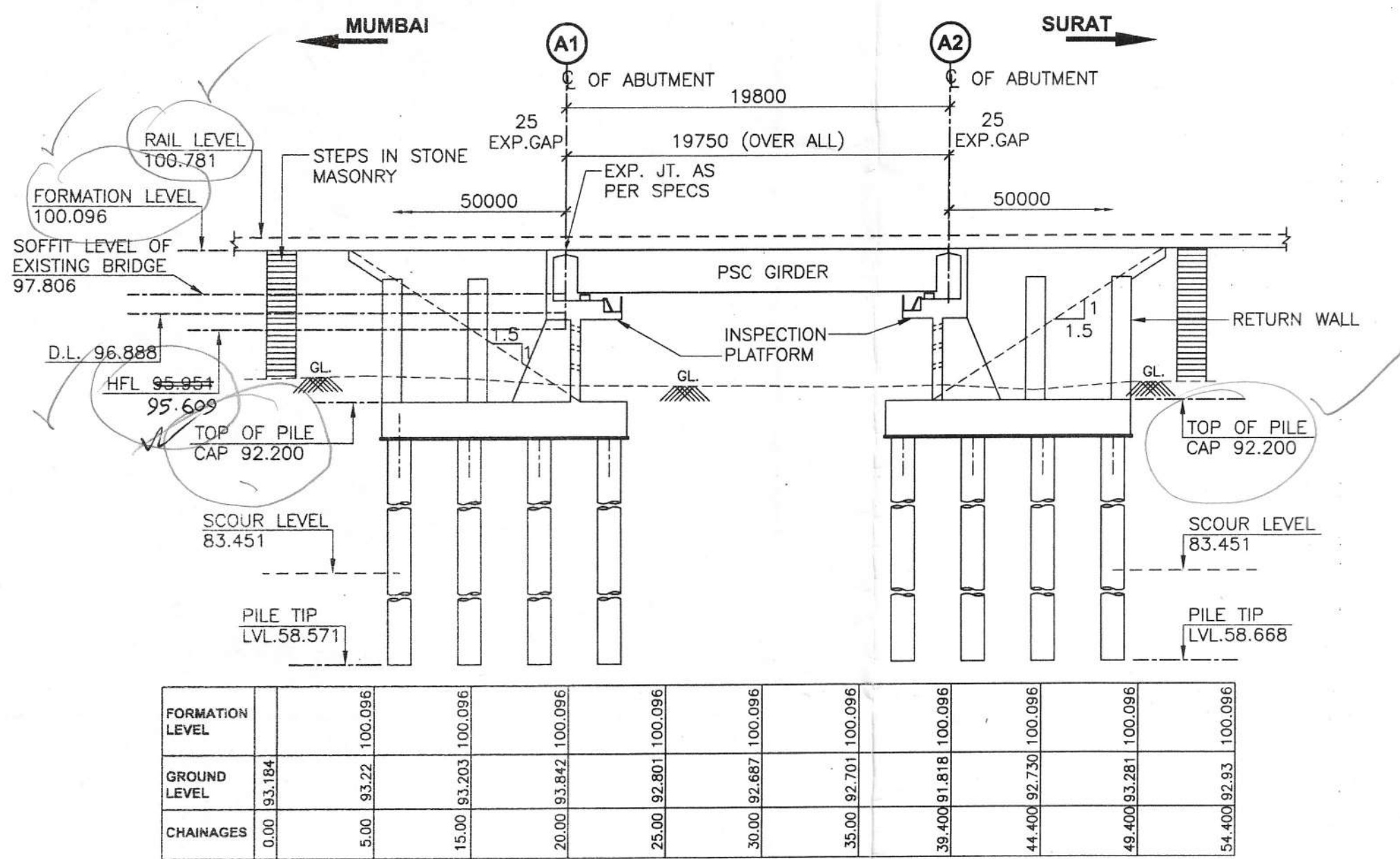


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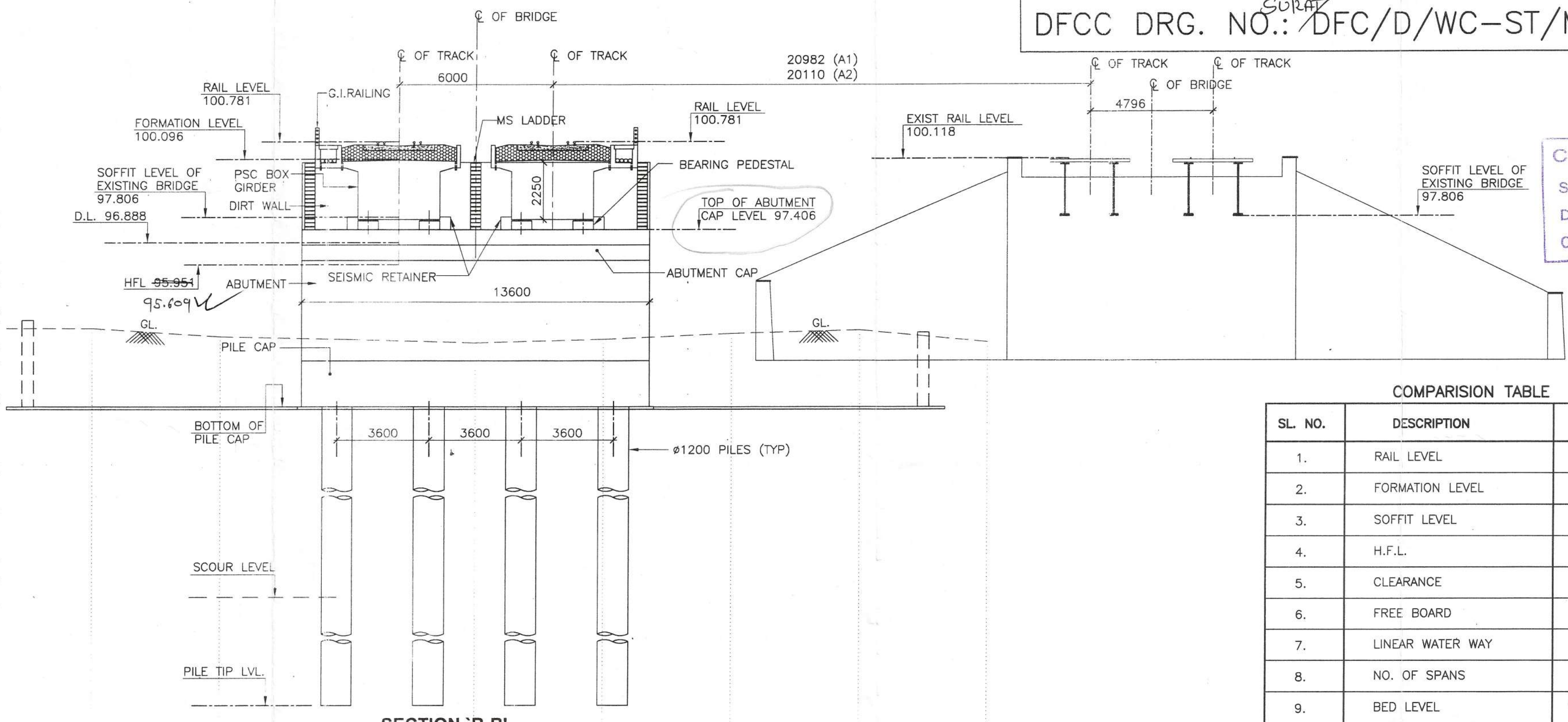
Signature
Date
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CPM



CHAINAGES	0.00	5.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
FORMATION LEVEL	100.096	100.096	100.096	100.096	100.096	100.096	100.096	100.096	100.096	100.096	100.096
GROUND LEVEL	93.104	93.22	93.203	93.203	93.842	92.801	92.687	92.701	92.730	92.821	92.931

LONGITUDINAL ELEVATION A-A

SCALE 1:250



DISTANCE	15.00	10.00	5.00	0.00	5.00	10.00	15.00	20.00
GROUND LEVEL	93.481	93.156	93.045	93.842	93.045	93.272	93.409	92.931

