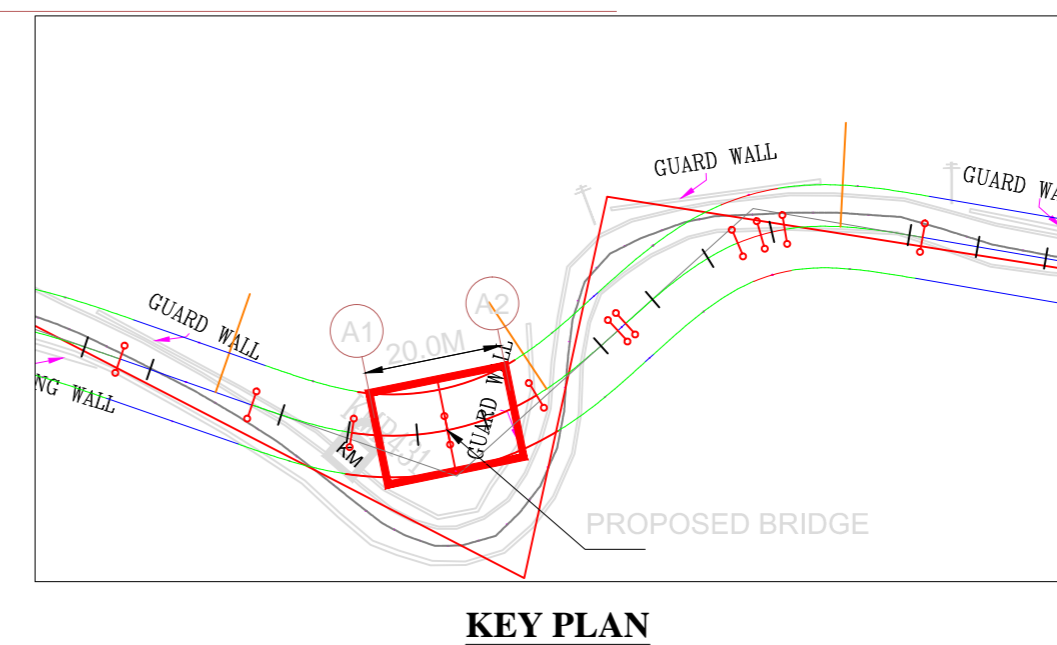
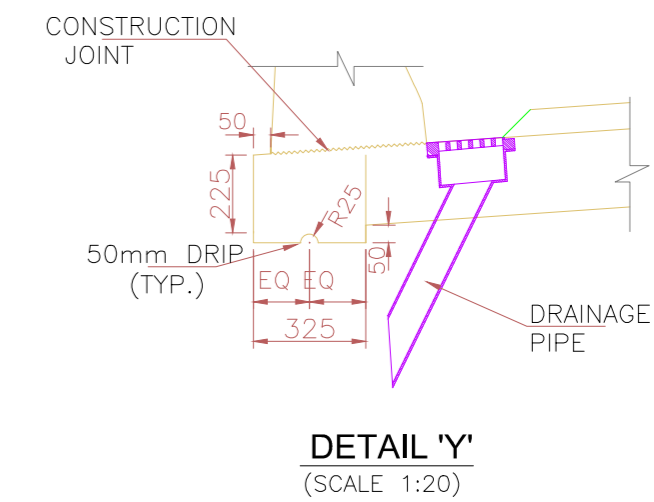
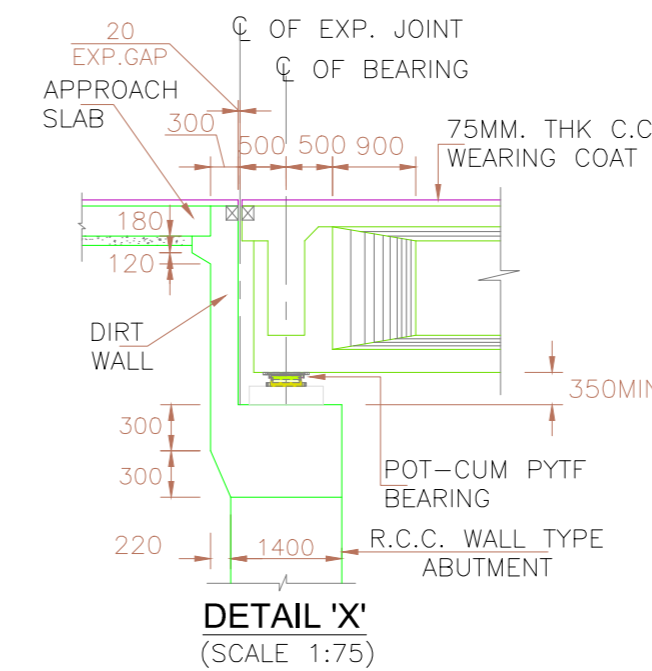
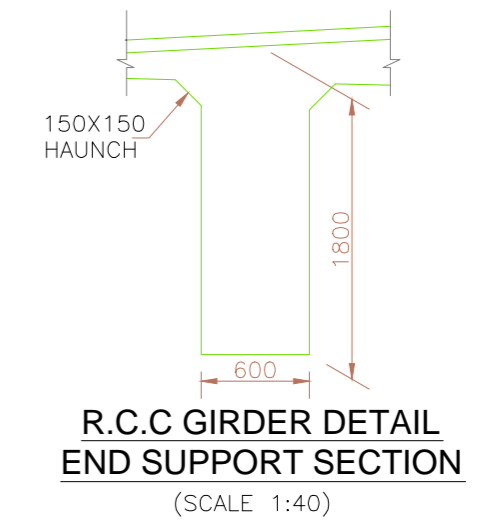
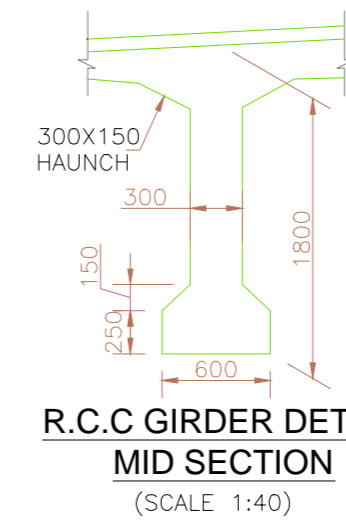
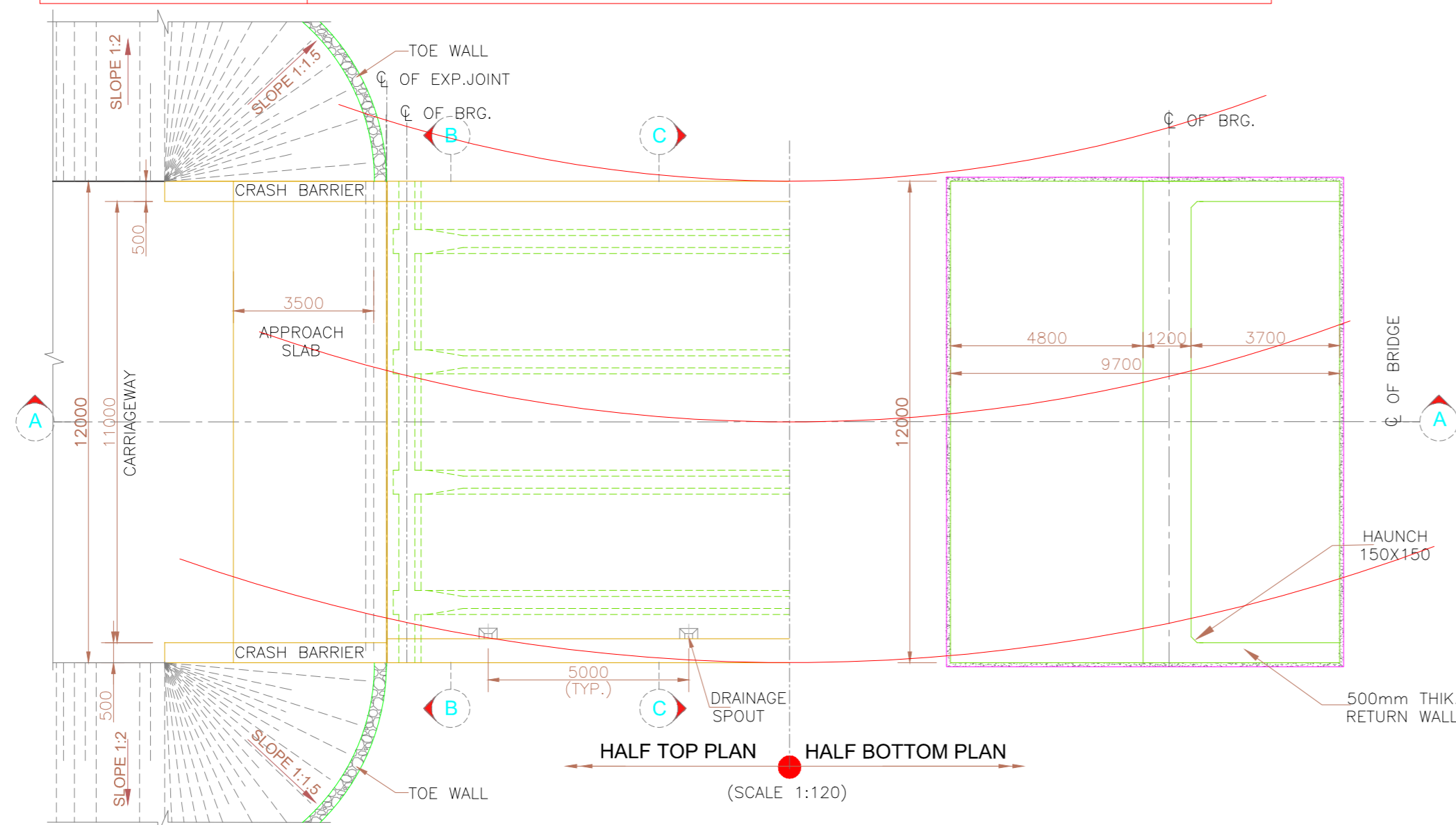
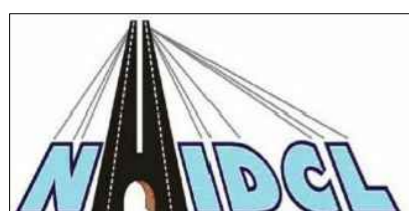


FRL LEVEL	943.334	943.334	943.334
GROUND LEVEL	928.031	937.488	931.117
CHAINAGE (M.)	428+925	428+935	428+945



KEY PLAN	
FOR PLANNING	<input type="radio"/>
FOR APPROVAL	<input checked="" type="radio"/>
FOR CONSTRUCTION	<input type="radio"/>
AS BUILT	<input type="radio"/>



National Highways and Infrastructure
Development Corporation

PROJECT TITLE :-

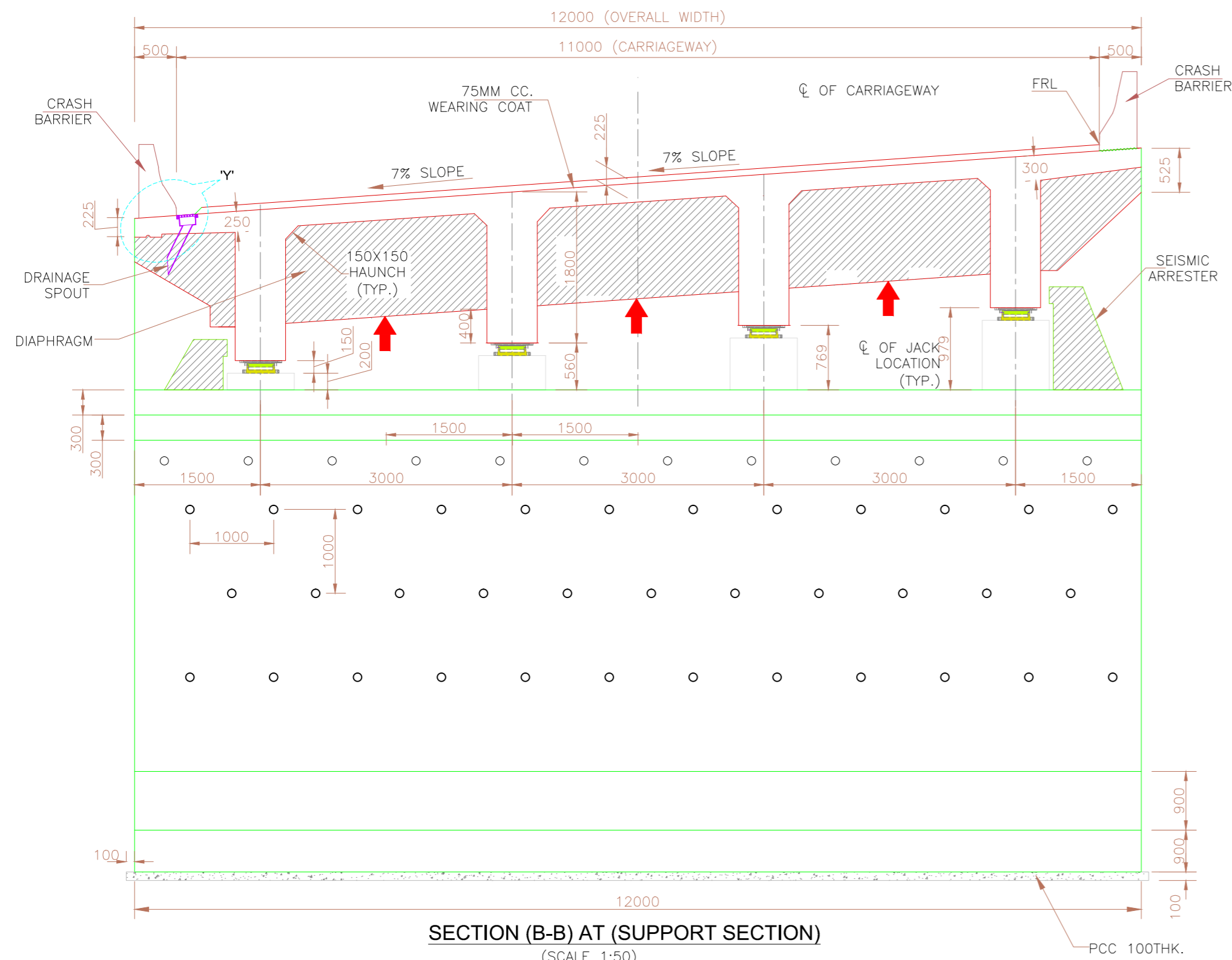
CONSTRUCTION & UPGRADATION OF EXISTING ROAD TO 2-LANE WITH PAVED SHOULDERS FROM KM 430.000 TO KM 468.000 OF CHAMOLI TO PAINI (EXCLUDING KM 437.625 TO KM 437.775, KM 458.900 TO KM 459.475 AND KM 464.425 TO KM 464.525) OF NH-07 UNDER CHARDHAM PARIYOJNA ON EPC BASICS IN THE STATE OF UTTARAKHAND (PKG-III)

REV	DATE	DESCRIPTION	SIGN
R1	JAN.2017	CARRIAGEWAY REVISED	Y.P.S

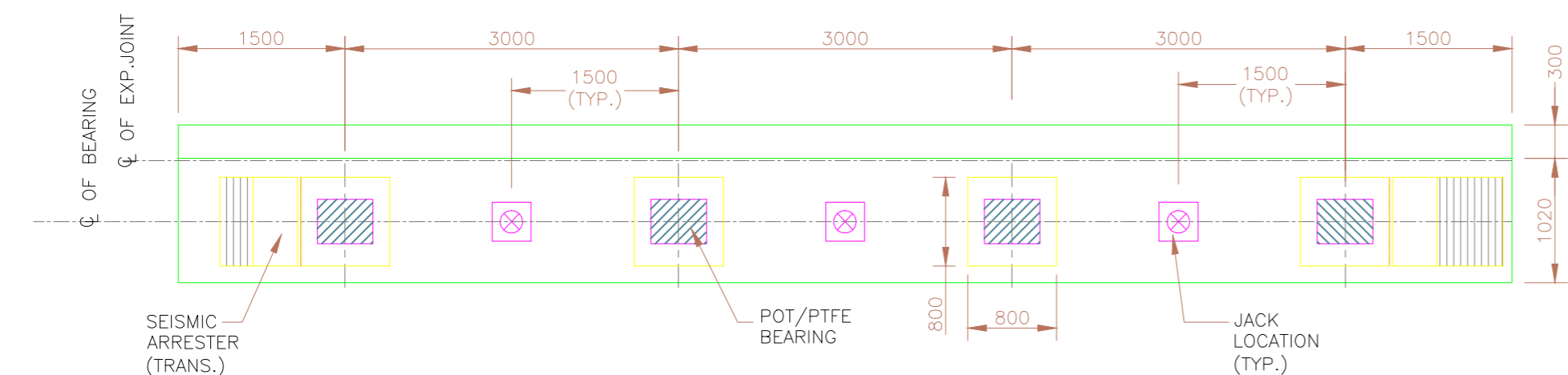
TITLE :- GENERAL ARRANGEMENT DRAWING 1X30M AT (CH.428+935)					
DWG. NO. NHIDCL/NH-07/MNB/CH.428+935/S-101					
DRN:-	DGN:-	CHK:-	DATE:-	SCALE:-	SHEET SIZE
PRAVEEN	P.V.M	V.P.S	JAN 2018	AS SHOWN	SHEET NO:- A2 01 OF 02

