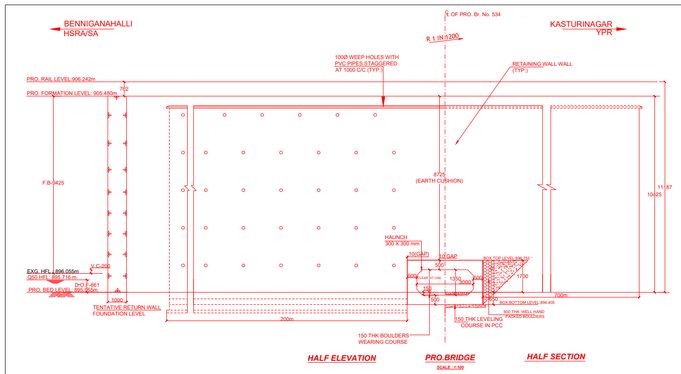
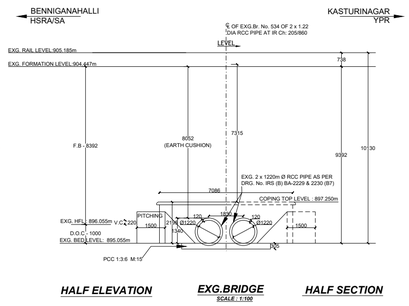
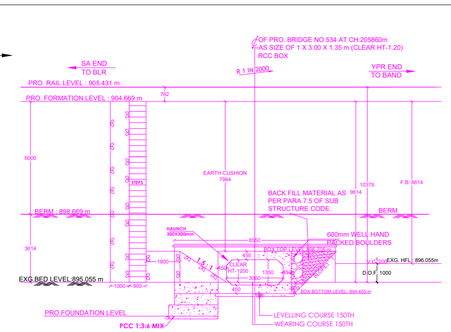
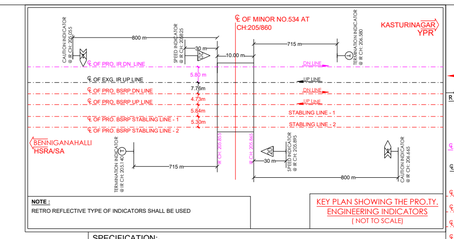
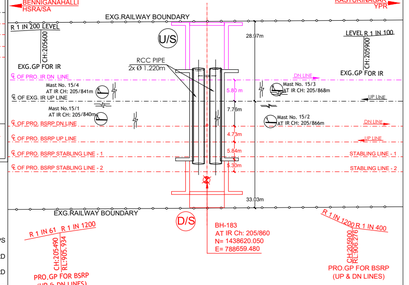








PROPOSED EXTENSION OF MINOR BRIDGE NO.534 AT IR KM: 205/860 AS CAST-IN-SITU RCC BOX OF SIZE 1 X 3.0 X 1.35m (1.20m CLEAR HT) ON DOWN STREAM SIDE OF EXISTING BRIDGE 2 x 1.220m DIA RCC PIPE IN BAIYAPPANAHALLI 'A' PANEL YARD BETWEEN BENNIGANAHALLI AND KASTURINAGAR STATIONS.



IR TRACK	
SKEW	NIL
GRADIENT	LEVEL
CURVE	NIL

KEY PLAN
Scale: 1:750

BSRP TRACK	
SKEW	NIL
GRADIENT	R 1 IN 1200
CURVE	NIL

KEY PLAN NOTE:-
1. PROPOSALS ARE SHOWN IN RED.
2. RAILWAY BOUNDARY DISTANCE ARE WITH RESPECT TO CENTRE LINE OF EXG.TRACK.
3. TRACK IS STRAIGHT ON BRIDGE LOCATION.

