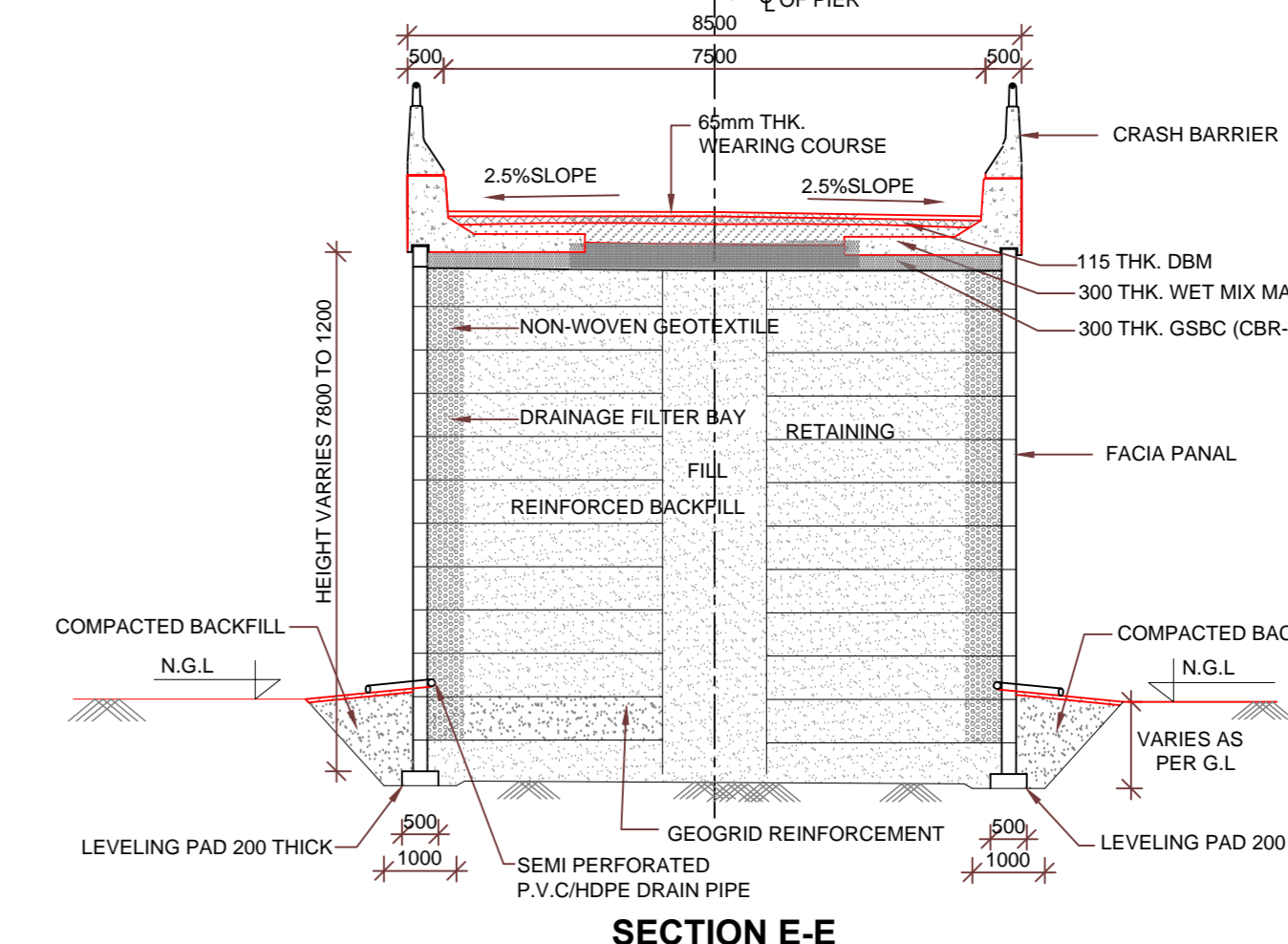
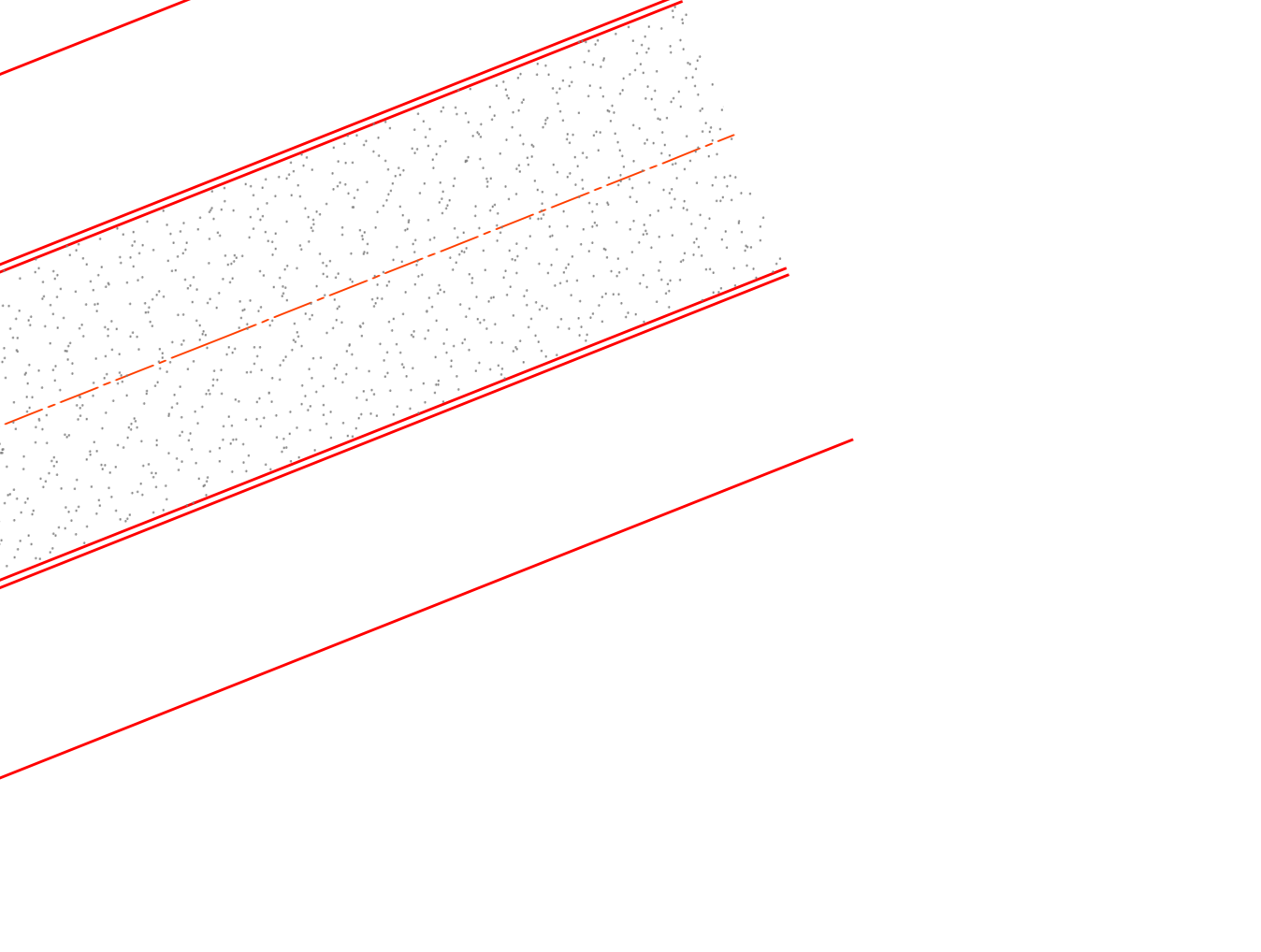
