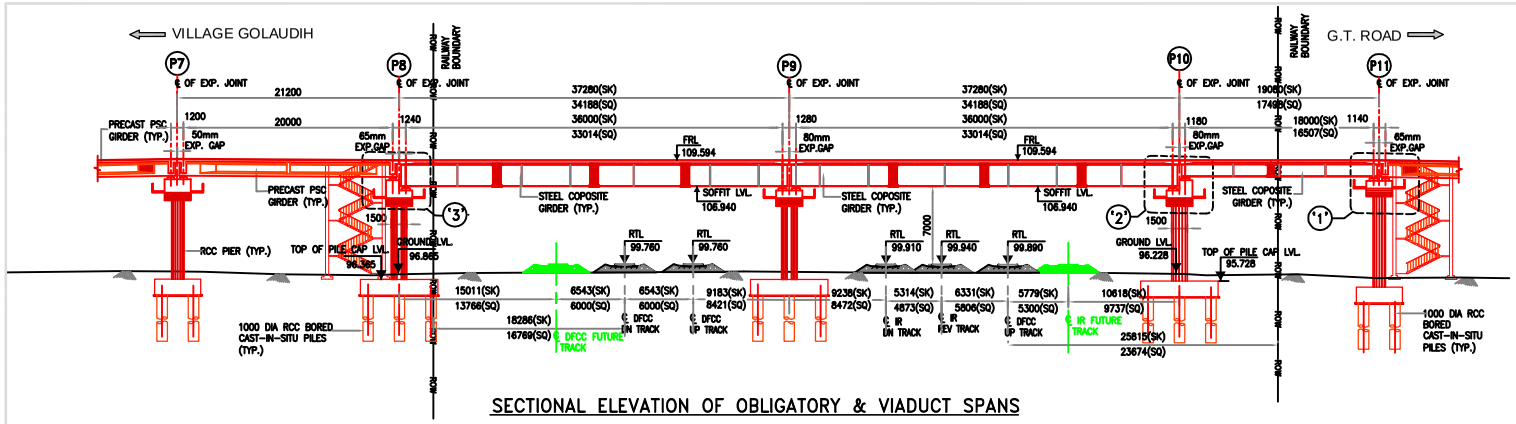
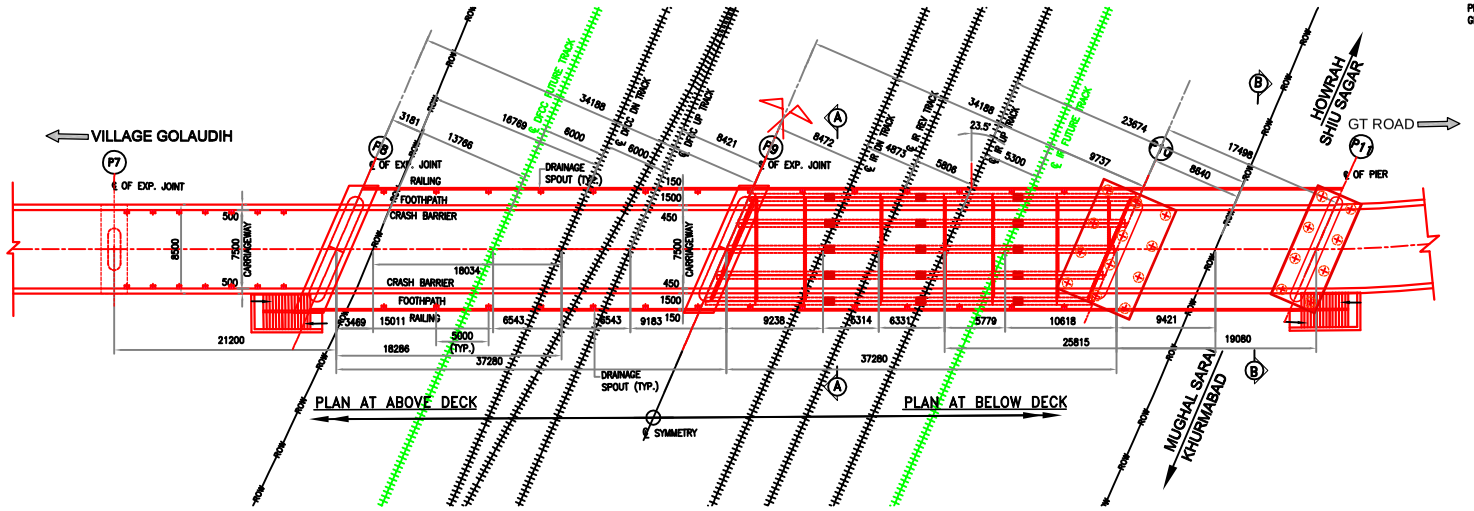
