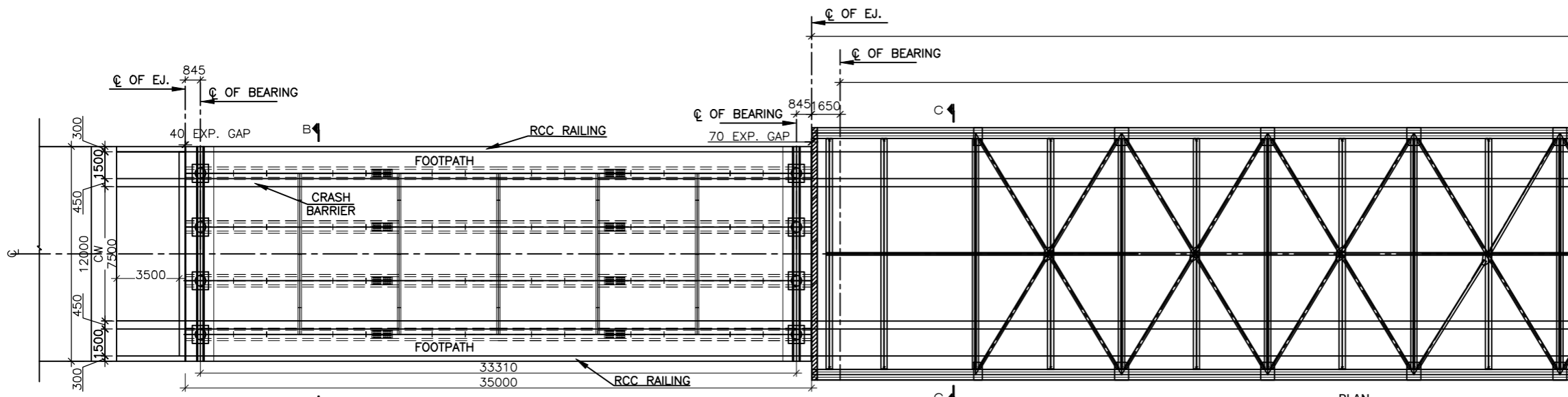
CRASH BARRIER	M40
DECK SLAB	M35
APPROACH SLAB	M30
RETURN WALL	M35
PEDESTAL UNDER BEARINGS	M40
ABUTMENT SHAFT & DIRT WALL	M35
FOUNDATION	M35
PCC	M15
- CLEAR COVER TO ANY REINFORCEMENT SHALL BE AS FOLLOWS
 - FOUNDATION 75mm
 - EARTH FACE 75mm
 - ABUTMENT SHAFT/CAP 45mm
 - PIER SHAFT/CAP 45mm
 - SUPER STRUCTURE 45mm
- TO IMPROVE WORKABILITY OF CONCRETE, ADMIXTURES CONFORMING TO IS: 9103 MAY BE USED SUBJECT TO SATISFACTORY PROVEN USE.
- THE MINIMUM & MAXIMUM CEMENT CONTENT IN CONCRETE SHALL BE AS PER IRC - 112: 2020.
- STRUCTURAL STEEL: B₆ KILLED STEEL F<540 N/mm² (Fe 540). REINFORCING STEEL (R): HYSD BARS CONFORM TO IS: 1786 GRADE Fe 500D.
- 75mm THICK WEARING COAT SHALL BE APPLIED AS PER MORTH SPECIFICATION CLAUSE NO 2702.2.
- BACK FILLING SHALL CONSIST OF SELECTED EARTH CONFORMING TO $\gamma=18$ KN/m³.
- WEEP HOLES IN SLOPE 1:20, SPACED @ 1000 mm. c/c BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN STAGGERED MANNER IN ABUTMENT ABOVE GROUND LEVEL.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH FINAL HIGHWAY PLAN AND PROFILE DRAWINGS, ALL LEVELS GIVEN IN DRAWING SHALL BE VERIFIED BEFORE EXECUTION.
- SEISMIC ZONE (V) HAS BEEN CONSIDERED IN DESIGN.
- TYPE OF BEARING - POT PTFE/SPHERICAL AND SHALL BE DESIGNED & INSTALLED BY MANUFACTURER.
- THE FOUNDATION DIMENSIONS MAY VARY AS PER DETAILED GEOTECHNICAL INVESTIGATION.
- FOUNDING LEVELS MAY BE MODIFIED IN DETAILED DESIGN AFTER GEOTECHNICAL INVESTIGATION.
- FOUNDATION SHALL BE EMBEDDED IN ROCK BY 0.6 m (HARD ROCK)/1.5 m (MEDIUM ROCK).
- STRIP SEAL EXPANSION JOINT SHALL BE PROVIDED AND SHALL BE DESIGNED & INSTALLED BY MANUFACTURER.
- SPLICES IF ANY SHOULD BE PROPERLY DESIGNED.



SECTIONAL ELEVATION
(SCALE 1:150)

FRL IN m	1312.047	1312.047
BED LEVEL IN m	1309.568	1305.132
FDN LEVEL	1306.068	1299.081

LEGEND	
FRL	FINISHED ROAD LEVEL
HFL	HIGH FLOOD LEVEL
CL	CENTER LINE
V	VERTICAL
H	HORIZONTAL



PLAN
(SCALE 1:150)

REFERENCE DRAWINGS:-

- GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 (SHEETS 2 & 3)
- FOR DETAIL OF RCC CRASH BARRIER, APPROACH SLAB, RAILING AND DRAIN PIPE, REFER SEPARATE DRAWING.

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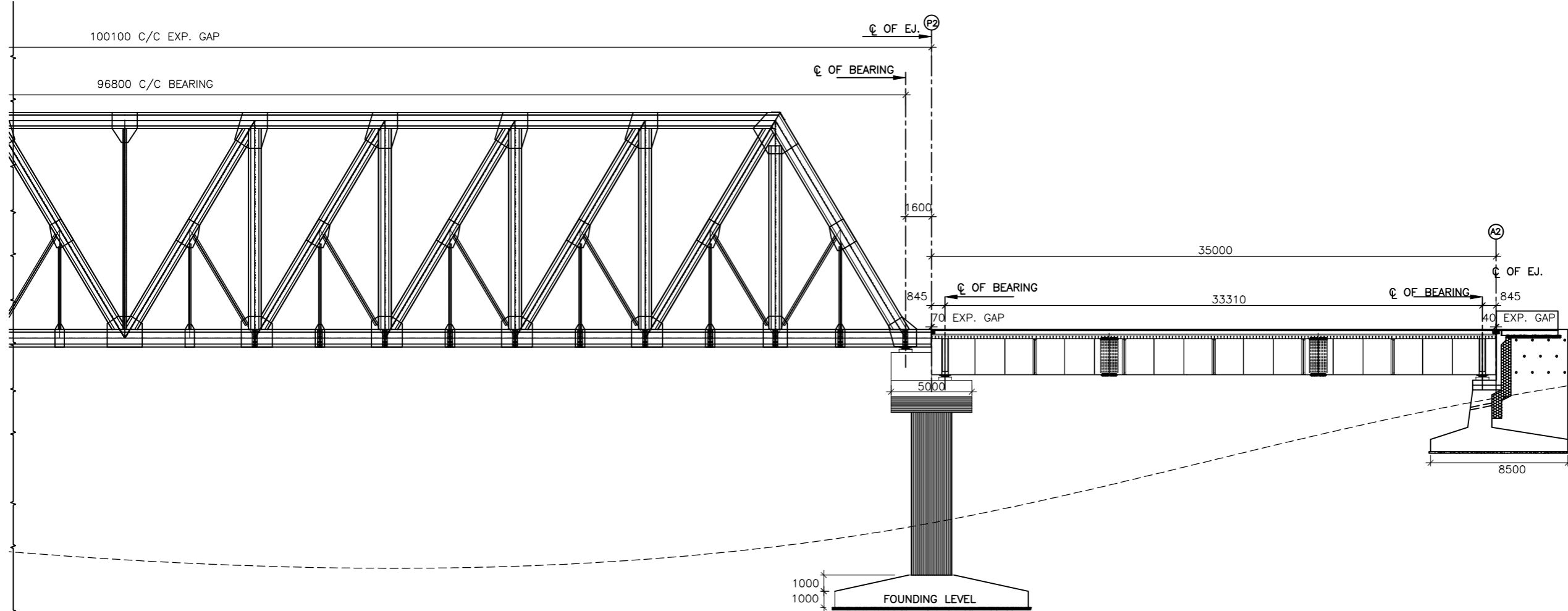
PROJECT:
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DPR CONSULTANTS:
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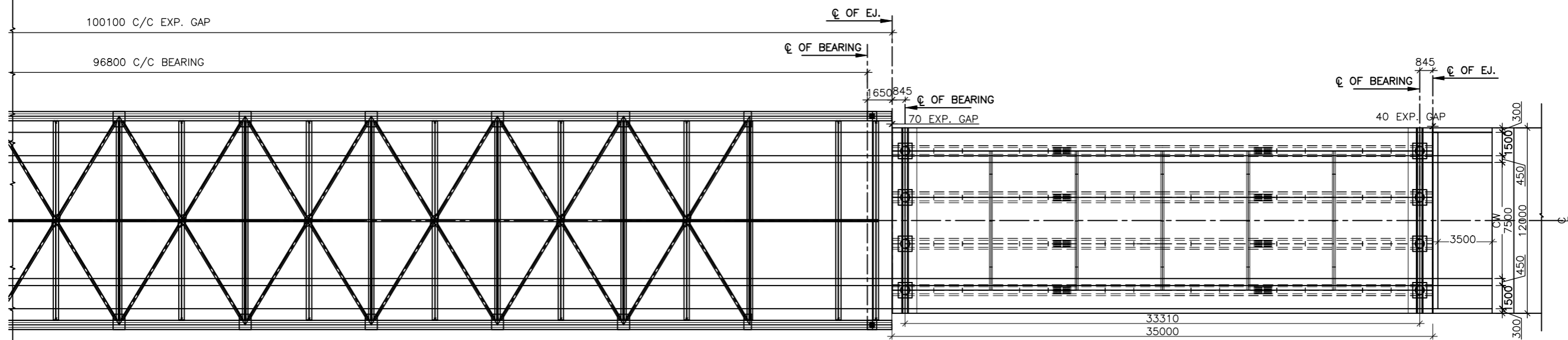
DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:
GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-43+443 SPAN (1 X 35 + 1 X 100 + 1 X 35 M)

DRAWING NO.
 NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 01 of 03



1312.047	1312.047	1312.047
1284.379	1302.081	1309.712
	1299.081	1306.068



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 NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101
 (SHEETS 1 & 3)

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DRAWN BY	MANISH
DESIGN BY	AMIT
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 SPAN (1 X 35 + 1 X 100 + 1 X 35 M)

DRAWING NO.
 NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 02 of 03

NOTES

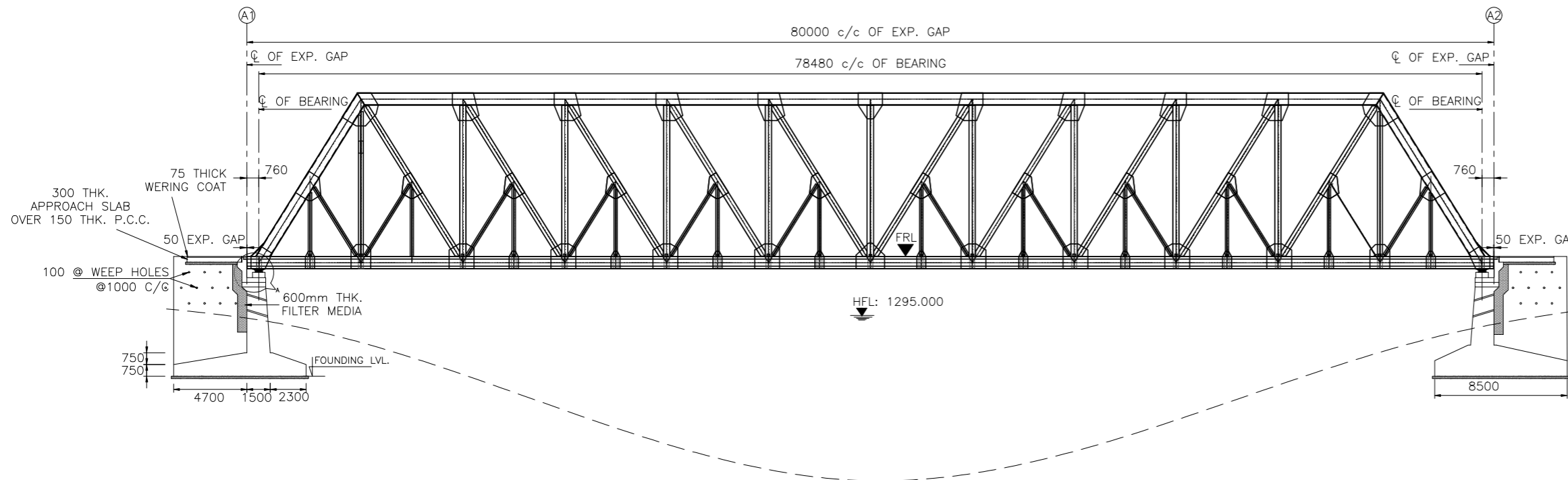
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 - ii) RCC RAILINGM30
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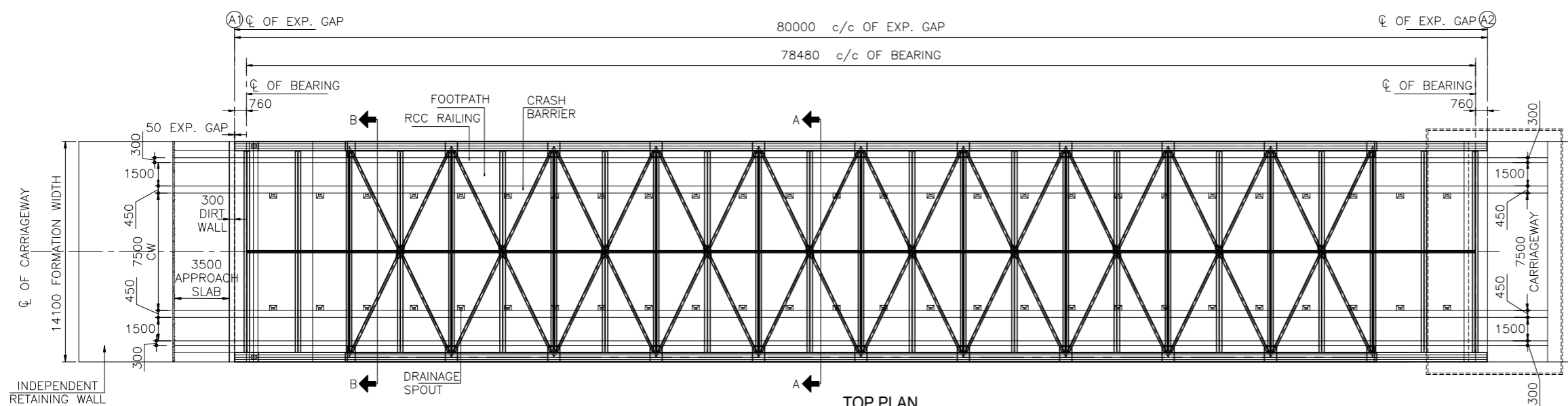
LEGEND

FRL	FINISHED ROAD LEVEL
HFL	HIGH FLOOD LEVEL
CL	CENTER LINE
V	VERTICAL
H	HORIZONTAL



SECTIONAL ELEVATION
(SCALE 1:225)

FRL IN m	1316.873	1316.873	1316.873
BED LEVEL IN m	1314.477	1291.562	1314.862
FDN LEVEL	1310.977		1310.977



TOP PLAN
(SCALE 1:225)

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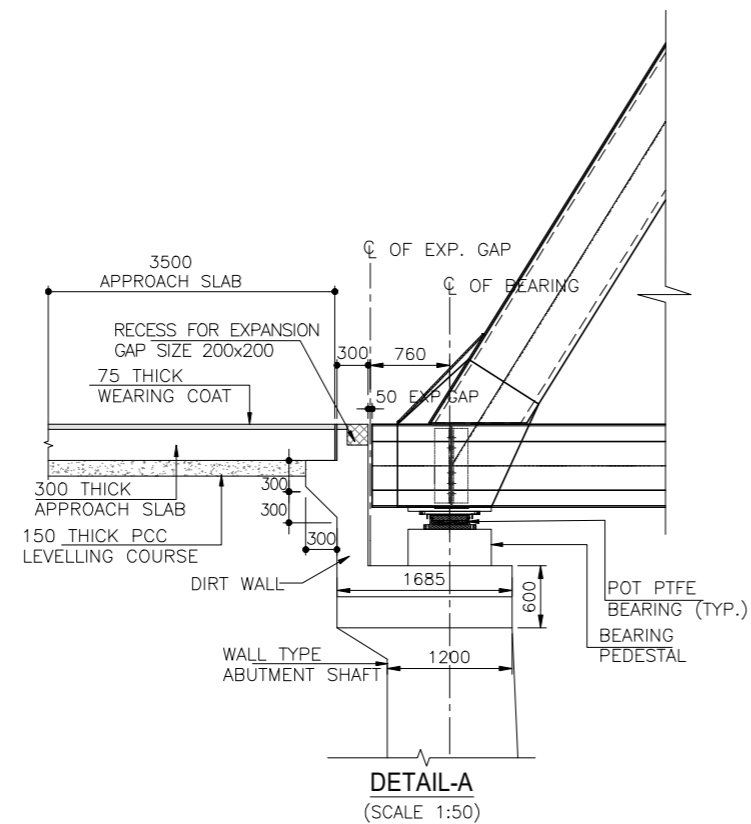
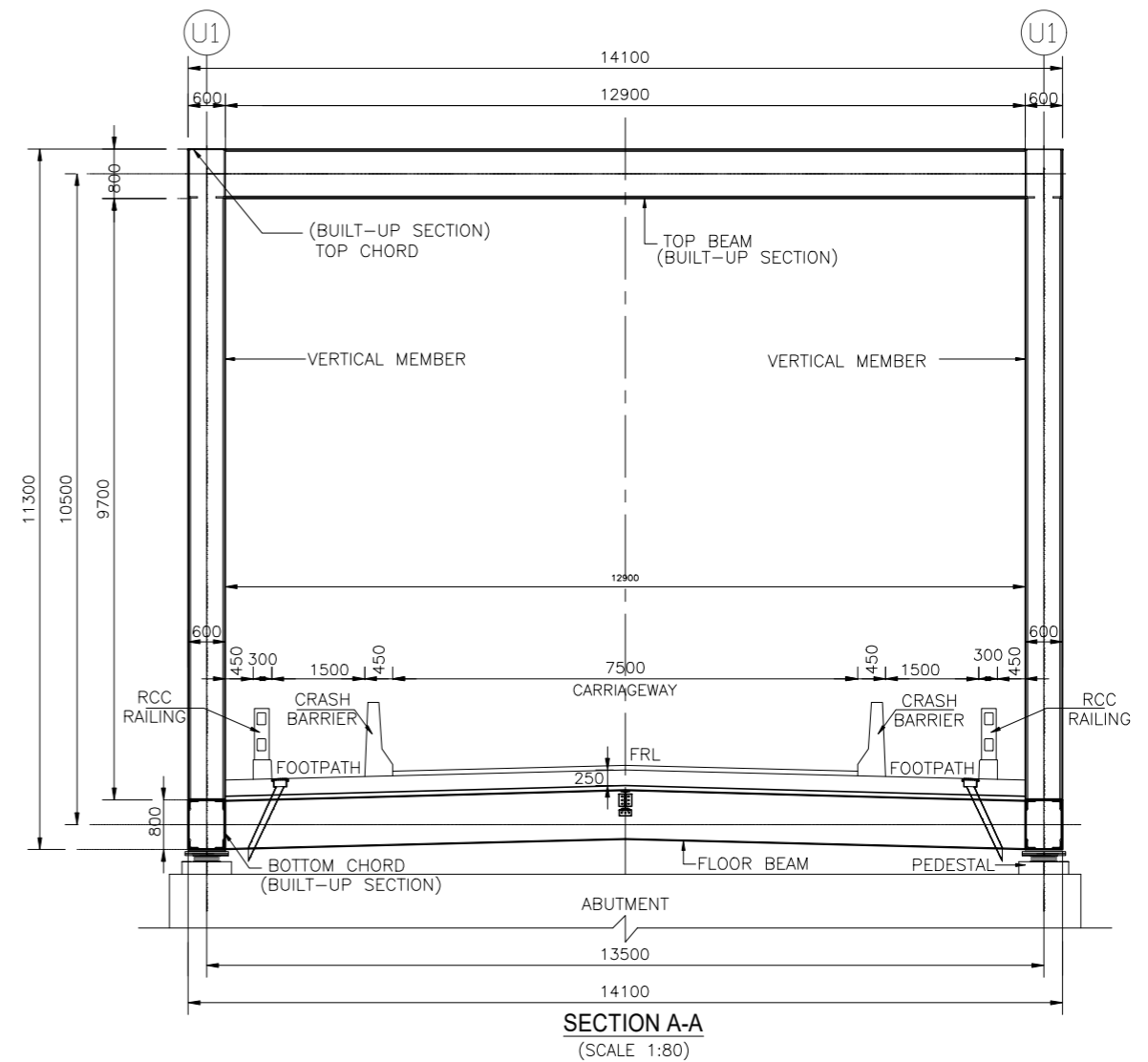
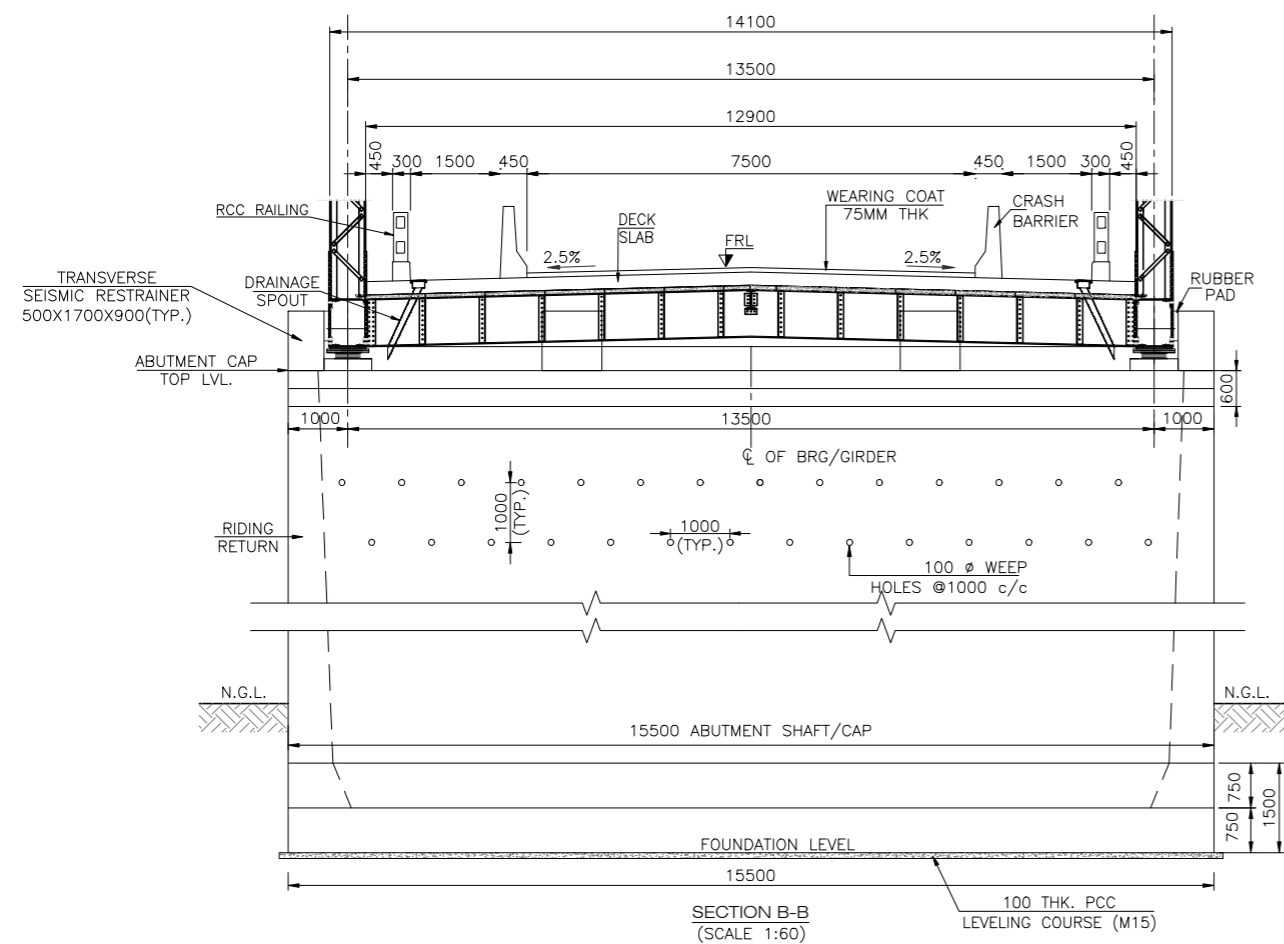
DPR CONSULTANTS:
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DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:
GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-51+329 SPAN (1 X 80 M)