NOTES :-

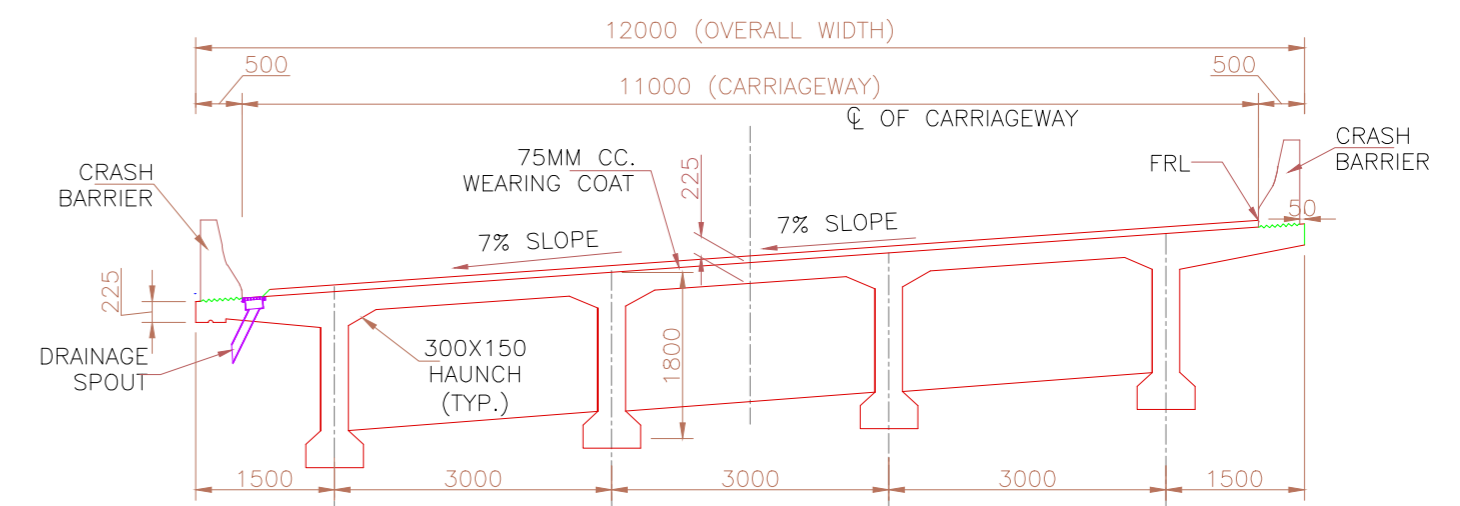
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS.
3. GRADE OF CONCRETE FOR VARIOUS STRUCTURES SHALL BE AS FOLLOWS -
 P.C.C. LEVELLING COURSE = M15
 SUPERSTRUCTURE = M35
 SUBSTRUCTURE = M35
 R.C.C. RAILING = M25
 APPROACH SLAB = M30
 RETURN/WING WALLS = M30
4. GRADE OF STEEL- Fe 500 CONFORMING TO IS:1786-1985.
5. THE SELECTED EARTH FILL BEHIND ABUTMENT SHALL HAVE FOLLOWING PROPERTIES WHICH HAVE BEEN ASSUMED FOR DESIGN OF ABUTMENTS FOUNDATION, PARAMETERS $\phi=30^\circ$, $\gamma_{dry} = 18 \text{ kN/m}^3$
6. 100 DIA. WEEP HOLES ARE TO BE PROVIDED @1000 C/C IN STAGGERED MANNER (BOTH HORIZONTALLY & VERTICALLY) IN 1:20 SLOPE (TYP).
- 7.(i) CLEAR COVER TO OUTER MOST STEEL IS 50mm FOR ALL COMPONENTS EXCEPT FOUNDATIONS.
 (ii) CLEAR COVER TO OUTER MOST STEEL IS 75mm FOR FOUNDATION.
8. EXPANSION JOINT :- STRIP SEAL
9. PROTECTION WORK SHALL BE PROVIDED AS PER IRC 89:1977.
10. IT MAY BE ENSURED THAT MINIMUM EMBEDMENT OF FOUNDATION IS 1.5M IN SOFT ROCK OR 0.6M IN HARD ROCK AS PER PROVISION OF OR IRC 78.
11. PROPOSED BRIDGE IS DESIGNED FOR 3 LANE OF CLASS-A OR SINGLE LANE OF 70R OF +1 LANE CLASS A WHICH EVER GOVERNS.



SECTION (B-B) AT (SUPPORT SECTION)
(SCALE 1:50)



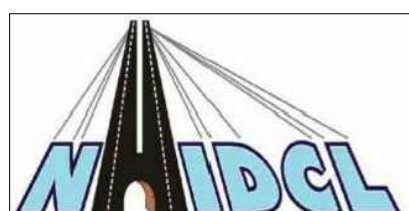
ABUTMENT CAP PLAN
(SCALE 1:50)



SECTION AT C-C (MID)
(SCALE 1:75)

KEY PLAN

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FOR APPROVAL	<input checked="" type="radio"/>
FOR CONSTRUCTION	<input type="radio"/>
AS BUILT	<input type="radio"/>



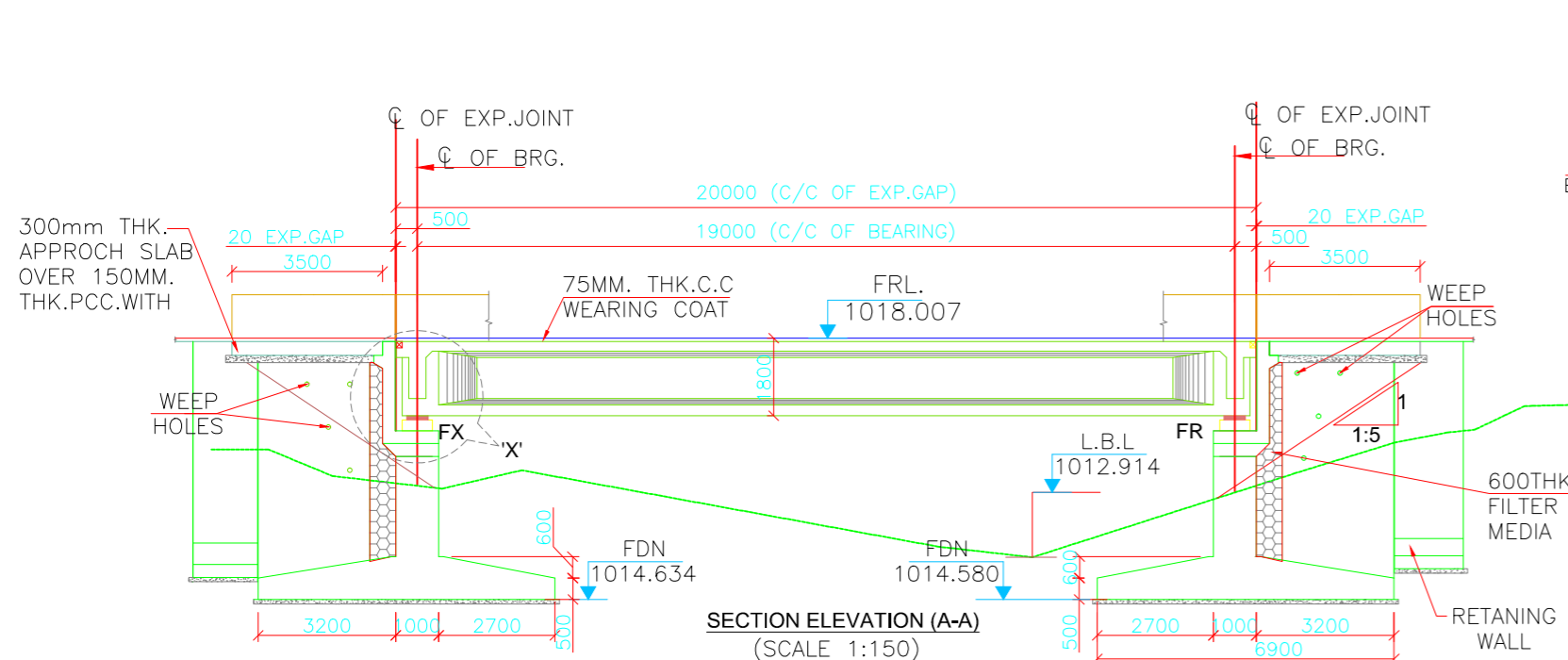
National Highways and Infrastructure
Development Corporation

PROJECT TITLE :-

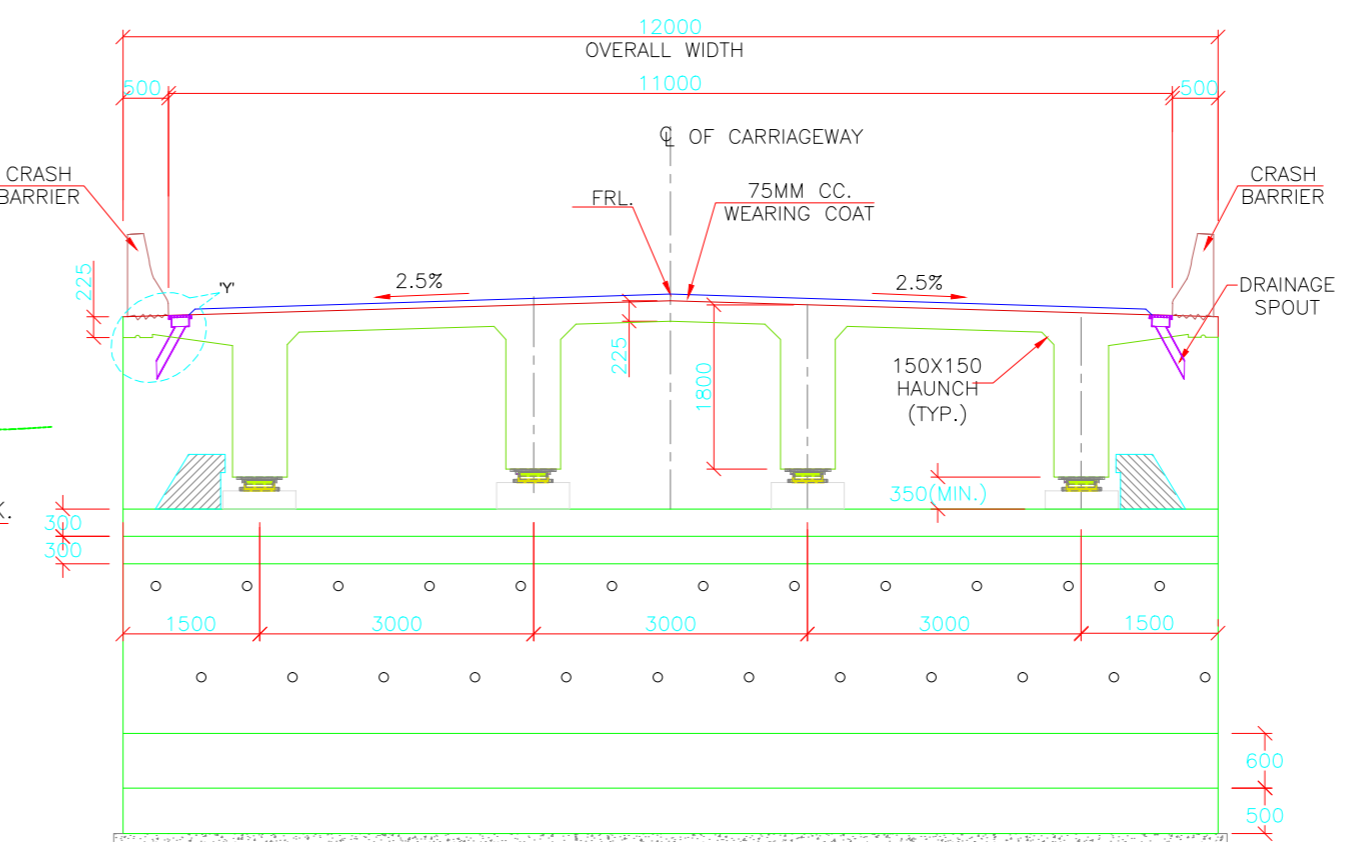
CONSTRUCTION & UPGRADATION OF EXISTING ROAD TO 2-LANE WITH PAVED SHOULDERS FROM KM 430.000 TO KM 468.000 OF CHAMOLI TO PAINI (EXCLUDING KM 437.625 TO KM 437.775, KM 458.900 TO KM 459.475 AND KM 464.425 TO KM 464.525) OF NH-07 UNDER CHARDHAM PARIYOJNA ON EPC BASICS IN THE STATE OF UTTARAKHAND (PKG-III)

REV	DATE	DESCRIPTION	SIGN
R1	JAN.2017	CARRIAGEWAY REVISED	Y.P.S

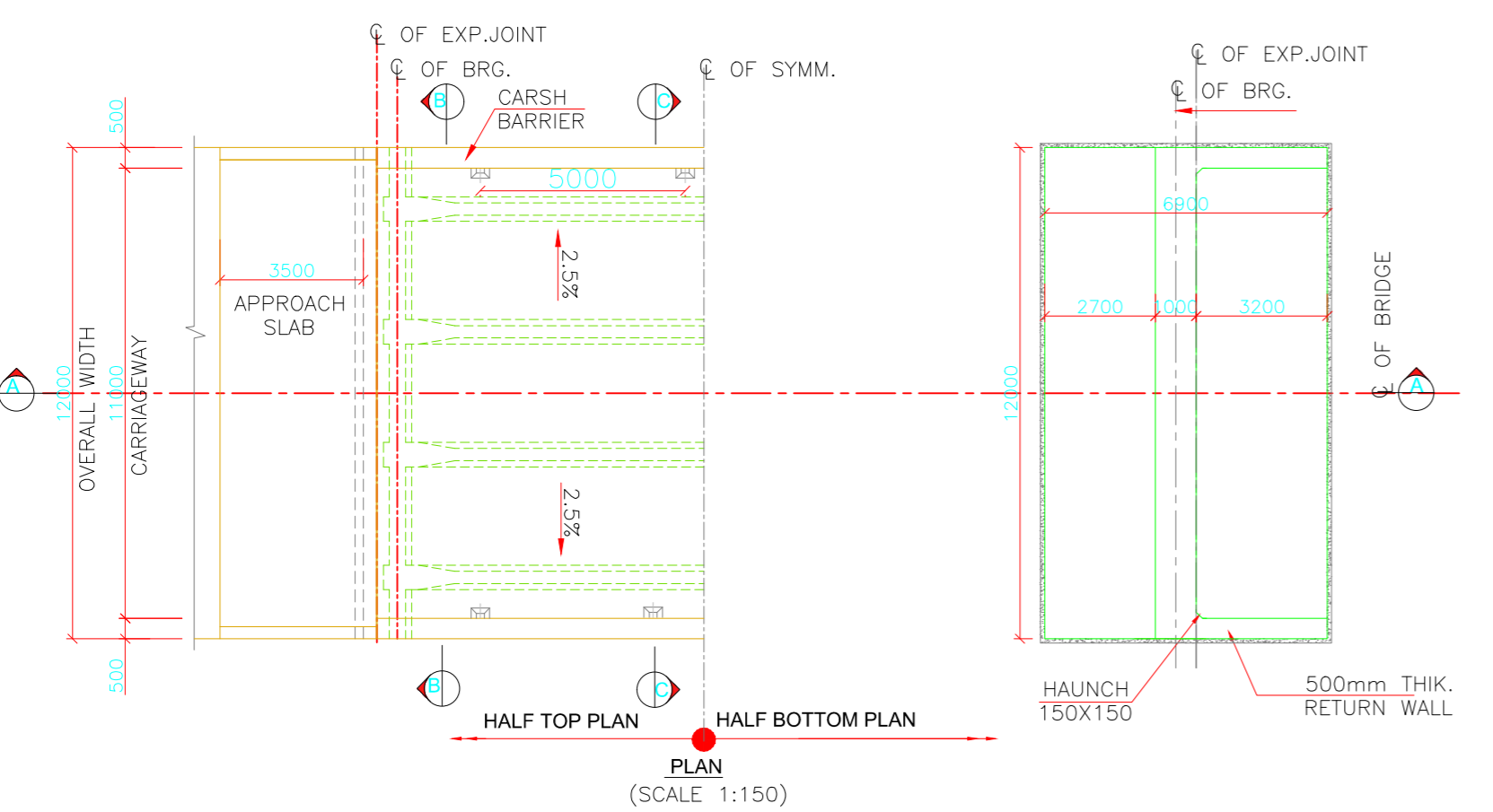
TITLE :- GENERAL ARRANGEMENT DRAWING					
1X30M AT (CH.428+935)					
DWG. NO. NHIDCL /NH-07 /MNB /CH.428+935/S-101					
DRN:-	DGN:-	CHK:-	DATE:-	SCALE:-	SHEET SIZE
PRAVEEN	P.V.M	V.P.S	JAN 2018	AS SHOWN	SHEET NO:-
					A2
					02 OF 02



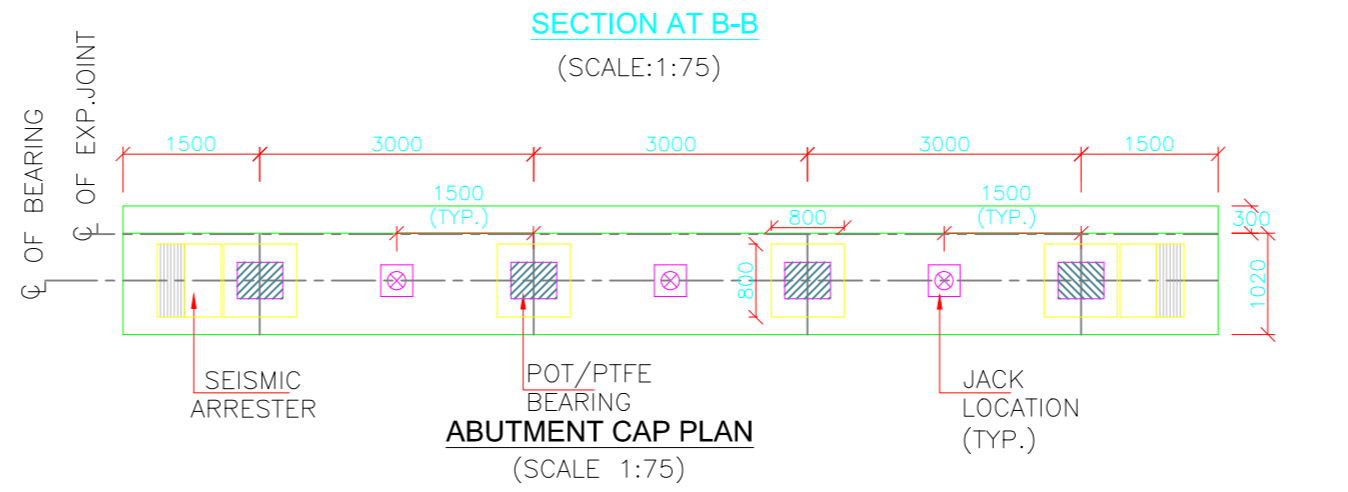
FRL LEVEL	1018.007	1018.007	1018.007
GROUND LEVEL	1014.634	1014.634	1014.580
CHAINAGE (M.)	431.150	431.160	431.170



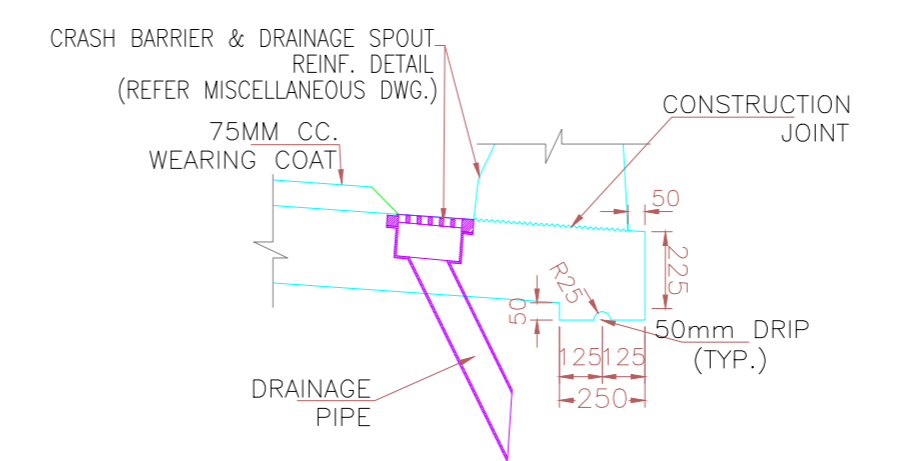
SECTION AT B-B
(SCALE:1:75)



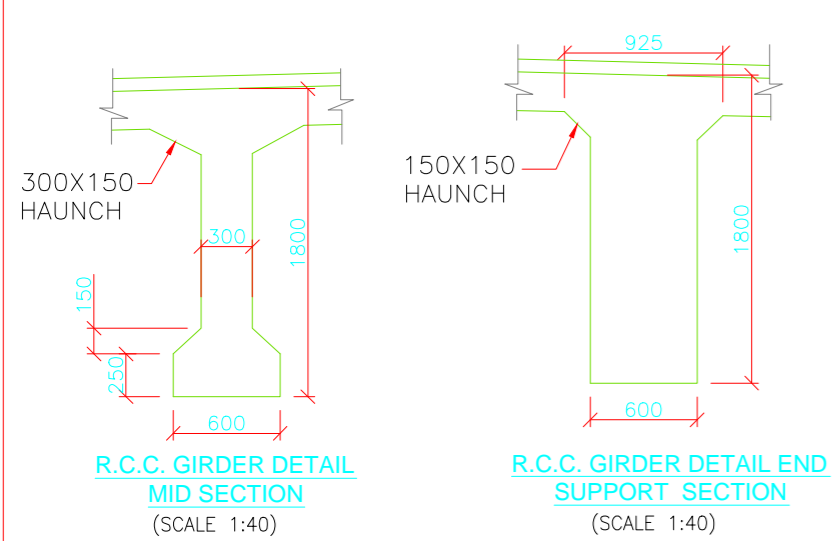
PLAN
(SCALE 1:150)



ABUTMENT CAP PLAN
(SCALE 1:75)

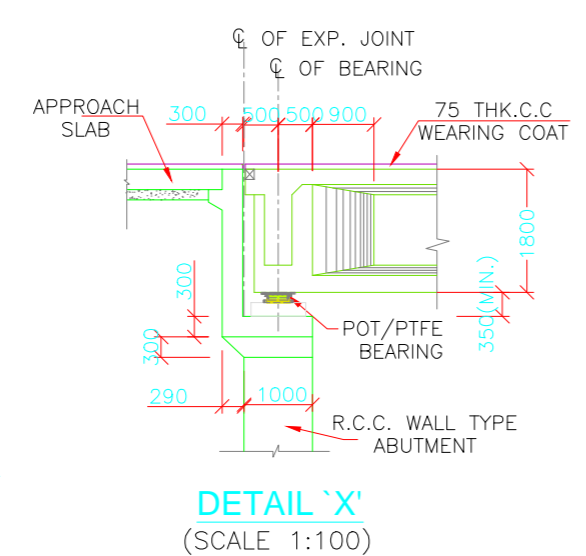


DETAIL 'Y'
(SCALE 1:20)

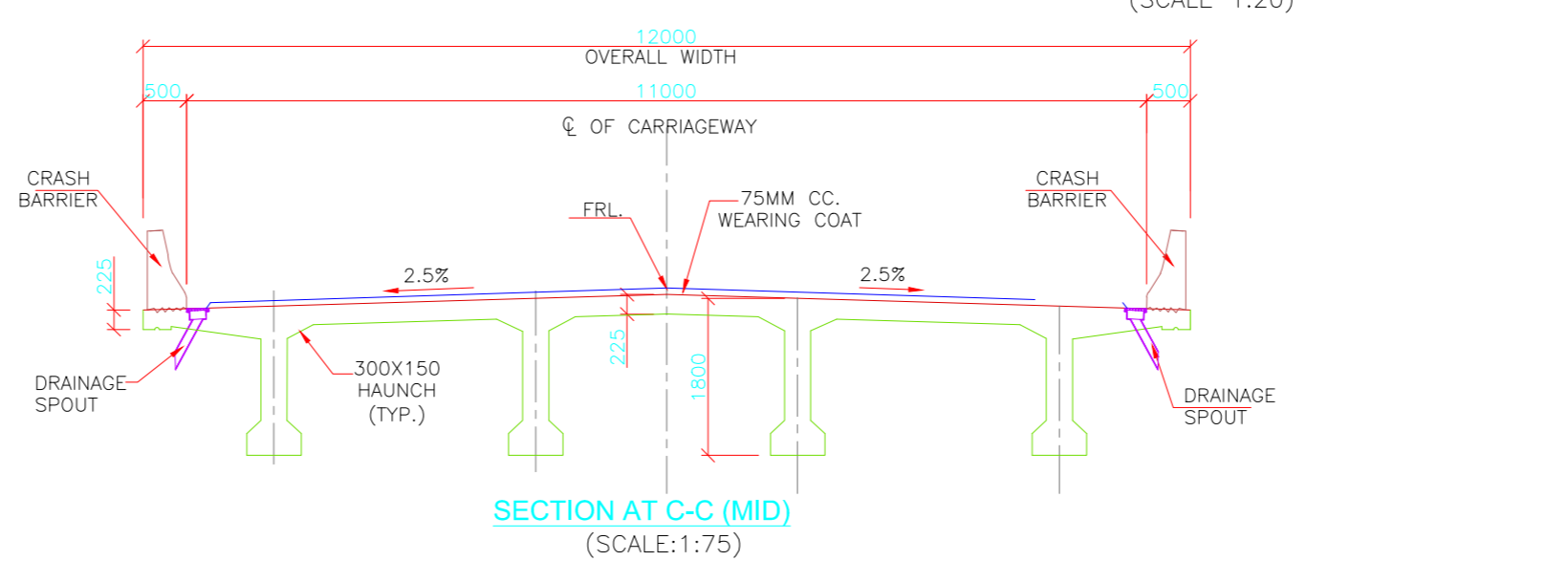


R.C.C. GIRDER DETAIL
MID SECTION
(SCALE 1:40)

R.C.C. GIRDER DETAIL
END SUPPORT SECTION
(SCALE 1:40)



DETAIL 'X'
(SCALE 1:100)

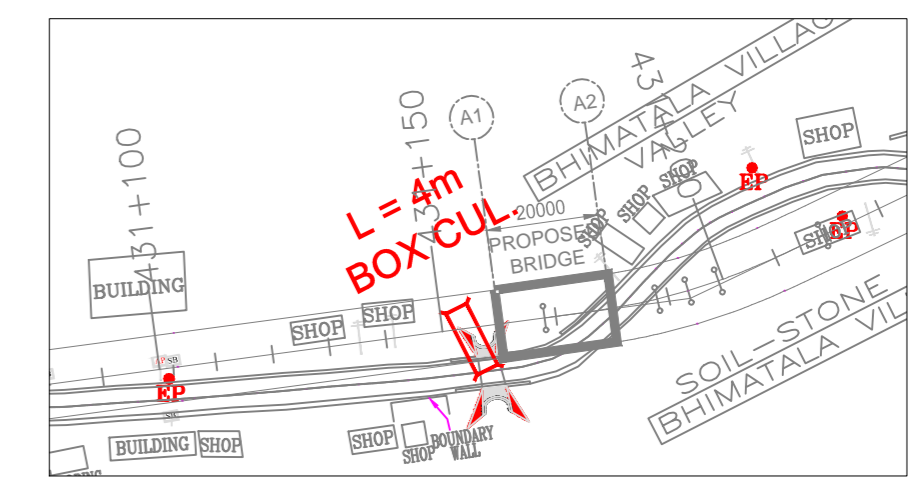


SECTION AT C-C (MID)
(SCALE:1:75)

NOTES :-

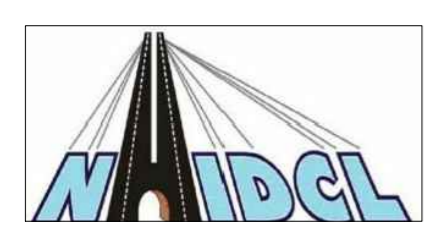
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS.
- GRADE OF CONCRETE FOR VARIOUS STRUCTURES SHALL BE AS FOLLOWS -

P.C.C. LEVELLING COURSE	= M15
SUPERSTRUCTURE	= M35
SUBSTRUCTURE	= M35
R.C.C. RAILING	= M25
APPROACH SLAB	= M30
RETURN/WING WALLS	= M30
- GRADE OF STEEL- Fe 415 CONFORMING TO IS:1786-1985.
- THE SELECTED EARTH FILL BEHIND ABUTMENT SHALL HAVE FOLLOWING PROPERTIES WHICH HAVE BEEN ASSUMED FOR DESIGN OF ABUTMENTS FOUNDATION, PARAMETERS $\phi=30^\circ$, $\gamma_{dry} = 18 \text{ kN/m}^3$
- 100 DIA. WEEP HOLES ARE TO BE PROVIDED @1000 C/C IN STAGGERED MANNER (BOTH HORIZONTALLY & VERTICALLY) IN 1:20 SLOPE
- (i) CLEAR COVER TO OUTER MOST STEEL IS 50mm FOR ALL COMPONENTS EXCEPT FOUNDATIONS.
(ii) CLEAR COVER TO OUTER MOST STEEL IS 75mm FOR FOUNDATION.
- EXPANSION JOINT :- STRIP SEAL
- PROTECTION WORK SHALL BE PROVIDED AS PER IRC 89:1977.
- IT MAY BE ENSURED THAT MINIMUM EMBEDMENT OF FOUNDATION IS 1.5M IN SOFT ROCK OR 0.6M IN HARD ROCK AS PER PROVISION OF OR IRC 78.
- PROPOSED BRIDGE IS DESIGNED FOR 3 LANE OF CLASS OR SINGLE LANE OF 70R OF +1 LANE CLASS A WHITH EVER GOVIRNS (CONSIDERING BOTH SIDE FOOTPATHS ARE UTILIZED FOR FUTURE TRAFIC GROWTH AFTER REMOVING CRASH BARRIES.



KEY PLAN

FOR PLANNING	<input type="checkbox"/>
FOR APPROVAL	<input checked="" type="checkbox"/>
FOR CONSTRUCTION	<input type="checkbox"/>
AS BULIT	<input type="checkbox"/>

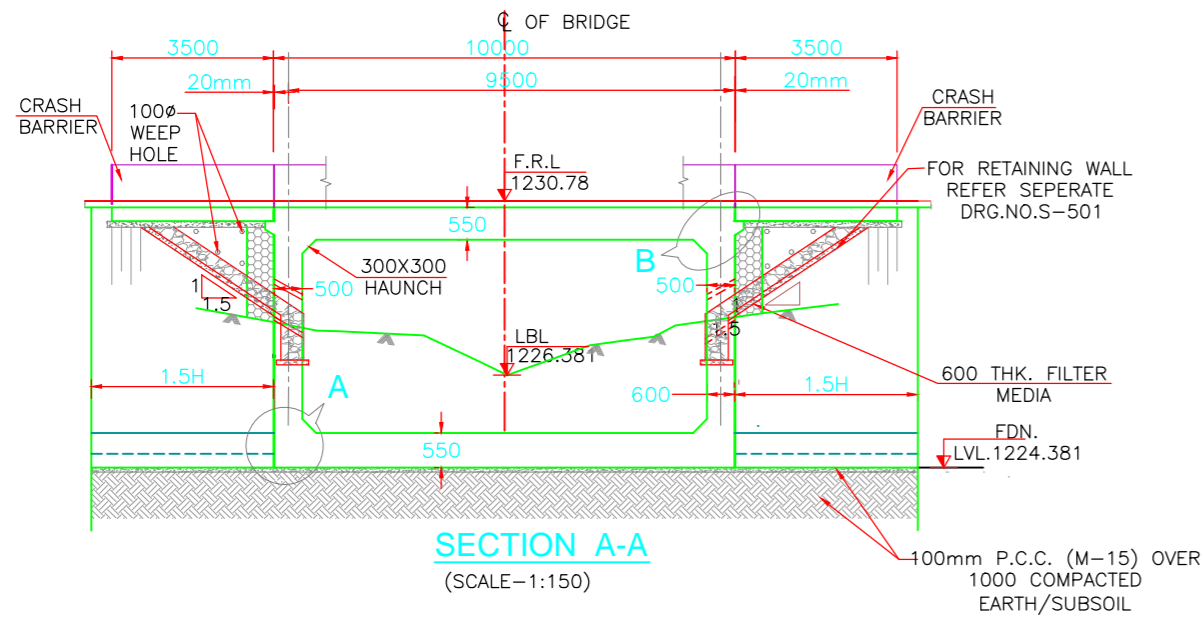


National Highways and Infrastructure
Development Corporation

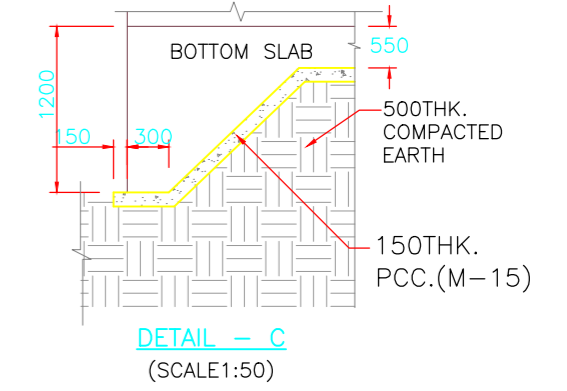
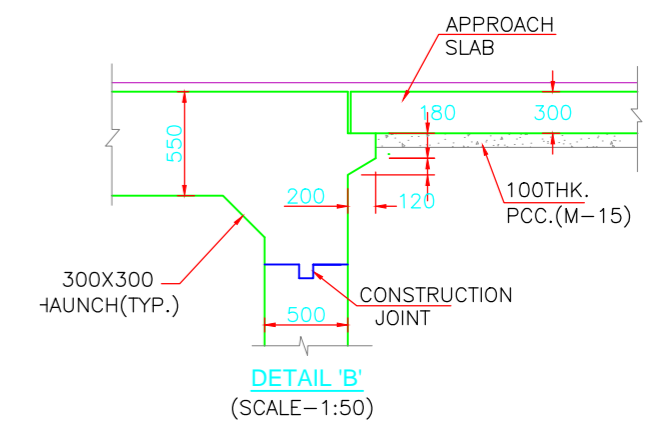
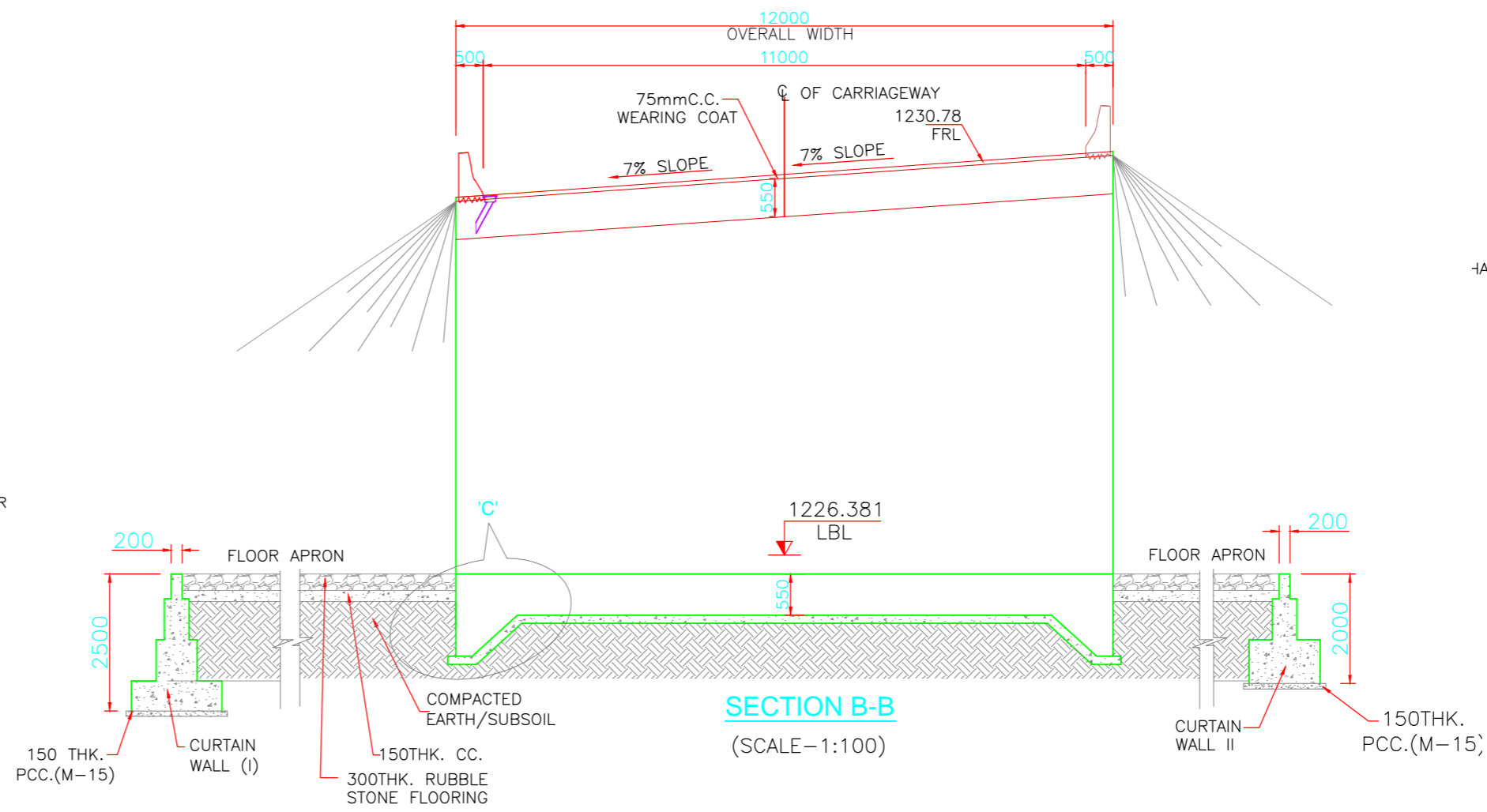
PROJECT TITLE :-
CONSTRUCTION & UPGRADATION OF EXISTING ROAD TO 2-LANE WITH PAVED SHOULDERS FROM KM 430.000 TO KM 468.000 OF CHAMOLI TO PAINI (EXCLUDING KM 437.625 TO KM 437.775, KM 458.900 TO KM 459.475 AND KM 464.425 TO KM 464.525) OF NH-07 UNDER CHARDHAM PARIYOJNA ON EPC BASICS IN THE STATE OF UTTAKHAND (PKG-III)

REV	DATE	DESCRIPTION	SIGN
R1	JAN.2017	CARRIAGEWAY REVISED	ALI

TITLE :- GENERAL ARRANGEMENT DRAWING 1X20M AT (CH.431+160)					
DWG. NO. NHIDCL /NH-07 /MNB /CH.431+160.20M. S-101					
DRN:-	DGN:-	CHK:-	DATE:-	SCALE:-	SHEET SIZE
ALI	P.V.M	V.P.S	JAN 2018	AS SHOWN	SHEET NO:- A2 01 OF 01

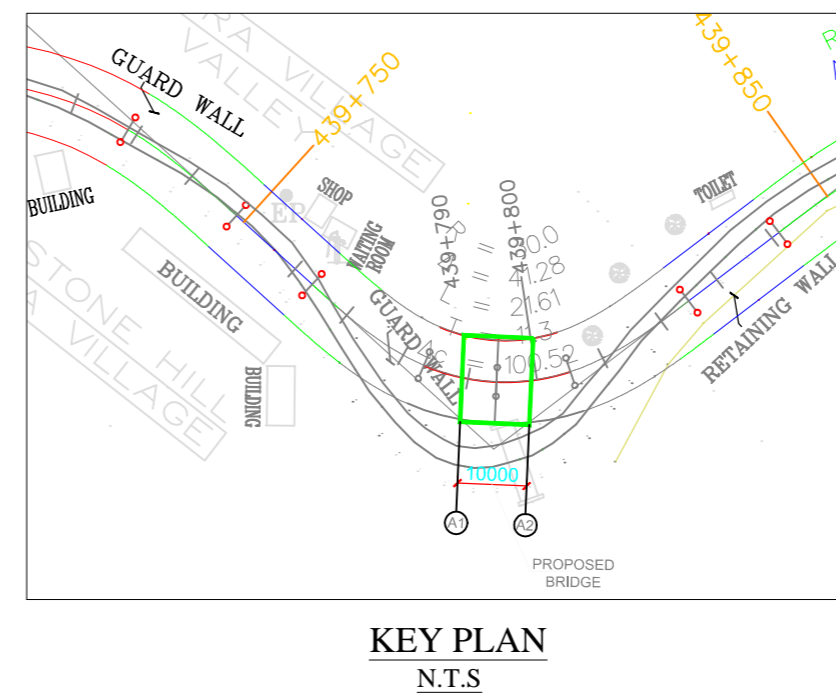
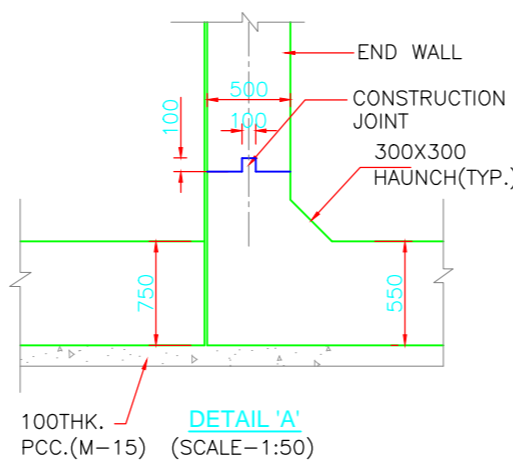
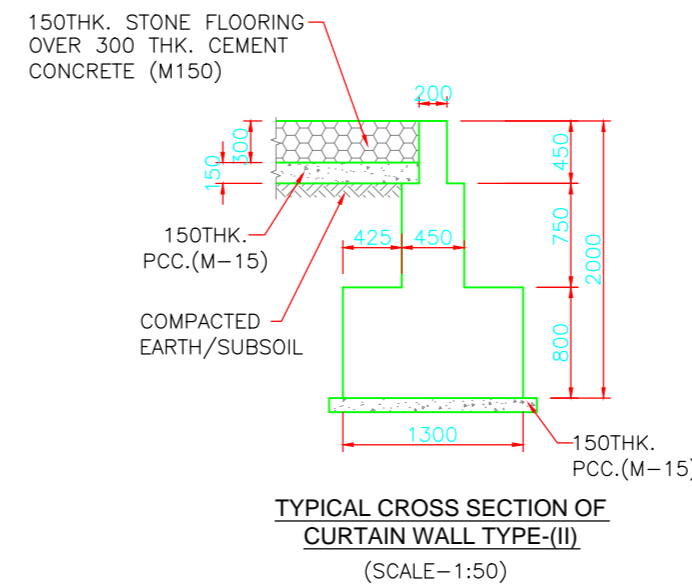
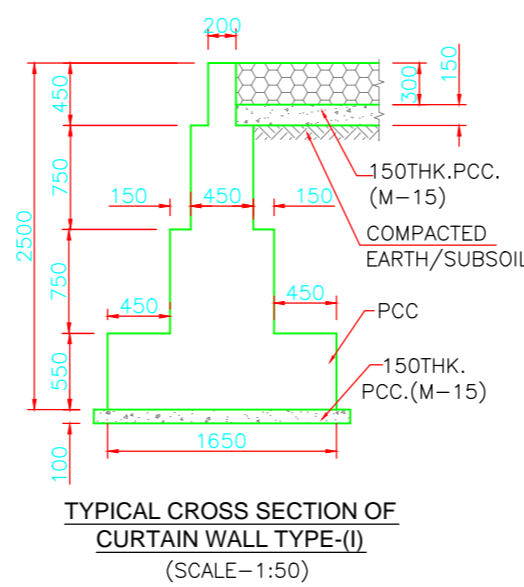
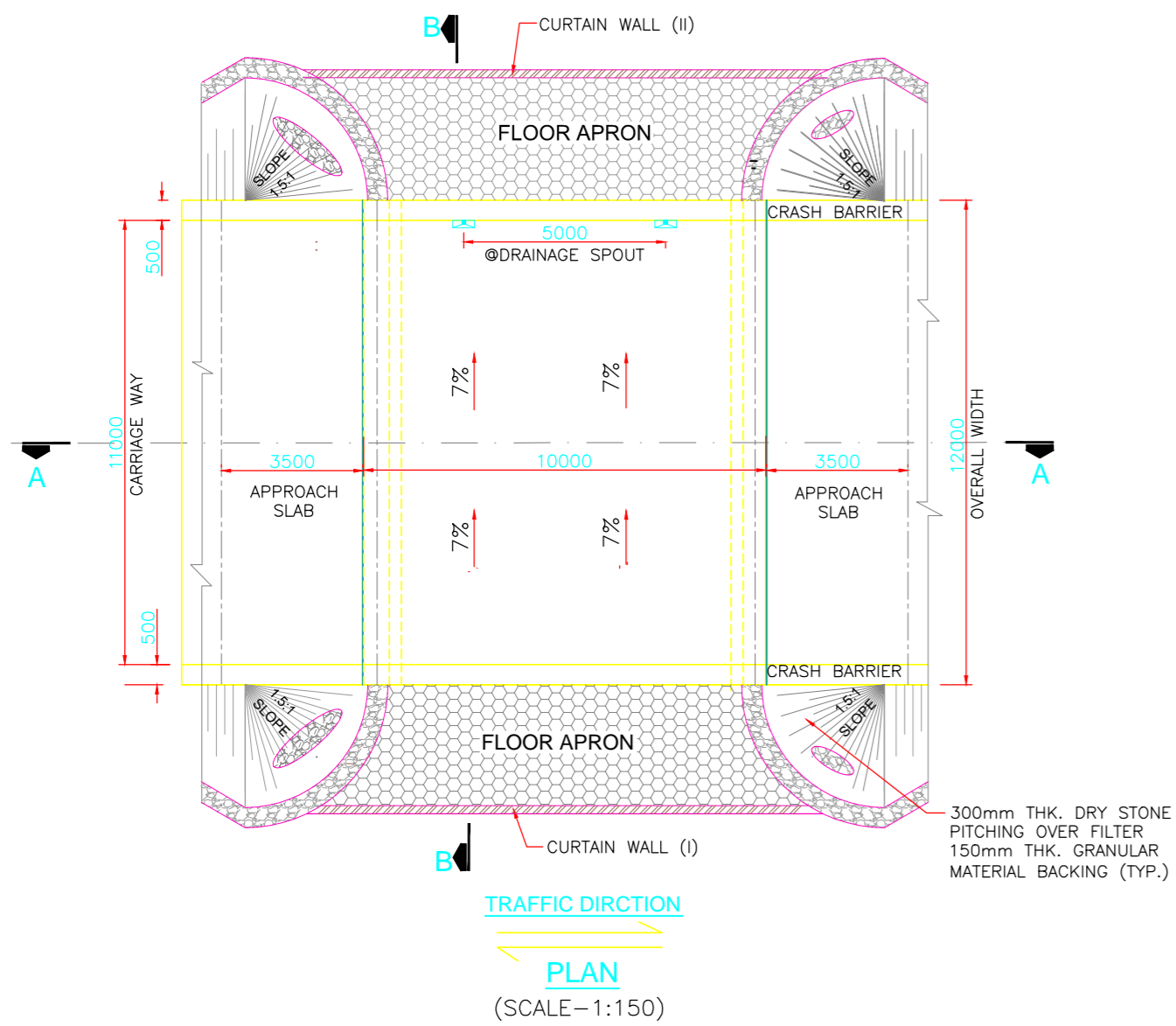


FORMATION LEVEL	1230.78	1230.78	1230.78
GROUND LEVEL	1227.465	1226.407	1227.596
CHAINAGE (M.)		439+795	

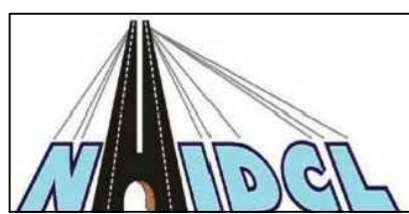


NOTES :-

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS SHALL FOLLOWED.
- THE ACTUAL BASE PRESSURE AS PER THE DESIGN 63.12 KN/SQM. THE SHOULD BE ASCERTAINED AT SITE BEFORE EXECUTION.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS.
- GRADE OF CONCRETE SHALL BE AS FOLLOWS :-
 P.C.C. LEVELING COURSE M15
 BOX STRUCTURE M35
 CRASH BARRIER M40
 APPROACH SLAB M30
 CURTAIN WALL M15
 RETAINING/WING WALLS M35
- GRADE OF STEEL- Fe 500 CONFORMING TO IS:1786-1985
- 75MM THK C.C WEARING COURSE SHALL BE PROVIDED AS PER SECTION 500 OF MORTH SPECIFICATIONS.
- THE SELECTED EARTH FILL BEHIND ABUTMENT SHALL HAVE FOLLOWING PROPERTIES WHICH HAVE BEEN ASSUMED FOR DESIGN OF ABUTMENTS & ABUTMENT :-
 CI B85HCZ 1' Ssz 1' % H_u
- (i) 40mm top slab
 (ii) 75mm bottom slab
 (iii) 40mm side wall
- 100 DIA. WEEP HOLES ARE TO BE PROVIDED @1000 C/C IN STAGGERED MANNER (BOTH HORIZONTALLY & VERTICALLY) IN 1:20 SLOPE (TYP).
- IT MAY BE ENSURED THAT MINIMUM EMBEDMENT OF FOUNDATION IS 1.5M IN SOFT ROCK OR 0.6M IN HARD ROCK AS PER PROVISION OF IRC 78.
- ALL DIMENSIONS ARE TENTATIVE SUBJECT TO CHANGE DURING THE DETAILED DESIGN.



FOR PLANNING	<input type="checkbox"/>
FOR APPROVAL	<input checked="" type="checkbox"/>
FOR CONSTRUCTION	<input type="checkbox"/>
AS BUILT	<input type="checkbox"/>



National Highways and Infrastructure Development Corporation

PROJECT TITLE :-

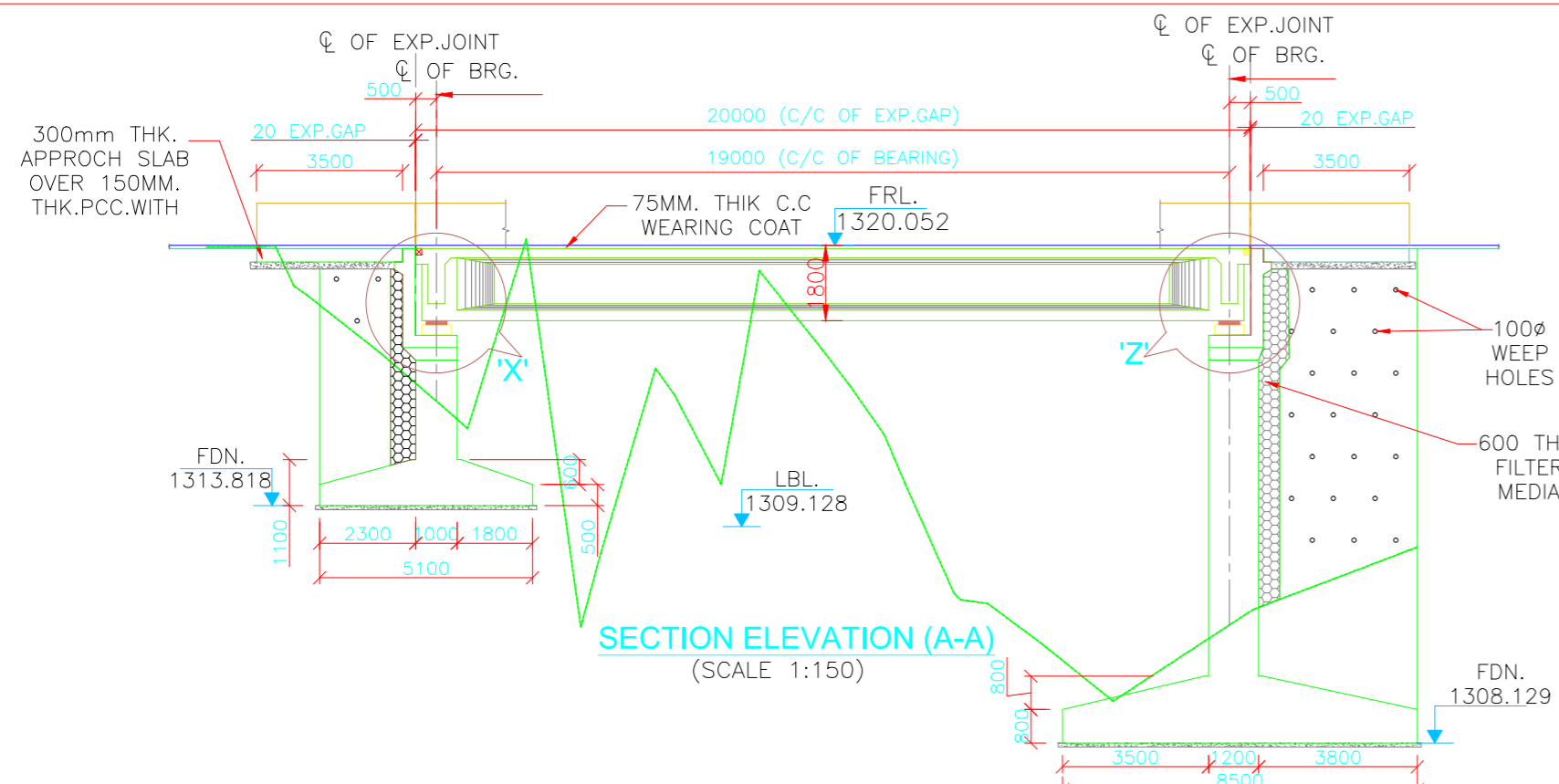
CONSTRUCTION & UPGRADATION OF EXISTING ROAD TO 2-LANE WITH PAVED SHOULDERS FROM KM 430.000 TO KM 468.000 OF CHAMOLI TO PAINI (EXCLUDING KM 437.625 TO KM 437.775, KM 458.900 TO KM 459.475 AND KM 464.425 TO KM 464.525) OF NH-07 UNDER CHARDHAM PARIYOJNA ON EPC BASICS IN THE STATE OF UTTAKHAND (PKG-III)

