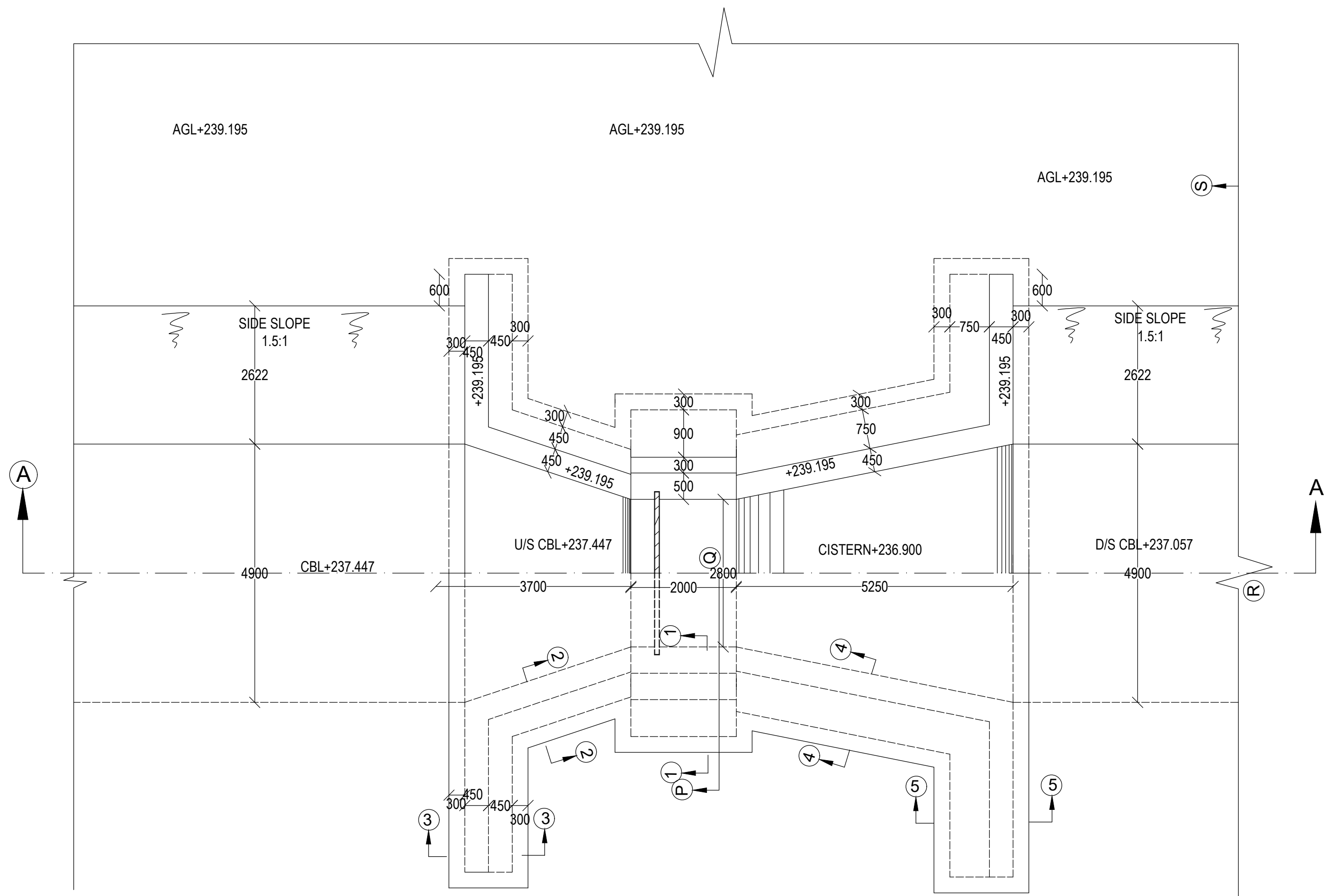
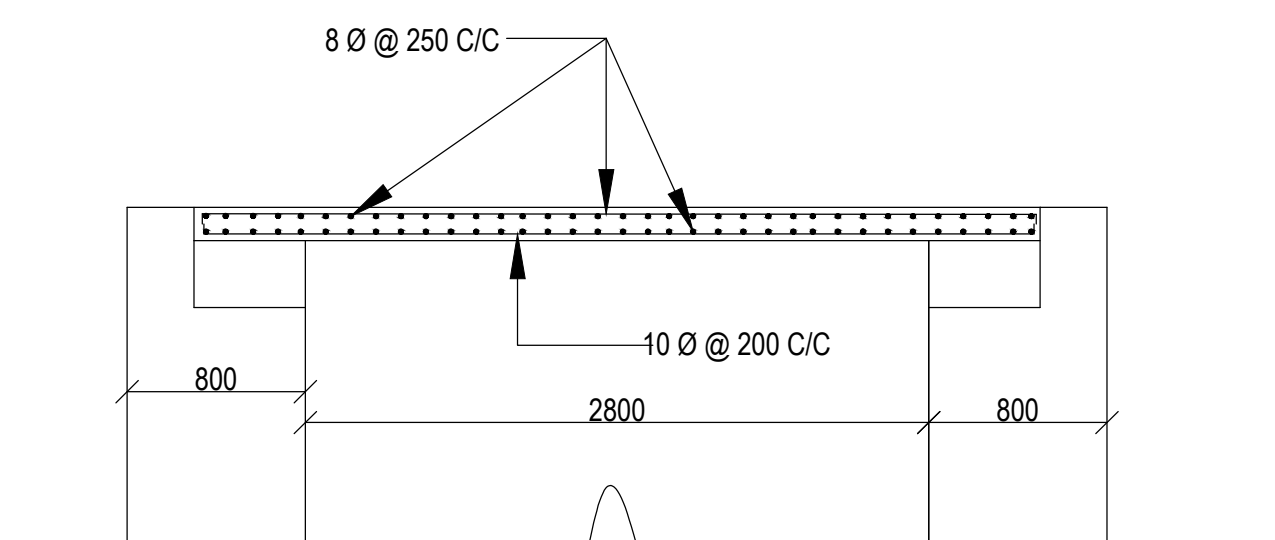


