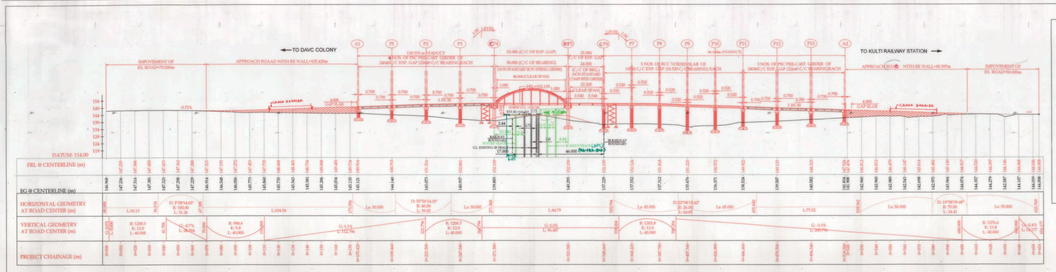
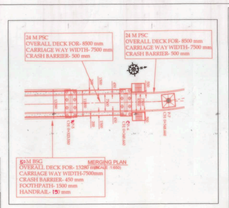
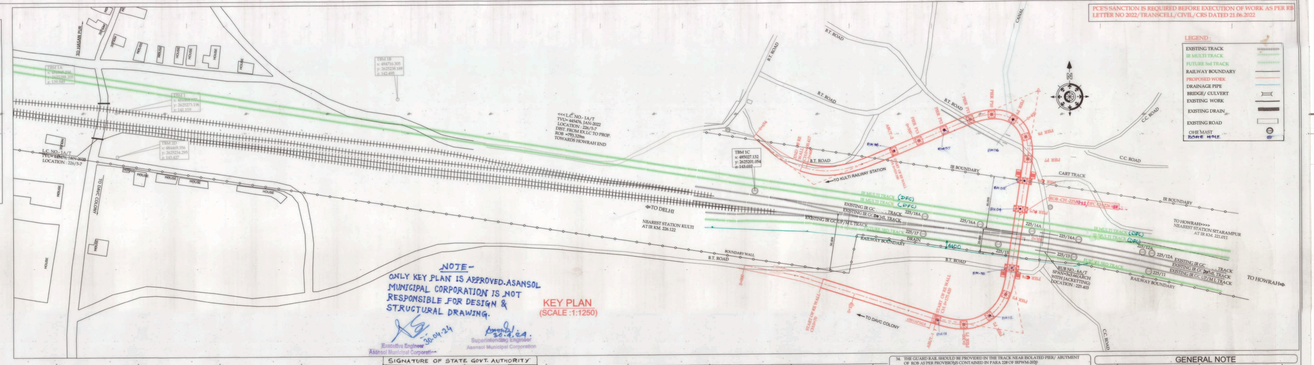
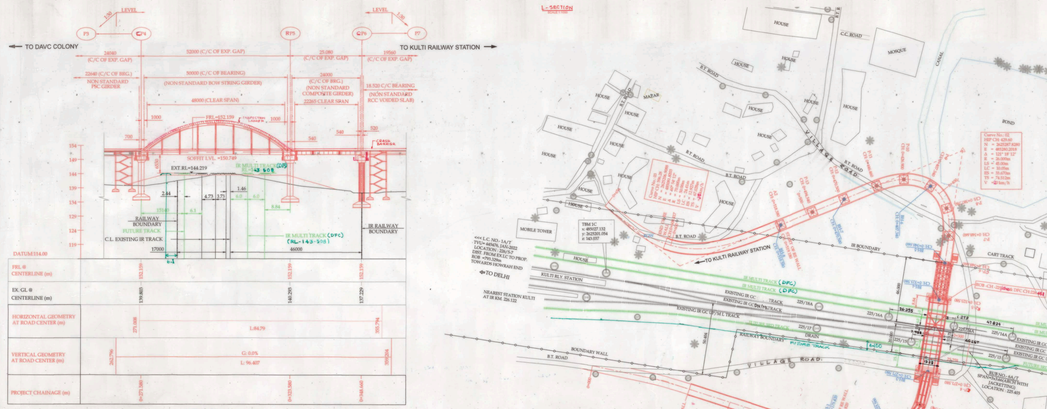
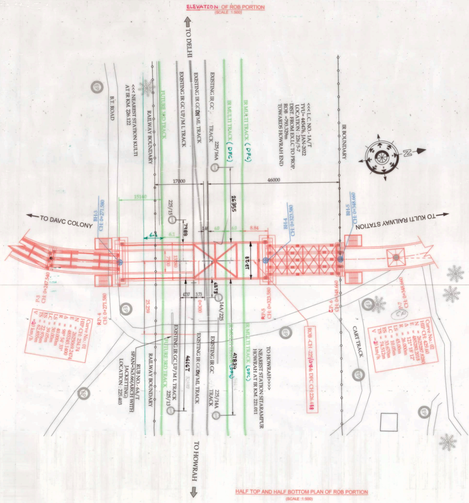
PCE'S SANCTION IS REQUIRED BEFORE EXECUTION OF WORK AS PER RB LETTER NO: 2022/TRANS(SIG.)/CTCS/1, CSD DATED 21.06.2022

