TOWARDS KODATHSULIKUNTE

TOWARDS SIDDAPURA

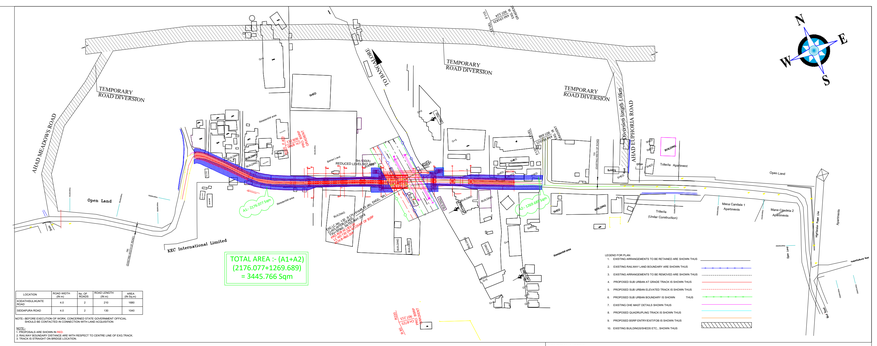
58000

	A1	P1	P2	P3	P4	P5	P6	A2
PROPOSED ROAD LEVEL		912.053	913.386	914.720	916.053	916.053	916.053	916.053	914.720
GROUND LEVEL		906.670	907.111	907.406	907.795	907.862	908.843	909.093	909.279
PILE CAP TOP LEVEL		906.170	906.611	906.906	907.295	907.362	908.343	908.593	908.779
PILE CAP BOTTOM LEVEL		904.370	904.811	905.106	905.495	905.562	906.543	906.793	906.979
CHAINAGE		-112.702	-93.002	-73.002	-53.002	-33.002	0.00	+24.9977	+44.998

ELEVATION

SLOPE 1 IN 15

20M PIER C/C



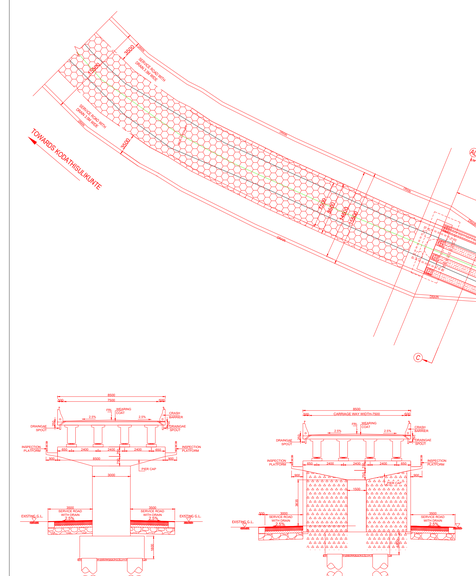
LOCATION PLAN

LOCATION	PLAN NORTH OF	PLAN OF	ROAD CHAINAGE	AREA
			Mtrs.	Mtrs.
A1&A2 EMBANKMENT	+X	Y	0.00	1800
A1	+X	Y	0.00	1645
EXISTING ROAD	+X	Y	0.00	1645

NOTE: BEFORE EXECUTION OF WORK, CONCERNED STATE GOVERNMENT OFFICIAL SHOULD BE CONTACTED IN CONNECTION WITH LAND ACQUISITION

NOTES:
1. DIMENSIONS ARE SHOWN IN MTS
2. TRACK IS STRAIGHT ON PLAN AND WITH RESPECT TO CENTRE LINE OF EXG TRACK
3. TRACK IS STRAIGHT ON VERTICAL CURVATURE

LEGEND FOR PLAN
1. EXISTING ARRANGEMENTS TO BE RETAINED ARE SHOWN THUS
2. EXISTING RAILWAY LAND BOUNDARY ARE SHOWN THUS
3. EXISTING ARRANGEMENTS TO BE REMOVED ARE SHOWN THUS
4. PROPOSED SUB URBAN TO BE REMOVED ARE SHOWN THUS
5. PROPOSED SUB URBAN BOUNDARY IS SHOWN THUS
6. EXISTING ONE WAY DETAILS SHOWN THUS
7. PROPOSED QUADRUPLING TRACK IS SHOWN THUS
8. PROPOSED BWP ENTRY/EXIT FOR 6 IS SHOWN THUS
9. EXISTING BUILDING/SHEDS ETC., SHOWN THUS
10. EXISTING BUILDINGS/SHEDS ETC., SHOWN THUS

