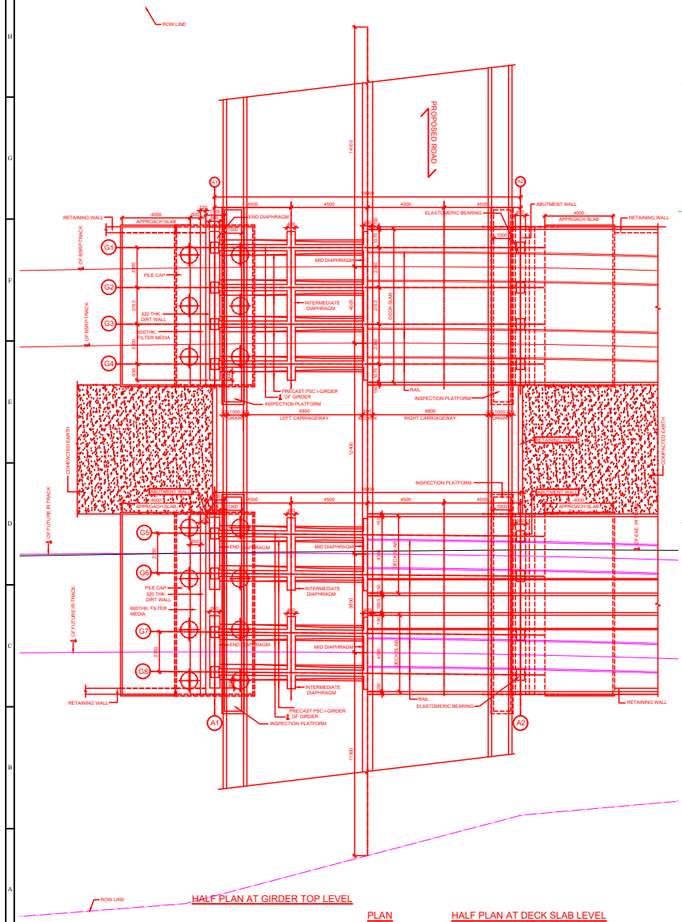
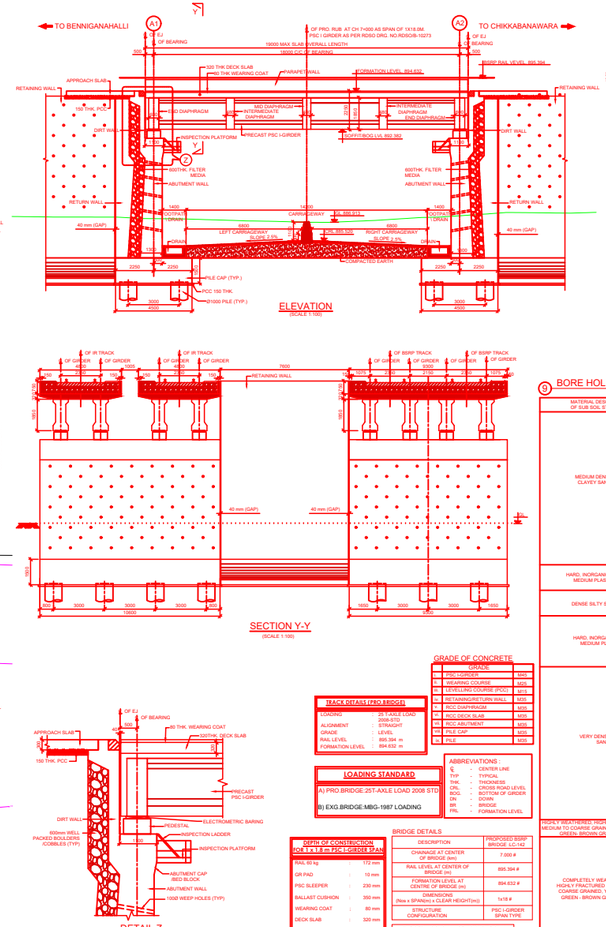
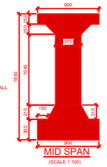
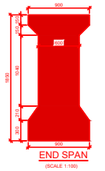
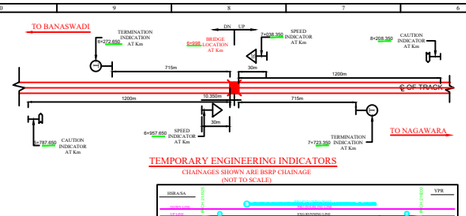
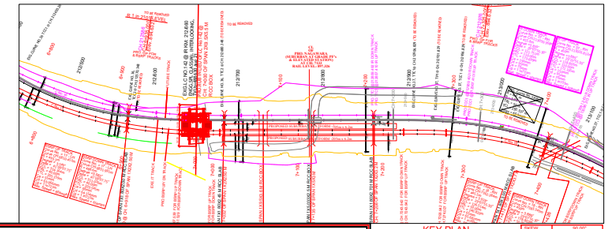