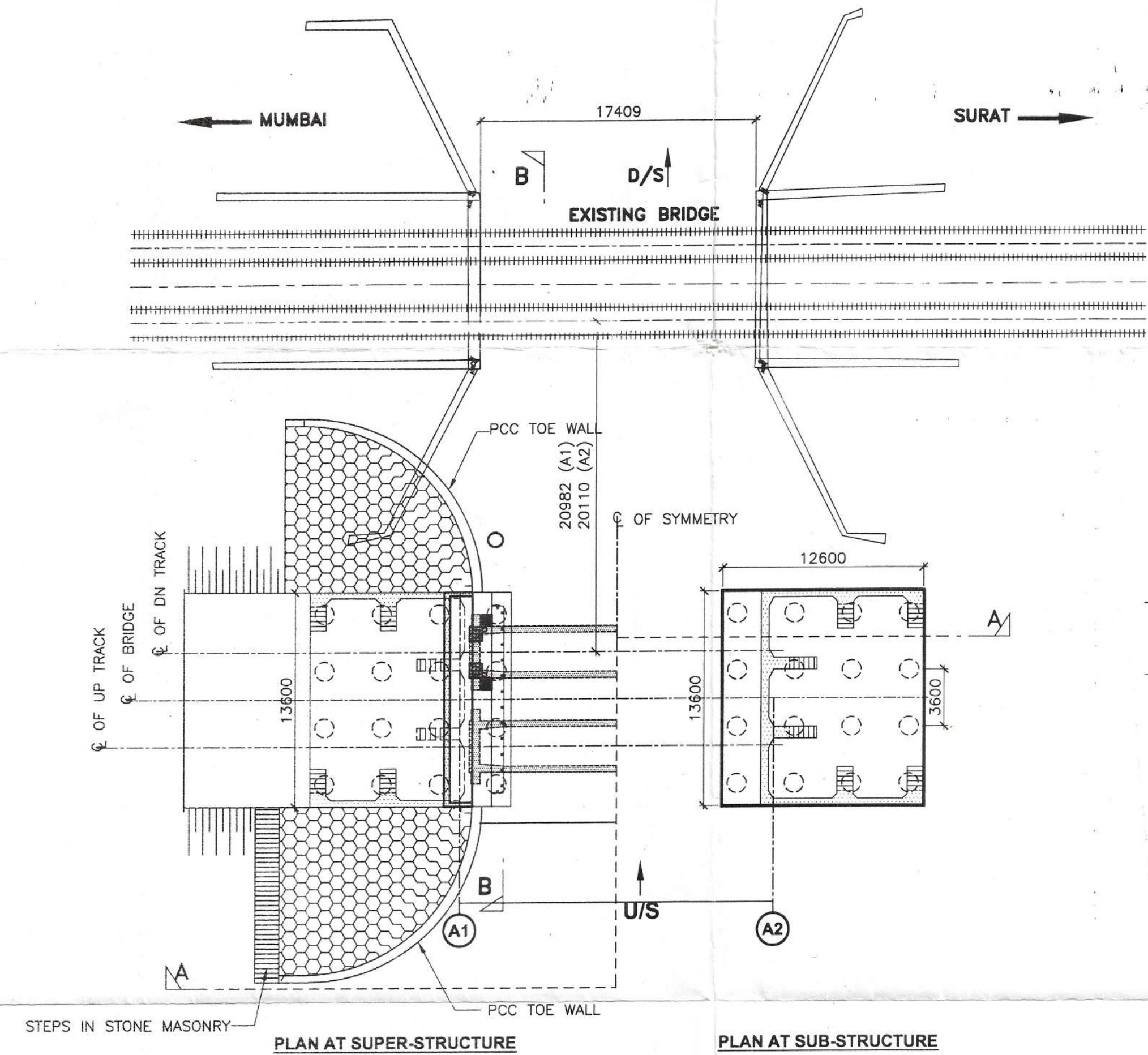
(NOTE:- GROUND LEVEL APPLICABLE ON ABUTMENT PIER 'A1' ONLY)

SECTION 'B-B'