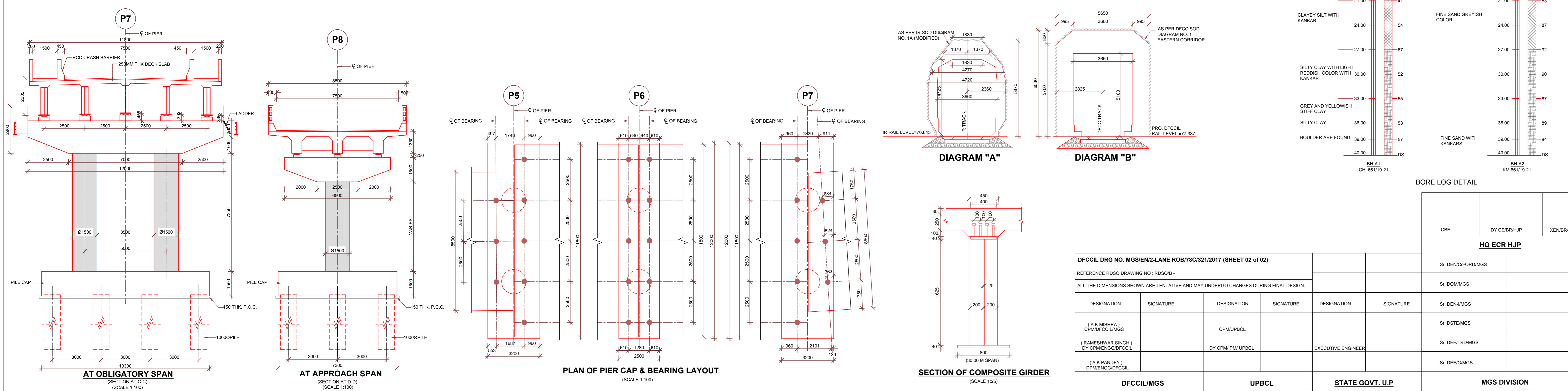
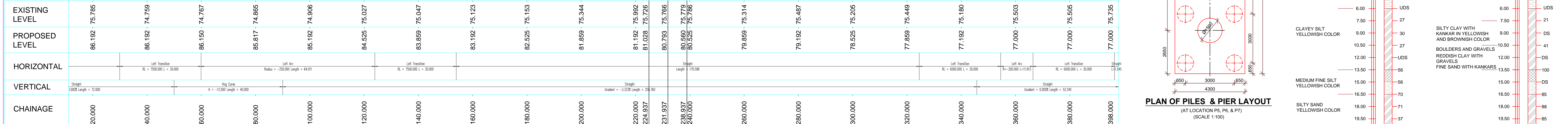