DRAWING NO.
 NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 01 of 02

A3



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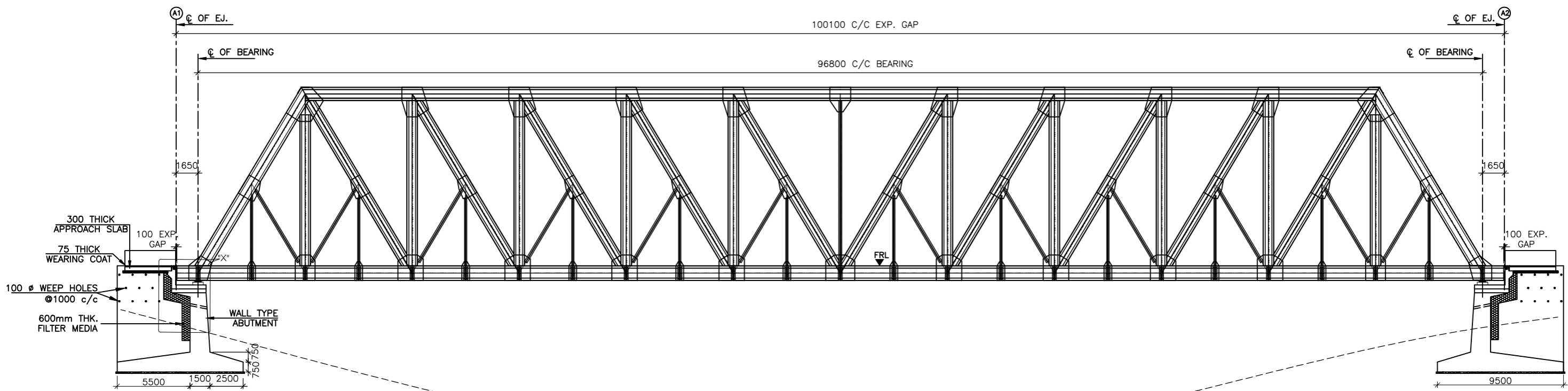
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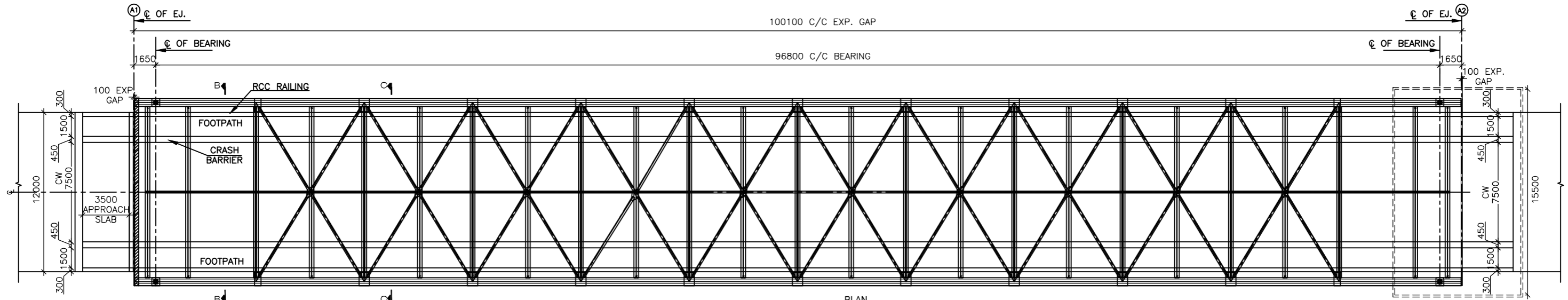
DRAWING NO.
 NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 02 OF 02

A3



SECTIONAL ELEVATION
(SCALE 1:210)


FRL IN m	1320.750	1320.750	1320.750
BED LEVEL IN m	1317.826	1297.351	1317.357
FDN LEVEL	1313.857		1313.857



PLAN
(SCALE 1:210)

- REFERENCE DRAWINGS:-
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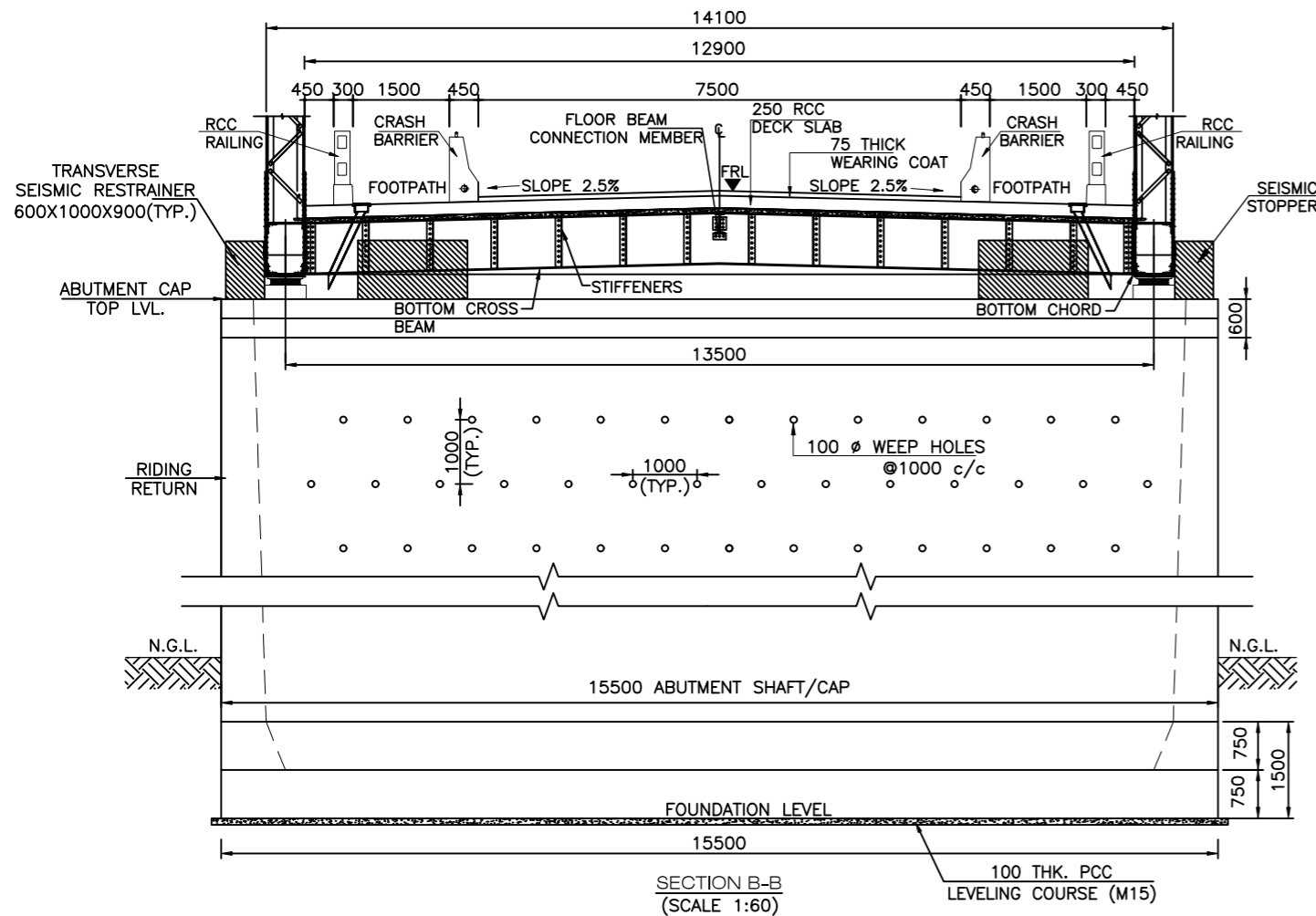
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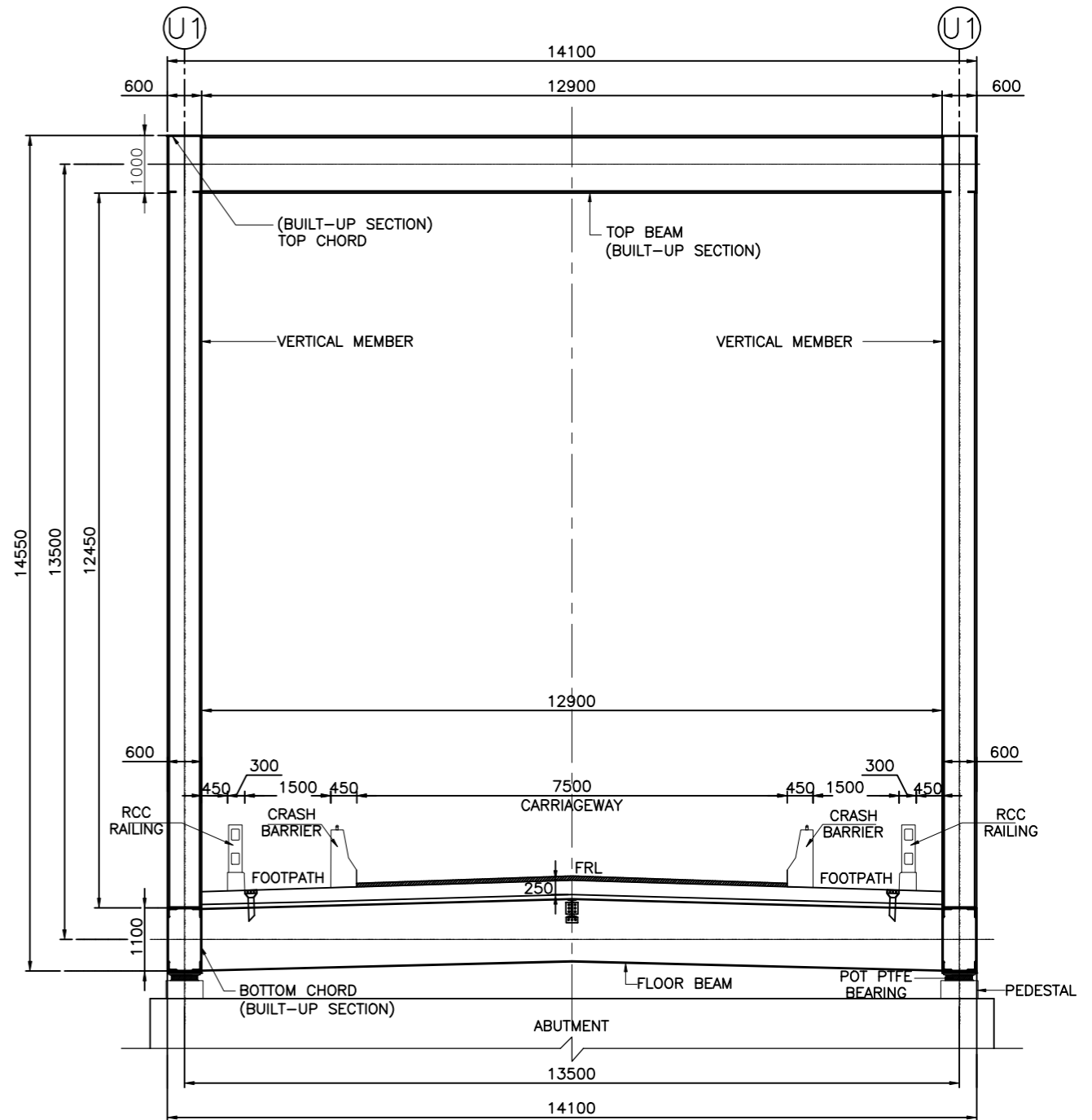
DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:
GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-52+134 SPAN (1 X 100 M)

DRAWING NO.
 NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 01 of 02



SECTION B-B
(SCALE 1:60)



SECTION C-C
(SCALE 1:60)

NOTES

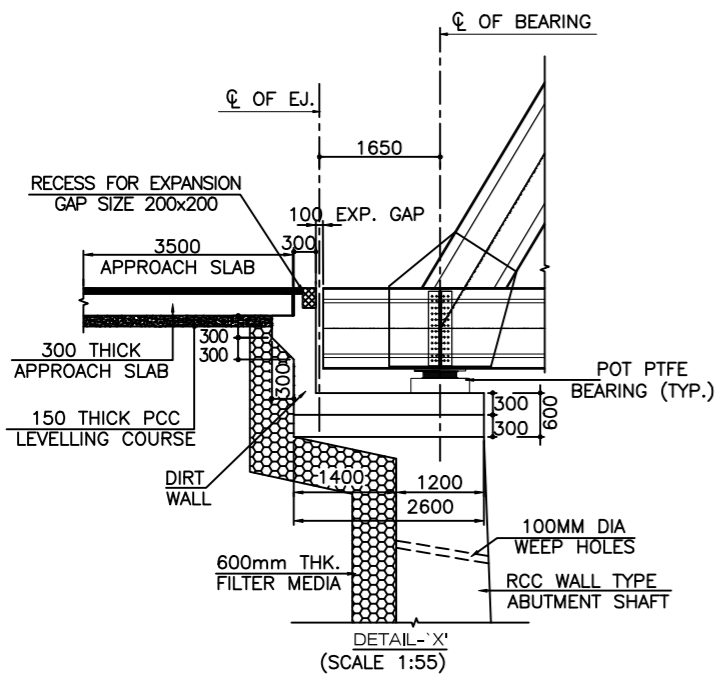
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 - THREE LANES OF IRC CLASS A
 - ONE LANE OF IRC CLASS 70R+1 LANES OF CLASS A OR
 - SPV LOADING WHICHEVER GOVERNS
- CONCRETE DETAILS:

CRASH BARRIER	M40
DECK SLAB	M35
APPROACH SLAB	M30
RETURN WALL	M35
PEDESTAL UNDER BEARINGS	M40
ABUTMENT SHAFT & DIRT WALL	M35
FOUNDATION	M35
PCC	M15
- CLEAR COVER TO ANY REINFORCEMENT SHALL BE AS FOLLOWS
 - FOUNDATION 75mm
 - EARTH FACE 75mm
 - ABUTMENT SHAFT/CAP 45mm
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 - SUPER STRUCTURE 45mm
- TO IMPROVE WORKABILITY OF CONCRETE, ADMIXTURES CONFORMING TO IS: 9103 MAY BE USED SUBJECT TO SATISFACTORY PROVEN USE.
- THE MINIMUM & MAXIMUM CEMENT CONTENT IN CONCRETE SHALL BE AS PER IRC - 112: 2020.
- STRUCTURAL STEEL: B₈ KILLED STEEL F₅₄₀ N/mm² (Fe 540). REINFORCING STEEL (R): HYSD BARS CONFORM TO IS: 1786 GRADE Fe 500D.
- 75mm THICK WEARING COAT SHALL BE APPLIED AS PER MORTH SPECIFICATION CLAUSE NO 2702.2.
- BACK FILLING SHALL CONSIST OF SELECTED EARTH CONFORMING TO Y=18 KN/m².

- WEEP HOLES IN SLOPE 1:20, SPACED @ 1000 mm. c/c BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN STAGGERED MANNER IN ABUTMENT ABOVE GROUND LEVEL.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH FINAL HIGHWAY PLAN AND PROFILE DRAWINGS, ALL LEVELS GIVEN IN DRAWING SHALL BE VERIFIED BEFORE EXECUTION.
- SEISMIC ZONE (V) HAS BEEN CONSIDERED IN DESIGN.
- TYPE OF BEARING - POT PTFE/SPHERICAL AND SHALL BE DESIGNED & INSTALLED BY MANUFACTURER.
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- SPLICES IF ANY SHOULD BE PROPERLY DESIGNED.

LEGEND	
FRL	FINISHED ROAD LEVEL
HFL	HIGH FLOOD LEVEL
CL	CENTER LINE
V	VERTICAL
H	HORIZONTAL

REFERENCE DRAWINGS:-
i) GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 (SHEETS 1 & 2)



DETAIL 'X'
(SCALE 1:55)

REV	DATE	DESCRIPTION OF REVISIONS
R7	AUG 2023	FINAL DPR
R6	JAN 2023	MODIFIED DPR INCORPORATION OBSERVATION
R5	JULY 2022	MODIFIED DPR INCORPORATION OBSERVATION
R4	AUG 2019	MODIFIED DPR
R3	JULY 2018	DPR

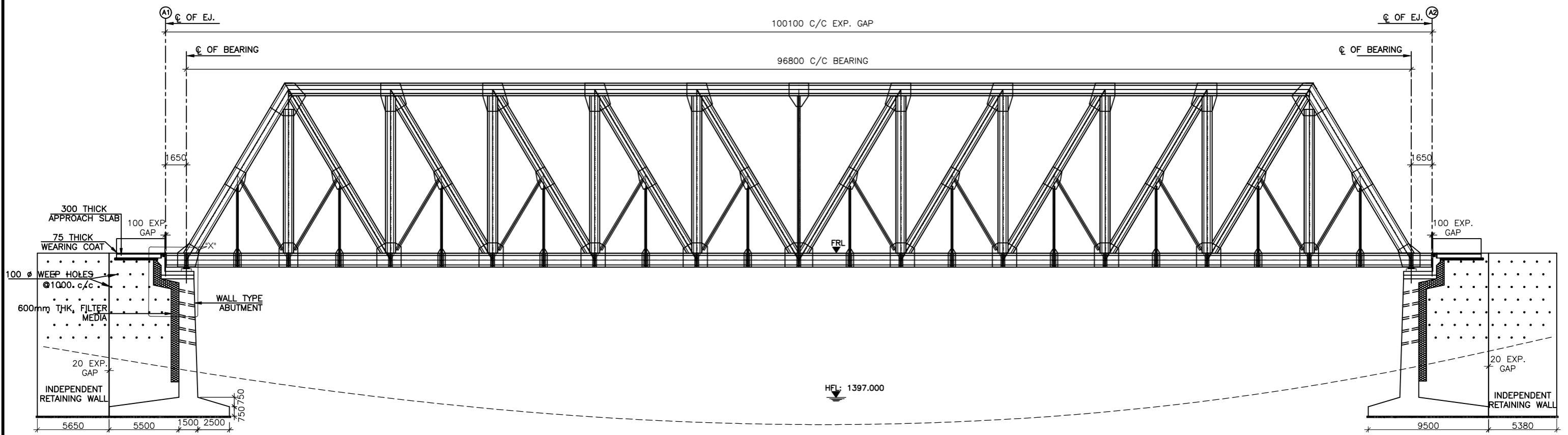
CLIENT:
National Highways & Infrastructure Development Corporation Limited.
3rd Floor, PTI building, 4-Parliament Street, New Delhi-110001

PROJECT:
Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two laning of Pango to Jorging Road (Length: 90 km) for execution on EPC Mode in the State of Arunachal Pradesh under SARDP-NE Phase'B'

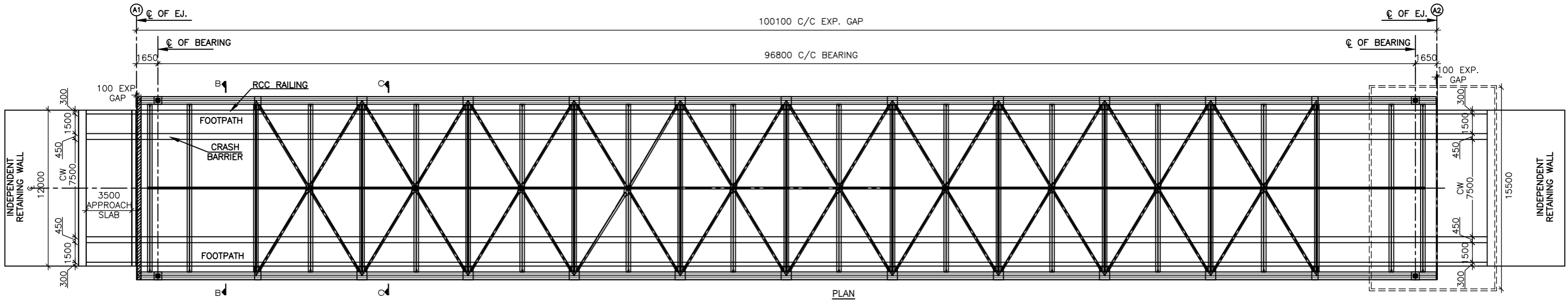
DPR CONSULTANTS:
S7C Shweta Technophile Consultants Pvt.Ltd.
(222-223, 313, Rajhans Plaza, Ahinsa Khand-1, Indrapuram, Ghaziabad-201014)

DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:
GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-52+134 SPAN (1 X 100 M)
DRAWING NO. NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 02 of 02




FRL IN m	1420.809	1420.809	1420.809
BED LEVEL IN m	1412.372	1393.464	1412.556
FDN LEVEL	1408.872		1408.872



- REFERENCE DRAWINGS:-
- i) GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 (SHEETS 2 & 2)
 - ii) FOR DETAIL OF RCC CRASH BARRIER, APPROACH SLAB, RAILING AND DRAIN PIPE, REFER SEPARATE DRAWING.

REV.	DATE	DESCRIPTION OF REVISIONS
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CLIENT:
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Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two laning of Pango to Jorging Road (Length: 90 km) for execution on EPC Mode in the State of Arunachal Pradesh under SARDP-NE Phase'B'

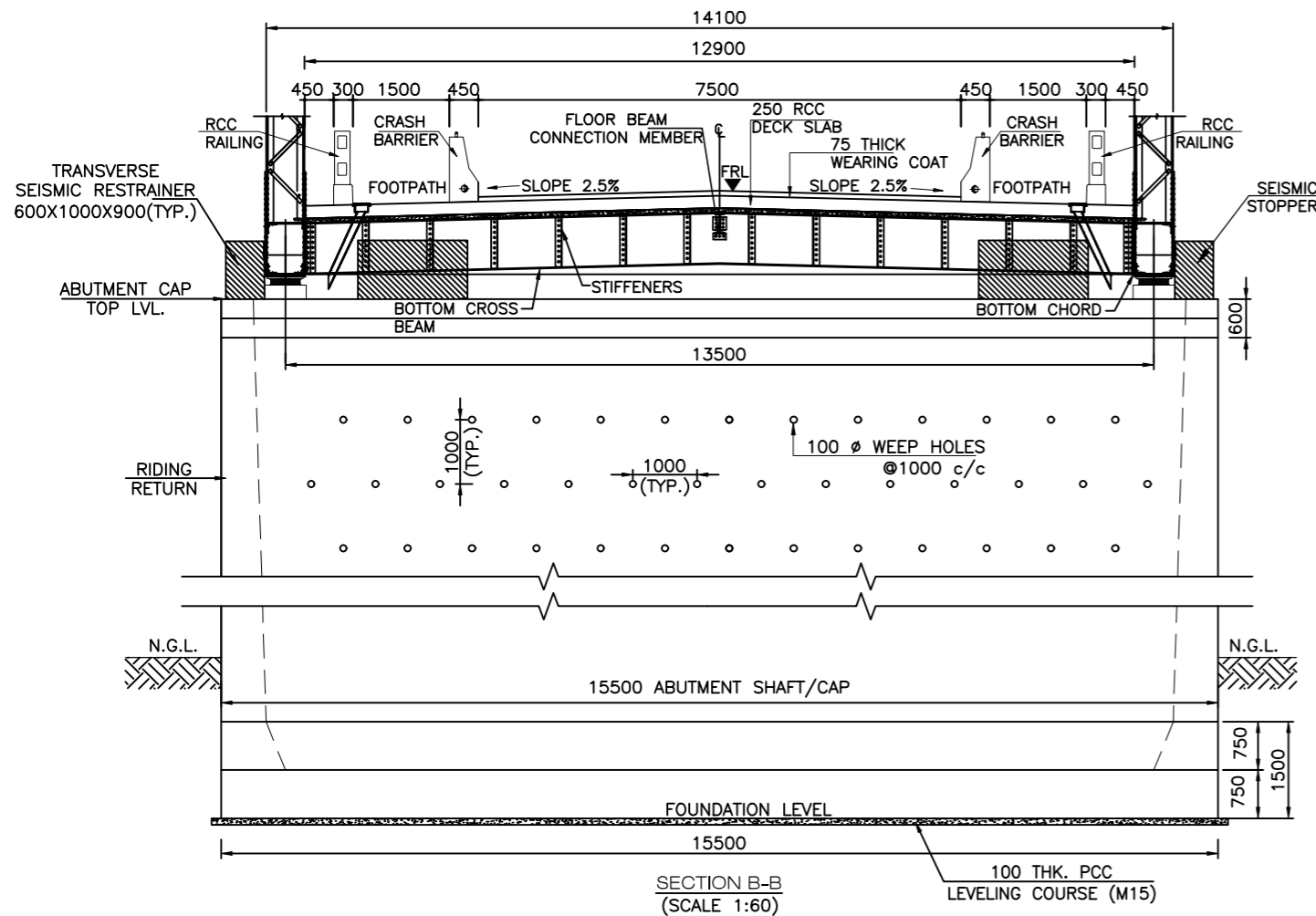
DPR CONSULTANTS:
 **Shweta Technophile Consultants Pvt.Ltd.**
 (222-223, 313, Rajhans Plaza, Ahinsa Khand-1, Indrapuram, Ghaziabad-201014)

DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

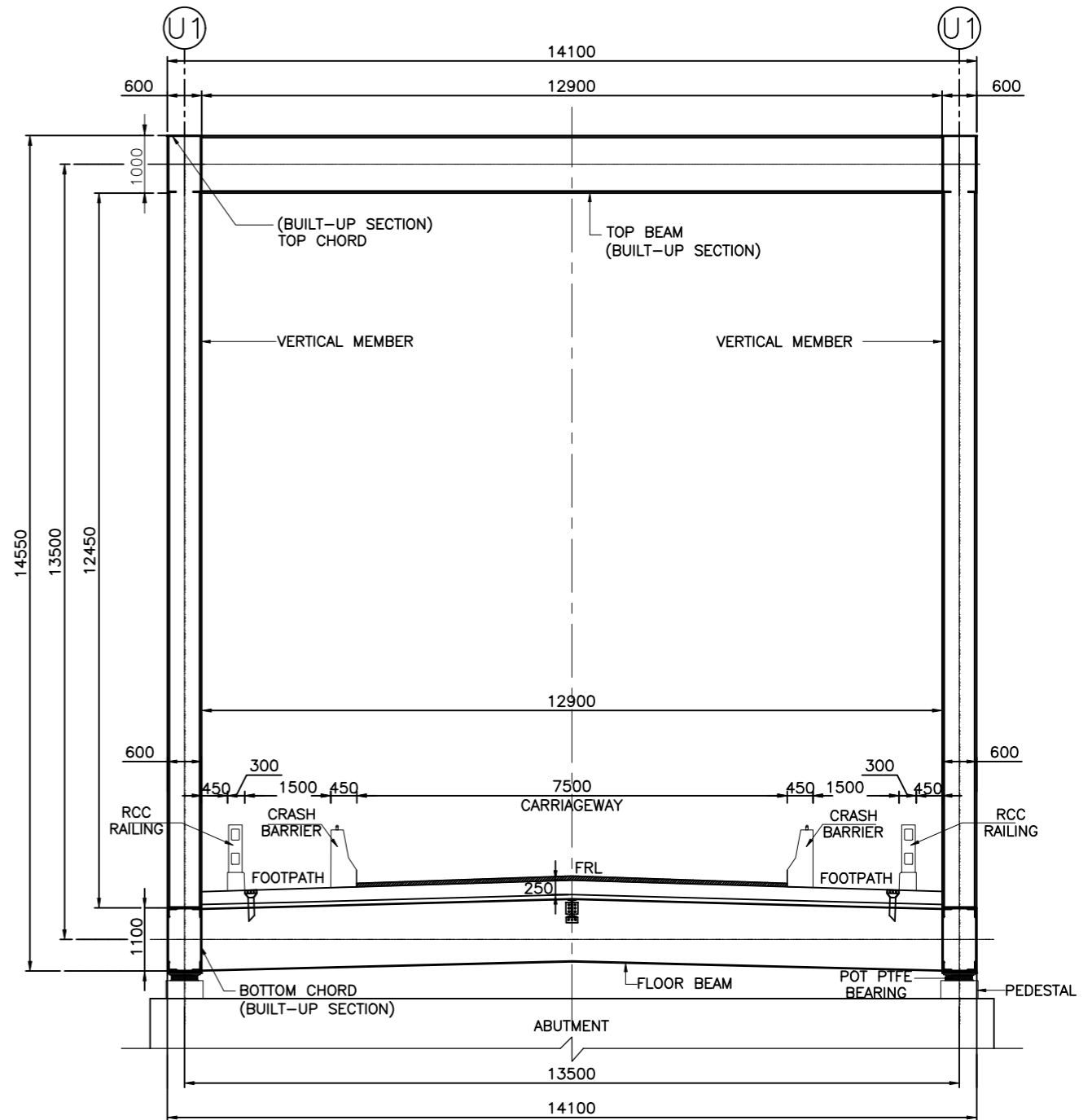
TITLE:
GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-56+074 SPAN (1 X 100 M)

DRAWING NO.
 NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 01 of 02

A3



SECTION B-B
(SCALE 1:60)



SECTION C-C
(SCALE 1:60)

NOTES

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 - SPV LOADING WHICHEVER GOVERNS
- CONCRETE DETAILS:

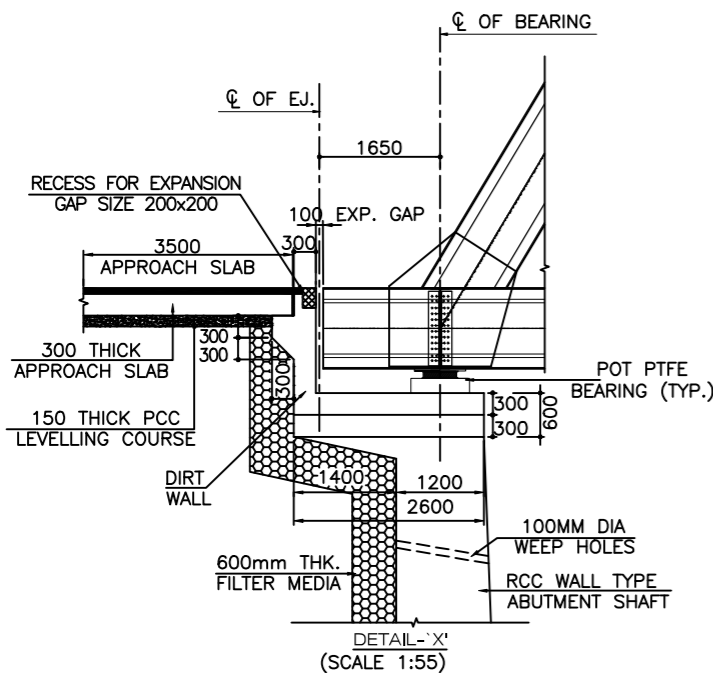
CRASH BARRIER	M40
DECK SLAB	M35
APPROACH SLAB	M30
RETURN WALL	M35
PEDESTAL UNDER BEARINGS	M40
ABUTMENT SHAFT & DIRT WALL	M35
FOUNDATION	M35
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LEGEND	
FRL	FINISHED ROAD LEVEL
HFL	HIGH FLOOD LEVEL
CL	CENTER LINE
V	VERTICAL
H	HORIZONTAL


REFERENCE DRAWINGS:-

- GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 (SHEETS 1 & 2)



DETAIL 'X'
(SCALE 1:55)

REV	DATE	DESCRIPTION OF REVISIONS
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REV	DATE	DESCRIPTION OF REVISIONS

CLIENT:

National Highways & Infrastructure Development Corporation Limited.
 3rd Floor, PTI building, 4-Parliament Street, New Delhi-110001

PROJECT:
Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two laning of Pango to Jorging Road (Length: 90 km) for execution on EPC Mode in the State of Arunachal Pradesh under SARDP-NE Phase'B'

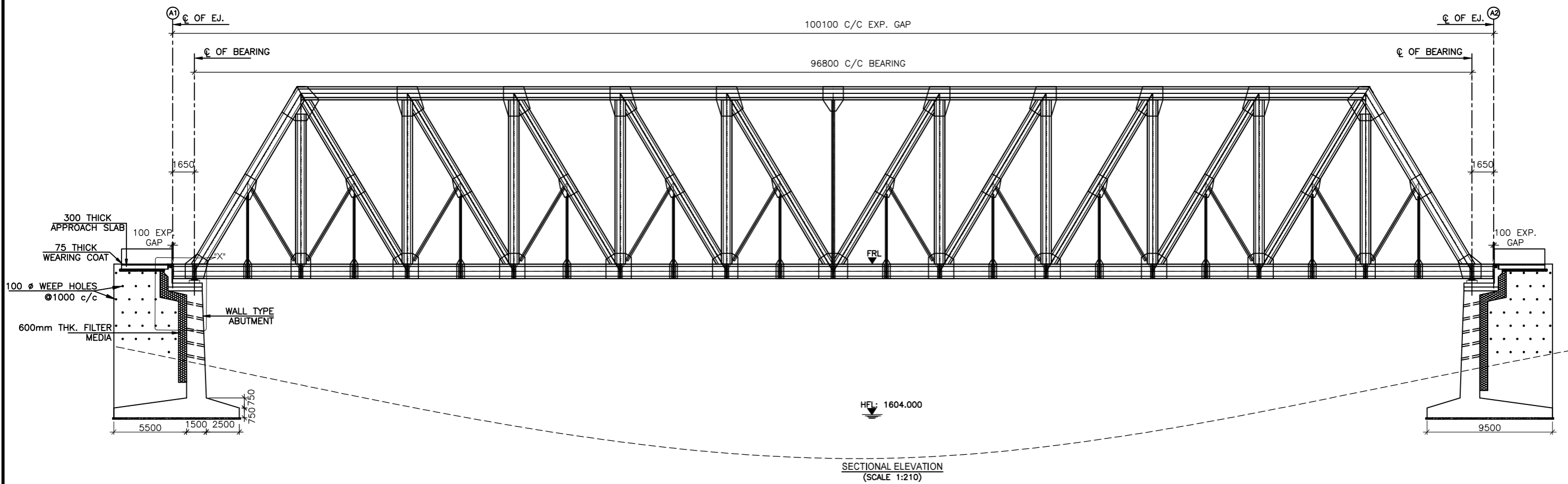
DPR CONSULTANTS:

Shweta Technophile Consultants Pvt.Ltd.
 (222-223, 313, Rajhans Plaza, Ahinsa Khand-1, Indrapuram, Ghaziabad-201014)

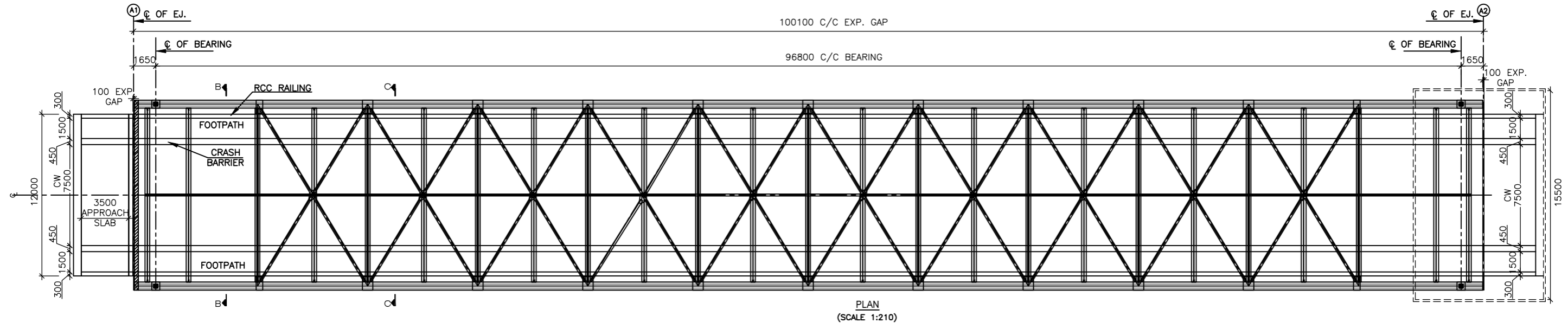
DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:
GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-56+074 SPAN (1 X 100 M)

DRAWING NO.
 NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 02 of 02




FRL IN m	1616.600	1616.600	1616.600
BED LEVEL IN m	1611.370	1600.923	1610.871
FDN LEVEL	1607.371		1607.371



- REFERENCE DRAWINGS:-
- i) GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 (SHEETS 2 & 2)
 - ii) FOR DETAIL OF RCC CRASH BARRIER, APPROACH SLAB, RAILING AND DRAIN PIPE, REFER SEPARATE DRAWING.

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CLIENT:
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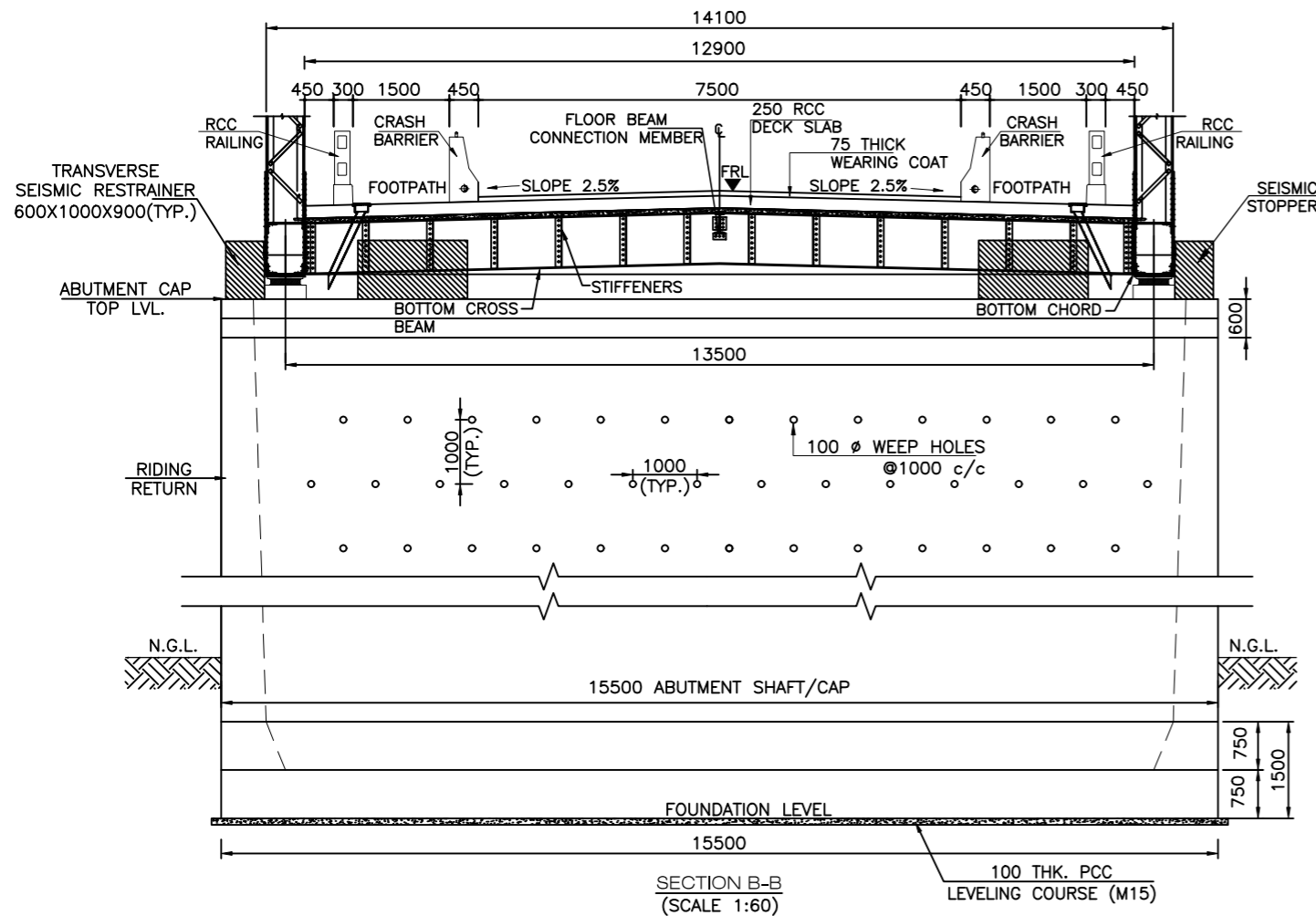
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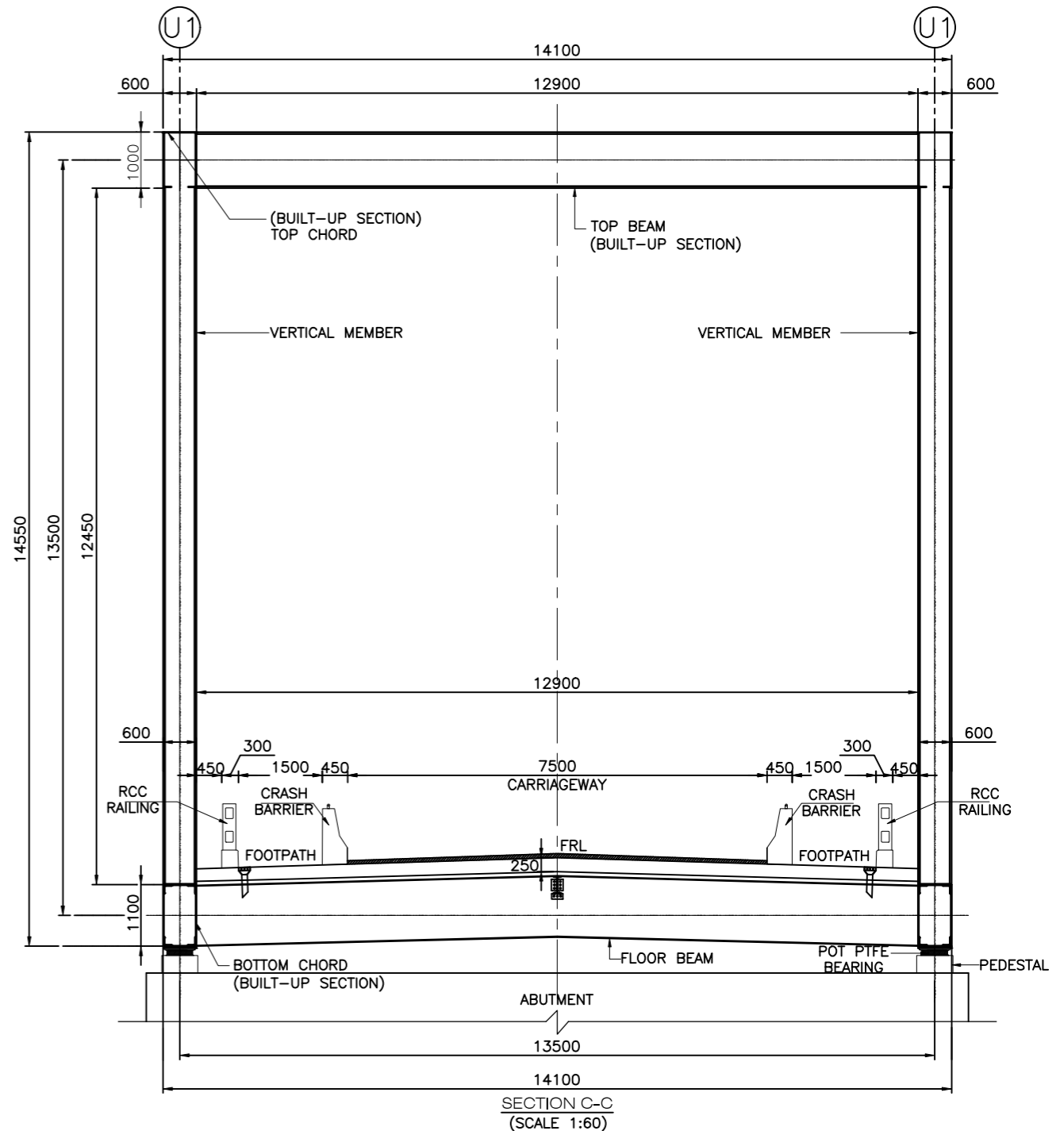
DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:
GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-63+363 SPAN (1 X 100 M)

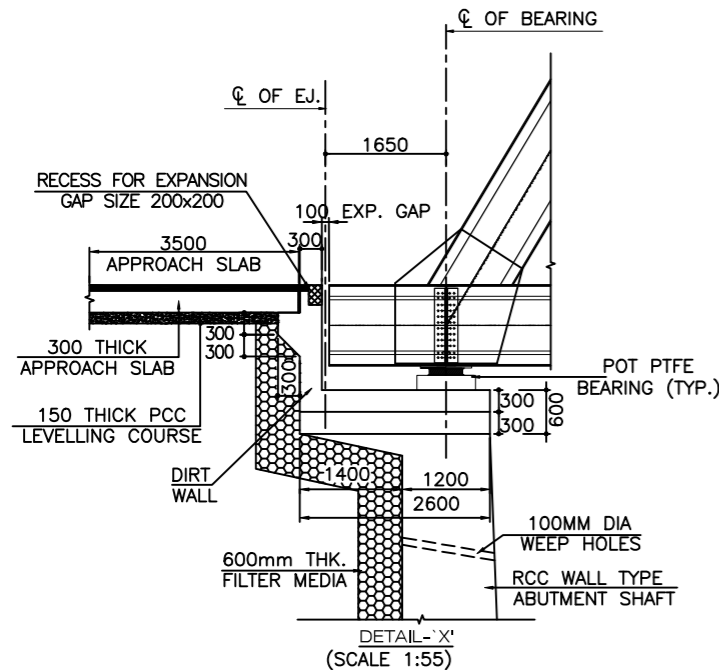
DRAWING NO.
 NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 01 of 02



SECTION B-B
(SCALE 1:60)



SECTION C-C
(SCALE 1:60)



DETAIL 'X'
(SCALE 1:55)

NOTES


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LEGEND	
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HFL	HIGH FLOOD LEVEL
CL	CENTER LINE
V	VERTICAL
H	HORIZONTAL

REFERENCE DRAWINGS:-
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REV	DATE	DESCRIPTION OF REVISIONS
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CLIENT:

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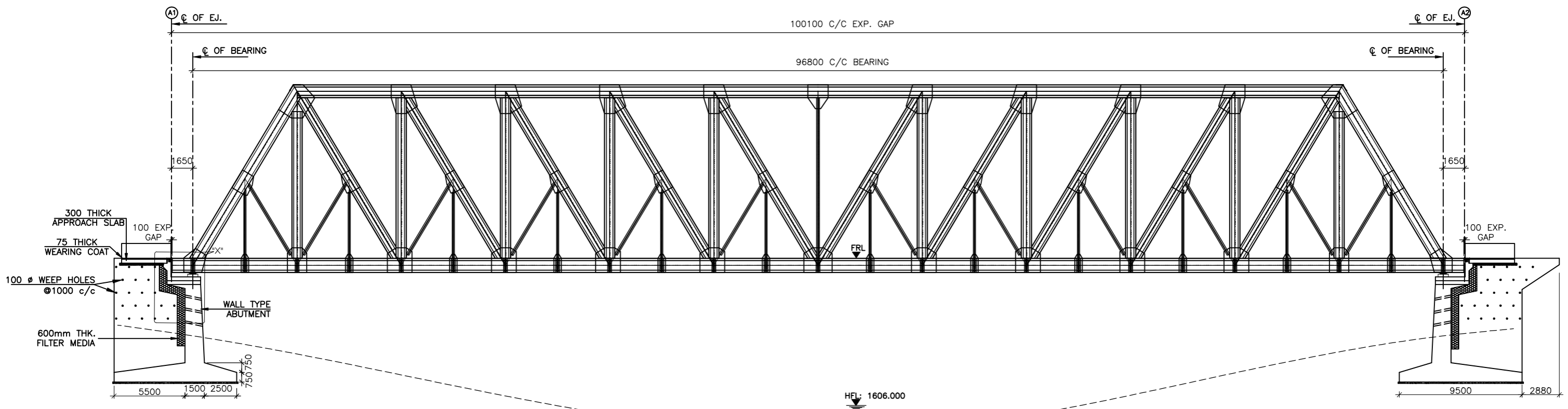
PROJECT:
Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two laning of Pango to Jorging Road (Length: 90 km) for execution on EPC Mode in the State of Arunachal Pradesh under SARDP-NE Phase'B'

DPR CONSULTANTS:

Shweta Technophile Consultants Pvt.Ltd.
 (222-223, 313, Rajhans Plaza, Ahinsa Khand-1, Indrapuram, Ghaziabad-201014)

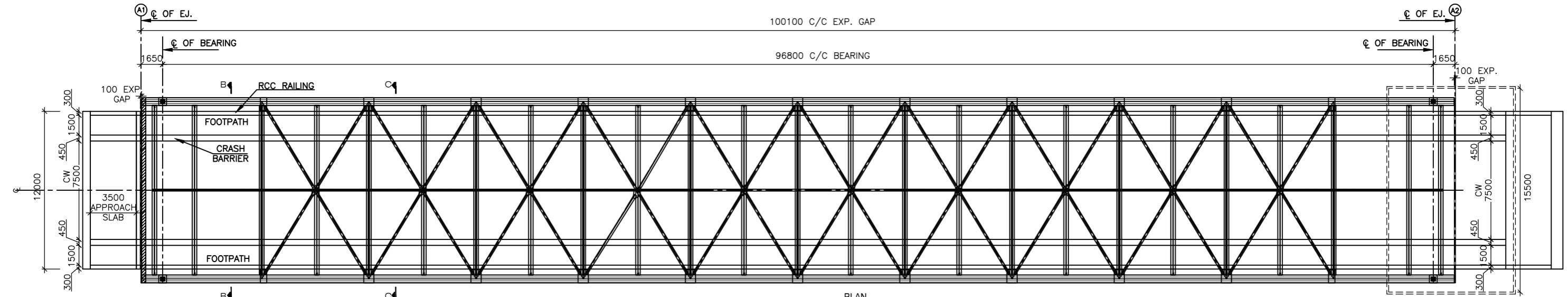
DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:
GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-63+363 SPAN (1 X 100 M)
 DRAWING NO. NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 02 of 02



SECTIONAL ELEVATION
(SCALE 1:210)


FRL IN m	1630.650	1630.650	1630.650
BED LEVEL IN m	1627.025	1602.761	1627.418
FDN LEVEL	1623.525		1623.525



PLAN
(SCALE 1:210)