SCALE 1:125

COMPARISON TABLE

SL. NO.	DESCRIPTION	EXISTING	PROPOSED
1.	RAIL LEVEL	100.118	100.781
2.	FORMATION LEVEL	99.433	100.096
3.	SOFFIT LEVEL	97.806	97.806
4.	H.F.L.	95.609	95.609 ✓
5.	CLEARANCE	2.197	2.198 ✓
6.	FREE BOARD	3.824	4.445 ✓
7.	LINEAR WATER WAY	17.409	18.125
8.	NO. OF SPANS	1	1
9.	BED LEVEL	VARYING	VARYING
10.	LOADING STANDARDS	MBG	DFCC
11.	INVERT LEVEL OF DRAIN	-	94.213
12.	DANGER LEVEL	96.888	96.888
13.	REFERENCE BENCH MARK AS TAKEN @A1	-	-
14.	FOUNDATION TOP LEVEL A1	-	92.200
15.	FOUNDATION TOP LEVEL A2	-	92.200

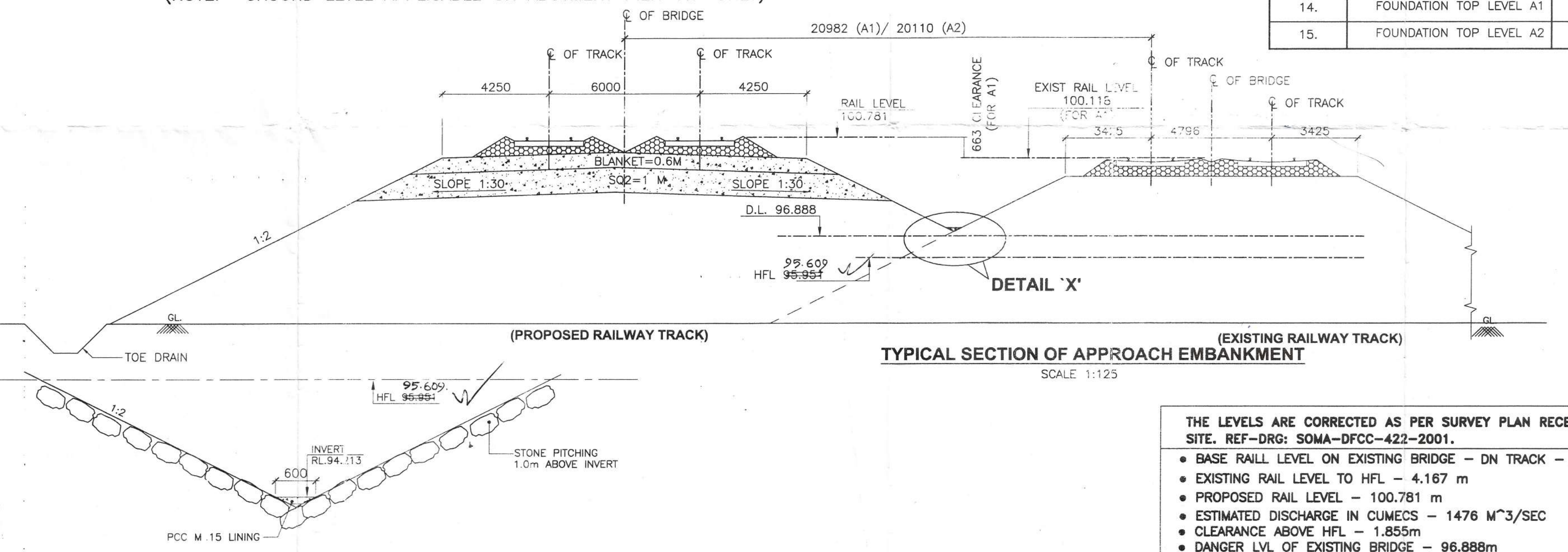


PLAN AT SUPER-STRUCTURE

PLAN AT SUB-STRUCTURE

PLAN

SCALE 1:250



TYPICAL SECTION OF APPROACH EMBANKMENT

SCALE 1:125

DETAIL - 'X'

SCALE 1:50

- THE LEVELS ARE CORRECTED AS PER SURVEY PLAN RECEIVED FROM SITE. REF-DRG: SOMA-DFCC-422-2001.
- BASE RAIL LEVEL ON EXISTING BRIDGE - DN TRACK - AT ABUTMENT A1- 100.118m
 - EXISTING RAIL LEVEL TO HFL - 4.167 m
 - PROPOSED RAIL LEVEL - 100.781 m
 - ESTIMATED DISCHARGE IN CUMECs - 1476 M³/SEC
 - CLEARANCE ABOVE HFL - 1.855m
 - DANGER LVL OF EXISTING BRIDGE - 96.888m
 - SOFFIT LVL OF EXISTING BRIDGE - 97.806m