REV	DATE	DESCRIPTION	SIGN

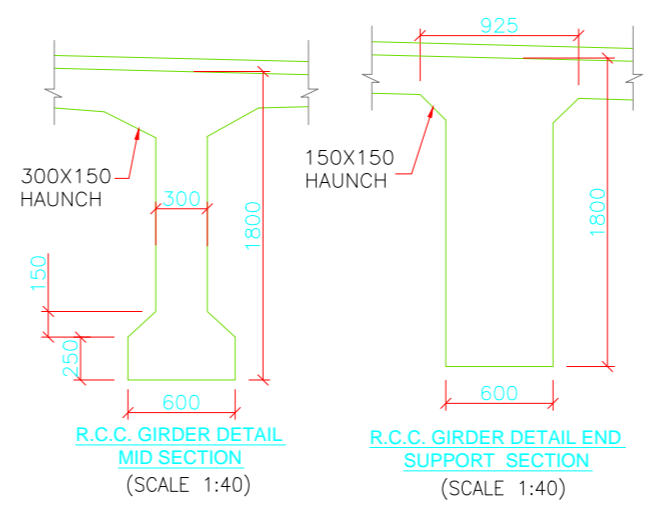
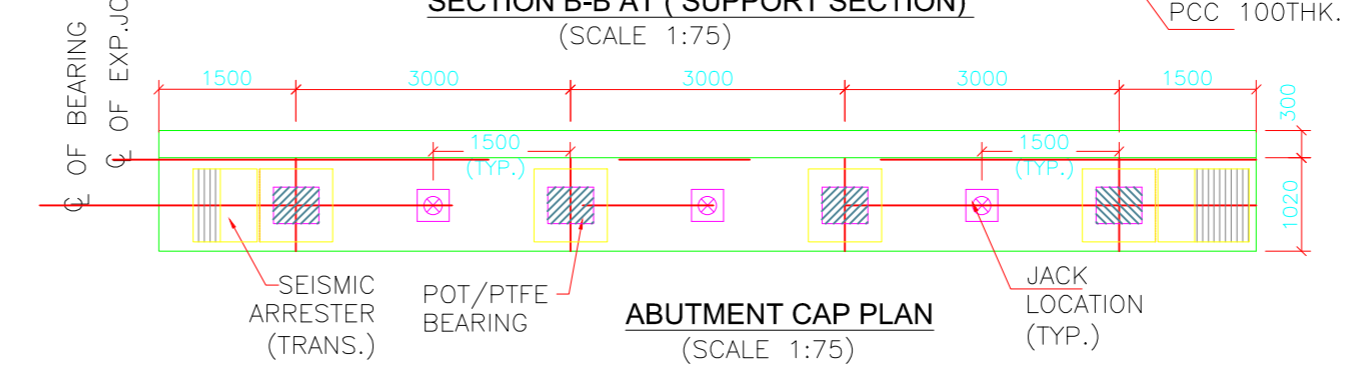
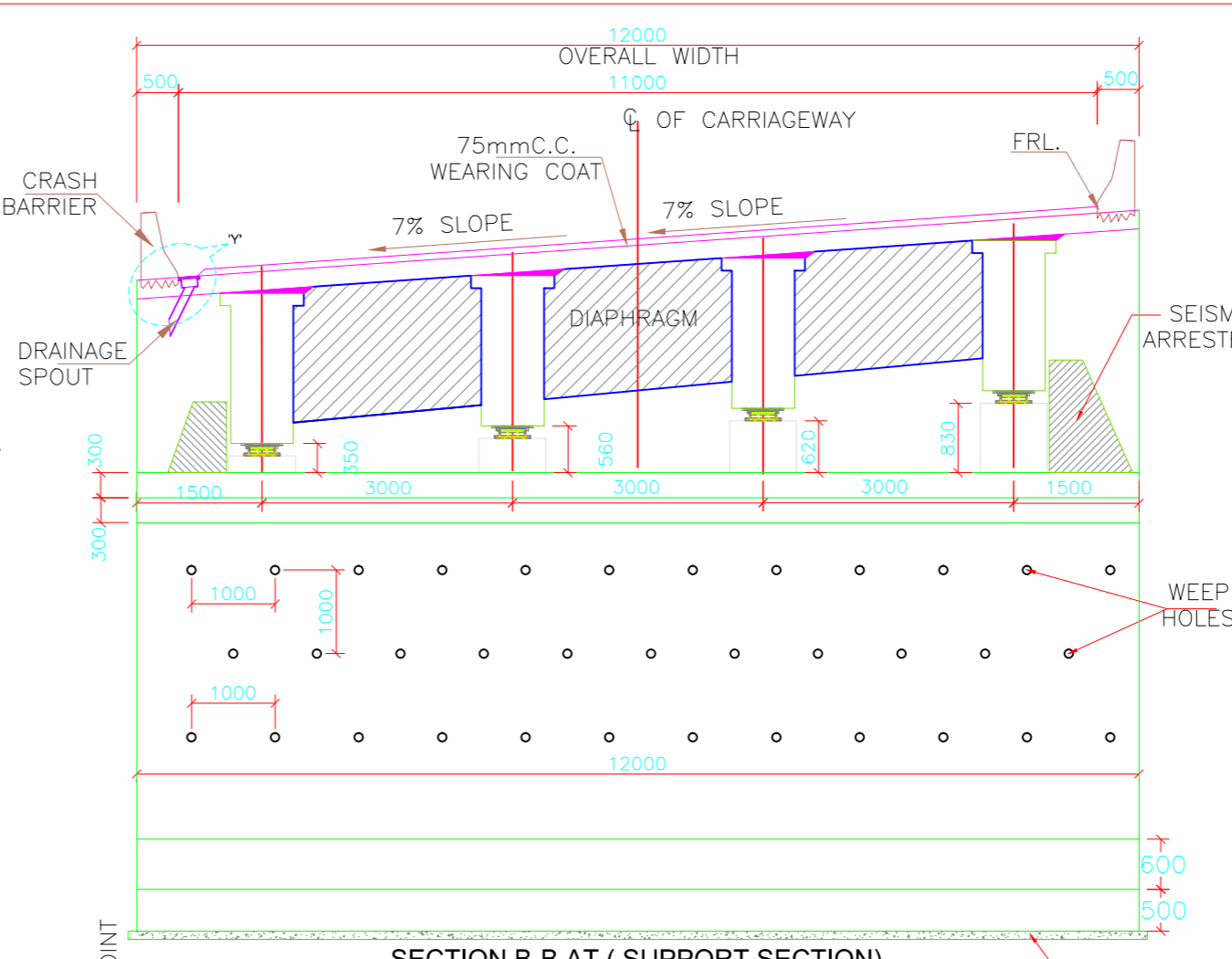
TITLE :- GENERAL ARRANGEMENT DRAWING FOR SOLID SLAB 10M CH 439+795 BOX CULVERT

DWG. NO. NHIDCL /NH-07 /MNB/ CH.439+795.10M.S-101

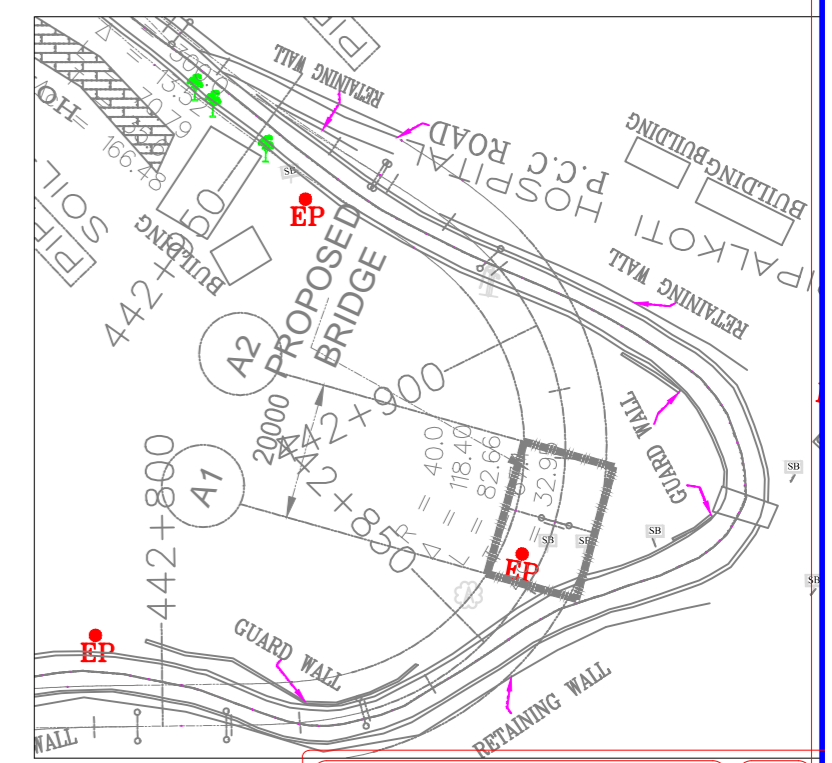
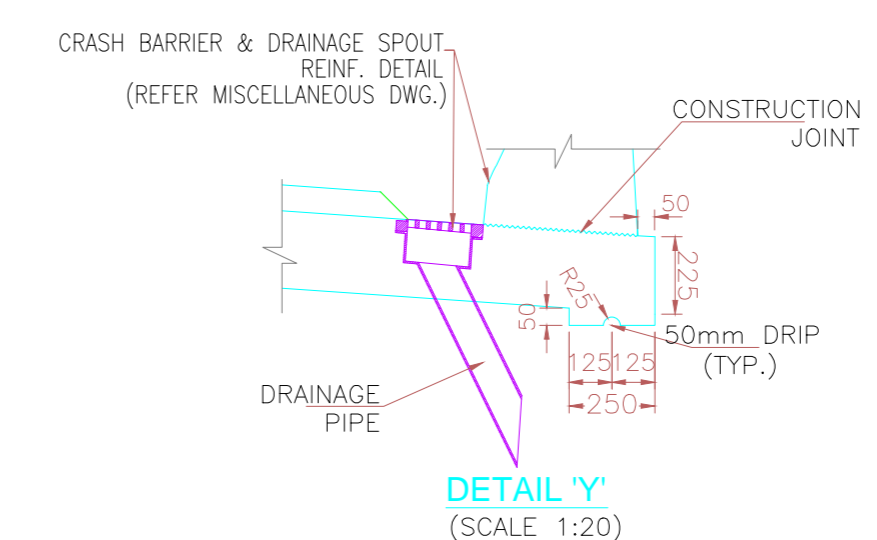
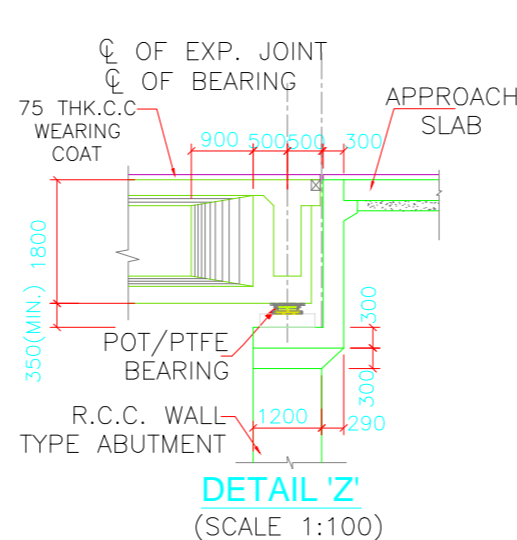
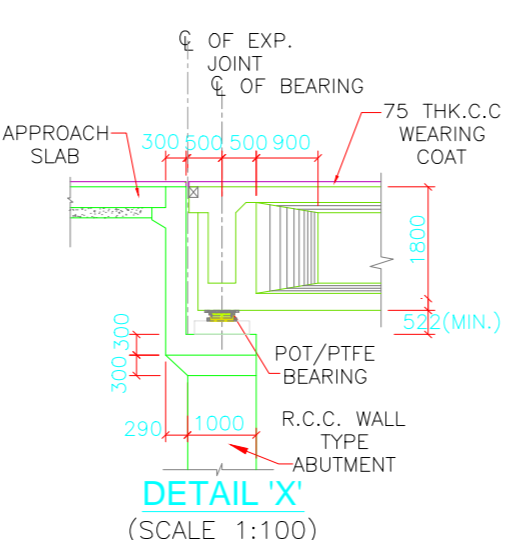
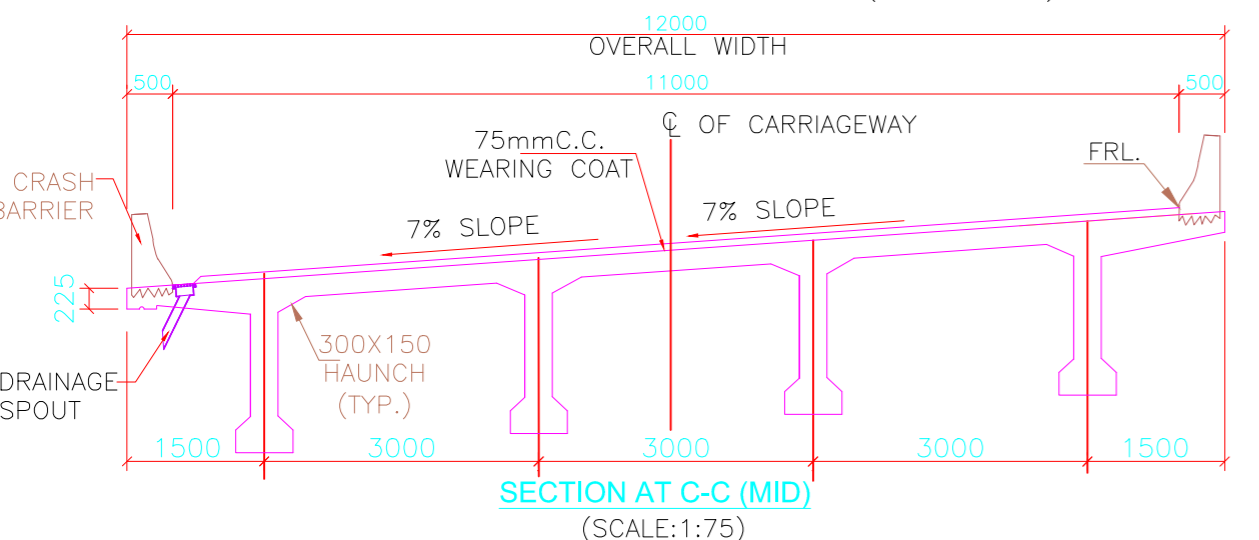
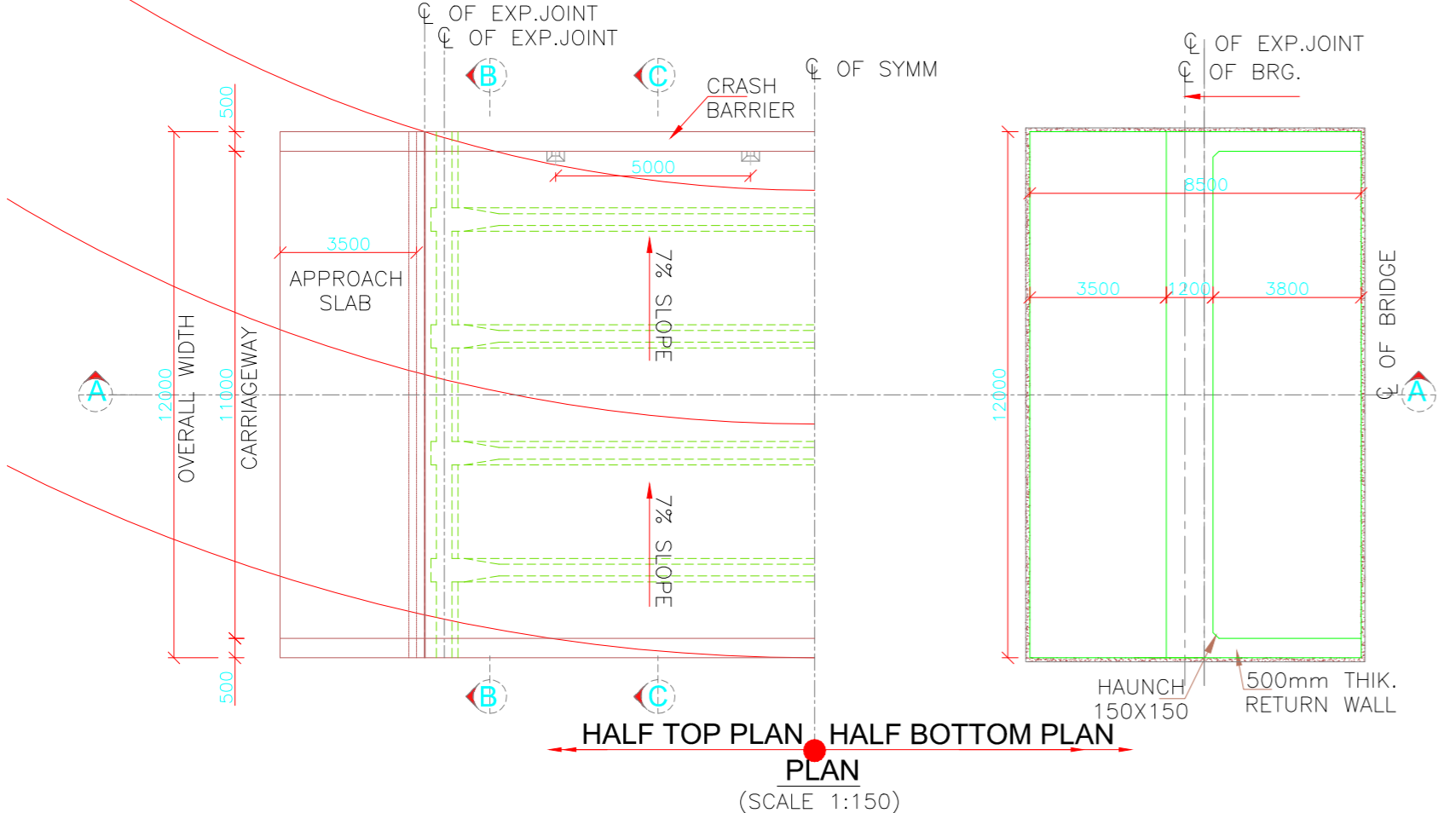
DRN:-	DGN:-	CHK:-	DATE:-	SCALE:-	SHEET SIZE
ALI	P.V.M	V.P.S	JAN 2018	AS SHOWN	SHEET NO:- A2 01 OF 01



