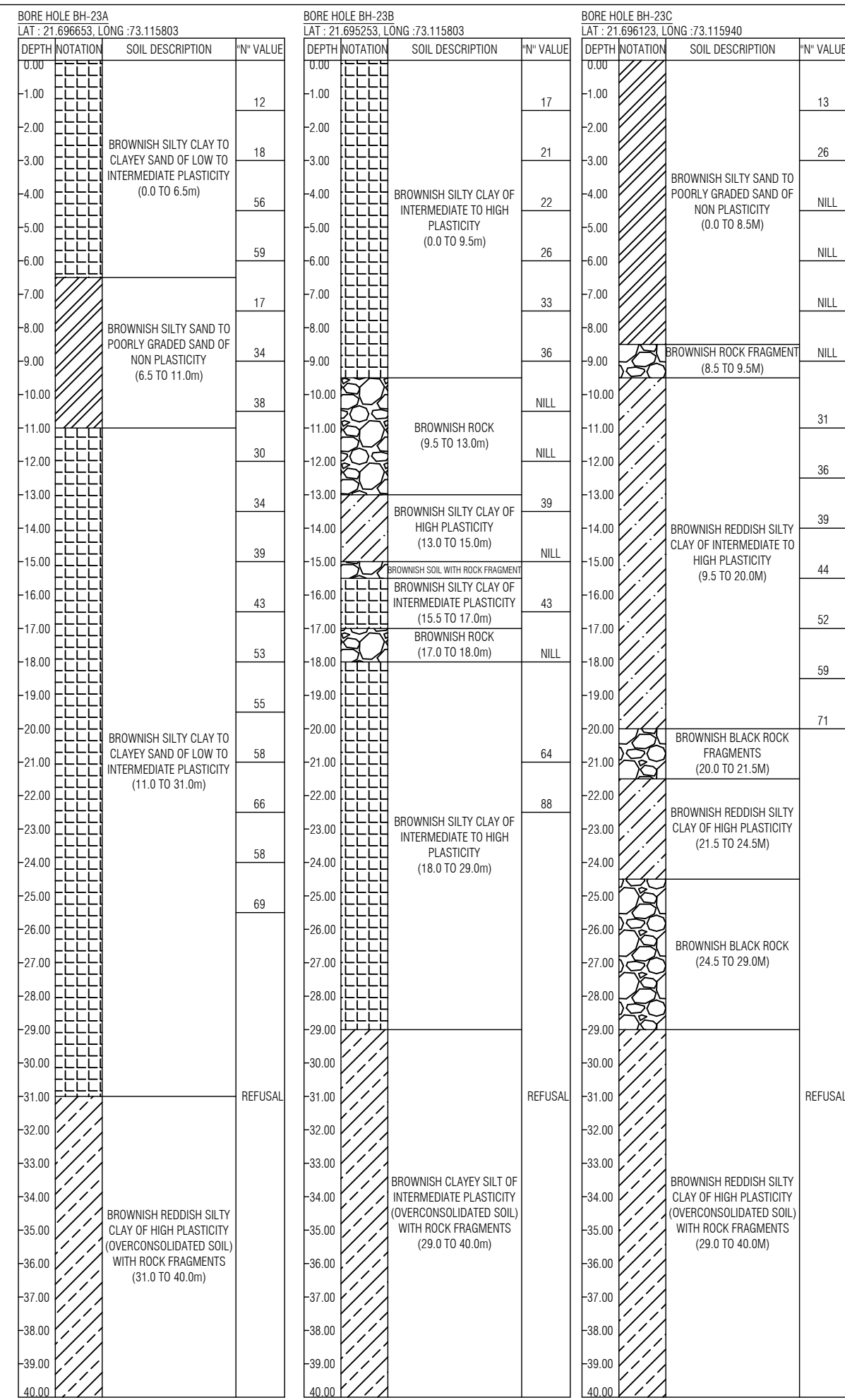


LEVEL TABLE								
LOCATION	F.R.L.	TOP OF PIER CAP / ABUTMENT CAP	BOTTOM OF PIER CAP / ABUTMENT CAP	HEIGHT OF PIER / ABUTMENT	BED LEVEL	TOP OF PILE CAP	BOTTOM OF PILE CAP	PILE TERMINATION LEVEL
A1	22.141	19.641	18.441	5.678	14.125	12.763	10.963	-14.037
P1	22.664	20.164	18.564	10.406	10.623	8.158	6.358	-18.642
P2	23.000	20.500	18.900	10.742	9.115	8.158	6.358	-18.642
P3	23.151	20.651	19.051	8.150	11.331	10.901	9.101	-15.899
A2	23.121	-	-	-	19.957	20.621	18.821	-6.179



