

Annex - III
(Schedule-A)

Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385
including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river
Brahmaputra on NH-17 at Jogighopa in the State of Assam

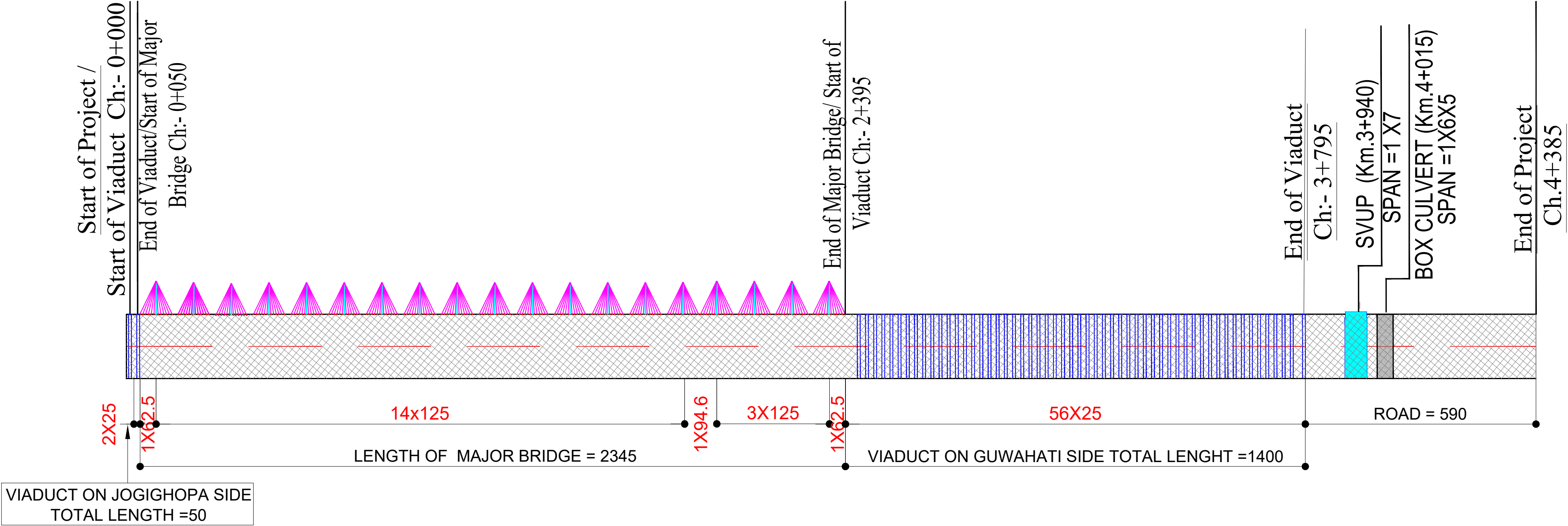
Alignment Plans

HIGHWAYS

Line Diagram

← TO JOGIGHOPA

TO GUWAHATI →



0+000 0+500 1+000 1+500 2+000 2+500 3+000 3+500 4+000 4+385

LEGENDS

PROPOSED BRIDGE

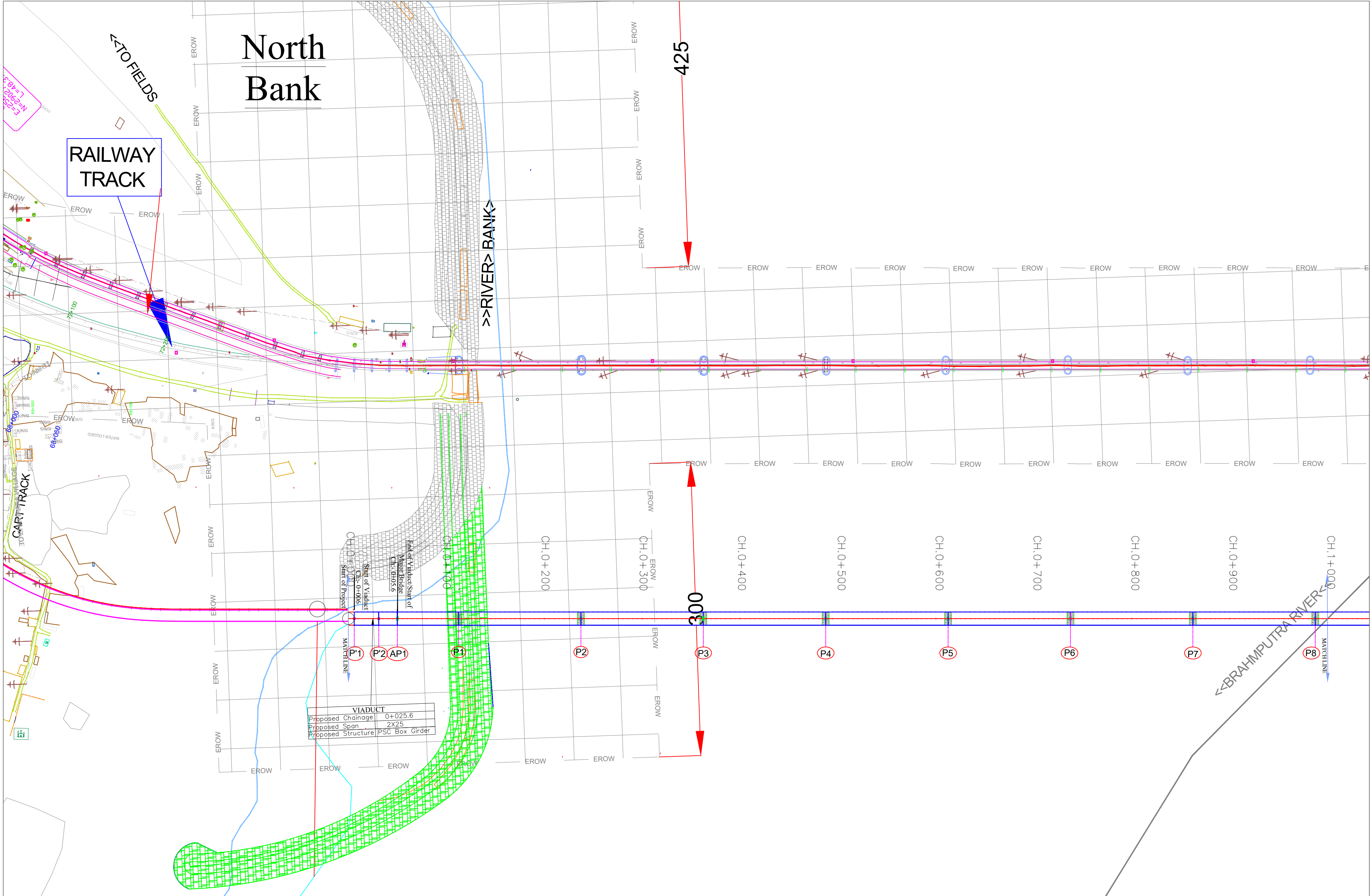
PROPOSED VIADUCT

APPROACH ROAD

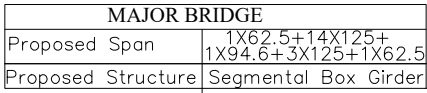
PROPOSED SVUP

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	TENDER DRAWING		Project	
R0	JAN 2021		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	 	1. JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)		Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam	
					In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,			
					Designed: BD	Scale N.T.S		
					Drawn: NL			
					Checked: AD			
					Approved: DSA		Drawing Title	NHIDCL/JOGIGHOPA/LD

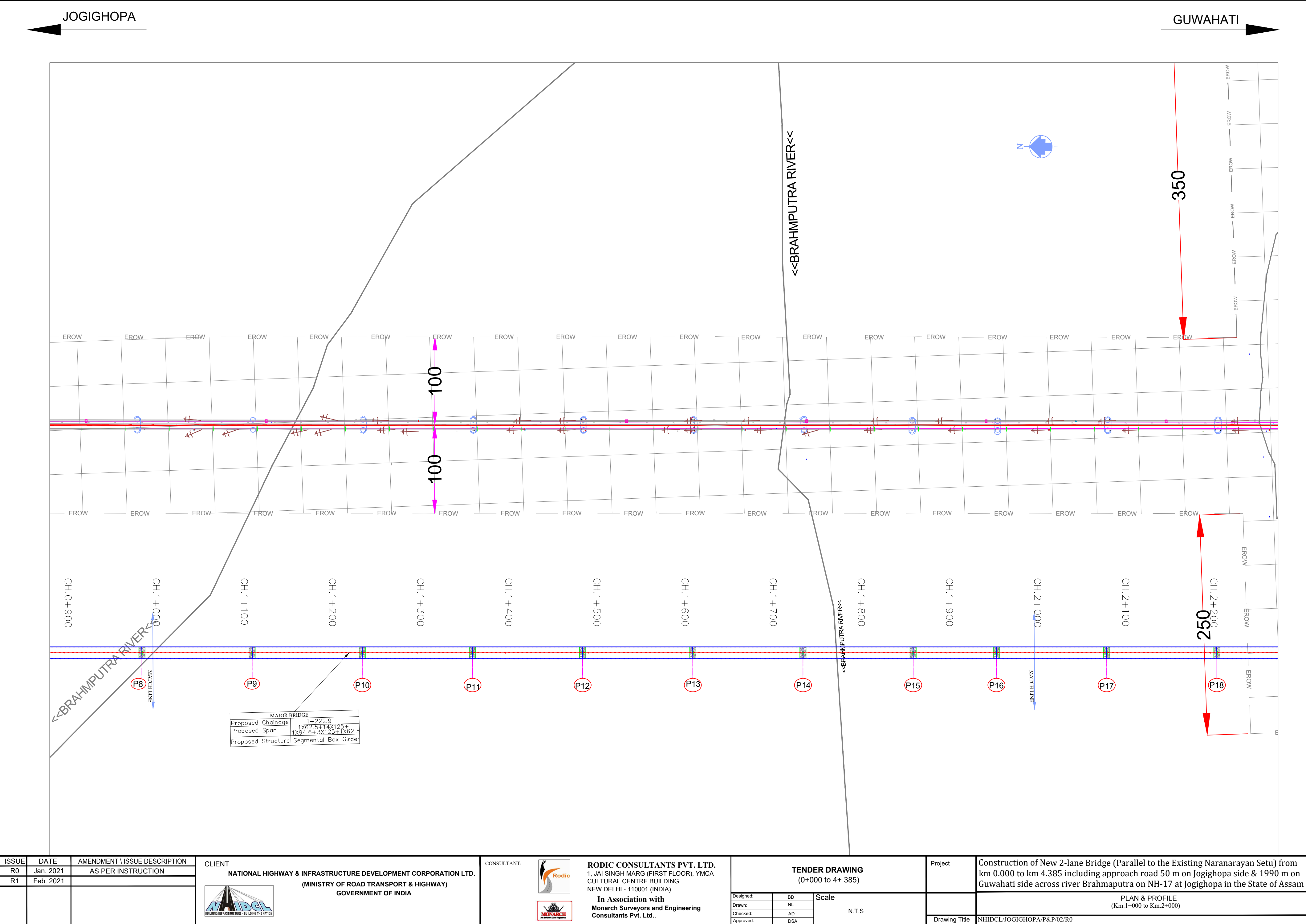
PLAN & PROFILE



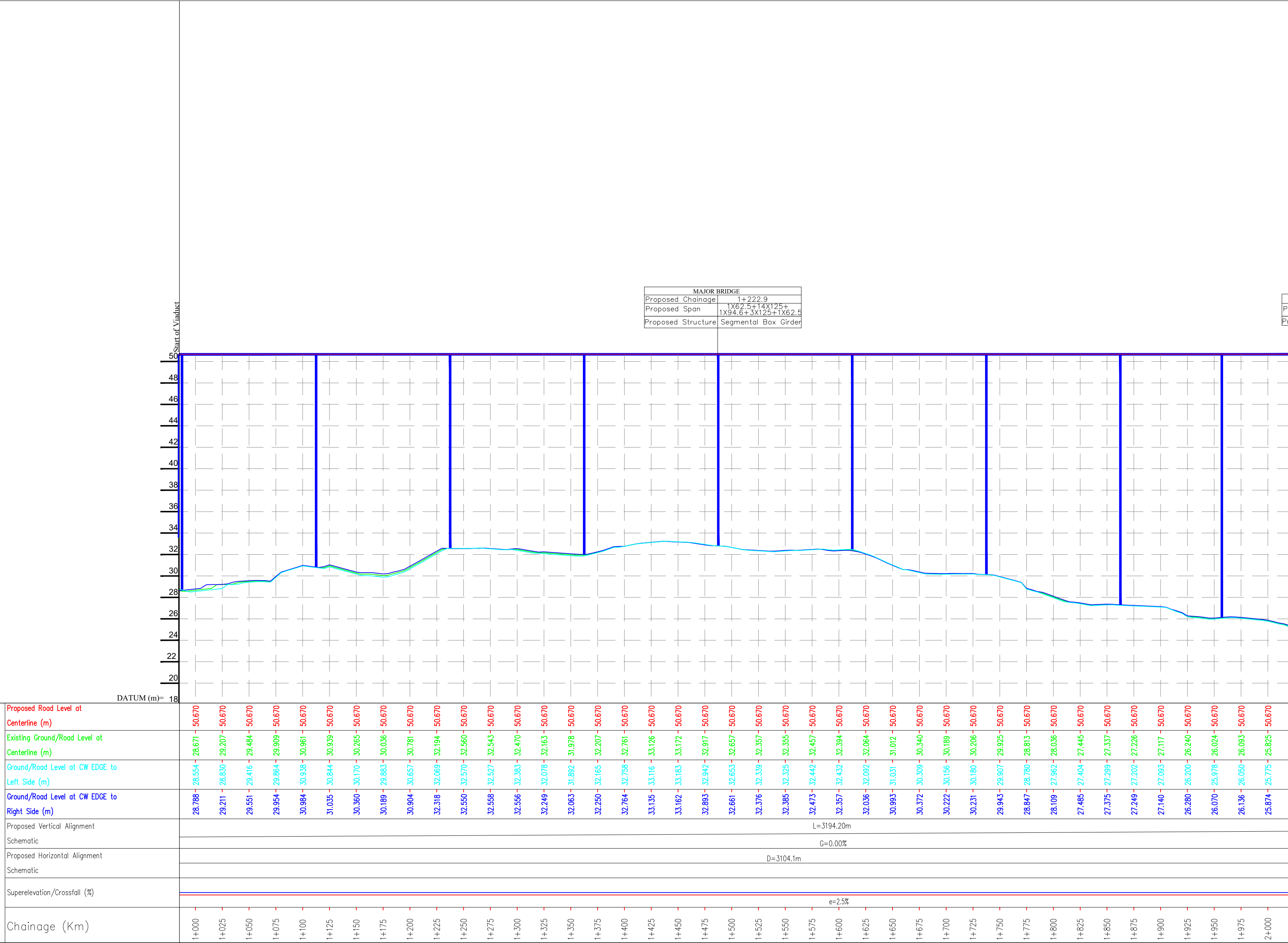
ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd., 	TENDER DRAWING (0+000 to 4+ 385)		Project	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam	
R0	Jan. 2021	AS PER INSTRUCTION			Designed:	BD	Scale N.T.S		PLAN & PROFILE (Km.0+000 to Km.1+000)
R1	Feb. 2021				Drawn:	NL			
			Checked:	AD					
			Approved:	DSA	Drawing Title	NHIDCL/JOGIGHOPA/P&P/01/R0			



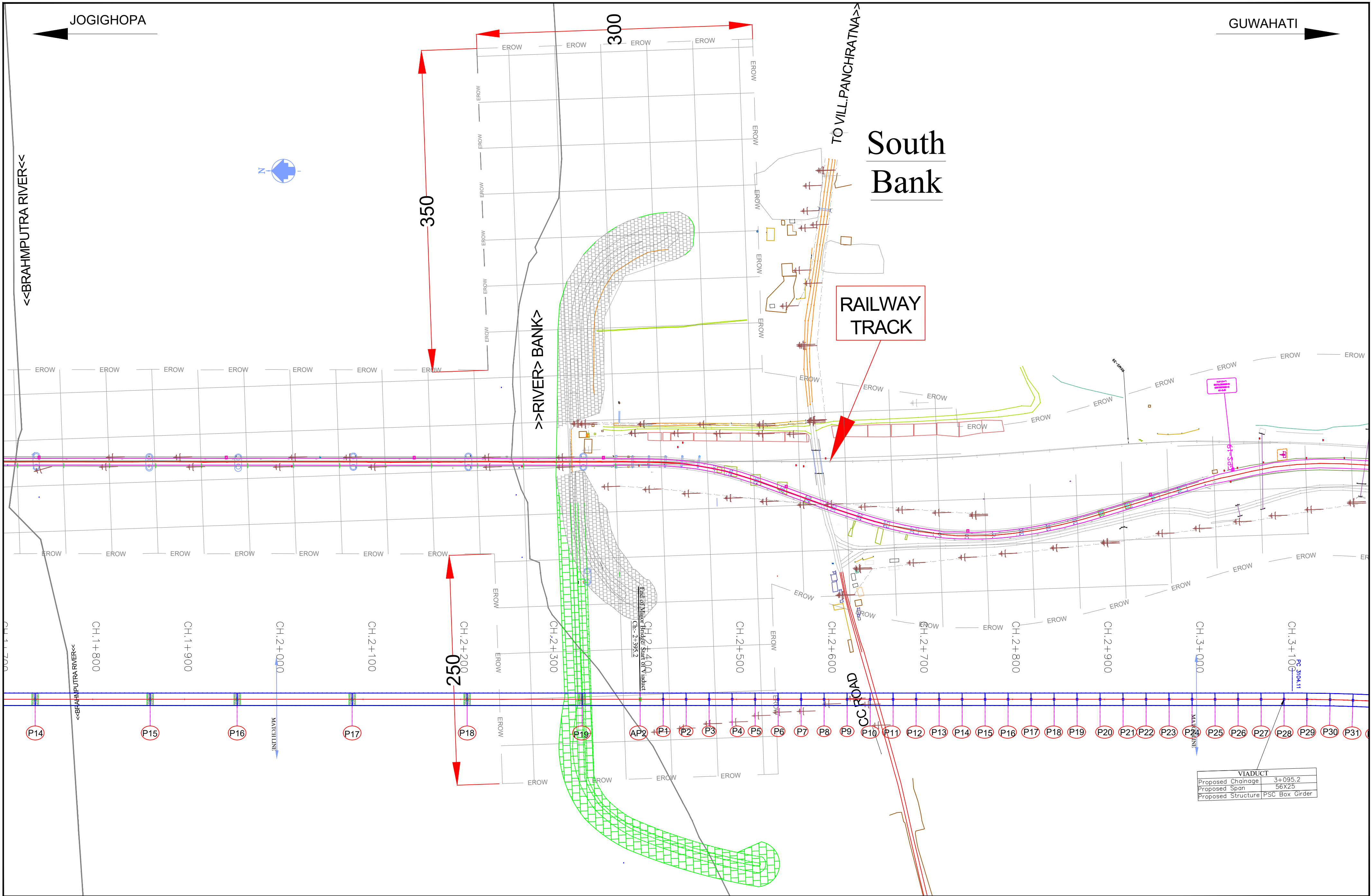
ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd., 	TENDER DRAWING (0+000 to 4+ 385)		Project	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
R0	Jan. 2021	AS PER INSTRUCTION						
R1	Feb. 2021				Drawn: NL	Drawing Title	NHIDCL/JOGIGHOPA/P&P/1A/R0	
					Checked: AD			
			Approved: DSA					



ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	TENDER DRAWING		Project	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
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R1	Feb. 2021				In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,			
					Scale N.T.S		Drawing Title	PLAN & PROFILE (Km.1+000 to Km.2+000)
								NHIDCL/JOGIGHOPA/P&P/02/R0



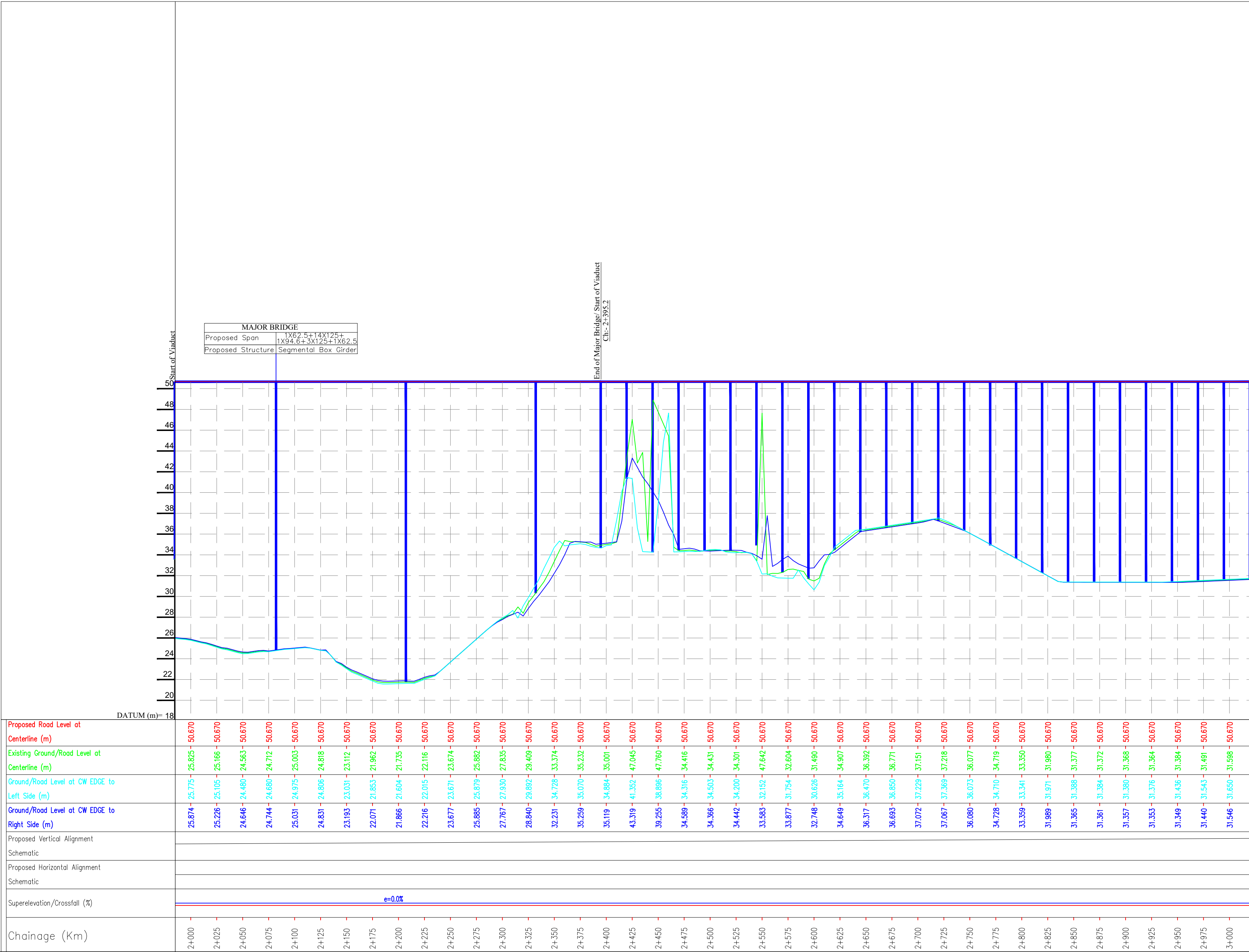
ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	TENDER DRAWING (0+000 to 4+ 385)		Project
R0	Jan. 2021	AS PER INSTRUCTION	 NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Scale		Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
R1	Feb. 2021						N.T.S
						Drawing Title	NHIDCL/JOGIGHOPA/P&P/2A/R0



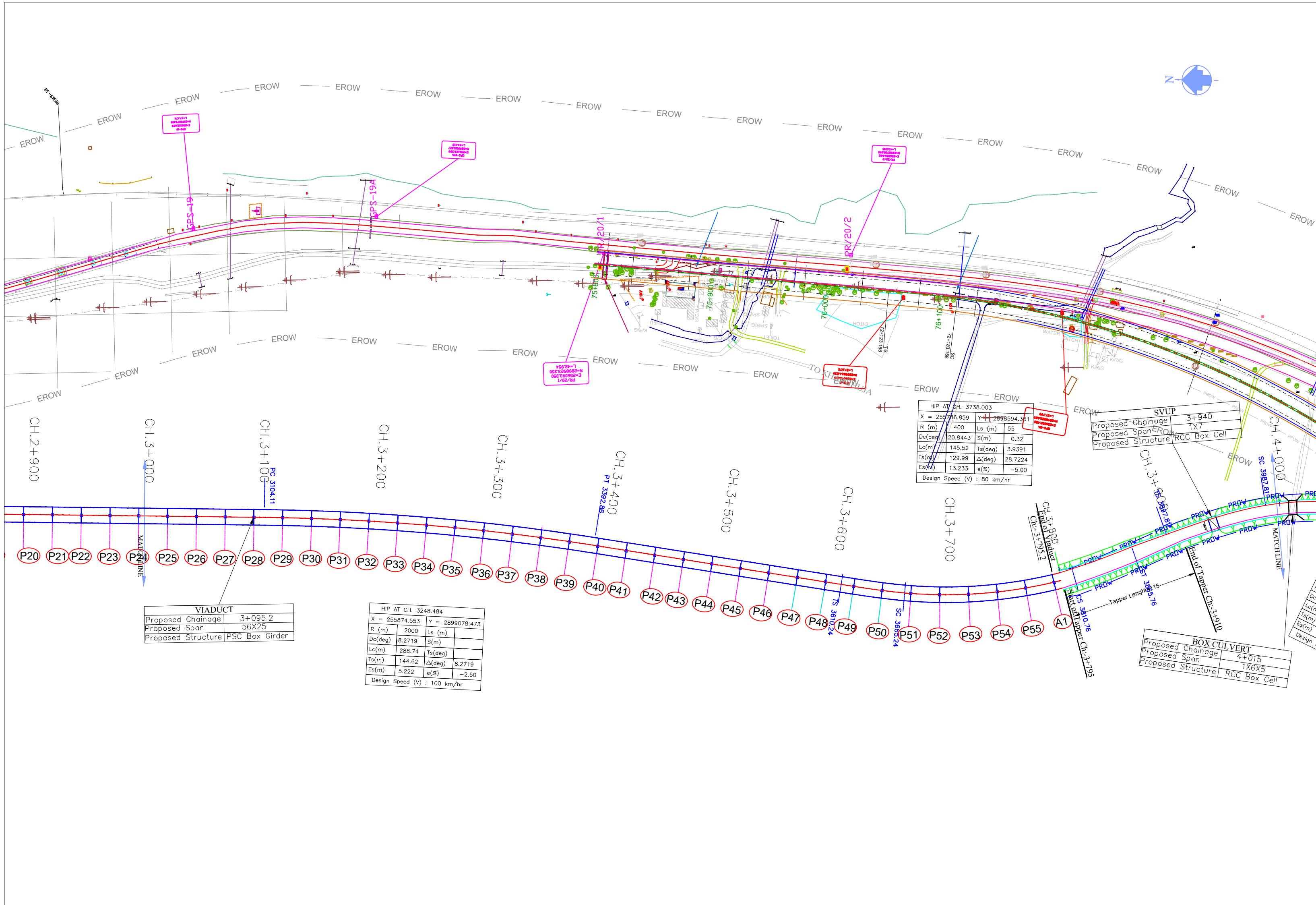
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R0	Jan. 2021	AS PER INSTRUCTION	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	(0+000 to 4+ 385)		Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
R1	Feb. 2021				Scale N.T.S		PLAN & PROFILE (Km.2+000 to Km.3+000)
					Designed: BD Drawn: NL Checked: AD Approved: DSA	Drawing Title	NHIDCL/JOGIGHOPA/P&P/03/R0

JOGIGHOPA

GUWAHATI



ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	TENDER DRAWING (0+000 to 4+ 385)		Project	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
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R1	Feb. 2021							



ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION
R0	Jan. 2021	AS PER INSTRUCTION
R1	Feb. 2021	

CLIENT

NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.