- REFERENCE DRAWINGS:-
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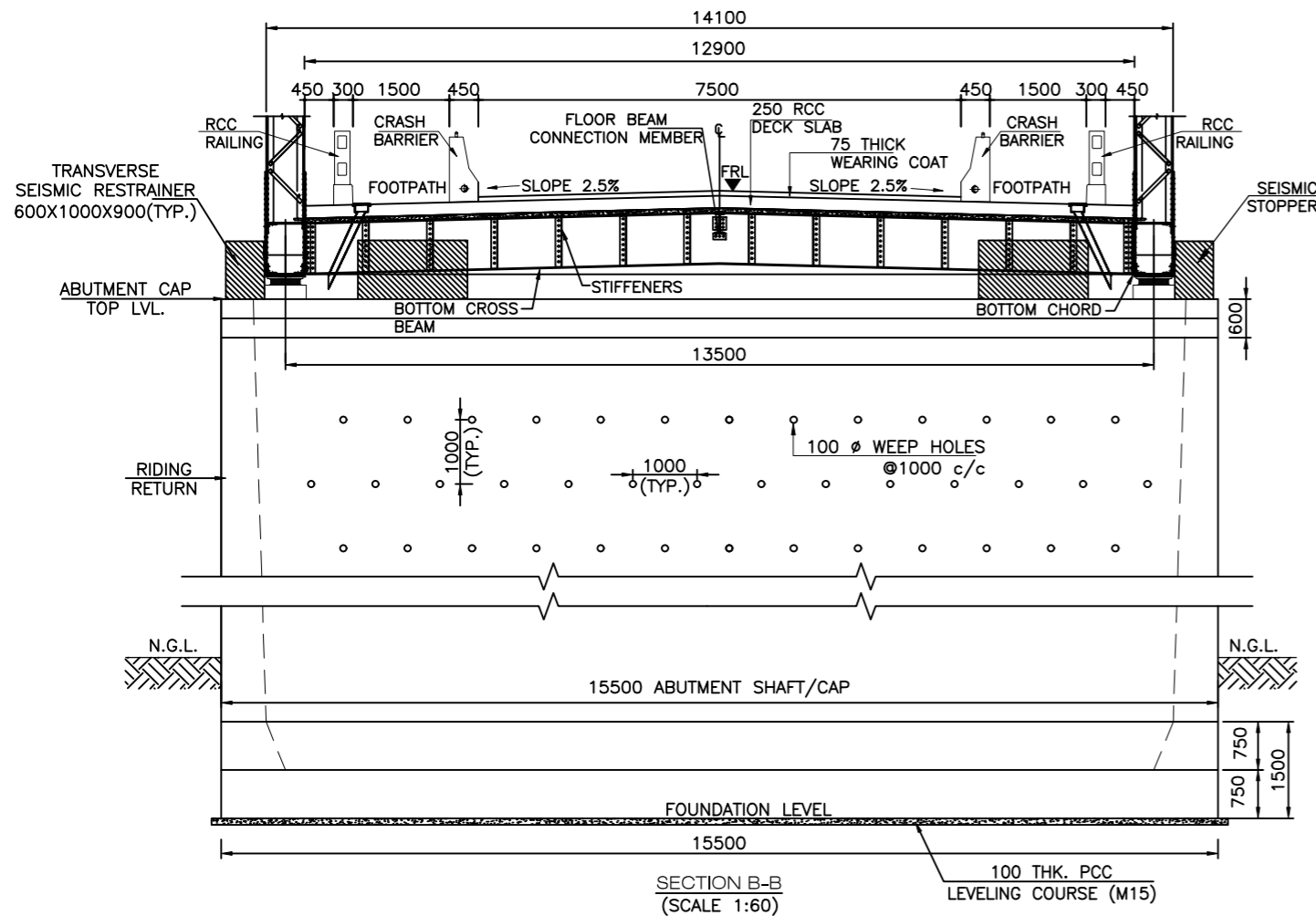
PROJECT:
 Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two laning of Pango to Jorging Road (Length: 90 km) for execution on EPC Mode in the State of Arunachal Pradesh under SARDP-NE Phase 'B'

DPR CONSULTANTS:
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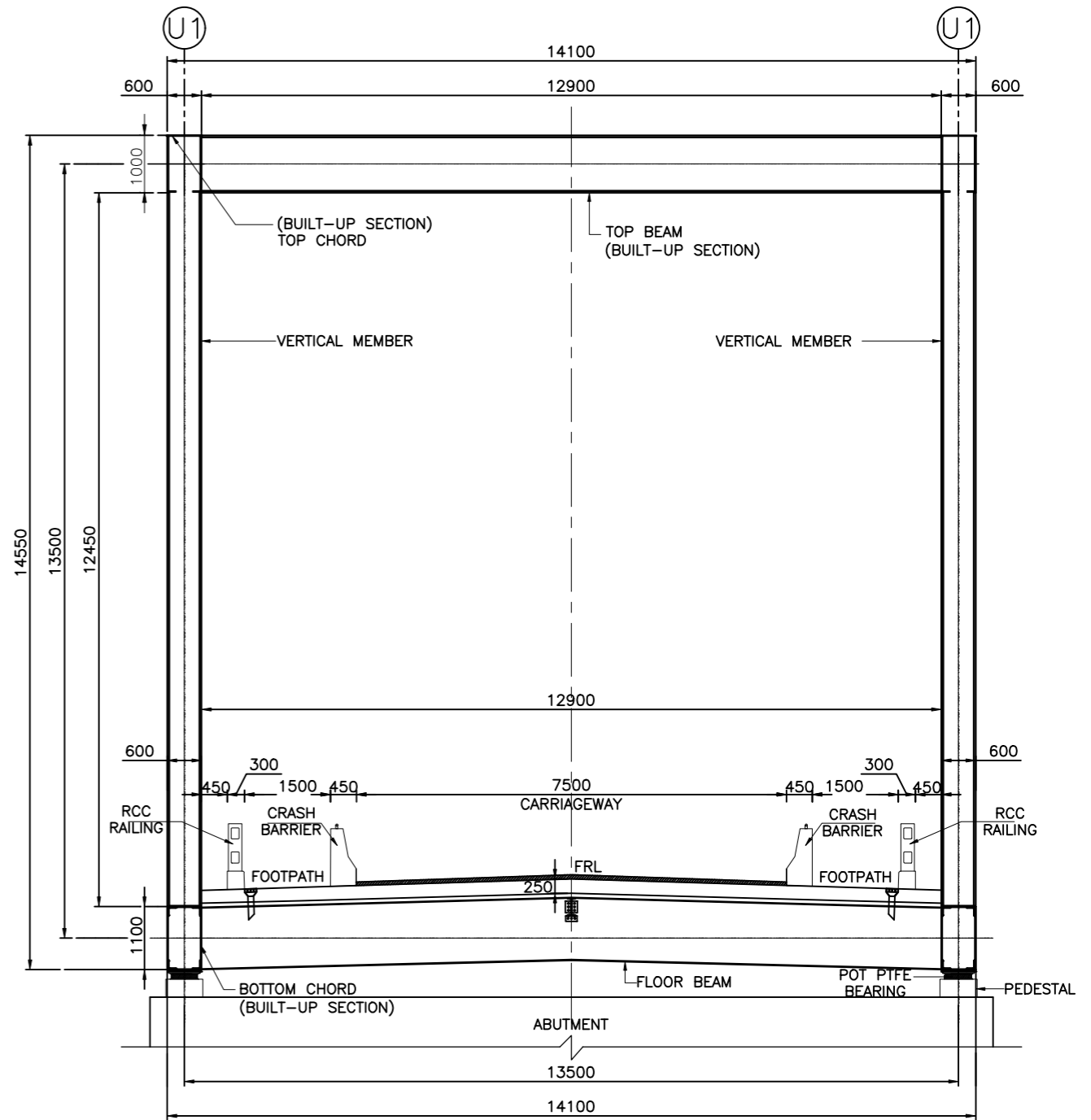
DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:
 GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-65+094 SPAN (1 X 100 M)

DRAWING NO. NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 01 of 02 A3



SECTION B-B
(SCALE 1:60)



SECTION C-C
(SCALE 1:60)

NOTES

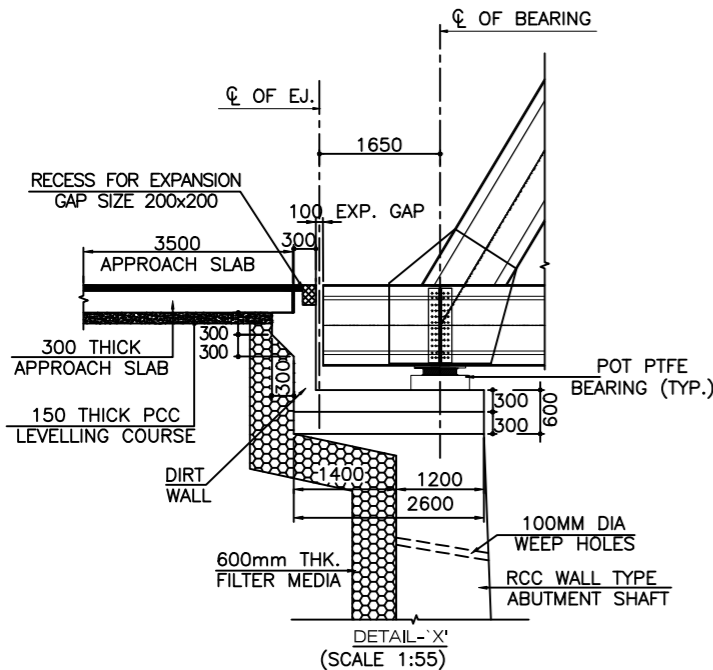
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CL	CENTER LINE
V	VERTICAL
H	HORIZONTAL

REFERENCE DRAWINGS:-
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DETAIL 'X'
(SCALE 1:55)

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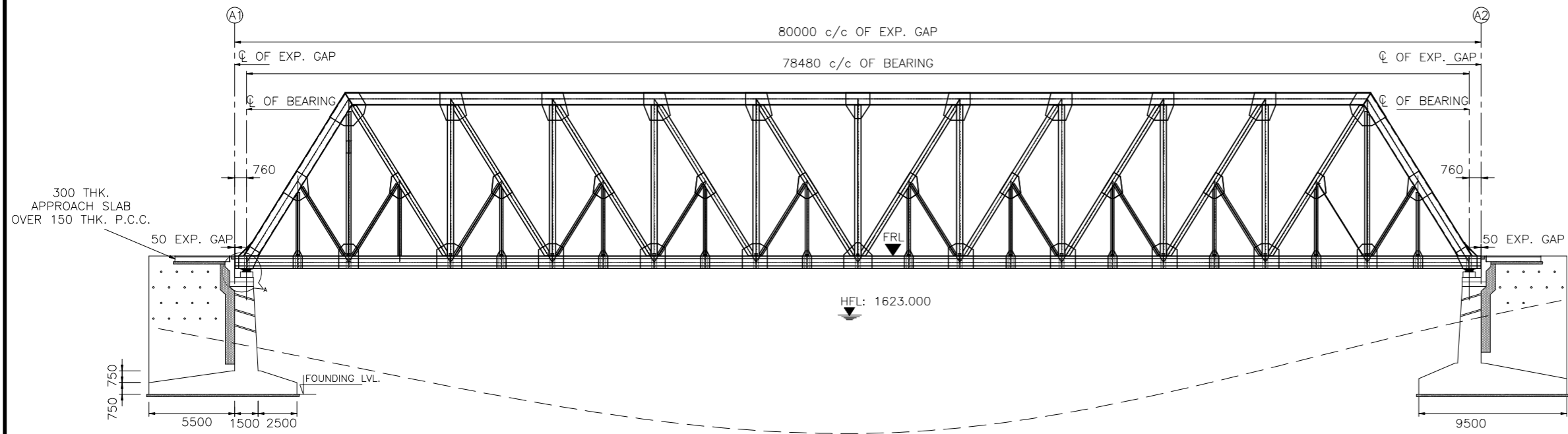
CLIENT:
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3rd Floor, PTI building, 4-Parliament Street, New Delhi-110001

PROJECT:
Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two laning of Pango to Jorging Road (Length: 90 km) for execution on EPC Mode in the State of Arunachal Pradesh under SARDP-NE Phase'B'

DPR CONSULTANTS:
S7C Shweta Technophile Consultants Pvt.Ltd.
(222-223, 313, Rajhans Plaza, Ahinsa Khand-1, Indrapuram, Ghaziabad-201014)

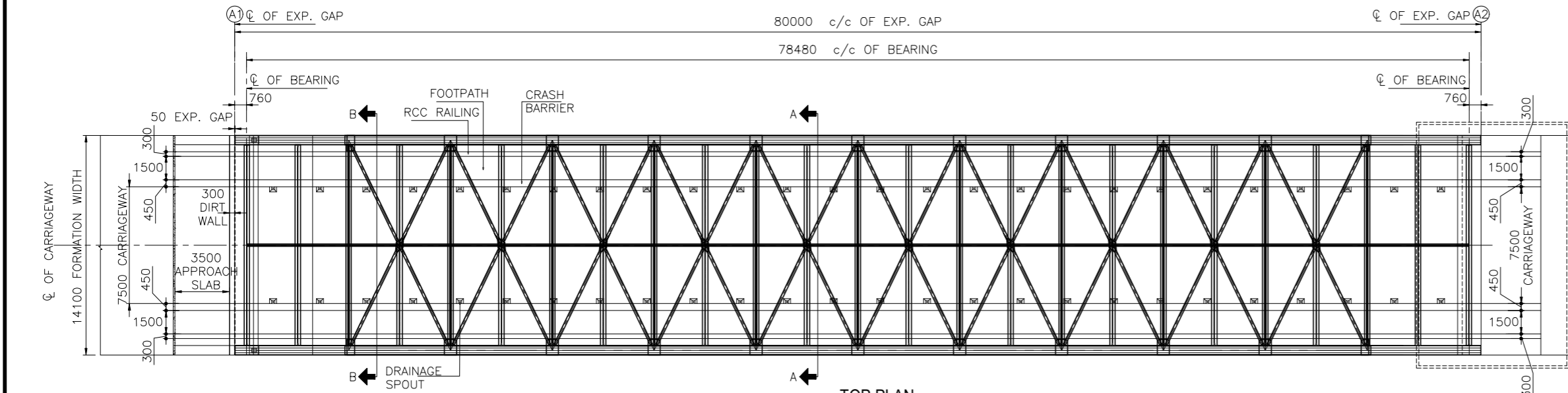
DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:
GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-65+094 SPAN (1 X 100 M)
DRAWING NO. NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 02 of 02



SECTIONAL ELEVATION
(SCALE 1:220)

FRL IN m	1630.200	1630.200	1630.200
BED LEVEL IN m	1627.631	1620.158	1627.466
FDN LEVEL	1623.966		1623.966



TOP PLAN
(SCALE 1:220)

NOTES

- ALL DIMENSION ARE IN MILLIMETERS, LEVELS IN METERS AND CHAINAGES IN KILOMETERS UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSION TO BE FOLLOWED.
- CONCRETE SHALL BE DESIGN MIX AND SHALL HAVE MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150mm CUBES FOR ALL ELEMENTS OF STRUCTURES AS INDICATED BELOW:-
 - CRASH BARRIERM40
 - RCC RAILINGM30
 - PRECAST RCC GIRDERM35
 - CAST-IN-SITU DECK SLABM35
 - SUBSTRUCTURE & FOUNDATION.....M35
 - APPROACH SLABM30
 - PCC LEVELING COURSEM15
 - RCC PEDESTALM40
- THE CARRIAGEWAY OF PROPOSED BRIDGE IS DESIGNED FOR 3 LANES OF LOADING AS PER IRC: 6-2017
 - THREE LANES OF IRC CLASS A
 - ONE LANE OF IRC CLASS 70R+1 LANES OF CLASS A OR
 - SPV LOADING WHICHEVER GOVERNS
- REINFORCING STEEL SHALL BE OF HYSD BARS.(GRADE DESIGNATION FE-500D) CONFORMING TO IS:1786.
- 75mm THICK CEMENT CONCRETE WEARING COAT SHALL BE PROVIDED AS PER MORTH SPECIFICATION
- CLEAR COVER TO OUTERMOST STEEL SHALL BE AS BELOW:-
 - SUPERSTRUCTURE (PRECAST)45mm
 - SUPERSTRUCTURE (CAST IN-SITU).....45mm
 - SUB-STRUCTURE (EARTH FACE)75mm
 - SUB-STRUCTURE (NON-EARTH FACE).....45mm
 - FOUNDATION75mm
- ALL SPACE EXCAVATED AND NOT OCCUPIED BY THE FOUNDATION & OTHER PERMANENT WORK SHALL BE REFILLED WITH EARTH UP TO SURFACE OF SURROUNDING GROUND IN ACCORDANCE WITH SECTION 300 OF "MORTH" SPECIFICATION. IN CASE OF EXCAVATION IN ROCK,THE ANNULAR SPACE AROUND FOUNDATION SHALL BE FILLED WITH M15 PCC UP TO THE TOP OF ROCK.
- 600 THICK FILTER MEDIA SHALL BE PROVIDED AS PER IRC 78:2014 (APPENDIX 6) / GEOCOMPOSITE AS PER CLAUSE 704 OF MORTH.
- 100Ø WEEP HOLES SPACED AT 1000 C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN A STAGGERED MANNER IN VERTICAL WALLS.
- 50mm STRIP SEAL TYPE EXPANSION JOINTS SHALL BE PROVIDED AS PER MORTH SPECIFICATIONS FOR ROAD AND BRIDGE WORKS.
- LAP/SPLICES SHALL BE PROVIDED AS PER CLAUSE NO. 15.2.4 & 15.2.5 OF IRC: 112-2020.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT APPROVED HIGHWAY DRAWINGS FOR STRUCTURE ORIENTATION, SKEW FRL & CAMBER/SUPER ELEVATION, ETC IF ANY DISCREPANCY FOUND IT SHALL BE BROUGHT TO THE NOTICE OF DESIGN CONSULTANT/PROOF CHECKING CONSULTANT.
- THE NET SAFE BEARING CAPACITY AT FOUNDING LEVEL OF ABUTMENT 40T/m². THE SAME SHOULD BE VALIDATED AT SITE BEFORE EXECUTION OF WORK BY PLATE LOAD TEST AT FOUNDING LEVEL.(FOR NORMAL FOUNDATION)
- PROPOSED CHAINAGE / FRL SHALL BE CHECKED AND CONFIRMED AS PER APPROVED PLAN & PROFILE.
- THE PROJECT ROAD FALLS WITHIN SEISMIC ZONE-III
- BEARING TYPE SHALL BE POT PTFE BEARING.
- EXPOSURE CONDITION IS SEVERE.
- SIZE & WEIGHT OF STONE PITCHING SHALL BE PROVIDED AS PER IRC-89-1997, TABLE 5.2


REFERENCE DRAWINGS:-

- GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE NHIDCL/PONGO-JORGING/STC/MJB/GAD/DDE-101 (SHEETS 2 OF 2)
- FOR DETAIL OF RCC CRASH BARRIER, APPROACH SLAB, RAILING AND DRAIN PIPE, REFER SEPARATE DRAWING.

LEGEND

FRL	FINISHED ROAD LEVEL
HFL	HIGH FLOOD LEVEL
CL	CENTER LINE
V	VERTICAL
H	HORIZONTAL

REV.	DATE	DESCRIPTION OF REVISIONS
R7	AUG 2023	FINAL DPR
R6	JAN 2023	MODIFIED DPR INCORPORATION OBSERVATION
R5	JULY 2022	MODIFIED DPR INCORPORATION OBSERVATION
R4	AUG 2019	MODIFIED DPR
R3	JULY 2018	DPR

CLIENT:

National Highways & Infrastructure Development Corporation Limited.
 3rd Floor, PTI building, 4-Parliament Street, New Delhi-110001

PROJECT:
Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two laning of Pango to Jorging Road (Length: 90 km) for execution on EPC Mode in the State of Arunachal Pradesh under SARDP-NE Phase'B'

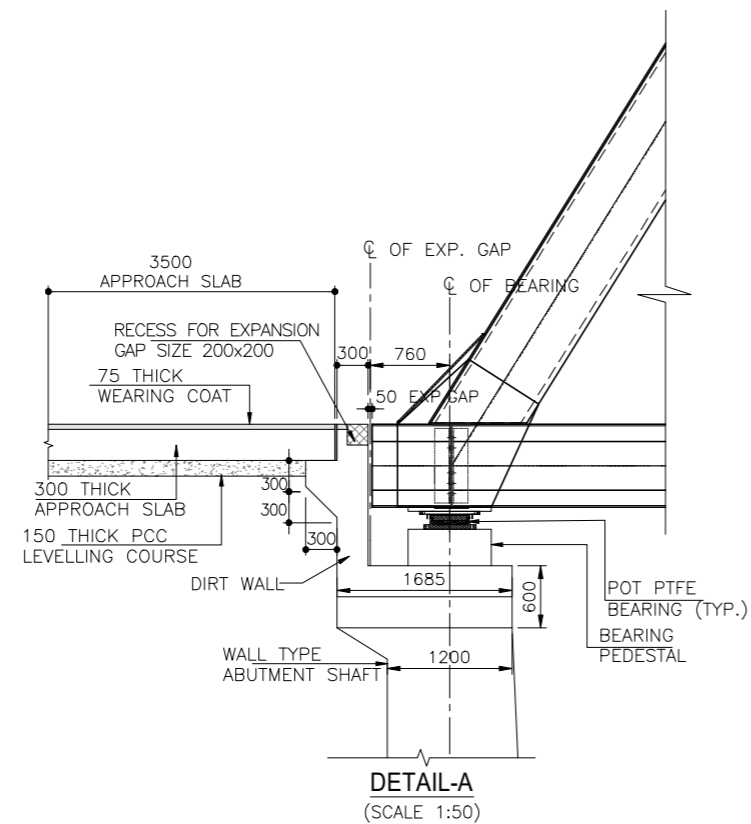
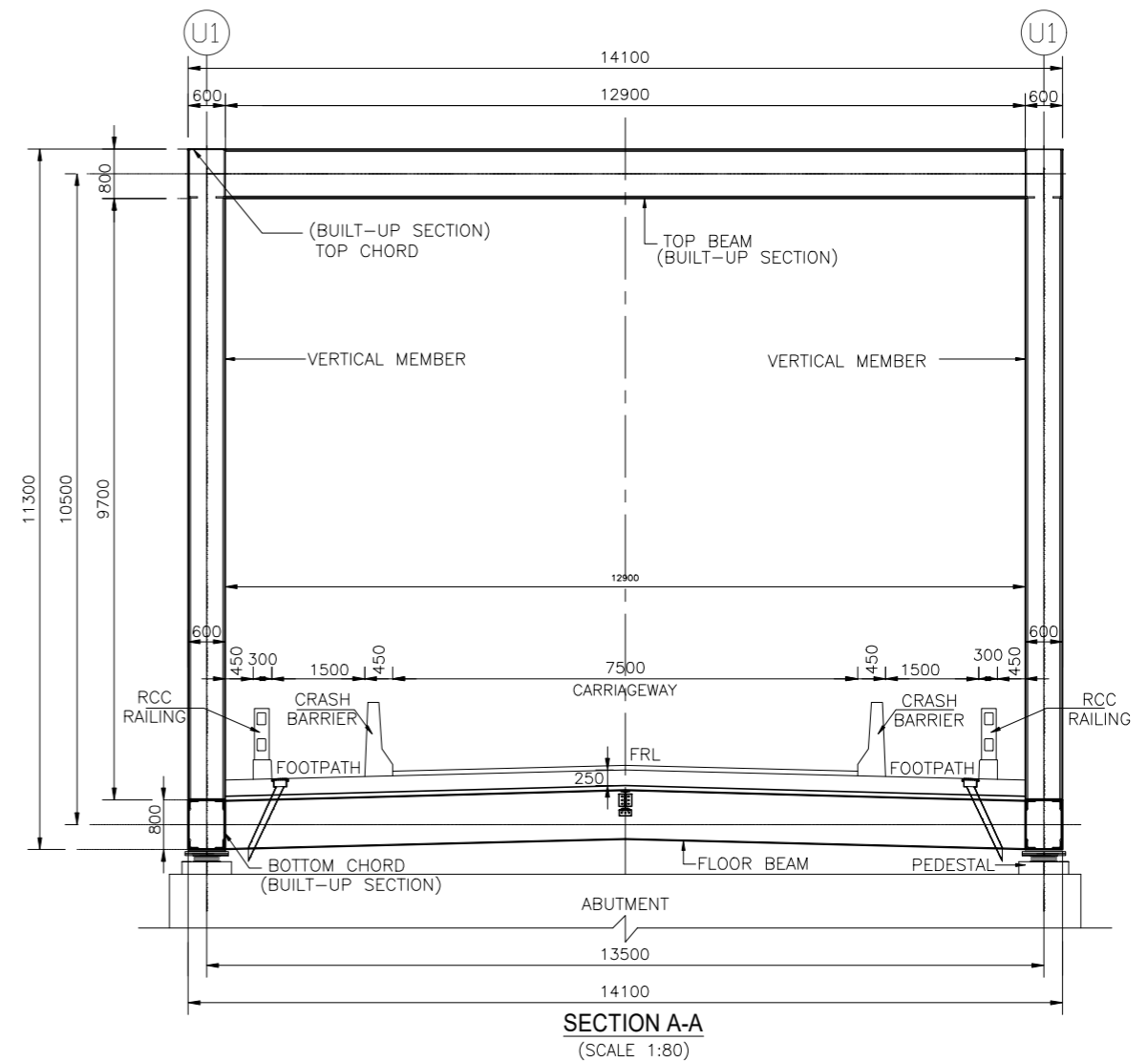
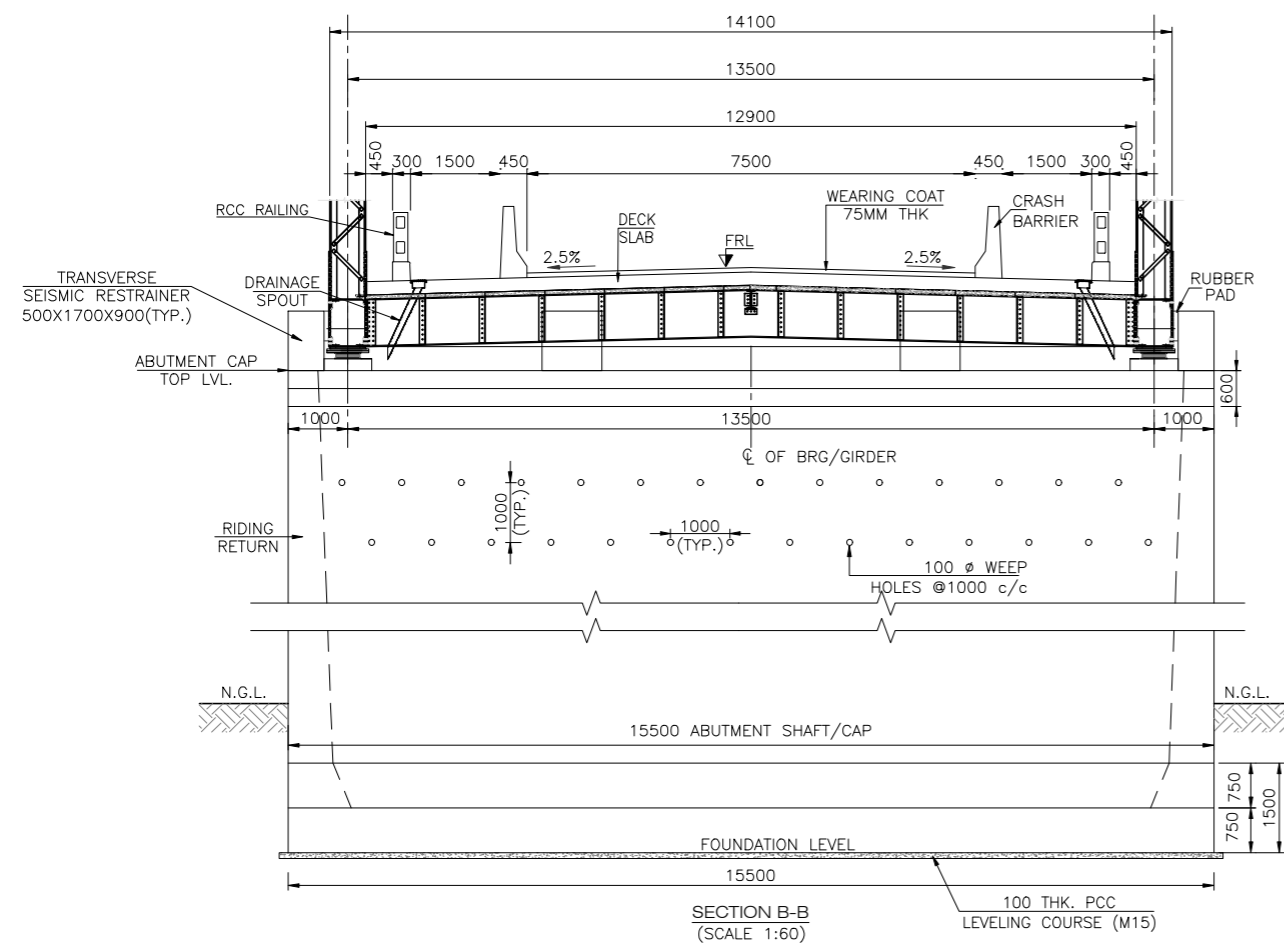
DPR CONSULTANTS:

Shweta Technophile Consultants Pvt.Ltd.
 (222-223, 313, Rajhans Plaza, Ahinsa Khand-1, Indirapuram, Ghaziabad-201014)

DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.