- 1) GENERAL:
A) ALL DIMENSIONS ARE IN MILLIMETER & LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.
B) WRITTEN DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWING.
C) DESIGN CRITERIA:
THE DESIGN IS ACCORDING TO THE FOLLOWING CODES:
a. IRC: 78-2020
b. SP: 13-2022
c. IRC: 8-2017
d. IRC: 112-2020
e. IRC: 63-2018(PART-II)
f. IRC: 114-2018
D) THE DESIGN ARE APPLICABLE FOR "SEVERE" EXPOSURE CONDITIONS & SEISMIC ZONE III.
E) THE STRUCTURE DESIGN FOR:
1. ONE LANE OF CLASS TOR-ONE LANES OF CLASS A
2. THREE LANES OF CLASS A
3. IRC 3V LOADING
F) WIND LOAD DETAILS CONSIDERED IN DESIGN:
1. BASIC WIND SPEED - 44 m/sec
TYPE OF TERRAIN - PLAIN TERRAIN
2) CONCRETE:
A) TO IMPROVE WORKABILITY OF CONCRETE, ADMIXTURE CONCRETE FORMING TO IS:8925 AND IS:9103 MAY BE PERMITTED SUBJECTED TO SATISFACTORY PROVEN USE, ADMIXTURES GENERATING HYDROGEN,
3) REINFORCEMENT:
A) REBC STEEL F650D CONFIRMING TO IS:1786-2008. SPECIFICATION.
4) WATER:
A) WATER TO BE USED IN CONCRETING AND CURING SHALL CONFORM TO CLAUSE 18.4.5 OF IRC 112-2020.
5) BEARING:
ELASTOMERIC BEARINGS SHALL BE CONFORM TO IRC: 83-2018 (PART-II)
6) EXPANSION JOINT:
A) MODULAR TYPE EXPANSION JOINT SHALL BE USED. THE EXPANSION JOINTS MUST BE ROBUST, DURABLE, WATER TIGHT AND REPLACEABLE IT MUST BE PROVIDED OVER THE FULL WIDTH OF SUPER STRUCTURE INCLUDING KERB AND FOOTPATH FOLLOWING THE PROFILE OF THE SAME. (WHERE RELEVANT) EXPANSION JOINTS SHALL BE OBTAINED ONLY FROM APPROVED MANUFACTURES AND BE OF PROVEN TYPE. DETAILS OF EXPANSION JOINT MAY BE GOT APPROVED BEFORE COMMENCEMENT OF CONSTRUCTION. SITE BLOCKS SHALL ONLY BE USED.
7) WORKMANSHIP/DETAILING:
A) FOR ENSURING PROPER COVER OF CONCRETE TO REINFORCEMENT SPECIALLY MADE POLYMER COVER BLOCKS SHALL ONLY BE USED.
B) CONCRETE GRADE:
NO. DESCRIPTION GRADE OF CONCRETE GRADE OF STEEL
01 PSC GIRDER M45
02 ABUTMENT M35
03 ABUTMENT PILE M35
04 ABUTMENT CAP M35
05 PIER M35
06 PIER PILE M35
07 PIER CAP M35
08 SEISMIC RESTRIER M40
09 LEVELING COURSE M15
10 APPROACH SLAB M35
11 WEARING COURSE M40
CONFIRMING TO IS:1786-2008
C) BONDING OF REINFORCEMENT BARS SHALL BE AS PER IS:2402.
D) PROPER COMPACTION OF CONCRETE SHALL BE ENSURED BY USE OF FORM AND/OR NEEDLE VIBRATORS. USE OF FULL WIDTH ACCEDED VIBRATORS FOR COMPACTION OF CONCRETE IN DECK SLAB SHALL BE ENSURED.
E) SHUTTERING PLATES SHALL SUITABLY BE STIFFENED TO ENABLE THE COMPACTION BY FORM VIBRATORS.
F) BACKFILL MATERIAL BEHIND END WALL SHALL BE SELECTED SOIL HAVING PROPERTIES AS C-100/Sp. 8-30, DENSITY OF EARTH FILL $\gamma = 18 \text{ kN/m}^3$ IT SHALL BE CONFIRM WITH IRC-78-2014.
9) SPECIFICATIONS:
A) THE WORK SHALL BE EXECUTED IN ACCORDANCE WITH MORTH (5TH REV) SPECIFICATION FOR ROAD & BRIDGE WORKS.
10) DRAINAGE SPOUT:
A) THE SPOUT SHALL OF 100mm DIA. @ 5.0m C/C AND MADE UP OF CORROSION RESISTANT MATERIAL.
B) DRAINAGE SPOUTS AS PER MORTH STANDARD DRG NO. SD/303.
11) IF ANY DISCREPANCY IS FOUND BETWEEN BORE HOLE DATA OF SOIL INVESTIGATION REPORT AND SITE SAME SHALL BE IMMEDIATELY REPORTED TO ENGINEER IN CHARGE.
12) BED LEVEL SHOULD BE CHECKED WITH GAD BEFORE EXECUTION AT SITE. IF ANY DISCREPANCY FOUND, IMMEDIATELY BROUGHT IT TO THE NOTICE OF DESIGN ENGINEER FOR NECESSARY MODIFICATION IN THE DRAWING.
13) FRL & CHANGES WILL BE SUBJECTED TO CORRESPONDING CHANGES IN APPROVED PLAN & PROFILE DRAWING.
14) IF ANY DISCREPANCY FOUND IN GAD & AT SITE CONDITION THE CONTRACTOR/CIENT SHALL MUST INFORM TO DESIGN CONSULTANT BEFORE EXECUTION OF WORK.
15) SIZE OF PER ABUTMENT / PIER CAP / BEARING, ORDER & PROFILES SHOWN IN THIS DRG. ARE TENTATIVE, AND ARE SUBJECT TO CHANGE IN FINAL DESIGN & DRAWING AS PER REQUIREMENT.
16) WEEP HOLES SHALL BE 100mm Ø PVC @ 1000mm C/C IN STAGGERED FASHION.
17) ADMINISTRATIVE APPROVAL FOR PROPOSED WORK WAS GIVEN BY GGS VIDE THEIR LETTER NO. PRG/10/2024/8/5/C.
18) GEO GRID SHALL BE PROVIDED BEHIND APPROACH SLAB AS PER GR OF NO. PRG/H102020/1293/C DATED: 17/02/2021.
19) SOIL ENGINEERING WAS CARRIED OUT BY: GEO DESIGN AND RESEARCH PRIVATE LIMITED AND SOIL INVESTIGATION REPORT WAS SUBMITTED TO EXECUTIVE ENGINEER, RAJPIPA (R&B) DIVISION, RAJPIPA. VIDE REPORT NO.: 6024-12004

HYDRAULIC DATA	
A) CATCHMENT AREA	115.00 SQ.KM
B) DESIGN DISCHARGE	1802.38 CUM/SEC
C) HFL	18.161m
D) AFFLUX	0.200m
E) AHFL	18.361m
F) RUSSGITY CO-EFFICIENT	0.035
G) OBSTRUCTED VELOCITY	3.42m/s

STRUCTURAL AND OTHER DATA	
A) SPAN ARRANGEMENT	A SPAN OF 25m C/C OF PIER
B) SUB STRUCTURE	FOUNDATION, PIERS, RCC ABUTMENT, RETAINING WALL
C) BEARING/SUPPORT	ELASTOMERIC BEARING
D) SUPER STRUCTURE	PSC-I GIRDER
E) WEARING COAT	100mm THICK RCC WEARING COAT
F) EXPANSION JOINT	40mm MODULAR TYPE EXPANSION JOINT
G) WATER SPOUTS	AT 5m C/C
H) RAILINGS	RCC CRASH BARRIER

ROAD AUTHORITY :

