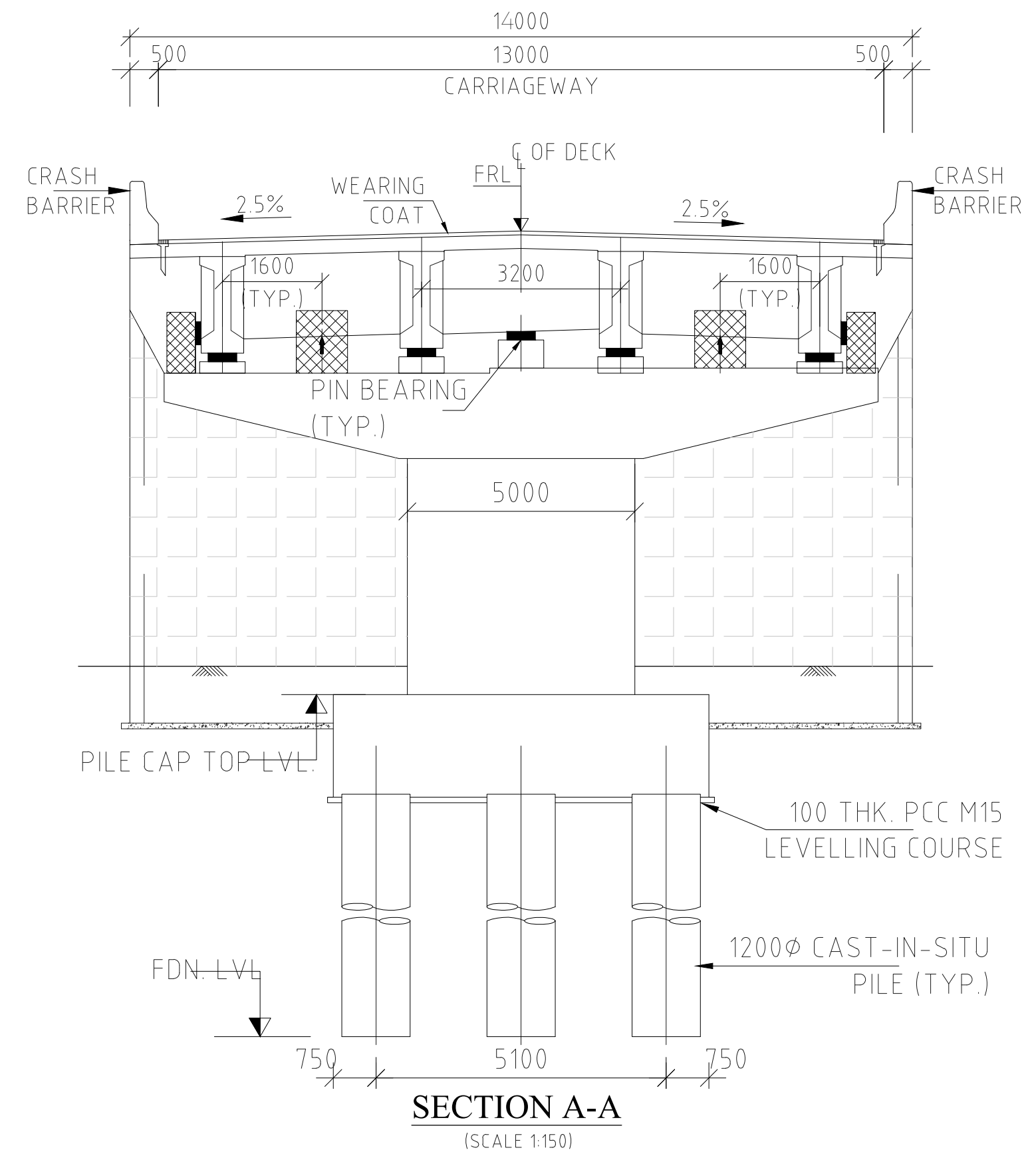
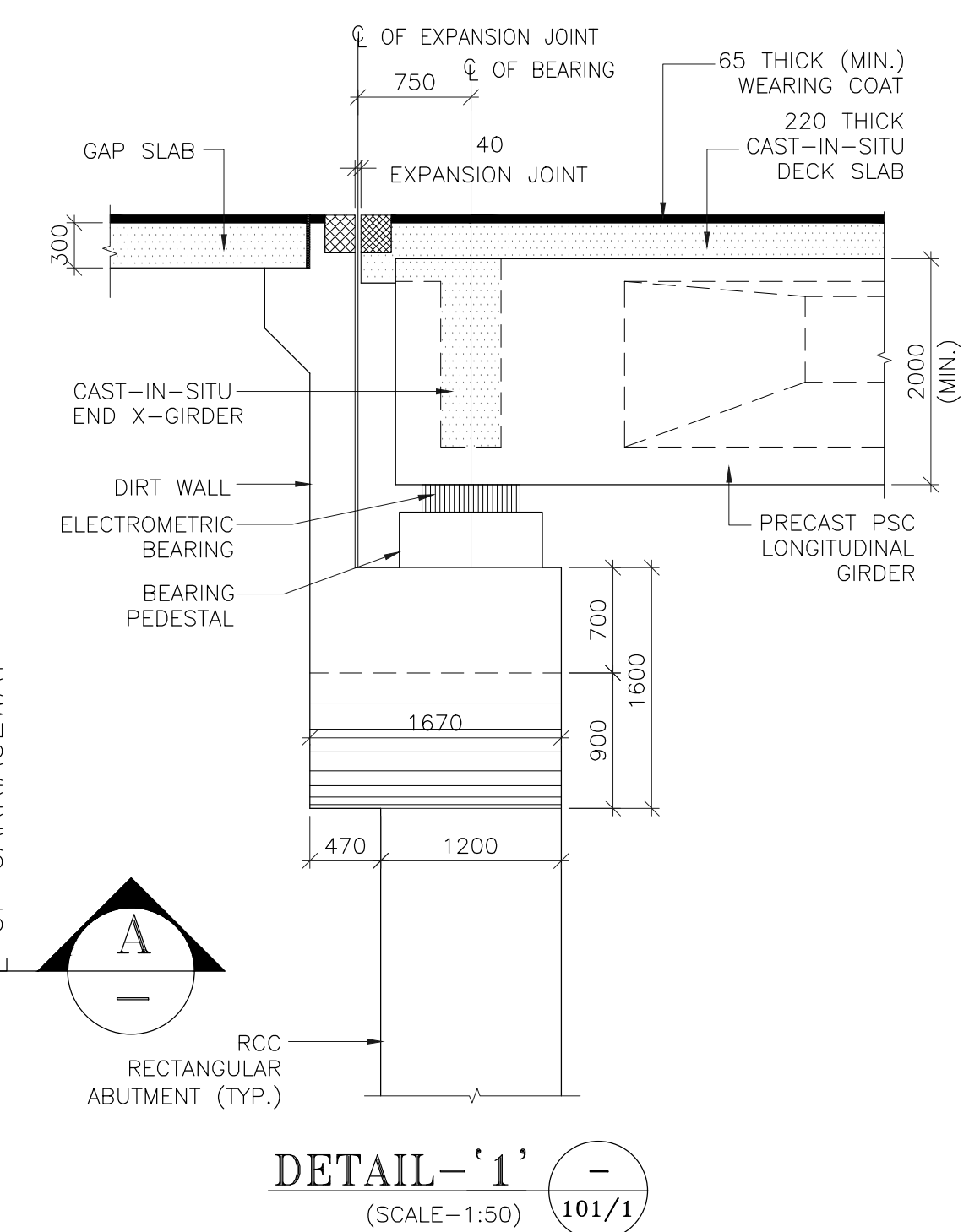
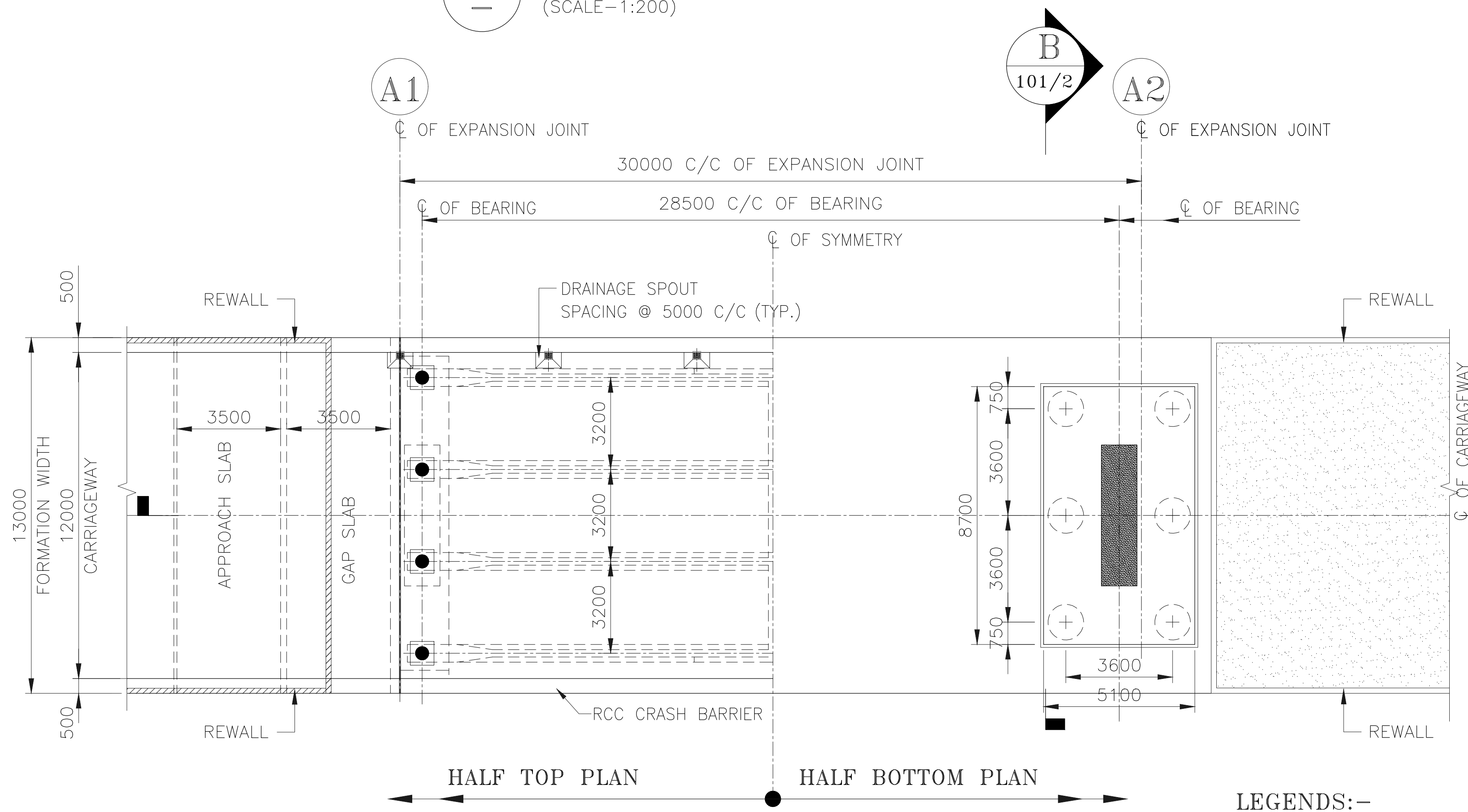
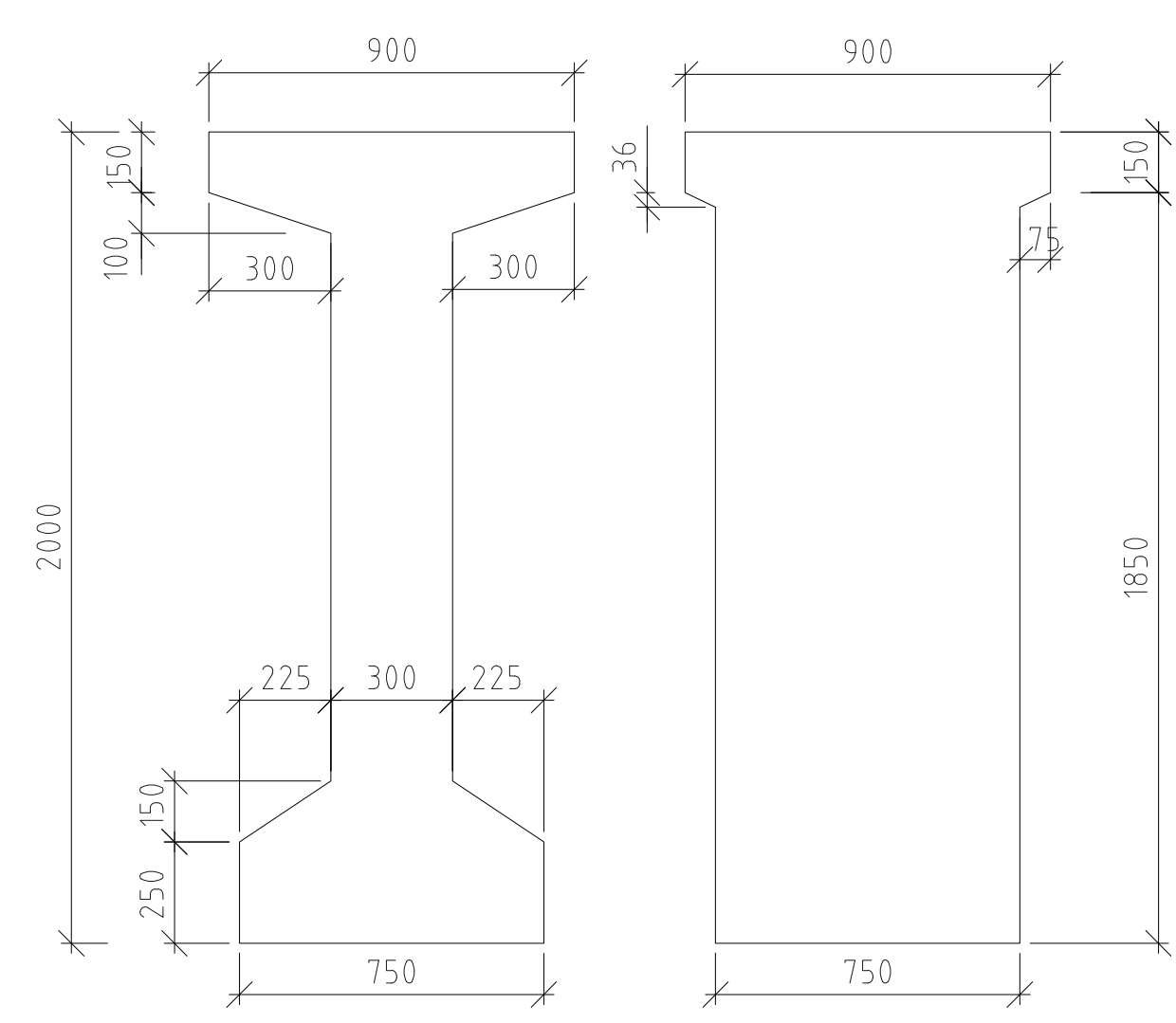
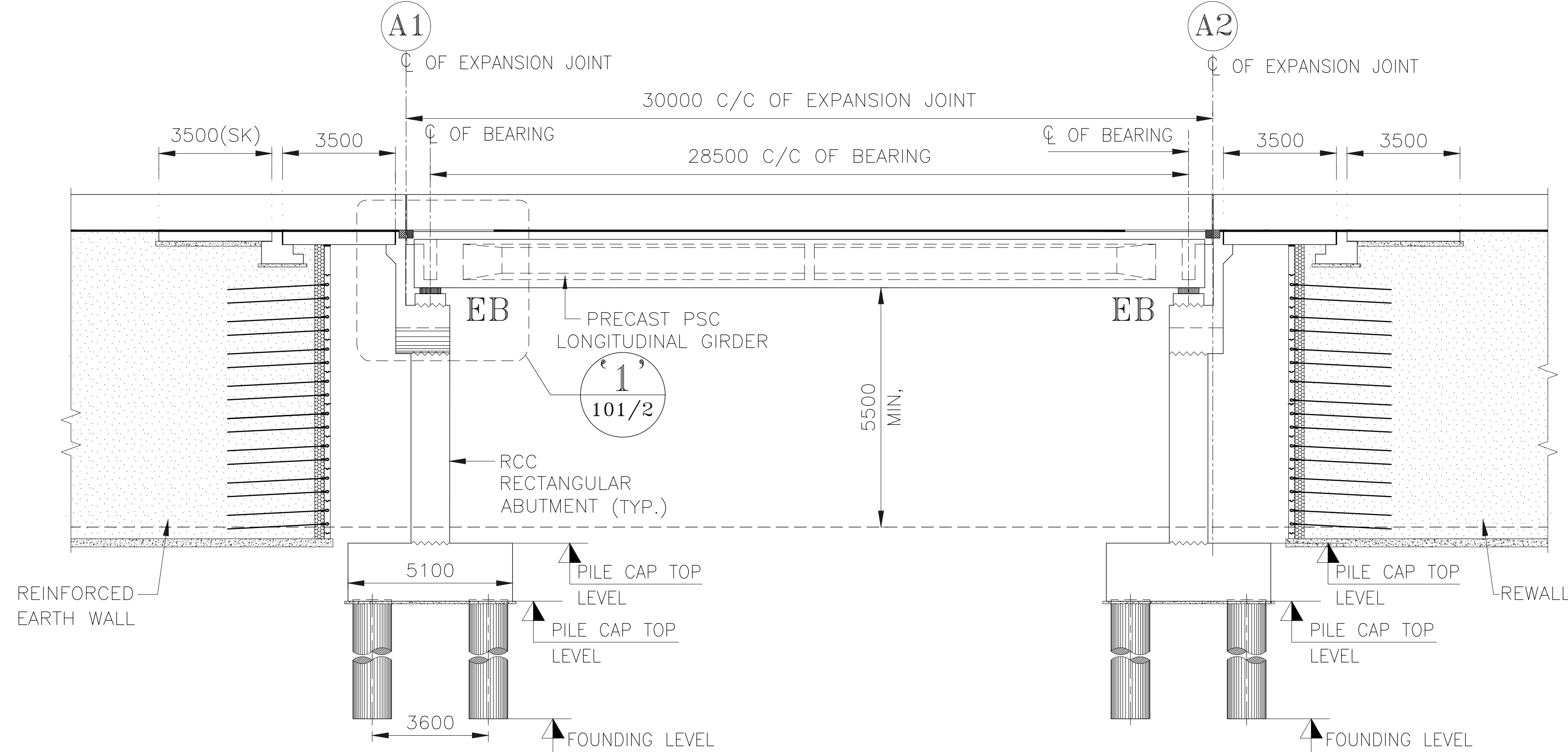