SPECIFICATION:-
1. ALL WORKS ARE TO BE CARRIED OUT AS PER THE FOLLOWING.
   a. INDIAN RAILWAY UNIFIED STANDARD SPECIFICATIONS FOR WORKS AND MATERIALS 2019.
   b. IRS CONCRETE BRIDGE CODE 2014(REPRINT) & RELEVANT I.S SPECIFICATIONS.
   c. IRS BRIDGE SUB - STRUCTURE CODE:2013(0 REVISED).
   d. IRS BRIDGE RULES 2014(REPRINT).
   e. IRS SCHEDULE OF DIMENSIONS 2022 (READ WITH UPDATED CORRECTION SLIP).
2. RETAINING WALL :- AS PER DESIGN.
3. PITCHING :- DRY STONE PITCHING 230MM THICK OVER 150MM THICK SAND MIXED WITH STONE CHIPS (AS PER PARA 205 OF INDIAN RAILWAY BRIDGE MANUAL ANNEXURE 2/3).
4. RCC BOX:- REINFORCED CEMENT CONCRETE M30 GRADE USING 20MM MAXIMUM SIZE GRADED HARD STONE AGGREGATE OF APPROVED QUALITY.
5. LEVELING COURSE :- 150 MM THICK USING M20 GRADE CONCRETE WITH 20 MM MAX. SIZE GRADED HARD STONE AGGREGATE WITH APPROVED QUALITY.
6. WEEP HOLES :- WEEP HOLES TO BE PROVIDED AS PARA 7.6 OF SUB STRUCTURE CODE & WEEP HOLES SHALL BE OF 100 DIA AC PIPES STAGGERED AT 1000 C/C ABOVE LOW WATER LEVEL IN BOTH WING WALL/RETURN WALL & EARTH RETAINER OF BOX.
7. LOADING STANDARD :- 25 T - 2008 AXLE LOAD.
8. TOE WALL :- GRADE M25 WITH 20 MM MAX. SIZE GRADED HARD STONE AGGREGATE IN FOUNDATION.
9. GRADE OF STEEL FOR RCC IS TMT-500D CONFORMING TO IS 1786-2008.
10. MASS CONCRETE TO BE OF M20 WITH 20MM GRADED STONE AGGREGATE FOR WEARING COURSE.
11. BAR BENDING SHALL CONFORM TO IS 2502.
12. FLOORING :- ROUGH STONE FLOORING 300MM THICK GROUTED WITH CM:1:3.
13. DROP WALL / CURTAIN WALL :- AS PER DESIGN.
15. COPING :- CC M25 GRAD USING 20MM MAX. SIZE GRADED HARD STONE AGGREGATE OD APP.QUALITY.

REFERENCE:
1. RCC BOX AS PER RDSO DRG NO: RDSO/B-10155/9 (REF SIZE: 3.00X1.8 M).
2. RETAINING WALL - AS PER DESIGN.
3. WEEP HOLES AS PER PARA 7.6 OF SUB-STRUCTURE CODE.
4. EARTH RETAINER WITH PARAPET WALL - AS PER DESIGN.
5. CURTAIN WALL, DROP WALL AND TOE WALL - AS PER DESIGN.
6. BACKFILL MATERIALS BEHIND RCC BOX TO PROVIDE AS PER PARA 7.5 OF IRS BRIDGE SUBSTRUCTURE &FOUNDATION CODE.
7. SHORING ARRANGEMENTS AS PER DESIGN.
8. RCC COLLAR ARRANGEMENT AS PER AS PER DESIGN.
9. COMPLETION DRAWING No. DRG No. CN/BNC/BR/211 - 98/CCM.
10. IR DOUBLING SDE EXTENSION SHOWN AS PER DRG. NO. SWR/2024/GAD-110/Br.No.534/EXTN/BYPL YARD/YPR-CSDR/RIDE .

