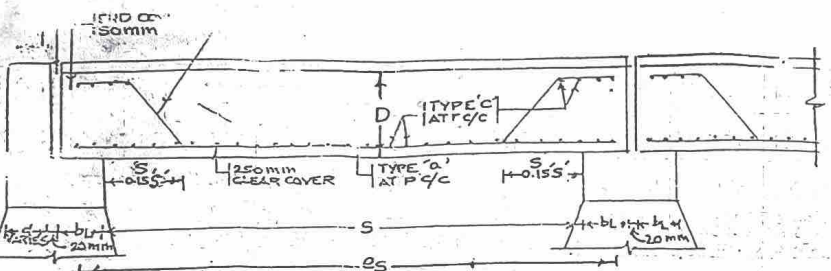
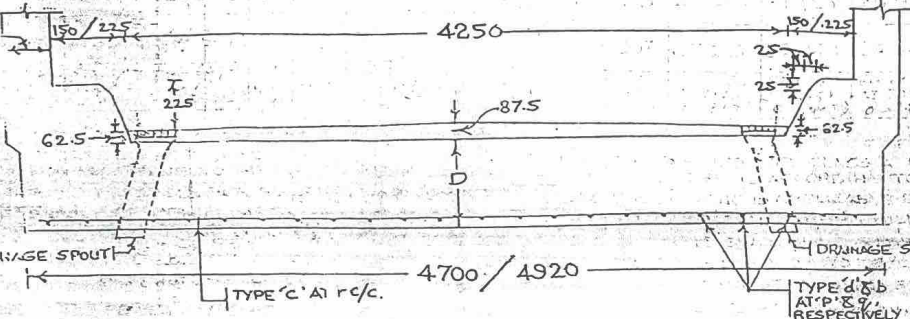


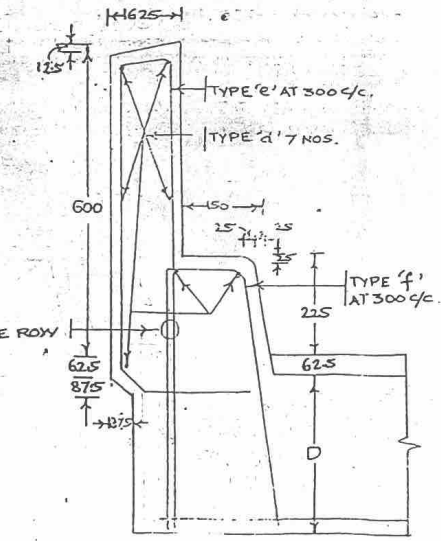
(TONNES)



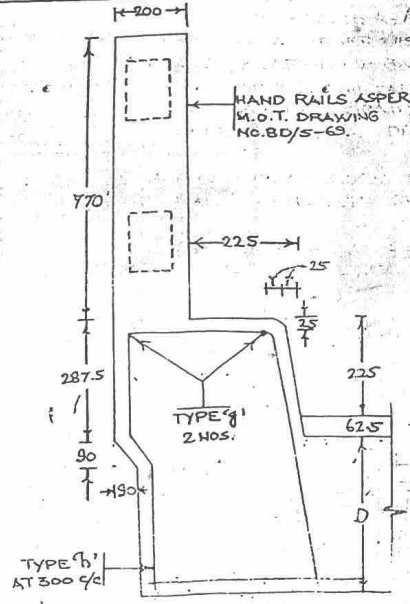
LONGITUDINAL SECTION



CROSS SECTION



KERB & PARAPET DETAILS FOR DISTRIBUTORIES

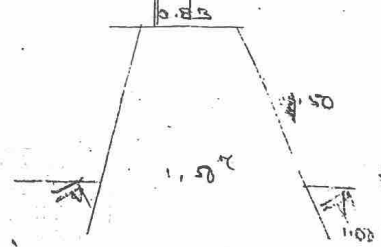


KERB & HANDRAILS DETAILS FOR MAIN CANAL

		2.00	3.00	4.00	5.00	6.00	7.00	8.00
REACTION AT ABUTMENT	DEAD LOAD (D.L)	6.476	10.088	14.669	19.660	25.522	34.000	42.891
	D.L + CHANGE IN V.R DUE TO BRAKING EFFECT	9.615	12.304	16.411	21.284	27.165	35.454	44.225
REACTION AT PIER	D.L + V.R + LIVE LOAD (L.L)	26.264	30.948	36.071	42.066	48.846	58.253	67.876
	D.L + V.R + L.L + IMPACT	26.264 + (16.649 x 0.5)	30.948 + (18.644 x 0.484)	36.071 + (19.66 x 0.484)	42.066 + (20.762 x 0.394)	48.846 + (21.261 x 0.361)	58.253 + (22.789 x 0.353)	67.876 + (23.651 x 0.312)
REACTION AT PIER	DEAD LOAD (D.L)	12.953	20.176	29.338	39.321	51.044	68.000	85.782
	D.L + CHANGE IN V.R DUE TO BRAKING EFFECT	16.090	22.392	31.080	40.945	52.687	69.464	87.116
REACTION AT PIER	D.L + V.R + LIVE LOAD (L.L)	36.307	43.286	52.624	64.647	78.113	96.477	116.049
	D.L + V.R + L.L + IMPACT	36.307 + (20.217 x 0.5)	43.286 + (20.894 x 0.5)	52.624 + (21.544 x 0.434)	64.647 + (23.702 x 0.394)	78.113 + (25.424 x 0.361)	96.477 + (27.033 x 0.353)	116.049 + (28.933 x 0.312)