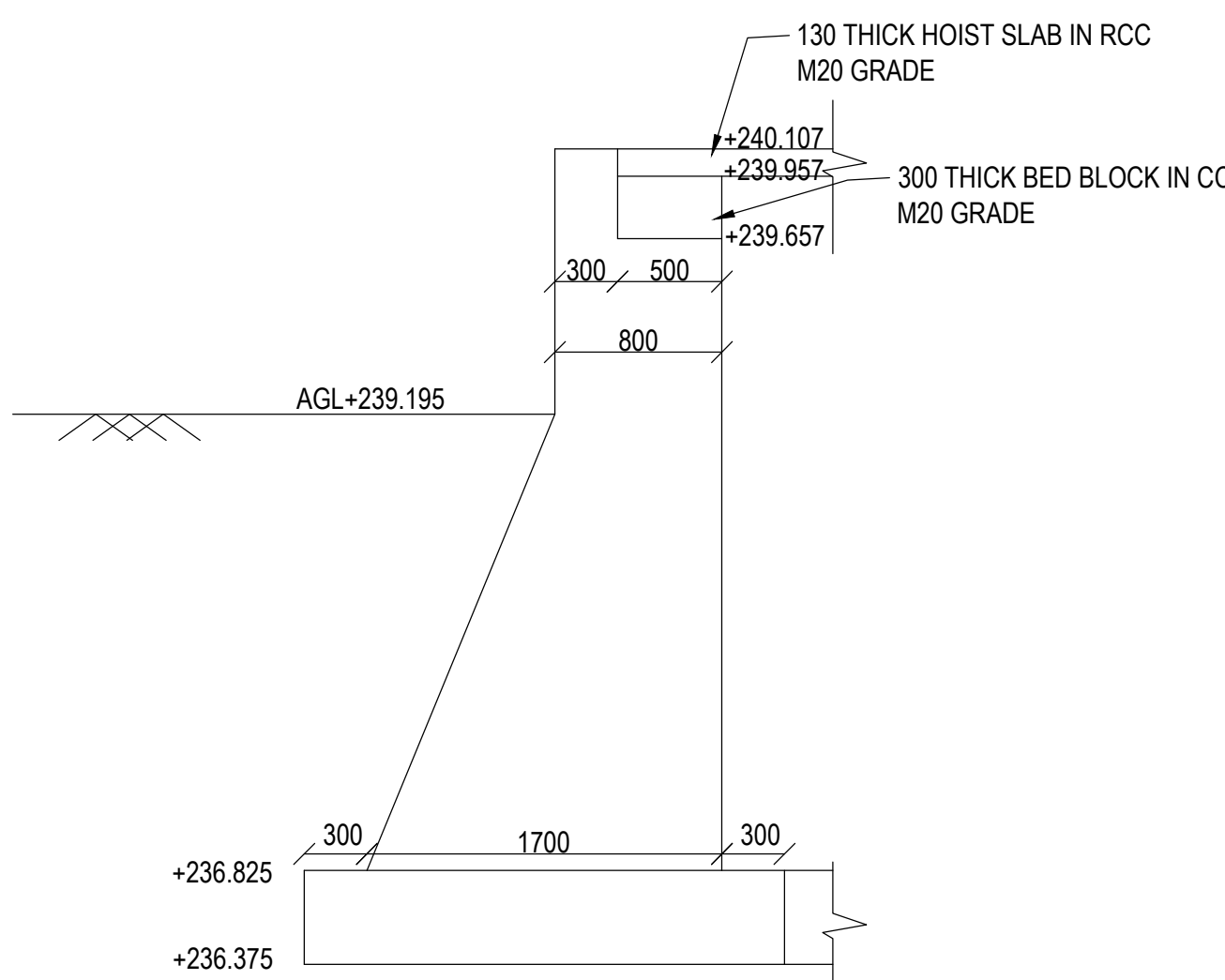
TRIAL PIT PARTICULARS



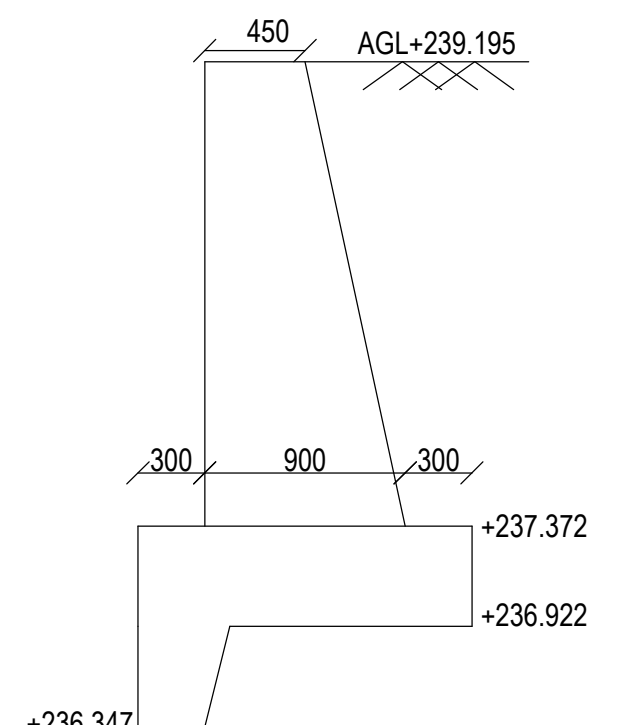
HALF PLAN AT TOP AND HALF AT BOTTOM  
SCALE 1:100