BRIDGE	BLOW
GRADIENT	LEVEL
CURVE	STRAIGHT

KEY PLAN NOTES:
1. ALL DIMENSIONS ARE SHOWN IN RED.
2. RAILWAY BOUNDARY DISTANCE ARE WRN RESPECT TO CENTRE LINE
3. ROAD ARE BLUE
5. TRACK IS STRAIGHT ON BRIDGE LOCATION.

REFERENCE:
1. WEEP HOLES AS PER PARA 7.6 OF BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
2. DESIGN DOCUMENT NO.
3. DIMENSIONAL AND REINFORCEMENT DETAIL-
4. PSC I-GIRDER AS PER RDSO DRG. NO.RDSO/B-10273.
5. BACKFILL MATERIAL BEHIND RCC BOX AS PER PARA 7.5 OR IRS BRIDGE SUBSTRUCTURE & FOUNDATION CODE.
6. DRAINAGE ARRANGEMENTS AS PER DRG.NO. _____/DRAINAGE ARRANGEMENT- RUB.
7. GEO COMPOSITE DRAIN AS PER RAILWAY BOARD LR.NO. _____RUB AT CH-0+898 DT-_____.

DRAINAGE CERTIFICATE:
IT IS CERTIFIED THAT THE DRAINAGE ARRANGEMENTS FOR PROPOSED CONSTRUCTION OF RUB IN LIEU OF LC NO 142 AT IR KM 212/655A, BSRP CH 7+000 AT CORRIDOR 2.0F BSRP HAVE BEEN THOROUGHLY CHECKED AND THERE WILL BE NO PROBLEM OF DRAINAGE AT THIS LOCATION IN THE FUTURE.

(-Sd-)	(-Sd-)
AGMK-RIDE	GMK-RIDE

DESIGN CRITERIA:
STRUCTURAL DESIGN :
1. BRIDGE SUBSTRUCTURE:- DIMENSIONS FOR EXISTING MAIN LINE AT BRIDGE LOCATION BY INSTALLING NECESSARY TEMPORARY ENGINEERING SPEED INDICATOR AS PER RPWPM-PART-I AND ENGINEERING SPECIFICATION.
2. DIVERT THE TRAFFIC THROUGH NEAREST LC/RUB. PROPER TRAFFIC SIGNALS TO BE PROVIDED FOR DIVERSION OF TRAFFIC WITH TRAFFIC CONTROLLING PERSON. PERMISSION TO BE ATTAINED FROM COMPETENT AUTHORITY FOR DIVERSION/CLOSING OF TRAFFIC.

STAGE 1:- EARTHWORK FOR EMBANKMENT OF BSRP LINE-2
1. EXCAVATE THE EARTH UP TO REQUIRED DEPTH FOR PILE FOUNDATION. PREPARE THE GROUND WELL BY RAMPING ETC AS NECESSARY AS PER REQUIREMENT.
4. LEVEL THE GROUND SURFACE.
5. CONSTRUCT THE REMAINING RUB & RETAINING WALLS WILL BE EXECUTED WITH ALL SAFETY MEASURES AT BSRP RUB PORTION.
6. CONSTRUCTION OF PROPOSED STAGE-1, RETAINING WALL R1 WILL BE DONE EXCEPT FOR RUB LOCATION.
7. LAY THE BACKFILL MATERIAL.
8. BACKFILLING WILL BE DONE BEHIND THE ABUTMENT.

STAGE 2:- LAYING OF TRACKS FOR BSRP LINE-2
9. CONSTRUCT THE REMAINING RUB PORTION. CARRY OUT EARTH FILLING AND BLANKET MATERIAL IN BSRP LINE 2 AT LC 142 LOCATION.
10. EXISTING ROAD AT LC 142 TO BE DISCONNECTED PERMANENTLY.
11. TRACK WILL BE LAID FOR BSRP LINE-2 FROM POINT 'A' TO POINT 'B' (FOR A LENGTH OF 5.0 KM).

