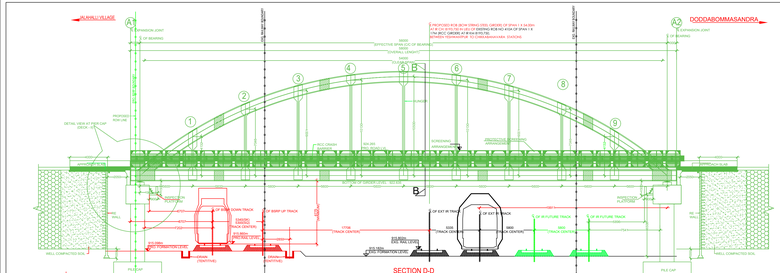
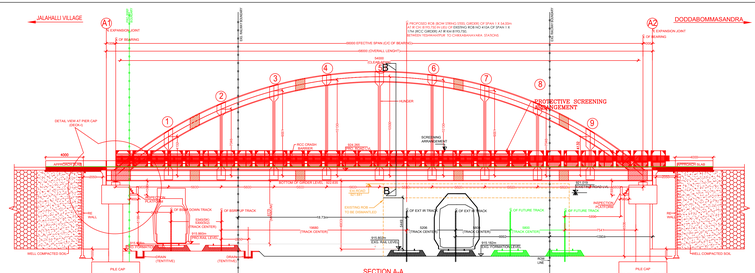
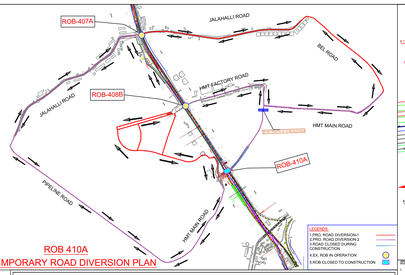
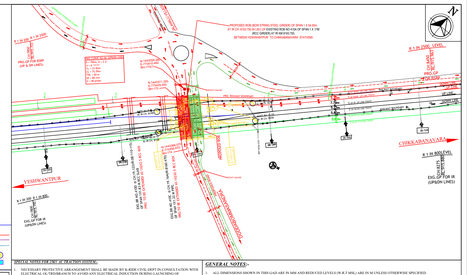
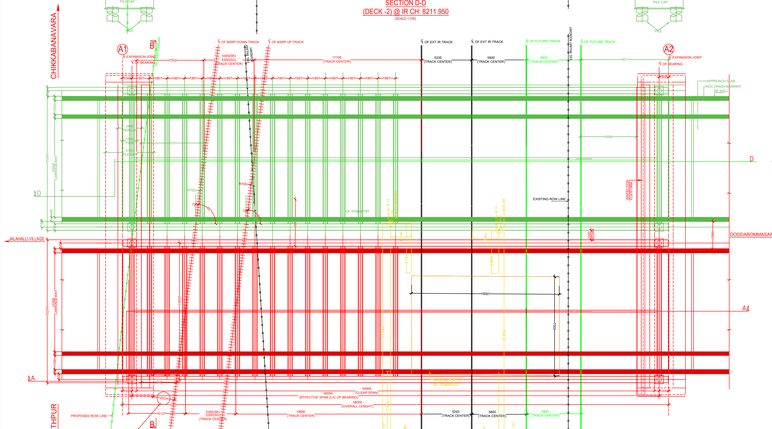