DESIGN CRITERIA :

- I.R.S. BRIDGE RULES
- I.R.S. CONCRETE BRIDGE CODE
- I.R.S. BRIDGE SUB-STRUCTURE AND FOUNDATION CODE
- I.R.S. SCHEDULE OF DIMENSIONS FOR DEDICATED FREIGHT CORRIDOR.
- MANUAL ON THE DESIGN AND CONSTRUCTION OF WELL AND PILE FOUNDATIONS.
- LOADING STANDARDS: DFCC LOADING 2007
- I.R.S. BRIDGE MANUAL

TYPICAL NOTES: 1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METER. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED. 2. SHOWN DIMENSIONS ARE TENTATIVE AND MAY CHANGE AFTER FINAL STRUCTURAL DESIGN. 3. THIS DRAWING IS BASED ON TOPOGRAPHIC, HYDROGRAPHIC SURVEY (AS APPROVED BY CPM/SURAT) AND GEOTECHNICAL INVESTIGATION CARRIED OUT AT SITE BY M/S. SOMA ENTERPRISE. 4. DELETED. 5. THE DRAWING AND DESIGN IS AS PER EMPLOYER'S REQUIREMENTS & SPECIFICATIONS AS CONTAINED IN THE CONTRACT AGREEMENT NO. H2 / EN / WC / BRIDGES / D&B / 1 / SOMA AND THERE IS NO CHANGE. 6. SAFETY AND PROTECTION OF THE PROPOSED WORK AND SAFETY AND PROTECTION FOR THE RUNNING TRAINS ON THE EXISTING LINES IS TO BE ENSURED BY THE CONTRACTOR. 7. EXCAVATION/DISMANTLING OF ANY PORTION OF THE EXISTING BRIDGE OR IN ITS VICINITY OR ANY ELEMENT OF EXISTING PERMANENT WAY OR ANY WORK AFFECTING SAFETY OF THE EXISTING BRIDGE / PERMANENT WAY OR SAFETY OF THE RUNNING TRAINS WILL REQUIRE APPROVAL OF THE CONCERNED ZONAL RAILWAY AND COMPLIANCE OF THE SAFETY REQUIREMENT AS DIRECTED BY THE CONCERNED ZONAL RAILWAY. 8. ANY DISCREPANCIES MUST BE BROUGHT TO THE NOTICE OF THE DRAWING APPROVING AUTHORITY BEFORE EXECUTION OF WORK AT SITE. 9. FOUNDATION DEPTH AS SHOWN IN THE GAD IS TENTATIVE & MAY BE ALTERED AS PER DESIGN, REQUIREMENT, FINAL DEPTH SHALL BE INDICATED IN THE STRUCTURAL DRAWING. ANY ALTERATION / MODIFICATION REQUIRED DURING CONSTRUCTION STAGE WILL REQUIRE PRIOR APPROVAL OF DESIGN APPROVING AUTHORITY. 10. WEEP HOLE TO BE PROVIDED IN WING WALL/RETURNS AS PER IRS SUB-STRUCTURE CODE AND IRS CONCRETE BRIDGE CODE (MINIMUM 1200 PVC PIPES @1.5m SPACING BOTH WAYS) REF. CL. NO. 3.6 OF SPECIFICATIONS VOL-III. 11. EARTH FILLING BETWEEN THE EXISTING RAILWAY FORMATION AND PROPOSED DFCC FORMATION AS MARKED 'X' IN THE DRAWING TO BE KEPT ABOVE HFL. 12. EARTH WORK ON APPROACHES ON THE BRIDGES SHALL BE AS PER DFCC'S SPECIFICATION REF. CL. NO. 2.1 TO 2.20 VOL-III. 13. FOR BANK HEIGHT MORE THAN 5 M ADEQUACY OF BANK IS TO BE CHECKED BY DOING APPROPRIATE SLOPE STUDY ANALYSIS AND PROVIDE SUITABLE STRENGTHENING OR OTHER ARRANGEMENT TO MAKE BASE STRUCTURALLY SAFE. 14. PROPER BENCHING ON EXISTING FORMATION TO BE DONE BEFORE EXECUTION OF EARTHWORK FOR DFCC'S FORMATION. 