STAGE 3:- CUT AND CONNECTION DURING TRAFFIC BLOCK
12. CONNECTION OF EXISTING BSRP TRACK FROM POINT 'A' TO POINT 'A1' WILL BE CONNECTED TO POINT 'A' WITH A LENGTH OF 58.5M.
13. SIMULTANEOUSLY DURING TRAFFIC BLOCK, CUT & CONNECTION OPERATION WILL BE CARRIED OUT AND POINT 'B1' WILL BE CONNECTED TO POINT 'B' WITH A LENGTH OF 55.0M.
14. AFTER CUT AND CONNECTION, INDIAN RAILWAY TRAFFIC WILL BE DIVERTED TO PROPOSED BSRP LINE-2.
15. EXISTING TRACK (REDUNDANT LINE BETWEEN POINT 'A2' & POINT 'B2') WILL BE DISMANTLED AS PER RDSO.
16. AFTER DIVERTING INDIAN RAILWAY TRAFFIC TO BSRP LINE-2, CONSTRUCTION OF PROPOSED RETAINING WALL WILL BE DONE EXCEPT FOR THE RUB LOCATION.

STAGE 4:- CONSTRUCTION OF REMAINING BOX PORTIONS DURING TRAFFIC BLOCK
17. PROPER DRAINAGE ARRANGEMENTS HAVE TO BE PROVIDED TO LEAD THE WATER FROM RUB TO LOW LYING AREAS. GROUND WELL BY RAMPING ETC AS NECESSARY AS PER REQUIREMENT.
18. LEVEL THE GROUND SURFACE.
19. SAND FILL OF 350 mm.
20. FOUNDATION WORK FOR THE RUB & RETAINING WALLS WILL BE EXECUTED WITH ALL SAFETY MEASURES.
21. CONSTRUCT THE REMAINING RUB PORTION.
22. LAY THE BACKFILL MATERIAL.
23. BACKFILLING WILL BE DONE BEHIND THE ABUTMENT & RETAINING WALL.

STAGE 5:- LAYING OF TRACKS FOR BSRP LINE-1 UP & DOWN MAIN LINE
24. BLANKET FILL WILL BE DONE FOR BSRP LINE-1 UP & DOWN MAIN LINE.
25. TRACK WILL BE LAID FOR BSRP LINE-1,UP & DOWN MAIN LINE FROM POINT 'C' TO POINT 'D' (FOR A LENGTH OF 5.01 KM).
26. CONSTRUCT THE NEW HEIGHT GAUGE ON BOTH SIDES OF RUB APPROACHES

STAGE 6:- CUT AND CONNECTION DURING TRAFFIC BLOCK
27. DURING TRAFFIC BLOCK CUT & CONNECTION OPERATION WILL BE CARRIED OUT AND POINT 'C' WILL BE CONNECTED TO POINT 'C1' WITH A LENGTH OF 58.5M.
28. SIMULTANEOUSLY CUT & CONNECTION OPERATION WILL BE CARRIED OUT AND POINT 'D' WILL BE CONNECTED TO POINT 'D1' WITH A LENGTH OF 55.0M.
29. FINALLY EXISTING INDIAN RAILWAY TRAFFIC WILL BE BE DIVERTED TO UP MAIN LINE.

STAGE 7:-
30. WEEP HOLES WILL BE REMOVED.
31. COMPLETE THE WORK IN ALL RESPECTS SUCH AS CONSTRUCTION OF RETAINING WALL CUM DRAIN,PARAPET WALLS, REGARDING OF APPROACH ROADS,SIDE DRAIN ETC,ON BOTH SIDES OF RCC BOX.
32. PROVISION OF OHE WORKS IN STAGES GRADUALLY AS PER PARA 238(G) OF IRPWM. RAILWAY ELECTRIFICATION INSTALLATIONS WILL BE SHIFTED AS PER REQUIREMENT AT SITE, FOR WHICH NECESSARY POWER BLOCK TO BE PROVIDED.