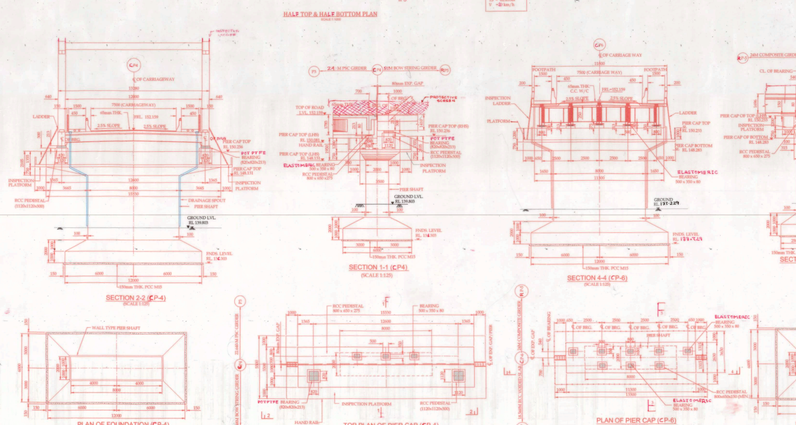


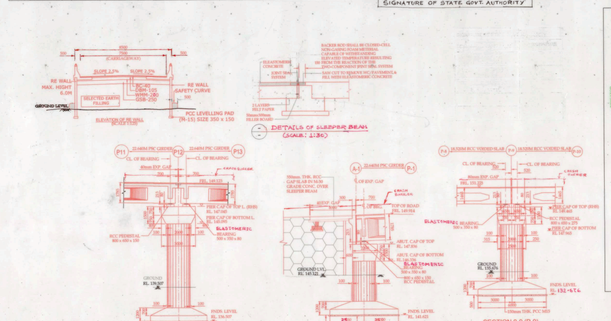


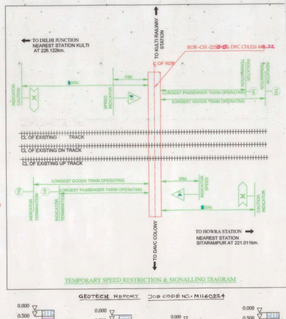


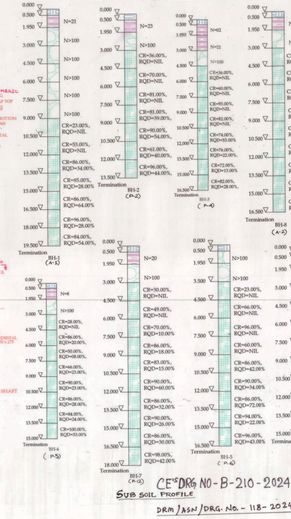












GENERAL NOTE

1. ALL DIMENSIONS ARE IN MM AND LEVELS ARE IN METRES UNLESS OTHERWISE MENTIONED.
2. DIMENSIONS ARE NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
3. FOUNDATION DIMENSIONS OF BRIDGE - MODERATE
4. SEISMIC ZONE - III, TOP OF EMBANKMENT RANGE - +0.5/- 40.5% MIN - 1.0*
5. BASIC WIND SPEED VALUE - 33 m/s
6. ALL CONCRETE SHOULD BE PROVIDED AS PER BRIDGE REPORT BS (19 JULY, 2021)
7. ALL THE DIMENSIONS AND LEVELS GIVEN IN THIS DRAWING, MUST BE RECONCILED AT SITE BEFORE EXECUTION OF THE WORK FOR FEASIBILITY.
8. ALL DIMENSIONS OF PROPOSED BRIDGES ARE TENTATIVE. IT WILL BE FINALIZED AFTER DETAILED DESIGN.
9. STANDARD OF LOADING - AS PER IRC: 6-2017
   i. 1 LANE OF CLASS A
   ii. 1 LANE OF 70R
   iii. SPECIAL VEHICLE (SV)
10. IMPACT FACTOR - IMPACT FACTOR: WHICHEVER GOVERNS
11. PROTECTIVE SCREEN SHALL BE PROVIDED OVER ROB AS PER STANDARD SPECIFICATION.
12. DRAINAGE ARRANGEMENT IN RAILWAY PORTION SHALL BE PROVIDED ASSURING NIL WATER LOGGING AS PER STANDARD TRACK BELOW ALTER STANDARD DRAWING.
13. INSPECTION PLATFORM AND INSPECTION LADDER/STEPS SHALL BE PROVIDED TO FACILITATE INSPECTION OF BEARINGS AND OTHER PARTS OF THE BRIDGE AS PER IRC:24-2010.
14. [CHANGE LANDUSE TO BE CONSIDERED FROM FRONT OF ROB ALL ALONG THE LENGTH AS PER LATEST PERIODS OF IRC:6, ALL ALONG THE LENGTH AS PER LATEST PERIODS OF IRC:6.
15. ALL WORKS SHALL BE EXECUTED AS PER LATEST MORTH GUIDELINES. CONTRACTOR SHALL ENSURE TO FOLLOW ALL THE LATEST GUIDELINES, SPECIFICATIONS AND STANDARDS.
16. EXISTING L/C GATE WILL BE CLOSED AFTER COMMISSIONING OF ROB.
17. ALL WORKS SHALL BE EXECUTED AS PER LATEST MORTH GUIDELINES, CONTRACTOR SHALL ENSURE TO FOLLOW ALL THE LATEST GUIDELINES, SPECIFICATIONS AND STANDARDS.
18. ROAD AUTHORITY SHALL ENSURE THAT BEFORE LAYING OF ANY NEW WEARING COAT OVER THE EXISTING ROAD IN FUTURE EXISTING WEARING COAT SHOULD BE COMPLETELY REMOVED.