FRL LEVEL	1320.052	1320.052	1320.052
GROUND LEVEL	1316.749	1317.249	1311.282
CHAINAGE (M.)	442+860	442+870	442+880



- NOTES :-**
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE MENTIONED. ONLY DIMENSIONS SHALL BE FOLLOWED.
 - THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS.
 - GRADE OF CONCRETE FOR VARIOUS STRUCTURES SHALL BE AS FOLLOWS -
 P.C.C. LEVELLING COURSE = M15
 SUPERSTRUCTURE = M35
 SUBSTRUCTURE = M35
 R.C.C. RAILING = M25
 APPROACH SLAB = M30
 RETURN/WING WALLS = M30
 - GRADE OF STEEL- Fe 500 CONFORMING TO IS:1786-1985.
 - THE SELECTED EARTH FILL BEHIND ABUTMENT SHALL HAVE FOLLOWING PROPERTIES WHICH HAVE BEEN ASSUMED FOR DESIGN OF ABUTMENTS FOUNDATION, PARAMETERS $\phi=30^\circ$, $\gamma_{dry} = 18 \text{ kN/m}^3$
 - 100 DIA. WEEP HOLES ARE TO BE PROVIDED @1000 C/C IN STAGGERED MANNER (BOTH HORIZONTALLY & VERTICALLY) IN 1:20 SLOPE
 - (i) CLEAR COVER TO OUTER MOST STEEL IS 50mm FOR ALL COMPONENTS EXCEPT FOUNDATIONS.
 (ii) CLEAR COVER TO OUTER MOST STEEL IS 75mm FOR FOUNDATION.
 - EXPANSION JOINT :- STRIP SEAL
 - PROTECTION WORK SHALL BE PROVIDED AS PER IRC 89:1977.
 - IT MAY BE ENSURED THAT MINIMUM EMBEDMENT OF FOUNDATION IS 1.5M IN SOFT ROCK OR 0.6M IN HARD ROCK AS PER PROVISION OF OR IRC 78.
 - PROPOSED BRIDGE IS DESIGNED FOR 3 LANE OF CLASS OR SINGLE LANE OF 70R OF +1 LANE CLASS A WHITH EVER GOVIRNS (CONSIDERING BOTH SIDE FOOTPATHS ARE UTILIZED FOR FUTURE TRAFIC GROWTH AFTER REMOVING CRASH BARRIES.



FOR PLANNING	<input type="checkbox"/>
FOR APPROVAL	<input checked="" type="checkbox"/>
FOR CONSTRUCTION	<input type="checkbox"/>
AS BUILT	<input type="checkbox"/>



PROJECT TITLE :-
CONSTRUCTION & UPGRADATION OF EXISTING ROAD TO 2-LANE WITH PAVED SHOULDERS FROM KM 430.000 TO KM 468.000 OF CHAMOLI TO PAINI (EXCLUDING KM 437.625 TO KM 437.775, KM 458.900 TO KM 459.475 AND KM 464.425 TO KM 464.525) OF NH-07 UNDER CHARDHAM PARIYOJNA ON EPC BASICS IN THE STATE OF UTTARAKHAND (PKG-III)

REV	DATE	DESCRIPTION	SIGN
R1	JAN.2017	CARRIAGEWAY REVISED	ALI

TITLE :-
GENERAL ARRANGEMENT DRAWING
1X20M AT (CH.442+870)

DWG. NO. NHIDCL /NH-07 /MNB /CH.442+870.20M. S-101

DRN:-	DGN:-	CHK:-	DATE:-	SCALE:-	SHEET SIZE
ALI	P.V.M	V.P.S	JAN 2018	AS SHOWN	SHEET NO:- A2 01 OF 01

NOTES:-
COMPOSITE SUPERSTRUCTURE :

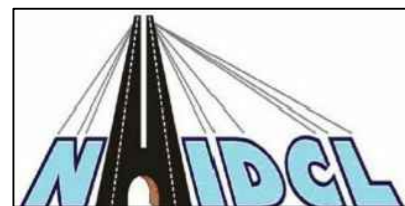
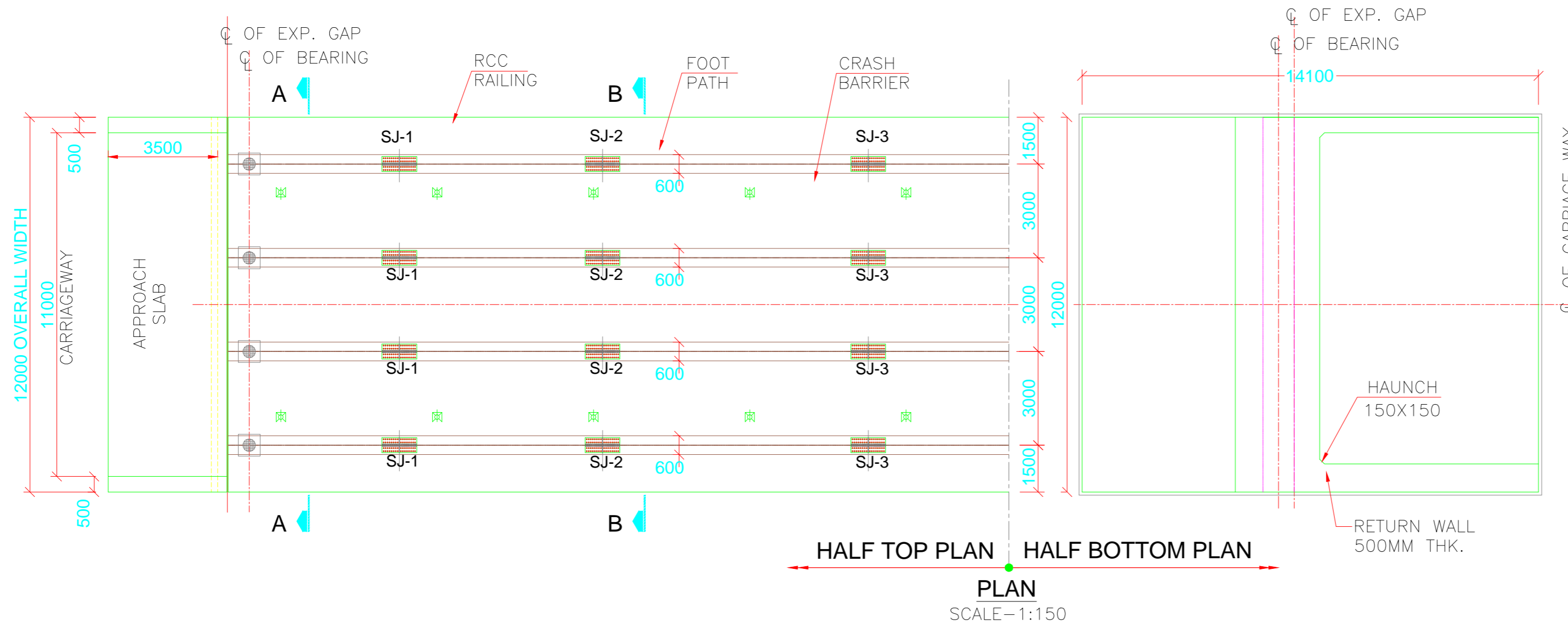
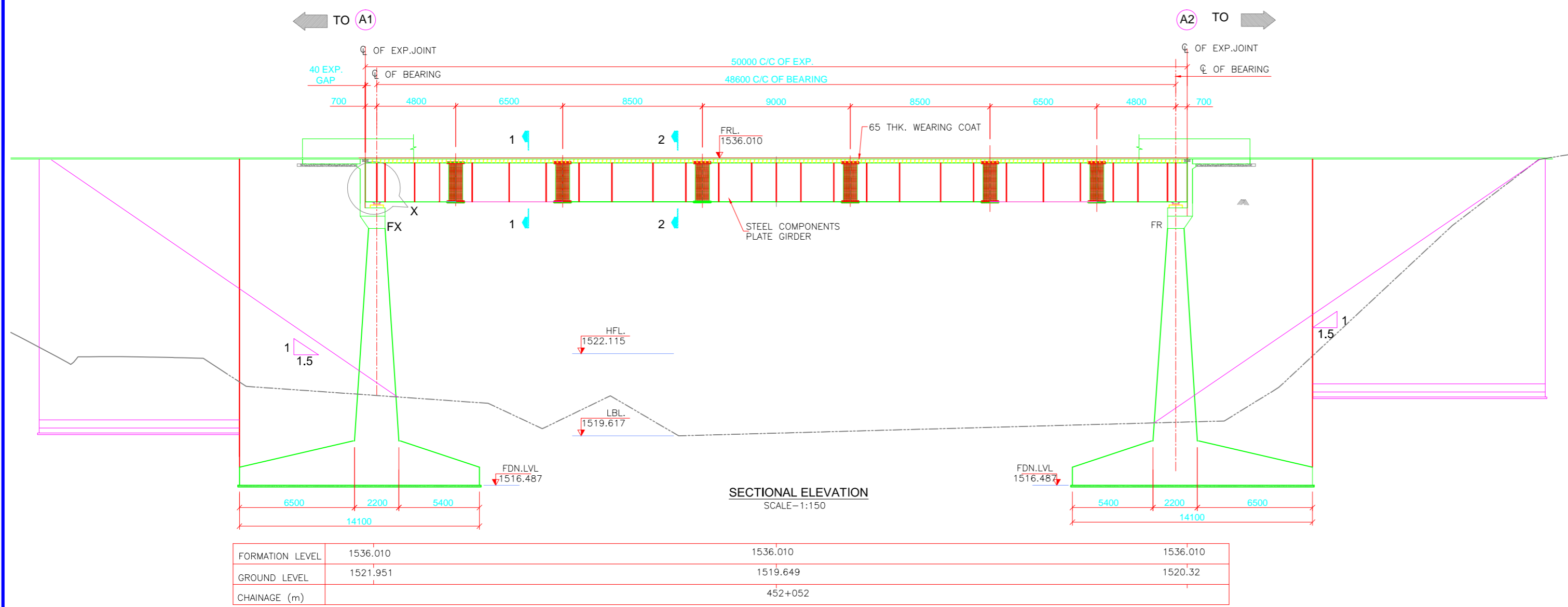
- ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS IN METRES.
 - DIMENSIONS ARE NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
 - STRUCTURE STEEL
 - * STEEL PLATE GIRDER - HIGH STRENGTH STEEL (GRADE E 410 Fe 450 CONFORMING TO IS : 2062)
 - * STIFFENERS & BRACING - MILD STEEL CONFORMING TO IS : 2062
 - THE PROPOSED BRIDGE HAS BEEN DESIGNED FOR SINGLE LANE OF IRC CLASS 70R OR TWO LANES OF IRC CLASS A LOADING, WHICHEVER GOVERNS.
 - DECK SLAB SHALL BE 225 THICK OF CONCRETE GRADE M-35 MIX.
 - POT CUM PTFE BEARINGS SHALL BE USED.
 - (a) BOLTS
 - * FOR SPLICING - 24Ø BOLTS
 - * FOR BRACINGS & STIFFENERS - 18Ø BOLTS
 - (b) BOLTS ACTING IN FRICTION
 - * HSFG - BOLTS, ACTING IN FRICTION TO CONFORM WITH BSS400-3. THE NOMENCLATURE OF THESE BOLTS, WHILST BEING DESCRIBED IN DRAWINGS IS TO FOLLOW IS:4000 - 1992.
 - * SLIP FACTORS FOR FAYING SURFACES TO CONFORM TO BS:5400 PART 3.
 - BOLTS ACTING IN TENSION
 - * HSFG - BOLTS, NOT ACTING IN FRICTION - BUT PRESTRESSED TO PREVENT LOOSENING OF BOLTS / NUTS DUE TO VIBRATION TO CONFORM TO IS : 3757 - 1985, GR 10.9 BOLTS. DESIGN TO CONFORM TO BS : 5400 PART - 3, BUT AT ULS ONLY.
 - WELDING CONSUMABLES
 - * THE WELDING CONSUMABLES TO CONFORM TO IS : 814 - 1991 AND OF STRENGTH REQUIREMENTS APPROPRIATE FOR PREHEATED HT STEEL OR UN-HEATED MILD STEEL.
 - ALL FILLET WELDS ARE TO BE EXAMINED BY DYE PENETRANT TEST OR ANY EQUALLY EFFECTIVE NON DESTRUCTIVE TEST METHOD.
 - ALL WELDS TO BE MADE BY WELDERS USING APPROVED WELDING PROCEDURES.
 - MEMBERS SHALL BE RIGIDLY SECURED IN JIGS & FIXTURES WITH TEMPORARY BOLTS DURING WELDING TO AVOID DISTORTION.
 - DURING WELDING POSITION OF MEMBERS AND ASSEMBLY SHOULD BE SUCH THAT OVERHEAD WELDING SHALL BE AVOID/ MINIMISED.
 - FABRICATION SHALL BE DONE AS PER IRC: 24, IS: 816 & IS: 1024.
 - ALL THE MEMBERS MEETING AT A JOINTS SHOULD BE CONNECTED AS PER DETAILS.
 - ALL STRUCTURAL ROLLED SECTIONS & BUILT UP SECTIONS STEEL SHALL CONFORM TO IS: 2062.
 - ALL BRACING GUSSETS SHALL BE 12 THICK UNLESS SPECIFIED OTHERWISE.
 - PAINTING OF STEEL STRUCTURE SHOULD BE DONE IN ACCORDANCE WITH MORTH SPECIFICATIONS FOR ROADS & BRIDGES REVISION IV.
 - ALL OBTUSE ANGLE CUTTING SHOULD BE DONE IN PROPER SHAPE AND WITHOUT DAMAGE.
 - OVERHANGING MEMBER TO BE SUITABLY SUPPORTED TO AVOID DISTORTION DURING TRANSPORTATION.
 - IN CASE THE MEMBERS OF SPECIFIED LENGTH ARE NOT AVAILABLE, SPLICE JOINTS TO BE PROVIDED AFTER PRIOR APPROVAL OF ENGINEER INCHARGE.
 - SHEAR CONNECTOR ARE PROPOSED.
 - CONCRETE SHALL BE DESIGN MIX AND SHALL BE OF GRADE AS INDICATED BELOW:-

PCC LEVELLING COURSE	:	M-15
SUBSTRUCTURE	:	M-35
APPROACH SLAB	:	M-30
FOUNDATION	:	M-35
26. ALL DIMENSIONS ARE TENTATIVE SUBJECT TO CHANGE DURING DETAIL DESIGN.

