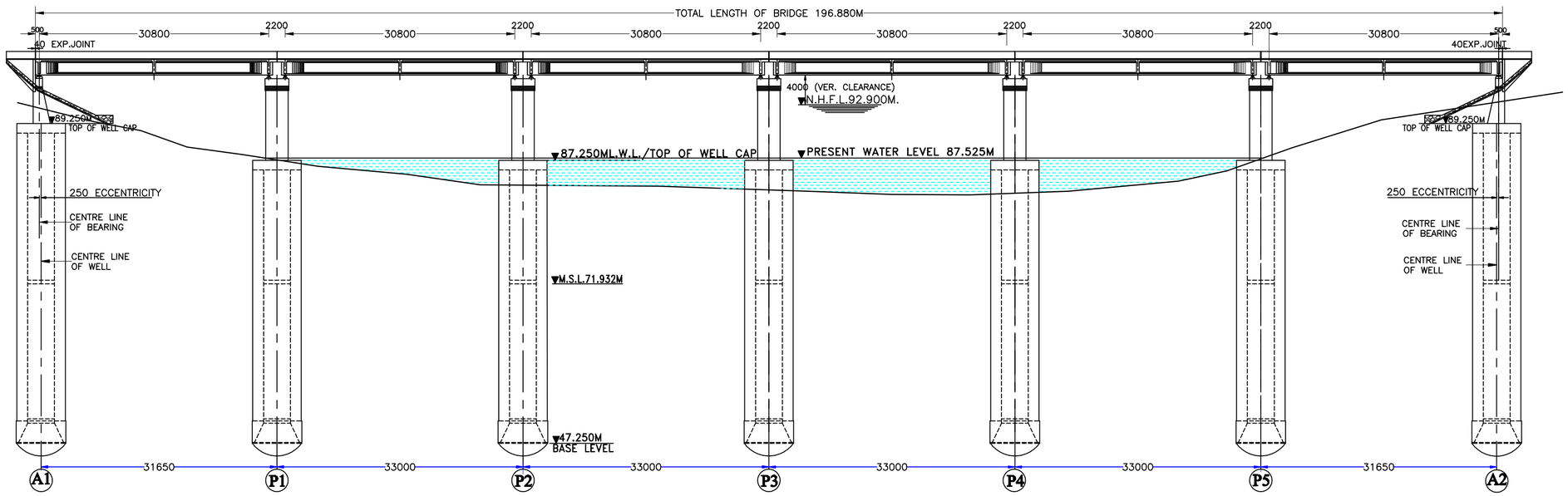
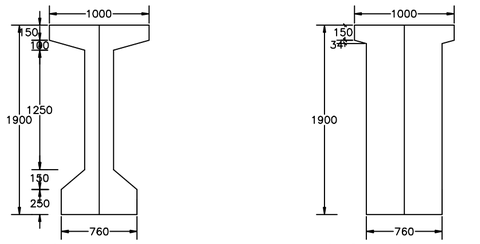
PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT



GENERAL ELEVATION OF BRIDGE



SEC. AT MID SPAN

SEC. AT SUPPORT

CROSS SECTION OF P.S.C. BEAM

NOTES & CONDITIONS:–

1–ALL DIMENSIONS ARE IN MILLIMETER, UNLESS OTHERWISE SPECIFIED, R.L.'S ARE IN METERS.

2–DIMENSIONAL DETAILS OF DIFFERENT COMPONENTS ARE TENTATIVE AND SHALL BE DECIDED AT TIME OF DETAILED DESIGN.

3–ONLY FIGURED DIMENSION SHALL BE FOLLOWED. AND NOT THE SCALED DIMENSIONS.

4–QUALITY CONTROL SHALL CONFORM TO RELEVANT I.R.C.CODE.

5–GRADE OF CONCRETE – AS FOLLOWS (TENTATIVE).
A– FOUNDATION
(a)– WELL CURB.....M25
(b)– WELL STEINING.....M30
(c)– BOTTOM PLUG.....M25
(d)– INTERMEDIATE PLUGGING.....M15
(e)– WELL CAP M30
(f)– BOTTOM PLUGGING:–THE CONCRETE OF BOTTOM PLUG SHALL BE DONE IN ACCORDANCE TO CLAUSE 708.8 OF I.R.C:78– 2014.THE CONCRETE MIX USED IN BOTTOM PLUG SHALL HAVE A MINIMUM CEMENT CONTENT OF 330KG/ CUM.FOR UNDER WATER CONCRETE BY TREMIE BOXES, THE CEMENT CONTENT SHALL BE INCREASED BY 10%
B– SUB STRUCTURE
(a)– PIER CAP & PIER.....M35
(b)– ABUTMENT M35
(c)– ABUTMENT TOP BEAM.....M35
(d)– WING WALL & BACK WALL.....M40
(e)– BEARING.....NEOPRENE BEARING
C– SUPER STRUCTURE
(a)– P.S.C. BEAM M45
(b)– CROSS BEAM M40
(c)– DECK SLAB.....M40
(d)– CRASH BARRIER M40
(e)– 75 M.M. THICK UNIFORM C.C.W/C.....M30

6–HYDRAULIC DATA HAVE BEEN TAKEN ON THE BASIS OF INFORMATION PROVIDED BY P.M. B.C.U. SULTANPUR.THESE ARE TO BE PERSONALLY RE–AFFIRMED BY THE UNIT INCHARGE,DIFFERENCE IF ANY WILL BE REPORTED TO HEAD OFFICE BEFORE START OF WORK.
(A)– N.H.F.L. .....92.900 M.
(B)– L.W.L. ..... 87.250 M.
(C)– H.F.L. .....94.650 M

7–THE DESIGN DISCHARGE OF THE RIVER HAS BEEN ADOPTED FOR CALCULATION PURPOSE AS 3900 CUMECS.

8–GEOTECHNICAL DATA:–
FOLLOWING VALUES OF SOIL PARAMETERS HAVE BEEN TAKEN ON THE BASIS OF ALREADY CONSTRUCTED BRIDGES NEARBY.
(A)– SCOUR ZONE : SILT FACTOR (Ksf) = 1.55
(B)– GRIP ZONE : C= 0.68 Kg/SqCm.
ø = 12°
(C)–SAFE BEARING CAPACITY = 76.00T/SqM.(AT 39.00M BELOW L.W.L.).

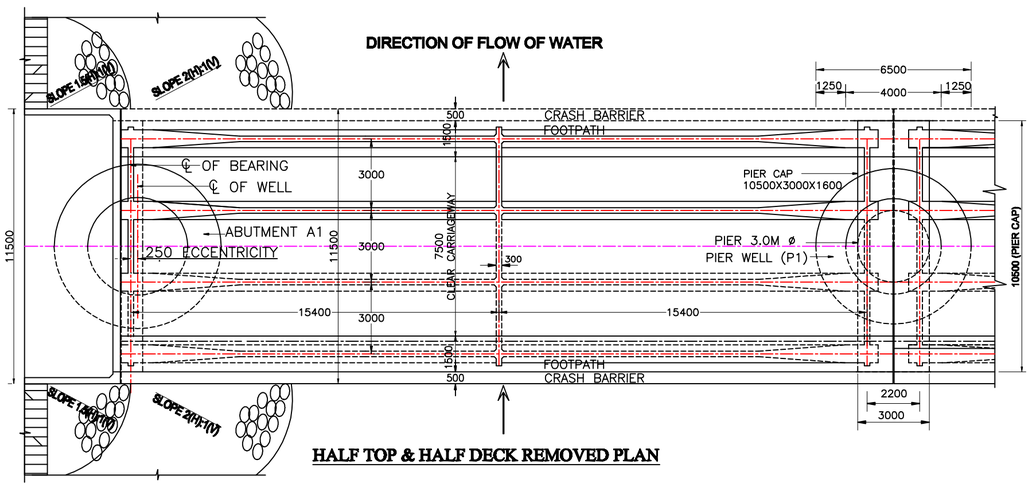
9–SEISMIC PARAMETERS:–
(I) IMPORTANCE FACTOR =1.2
(II) SEISMIC ZONE = III
(III) Sa/g = 2.5

10–TENTATIVE DESIGN OF THE WELL HAS BEEN DONE AS PER ABOVE SOIL PARAMETERS. IF ANY CHANGE IN SOIL PARAMETERS, PLEASE PROVIDE TO DESIGN UNIT IMMEDIATELY.

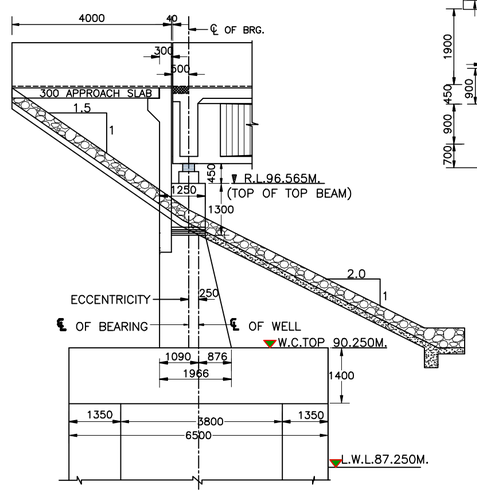
11–PITCHING AND APRON SHALL BE PROVIDED AS PER EngineerIn.Chief. U.P. PW.D.'S CIRCULAR NO.39/P.W.D./4309MT/52M.39/89,DATED:–17–08–89/ I.R.C.89–2000.

12–DEPTH OF WELL AND NO. OF SPAN HAS BEEN DECIDED BASED ON THE DISCHARGE MENTIONED ABOVE BUT THE FIELD. UNIT RE–AFFIRM THE DISCHARGE AS PER I.R.C. GUIDELINES AND ANY MODIFICATIONS IN DISCHARGE VALUE SHALL BE REPORTED TO DESIGN UNIT BEFORE START OF WORK.

