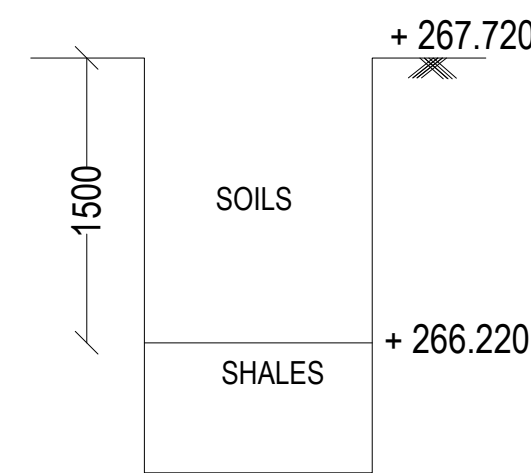
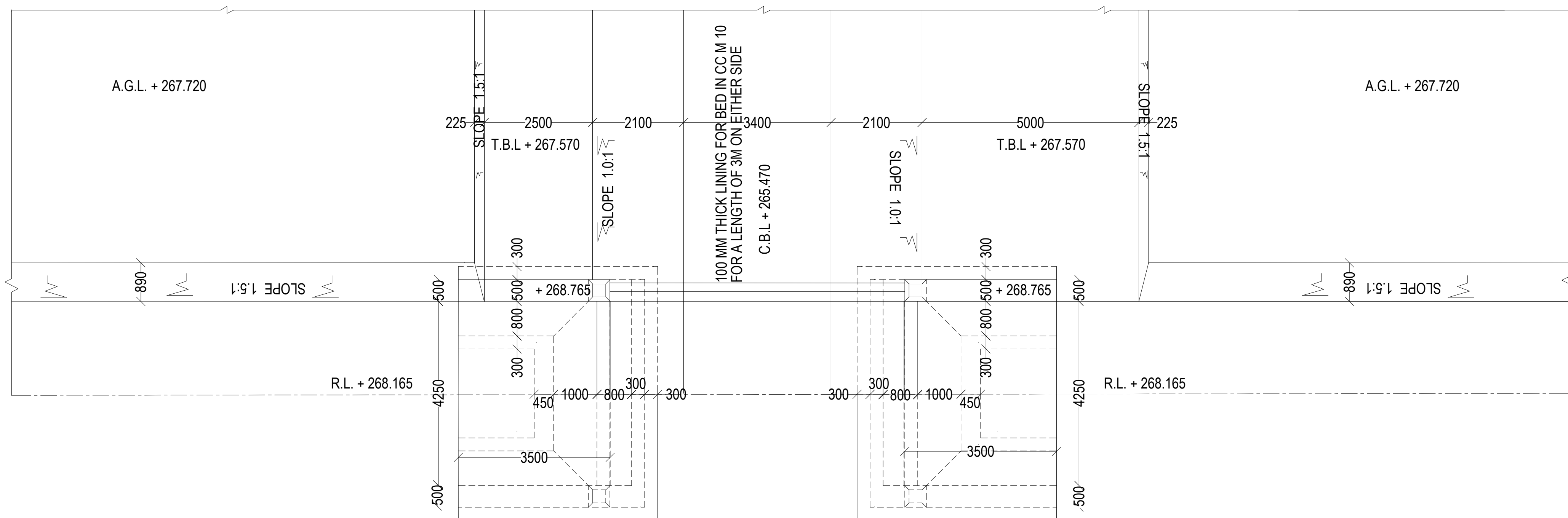