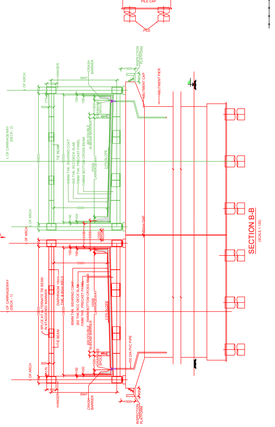


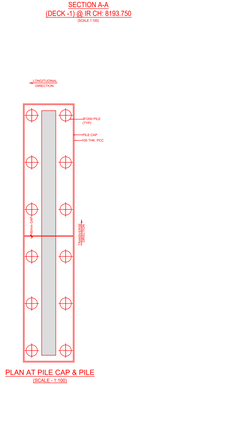


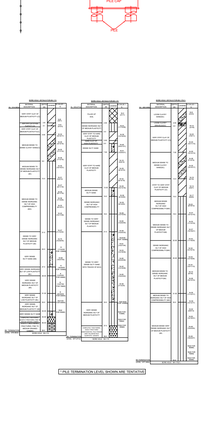
ROB 410A
TEMPORARY ROAD DIVERSION PLAN

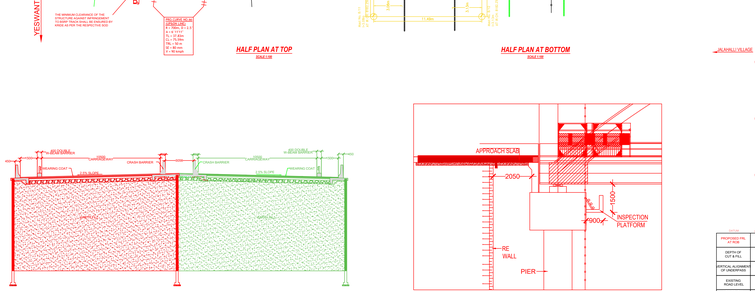


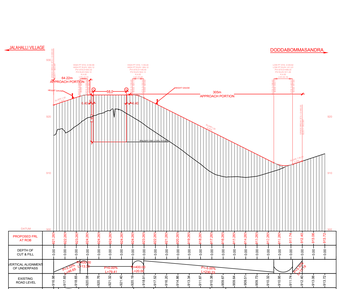


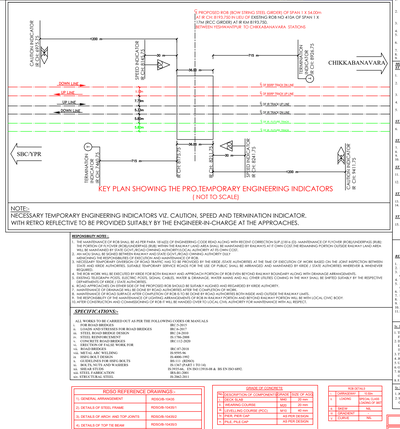












NOTE:-
NECESSARY TEMPORARY ENGINEERING INDICATORS VIZ. CAUTION, SPEED AND TERMINATION INDICATOR.
WITH RETRO REFLECTIVE TO BE PROVIDED SUITABLY BY THE ENGINEER-IN-CHARGE AT THE APPROACHES.

RESPONSIBILITY NOTE:-

1. THE MAINTENANCE OF ROB SHALL BE AS PER PARA 1812(3) OF ENGINEERING CODE READ ALONG WITH RELEVANT CORRECTION SLIP (CSI) (3). MAINTENANCE OF YU FOUR BOX(GIRDER)SPANS, BEARINGS, EXPANSION JOINTS, APPROACH SLABS, RETAINING WALLS, WING WALLS, RETURN WALLS, ABUTMENTS, PIERS, PILE CAPS AND PILES INCLUDING ALL PROTECTIVE WORKS, ALL SIGNAGES AND PAINTING ETC. SHALL BE UNDERTAKEN BY BANGALORE DIVISION (ROAD OVER BRIDGE) AUTHORITY (ELECTRICAL WORKS SHALL BE MAINTAINED BY ELECTRICAL DEPARTMENT).
2. THE ROAD UNDER BRIDGE SHALL BE MAINTAINED BY BANGALORE DIVISION (ROAD OVER BRIDGE) AUTHORITY.
3. THE ROAD APPROACHES SHALL BE MAINTAINED BY THE AGENCY AS MAY BE AUTHORISED AT THE TIME OF EXECUTION OF WORK BASED ON THE JOINT INSPECTION BETWEEN STATE AND RAILWAYS AUTHORITIES, SUITABLE TEMPORARY SERVICE ROADS FOR THE USE OF RAILWAYS SHALL BE PROVIDED AND MAINTAINED BY RAILWAYS.
4. ALL THE WORK WILL BE EXECUTED BY KRIDE FROM BOTH RAILWAY AND APPROACH PORTION OF ROB EVEN BEYOND RAILWAY BOUNDARY ALONG WITH DRAINAGE ARRANGEMENTS.
5. EXISTING ROB DRAINAGE PIPES, DUCTING, POSTS, SIGNAL CABLES, WATER & DRAINAGE, WATER MAINS AND ALL OTHER UTILITIES COMING IN THE WAY SHALL BE SHIFTED SUITABLY BY THE RESPECTIVE DEPARTMENTS.
6. ROAD APPROACHES ON EITHER SIDE OF THE PROPOSED ROB BRIDGE TO SUITABLY ALIGNED AND REGRADED BY KRIDE AUTHORITY.
7. THE RESPONSIBILITY OF THE MAINTENANCE OF LIGHTING ARRANGEMENTS OF ROB IN RAILWAY PORTION AND BEYOND RAILWAY PORTION WILL BE WITH LOCAL CIVIC BODY.
8. THE RESPONSIBILITY OF THE MAINTENANCE OF LIGHTING ARRANGEMENTS OF ROB IN RAILWAY PORTION AND BEYOND RAILWAY PORTION WILL BE WITH LOCAL CIVIC BODY.
9. WATER CONNECTIONS IF ANY AVAILABLE ON THE APPROACHES OF ROB SHALL BE MAINTAINED WITH ALL REPUTE.