19. NO WORK SHOULD BE TAKEN UP IN HAND TILL PROOF CHECKED DESIGN AND DRAWING SHOWN IN RAILWAY JURISDICTION ARE APPROVED BY COMPETENT AUTHORITY.
20. [EXISTING L/C GATE WILL BE CLOSED AFTER COMMISSIONING OF ROB.
21. ROW CHAINAGE FOR THE PROPOSAL TO BE ADOPTED.
22. MANUAL TRENCHING WILL BE DONE AS PER REQUIREMENT OF S&T DEPARTMENT TO AVOID DAMAGE TO CABLES DURING EXECUTION OF ROB.
23. PROTECTION OF S&T ASSETS FROM DAMAGE WILL BE ENSURED DURING EXECUTION OF ROB WORKS.
24. TEMPORARY DIVERSION ROAD IN LIEU OF THE LEVEL CROSSING SHALL BE PROVIDED IN CONSULTATION WITH RAILWAY AUTHORITIES AND LOCAL BODIES.
25. STANDARD DIMENSIONS OF GIRDER WILL BE DULY CONSIDERED IN DESIGN OF SUBSTRUCTURE AND FOUNDATION.
26. PROVISION FOR PROVIDING ELECTRICAL FOUR OUTLETS BOTH SIDE OF ROB SHOULD BE KEPT IN ESTIMATE FOR ELECTRICAL DEPT & S & T DEPT.
27. ROB SHOULD BE DESIGNED FOR TOTAL LOAD, LIVE LOAD, DEAD LOAD, IMPACT, SEISMIC ETC. AS PER IRC:6-2017.
28. [TOTAL LENGTH OF ROB INCLUDING APPROACH & BOTH SIDE RETAINING WALL IS 1.5 KM. ROB SHALL BE CONSTRUCTED IN PHASES. DURING CONSTRUCTION OF ROB, EXISTING L/C GATE SHALL BE CLOSED FOR ROAD TRAFFIC. ALTERNATE ARRANGEMENT FOR DIVERSION OF ROAD TRAFFIC AND RAILWAY TRAFFIC SHALL BE MADE BY CONSTRUCTING TEMPORARY DIVERSION ROAD AND ROB SHALL BE CONSTRUCTED IN TWO PHASES.
29. CONCRETE OF GRADE M-40 SHALL BE USED FOR ALL RCC WORKS.
30. ELECTRICAL SIGNALLING LINE, WATER SUPPLY LINE ETC. UTILITIES IN RAILWAY PORTION OF ROB ALIGNMENT ARE REQUIRED TO BE SHIFTED WITH PERMISSION OF CONCERNED DEPARTMENT.
31. CLEAR COVER OF REINFORCEMENT SHALL BE AS PER IRC:112-2020.
32. TYPE AND DEPTH OF FOUNDATION SHALL BE AS PER GEOTECHNICAL REPORT. THE DEPTH SHOWN IS TENTATIVE.
33. STRUCTURAL STEEL WILL BE OF IS:2062:2011 E 410 GR.C.
34. RAILWAY SUPERSTRUCTURE SHALL BE DESIGNED FOR DYNAMIC IMPACT LOAD AS PER RAILWAY SPECIFICATION AND IRC:6-2017, CLAUSE 211 AND IRC:24-2010 CLAUSE 16.2.