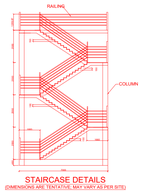


SECTION B-B
CROSS SECTION AT PIER
SCALE 1:50

SECTION C-C
CROSS SECTION AT ABUTMENT
SCALE 1:50

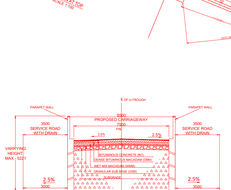
FOOTING DETAILS
FOR PIER NO'S:P1 TO P5 & P8,P9
SCALE 1:50

FOOTING DETAILS
FOR PIER NO'S: A1 & A2
SCALE 1:50



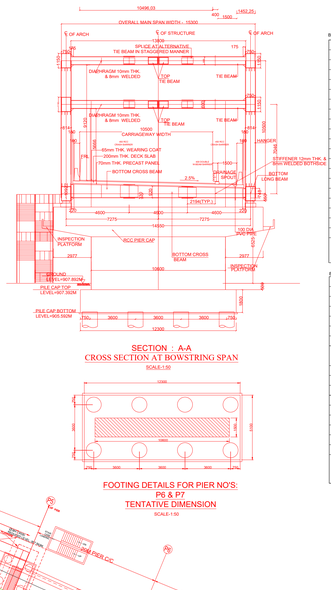
STAIRCASE DETAILS
(DIMENSIONS ARE TENTATIVE, MAY VARY AS PER SITE)

STAIRCASE PLAN
(DIMENSIONS ARE TENTATIVE, MAY VARY AS PER SITE)



SPECIAL NOTE:

1. THE CARRIAGEWAY ON BOTH THE APPROACHES IS 7.5M BUT THE CARRIAGEWAY IN THE RAILWAY PORTION IS 10.9M.CONVERGENCE AND DIVERGENCE IN THE WIDTH OF CARRIAGEWAY TO BE GRADUALLY MADE ON THE APPROACHES AS PER THE RATE PRESCRIBED BY RELEVANT IRC.
2. SUITABLE TRANSITION AS PER IRC TO BE PLANNED FOR THE CAMBER PROFILE FROM APPROACH TO THE OBLIGATORY PORTION AND VICE-VERSA.

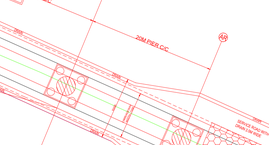


BOREHOLE LOG DETAILS-I-130A REDUCED LEVEL 907.463

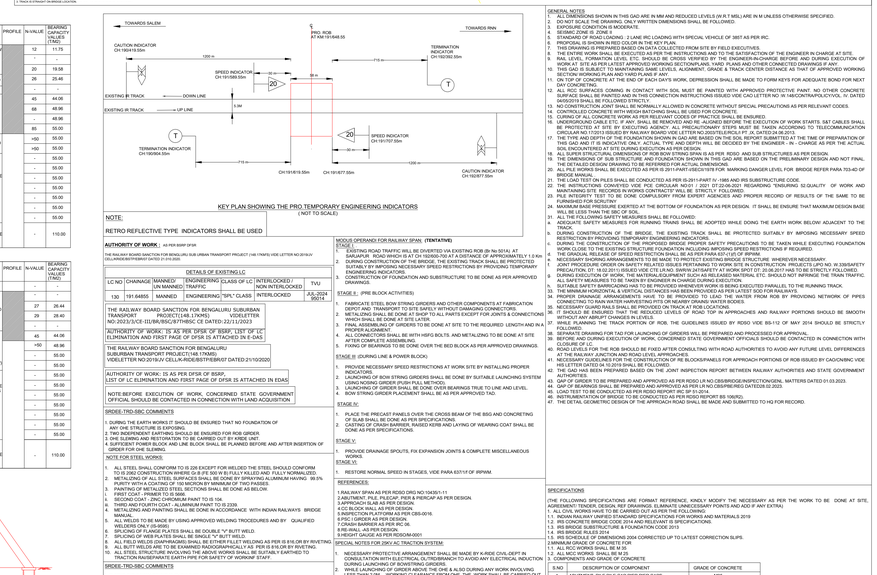
DEPTH (M)		THICKNESS OF LAYER(M)	DESCRIPTION	PROFILE	N-VALUE	BEARING CAPACITY (TN/M2)
FROM	TO					
0.0	1.5	3.5	WHITE &YELLOW COLOURED SANDY SILT (MEDIUM TO CLAYEY)		12	11.75
1.5	3.0					
3.0	3.5				20	19.58
3.5	4.5	1.0	BROWN COLORED SAND (SP)		26	25.46
4.5	6.0	5.0	FOUNDATION LEVEL		45	44.06
6.0	6.5					
6.5	7.5		BROWN COLORED SILTY SAND (SM)		68	66.96
7.5	9.0				51	48.96
9.0	9.5				85	55.00
9.5	10.5	2.5	SOFT DISINTEGRATED ROCK		>50	55.00
10.5	12.0					
12.0	13.5	10.5	GRANITIC GNEISS WITH COMPLETE WEATHERING (GRADE V)		-	55.00
13.5	15.0				-	55.00
15.0	16.5				-	55.00
16.5	18.0				-	55.00
18.0	19.5				-	55.00
19.5	21.0	1.5			-	55.00
21.0	22.5		GRANITIC GNEISS WITH MODERATE WEATHERING (GRADE III)		-	110.00