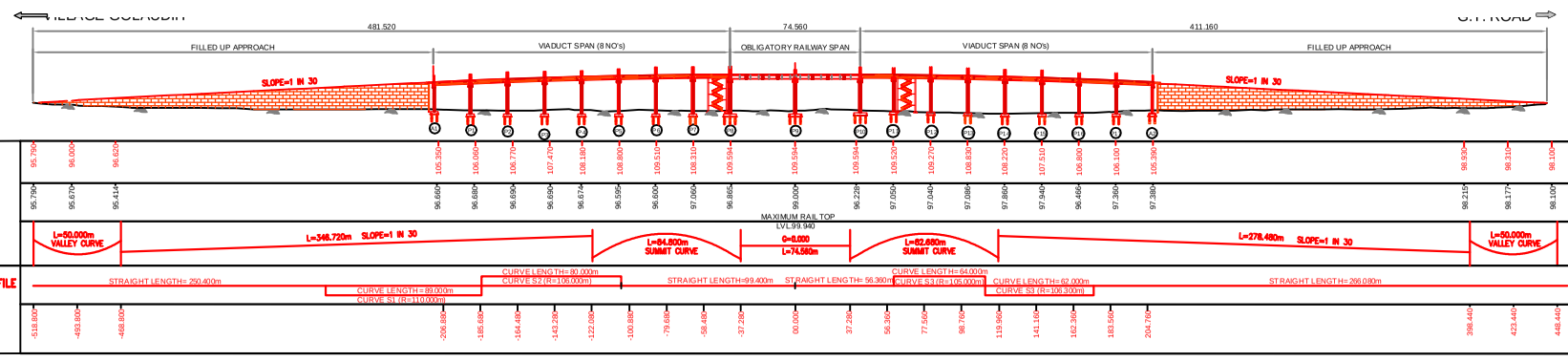
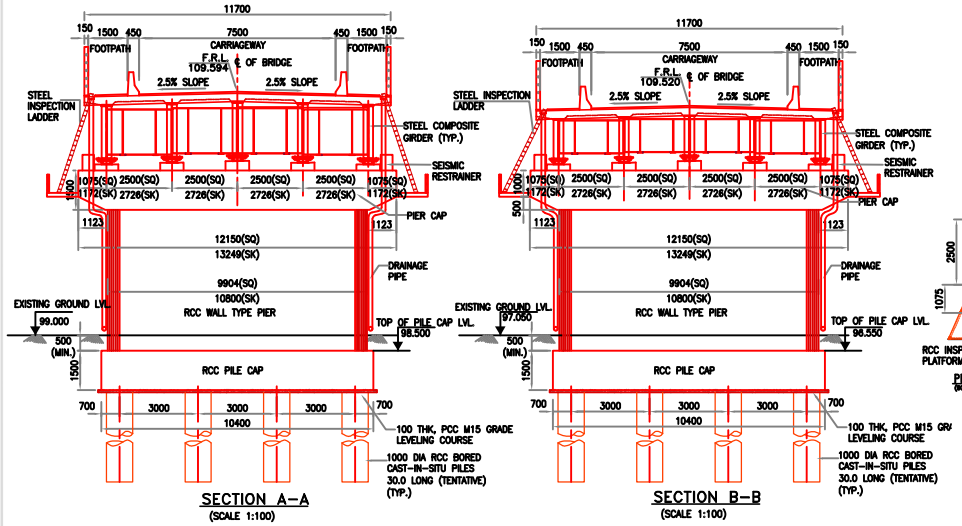