35. DETAILED DESIGN OF NON STANDARD SUPER STRUCTURE & SUB-STRUCTURES SHALL BE PREPARED AND CHECK CHECKED (DATA VETTED BY RVNL) BY AND GOT APPROVED BY COMPETENT AUTHORITIES.
36. ALL WORKS SHALL BE AS PER NOTES WITH HIGH RAILWAY/ROAD SECTIONS.
37. SEPARATE DRAWING SHOULD BE PREPARED FOR ELECTRICAL SCHEME OF GIRDER AND GOT APPROVED FROM COMPETENT AUTHORITIES.
38. GAP FOR EXPANSION AND CONSTRUCTION, AND BEARINGS TO BE PREPARED AND GOT IT APPROVED FROM COMPETENT AUTHORITY BEFORE EXECUTION OF WORKS.
39. SEPARATE UTILITY DUCTS IF REQUIRED SHOULD BE PROVIDED BELOW FOOTPATH SLAB WITH THE APPROVAL OF ENGINEER IN CHARGE.
40. [ALL THE WORKS SHALL BE EXECUTED AS PER LATEST MORTH GUIDELINES. CONTRACTOR SHALL ENSURE TO FOLLOW ALL THE LATEST GUIDELINES, SPECIFICATIONS AND STANDARDS.
41. ALL WORKSHOP FABRICATION SHALL BE DONE USING SAW (SUBMERGED ARC WELDING) PROCESS ONLY.
42. FOR FABRICATION, NORMALISED IMPACT TESTING & TESTING, PROTECTION AGAINST CORROSION, RELEVANT PROVISIONS OF IRC:24-2010 SHALL BE FOLLOWED.
43. STEEL RSJ, TYPE DESIGNATION (UNIVERSAL BEAMS) SHALL BE PROVIDED AS PER LATEST MORTH REQUIREMENTS. CONTRACTOR WILL FURNISH DESIGN/DRAWINGS OF EXPANSION JOINT, BEARINGS, ETC. FOR APPROVAL OF ENGINEER-IN-CHARGE. NO WORK SHALL BE TAKEN UP WITHOUT APPROVAL OF ENGINEER-IN-CHARGE.
44. RE WALL SHALL BE PROVIDED AS PER LATEST MORTH GUIDELINES. CONTRACTOR SHALL ENSURE TO FOLLOW ALL THE LATEST GUIDELINES, SPECIFICATIONS AND STANDARDS FROM MENTIONED APPROVAL OF COMPETENT AUTHORITY.
45. ROAD AUTHORITY SHALL ENSURE THAT BEFORE LAYING OF ANY NEW WEARING COAT OVER THE EXISTING ROAD IN FUTURE EXISTING WEARING COAT SHOULD BE COMPLETELY REMOVED.
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BREAK UP OF GIRDER FROM SAFETY CURB TO CURB (P-9)	BREAK UP OF GIRDER FROM SAFETY CURB TO CURB (P-10)
WEARING COURSE- 65 MM SLAB- 220 MM CC BLOCK- 150 WEB- 1100 SPLICE THICKNESS- 40 MM SPLICE DIA/SHEAR- 16mm CAMBER 2.5% = 125mm TOTAL HEIGHT= 1695MM	WEARING COURSE- 65 MM SLAB- 220 MM CC BLOCK- 150 WEB- 1100 SPLICE THICKNESS- 40 MM SPLICE DIA/SHEAR- 16mm CAMBER 2.5% = 125mm TOTAL HEIGHT= 1695MM

