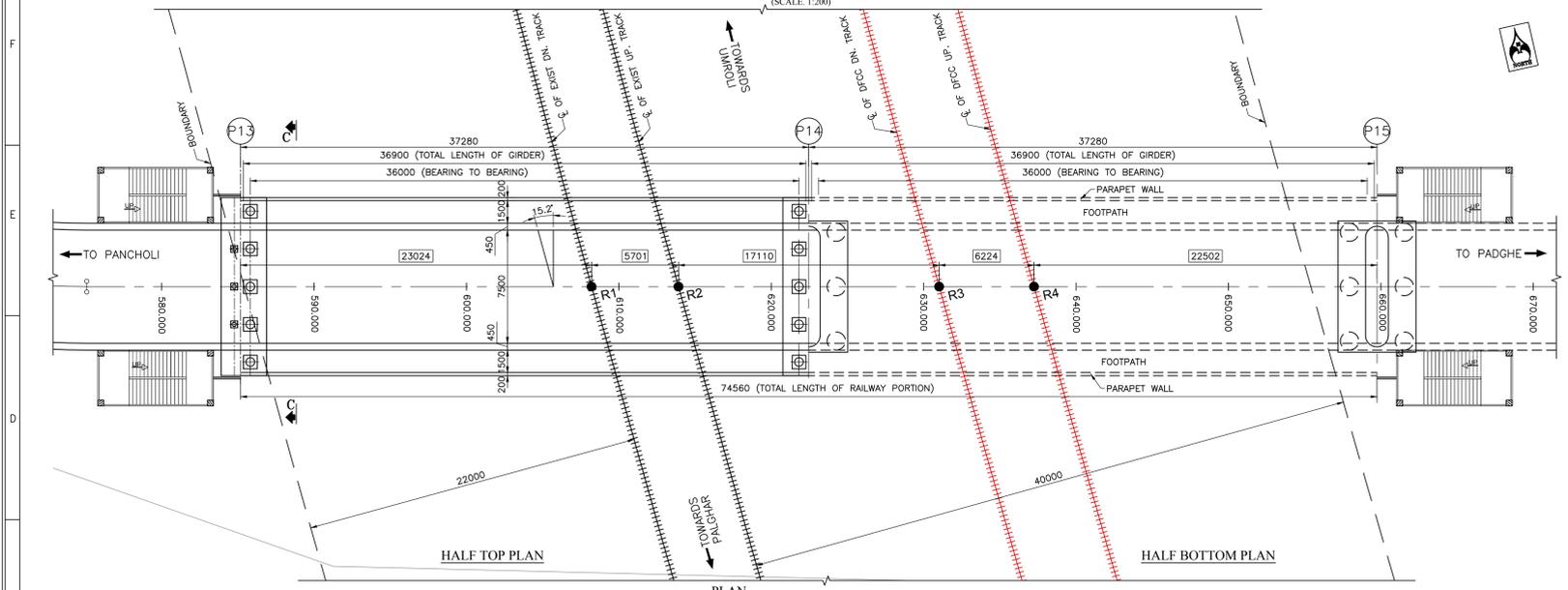


PROF. ROAD TOP LEVEL	21.206	21.206	21.206
PIER CAP TOP LEVEL	19.020/18.298	18.298	18.298/19.020
GROUND LEVELS	6.346	6.750	6.729
PILE CAP TOP LEVEL	5.846	6.250	6.223
PILE CAP BOTTOM LEVEL	4.046	4.450	4.429
CHAINAGE	585.183	622.463	659.743

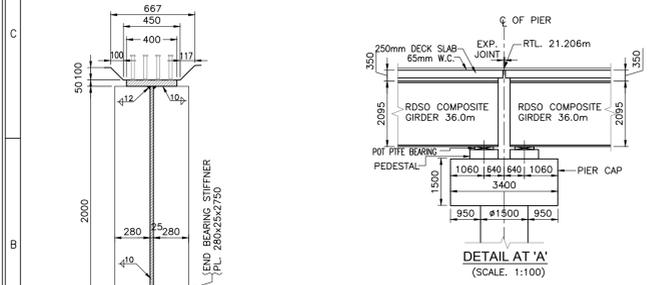
ELEVATION (RAILWAY PORTION) (SCALE: 1:300)