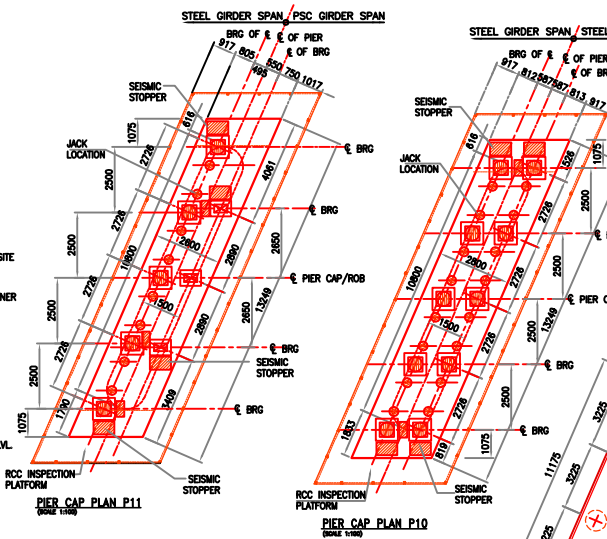
SECTIONAL ELEVATION OF OBLIGATORY & VIADUCT SPANS

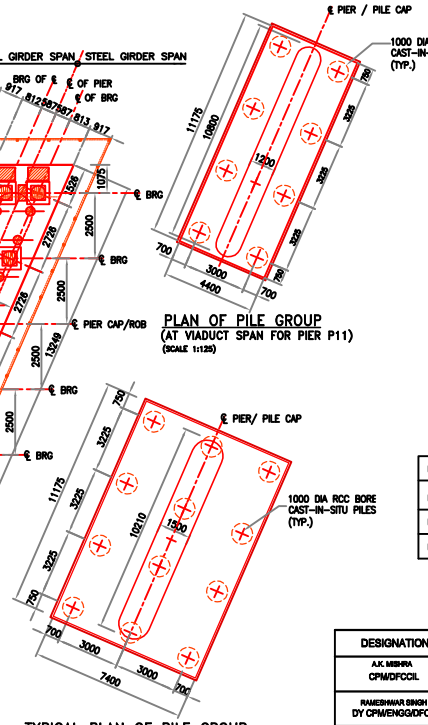


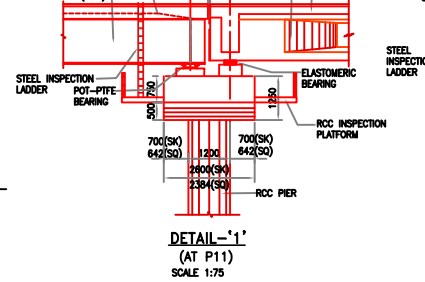


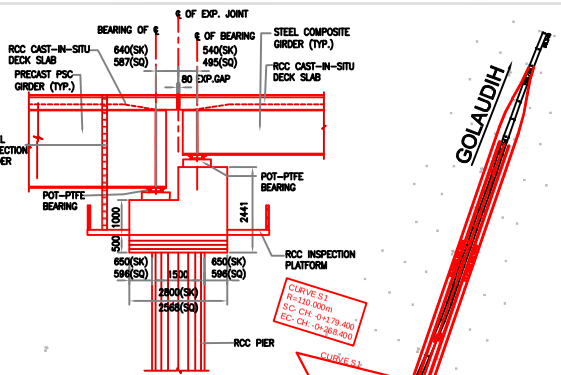
LONGITUDINAL ELEVATION INCLUDING FILLED UP PORTION

