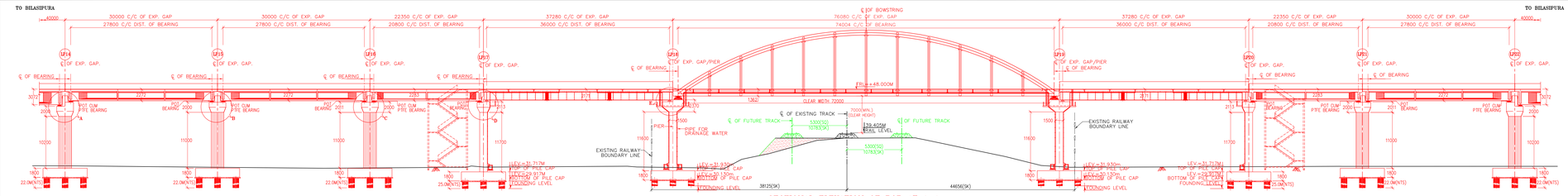
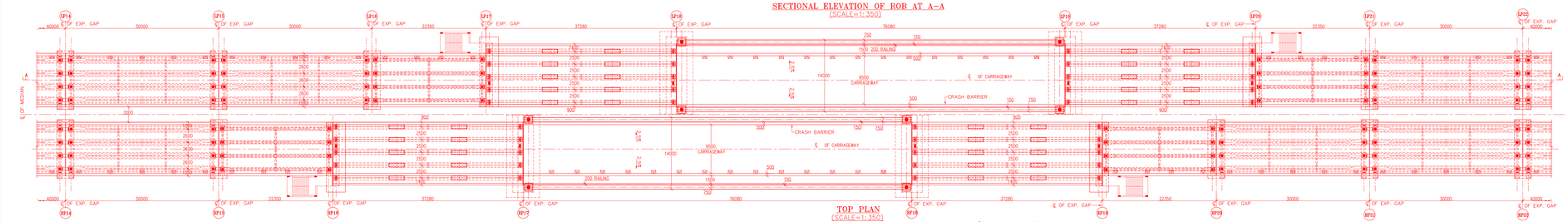
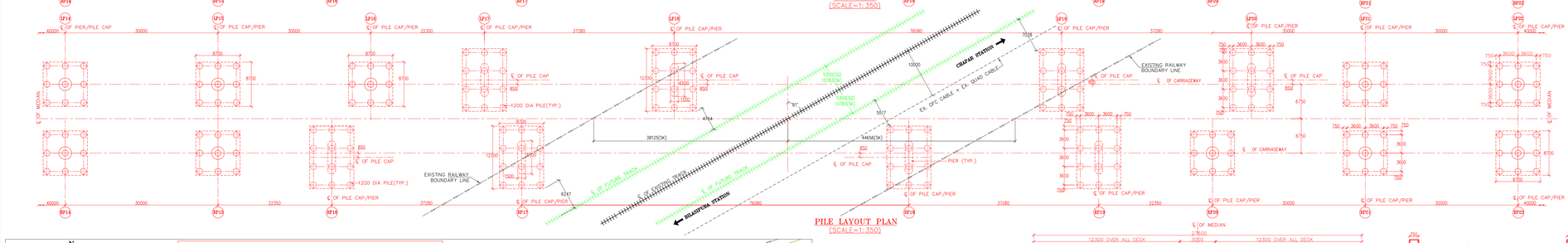
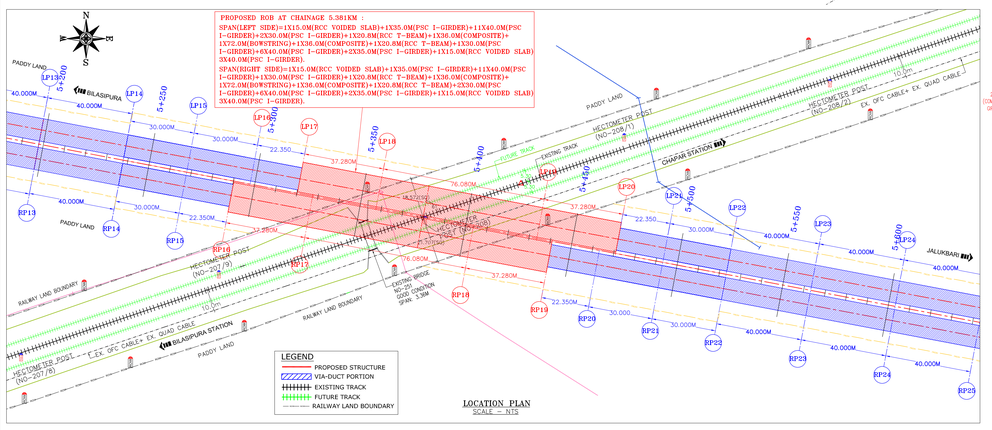
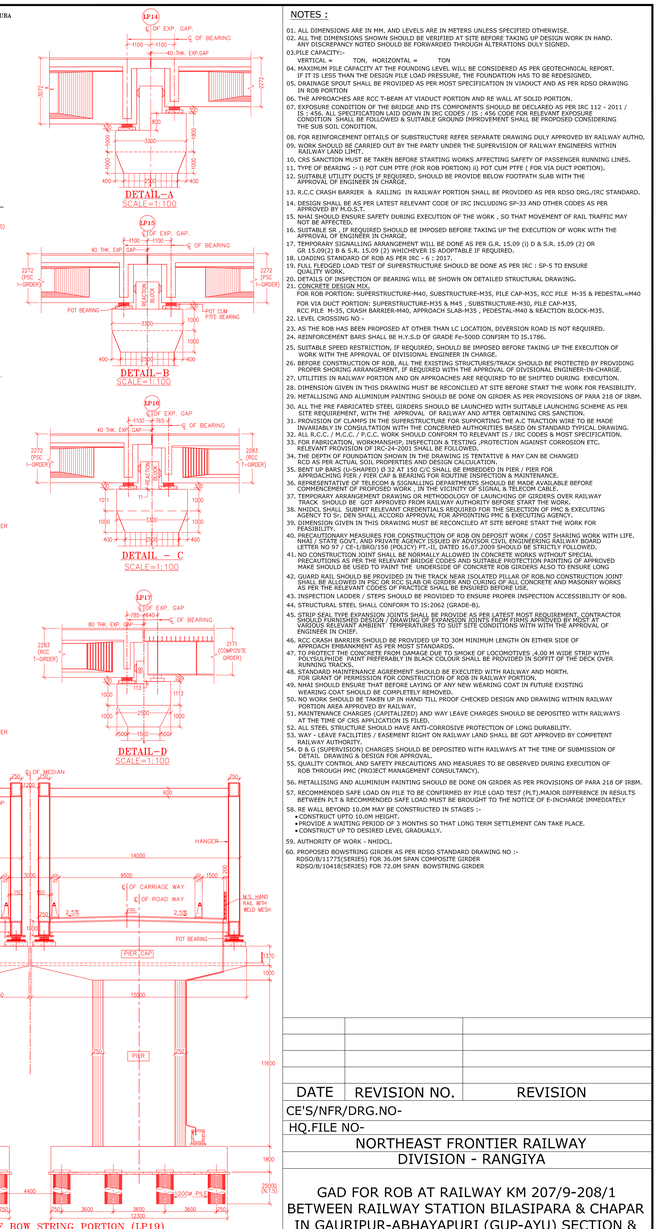