General Arrangement

Drawings (GAD)




- ALL DIMENSIONS ARE IN MILLIMETERS, LEVELS ARE IN METERS. AND CHAINAGE ARE IN KILOMETERS. UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE RELEVANT PLAN AND PROFILE DRAWING OF ROAD.
- CONCRETE GRADE
 - PEDESTAL/SEISMIC RESTRAINER-----M45
 - PIER-----M45
 - ABUTMENT -----M40
 - PIER CAP, DIRT WALL -----M40
 - PILE AND PILE CAP -----M35
 - LEVELING COURSE(UNDER FOUNDATION)-----M15
 - LEVELING COURSE(UNDER APPROACH SLAB)-----M15
 - CRASH BARRIER-----M40
 - APPROACH SLAB-----M35
 - PSC GIRDER -----M50
 - DECK SLAB & RCC GIRDER -----M40
- THE CARRIAGEWAY OF PROPOSED BRIDGE IS DESIGNED FOR 3 LANES. AS PER IRC 6 2017 FOR CLASS A, 70R & SV LOADING WHICHEVER GOVERNS.
- REINFORCEMENT GRADE--Fe:500D CONFORMING TO IS:1786.
- MINIMUM CLEAR COVER TO ALL REINFORCEMENT SHALL BE --
 - SUPERSTRUCTURE -----50MM.
 - SUB STRUCTURE (EARTH FACE)-----75MM.
 - SUB STRUCTURE (NON EARTH FACE)-----50MM.
 - FOUNDATION-----75MM.
- ALL SPACE EXCAVATED AND NOT OCCUPIED BY THE FOUNDATION & OTHER PERMANENT WORK SHALL BE REFFILLED WITH EARTH UP TO SURFACE OF SURROUNDING GROUND IN ACCORDANCE WITH SECTION 300 OF "MORTH" SPECIFICATION . IN CASE OF EXCAVATION IN ROCK, THE ANNULAR SPACE AROUND FOUNDATION SHALL BE FILLED WITH M15 PCC UP TO THE TOP OF ROCK.
- DRAWING SHALL BE VERIFIED WITH CORRESPONDING APPROVED PLAN & PROFILE DRAWING BEFORE EXECUTION. IF THERE IS ANY VARIATION BETWEEN THIS DRAWING AND APPROVED PLAN & PROFILE DRAWING THE SAME SHALL BE BROUGHT TO THE NOTICE OF ENGINEER FOR THE FOR HIS FINAL DECISION".
- ELASTOMERIC BEARING SHALL BE DESIGNED AS PER PROVISION OF IRC:83.
- VERTICAL AND LATERAL PILE CAPACITY ASSUMED IN DESIGN AT PROPOSED FOUNDING LEVEL IS 400T & 40.0T RESPECTIVELY. THIS SHALL BE CONFIRM BY CONDUCTING PILE LOAD TEST AS PER IS:2911--PART 4 2015 BEFORE EXECUTION OF WORK AT THE SITE.
- ALL DIMENSION ARE TENTATIVE. SIZES MAY VARY AFTER FINAL DESIGN.
- 65mm THICK BITUMINOUS CONCRETE/SMA WEARING COAT SHALL BE PROVIDED AS PER MORTH SPECIFICATION.
- SEISMIC PARAMETERS:

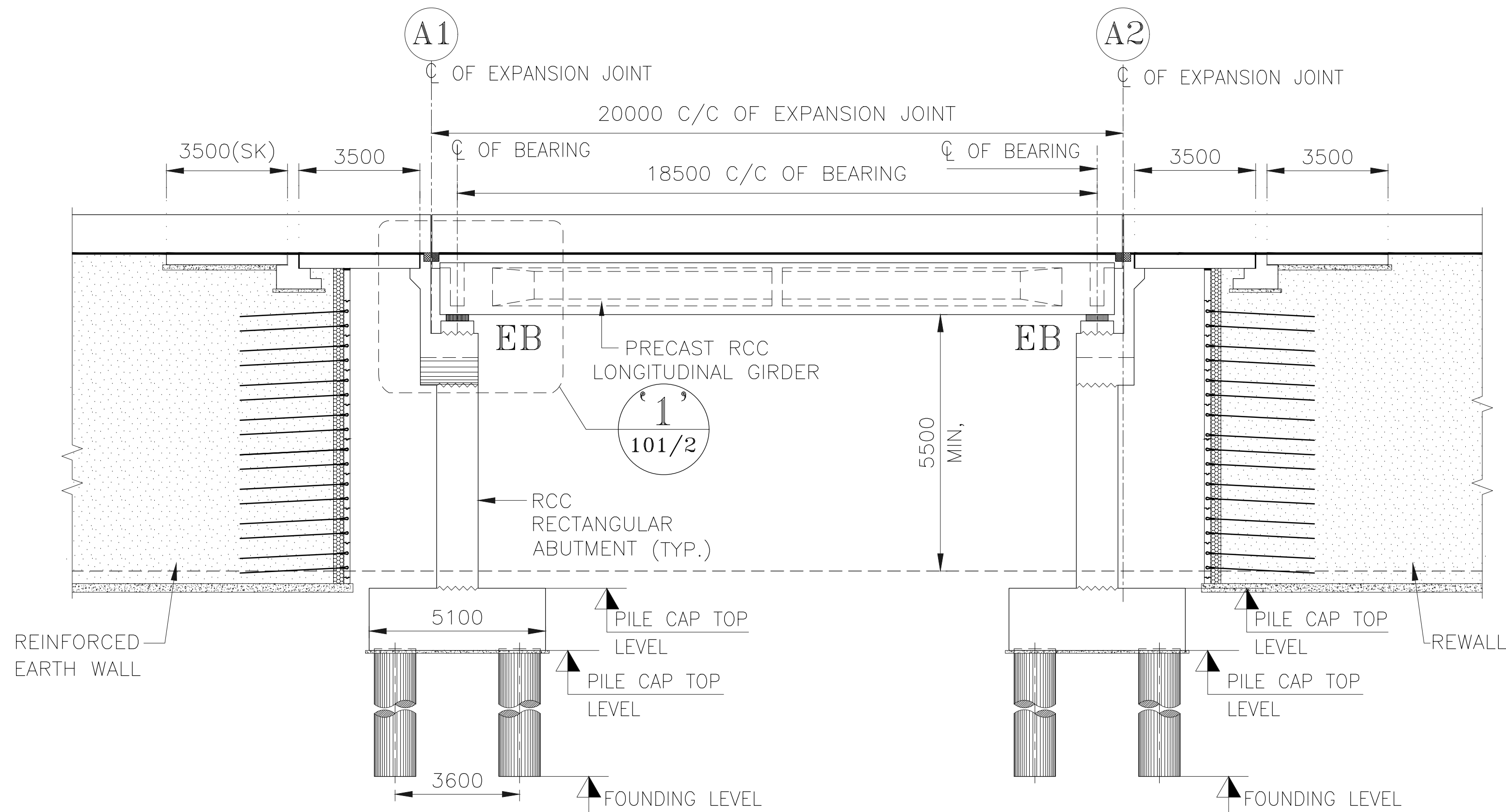
SEISMIC ZONE--III
- ALL WORK SHALL BE CARRIED OUT AS PER RELEVANT IRC/IS CODE SPECIFICATIONS.
- NOTE FOR CVR AGRMENT CONDITION.



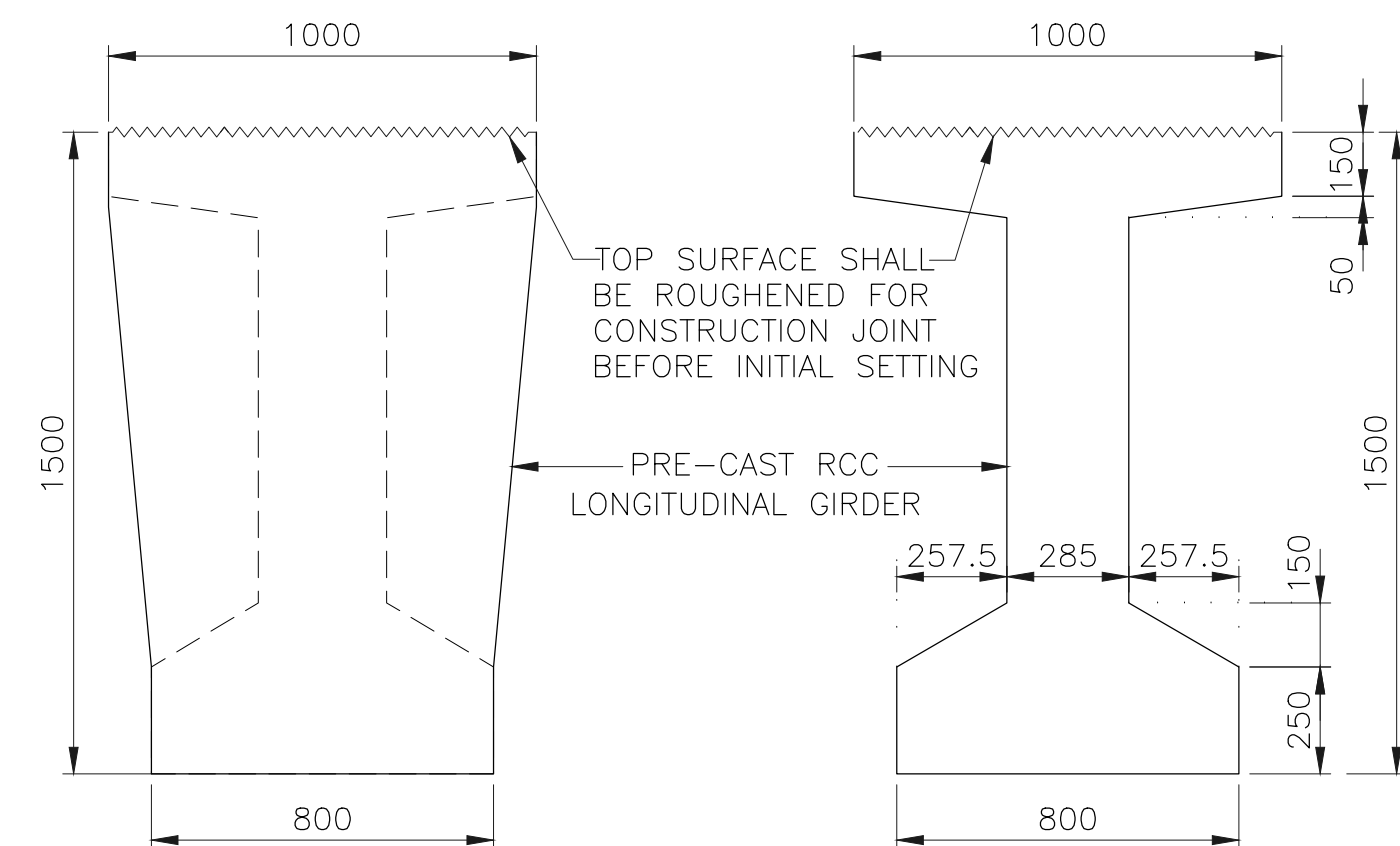
LEGENDS:-

EB	ELASTOMERIC BEARING
----	---------------------

				CLIENT				DESIGN CONSULTANT				TITLE				PROJECT:			
								 In Association with 				DRAWN BY				NAME			
												DESIGN BY				DATE			
												APPROVED BY				PROJECT:			
																CONSTRUCTION OF KARALI BYPASS ON NH-23 IN THE STATE OF RAJASTHAN UNDER ANNUAL PLAN 2024-2025			
																TITLE:			
																GENERAL ARRANGEMENT DRAWING FOR VUP (1+30 SPAN)			
																Original Size		Drawing Status	
																A2			
																		Drawing No.	

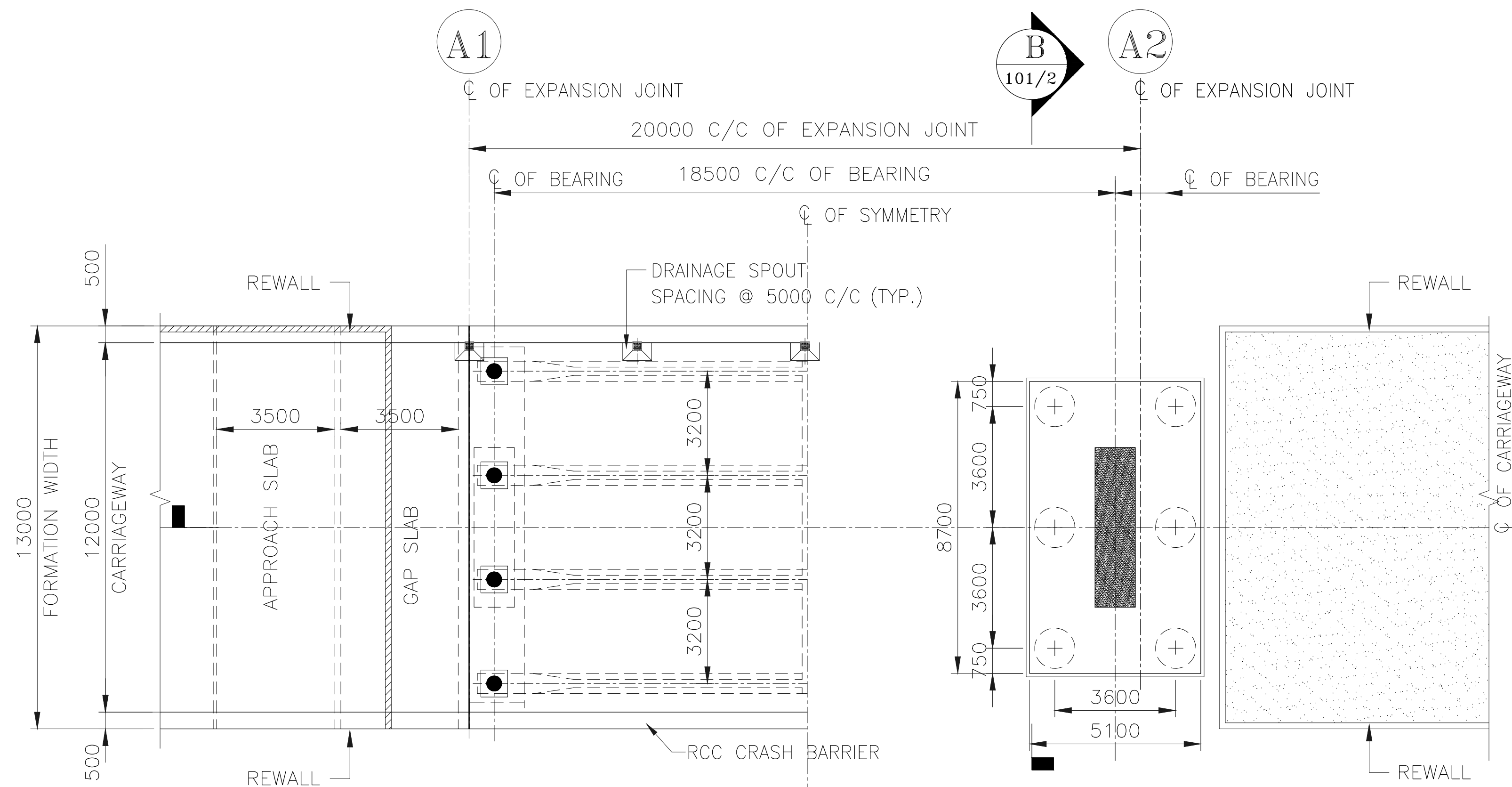


LONGITUDINAL SECTION AT A-A
(SCALE-1:200)



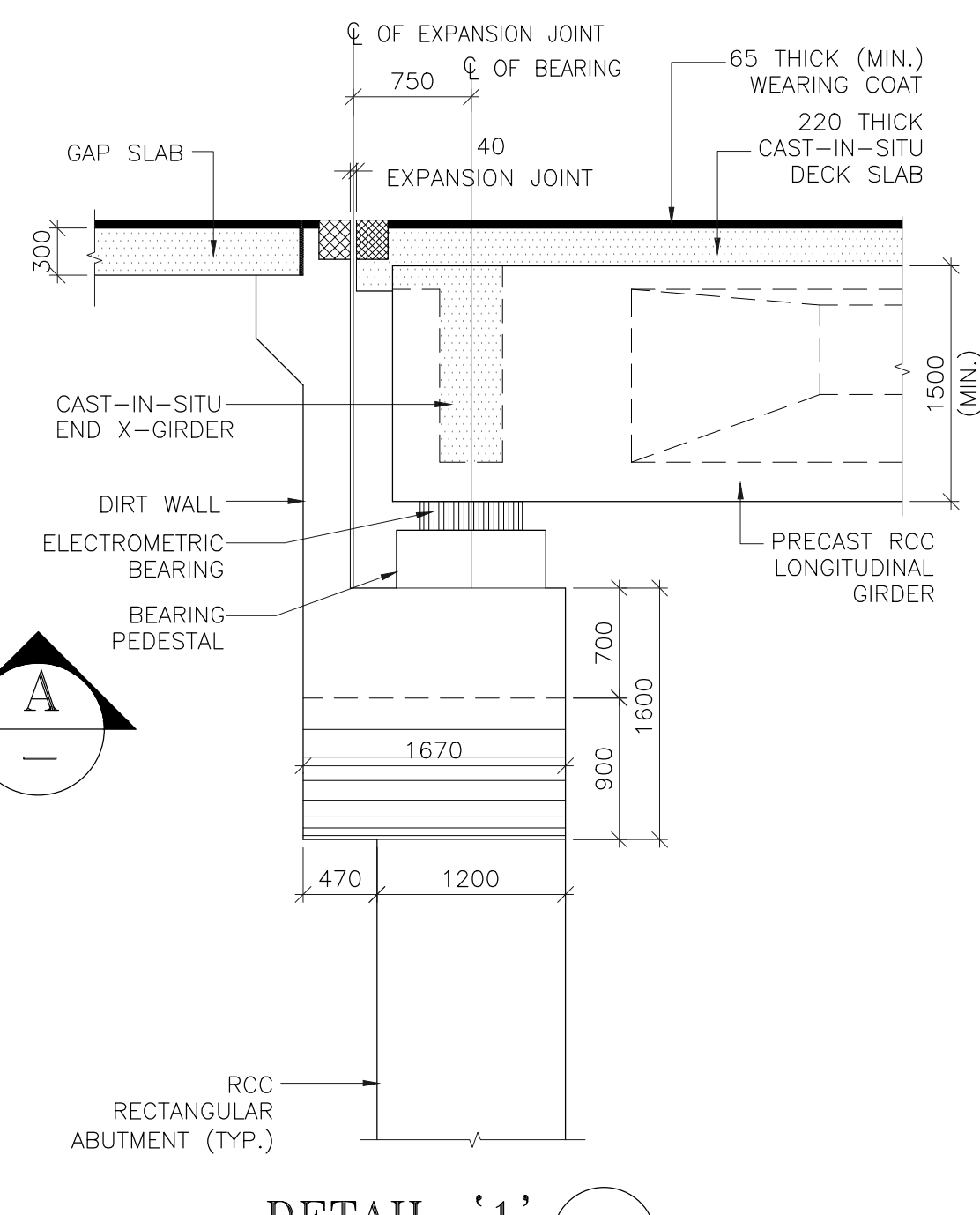
SUPPORT SECTION MID SPAN SECTION
DIMENSION OF PRECAST RCC GIRDER FOR 20.0M SPAN
(SCALE:-1:25)