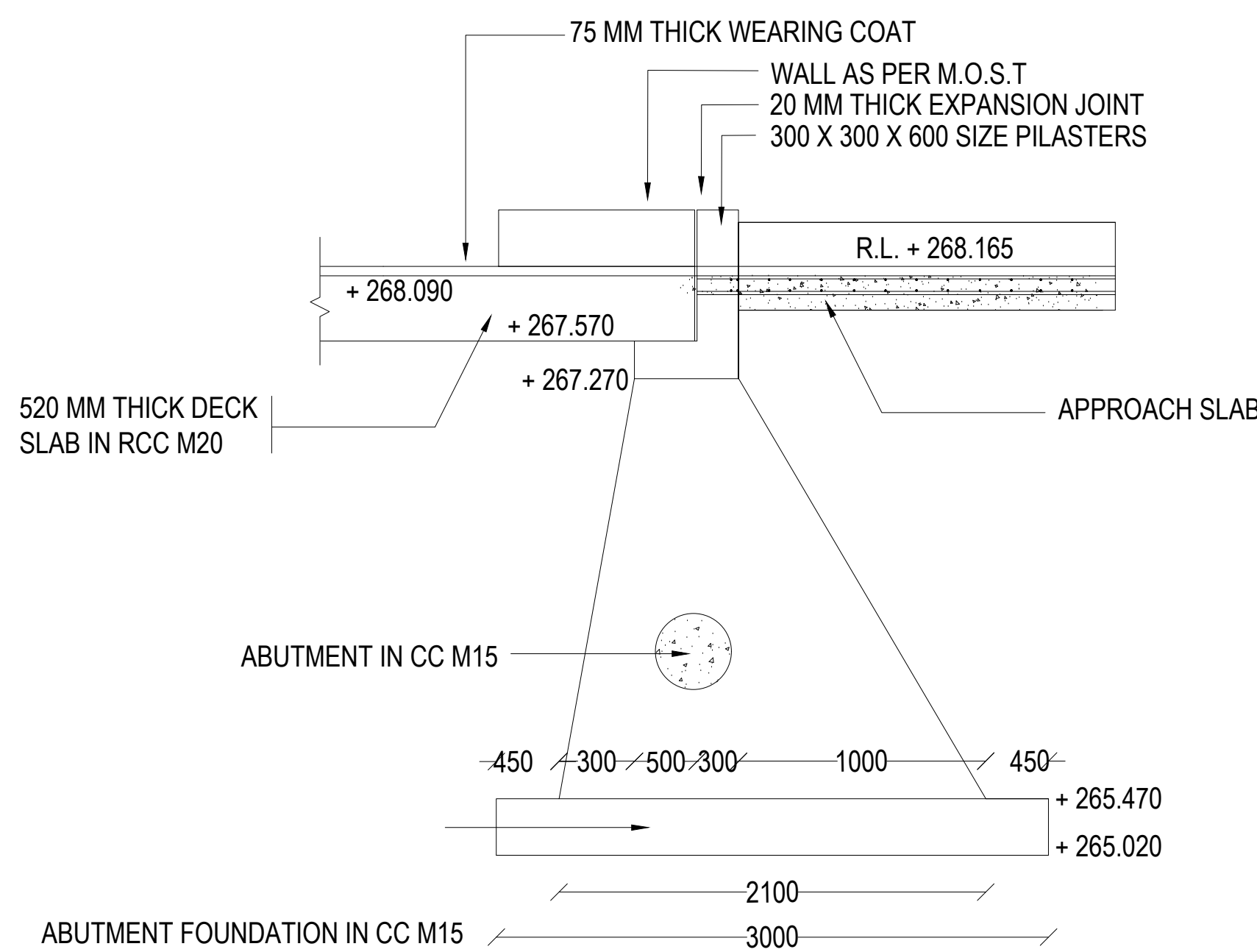
SECTIONAL ELEVATION  
SCALE 1 : 100



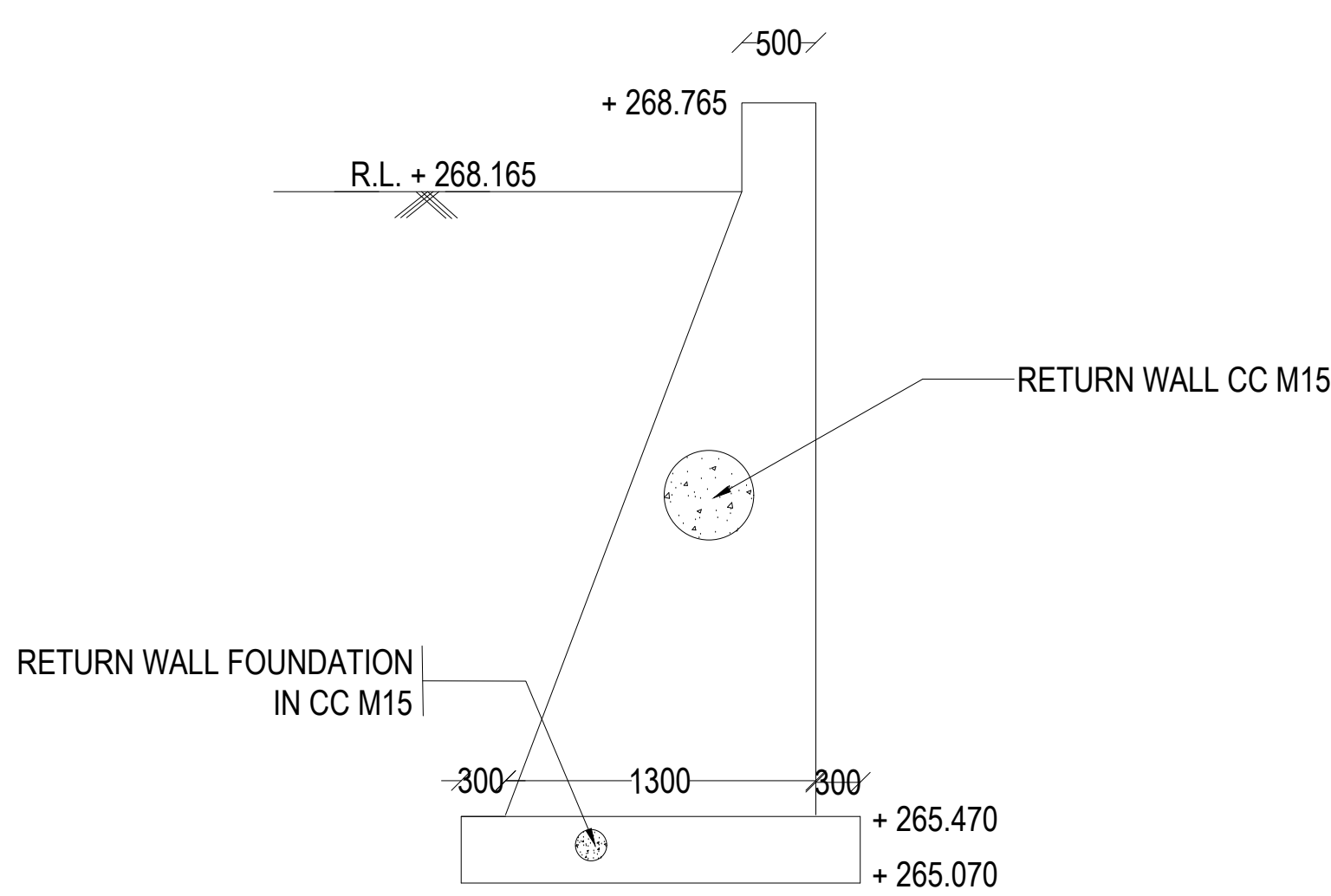
TRAIL PIT PARTICULARS @ KM 5.575



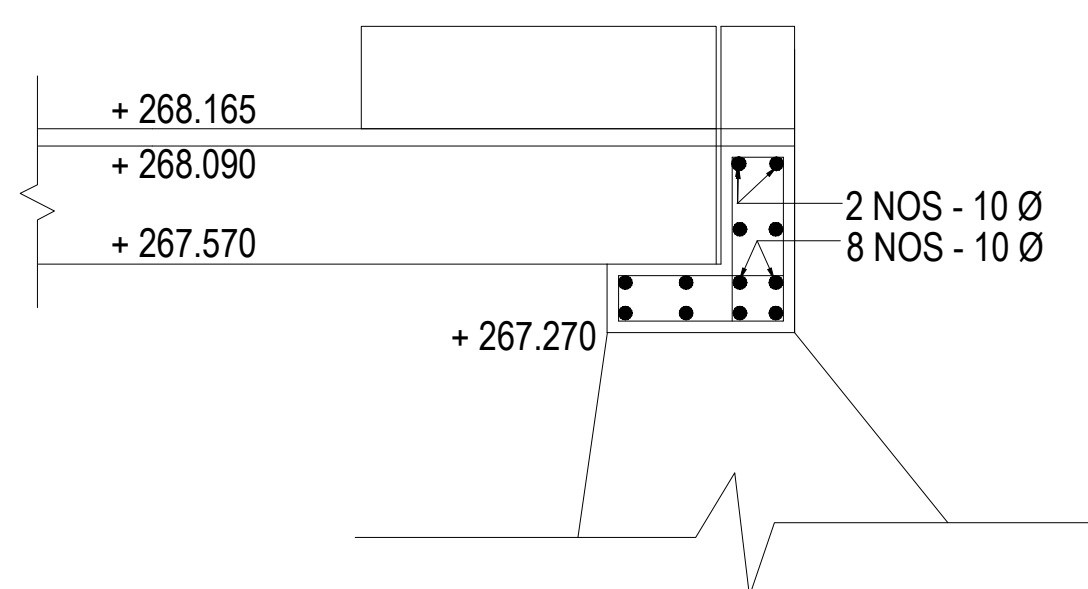
HALF PLAN AT TOP AND HALF PLAN AT BOTTOM  
SCALE 1 : 100



SECTION OF ABUTMENT  
SCALE 1 : 50



SECTION OF RETURN  
SCALE 1 : 50



RCC DETAILS OF BED BLOCK & DIRT WALL  
SCALE 1 : 50

### HYDRAULIC PARTICULARS

S.NO	DESCRIPTION OF ITEMS	QUANTITY & UNITS
1	DISCHARGE REQUIRED	3.262 CUMEC/S