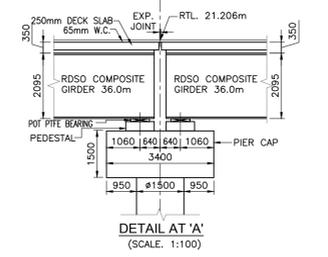
HALF TOP PLAN

HALF BOTTOM PLAN

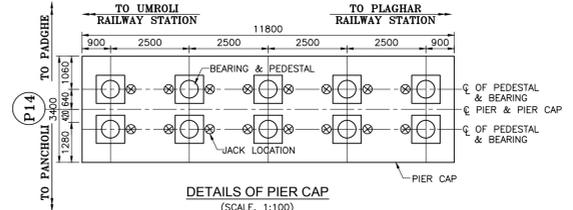
PLAN (SCALE: 1:300)



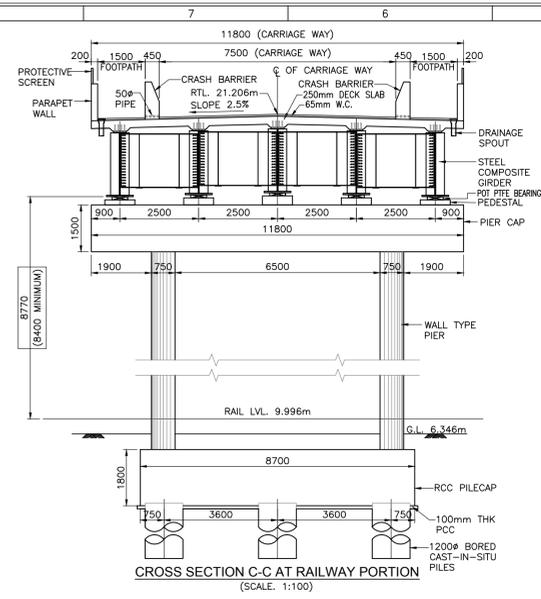
COMPOSITE GIRDER SECTION (SCALE: 1:25)



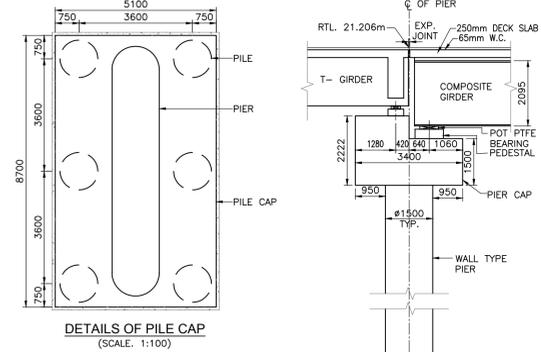
DETAIL AT 'A' (SCALE: 1:100)



DETAILS OF PIER CAP (SCALE: 1:100)

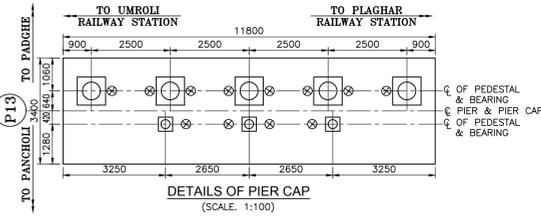


CROSS SECTION C-C AT RAILWAY PORTION (SCALE: 1:100)



DETAILS OF PILE CAP (SCALE: 1:100)

TRACK NO.	RAIL TOP LEVEL	LOCATION
EXIST DN. TRACK	9.996m	R1
EXIST UP. TRACK	9.996m	R2
DFCC DN. TRACK	9.996m	R3
DFCC UP. TRACK	9.996m	R4



DETAILS OF PIER CAP (SCALE: 1:100)

- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS ARE IN METRES UNLESS WRITTEN OTHERWISE.
 - NO DIMENSION SHALL BE SCALED FROM THIS DRAWING UNLESS WRITTEN OTHERWISE.
 - PROPOSED WORK SHOWN IN RED, FUTURE WORK IS IN RED DOTTED AND EXISTING WORK IS SHOWN IN BLACK.
 - ACTUAL LOCATION OF R.O.B SHALL BE DECIDED BY ENGINEER IN CHARGE IN CONSULTATION WITH ROAD AUTHORITIES AT THE TIME OF ITS CONSTRUCTION.
 - A MINIMUM VERTICAL CLEARANCE OF 8430mm SHALL BE PROVIDED FROM RAIL TOP LEVEL (HIGHEST) TO BOTTOM OF PROPOSED STEEL PLATE GIRDER AS PER RAILWAY BOARD'S LETTER NO. 80/WO/SO/10 DATED 15/10/1986.
 - KEEP HOLE SHALL BE PROVIDED IN ABUTMENTS AND RETURN WALL.
 - SHAPE AND SIZE OF STEEL COMPOSITE GIRDERS, POT, PTFE BEARINGS, PEDESTALS, R.C.C COLUMN, PIER CAP AND FOOTING SHOWN IN THIS DRAWING ARE TENTATIVE AND ARE SUBJECT TO CHANGE IN FINAL EXECUTION DRAWING AND DESIGN.
 - SHAPE AND DIMENSION OF ABUTMENT, PIERS, PIER CAP, PIER SHAPE AND FOOTING ARE TENTATIVE AND ARE SUBJECT TO CHANGES IN FINAL DESIGN AND DRAWING.
 - GUARD RAIL SHALL BE PROVIDED AS PER STANDARD DRAWING.
 - ANTI-CRASH-BARRIER SHALL BE PROVIDED AS PER M.O.S.T. STANDARD.
 - 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 M25 RESPECTIVELY.
 - WEARING COAT OF THICKNESS 65MM PROVIDED ROAD SURFACE TO BE MAINTAINED BY ROAD AUTHORITY.
 - A SEPARATE LAUNCHING SCHEME HAS TO BE SUBMITTED DULY APPROVED BY CBE BEFORE COMMENCEMENT OF LAUNCHING.
 - EXCAVATION OF ROB WORK SHALL BE DONE ONLY IN PRESENCE OF AUTHORIZED RAILWAY REPRESENTATIVE TO ENSURE 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.
 - ADDITIONAL LOAD TRANSFERRED FROM FUTURE TRACK SHALL BE CONSIDERED WHILE DESIGNING OPEN FOUNDATION ON EITHER SIDE.
 - IN ORDER TO OFFER ADEQUATE RESISTANCE AGAIN CORROSION, THE REINFORCEMENT BARS SHALL BE PROVIDED 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.
 - OFFICE FOR THE RAILWAY ENGINEERS AT THE BRIDGE SITE OR AT NEAR BY LOCATION DECIDED BY THE RAILWAY SHALL BE PROVIDED BY SPONSORING AUTHORITY AND MAINTAINED DURING THE PERIOD OF CONSTRUCTION OF THE PROJECT.
 - DRAWING & DESIGN OF ROB SHALL BE PROOF CHECKED BY IIT/NIIT OR REPUTED CONSULTANT AS APPROVED BY NHAI/RAILWAY.
 - LONG DURABILITY ANTI CORROSION PROTECTION SHOULD BE APPLIED TO THE STEEL STRUCTURE.
 - INSPECTION LADDER AND PLATFORM FOR INSPECTION OF BEARING SHOULD BE PROVIDED AT EVERY PIER.
 - ALL TECHNICAL RECORDS I.e. CUBE STRENGTH, PRESTRESSING DETAILS ETC. SHALL BE HANDED OVER TO RAILWAY ENGINEER IN CHARGE.
 - 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.
 - BEFORE OPENING OF ROB (WITHIN RAILWAY PORTION) FOR ROAD TRAFFIC, APPROVAL OF RAILWAY ENGINEER IN CHARGE IS TO BE OBTAINED BY ROAD AUTHORITY.
 - BEFORE OPENING OF ROB (OUTSIDE RAILWAY PORTION) FOR ROAD TRAFFIC, APPROVAL OF ROAD AUTHORITY SHALL BE OBTAINED BY ROAD AUTHORITY.
 - DECK SLAB /PIERCAP/PIER -M40
 - PEDESTALS/JOINT -M35
 - FOUNDATION -M20
 - LEVELLING COURSE -M40
 - ANTI-CRASH BARRIER -M30
 - APPROACH SLAB -M30
 - RCC ABUTMENT -M35
 - BEARING PEDESTALS -M35
 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.
 - CRS SANCTION SHALL BE OBTAINED BEFORE COMMENCEMENT OF WORK.