	P6	P7	P8	P9	P10	P11	A2
EXISTING LEVEL	75.785	74.759	74.707	74.885	75.027	75.123	75.183
PROPOSED LEVEL	86.192	86.192	86.150	85.817	84.525	83.859	81.192
HORIZONTAL	E = 1:20000 (SLOPE 1:30)						
VERTICAL	SLOPE 1:30						
CHAINAGE	20.000	40.000	60.000	80.000	100.000	120.000	140.000



DFCCIL DRG NO.	MGS/EN2-LANE ROB/78/C/21/2017 (SHEET 02 OF 02)				
DESIGNATION	SIGNATURE	DESIGNATION	SIGNATURE	DESIGNATION	SIGNATURE
(A.K. MISHRA)	CPM/MSPCL	(RAMESHWAR SINGH)	DY CPM PM/UPBCL	(A.K. PANDEY)	DP/ENGG/DFCCIL
(SUNIL KUMAR)	(ATIF AHMED)	(MD. NOVAM)	(D.S. NEGI)	(A.K. MATTHUR)	

SANCTION OF CRS TO BE TAKEN PRIOR TO EXECUTION OF WORK

SPECIAL NOTES:

- LAUNCHING SCHEME OF THE RAILWAY BRIDGE/ROB WILL BE SUBMITTED SEPARATELY.
- MAINTENANCE AGREEMENT TO BE EXECUTED BEFORE EXECUTION OF WORK.
- NO WORK WITHIN RAILWAY BOUNDARY TO BE DONE WITHOUT PRESENCE OF RAILWAY REPRESENTATIVE.
- CRIBS OVER ROB PROPERLY TO BE FABRICATED PREFERABLY BY RSDO APPROVED FIRMS.

NOTES:

- ALL DIMENSIONS ARE IN MM AND LEVELS ARE IN METERS UNLESS SPECIFIED OTHERWISE.
- DIMENSIONS ARE NOT TO BE SCALED ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
- ALL THE DIMENSIONS SHOWN SHOULD BE VERIFIED AT SITE BEFORE STARTING UP DESIGN WORK IN HAND. ANY DISCREPANCY NOTED SHOULD BE FORWARDED THROUGH ALTERATIONS DAILY SHEET.
- MAXIMUM SAFE BEARING CAPACITY AT THE FOUNDING LEVELS SHOULD BE AS PER GEOTECHNICAL REPORT. IF IT IS LESS THAN THE BASE PRESSURE, THE FOUNDATION HAS TO BE REDESIGNED.
- DRAINAGE SLOTTING SHALL BE PROVIDED AS PER MONTH SPECIFICATIONS. DESIGN CONSULTANT SHOULD SUBMIT SEPARATE SHEET OF DRAINAGE SLOTTING AS PER LATEST MONTH STANDARDS.
- EXPOSURE CONDITION OF THE BRIDGE AND ITS COMPONENTS SHOULD BE DECLARED AS PER IRC 21:2009/BRC 12:15:46. ALL SPECIFICATION LAD DOWN IN IRC CODES/IS CODE FOR RELEVANT EXPOSURE CONDITION SHALL BE FOLLOWED.
- FOR DETAILS OF SUBSTRUCTURE AND FOUNDATION REFER SEPARATE DRAWING DULY APPROVED BY RAILWAY/DFCCIL.
- WORK SHOULD BE CARRIED OUT UNDER THE SUPERVISION OF RAILWAY ENGINEERS WITHIN RAILWAY LAND LIMIT.
- TYPE OF BEARING - POT-PILE.
- SUITABLE UTILITY DUCTS IF REQUIRED SHOULD BE PROVIDED BELOW FOOTPATH SLAB WITH THE APPROVAL OF ENGINEER IN CHARGE.
- DESIGN SHALL BE AS PER LATEST RELEVANT CODE OF IRC INCLUDING SP-33 AND OTHER CODES AS APPROVED BY M.O.T.
- DFCCIL/PRIVATE AUTHORITIES SHOULD BE ENSURED DURING EXECUTION OF WORK SAFETY OF RUNNING RAIL TRAFFIC SHOULD NOT BE HAZARDED.
- SUITABLE SR, IF REQUIRED SHOULD BE IMPOSED BEFORE TAKING UP THE EXECUTION OF WORK WITH THE APPROVAL OF ENGINEER IN CHARGE.
- TEMPORARY SIGNALING ARRANGEMENT WILL BE DONE AS PER G.R.15.09 (I) OR G.R.15.09/2B AS PER 15:100/2B.
- LOADING STANDARD OF ROB AS PER IRC-6:2000.
- FALL RESISTED LOAD TEST OF SUPER STRUCTURE SHOULD BE DONE AS PER IRC-SP-5 TO ENSURE QUALITY WORK.
- CONCRETE DESIGN MIX: RCC DECK SLAB - M40, CRASH BARRIER - M40, PIER/PIER CAP/PILE/PIE CAP - M35, LEVELING COURSE - M15, PEDESTAL - M40.
- MANNED LEVEL CROSSING NO 78/C EXIST AT THIS LOCATION.
- L.C. SHALL BE CLOSED SIMULTANEOUSLY WITH COMMISSIONING OF ROB AND NOC IN THIS REGARD HAS BEEN ISSUED BY STATE GOVT. VIDE LETTER NO.5970/2011-2015-12/2015 DATED 07.06.2016.
- TYL OF L.C. IS 9074 DATED 06.01.2015.
- PROVISION OF CLAMPS IN THE SUPERSTRUCTURE FOR THE SUPPORTING THE AC TRACTION WIRE TO BE MADE INVARIABLY IN CONSULTATION WITH CONCERNED AUTHORITIES BASED ON TYPICAL DRAWING.
- ALL R.C.C. WORK SHOULD CONFORM TO RELEVANT ISRC CODES & MOST SPECIFICATION.
- FOR FABRICATION, WORKMANSHIP, INSPECTION & TESTING, PROTECTION AGAINST CORROSION ETC. RELEVANT PROVISION OF IRC-24:2001 SHALL BE FOLLOWED.
- THE DEPTH OF CONSTRUCTION WORK IN THIS DRAWING IS TENTATIVE & SHOULD BE DECIDED BY COMPETENT AUTHORITIES AS PER ACTUAL SOIL PROPERTIES AND DESIGN CALCULATION.
- REPRESENTATIVE OF TELECOM & SIGNAL DEPARTMENTS SHOULD BE MADE AVAILABLE BEFORE COMMENCEMENT OF PROPOSED WORK. IN THE VICINITY OF SIGNAL & TELECOM CABLE.
- TEMPORARY ARRANGEMENT DRAWINGS FOR CONSTRUCTION OF ROB ON EXISTING WORKS/ROB SHOULD BE APPROVED BY RAILWAY AUTHORITY BEFORE START THE WORK.