GENERAL NOTES:
1. ALL DIMENSIONS SHOWN IN THIS GAD ARE IN MM AND REDUCED LEVELS (M.R.T. MSL) ARE IN M UNLESS OTHERWISE MENTIONED.
2. DO NOT SCALE THE DRAWING ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. EXPOSURE CONDITION IS MODERATE.
4. SEISMIC ZONE IS ZONE II.
5. STANDARD OF RAILWAY LOADING: 25T AXLE LOADING - 2008 STANDARD.
6. STANDARD OF ROAD LOADING: IRC.
7. PROFILING IS SHOWN IN RED COLOR IN THE KEY PLAN.
8. EXISTING BRIDGE DETAILS ARE BASED ON DATA COLLECTED FROM SITE BY FIELD EXECUTIVES.
9. THE ENTIRE WORK SHALL BE CARRIED OUT AS PER THE INSTRUCTIONS AND TO THE SATISFACTION OF THE ENGINEER IN CHARGE AT SITE.
10. RAIL LEVEL, FORMATION LEVEL, ETC., SHOULD BE CROSS VERIFIED BY THE ENGINEER IN CHARGE BEFORE AND DURING EXECUTION OF WORK AT SITE AS PER LATEST APPROVED WORKING SECTION/PLANS AND OTHER CONNECTED DRAWING IF ANY.
11. THIS GAD IS SUBJECT TO MAINTAINING SAME LEVELS, ALIGNMENT, GRADE & TRACK CENTER DISTANCE AS THAT OF APPROVED WORKING SECTION/ WORKING PLAN AND THEO PLANS IF ANY.
12. ON TOP OF CONCRETE AT THE END OF EACH DAY'S WORK, DEPRESSION SHALL BE MADE TO FORM KEYS FOR ADEQUATE BOND FOR NEXT DAY CONCRETING.
13. ALL RCC SURFACES COMING IN CONTACT WITH SOIL MUST BE PAINTED WITH APPROVED PROTECTIVE PAINT. NO OTHER PAINTING IS ENVISAGED. PROTECTIVE PAINT TO BE APPLIED AS PER MANUFACTURER'S REQUIRED VIDE CRO LETTER NO. W.144/CONTRA/POLICY/VOL.IV DATED _____. SHALL BE FOLLOWED STRICTLY.
14. NO CONSTRUCTION JOINT SHALL BE NORMALLY ALLOWED IN CONCRETE WITHOUT SPECIAL PRECAUTIONS AS PER RELEVANT CODES.
15. CONTROLLED CONCRETE WITH MIEXSH BATCHING SHALL BE USED FOR CONCRETE.
16. CURING OF ALL CONCRETE WORK AS PER RELEVANT CODES OF PRACTICE SHALL BE ENSURED.
17. UNDERGROUND CABLE ETC., IF ANY, SHALL BE REMOVED AND RE-ALIGNED BEFORE THE EXECUTION OF WORK STARTS.SET CABLES SHALL BE PROTECTED AT SITE BY R-ADE. ALL PRECAUTIONARY STEPS MUST BE TAKEN ACCORDING TO DGS&D/MUNICIPALITY CIRCULAR NO. 1/1/2013. ISSUED BY RAILWAY BOARD VIDE LETTER NO. 2003/TELE/VOL.I PT, DC, DATED 30.01.2013.
18. ALL STRUCTURAL DIMENSION OF RUB IS AS PER DESIGN AND OTHER STRUCTURES SHOWN IN THIS GAD ARE TENTATIVE. THE DIMENSIONS SHOWN IN THIS GAD ARE BASED ON THE PRELIMINARY DESIGN. THE DETAILED DESIGN/ DRAWING WILL BE PROCESSED SEPARATELY AFTER THE APPROVAL OF GAD.
19. SAFE BEARING CAPACITY OF SOIL/ROCK AT BOTTOM OF FOUNDATION IS ___T/SQM AS PER SOIL REPORT.
20. THE MINIMUM HORIZONTAL & VERTICAL DISTANCES I.A.W.GEN PROVIDED AS PER LATEST GSI FOR RAILWAYS/BSRP.
21. PROPER DRAINAGE ARRANGEMENTS HAVE TO BE PROVIDED TO LEAD THE WATER FROM RUB TO LOW LYING AREAS EITHER BY LAYING UNDERGROUND PIPES / OPEN DRAINS WITH PROPER MAINTAINABILITY OR BY USING RAIN WATER HARVESTING TECHNIQUES AS PER CPD/BWS/SWR/GBL LETTER NO. SWR/W-75/POLICY/VOL.IV, DATED:07.01.2020.
22. NECESSARY GUARD RAILS SHALL BE PROVIDED ON TRACK AT RUB LOCATIONS BY R-RIDE.
23. SUITABLE HEIGHT GAUGE TO BE PROVIDED ON EITHER SIDE OF RUB LOCATION.
24. DETAILED INSTRUCTIONS ISSUED ON CONSTRUCTION OF BOX SGIMENTS/RUB/LIVS BY CCRS/LKD VIDE LETTER NO 1501/2/01/2013-18-T-II, DATED27-04-2018 FORWARDED BY CRS/BSC VIDE LETTER NO. G2201/2013-14-SWR, DATED 05.06.2018 SHALL BE FOLLOWED.
25. ALL THE FOLLOWING SAFETY MEASURES SHALL BE FOLLOWED
   a. ADEQUATE SAFETY MEASURES FOR RUNNING TRAINS SHALL BE ADOPTED WHILE DOING THE EARTH WORK BELOW THE TRACK.
   b. DURING CONSTRUCTION OF THE BRIDGE THE EXISTING TRACK SHALL BE PROTECTED SUITABLY BY IMPOSING NECESSARY SPEED RESTRICTIONS BY PROVIDING TEMPORARY ENGINEERING INDICATORS.
   c. DURING THE CONSTRUCTION OF THE PROPOSED BRIDGE PROPER SAFETY PRECAUTIONS TO BE TAKEN WHILE DOING WORK IN/NEAR/OVER CLOSE TO THE EXISTING BRIDGE FOUNDATIONS INCLUDING IMPOSING SPEED RESTRICTIONS WHERE NECESSARY.
   d. THE GRADUAL RELEASE OF SPEED RESTRICTION SHALL BE AS PER PARA NO.238 (2)(G) OF IRPWM.
   e. NECESSARY SHORING ARRANGEMENTS TO BE MADE TO PROTECT EXISTING BRIDGE STRUCTURE WHENEVER NECESSARY.
   f. JOINT PROCEDURE ORDER ON SAFETY RELATED ISSUES PERTAINING TO WORK SITE IN CONSTRUCTION PROJECTS (JPO NO. W.239/SAFETY-PRECAUTION, DT.18.02.2011) ISSUED VIDE CTE LTR NO. SWR/W/347/SAFETY AT WORK SPOT OF 25.06.2017 HAS TO BE STRICTLY FOLLOWED.
   g. DURING EXECUTION OF WORK THE MATERIAL/ EQUIPMENT SUCH AS RELEASED MATERIAL ETC., SHOULD NOT INFRINGE THE TRAIN TRAFFIC. ALL SAFETY MEASURES TO BE TAKEN BY ENGINEER IN CHARGE DURING EXECUTION
   h. SUITABLE SAFETY BARRICADING HAS TO PROVIDED WHENEVER WORK IS BEING EXECUTED PARALLEL TO THE RUNNING TRACK.
26. THE GAD HAS BEEN PREPARED BASED ON THE JOINT INSPECTION REPORT DATED _____ BETWEEN RAILWAY AND GOK AUTHORITIES.
27. SUITABLE SPAN OF 1x1.8 MTLSN PROPOSED RUB PORTION IS PROPOSED FOR FLEXIBLE VEHICULAR MOVEMENTS.
28. PROPER VENTILATION & LIGHTING ARRANGEMENTS WILL BE PROVIDED FOR THE RUB.
29. GEOPHYSICAL SURVEY WILL BE DONE BEFORE EXECUTION & NO. OF INJECTION RECHARGE WELLS WILL BE DECIDED ACCORDINGLY.
30. STRUCTURES WITHIN THE K-REE ROW IS ONLY CONSIDERED IN L&T SCOPE OF WORK.
31. FOR RETURN STRUCTURE, SEPARATE DRAWING WILL BE SUBMITTED
32. THE STRUCTURAL THICKNESS OF MEMBERS SHOWN ARE INDICATIVE ONLY & SHALL BE CONSIDERED AS IN STRUCTURAL DRAWING.