- ALL DIMENSIONS ARE IN MILLIMETERS, LEVELS ARE IN METERS, AND CHAINAGE ARE IN KILOMETERS, UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE RELEVANT PLAN AND PROFILE DRAWING OF ROAD.
- CONCRETE GRADE
 - PEDESTAL/SEISMIC RESTRAINER-----M45
 - PIER-----M45
 - ABUTMENT -----M40
 - PIER CAP, DIRT WALL -----M40
 - PILE AND PILE CAP -----M35
 - LEVELING COURSE(UNDER FOUNDATION)-----M15
 - LEVELING COURSE(UNDER APPROACH SLAB)-----M15
 - CRASH BARRIER-----M40
 - APPROACH SLAB-----M35
 - RCC GIRDER -----M40
 - DECK SLAB & RCC GIRDER -----M40
- THE CARRIAGEWAY OF PROPOSED BRIDGE IS DESIGNED FOR 3 LANES, AS PER IRC 6 2017 FOR CLASS A, 70R & SV LOADING WHICHEVER GOVERNS.
- REINFORCEMENT GRADE--Fe:500D CONFORMING TO IS:1786.
- MINIMUM CLEAR COVER TO ALL REINFORCEMENT SHALL BE --
 - SUPERSTRUCTURE -----50MM.
 - SUB STRUCTURE (EARTH FACE)-----75MM.
 - SUB STRUCTURE (NON EARTH FACE)-----50MM.
 - FOUNDATION-----75MM.
- ALL SPACE EXCAVATED AND NOT OCCUPIED BY THE FOUNDATION & OTHER PERMANENT WORK SHALL BE REFFILLED WITH EARTH UP TO SURFACE OF SURROUNDING GROUND IN ACCORDANCE WITH SECTION 300 OF "MORTH" SPECIFICATION . IN CASE OF EXCAVATION IN ROCK, THE ANNULAR SPACE AROUND FOUNDATION SHALL BE FILLED WITH M15 PCC UP TO THE TOP OF ROCK.
- DRAWING SHALL BE VERIFIED WITH CORRESPONDING APPROVED PLAN & PROFILE DRAWING BEFORE EXECUTION, IF THERE IS ANY VARIATION BETWEEN THIS DRAWING AND APPROVED PLAN & PROFILE DRAWING THE SAME SHALL BE BROUGHT TO THE NOTICE OF ENGINEER FOR THE FOR HIS FINAL DECISION".
- ELASTOMERIC BEARING SHALL BE DESIGNED AS PER PROVISION OF IRC:83.
- VERTICAL AND LATERAL PILE CAPACITY ASSUMED IN DESIGN AT PROPOSED FOUNDING LEVEL IS 400T & 40.0T RESPECTIVELY. THIS SHALL BE CONFIRM BY CONDUCTING PILE LOAD TEST AS PER IS:2911--PART 4 2015 BEFORE EXECUTION OF WORK AT THE SITE.
- ALL DIMENSION ARE TENTATIVE. SIZES MAY VARY AFTER FINAL DESIGN.
- 65mm THICK BITUMINOUS CONCRETE/SMA WEARING COAT SHALL BE PROVIDED AS PER MORTH SPECIFICATION.
- SEISMIC PARAMETERS:
 - SEISMIC ZONE--III
- ALL WORK SHALL BE CARRIED OUT AS PER RELEVANT IRC/IS CODE SPECIFICATIONS.
- NOTE FOR CVR AGRMENT CONDITION.

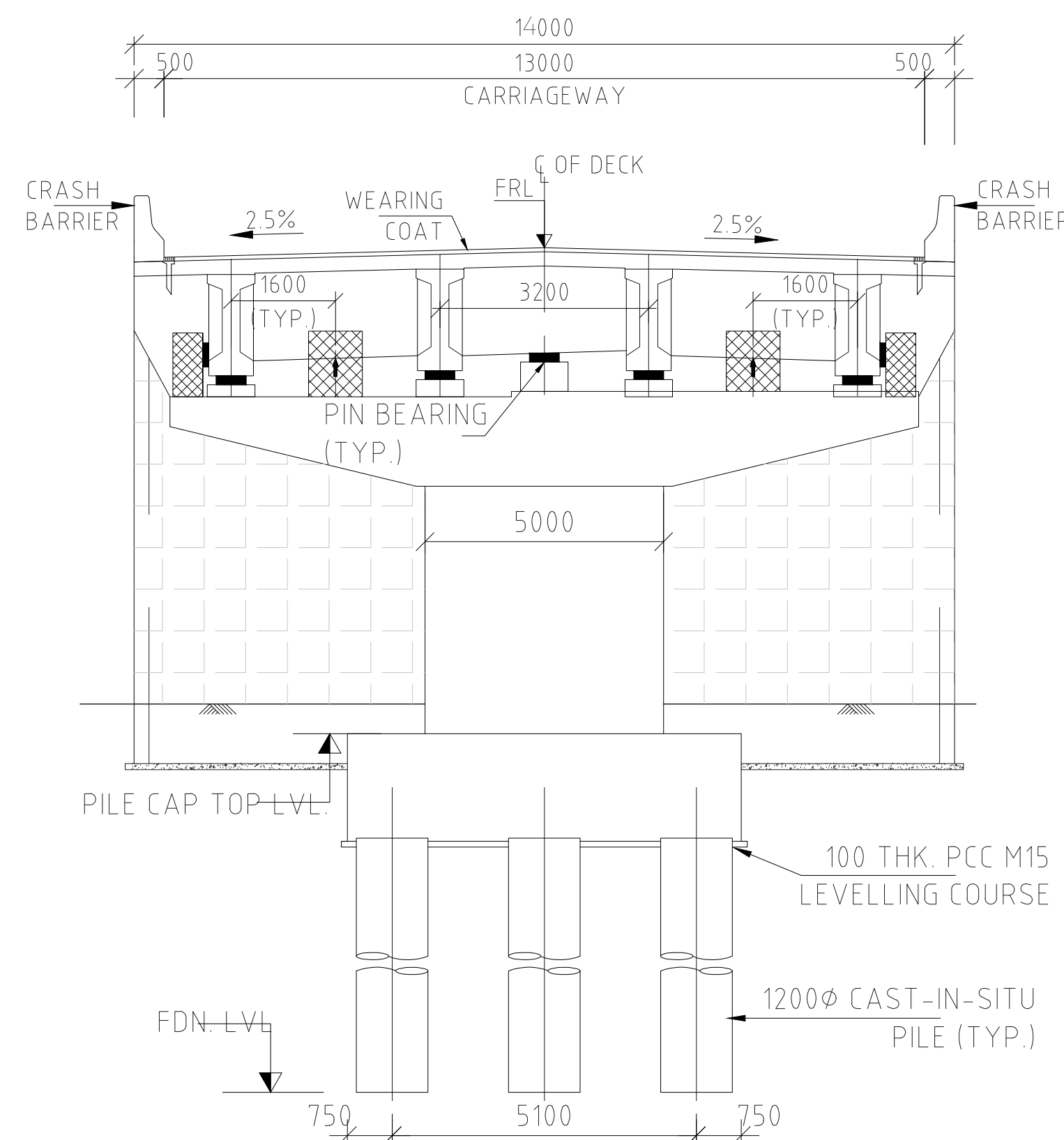


HALF TOP PLAN HALF BOTTOM PLAN

PLAN
(SCALE-1:200)



DETAIL-'1'
(SCALE-1:50)



SECTION A-A
(SCALE 1:150)

LEGENDS:-

EB	ELASTOMERIC BEARING
----	---------------------

CLIENT



DESIGN CONSULTANT



In Association with



TITLE

DRAWN BY

DESIGN BY

APPROVED BY

NAME

DATE

PROJECT:

CONSTRUCTION OF KARALI BYPASS ON NH-23 IN THE STATE OF RAJASTHAN UNDER ANNUAL PLAN 2024-2025

TITLE:

GENERAL ARRANGEMENT DRAWING FOR VUP/MNB (1x20 SPAN)

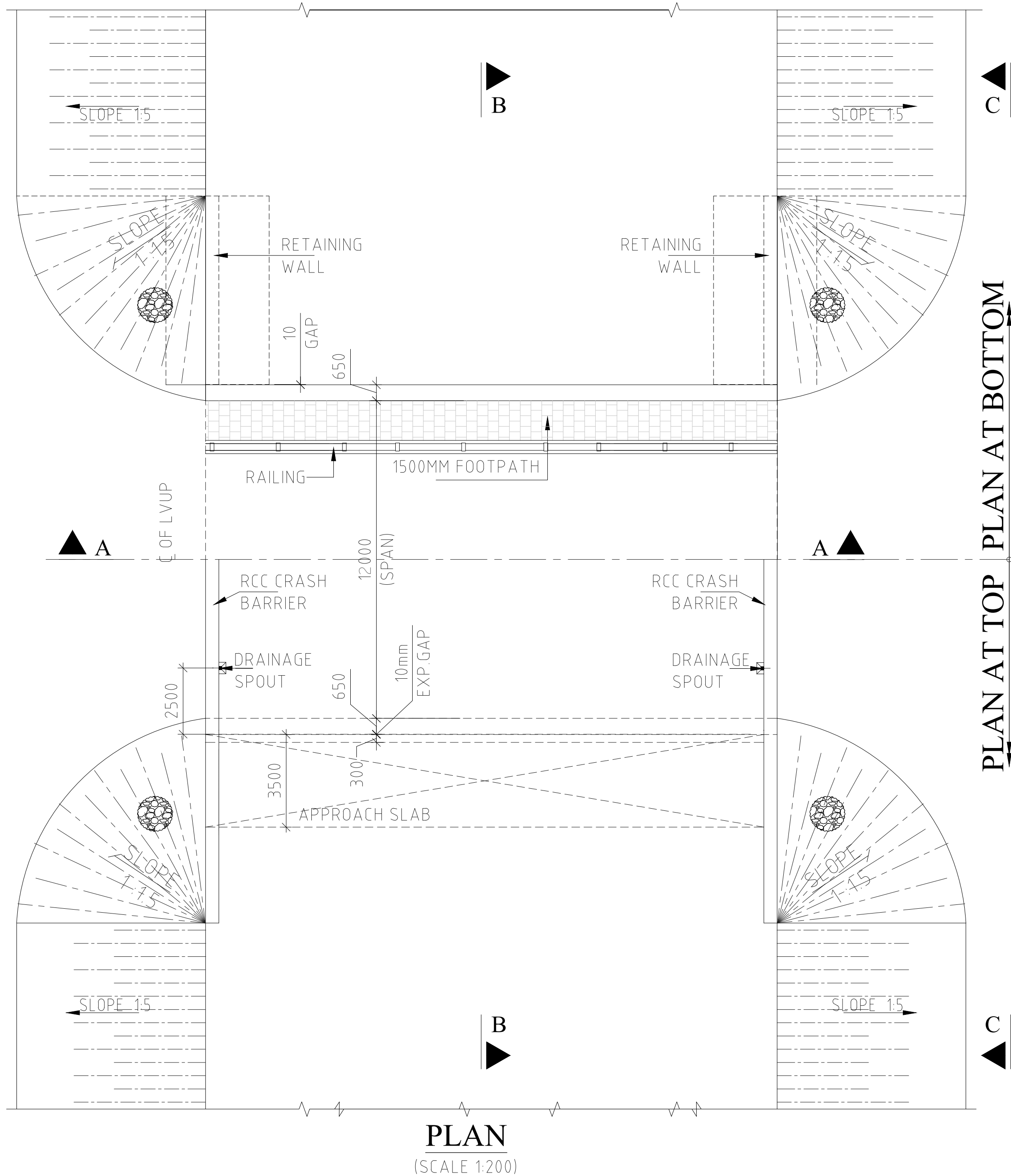
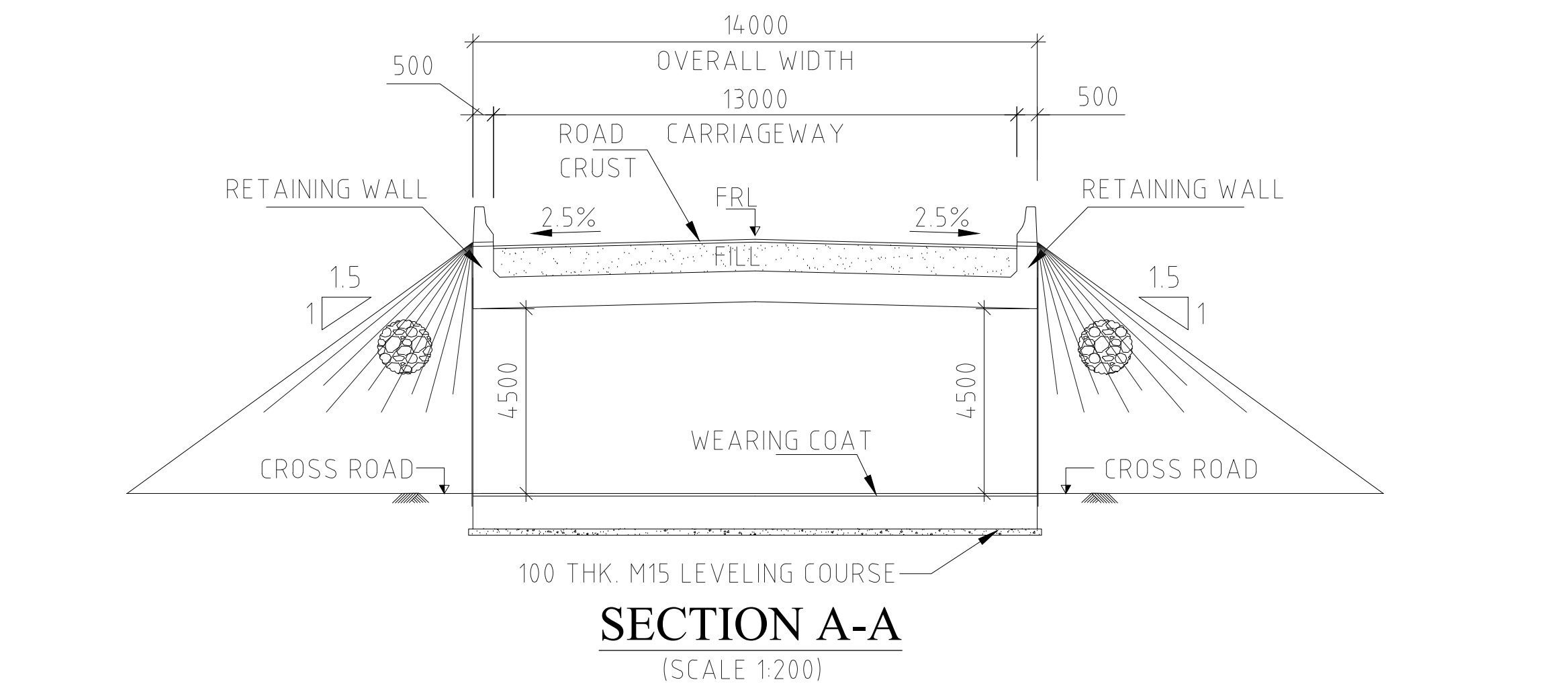
Original Size
A2

Drawing Status

Drawing No.

Rev

RO



NOTES:-

- ALL DIMENSIONS ARE IN MILLIMETERS, LEVELS ARE IN METERS. AND CHAINAGE ARE IN KILOMETERS. UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE RELEVANT PLAN AND PROFILE DRAWING OF ROAD.
- CONCRETE GRADE
 - RCC BOX-----M35
 - LEVELING COURSE-----M15
 - CRASH BARRIER-----M40
 - APPROACH SLAB-----M30
- REINFORCEMENT GRADE-Fe500D CONFIRMING TO IS:1786.
- MINIMUM CLEAR COVER TO ALL REINFORCEMENT SHALL BE -
 - BOTTOM SLAB -----75MM.
 - TOP SLAB -----40MM.
 - SIDE WALL -----50MM NON EARTH FACE .
 - SIDE WALL -----75MM EARTH FACE.
- SAFE BEARING CAPACITY :-
FOUNDATION HAS BEEN DESIGNED FOR PRESSURE 15T/M²
- THE FOLLOWING LOADS HAVE BEEN CONSIDERED IN THE DESIGN:-
 - CLASS A LOADING - ONE, TWO ,THREE, LANE.
 - CLASS 70R WHEELED + ONE LANE OF CLASS A.
 - CLASS 70R TRACK + ONE LANE OF CLASS A.
 - THE BRIDGE SPAN IS ALSO DESIGNED FOR SPECIAL CLASS (SV) LOADING 385 MT AS PER IRC-6-2017
- BACKFILL MATERIAL BEHIND END WALL SHALL BE SELECTED GRANULAR SOIL HAVING MINIMUM $\phi 30^\circ$, $Y=2T/m^3$
- ANY LOOSE / UNSUITABLE MATERIAL BELOW BOX STRUCTURE IF FOUND DURING EXECUTION SHALL BE REPLACED BY SUITABLE MATERIAL.
- 600MM THICK FILTER MATERIAL BEHIND BOX SHALL BE LAID AS PER APPENDIX 6 OF IRC 78-2014.
- PERFORATED P.V.C. PIPE 150 ϕ TO BE PROVIDED OF GROUND LEVEL BEHIND WALL FOR DRAINAGE.
- WEARING COAT - 65MM THICK WITH 40MM BITUMINOUS CONCRETE OVERLAID + 25MM THICK BITUMINOUS MASTIC LAYER.
- SEISMIC ZONE IV & V
- GROUND IMPROVEMENT TO BE DONE AT A DEPTH OF 2.0M BELOW FOUNDING LEVEL(SOIL WITH GRANULAR MATERIAL $\phi=30^\circ$ AND $y=20KN/M3$).
- WHERE EVER LIQUIFICATION IS OBSERVED IN OPEN FOUNDATION AND RAFT STRUCTURES THE GROUND IMPROVEMENT TO BE DONE TOE COMPACT THE SOIL TO INCREASE IT'S PENETRATION RESISTANCE AND SATISFY CLAUSE 8.4.4 (V) OF IRC114.