CONSULTANT

DY. EXECUTIVE ENGINEER,
CITY (R&B) SUB DIVISION
BHARUCH

EXECUTIVE ENGINEER
BHARUCH (R&B) DIVISION
BHARUCH

CLIENT:- EXECUTIVE ENGINEER, DISTRICT (R&B) DIVISION, BHARUCH

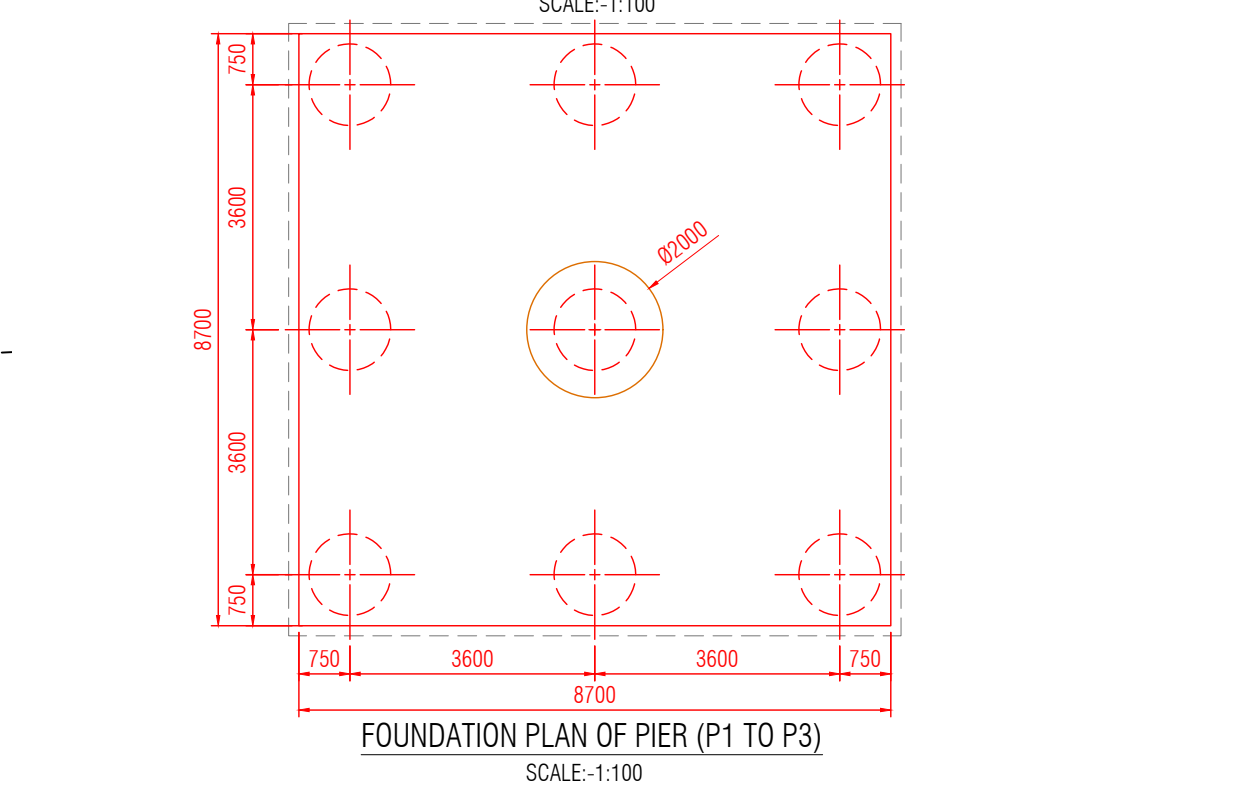
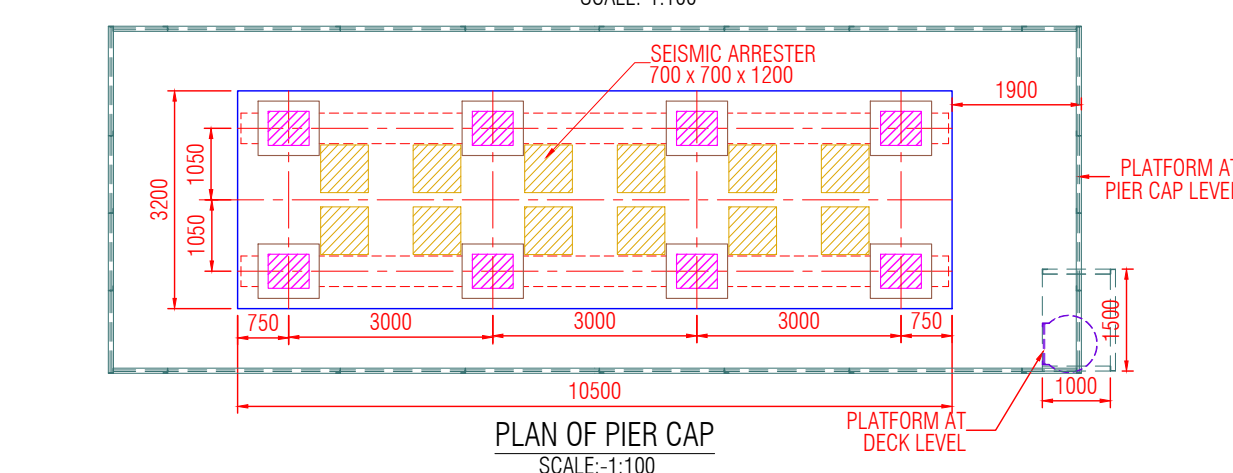
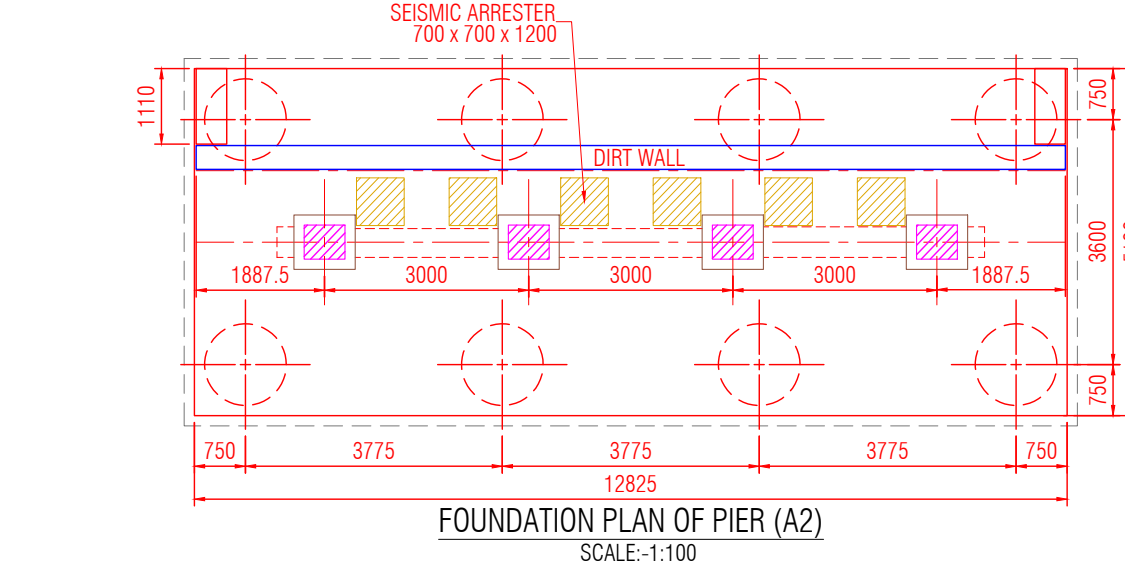
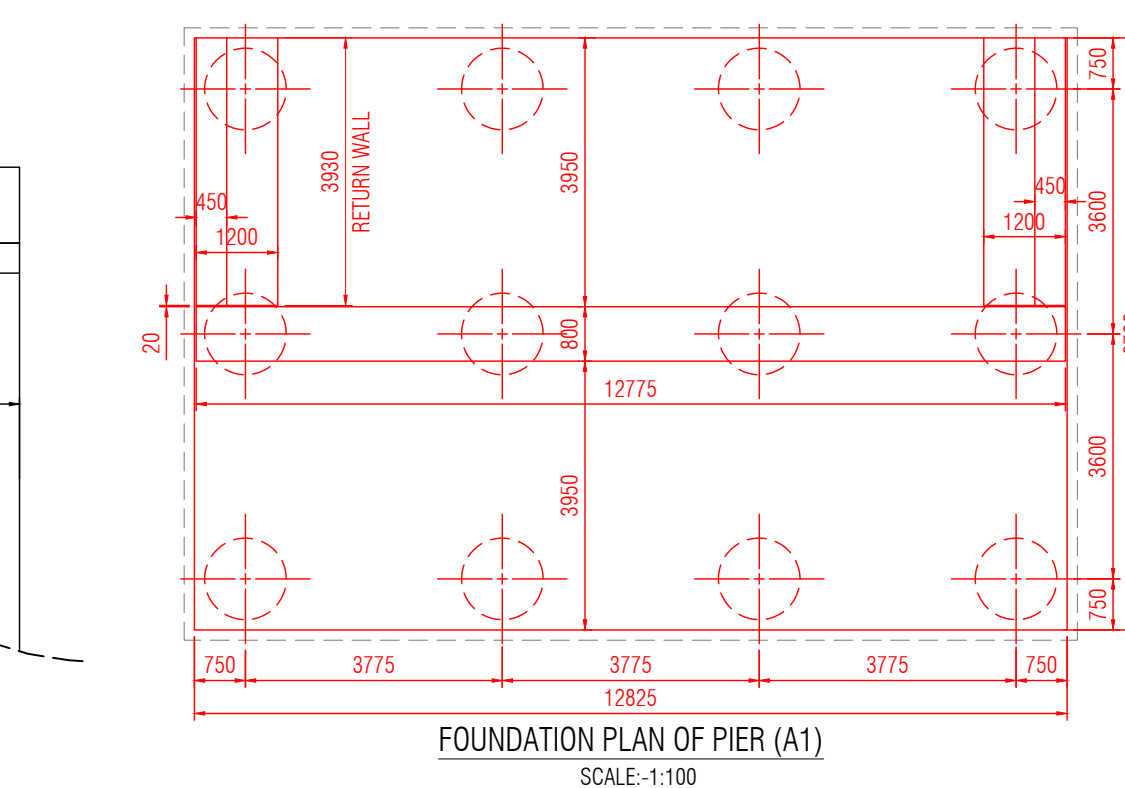
