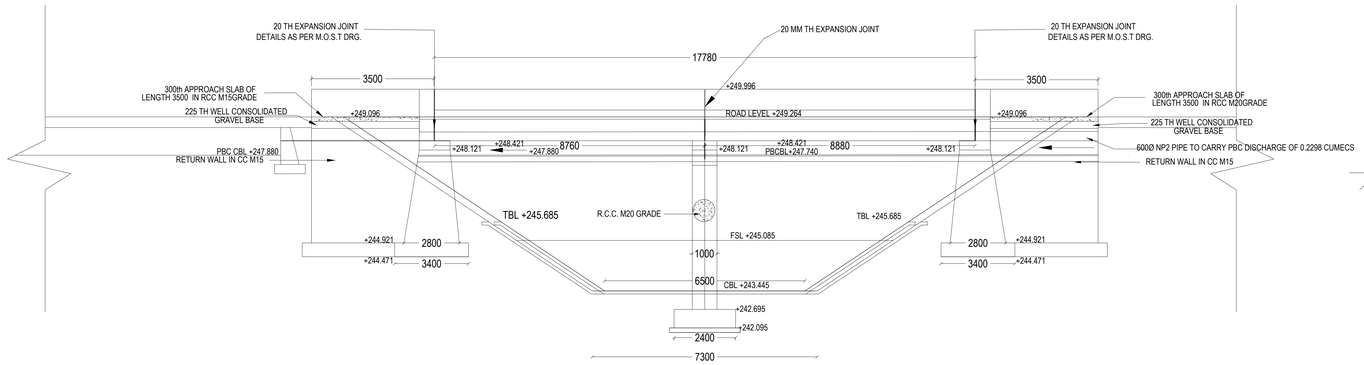
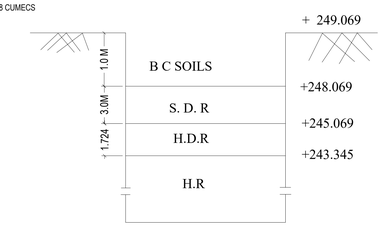
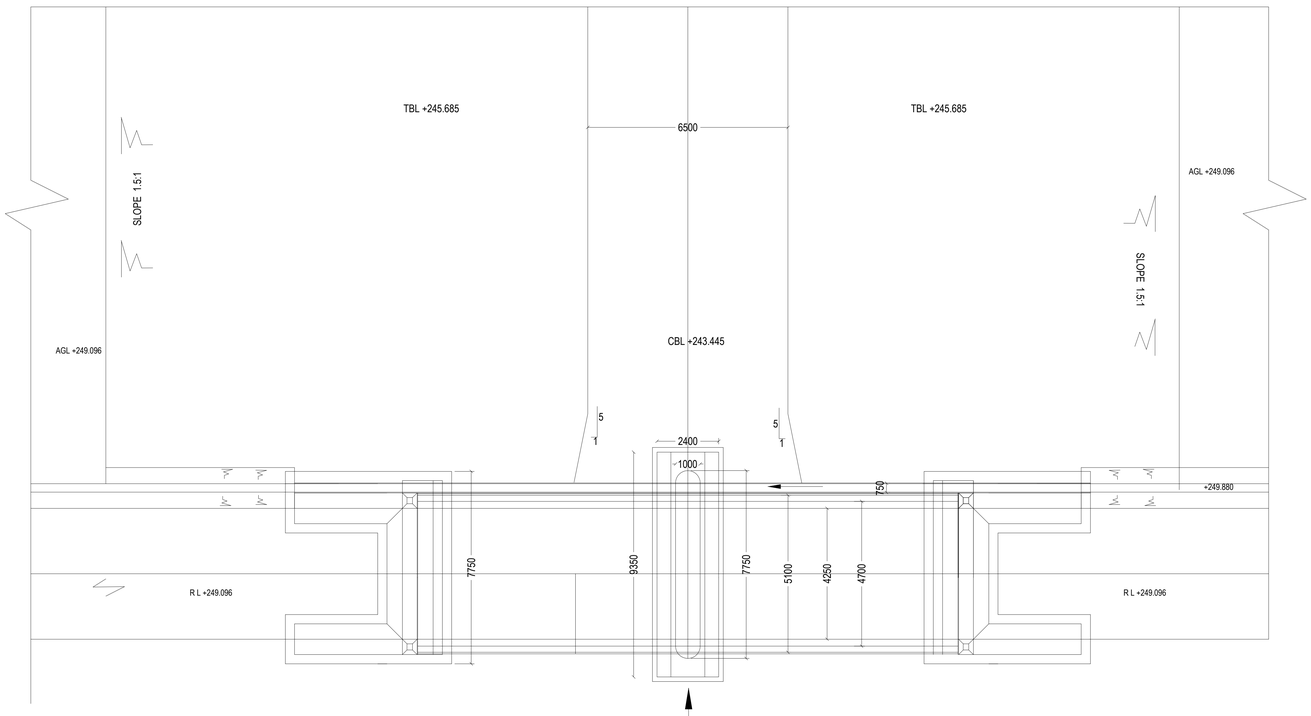