LEGEND:-

FRL	FINISHED ROAD LEVEL
FDN.	FOUNDATION LEVEL
LVL.	LEVEL
GL	GROUND LEVEL

REV.	DATE	DESCRIPTION	DRAWN	
1		2	3	4

CLIENT



DESIGN CONSULTANT



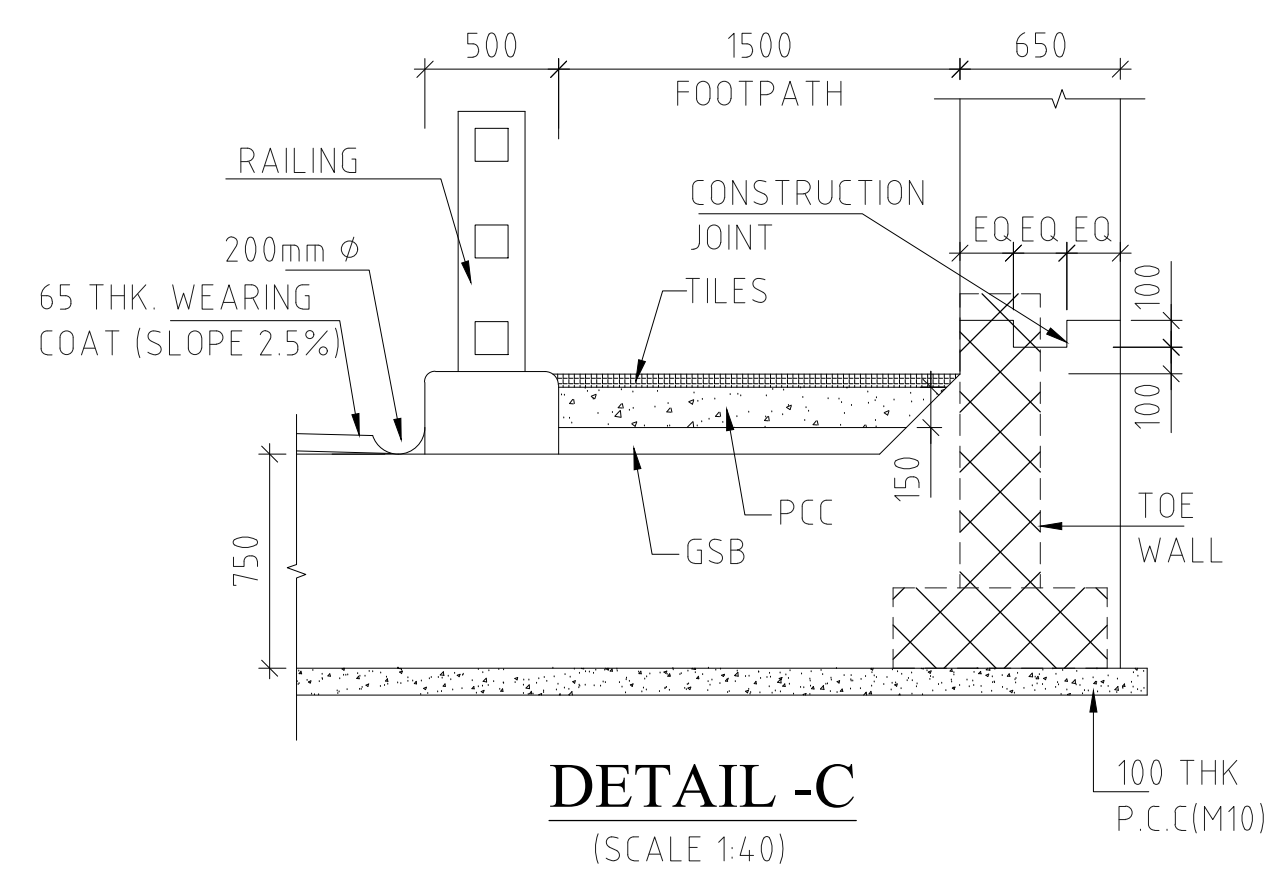
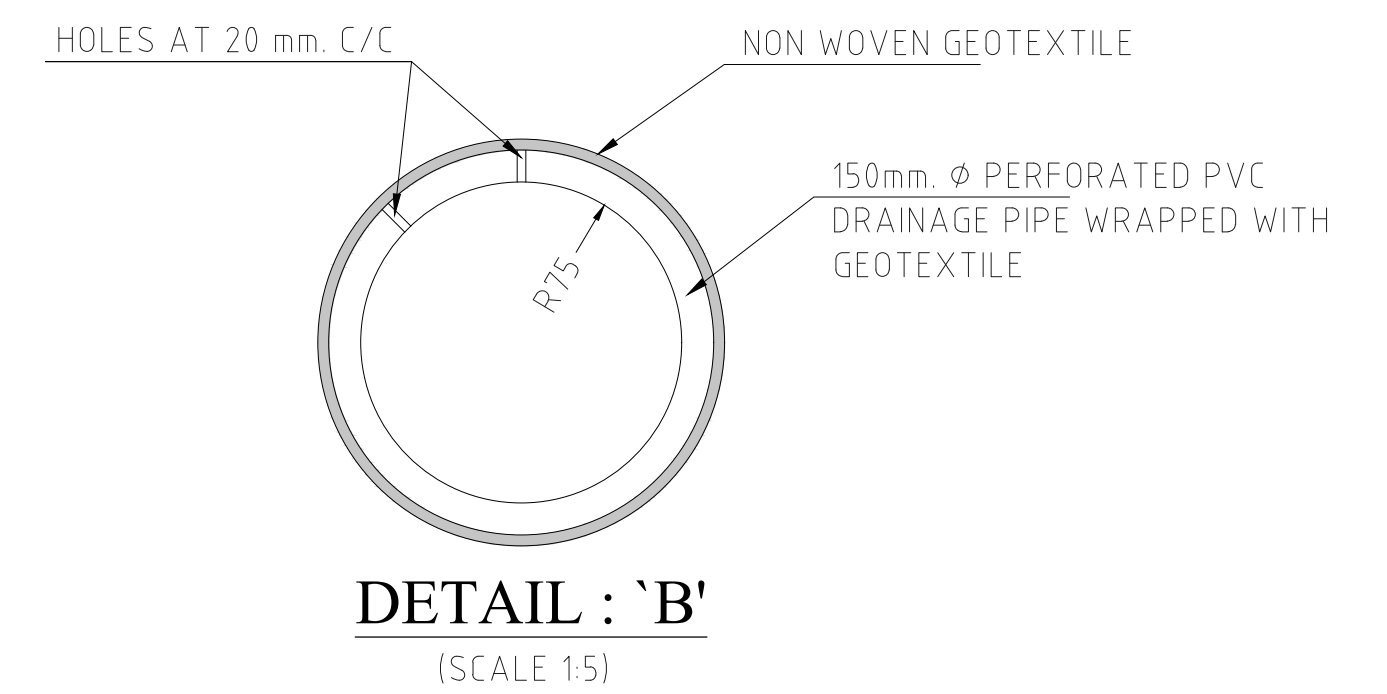
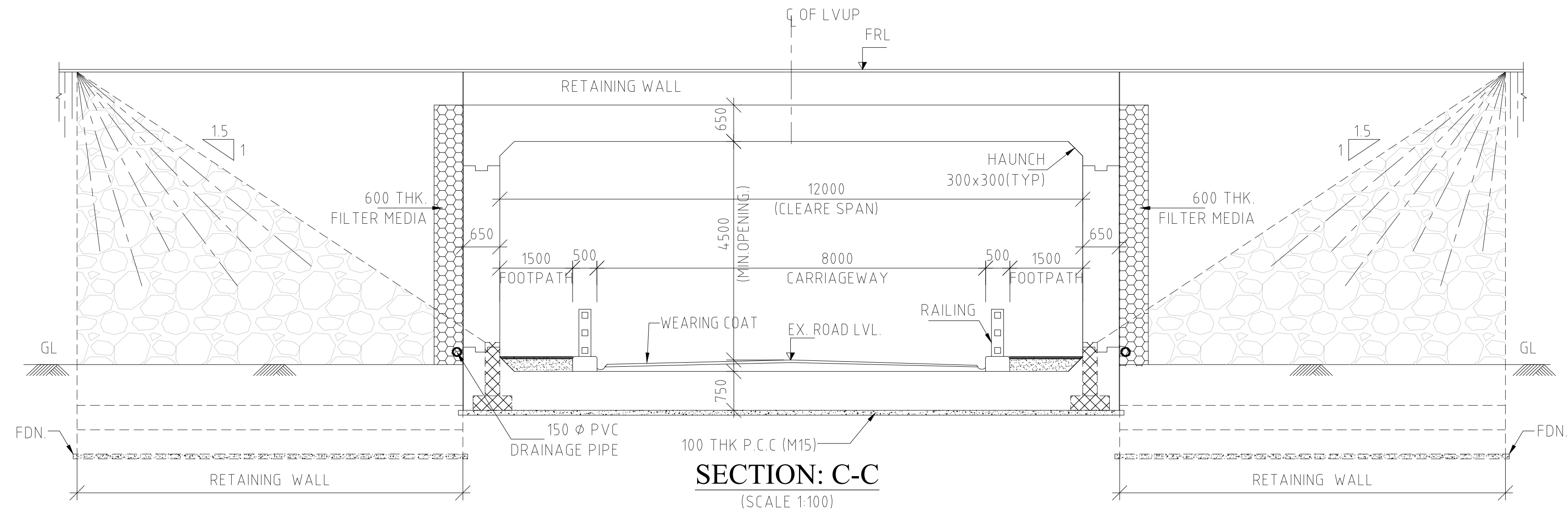
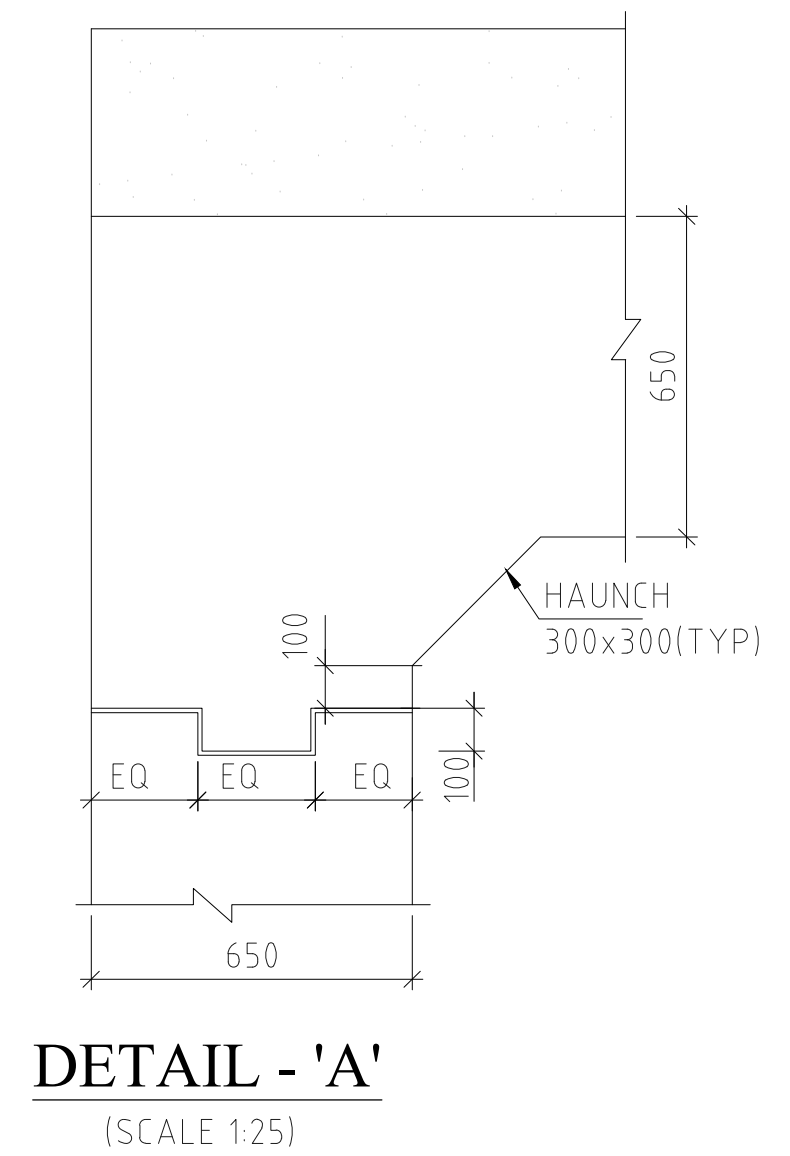
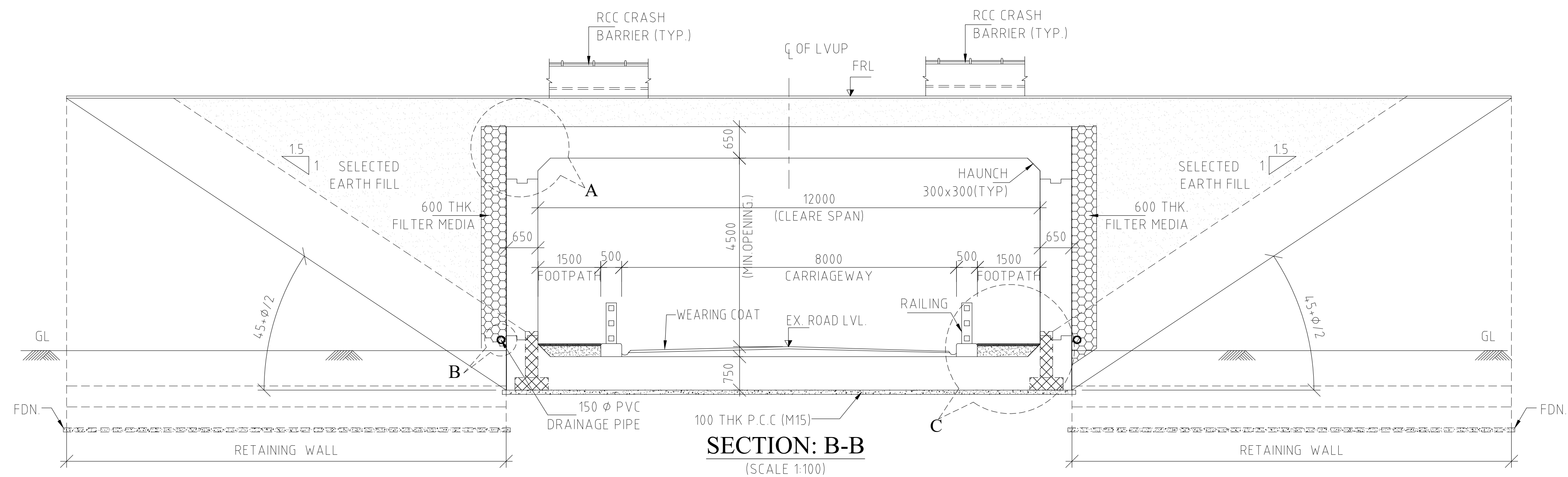
TECHNICAL CONSULTANCY
SERVICES

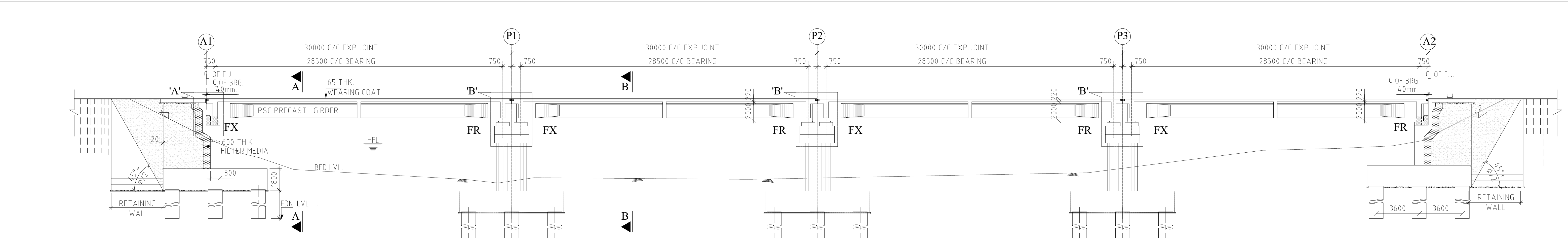
In
Association
with



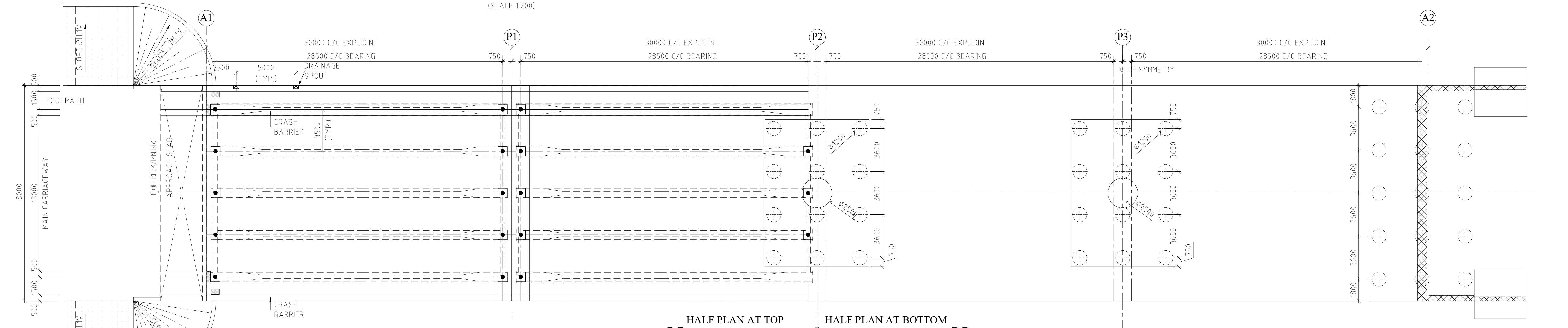
P.K. ENGINEERS

TITLE	NAME	DATE	PROJECT:	CONSTRUCTION OF KARAU LI BYPASS ON NH-23 IN THE STATE OF RAJASTHAN UNDER ANNUAL PLAN 2024-2025
DRAWN BY			TITLE:	GENERAL ARRANGEMENT DRAWING FOR LIGHT VEHICULAR UNDERPASS (1x12x4.5)
DESIGN BY			Original Size	Drawing Status
APPROVED BY			A2	Drawing No.
				Rev
				RO
9	10	11	12	