TITLE:
GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-66+759 SPAN (1 X 80 M)

DRAWING NO. NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 01 of 02 **A3**



REFERENCE DRAWINGS:-
 1) GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE NHIDCL/PONGO-JORGING/STC/MJB/GAD/DDE-101 (SHEETS 1 OF 2)

REV.	DATE	DESCRIPTION OF REVISIONS
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CLIENT:
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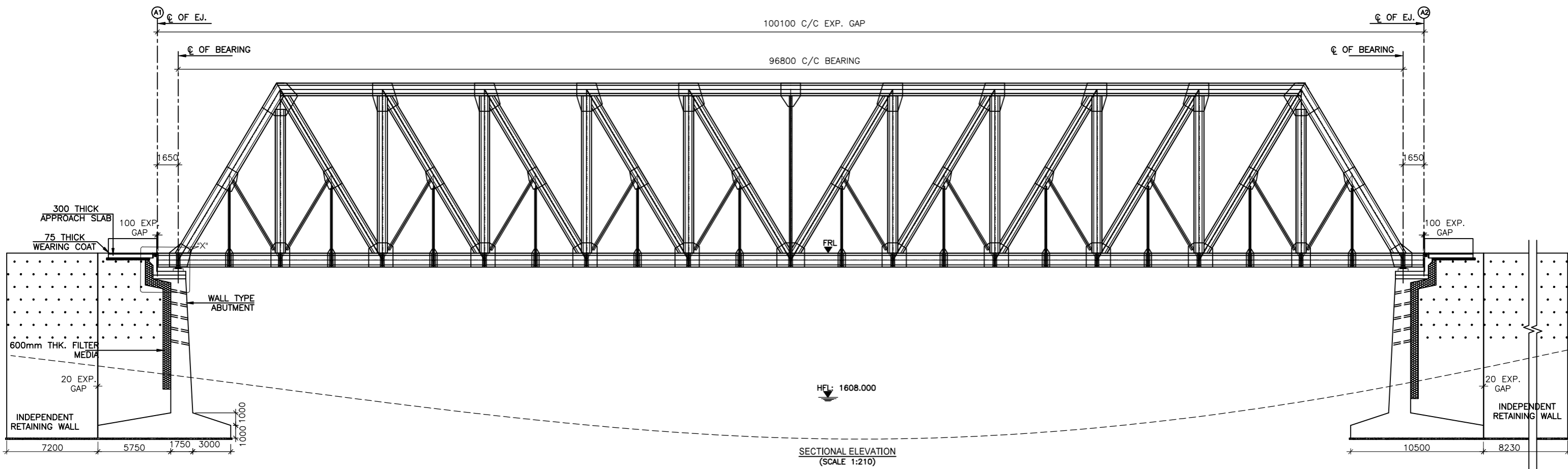
DPR CONSULTANTS:
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 (222-223, 313, Rajhans Plaza, Ahinsa Khand-1, Indirapuram, Ghaziabad-201014)

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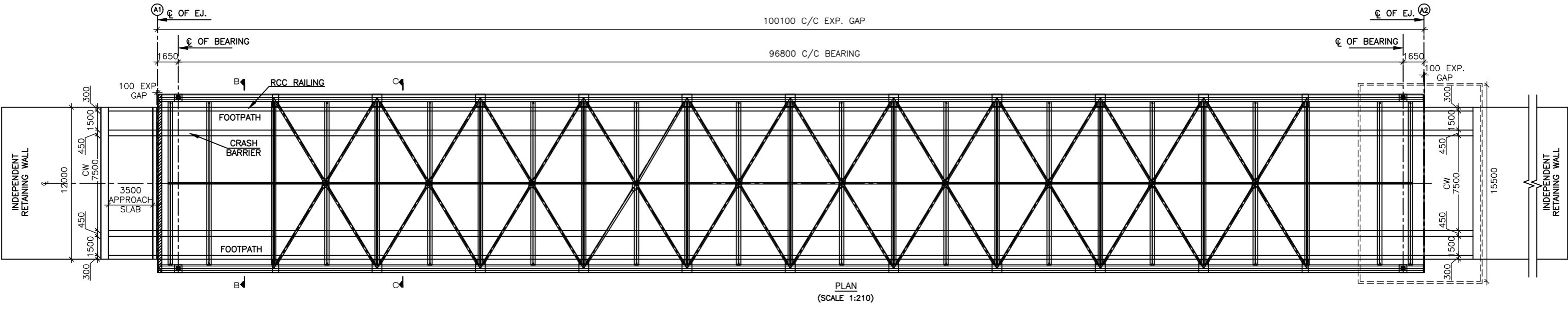
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DRAWING NO.
 NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 02 OF 02

A3




FRL IN m	1629.774	1629.774	1629.774
BED LEVEL IN m	1619.972	1604.676	1619.287
FDN LEVEL	1615.787		1615.787



- REFERENCE DRAWINGS:-
- i) GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 (SHEETS 2 & 2)
 - ii) FOR DETAIL OF RCC CRASH BARRIER, APPROACH SLAB, RAILING AND DRAIN PIPE, REFER SEPARATE DRAWING.

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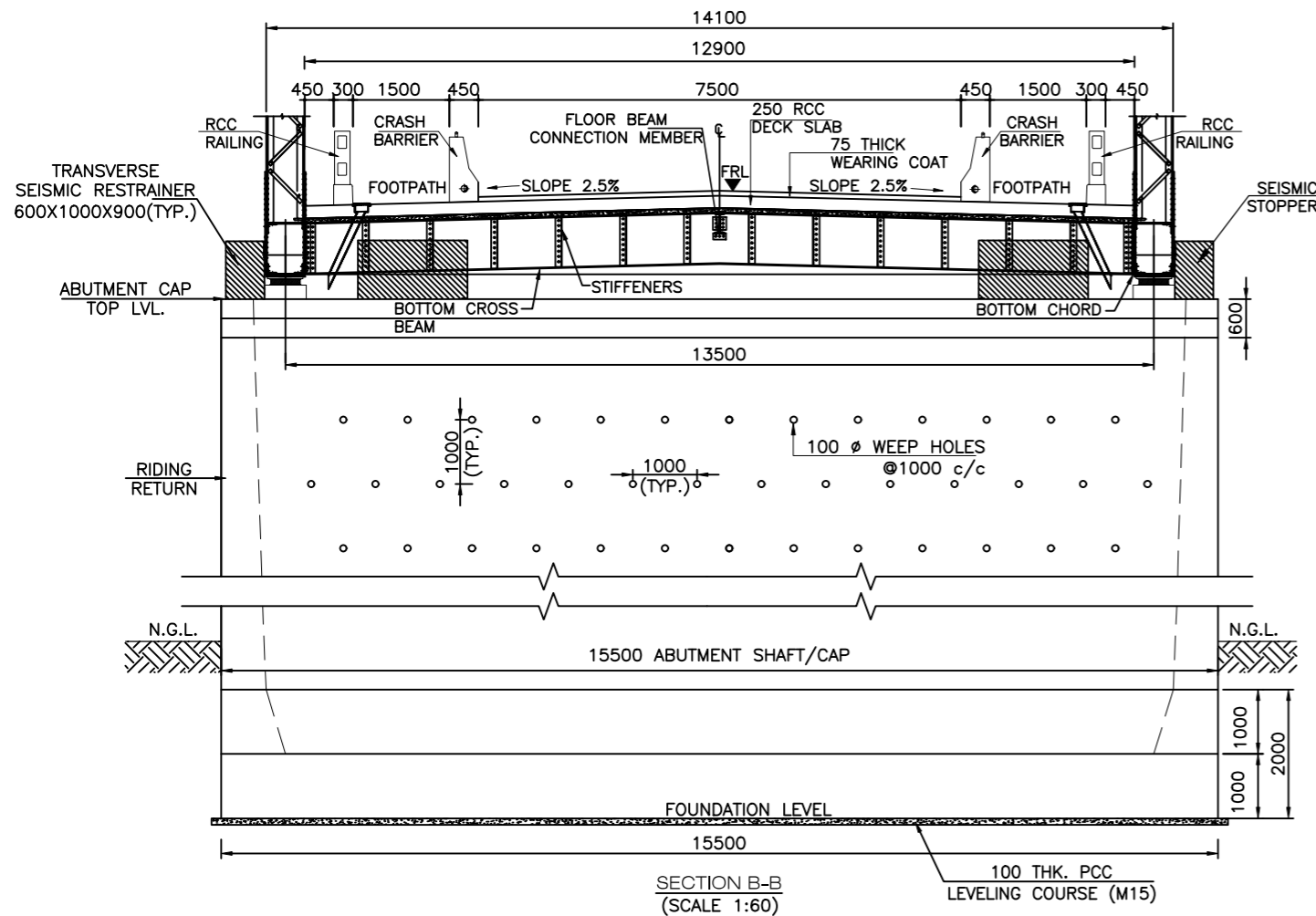
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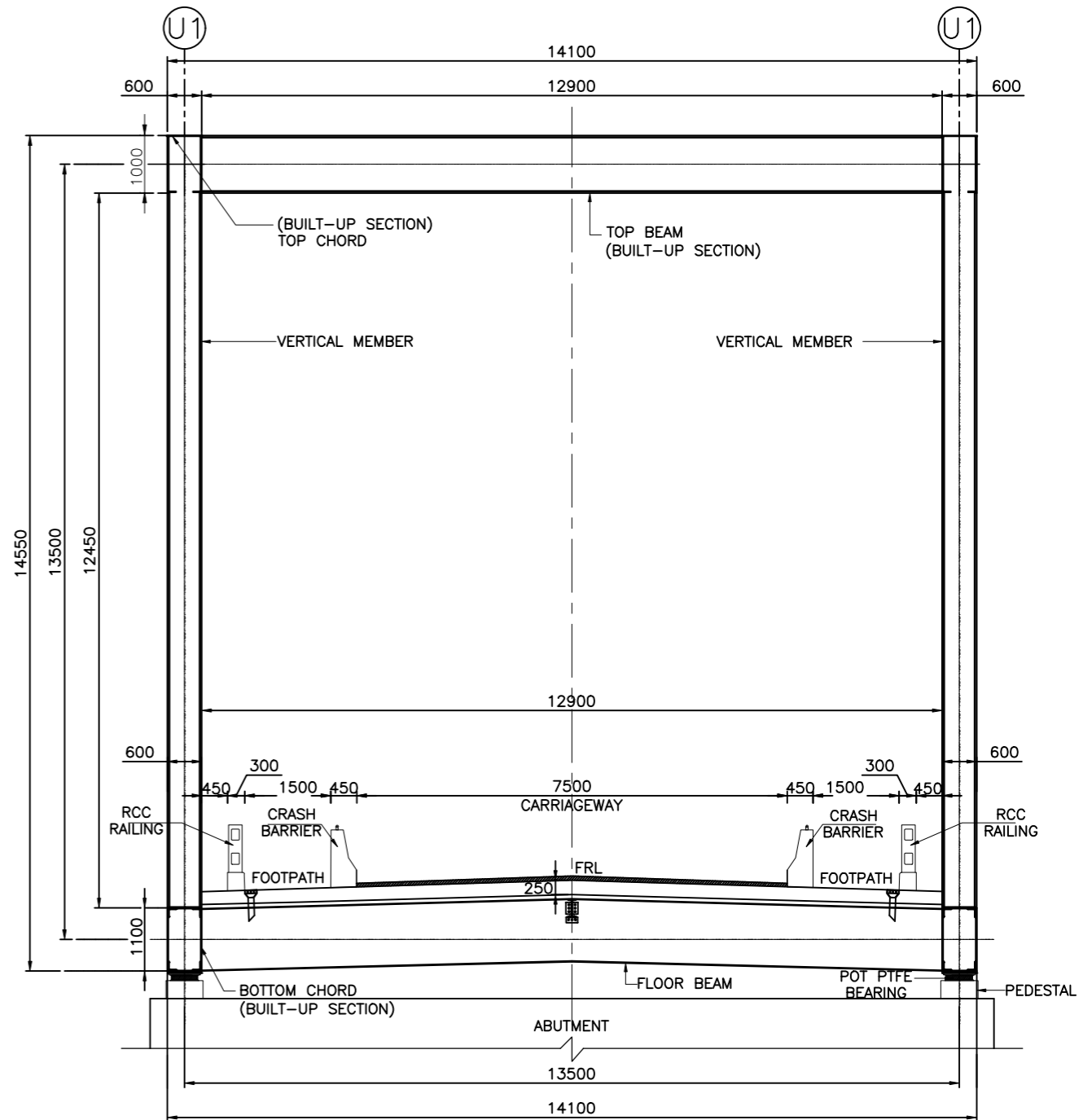
DPR CONSULTANTS:
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 (222-223, 313, Rajhans Plaza, Ahinsa Khand-1, Indrapuram, Ghaziabad-201014)

DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:
GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-68+603 SPAN (1 X 100 M)
 DRAWING NO. NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 01 of 02



SECTION B-B
(SCALE 1:60)



SECTION C-C
(SCALE 1:60)

NOTES

- ALL DIMENSIONS ARE IN mm AND LEVELS IN M UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.
- THE CARRIAGEWAY OF PROPOSED BRIDGE IS DESIGNED FOR 3 LANES OF LOADING AS PER IRC: 6-2017
 - THREE LANES OF IRC CLASS A
 - ONE LANE OF IRC CLASS 70R+1 LANES OF CLASS A OR
 - SPV LOADING WHICHEVER GOVERNS
- CONCRETE DETAILS:

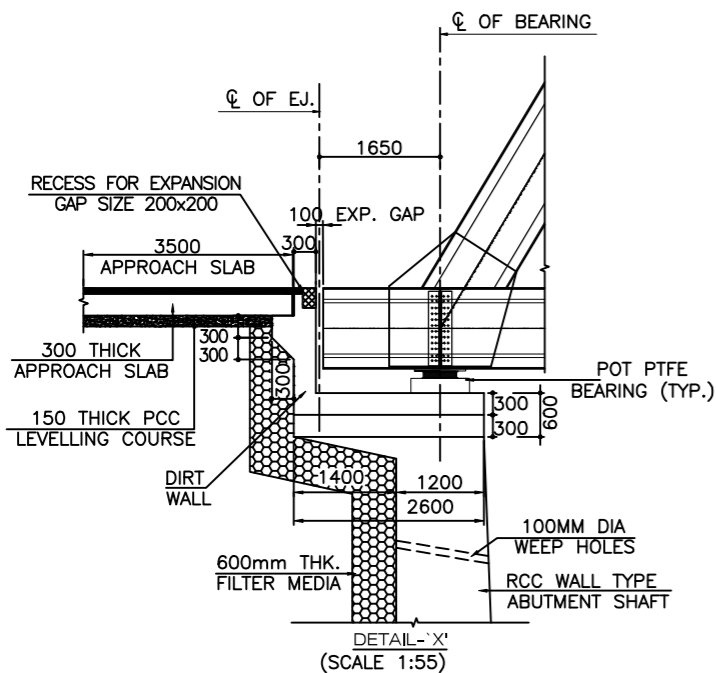
CRASH BARRIER	M40
DECK SLAB	M35
APPROACH SLAB	M30
RETURN WALL	M35
PEDESTAL UNDER BEARINGS	M40
ABUTMENT SHAFT & DIRT WALL	M35
FOUNDATION	M35
PCC	M15
- CLEAR COVER TO ANY REINFORCEMENT SHALL BE AS FOLLOWS
 - FOUNDATION 75mm
 - EARTH FACE 75mm
 - ABUTMENT SHAFT/CAP 45mm
 - PIER SHAFT/CAP 45mm
 - SUPER STRUCTURE 45mm
- TO IMPROVE WORKABILITY OF CONCRETE, ADMIXTURES CONFORMING TO IS: 9103 MAY BE USED SUBJECT TO SATISFACTORY PROVEN USE.
- THE MINIMUM & MAXIMUM CEMENT CONTENT IN CONCRETE SHALL BE AS PER IRC - 112: 2020.
- STRUCTURAL STEEL: B₈ KILLED STEEL F_c540 N/mm² (Fe 540). REINFORCING STEEL (R): HYSD BARS CONFORM TO IS: 1786 GRADE Fe 500D.
- 75mm THICK WEARING COAT SHALL BE APPLIED AS PER MORTH SPECIFICATION CLAUSE NO 2702.2.
- BACK FILLING SHALL CONSIST OF SELECTED EARTH CONFORMING TO Y=18 KN/m².

- WEEP HOLES IN SLOPE 1:20, SPACED @ 1000 mm. c/c BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN STAGGERED MANNER IN ABUTMENT ABOVE GROUND LEVEL.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH FINAL HIGHWAY PLAN AND PROFILE DRAWINGS, ALL LEVELS GIVEN IN DRAWING SHALL BE VERIFIED BEFORE EXECUTION.
- SEISMIC ZONE (V) HAS BEEN CONSIDERED IN DESIGN.
- TYPE OF BEARING - POT PTFE/SPHERICAL AND SHALL BE DESIGNED & INSTALLED BY MANUFACTURER.
- THE FOUNDATION DIMENSIONS MAY VARY AS PER DETAILED GEOTECHNICAL INVESTIGATION.
- FOUNDATION SHALL BE EMBEDDED IN ROCK BY 0.6 m (HARD ROCK)/1.5 m (MEDIUM ROCK).
- STRIP SEAL EXPANSION JOINT SHALL BE PROVIDED AND SHALL BE DESIGNED & INSTALLED BY MANUFACTURER.
- SPLICES IF ANY SHOULD BE PROPERLY DESIGNED.

LEGEND	
FRL	FINISHED ROAD LEVEL
HFL	HIGH FLOOD LEVEL
CL	CENTER LINE
V	VERTICAL
H	HORIZONTAL


REFERENCE DRAWINGS:-

- GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 (SHEETS 1 & 2)



DETAIL 'X'
(SCALE 1:55)

REV	DATE	DESCRIPTION OF REVISIONS
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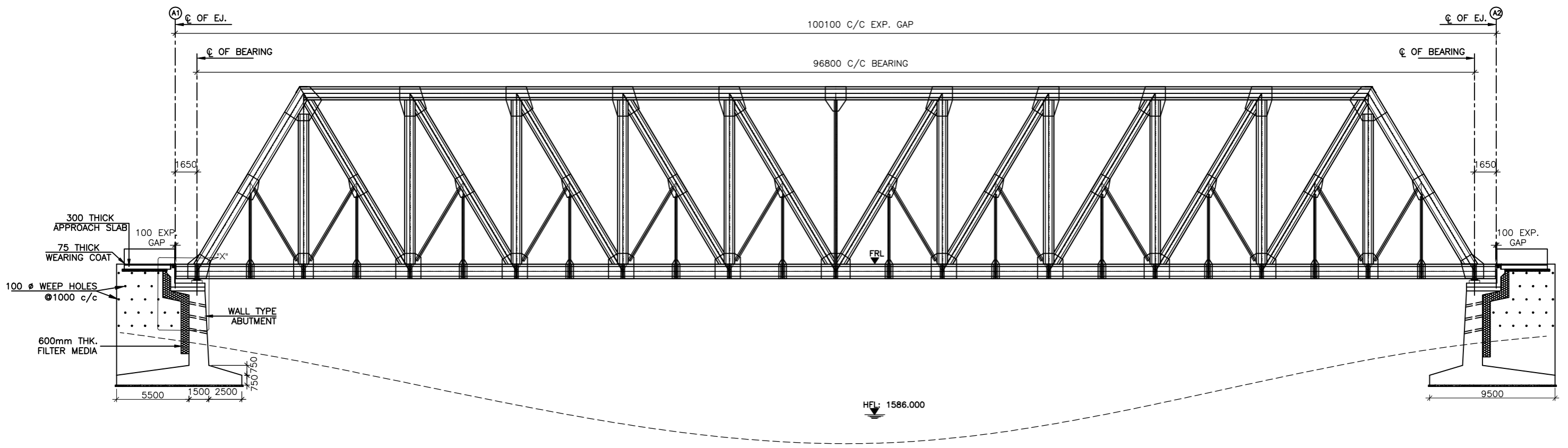
PROJECT:
Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two laning of Pango to Jorging Road (Length: 90 km) for execution on EPC Mode in the State of Arunachal Pradesh under SARDP-NE Phase'B'

DPR CONSULTANTS:

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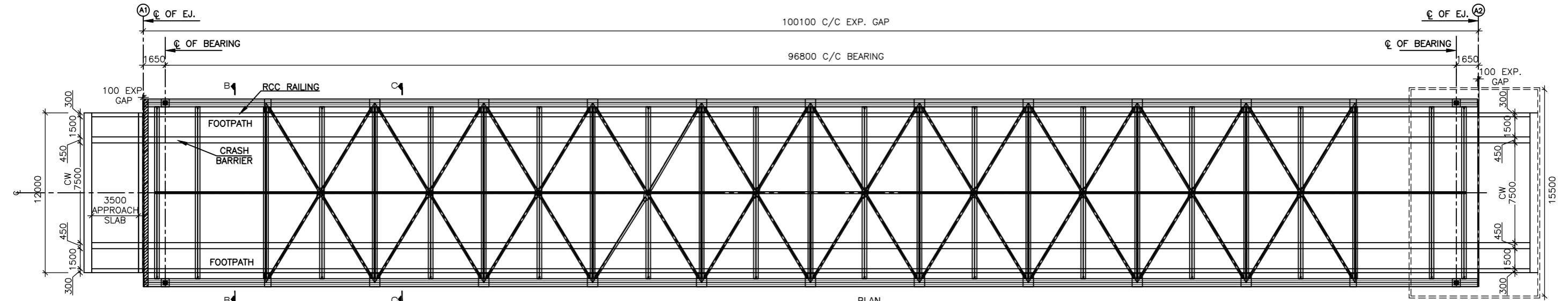
DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:
GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-68+603 SPAN (1 X 100 M)
 DRAWING NO. NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 02 of 02



SECTIONAL ELEVATION
(SCALE 1:210)


FRL IN m	1667.494	1667.494	1667.494
BED LEVEL IN m	1664.840	1582.707	1664.913
FDN LEVEL	1661.340		1661.340



PLAN
(SCALE 1:210)

- REFERENCE DRAWINGS:-
- i) GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 (SHEETS 2 & 2)
 - ii) FOR DETAIL OF RCC CRASH BARRIER, APPROACH SLAB, RAILING AND DRAIN PIPE, REFER SEPARATE DRAWING.