VERTICAL CLEARANCE =4250mm
SPLICE THICKNESS=30mm
CAMBER 2.5% = 125mm

BRIDGE TYPE SUMMARY:-
MULTI-SLAB + RING WELL RE WITH 3m DIA. CIRCULAR SHAFT FOR ABUTMENT & PIER, PSC GIRDER + RCC VOIDED SLAB, 40 NOS. + 3 NOS. = 43 NOS. SPANNING 24.64 M EACH, TOTAL 43 NOS. SPANS OF 24.64 M EACH WITH WELL RE STRUCTURE AND TAPERED RE WALL ON BOTH ENDS, TOTAL LENGTH OF BRIDGE 1060.520 M.

LEGENDS:
- Disturbed Sample
- Sandy Clay
- Weathered Rock
- shale Rock

DESIGNATION AND NAME	SIGNATURE	DESIGNATION AND NAME	SIGNATURE	DESIGNATION AND NAME	SIGNATURE
(PANKAJ KUMAR) CBE / ER / HQ		(A. K. THAKUR) SR DEN / ASN		(A. K. THAKUR) SR DEN / DFCC / KKK	
(SUMAN ANUNAY) Dy. CE / BRIDGE		(ARUNAVA ROY) SR DEN (Coord.) ASN		(AJAY KUMAR) DY. CE (CON.) / DFCC / KKK	
(RAJNEESH KUMAR) SR. DEN / ASN		(SOUVIK SENGUPTA) SR DEN / DFCC / KKK		(SOUVIK SENGUPTA) SR DEN / DFCC / KKK	
(SHRI PRAKASH RAO) DY. CE / ELECT / HQ		(ARUNAVA ROY) Dy. CPM / ELECT / KKK		(ARUNAVA ROY) Dy. CPM / ELECT / KKK	
(SHUBHI BHUSAN SINGH) SR. DOM / ASN		(S.K. MUKHERJEE) Dy. PM / C.R / DFCC / KKK		(S.K. MUKHERJEE) Dy. PM / C.R / DFCC / KKK	
(DIPTI SHAW) ADEN / ASN		(RAJESH AGARWAL) ASSTT. DIVN. ENGR. / KKK		(RAJESH AGARWAL) ASSTT. DIVN. ENGR. / KKK	
(RAJESH KUMAR) SR. DEN / TRD / ASN		(ABHISHEK MEDHEKAR) ASSTT. DIVN. ENGR. / KKK		(ABHISHEK MEDHEKAR) ASSTT. DIVN. ENGR. / KKK	
SIGNATURE OF CONSTRUCTION OFFICIAL		SIGNATURE OF DIV. OFFICIAL		SIGNATURE OF DFCC OFFICIAL	

EASTERN RAILWAY

ASANSOL DIVISION

DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED (A Govt. of India Enterprise), Ministry of Railway,

NAME OF WORK	CONSULTANCY SERVICES FOR PREPARATION OF DETAILED PROJECT REPORT FOR CONSTRUCTION OF ROBs IN CONNECTION WITH EASTERN DEDICATED FREIGHT CORRIDOR CORPORATION BETWEEN ANDAL TO PRADHANKHANTA OF ASANSOL DIVISION IN THE STATE OF WEST BENGAL & JHARKHAND
TITLE :	CONSTRUCTION OF PROPOSED ROB AT IR KM 225/13-15 (CH: 226489.270) AND IT APPROACHES HAVING EFFECTIVE SPAN 4X22.64m PSC GIRDER + 1x50.0m B.S.G.+1x24.0m C.G.+ 5x18.520m RCC VOIDED SLAB + 3x22.640 PSC GIRDER) IN LIEU OF LC GATE NO- 1 A/T AT IR Km. 226/5-7 (CH: 227281.56) BETWEEN STATION KULTI AND SITARAMPUR ON- ANDAL SECTION OF EASTERN RAILWAY UNDER ASANSOL DIVISION.
DRG. NO.	DFCC/KKK/GAD/ROB/1/A/T
DRG.	COMBINED GENERAL ARRANGEMENT DRAWING
SCALE = AS SHOWN	SHEET : 1 OF 1

DRAWN BY	JAVED	
CHECKED BY	SUDHIR KUMAR	
DATE OF	MARCH. 2024	

CONSULTANT: SPARSH ENGINEERING COMPANY PRIVATE LIMITED
H-55, Hamu Housing Colony, Near Nigam Park,
Ranchi, Jharkhand - 834 002, PH- 0651-2340859

CE'S DRG NO - B-210 - 2024

SUB SOIL PROFILE

DRM / ASM / DRG. NO. - 118 - 2024

14-1190