MODUS OPERANDI :-
1. IMPOSE 20KMPH SPEED RESTRICTIONS BEFORE EXCAVATION WORKS.
2. INSTALL THE TEMPORARY ENGINEERING INDICATORS AT THE APPROACHES AS PER THE SKETCH.
3. DIVERT OR RESTRICT THE WATER FLOW BY PROVIDING BUND ON UPSTREAM SIDE OF THE BRIDGE.
4. SHORING ARRANGEMENTS WILL BE DONE FOR PROTECTION OF BANK AND EXG. TRACK AS PER SITE CONDITION.
5. A PORTION OF DROP WALL, TOE WALL AND ROUGH STONE PITCHING WILL BE DISMANTLE., A MINIMAL PORTION OF ABUTMENT CUM RETAINING WALL FOUNDATION WILL BE CHIPPED OFF MANUALLY FOR BUTTING /FLUSHING THE RAFT OF RCC BOX OF PROPOSED BRIDGE.
6. EARTHWORK EXCAVATION TO BE DONE FOR PROPOSED BARREL LENGTH.
7. IF SBC OF SOIL AT FOUNDATION LEVEL IS LESS THAN THE MAXIMUM BASE PRESSURE, THEN SOIL IMPROVEMENT TO BE DONE AS PER INSTRUCTIONS OF ENGINEER IN CHARGE.
8. AFTER SOIL IMPROVEMENT, ENGINEER IN CHARGE SHOULD ENSURE THAT, SBC OF SOIL AT FOUNDATION
9. LEVEL IS MORE THAN THE MAXIMUM BASE PRESSURE EXERTED AT THAT LEVEL.
10. IF MAXIMUM BASE PRESSURE AT FOUNDATION LEVEL IS LESS THAN THE SAFE BEARING CAPACITY OF SOIL, THAN SOIL IMPROVEMENT TO BE DONE AS PER INSTRUCTION OF ENGINEER-IN-CHARGE.
11. AFTER SOIL IMPROVEMENT ENGINEER-IN-CHARGE SHALL ENSURE THAT THE MAXIMUM BASE PRESSURE AT FOUNDATION LEVEL FOR EACH ELEMENT OF BRIDGE IS LESS THAN THE SAFE BEARING CAPACITY OF SOIL AT THAT LOCATION.
12. CONSTRUCT RCC BOX CAST-IN-SITU AS PER RSDO DRAWING.
13. THE EXTENSION OF THE PROPOSED BRIDGE SHALL BUTT TO EXISTING BRIDGE AND RCC COLLAR ARRANGEMENT AS PER DESIGN AND AS PER SITE REQUIREMENTS TO BE PROVIDED TO AVOID THE SEEPAGE OF WATER.
14. RETURNS WALL, CURTAIN WALL, TOE WALL, STONE FLOORING WITH CM 1:3 & OTHER BRIDGE PROTECTION WORKS TO BE DONE.
15. LAY THE BOULDER FILLING AND BACKFILL AS PER PARA 7.5 OF IRS SUBSTRUCTURE AND FOUNDATION CODE TO BE DONE.
16. COMPLETE THE REMAINING WORK IN ALL RESPECTS WITHOUT INFRINGING TRAIN TRAFFIC.
17. REMOVE THE SPEED RESTRICTION IF IMPOSED ON EXISTING MAIN LINE, AFTER ATTAINING THE REQUIRED CONSOLIDATION IN NEW EMBANKMENTS.
18. RESTORE THE TRAFFIC TO NORMAL SECTIONAL SPEED GRADUALLY IN STAGES AS PER IRPWM 637(1)(F).
19. ALSO RE-DIVERT THE WATER THROUGH THE BRIDGE.

NOTE:PROPOSED WORK HAS TO BE EXECUTED UNDER SUPERVISION OF AN EXPERIENCED AND COMPETENT RAILWAY ENGINEER.

SPECIAL NOTES : ALL THE FOLLOWING SAFETY MEASURES SHALL BE FOLLOWED.
1. ADEQUATE SAFETY MEASURES FOR RUNNING TRAINS SHALL BE ADOPTED WHILE DOING THE EARTH WORK BELOW THE TRACK.
2. DURING CONSTRUCTION OF THE BRIDGE, THE EXISTING TRACK SHALL BE PROTECTED SUITABLY BY IMPOSING NECESSARY SPEED RESTRICTION BY PROVIDING TEMPORARY ENGINEERING INDICATORS.
3. DURING THE CONSTRUCTION OF THE PROPOSED BRIDGE PROPER SAFETY PRECAUTIONS TO BE TAKEN WHILE EXECUTING FOUNDATION WORK CLOSE TO THE EXISTING BRIDGE FOUNDATION INCLUDING IMPOSING SPEED RESTRICTIONS IF REQUIRED.
4. THE GRADUAL RELEASE OF SPEED RESTRICTION SHALL BE AS PER PARA 637 (1) (F) OF IRPWM.
5. NECESSARY SHORING ARRANGEMENTS TO BE MADE TO PROTECT EXISTING BRIDGE STRUCTURE WHEREVER NECESSARY.
6. JOINT PROCEDURE ORDER ON SAFETY RELATED ISSUES PERTAINING TO WORK SITE IN CONSTRUCTION. PROJECTS (JPO NO. W.339/SAFETY PRECAUTION, DT: 18.02.2011) ISSUED VIDE CTE LR.NO.SWR/W.247/SAFETY AT WORK SPOT DT: 20.06.2017 HAS TO BE STRICTLY FOLLOWED.
7. SAFETY PRECAUTIONS MUST BE ENSURED AS PER ABOVE RELEVANT JPO's ZONAL RAILWAY AND INSTRUCTIONS OF RAILWAY BOARD.
8. 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.
9. SUITABLE SAFETY BARRICADING HAS TO BE PROVIDED WHENEVER WORK IS BEING EXECUTED PARALLEL TO THE RUNNING TRACK.
10. NECESSARY PROTECTIVE ARRANGEMENTS SHALL BE MADE BY KRIDE IN CONSULTATION WITH SBC DIVISION ELECTRICAL TRD/BRANCH TO AVOID ANY ELECTRICAL INDUCTION DURING EXECUTION OF PROPOSED WORK.
11. EXECUTION OF WORK OVER RUNNING LINE SHALL BE CARRIED OUT UNDER TRAFFIC AND POWER BLOCK, UNDER SUPERVISION OF CONCERNED ENGINEER-IN-CHARGE.
12. WORK HAS TO BE EXECUTED UNDER SUPERVISION OF AN EXPERIENCED AND COMPETENT CONTRACTORS / RAILWAY ENGINEER.
13. ADHERENCE OF PROVISION OF SOD TO BE ENSURED AND VISIBILITY OF SIGNAL TO BE CHECKED AFTER COMPLETION OF WORK.