SPECIFICATION:
1. ALL CIVIL WORKS HAVE TO BE CARRIED OUT AS PER THE FOLLOWING
   1.1 IRS CONCRETE BRIDGES STANDARD SPECIFICATIONS FOR WORKS AND MATERIALS 2010.
   1.2 IRS CONCRETE BRIDGE CODE 2004 & RAILWAY'S SPECIFICATIONS.
   1.3 IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE 2013.
   1.4 IRS BRIDGE RULES 2014
   1.5 IRS SCHEDULE OF DIMENSIONS 2004 CORRECTED UP TO LATEST CORRECTION SLIPS.
2. MINIMUM GRADE OF CONCRETE FOR
   2.1 ALL RCC WORKS SHALL BE M 25
   2.2 ALL NCC WORKS SHALL BE M 25
3. WEEP HOLES : 100MM DIA PVC/AC PIPES AS IRS SUBSTRUCTURE CODE 2013 CL.7.6
4. ALL THE PROPOSED RUB WILL BE CONSTRUCTED AS PER RDSO LETTER NO.2017-CD-(E/RUB/B), DATED 18.02.2018. BEHIND THE GEO COMPOSITE DRAIN, BACKFILL MATERIALS SHALL CONSIST OF GRANULAR MATERIALS OF GSI, GP, SW, GRSUPS AS PER IS:1498-1970(WC BOX) AND THE BACKFILL MATERIALS SHALL CONSIST OF GRANULAR MATERIALS OF GSI,GP,SW,GRSUPS AS PER IS:1498-1970(RCC BOX) IN THE REMAINING PORTION. BACKFILL MATERIAL SHALL CONSIST OF GRANULAR MATERIALS OF GSI,GP,SW,GRSUPS AS PER IS:1498-1970(RCC BOX) IN THE REMAINING PORTION. BACKFILL MATERIAL SHALL CONSIST OF GRANULAR MATERIALS OF GSI,GP,SW,GRSUPS AS PER IS:1498-1970(RCC BOX) IN THE REMAINING PORTION. BACKFILL MATERIAL SHALL CONSIST OF GRANULAR MATERIALS OF GSI,GP,SW,GRSUPS AS PER IS:1498-1970(RCC BOX) IN THE REMAINING PORTION. BACKFILL MATERIAL SHALL CONSIST OF GRANULAR MATERIALS OF GSI,GP,SW,GRSUPS AS PER IS:1498-1970(RCC BOX) IN THE REMAINING PORTION.
5. HIGH STRENGTH DEFORMED BARS (TOR) SHALL CONFORM TO IS: 1786-2008 (FE 500).
6. BAR BENDING SHALL BE CONFORMING TO IS:2502
7. LOADING STANDARD: 25T - 2008 AXLE LOAD.
8. CONCRETE SHALL BE MECHANICALLY MIXED, VIBRATED & THOROUGHLY CURED.
9. BASE COURSE SHALL BE 350MM OF PROPERLY COMPACTED CRUSHED STONE LAYER OF 80MM SIZE AND DOWNGRADED SHALL BE PROVIDED BELOW PCC LEVELING COURSE.
10. GROUND IMPROVED SOIL SHALL BE OF SOIL QUALITY CLASS SC2 AND SC3 AS PER RDSO GUIDELINES.