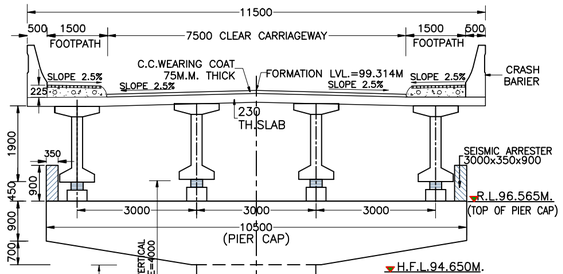
13–R.L.'S SHOWN ARE AS REPORTED BY FIELD UNIT BUT THE UNIT RE–AFFIRM IT. IF IT DIFFERS WITH RESPECT TO G.T.'S. AND IF ANY MODIFICATION REQUIRED REPORT TO HEAD QUARTER BEFORE START OF WORK.

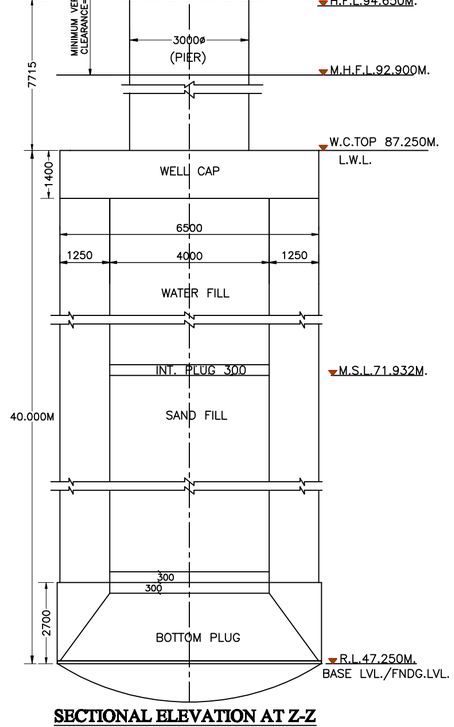


HALF TOP & HALF DECK REMOVED PLAN

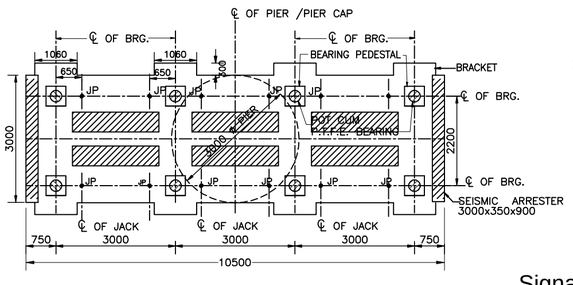


CROSS SECTION AT ABUTMENT

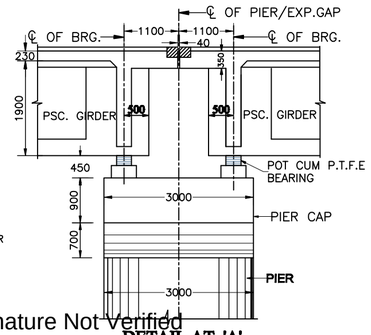




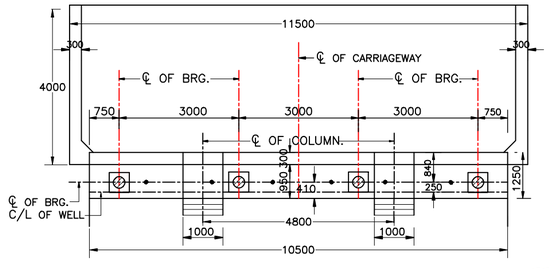
SECTIONAL ELEVATION AT Z-Z



TOP PLAN OF PIER CAP



DETAIL AT 'A'



PLAN OF ABUTMENT TOP BEAM

TENTATIVE G.A.D. FOR ESTIMATE PURPOSE ONLY

	U.P.STATE BRIDGE CORPORATION LTD. 16-MADAN MOHAN MALVIYA MARG LUCKNOW. - 226001
PROJECT:-	CONST. OF BRIDGE OVER RIVER GOMTI ON NIRSAHIYA GHAT NEAR VILLAGE AMAUJASARPUR BLOCK DHANPATGANJ IN DISTT.:- SULTANPUR.
SPAN	6 X 30.80 M. C/C BEARING (7.50M CLEAR CARRIAGEWAY WITH FOOT PATH)
TITLE	GENERAL ARRANGEMENT DRAWING
LOADING	SAFE FOR 2 LANES OF I.R.C. CLASS 'A'

		APPROVED
A.E. (B.C.U.SULTANPUR)	P.M.(SULTANPUR)	G.M. (AYODHYA ZONE)

BRIDGE CONST. UNIT– SULTANPUR DRG. NO. 01(T)/GOMTI/NIRSAHIYA GHAT/SULTANPUR/2025

Signature Not Verified
Digitally signed by KAMAL KUMAR SRIVASTAVA
Date: 2026.05.19 18:55:37 IST
Location: Uttar Pradesh-UP

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