SPECIFICATIONS:-

ALL WORKS TO BE CARRIED OUT AS PER THE FOLLOWING CODES OR MANUALS

i.	FOR ROAD BRIDGES	IRC: 5-2015
ii.	SPECIFICATIONS FOR ROAD BRIDGES	IRC: 6-2014
iii.	STEEL ROAD BRIDGES	IRC: 24-2010
iv.	CONCRETE ROAD BRIDGES	IRC: 21-2000
v.	CONCRETE ROAD BRIDGES	IRC: 112-2020
vi.	CODE OF PRACTICE FOR PLAIN AND REINFORCED CONCRETE	IRC: 87-2018
vii.	ROAD BRIDGES	IRC: 83 (Part 3)/2010
viii.	METAL ARC WELDING	IS 9595:96
ix.	STEEL FOR BRIDGES	IS 2062:11
x.	ALTERNATE HIGH STRENGTH BOLTS	IRC:11-2000(P)
xi.	CEMENT CONCRETE (PLAIN & REINFORCED)	IS 456:2000 & IRC:21-2000
xii.	SHEAR STUDS	IS:1911(Part 1/Sec 2):2010(Reaff.2019) & IRC:EN 1993-1-9
xiii.	STEEL BRIDGE RAILING	IRC:83(Part 1)/2010
xiv.	STEEL FOR BOLTS	IS:1862:2013

ROSO REFERENCE DRAWINGS:-

i) GENERAL ARRANGEMENT	ROSO/B-16/05
ii) DETAILS OF STEEL FRAME	ROSO/B-16/06
iii) DETAILS OF BRGS -END TOP JOINTS	ROSO/B-16/07
iv) DETAILS OF TOP TIE BEAM	ROSO/B-16/08
v) DETAILS OF JOINT 1,2	ROSO/B-16/09
vi) DETAILS OF BOTTOM LONG BEAM	ROSO/B-16/10
vii) DETAILS OF BOTTOM CROSS BEAM	ROSO/B-16/11
viii) DETAILS OF CONCRETE DECK SLAB	ROSO/B-16/12
ix) SPLICING LOCATIONS	ROSO/B-16/13
x) DETAILS OF HANDRAIL AND JOINTS	ROSO/B-16/14
xi) DETAILS OF PROFILE SLAB	ROSO/B-16/15
xii) DETAILS OF BEARING	ROSO/B-16/16

SIGNS OF CONCRETE

RCC/PCC/REINFORCED CEMENT CONCRETE	RCC	25 kN/m³
PLAIN CEMENT CONCRETE	PCC	24 kN/m³
LEVELLING COURSE	ASC	24 kN/m³
LEVELLING COURSE (PCC)	WPC	40 kN/m
PRE-CAST PILE	PRE-CAST PILE	25 kN/m³
CAST IN PLACE PILE CAP	CAST IN PLACE	25 kN/m³

ROB DETAILS

ROB NUMBER	ROB-410A
ROB LOCATION	BETWEEN YESWANTHPUR TO CHIKKABANAVARA STATIONS
ROB TYPE	4 LANE ROB
ROB LENGTH	54 m
ROB WIDTH	15.7 m
NO OF SPANS	1
SKEW ANGLE	90°

DEPTH OF CONSTRUCTION

	DESCRIPTION	THICKNESS
a.	WEARING COAT	65
b.	DECK SLAB	230
c.	CONCRETE PRE-CAST PANEL	70
d.	DEPTH OF BOTTOM GIRDER	940
e.	CAMBER	155
f.	KERB	240
	TOTAL	1630

PROPOSED TRACK STRUCTURE

LOADING	SPECIAL CLASS LOADING OF 38ST
ALIGNMENT	2.50° CURVE
GRADIENT	RISE: 1 IN 2500
SPECIFICATION LEVEL	1 IN 2500
BSRP FOR/ESR LVL	915.098 m
RAIL 60 kg	177 mm
PSC SLEEPER	200 mm
FPC SLEEPER	250 mm
BALLAST CUSHION	300 mm
SKEW ANGLE	7.00°
ANGLE OF CROSSING	83.00°

ABBREVIATIONS

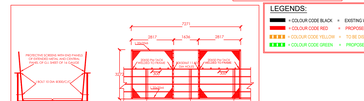
CL	CENTRE LINE
TOR	TOP OF RAIL
FOR	FORMATION LEVEL
OHE	OVER HEAD EQUIPMENT
SWR	SOUTH WESTERN RAILWAY
PROP	PROPOSED
EXIST	EXISTING
TOP	TOP OF LEVEL

RAILWAYS

Rail 60 kg	120mm
26T/42	72 mm
PSC SLEEPER	250 mm
BALLAST CUSHION	300 mm
TOTAL	742 mm

LEGENDS:

- = COLOUR CODE BLACK = EXISTING WORKS
- = COLOUR CODE RED = PROPOSED BSRP WORKS
- = COLOUR CODE YELLOW = TO BE DEMANTLED
- = COLOUR CODE GREEN = PROPOSED IN FUTURE WORKS



TYPICAL PROTECTIVE SCREENING ARRANGEMENT

NOTE:
1. PROTECTIVE SCREEN AS PER RDSO, ETI/C/0068.
2. THE METHOD OF FIXING SHALL BE DECIDED TO SUIT THE LOCAL SITE CONDITION.
3. THE PROTECTIVE SCREEN MAY BE FIXED IN VERTICAL POSITION WHEN THERE IS NO OBSTRUCTION EITHER INSIDE OR OUTSIDE.