BOREHOLE LOG DETAIL-S-130B REDUCED LEVEL 907.363

DEPTH (M)		THICKNESS OF LAYER(M)	DESCRIPTION	PROFILE	N-VALUE	BEARING CAPACITY (TN/M2)
FROM	TO					
0.0	1.5	1.5	BACK FILLING		-	-
1.5	3.0	5.0	BROWN & GREY COLORED SILT(ML)		27	26.44
3.0	3.5				29	28.40
3.5	4.5					
4.5	6.0		FOUNDATION LEVEL		45	44.06
6.0	6.5	1.0	BROWN COLORED SILTY SAND(SM)		>50	48.96
6.5	7.5				-	55.00
7.5	9.0				-	55.00
9.0	10.5	13.5	GNEISS WITH COMPLETE WEATHERING (GRADE V)		-	55.00
10.5	12.0				-	55.00
12.0	13.5				-	55.00
13.5	15.0				-	55.00
15.0	16.5				-	55.00
16.5	18.0				-	55.00
18.0	19.5				-	55.00
19.5	21.0				-	55.00
21.0	22.5	1.5	GRANITIC GNEISS WITH MODERATE WEATHERING (GRADE III)		-	110.00



SECTION OF HEIGHT GAUGE
AS PER DRG-5051



KEY PLAN SHOWING THE PRO TEMPORARY ENGINEERING INDICATORS
(NOT TO SCALE)

NOTE:

RETRO REFLECTIVE TYPE INDICATORS SHALL BE USED

AUTHORITY OF WORK : AS PER BSRP DFSR

THE RAILWAY BOARD SANCTION FOR BENGALURU SUBURBAN TRANSPORT PROJECT (148.17KMS) VIDE LETTER NO.2019/TG-I/SUBURBAN/RERPHASE1/DFR/0.0 DATED 21/10/2020

DETAILS OF EXISTING LC

LC NO	CHAINAGE	MANNED/ UN MANNED	ENGINEERING/ TRAFFIC	CLASS OF LC	INTERLOCKED / NON INTERLOCKED	TVU
130	191.648/05	MANNED	ENGINEERING	"SPL" CLASS	INTERLOCKED	AS-2024 95014

AUTHORITY OF WORK: IS AS PER DFSR OF BSRP, LIST OF LC ELIMINATION AND FIRST PAGE OF DFSR IS ATTACHED IN EDAS

NOTE:BEFORE EXECUTION OF WORK, CONCERNED STATE GOVERNMENT OFFICIAL SHOULD BE CONTACTED IN CONNECTION WITH LAND ACQUISITION

SRDDEL-THD-SBC COMMENTS

1. DURING THE EARTH WORKS IT SHOULD BE ENSURED THAT NO FOUNDATION OF ANY ONE STRUCTURE IS EXPOSING.
2. TWO INDEPENDENT EARTHING SHOULD BE ENSURED FOR ROB GIRDER.
3. OHE SLEWING AND RESTORATION TO BE CARRIED OUT BY KRIDE UNIT.
4. SUFFICIENT POWER BLOCK AND LINE BLOCK SHALL BE PLANNED BEFORE AND AFTER INSERTION OF GIRDER FOR OHE SLEWING.

NOTE FOR STEEL WORKS:

1. ALL STEEL SHALL CONFORM TO IS:226 EXCEPT FOR WELDED THE STEEL SHOULD CONFORM TO IS:2062 (CONSTRUCTION GRADE D) (FE 500 W B) FULLY KILLED AND FULLY NORMALIZED.
2. METALLIZING OF ALL STEEL SURFACES SHALL BE DONE BY SPRAYING ALUMINIUM HAVING 99.5% PURITY AT A RATE OF 150 GRAMS PER SQ.M. AS PER IS:2629 & IS:2633.
3. PAINTING OF METALIZED STEEL SECTIONS SHALL BE DONE AS BELOW.
   1. FIRST COAT - PRIMER TO IS:5666
   2. THIRD AND FOURTH COAT - ALUMINIUM PAINT TO IS:104.
   3. THIRD AND FOURTH COAT - ALUMINIUM PAINT TO IS:2339.
4. METALIZING AND PAINTING SHALL BE DONE IN ACCORDANCE WITH INDIAN RAILWAYS BRIDGE MANUAL.
5. ALL WELDS TO BE MADE BY USING APPROVED WELDING TROCEDURES AND BY QUALIFIED WELDERS AS PER IS:823.
6. SPLICING OF FLANGE PLATES SHALL BE DOUBLE "V" BUTT WELD.
7. SPLICING OF WEB PLATES SHALL BE SINGLE "V" BUTT WELD.
8. ALL FIELD WELDS (SHOP/SHOP) SHALL BE FILLET WELDING AS PER IS 816 OR BY RIVETING.
9. ALL BUTT WELDS AND TO BE EXAMINED RADIOGRAPHICALLY AS PER IS 816 OR BY RIVETING.
10. ALL STEEL STRUCTURE INVOLVING THE ABOVE WORKS SHALL BE SUITABLY EARTHED TO TRACTION RAIS/SEPARATE EARTH PIPE FOR SAFETY OF WORKIN STAFF.

SRDDEL-THD-SBC COMMENTS

1. DURING THE EARTH WORKS IT SHOULD BE ENSURED THAT NO FOUNDATION OF ANY ONE STRUCTURE IS EXPOSING.
2. TWO INDEPENDENT EARTHING SHOULD BE ENSURED FOR ROB GIRDER.
3. OHE SLEWING AND RESTORATION TO BE CARRIED OUT BY KRIDE UNIT.
4. SUFFICIENT POWER BLOCK AND LINE BLOCK SHALL BE PLANNED BEFORE AND AFTER INSERTION OF GIRDER FOR OHE SLEWING.

RESPONSIBILITY NOTES :

1. THE MAINTENANCE OF ROB SHALL BE AS PER PARA 1816(3) OF ENGINEERING CODE READ ALONG WITH RECTIFICATION SLIP.
2. AN MOU SHALL BE SIGNED BETWEEN RAILWAY AND STATE GOVT./ROAD OWNING AUTHORITY TO DETERMINE THE RESPONSIBILITIES OF EXECUTION AND MAINTENANCE OF ROB.
3. NECESSARY TEMPORARY DIVERSION OF ROAD TRAFFIC HAS TO BE PROVIDED BY THE KRIDE STATE AUTHORITIES AT THE TIME OF EXECUTION OF WORK BASED ON THE JOINT INSPECTION BETWEEN STATE AND KRIDE AUTHORITIES. SUITABLE TEMPORARY SERVICE ROADS ON BOTH SIDES OF THE ROB APPROACHES SHALL BE PROVIDED AND MAINTAINED BY KRIDE / STATE AUTHORITIES WHEREVER & WHENEVER REQUIRED.
4. THE ROB WORK WILL BE EXECUTED BY KRIDE FOR BOTH RAILWAY AND APPROACH PORTION OF ROB EVEN BEYOND RAILWAY BOUNDARY ALONG WITH DRAINAGE ARRANGEMENTS.
5. EXISTING TELEGRAPH POSTS, ELECTRIC POSTS, SIGNAL CABLES, WATER & DRAINAGE, WATER MAINS AND ALL OTHER UTILITIES COMING IN THE WAY SHALL BE SHIFTED BY THE STATE AUTHORITIES OR AGENCY AT THEIR COST.
6. ROAD APPROACHES ON EITHER SIDE OF THE PROPOSED ROB SHOULD BE SUITABLY ALIGNED AND REGRADED BY KRIDE AUTHORITY.
7. MAINTENANCE OF DRAINAGE WILL BE DONE BY ROAD AUTHORITIES AFTER THE COMPLETION OF WORK.
8. THE ROAD PAVED AND SURFACE AFTER COMPLETION OF ROB IS TO BE DONE BY ROAD AUTHORITIES BOTH INSIDE AND OUTSIDE THE RAILWAY LIMITS.
9. THE RESPONSIBILITY OF THE MAINTENANCE OF LIGHTING ARRANGEMENTS OF ROB IN RAILWAY PORTION AND BEYOND RAILWAY PORTION WILL BE WITH LOCAL CIVIC BODY.
10. AFTER CONSTRUCTION AND COMMISSIONING OF ROB IT WILL BE HANDED OVER TO LOCAL CIVIL AUTHORITY FOR MAINTENANCE WITH ALL RESPECT.

