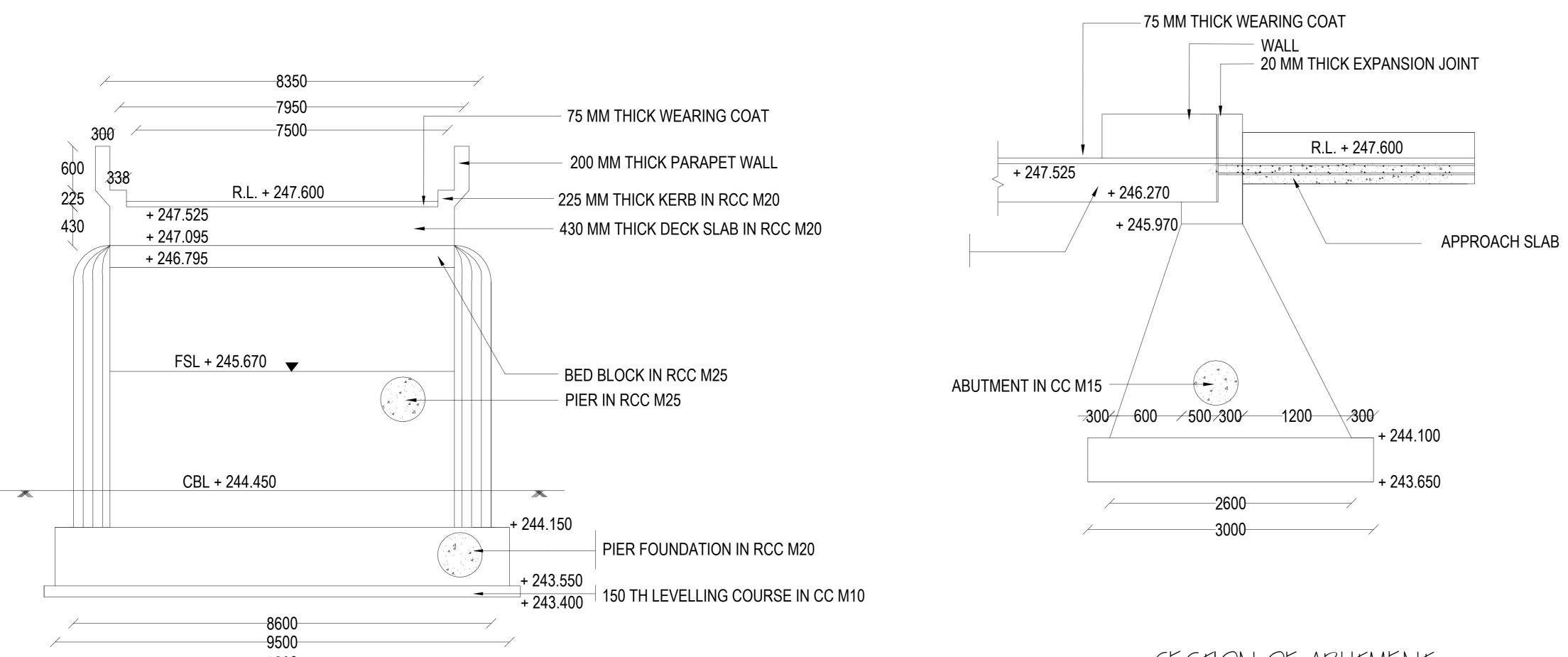


HALF PLAN AT TOP AND HALF PLAN AT BOTTOM



Sd/- 15-8-08 SUPERINTENDING ENGINEER GNSS CIRCLE, KADAPA.

SECTION OF ABUTMENT

SCALE 1: 50

SECTIONAL ELEVATION AT ' PP '

SCALE 1:50

## 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 4.25M 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. THE SPECIFICATIONS PROPOSED FOR THE VARIOUS COMPONENTS OF THE STRUCTURE ARE AS FOLLOWS:

| SI.No | DETAILS OF COMPONENTS     | GRADE OF CONCRETE<br>AS PER IRC: 6-2000 | MAX. SIZE OF C.A<br>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     | BEDBLOCK OVER PIER        | RCC M25                                 | 20 MM                             |
| 5     | PIER                      | RCC M25                                 | 20 MM                             |
| 6     | ABUTMENT AND RETURN       | CC M15                                  | 40 MM                             |
| 7     | PIER FOUNDATION           | RCC M20                                 | 20 MM                             |
| 8     | ABUTMENT FOUNDATION       | CC M15                                  | 40 MM                             |
| 9     | APPROACH SLAB             | CC M20                                  | 20 MM                             |
| 10    | LEVELLING COURSE FOR PIER | CC M10                                  | 40 MM                             |
| 11    | LINING FOR CANAL          | CC M10                                  | 20 MM                             |

## HYDRAULIC PARTICULARS

| S.NO | DESCRIPTION OF ITEMS       | QUANTITY & UNITS |
|------|----------------------------|------------------|
| 1    | DISCHARGE REQUIRED         | 5.820 CUMECS     |
| 2    | DISCHARGE DESIGNED         | 5.870 CUMECS     |
| 3    | BED WIDTH                  | 5.50 M           |
| 4    | FULL SUPPLY DEPTH          | 1.22 M           |
| 5    | VELOCITY                   | 0.66 M/SEC       |
| 6    | BED FALL                   | 1 / 4000         |
| 7    | SIDE SLOPES ( HDR/ SOILS ) | 1.5 : 1          |
| 8    | COEFFICIENT OF RUGOSITY    | 0.0225           |
| 9    | CANAL BED LEVEL            | + 244.450 M      |
| 10   | FULL SUPPLY LEVEL          | + 245.670 M      |
| 11   | TOP OF BANK LEVEL          | + 246.270 M      |
| 12   | EXSISTING ROAD LEVEL       | + 246.480M       |
| 13   | PROPOSED ROAD LEVEL        | + 247.600M       |
| 14   | SKEW ANGLE                 | 0 °              |
|      |                            |                  |

## STRESS TABLE

| S.NO | DESCRIPTION OF ITEMS | STRESSES IN T / SQ.M |           |         |      |
|------|----------------------|----------------------|-----------|---------|------|
|      |                      | IN CONCRETE          |           | ON SOIL |      |
|      |                      | MAX.                 | MIN.      | MAX.    | MIN. |
| 1    | PIER                 | 107.65               | (-) 59.32 | 10.06   | 0.56 |
| 2    | ABUTMENT             | 27.13                | (-) 5.16  | 21.33   | 0.43 |

## REFERENCE DRAWINGS

1. DRAWING NO. SKD/SLRB/002/2008 - RCC DETAILS OF PIER, PIER FOOTING AND ABUTMENT

| REVISION NO:      | DRAWN   | CHECKED | APPROVED | DATE |  |
|-------------------|---|---------|----------|------|--|
| CLIENT            | GOVERNMENT OF ANDHRA PRADESH<br>IRRIGATION & CAD DEPARTMENT       |         |          |      |  |
| PROJECT           | GANDIKOTA LIFT IRRIGATION SCHEME<br>SANTHAKOVUR DISTRIBUTORY      |         |          |      |  |
| 1111E             | DOUBLE LANE ROAD BRIDGE AT KM. 2.025<br>GENERAL PLAN AND SECTIONS |         |          |      |  |
| CONTRACTORS       | M/S KBL - MCCL (JV)<br>PUNE                                       |         |          |      |  |
| CONSULTANTS       |   |         |          |      |  |
| DRAWING NO:       | SCA.  | LE      | DATE     |      |  |
| SKD/SLRB/001/2008 | AS IND  | ICATED  |          |      |  |