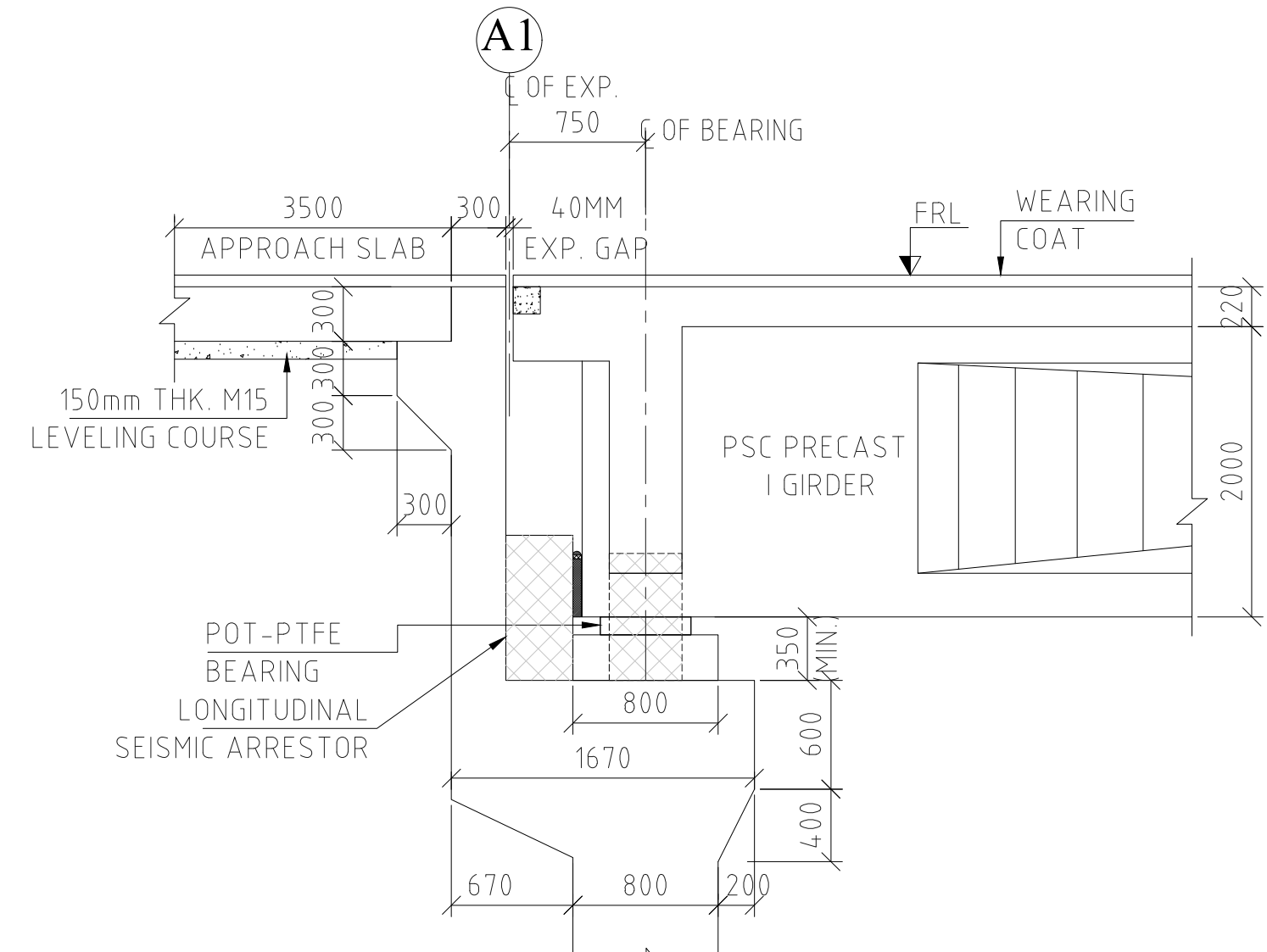
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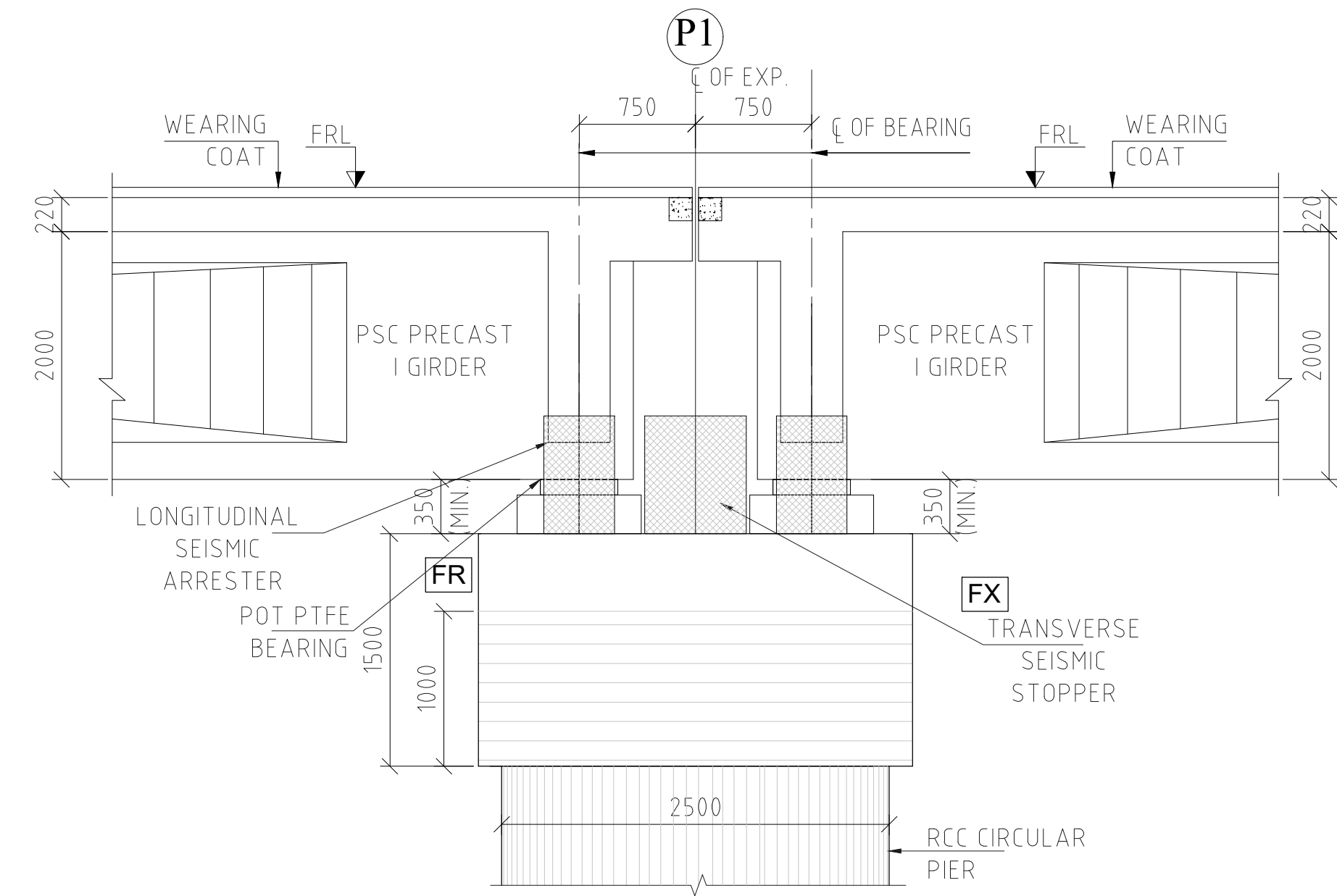
LONGITUDINAL ELEVATION
(SCALE 1:200)



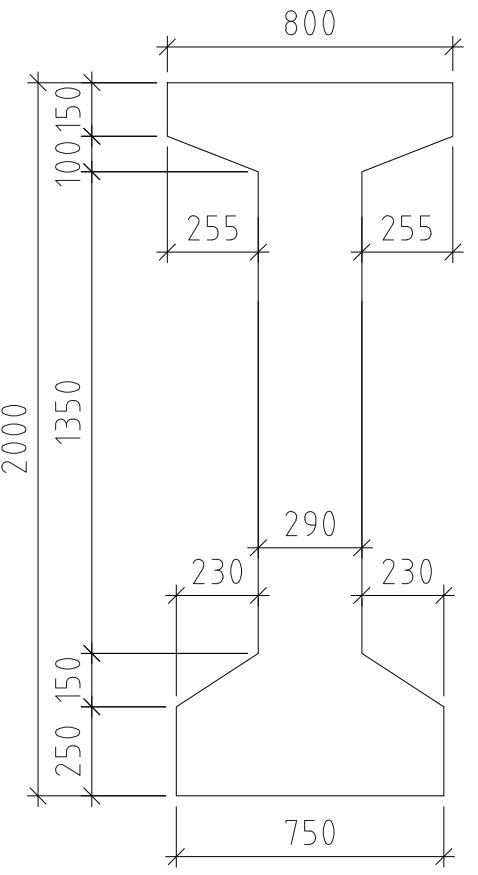
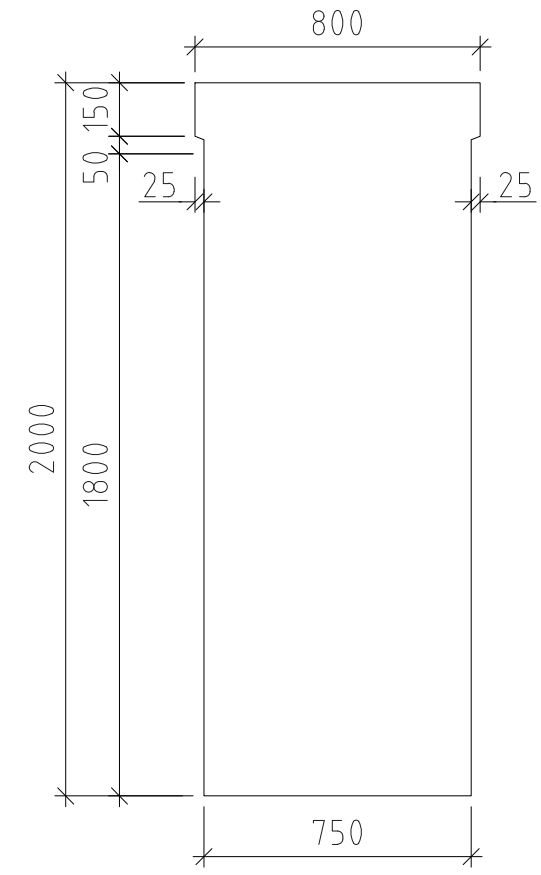
HALF PLAN AT TOP HALF PLAN AT BOTTOM
PLAN
(SCALE 1:300)



DETAIL - 'A'
(SCALE 1:50)






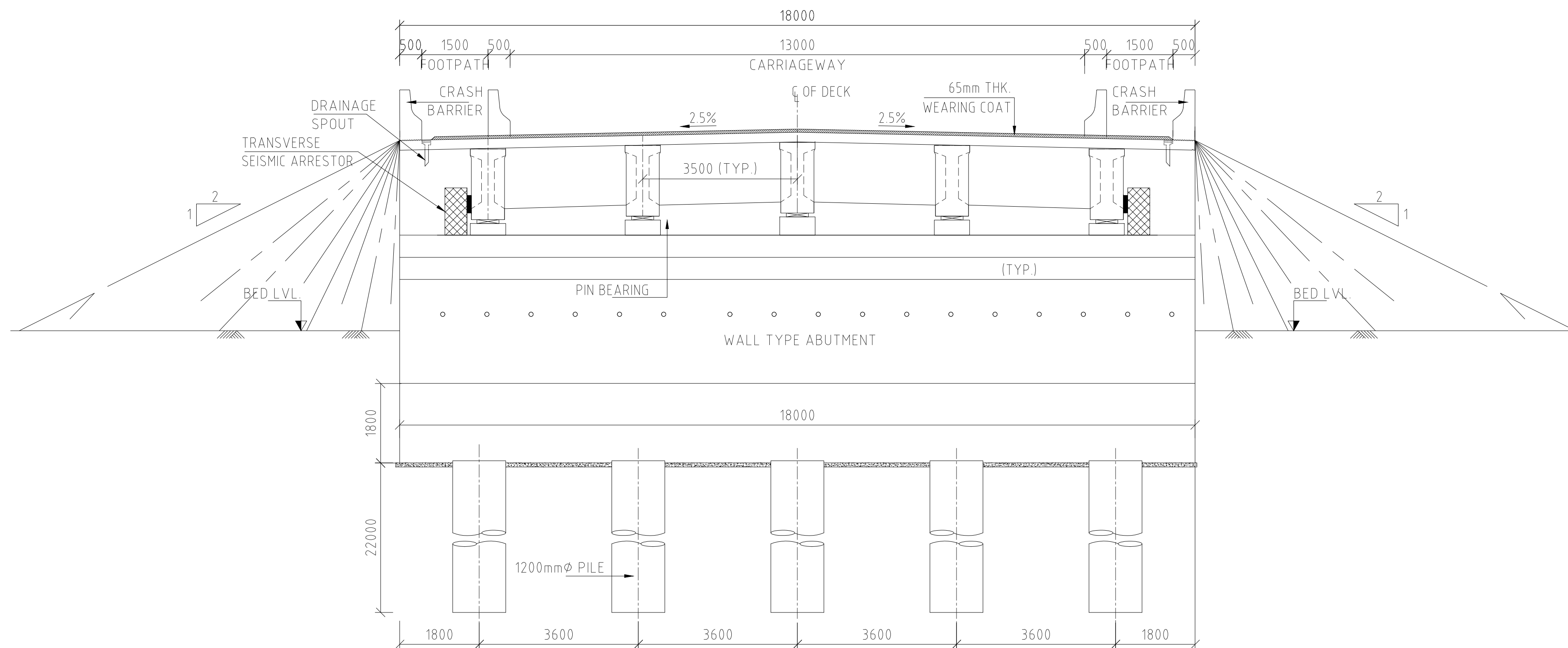
DETAIL - 'B'
(SCALE 1:40)



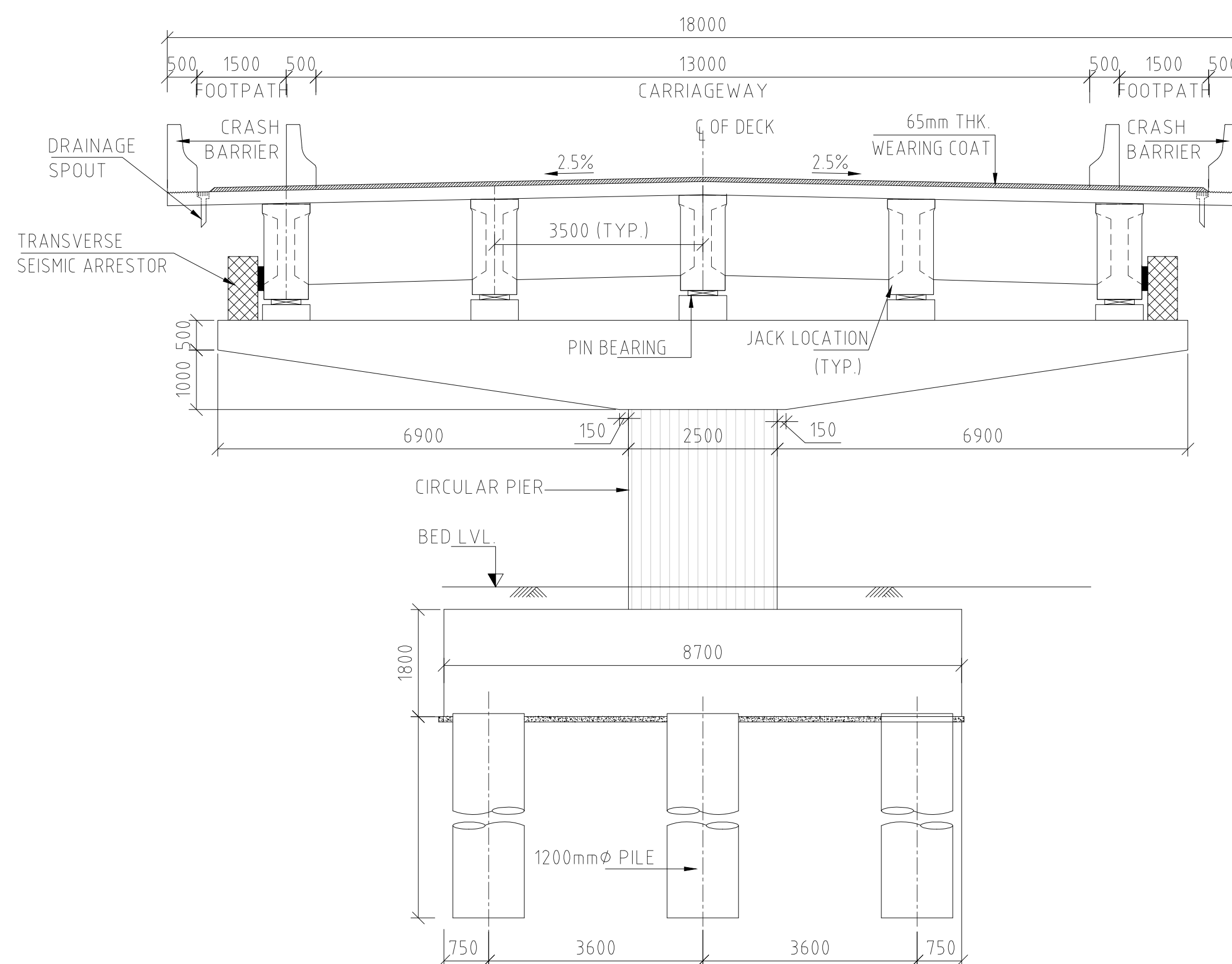
SECTION AT END SECTION AT MID
DETAIL PRECAST PSC-IGIRDER
(SCALE 1:30)