SBC DIVISION	
Sr.DEN/SOUTH/SBC	YOGHA GHANGOLYA Digitally Signed By YOGHA GHANGOLYA Date:2026.04.04 10:36:16 +05'30"
Sr.DEN/CO-ORD/SBC	RAJEEV SHARMA Digitally Signed By RAJEEV SHARMA Date:2026.04.06 13:47:42 +05'30"
Sr.DEE/TRD/SBC	SURENDRANATH VADDE Digitally Signed By SURENDRANATH VADDE Date:2026.04.06 15:53:18 +05'30"
Sr.DSTE/SBC	K RAMACHANDAR REDDY Digitally Signed By K RAMACHANDAR REDDY Date:2026.04.06 18:32:31 +05'30"
ADRM/G/SBC	PRAVEEN KATARIA Digitally Signed By PRAVEEN KATARIA Date:2026.04.06 18:56:56 +05'30"
DRM/SBC	ASHUTOSH KUMAR SINGH Digitally Signed By ASHUTOSH KUMAR SINGH Date:2026.04.16 13:25:03 +05'30"

SI NO	ALTERATION NO	DESCRIPTION	SIGNATURE OF OFFICER

AUTHORITY OF WORK: IS AS PER DFSR OF BSRP, LIST OF LC ELIMINATION AND FIRST PAGE OF DFSR IS ATTACHED IN EDAS	HQ/SWR/UBL	
SSE/DRG/BRI/HQ	VINUT MANAGULI	Digitally signed by VINUT MANAGULI Date: 2026.04.01 19:18:52 +05'30"
Dy.CE/BR/HQ	DEBADWAR VIPUL ULHAS	Digitally signed by DEBADWAR VIPUL ULHAS Date: 2026.04.01 19:23:36 +05'30"
CBE/SWR	C M RANGANATH	Digitally signed by C M RANGANATH Date: 2026.06.01 19:45:50 +05'30"