- PRECAUTIONARY MEASURES FOR CONSTRUCTION OF ROB ON EXISTING WORKS/ROB SHOULD BE APPROVED BY STATE GOVT. AND PRIVATE AGENCY ISSUED BY ADVISOR CIVIL ENGINEERING RAILWAY BOARD LETTER NO. 87/C-18/0158/POLICY/P1-8, DATED 16.07.2009, 27.10.2009, 15.02.2011 & 09.07.2012 SHOULD BE STRICTLY FOLLOWED.
- 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 LIFE.
- CONTROLLED CONCRETE WITH WEIGH WATCHING SHALL BE USED.
- GUARD RAIL SHOULD BE PROVIDED IN THE TRACK NEAR THE ISOLATED PIER OF ROB. NO CONSTRUCTION JOINT SHALL BE ALLOWED IN R/S OR R/C SLAB OR GIRDER AND CURING OF ALL CONCRETE AND MASONRY WORKS AS PER THE RELEVANT CODES OF PRACTICE SHALL BE ENSURED BEFORE USE.
- INSPECTION AND TESTING REPORT SHOULD BE PROVIDED TO ENSURE PROPER INSPECTOR'S CONCERNABILITY OF ROB.
- STRUCTURAL STEEL SHALL CONFORM TO IS 2062 GRADE - B.
- STRIP SEAL TYPE EXPANSION JOINTS SHALL BE PROVIDED AS PER LATEST MOST REQUIREMENT. CONTRACTOR SHOULD FURNISH DESIGN/DRAWING OF EXPANSION JOINTS FROM FIRMS APPROVED BY M.O.T AT VARIOUS RELEVANT AMBIENT TEMPERATURE TO SUIT SITE CONDITIONS WITH THE APPROVAL OF ENGINEER IN CHARGE.
- TO PROTECT THE CONCRETE FROM DAMAGE DUE TO SMOKE OF LOCOMOTIVES, 400MM WIDE STRIP WITH POLYURETHANE PAINT PREFERABLY IN BLACK COLOUR SHALL BE PROVIDED IN THE SOFFIT OF THE DECK OVER RUNNING TRACKS.
- STANDARD MAINTENANCE AGREEMENT SHOULD BE EXECUTED WITH RAILWAY AND STATE GOVT. AUTHORITIES FOR GRANT OF PERMISSION FOR CONSTRUCTION OF ROB IN RAILWAY PORTION.
- NO WORK SHOULD BE TAKEN UP IN HAND TILL PROOF CHECKED DESIGN AND DRAWING WITHIN RAILWAY AREA APPROVED BY RAILWAY.
- ALL STEEL STRUCTURES SHOULD HAVE ANTI-CORROSION PROTECTION DESIGN OF LONG DURABILITY.
- FOR DETAILS OF SUPER STRUCTURE OF RAILWAY SPAN OF 30.00M SPAN, REFER RSDO'S DRG. NO. RD/08/1750R, AND FOR 30M GIRDER REFER RSDO'S DRG. NO. RD/08/1750R.
- ANY CHANGE IN THE GAD FOR RAILWAY PORTION SHOULD BE DONE WITH PRIOR APPROVAL OF RAILWAY.
- CLEAR COVER TO OUTER MOST STEEL SHALL BE AS UNDER:
A. FOR SUPER STRUCTURE - 15MM;
B. FOR FOUNDATION - 75MM;
C. FOR ABUTMENT, DIRT WALL AND RETURN WALL - 50MM.
- FOR JACKING UP THE GIRDER FOR ANY HANDING REQUIREMENTS IN FUTURE SUCH AS FOR REPLACEMENT OF BEARINGS OR ANY OTHER WORK REQUIRES SUITABLE FEATURES SHOULD BE PROVIDED TO ENABLE JACKING.
- THE DIMENSIONS & LEVELS SHOWN IN THE GAD ARE SUBJECT TO CHANGES AS PER SITE REQUIREMENT/DETAIL DESIGN AND WILL BE DONE WITH PRIOR APPROVAL OF RAILWAY.
- THE BRIDGE IS DESIGNED FOR SEISMIC ZONE III.
- DIMENSIONS MAY GET CHANGED AFTER ITS DETAILED DESIGN.
- AS PER DATA GIVEN BY DFC OFFICIAL, THE DISTANCE BETWEEN PROPOSED DFC TRACK FROM DN LINE AND ITS PROPOSED LEVEL, HAVE BEEN SHOWN IN THE DRAWING.
- PROVISION OF EXPANSION JOINT SHOULD BE BETWEEN APPROVED OF ENGINEER IN CHARGE.
- VERTICAL CURVE WILL BE PROVIDED WHEREVER THERE IS CHANGE IN GRADIENT IN APPROACHES AS PER IRC SP-2.
- RESTRAINER ON BOTH SIDE OF OUTERMOST GIRDER ON PIER CAP & ABUTMENT CAP WILL BE PROVIDED IN SEISMIC ZONE III & V.
- APPROACH SPAN CONFIGURATION ARE INDICATIVE ONLY. FINAL SPAN OF APPROACH SPAN DECIDED BY UPR&CL ENR.