(MINISTRY OF ROAD TRANSPORT & HIGHWAY)

GOVERNMENT OF INDIA



CONSULTANT:



RODIC CONSULTANTS PVT. LTD.
1, JAI SINGH MARG (FIRST FLOOR), YMCA
CULTURAL CENTRE BUILDING
NEW DELHI - 110001 (INDIA)



In Association with
Monarch Surveyors and Engineering
Consultants Pvt. Ltd.,

TENDER DRAWING

(0+000 to 4+ 385)

Designed:	BD	Scale
Drawn:	NL	
Checked:	AD	
Approved:	DSA	

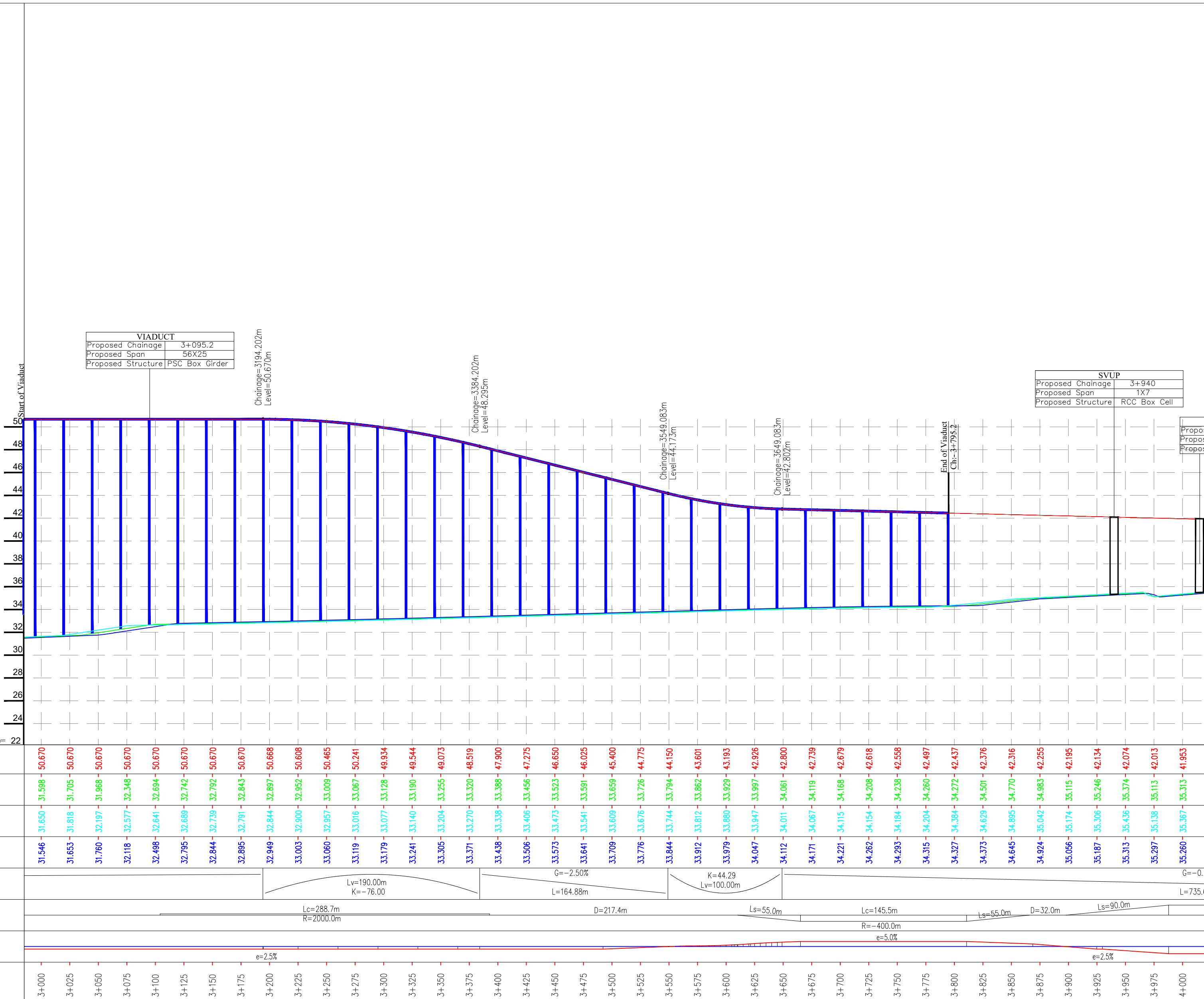
N.T.S

Project	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
Drawing Title	PLAN & PROFILE (Km.3+000 to Km.4+000)

NHIDCL/JOGIGHOPA/P&P/04/R0

JOGIGHOPA

GUWAHATI



VIADUCT	
Proposed Chainage	3+095.2
Proposed Span	56X25
Proposed Structure	PSC Box Girder

Chainage=3194.202m
Level=50.670m

Chainage=3384.202m
Level=48.295m

Chainage=3549.083m
Level=44.173m

Chainage=3649.083m
Level=42.802m

End of Viaduct
Ch=3+795.2

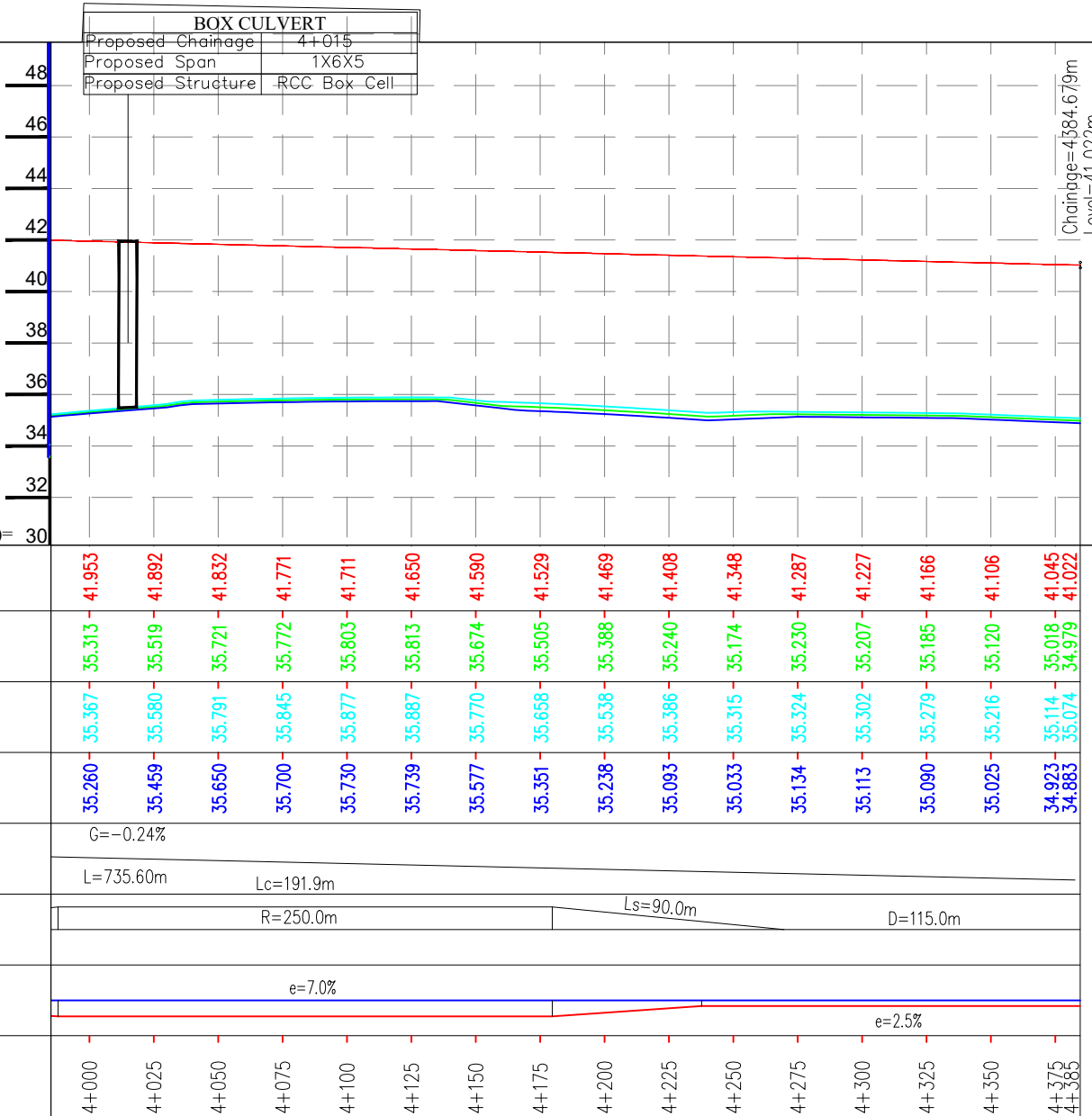
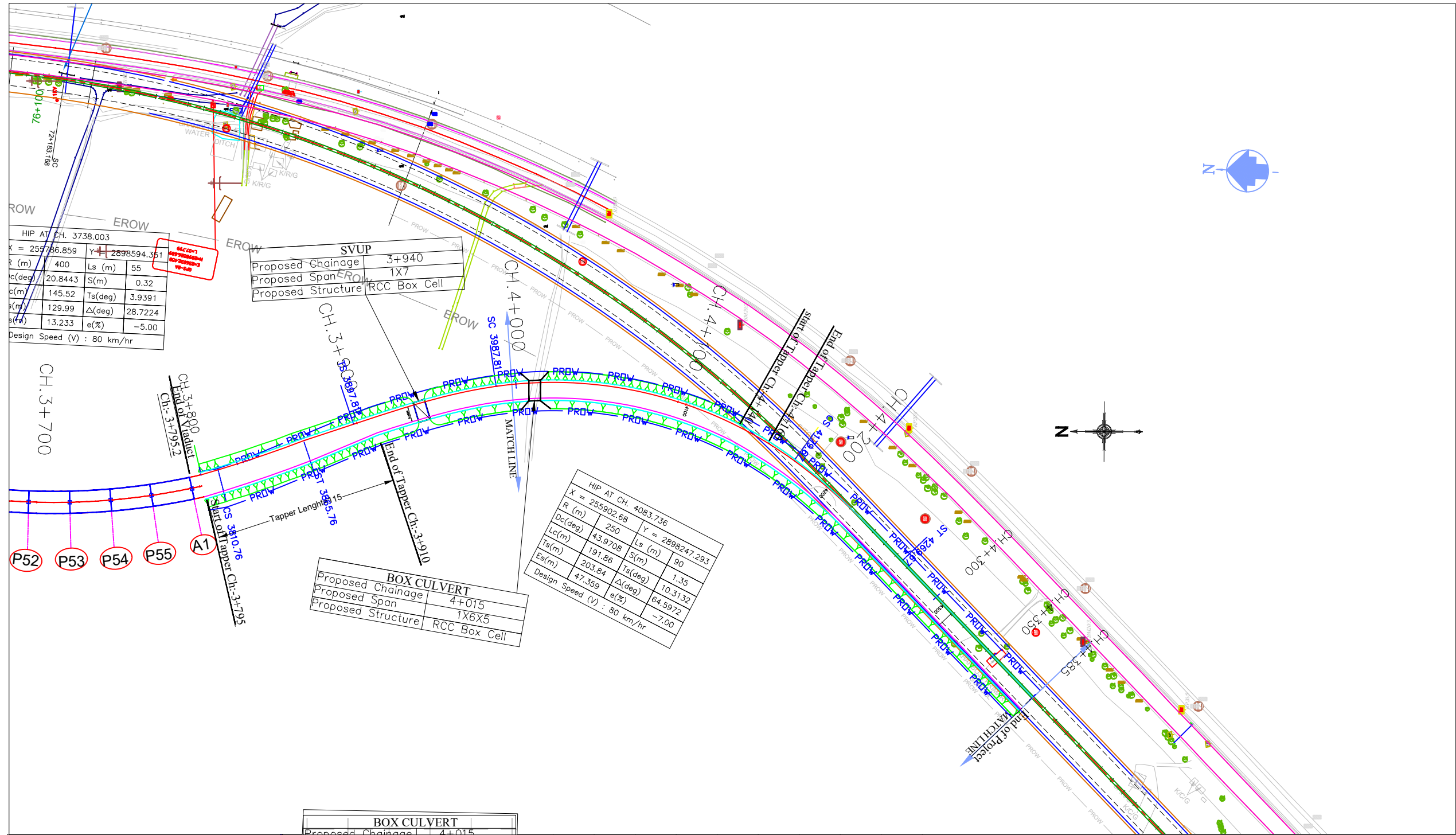
SVUP	
Proposed Chainage	3+940
Proposed Span	1X7
Proposed Structure	RCC Box Cell

Proposed
Proposed
Proposed

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R1	Feb. 2021				Drawn:	NL			
					Checked:	AD			
			Approved:	DSA	Drawing Title	NHIDCL/JOGIGHOPA/P&P/4A/R0			

JOGIGHOPA

GUWAHATI



ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION
R0	Jan. 2021	AS PER INSTRUCTION
R1	Feb. 2021	

CLIENT

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GOVERNMENT OF INDIA

CONSULTANT:

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CULTURAL CENTRE BUILDING
NEW DELHI - 110001 (INDIA)

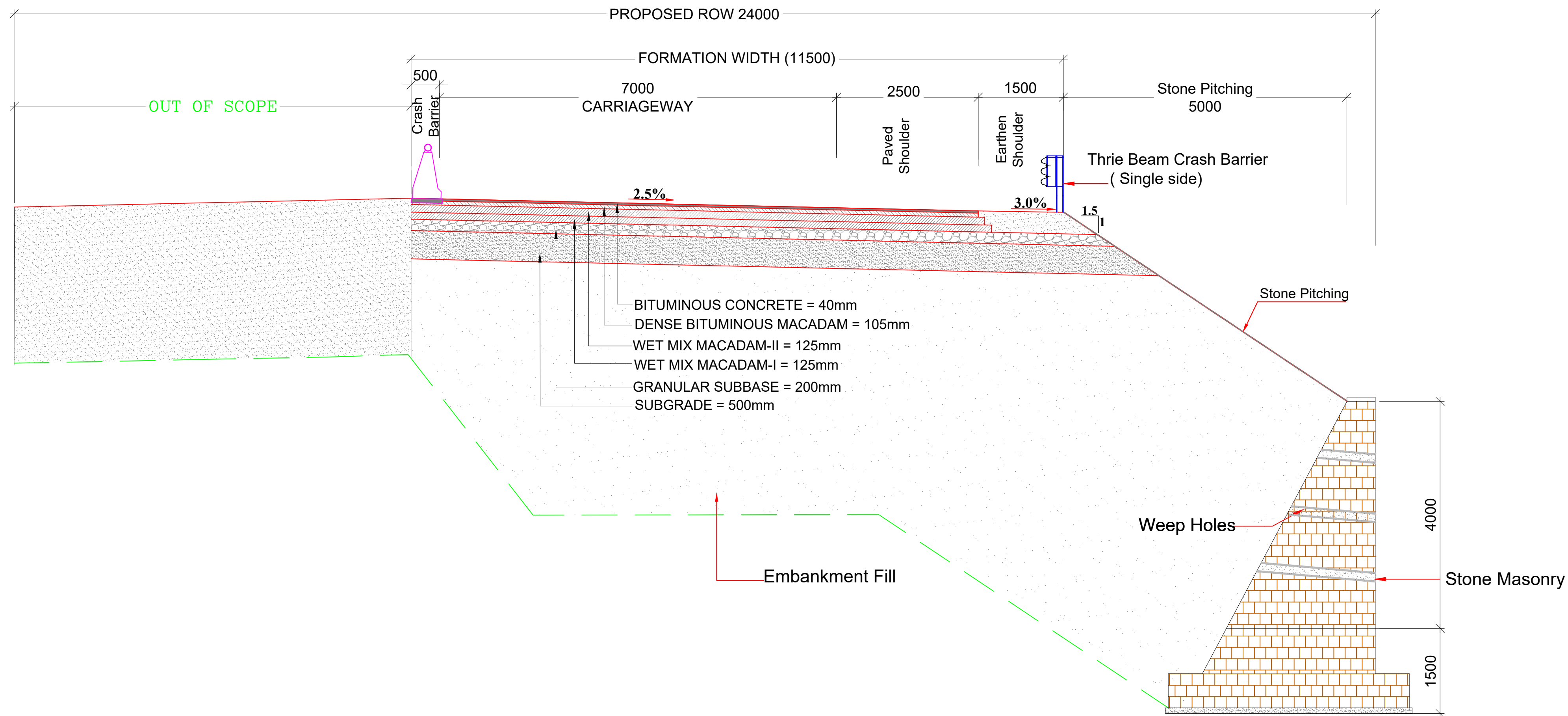
In Association with
Monarch Surveyors and Engineering Consultants Pvt. Ltd.,

TENDER DRAWING
(0+000 to 4+385)

Designed:	BD	Scale N.T.S
Drawn:	NL	
Checked:	AD	
Approved:	DSA	

Project	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
Drawing Title	PLAN & PROFILE (Km.4+000 to Km.4+385) NHIDCL/JOGIGHOPA/P&P/05/R0

TYPICAL CROSS SECTION

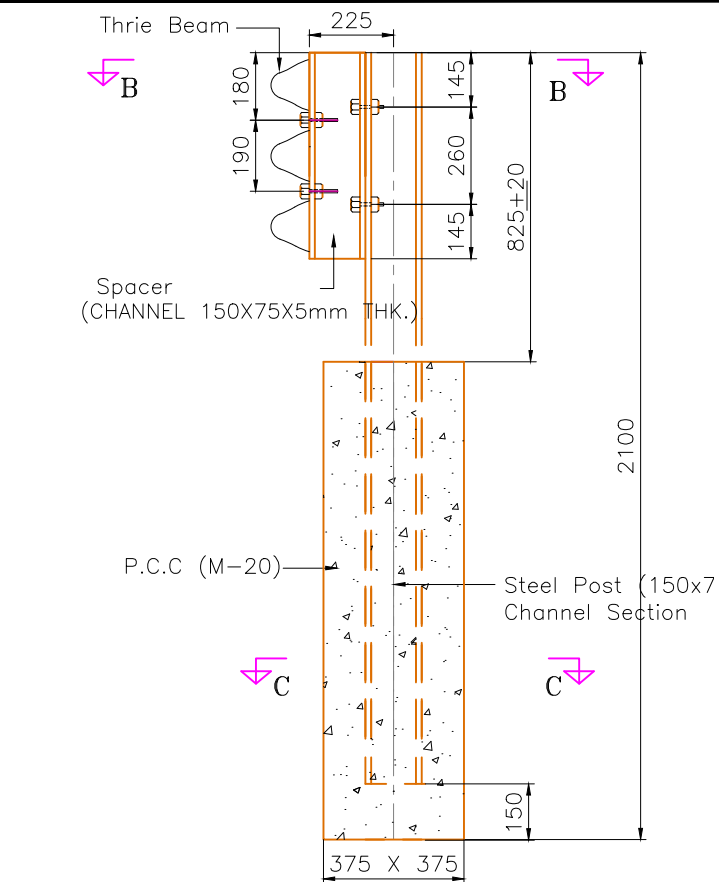


TYPE - 2- TYPICAL CROSS-SECTION FOR TWO LANE CARRIAGEWAY WITH RIGHT SIDE TOE WALL

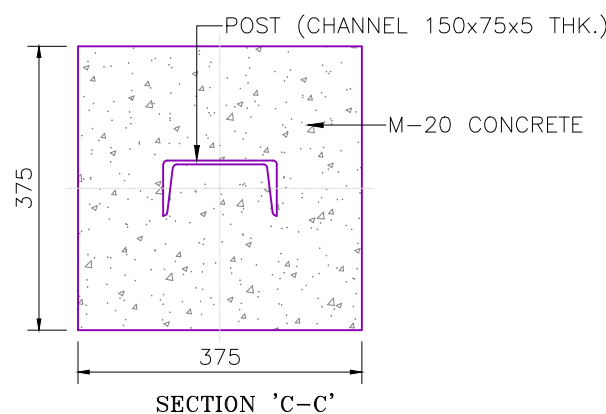
NOTE:-
1.All Dimension in millimeters except otherwise specified

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	TENDER DRAWING		Project	
R0	Jan. 2021	AS PER INSTRUCTION	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd., 	0+000 to 4+ 385)			Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
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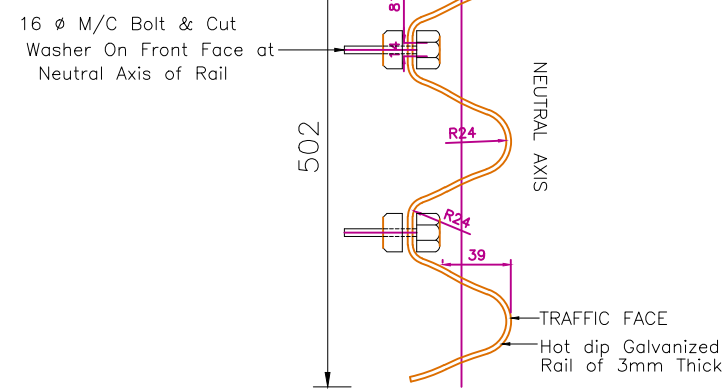
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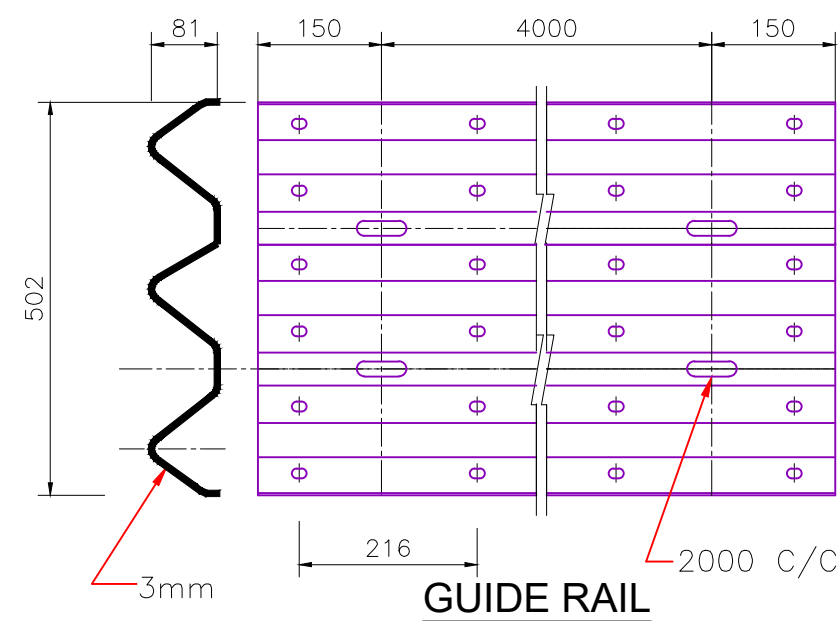
SECTION 2-2
Scale 1:20