LEGEND:-	
FRL	FINISHED ROAD LEVEL
G.L.	GROUND LEVEL
FDN.	FOUNDATION
LVL.	LEVEL
E.J.	EXPANSION JOINT

				<div>CLIENT</div> <div></div>	<div>DESIGN CONSULTANT</div> <div><div><div>TECHNICAL CONSULTANCY SERVICES</div></div><div>In Association with</div><div><div>P.K. ENGINEERS</div></div></div>	TITLE	NAME	DATE	PROJECT: CONSTRUCTION OF KARAUJI BYPASS ON NH-23 IN THE STATE OF RAJASTHAN UNDER ANNUAL PLAN 2024-2025							
							DRAWN BY									
							DESIGN BY			TITLE: GENERAL ARRANGEMENT DRAWING						
							APPROVED BY			Original Size A2		Drawing Status		Drawing No.		(01 OF 03)
REV.	DATE	DESCRIPTION				DRAWN	Rev RO									
1		2			3	4	5	6	7	8	9	10	11	12		



SECTION A-A
(SCALE 1:100)



SECTION B-B
(SCALE 1:100)

NOTES:-




1. ALL DIMENSIONS ARE IN MILLIMETERS, LEVELS ARE IN METERS, AND CHAINAGE ARE IN KILOMETERS. UNLESS OTHERWISE MENTIONED, ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE RELEVANT PLAN AND PROFILE DRAWING OF ROAD.
3. CONCRETE GRADE
 - a. DECK SLAB & PSC GIRDER-----M45
 - b. PEDESTAL-----M40
 - c. SUBSTRUCTURE -----M35
 - d. LEVELING COURSE-----M15
 - e. CRASH BARRIER -----M40
 - f. APPROACH SLAB -----M30
4. REINFORCEMENT GRADE -Fe500
5. MINIMUM CLEAR COVER TO ALL REINFORCEMENT SHALL BE -
 - a. SUPERSTRUCTURE -----40MM.
 - b. ABUTMENT PIER AND PIER CAP -----50MM.
 - c. FOOTING -----75MM.
6. 600MM THICK FILTER MATERIAL BEHIND ABUTMENT/ RETAINING WALL SHALL BE AS PER APPENDIX-6 OF IRC: 78-2014 & MORTH SPECIFICATION.
7. WEEP HOLES IN SLOPE 1:20, 100 DIA P.V.C. PIPE @ SPACING 1000MM C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN STAGGERED MANNER IN MEDIAN WALL AND ABUTMENT ABOVE GROUND LEVEL/LWL.
8. "FRL, CROSS-SECTION AND CAMBER etc. SHOWN IN THIS DRAWING SHALL BE VERIFIED WITH CORRESPONDING APPROVED PLAN & PROFILE DRAWING BEFORE EXECUTION. IF THERE IS ANY VARIATION BETWEEN THIS DRAWING AND APPROVED PLAN & PROFILE DRAWING THE SAME SHALL BE BROUGHT TO THE NOTICE OF ENGINEER FOR THE FOR HIS FINAL DECISION".
9. THE FOLLOWING LOADS HAVE BEEN CONSIDERED IN THE DESIGN -
 - f. ONE LANE ,TWO LANE AND THREE LANE OF CLASS A
 - g. ONE LANE OF CLASS A IN ADDITION OF ONE LANE OF CLASS 70R WHEEL OR ONE LANE OF 70R TRACKED WHICHEVER IS GOVERNS.
10. BEARING TYPE- POT PTFE
11. SEISMIC ZONE - IV
12. DRAINAGE SPOUT SHALL BE PROVIDED IN DECK AS PER MORTH STANDARD.
13. WEARING COAT - 50mm THK. BITUMINOUS CONCRETE.
14. PILE LOAD TEST SHALL BE CONDUCTED ON INITIAL PILE. THE NUMBER OF TESTS, TEST PROCEDURE, METHOD OF TEST SHALL BE SIMILAR TO THE PROVISIONS OF IS:2911(PART-1/SEC-4). IT SHALL HOWEVER BE ENSURED THAT IT IS NOT LESS THAN THE DESIGN VALUES AS UNDER. DESIGN LOAD ON PILES

ABUTMENT	AS PER DESIGN	V= 228T (N)	V= 254(S)	H= 38.06T
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ABUTMENT	AS PER GEOTECH	V= 400T	H= 40T
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AT ABUTMENT AND PIER LOCATION THE HORIZONTAL LOAD CAPACITY OF PILE IS TO BE VERIFIED AT SITE.

- 15 6MM THICK PERMANENT STEEL LINER TO BE PROVIDED UPTO
MAXIMUM SCOUR LEVEL AS PER IRC 78-2014, CLAUSE 709.1.4(III).
IN CASE OF MARINE CLAY OR SOFT SOIL OR SOIL HAVING AGGRESSIVE
MATERIAL,PERMANET STEEL LINER OF SUFFICIENT STRENGTH SHALL BE USED FOR
THE FULL DEPTH OF SUCH STRATA.

					CLIENT 	DESIGN CONSULTANT  TECHNICAL CONSULTANCY SERVICES In Association with  P.K. ENGINEERS	TITLE	NAME	DATE	PROJECT: CONSTRUCTION OF KARAU LI BYPASS ON NH-23 IN THE STATE OF RAJASTHAN UNDER ANNUAL PLAN 2024-2025			
										TITLE: GENERAL ARRANGEMENT DRAWING			
REV.	DATE	DESCRIPTION	DRAWN							APPROVED BY			Original Size A2

NOTES:-

1. ALL DIMENSIONS ARE IN MILLIMETERS, LEVELS ARE IN METERS. AND CHAINAGE ARE IN KILOMETERS. UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE RELEVANT PLAN AND PROFILE DRAWING OF ROAD.
3. CONCRETE GRADE
- a. DECK SLAB & PSC GIRDER-----M45
 - b. PEDESTAL-----M40
 - c. SUBSTRUCTURE -----M35
 - d. LEVELING COURSE-----M15
 - e. CRASH BARRIER -----M40
 - f. APPROACH SLAB -----M30
4. REINFORCEMENT GRADE-Fe500
5. MINIMUM CLEAR COVER TO ALL REINFORCEMENT SHALL BE -
- a. SUPERSTRUCTURE -----40MM.
 - b. ABUTMENT PIER AND PIER CAP -----50MM.
 - c. FOOTING -----75MM.
6. 600MM THICK FILTER MATERIAL BEHIND ABUTMENT/ RETAINING WALL SHALL BE AS PER APPENDIX-6 OF IRC: 78-2014 & MORTH SPECIFICATION.
7. WEEP HOLES IN SLOPE 1:20, 100 DIA P.V.C. PIPE @ SPACING 1000MM C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN STAGGERED MANNER IN MEDIAN WALL AND ABUTMENT ABOVE GROUND LEVEL/LWL.
8. "FRL, CROSS-SECTION AND CAMBER etc. SHOWN IN THIS DRAWING SHALL BE VERIFIED WITH CORRESPONDING APPROVED PLAN & PROFILE DRAWING BEFORE EXECUTION. IF THERE IS ANY VARIATION BETWEEN THIS DRAWING AND APPROVED PLAN & PROFILE DRAWING THE SAME SHALL BE BROUGHT TO THE NOTICE OF ENGINEER FOR THE FOR HIS FINAL DECISION".
9. THE FOLLOWING LOADS HAVE BEEN CONSIDERED IN THE DESIGN:-
- f. ONE LANE ,TWO LANE AND THREE LANE OF CLASS A
 - g. ONE LANE OF CLASS A IN ADDITION OF ONE LANE OF CLASS 70R WHEEL OR ONE LANE OF 70R TRACKED WHICHEVER IS GOVERNS.
10. BEARING TYPE- POT PTFE
11. SEISMIC ZONE = IV
12. DRAINAGE SPOUT SHALL BE PROVIDED IN DECK AS PER MORTH STANDARD.
13. WEARING COAT - 50mm THK. BITUMINOUS CONCRETE.
14. PILE LOAD TEST SHALL BE CONDUCTED ON INITIAL PILE. THE NUMBER OF TESTS, TEST PROCEDURE, METHOD OF TEST SHALL BE SIMILAR TO THE PROVISIONS OF IS:2911(PART-1/SEC-4). IT SHALL HOWEVER BE ENSURED THAT IT IS NOT LESS THAN THE DESIGN VALUES AS UNDER. DESIGN LOAD ON PILES
- | | | | | |
|----------|----------------|-------------|-----------|-----------|
| ABUTMENT | AS PER DESIGN | V= 228T (N) | V= 254(S) | H= 38.06T |
| ABUTMENT | AS PER GEOTECH | V= 400T | H= 40T | |
- AT ABUTMENT AND PIER LOCATION THE HORIZONTAL LOAD CAPACITY OF PILE IS TO BE VERIFIED AT SITE.
15. 6MM THICK PERMANENT STEEL LINER TO BE PROVIDED UPTO MAXIMUM SCOUR LEVEL AS PER IRC:78-2014, CLAUSE 709.1.4(II). IN CASE OF MARINE CLAY OR SOFT SOIL OR SOIL HAVING AGGRESSIVE MATERIAL,PERMANET STEEL LINER OF SUFFICIENT STRENGTH SHALL BE USED FOR THE FULL DEPTH OF SUCH STRATA.

LONGITUDINAL ELEVATION
(SCALE 1:200)

PLAN
(SCALE 1:300)



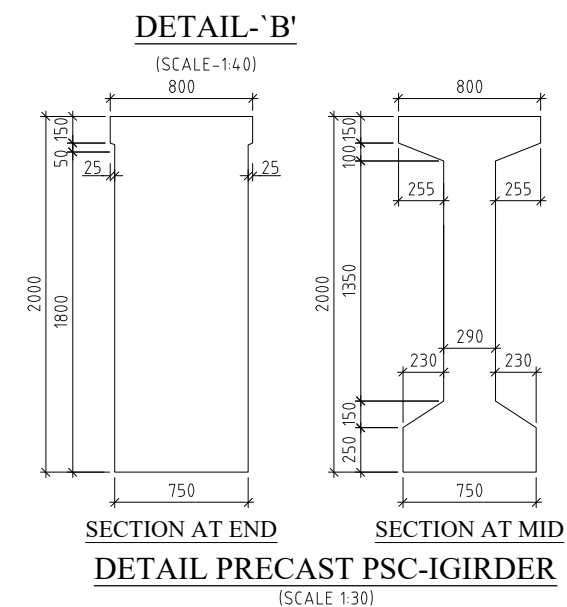
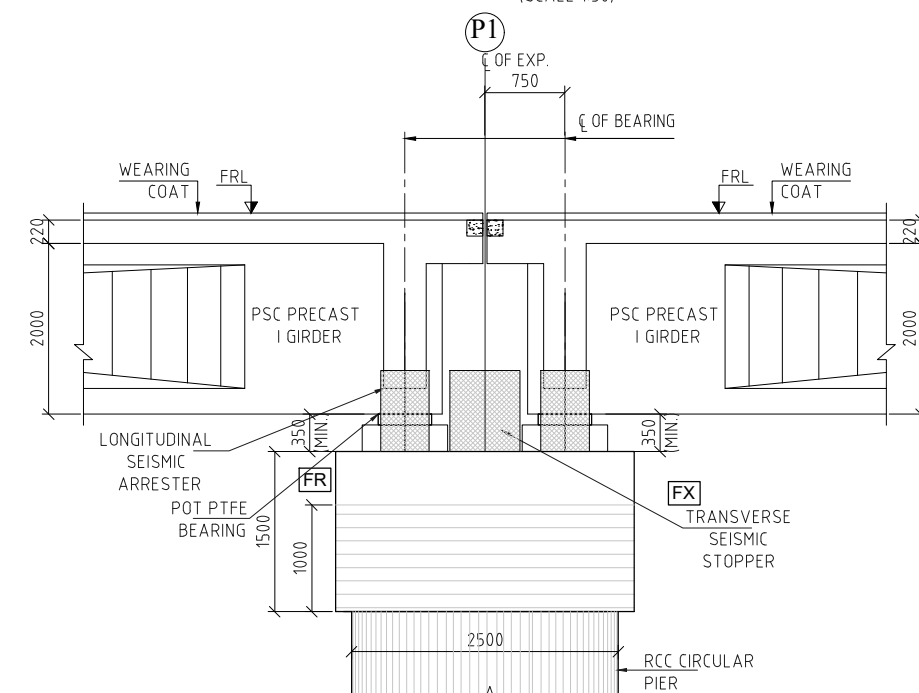
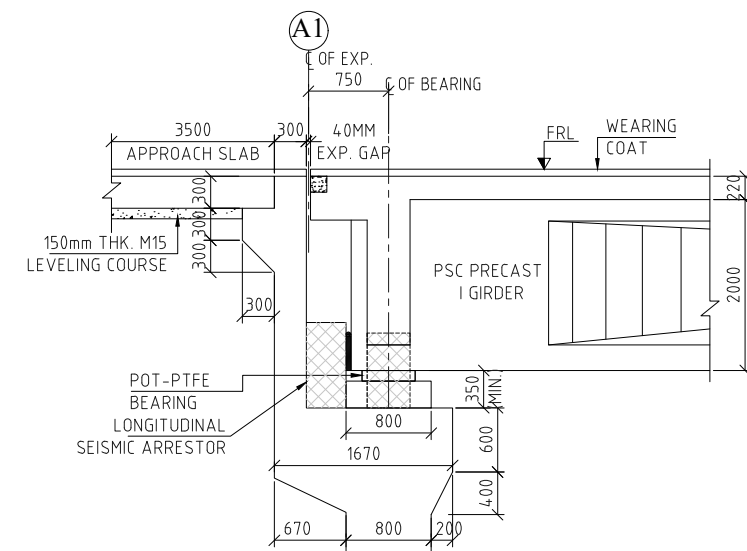
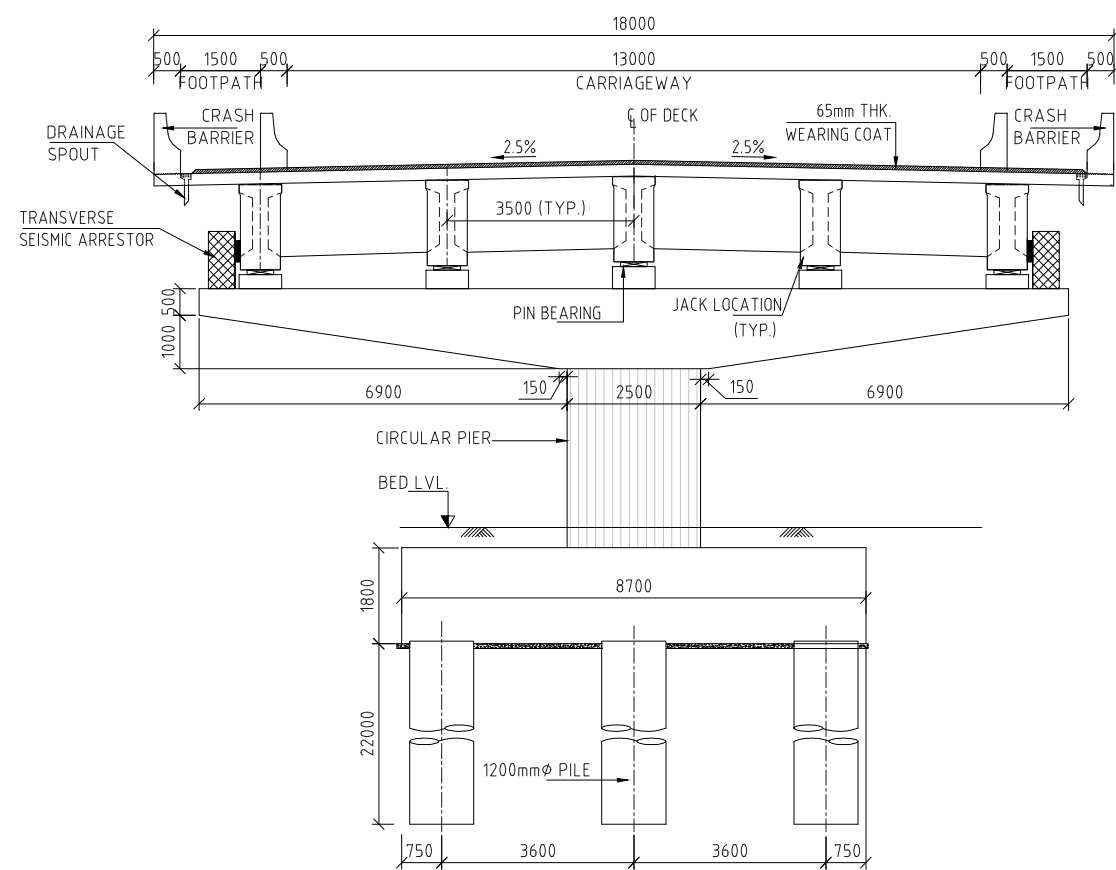
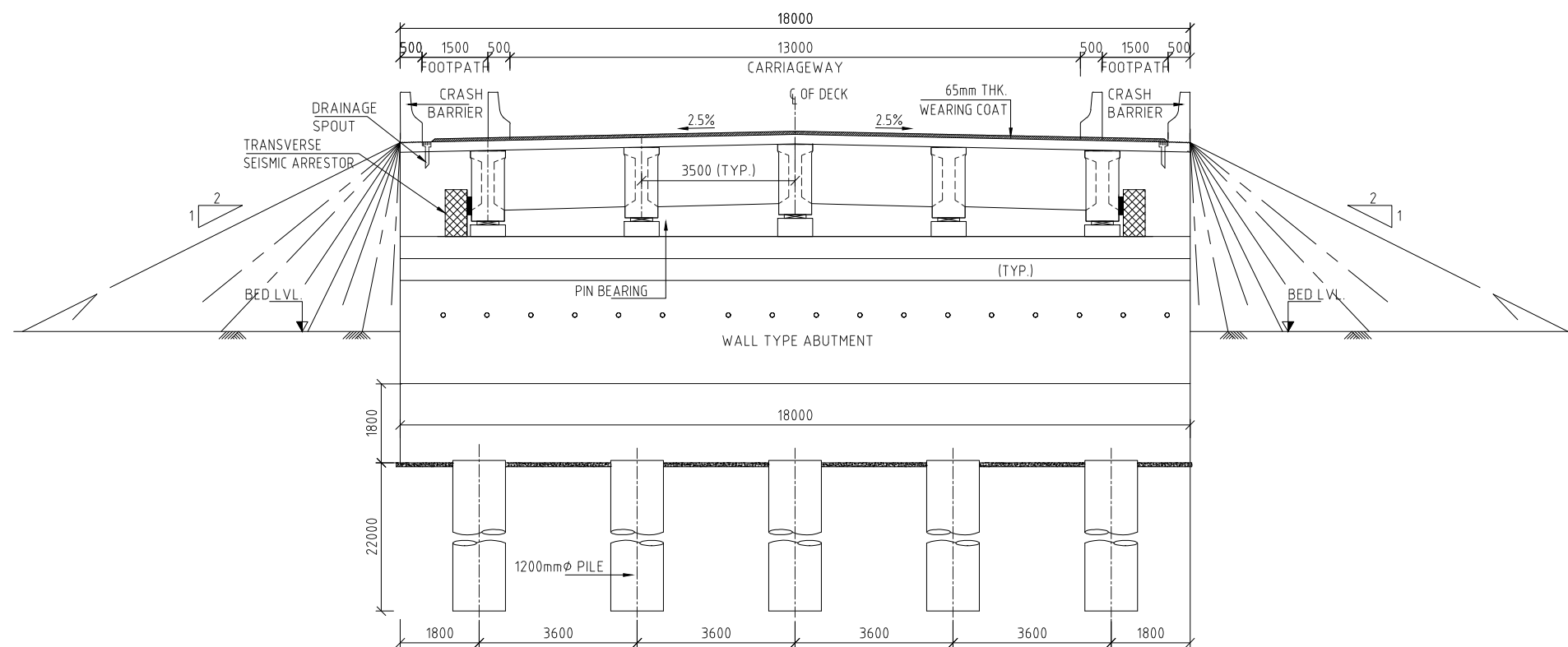
TECHNICAL CONSULTANCY
SERVICES




