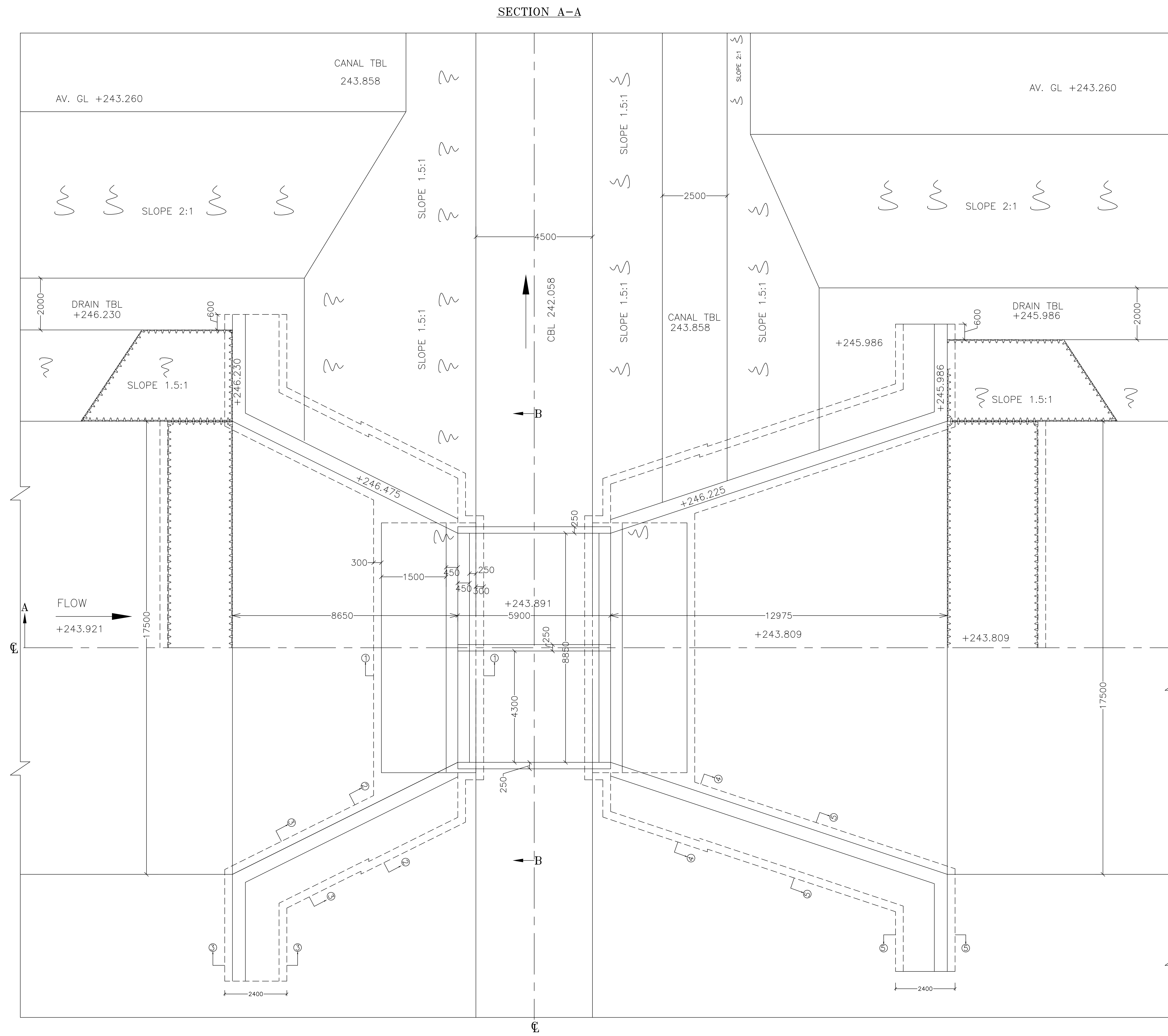




SECTION 4.4



## PLAN

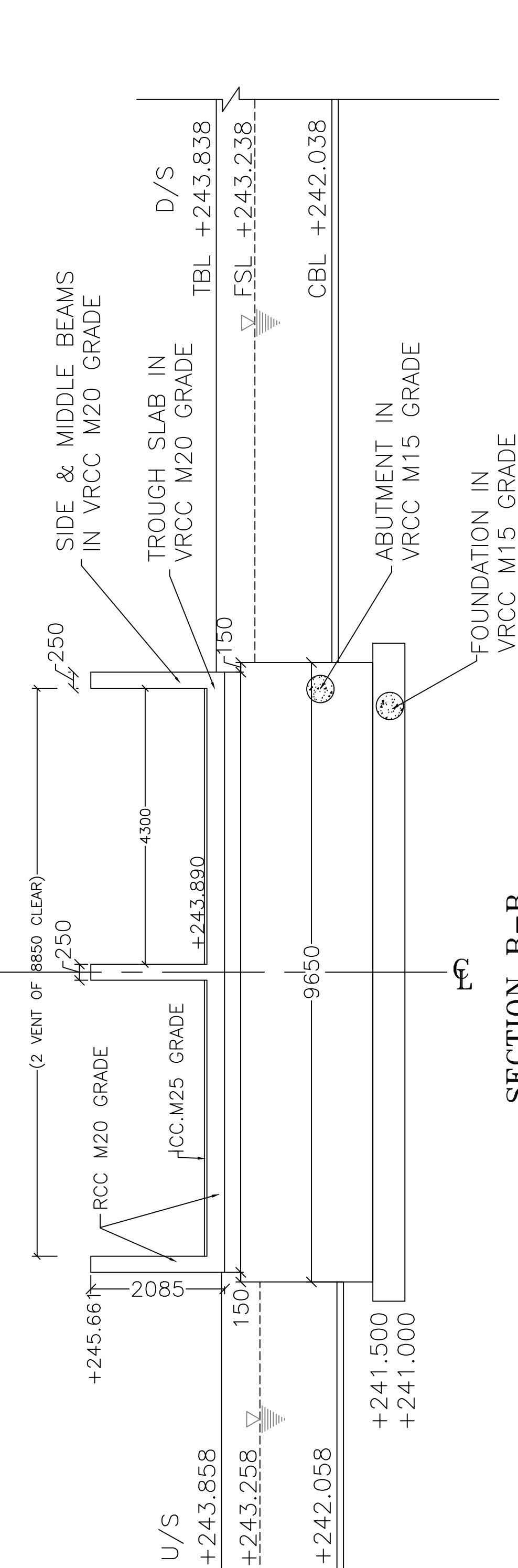
<u>HYDRAULIC PARTICULARS OF DRAIN:</u>		
S.NO.	PARITCULARS	
1.	CATCHMENT AREA	1.873 SqKm = 0.728 SqMiles
2.	DEEPEST BED LEVEL	+243.260
3.	MAXIMUM FLOOD DISCHARGE	31.500 Cumecs

OGL +243.260

+242.760

GRAVEL WITH  
SMALL BOUDERS

TRAIL PIT PARTICULARS



Sd/- 08/04/2010  
SUPERINTENDING ENGINEER  
G.N.S.S. CIRCLE, KADAPA.

NOTES

1/2

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES UNLESS OTHERWISE SPECIFIED.
2. THE ABUTMENTS, WINGS AND RETURNS ARE DESIGNED BASED ON T.V.A PROCEDURE
3. STEEL : ALL STEEL SHALL CONFORM TO LATEST IS : 1786
4. CONCRETE : ALL CONCRETE SHALL CONFORM TO LATEST IS : 456 AND IS : 3370
5. 300 TH ROUGH STONE DRY PACKING OVER 225 TH GRAVEL COMPACTED TO O.M.C. SHALL BE PROVIDED FOR BED PITCHING AND SIDE REVETMENT AS SHOWN IN THE DRAWINGS IN APPROACH AND TAIL CHANNEL.
6. DURING EXECUTION, IF THE STRATA MET WITH AT FOUNDATION LEVEL IS NOT CAPABLE OF TAKING THE DESIGN STRESSES UNDER SATURATION CONDITION THE SECTIONS ARE TO BE SUITABLY MODIFIED.
7. 100 MM LINING TO THE CANAL IN CC M15 GRADE UP TO A LENGTH OF 10.0 M OR AS PER AGREEMENT WHICHEVER IS HIGHER ON EITHER SIDE OF THE STRUCTURE IS TO BE PROVIDED.
8. 12MM MASTIC PAD AND 300mm THICK P.V.C. WATER STOPPER SHALL BE PROVIDED AT BOTH ENDS OF TROUGH SLAB ON ABUTMENTS.
9. TAIL CHANNEL SECTION IS FOR GUIDANCE ONLY PROPER CONNECTIONS TO SUIT SITE CONDITIONS MAY BE PROVIDED. THE TAIL CHANNEL IS PROPOSED WITH 17.500M BED WIDTH, 1:5:1 SIDE SLOPES AND 1 IN 1980 BED FALL. TAIL CHANNEL SHALL BE EXCAVATED TILL IT MEETS THE NATURAL BED LEVEL OF THE STREAM.
10. 50X75 MM WEEP HOLES WITH REVERSE FILTERS AT 1800/C STAGGERED BOTH VERTICALLY AND HORIZONTALLY SHALL BE PROVIDED IN WINGS, RETURNS AND HEAD WALLS
11. 40MM TH SEALING COAT IN C.C. M20 SHALL BE PROVIDED ON THE SLAB UNDER CANAL PORTION.
12. ALL THE WORKMANSHIP OF CONCRETE SHALL CONFORM TO IS 456
13. THE COARSE AGGREGATE SHALL CONFORM TO IS 383.
14. THE BANK CONNECTIONS ARE ONLY TENTATIVE. THEY SHALL BE PROVIDED AS PER SITE CONDITION DURING EXECUTION.
15. THE ABUTMENTS, WING AND RETURN WALLS ARE DESIGNED FOR EARTH PRESSURE BASED ON TVA PROCEDURE WITH BACK FILL SOILS OF NON-COHESIVE NATURE AND AN ANGLE OF INTERNAL FRICTION  $\phi = 28$  DEGREES AND WITH UNIT WEIGHT OF SOIL AS 2.1 T/SQM. THE BACK FILLING OF THESE WALLS SHALL BE WITH SOILS HAVING THE PROPERTIES AS ABOVE AND PROPERLY COMPACTED TO MAXIMUM DRY DENSITY AT OMC AND SHALL BE DONE CONCURRENTLY WITH RAISING OF STRUCTURE.
16. IF THE FOUNDATION IS TO BE REST ON AN EXCAVATED PORTION THE SAME SHALL BE FILLED WITH LEAN MIX.
17. THE TROUGH SLAB & BEAMS SHALL BE CONSTRUCTED IN RCC M20
18. ENSURE THE S.B.C OF SOIL BEFORE EXECUTION.
19. GUIDE BUNDS ARE FORMED AS PER SITE CONDITION.
20. THE DESIGN IS CHECKED BASED ON THE SITE SURVEY & L.S FURNISHED BY THE E.E.

1. TROUGH SLAB & WALLS	-	RCC M20	A20
2. SEALING COAT	-	CC M25	A20
3. BED BLOCK	-	RCC M25	A20
4. ABUTMENT, WINGS, RETURNS	-	CC M15	A20
5. APRON, CUTOFF & W.C	-	CC M20	A20

[illegible]

S.NO.	PARITCULARS	
1.	DISCHARGE REQD. (CUMECS)	4.892
2.	DISCHARGE DGND. (CUMECS)	4.950
3.	BED WIDTH (M)	4.500
4	F.S.D (M)	1.200
5.	VELOCITY (M/S)	0.600
6.	BED FALL	1 IN 3750
7.	CANAL BED LEVEL (M)	+242.058
8.	FULL SUPPLY LEVEL (M)	+243.258
9.	TOP OF BANK LEVEL (M)	+243.858
10.	FREE BOARD (M)	0.600
11.	SIDE SLOPES (INNER/OUTER)	1.5:1
12.	VALUE OF 'n'	0.0225
13.	TOP WIDTH OF BANKS (L/R)(M)	4.50/2.50

REFERENCE:

1. DWG NO.: 2/2 REINFORCEMENT DETAILS OF TROUGH & SECTIONS		
CLIENT	GOVERNMENT OF ANDHRA PRADESH IRRIGATION & CAD DEPARTMENT	
PROJECT	GANDIKOTA LIFT IRRIGATION SCHEME KADAPA	
TITLE	SUPER PASSAGE AT KM 8.532 OF SANTHAKOVUR MAJOR ON FEEDER CHANNEL TO BUCHUPALLI TANK	
	GENERAL PLAN & SECTIONAL ELEVATIONS	
CONTRACTORS	M/S K.B.L. - M.C.C.L. JV, PUNE	
DRAWING NO.:	SCALE	DATE
	AS INDICED	