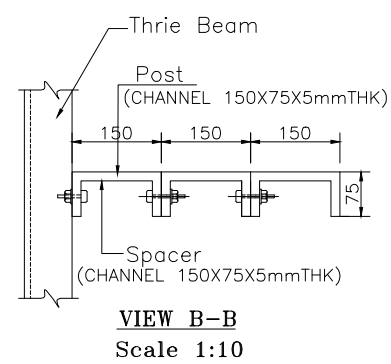
SECTION 'C-C'



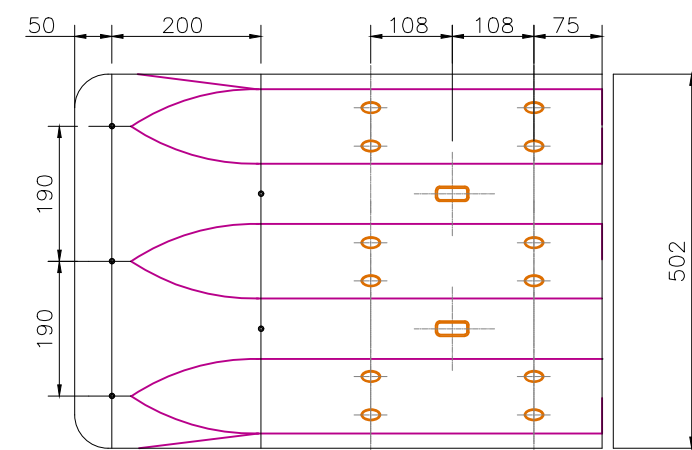
THRIE-BEAM
Scale 1:5



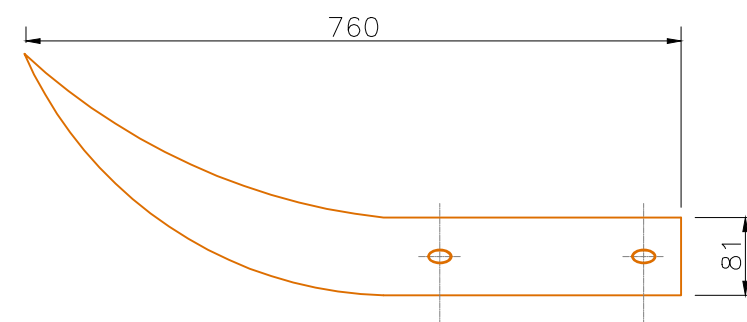
GUIDE RAIL



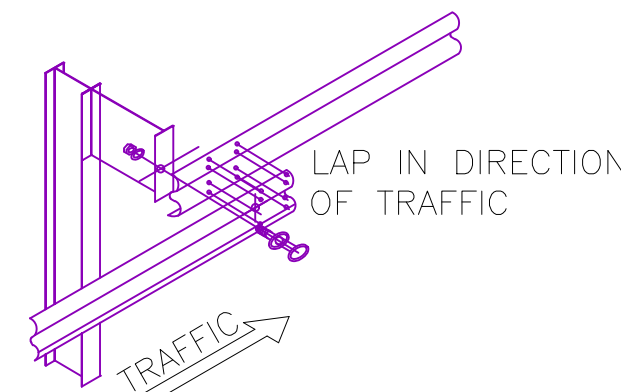
VIEW B-B
Scale 1:10



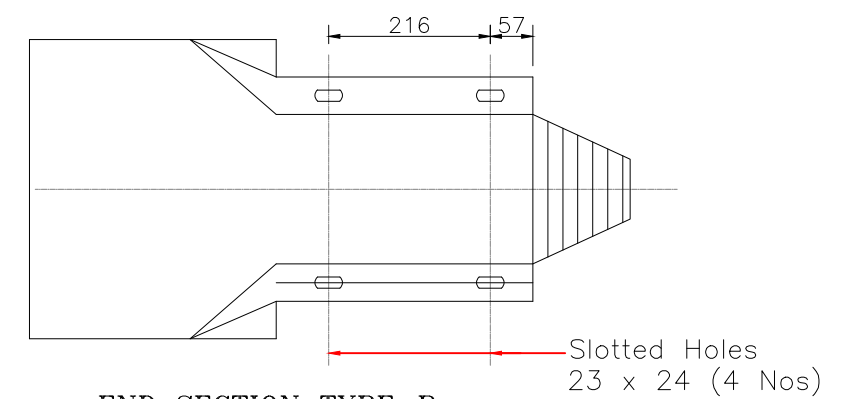
END SECTION TYPE - A
(FLARED END SECTION)
SIDE VIEW
Scale 1:10



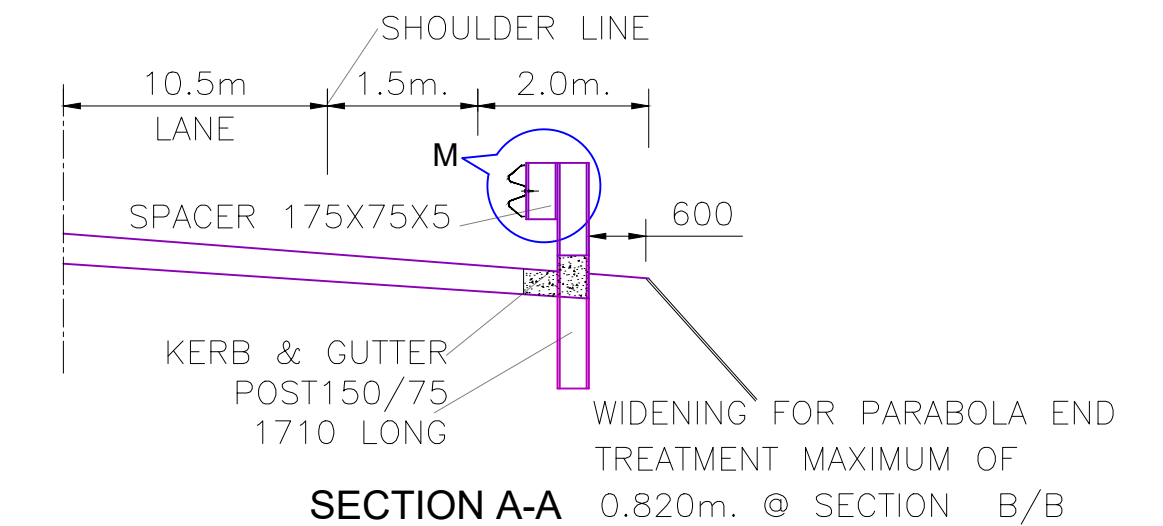
TOP VIEW OF END SECTION TYPE - A
(FLARED END SECTION)
Scale 1:10



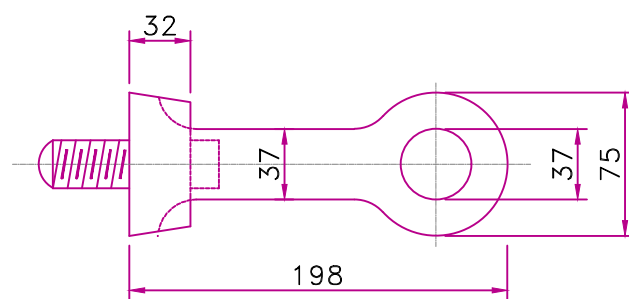
EXPLODED VIEW OF
THRIE BEAM SPLICE / ASSEMBLY



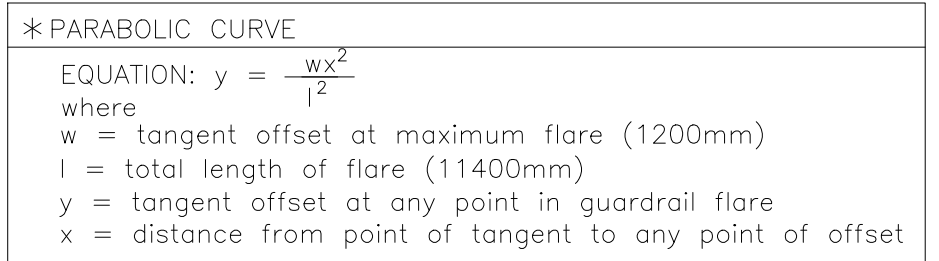
END SECTION TYPE-B
(ROUNDED END SECTION)
SIDE VIEW



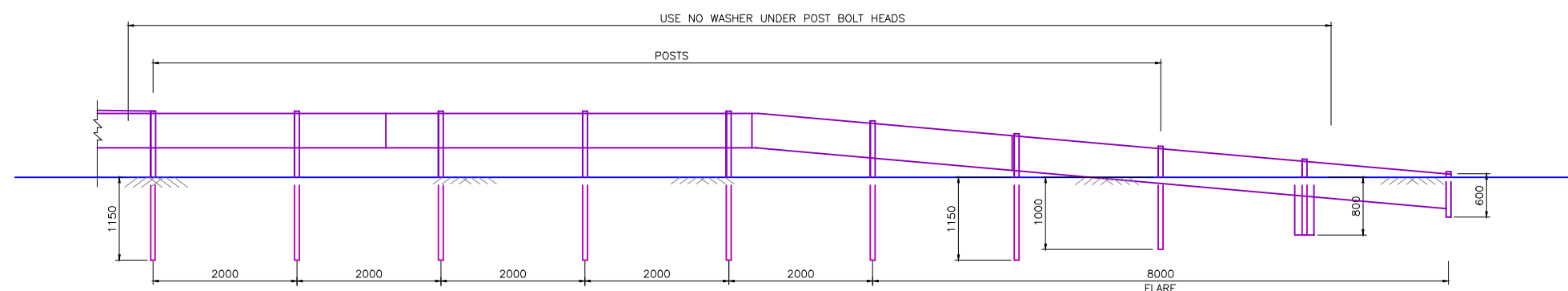
SECTION A-A



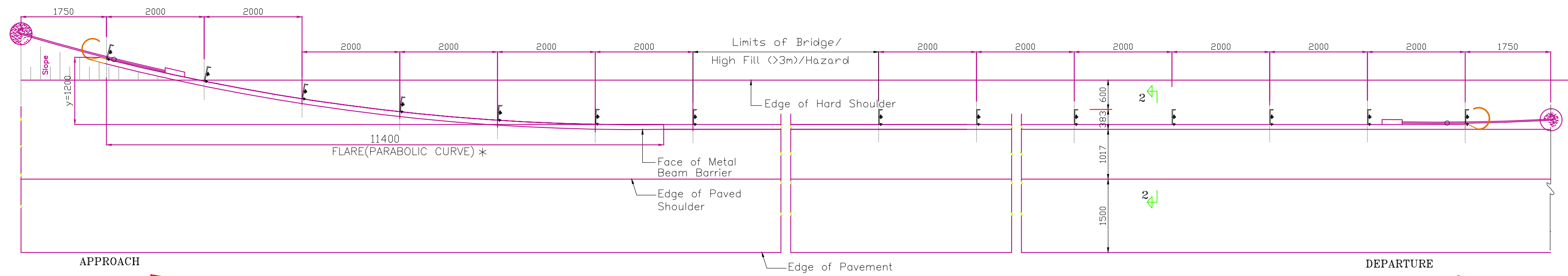
DETAIL OF EYE
Scale 1:5



*PARABOLIC CURVE
EQUATION: $y = \frac{wx^2}{l^2}$
where
w = tangent offset at maximum flare (1200mm)
l = total length of flare (11400mm)
y = tangent offset at any point in guardrail flare
x = distance from point of tangent to any point of offset

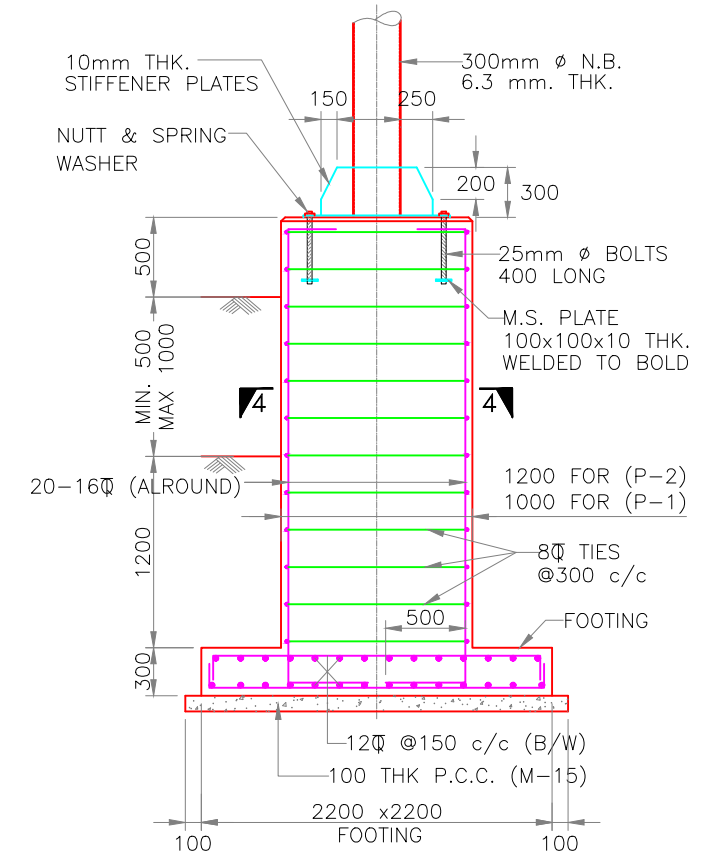
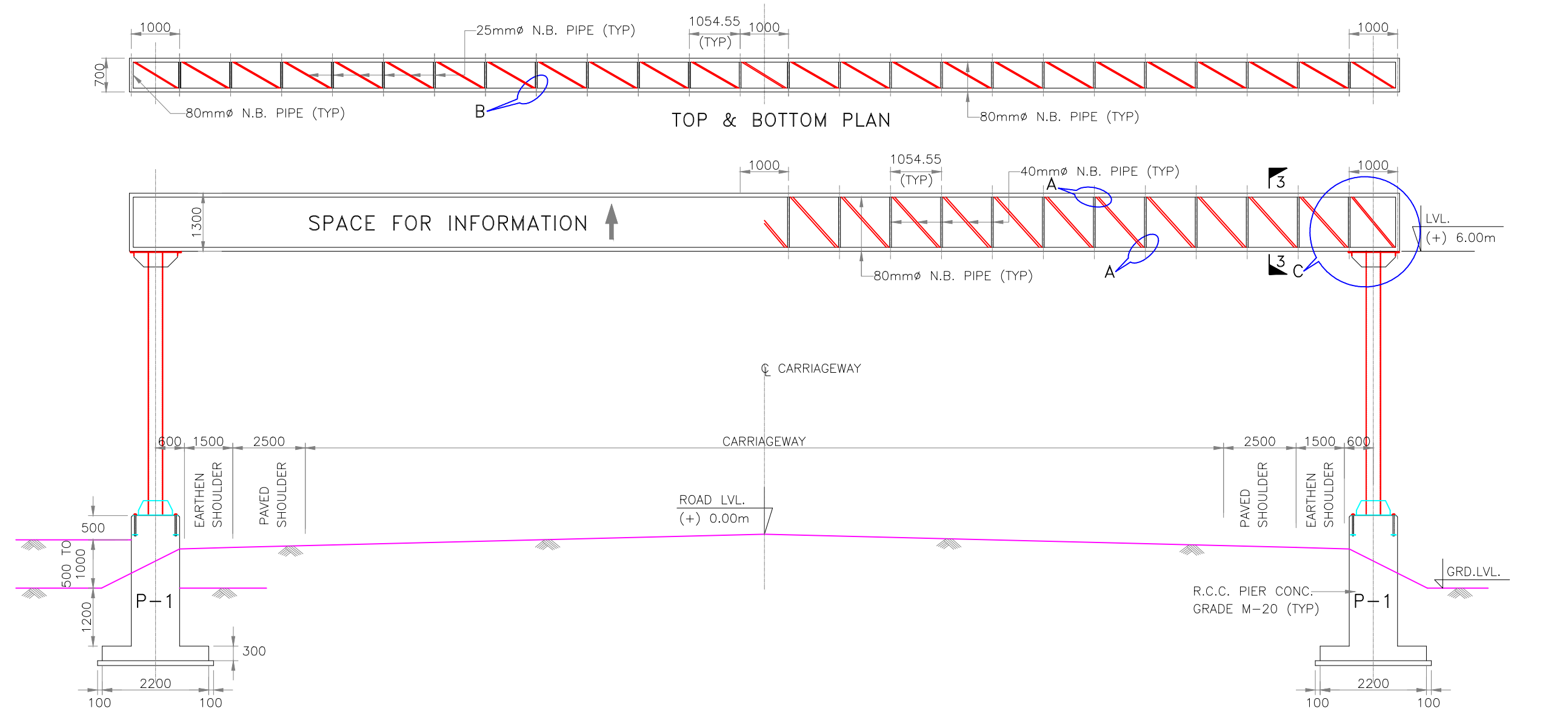


END DETAIL

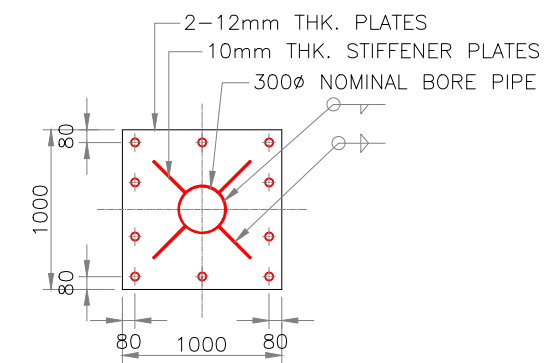


PLAN OF APPROACH END

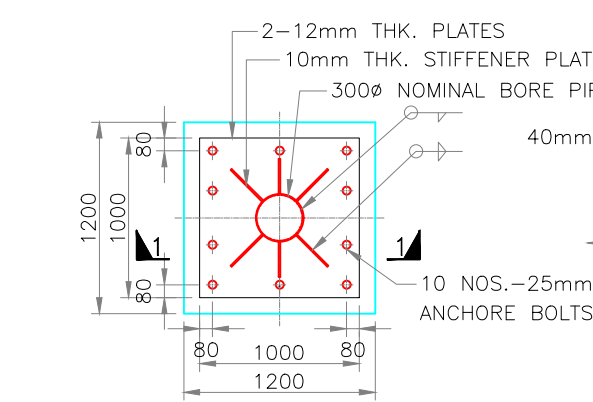
ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	TENDER DRAWING	Project
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					Designed: BD Drawn: NL Checked: AD Approved: DSA	Drawing Title Sheet size: A2 Drawing No. NHIDCL/JOGIGHOPA/ MISC/03/R0



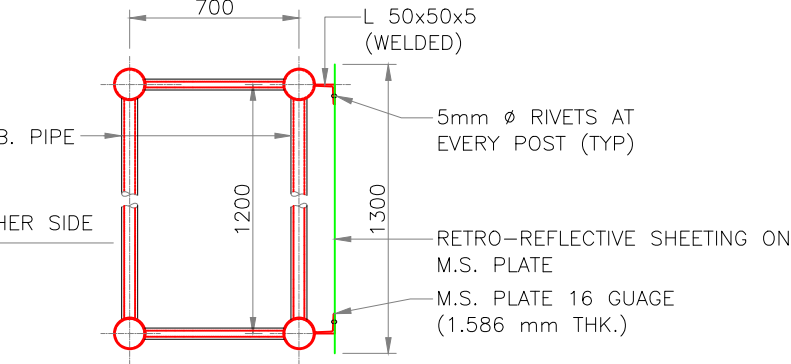
SECTION 1-1



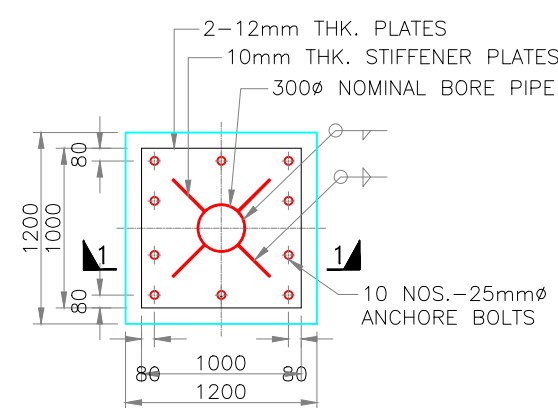
DETAILS COLUMN JUNCTION



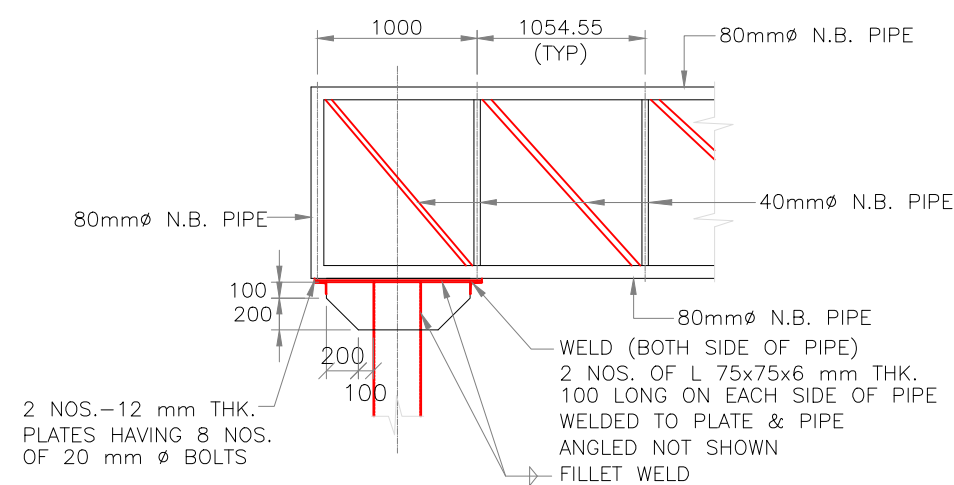
DETAILS COLUMN BASE FOR P-2



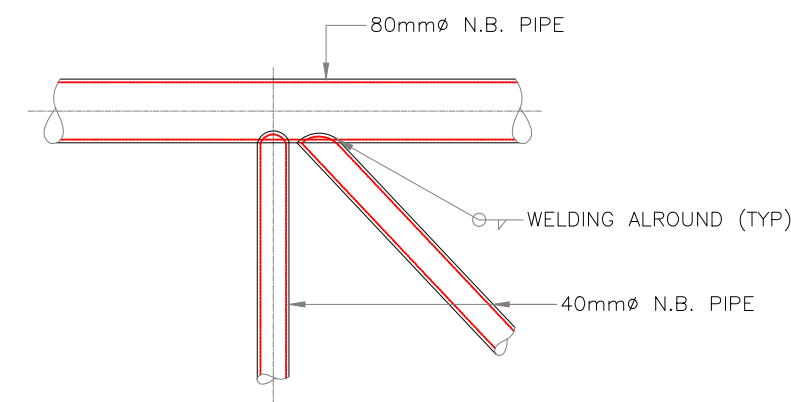
SECTION 3-3
(SIMILAR ARRANGEMENT SHALL BE ON THE OTHER SIDE)