GENERAL NOTES:-

1. ALL DIMENSIONS SHOWN IN THIS GAD ARE IN MM AND RESTRICTED LEVELS IN R.T.MILLARD IN SCALING OTHERWISE SPECIFIED.
2. DO NOT SCALE DRAWING. WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. CONSTRUCTION JOINTS IS REFERRED.
4. ALL WORKS SHALL BE AS PER STANDARD SPECIFICATIONS.
5. STANDARD OF ROAD IS LOADING : CLASS IRC LOADING.
6. ALL LEVELS ARE IN METERS AND ARE TO MSL.
7. ALL THE DIMENSIONS ARE TO BE CHECKED FROM SITE BY FIELD EXECUTIVES.
8. ANY DISCREPANCY IN THE DRAWING SHALL BE BROUGHT TO THE NOTICE OF THE ENGINEER-IN-CHARGE AT SITE.
9. RAIL LEVEL, FORMATION LEVEL ETC. SHOULD BE CLOSELY CHECKED VERIFIED BY THE ENGINEER-IN-CHARGE BEFORE ADVANCEMENT EXECUTION OF WORK AT SITE. ANY DISCREPANCY IN THE DRAWING SHALL BE BROUGHT TO THE NOTICE OF THE ENGINEER-IN-CHARGE AT SITE.
10. TRAFFIC DIVERSION SCHEMES SHALL BE SUBJECT TO MODIFICATIONS DURING CONSTRUCTION, AS THAT MAY APPROVED WORKING DRAWING FOR THE WORKING PLAN AND VARIOUS DAY AND
11. ALL WORKS SHALL BE AS PER THE LATEST DAY'S WORK, DEPRESSION SHALL BE MADE TO OBTAIN SUITABLE FOR ADEQUATE BOND FOR NEXT DAY CONCRETING.
12. ALL PRECAUTIONS SHALL BE TAKEN IN CONTACT WITH OHE, MUST BE PASSED WITH APPROVED PROTECTIVE PARTY AND OTHER CONSTRUCTIONS SUCH AS PLANTED AND IN THIS CONNECTION INSTRUCTIONS ISSUED VIDE CAO/LETTER NO. W.140/OHE/PLAN/POLICY VOL. IV, DATED 04/05/2020 SHALL BE FOLLOWED.
13. ALL CONSTRUCTION JOINT SHALL BE ROUGHENED AND CLEANED IN CONCRETE WITHOUT SPECIAL PRECAUTIONS AS PER RELEVANT CODES.
14. CONTROLLED CONCRETE WITH READY MIXED CONCRETE SHALL BE USED FOR CONCRETE.
15. ALL CONCRETE SHALL BE CURED FOR A MINIMUM PERIOD OF 7 DAYS AFTER THE PLACING.
16. UNDERGROUND CABLE ETC. IF ANY SHALL BE ENSURED GUARD - ALL AGENCIES RESPONSIBLE TO ELECTRONICS/ELECTRICAL/SIGNAL/TELECOM/OHE/ETC. SHALL BE INFORMED IN ADVANCE AND ALL PRECAUTIONS SHALL BE TAKEN AS PER THE INSTRUCTIONS ISSUED BY RAILWAY BOARD VIDE LETTER NO.2002/ELE(G)/178/2 DT. 28/10/2016 AND 04/11/2021.
17. ALL THE WORKS SHALL BE EXECUTED AS PER THE DRAWINGS AND SPECIFICATIONS AND AFTER GETTING THE APPROVAL OF THE TIME OF PREPARATIONS OF THIS GAD AMOUNT OF BOND ACTIVITIES ACTUAL TYPES AND QUANTITIES WILL BE DECIDED BY THE ENGINEER-IN-CHARGE AT SITE AND ENCOUNTERED AT SITE DURING EXECUTION AS PER DESIGN.
18. ALL THE WORKS SHALL BE EXECUTED AS PER THE DRAWINGS SPAN IS AS PER RDSO, AND SUB STRUCTURES AS PER DESIGN. THE DIMENSIONS SHOWN IN THIS GAD ARE BASED ON THE PRELIMINARY DESIGN. THE DETAILED DESIGN AND DRAWINGS WILL BE PREPARED SEPARATELY AFTER THE APPROVAL OF THIS GAD.
19. THE GOOD TEST ON PILES SHALL BE CONDUCTED AS PER IS:2911-PART IV, 1985 AND IRS SUBSTRUCTURE CODE.
20. THE PILES SHALL BE DESIGNED AS PER IRC:78-2014 AND IRS CODE.
21. THE BEARING CAPACITY OF PILES ARE TO BE ASCERTAINED EVEN THE PILE CAP FULLY.
22. THE PILES SHALL BE DESIGNED AS PER IRC:78-2014 AND IRS CODE.
23. THE FOUNDATION SOIL SHALL BE TESTED AS PER IS:1892: 2021 IRC:22-06-2021 REGARDING "ENSURING QUALITY OF WORK AND MAINTAINING SOIL INVESTIGATION FOR FOUNDATION OF BRIDGES" AND IRC:78-2014.
24. PILE INTEGRITY TEST TO BE DONE COMPULSORY TO ENSURE CERTIFY AGENCIES AND PROPER RECORDS OF RESULTS OF THE SAME TO BE FURNISHED FOR SUBMITTED.
25. THE FOLLOWING SAFETY MEASURES SHALL BE FOLLOWED.