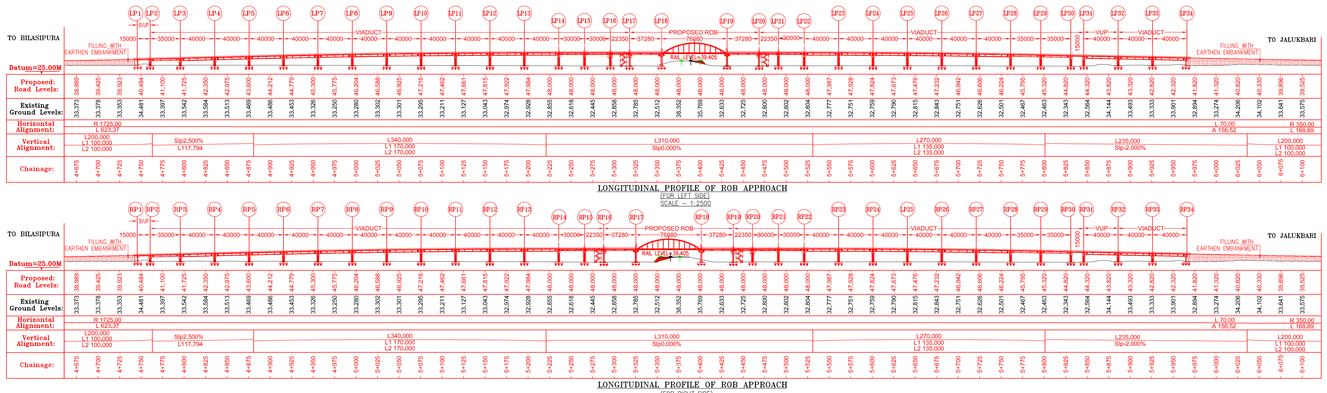


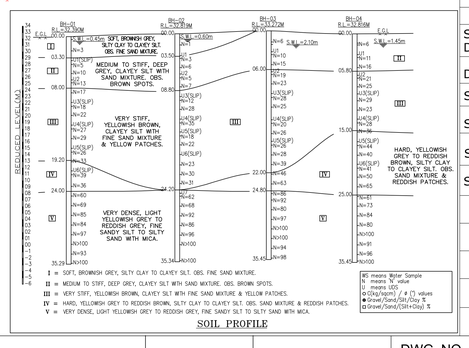




LOCATION PLAN
SCALE - NTS







NOTES :