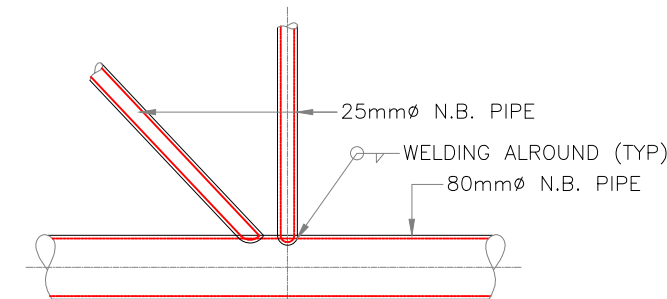
DETAILS COLUMN BASE FOR P-1



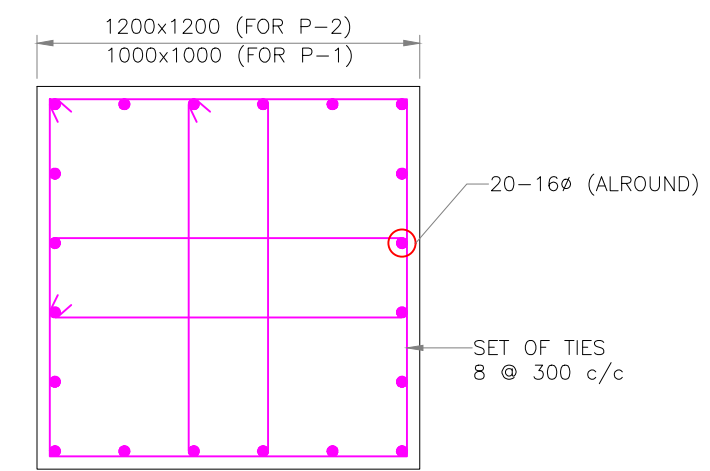
DETAIL-C



DETAIL-A



DETAIL-B

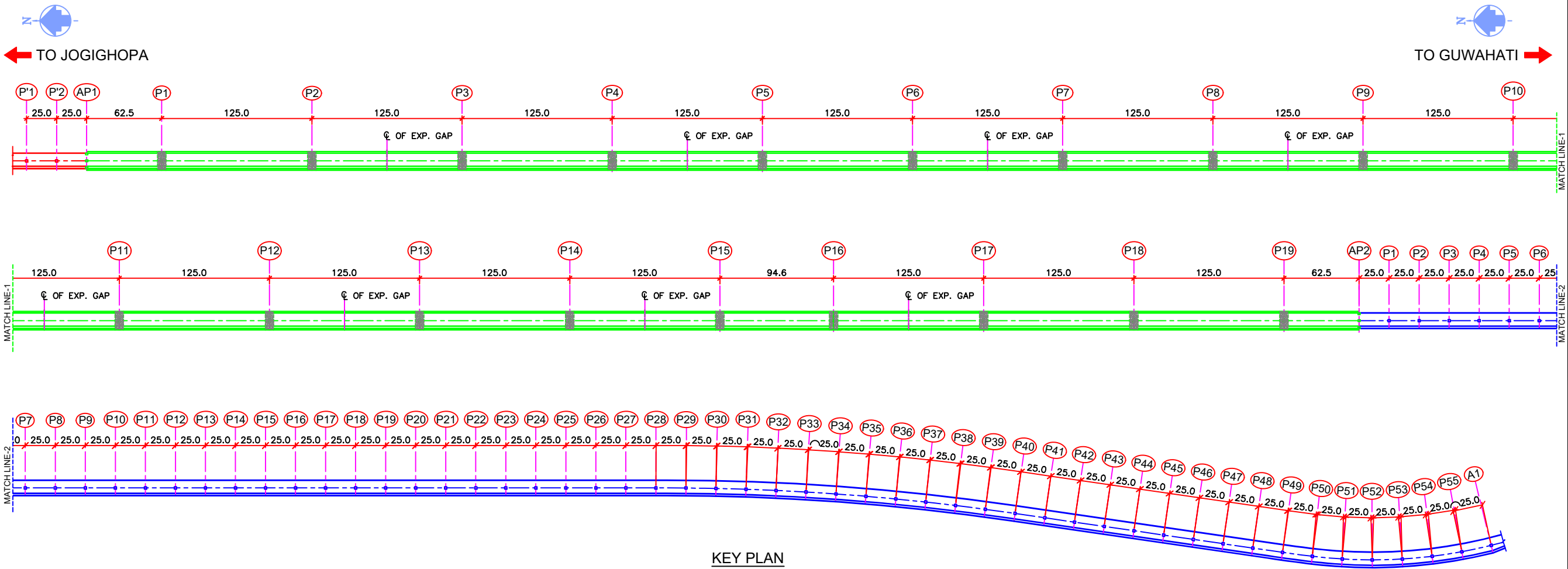


SECTION 4-4

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	
R0	Jan. 2021		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	TENDER DRAWING (0+000 to 4+ 385)	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
					Scale N.T.S	DETAILS OF OVER HEAD SIGN (PORTAL TYPE)
					Designed: BD Drawn: NL Checked: AD Approved: DSA	Drawing Title Sheet size: A2 Drawing No. NHIDCL/JOGIGHOPA/OHS/02/R0

STRUCTURES

DRAWING INDEX				
Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam				
DRAWING OF STRUCTURES				
SL. No.	DRAWING TITLE	DRAWING NO.	DATE OF ISSUE OF DRAWINGS	REVISION STATUS & DATE
A.	KEY PLAN			
1	KEY PLAN	NHIDCL/JOGIGHOPA/KEY PLAN/01/R0	Jan-21	R0
B.	EXTRADOSED BRIDGE			
1	SPAN ARRANGEMENT DRAWING FOR EXISTING NARANARAYAN SETU (RAIL CUM ROAD BRIDGE) & PROPOSED 2-LANE EXTRADOSED BRIDGE	NHIDCL/JOGIGHOPA/SAD/01/R0	Jan-21	R0
2	GENERAL ARRANGEMENT DRAWING FOR EXTRA DOSE BRIDGE	NHIDCL/JOGIGHOPA/EXTRADOSED BRIDGE/01/R0	Jan-21	R0
		NHIDCL/JOGIGHOPA/EXTRADOSED BRIDGE/02/R0	Jan-21	R0
		NHIDCL/JOGIGHOPA/EXTRADOSED BRIDGE/03/R0	Jan-21	R0
		NHIDCL/JOGIGHOPA/EXTRADOSED BRIDGE/04/R0	Jan-21	R0
		NHIDCL/JOGIGHOPA/EXTRADOSED BRIDGE/05/R0	Jan-21	R0
		NHIDCL/JOGIGHOPA/EXTRADOSED BRIDGE/06/R0	Jan-21	R0
		NHIDCL/JOGIGHOPA/EXTRADOSED BRIDGE/07/R0	Jan-21	R0
3	REINFORCEMENT DRAWING FOR EXTRADOSED BRIDGE	NHIDCL/JOGIGHOPA/REIN./01/R0	Jan-21	R0
C.	VIADUCT			
1	GENERAL ARRANGEMENT DRAWING FOR VIADUCT ON GUWAHATI SIDE	NHIDCL/JOGIGHOPA/VIADUCT/01/R0	Jan-21	R0
		NHIDCL/JOGIGHOPA/VIADUCT/02/R0	Jan-21	R0
		NHIDCL/JOGIGHOPA/VIADUCT/03/R0	Jan-21	R0
		NHIDCL/JOGIGHOPA/VIADUCT/04/R0	Jan-21	R0
		NHIDCL/JOGIGHOPA/VIADUCT/05/R0	Jan-21	R0
		NHIDCL/JOGIGHOPA/VIADUCT/06/R0	Jan-21	R0
D.	SMALL VEHICULAR UNDERPASS			
1	GENERAL ARRANGEMENT DRAWING FOR SMALL VEHICULAR UNDERPASS AT CH-3+940	NHIDCL/JOGIGHOPA/SVUP/3+940/01/R0	Jan-21	R0
E.	CULVERT			
1	GENERAL ARRANGEMENT DRAWING OF SINGLE CELL BOX CULVERT	NHIDCL/JOGIGHOPA/CUL/4+015/01/R0	Jan-21	R0



KEY PLAN

SPAN ARRANGEMENT FOR VIADUCT ON JOGIGHOPA SIDE
2x25.0m = 50.0m
SPAN ARRANGEMENT FOR EXTRADOSED BRIDGE
1x62.5m+14x125.0m+1x94.6m+3x125.0m+1x62.5m
TOTAL LENGTH OF BRIDGE = 2344.60m
SPAN ARRANGEMENT FOR VIADUCT ON GUWAHATI SIDE
56x25.0m = 1400.0m

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT	Project	Drawing Title	Drawing No.
R0	JAN 2021		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	TENDER DRAWING (0+000 to 4+ 385)	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam	KEY PLAN
					Designed: PK Drawn: KS Checked: RKS Approved: DSA	Scale :- AS SHOWN	NHIDCL/JOGIGHOPA/KEY PLAN/01/R0

EXTRADOSED BRIDGE

MATCH LINE-1

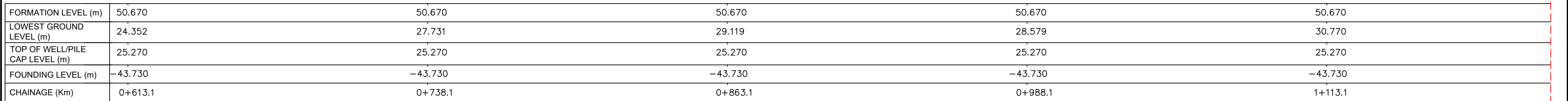
(SCALE 1:1100)



(SCALE 1:1100)

SPAN ARRANGEMENT FOR EXTRADOSSED BRIDGE
 $1 \times 62.5\text{m} + 14 \times 125.0\text{m} + 1 \times 94.6\text{m} + 3 \times 125.0\text{m} + 1 \times 62.5\text{m}$
 TOTAL LENGTH OF BRIDGE = 2344.60m
 SPAN ARRANGEMENT FOR VIADUCT ON JOGIGHOPA SIDE
 $2 \times 25.0\text{m} = 50.0\text{m}$

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	TENDER DRAWING (0+000 to 4+ 385)		Project
R0	JAN 2021		 NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd., 	Designed: PK Drawn: KS Checked: RKS Approved: DSA Scale :- AS SHOWN		Drawing Title
		Drawing No.					
							Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
							GENERAL ARRANGEMENT DRAWING FOR EXTRADOSED BRIDGE
							NHIDCL/JOGIGHOPA/ EXTRADOSED BRIDGE/01/R0

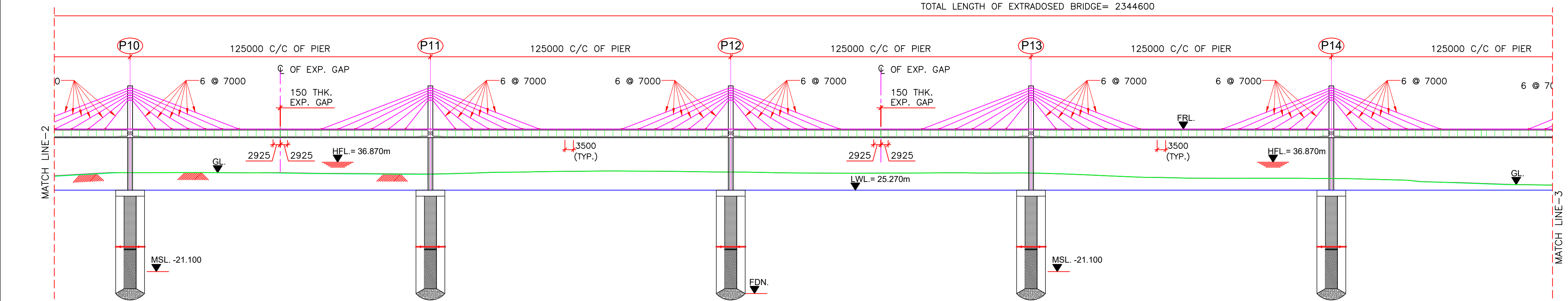


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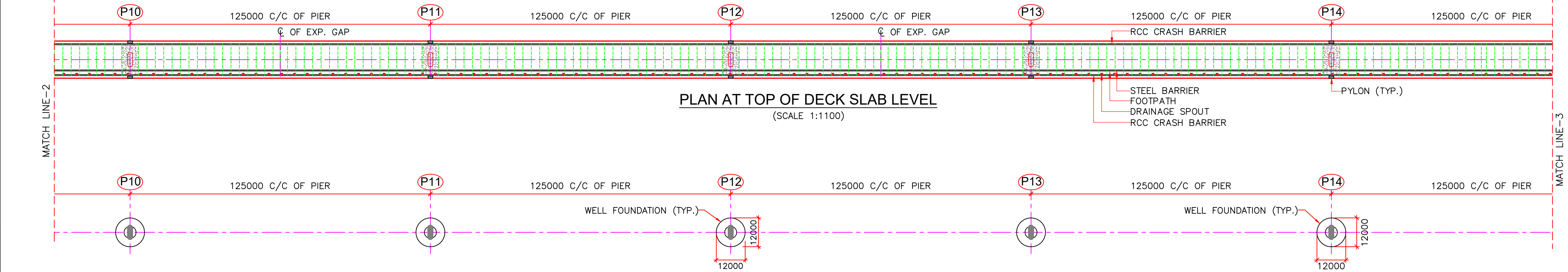
SPAN ARRANGEMENT FOR EXTRADOSSED BRIDGE
1x62.5m+14x125.0m+1x94.6m+3x125.0m+1x62.5
Total Length of Bridge = 2344.60m

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.  (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with  Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	TENDER DRAWING (0+000 to 4+ 385)		Project	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam	
R0	JAN 2021				Designed: PK Drawn: KS Checked: RKS Approved: DSA		Scale :- AS SHOWN	Drawing Title	GENERAL ARRANGEMENT DRAWING FOR EXTRADOSSED BRIDGE
								Drawing No.	NHIDCL/JOGIGHOPA/ EXTRADOSSED BRIDGE/02/R0

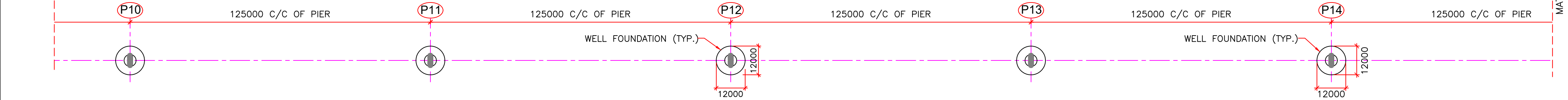


FORMATION LEVEL (m)	50.670	50.670	50.670	50.670	50.670
LOWEST GROUND LEVEL (m)	32.550	31.893	32.793	32.336	30.114
TOP OF WELL/PILE CAP LEVEL (m)	25.270	25.270	25.270	25.270	25.270
FOUNDING LEVEL (m)	-43.730	-43.730	-43.730	-43.730	-43.730
CHAINAGE (Km)	1+238.1	1+363.1	1+488.1	1+613.1	1+738.1

LONGITUDINAL ELEVATION OF EXTRADOSE BRIDGE
(SCALE 1:1100)



PLAN AT TOP OF DECK SLAB LEVEL
(SCALE 1:1100)

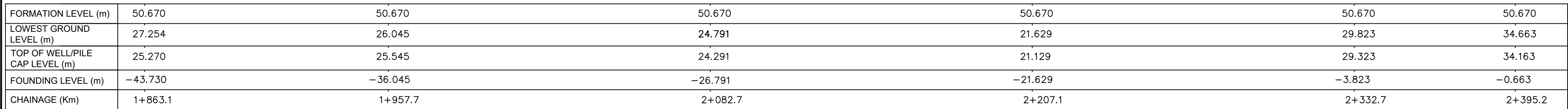


BOTTOM PLAN
(SCALE 1:1100)

FORMATION LEVEL	50.670
SOFFIT LEVEL	46.880
HIGHEST FLOOD LEVEL	36.870
LOWEST WATER LEVEL	25.270

SPAN ARRANGEMENT FOR EXTRADOSED BRIDGE
1x62.5m+14x125.0m+1x94.6m+3x125.0m+1x62.5
Total Length of Bridge = 2344.60m

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT	TENDER DRAWING	Project	
R0	JAN 2021		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	(0+000 to 4+ 385)	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam	
					Designed: PK Drawn: KS Checked: RKS Approved: DSA	Drawing Title	GENERAL ARRANGEMENT DRAWING FOR EXTRADOSED BRIDGE
					Scale :- AS SHOWN	Drawing No.	NHIDCL/JOGIGHOPA/ EXTRADOSED BRIDGE/03/R0



PLAN AT TOP OF DECK SLAB LEVEL
(SCALE 1:1100)

Dimensions and Labels:

- P15 to P16: 94600 C/C OF PIER
- P16 to P17: 125000 C/C OF PIER
- P17 to P18: 125000 C/C OF PIER
- P18 to P19: 125000 C/C OF PIER
- P19 to AP2: 62500 C/C OF PIER
- EXP. GAP: 94600 C/C OF PIER (between P15 and P16)
- EXP. GAP: 125000 C/C OF PIER (between P17 and P18)
- EXP. GAP: 125000 C/C OF PIER (between P18 and P19)
- EXP. GAP: 62500 C/C OF PIER (between P19 and AP2)
- EXP. GAP: 94600 C/C OF PIER (between P15 and P16)

Legend:

- STEEL BARRIER
- FOOTPATH
- DRAINAGE SPOUT
- RCC CRASH BARRIER

Other Labels:

- P15, P16, P17, P18, P19, AP2
- LINE-3
- PLAN AT TOP OF DECK SLAB LEVEL
- (SCALE 1:1100)

FORMATION LEVEL	50.670
SOFFIT LEVEL	46.880
HIGHEST FLOOD LEVEL	36.870
LOWEST WATER LEVEL	25.270

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION
R0	JAN 2021	

CONSULTANT:

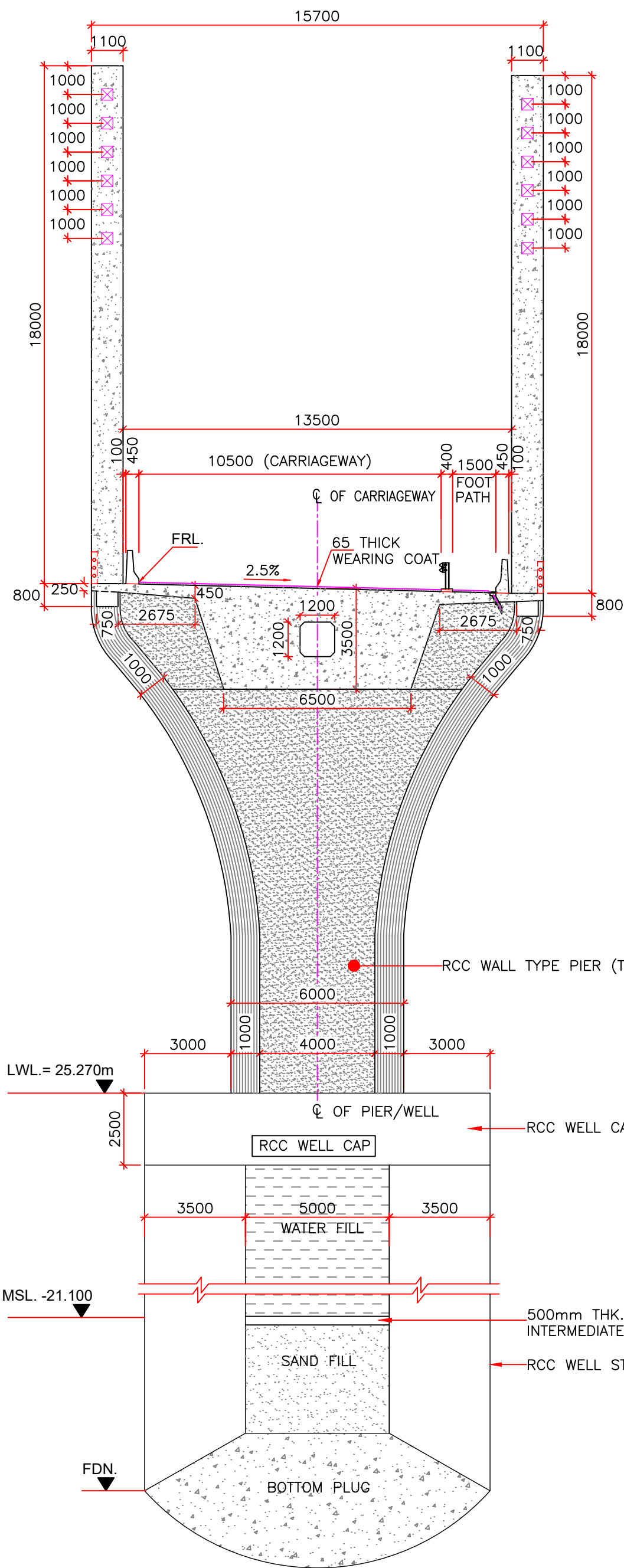


RODIC CONSULTANTS PVT. LTD.
1, JAI SINGH MARG (FIRST FLOOR), YMCA
CULTURAL CENTRE BUILDING
NEW DELHI - 110001 (INDIA)

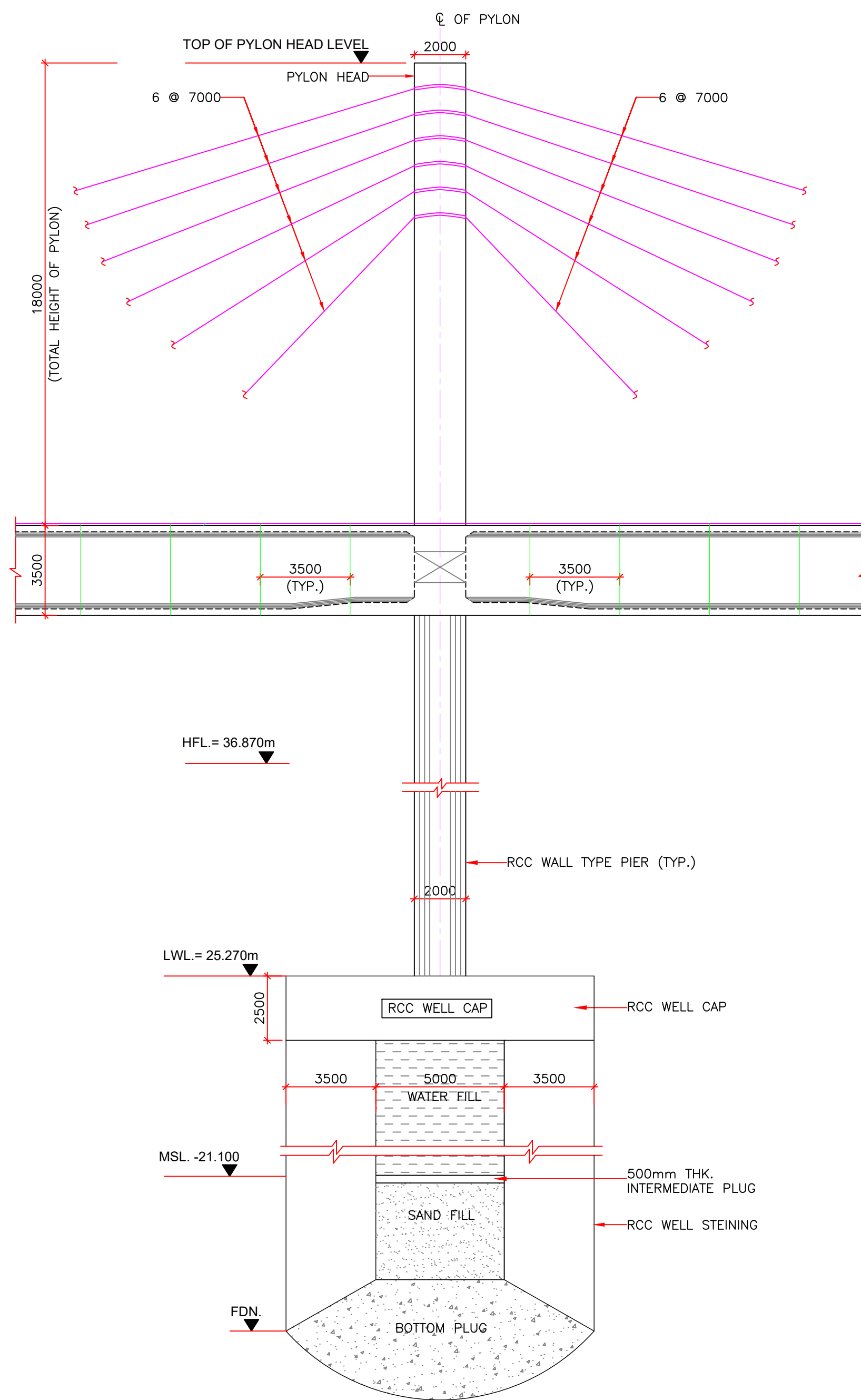
In Association with
Monarch Surveyors and Engineering
Consultants Pvt. Ltd.,

TENDER DRAWING (0+000 to 4+ 385)		
Designed:-	PK	Scale :- AS SHOWN
Drawn:-	KS	
Checked:-	RKS	
Approved:-	DSA	

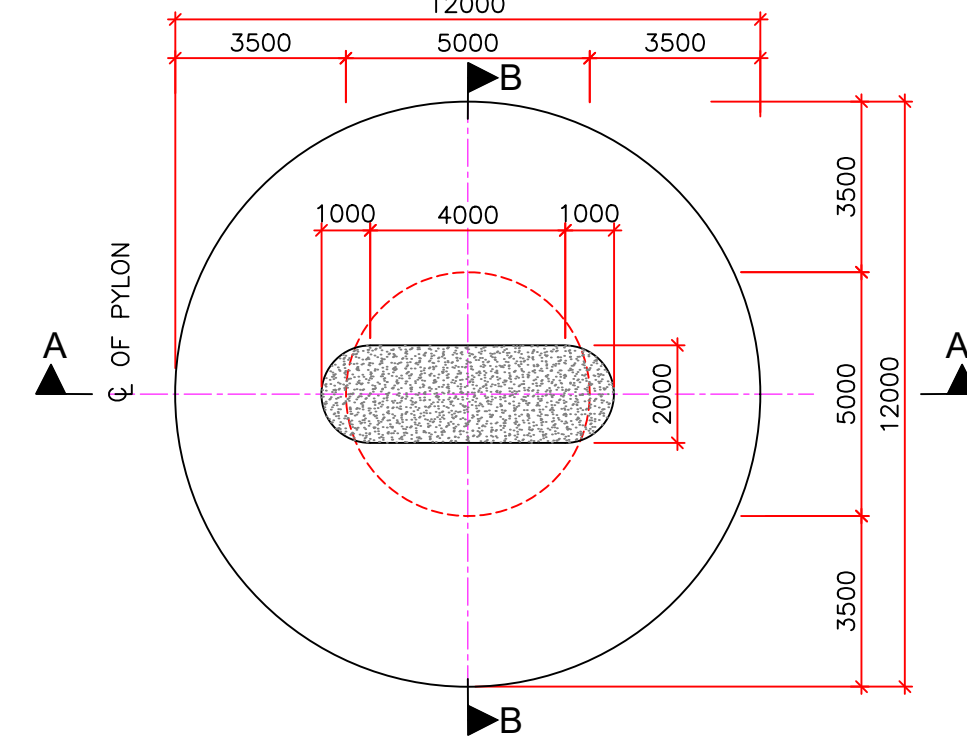
Project	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
Drawing Title	GENERAL ARRANGEMENT DRAWING FOR EXTRADOSED BRIDGE
Drawing No.	NHIDCL/JOGIGHOPA/ EXTRADOSED BRIDGE/04/R0