NOTES:
1. ALL LEVELS ARE W.R.T TO MSL.
2. PROPOSALS ARE SHOWN IN RED.
3. ALL DIMENSIONS ARE IN MILLIMETERS, REDUCED LEVELS ARE IN METERS AND CHAINAGE ARE IN KILOMETERS, UNLESS STATED OTHERWISE.
4. DO NOT SCALE THE DRAWING,FOLLOW FIGURED DIMENSIONS ONLY.
5. LENGTH OF PITCHING FOR APPROACHES SHALL BE DECIDED BY THE ENGINEER-IN-CHARGE OF THE WORK TO SUIT SITE CONDITIONS.
6. PRO.BRIDGE IS ON DOWN STREAM SIDE OF THE EXISTING BRIDGE.
7. DETAILS OF OLD BRIDGE (EXG.) ARE AS PER THE SITE DETAILS PROVIDED.
8. DISMANTLING OF EXISTING BRIDGE AND PROTECTIVE/PITCHING SHOULD BE DONE AS PER SITE CONDITION.
9. A) ON THE TOP SURFACE OF CONCRETE AT THE END OF EACH DAYS WORK DEPRESSION IN ZIG-ZAG PATTERN TO BE FORMED BY EMBEDDING WOODEN SCANTLINGS OR SLEEPERS TO FORM KEY FOR ADEQUATE BOND FOR THE NEXT DAYS CONCRETING.
   B) ON THE NEXT WORKING DAY ALL THE LAITANCE SHALL BE REMOVED BY SCRUBBING THE SURFACE WITH WIRE BRUSH WITHOUT DISLODGING THE PARTICLES OF AGGREGATE,THE SURFACE SHALL BE THOROUGHLY WETTED & CAN BE COATED WITH NEAT CEMENT GROUT BEFORE FIRST LAYER OF CONCRETE IS LAID.
10. THE BOULDER FILLING SHALL CONSISTS OF WELL HAND PACKED BOULDERS & COBBLES TO THICKNESS NOT LESS THAN 600 mm AND BACKFILLING MATERIALS SHALL CONSIST OF GRANULAR MATERIALS OF GW, GP, SW CORRECT AS PER IS 1498 - 1970.
11. EXPOSURE CONDITION IS MODERATE.
12. DISMANTLING ELEMENTS ARE SHOWN IN YELLOW COLOUR AND DOTTED LINE.
13. WHILE EXECUTION OF PRO BRIDGE, EXISTING FLOOR PROTECTIVE WORKS MAY GET DAMAGED,SO TO PROTECT THE EXG.BRIDGE FROM SCOURING EFFECT FLOORING PROTECTIVE WORKS WILL BE PROVIDED.
14. SUITABLE SPEED RESTRICTIONS MAY BE IMPOSED BASED ON SITE CONDITIONS WHENEVER & WHEREVER IF IS NEEDED TO ENSURE SAFETY OF RUNNING LINE.
15. SUITABLE PROTECTIVE MEASURES SHOULD BE PUT IN PLACE WHILE CARRYING OUT THE WORK IN CONSULTATION WITH SBC DIVISION, KRIDE & GENERAL CONSULTANT.
16. NECESSARY SHORING ARRANGEMENTS TO BE PROVIDED FOR THE PROTECTION OF EXG.TRACK & FORMATION.
17. INSTRUCTIONS CONVEYED VIDE PCE'S CIRCULAR NO 01.2015, DATED: 09.03.2015 REGARDING" WORK DISCIPLINE AT SITE" AND AS PER PCE CIRCULAR NO.01/2021 DATED: 22.06.2021 REGARDING "ENSURING QUALITY OF WORK AND MAINTAINING SANCTITY OF RECORDS IN WORKS CONTRACTS" TO BE STRICTLY FOLLOWED.
18. BEFORE EXECUTION OF WORK, GM/CIVIL/P/C-2/K-RIDE AND ENGINEER IN-CHARGE SHOULD ENSURE THAT THE MAXIMUM BASE PRESSURE AT THE FOUNDATION LEVEL FOR EACH ELEMENT OF BRIDGE IS LESS THAN THE SAFE BEARING CAPACITY OF THE SOIL AT THAT LOCATION.
19. ENGINEER IN-CHARGE SHALL ENSURE THAT LEVEL OF FOUNDATION OF DROP/ CURTAIN WALL AND RETURN WALL SHALL BE SUFFICIENTLY LOWER LEVEL THAN THE REQUIRED CALCULATED SCOUR LEVEL.
20. FEASIBILITY OF THIS BOX STRUCTURE AT SITE SHOULD BE ENSURED BY GM/CIVIL/P/C-2/K-RIDE AND ENGINEER IN-CHARGE.
21. PROPER CONNECTION BETWEEN EXISTING AND PROPOSED BRIDGE TO BE ENSURED BY ENGINEER IN-CHARGE TO AVOID THE SEEPAGE OF WATER.
22. ENGINEER IN-CHARGE SHOULD ENSURE THAT SUITABILITY OF THE EXISTING BRIDGE TO TAKE CARE OF 25T LOAD AND DISPERSION FROM PROPOSED TRACKS BEFORE TAKING UP OF PROPOSED WORK.
23. UNDERGROUND CABLE ETC. IF ANY, SHALL BE REMOVED AND BE ALIGNED BEFORE THE EXECUTION OF WORK STARTS S&T CABLES SHALL BE PROTECTED AT SITE BY EXECUTING AGENCY. ALL PRECAUTIONARY STEPS MUST BE TAKEN ACCORDING TELE COMMUNICATION CIRCULAR NO.17/2013 ISSUED BY RAILWAY BOARD VIDE LETTER NO.2003/TELE/RC/LI PT ,IX, DATED:24.06.2013.
24. LATEST TECHNICAL CIRCULAR NO 09 / 2023 DATED 12.06.2023 BY RAILWAY BOARD & JPO ISSUED BY ZONAL HQ TO BE FOLLOWED FOR UNDERTAKING DIGGING WORK IN THE VICINITY OF UNDERGROUND SIGNALING, ELECTRICAL AND TELECOMMUNICATION CABLES BY RAILWAY CONTRACTOR.

