

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. DIMENSIONS SHOWING DIMENSION LINES ARE TO BE MAINTAINED FOR 3000 MM OR MORE.

4. IF ANY DISCREPANCY NOTED SHOULD BE FORWARDED THROUGH ALTERATIONS DULY SIGNED.

5. MAXIMUM SATE BEARING CAPACITY AT THE FOLDING LINE, CONSIDERED AS PER GEOTECHNICAL ANALYSIS, IS LESS THAN THAT OF THE FOUNDATION HAS TO BE REDESIGNED.

6. DRAINAGE SPOUT SHALL BE PROVIDED AS PER M.O.R.T.I. SPECIFICATION, DESIGN CONSULTANT SHOULD PROVIDE DRAINAGE ARRANGEMENTS TO BE MAINTAINED.

7. FOUNDATION CONDITION OF THE BRIDGE AND ITS COMPONENTS SHOULD BE DECLARED AS PER IRC 21-2000/8456. ALL SPECIFICATION LAD DOWN IN IRC CODE/IS/456 CODE FOR RELEVANT EQUIPMENT.

8. FOUNDATION SHALL BE FOLLOWED BY THE FOLLOWING:

9. FOR DETAILS OF SUBSTRUCTURE AND FOUNDATION REFER SEPARATE DRAWING DULY APPROVED BY RAILWAY/DTF.

10. TEMPORARY BRIDGE SHOULD BE CARRIED OUT UNDER THE SUPERVISION OF RAILWAY ENGINEERS WITHIN RAILWAY LAD.

11. LINE BEARING: NOT-TOE-PIE

12. TEMPORARY UTILITY DUTIES IF REQUIRED SHOULD BE PROVIDED BELOW FOOTPATH SLAB WITH THE APPROVAL OF ENGINEER IN CHARGE.

13. ALL BRIDGE SHALL BE PER LATEST RELEVANT CODE OF IRC INCLUDING SP-33 AND OTHER CODES AS APPLICABLE BY M.O.S.T.

14. DFOCI/PRIVATE AUTHORITIES SHOULD BE CONTACTED DURING EXECUTION OF WORK SAFETY OF RUNNING TRAINS SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION.

15. SUITABLE SR, IF REQUIRED SHOULD BE IMPOSED BEFORE TAKING UP THE EXECUTION OF WORK WITH THE APPROVAL OF ENGINEER IN CHARGE.

16. ALL BRIDGE SHALL BE CONSTRUCTED AS PER D.O. NO. 10/1509 (2) D&S.R. 15.09 (2) OR GR 15.09 (2) & B&S 15.09 (2) WHICHEVER IS ADAPTABLE IF REQUIRED.

17. FOLLOWING STANDARD OF ROAD SHALL BE MAINTAINED:

18. FULL LENGTH ROAD TEST OF SUPERSTRUCTURE SHOULD BE DONE AS PER IRC-SP-5 TO ENSURE QUALITY WORK.

19. CONCRETE DESIGN MIX:

20. RCC DECK SLAB: M40 PIER/PILE CAP:PIE/PILE CAP M35 CRASH BARRIER M40 PEDESTAL M40

21. LEAVING COURSE 1:3:10

22. MANHOLE CROSSING NO 42 EXIST AT THIS LOCATION.

23. EXISTING ROAD CLOSING DUE TO THE CONSTRUCTION OF EXPANSION OF ROB AND NOC IN THIS REGARD HAS BEEN ISSUED BY STATE GOVT. DUE DATE NO.11 AP-08-02/148824 DATED 25.07.14

24. T.O. OF LC IS 108789 OF YEAR 2015.

25. ALL BRIDGE SHALL BE CONSTRUCTED WITHIN THE LIMIT OF THE SUPERSTRUCTURE OF THE ACT. TRACTION WIRE TO BE MADE INVARIABLY IN CONSULTATION WITH CONCERNED AUTHORITIES WITH NORMAL TYPICAL DRAWING.

26. ALL R.C.C./M.C.C./P.C.C WORK SHOULD CONFORM TO RELEVANT IS/IRC CODES & MOST SPECIFICATION.

27. ALL BRIDGE SHALL BE CONSTRUCTED WITHIN THE LIMIT OF THE SUPERSTRUCTURE OF THE ACT. TRACTION WIRE TO BE MADE INVARIABLY IN CONSULTATION WITH CONCERNED AUTHORITIES WITH NORMAL TYPICAL DRAWING.

28. THE DESIGN OF FOUNDATION SHOWN IN THIS DRAWING IS PRELIMINARY & IS NOT A FINAL DESIGN. THE DESIGN SHALL BE FINALIZED AS PER THE REQUIREMENTS OF THE DESIGN CONSULTANT.

29. REPRESENTATIVE OF TELECOM & SIGNAL DEPARTMENTS SHOULD BE MADE AVAILABLE BEFORE THE CONSTRUCTION OF PROPOSED WORK, IN THE VIGNITY OF SIGNAL & TELECOM CABLE.

30. TEMPORARY ARRANGEMENT DRAWING OR METHODOLOGY FOR LAUNCHING OF ORDERS OVER RAILWAY TRACK SHOULD BE GOT APPROVED FROM RAILWAY AUTHORITY BEFORE START OF THE WORK.

31. ALL BRIDGE SHALL BE CONSTRUCTED WITHIN THE LIMIT OF THE SUPERSTRUCTURE OF THE ACT. TRACTION WIRE TO BE MADE INVARIABLY IN CONSULTATION WITH CONCERNED AUTHORITIES WITH NORMAL TYPICAL DRAWING.

32. PRECAUTIONS AS PER THE RELEVANT BRIDGE CODES AND SUITABLE PROTECTIVE PAINTING OF THE BRIDGE SHALL BE PROVIDED TO BE TAKEN UNDER THE CONSIDERATION OF ROB ORDERS ALSO AS PER ENDS LONG LIFE.

33. CONTROLLED CONCRETE WITH WEIGH BATCHING SHALL BE USED.

34. CONCRETE SHOULD BE FURNISHED WITHIN THE LIMIT OF THE SUPERSTRUCTURE OF THE ACT. TRACTION WIRE TO BE MADE INVARIABLY IN CONSULTATION WITH CONCERNED AUTHORITIES WITH NORMAL TYPICAL DRAWING.

35. NO CONSTRUCTION JUNT SHALL BE ALLOWED IN PSC OR RCC SLAB OR ORDER AND CURING OF ALL CONCRETE AND MASONRY WORKS AS PER THE RELEVANT CODES OF PRACTICE SHALL BE ENSURED.

36. INSPECTION LADDER/STEPS SHOULD BE PROVIDED TO ENSURE PROPER INSPECTION / ACCESSIBILITY

37. STRUCTURAL STEEL SHALL CONFORM TO IS2062 (GRADE-B)

38. STRIP SEAL TYPE EXPANSION Joints SHALL BE PROVIDED AS PER LATEST MOST REQUIREMENT.

39. THE BRIDGE SHOULD FURNISH A SUFFICIENT CLEARANCE TO THE EXISTING ROAD FROM FRMS APPROVED BY MOST AT VARIOUS RELEVANT AMBIENT TEMPERATURE TO SUIT SITE CONDITIONS WITH THE APPROVAL OF ENGINEER IN CHARGE.

40. THE BRIDGE SHOULD BE PROTECTED FROM DAMAGE DUE TO SMOKE OF LOCOMOTIVES, 4.00M WIDE STRIP WITH POLYETHYLENE PAINT PREFERABLE IN BLACK COLOUR SHALL BE PROVIDED IN THE SOFITE OF THE BRIDGE FOR RUNNING TRAINS.

41. STANDARD MAINTENANCE AGREEMENT SHOULD BE EXECUTED WITH RAILWAY AND STATE GOVT. AUTHORITIES FOR GRANT OF PERMISSION FOR CONSTRUCTION OF ROB IN RAILWAY PORTION.

42. ALL BRIDGE SHALL BE TAKEN UP WITHIN THE LIMIT OF THE SUPERSTRUCTURE OF THE ACT. TRACTION WIRE TO BE MADE INVARIABLY IN CONSULTATION WITH CONCERNED AUTHORITIES WITH NORMAL TYPICAL DRAWING.

43. ALL STEEL STRUCTURES SHALL HAVE ANTI-CORROSION PROTECTION BY ZINC ANODIZING FOR DURABILITY.

44. ALL BRIDGE SHALL BE CONSTRUCTED WITHIN THE LIMIT OF THE SUPERSTRUCTURE OF THE ACT. TRACTION WIRE TO BE MADE INVARIABLY IN CONSULTATION WITH CONCERNED AUTHORITIES WITH NORMAL TYPICAL DRAWING.

45. THE BRIDGE SHOULD BE PROTECTED FROM DAMAGE DUE TO SMOKE OF LOCOMOTIVES, 4.00M WIDE STRIP WITH POLYETHYLENE PAINT PREFERABLE IN BLACK COLOUR SHALL BE PROVIDED IN THE SOFITE OF THE BRIDGE FOR RUNNING TRAINS.

46. CLEAR CROUT TO OUTER MOST STEEL SHALL BE AS UNDER

47. FOR SUPERSTRUCTURE

48. FOR FOUNDATION-75MM.

49. CR. FOR ABUTMENT, DIRT WALL AND RETURN WALL-SO UNDER

50. CR. FOR THE ORDER

51. CR. FOR REPLACEMENT OF BEARING OR ANY WORK REQUIRED. SUITABLE FEATURES SHOULD BE PROVIDED TO ENHANCE THE DURABILITY OF THE BRIDGE.

52. THE DIMENSIONS AND LEVELS SHOWN IN THE GAD ARE SUBJECT TO CHANGES AS PER SITE REQUIREMENT AND WILL BE DONE WITH PRIOR APPROVAL OF DFOCI.

53. THE BRIDGE IS DESIGNED TO BE CONSTRUCTED WITHIN THE LIMIT OF THE SUPERSTRUCTURE OF THE ACT. TRACTION WIRE TO BE MADE INVARIABLY IN CONSULTATION WITH CONCERNED AUTHORITIES WITH NORMAL TYPICAL DRAWING.

54. THE BRIDGE SHALL BE METALLISED AS PER IRS 81-2001.

55. VERICAL CURVE WILL BE PROVIDED WHEREVER THERE IS CHANGE IN GRADIENT IN APPROACHES AS PER IRC.

56. AS PER THE INFORMATION AVAILABLE S&T CABLE IS LAND SOUTH SIDE WITHIN APP 8M FROM THE UP STRIKE OF THE BRIDGE. THE CABLE SHALL BE PARALLEL TO THE ROAD TRACK AT A DISTANCE OF APP 8M FROM THE DOWN TRACK.

57. TRENCING ON THE SITE OR TRACK IN RLY. BOUNDARY SHOULD BE DONE IN THE PRESENCE OF S&T ENGINEER.

58. DECK SLAB SHOULD SUPER ELEVATION AND ARRANGEMENT OF ORDERS WITHIN CURVED ALIGNMENT IS TO BE DONE AND WILL BE DECIDED AFTER FINALIZATION OF DESIGN OF SUPER STRUCTURE AND SUBSTRUCTURE.

59. CRE'S APPROVAL IS ONLY FOR GAD OF ROB WITHIN RLY. BOUNDARY DESIGN LAND ACQUISITION, S&T ENGINEER'S APPROVAL IS REQUIRED FOR THE DESIGN OF THE BRIDGE TO BE ENSURED BY DFOCI.

60. MAINTENANCE AGREEMENT TO BE EXECUTED BEFORE EXECUTION OF WORK.

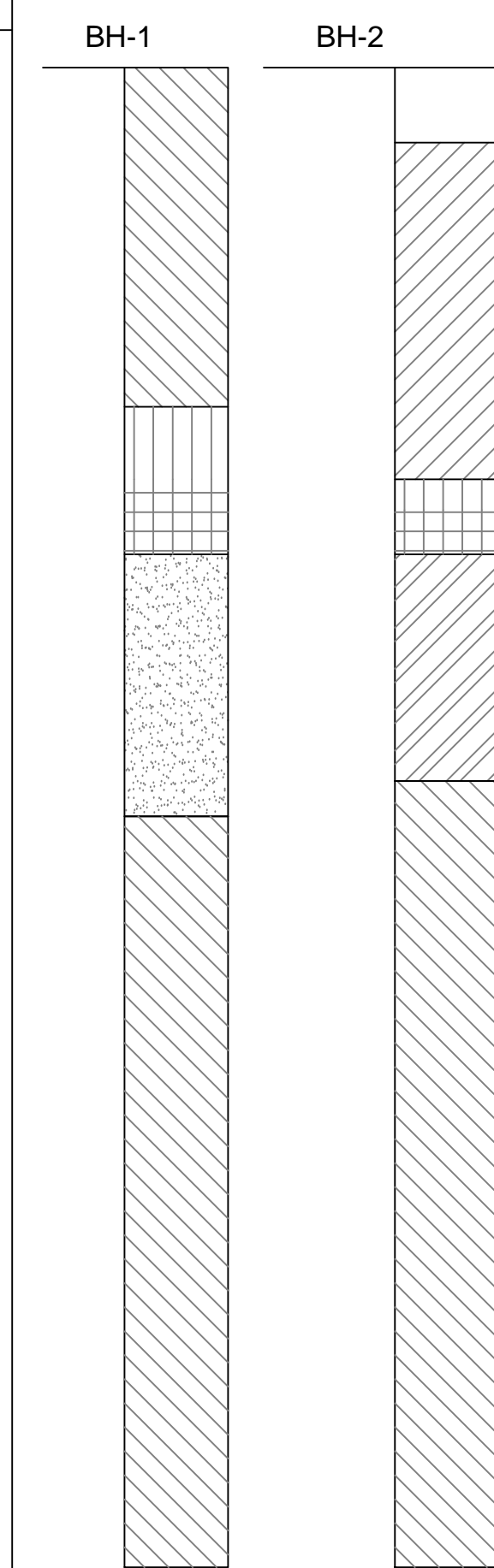
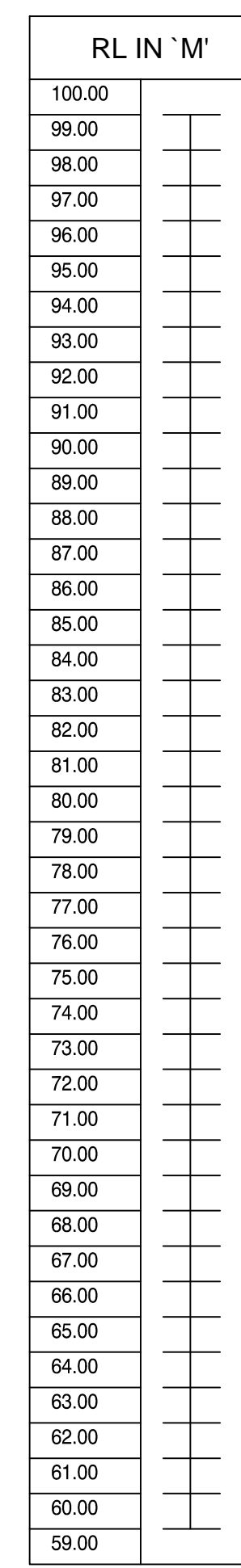
61. NO WORK WITHIN RLY. BOUNDARY TO BE DONE WITHOUT PRESENCE OF RAILWAY REPRESENTATIVE.

62. ALL BRIDGE SHALL BE CONSTRUCTED WITHIN THE LIMIT OF THE SUPERSTRUCTURE OF THE ACT. TRACTION WIRE TO BE MADE INVARIABLY IN CONSULTATION WITH CONCERNED AUTHORITIES WITH NORMAL TYPICAL DRAWING.

63. PERSONAL APPROVAL OF CPM/DFOCI SHOULD BE TAKEN BEFORE EXECUTION OF WORKS FOR ADOPTION OF FILE FOUNDATION IN PLACE OF OPEN FOUNDATION.

64. ALL BRIDGE SHALL BE CONSTRUCTED WITHIN THE LIMIT OF THE SUPERSTRUCTURE OF THE ACT. TRACTION WIRE TO BE MADE INVARIABLY IN CONSULTATION WITH CONCERNED AUTHORITIES WITH NORMAL TYPICAL DRAWING.





65. LAUNCHING METHOD OF THE STEEL ORDERS WILL BE SUBMITTED SEPARATELY BY THE CONTRACTOR



Recorded N' Value				Cohesion (c) & Friction Angle (φ)				
Depth (m)	For BH-1	For BH-2		Depth (m)	For BH-1 c in t/m <sup>2</sup>	For BH-1 φ Degree	For BH-2 c in t/m <sup>2</sup>	For BH-2 φ Degree
1.50	7	-	-	1.50	1.50	10.00	-	-
3.00	8	13	-	4.00	-	-	-	-
4.50	10	11	-	7.00	6.50	0.00	6.60	0.00
6.00	12	10	-	10.00	0.58	29.00	-	-
7.50	14	15	-	13.00	-	-	-	-
9.00	15	16	-	16.00	-	-	-	-
10.50	13	11	-	19.00	-	-	16.50	0.00
12.00	16	12	-	22.00	15.50	0.00	-	-
13.50	34	38	-	25.00	-	-	-	-
15.00	40	43	-	28.00	-	-	-	-
18.00	45	43	-	31.00	-	-	22.60	0.00
21.00	29	29	-	34.00	25.30	0.00	-	-
24.00	33	31	-	37.00	-	-	-	-
27.00	26	24	-					
30.00	33	34	-					
33.00	38	36	-					
36.00	39	37	-					
39.55	47	44	-					

LAYERS	DESCRIPTION
LAYER-1	FILLED UP SOIL

LAYERS	DESCRIPTION	LEGEND	SOIL CLASS
LAYER-1	FILLED UP SOIL		
LAYER-2	SILTY CLAY OF MEDIUM PLASTICITY WITH GRAVEL		CI
LAYER-3	SANDY SILTY WITH GRAVEL		ML-CL
LAYER-4	SILTY SAND WITH GRAVEL		SM
LAYER-5	FINE SAND WITH GRAVEL		SP

DESIGNATION	SIGNATURE	DESIGNATION	SIGNATURE
A.K. MEHRA CPM/DFCCIL		CE RWD PATNA	
HAJESHKAR SINGH DY CPM/ENGG/DFCCIL		EXECUTIVE ENGINEER (RWD-1 WORK DIVISION SASARAM)	
APM/DM/ENGG/DFCCIL		SUPERINTENDING ENGINEER (RWD-1 WORK DIVISION SASARAM)	
DFCCIL/MGS		STATE GOVT. BIHAR	

PANKAJ SAXENA DRM		CBE	
ATUL KUMAR Sr. DEN/Co-ORD/MGS		MUKESH KUMAR DY CE/BRD	
RUPES KUMAR Sr. DOM/MGS		M.A RAHMAN AEN/BRD	
ALOK KUMAR Sr. DEN-II/MGS			
B.K. YADAV Sr. DS/TE/MGS			
OMI SHANKAR PRASAD Sr. DEET/ID/MGS			
MGS DIVISION			HQ ECR HUP

CES DRG NO:-		
DRM/MGS/PLAN NO:-		
DFCCIL DRG NO:-		
DATE :-	REV. NO.	REVISION

EAST CENTRAL RAILWAY	MGS DIVISION
 <p>डेडीकेड फ्रीट कॉरिडोर</p> <p><b>DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED</b> (A GOVERNMENT OF INDIA ENTERPRISE)</p>	

PROJECT :  
PROPOSED 2-LANE ROB BETWEEN KARWANDIA-SASARAM AT  
Km 571/25-27 AND ROAD Km----- VILLAGE DHANPURWA AND  
NH2 ON MUGHALSARAI - GAYA SECTION IN-LIEU OF LC 42

TITLE			
GENERAL ARRANGEMENT DRAWING OF ROB AT LC No. 42			
DEALT BY: A.K.GUPTA	DATE : 18.05.18	DRG. NO. PPC/DFCC/ROB/ILC 42 GAD/01 ( Sheet 1 Of 2)	REV.
DRAWN BY: A.S.RAWAT	SCALE:-AS SHOWN		RO
CONSULTANTS : PARK PROJECTS CONSULTANCY PVT.LTD. NEW DELHI			