In
Association
with

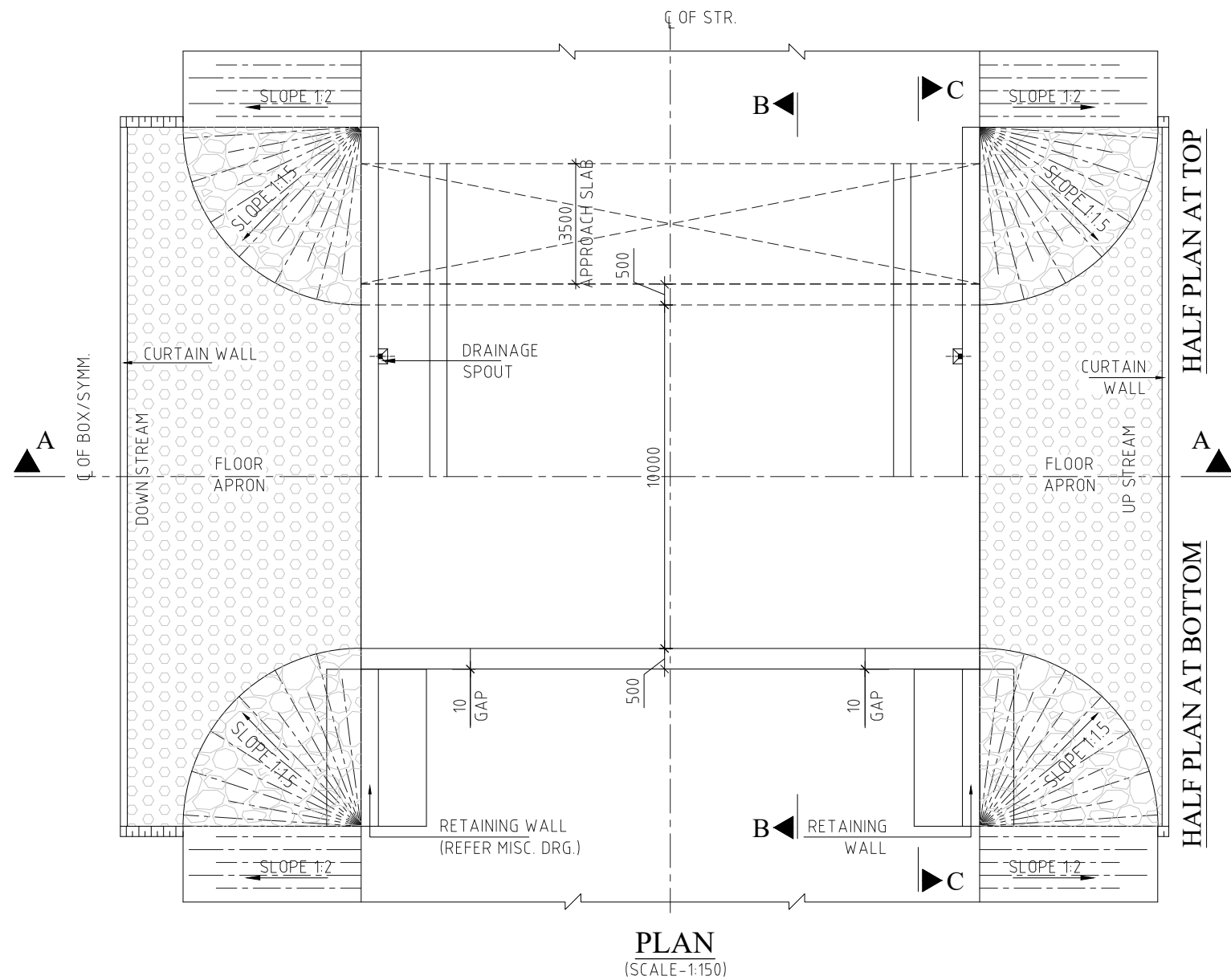
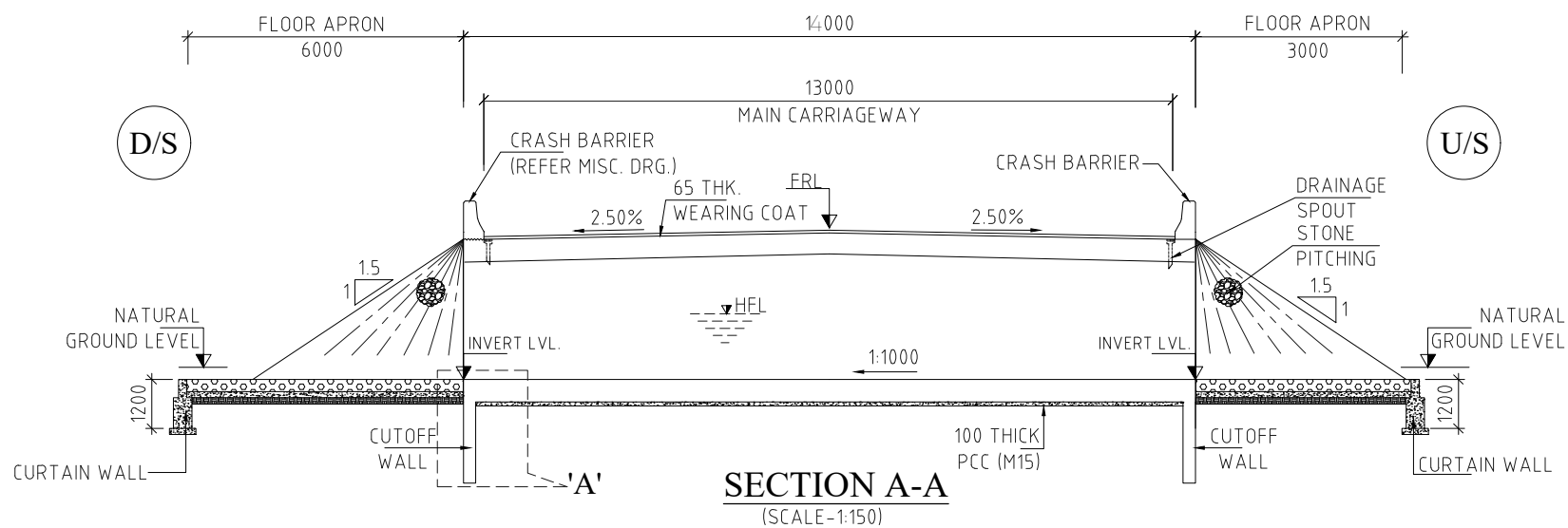


P.K. ENGINEERS

TITLE	NAME	DATE	PROJECT:			
DRAWN BY			CONSTRUCTION OF KARALI BYPASS ON NH-23 IN THE STATE OF RAJASTHAN UNDER ANNUAL PLAN 2024-2025			
DESIGN BY			TITLE: GENERAL ARRANGEMENT DRAWING OF MAJOR BRIDGE (2x30)			
APPROVED BY			Original Size A2	Drawing Status	Drawing No.	Rev R0



				CLIENT		DESIGN CONSULTANT		TITLE		NAME		DATE		PROJECT:											
						 TECHNICAL CONSULTANCY SERVICES		 In Association with P.K. ENGINEERS		DRAWN BY				CONSTRUCTION OF KARAULI BYPASS ON NH-23 IN THE STATE OF RAJASTHAN UNDER ANNUAL PLAN 2024-2025											
DESIGN BY										TITLE: GENERAL ARRANGEMENT DRAWING OF MAJOR BRIDGE (2x30)															
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REV.										DATE		DESCRIPTION		DRAWN											
1				2		3		4		5		6		7		8		9		10		11		12	






NOTES:-

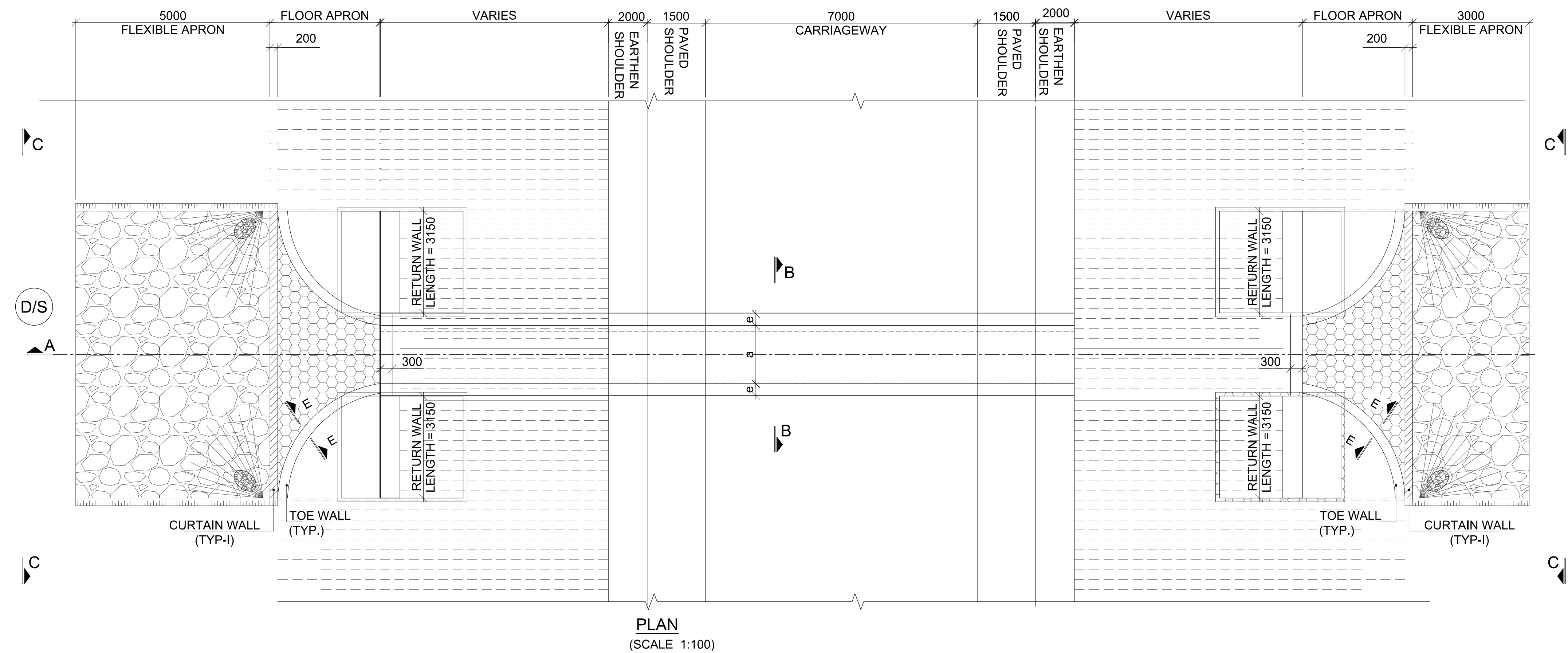
- ALL DIMENSIONS ARE IN MILLIMETER, LEVELS ARE IN METER AND CHAINAGE ARE IN KILOMETERS UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE RELEVANT PLAN AND PROFILE DRAWING OF ROAD.
- GRADE OF CONCRETE:-
 - M35-FOR RCC BOX CELL STRUCTURE.
 - M15-FOR PCC AND LEVELING COURSE.
 - M40-CRASH BARRIER
- GRADE OF STEEL - Fe500.
- THE FOLLOWING LOADS HAVE BEEN CONSIDERED IN THE DESIGN:-
 - ONE LANE ,TWO LANE AND THREE LANE OF CALSS A
 - ONE LANE OF CLASS A IN ADDITION OF ONE LANE OF CLASS 70R WHEEL OR ONE LANE OF 70R TRACKED WHICHEVER IS GOVERNS.
- BACKFILL MATERIAL BEHIND END WALL SHALL BE SELECTED GRANULAR SOIL HAVING PROPERTIES
MAX DRY DENSITY = 1850-2280kg/m³
OPTIMUM MOISTURE CONTENT = 7-15
AS PER IRC78-2014 AND MORTH SPECIFICATION.
- THE FRL SHOWN IN THE DRAWING SHALL BE VERIFIED WITH CORRESPONDING PLAN AND PROFILE DRAWING BEFORE EXECUTION, IF THERE IS ANY VARIATION SHALL BE BROUGHT TO THE NOTICE OF ENGINEER.
- BACKFILL TO BE DONE AND COMPACTED FROM BOTH SIDE SIMULTANEOUSLY.
- 600MM THICK. FILTER MATERIAL BEHIND WALL SHALL BE LAID AS PER APPENDIX 6 OF IRC 78-2014.
- WEARING COAT - 50mm THK. BITUMINOUS CONCRETE .
- 100MM DIA P.V.C. PIPE AT SPACING 1000MMc/c IN HORIZONTAL/VERTICAL DIRECTION SHALL BE PROVIDED UP TO 150MM ABOVE GROUND LEVEL FOR WEEP HOLES IN RETAINING WALL.
- THE MAXIMUM BASE PRESSURE 10t/m².HAS BEEN CONSIDERED IN DESIGN.
- HYDRAULIC DATA:-