SPECIAL NOTE-1:-
1. 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 DRAWINGS IF ANY.
2. THIS GAD IS SUBJECT TO MAINTAINING THE SAME LEVELS, ALIGNMENT, GRADE & TRACK CENTER DISTANCE AS THAT OF APPROVED WORKING SECTION/WORKING PLAN AND YARD PLANS IF ANY.
3. AS PER APPROVED YARD PLAN. RAIL LEVEL, TRACK DETAILS, NUMBER OF TRACKS AND RAILWAY BOUNDARIES DETAILS HAS BEEN MENTIONED.

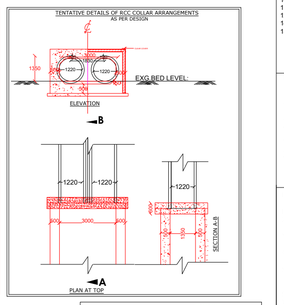
VIDE LETTER NO. K-RIDE/BSRP/GM/C-2/BRIDGES/GAD/107 DATED 09.07.2025, GENERAL MANAGER/CIVIL/C1/C2/PLANNING STATED THE FOLLOWING POINTS AND SAME ARE INCORPORATED IN GAD.
1. RETAINING WALL HAS BEEN MOVED UP TO RAILWAY BOUNDARY. SINCE EARTH CUSHION IS 8.725 M (8.575M + 0.150M), BARREL LENGTH EXTENSION WITH 2 X EARTH CUSHION CANNOT BE DONE DUE TO LAND BOUNDARY CONSTRAINTS.
2. RETAINING WALL WILL BE DESIGNED WITH PARAPET WALL. IT WILL BE A MONOLITHIC STRUCTURE. 10MM GAP IS KEPT BETWEEN THE BOX AND RETAINING WALL SO THE LOAD ON RETAINING WALL WILL NOT BE ON THE RCC BOX.
3. COUNTER-FORT RETAINING WALL WILL BE DESIGNED AS PER THE SITE CONDITIONS.
4. EXISTING BRIDGE CLEAR HEIGHT REVISED FROM 1.35M TO 1.20M AS PER THE EXISTING VENT HEIGHT.