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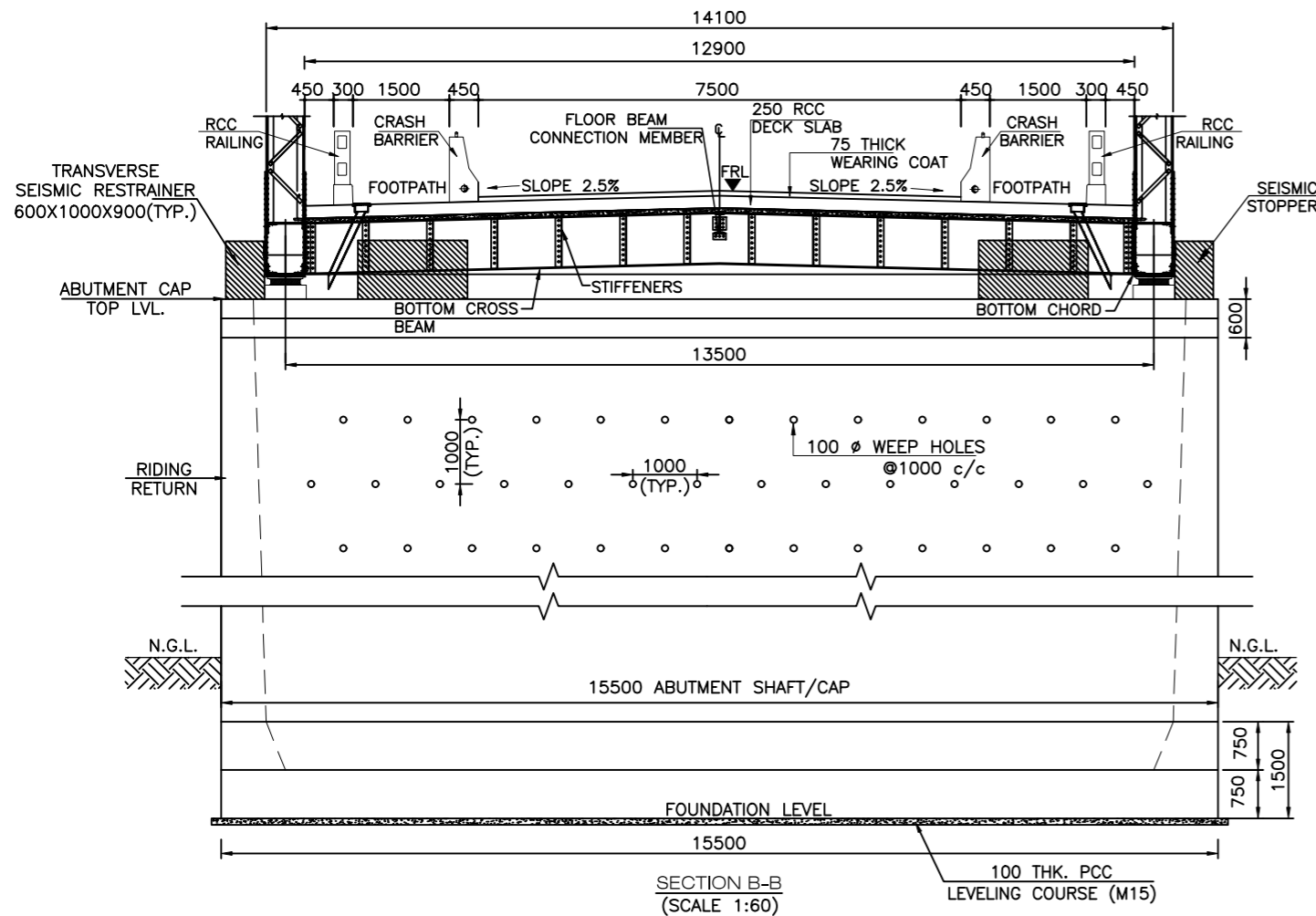
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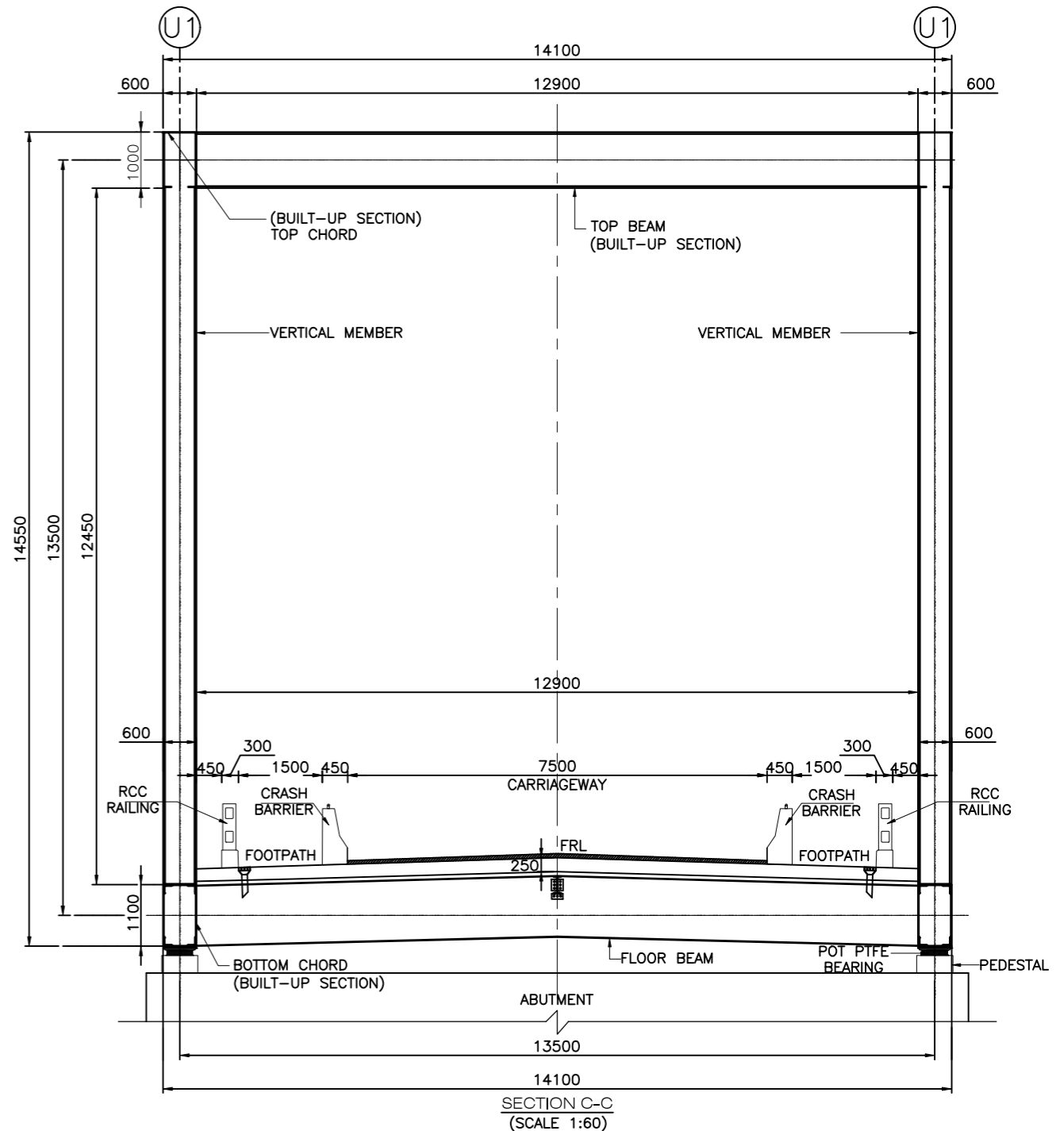
TITLE:
 GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-70+021 SPAN (1 X 100 M)

DRAWING NO.
 NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 01 of 02

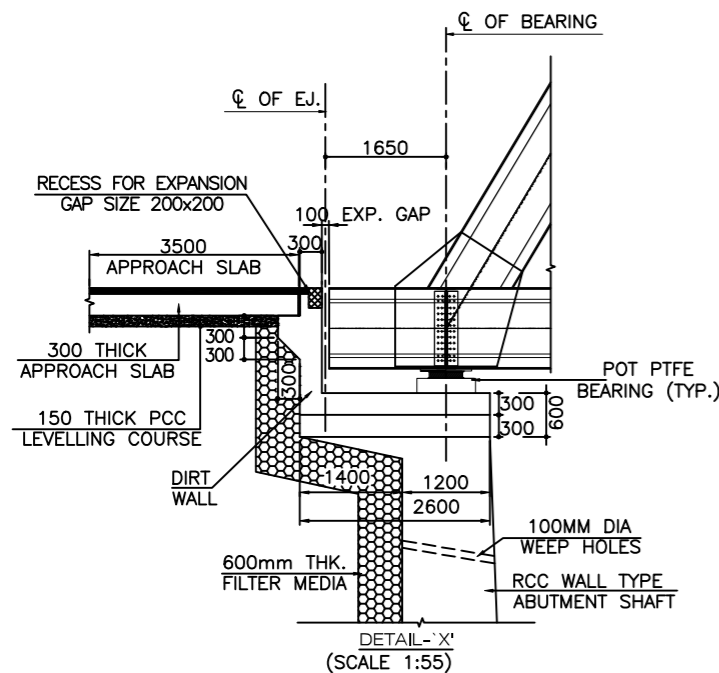
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SECTION B-B
(SCALE 1:60)



SECTION C-C
(SCALE 1:60)



DETAIL 'X'
(SCALE 1:55)

NOTES

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- CLEAR COVER TO ANY REINFORCEMENT SHALL BE AS FOLLOWS
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LEGEND	
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HFL	HIGH FLOOD LEVEL
CL	CENTER LINE
V	VERTICAL
H	HORIZONTAL

REFERENCE DRAWINGS:-

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DPR CONSULTANTS:

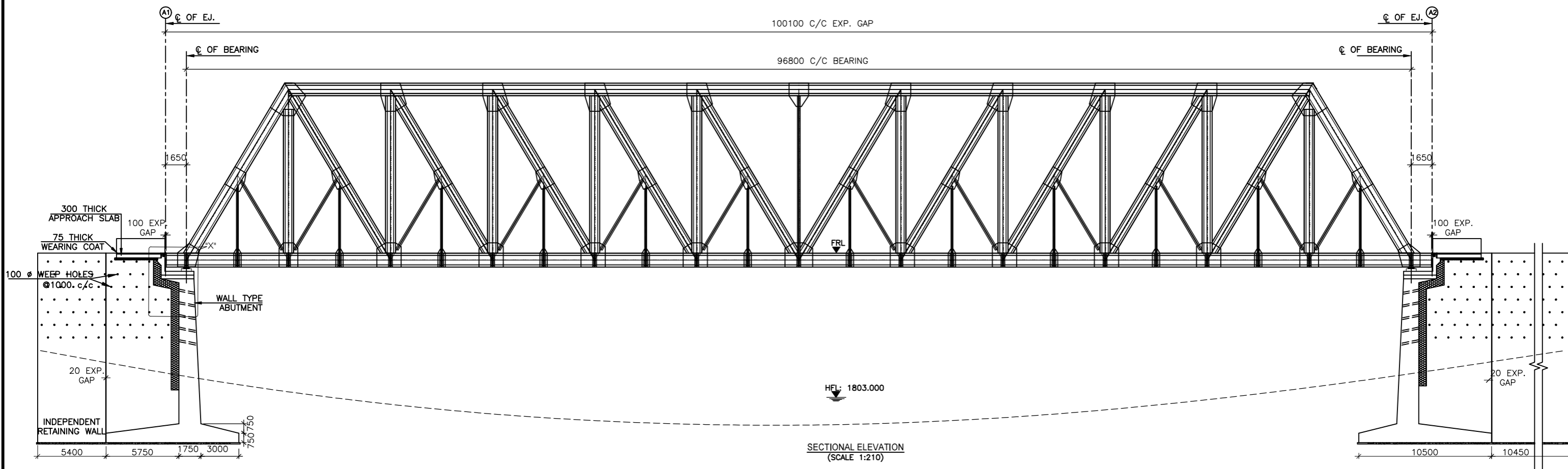
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DESIGN BY	AMIT
CHECKED BY	A.G.

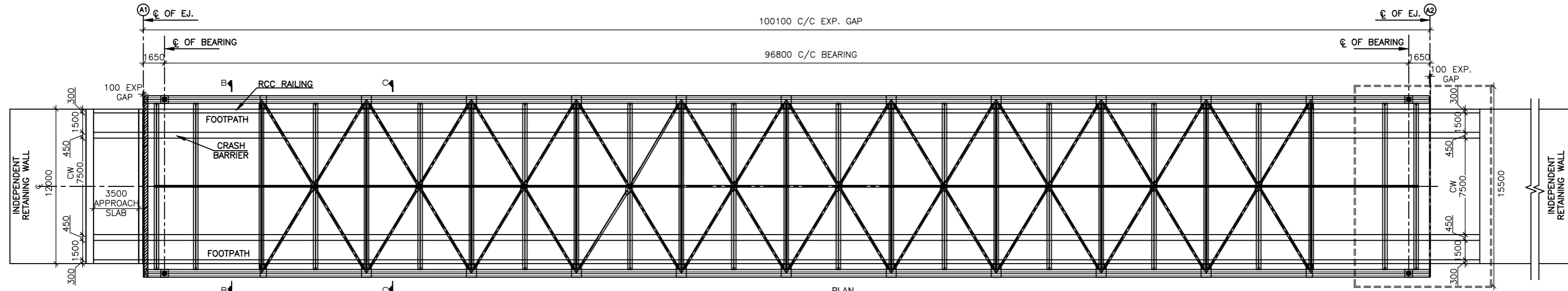
TITLE:

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DRAWING NO. NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 02 of 02



FRL IN m	1887.459	1887.459	1887.459
BED LEVEL IN m	1878.859	1799.070	1875.473
FDN LEVEL	1871.973		1871.973



- REFERENCE DRAWINGS:-
- i) GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 (SHEETS 2 & 2)
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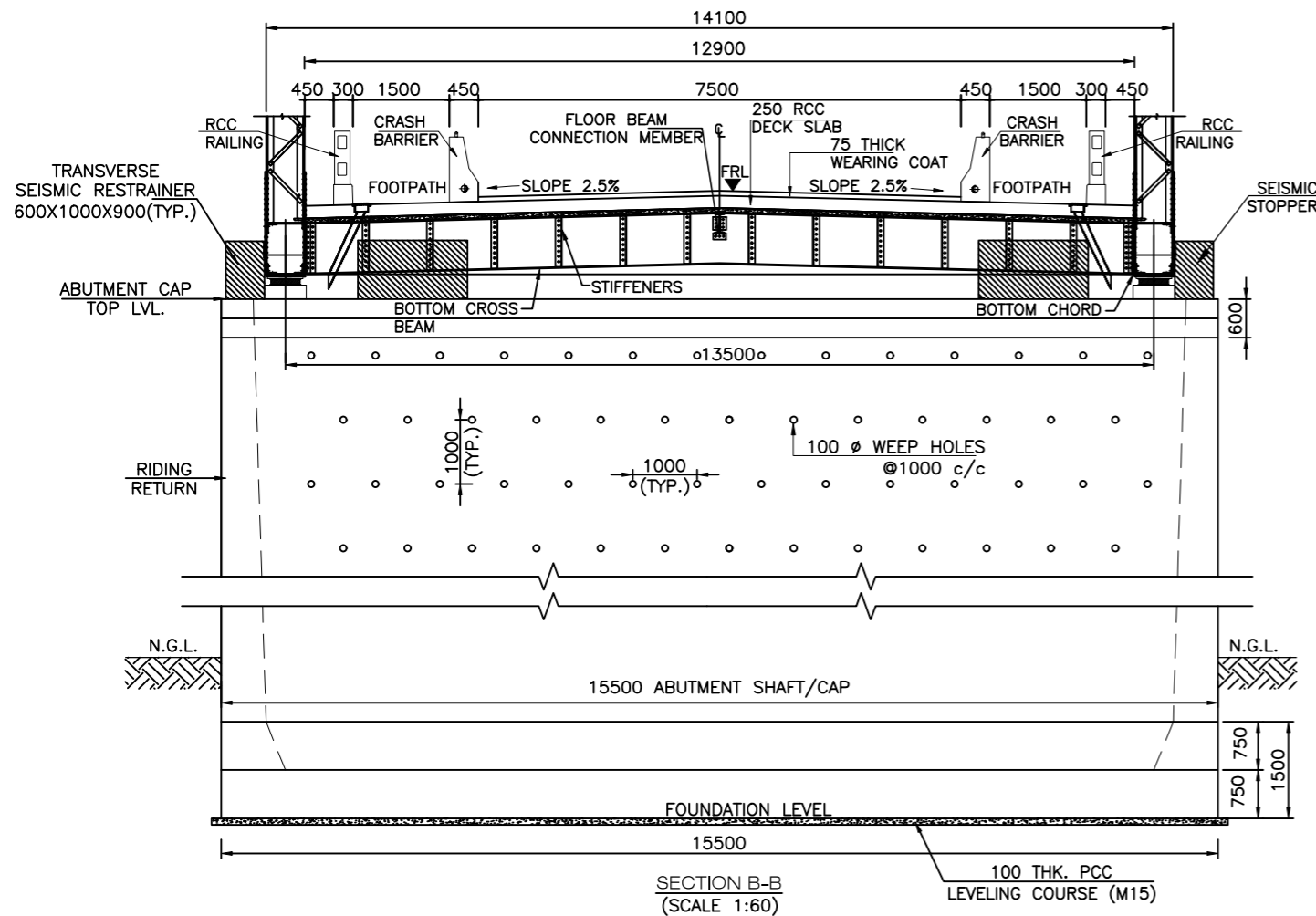
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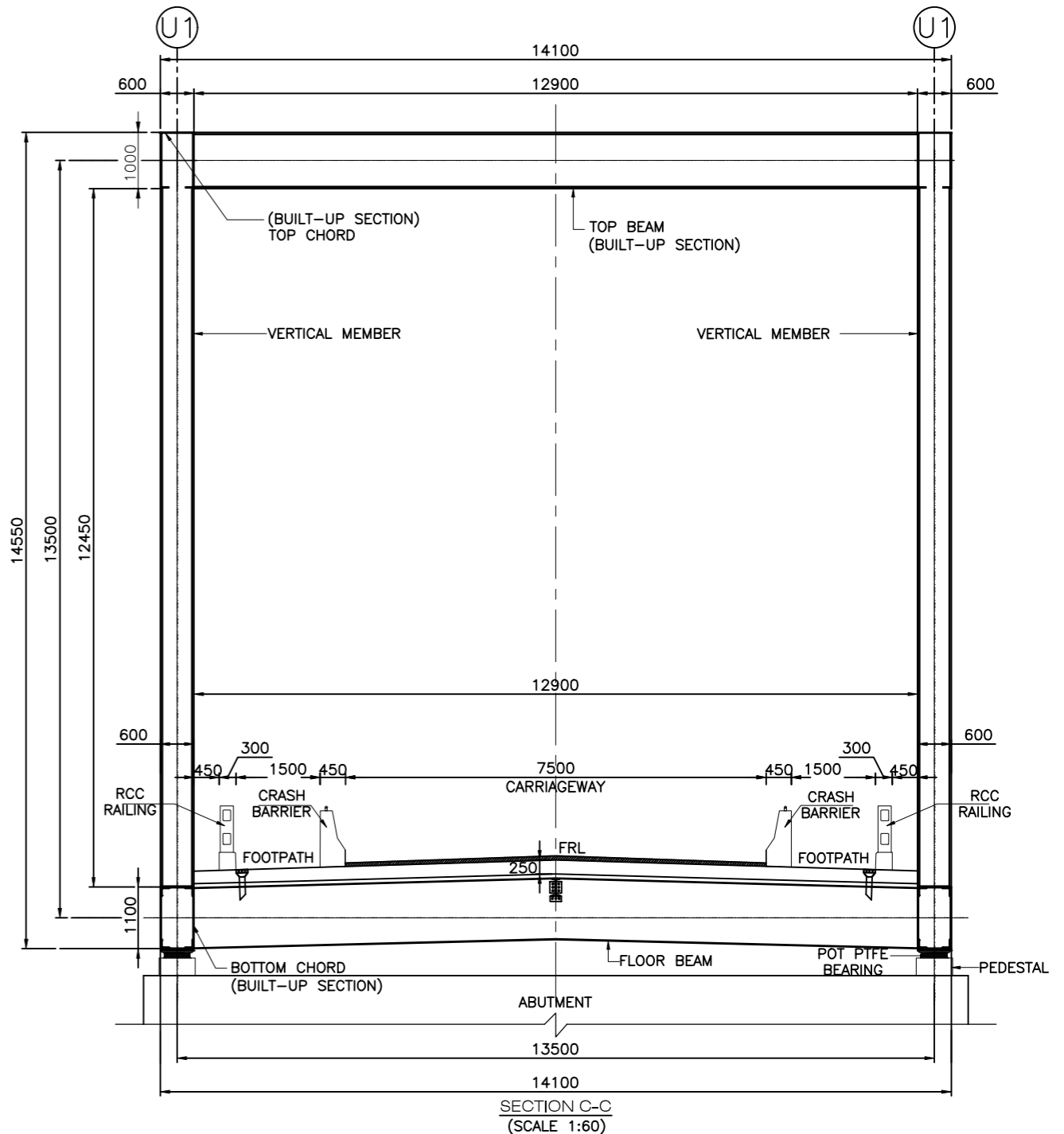
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GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-78+300 SPAN (1 X 100 M)

DRAWING NO.
 NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 01 of 02

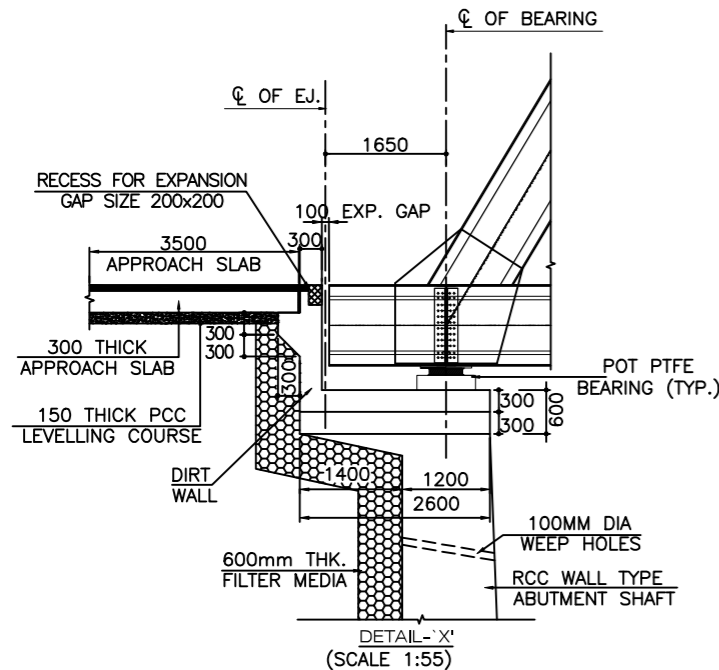
A3



SECTION B-B
(SCALE 1:60)



SECTION C-C
(SCALE 1:60)



DETAIL 'X'
(SCALE 1:55)

NOTES

- ALL DIMENSIONS ARE IN mm AND LEVELS IN M UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.
- THE CARRIAGEWAY OF PROPOSED BRIDGE IS DESIGNED FOR 3 LANES OF LOADING AS PER IRC: 6-2017
 - THREE LANES OF IRC CLASS A
 - ONE LANE OF IRC CLASS 70R+1 LANES OF CLASS A OR
 - SPV LOADING WHICHEVER GOVERNS
- CONCRETE DETAILS:

CRASH BARRIER	M40
DECK SLAB	M35
APPROACH SLAB	M30
RETURN WALL	M35
PEDESTAL UNDER BEARINGS	M40
ABUTMENT SHAFT & DIRT WALL	M35
FOUNDATION	M35
PCC	M15
- CLEAR COVER TO ANY REINFORCEMENT SHALL BE AS FOLLOWS
 - FOUNDATION 75mm
 - EARTH FACE 75mm
 - ABUTMENT SHAFT/CAP 45mm
 - PIER SHAFT/CAP 45mm
 - SUPER STRUCTURE 45mm
- TO IMPROVE WORKABILITY OF CONCRETE, ADMIXTURES CONFORMING TO IS: 9103 MAY BE USED SUBJECT TO SATISFACTORY PROVEN USE.
- THE MINIMUM & MAXIMUM CEMENT CONTENT IN CONCRETE SHALL BE AS PER IRC - 112: 2020.
- STRUCTURAL STEEL: B₈ KILLED STEEL F₅₄₀ N/mm² (Fe 540). REINFORCING STEEL (R): HYSD BARS CONFORM TO IS: 1786 GRADE Fe 500D.
- 75mm THICK WEARING COAT SHALL BE APPLIED AS PER MORTH SPECIFICATION CLAUSE NO 2702.2.
- BACK FILLING SHALL CONSIST OF SELECTED EARTH CONFORMING TO Y=18 KN/m².

- WEEP HOLES IN SLOPE 1:20, SPACED @ 1000 mm. c/c BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN STAGGERED MANNER IN ABUTMENT ABOVE GROUND LEVEL.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH FINAL HIGHWAY PLAN AND PROFILE DRAWINGS, ALL LEVELS GIVEN IN DRAWING SHALL BE VERIFIED BEFORE EXECUTION.
- SEISMIC ZONE (V) HAS BEEN CONSIDERED IN DESIGN.
- TYPE OF BEARING - POT PTFE/SPHERICAL AND SHALL BE DESIGNED & INSTALLED BY MANUFACTURER.
- THE FOUNDATION DIMENSIONS MAY VARY AS PER DETAILED GEOTECHNICAL INVESTIGATION.
- FOUNDATION SHALL BE EMBEDDED IN ROCK BY 0.6 m (HARD ROCK)/1.5 m (MEDIUM ROCK).
- STRIP SEAL EXPANSION JOINT SHALL BE PROVIDED AND SHALL BE DESIGNED & INSTALLED BY MANUFACTURER.
- SPLICES IF ANY SHOULD BE PROPERLY DESIGNED.