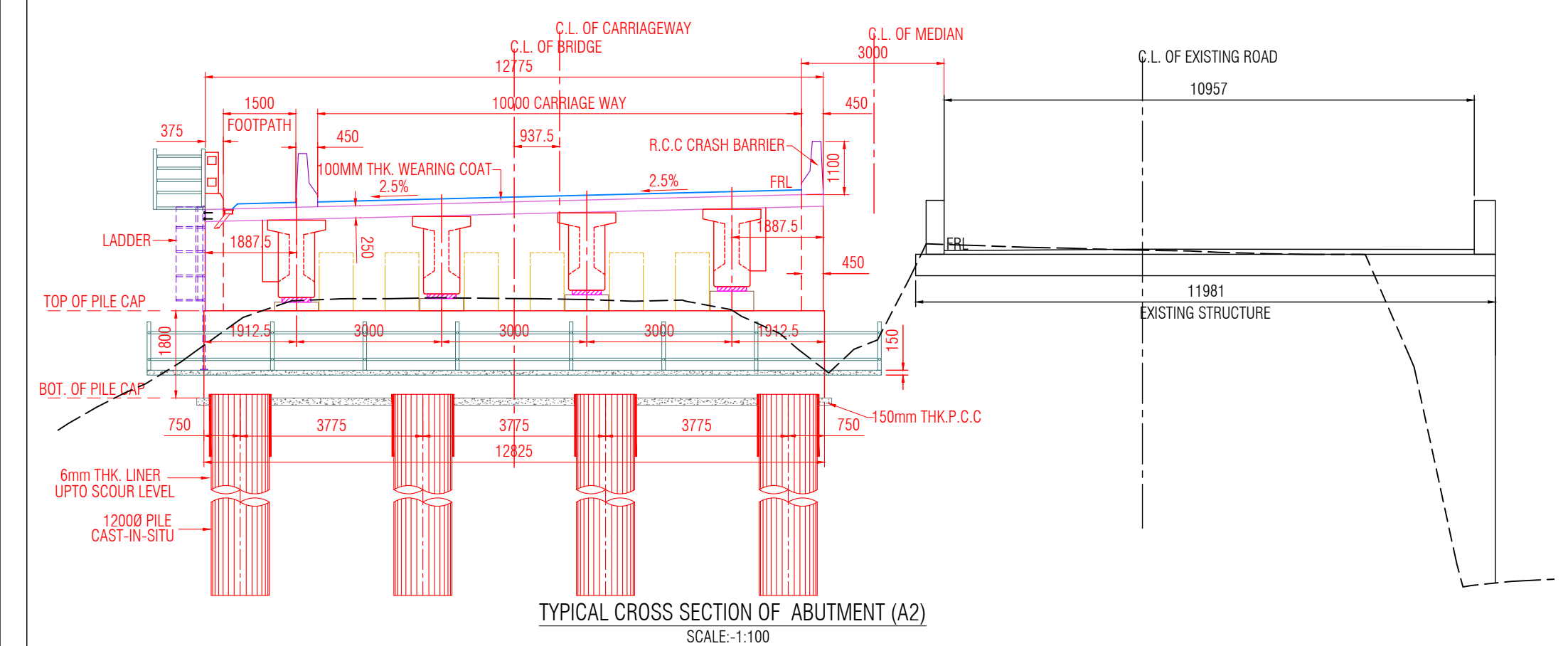
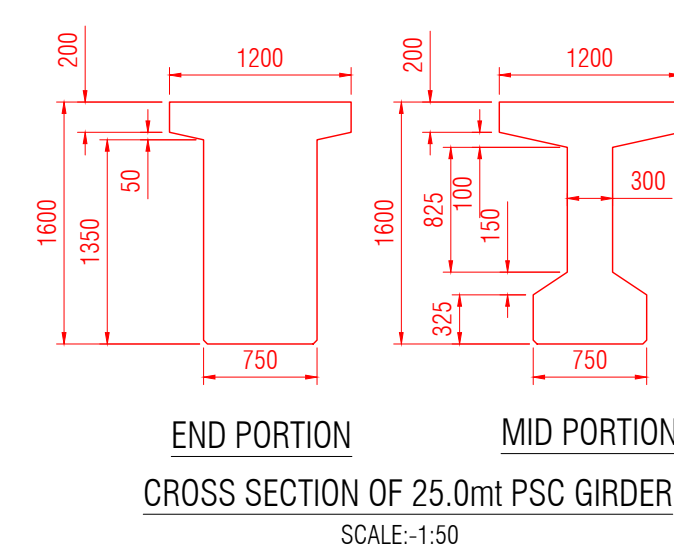
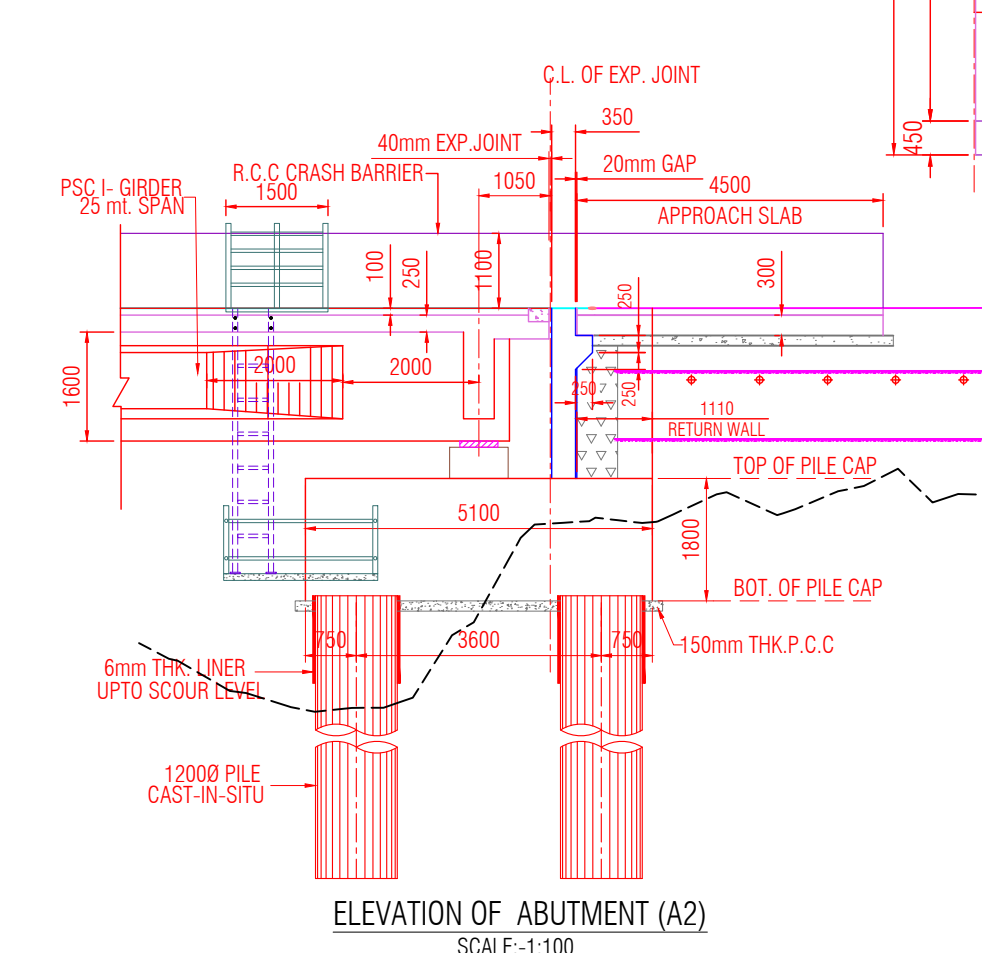
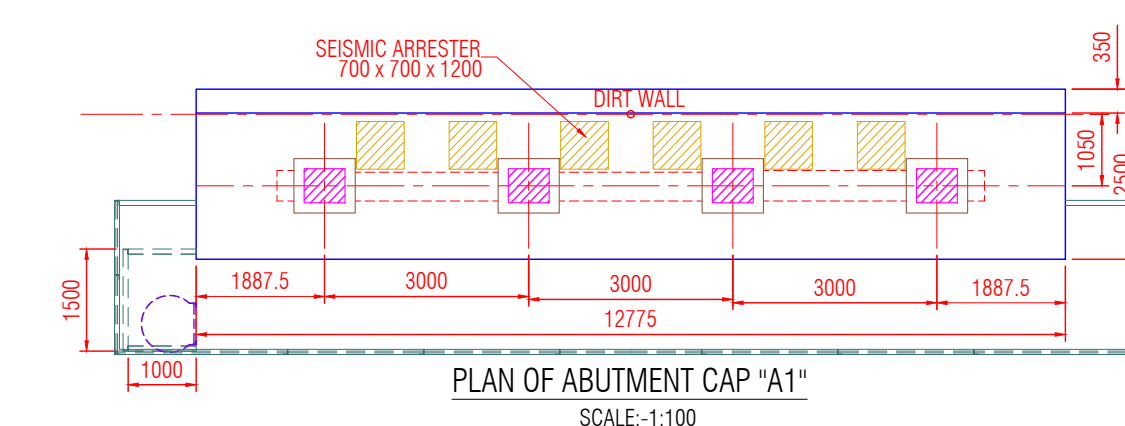