SPECIAL NOTE :-
THE JUNCTION BETWEEN THE EXISTING BRIDGE AND NEW RCC BOX TO BE SEALED PROPERLY TO AVOID SEEPAGE OF WATER.

WATERWAY PARTICULARS		
CATCHMENT AREA	:	0.154 SQKM.
LATITUDE	:	12°59'58.104"N
LONGITUDE	:	77°39'40.167"E
TOPOSHEET NO.	:	D43 R-12
Q50 DISCHARGE	:	1.328 CUM/SEC
VELOCITY	:	0.670 M/SEC
DEPTH OF FLOW	:	0.661 M
EXG. HFL	:	896.055 M
Q50 HFL (DESIGN HFL)	:	895.716 M

	REQUIRED	PROVIDED
WATERWAY AREA, Sqm	1.984	3.600
FREE BOARD, m	1.000	9.425
VERTICAL CLEARANCE, m	0.000	0.200
SCOUR DEPTH		
From OF HFL, m	1.113	
Scour Level	894.716	
From B.L, m	0.339	1.200

EXISTING WATERWAY PARTICULARS	PROVIDED
WATERWAY AREA, Sqm	2.400
FREE BOARD, m	8392
VERTICAL CLEARANCE, m	0.220



IR DEPTH OF CONSTRUCTION FOR 1 x 3.00 x 1.35 m RCC BOX		
RAIL 60 kg	:	172 mm
GR PAD	:	10 mm
PSC SLEEPER	:	230 mm
BALLAST CUSHION	:	350 mm
EARTH CUSHION	:	7904 mm
TOP SLAB	:	450 mm
CLEAR HEIGHT	:	1200 mm
TOTAL	=	10376 mm

IR TRACK DETAILS (PRO.BRIDGE)		
ALIGNMENT	:	STRAIGHT
GRADE	:	R 1 IN 2000
RAIL LEVEL	:	905.631 m
FORMATION LEVEL	:	904.669 m

EXG.DEPTH OF CONSTRUCTION FOR 2 X 1.22 RCC PIPE		
RAIL TO FORMATION	:	738 mm
EARTH CUSHION	:	8052 mm
PIPE DIA/THICKNESS	:	120 mm
CLEAR HEIGHT	:	1220 mm
TOTAL	=	10130 mm

TRACK DETAILS (EXG.BRIDGE)		
ALIGNMENT	:	STRAIGHT
GRADE	:	LEVEL
RAIL LEVEL	:	905.185m
FORMATION LEVEL	:	904.447m

DEPTH OF CONSTRUCTION FOR 1 x 3.00 x 1.35 m RCC BOX		
RAIL 60 kg	:	172 mm
GR PAD	:	10 mm
PSC SLEEPER	:	230 mm
BALLAST CUSHION	:	350 mm
EARTH CUSHION	:	8725 mm
TOP SLAB	:	500 mm
CLEAR HEIGHT	:	1200 mm
TOTAL	=	11187 mm

TRACK DETAILS (PRO.BRIDGE)		
ALIGNMENT	:	STRAIGHT
GRADE	:	R 1 IN 1200
RAIL LEVEL	:	906.242 m
FORMATION LEVEL	:	905.480 m

LOADING STANDARD	
PRO. BRIDGE :	25T-AXLE LOAD 2008 STD
EXG. BRIDGE :	BGML-1926

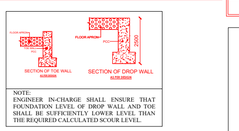
BASE PRESSURE AT FOUNDATION LEVEL

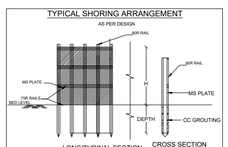
STRUCTURE	MAX	MIN	SBC VALUE T/Sqm
RCC BOX (T/Sqm)	29.00	——	25.409 T/Sqm @ 2.538m DEPTH
RETAINING WALL (T/Sqm)	AS PER DESIGN		