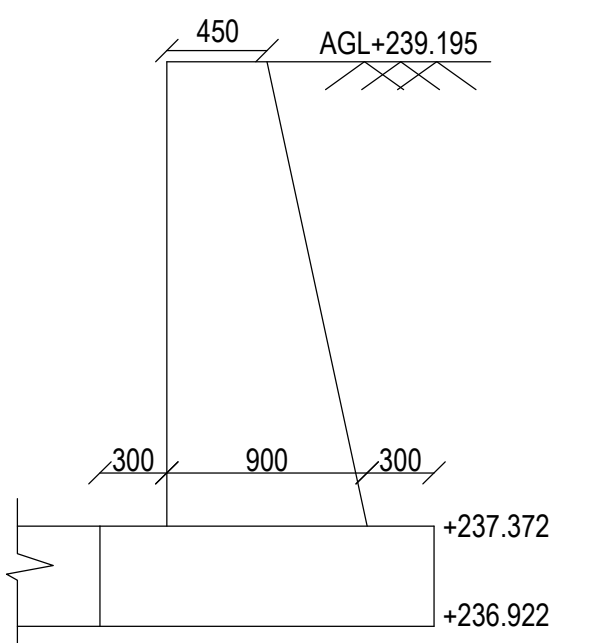
REINFORCEMENT DETAILS OF HOIST SLAB  
SCALE 1:50



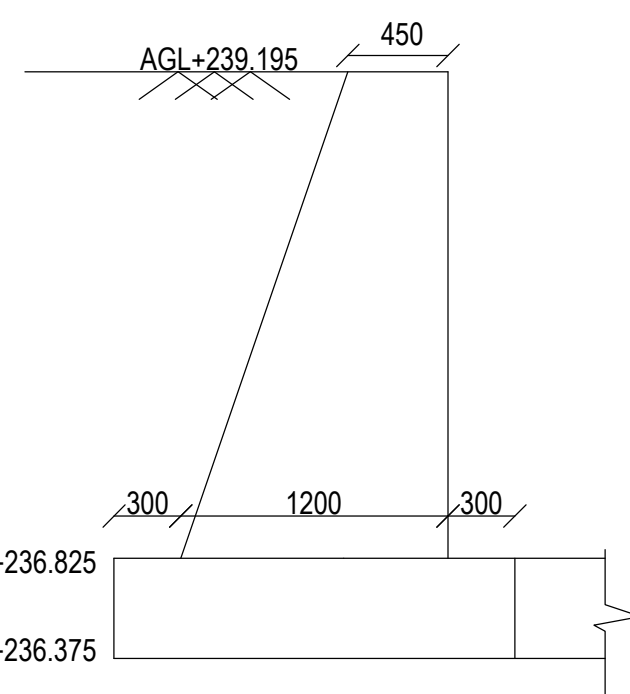
SECTION OF ABUTMENT WALL  
SECTION '1-1'  
SCALE 1:50



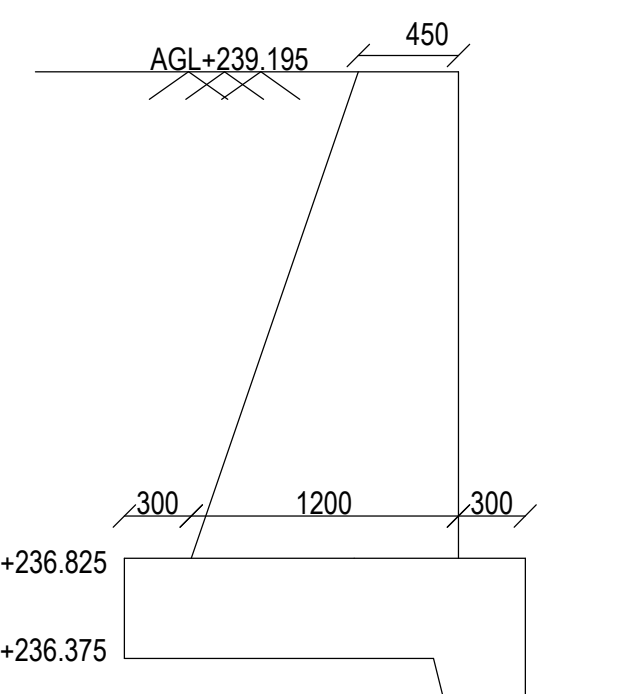
SECTION OF RETURN WALL  
SECTION '3-3'  
SCALE 1:50