01. ALL DIMENSIONS ARE IN MM. AND LEVELS ARE IN METERS UNLESS SPECIFIED OTHERWISE.
02. ALL THE DIMENSIONS SHOWN SHOULD BE VERIFIED AT SITE BEFORE TAKING UP DESIGN WORK IN HAND. ANY DISCREPANCY NOTED SHOULD BE FORWARDED THROUGH ALTERATIONS DULY SIGNED.
03. PILE CAPACITY:-
VERTICAL = TON, HORIZONTAL = TON
04. MAXIMUM PILE CAPACITY AT THE FOUNDING LEVEL WILL BE CONSIDERED AS PER GEOTECHNICAL REPORT. IF IT IS LESS THAN THE DESIGN PILE LOAD PRESSURE, THE FOUNDATION HAS TO BE REDESIGNED.
05. DRAINAGE SPOUT SHALL BE PROVIDED AS PER MOST SPECIFICATION IN VIADUCT AND AS PER RDSO DRAWING IN ROB PORTION
06. THE APPROACHES ARE RCC T-BEAM AT VIADUCT PORTION AND RE WALL AT SOLID PORTION.
07. EXPOSURE CONDITION OF THE BRIDGE AND ITS COMPONENTS SHOULD BE DECLARED AS PER IRC 112 - 2011 / IS : 456, ALL SPECIFICATION LAID DOWN IN IRC CODES / IS : 456 CODE FOR RELEVANT EXPOSURE CONDITION SHALL BE FOLLOWED & SUITABLE GROUND IMPROVEMENT SHALL BE PROPOSED CONSIDERING THE SUB SOIL CONDITION.
08. FOR REINFORCEMENT DETAILS OF SUBSTRUCTURE REFER SEPARATE DRAWING DULY APPROVED BY RAILWAY AUTHO.
09. WORK SHOULD BE CARRIED OUT BY THE PARTY UNDER THE SUPERVISION OF RAILWAY ENGINEERS WITHIN RAILWAY LAND LIMIT.
10. CRS SANCTION MUST BE TAKEN BEFORE STARTING WORKS AFFECTING SAFETY OF PASSENGER RUNNING LINES.
11. TYPE OF BEARING :- i) POT CUM PTFE (FOR ROB PORTION) ii) POT CUM PTFE (FOR VIA DUCT PORTION).
12. SUITABLE UTILITY DUCTS IF REQUIRED. SHOULD BE PROVIDE BELOW FOOTPATH SLAB WITH THE APPROVAL OF ENGINEER IN CHARGE.
13. R.C.C CRASH BARRIER & RAILING IN RAILWAY PORTION SHALL BE PROVIDED AS PER RDSO DRG./IRC STANDARD.
14. DESIGN SHALL BE AS PER LATEST RELEVANT CODE OF IRC INCLUDING SP-33 AND OTHER CODES AS PER APPROVED BY R.D.S.T.
15. NHAI SHOULD ENSURE SAFETY DURING EXECUTION OF THE WORK , SO THAT MOVEMENT OF RAIL TRAFFIC MAY NOT BE AFFECTED.
16. SUITABLE SB , IF REQUIRED SHOULD BE IMPOSED BEFORE TAKING UP THE EXECUTION OF WORK WITH THE APPROVAL OF ENGINEER IN CHARGE.
17. TEMPORARY SIGNALLING ARRANGEMENT WILL BE DONE AS PER G.R. 15.09 (I) D & S.R. 15.09 (2) OR GR 15.09(2) B & S.R. 15.09 (2) WHICHEVER IS ADOPTABLE IF REQUIRED.
18. LOADING STANDARD OF ROB AS PER IRC - 6 : 2017.
19. FULL FLEDGED LOAD TEST OF SUPERSTRUCTURE SHOULD BE DONE AS PER IRC : SP-5 TO ENSURE QUALITY OF WORK.
20. DETAILS OF INSPECTION OF BEARING WILL BE SHOWN ON DETAILED STRUCTURAL DRAWING.
21. CONCRETE DESIGN MIX:
FOR ROB PORTION: SUPERSTRUCTURE-M40, SUBSTRUCTURE-M35, PILE CAP-M35, RCC PILE M-35 & PEDESTAL+M40
FOR VIA DUCT PORTION: SUPERSTRUCTURE-M35 & M45 , SUBSTRUCTURE-M30, PILE CAP-M35, RCC PILE M-35, CRASH BARRIER-M40, APPROACH SLAB-M35 , PEDESTAL-M40 & REACTION BLOCK-M35.
22. LEVEL CROSSING NO :
23. AS THE ROB HAS BEEN PROPOSED AT OTHER THAN LC LOCATION, DIVERSION ROAD IS NOT REQUIRED.