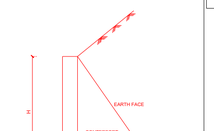
BRIDGE DETAILS			
DESCRIPTION	IR PROPOSED BRIDGE : 534	EXISTING IR BRIDGE : 534	PROPOSED BSRP BRIDGE : 534
CHAINAGE AT CENTER OF BRIDGE (km)	205/860	205/860	205/860
RAIL LEVEL AT CENTER OF BRIDGE (m)	905.431 m	905.185m	906.242m
FORMATION LEVEL AT CENTRE OF BRIDGE (m)	904.669 m	904.447m	905.480m
DIMENSIONS (Nos x SPAN(m) x HEIGHT(m))	1 x 3.00 X 1.35m	2 x 1.220 DIA	1 X 3.0M X 1.35M
STRUCTURE CONFIGURATION	RCC BOX (EXTENSION)	PIPE CULVERT	RCC BOX (EXTENSION)

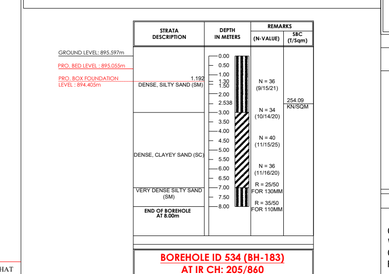
GRADE OF CONCRETE:-

No.	DESCRIPTION OF COMPONENTS	GRADE	SIZE OF AGG.
i.	RCC BOX	M30	20 mm
ii.	WEARING COURSE	M20	20 mm
iii.	LEVELLING COURSE (PCC)	M20	20 mm
iv.	RETAINING WALL	AS PER DESIGN	









SPECIAL NOTES:3
1. DETAILED SOIL INVESTIGATION TO BE DONE BEFORE EXECUTION OF WORK.
2. SBC AT FOUNDATION LEVEL OF RCC BOX AND RETAINING WALLS COULD NOT ASCERTAINED DURING SOIL INVESTIGATION. PLATE LOAD TEST BE CONDUCTED IN SITE AT FOUNDATION LEVEL TO ASCERTAIN SBC.
3. BEFORE EXECUTION OF THE WORK, ENGINEER IN-CHARGE SHALL ENSURE THAT THE MAXIMUM BASE PRESSURE AT FOUNDATION LEVEL FOR EACH ELEMENT OF BRIDGE IS LESS THAN THE SAFE BEARING CAPACITY OF SOIL AT THAT LOCATION.
4. SOIL IMPROVEMENT TO BE DONE AS PER THE REQUIREMENT OF SITE AND AS PER INSTRUCTIONS OF ENGINEER IN-CHARGE.
5. AFTER SOIL IMPROVEMENT ENGINEER IN-CHARGE SHALL ENSURE THAT THE SAFE BEARING CAPACITY OF SOIL AT FOUNDATION LEVEL IS MORE THAN THE MAXIMUM BASE PRESSURE EXERTED.

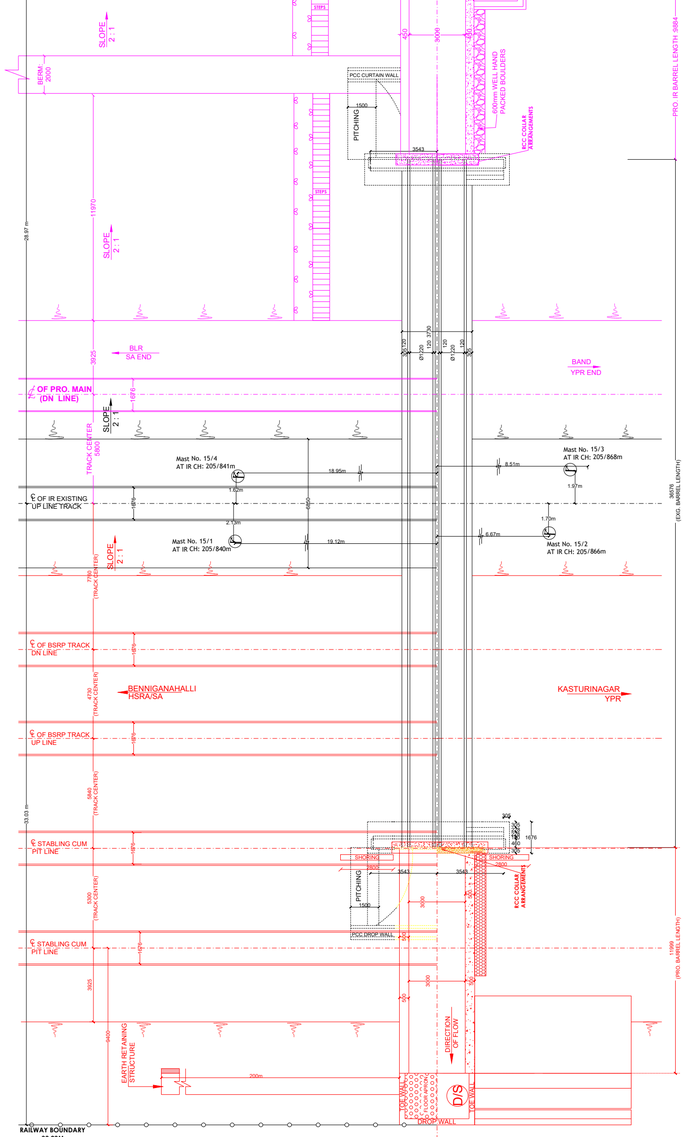
NOTE: DETAILED SOIL INVESTIGATION REPORT AND DETAILS OF SOIL IMPROVEMENT PROPOSED TO IMPROVE SBC IF ANY ARE TO BE SUBMITTED WHILE SEEKING PCE SANCTION FOR CONSTRUCTION OF BRIDGE.