GENERAL NOTES

1. ALL DIMENSIONS SHOWN IN THIS GAD ARE IN MM AND REDUCED LEVELS (H.R.T MS) ARE IN M UNLESS OTHERWISE SPECIFIED.
2. DO NOT SCALE THE DRAWING ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. EXPOSURE CONDITION IS MODERATE.
4. SEISMIC ZONE III, ZONE-II.
5. DESIGN LIVE LOAD - 25 TONNES.
6. PROPOSAL IS SHOWN IN RED COLOUR IN THE KEY PLAN.
7. THIS DRAWING IS PREPARED BASED ON DATA COLLECTED FROM SITE BY FIELD EXECUTIVES.
8. THE ENTIRE WORK SHALL BE EXECUTED AS PER THE INSTRUCTIONS AND TO THE SATISFACTION OF THE ENGINEER IN CHARGE AT SITE.
9. RAIL LEVEL, FORMATION LEVEL, ETC. SHOULD BE CROSS VERIFIED BY THE ENGINEER-IN-CHARGE BEFORE AND DURING EXECUTION OF WORK.
10. THIS GAD IS SUBJECT TO MAINTAINING SAME LEVELS, ALIGNMENT, GRADE & TRACK CENTER DISTANCE AS THAT OF APPROVED WORKING SECTION/ WORKING PLAN AND YARD PLANS IF ANY.
11. THIS GAD IS SUBJECT TO TEST AT THE END OF EACH DAY'S WORK, DEPRESSION SHALL BE MADE TO FORM KEYS FOR ADEQUATE BOND FOR NEXT DAY CONCRETING.
12. ALL RCC SURFACES COMING IN CONTACT WITH SOIL MUST BE PAINTED WITH APPROVED PROTECTIVE PAINT. NO OTHER CONCRETE SURFACE SHALL BE PAINTED AND IN THIS CONNECTION INSTRUCTIONS ISSUED VIDE CAO LETTER NO. W.140/CON/APPL/ECV/01, IV DATED 04/05/2019 SHALL BE FOLLOWED STRICTLY.
13. CONTROLLED CONCRETE OF M30 GRADE ONLY ALLOWED IN CONCRETE WITHOUT SPECIAL PRECAUTIONS AS PER RELEVANT CODES.
14. CONTROLLED CONCRETE WITH HEIGH BATCHING SHALL BE USED FOR CONCRETE.
15. CURING OF ALL CONCRETE WORK AS PER RELEVANT CODES OF PRACTICE SHALL BE ENSURED.
16. ALL NECESSARY PERMISSIONS FROM THE CONCERNED AUTHORITIES SHALL BE OBTAINED BEFORE THE COMMENCEMENT OF WORK STARTS. S&T CABLES SHALL BE PROTECTED AT SITE BY EXECUTING AGENCY. ALL PRECAUTIONARY STEPS MUST BE TAKEN ACCORDING TO TELECOMUNICATION CIRCULAR NO.17/2013 ISSUED BY RAILWAY BOARD VIDE LETTER NO.2003/TELE/CIRCULR PT.-IX, DATED 24.06.2013.
17. THE TYPE AND DEPTH OF THE FOUNDATION SHOWN IN GAD ARE BASED ON THE SOIL REPORT SUBMITTED AT THE TIME OF PREPARATION OF THIS GAD AND IT IS INDICATIVE ONLY. ACTUAL TYPE AND DEPTH WILL BE DECIDED BY THE ENGINEER - IN - CHARGE AS PER THE ACTUAL STRATA FOUND AT THE TIME OF EXCAVATION OF FOUNDATION.
18. ALL SUPER STRUCTURAL DIMENSIONS OF ROB BOW STRING SPAN IS AS PER RDSO AND SUB STRUCTURES AS PER DESIGN.
19. THE DIMENSIONS OF SUB STRUCTURE AND FOUNDATION SHOWN IN THIS GAD ARE BASED ON THE PRELIMINARY DESIGN AND NOT FINAL. THE FINAL DESIGN SHALL BE DONE BY THE EXECUTING AGENCY.
20. ALL PILE WORKS SHALL BE EXECUTED AS PER IS:2911-PART-I/SEC3/2979 FOR MARKING DANGER LEVEL FOR BRIDGE REFER PARA 703-A2 OF BRIDGE MANUAL.
21. THE LOAD TESTS SHALL BE CONDUCTED AS PER IS-2911-PART IV - 1985 AND IRS SUBSTRUCTURE CODE.
22. THE INSTRUCTIONS CONVEYED VIDE PCE CIRCULAR NO.01 / 2021 DT.22-06-2021 REGARDING "ENSURING 3Q QUALITY OF WORK AND PREVENTION OF SUB STANDARD WORKS" SHALL BE FOLLOWED STRICTLY.
23. PILE INTEGRITY TEST TO BE DONE COMPULSORY BY THE EXPERT AGENCIES AND PROPER RECORD OF RESULTS OF THE SAME TO BE FURNISHED FOR SCRUTINY.
24. MINIMUM CLEARANCE EXISTED AT THE BOTTOM OF FOUNDATION AS PER DESIGN. IT SHALL BE ENSURE THAT MAXIMUM DESIGN BASE WILL BE LESS THAN THE SBC OF SOIL.
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 ADJACENT TO THE TRACK.
   b. DURING CONSTRUCTION OF THE BRIDGE, THE EXISTING TRACK SHALL BE PROTECTED SUITABLY BY IMPOSING NECESSARY SPEED RESTRICTION BY PROVIDING TEMPORARY ENGINEERING INDICATORS.
   c. DURING THE CONSTRUCTION OF THE PROPOSED BRIDGE PROPER SAFETY PRECAUTIONS TO BE TAKEN WHILE EXECUTING FOUNDATION AND SUBSTRUCTURE TO BE DONE AS PER APPROVED DRAWINGS.
   d. THE GRADUAL RELEASE OF SPEED RESTRICTIONS SHALL BE DONE AS PER PARA 601 OF GCOR VOL-I 2014.
   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 339/SAFETY PRECAUTION, DT. 16.02.2011 ISSUED VIDE CTE LR.NO. SWR/N 24/T/SAFETY AT WORK SPOT DT. 25.06.2017 HAS TO BE STRICTLY FOLLOWED.
   g. CONSTRUCTION OF FOUNDATION AND SUBSTRUCTURE TO BE DONE AS PER APPROVED DRAWINGS. RAIL LEVEL, FORMATION LEVEL, ETC. SHOULD NOT INFRINGE THE TRAFFIC.
   h. ALL SAFETY MEASURES TO BE TAKEN IN ENGINEER IN CHARGE DURING EXECUTION.
   i. SUITABLE SAFETY BARRICADING HAS TO BE PROVIDED WHENEVER WORK IS BEING EXECUTED PARALLEL TO THE RUNNING TRACK.
   j. THE MINIMUM HORIZONTAL & VERTICAL DISTANCES HAS BEEN PROVIDED AS PER LATEST SOD FOR RAILWAYS.
26. PROPER DRAINAGE ARRANGEMENTS HAVE TO BE PROVIDED TO LEAD THE WATER FROM ROB BY PROVIDING NETWORK OF PIPES CONNECTED TO THE EXISTING DRAINAGE SYSTEM AS PER THE DIRECTION OF ENGINEER.
27. THE RAILWAY BOARD SANCTION FOR BENGALURU SUBURBAN TRANSPORT PROJECT(148.17KMS) VIDE LETTER NO.2019/TG-I/SUBURBAN/RERPHASE1/DFR/0.0 DATED 21/10/2020
28. IT SHOULD BE ENSURED THAT THE INDICATED LEVELS OF ROAD TOP IN APPROACHES AND RAILWAY PORTIONS SHOULD BE SMOOTH AND FREE FROM ANY UNDULATIONS.
29. WHILE PLANNING THE TRACK PORTION OF ROB, THE GUIDELINES ISSUED BY RDSO VIDE BS-112 OF MAY 2014 SHOULD BE STRICTLY FOLLOWED.
30. SEPARATE DRAWING FOR TAD FOR LAUNCHING OF GIRDERS WILL BE PREPARED AND PROCESSED FOR APPROVAL.
31. BEFORE AND DURING EXECUTION OF WORK, CONCERNED STATE GOVERNMENT OFFICIALS SHOULD BE CONTACTED IN CONNECTION WITH LAND ACQUISITION.
40. ROAD LEVELS FOR THE ROB SHOULD BE FIXED AFTER CONSULTING WITH ROAD AUTHORITIES TO AVOID ANY FUTURE LEVEL DIFFERENCES AT THE RAILWAY JUNCTION AND ROAD LEVELS APPROACHES.
41. THE RAILWAY BOARD HAS ISSUED STANDARD DRAWINGS OF RE BLOCKS/PANELS FOR APPROACH PORTIONS OF ROB ISSUED BY CAO/CHENNAI VIDE LETTER NO.S2 (W 1A 02/16 SHALL BE FOLLOWED
42. THE GAD HAS BEEN PREPARED BASED ON THE JOINT INSPECTION REPORT BETWEEN RAILWAY AUTHORITIES AND STATE GOVERNMENT AUTHORITIES.
43. GAP OF GIRDER TO BE PREPARED AND APPROVED AS PER RDSO LR NO.CBS/BRIDGE/INSPECTION/GEN, MATTERS DATED 01.03.2023.
44. ALL THE WORKS SHALL BE EXECUTED AS PER THE INSTRUCTIONS CONVEYED IN CBS/BRIDGE/DATED/ISSUED 03.2023.
45. LOAD TEST TO BE CONDUCTED AS PER RDSO REPORT IRC SP-31-2014.
46. INSTRUMENTATION OF BOW STRING TO BE CONDUCTED AS PER RDSO REPORT NO. SBC/BRIDGE/ 108/02.
47. THE DETAIL GEOMETRIC DESIGN OF THE APPROACH ROAD SHALL BE MADE AND SUBMITTED TO HQ FOR RECORD.