24. REINFORCEMENT BARS SHALL BE H.Y.S.D OF GRADE Fe-500D CONFIRM TO IS.1786.
25. SUITABLE SPEED RESTRICTION, IF REQUIRED, SHOULD BE IMPOSED BEFORE TAKING UP THE EXECUTION OF WORK WITH THE APPROVAL OF DIVISIONAL ENGINEER IN CHARGE.
26. BEFORE CONSTRUCTION OF ROB, ALL THE EXISTING STRUCTURES/TRACK SHOULD BE PROTECTED BY PROVIDING PROPER SHORING ARRANGEMENT, IF REQUIRED WITH THE APPROVAL OF DIVISIONAL ENGINEER-IN-CHARGE.
27. UTILITIES IN RAILWAY PORTION AND ON APPROACHES ARE REQUIRED TO BE SHIFTED DURING EXECUTION.
28. DIMENSION GIVEN IN THIS DRAWING MUST BE RECONCILED AT SITE BEFORE START THE WORK FOR FEASIBILITY.
29. METALLISING AND ALUMINIUM PAINTING SHOULD BE DONE ON GIRDER AS PER PROVISIONS OF PARA 218 OF IRBM.
30. ALL THE PRE FABRICATED STEEL GIRDERS SHOULD BE LAUNCHED WITH SUITABLE LAUNCHING SCHEME AS PER SITE REQUIREMENT, WITH THE APPROVAL OF RAILWAY AND AFTER OBTAINING CRS SANCTION.
31. PROVISION OF CLAMPS IN THE SUPERSTRUCTURE FOR SUPPORTING THE A.C TRACTION WIRE TO BE MADE INVARIABLY IN CONSULTATION WITH THE CONCERNED AUTHORITIES BASED ON STANDARD TYPICAL DRAWING.
32. ALL R.C.C. / M.C.C. / P.C.C. WORK SHOULD CONFORM TO RELEVANT IS / IRC CODES & MOST SPECIFICATION.
33. FOR FABRICATION, WORKMANSHIP, PROTECTION & TESTING ,PROTECTION AGAINST CORROSION ETC. RELEVANT PROVISION OF IRC-24-2001 SHALL BE FOLLOWED.
34. THE DEPTH OF FOUNDATION SHOWN IN THE DRAWING IS TENTATIVE & MAY CAN BE CHANGED RCD AS PER ACTUAL SOIL PROPERTIES AND DESIGN CALCULATION.
35. BENT BARS (U-SHAPED) @ 32 AT 150 C/C SHALL BE EMBEDDED IN PIER / PIER FOR APPROACHING PIER / PIER CAP & BEARING FOR ROUTINE INSPECTION & MAINTENANCE.
36. REPRESENTATIVE OF RAILWAY & SIGNALLING DEPARTMENT SHOULD BE MADE AVAILABLE BEFORE PROCEEDING WITH THE WORK OF REMODELLING OF RELAY ROOM & SIGNALLING.
37. TEMPORARY ARRANGEMENT DRAWING OR METHODOLOGY OF LAUNCHING OF GIRDERS OVER RAILWAY TRACK SHOULD BE GOT APPROVED FROM RAILWAY AUTHORITY BEFORE START THE WORK.
38. NHIDCL SHALL SUBMIT RELEVANT CREDENTIALS REQUIRED FOR THE SELECTION OF PMC & EXECUTING AGENCY TO Sr. DEN SHALL ACCORD APPROVAL FOR APPOINTING PMC & EXECUTING AGENCY.
39. DIMENSION GIVEN IN THIS DRAWING MUST BE RECONCILED AT SITE BEFORE START THE WORK FOR FEASIBILITY.
40. PRECAUTIONARY MEASURES FOR CONSTRUCTION OF ROB ON DEPOSIT WORK / COST SHARING WORK WITH LIFE. NHAI / STATE GOVT. AND PRIVATE AGENCY ISSUED BY ADVISOR CIVIL ENGINEERING RAILWAY BOARD LETTER NO 97 / CE-1/BROJ/158 (POLICY) PT.-II, DATED 16.07.2009 SHOULD BE STRICTLY FOLLOWED.
41. NO CONSTRUCTION JOINT SHALL BE NORMALLY ALLOWED IN CONCRETE WORKS WITHOUT SPECIAL PRECAUTIONS AS PER THE RELEVANT BRIDGE CODES AND SUITABLE PROTECTION PAINTING OF APPROVED MAKE SHOULD BE USED TO PAINT THE UNDERSIDE OF CONCRETE ROB GIRDERS ALSO TO ENSURE LONG