26. THE SIDEWALK/RAILING, & TRAFFIC ISLAND SHALL BE CONSTRUCTED AS PER LATEST IRS FOR RAILWAYS.
27. THE ROAD SHALL BE PROVIDED WITH ADEQUATE DRAINAGE SYSTEM SO AS TO DRAIN THE WATER FROM ROAD BY PREVENTING SETTLING OF SOIL CONSTRUCTING A RAIN WATER HARVESTING PITS OR NEARBY DRAINS. WATER BORNE
28. THE ROAD SHALL BE PROVIDED WITH ADEQUATE DRAINAGE SYSTEM SO AS TO DRAIN THE WATER FROM ROAD BY PREVENTING SETTLING OF SOIL CONSTRUCTING A RAIN WATER HARVESTING PITS OR NEARBY DRAINS. WATER BORNE
29. WHILE PLANNING THE TRACK PORTION OF ROB, THE GUIDELINES GIVEN IN RDSO VIDE RDL/CI/OF 36/14 DTD 26.10.2015 SHALL BE STRICTLY FOLLOWED.
30. THE ROAD SHALL BE PROVIDED WITH ADEQUATE DRAINAGE SYSTEM SO AS TO DRAIN THE WATER FROM ROAD BY PREVENTING SETTLING OF SOIL CONSTRUCTING A RAIN WATER HARVESTING PITS OR NEARBY DRAINS. WATER BORNE
31. ROAD CLOSED FOR THE ROB SHALL BE FIXED AFTER CONSULTING WITH ROAD AUTHORITIES TO AVOID ANY FUTURE LEVEL DIFFERENCES AT THE TIME OF CONSTRUCTION OF ROAD.
32. ALL THE WORKS SHALL BE EXECUTED AS PER THE DRAWINGS AND SPECIFICATIONS AND AFTER GETTING THE APPROVAL OF THE TIME OF PREPARATIONS OF THIS GAD AMOUNT OF BOND ACTIVITIES ACTUAL TYPES AND QUANTITIES WILL BE DECIDED BY THE ENGINEER-IN-CHARGE AT SITE AND ENCOUNTERED AT SITE DURING EXECUTION AS PER DESIGN.
33. PROVIDE DRAINAGE SPOUTS, ITS EXPANSION JOINTS & COMPLETE MISCELLANEOUS WORKS.
34. THE ROAD SHALL BE PROVIDED WITH ADEQUATE DRAINAGE SYSTEM SO AS TO DRAIN THE WATER FROM ROAD BY PREVENTING SETTLING OF SOIL CONSTRUCTING A RAIN WATER HARVESTING PITS OR NEARBY DRAINS. WATER BORNE
35. ROAD CLOSED FOR THE ROB SHALL BE FIXED AFTER CONSULTING WITH ROAD AUTHORITIES TO AVOID ANY FUTURE LEVEL DIFFERENCES AT THE TIME OF CONSTRUCTION OF ROAD.
36. ALL THE WORKS SHALL BE EXECUTED AS PER THE DRAWINGS AND SPECIFICATIONS AND AFTER GETTING THE APPROVAL OF THE TIME OF PREPARATIONS OF THIS GAD AMOUNT OF BOND ACTIVITIES ACTUAL TYPES AND QUANTITIES WILL BE DECIDED BY THE ENGINEER-IN-CHARGE AT SITE AND ENCOUNTERED AT SITE DURING EXECUTION AS PER DESIGN.
37. ALL THE WORKS SHALL BE EXECUTED AS PER THE DRAWINGS AND SPECIFICATIONS AND AFTER GETTING THE APPROVAL OF THE TIME OF PREPARATIONS OF THIS GAD AMOUNT OF BOND ACTIVITIES ACTUAL TYPES AND QUANTITIES WILL BE DECIDED BY THE ENGINEER-IN-CHARGE AT SITE AND ENCOUNTERED AT SITE DURING EXECUTION AS PER DESIGN.
38. ALL THE WORKS SHALL BE EXECUTED AS PER THE DRAWINGS AND SPECIFICATIONS AND AFTER GETTING THE APPROVAL OF THE TIME OF PREPARATIONS OF THIS GAD AMOUNT OF BOND ACTIVITIES ACTUAL TYPES AND QUANTITIES WILL BE DECIDED BY THE ENGINEER-IN-CHARGE AT SITE AND ENCOUNTERED AT SITE DURING EXECUTION AS PER DESIGN.
39. ALL THE WORKS SHALL BE EXECUTED AS PER THE DRAWINGS AND SPECIFICATIONS AND AFTER GETTING THE APPROVAL OF THE TIME OF PREPARATIONS OF THIS GAD AMOUNT OF BOND ACTIVITIES ACTUAL TYPES AND QUANTITIES WILL BE DECIDED BY THE ENGINEER-IN-CHARGE AT SITE AND ENCOUNTERED AT SITE DURING EXECUTION AS PER DESIGN.
40. ALL THE WORKS SHALL BE EXECUTED AS PER THE DRAWINGS AND SPECIFICATIONS AND AFTER GETTING THE APPROVAL OF THE TIME OF PREPARATIONS OF THIS GAD AMOUNT OF BOND ACTIVITIES ACTUAL TYPES AND QUANTITIES WILL BE DECIDED BY THE ENGINEER-IN-CHARGE AT SITE AND ENCOUNTERED AT SITE DURING EXECUTION AS PER DESIGN.