SECTION A-A
TYPICAL CROSS SECTION AT P1 TO P15
(SCALE 1:150)



SECTION B-B
TYPICAL LONGITUDINAL SECTION AT P1 TO P15
(SCALE 1:150)



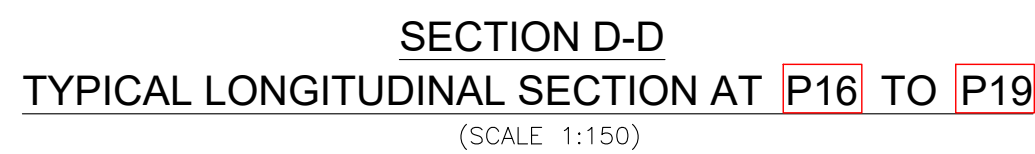
PLAN AT WELL CAP LEVEL
(SCALE 1:150)

NOTES:-

- ALL DIMENSIONS ARE IN mm AND LEVELS IN METRES UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
- EACH CARRIAGEWAY OF EXTRADOSE BRIDGE SHALL BE DESIGNED FOR GOVERNING CASE OF FOLLOWING
 - ONE LANE OF IRC CLASS 70R + ONE LANE OF IRC CLASS A
 - THREE LANE OF IRC CLASS A
 - IRC CLASS SV LOADING: SPECIAL MULTI AXLE HYDRAULIC TRAILER ON ONE SIDE OF THE CARRIAGEWAY AND 70R + CLASS A ON OTHER SIDE OF CARRIAGEWAY VEHICLE (PRIME MOVER WITH 20 AXLE TRAILER-GVW=385 Tonnes)
- CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150mm CUBES AS FOLLOWS :-

PSC BOX GIRDER FOR EXTRA DOSE PORTION	- M60
PIER & PYLON	- RCC M50
PEDESTAL	- M50
WELL CAP, WELL STEINING, & WELL KERB	- RCC M35
PILE	- M35
INTERMEDIATE PLUG	- PCC M25
BOTTOM PLUG	- PCC M25 (WITH 10% EXTRA CEMENT)
CRASH BARRIER	- M40
APPROACH SLAB	- M30
LEVELING COURSE	- M15
- PILE CAPACITY CONSIDERED FOR THE DESIGN OF 1.5m DIA PILE PILE IS 1200T AND 1.2M DIA PILE AS 400T
- PERMANENT STEEL LINER IN PILE UP TO MSL SHALL BE PROVIDED.
- THE REINFORCING STEEL SHALL BE TMT H.Y.S.D.BARS (GRADE DESIGNATION Fe-500D) CONFORMING TO IS:1786.
- PRESTRESSING CABLES SHALL COMPRISE OF LOW RELAXATION STRANDS CONFORMING TO IS:14268.
- CABLE PROPERTIES :-
 - STRAND NOMINAL DIAMETER - 15.7mm
 - STRAND NOMINAL AREA - 150mm²
 - ULTIMATE CAPACITY OF EACH STRAND - 28.44 TONES
- SBC FOR THE DESIGN OF WELL FOUNDATION = 135t/m²
- CLEAR COVER TO OUTERMOST STEEL IS 50mm FOR ALL COMPONENTS EXCEPT FOUNDATIONS IT SHALL BE 75mm.
- BACK FILLING BEHIND ABUTMENTS AND RETAINING WALLS SHALL CONSIST OF SELECTED EARTH CONFORMING TO APPENDIX :6 OF IRC:78-2000 HAVING PROPERTIES C=0, $\phi \geq 30^\circ$, $d=20'$ & $\gamma_d = 20$ KN/m³
- WEEP HOLES, SPACED AT 1000 C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN A STAGGERED MANNER IN ABUTMENTS AND RETURN WALLS FROM GROUND LEVEL TO WALL TOP LEVEL.
- 65mm THK. WEARING COAT COMPRISING OF 40mm THK. BITUMINOUS CONCRETE OVER LAID WITH 25mm THK. BITUMEN MASTIC LAYER CAN BE ADOPTED IN CONFORMITY WITH SECTION 500 OF MORTH SPECIFICATIONS.
- MODULAR TYPE EXPANSION JOINTS & STRIP SEAL EXP. JOINT OF PROVEN QUALITY SHALL BE PROVIDED IN ACCORDANCE WITH IRC:SP:69-2005 GUIDELINES AND SPECIFICATIONS FOR EXPANSION JOINTS.
- ALL EXPOSED CONCRETE SURFACES OF THE BRIDGE WILL BE PAINTED, AS PER SPECIFICATIONS, WITH APPROVED PROTECTIVE PAINT, COMPRISING OF INTERPENETRATING EPOXY PHENNOLIC POLYMERIC COATING SYSTEM.
- SPHERICAL BEARINGS SHALL BE DESIGNED AND MANUFACTURED AS PER PROVISION OF IRC:83(PART IV)-2014.
- DEPTH OF WELL SINKING SHALL BE MEASURED. FROM BOTTOM OF WELL CAP.
- THE WELL FOUNDATION SHALL BE SOCKETED IN ROCKY STRATA FOR A MINIMUM DEPTH OF 3m. IF ROCKY STRATA IS MET WITH.
- RIVER TRAINING WORK WILL BE PROVIDED ON U/S AND D/S SIDE OF THE BRIDGE TO PROTECT THE RIVER BANKS.
- MINIMUM CONCRETE COVER, GRADE OF CONCRETE, MINIMUM CEMENT CONTENT AND MAXIMUM W/C RATIO SHALL BE AS PER SEVERE CONDITION OF EXPOSURE.
- SUITABLE LENGTH OF SIDE SLOPE OF APPROACH ROADS BEHIND ABUTMENTS WILL BE PROTECTED BY SLOPE PITCHING AS PER PROVISION IN IRC : 89 - 1997.

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R0	JAN 2021		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam	GENERAL ARRANGEMENT DRAWING FOR EXTRADOSED BRIDGE
					TENDER DRAWING (0+000 to 4+ 385)	NHIDCL/JOGIGHOPA/EXTRADOSED BRIDGE/05/R0
					Designed: PK Drawn: KS Checked: RKS Approved: DSA	Drawing No.
					Scale :- AS SHOWN	



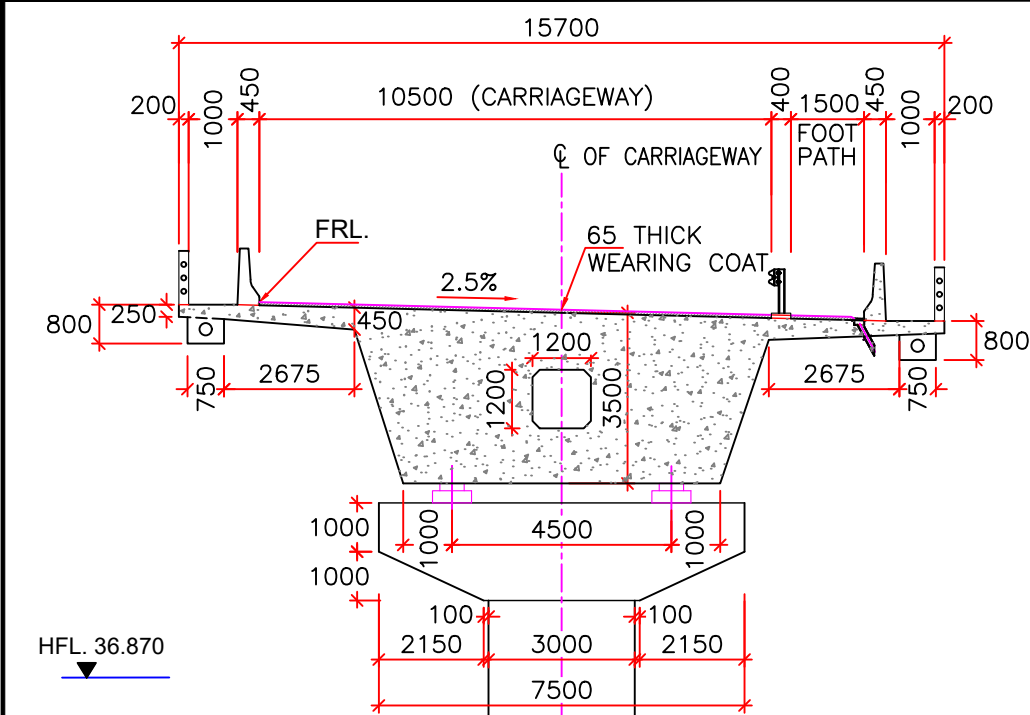
PLAN AT PILE CAP LEVEL

(SCALE 1:150)

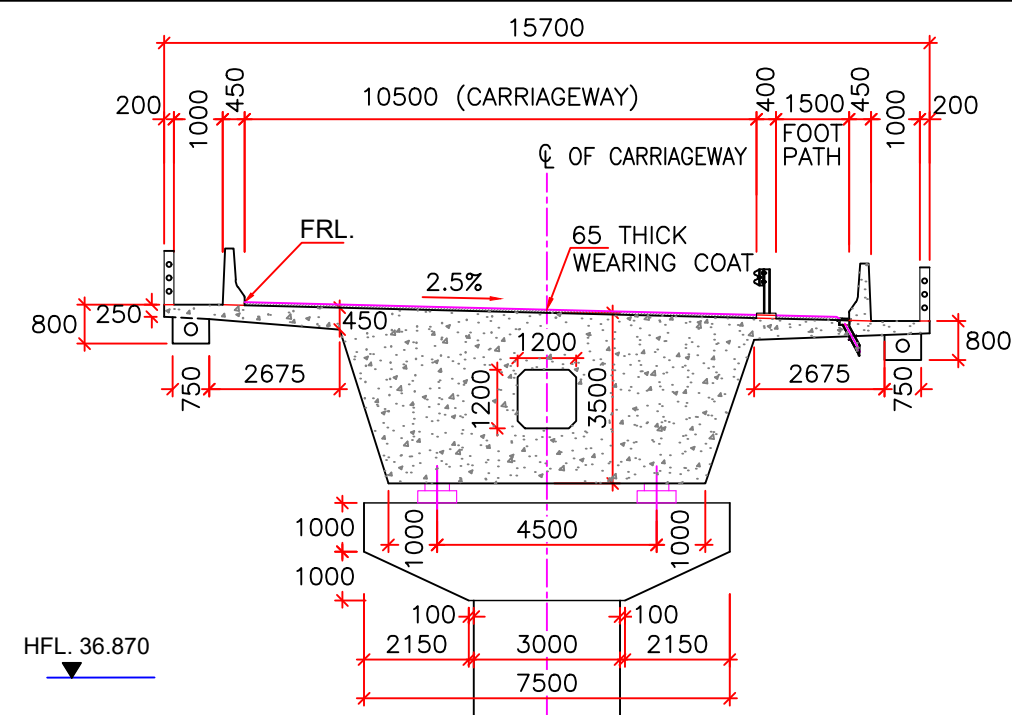
The diagram illustrates the plan view of the pile cap level. It shows a rectangular layout with overall dimensions of 11000 mm by 11000 mm. The layout includes a central rectangular area with rounded corners, measuring 4000 mm by 2000 mm, which is filled with a stippled pattern. Surrounding this central area are eight circular pile locations, arranged in a 3x3 grid with the center position occupied by the central rectangle. The dimensions between the pile locations are 1000 mm between the outer piles and 4500 mm between the middle piles. The overall dimensions are 11000 mm by 11000 mm. The diagram also shows the center of the pylon (C) and the direction of the wind (D).

[illegible]

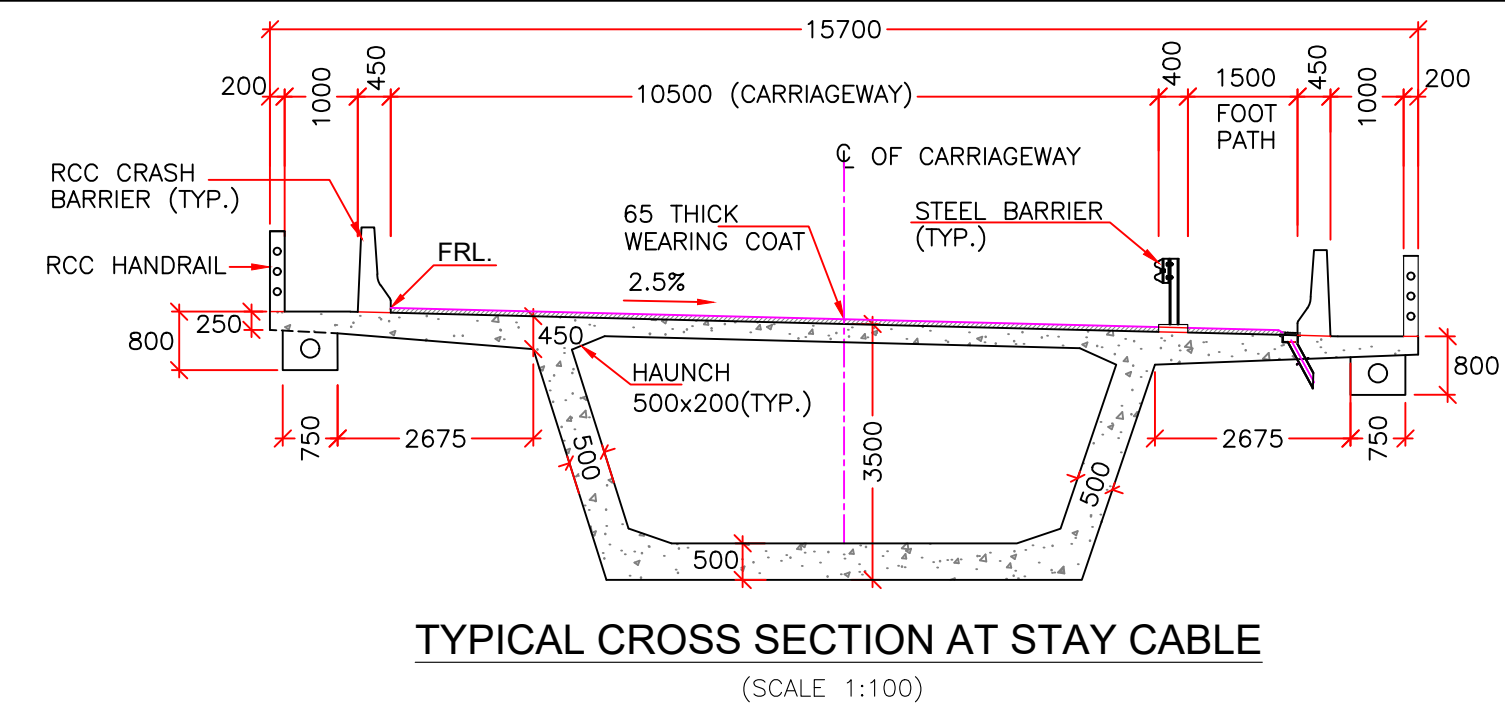
ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT  NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,  <th colspan="2">TENDER DRAWING (0+000 to 4+ 385)</th> <th>Project</th> <th>Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam</th>	TENDER DRAWING (0+000 to 4+ 385)		Project	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
R0	JAN 2021				Designed: PK	Scale :-	Drawing Title	GENERAL ARRANGEMENT DRAWING FOR EXTRADOSSED BRIDGE
					Drawn: KS	AS SHOWN	Drawing No.	NHIDCL/JOGIGHOPA/EXTRADOSSED BRIDGE/06/R0
			Checked: RKS	Approved: DSA				



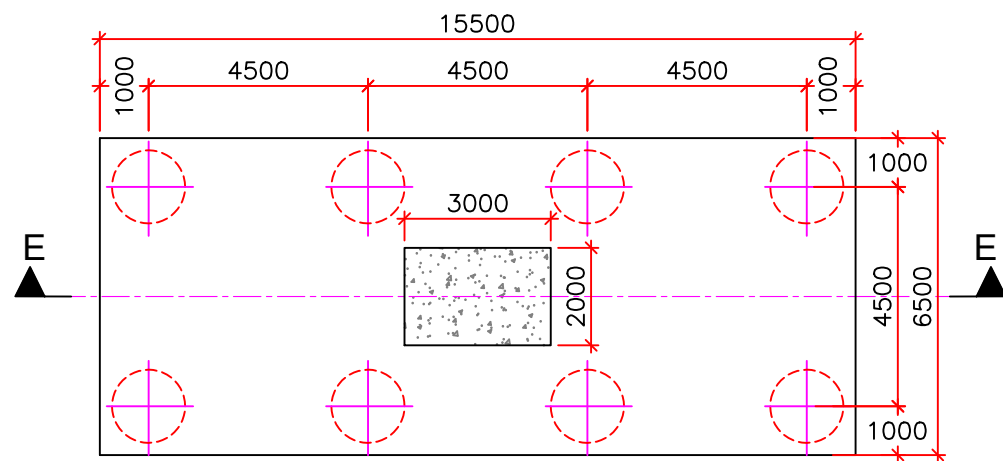
SECTION E-E
TYPICAL CROSS SECTION AT API
(SCALE 1:150)



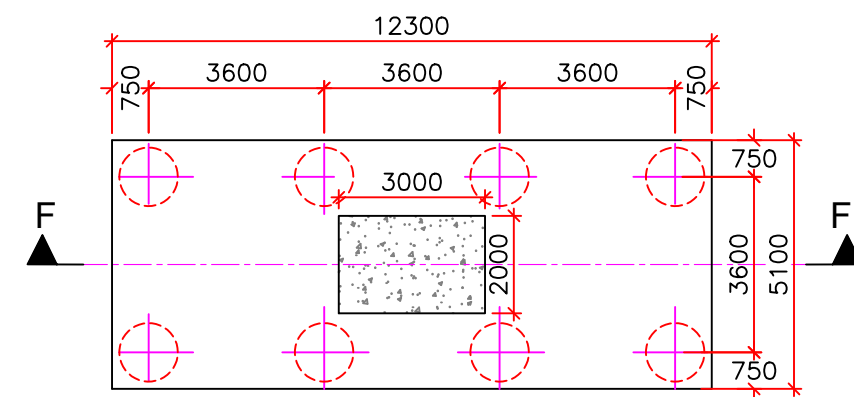
SECTION F-F
TYPICAL CROSS SECTION AT AP2
(SCALE 1:150)



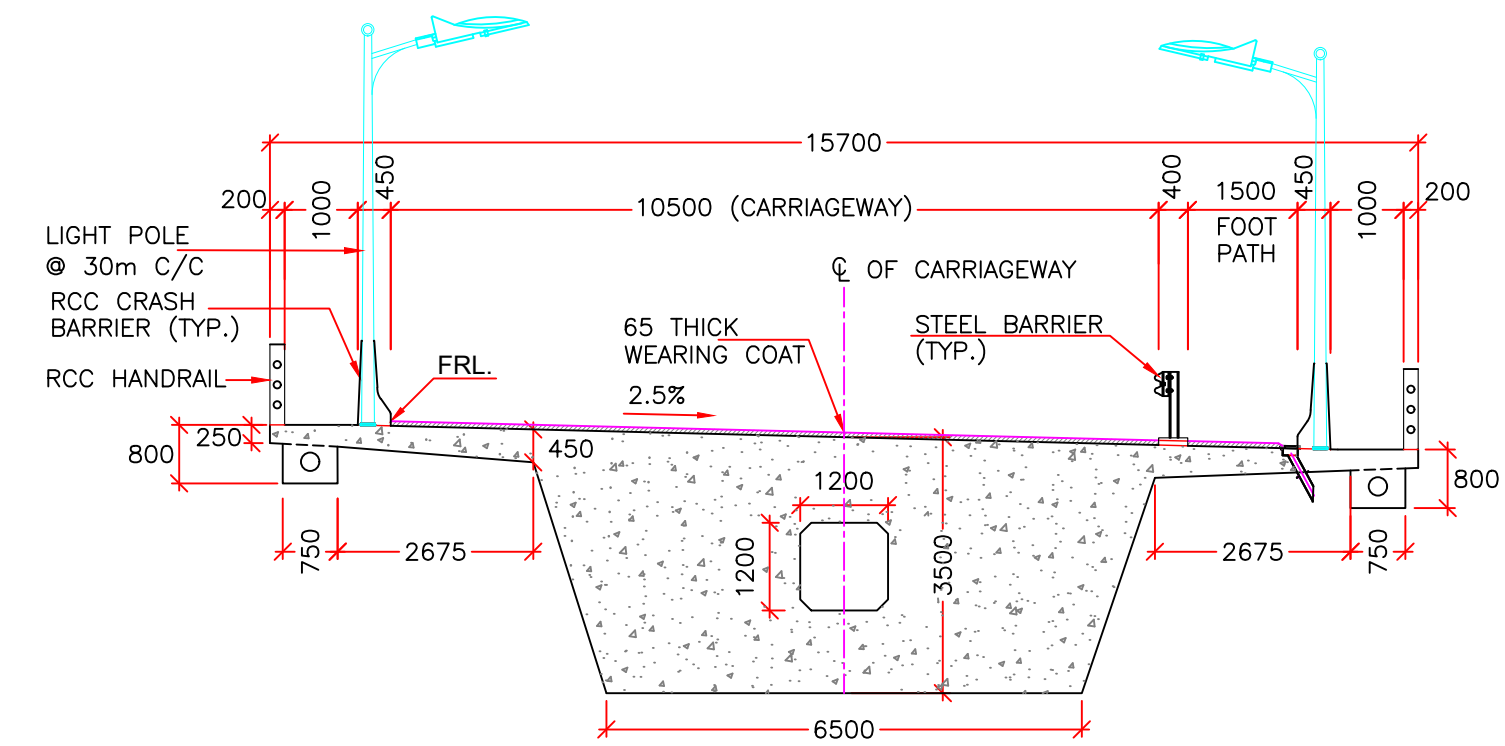
TYPICAL CROSS SECTION AT STAY CABLE
(SCALE 1:100)



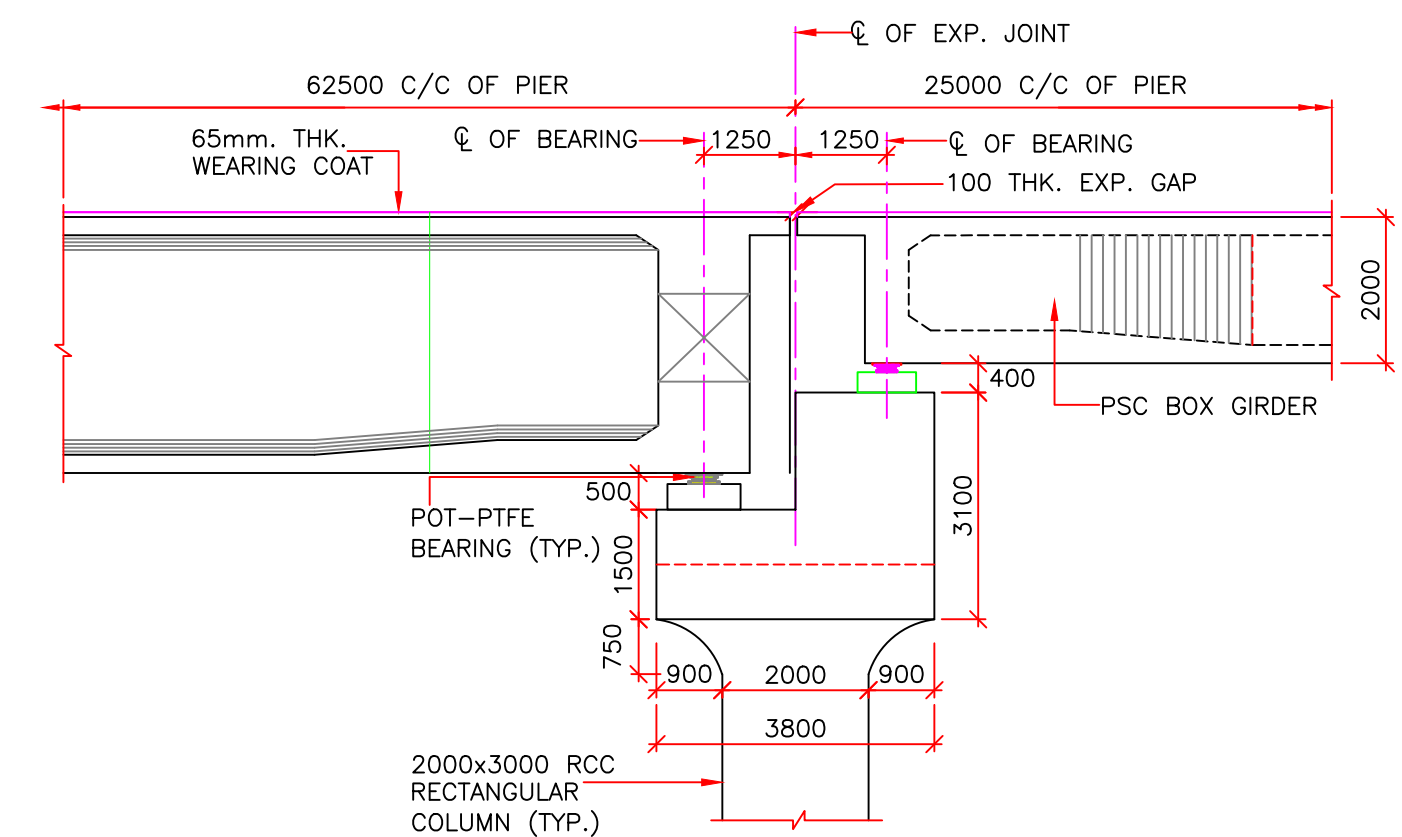
PLAN AT PILE CAP LEVEL
(SCALE 1:150)