15. BEHIND ABUTMENTS, WING WALLS AND RETURN WALLS BACK FILL MATERIAL SHALL BE PROVIDED AS PER DFCC'S SPECIFICATION REF. CL. NO. 3.5.7 AND 3.5.8 OF SPECIFICATIONS VOL - II & WITH MINIMUM 0 VALUE OF 35° 16. STONE PITCHING ON SLOPES OF BANK ON APPROACHES OF BRIDGE SHALL BE PROVIDED UPTO 300 MM ABOVE HFL DEPENDING UPON THE SITE CONDITION. 17. FOR TRANSITION SYSTEM ON APPROACH OF BRIDGES REFER SEPARATE DRG. 18. FOR BORE HOLE DETAILS REFER: SOMA/DFCC/551. 19. DELETED. 20. BEARING CAPACITY TO BE ASCERTAINED BY CONDUCTING INITIAL LOAD TEST AND WORKING LOAD TEST AT EACH SUB STRUCTURE LOCATION AND REPORTS SUBMITTED TO DESIGN CELL FOR APPROVAL BEFORE TAKING UP CONSTRUCTION. 21. FORMATION LEVEL/GROUND LEVEL/HFL/ DISCHARGE/ VERTICAL CLEARANCE/FREEBOARD/C.L. DISTANCE OF BRIDGES AS CERTIFIED BY CPM/SURAT. 22. CONSTRUCTION METHODOLOGY STATEMENT IN TERMS OF CLAUSE 4.2 (g) (iv) OF EMPLOYERS REQUIREMENT SHOULD BE PREPARED AND SUBMITTED FOR APPROVAL BEFORE EXECUTION OF WORKS. 23. WORK WILL BE EXECUTED AS PER EMPLOYERS REQUIREMENT AND SPECIFICATION CONTAINED IN THE CONTRACT AGREEMENT. 24. MINIMUM GRADE OF CONCRETE : a. SUBSTRUCTURE - M40 b. FOUNDATION - M40 c. SUPER STRUCTURE - M50 d. WEARING COURSE - M35 25. THE OUTER SURFACE OF LINERS FOR TOP PORTION OF 10 M SHALL BE PAINTED WITH COAT TARI EPOXY PAINT WITH TOTAL DFT OF 140 MICRONS AS PER S.NO. 12 OF CLAUSE 8.3.1 OF EMPLOYER'S REQUIREMENTS FUNCTIONAL AND OUTLINE DESIGN. 26. NO. OF PILES SHOWN IN THIS GAD ARE TENTATIVE FOR DETAIL REFER RELEVANT STRUCTURAL DRAWING.					DRAWN BY KAMAL		CLIENT: DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.	
CONTRACTOR REVISION NO.					CHECKED BY HSG		PROJECT: WESTERN FREIGHT CORRIDOR : MAJOR BRIDGES BETWEEN VAITARNA AND UTRAN ON VASAI - BHARUCH SECTION	
CONTRACTOR : SOMA ENTERPRISE LTD. SOMA MERIT, 9, VENKATESHWAMY NAIDU STREET, TASKER TOWN, SHIVAJI NAGAR, BANGALORE - 560 051, KARNATAKA, INDIA. TEL. NO. : +91-80-4025 4545, FAX NO. : +91-80-2286 4545 E-mail : smab@somaprojects.com					VERIFIED BY NG		BRIDGE NO. : BRIDGE NO. 191 OF SURAT UNIT(EXT BRIDGE NO 422)	
CONSULTANTS : TANDON CONSULTANTS PVT. LTD. 17, LINK ROAD, JANGPURA EXTN, NEW DELHI - 110014. Tel : 24317684, 24319509, 24319288 Fax : 24316057 E-mail : tandon@tandon.com & tcpl_123@yahoo.com					30.08.2010		DRAWING TITLE : GENERAL ARRANGEMENT DRAWING OF 1x19.8m PSC BOX GIRDER BRIDGE AT km 252/13-15 ON HANUMAN KHADI	
CONTRACTOR REVISION NO.					REV. 6		STATUS : APPROVAL	
PARTICULARS					SCALE : AS SHOWN		SOMA-DFCC-422-C-1001	