SPECIFICATIONS

(THE FOLLOWING SPECIFICATIONS ARE FORMAT REFERENCE, KINDLY MODIFY THE NECESSARY AS PER THE WORK TO BE DONE AT SITE. ADDENDUM/ CORRIGENDUM/ TENDER, RAT DRAWINGS, ELIMINATE UNNECESSARY POINTS AND ADD IF ANY EXTRA)

1. ALL CIVIL WORKS SHALL BE CARRIED OUT AS PER THE FOLLOWING:
   1.1. INDIAN RAILWAY UNIFIED STANDARD SPECIFICATIONS FOR WORKS AND MATERIALS 2019
   1.2. IRS CONCRETE BRIDGE CODE 2014 AND RELEVANT IS SPECIFICATIONS.
   1.3. IRS SUBSTRUCTURE & FOUNDATION CODE 2015
   1.4. IRS BRIDGE RULES 2014
   1.5. IRS SCHEDULE OF DIMENSIONS 2004 CORRECTED UP TO LATEST CORRECTION SLIPS.
   SPECIAL NOTES FOR 25KV AC TRACTION SYSTEM:
   1.6. NECESSARY PROTECTIVE ARRANGEMENT SHALL BE MADE BY K-RIDE CIVIL-DEPT IN CONSULTATION WITH ELECTRICAL DLT/RDB/BRANCH TO AVOID ANY ELECTRICAL INDUCTION DURING LAUNCHING OF BOWSTRING GIRDERS.
   1.7. WHILE LAUNCHING OF GIRDER ABOVE THE OHE & ALSO DURING ANY WORK INVOLVING THE USE OF CRANE/ MACHINERY WITHIN 5.0 MTS OF OHE, THE WORK SHALL BE CARRIED OUT ONLY DURING POWER BLOCK CONDITION BY OBTAINING PERMISSION TO WORK FROM AUTHORIZED TRD BRANCH OFFICIALS.
   1.8. ALL STEEL STRUCTURES/COMPOSITE GIRDERS INVOLVING THE ABOVE WORKS SHALL BE SUITABLY EARTHED TO TRACTION RAILS/SEPARATE EARTH PIPE FOR SAFETY OF WORKING STAFF.
2. MINIMUM GRADE OF CONCRETE FOR
   2.1. PILE CAP IS M30 & PIER IS M35
   2.2. ALL RCC WORKS SHALL BE M 25
3. COMPONENTS AND GRADE OF CONCRETE