ALL DETAIL SPECIAL NOTES:-

1. ALL THE WORKS INCLUDING ONE WALL/LATTING SHOULD BE SUITABLY MODIFIED AFTER PROOF APPROVAL OF SECTIONING DRAWING.
2. DRAWING.
3. DURING THE EARTH WORKS IT SHOULD BE ENSURED THAT NO FOUNDATION OF ANY AND STRUCTURE IS DISTURBED AND ALL THE WORKS SHOULD BE SUPERVISED BY THE ENGINEER-IN-CHARGE AT SITE.
4. THE APPROVAL OF THE DRAWINGS.
5. TWO INDEPENDENT EARTHING SHOULD BE ENSURED FOR THE GIRDER IF ANY METAL STRUCTURE.
6. ALL THE WORKS SHALL BE EXECUTED AS PER THE DRAWINGS.
7. UNDER BUILDING CLEARANCE TO THE RAILWAY BOUNDARY IS AS PER IRC:6-2017 SECTION 5.
8. SURFACING AND RESTORATION TO BE CARRIED OUT AND WORK SITE SAFETY TO BE ENSURED BY KRIDE.
9. ALL THE WORKS SHALL BE EXECUTED AS PER THE DRAWINGS AND SPECIFICATIONS AND AFTER GETTING THE APPROVAL OF THE TIME OF PREPARATIONS OF THIS GAD AMOUNT OF BOND ACTIVITIES ACTUAL TYPES AND QUANTITIES WILL BE DECIDED BY THE ENGINEER-IN-CHARGE AT SITE AND ENCOUNTERED AT SITE DURING EXECUTION AS PER DESIGN.

5 NOS CAUTIONARY SIGNS TO BE PROVIDED BELOW THE ROB.

SAFETY NOTES:-

1. ADEQUATE SAFETY MEASURE FOR EXISTING TRAFFICS BE ADOPTED WHILE DOING THE CONSTRUCTIONS OF EARTH WORKS.
2. ADEQUATE SAFETY MEASURES TO BE TAKEN DURING THE DEMOLITION OF EXISTING ROB.
3. ALL THE CONSTRUCTIONS OF PROPOSED BRIDGE PIERS, PILES SAFETY PRECAUTIONS TO BE TAKEN WHILE CONSTRUCTIONS NEAR TO THE EXISTING STRUCTURES FUNCTIONING INCLUDING IMPOSING OF SPEED RESTRICTIONS IF REQUIRED.
4. ALL THE WORKS SHALL BE EXECUTED AS PER THE DRAWINGS AND SPECIFICATIONS AND AFTER GETTING THE APPROVAL OF THE TIME OF PREPARATIONS OF THIS GAD AMOUNT OF BOND ACTIVITIES ACTUAL TYPES AND QUANTITIES WILL BE DECIDED BY THE ENGINEER-IN-CHARGE AT SITE AND ENCOUNTERED AT SITE DURING EXECUTION AS PER DESIGN.
5. NECESSARY SIGNAL/ SIGNBOARDS TO BE MADE TO PROTECT EXISTING STRUCTURES WHEREVER NECESSARY.
6. ADEQUATE SAFETY MEASURES TO BE TAKEN BY ENGINEER-IN-CHARGE DURING THE CONSTRUCTION OF THE TRAFFIC ALL SAFETY MEASURES TO BE TAKEN BY ENGINEER-IN-CHARGE DURING EXECUTION.
7. ADEQUATE SAFETY MEASURES TO BE TAKEN BY ENGINEER-IN-CHARGE DURING THE WORK IS BEING EXECUTED PARALLEL TO RUNNING TRACK.
8. SAFETY FIRST ALL PERSONS MUST BE EQUIPPED WITH SAFETY ARTICLES, KEEN EYE SHOULD BE KEPT ON THE MOVEMENT OF RAILWAY ROLLING STOCK.
9. WORKERS AND A SMALL BE WARNED AGAINST TO ENSURE SAFETY OF TRACK OPERATION ON RUNNING LINES. WHILE CARRYING OUT PERMANENT WAY WORK ON OR NEAR RUNNING LINES, WHILE CARRYING OUT PERMANENT WAY WORK ON OR NEAR RUNNING LINES.
10. THE SAFETY MEASURES TO BE TAKEN BY ENGINEER-IN-CHARGE.
11. THE SAFETY MEASURES TO BE TAKEN BY ENGINEER-IN-CHARGE.
12. ADEQUATE SAFETY MEASURES TO BE TAKEN BY ENGINEER-IN-CHARGE DURING THE WORK IS BEING EXECUTED PARALLEL TO RUNNING TRACK.
13. GREEN MAT OR APPROVED EQUIVALENT SHOULD BE PROVIDED AT ENTRY/EXIT POINTS TO AVOID MUD FROM PUBLIC ROAD.
14. WORK MAY TO BE EXECUTED UNDER SUPERVISION OF AN EXPERIENCED AND COMPETENT RAILWAY ENGINEER.
15. ADEQUATE SAFETY MEASURES TO BE TAKEN BY ENGINEER-IN-CHARGE DURING THE WORK IS BEING EXECUTED PARALLEL TO RUNNING TRACK.