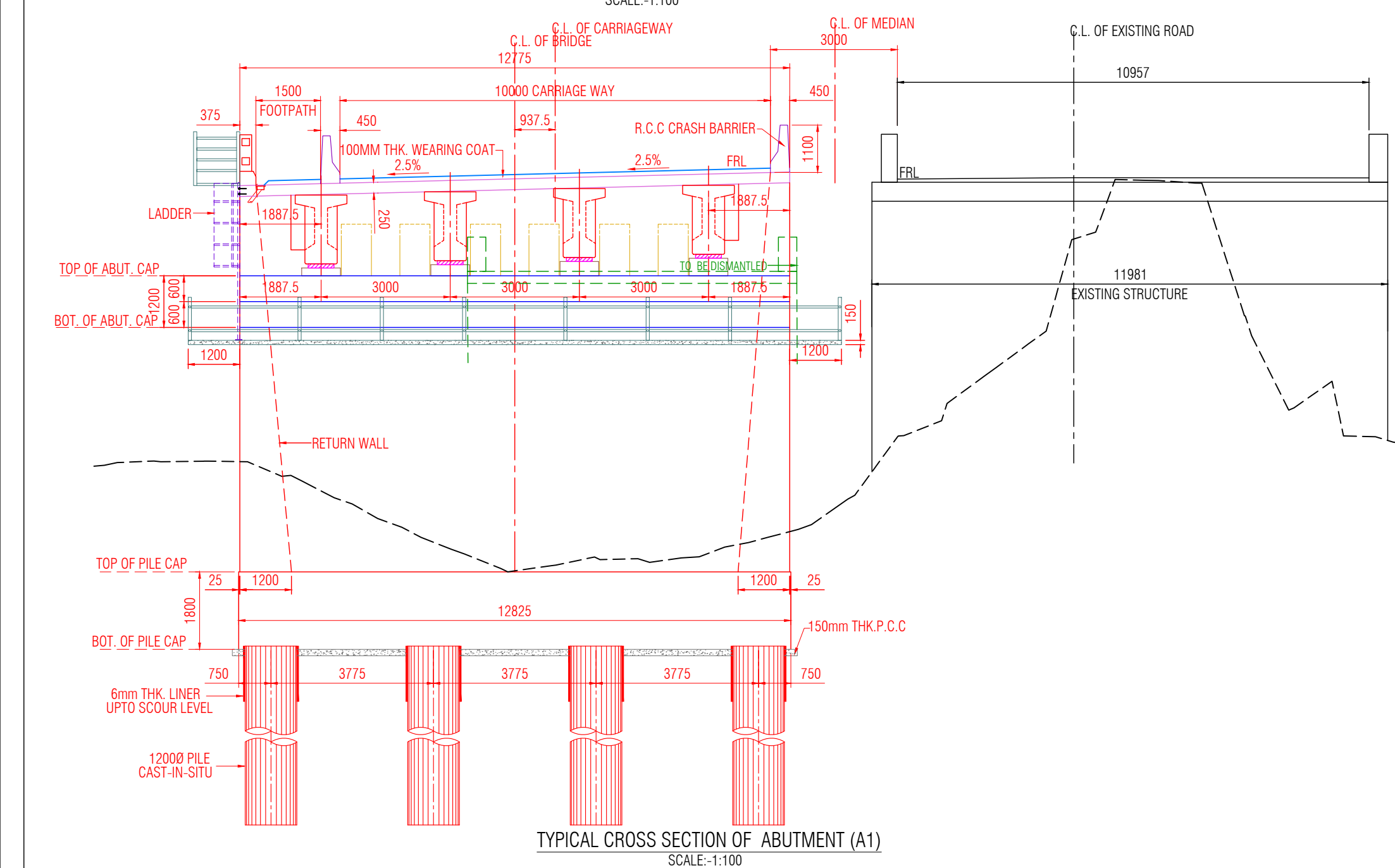
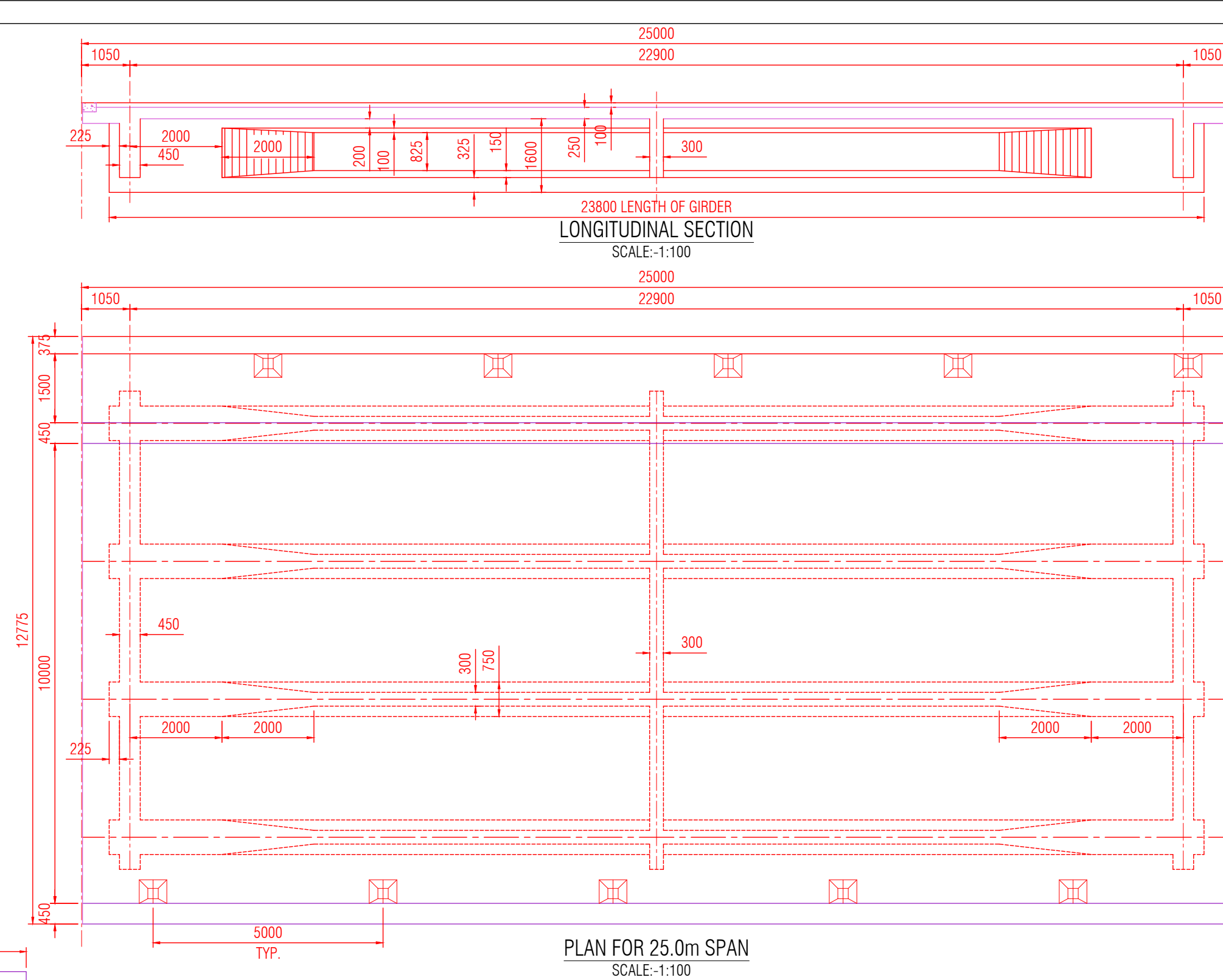
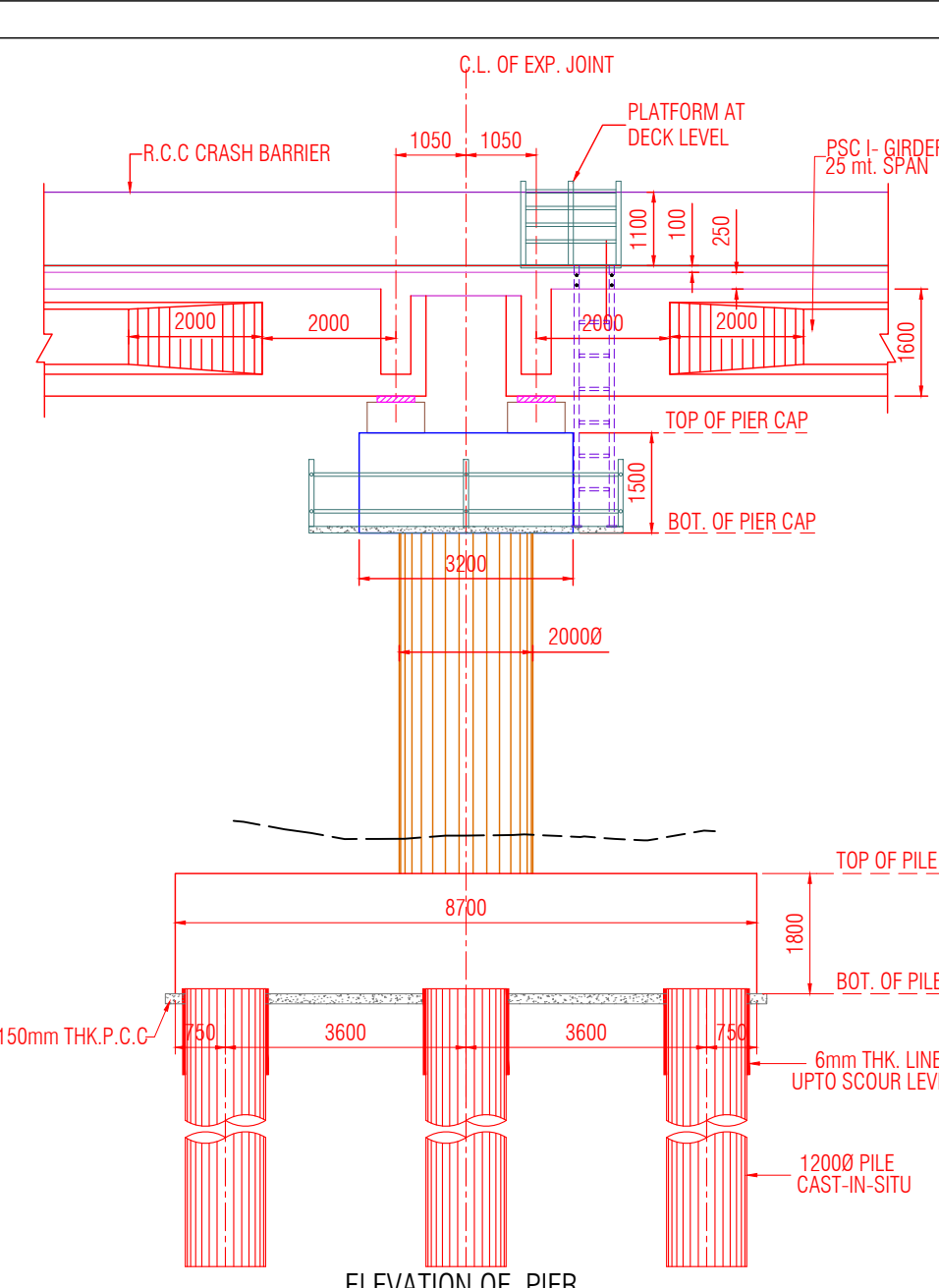
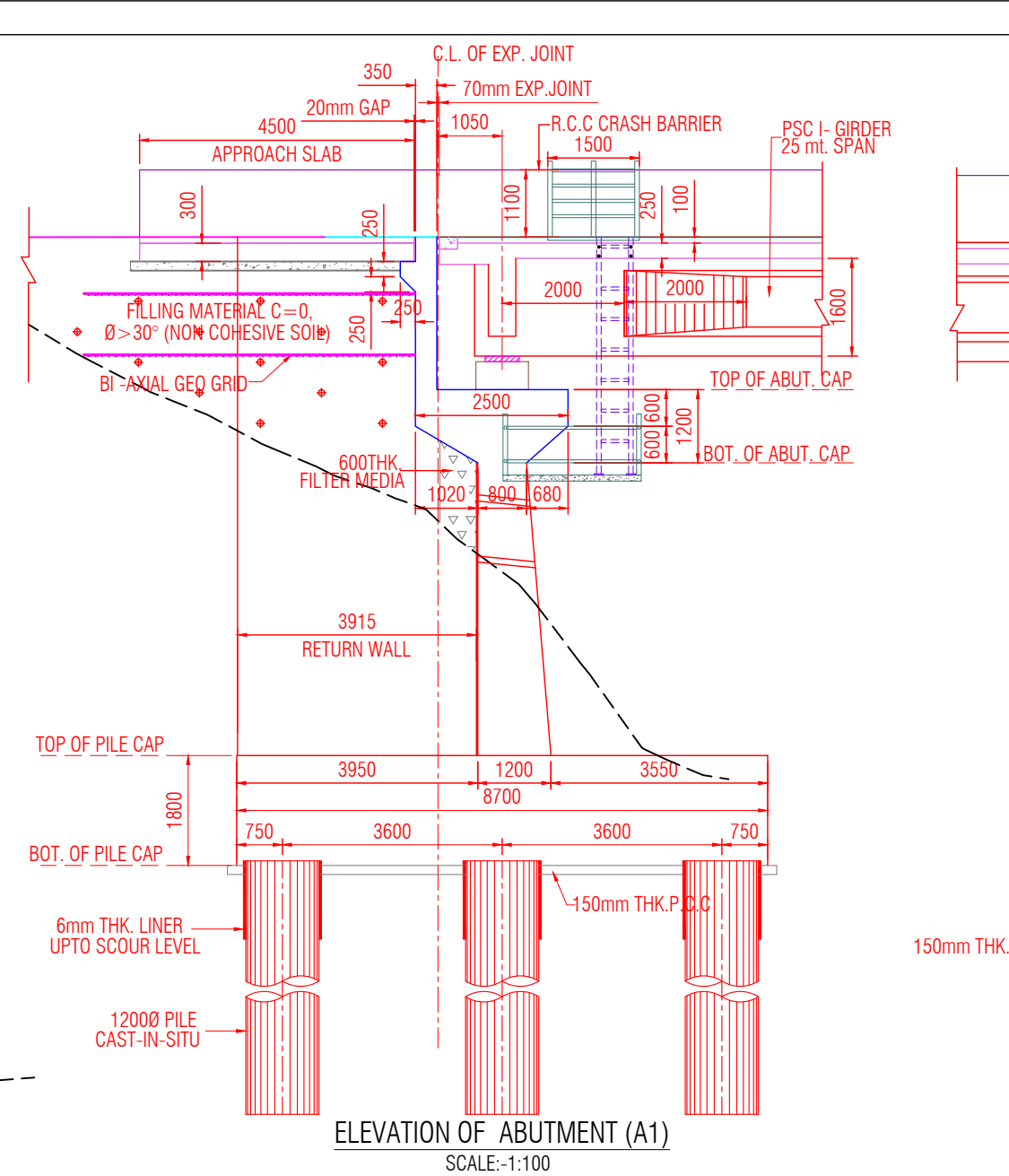