LEGEND	
FRL	FINISHED ROAD LEVEL
HFL	HIGH FLOOD LEVEL
CL	CENTER LINE
V	VERTICAL
H	HORIZONTAL

REFERENCE DRAWINGS:-

- GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 (SHEETS 1 & 2)

REV	DATE	DESCRIPTION OF REVISIONS
R7	AUG 2023	FINAL DPR
R6	JAN 2023	MODIFIED DPR INCORPORATION OBSERVATION
R5	JULY 2022	MODIFIED DPR INCORPORATION OBSERVATION
R4	AUG 2019	MODIFIED DPR
R3	JULY 2018	DPR

CLIENT:

National Highways & Infrastructure Development Corporation Limited.
3rd Floor, PTI building, 4-Parliament Street, New Delhi-110001

PROJECT:

Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two laning of Pango to Jorging Road (Length: 90 km) for execution on EPC Mode in the State of Arunachal Pradesh under SARDP-NE Phase'B'

DPR CONSULTANTS:

Shweta Technophile Consultants Pvt. Ltd.
(222-223, 313, Rajhans Plaza, Ahinsa Khand-1, Indrapuram, Ghaziabad-201014)

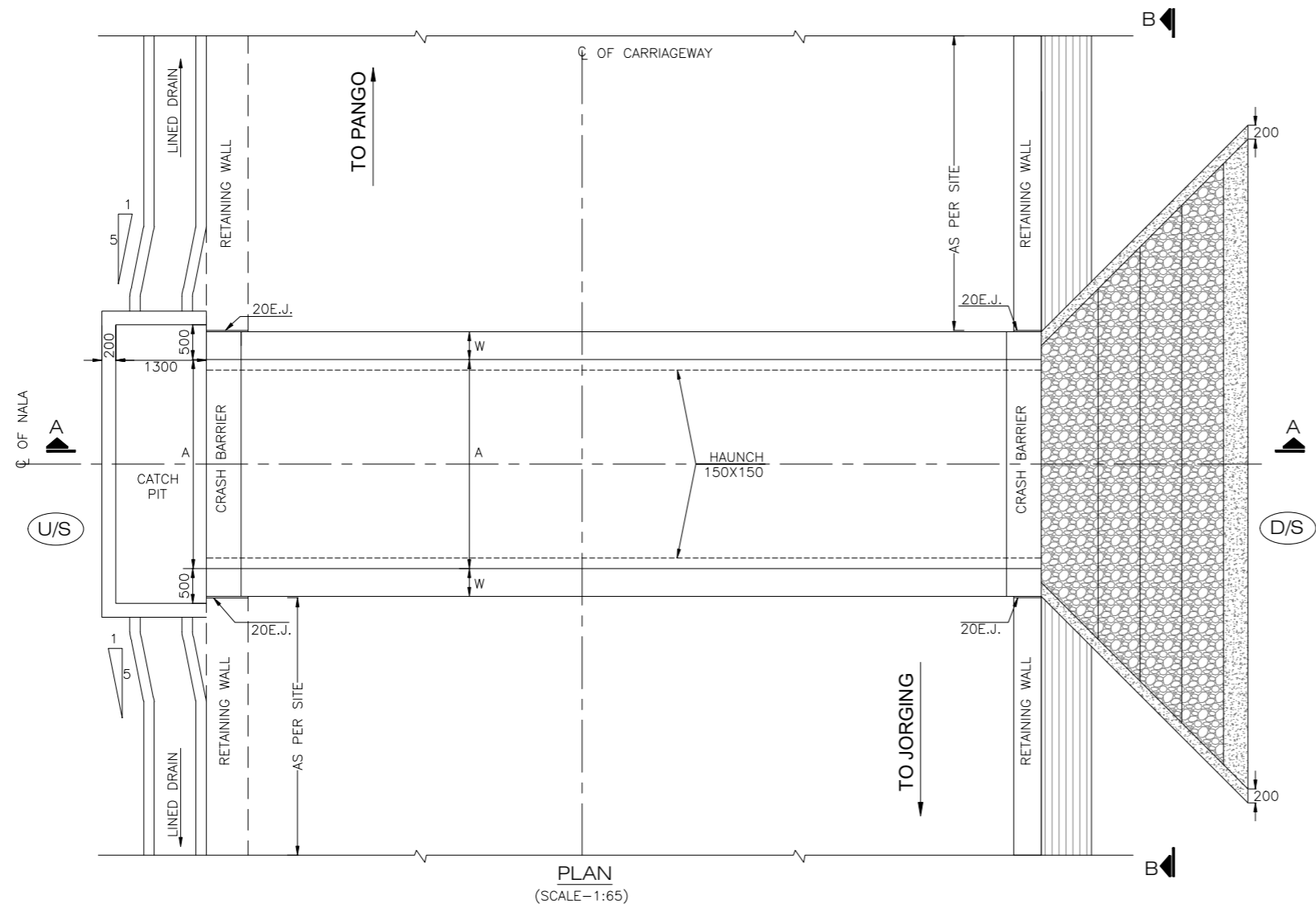
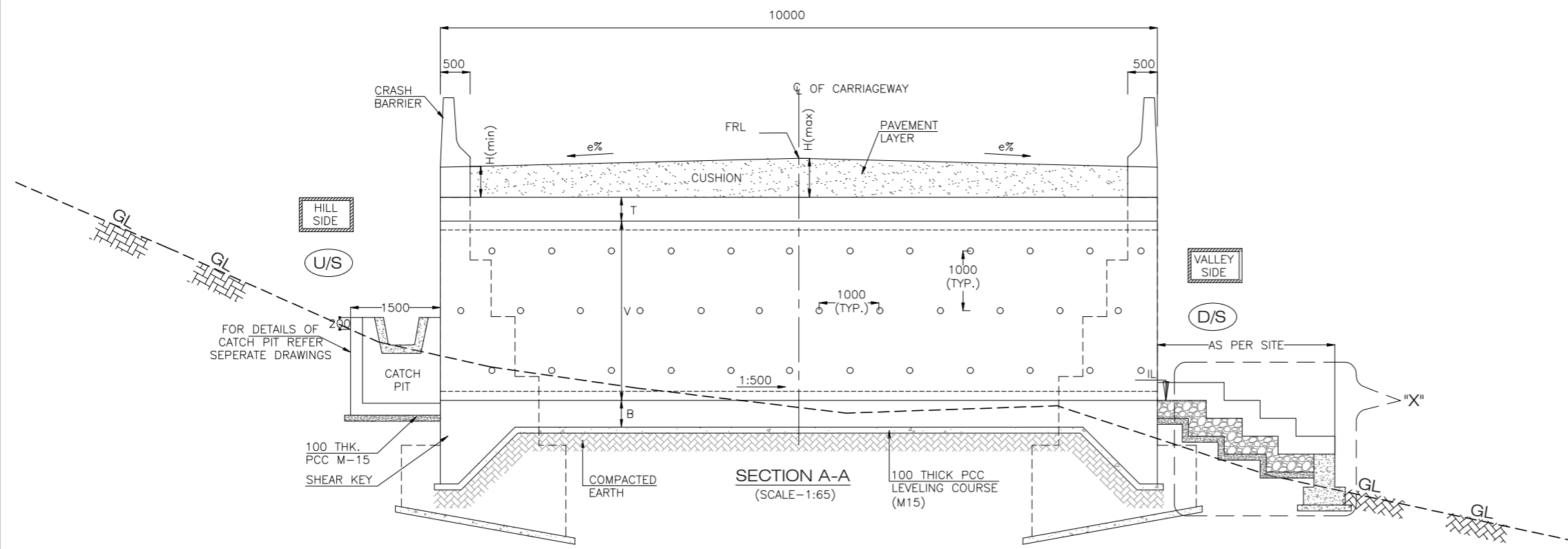
DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:

GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH-78+300 SPAN (1 X 100 M)


DRAWING NO. NHIDCL/PANGO-JORGING/STC/MJB/GAD/DDE-101 SHEET 02 of 02

BOX CULVERT



- NOTES:-**
- ALL DIMENSION ARE IN MILLIMETERS, LEVELS IN METERS AND CHAINAGES ARE IN KILOMETERS UNLESS OTHERWISE MENTIONED.
 - DIMENSIONS ARE NOT TO BE SCALED, ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
 - PROPOSED BOX CULVERT HAS BEEN DESIGNED FOR LIVE LOAD AS PER IRC: 6-2017:
 - THREE LANE OF CLASS A
 - 1 LANE OF CLASS A + 1 LANE OF 70R
 - SPECIAL VEHICLE LOADING WHICHEVER GOVERNS.
 - CONCRETE SHALL BE DESIGN MIX UNLESS OTHERWISE SPECIFIED IN DETAILED, AND SHALL HAVE MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150mm CUBES FOR ALL ELEMENTS OF STRUCTURES AS INDICATED BELOW:-
 - RCC BOX CELL ----- M30
 - RCC CRASH BARRIER-----M40
 - PCC LEVELING COURSE ----- M15
 - REINFORCING STEEL SHALL BE HYSD BARS (GRADE DESIGNATION Fe 500D) CONFORMING TO TABLE 18.1 OF IRC: 112-2020.
 - CLEAR COVER TO OUTERMOST STEEL SHALL BE AS BELOW:
 - TOP SLAB (BOTH FACE) ----- 45MM
 - BOTTOM SLAB (BOTH FACE) ----- 75MM
 - VERTICAL WALL (EARTH FACE) ----- 75MM
 - VERTICAL WALL (OTHER FACE) -----45MM
 - GEOCOMPOSITE/FILTER MEDIA 600mm THICK BEHIND EARTH RETAINING VERTICAL WALLS SHALL BE PROVIDED AS PER "MORT&H" SPECIFICATION.
 - BACKFILLING SHALL BE DONE IN LAYERS NOT EXCEEDING 200mm THK. EACH LAYERS SHALL BE COMPACTED TO THE OPTIMUM DENSITY.
 - BACK FILLING BEHIND EARTH RETAINING WALL CONSIST OF SELECTED EARTH CONFIRMING TO APPENDIX 6 OF IRC 78:2014 HAVING PROPERTIES $C = 0, \phi \geq 30^\circ, \gamma = 2.0 \text{ t/m}^3$.
 - LAYING, COMPACTION AND EXTENT OF BACK FILL BEHIND SIDE WALL SHALL CONFORM TO SPECIFICATIONS IN APPENDIX : 6 OF IRC : 78-2014.
 - THE SAFE BEARING CAPACITY AT THE FOUNDING LEVEL HAS BEEN CONSIDERED AS 10 T/M^2 . THE SAME SHALL BE CONFIRMED AT SITE BEFORE EXECUTION OF WORK.
 - THE DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT APPROVED HIGHWAY DRAWINGS FOR STRUCTURE ORIENTATION. SKEW, FRL AND CAMBER/SUPER ELEVATION ETC.
 - LAP/SPLICES SHALL BE PROVIDED AS PER CLAUSE NO.15.2.4 & 15.2.5 OF IRC 112-2011.
 - INVERT LEVEL SHALL BE CONFIRMED AT SITE BEFORE EXECUTION OF WORK.
 - PROPOSED CHAINAGE / FORMATION LEVEL SHALL BE CHECKED AND CONFIRMED AS PER APPROVED PLAN & PROFILE.
 - THE PROJECT ROAD FALLS WITHIN SEISMIC ZONE-V
 - EXPOSURE CONDITION IS MODERATE.
 - 100 ϕ WEEP HOLES SLOPE 1:20 & SPACED AT 1000C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN A STAGGERED MANNER IN VERTICAL WALLS.
 - THIS DRAWING SHALL BE USED FOR PRECAST AS WELL AS CAST IN SITU BOX CULVERT.

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R7	AUG 2023	FINAL DPR
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R5	JULY 2022	MODIFIED DPR INCORPORATION OBSERVATION
R4	AUG 2019	MODIFIED DPR
R3	JULY 2018	DPR

CLIENT:

National Highways & Infrastructure Development Corporation Limited.
 3rd Floor, PTI building, 4-Parliament Street, New Delhi-110001

PROJECT:
Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two Lining of Pango to Jorging Road (Length: 90 km) for execution on EPC Mode in the State of Arunachal Pradesh under SARDP-NE Phase'B'

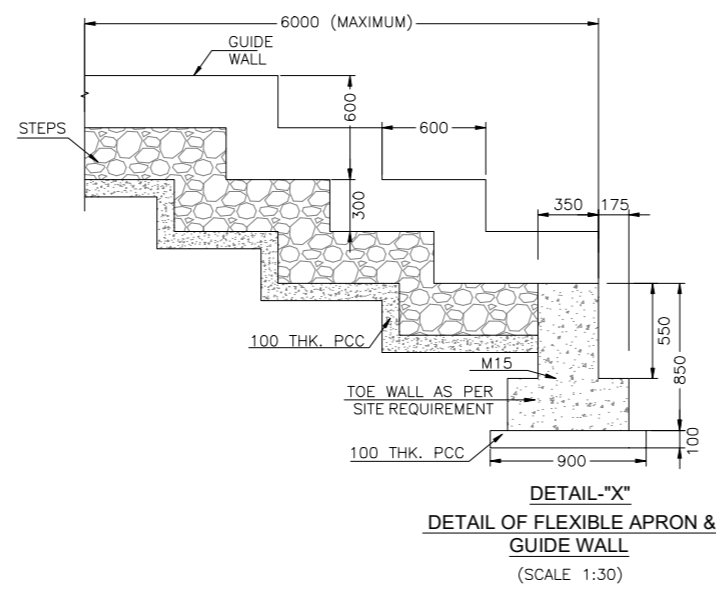
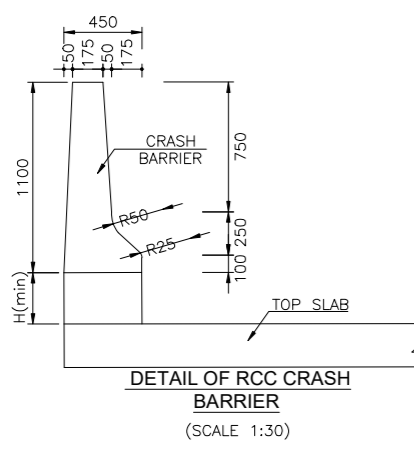
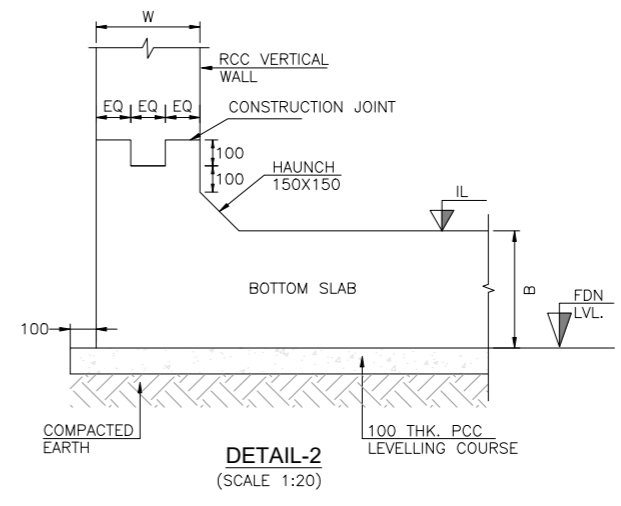
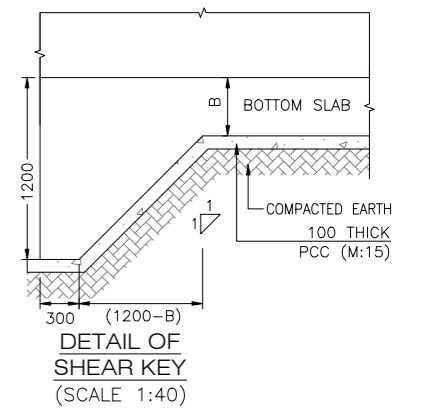
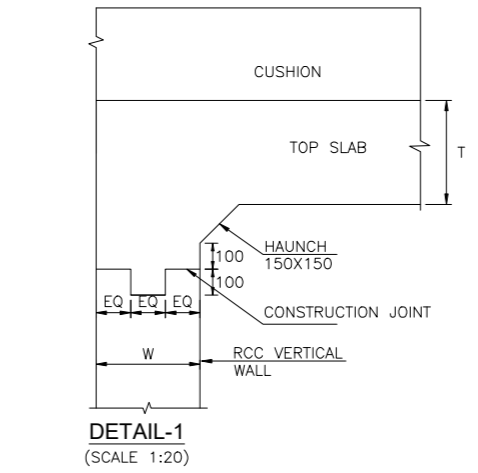
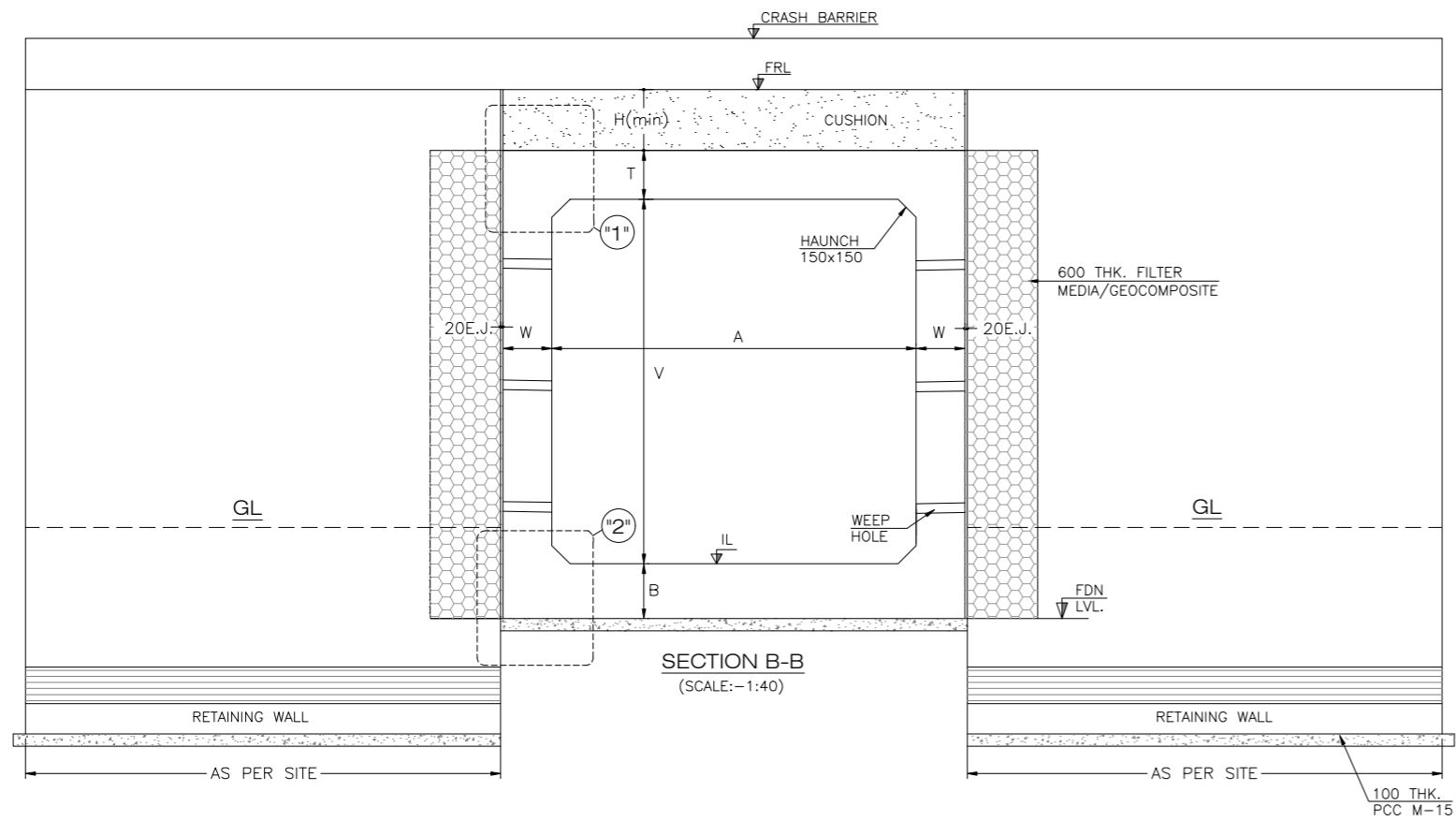
DPR CONSULTANTS:
 **Shweta Technophile Consultants Pvt.Ltd.**
 (222-223, 313, Rajhans Plaza, Ahinsa Khand-1, Indrapuram, Ghaziabad-201014)

DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:
GENERAL ARRANGEMENT DRAWING OF BOX CULVERT (TYP.) (SHEET-01 OF 04)

DRAWING NO.
 NHIDCL/PANGO-JORGING/STC/CUL/BOX/GAD


A3



LEGEND	
FRL	FINISHED ROAD LEVEL
U/S	UP STREAM
D/S	DOWN STREAM
GL	GROUND LEVEL
IL	INVERT LEVEL
FDN LVL.	FOUDATION LEVEL
E.W.	EXTRA WIDENING

DIMENSION DETAILS OF PROPOSED BOX CULVERT CUSHION 0-1.5m				
S.NO.	Span (m)	Top Slab (T) (mm)	SIDE WALL (W) (mm)	BOTTOM Slab (B) (mm)
1.	1 X 2.0 X 2.0	0.35	0.30	0.38
2.	1 X 3.0 X 3.0	0.42	0.42	0.42

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R3	JULY 2018	DPR

CLIENT:
 **National Highways & Infrastructure Development Corporation Limited.**
 3rd Floor, PTI building, 4-Parliament Street, New Delhi-110001

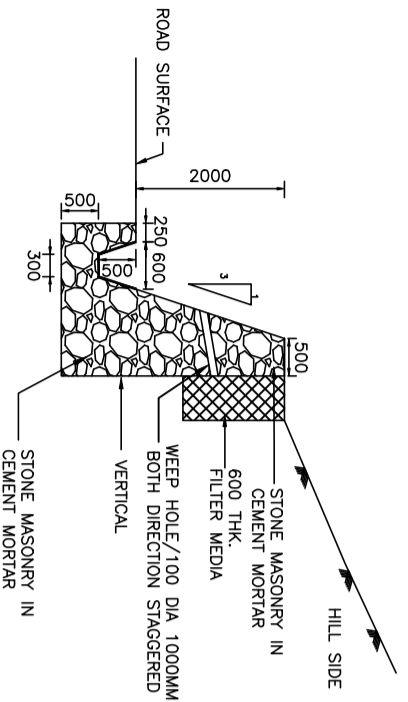
PROJECT:
Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two laning of Pango to Jorging Road (Length: 90 km) for execution on EPC Mode in the State of Arunachal Pradesh under SARDP-NE Phase'B'

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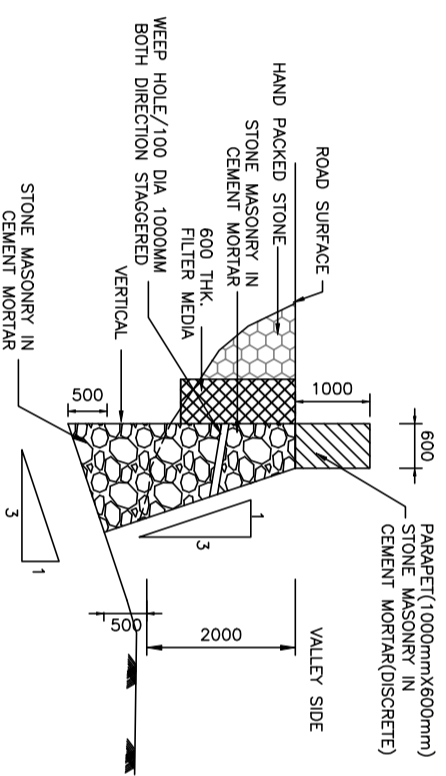
DRAWN BY MANISH
DESIGN BY AMIT
CHECKED BY A.G.