JUSTIFICATION FOR CARRIAGEWAY CONFIGURATION OF 2 x 11.5m:-

DUAL WIDTH (PKG-DIVERSION-1) FOR TRAFFIC WITH 4% LOADING.
THE CONSTRUCTION OF ROB IS BEING DONE IN 2 PHASES. WHERE DIVERSION OF EXISTING ROB IS BEING DONE BEFORE DEMANTLING THE EXISTING ROB, HENCE 2 LANE WIDTH IS PROVIDED FOR SMOOTH MOVEMENT OF TRAFFIC.

JUSTIFICATION FOR DISMANTLING OF THE EXISTING ROB:-

THE DEMANTLING IS REQUIRED FOR ACCOMMODATING THE PROPOSED BSRP AND FUTURE IR TRACK AS WELL AS PROVIDING THE REQUIRED VERTICAL CLEARANCE FOR IR TRACKS.

SAFETY NOTES:-

1. ADEQUATE SAFETY MEASURE FOR EXISTING TRAFFICS BE ADOPTED WHILE DOING THE CONSTRUCTIONS OF EARTH WORKS.
2. ADEQUATE SAFETY MEASURES TO BE TAKEN DURING THE DEMOLITION OF EXISTING ROB.
3. ALL THE CONSTRUCTIONS OF PROPOSED BRIDGE PIERS, PILES SAFETY PRECAUTIONS TO BE TAKEN WHILE CONSTRUCTIONS NEAR TO THE EXISTING STRUCTURES FUNCTIONING INCLUDING IMPOSING OF SPEED RESTRICTIONS IF REQUIRED.
4. ALL THE WORKS SHALL BE EXECUTED AS PER THE DRAWINGS AND SPECIFICATIONS AND AFTER GETTING THE APPROVAL OF THE TIME OF PREPARATIONS OF THIS GAD AMOUNT OF BOND ACTIVITIES ACTUAL TYPES AND QUANTITIES WILL BE DECIDED BY THE ENGINEER-IN-CHARGE AT SITE AND ENCOUNTERED AT SITE DURING EXECUTION AS PER DESIGN.
5. NECESSARY SIGNAL/ SIGNBOARDS TO BE MADE TO PROTECT EXISTING STRUCTURES WHEREVER NECESSARY.
6. ADEQUATE SAFETY MEASURES TO BE TAKEN BY ENGINEER-IN-CHARGE DURING THE CONSTRUCTION OF THE TRAFFIC ALL SAFETY MEASURES TO BE TAKEN BY ENGINEER-IN-CHARGE DURING EXECUTION.
7. ADEQUATE SAFETY MEASURES TO BE TAKEN BY ENGINEER-IN-CHARGE DURING THE WORK IS BEING EXECUTED PARALLEL TO RUNNING TRACK.
8. SAFETY FIRST ALL PERSONS MUST BE EQUIPPED WITH SAFETY ARTICLES, KEEN EYE SHOULD BE KEPT ON THE MOVEMENT OF RAILWAY ROLLING STOCK.
9. WORKERS AND A SMALL BE WARNED AGAINST TO ENSURE SAFETY OF TRACK OPERATION ON RUNNING LINES. WHILE CARRYING OUT PERMANENT WAY WORK ON OR NEAR RUNNING LINES, WHILE CARRYING OUT PERMANENT WAY WORK ON OR NEAR RUNNING LINES.
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12. ADEQUATE SAFETY MEASURES TO BE TAKEN BY ENGINEER-IN-CHARGE DURING THE WORK IS BEING EXECUTED PARALLEL TO RUNNING TRACK.
13. GREEN MAT OR APPROVED EQUIVALENT SHOULD BE PROVIDED AT ENTRY/EXIT POINTS TO AVOID MUD FROM PUBLIC ROAD.
14. WORK MAY TO BE EXECUTED UNDER SUPERVISION OF AN EXPERIENCED AND COMPETENT RAILWAY ENGINEER.
15. ADEQUATE SAFETY MEASURES TO BE TAKEN BY ENGINEER-IN-CHARGE DURING THE WORK IS BEING EXECUTED PARALLEL TO RUNNING TRACK.