- COST SHARING:
- STANDARD STANDARD 36.0M RDSO DRAWING NO. RDSO/B/-11758/R TO RDSO/B/-11758/10R & RDSO/B/-11759/R. SHALL BE USED FOR SUPERSTRUCTURE.
 - SEISMIC ZONE IS III.
 - AS PER RAILWAY BOARD LETTER NO. 2007/RE/161/5-FTS-774, DATED 12.10.2011 TRACK LEVEL SHOULD BE FROZEN.
 - THE COST OF MODIFICATION OF ONE TO BE CHARGEABLE TO ESTIMATE.
 - DIMENSION OF ALL STRUCTURAL MEMBER I.E. PILE, PILE CAP, PIER, ABUTMENT, PIER CAP ETC. SHOWN ARE TENTATIVE AND SHALL BE AS PER STRUCTURAL DESIGN AND DRAWING SUBMITTED BY CONSULTANT/PARTY AND APPROVED BY RAILWAY.
 - STRUCTURAL STEEL COMPOSITE GIRDERS CONFORM TO IS:2062-2006 E250 B0 OTHERWISE SPECIFIED IN DESIGN.
 - FOR STEEL COMPOSITE GIRDER REFER RDSO DRAWINGS (36.0M C/C OF BEARING) (UP TO 20° SKEW ANGLE) SHALL BE FOLLOWED.
 - ROAD TRAFFIC SHALL BE DIVERTED AT SUITABLE LOCATION IN CONSULTATION WITH ROAD AUTHORITY.
 - EXISTING LC WILL BE CLOSED AFTER COMPLETION OF ROB WORK.
 - THE OAP BEARING AS PER RDSO FORMAT (CIRCULATED BY RDSO VIDE LETTER NO. CBE/PSE/REG, DATED 16.05.2014) SHALL BE ENSURED BY INSPECTING ENGINEER. CONSENT LETTER FROM DISTRICT COLLECTOR, VALSAD FOR CLOSING OF LEVEL CROSSING NO.49 HAS BEEN OBTAINED VIDE LETTER NO. DATED.
 - DFCC BOUNDARY IS TENTATIVE, IT SHALL BE FINALIZED AFTER LAND ACQUISITION.
 - THE GAD IS FOR RAILWAY PORTION ONLY. THE CONCERN STATE GOVT. HAS ALREADY APPROVED SIGNED IN GAD OF APPROACH PORTION, DWG. NO. LC 49/APPR/1, R/O DTD. THE ROAD ALIGNMENT AND LEVELS OF THIS GAD HAS BEEN MAINTAINED AS PER THE APPROVED GAD OF APPROACH PORTION BY CONCERN ROAD AUTHORITY.
 - STORM DRAIN TO BE PROVIDED UP TO GROUND LEVEL.
 - EPOXY PAINT ON PIERS & ABUTMENT (DELETED).
 - GAD FOR APPROACH PORTION IS AS PER APPROVED BY CONCERN STATE GOVT.
 - THE ROAD AUTHORITY HAD APPROVED THE PROPOSAL, MARKED ON DRG. LC 49/APPR/1, R/O DTD. THIS DRAWING NO. IS BASED ON LC.NO. 49, RO, WHICH WAS SIGNED BY THE ROAD AUTHORITY BUT CHANGES HAVE BEEN INCORPORATED IN THE DRG. IN VIEW OF CHANGES DONE, THIS DRG SHOULD ALSO BE GOT SIGNED FROM THE ROAD AUTHORITY BY CIVIL BEFORE STARTING THE WORK AND COPY OF PLAN DULY SIGNED BY THE ROAD AUTHORITY SHOULD BE SEND TO CBE'S OFFICE FOR RECORD.
 - PRIOR COMMENCING THE WORK CPM/DFCC TO ENSURE THAT SIGNATURE OF ROAD AUTHORITY SHALL BE OBTAINED.
 - VIDE MINUTES OF MEETING BETWEEN PCE & MD -DFCC ON DATED 20/03/2015 ONE LHS SHALL BE PROVIDED BY THE SIDE OF ROB GAD OF THE SAME WILL FOLLOW SEPARATELY.
 - RAILWAY WILL SHARE THE COST OF 2 LANE ROB I.E. FOR 10.50M WIDTH OF ROB WITH RE WALL ON APPROACHES. COST OF APPROACH WIDTH WILL BE TOTALLY BORNE BY ROAD AUTHORITY.
 - SKEW ANGLE 0°.
 - PROVISION OF CLAMPS IN THE SUPERSTRUCTURE FOR A.C. TRACTION WIRE TO BE MADE IN CONSULTATION WITH THE CONCERNED AUTHORITIES.
 - REPRESENTATION OF TELECOM AND SIGNALING DEPTT. SHALL BE MADE AVAILABLE BEFORE COMMENCEMENT OF PROPOSED WORK IN THE VICINITY OF SIGNAL AND TELECOM CABLE.
 - SUITABLE SPEED RESTRICTION SHALL BE IMPOSED BY ENGINEER IN CHARGE DURING THE EXECUTION OF WORK. TEMP ENGINEERING INDICATE WILL BE PROVIDED AS PER G.R. 15.09 (2) b+s.p. 15.09 (2).
 - PROTECTIVE SCREEN TO BE PROVIDED FOR EACH TRACK DURING EXECUTION OF SUPERSTRUCTURE.
 - VERTICAL AND HORIZONTAL CLEARANCES WITH RESPECT TO RAIL LEVEL AND C/L OF TRACK RESPECTIVELY SHOWN IN THIS DRAWING ARE FIXED.