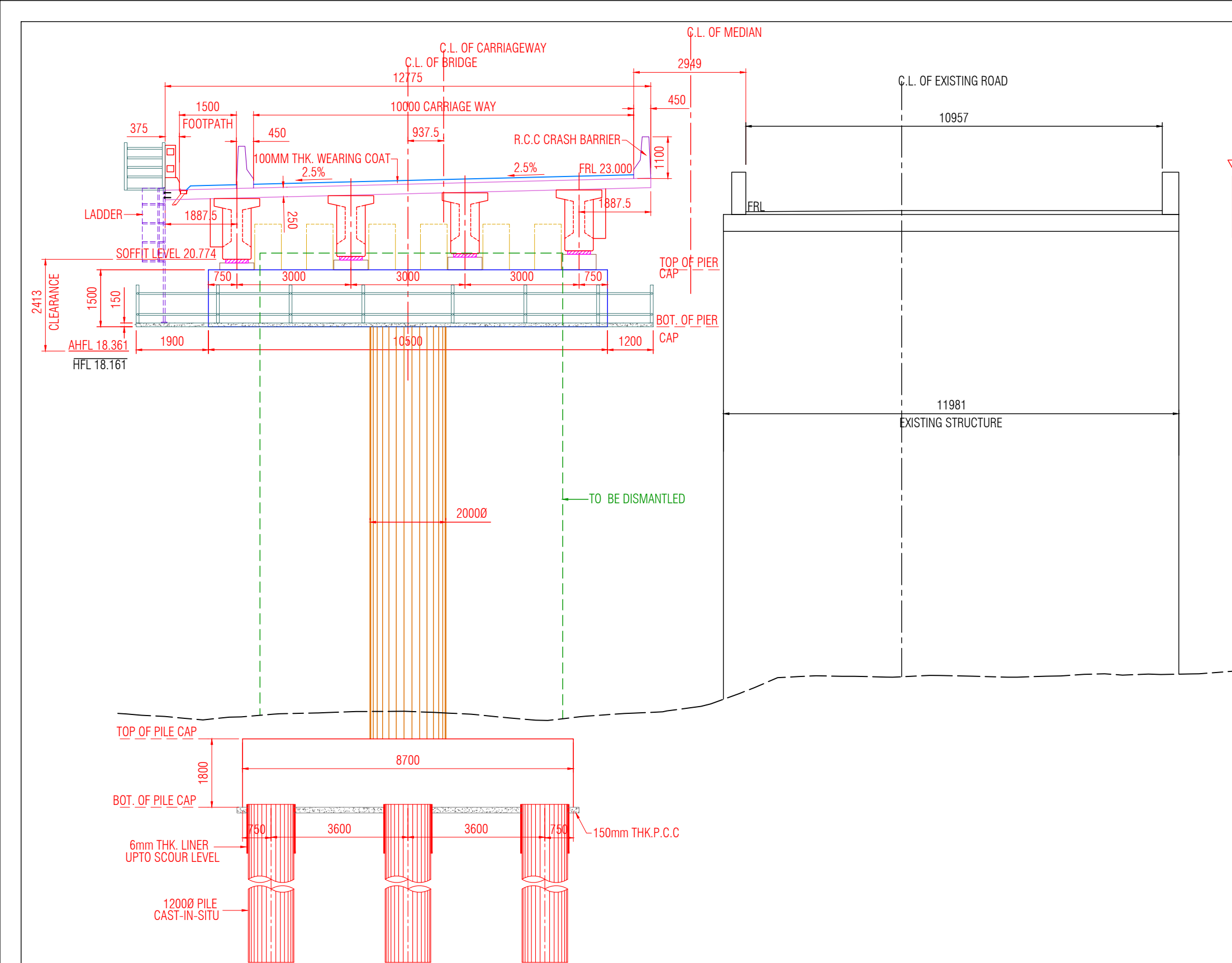
NAME OF WORK:-
RECONSTRUCTION OF MAJOR BRIDGE AT CH. 14+720 ON
ANKLESHWAR-RAJPIPA STATE HIGHWAY (SH-64) IN BHARUCH DISTRICT IN
THE STATE OF GUJARAT