DESIGN DISCHARGE	: 25.91m ³ /s
DESIGN VELOCITY	: 1.07m/s
SCOUR DEPTH	: 3.39m




LEGEND:-




FRL	FINISHED ROAD LEVEL
GR.	GROUND
IL	INVERT LEVEL
FDN.	FOUNDATION
LVL.	LEVEL

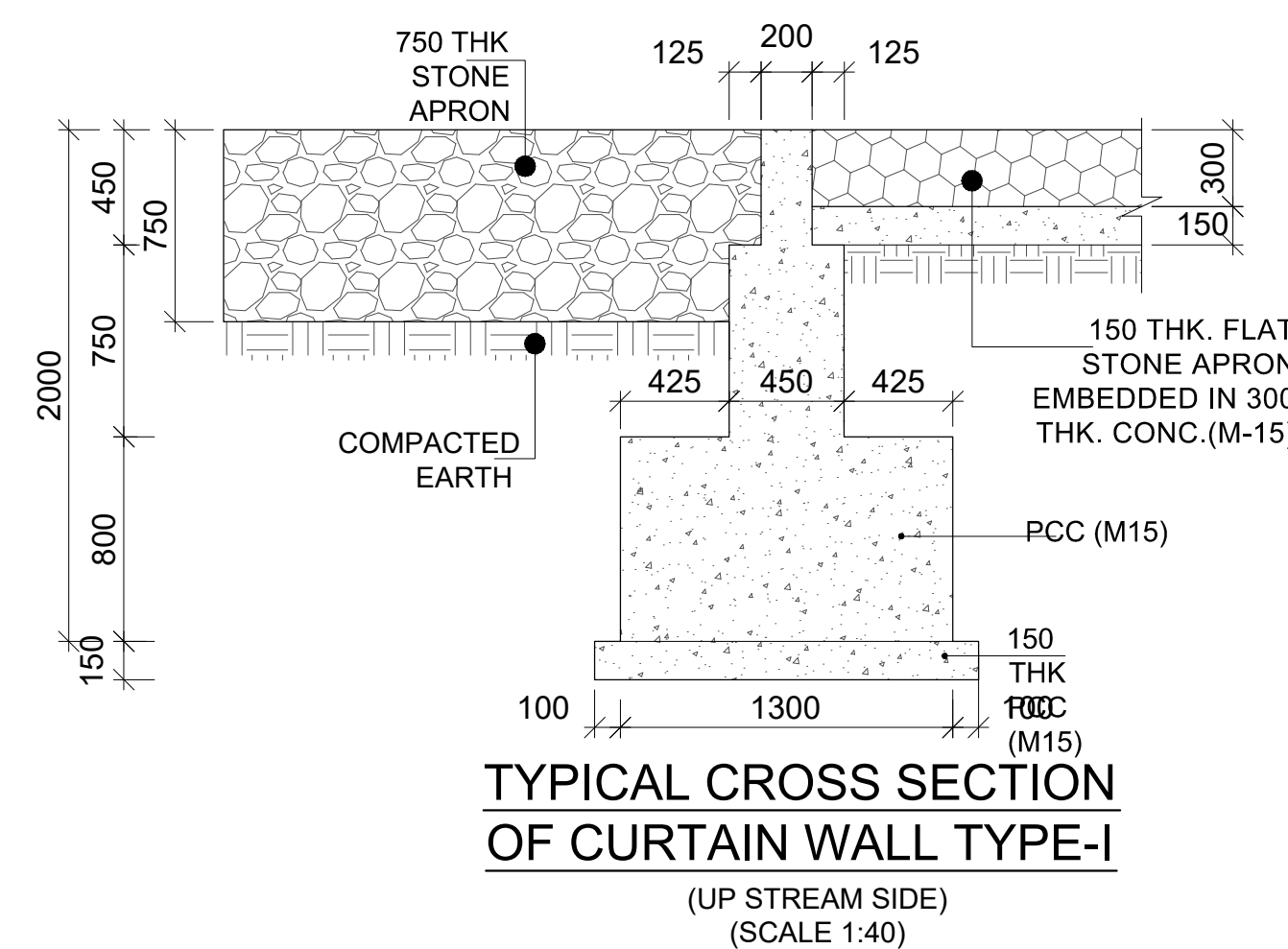
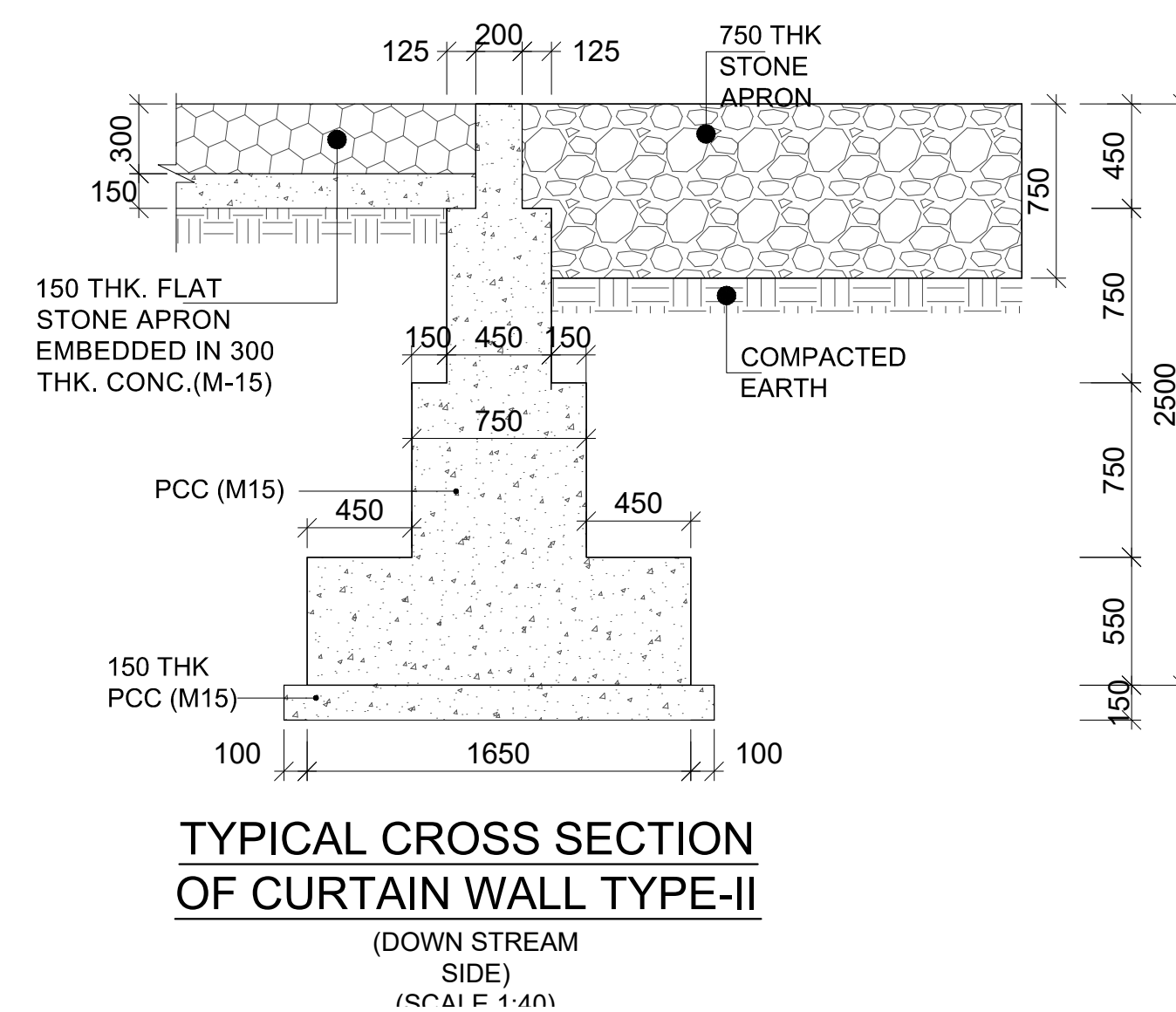
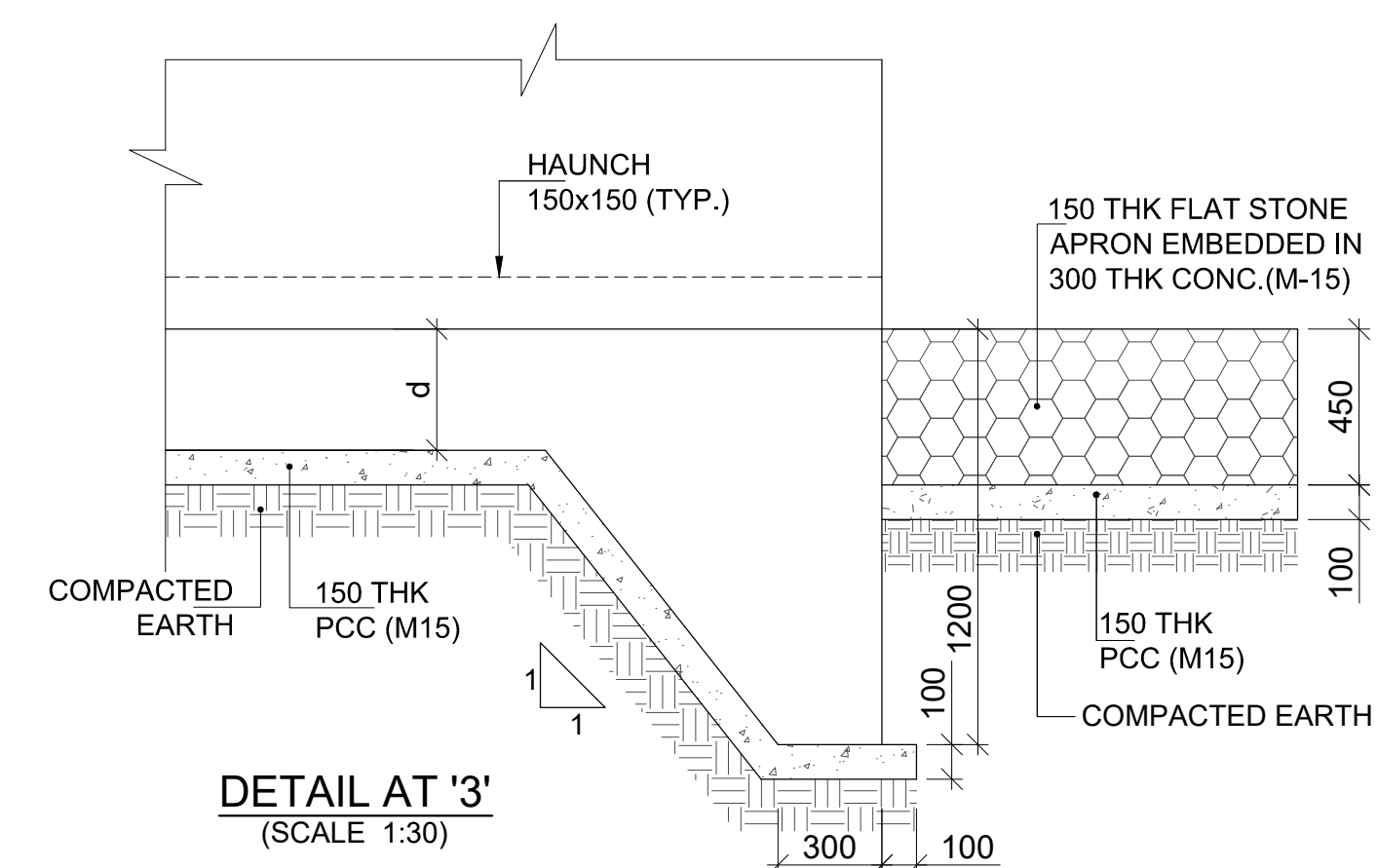
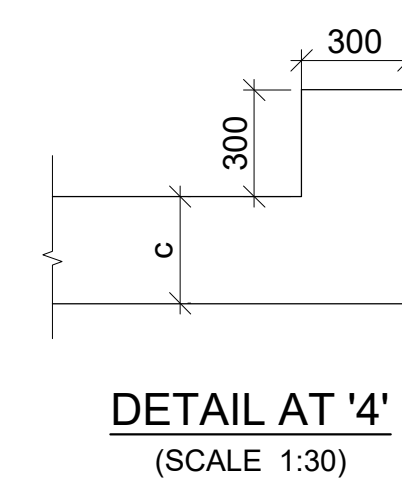
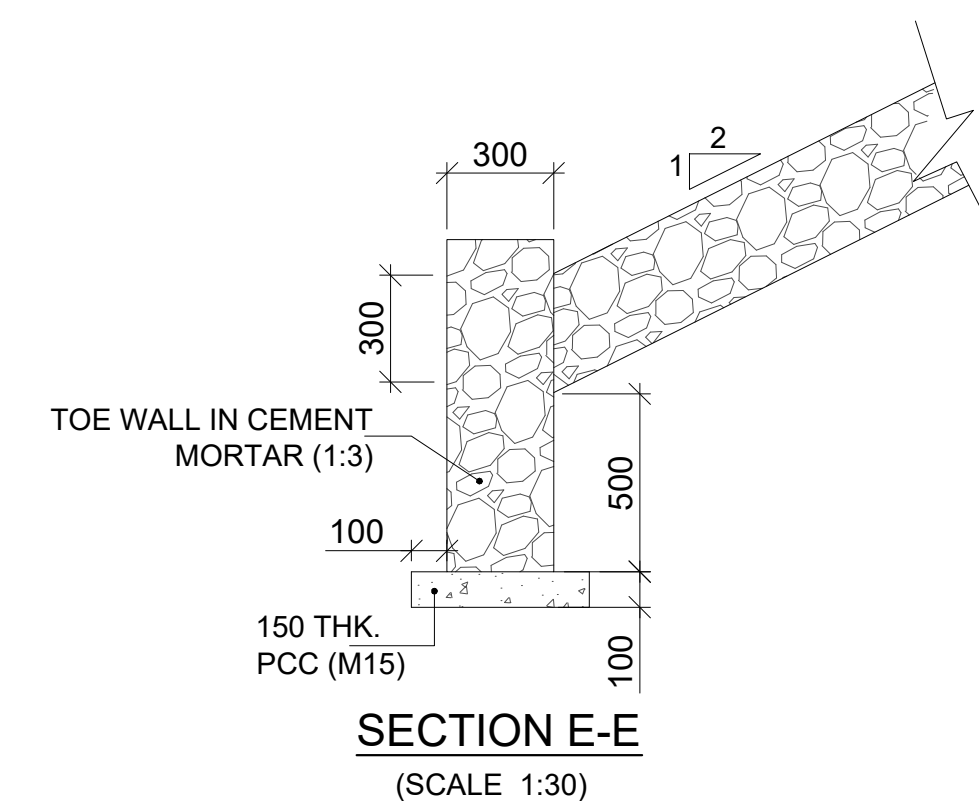
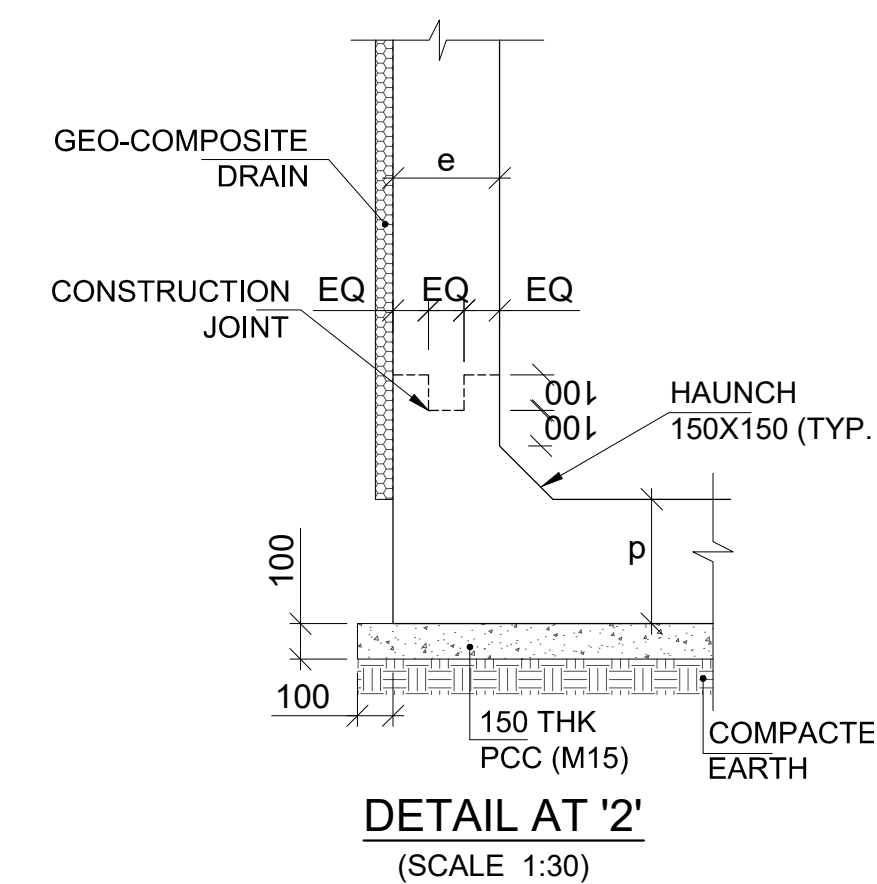
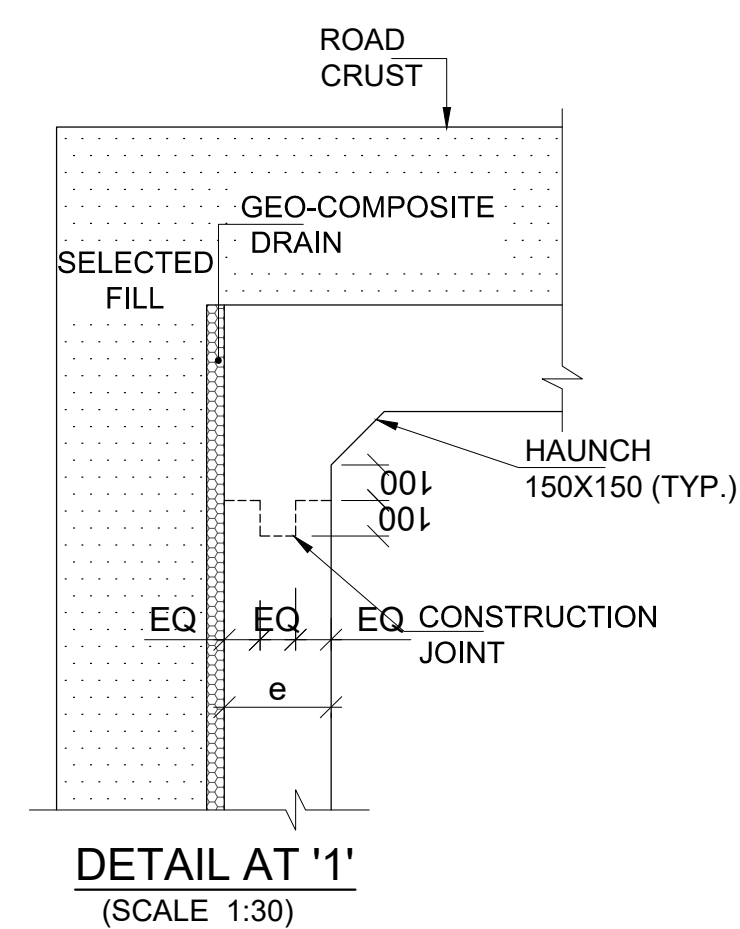
				<div></div>	CLIENT <div></div>	DESIGN CONSULTANT <div><div>In Association with</div></div>	TITLE	NAME	DATE	PROJECT: CONSTRUCTION OF KARALI BYPASS ON NH-23 IN THE STATE OF RAJASTHAN UNDER ANNUAL PLAN 2024-2025			
										TITLE: GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE (SPAN 1x10m)			
REV.	DATE	DESCRIPTION	DRAWN							Original Size A2	Drawing Status	Drawing No.	Rev R0





- ## ABBREVIATIONS
- £ - CENTER LINE
FRL - FINISHED ROAD LEVEL
IL - INVERT LEVEL
NGL - NATURAL GROUND LEVEL
LHS. - LEFT HAND SIDE
RHS. - RIGHT HAND SIDE
U/S - UP STREAM
D/S - DOWN STREAM
PCC - PLAIN CEMENT CONCRETE
THK. - THICKNESS
TYP. - TYPICAL

- LEGENDS:-**
- | | |
|---|------------------|
|  | -SELECTED FILL |
|  | -PCC |
|  | -COMPACTED EARTH |

			JOB NO		CLIENT: <div>  </div>	DESIGN CONSULTANT <div>   </div>		PROJECT: CONSTRUCTION OF KARAU LI BYPASS ON NH-23 IN THE STATE OF RAJASTHAN UNDER ANNUAL PLAN 2024-2025
			DRAWN	A.S				
	R0	FOR APPROVAL	CHKD	C.K.V				TITLE: TYPICAL GENERAL ARRANGEMENT DRAWING FOR BOX CULVERT 3X3
DATE	REV.	DESCRIPTION	APRD	A.D				SCALE : AS SHOWN



			JOB NO		CLIENT: 	DESIGN CONSULTANT  TECHNICAL CONSULTANCY SERVICES In Association with  P.K. ENGINEERS		PROJECT: CONSTRUCTION OF KARALI BYPASS ON NH-23 IN THE STATE OF RAJASTHAN UNDER ANNUAL PLAN 2024-2025
			DRAWN	A.S				
	R0	FOR APPROVAL	CHKD	C.K.V				TITLE: TYPICAL GENERAL ARRANGEMENT DRAWING FOR BOX CULVERT 3X3
			APRD	A.D				
DATE	REV.	DESCRIPTION	SIZE	A2				
								SCALE : AS SHOWN