42. GUARD RAIL SHOULD BE PROVIDED IN THE TRACK NEAR ISOLATED PILLAR OF ROB.NO CONSTRUCTION JOINT SHALL BE ALLOWED IN PSC OR RCC SLAB OR GIRDER AND CURING OF ALL CONCRETE AND MASONRY WORKS AS PER THE RELEVANT CODES OF PRACTICE SHALL BE ENSURED BEFORE USE.
43. INSPECTION LADDER / STEPS SHOULD BE PROVIDED TO ENSURE PROPER INSPECTION ACCESSIBILITY OF ROB.
44. STRUCTURAL STEEL SHALL CONFORM TO IS:2062 (GRADE-B).
45. STEEP SLIP TYPE EXPANSION JOINTS SHALL BE PROVIDED AS PER LATEST MOST REQUIREMENT. CONTRACTOR SHOULD FURNISHED DESIGN / DRAWING OF EXPANSION JOINTS FROM FIRME APPROVED BY MOST AT VARIOUS RELEVANT AMBIENT TEMPERATURES TO SUIT SITE CONDITIONS WITH WITH THE APPROVAL OF ENGINEER IN CHIEF.
46. RCC CRASH BARRIER SHOULD BE PROVIDED UP TO 30M MINIMUM LENGTH ON EITHER SIDE OF APPROACH EMBANKMENT AS PER MOST STANDARDS.
47. TO PROTECT THE CONCRETE FROM DAMAGE DUE TO SMOKE OF LOCOMOTIVES ,4.00 M WIDE STRIP WITH POLYSULPHIDE PAINT PREFERABLY IN BLACK COLOUR SHALL BE PROVIDED IN SOFFIT OF THE DECK OVER RUNNING TRACKS.
48. STANDARD MAINTENANCE AGREEMENT SHOULD BE EXECUTED WITH RAILWAY AND MORTH. FOR GRANT OF PERMISSION FOR CONSTRUCTION OF ROB IN RAILWAY PORTION.
49. NHAI SHOULD ENSURE THAT BEFORE LAYING OF ANY NEW WEARING COAT IN FUTURE EXISTING WEARING COAT SHOULD BE COMPLETELY REMOVED.
50. NO WORK SHOULD BE TAKEN UP IN HAND TILL PROOF CHECKED DESIGN AND DRAWING WITHIN RAILWAY PORTION AREA APPROVED BY RAILWAY.
51. MAINTENANCE CHARGES (CAPITALIZED) AND WAY LEAVE CHARGES SHOULD BE DEPOSITED WITH RAILWAYS AT THE TIME OF CRS APPLICATION IS FILED.
52. ALL STEEL STRUCTURE SHOULD HAVE ANTI-CORROSIVE PROTECTION OF LONG DURABILITY.
53. WAY - LEAVE FACILITIES / EASEMENT RIGHT ON RAILWAY LAND SHALL BE GOT APPROVED BY COMPETENT RAILWAY AUTHORITY.
54. D & G (SUPERVISION) CHARGES SHOULD BE DEPOSITED WITH RAILWAYS AT THE TIME OF SUBMISSION OF DETAIL DRAWING & DESIGN FOR APPROVAL.
55. QUALITY CONTROL AND SAFETY PRECAUTIONS AND MEASURES TO BE OBSERVED DURING EXECUTION OF ROB THROUGH PMC (PROJECT MANAGEMENT CONSULTANCY).
56. METALLISING AND ALUMINIUM PAINTING SHOULD BE DONE ON GIRDER AS PER PROVISIONS OF PARA 218 OF IRBM.
57. RECOMMENDED SAFE LOAD ON PILE TO BE CONFIRMED BY PILE LOAD TEST (PLT).MAJOR DIFFERENCE IN RESULTS BETWEEN PLT & RECOMMENDED SAFE LOAD MUST BE BROUGHT TO THE NOTICE OF E-INCHARGE IMMEDIATELY
58. RE WALL BEYOND 10.0M MAY BE CONSTRUCTED IN STAGES :-
• CONSTRUCT UPTO 10.0M HEIGHT.
• PROVIDE A WAITING PERIOD OF 3 MONTHS SO THAT LONG TERM SETTLEMENT CAN TAKE PLACE.
• CONSTRUCT UP TO DESIRED LEVEL GRADUALLY.
59. AUTHORITY OF WORK - NHIDCL.
60. PROPOSED BOWSTRING GIRDER AS PER RDSO STANDARD DRAWING NO :-
RDSO/B/11775(SERIES) FOR 36.0M SPAN COMPOSITE GIRDER
RDSO/B/10418(SERIES) FOR 72.0M SPAN BOWSTRING GIRDER