RESPONSIBILITY NOTES:
1. The RUB WORK WILL BE EXECUTED BY KRIDE FOR BOTH RAILWAY AND APPROACH PORTION OF RUB EVEN BEYOND RAILWAY BOUNDARY ALONG WITH DRAINAGE ARRANGEMENTS.
2. EXISTING TELEGRAPH POSTS, ELECTRIC POSTS, SIGNAL CABLES, WATER & DRAINAGE, WATER MAINS AND ALL OTHER UTILITIES COMING IN THE WAY SHALL BE SHIFTED SUITABLY BY THE RESPECTIVE DEPARTMENTS OF RAILWAYS / STATE AUTHORITIES.
3. NECESSARY TEMPORARY DIVERSION OF ROAD TRAFFIC HAS TO BE PROVIDED BY KRIDE /STATE AUTHORITIES AT THE TIME OF EXECUTION OF WORK BASED ON THE JOINT INSPECTION BETWEEN STATE AND KRIDE AUTHORITIES. SUITABLE TEMPORARY SERVICE ROADS FOR THE USE OF PUBLIC SHALL BE ARRANGED AND MAINTAINED BY KRIDE / STATE AUTHORITIES WHENEVER & WHENEVER REQUIRED.
4. ROAD APPROACHES ON EITHER SIDE OF THE PROPOSED RUB SHOULD BE SUITABLY ALIGNED AND BE GRADED BY R-RIDE AUTHORITY IN DUE CONSULTATION WITH STATE AUTHORITIES.
5. THE RESPONSIBILITY FOR THE MAINTENANCE OF ROAD PASSING THROUGH THE RUB, LIGHTING, DRAINAGE SYSTEM, DIVERSION ROAD AND ANY OTHER ALLIED WORKS IN RAILWAY PORTION AND BEYOND RAILWAY BOUNDARY IS OF STATE GOVERNMENT.
6. IN CASE OF ANY LAND ACQUISITION INVOLVED FOR EXECUTING THE SUB-WAY WORK, K-RIDE AUTHORITY SHALL ACQUIRE SUCH LAND CHARGEABLE TO THE CONCERNED AS PER EXTANT RULES AND STATE GOVERNMENT HAS TO ACQUIRE SUCH LAND.