LEGENDS:-

FR FREE BEARING
FX FIXED BEARING

FOR PLANNING	<input type="checkbox"/>
FOR APPROVAL	<input checked="" type="checkbox"/>
FOR CONSTRUCTION	<input type="checkbox"/>
AS BUILT	<input type="checkbox"/>

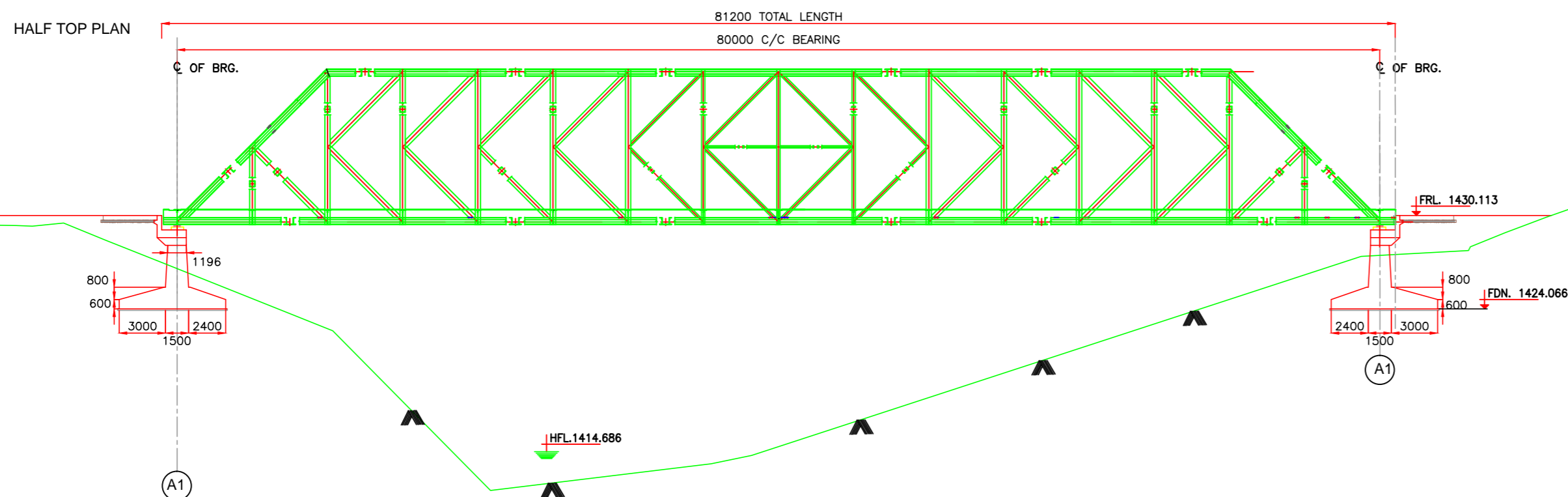


National Highways and Infrastructure Development Corporation

PROJECT TITLE :-
CONSTRUCTION & UPGRADATION OF EXISTING ROAD TO 2-LANE WITH PAVED SHOULDERS FROM KM 430.000 TO KM 468.000 OF CHAMOLI TO PAINI (EXCLUDING KM 437.625 TO KM 437.775, KM 458.900 TO KM 459.475 AND KM 464.425 TO KM 464.525) OF NH-07 UNDER CHARDHAM PARIYOJNA ON EPC BASICS IN THE STATE OF UTTARAKHAND (PKG-III)

REV	DATE	DESCRIPTION	SIGN
R1	JAN.2017	CARRIAGEWAY REVISED	ALI

TITLE :- GENERAL ARRANGEMENT DRAWING 1X50M AT (CH.452+052)					
DWG. NO. NHIDCL/NH-07/MNB/CH.452+050					
Drn:-	Dgn:-	Chk:-	Date:-	Scale:-	Sheet no:-
Praveen	P.V.M	V.P.S	JAN 2018	AS SHOWN	01 OF 02



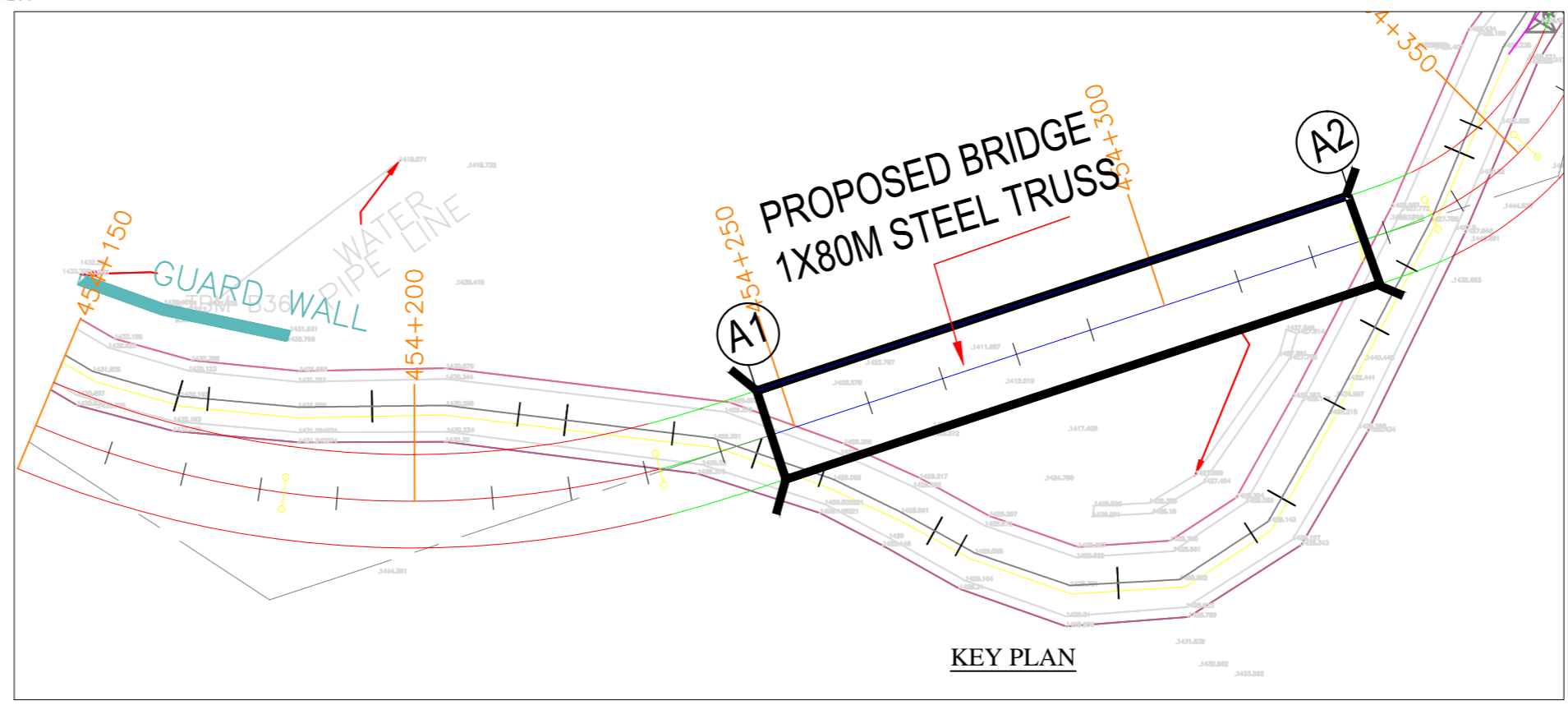
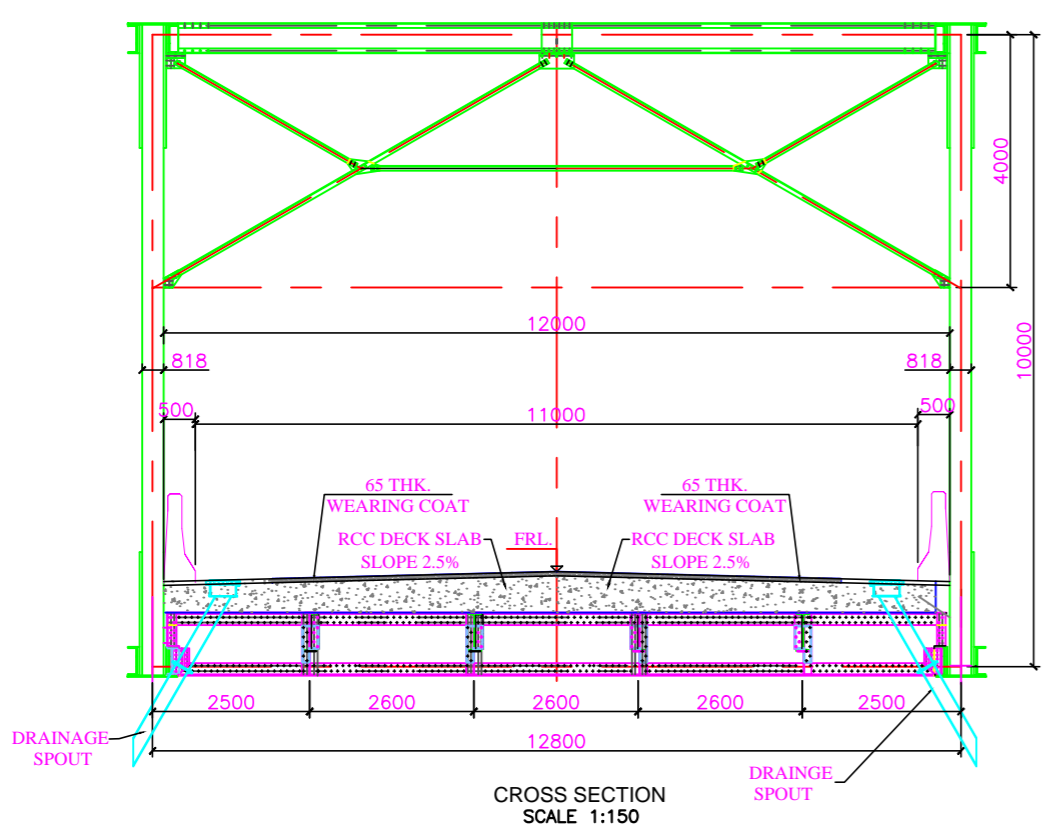
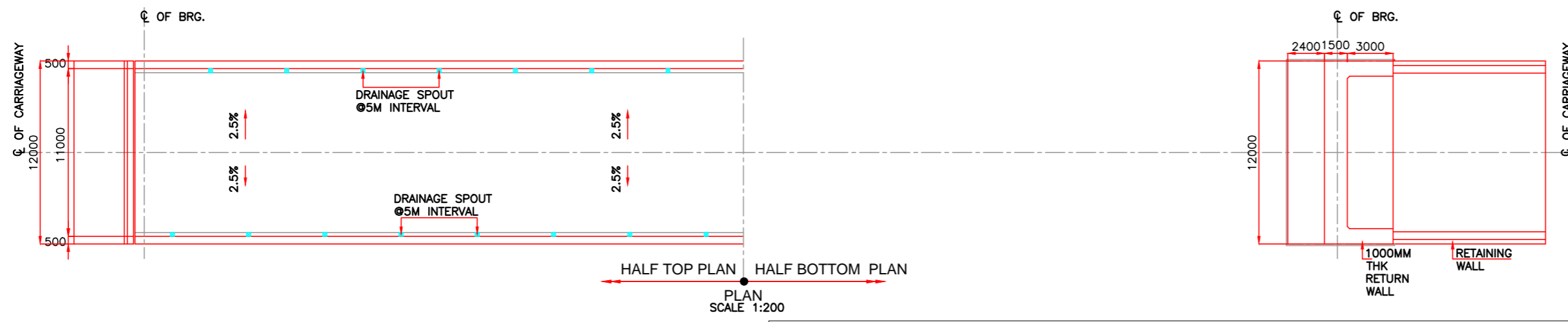
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GROUND LVL.	1427.066	1423.077	1413.626	1413.341	1415.132	1418.394	1421.656	1424.918	1427.581
CH.(M)	454+249	454+259	454+269	454+279	454+289	454+299	454+309	454+319	454+329

NOTES:-

1. ALL DIMENSIONS ARE IN mm AND LEVELS ARE IN METRES UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED. NO DIMENSION SHALL BE SCALED.
2. THE PROPOSED 3 LANE BRIDGE HAS BEEN DESIGNED FOR SINGLE LANE OF IRC CLASS 70R & 1 LANE OF CLASS A OR 3 LANES OF IRC CLASS A LOADING WHICHEVER GOVERNS.
3. CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH OF 35 MPa FOR SUPERSTRUCTURE, SUBSTRUCTURE AND FOUNDATIONS
4. MILD STEEL SHALL CONFORM TO IS:2062-1999
5. STONE USED FOR CONSTRUCTION CONFORM TO IS:1597-1992
6. BACK FILLING BEHIND ABUTMENTS AND RETURN WALLS SHALL CONSIST OF SELECTED EARTH CONFORMING TO APPENDIX:6 OF IRC:78-2000 HAVING PROPERTIES C=0, $\phi=30^\circ$, $E_s=20'$ & $\gamma_s = 18 \text{ kN/m}^3$
7. LAYING COMPACTION AND EXTENT OF BACKFILL BEHIND ABUTMENTS AND RETURN WALLS SHALL CONFORM TO SPECIFICATIONS IN APPENDIX : 6 OF IRC : 78-2000.
8. SAFE BEARING CAPACITY AT FOUNDATION LEVEL HAS BEEN TAKEN AS 500 kN/m² AS PER SUB-SOIL INVESTIGATION REPORT.
9. STRIP SEAL TYPE EXPANSION JOINTS OF PROVEN QUALITY SHALL BE PROVIDED AS PER TERMS OF MODIFIED INTERIM SPECIFICATIONS FOR EXPANSION JOINTS ISSUED VIDE "MORTH" CIRCULAR No. RW/NH-34059/1/96-S&R DATED 30.11.2000 & 25.01.2001
10. WATER TO BE USED IN CONCRETING, GROUTING AND CURING SHALL CONFORM TO CLAUSE 302.4 OF IRC-21-2000

LEGENDS:-

- FX FIXED BEARING
- FR FREE BEARING



FOR PLANNING	<input type="radio"/>
FOR APPROVAL	<input checked="" type="radio"/>
FOR CONSTRUCTION	<input type="radio"/>
AS BUILT	<input type="radio"/>

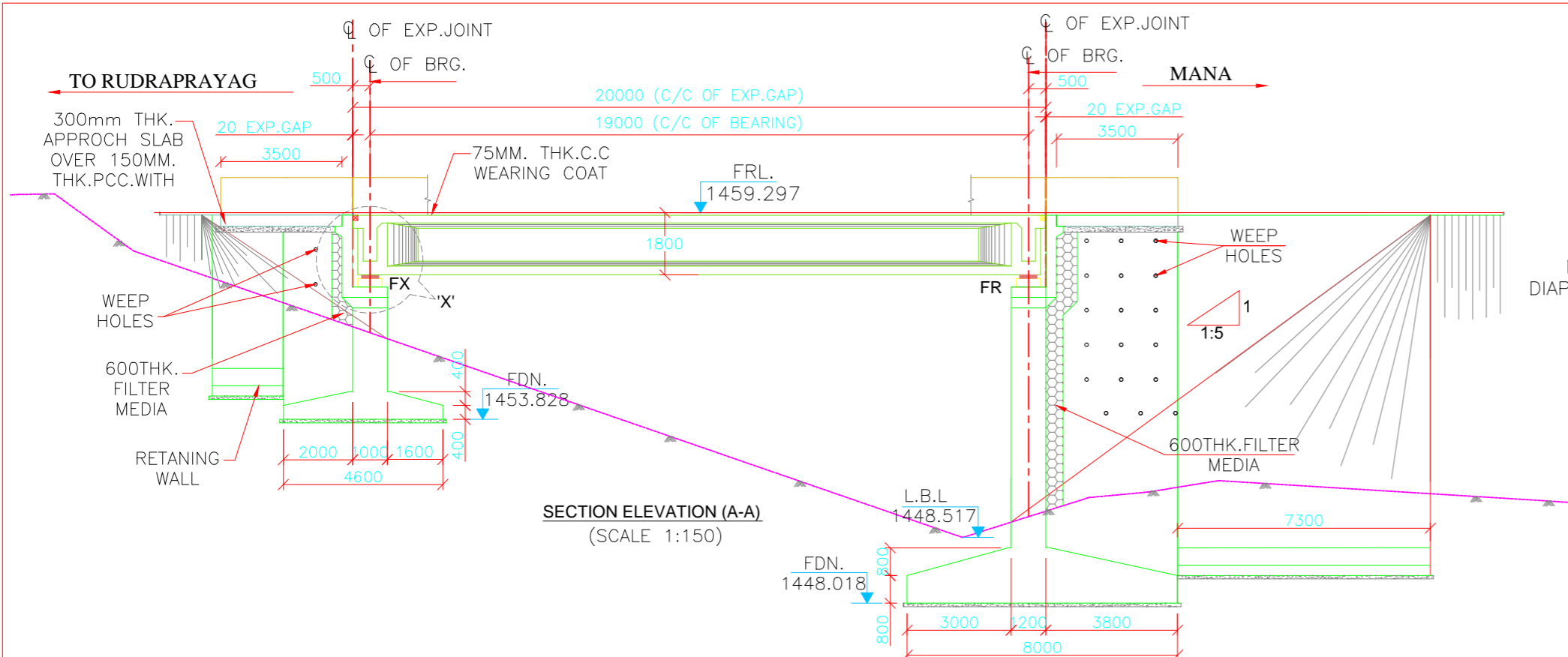


National Highways and Infrastructure Development Corporation

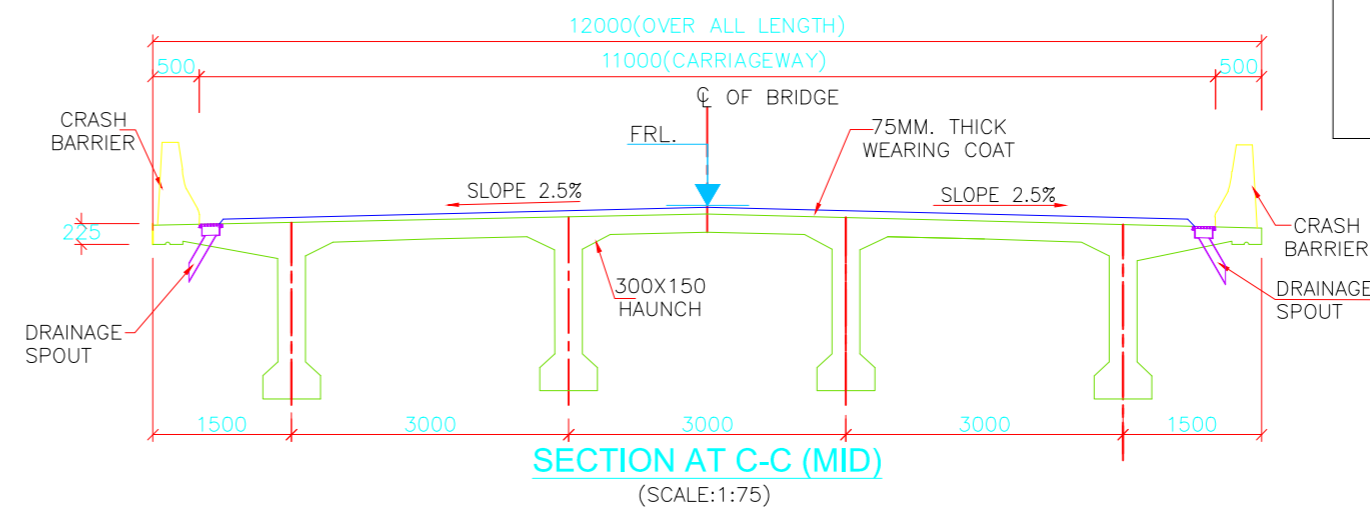
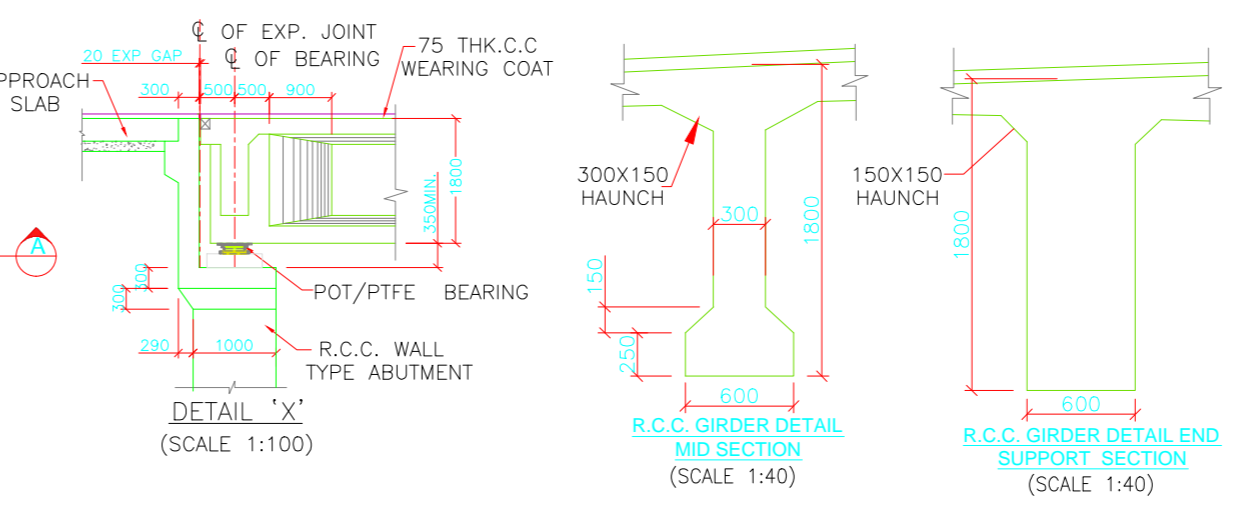
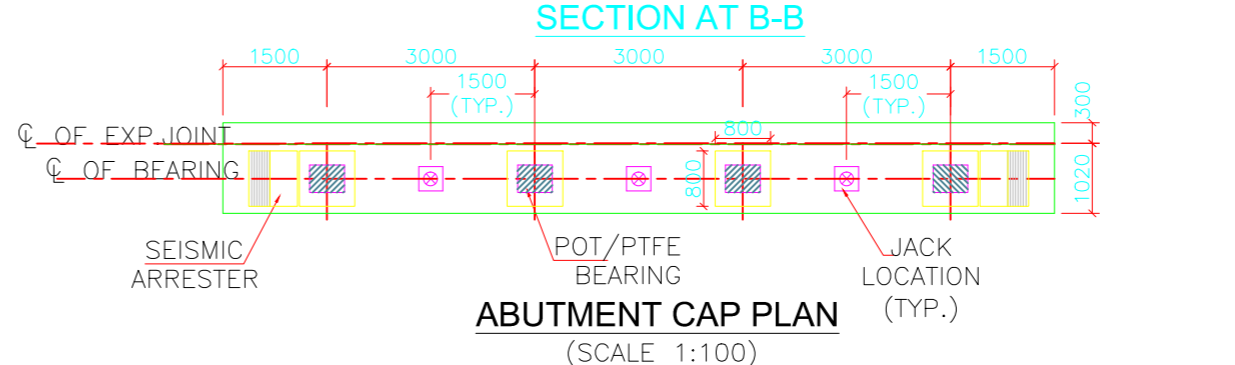
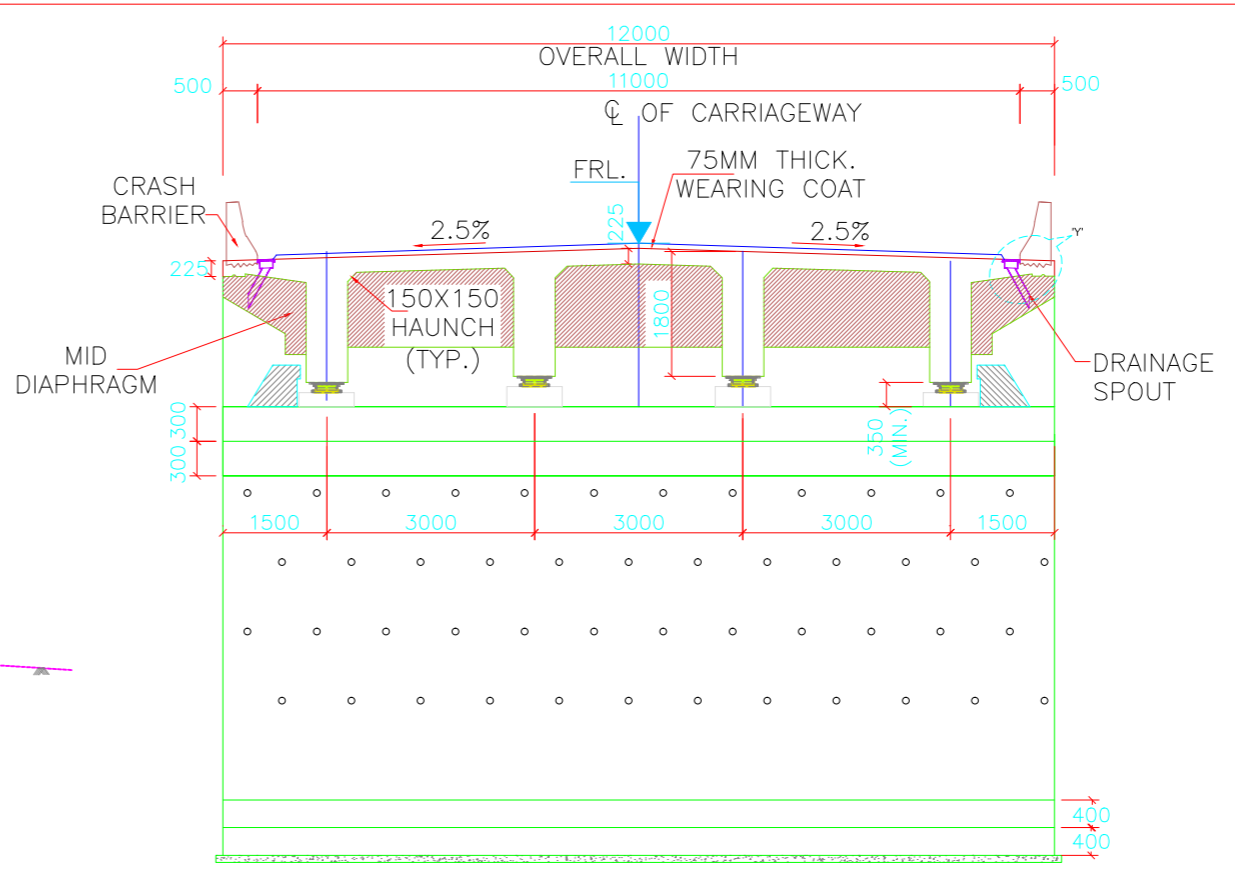
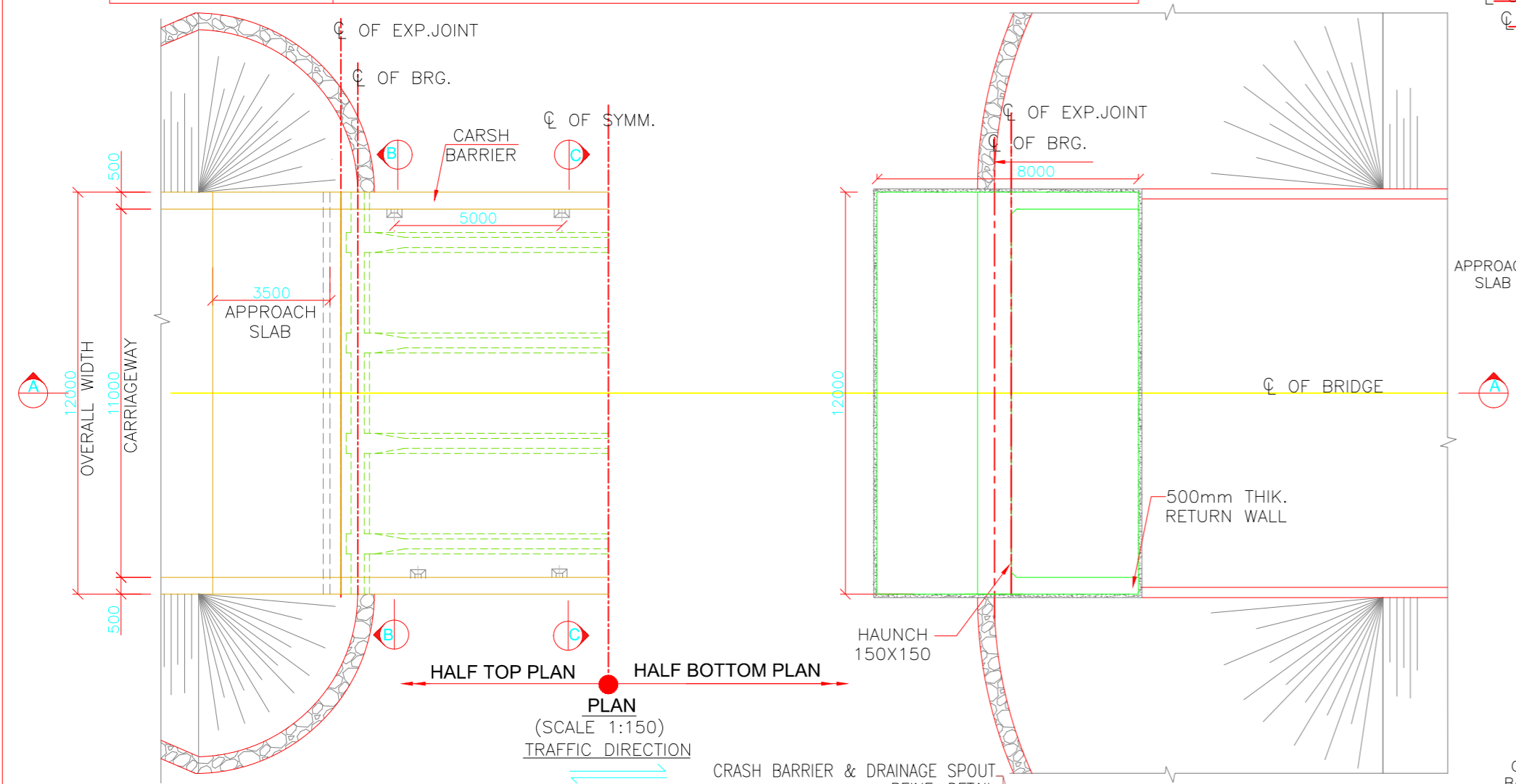
PROJECT TITLE :-
CONSTRUCTION & UPGRADATION OF EXISTING ROAD TO 2-LANE WITH PAVED SHOULDERS FROM KM 430.000 TO KM 468.000 OF CHAMOLI TO PAINI (EXCLUDING KM 437.625 TO KM 437.775, KM 458.900 TO KM 459.475 AND KM 464.425 TO KM 464.525) OF NH-07 UNDER CHARDHAM PARIYOJNA ON EPC BASICS IN THE STATE OF UTTARAKHAND (PKG-III)

REV	DATE	DESCRIPTION	SIGN
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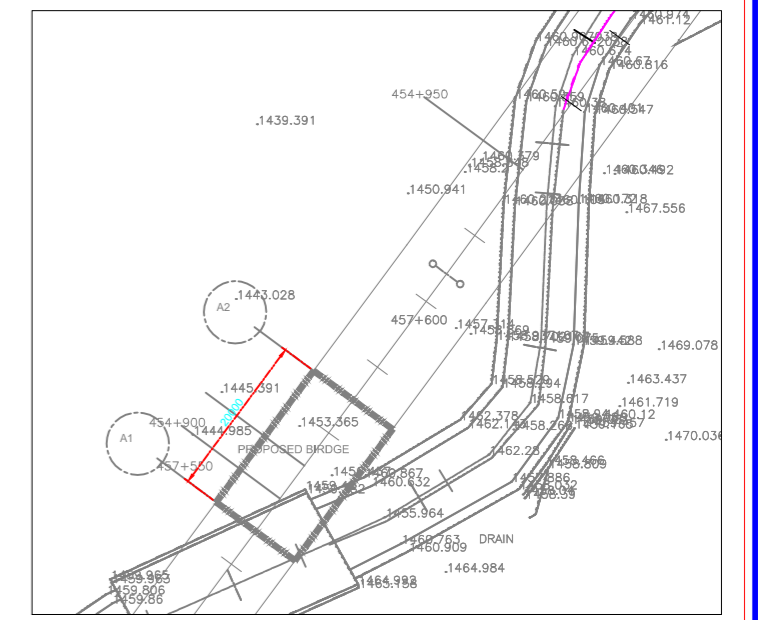
TITLE :- GENERAL ARRANGEMENT DRAWING 1X80M AT KM.(CH.454+300)					
DWG. NO. NHIDCL /NH-07/ UK/ GAD/S-101					
Dwn:-	Dgn:-	Chk:-	Date:-	Scale:-	Sheet no:-
ALI	P.V.M	V.P.S	JAN 2018	AS SHOWN	01 OF 01



FRL LEVEL	1459.297	1459.297	1459.297
GROUND LEVEL	1455.828	1452.543	1450.517
CHAINAGE (M.)	454+880	454+890	454.900



- NOTES :-**
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE MENTIONED, ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
 - THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS.
 - GRADE OF CONCRETE FOR VARIOUS STRUCTURES SHALL BE AS FOLLOWS -
 P.C.C. LEVELLING COURSE = M15
 SUPERSTRUCTURE = M35
 SUBSTRUCTURE = M35
 R.C.C. RAILING = M25
 APPROACH SLAB = M30
 RETURN/WING WALLS = M30
 - GRADE OF STEEL- Fe 500 CONFORMING TO IS:1786-1985.
 - THE SELECTED EARTH FILL BEHIND ABUTMENT SHALL HAVE FOLLOWING PROPERTIES WHICH HAVE BEEN ASSUMED FOR DESIGN OF ABUTMENTS FOUNDATION, PARAMETERS $\phi=30^\circ$, γ dry = 18 kN/m
 - 100 DIA. WEEP HOLES ARE TO BE PROVIDED @1000 C/C IN STAGGERED MANNER (BOTH HORIZONTALLY & VERTICALLY) IN 1:20 SLOPE (TYP.).
 - (i) CLEAR COVER TO OUTER MOST STEEL IS 50mm FOR ALL COMPONENTS EXCEPT FOUNDATIONS.
 (ii) CLEAR COVER TO OUTER MOST STEEL IS 75mm FOR FOUNDATION.
 - EXPANSION JOINT :- STRIP SEAL
 - PROTECTION WORK SHALL BE PROVIDED AS PER IRC 89:1977.
 - IT MAY BE ENSURED THAT MINIMUM EMBEDMENT OF FOUNDATION IS 1.5M IN SOFT ROCK OR 0.6M IN HARD ROCK AS PER PROVISION OF OR IRC 78.
 - PROPOSED BRIDGE IS DESIGNED FOR 3 LANE OF CLASS-A OR SINGLE LANE OF 70R OF +1 LANE CLASS A WHICH EVER GOVERNS.



FOR PLANNING	<input type="checkbox"/>
FOR APPROVAL	<input checked="" type="checkbox"/>
FOR CONSTRUCTION	<input type="checkbox"/>
AS BUILT	<input type="checkbox"/>

National Highways and Infrastructure Development Corporation

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REV	DATE	DESCRIPTION	SIGN
R1	JAN.2017	CARRIAGEWAY REVISED	ALI

TITLE :- GENERAL ARRANGEMENT DRAWING
 MNB 1X20M. AT (CH454+890)

DWG. NO. NHIDCL /NH-07 /MNB /CH.454.890.20M. S-101

DRN:-	DGN:-	CHK:-	DATE:-	SCALE:-	SHEET SIZE
ALI	P.V.M	V.P.S	JAN 2018	AS SHOWN	SHEET NO:- A2 01 OF 01