DATE	REVISION NO.	REVISION

CE'S/NFR/DRG.NO-
HQ.FILE NO-

NORTHEAST FRONTIER RAILWAY
DIVISION - RANGIYA

GAD FOR ROB AT RAILWAY KM 207/9-208/1 BETWEEN RAILWAY STATION BILASIPARA & CHAPAR IN GAURIPUR-ABHAYAPURI (GUP-AYU) SECTION & ROAD KM 5.381 FROM BILASIPURA TO JALUKBARI OF NATIONAL HIGHWAY-17.

(GENERAL ARRANGEMENT DRAWING)

APPROVAL OF RAILWAY AUTHORITY

SIGNATURE OF DIV.OFFICER'S:-		SIGNATURE OF HQ.OFFICER'S:-	
DRM/ :		C.B.E/N.F.R:	
SR.DEN(Co-Ord.):		DY.CE/BR/HQ:	
SR.DEE/ :		XEN/BR/D:	
SR.DSTE/ :		AEN/BR/D:	
SR.DOM/			

MKD.	DESCRIPTION	CHKD.	APPRD.
	REVISIONS		

SCALE :- AS SHOWN

DATE:- OCTOBER, 2023

CLIENT:
NATIONAL HIGHWAYS AND INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED.
3RD FLOOR, PTI BUILDING, 4-PARLIAMENT STREET, NEW DELHI - 110001

PROJECT:
CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOJANA (LOT-1) - PACKAGE 1A
BILASIPURA-CHAPAR-TULUNGIA-JOGIGHOPA-GENDERA-PAIKAN-DUDHNOI-GUWAHATI ROAD
(LENGTH 225.000 KM) IN THE STATE OF ASSAM.

GENERAL ARRANGEMENT DRAWING
PACKAGE-1

PROJECT ID:-
PROP. ROB AT CH. 5.381KM

CONSULTANT :-
CETEST Engineering Consultants
C.E. TESTING COMPANY PVT. LTD.
(An ISO 9001 , 14001 & OHSAS 18001 Certified Company)
124-A, N.S.C. Bose Road , Kolkata - 700092

MANAGER NHIDCL

GENERAL MANAGER NHIDCL

DWG. NO.
CET/BDG/2018/4146/NHIDCL/NH-17/B-G ROAD/FDPR/ROB/(STR-.../.)/GA

DRAWN BY	CHECKED BY	APPROVED BY	REV.
A. Manna	S. Deb	S. Bhadra	R0