PLAN AT PILE CAP LEVEL
(SCALE 1:150)



TYPICAL CROSS SECTION AT END DIAPHRAGM
(SCALE 1:100)



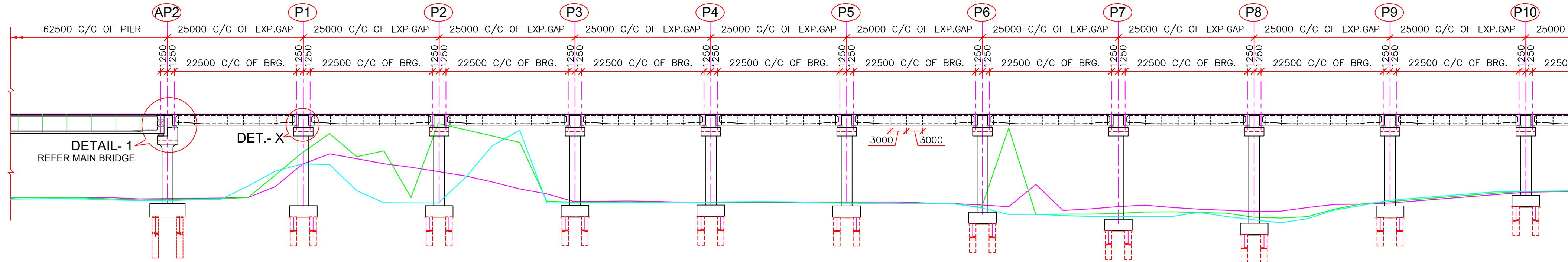
DETAIL- '2'
(SCALE 1:100)

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT	TENDER DRAWING	Project
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					Designed: PK Drawn: KS Checked: RKS Approved: DSA	Drawing Title GENERAL ARRANGEMENT DRAWING FOR EXTRADOSED BRIDGE
					Scale :- AS SHOWN	Drawing No. NHIDCL/JOGIGHOPA/ EXTRADOSED BRIDGE/07/R0

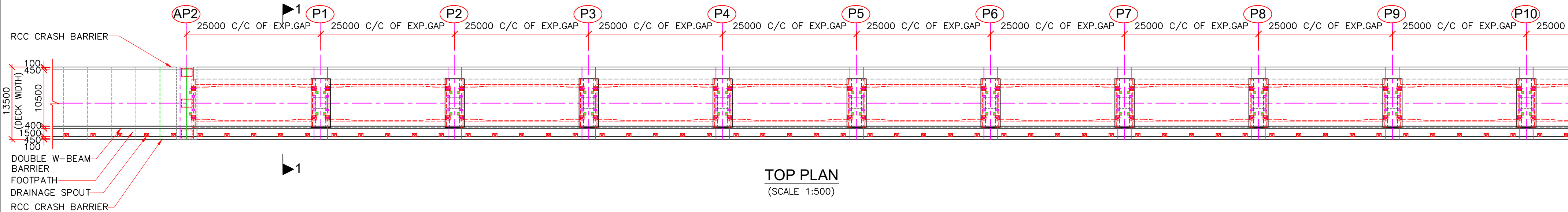
VIADUCT

← TO JOGIGHOPA

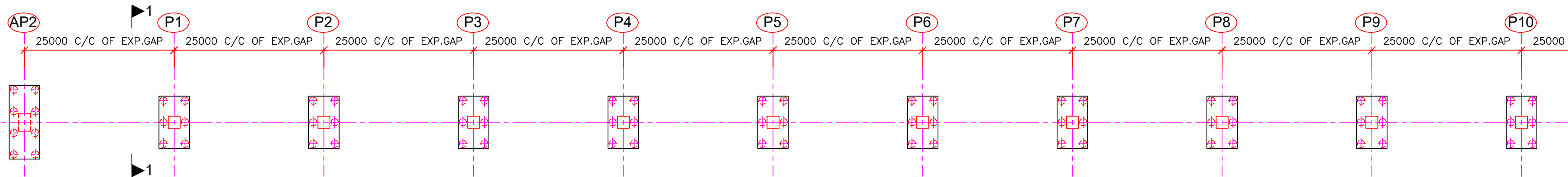
TO GUWAHATI →



LONGITUDINAL ELEVATION OF APPROACHES
(SCALE 1:500)



TOP PLAN
(SCALE 1:500)



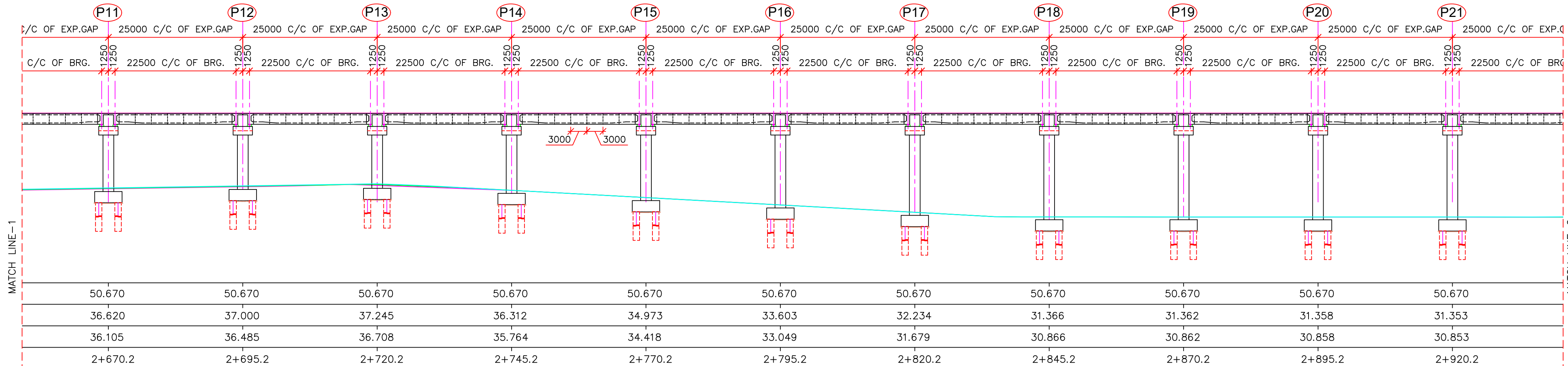
BOTTOM PLAN
(SCALE 1:500)

SPAN ARRANGEMENT FOR
VIADUCT ON GUWAHATI SIDE
56X25.0M = 1400.0M

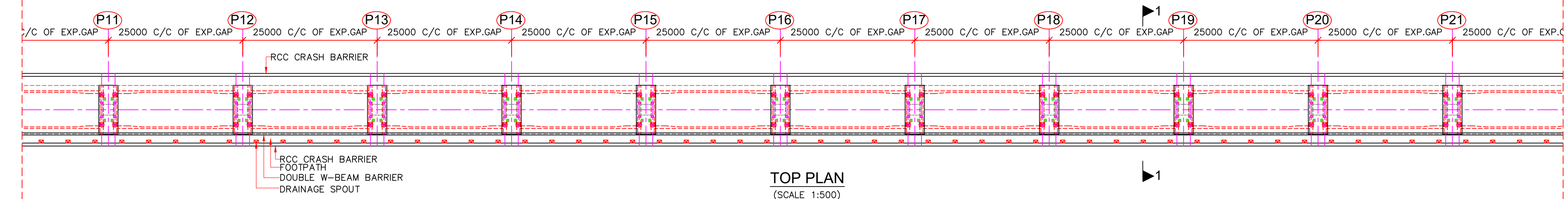
ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT	TENDER DRAWING		Project		
R0	JAN 2021		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	Rodici In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	(0+000 to 4+ 385)		Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam		
					Designed: AK	Scale :-		Drawing Title	GENERAL ARRANGEMENT DRAWING FOR VIADUCT ON GUWAHATI SIDE
					Drawn: KS	AS SHOWN		Drawing No.	NHIDCL/JOGIGHOPA/ VIADUCT/01/R0
					Checked: VT				
					Approved: DSA				

← TO JOGIGHOPA

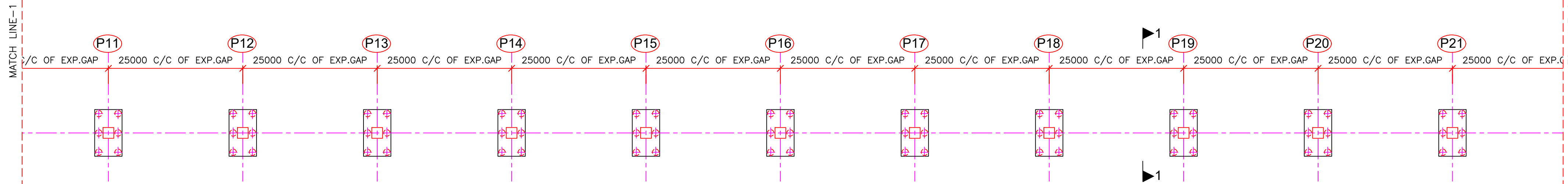
TO GUWAHATI →



LONGITUDINAL ELEVATION OF APPROACHES
(SCALE 1:500)



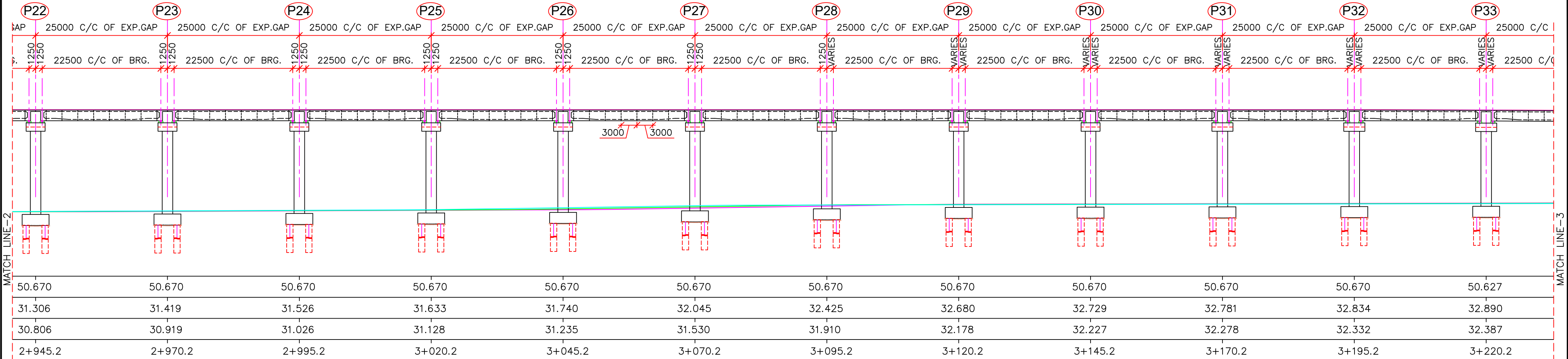
TOP PLAN
(SCALE 1:500)



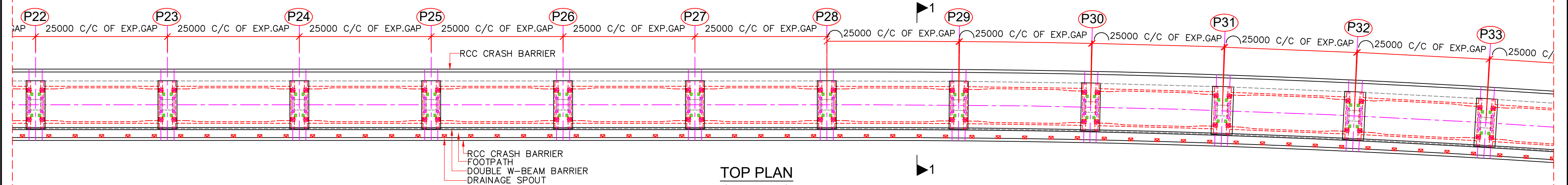
BOTTOM PLAN
(SCALE 1:500)

SPAN ARRANGEMENT FOR
VIADUCT ON GUWAHATI SIDE
56x25.0m = 1400.0m

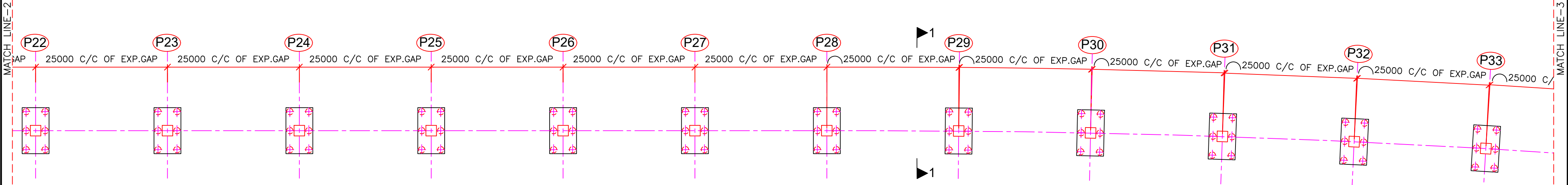
ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	TENDER DRAWING		Project
R0	JAN 2021		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	(0+000 to 4+ 385)		Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
					Designed: AK	Scale :-	Drawing Title
					Drawn: KS	AS SHOWN	GENERAL ARRANGEMENT DRAWING FOR VIADUCT ON GUWAHATI SIDE
					Checked: VT		Drawing No.
					Approved: DSA		NHIDCL/JOGIGHOPA/ VIADUCT/02/R0



LONGITUDINAL ELEVATION OF APPROACHES
(SCALE 1:500)



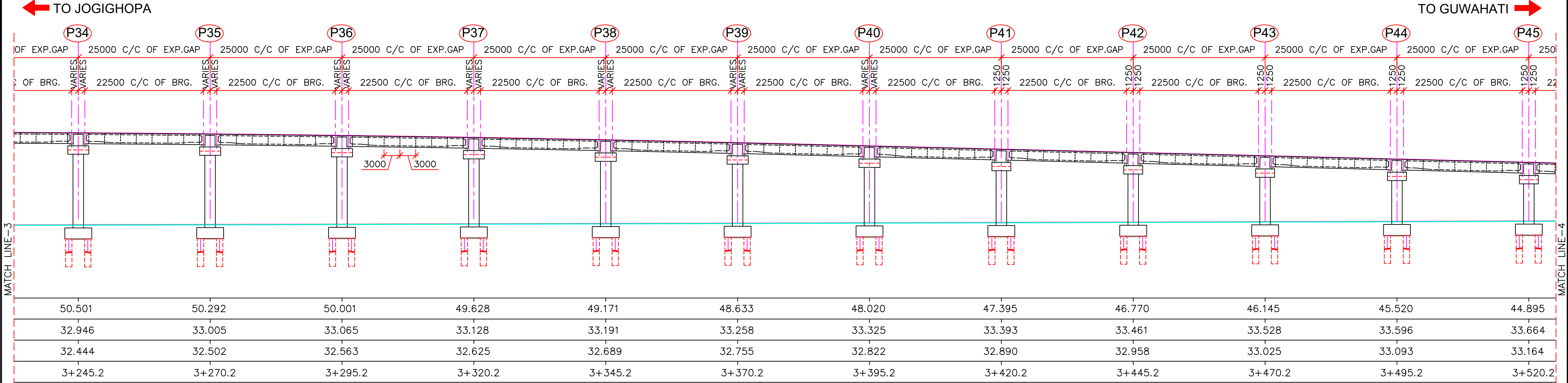
TOP PLAN
(SCALE 1:500)



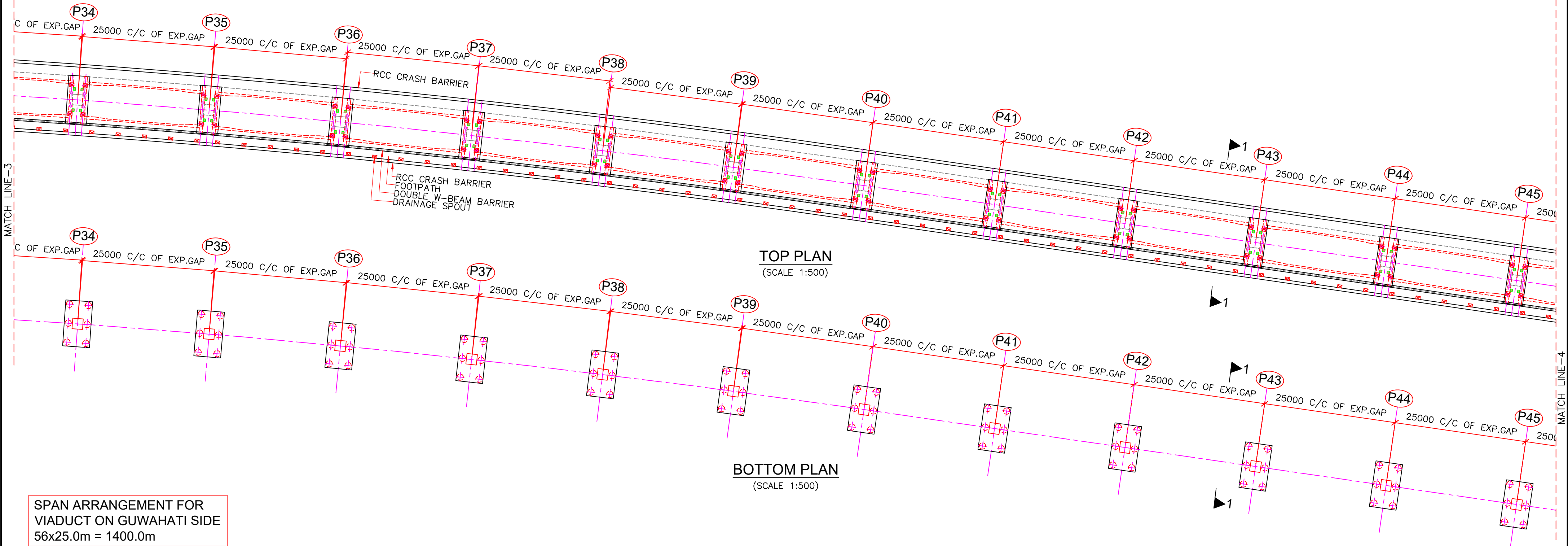
BOTTOM PLAN
(SCALE 1:500)

SPAN ARRANGEMENT FOR
VIADUCT ON GUWAHATI SIDE
56x25.0m = 1400.0m

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT	TENDER DRAWING	Project	Drawing Title
R0	JAN 2021		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	(0+000 to 4+ 385) AS SHOWN	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam	GENERAL ARRANGEMENT DRAWING FOR VIADUCT ON GUWAHATI SIDE
							Drawing No.
							NHIDCL/JOGIGHOPA/ VIADUCT/03/R0



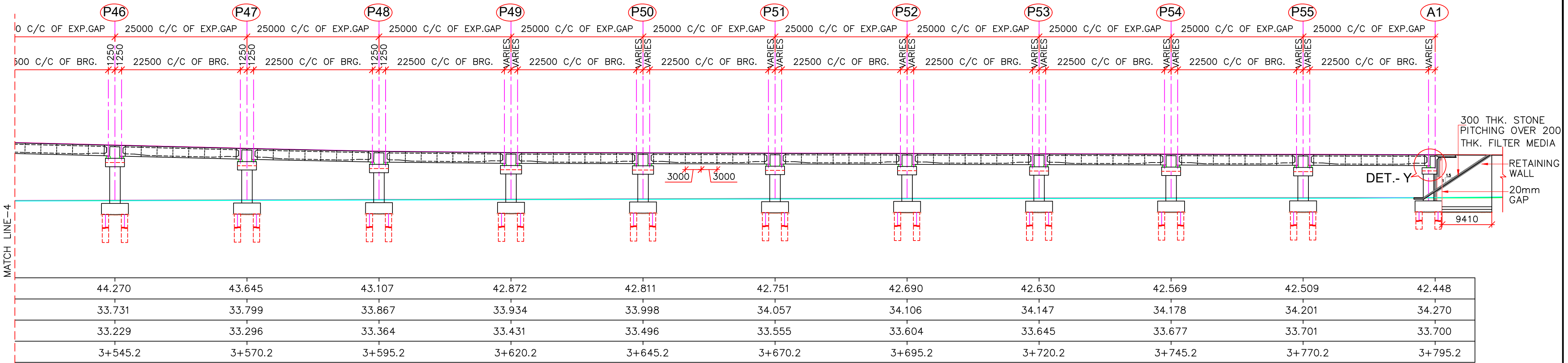
LONGITUDINAL ELEVATION OF APPROACHES
(SCALE 1:500)



ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT	TENDER DRAWING (0+000 to 4+ 385)	Project	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
R0	JAN 2021		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	Rodici In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: AK Drawn: KS Checked: VT Approved: DSA Scale :- AS SHOWN	Drawing Title	GENERAL ARRANGEMENT DRAWING FOR VIADUCT ON GUWAHATI SIDE
						Drawing No.	NHIDCL/JOGIGHOPA/ VIADUCT/04/R0