SPECIAL NOTES FOR 25 KV AC TRACTION SYSTEM
1. NECESSARY PROTECTIVE ARRANGEMENT SHALL BE MADE BY CONSTRUCTION ORGANIZATION IN CONSULTATION WITH ELECTRICAL TRD/BANGALORE TO AVOID ANY ELECTRICAL INDUCTION DURING LAUNCHING OF GIRDER/EXECUTION OF WORK.
2. WHILE LAUNCHING OF GIRDER ABOVE THE OHE AND ALSO DURING ANY WORK INVOLVING LESS THAN 2M WORKING CLEARANCE FROM OHE, THE WORK SHALL BE CARRIED OUT ONLY DURING POWER BLOCK CONDITION BY OBTAINING PERMISSION TO WORK FROM AUTHORIZED TRD BRANCH OF OFFICIALS.
3. ALL STEEL STRUCTURE & GIRDERS INVOLVING THE ABOVE WORKS SHALL BE SUITABLY EARTHED TO TRACTION RAIL, SEPARATE EARTH PIPE FOR SAFETY OF WORKING STAFF.
4. GIRDER LAUNCHING / ERECTION OF WORK TO BE DONE WITHOUT DISTURBING OHE.
5. OHE TRACTION CONDUCTORS SHALL BE PROTEGED TO GET MAXIMUM CONTACT WIRE HEIGHT WITH NORMAL ELECTRICAL CLEARANCE AFTER COMPLETION OF WORK BY OLTRD.
6. ALL OHE WORKS, INCLUDING TEMPORARY DIVERSION ETC., WILL BE DONE UNDER THE SUPERVISION OF SEE/OLTRD UNDER POWER BLOCK CONDITIONS.
7. JOINT PROCEDURE ORDER FOR PROVISION PROTECTIVE SCREEN OVER PROTECTIVE SCREEN OVER 25KV AC ELECTRIFIED SECTION-CIRCULATED VIDE LETTER NO SWR/W. 352/BRIDGE -DESIGN AND DRAWING/VOL III DT _____ TO BE STRICTLY FOLLOWED.

SPECIAL NOTES FOR CONSTRUCTION OF RUB
1. AS PER IRC, MINIMUM VERTICAL CLEARANCE REQUIRED FOR RUB IS 5.5M, HOWEVER VERTICAL CLEARANCE IS PROVIDED AS 5.5M SINCE LIGHT VEHICLES SHALL PASS THROUGH RUB.
2. AS PER IRC, THE APPROACH GRADIENT FOR THIS RUB SHALL NOT BE STEEPER THAN 1 IN 30.
3. BEFORE AND DURING EXECUTION OF WORK, CONCERNED STATE GOVERNMENT OFFICIALS SHOULD BE CONTACTED IN CONNECTION WITH CLOSURE OF LC
4. ROAD LEVELS FOR THE RUB SHOULD BE FIXED AFTER CONSULTING WITH ROAD AUTHORITIES TO AVOID ANY FUTURE LEVEL DIFFERENCES AT THE RAILWAY JUNCTION AND ROAD LEVEL APPROACHES.
5. AL SHALL BE CLOSED AFTER COMMISSIONING OF RUB AFTER RECEIVING CONSENT FOR CLOSURE OF LEVEL CROSSING IS OBTAINED FROM CONCERNED AUTHORITY.
6. ROAD LEVELS FOR THE RUB SHOULD BE FIXED AFTER CONSULTING WITH ROAD AUTHORITIES TO AVOID ANY FUTURE LEVEL DIFFERENCES AT THE RAILWAY JUNCTION AND ROAD LEVEL APPROACHES.
7. CERTIFICATION FOR DRAINAGE ARRANGEMENT FOR THE PROPOSED RUB. AT KM 212/655 TO BE OBTAINED FROM GC / EMPLOYER
8. PROPER DRAINAGE ARRANGEMENTS HAVE TO BE PROVIDED TO RUB AS PER PCC CIRCULAR NO. _____ DATED _____ BC&R/SWR LETTER NO._____BRIDGE-DESIGN & DRAWING/VOL-III DATED _____.

JUSTIFICATION FOR TRACK CENTRE DISTANCE
TRACK CENTRE DECIDED BASED ON THE APPROVED ALIGNMENT PLAN AS PER LETTER NO.
_____

JUSTIFICATION FOR SELECTION THE SPAN
SPAN SELECTED BASED ON THE JOINT INSPECTION REPORT DATED _____ BETWEEN RAILWAY OFFICIALS AND BSRP OFFICIALS. FOR THIS PURPOSE SEC DIVISION DEMANDED FOR A 9.5M ROAD IN THE FORMATION.

AUTHORITY OF WORK
MATERIAL MODIFICATION TO INCLUDE THIS WORK IN _____ WAS VERIFIED BY_____

LEGENDS:
Total Barrel length of LC-142= 41m.
Completed Barrel length = 0m(BSRP Side).
Remaining Barrel length 41m is yet to be Constructed.