NOTE:ADEQUACY OF EXISTINNG RCC PIPE TO CARRY MULTIPLE TRACKS IS CHECKED AND FOUND SAFE.

SPECIAL NOTES:
1. THIRD PARTY INSPECTION (TPI) OF WORKING CRANE, SPARE CRANE & ALL OTHER LIFTING EQUIPMENTS, MACHINERIES, TOOLS AND PLANTS DEPLOYED FOR THE WORK SHOULD BE GOT DONE BEFORE PUT INTO USE.
2. LAUNCHING CRANE WITH ONE SPARE CRANE OF SAME CAPACITY SHALL BE ARRANGED.
3. ENGINEER IN CHARGE SHOULD ENSURE THE PROPER WORKING OF CRANES WELL IN ADVANCE BEFORE COMMENCEMENT OF WORK. ALSO IT SHOULD BE ENSURED THAT SUFFICIENT OILS, TOOLS, SPARE PARTS AND MAN POWER ARE MADE AVAILABLE BEFORE COMMENCEMENT OF WORK.
4. ALL THE SAFETY PRECAUTIONS SHOULD BE ENSURED BY ENGINEER IN-CHARGE BEFORE COMMENCEMENT OF WORK.
5. ENGINEER IN-CHARGE SHOULD ENSURE THAT ALL THE TEMPORARY ARRANGEMENTS ADOPTED ARE SUITABLY DESIGNED TO SERVE THE PURPOSE INTENDED AND ALSO FROM SAFETY POINT OF VIEW.

SPECIAL NOTES 4: PROPOSED LINES ARE COMING OVER THE EXISTING BRIDGE IN THIS CONNECTION SUITABILITY CHECK / REPORT OF EXISTING BRIDGE FOR CARRYING 25T LOADING TO BE SUBMITTED BEFORE TAKING THE PCE SANCTION

SPECIAL NOTE:5
SUITABILITY OF EXISTING SUBSTRUCTURE AND FOUNDATION DETAILS TO TAKE THE LOAD OF BSRP LINES TO BE CHECKED, APPROVED AND SUBMITTED TO THIS OFFICE. ADDITIONALLY THE PROPOSED BOX IS COMING OVER THE EXISTING BRIDGE FOUNDATION, FOR WHICH THE SUITABILITY TO BE CHECKED.


RAILWAY BOUNDARY 28.97m
DRY STONE PITCHING 230 mm THK OVER 150 mm THK GRAVEL BACKING
CURTAIN WALL
SLOPE 2:1
BERM 2000
PCC CURTAIN WALL
PITCHING
1500
2043
600mm WELL HAND PACKED BOULDERS
PCC COLLAR ARRANGEMENT
PRO. IR BARREL LENGTH 9984
BLR SA END
BAND YPR END
OF PRO. MAIN IR (DN LINE)
SLOPE 2:1
Mast No. 15/4 AT IR CH: 205/841m
Mast No. 15/3 AT IR CH: 205/868m
Mast No. 15/1 AT IR CH: 205/840m
Mast No. 15/2 AT IR CH: