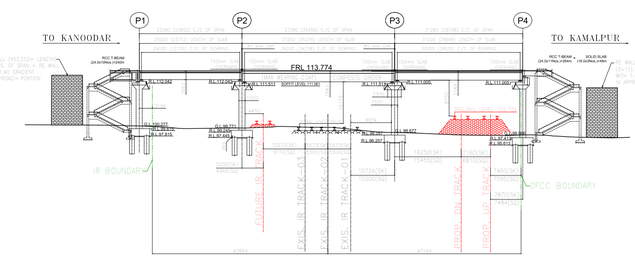
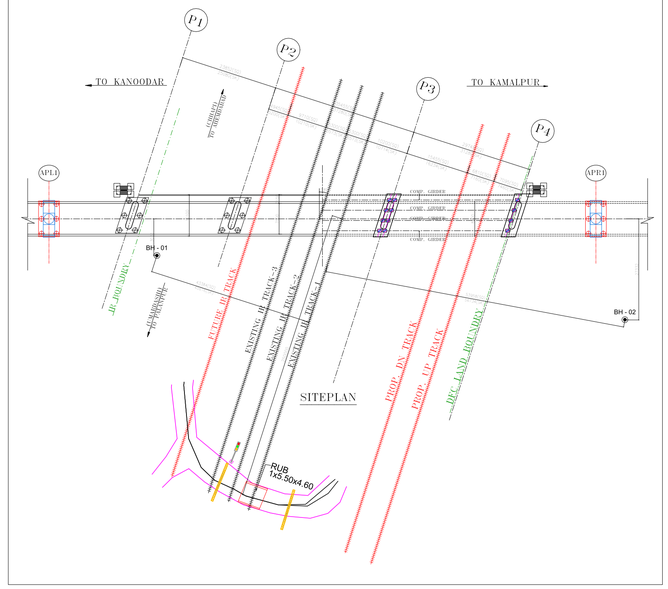
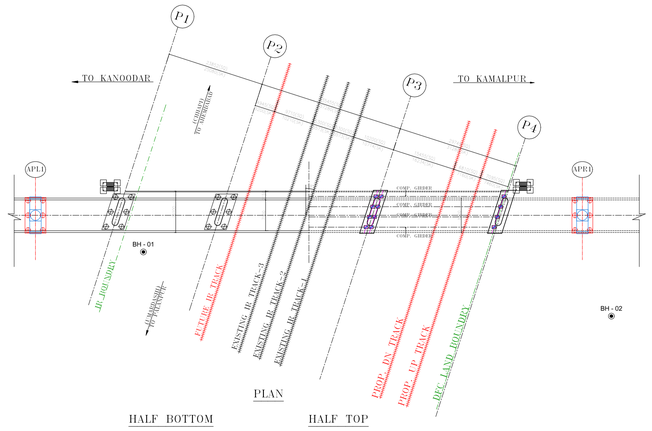


FINISHED ROAD LEVEL (mt.)						
GROUND LEVELS (mt.)	+0.720 113.100	+0.740 99.797	+0.760 99.943	+0.780 99.864	+0.800 99.606	+0.820 97.773
CHAINAGE (mt.)	+0.720 113.774	+0.740 113.774	+0.760 113.774	+0.780 113.774	+0.800 113.774	+0.820 113.774

ELEVATION

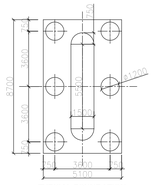


SITEPLAN



HALF BOTTOM HALF TOP

PLAN



TYPICAL FOUNDATION PLAN

BORE LOG DETAIL

BORE LOG DETAIL-01

N-237702.636 E-2667481.32

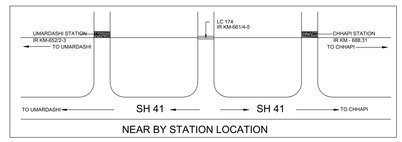
DEPTH (M)	SOIL DESCRIPTION	SPT N VALUE
0.00		0.00 :
1.00		1.50 : 28
2.00		3.00 :
3.00		4.50 : 41
4.00		6.00 :
5.00		7.50 : 67
6.00		9.00 : 100
7.00		10.50 : 100
8.00		12.00 : 100
9.00		13.50 : 100
10.00		15.0 : 81
11.00		16.5 : 100
12.00		18.0 : 100
13.00		19.5 : 100
14.00		21.0 : 100
15.00	BROWISH YELLOW SILTY SAND OF NON PLASTICITY (0.0m TO 15.0m)	22.5 : 100
16.00		24.0 : 100
17.00		25.5 : 100
18.00		27.0 : 100
19.00		28.5 : 100
20.00		30.0: 100
21.00		
22.00		
23.00		
24.00		
25.00		
26.00		
27.00		
28.00		
29.00		
30.00	YELLOWISH BROWN SILTY SAND OF NON PLASTICITY (15.0m TO 30.0m)	

BORE LOG DETAIL-02

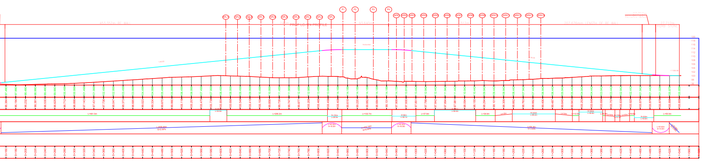
N-237798.277 E-2667488.699

DEPTH (M)	SOIL DESCRIPTION	SPT N VALUE
0.00		0.00 :
1.00		1.50 : 16
2.00		3.00 :
3.00		4.50 : 58
4.00		6.00 :
5.00		7.50 : 69
6.00		9.00 :
7.00		10.50 : 100
8.00	BROWNISH SILTY SAND OF NON PLASTICITY (0.0m TO 13.5m)	12.00 :
9.00		13.50 : 85
10.00		15.0 :
11.00		16.5 : 66
12.00		18.0 :
13.00		19.5 : 100
14.00		21.0 :
15.00	BROWNISH CLAYEY SAND OF LOW PLASTICITY (15.0m TO 16.5m)	22.5 : 100
16.00		24.0 :
17.00		25.5 : 100
18.00		27.0 :
19.00		28.5 : 100
20.00		30.0: 100
21.00		
22.00		
23.00		
24.00		
25.00		
26.00		
27.00		
28.00		
29.00		
30.00	BROWNISH SILTY SAND AND POORLY GRADED SAND OF NO PLASTICITY (15.5m TO 30.0m)	

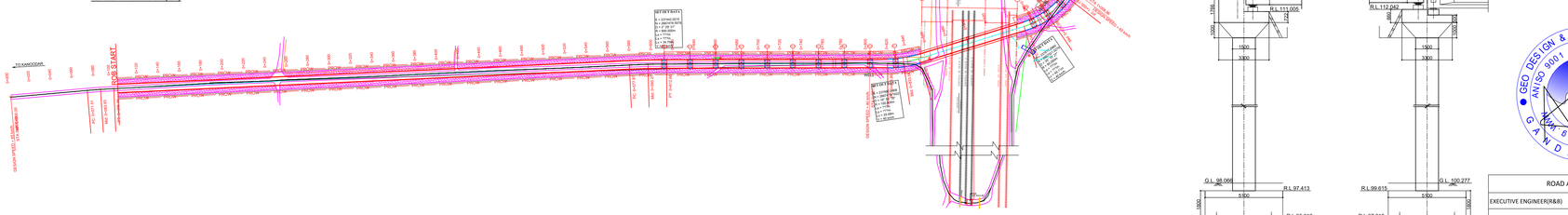
1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS IN METER UNLESS WRITTEN OTHERWISE.
2. NO DIMENSIONS SHALL BE SCALED FROM THIS DRAWINGS. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. PROPOSED WORK SHOWN IN WHITE,ASSETS BEING DISMANTLED SHOWN IN GREEN AND FUTURE WORK/TRACKS SHOWN IN RED.
4. ACTUAL LOCATION OF ROB SHALL BE DECIDED BY RAILWAY ENGINEER-IN-CHARGE IN CONSULATION WITH ROAD AUTHORITIES AT THE TIME OF ITS CONSTRUCTION.
5. ACTUAL DEPTH OF FOUNDATION SHALL BE DECIDED BY ENGINEER-IN-CHARGE TO SUIT THE SOIL STRATA MET WITH AT THE SITE.
6. MINIMUM VERTICAL CLEARANCE FROM HIGHEST RAIL LEVEL TO BOTTOM OF GIRDER SHALL NOT BE LESS THAN 8.050m A C TRACTION AREA AND 8.430m IN CASE OF DFC/FEEDER/DOUBLE STACK CONTAINER ROUTE.
7. GUARD RAIL SHALL BE PROVIDED AS PER STANDARD DRAWING.
8. SHAPES & SIZE OF GIRDERS, POT-PTFE BEARING, BEARING PEDESTALS, SHOWN IN DRAWING ARE TENTATIVE AND ARE SUBJECTED TO CHANGES IN FINAL DESIGN AND DRAWING.
9. SHAPES AND DIMENSIONS OF ABUTMENT, PIERS, PIER CAP, PIER SHAFT AND FOOTING ARE TENTATIVE AND ARE SUBJECTED TO CHANGES IN FINAL DESIGN AND DRAWING.
10. WEEP HOLES SHALL BE PROVIDED IN ABUTMENT AND RETURN WALLS.
11. ANTI CRASH BARRIER SHALL BE PROVIDED AS PER MOST. STD.
12. ONLY CONTROLLED CEMENT CONCRETE MIX IS, TO BE PROVIDED. GRADE OF CONCRETE FOR MASS CONCRETE AND FOR RCC WORK SHALL NOT BE LEANER THAN M-20 AND M-25 RESPECTIVELY.
13. A SEPARATE LAUNCHING SCHEME OF SUPER STRUCTURE HAS TO BE SUBMITTED WHICH WILL BE APPROVED BY CBE BEFORE COMMENCEMENT OF LAUNCHING.
14. EXCAVATION OF ROB WORK SHALL BE DONE ONLY IN PRESENCE OF AUTHORIZED RAILWAY REPRESENTATIVE TO ENDURE THE SAFETY OF RUNNING TRAINS. PROPER PRECAUTIONS SHALL BE TAKEN DURING EXCAVATION OF OPEN FOUNDATION NEAR THE EXISTING RAILWAY TRACK. IN CASE THE EXCAVATION TO BE DONE NEAR THE TRACK, PROPER SHORING SHALL BE DONE TO PROTECT SLOPE FAILURE OF SOIL.
15. ADDITIONAL LOAD TRANSFERRED FROM FUTURE TRACKS SHALL BE CONSIDERED WHILE DESIGNING OPEN FOUNDATION ON EITHER SIDE.
16. IN ORDER TO OFFER ADEQUATE RESISTANCE AGAIN CORROSION, THE REINFORCEMENT BARS SHALL BE PROVIDED WITH SUITABLE PROTECTIVE COATING DEPENDING UPON THE ENVIRONMENTAL CONDITION AS PER PARA 7.15 OF CONCRETE BRIDGE CODE CORRECTION SL NO.2 DT. 26.04.2000
17. OFFICE FOR THE RAILWAY ENGINEERS AT BRIDGE SIDE OR AT NEAR BY LOCATION DECIDED BY THE RAILWAY SHALL BE PROVIDED BY SPONSORING ROAD AUTHORITY AND MAINTAINED DURING THE PERIOD OF CONSTRUCTION OF THE PROJECT.
18. DRAWING AND DESIGN OF ROB SHALL BE PROOF CHECKED BY IIT/NIT OR GOVERNMENT COLLEDGE OR REPUTED CONSULTANT AS APPROVED BY DFCCIL/RAILWAY.
19. LONG DURABILITY ANTI CORROSIVE PROTECTION SHOULD BE APPLIED TO THE STEEL STRUCTURE.
20. INSPECTION LADDER AND PLATFORM FOR INSPECTION OF BEARING SHOULD BE PROVIDED AT EVERY PIER.
21. ALL TECHNICAL RECORD i.e CUBE STRENGTH, PRESTRESSING DETAILS ETC. SHALL BE HANDED OVER TO RAILWAY ENGINEER INCHARGE.
22. BEFORE OPENING OF ROB COMPLETION DRAWING AND COMPLETE COST OF ROB IN HARD COPY AND SOFT COPY DULY APPROVED BY AUTHORITIES SHALL BE HANDED OVER TO RAILWAY ENGINEER IN CHARGE.
23. BEFORE OPENING OF ROB (WITHIN RAILWAY PORTION) FOR ROAD TRAFFIC, APPROVAL OF RAILWAY ENGINNER IN CHARGE IS TO BE OBTAINED BY ROAD AUTHORITY.
24. GRADE OF CONCRETE
    - RCC PIER M:35
    - RCC ANTICRASH BARRIER M:40
    - RCC DECK SLAB M:40
    - PILE,PILE CAP M:35
    - BEARING,PEDESTAL M:40
    - RCC ABUTMENT M:35
26. STOPPER SHOULD BE PROVIDED AT END ON THE TOP OF PIER / ABUTMENT CAP TO REDUCE POSSIBILITIES OF TOPPING OF GIRDER DURING LAUNCHING OF GIRDER.
27. CRS SANCTION SHALL BE OBTAINED BEFORE COMMENCEMENT OF WORK.
28. THE BRIDGE SHALL BE DESIGNED FOR 2 LANES OF IRC CLASS "A" LOADING OR 1 LANE OF CALSS 70R LOADING ALONG WITH FOOTPATH LOADING WITH WORST COMBINATION. FOOTPATH LOADING SHALL BE CONSIDERED AS PER IRC 6.
29. AS PER RAILWAY BOARD LETTER NO. 2007/RE/161/5-FTS -774, DATED 12-10-2011. TRACK LEVEL SHOULD BE FROZEN.
30. DIMENSIONS OF ALL STRUCTURAL MEMBERS, i.e PILE,PILE CAP, PIER, ABUTMENT CAP. PIER CAP ETC. SHOWN ARE TENTATIVE AND SHALL BE AS PER STRUCTURAL DESIGN & DRAWING. SUBMITTED BY CONSULTANT/PARTY AND APPROVED BY RAILWAY.
31. STRUCTURAL STEEL OF COMPOSITE GIRDERS CONFORM TO IS: 2062-2006 E250 BO. OTHERWISE SPECIFIED IN DESIGN.
32. ROAD TRAFFIC SHALL BE DIVERTED AT SUITABLE LOCATION IN CONSULTATION WITH ROAD AUTHORITY.
33. EXISTING LC WILL BE CLOSED AFTER COMPLETION OF ROB WORK.
34. THE GAP BEARING AS PER RDSO FORMAT (CIRCULATED BY RDSO VIDE LETTER NO.CBS/PBEJ/reg. DATED 16.05.2014) SHALL BE ENSURED BY INSPECTING ENGINEER.
35. CONSENT LETTER FROM DISTRICT COLLECTOR - BANASKANTHA FOR CLOSING LEVEL CROSSING NO. 209 HAS BEEN OBTAINED VIDE LETTER NO. DMAG.-2/RLY. CROSSING/SWS4208-4415 DATED 15.10.2015.
36. DURING EXECUTION OF WORK ANY S&T CABLE FOUND THEN SHIFTING OF CABLE WORK TO BE DONE ON PRIORITY.
37. IN CASE OF S&T CABLE CUTTING/DAMAGE,PENALTY SHOULD BE IMPOSED AS PER RAILWAY BOUNDARY LETTER NO. 2003/TELE/ROLI/1 PT.IX DATED 24-06-2013.
38. PLAN SIGNED BY Sr. DOM WITH CONDITION THAT LC TO BE CLOSED AFTER COMMISSIONING OF ROB.
39. VIDE MINUTES OF MEETING BETWEEN PCE AND MD-DFCCL DATE 20/03/2015.ONE LHS SHALL BE PROVIDED BY THE SIDE OF ROB GAD OF THE SAME WILL BE FOLLOW SEPERATELY.
40. S.B.C. AT 4.5m DEPTH 35t/sqm.
41. FOR SUPERSTRUCTURE REFER FOLLOWING DRWING:
    36.0 M SPAN COMPOSITE GIRDER - REFER RDSO DRW NO - 11758/R
    30.0 M SPAN COMPOSITE GIRDER - REFER RDSO DRW NO - 11755/R
    24.0 M SPAN COMPOSITE GIRDER - REFER RDSO DRW NO - 11757/R
42. STANDARD OF LOADING = 70R
43. FOR NON STANDARD PSC/RCC GIRDER REFER SEPERATE DRAWING (TO BE DESIGNED BY DFCCIL).
44. THE PROPOSED ROB FALLS IN BLOCK SECTION IN UMARDASHI AND CHHAPPI IN MD STATION IS NOT VICINITY OF ANY OF THIS STATION.HENCE,THE CONSTRUCTION OF ROB IN LEU OF ROB 174 IS NOT GOING TO EFFECT THE MOVEMENT OF PASSENGERS TRAFFIC TO THE STATION.
45. THE CENTRE PIER SHALL ALSO BE DESIGNED TO CATER LOAD OF EARTH PRESSURE AND LATERAL PRESSURE ARISING DURE TO DYNAMIC LOADING OF DFC, AS APPROX HIGH OF DFC TRACK IS 4MTR ABOVE THE IR TRACK.
46. THE PROPOSED ROB IS PLANNED 250M AWAY (TOWARDS AHMEDABAD).THE CONSTRUCTION OF PROPOSED ROB IN LIEU OF LC NO.174 IS NOT GOING TO AFFECT MOVEMENT OF RAILWAY PASSENGERS TRAFFIC TOWARDS STATION.
47. THE DIVERSION OF TRAFFIC FOR THIS PROPOSED ROB IS NOT REQUIRED AS PROPOSED ROB IS 250m AWAY FROM LC LOCATION.
48. NUMBER OF PILES AND DEPTH AT PILES SHOWN ARE TENTATIVE FOR DETAILED,REFER SEPEARTE DRAWING.
49. THE DESIGN OF APPROACHES ARE TO BE APPROVED BY ROAD AUTHORITY,THE FINAL DECISION FOR TYPE OF FOUNDATION REST WITH THEM AND IS TO BE DECIDED BY THEM.
50. BEFORE EXECUTION OF WORK CONCERNED SSE/SIG AND ADSTE/W/II/ADI TO BE INFORMED WELL IN ADVANCE.
51. THIS DRAWING IS BASED ON DIVISIONAL APPROVED DRG. NO. DRM (B)23080/17.D.



NEAR BY STATION LOCATION



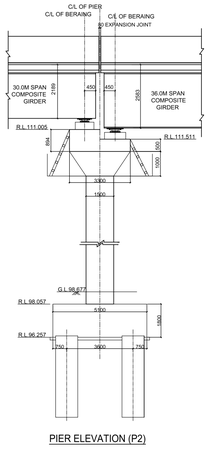
PROFILE (N.T.S.)



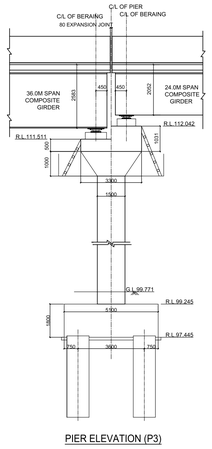
RECAPITULATION OF LENGTH FOR PROPOSED BRIDGE						
	SPAN-1	SPAN-2	SPAN-3	TOTAL LENGTH		
SKEW ANGLE	18°	18°	18°	—		
SQUARE LENGTH(mm)	23852	35456	29748	89056		
SKEW LENGTH(mm)	25080	37280	31280	93640		

LEVEL DETAILS

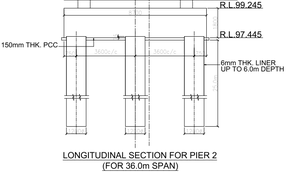
AS PER TRACK ALIGNMENT & PROFILE SHEET NO. 9_AL_MLS_0005 & AT CHAINAGE:104440	LEVEL
EXISTING IR FORMATION LEVEL	186.088
PROPOSED DFCC FORMATION LEVEL	188.758
IR TOP OF TRACK LEVEL	186.813
DFCC TOP OF TRACK LEVEL	189.518
AS PER SURVEY,IR LEVEL	100.00
AS PER SURVEY,DFCC LEVEL	102.705