GC/K-RIDE	K-RIDE
FOR GC	FOR K-RIDE

TRACK DETAILS (PRO.BRIDGE)

LOADING	25 T AXLE LOAD 2008-STD
ALIGNMENT	STRAIGHT
GRADE	LEVEL
RAIL LEVEL	895.394 m
FORMATION LEVEL	894.632 m

LOADING STANDARD
A) PRO.BRIDGE:25T-AXLE LOAD 2008 STD
B) EXG.BRIDGE:MBG-1987 LOADING

ABBREVIATIONS

℄	-	CENTER LINE
TYP	-	TYPICAL
THK.	-	THICKNESS
CRL	-	CROSS ROAD LEVEL
BOG.	-	BOTTOM OF GIRDER
DN	-	DOWN
BR	-	BRIDGE
FRL	-	FORMATION LEVEL

GRADE OF CONCRETE

	GRADE	
1	PCC / GEOMAT	M20
2	WEARING COURSE	M35
3	LEVELLING COURSE (PCC)	M15
4	RETAINING/RETURN WALL	M30
5	RCC DIAPHRAGM	M35
6	RCC DECK SLAB	M35
7	RCC ABUTMENT	M35
8	PILE CAP	M35
9	PILE	M35

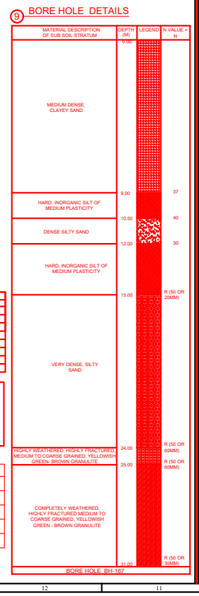
DEPTH OF CONSTRUCTION FOR 1 X 1.8 m PSC I-GIRDER SPAN

RAIL 60 kg	:	172 mm
GR PAD	:	10 mm
PSC SLEEPER	:	250 mm
BALLAST CUSHION	:	350 mm
WEARING COAT	:	80 mm
DECK SLAB	:	320 mm
PSC I-GIRDER	:	1850 mm
TOTAL	:	3032 mm

THE DETAILS SHOWN ARE INDICATIVE ONLY. THE DETAILS ARE SUBJECTED TO CHANGE AS PER THE APPROVED ALIGNMENT

BRIDGE DETAILS

DESCRIPTION	PROPOSED BSRP BRIDGE LC-142
CHAINAGE AT CENTER OF BRIDGE (km)	7.000 #
RAIL LEVEL AT CENTER OF BRIDGE (m)	895.394 #
FORMATION LEVEL AT CENTRE OF BRIDGE (m)	894.632 #
DIMENSIONS (Nos x SPAN(m) x CLEAR HEIGHT(m))	1x18 #
STRUCTURE CONFIGURATION	PSC I-GIRDER SPAN TYPE



(-Sd-)	(-Sd-)
AGMK-RIDE	GMK-RIDE

BRIDGE STRENGTH CERTIFICATE

CERTIFIED THAT THE PRO BRIDGE AS PER DESIGN TO BE CONSTRUCTED IS OF SUCH DESIGN, DIMENSIONS AND CONSTRUCTIONS AS WILL ENABLE IT TO CARRY THE DEAD-LOAD OF THE STRUCTURE ITSELF (INCLUDING P-WAY COMPLETE) AND IN ADDITION TO THE EQUIVALENT OF 25T - 2008 LOADING PRESCRIBED IN THE BRIDGE RULES CHAPTER VII OF THE RULES FOR THE OPENING OF RAILWAYS AT FULL SPEED.
THE BRIDGE WILL BE SUBJECT TO HEAVIEST LOADS WHICH THE BRIDGE WILL HAVE TO CARRY WILL NOT BE IN EXCESS OF THE ABOVE STANDARDS OF LOADING AT THE STIPULATED SPEED AND WILL NOT CAUSE ANY STRESS IN ANY MEMBERS OR PORTION OF THE STRUCTURE IN EXCESS OF MAXIMUM PERMISSIBLE STRESSES LAID DOWN IN THE INDIAN RAILWAY STANDARD CODE OF PRACTICES.

EMPLOYER : RAIL INFRASTRUCTURE DEVELOPMENT COMPANY (KARNATAKA) LIMITED

GENERAL CONSULTANTS: AECOM-EGIS-WSP

GENERAL ARRANGEMENT DRAWING

BENGALURU SUBURBAN RAILWAY PROJECT (BSRP)
K-RIDE CORRIDOR - 2

PROPOSED CONSTRUCTION OF RUB 1x1.8m IN LIEU OF EXISTING LC NO 142 AT IR KM 212/655, BSRP CH 7+000 BETWEEN BANASWADI AND NAGAWARA STATIONS
EXG. LEVEL CROSSING
BETWEEN BENNIGANAHALLI AND CHIKABANAVARA STATIONS.

RAIL LOADING STANDARD : 25 T AXLE LOADING (2008)

DRG, No:022077-BSRP-CR2-C-J-B-0-10-1311	SCALE 1 : 100 (UNLESS NOTED)