SI NO	ALTERATION NO	DESCRIPTION	SIGNATURE OF OFFICER

STATE GOVERNMENT AUTHORITY APPROVAL

AM/EE/CIVIL ENGINEER BBMP/BANGALORE	EXECUTIVE ENGINEER BBMP/BANGALORE	EXECUTIVE ENGINEER BBMP/BANGALORE	CHIEF ENGINEER BBMP/BANGALORE

PREPARED BY	N.S.BABU		CONTRACTOR : LARSEN & TOUBRO LTD. L&T CONSTRUCTION L&T TRANSPORTATION INFRASTRUCTURE IC
CHECKED BY	GOWTHAM		
APPROVED BY	S.S.CHIKODI		PROOF CONSULTANT : INDIAN INSTITUTE OF TECHNOLOGY MADRAS P.O., Chennai-600 036
G.C			GENERAL CONSULTANTS : EGIS-AECOM-WSP
PROJECT DIRECTOR	MAHESH KUMAR		DETAILED DESIGN CONSULTANT (DDC) : STUP Consultants Pvt. Ltd. 3rd Floor, Jakkasandra Block, 80 Feet Road, Koramangala 1A Block, Bangalore-560034 Email : info@stupconsultants.com Web : www.stupconsultants.com
PROJECT MANAGER	KOTA VENKATA MAHADEV		L&T CONSTRUCTION EGIS/BRIDGES - TNC

K RIDE — RAIL INFRASTRUCTURE DEVELOPMENT COMPANY (KARNATAKA) LIMITED

EMPLOYER : RAIL INFRASTRUCTURE DEVELOPMENT COMPANY (KARNATAKA) LIMITED

SOUTH WESTERN RAILWAY

AUTHORITY OF WORK :- AS PER BSRP DPSR
THE RAILWAY BOARD SANCTION FOR BENGALURU SUBURBAN TRANSPORT PROJECT (148.17 kms) VIDE LETTER NO:2019/IV CELL/KRIDE/BSTP/ERB/07 DATED:21.10.2020.

GENERAL ARRANGEMENT DRAWING

BENGALURU SUBURBAN RAILWAY PROJECT(BSRP) CORRIDOR:2
BETWEEN STATIONS BENNIGANAHALLI AND CHIKKABANAVARA

PROPOSED ROB (BOW STRING STEEL GIRDER) OF SPAN 1 X 54.00m AT IR CH: 8193.750 IN LIEU OF EXISTING ROB NO 410A OF SPAN 1 X 17M (RCC GIRDER) AT IR KM 8193.750, BETWEEN YESWANTHPUR TO CHIKKABANAVARA STATIONS

Sr.DEN/NORTH/SBC	HARSHIT GUPTA Digitally signed by HARSHIT GUPTA Date: 2021.01.28 12:57:57 +05'30'	Signature block
Sr. DSTE/SBC	SATISH KUMAR CHILAMKURTI Date: 2021.01.28 13:45:06 +05'30'	
Sr.DEE/TRD/SBC	AMAN KATYAL Digitally signed by AMAN KATYAL Date: 2021.01.28 17:50:07 +05'30'	
Sr.DEN/Co-Ord/SBC	RAJEEV SHARMA Digitally signed by RAJEEV SHARMA Date: 2021.01.29 20:04:57 +05'30'	
ADRM/T/SBC	RAVINDRA MATHUR Digitally signed by RAVINDRA MATHUR Date: 2021.01.12 16:41:40 +05'30'	
DRM/SBC	AMITESH KUMAR SINHA Date: 2021.01.23 20:04:57 +05'30'	
SSE/ORG/SBI/HQ	VINUT MANAGULI Digitally signed by VINUT MANAGULI Date: 2021.01.29 15:47:10 +05'30'	
Dy.CE/SBI/HQ	Digitally signed by SATISH BABU M.S. Date: 2021.01.29 15:47:10 +05'30'	
CBE/SWR	BUVENULA RAMA SUBBAIAH	Digitally signed by BUVENULA RAMA SUBBAIAH Date: 2021.01.29 15:47:10 +05'30'
DIRECTOR / PROJECT & PLANNING	RAJESH KUMAR SINGH	RAJESH KUMAR SINGH Digitally signed by RAJESH KUMAR SINGH Date: 2021.01.29 15:47:10 +05'30'

KRIDE.DRG.NO: SWR/2025/GAD-35/BOB No.410A/BAW-YPR/YPR-S.S/KRIDE	
SCALE : 1 : 100 (UNLESS SPECIFIED OTHERWISE)	
HQ.DRG.NO: SWR/2025/GAD-35/BOB No.410A/BAW-YPR/YPR-S.S/KRIDE	