TITLE:- GENERAL ARRANGEMENT DRAWING OF MAJOR BRIDGE AT
(4x25.0m SPAN)

CONSULTANT :-
GEO DESIGN & RESEARCH (P) LTD.


B/10, KRISHNA INDUSTRIAL ESTATE,
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PREPARED BY	SHARIK (S ENGINEER)	DRG NO.	16/001/MJB/14+720/01 OF 02	Rev	16/001/334
DESIGNED BY	FAKHRUDDIN DHILAWALA (MANAGER DESIGN)	DATE	30-12-2025		
CHECKED BY	MEHUL PATEL (DESIGN DIRECTOR)	JOB NO.			



ROAD AUTHORITY :

CLIENT:- EXECUTIVE ENGINEER, DISTRICT (R&B) DIVISION, BHARUCH
NAME OF WORK:- RECONSTRUCTION OF MAJOR BRIDGE AT CH. 14 + 720 ON ANKLESHWAR-RAJPIPLA STATE HIGHWAY (SH-64) IN BHARUCH DISTRICT IN THE STATE OF GUJARAT
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& RESEARCH (P) LTD.**

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PREPARED BY	SHARIK (Sr.ENGINEER)	DRG NO.	16/001/MJB/14+720/02 OF 02	Rev
DESIGNED BY	FAKHRUDDIN DHILAWALA (MANAGER DESIGN)	DATE	30-12-2025	
CHECKED BY	MEHUL PATEL (DESIGN DIRECTOR)	JOB NO.		

CONSULTANT

DY. EXECUTIVE ENGINEER
 CITY (R&B) SUB DIVISION
 BHARUCH

EXECUTIVE ENGINEER
BHARUCH (R&B) DIVISION
BHARUCH