OPERATION SCHEDULE FOR RAILWAY SPAN:

- TRACK SHALL BE PROTECTED SUITABLY DURING THE CONSTRUCTION OF BRIDGE/ROB FOR SAFETY OF RUNNING TRAIN.
- ADEQUATE MEASURES SHALL BE TAKEN AT SITE TO ENSURE SAFETY FOR WORKING MEMBERS, MATERIALS, EQUIPMENTS, TRAFFIC ETC.
- FOR SHEDDING OF THE MASTS AND SIGNALING EQUIPMENTS, DIVISION MAY BE CONSULTED AS PER EXISTING RULES.
- FOR DETAILS OF SUPER STRUCTURE OF RAILWAY SPAN OF 30.00M SPAN, REFER RSDO'S DRG. NO. RD/08/1750R, AND FOR 30M GIRDER REFER RSDO'S DRG. NO. RD/08/1750R.
- LAUNCHING SCHEME SHALL BE APPROVED BY RSDO BEFORE EXECUTION OF WORK.
- FOR LAUNCHING OF GIRDERS OVER RAILWAY TRACK, SUITABLE BLOCK WILL BE TAKEN WITH ADVANCE INTIMATION.
- DRAWING APPROVAL SHALL BE SUBMITTED TO APPROVAL OF ALIGNMENT AND LEVELS BY STATE GOVT.
- CONSTRUCTION SEQUENCE:
(i) CONSTRUCTION OF SUITABLE FOUNDATION FOR PIERS, ABUTMENT.
(ii) CONSTRUCTION OF R/C PEDESTALS.
(iii) FABRICATION OF STEEL GIRDERS, CROSS GIRDERS AND DIAPHRAGMS ETC.
(iv) SPREAD RESTRICTION OF 20 KM/H WILL BE IMPOSED BEFORE ERECTION OF TEMPORARY STAGING WORK.
(v) POSITIONING OF CRANES FOR LIFTING AND PLACEMENT OF GIRDERS WITH RAILWAY TRAFFIC BLOCK BRIGES AND LAUNCHING OF GIRDERS.
(vi) CASTING OF RCC DECK SLAB WITH SHUTTERING SUPPORTED ON GIRDERS UNDER 20 KM/H SR.
(vii) REMOVAL OF STAGING AND SHUTTERING OF DECK SLAB UNDER TRAFFIC BLOCK.
(viii) COMPLETION OF ANCIARY WORKS LIKE CRASH BARRIER, RAILING, WEARING COURSE, EXPANSION JOINT ETC.
- ALL SAFETY RULES SHALL BE FOLLOWED DURING EXECUTION OF WORK.
- RAILWAY AUTHORITIES SHALL BE INFORMED BEFORE STARTING ANY WORK. INSTRUCTIONS GIVEN BY RAILWAY AUTHORITIES TIME TO TIME DURING EXECUTION SHALL BE FOLLOWED.

EAST CENTRAL RAILWAY (E.C.RLY)

PROPOSED TWO LANE ROB SPAN 2x30.00 FOR OBLIGATORY SPAN IN LIEU OF L-XING NO 78, (SKEW ANGLE 0°) (TVU-96744, DT.08/2015)

ON MUGHALSARAI - GAYA SECTION OF EAST CENTRAL RAILWAY MUGHALSARAI GENERAL ARRANGEMENT DRAWING

DRG. NO. RITES/RICE/DFCC/ROB/78/C/L

2 OF 2

DATE: SEPTEMBER, 2017

REV: RO

SCALE: 100 0 100 200 300cm / 200 0 200 400 600cm

DFCCIL/MGS **UPBCL** **STATE GOVT. UP** **MGS DIVISION**

DFCCIL DRG NO. MGS/EN2-LANE ROB/78/C/21/2017 (SHEET 02 OF 02)

REFERENCE RSDO DRAWING NO. RSDO/B-

ALL THE DIMENSIONS SHOWN ARE TENTATIVE AND MAY UNDERGO CHANGES DURING FINAL DESIGN.

(SUNIL KUMAR) DRAWN BY (ATIF AHMED) AMD (MD. NOVAM) MANAGERED (D.S. NEGI) JAMD (A.K. MATTHUR) GAMD

RITES
THE INFRASTRUCTURE PEOPLE

RITES LTD.