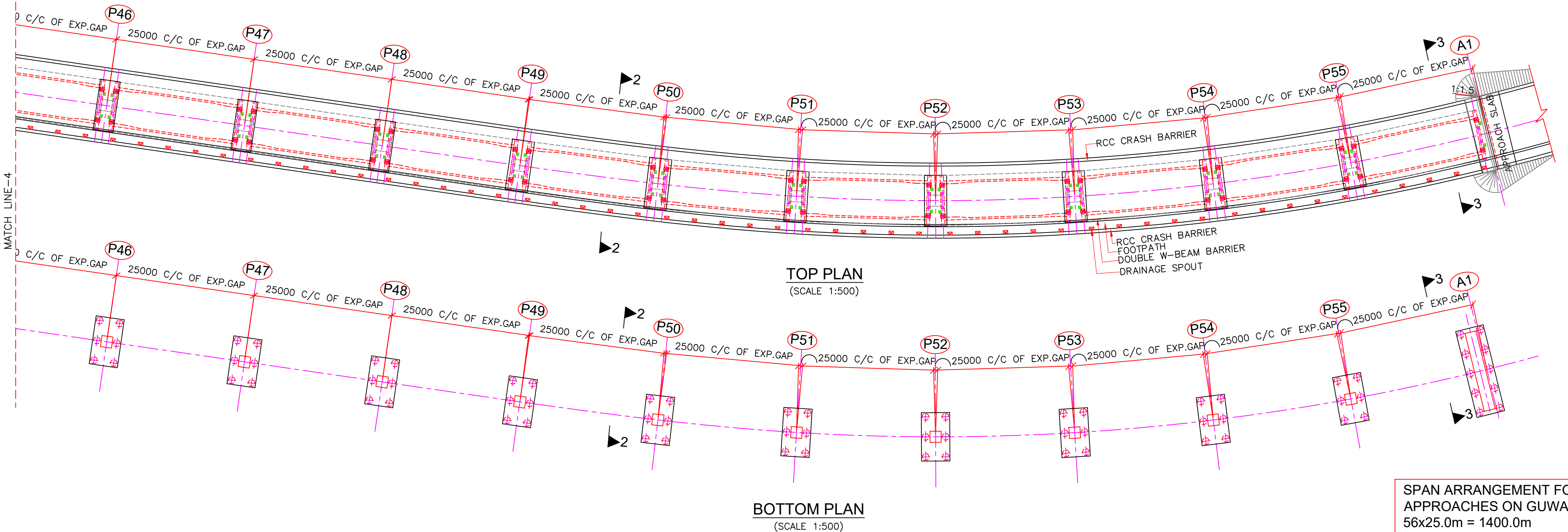
← TO JOGIGHOPA

TO GUWAHATI →

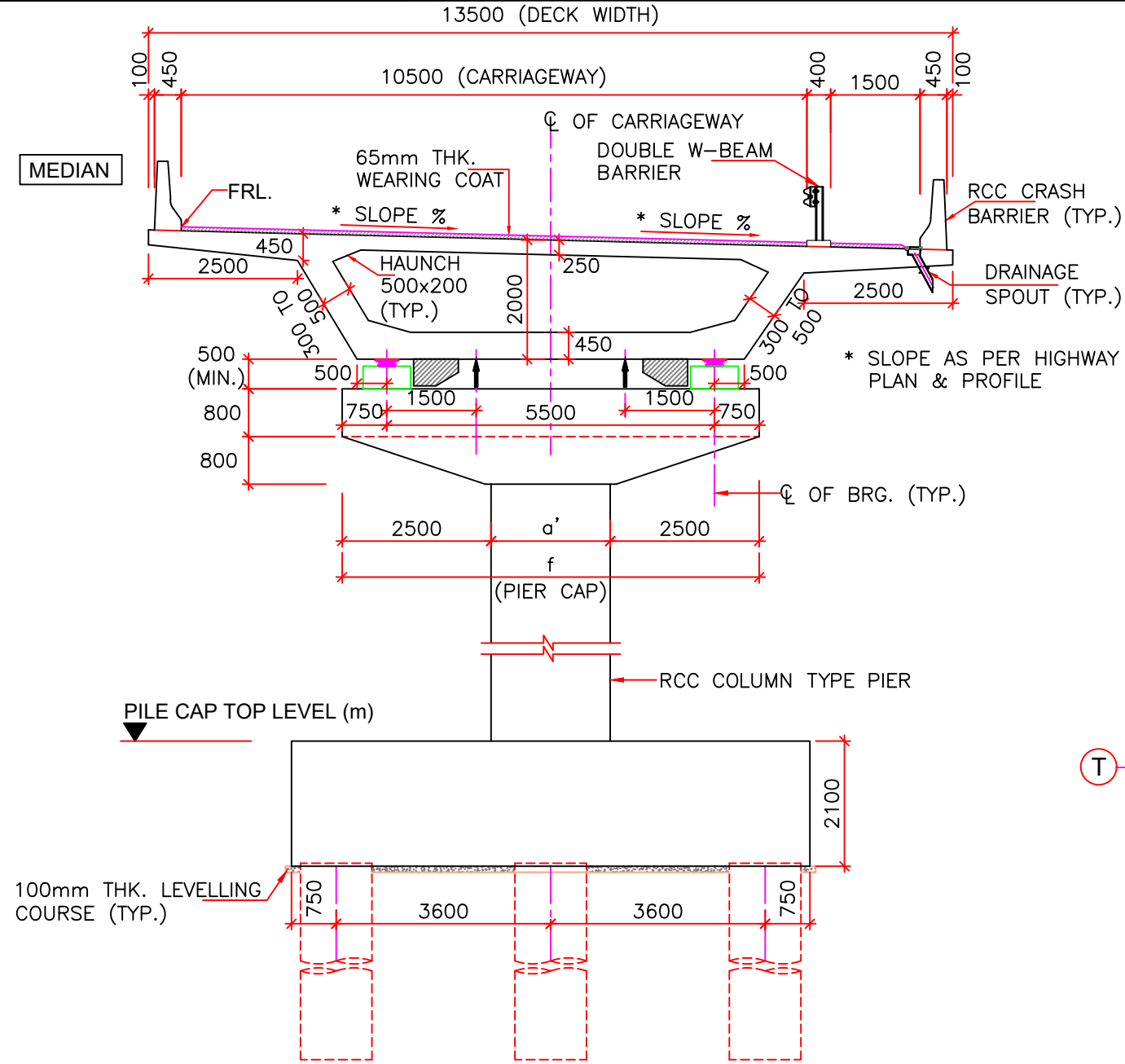


LONGITUDINAL ELEVATION OF APPROACHES

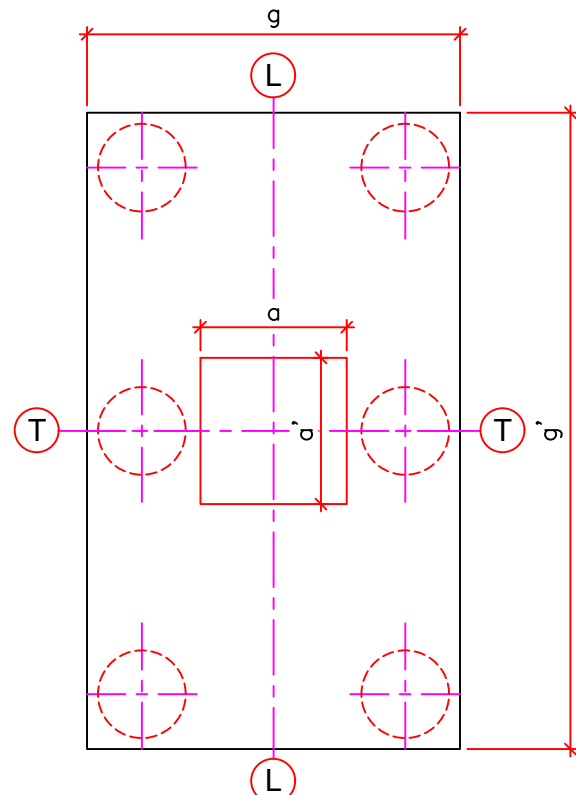
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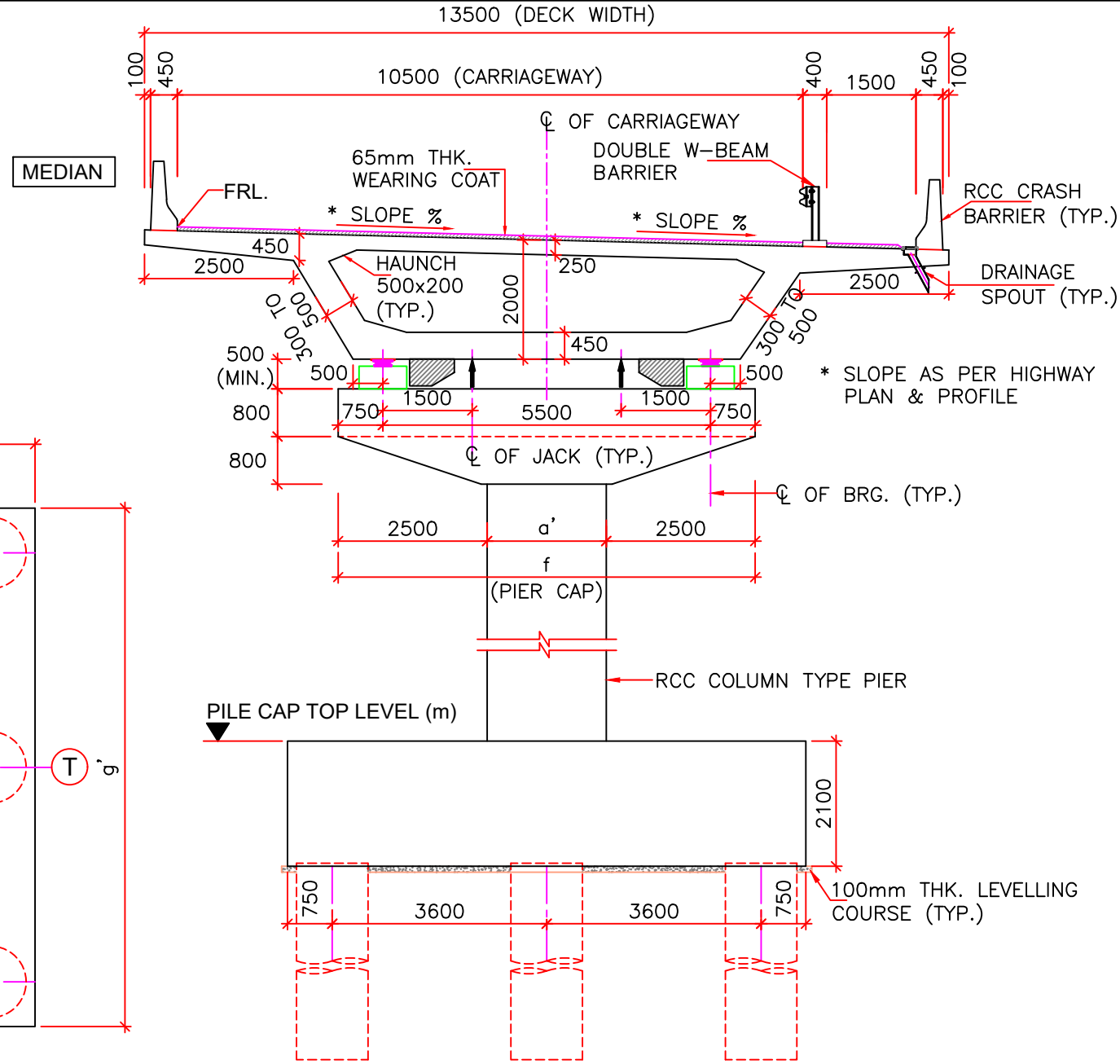
ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	TENDER DRAWING		Project
R0	JAN 2021		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveys and Engineering Consultants Pvt. Ltd.,	(0+000 to 4+ 385)		Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
					Designed: AK	Scale :-	Drawing Title
					Drawn: KS	AS SHOWN	Drawing No.
					Checked: VT		NHIDCL/JOGIGHOPA/ VIADUCT/05/R0
					Approved: DSA		



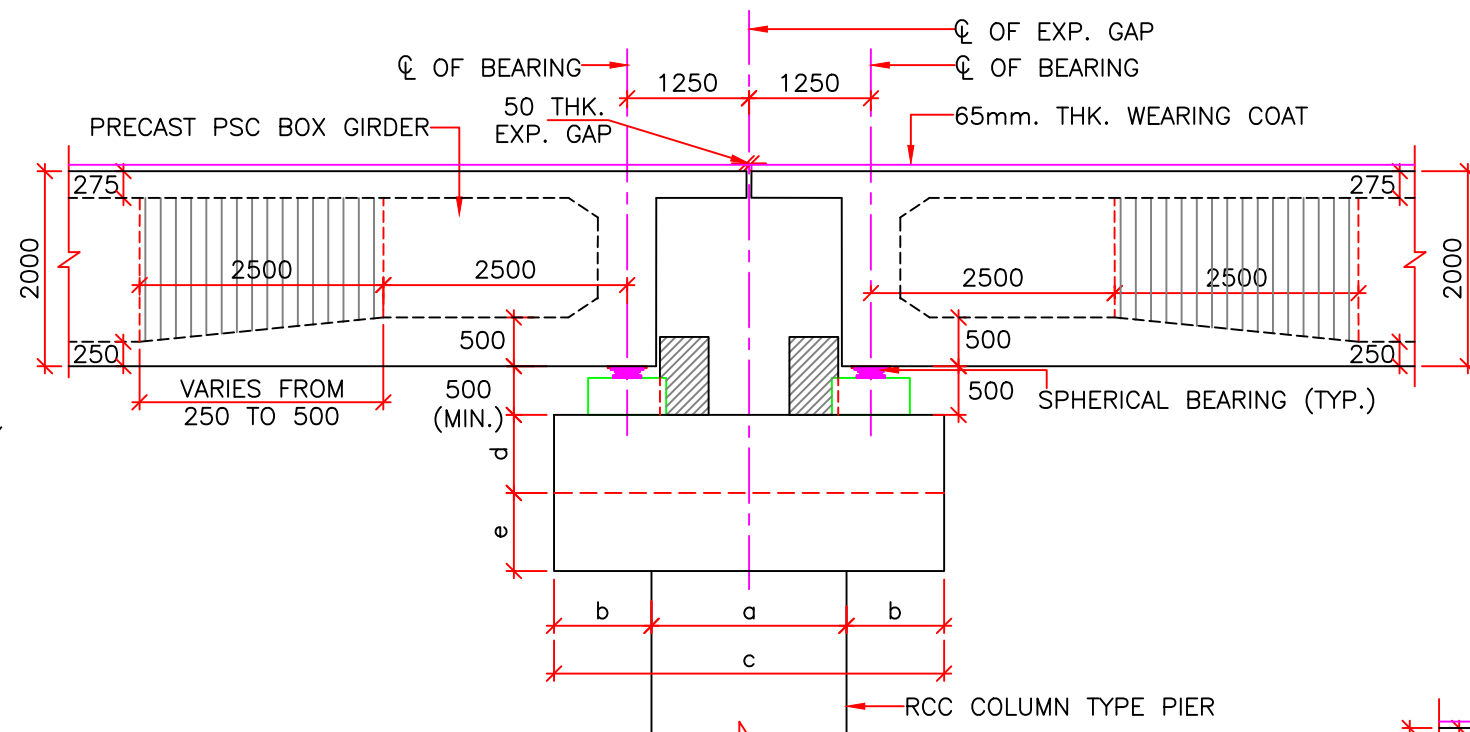
SECTION 1-1
(SCALE 1:100)



PART FOUNDATION PLAN
(SCALE 1:100)

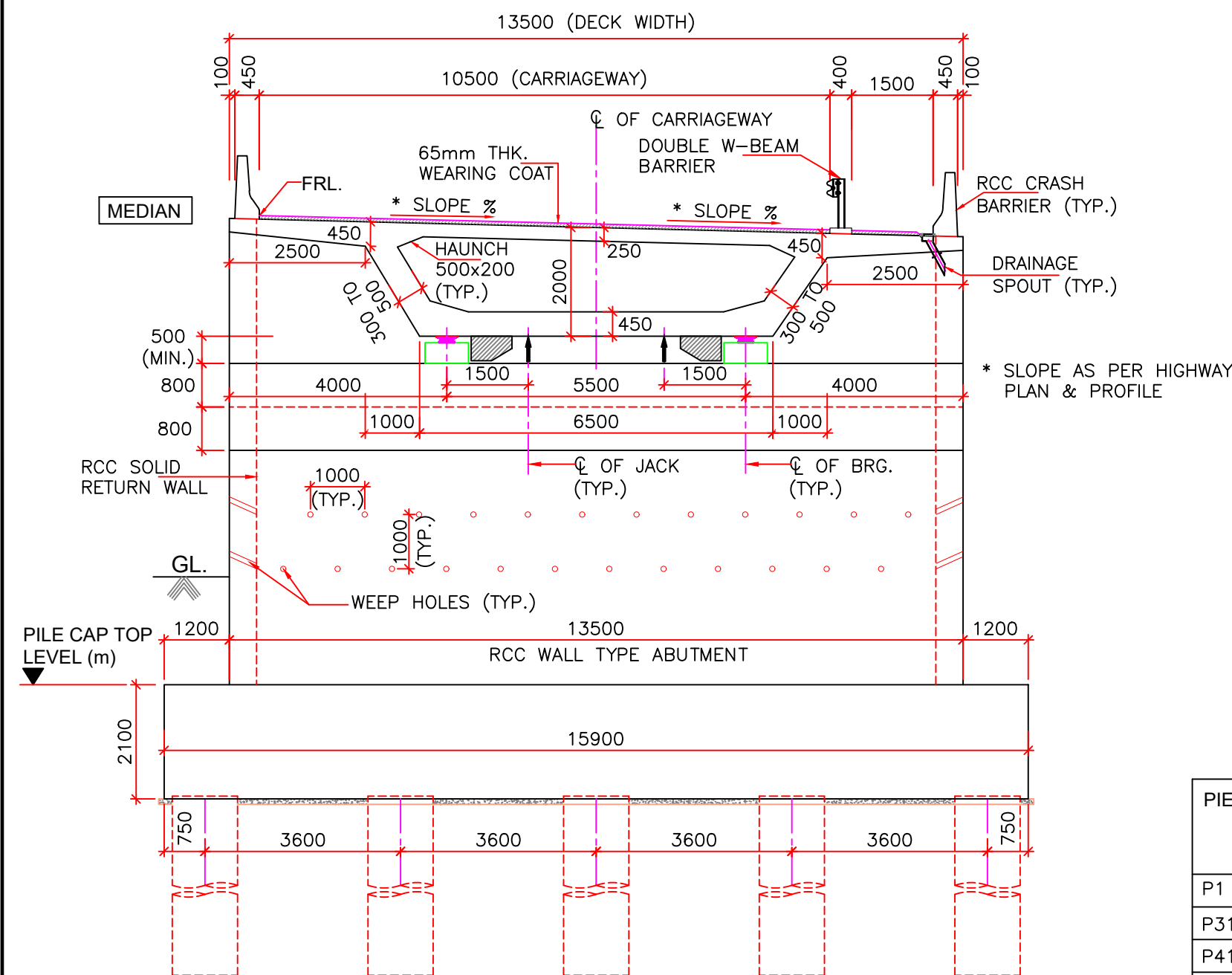


SECTION 2-2
(SCALE 1:100)

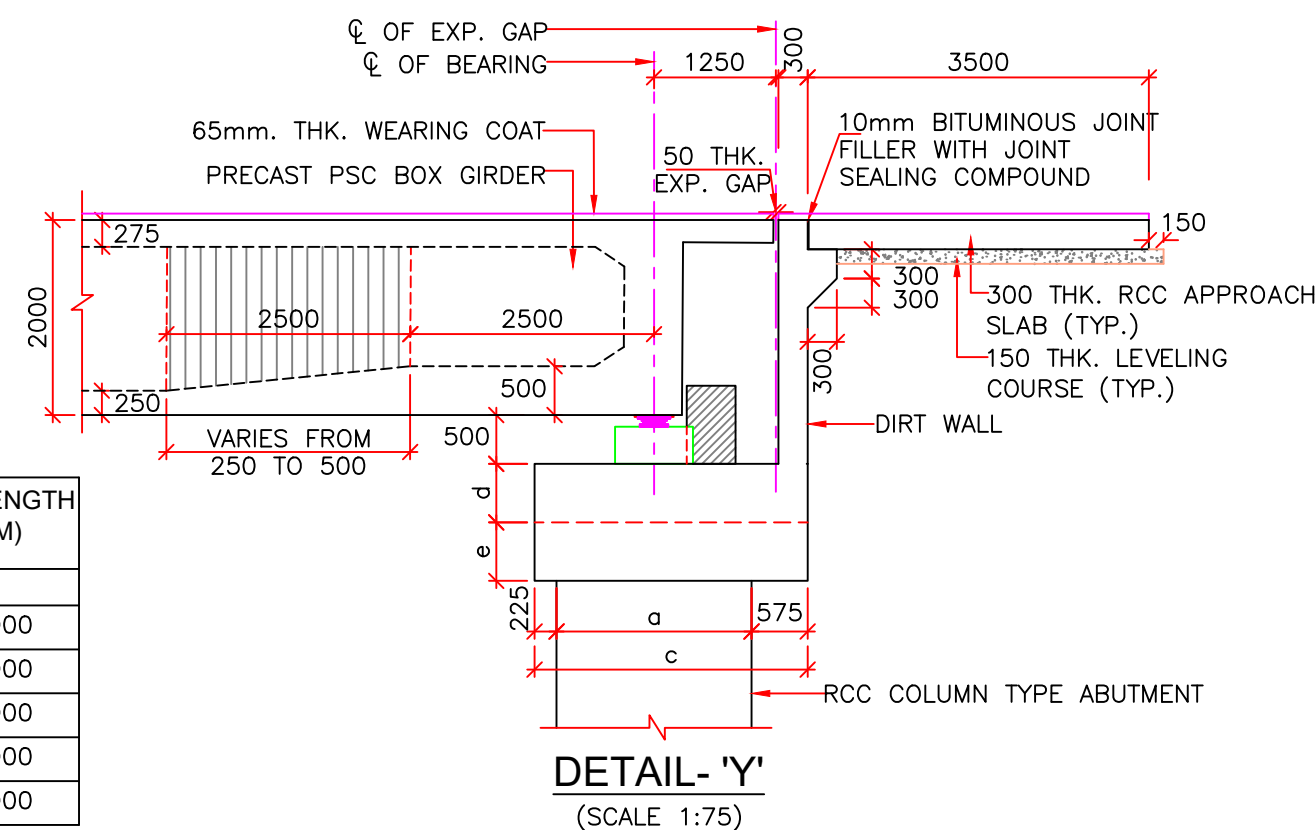


DETAIL- 'X'
(SCALE 1:75)

PIER NOS.	PIER SHAFT SIZE (MM)	PIER CAP SIZE (MM)					PILE SIZE (DIA)	PILE NUMBERS	PILE CAP SIZE (MM)		PILE LENGTH (MM)
	a x a'	b	c	d	e	f			g x g'		
P1 TO P30	2000x2000	800	3600	800	800	7000	1200	2x3=6	5100x8700x2100		35000
P31 TO P40	2000x2000	1000	4000	800	800	7000	1200	2x3=6	5100x8700x2100		35000
P41 TO P48	2000x2000	800	3600	800	800	7000	1200	2x3=6	5100x8700x2100		35000
P49 TO P55	2000x2000	1000	4000	800	800	7000	1200	2x3=6	5100x8700x2100		35000
A1	2000x13500	—	2800	800	800	13500	1200	2x5=10	5100x15900x2100		35000



SECTION 3-3
(SCALE 1:100)



DETAIL- 'Y'
(SCALE 1:75)

NOTES:-

- ALL DIMENSIONS ARE IN mm AND LEVELS IN METERS UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DIMENSIONS SHALL BE SCALED.
- EACH CARRIAGEWAY OF EXTRADOSE BRIDGE SHALL BE DESIGNED FOR GOVERNING CASE OF FOLLOWING
 - ONE LANE OF IRC CLASS 70R + ONE LANE OF IRC CLASS A ALONG WITH FOOTPATH AND LANE REDUCTION FACTOR AND CONGESTION FACTOR ON EACH CARRIAGEWAY
 - THREE LANE OF IRC CLASS A ALONG WITH FOOTPATH AND LANE REDUCTION FACTOR AND CONGESTION FACTOR ON EACH CARRIAGEWAY
 - IRC CLASS SV LOADING: SPECIAL MULTI AXLE HYDRAULIC TRAILER ON ONE SIDE OF THE CARRIAGEWAY AND 70R + CLASS A ON OTHER SIDE OF CARRIAGEWAY VEHICLE (PRIME MOVER WITH 20 AXLE TRAILER-GW=385 Tonnes)
- CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150mm CUBES AS FOLLOWS:-

PRECAST PSC BOX GIRDER	-50MPa
ABUTMENT, ABUTMENT CAP, DIRT WALL	-40MPa
PIER & PIER CAP	-40MPa
PILE CAP & PILE FOUNDATION	-35MPa
RCC CRASH BARRIER	-40MPa
RCC APPROACH SLAB	-30MPa
LEVELING COURSE UNDER APPROACH SLAB	-15MPa
LEVELING COURSE UNDER FOUNDATION	-10MPa
PEDESTAL & SEISMIC STOPPER	-45 MPa
- THE REINFORCING BARS SHALL BE OF THERMO MECHANICALLY TREATED/CORROSION RESISTANT STEEL (TMT/CRS) (GRADE DESIGNATION Fe-500D) CONFORMING TO IS:1786 STANDARDS.
- CLEAR COVER TO OUTER MOST STEEL SHALL BE AS UNDER:-
 - FOR SUPER STRUCTURE -50mm
 - FOR FOUNDATION -75mm
 - FOR SUBSTRUCTURE:
 - EARTH FACE -75mm
 - NON EARTH FACE -50mm
- 65mm THK. WEARING COURSE COMPRISING OF 40mm THK. ASPHALTIC CONCRETE OVER LAID WITH 25mm THK. MASTIC ASPHALT SHALL BE PROVIDED AS PER SECTION 500 OF MORTH SPECIFICATIONS.
- SPHERICAL BEARINGS SHALL BE DESIGNED AS PER PROVISION OF IRC : 83 (PART-IV 2014).
- STRIP SEAL TYPE EXPANSION JOINTS SHALL BE PROVIDED AS PER PROVISION OF SP-69.
- BACK FILLING BEHIND ABUTMENT SHALL CONSIST OF SELECTED EARTH CONFORMING TO APPENDIX:6 OF IRC:78-2014 HAVING PROPERTIES $C=0$, $\phi \geq 35^\circ$, $\delta=22.5^\circ$ & $\gamma_d = 20 \text{ KN/m}^3$
- 100mm DIA WEEP HOLES AT 1000mm C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN STAGGERED MANNER IN VERTICAL WALLS OF THE ABUTMENT SHAFT AND RETURN WALL FROM 150mm ABOVE G.L IN ONE OR TWO LAYERS AT A SLOPE OF 1 VERTICAL TO 20 HORIZONTAL TOWARDS THE DRAINING FACE.
- WATER TO BE USED IN CONCRETING & CURING SHALL CONFORM TO CLAUSE 18.8.4(4) IRC : 112:2011.
- THE BRIDGE IS DESIGNED FOR SEISMIC ZONE-V
- MODERATE CONDITION OF EXPOSURE SHALL BE CONSIDERED IN DESIGN.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT HIGHWAY DRAWING. FRL & CAMBER, SUPER ELEVATION AT PARTICULAR LOCATION SHALL BE VERIFIED WITH THE HIGHWAY DRAWINGS.
- PILE CAPACITY OF 425T FOR 35M PILE LENGTH HAS BEEN CONSIDERED FOR THE DESIGN OF FOUNDATION AND SAME SHALL BE CONFIRMED BY PILE LOAD TEST.
- FOR GUIDE BUND DETAILS PLEASE REFER SEPARATE DRAWINGS.