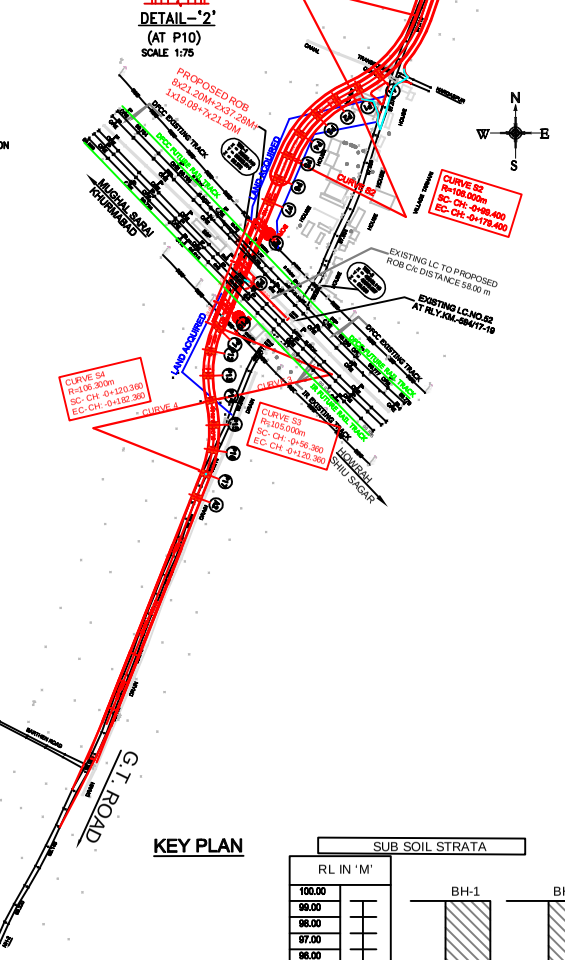










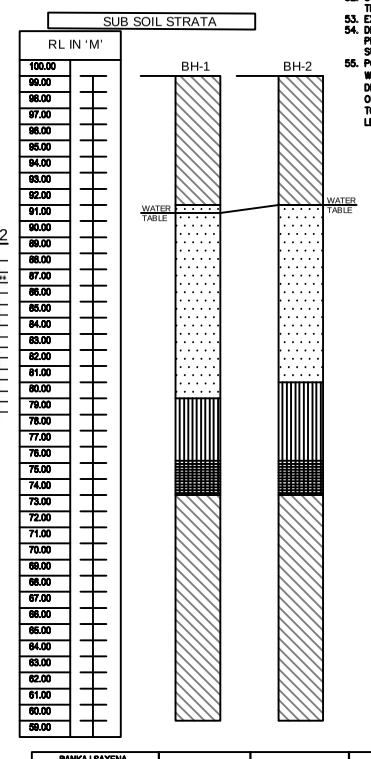


KEY PLAN

SANCTION OF CRS TO BE TAKEN PRIOR TO EXECUTION OF WORK NOTES:–

1. ALL DIMENSION ARE IN MILLIMETER AND LEVELS ARE IN METERS UNLESS SPECIFIED OTHERWISE.
2. DIMENSION ARE NOT TO BE SCALED ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
3. ALL THE DIMENSIONS SHOWN SHOULD BE VERIFIED AT SITE BEFORE TAKING UP DESIGN WORK IN HAND. ANY DISCREPANCY NOTED SHOULD BE FORWARDED THROUGH ALTERATIONS DULY SIGNED.
4. MAXIMUM SAFE BEARING CAPACITY AT THE FOUNDING LEVEL CONSIDERED AS PER GEOTECHNICAL REPORT. IF IT IS LESS THAN THE BASE PRESSURE, THE FOUNDATION HAS TO BE REDESIGNED.
5. DRAINAGE SPOUT SHALL BE PROVIDED AS PER M.O.R.T.H. SPECIFICATION. DESIGN CONSULTANT SHOULD SUBMIT SEPARATE SHEET OF DRAINAGE SPOUTS AS PER LATEST M.O.R.T.H. SPECIFICATION.
6. EXPOSURE CONDITION OF THE BRIDGE AND ITS COMPONENTS SHOULD BE DECLARED AS PER IRC 21–2000/456. ALL SPECIFICATION LAID DOWN IN IRC CODE/IS:456 CODE FOR RELEVANT EXPOSURE CONDITION SHALL BE FOLLOWED.
7. FOR DETAILS OF SUBSTRUCTURE, SUPERSTRUCTURE AND FOUNDATION REFER SEPARATE DRAWING DULY APPROVED BY RLY/DFCOL.
8. WORK SHOULD BE CARRIED OUT UNDER THE SUPERVISION OF RAILWAY ENGINEERS WITHIN RAILWAY LAND LIMIT.
9. TYPE OF BEARING:– POT–PTFE
10. SUITABLE UTILITY DUCTS IF REQUIRED SHOULD BE PROVIDED BELOW FOOTPATH SLAB WITH THE APPROVAL OF ENGINEER IN CHARGE.
11. DESIGN SHALL BE AS PER LATEST RELEVANT CODE OF IRC INCLUDING SP–33 AND OTHER CODES AS APPROVED BY M.O.S.T.
12. DFCOL/PRIVATE AUTHORITIES SHOULD ENSURE THAT DURING EXECUTION OF WORK SAFETY OF RUNNING RAIL TRAFFIC SHOULD NOT BE AFFECTED.
13. SUITABLE SR, IF REQUIRED SHOULD BE IMPOSED BEFORE TAKING UP THE EXECUTION OF WORK WITH THE APPROVAL OF ENGINEER IN CHARGE.
14. TEMPORARY SIGNALING ARRANGEMENT WILL BE DONE AS PER G.R.15.09 (I) b&s.R 15.09 (2) OR GR 15.09 (2) B&S.R 15.09 (2) WHICHEVER IS ADOPTABLE IF REQUIRED.
15. LOADING STANDARD OF ROB AS PER IRC–6:2000.
16. FULL FLEDGED LOAD TEST OF SUPER STRUCTURE SHOULD BE DONE AS PER IRC–SP–5 TO ENSURE QUALITY WORK.
17. CONCRETE DESIGN MIX.
    RCC DECK SLAB :M40 PIER,PIER CAP,PILE,PILE CAP :M35
    CRASH BARRIER :M40 PEDESTAL :M40
    LEVELING COURSE :M15
18. MANNED LEVEL CROSSING NO–52 EXIST AT THIS LOCATION.
19. L.C. SHALL BE CLOSED SIMULTANEOUSLY WITH COMMISSIONING OF ROB AND NOC IN THIS REGARD HAS BEEN ISSUED BY STATE GOVT. VIDE LETTER NO.11 A.P.–09–02/14/8842 DATED 25.07.14
20. TVU OF L.C. IS 99143 OF YEAR SEP–2013.