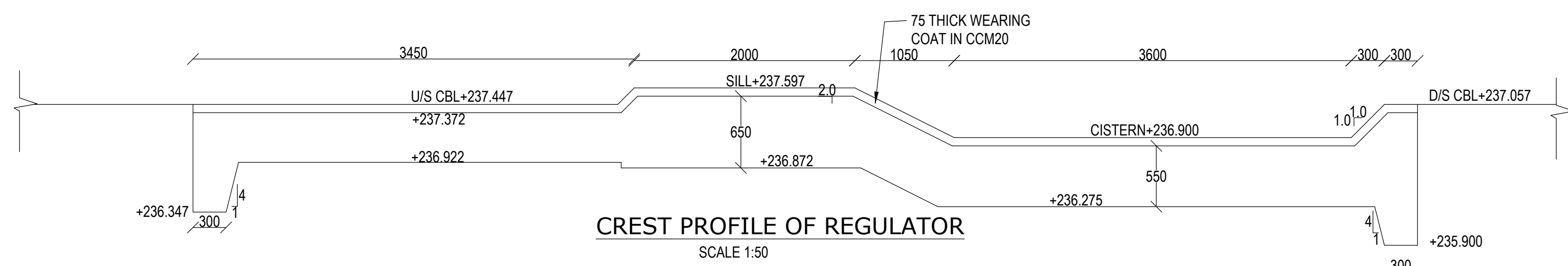
SECTION OF WING WALL  
SECTION '2-2'  
SCALE 1:50