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION
R0	JAN 2021	

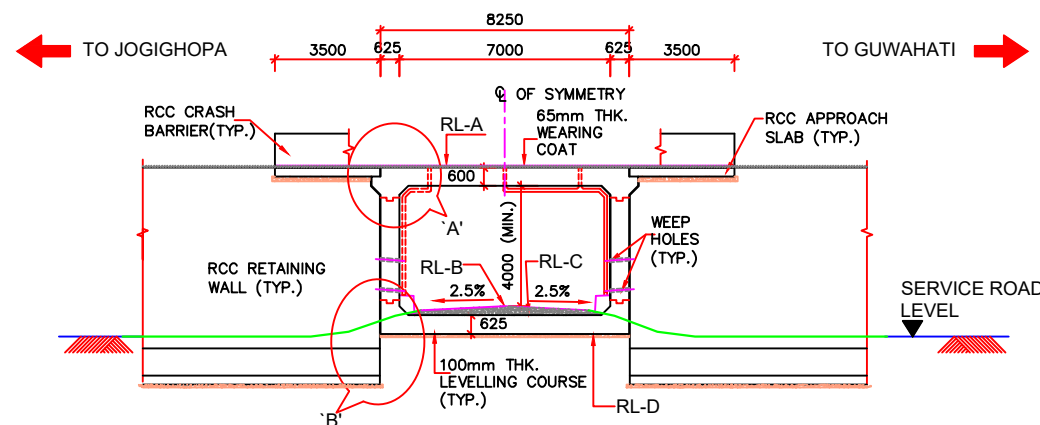
CLIENT	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA
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CONSULTANT:	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,
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TENDER DRAWING (0+000 to 4+ 385)		
Designed:	AK	Scale :- AS SHOWN
Drawn:	KS	
Checked:	VT	
Approved:	DSA	

Project	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
Drawing Title	GENERAL ARRANGEMENT DRAWING FOR VIADUCT ON GUWAHATI SIDE
Drawing No.	NHIDCL/JOGIGHOPA/ VIADUCT/06/R0

SMALL VEHICULAR UNDERPASS



SECTIONAL ELEVATION OF VUP
(SCALE 1:150)

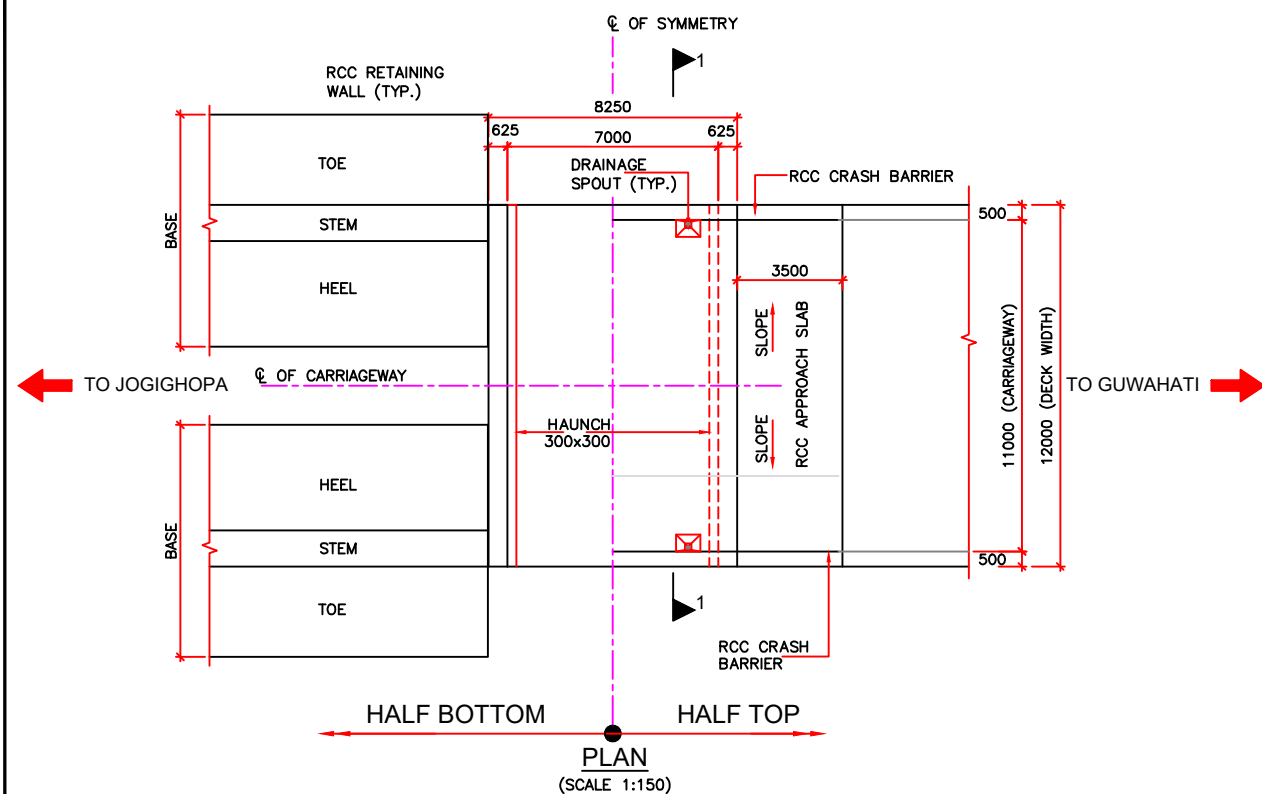
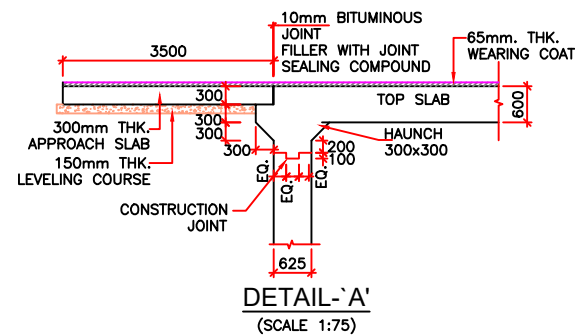


TABLE SHOWING LEVELS

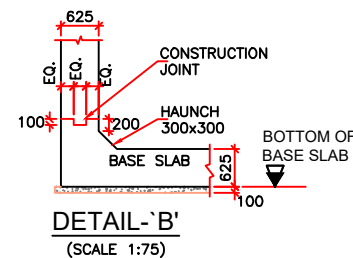
SL.No.	PROPOSED CHAINAGE (km)	LEVELS (m)			
		FINISHED ROAD LEVEL RL-A	CROSS ROAD LEVEL RL-B	TOP OF BASE SLAB LEVEL RL-C	BOTTOM OF BASE SLAB LEVEL RL-D
1	3+940	42.098	37.354	37.283	36.658

LEGEND:

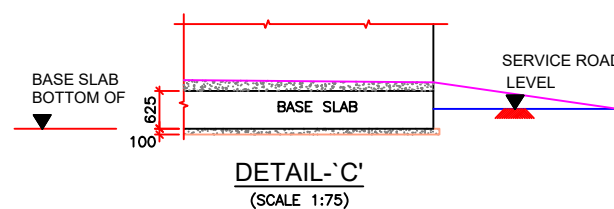
CL	: CENTER LINE
THK.	: THICKNESS
TYP.	: TYPICAL
EQ.	: EQUAL
RL	: REDUCED LEVEL
RE	: REINFORCED EARTH



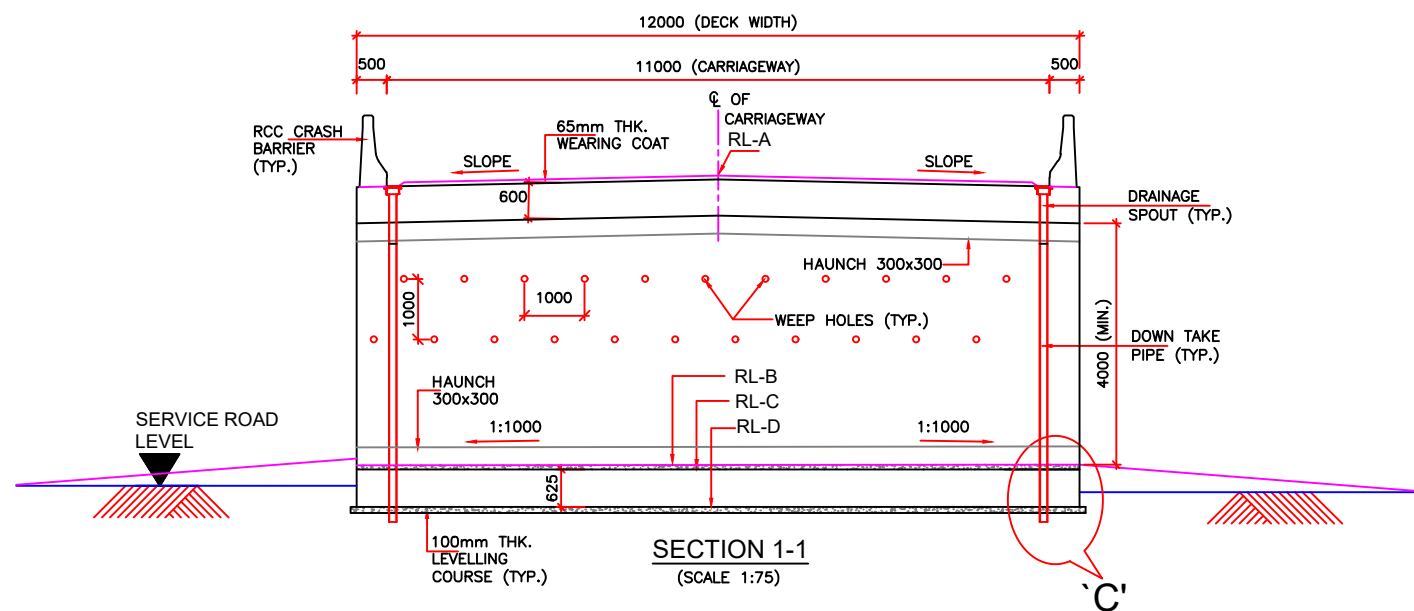
DETAIL 'A'
(SCALE 1:75)



DETAIL 'B'
(SCALE 1:75)



DETAIL 'C'
(SCALE 1:75)



SECTION 1-1
(SCALE 1:75)

NOTES:-

- ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS IN METRES UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
- 1) EACH UNIT OF VUP SHALL BE DESIGNED FOR LIVE LOAD OF ONE LANE OF IRC CLASS 70R +1-LANE OF IRC CLASS A OR THREE LANES OF IRC CLASS A LOADING WHICHEVER GOVERNS.
2) THIS VUP SHALL BE DESIGNED FOR IRC CLASS SV LOADING: SPECIAL MULTI AXLE HYDRAULIC TRAILER VEHICLE (PRIME MOVER WITH 20 AXLE TRAILER-GW=385 TONNES)
- CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150mm CUBES AS FOLLOWS :-
BOX STRUCTURE - M30
RCC CRASH BARRIER - M40
RCC APPROACH SLAB - M30
LEVELING COURSE (UNDER FOUNDATION) - M10
LEVELING COURSE (UNDER APPROACH SLAB) - M15
- THE REINFORCING BARS SHALL BE OF THERMO MECHANICALLY TREATED (TMT) (GRADE DESIGNATION FE-500D) CONFORMING TO IS:1786 STANDARDS.
- CLEAR COVER TO OUTER MOST STEEL SHALL BE 50mm. EXCEPT IN BOTTOM SLAB OF BOX AND EARTH FACE OF VERTICAL WALL WHERE IT SHOULD BE 75mm.
- 65mm THK. WEARING COAT COMPRISING OF 40mm THK. BITUMINOUS CONCRETE OVER LAID WITH 25mm THK. BITUMEN MASTIC LAYER CAN BE ADOPTED IN CONFORMITY WITH SECTION 500 OF MORTH SPECIFICATIONS.
- 100MM DIA WEEP HOLES AT 1000MM C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN STAGGERED MANNER IN VERTICAL WALLS OF THE ABUTMENT SHAFT AND RETURN WALL FROM 150MM ABOVE G.L IN ONE OR TWO LAYERS AT A SLOPE OF 1 VERTICAL TO 20 HORIZONTAL TOWARDS THE DRAINING FACE.
- MINIMUM CONCRETE COVER, GRADE OF CONCRETE, MINIMUM CEMENT CONTENT AND MAXIMUM W/C RATIO SHALL BE AS PER MODERATE CONDITION OF EXPOSURE AS PER PROVISION OF IRC:112-2011.
- WATER TO BE USED IN CONCRETING, GROUTING & CURING SHALL CONFORM TO IS:112-2011.
- DESIGN BASE PRESSURE AT FOUNDING LEVEL IS 15T/m². THIS SHALL BE GOT VERIFIED AT SITE BEFORE EXECUTION OF WORK. IF SBC IS NOT ACHIEVED, NECESSARY GROUND IMPROVEMENT MAY BE GOT CARRIED OUT TO ENSURE THAT SBC IS NOT LESS THAN 15T/m².
- FOR AESTHETIC REASON, A FEATURE FINISH WILL BE DONE ON EXPOSED FACE OF SIDE WALL.
- SATURATED EARTH PRESSURE CONSIDERED IN DESIGN AS NO WEEP HOLES ARE PROVIDED.

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION
R0	JAN 2021	

CLIENT	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA
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CONSULTANT:	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,
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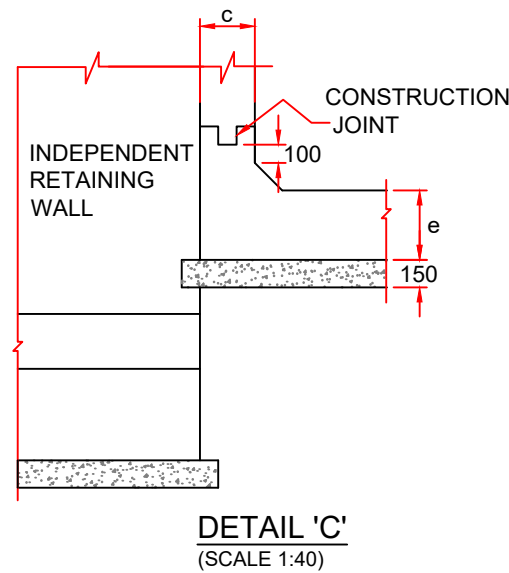
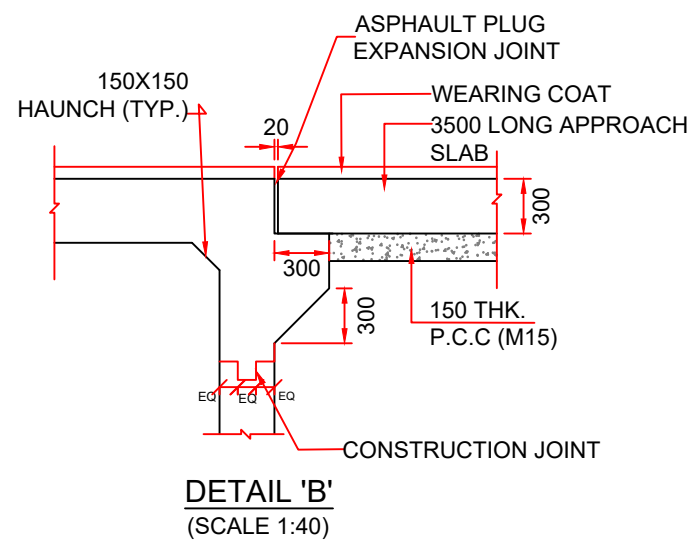
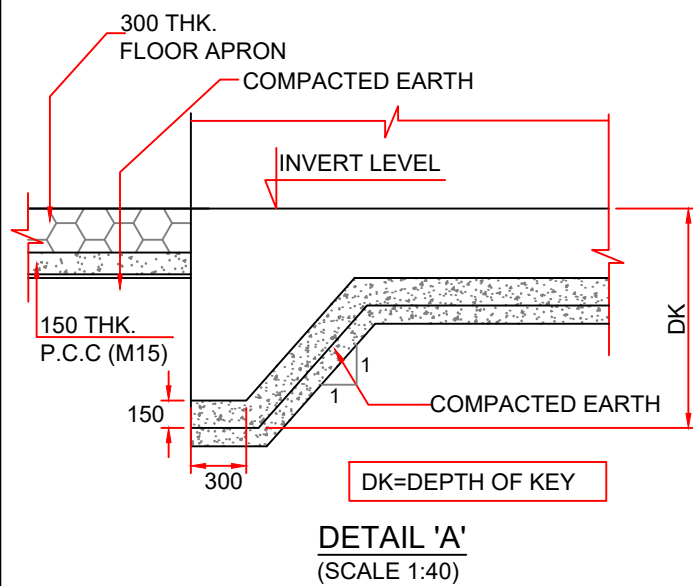
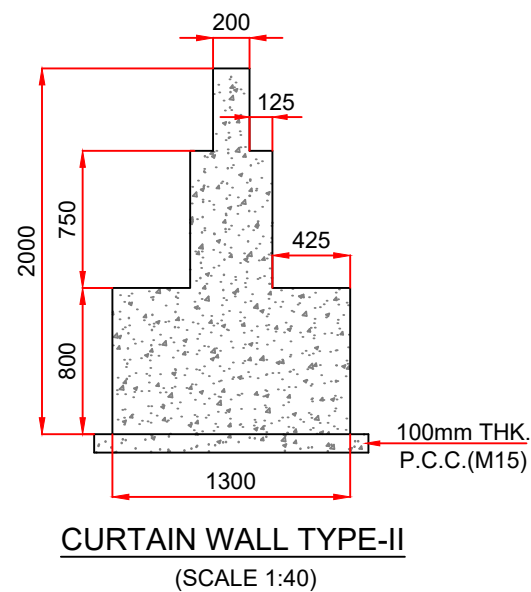
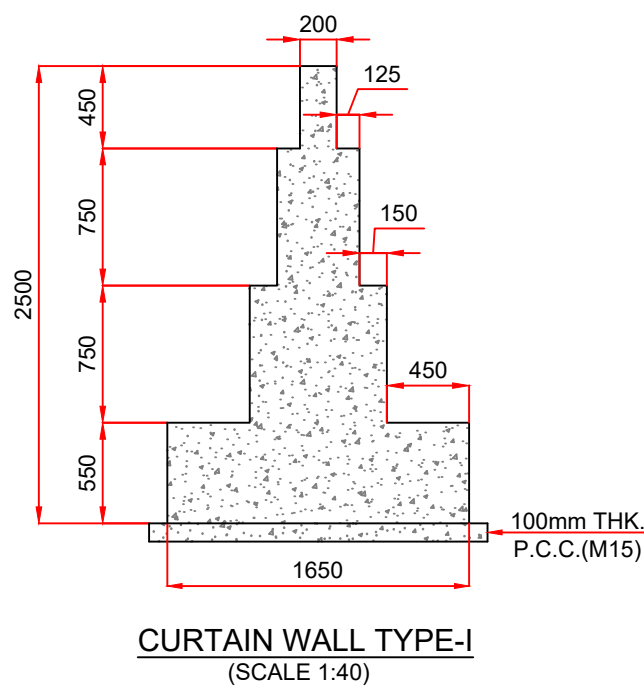
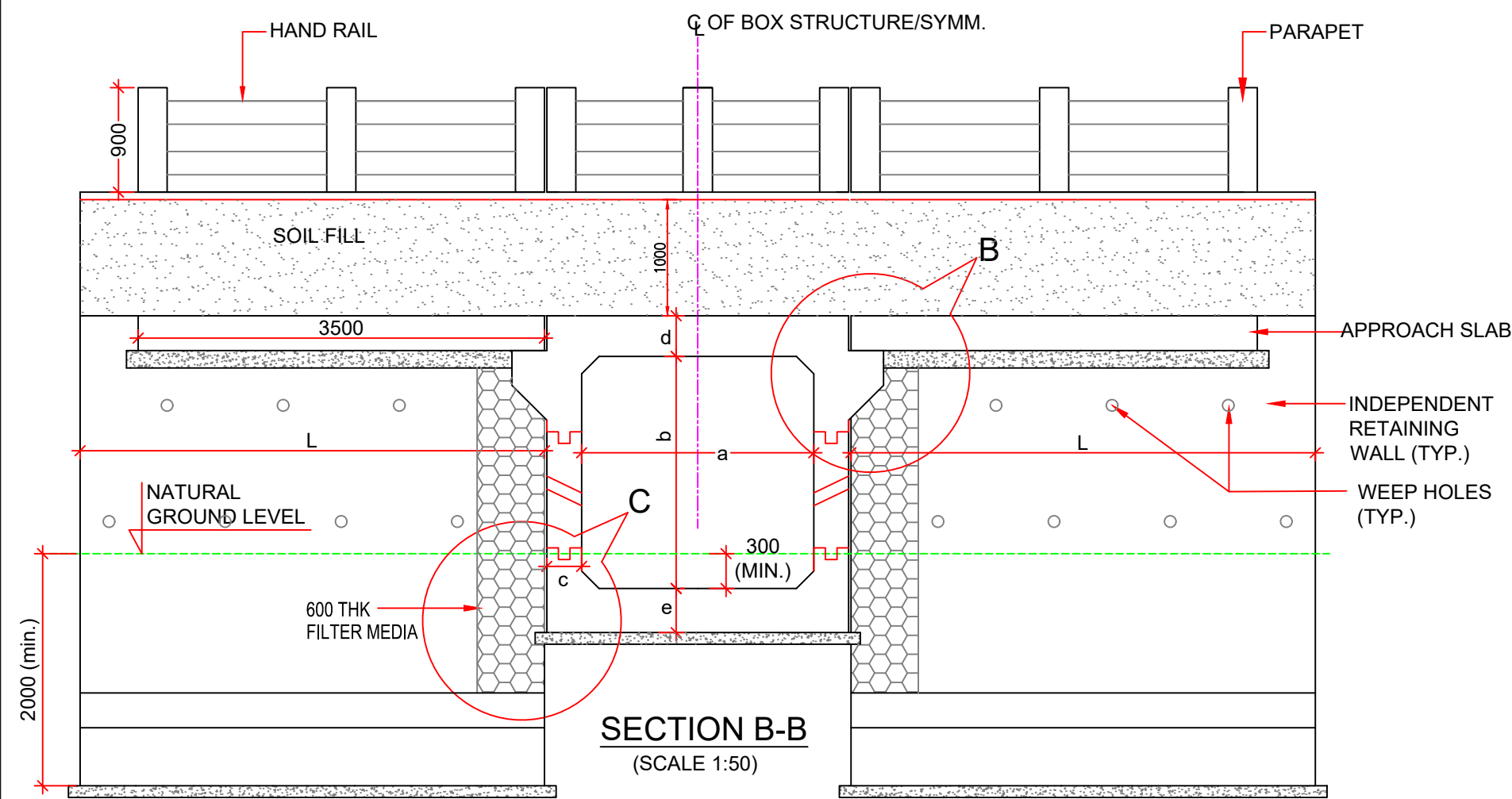
TENDER DRAWING (0+000 to 4+ 385)	Project
Designed: AV Drawn: SB Checked: VT Approved: DSA	Drawing Title GENERAL ARRANGEMENT DRAWING FOR SMALL VEHICULAR UNDERPASS AT CH-3+940
Scale :- AS SHOWN	Drawing No. NHIDCL/JOGIGHOPA/SVUP/3+940/01/R0

Project	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
Drawing Title	GENERAL ARRANGEMENT DRAWING FOR SMALL VEHICULAR UNDERPASS AT CH-3+940
Drawing No.	NHIDCL/JOGIGHOPA/SVUP/3+940/01/R0

CULVERT

TABLE SHOWING SALIENT DIMENSIONS

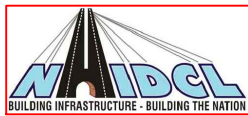
PROPOSED CHAINAGE	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	L (mm)
4+015	6000	5000	450	450	500	3500



ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION
R0	JAN 2021	

CLIENT

NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
(MINISTRY OF ROAD TRANSPORT & HIGHWAY)
GOVERNMENT OF INDIA



CONSULTANT:



RODIC CONSULTANTS PVT. LTD.
1, JAI SINGH MARG (FIRST FLOOR), YMCA
CULTURAL CENTRE BUILDING
NEW DELHI - 110001 (INDIA)
In Association with
**Monarch Surveyors and Engineering
Consultants Pvt. Ltd.,**



TENDER DRAWING (0+000 to 4+ 385)		
Designed:	HB	Scale :- AS SHOWN
Drawn:	KS	
Checked:	VT	
Approved:	DSA	

Project	Construction of New 2-lane Bridge (Parallel to the Existing Naranarayan Setu) from km 0.000 to km 4.385 including approach road 50 m on Jogighopa side & 1990 m on Guwahati side across river Brahmaputra on NH-17 at Jogighopa in the State of Assam
Drawing Title	GENERAL ARRANGEMENT DRAWING OF SINGLE CELL BOX CULVERT
Drawing No.	NHIDCL/JOGIGHOPA/CUL/4+015/01/R0 (SHEET 2 OF 2)