LEGEND FOR STRUCTURE

STRUCTURE TYPE	CODE FOR SURVEY	SYMBOL
EX. ELECTRIC POLE	EP	⎓
TREE	TR	⌘
ELECTRIC TRANSFORMER	DP	⊞
HAND PUMP	HP	⊕
SIGNAL POST	SP	⊙
RAILWAY BOUNDARY	RB	⊞

Rev.	Revision Details	Date	PURPOSE
RO	FOR DISCUSSION	16.01.2020	FOR APPROVAL

Drawn: AJIT PATIL
 Designed: MOHIT
 Checked: L.K.MISHRA

Owner: WESTERN RAILWAY

Client: DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED, MUMBAI

SOWIL Limited consulting engineers
 GOODWILL AVENUE, OFFICE NO. 02, A WING, FIRST FLOOR,
 PLOT NO. 01, SECTOR-40, NEERUL (WEST), NAVI MUMBAI - 400 706

Name of Work: CONSTRUCTION OF PROPOSED ROAD OVER BRIDGE IN LIEU OF LC NO. 49 BETWEEN UMROLI & PALGHAR RAILWAY STATION AT CH. 96/6-8.

Drawing No: SOWIL / WR / GAD / UMR - PLG / 02. Rev. R0

Scale: AS SHOWN Sheet: 2 OF 2

Title: GENERAL ARRANGEMENT DRAWING (RAILWAY PORTION)