2	DISCHARGE DESIGNED	3.600 CUMEC/S
3	BED WIDTH	3.40 M
4	FULL SUPPLY DEPTH	1.20 M
5	VELOCITY	0.650 M/SEC
6	BED FALL	1 / 5500
7	SIDE SLOPES ( HDR/ SOILS )	1.0 : 1
8	COEFFICIENT OF RUGOSITY	0.018
9	CANAL BED LEVEL	+ 265.470 M
10	FULL SUPPLY LEVEL	+ 266.670 M
11	TOP OF BANK LEVEL	+ 267.570 M
12	EXISTING ROAD LEVEL	+ 267.720 M
13	PROPOSED ROAD LEVEL	+ 268.165 M
14	SKEW ANGLE	0 °

### NOTES AND SPECIFICATIONS

- ALL THE DIMENSIONS ARE IN MILLIMETRES AND THE LEVELS ARE IN METRES.
- DO NOT SCALE THE DRAWING. ONLY FIGURED DIMENSIONS SHALL BE FOLLOWED.
- THE SINGLE LANE ROAD BRIDGE IS DESIGNED FOR A CARRIAGE WAY WIDTH OF 4.25M AND FOR ONE LANE OF IRC CLASS 'A' LOADING.
- THE BRIDGE IS DESIGNED ADOPTING THE FOLLOWING IRC AND IS CODES.
  - IRC - 5 - 1998
  - IRC - 6 - 2000
  - IRC - 21 - 2000
  - IRC - 78 - 2000
  - IRC - 83 - 2000
  - IS 456 - 2000
  - IS 383
- THE SPECIFICATIONS PROPOSED FOR THE VARIOUS COMPONENTS OF THE STRUCTURE ARE AS FOLLOWS.