21. PROVISION OF CLAMPS IN THE SUPERSTRUCTURE FOR THE SUPPORTING THE AC TRACTION WIRE TO BE MADE INVARIABLY IN CONSULTATION WITH CONCERNED AUTHORITIES BASED ON TYPICAL DRAWING.
22. ALL R.C.C./M.C.C./P.C.C WORK SHOULD CONFORM TO RELEVANT IS/IRC CODES & MOST SPECIFICATION.
23. FOR FABRICATION, WORKMANSHIP, INCEPTION & TESTING, PROTECTION AGAINST CORROSION ETC. RELEVANT PROVISION OF IRC–24–2001 SHALL BE FOLLOWED.
24. THE DEPTH OF FOUNDATION SHOWN IN THIS DRAWINGS IS TENTATIVE & SHOULD BE DECIDED BY DFCOL AS PER ACTUAL SOIL PROPERTIES AND DESIGN CALCULATION.
25. REPRESENTATIVE OF TELECOM & SIGNAL DEPARTMENTS SHOULD BE MADE AVAILABLE BEFORE COMMENCEMENT OF PROPOSED WORK, IN THE VICINITY OF SIGNAL & TELECOM CABLE.
26. TEMPORARY ARRANGEMENT DRAWING OR METHODOLOGY FOR LAUNCHING OF GIRDERS OVER RAILWAY TRACK SHOULD BE GOT APPROVED FROM RAILWAY AUTHORITY BEFORE START OF THE WORK.
27. PRECAUTIONARY MEASURES FOR CONSTRUCTION OF ROB ON DEPOSIT WORK/COST SHARING WORK WITH STATE GOVT. AND PRIVATE AGENCY ISSUED BY ADVISOR CIVIL ENGINEERING RAILWAY BOARD LETTER NO. 97/CE–1/BRO/158(POLICY)PT–II, DATED 16.07.2009, 27.10.2009, 15.02.2011 & 09.07.2012 SHOULD BE STRICTLY FOLLOWED.
28. NO CONSTRUCTION JOINT SHALL BE NORMALLY ALLOWED IN CONCRETE WORKS WITHOUT SPECIAL PRECAUTIONS AS PER THE RELEVANT BRIDGE CODES AND SUITABLE PROTECTION PAINTING OF APPROVED MAKE SHOULD BE USED TO PAINT THE UNDERSIDE OF CONCRETE ROB GIRDERS ALSO TO ENSURE ING LIFE.
29. CONTROLLED CONCRETE WITH WEIGH BATCHING SHALL BE USED.
30. GUARD RAIL SHOULD BE PROVIDED IN THE TRACK NEAR THE ISOLATED PILLAR OF ROB. NO CONSTRUCTION JOINT SHALL BE ALLOWED IN PSC OR RCC SLAB OR GIRDER AND CURING OF ALL CONCRETE AND MASONRY WORKS AS PER THE RELEVANT CODES OF PRACTICE SHALL BE ENSURED BEFORE USE.
31. INSPECTION LADDER/STEPS SHOULD BE PROVIDED TO ENSURE PROPER INSPECTION / ACCESSIBILITY OF ROB.
32. STRUCTURAL STEEL SHALL CONFIRM TO IS:2062 (GRADE–B0)
33. STRIP SEAL TYPE EXPANSION JOINTS SHALL BE PROVIDED AS PER LATEST MOST REQUIREMENT, CONTRACTOR SHOULD FURNISH DESIGN/ DRAWING OF EXPANSION JOINTS FROM FIRMS APPROVED BY MOST AT VARIOUS RELEVANT AMBIENT TEMPERATURE TO SUIT SITE CONDITIONS WITH THE APPROVAL OF ENGINEER IN CHIEF.
34. TO PROTECT THE CONCRETE FROM DAMAGE DUE TO SMOKE OF LOCOMOTIVES, 4.00M WIDE STRIP WITH POLYSULPHIDE PAINT PREFERABLE IN BLACK COLOUR SHALL BE PROVIDED IN THE SOFFIT OF THE DECK OVER RUNNING TRACKS.
35. STANDARD MAINTENANCE AGREEMENT SHOULD BE EXECUTED WITH RAILWAY AND STATE GOVT. AUTHORITIES FOR GRANT OF PERMISSION FOR CONSTRUCTION OF ROB IN RAILWAY PORTION.
36. ALL STEEL STRUCTURES SHOULD HAVE ANTI–CORROSIVE PROTECTION FOR LONG DURABILITY.