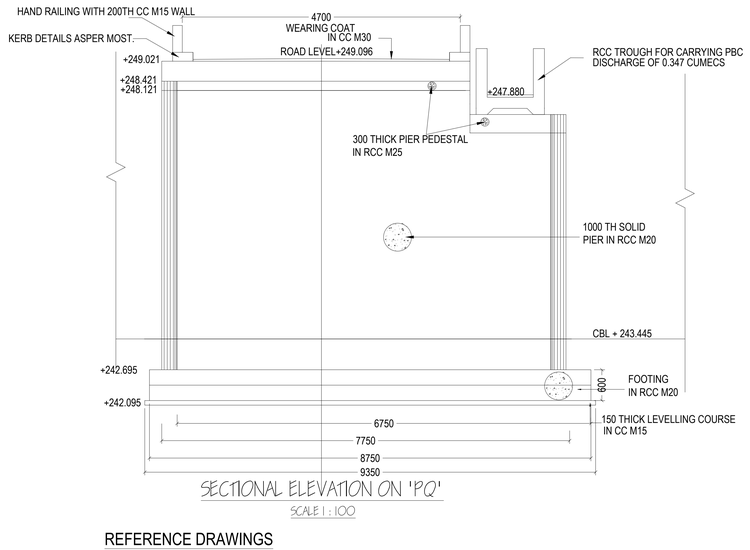


TRIAL PIT PARTICULARS AT KM. 15.378



CANAL

HALF PLAN TOP & HALF PLAN BOTTAM



SECTIONAL ELEVATION ON 'PQ'

SCALE 1 : 100

REFERENCE DRAWINGS

1. DETAILS OF PIER AND ABUTMENT DECK SLAB GLIP/FC/SLRB-15.378/002/2009

NOTES AND SPECIFICATIONS

1. ALL THE DIMENSIONS ARE IN MILLMETRES AND THE LEVELS ARE IN METRES.
2. DO NOT SCALE THE DRAWING. ONLY FIGURED DIMENSIONS SHALL BE FOLLOWED.
3. THE SINGLE LANE ROAD BRIDGE IS DESIGNED FOR A CARRIAGE WAY WIDTH OF 4.25 M AND FOR ONE LANE OF IRC CLASS 'A' LOADING.
4. THE BRIDGE IS DESIGNED ADOPTING THE FOLLOWING IRC AND IS CODES.
   (i) IRC - 5 - 1998, (ii) IRC - 6 - 2000, (iii) IRC - 21 - 2000, (iv) IRC - 78 - 2000, (v) IRC - 83 - 2000, (vi) IS 456 - 2000, (vii) IS 383
5. 100 THICK LINING IN C.C. M15 GRADE SHALL BE PROVIDED FOR BED AND SIDES OF THE CANAL FOR A LENGTH OF 10.0 M ON EITHER SIDE OR AS PER AGREEMENT.
6. BACK FILLING SHALL BE DONE SIMULTANEOUSLY WITH THE RAISING OF THE STRUCTURE WITH Ø VALUE OF SOIL NOT LESS THAN 28°.
7. IF THE STRATA METWITH AT FOUNDATION LEVEL DURING EXECUTION IS DIFFERENT FROM WHAT HAS BEEN CONSIDERED IN THE DESIGN (SHOWN IN THE STRESS TABLE), THE SECTION NEEDS TO BE REDESIGNED.
8. SUITABLE APPROACHES IS SHALL BE FORMED TO CONNECT MAIN ROAD ON EITHER SIDE OF THE BRIDGE.
9. THE FIELD AUTHORITIES SHOULD SATISFY ABOUT THE SUITABILITY OF THE STRUCTURE AS PER SITE CONDITIONS BEFORE EXECUTION OF WORK.
10. RETURNS SHALL INVARIABLY BE PROVIDED FOR EFFECTIVE BANK CONNECTIONS.
11. THE SPECIFICATIONS PROPOSED FOR THE VARIOUS COMPONENTS OF THE STRUCTURE ARE AS FOLLOWS:
12. 100 MM WEEP HOLES WITH REVERSE FILTERS AT 1800 C/C STAGGERED BOTH VERTICALLY AND HORIZONTALLY SHALL BE PROVIDED IN RETURNS WALL AND ABUTMENTS.

Sl.No	DETAILS OF COMPONENTS	GRADE OF CONCRETE AS PER IRC: 6-2000	MAX. SIZE OF C.A AS PER IS:383
1	WEARING COAT OF SLAB	CC M30	20 MM
2	SLAB OF DECK	RCC M25	20 MM
3	PIER CAP, ABUTMENT BED BLOCK	RCC M30	20 MM
4	PIER	RCC M25	20 MM
5	ABUTMENT & RETURN	CC M15	20 MM
6	PIER FOOTING	RCC M25	20 MM
7	ABUTMENT & RETURN FOUNDATION	CC M15	20 MM
8	APPROACH SLAB	CC M30	20 MM
9	LEVELLING COURSE FOR PIER	CC M15	20 MM
10	LINING	CC M15	20 MM
11	S.P TROUGH SLAB & BEAM	RCC M20	20 MM
12	CUT OFF	CC M15	20 MM

HYDRAULIC PARTICULARS

S.NO	DESCRIPTION OF ITEMS	FEEDER CHANNEL	PBC 3R MINOR
1	DISCHARGE REQUIRED	9.068 CUMECS	0.347CUMECS
2	DISCHARGE DESIGNED	9.135 CUMECS	0.360 CUMECS
3	BED WIDTH	6.50 M	1.000 M
4	FULL SUPPLY DEPTH	1.64 M	0.500 M
5	VELOCITY	0.621 M/SEC	0.412 m/sec
6	BED FALL	1 / 10000	1 in 2000
7	SIDE SLOPES	1.5 : 1	1.5 : 1
8	COEFFICIENT OF RUGOSITY	0.018	0.025
9	TOP WIDTH OF BANKS (L / R)	4 M / 2.50 M	4/2.50
10	BED LEVEL	+ 243.445 M	+ 247.880 M
11	FULL SUPPLY LEVEL	+ 245.085M	+248.380 M
12	TOP OF BANK LEVEL	+ 245.685M	+ 248.680M
13	AVE. GROUND LEVEL	+ 249.096 M	+ 249.096 M
14	ROAD LEVEL	+ 249.096 M	
15	FREE BOARD	0.6M	0.3M

STRESS TABLE

S.NO	DESCRIPTION OF ITEMS	STRESSES IN T / SQ.M			
		AT BASE		ON SOIL	
		MAX.	MIN.	MAX.	MIN.
1	ABUTMENT	28.912	(-)4.239	23.937	0.357
2	RETURN WALL	26.408	(-) 4.487	20.617	1.073
3	Pier				
	Condition-I				
	Case-i	76.032	(-)25.934	19.205	0.573
	Case-ii	71.707	(-)20.907	18.669	1.361
	Condition-II				
	Case-i	71.925	(-)21.125	18.419	1.611
	Case-ii	67.249	(-)16.449	17.756	2.274

REVISION NO:	REFERENCE	DATE
CLIENT	GOVERNMENT OF ANDHRA PRADESH IRRIGATION & CAD DEPARTMENT	
PROJECT	GANDIKOTA LIFT IRRIGATION SCHEME FEEDER CHANNEL	
TITLE	SINGLE LANE ROAD BRIDGE AT KM. 15.378 GENERAL PLAN AND SECTIONAL ELEVATION	
CONTRACTORS		
CONSULTANTS		
DRAWING NO:	SCALE	DATE
GLIP/FC/SLRB-15.378 /001/2009	AS INDICATED	