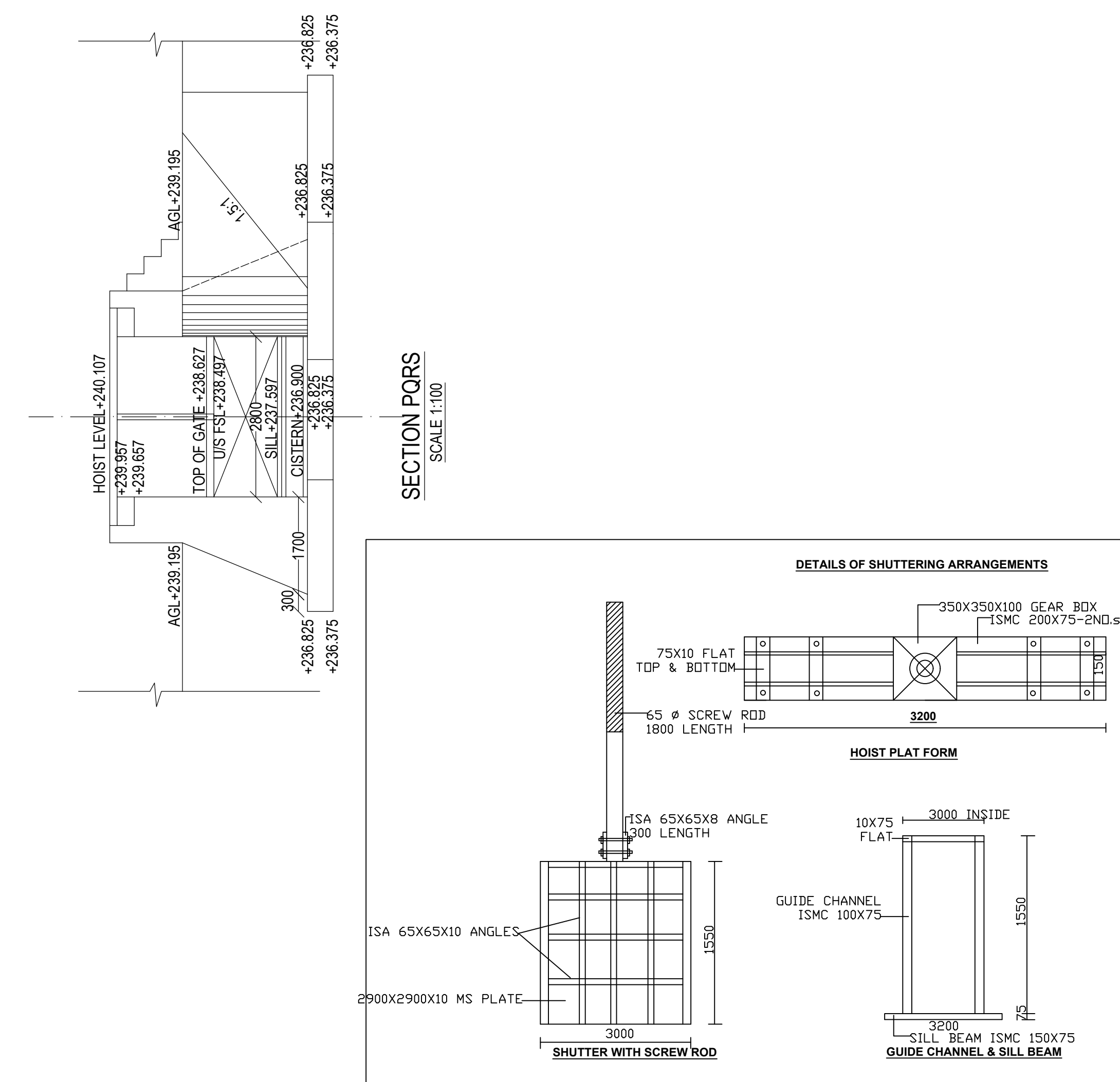
SECTION OF WING WALL  
SECTION '4-4'  
SCALE 1:50



SECTION OF RETURN WALL  
SECTION '5-5'  
SCALE 1:50



CREST PROFILE OF REGULATOR  
SCALE 1:50



## NOTES & SPECIFICATIONS :

- ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES. FOLLOW FIGURED DIMENSIONS AND DO NOT SCALE THE DRAWING.
- UPSTREAM APRON, CREST & CISTERN SHALL BE IN CC M15 CONCRETE WITH 40 MM MAXIMUM SIZE GRADED COARSE AGGREGATE.
- 75 THICK WEARING COAT SHALL BE LAID IN CC M20 GRADE WITH 20 MSA OVER U/S APRON, CREST AND CISTERN FLOOR CONCRETE.
- HAND RAILING FOR HOIST PLATFORM SHALL BE OF ANY APPROVED TYPE.
- THE ABUTMENTS, WINGS, RETURNS AND THEIR FOUNDATIONS SHALL BE IN CC M15 GRADE CONCRETE WITH 40 MSA.
- BACK FILLING SHALL BE WITH SELECTED SOILS WITH 'Ø' VALUE NOT LESS THAN 28 AND PERMEABILITY VALUE NOT MORE THAN 3M/YEAR. BACK FILLING SHALL BE DONE SIMULTANEOUSLY WITH THE RISING OF THE WALLS.
- WEEP HOLES OF 50MM DIA. WITH REVERSE FILTERS ON THE SIDES SHALL BE PROVIDED AT 1500 MM C/C BOTH WAYS IN STAGGERED PATTERN IN WING & RETURN ABOVE FSL AS PER CL. 714.3 AND APPENDIX 6 OF IRC 78- 1983.
- 12 MM THICK EXPANSION JOINT FILLED WITH MASTIC FILLER SHALL BE PROVIDED IN JOINTS.
- ALL THE AGGREGATES SHALL CONFORM TO IS: 383.
- GENERAL WORKING AND WORKMANSHIP SHALL CONFORM TO RELEVANT IS CODES.
- LADDER OR STEPS SHALL BE PROVIDED TO HAVE ACCESS TO THE HOIST PLATFORM TO OPERATE THE REGULATOR GATE.
- CONCRETING AT GATE GROOVES, HOIST PLATFORM SHALL BE DONE AFTER PLACING EM PARTS.
- IF THE FOUNDATION STRATA MET WITH DURING EXECUTION IS NOT CAPABLE OF TAKING THE DESIGNED STRESSES THE SECTIONS HAVE TO BE SUITABLY MODIFIED.
- THE INFALL REGULATOR IS DESIGNED ADOPTING THE FOLLOWING IS CODES.
  - IS 383 - 1989
  - IS 3370-1965
  - IS 456-2000
  - IS 4997-1995
  - IS 7114-1973

S.NO.	PARTICULARS	GRADE OF CEMENT CONCRETE AS PER IS:456-2000	MAX SIZE OF GRADED COARSE AGGREGATE AS PER IS:383-1999.
a	ABUTMENTS, WINGS & RETURNS AND THEIR FOUNDATION CONCRETE U/S APRON, CREST, CISTERN CUT-OFF CONCRETE.	CC M15 GRADE	40 MM
b	WEARING COAT OVER U/S APRON CREST AND CISTERN	CC M20 GRADE	20 MM

## HYDRAUKIC PARTICULARS:

S.NO	DESCRIPTION OF ITEMS	MAIN CANAL @ KM.16.602 (U/S)	MAIN CANAL @ KM.16.602 (D/S)
1	DISCHARGE REQUIRED	3.670 CUMECs	3.670 CUMECs
2	DISCHARGE DESIGNED	3.704 CUMECs	3.704 CUMECs
3	BED WIDTH	4.90 M	4.90 M
4	FULL SUPPLY DEPTH	1.05 M	1.05 M
5	VELOCITY	0.584 M/SEC	0.584 M/SEC
6	BED FALL	1 / 4800	1 / 4800
7	SIDE SLOPES	1.5 : 1	1.5 : 1
8	COEFFICIENT OF RUGOSITY	0.025	0.025
9	FREE BOARD	0.50 M	0.50 M
10	BED LEVEL	+ 237.447 M	+ 237.057 M
11	FULL SUPPLY LEVEL	+ 238.497 M	+ 238.107 M
12	TOP BUND LEVEL	+ 238.997 M	+ 238.607 M
13	AVE. GROUND LEVEL	+ 239.195 M	+ 239.195 M

## STRESS TABLE

S.NO	DESCRIPTION	STRESSES IN T / SQ.M			
		IN CONCRETE		ON SOIL	
		MAX.	MIN.	MAX.	MIN.
1	ABUTMENT	14.05	-0.09	11.56	2.48
2	U/S WING & RETURN WALL	9.871	-0.78	6.245	3.104
3	D/S WING & RETURN WALL	12.46	-0.75	8.445	3.394

REVISION NO:	DRAWN	CHECKED	APPROVED	DATE
GOVERNMENT OF ANDHRA PRADESH IRRIGATION & CAD DEPARTMENT				
PROJECT NAME	GANDIKOTA LIFT IRRIGATION SCHEME SANTHAKOVURU DISTRIBUTORY			
COMPANY NAME	M/S KBL - MCCL (JV)			
DETAILS OF STRUCTURE	OUTFALL REGULATOR AT KM.16.602			
	DRAWING NO:	SCALE	DATE	
		AS INDICATED		