37. FOR DETAILS OF SUPER STRUCTURE 35M RAILWAY SPAN OF COMPOSITE GIRDER REFER RDSO DRG NO.RDSO/B–11758/R TO RDSO/B/11756/10R. AND 18M RAILWAY SPAN OF BOW STRING GIRDER REFER RDSO DRG NO.RDSO/B–11756/R TO RDSO/B/11758/10R.
38. ANY CHANGE IN THE GAD FOR RAILWAY PORTION SHOULD BE DONE WITH PRIOR APPROVAL OF RAILWAY.
39. CLEAR COVER TO OUTER MOST STEEL SHALL BE AS UNDER
    A. FOR SUPER STRUCTURE–50MM.
    B. FOR FOUNDATION–75MM.
    C. FOR ABUTMENT, DIRT WALL AND RETURN WALL–50MM
40. FOR JACKING UP THE GIRDER FOR ANY HANDLING REQUIREMENTS IN FUTURE SUCH AS FOR REPLACEMENT OF BEARING OR ANY WORK REQUIRED. SUITABLE FEATURES SHOULD BE PROVIDED TO ENABLE JACKING.
41. THE DIMENSIONS AND LEVELS SHOWN IN THE GAD ARE SUBJECT TO CHANGES AS PER SITE REQUIREMENT AND WILL BE DONE WITH PRIOR APPROVAL OF RAILWAY.
42. THE BRIDGE IS DESIGNED FOR SEISMIC ZONE III.
43. GIRDER SHALL BE METALISED AS PER IRS 81–2001.
44. VERTICAL CURVE WILL BE PROVIDED WHEREVER THEIR IS CHANGE IN GRADIENT IN APPROACHES AS PER IRC SP–23.
45. CBE'S APPROVAL IN ONLY FOR PORTION REST OVER PB & P9. DESIGN, LAND ACQUISITION, MAINTENANCE & OTHER CHARGES & OTHER SUITABILITY ASPECT SHOULD BE ENSURED BY DFCOL.
46. MAINTENANCE AGREEMENT TO BE EXECUTED BEFORE EXCUTION OF WORK.
47. NO WORK WITHIN RLY. BOUNDARY TO BE DONE WITHOUT PRESENCE OF RAILWAY REPRESENTATIVE.
48. GIRDER OVER ROB PROPER TO BE FABRICATED PREFERABLY BY RDSO APPROVED FIRMS.
49. VERTICAL CLEARANCE SHALL BE 6805 MM AS PER SOD DFC.
50. VERTICAL CLEARANCE HAS BEEN KEPT AS PER 'SSOD OF DFC IN LIGHT OF RLY. BD LETTER NO.2017/INFRA/16/8 DATED 28–02–2018.
51. DFCOL WILL BE RESPONSIBLE FOR LONGITUDINAL PROFILE & PLAN SHOWN.
52. STAIR CASE SHALL PROVIDED OUTSIDE RLY. BOUNDARY AND CONNECTIVITY TO EITHER SIDE OF STAIRS THROUGH FOOTPATH ALONG THE ROAD DESK.
53. EXECUTION OF WORK SHOULD START AFTER APPROVAL OF DETAILED DESIGN BY COMPETENT AUTHORITY.
54. DECK SLAB WIDTH, SUPER–ELEVATION AND ARRANGEMENT OF GIRDERS WITHIN CURVE ALIGNMENT IS PROVISIONAL. AND WILL BE DECIDED AFTER FIND LISATION OF DESIGN OF SUPER–STRUCTURE AND SUB–STRUCTURE.
55. PCE/ECR'S APPROVAL FOR USING NON–STANDARD GIRDER WITH IN RLY. BOUNDARY i.e. P–8 TO P–11 WAS BEEN OBTAINED IN TERMS OF RLY. BD. L.N. 2013/CE–111/BR/RDSO/MISC. DT. 11.08.2014. DRAWING DESIGN SHOULD BE GOT BY COM PATENT AUTHORITY DULY PROOF CHECKED BY IIT/NIT/RITE OR ANY REPUTED ORGANIZATION AND COPY OF APPROVED DRAWING & DESIGN SHOULD BE SUBMITTED TO PCE'S OFFICE FOR OWNWARDS SUBMISSION TORDSO AS INSTRUCTION LAND DOWN IN THE SND LETTER.