S.NO	DESCRIPTION OF COMPONENT	GRADE OF CONCRETE
1	ABUTMENT, PILE,PILE CAP,PIER,PIER CAPS	M35
2	CRASH BARRIER	M40
3	DECK SLAB,PRE CAST PANEL	M40
4	PSC I GIRDER	M40
5	LEVELING COURSE	M20

4. WEEP HOLES-(75/100)MM DIA PVC/AC PIPES AS IRS SUBSTRUCTURE CODE 2015 CL: 7.2
5. BACK FILLING BEHIND ABUTMENT AND RETAINING WALLS SHALL CONSIST OF GRANULAR MATERIALS OF GW, GP, SW GROUPS AS PER IS: 1498-1970. (ABUTMENTS, RETAINING WALLS. (OR) THE BOULDER FILLING SHALL CONSIST OF WELL HAND-PACKED BOULDERS AND COBBLERS TO THICKNESS NOT LESS THAN 600MM WITH SMALLER SIZE TOWARDS THE BACK. BEHIND THE BOULDER FILLING, BACKFILL SHALL CONSIST OF GRANULAR MATERIALS OF GW, GP, SW GROUPS AS PER IS: 1498-1970 (RCC BOX).
6. HIGH STRENGTH DEFORMED BARS(HYSD) SHALL CONFORM TO IS: 1786-2008 (FE 500).
7. BAR BENDING SHALL BE CONFORM TO IS : 2502.
8. IRS PANEL FOR ROB'S - REINFORCED EARTH PANELS TO BE DESIGNED AS PER LATEST IRS 8006.
9. APPROACH SLAB FOR ROB'S AS PER IRC 6 - 2017 TO. CRASH BARRIER SHALL BE AS PER IRC 5 - 2015.

SPECIAL NOTE:

1."COMPLETION DRAWING TO BE SUBMITTED TO HQ FOR RECORD IMMEDIATELY AFTER THE COMPLETION OF THE WORK IN ACCORDANCE WITH PARA 911 OF INDIAN RAILWAY WORKS MANUAL".

2.THE CARRIAGEWAY ON BOTH THE APPROACHES IS 7.5M BUT THE CARRIAGEWAY IN THE RAILWAY PORTION IS 10.5M. THIS MAY RESULT INTO AN ACCIDENT PRONE ZONE FOR THE ROAD BEING IN THE CITY LIMITS, HENCE, THE DIVERGENCE/ THE CONVERGENCE SHALL BE PROVIDED IN THE APPROACHES AS PER THE CODAL PROVISIONS IN THE RELEVANT IRC CODE.

SPECIAL NOTES 1:

THIS GAD SUPERSEDES PREVIOUSLY APPROVED GAD (HQ DRG NO. SWR/2024/GAD-166/LC No. 130 (ROB)/ CRLM -HLE/ SA- SBC/ KRIDE AND KRIDE DRG.NO. DRG.NO:KRIDE/COR-4/LC-130/GAD 001-2023.AND APPROVED DATE:26.12.2025)

JUSTIFICATION FOR REVISION IN GAD:

THE JUSTIFICATION FOR REVISION OF THE GAD IS BROUGHT OUT VIDE DIRECTOR/ PROJECT & PLANNING/ KRIDE'S LETTER NO. K-RIDE/BSRP/GMC-4/LC/036 DATED 16.05.2026 STATING THE CHIEF SECRETARY'S INSTRUCTIONS TO EXPLORE THE POSSIBILITIES TO REDUCED THE PRIVATE LAND ACQUISITION TO BARE MINIMUM.

MODULE OPERAND FOR RAILWAY SPAN: (TENTATIVE)

STAGE I: (PRE BLOCK ACTIVITIES)

1. EXISTING ROAD TRAFFIC WILL BE DIVERTED VIA EXISTING ROB (Br No 5014) AT SARJAPUR ROAD WHICH IS AT CH:192/00-750 AT A DISTANCE OF APPROXIMATELY 1.0 Km FROM PROPOSED ROB AT CH:191/648.55 BETWEEN CRLM - HLE STATIONS. THE SAME SHALL BE SUITABLY BY IMPOSING NECESSARY SPEED RESTRICTIONS BY PROVIDING TEMPORARY ENGINEERING INDICATORS.
2. CONSTRUCTION OF FOUNDATION AND SUBSTRUCTURE TO BE DONE AS PER APPROVED DRAWINGS.

STAGE II : (PRE BLOCK ACTIVITIES)

1. FABRICATE STEEL BOW STRING GIRDERS AND OTHER