TITLE:
GENERAL ARRANGEMENT DRAWING OF BOX CULVERT (TYP.) (SHEET-02 OF 04)
DRAWING NO.
 NHIDCL/PANGO-JORGING/STC/CUL/BOX/GAD **A3**

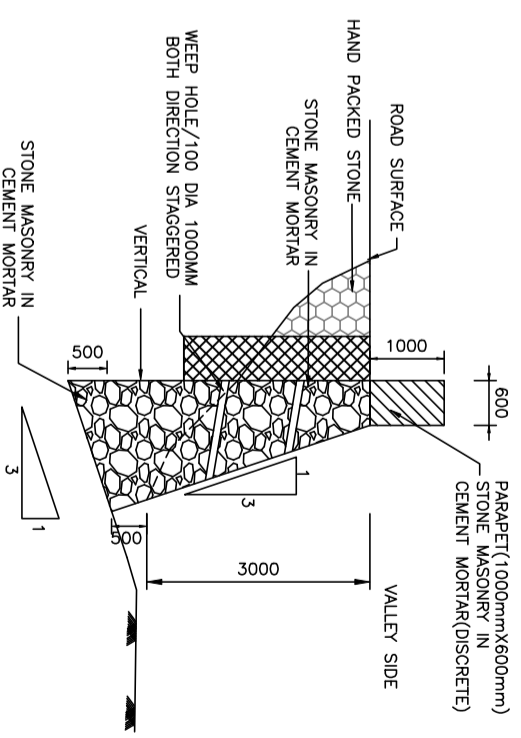
TYPICAL RETAINING / BREAST WALL



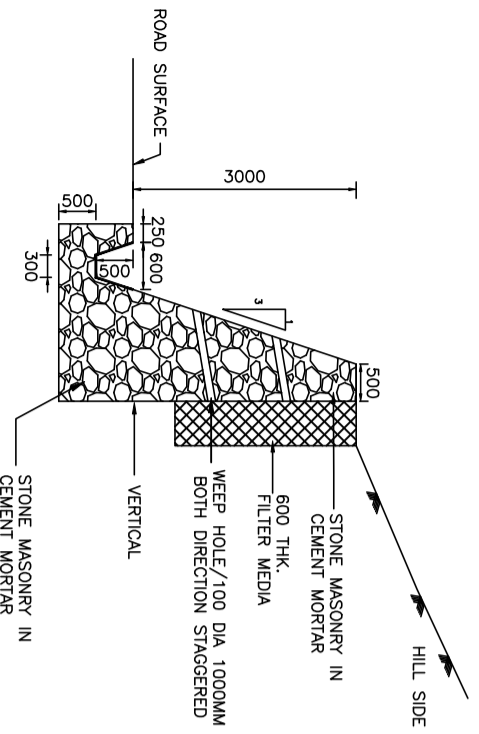
STONE MASONRY(CEMENT MORTAR 1:3)
BREAST WALL 2M HEIGHT



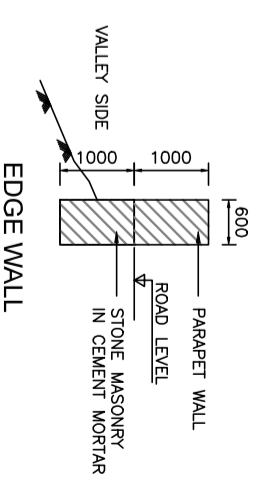
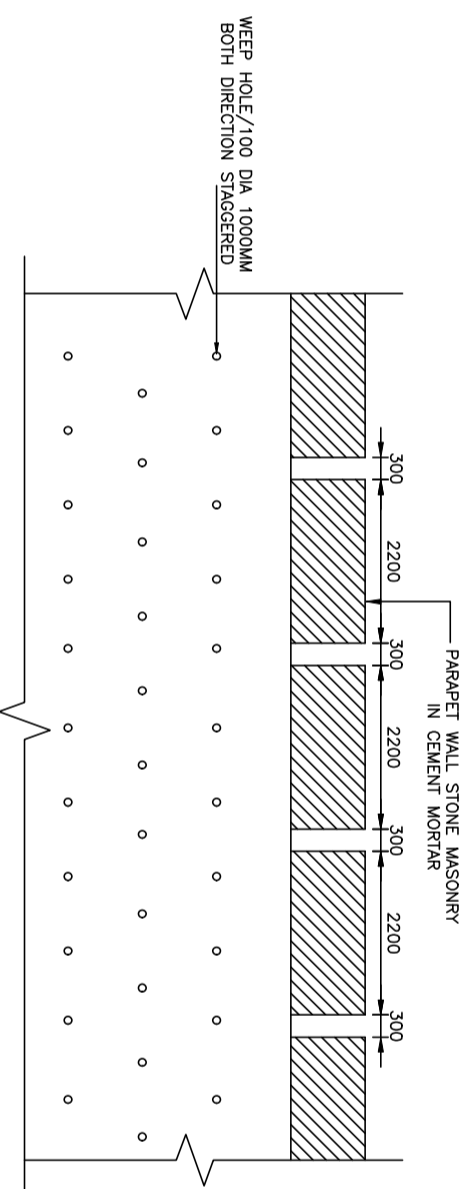
STONE MASONRY (CEMENT MORTAR 1:3)
RETAINING WALL 2M HEIGHT



STONE MASONRY (CEMENT MORTAR 1:3)
RETAINING WALL 3M HEIGHT



STONE MASONRY(CEMENT MORTAR 1:3)
BREAST WALL 3M HEIGHT



REV	DATE	DESCRIPTION OF REVISIONS
K3	JULY 2018	DPR
K4	AUG 2019	MODIFIED DPR
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K6	JAN 2023	MODIFIED DPR
K7	AUG 2023	FINAL DPR

CLIENT:

National Highways & Infrastructure Development Corporation Limited.
3rd Floor, PTI building, 4-Parliament Street, New Delhi-110001

PROJECT:

Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two Lanes of Pango to Jorjig Road (Length: 90 km) for execution on EPC Mode in the State of Arunachal Pradesh under SARDP-NE Phase B'

DPR CONSULTANTS:

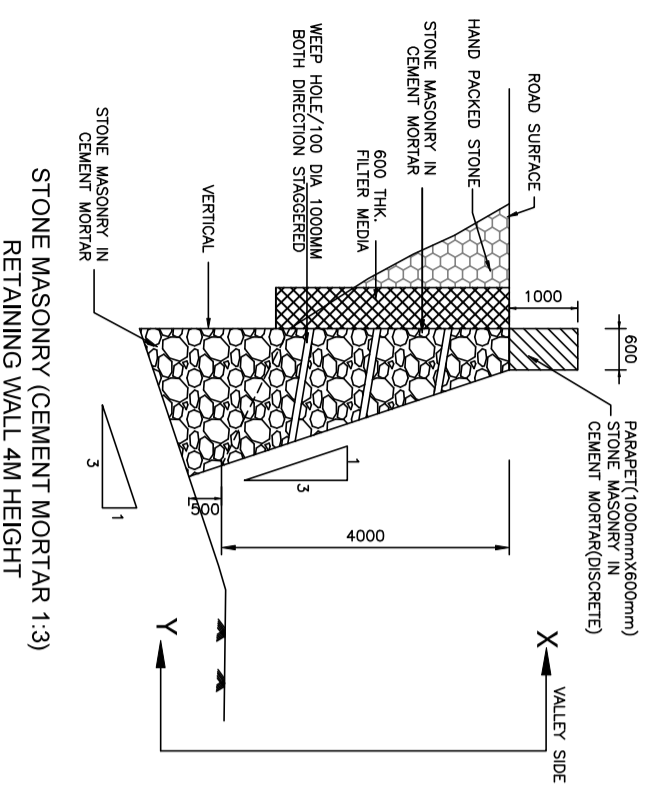
Shweta Technophile Consultants Pvt.Ltd.
(222-223, 313, Rajhans Plaza, Ahinsa Khand-1, Indrapuram, Ghazalabad-201014)

DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

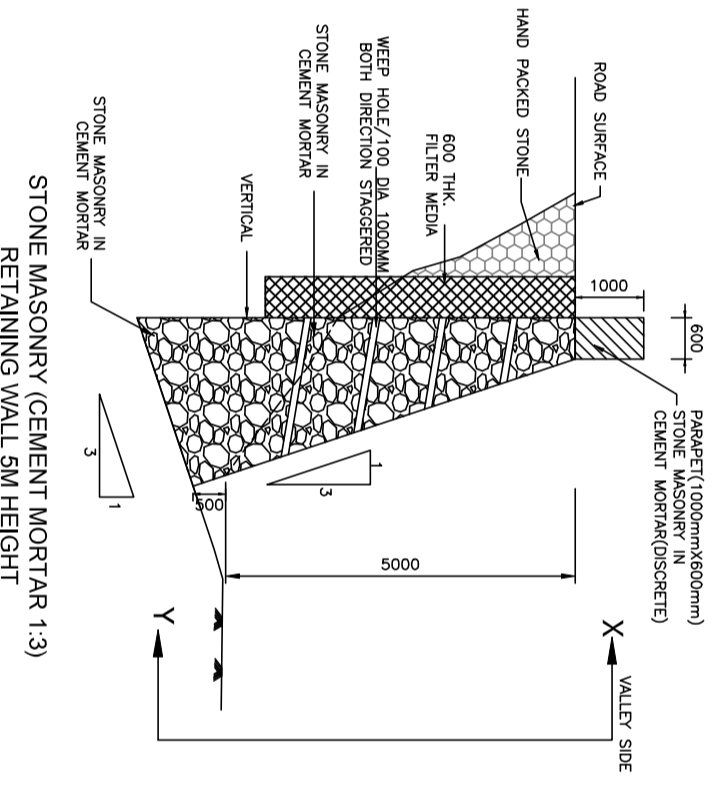
TITLE:

TYPICAL DETAIL OF 2M & 3M STONE MASONRY WALL

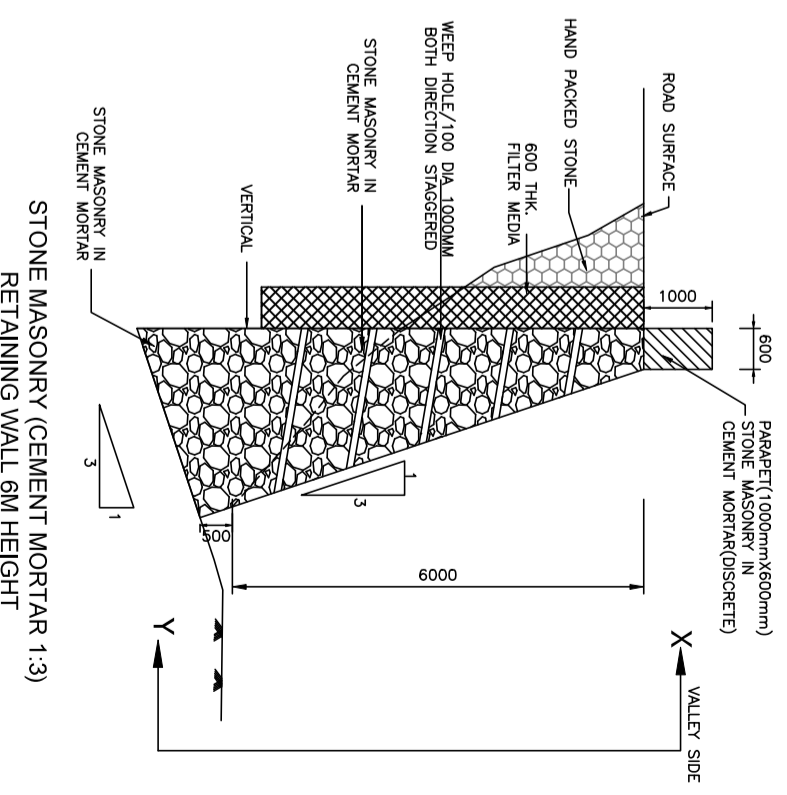
DRAWING NO. SHDDCL/PANGO-JORJIG/STC/RW



STONE MASONRY (CEMENT MORTAR 1:3)
RETAINING WALL 4M HEIGHT




STONE MASONRY (CEMENT MORTAR 1:3)
RETAINING WALL 5M HEIGHT




STONE MASONRY (CEMENT MORTAR 1:3)
RETAINING WALL 6M HEIGHT

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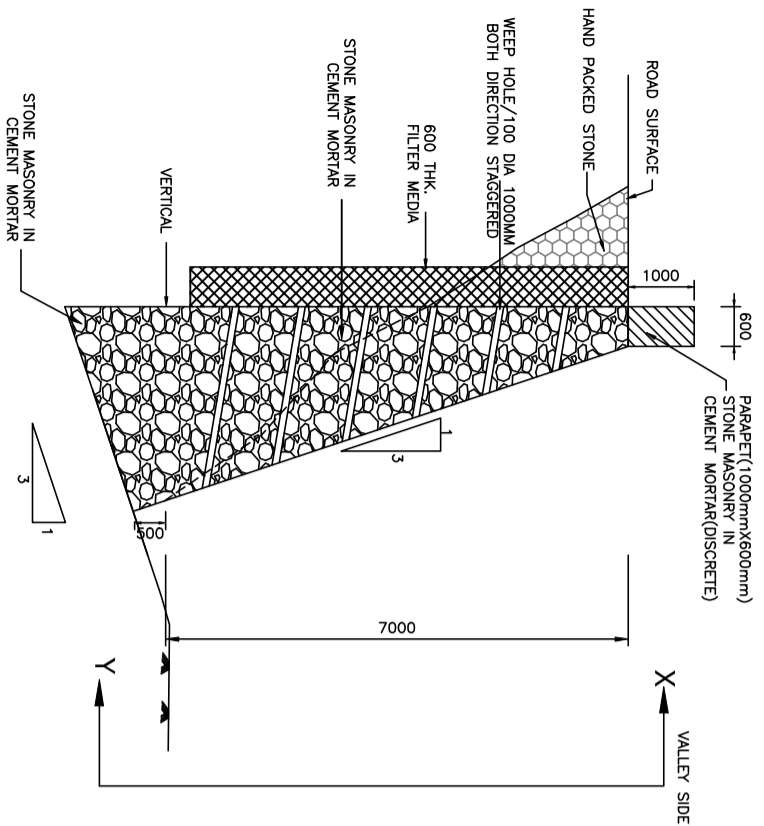
PROJECT:
Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two Laning of Pango to Jorjng Road (Length: 90 km) for execution on EPC Mode in the State of Arunachal Pradesh under SARDP-NE Phase 'B'

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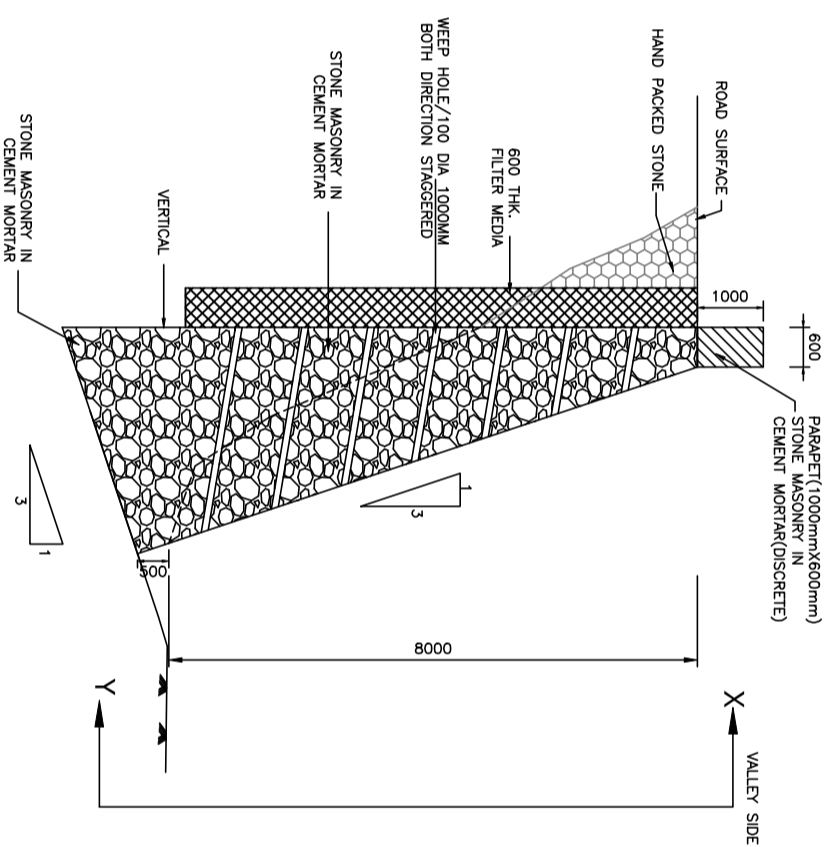
DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:
 TYPICAL DETAIL OF 4M, 5M & 6M
 STONE MASONRY WALL

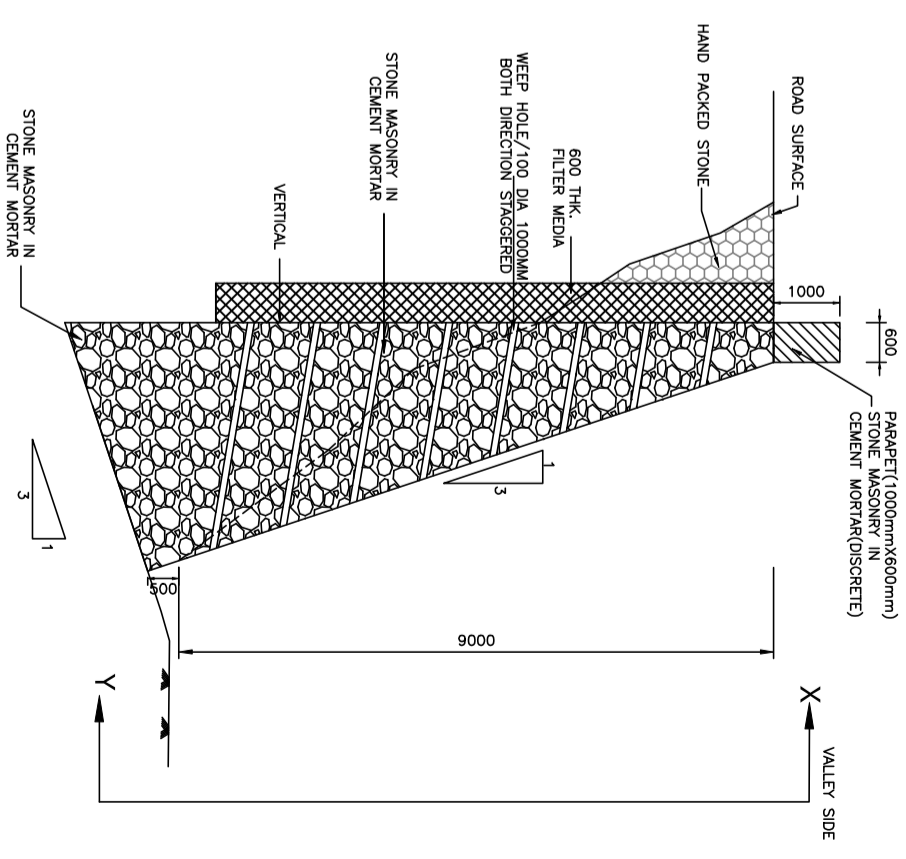
DRAWING NO.
 SHDDCL/PANGO-JORJING/STC/RW



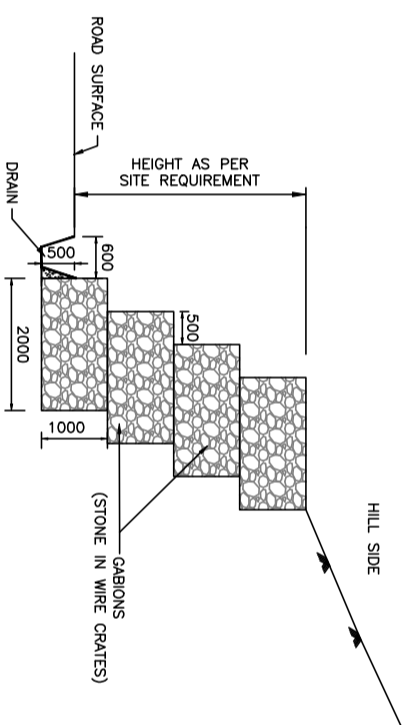
STONE MASONRY (CEMENT MORTAR 1:3)
RETAINING WALL 7M HEIGHT



STONE MASONRY (CEMENT MORTAR 1:3)
RETAINING WALL 8M HEIGHT



STONE MASONRY (CEMENT MORTAR 1:3)
RETAINING WALL 9M HEIGHT



GABION WALL
(BREAST WALL WHERE FOUNDATION IS WEAK)

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 Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two Laning of Pango to Jorjeng Road (Length: 90 km) for execution on EPC Mode in the State of Arunachal Pradesh under SARDP-NE Phase B'

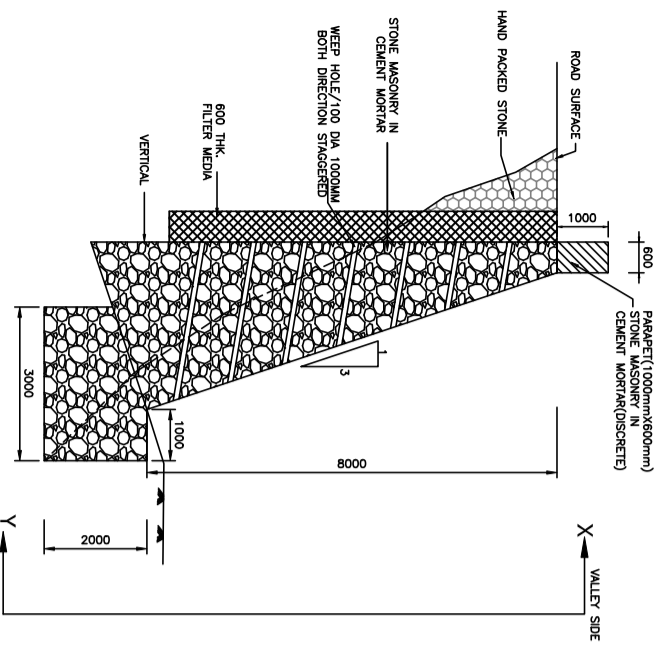
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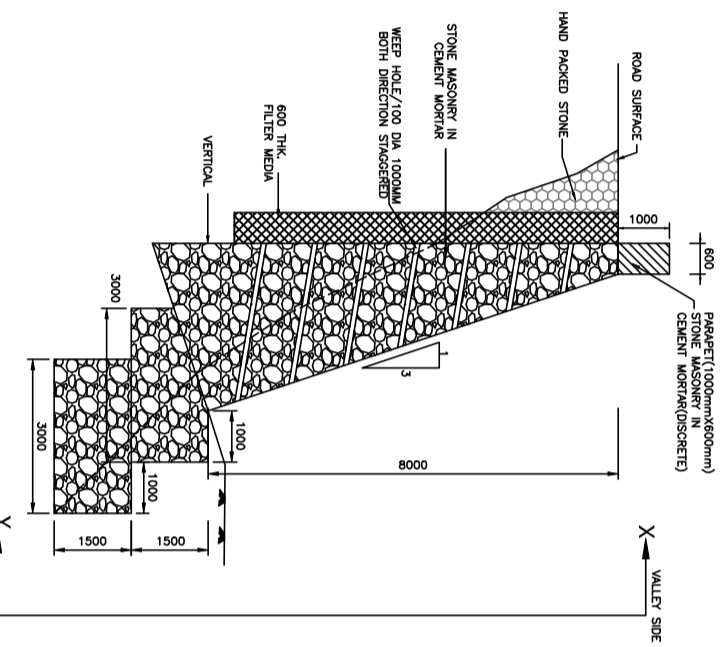
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DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:
 TYPICAL DETAIL OF 7M, 8M & 9M
 STONE MASONRY WALL

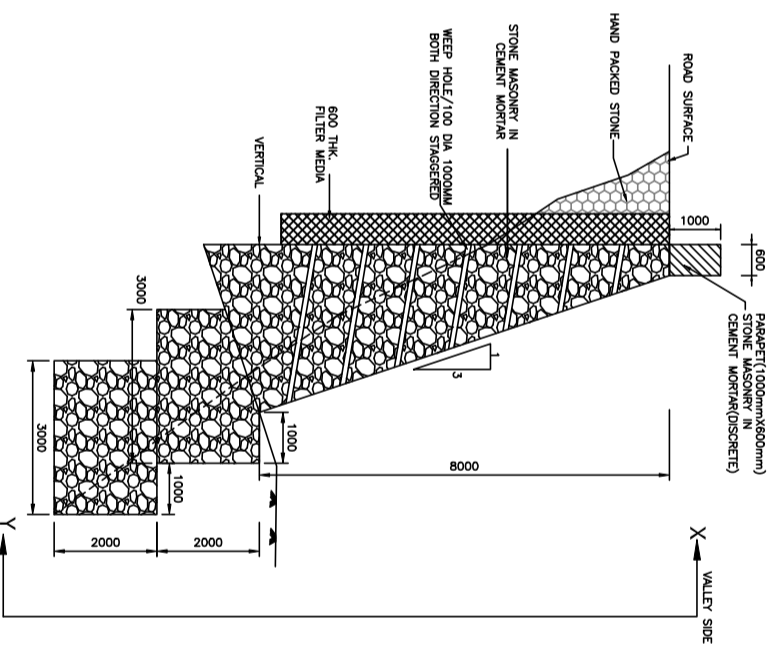
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 SHDDCL/PANGO-JORJENG/STC/RW



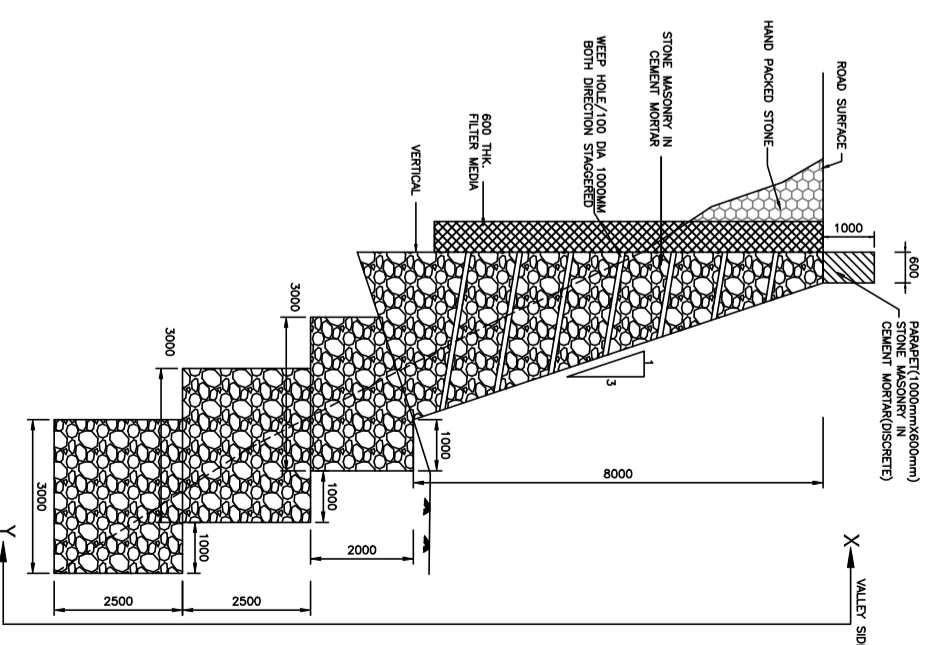
STONE MASONRY (CEMENT MORTAR 1:3)
RETAINING WALL 10M HEIGHT



STONE MASONRY (CEMENT MORTAR 1:3)
RETAINING WALL 11M HEIGHT




STONE MASONRY (CEMENT MORTAR 1:3)
RETAINING WALL 12M HEIGHT




STONE MASONRY (CEMENT MORTAR 1:3)
RETAINING WALL 15M HEIGHT

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 (222-223, 313, Rajhans Plaza, Anisa Khand-1, Indrapuram, Ghaziabad-201014)

DRAWN BY	MANISH
DESIGN BY	AMIT
CHECKED BY	A.G.

TITLE:
 TYPICAL DETAIL OF 10M, 11M, 12M & 15M
 STONE MASONRY WALL

DRAWING NO.
 SHDDCL/PANGO-JORJING/STC/RW

A3