S.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	DECK SLAB	RCC M20	20 MM
3	BED BLOCK OVER ABUTMENT	RCC M25	20 MM
4	ABUTMENT AND RETURN	CC M15	40 MM
5	ABUTMENT & RETURN FOUNDATION	CC M15	40 MM
6	APPROACH SLAB	CC M30	20 MM
7	LINING FOR CANAL	CC M10	20 MM

### NOTES AND SPECIFICATIONS

- ALL THE DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES.
- DO NOT SCALE THE DRAWINGS. WRITTEN DIMENSIONS ONLY SHALL BE FOLLOWED.
- THE DESIGN IS ACCORDING TO THE FOLLOWING BRIDGE AND IS CODES:
  - IRC 5 - 1998
  - IRC 6 - 2000
  - IRC 21 - 2000
  - AND 4) IS 456 - 2000.
- MINIMUM COVER TO ALL REINFORCEMENT INCLUDING STIRRUPS SHALL BE 40MM UNLESS OTHER WISE SPECIFIED TO ENSURE PROPER CONCRETE COVER TO REINFORCEMENT.
- ALL REINFORCEMENT STEEL SHALL BE OF HIGH YIELD STRENGTH DEFORMED BARS (Fe 415) CONFORMING TO IS 1786 - 1985.
- JOINTS OR LAPPING OF BARS IN MAIN REINFORCEMENT SHALL BE AVOIDED AS FAR AS POSSIBLE. HOWEVER IF LAPS ARE INEVITABLE THE PROVISION IN CLAUSE 304.6.6 OF IRC 21 - 2000 SHALL BE STRICTLY FOLLOWED.
- BENDING OF REINFORCEMENT BARS SHALL BE AS PER IS -2502. SUPPORTING CHAIRS OF 12Ø SHALL BE STRICTLY FOLLOWED.
- CONCRETE SHALL BE PREPARED IN THE MECHANICAL MIXERS OF CAPACITY NOT LESS THAN 200 LITRES. PROPER COMPACTION OF CONCRETE SHALL BE ENSURED BY USE OF FORM AND NEEDLE VIBRATORS.
- BACK FILLING SHALL BE DONE SIMULTANEOUSLY WITH THE RAISING OF THE STRUCTURE WITH Ø VALUE OF SOIL NOT LESS THAN 28° OR 'K' VALUE NOT MORE THAN 3 M/YEAR.
- IF THE STRATA MET WITH AT FOUNDATION LEVEL DURING EXECUTION IS DIFFERENT FROM WHAT IS CONSIDERED IN THE DESIGN (SHOWN IN STRESS TABLE), THE SECTION NEEDS TO BE RE DESIGNED

### STRESS TABLE

S.NO	DESCRIPTION OF ITEMS	STRESSES IN T / SQ.M			
		IN CONCRETE		ON SOIL	
		MAX.	MIN.	MAX.	MIN.
1	ABUTMENT	31.63	(-) 10.29	18.68	0.35
2	RETURN	24.48	-6.41	16.28	0.18

### REFERENCE DRAWINGS

- DRAWING NO. MSC/SLRB-5.575/002/2008 - RCC DETAILS OF DECK SLAB, KERB AND ABUTMENT BED BLOCK

REVISION NO.	DRAWN	CHECKED	APPROVED	DATE
CLIENT	GOVERNMENT OF ANDHRA PRADESH IRRIGATION & CAD DEPARTMENT			
PROJECT	GANDIKOTA LIFT IRRIGATION PROJECT MALYALA SUPPLY CANAL			
TITLE	SINGLE LANE ROAD BRIDGE AT KM. 5.575 GENERAL PLAN AND SECTIONS			
CONTRACTORS	M/S KBL - MCCL (JV) PUNE			
CONSULTANTS				
DRAWING NO.	SCALE		DATE	
MSC/SLRB-5.575/001/2008	AS INDICATED			