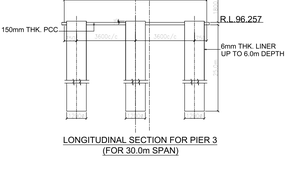
PIER ELEVATION (P2)



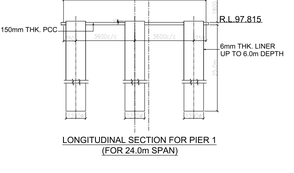
PIER ELEVATION (P3)



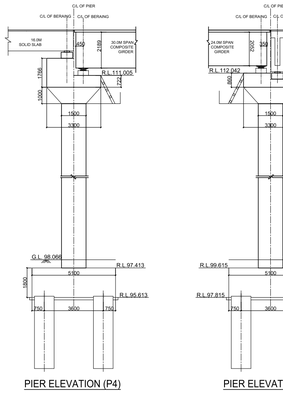
LONGITUDINAL SECTION FOR PIER 2 (FOR 36.0m SPAN)



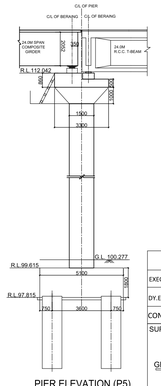
LONGITUDINAL SECTION FOR PIER 3 (FOR 30.0m SPAN)



LONGITUDINAL SECTION FOR PIER 1 (FOR 24.0m SPAN)



PIER ELEVATION (P4)



PIER ELEVATION (P5)

GEO DESIGN & RESEARCH PVT LTD
AN ISO 9001 - 2015 Certified
GDR
GANDHINAGAR

ROAD AUTHORITY	
EXECUTIVE ENGINEER(R&B)	
DY.EXECUTIVE ENGINEER(R&B)	
CONSULTANT AUTHORITY	

SURVEY AGENCY :
(A Division of GEO DESIGNS AND RESEARCH PVT LTD)
GEO TEST HOUSE
PLOT - NO - 101/1/2 - G.I.D.C. SECTOR - 28 GANDHINAGAR - 388028
CONTACT : 079-23210179
E-Mail : gandhinagargdr@geogroup.in

WESTERN RAILWAY

AHMEDABAD DIVISION | ADI-PNU SECTION

CONSENTEE :-
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD. AHMEDABAD-380005, (GUJARAT)

PROJECT:-
CONSTRUCTION OF ROB IN LIEU OF **LC NO.174**
OF AHMADABAD-PALANPUR BETWEEN
BLOCK SECTION UMARDASHI TO CHHAPI
(DFCC CH-Km 104/183)(IR Km 661/04-05)
NAME OF ROAD - KAMALPUR TO KANODAR
RAILWAY SPAN : 1x24m+1x36m+1x30m SPAN COMPOSITE GIRDER

SCALE - AS SHOWN	PINK BOOK ITEM NO- 293(2019-20)	TVU NO-90200
(SANJAY GUPTA) CGM - DFCCIL	(D.K.JHA) DRM-ADI	(MANJUL MATHUR) CBE CCG.
(S.L. LOHAR) DY. CPM - DFCCIL	(ASHISH TIWARI) SR.DSTE-ADI	(J.P.VERMA) CE(RSW)-CCG
(SATISH KUMAR MALIK) Dy. PM-DFCCIL	(MADHUKAR ROAT) SR.DOM-ADI	(B.K.KUSHWAHA) DY.CE/D-CCG
PRADEEP KUMAR Dy. CPM/S&T.	(ANKUR KUMAR SINGH) DEN(N)-ADI	(M. D. DIXIT) AXEN/D-II
S.NAG Dy. CPM/ELEC.	(SANJEEV MEHTA) SR.DEE-ADI	VISHAL MANDLOI SR.DEE/TRD

REVISIONS

TITLE:-
GENEREAL ARRANGEMENT DRAWING FOR RAILWAY SPAN

DRAWING NO: DFCCIL/ADI/ROB/LC-174/GAD