SUB SOIL STRATA



Bore Hole Details of Soil Exploration at LC -52

Depth (m)	Recorded 'N' Value For BH-1	For BH-2
1.50	12	10
3.00	17	18
4.50	17	18
6.00	20	18
7.50	21	22
9.00	35	38
10.50	34	38
12.00	50	47
13.50	45	45
15.00	51	53
16.00	49	50
21.00	44	42
24.00	43	43
27.00	30	37
30.00	47	43
33.00	42	43
36.00	36	37
39.55	48	49

LAYERS	DESCRIPTION	LEGEND	SOIL CLASS
LAYER-1	SILTY CLAY OF MEDIUM PLASTICITY WITH GRAVEL		CI
LAYER-2	MEDIUM TO FIND SAND WITH GRAVEL		SW
LAYER-3	SANDY SILT WITH GRAVEL		ML-CL

LEGEND

- PROPOSED WORK
- EXISTING WORK
- FUTURE WORK

DESIGNATION	SIGNATURE	DESIGNATION	SIGNATURE
A.K. MISHRA CPM/DFCOL		CE RWD PATNA	
RAMESHWAR SINGH DY CPM/ENGG/DFCOL		EXECUTIVE ENGINEER (RWD-1 WORK DIVISION SASARAM)	
APM/ENGG/DFCOL		SUPERINTENDING ENGINEER (RWD-1 WORK DIVISION SASARAM)	
SSE/WD/DOS	SR.ADEN/DOS	DFCCIL/MGS	STATE GOVT. BIHAR

PANKAJ SAXENA DRM		CBE	
ATUL KUMAR Sr. DEN/Co-ORD/MGS		MUKESH KUMAR DY CE/BRVD	
RUPES KUMAR Sr. DOM/MGS		M.A RAHMAN AEN/BRVD	
ALOK KUMAR Sr. DEN-II/MGS			
B.K. YADAV Sr. DSTE/MGS			
OM SHANKAR PRASAD Sr. DEE/TRD/MGS			
MGS DIVISION		HQ ECR HJP	

CE'S DRG NO:–
DRAWINGS/PLAN NO:–
DFCCIL DRG NO:–

DATE :	REV. NO.	REVISION

EAST CENTRAL RAILWAY | MGS DIVISION

DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED
(A GOVERNMENT OF INDIA ENTERPRISE)

PROJECT :
PROPOSED 2-LANE ROB BETWEEN KHURMABAD-SHIU SAGAR STATION AT Km 594/17-19 AND ROAD Km_____VILLAGE GOLAUDIH AND NH2 ON MUGHALSARAI - GAYA SECTION IN-LIEU OF LC 52

TITLE
GENERAL ARRANGEMENT DRAWING OF ROB AT LC NO. 52

DEALT BY: A.K.GUPTA	DATE : 24.07.2018	DRG. NO. PPC/DFCC/ROB/LC52 GAD/01 (Sheet 1 Of 2)	REV. R0
DRAWN BY: A.S.RAWAT	SCALE:-AS SHOWN		

CONSULTANTS :
PARK PROJECTS CONSULTANCY PVT.LTD.
NEW DELHI