S	CLEAR SPAN
ES	EFFECTIVE SPAN
BL	BEARINGS LENGTH
D	OVER ALL DEPTH OF SLAB
DL	DEAD LOAD
LL	LIVE LOAD
VR	VERTICAL REACTION
IMP	IMPACT FACTOR
IMPF	IMPACT MULTIPLYING FACTOR

- NOTES
- THE DECK IS 4.25 M WIDE BETWEEN THE KERB AND IS DESIGNED FOR CLASS 'A' LOADING.
 - THE DESIGN IS ACCORDING TO THE I.R.C. BRIDGE CODES.
 - THIS DRAWING IS APPLICABLE FOR SQUARE CROSSING.
 - ALL DIMENSIONS ARE IN MILLIMETRES.
 - CONCRETE SHALL HAVE A MINIMUM 28 DAYS WORKS CUBE STRENGTH OF 150 KG/CM² ON 150MM CUBES.
 - REINFORCING STEEL USED SHALL BE HIGH YIELD STRENGTH DEFORMED BARS CONFORMING TO I-S-1786-1966 (WITH AMENDMENT NO.1 OF AUGUST 1988, AND AMENDMENT NO.2 OF DECEMBER 1970).
 - MINIMUM COVER TO ANY REINFORCEMENT SHALL BE 25MM UNLESS SHOWN OTHER WISE IN THE DRAWING.
 - JOINTS OR LAPPING OF BARS SHALL BE SUITABLY STAGGERED AND THE LAP LENGTH SHALL BE 30 DIA.
 - PROVISION FOR DRAINAGE HAS BEEN MADE IN THIS DRAWING AS PER DRAWING NO. BD/A-69
 - PRE CAST MORTAR BLOCKS OF THE SAME STRENGTH AS THE SLAB CONCRETE, SHALL BE USED UNDER THE REINFORCEMENT TO ENSURE THE REQUIRED COVER.
 - PROPERLY BRACED STEEL PLATES SHALL BE USED AS SHUTTERING.



REINFORCEMENT DETAILS OF DECK SLABS FOR SINGLE LANE BRIDGES FOR CLEAR SPAN 2.00M TO 8.00M

Professional Engineer

Chief Executive Engineer
LLS/B-DIVISION
E.R.D.

CLEAR SPAN (METRES)	EFFECTIVE SPAN (METRES)	BEARING LENGTH (mm)	OVER ALL LENGTH OF SLAB (mm)	OVER ALL WIDTH OF SLAB (mm)	OVER ALL DEPTH OF SLAB (mm)	TYPE 'a'				TYPE 'b'				TYPE 'c'				TYPE 'd'			
						DIA (mm)	NO. OF BARS	LENGTH OF EACH BAR (mm)	TOTAL LENGTH (m)	DIA (mm)	NO. OF BARS	LENGTH OF EACH BAR (mm)	TOTAL LENGTH (m)	DIA (mm)	NO. OF BARS	LENGTH OF EACH BAR (mm)	TOTAL LENGTH (m)	DIA (mm)	NO. OF BARS	LENGTH OF EACH BAR (mm)	TOTAL LENGTH (m)
2.000	2.224	450	2900	4700	255	12	10	300	3600	12	10	300	3600	12	10	300	3600	12	10	300	3600
3.000	3.292	450	3900	4700	325	16	150	3150	5040	16	150	3150	5040	16	150	3150	5040	16	150	3150	5040
4.000	4.357	450	4900	4700	390	16	150	3150	5040	16	150	3150	5040	16	150	3150	5040	16	150	3150	5040
5.000	5.417	450	5900	4700	450	16	150	3150	5040	16	150	3150	5040	16	150	3150	5040	16	150	3150	5040
6.000	6.450	450	6900	4700	515	16	150	3150	5040	16	150	3150	5040	16	150	3150	5040	16	150	3150	5040
7.000	7.500	500	8000	4920	580	20	200	4000	8000	20	200	4000	8000	20	200	4000	8000	20	200	4000	8000
8.000	8.540	540	9080	4920	650	20	220	4400	8800	20	220	4400	8800	20	220	4400	8800	20	220	4400	8800

KERB & PARAPET FOR DISTRIBUTARY

LONGITUDINAL				TRANSVERSE														
TYPE 'a'	TYPE 'b'	TYPE 'c'	TYPE 'd'	TYPE 'a'	TYPE 'b'	TYPE 'c'	TYPE 'd'											
12	(5+2) x 2	2800	39 20	10	300	10x2	147.5	1771.5	1914	38 28	10	300	10x2	492.5	496.3	125	1110.5	22.21
12	(5+2) x 2	3800	53 20	10	300	14x2	212.5	1771.5	1984	55 56	10	300	14x2	562.5	566.8	125	1250.5	35.01
12	(5+2) x 2	4800	67 20	10	300	16x2	277.5	1771.5	2049	65 57	10	300	16x2	627.5	632.8	125	1380.5	44.18
12	5x7 x 2	5800	81 7	10	300	20x2	35	1771.5	2109	84 36	10	300	20x2	687.5	693	125	1500.5	60.02
12	6x8 x 2	6800	95	10	300	24x2	4	1771.5	2174	104 35	10	300	24x2	752.5	758	125	1620.5	78.26

QUANTITIES			
CLEAR SPAN	CONCRETE cum EXCLUDING WEARING COAT FALLING	STEEL kg. INCLUDING STEEL FOR LAPS & WASTES	
2.0	4.0186	253.894	
3.0	6.6874	398.954	
4.0	9.8995	558.604	
5.0	13.5835	761.665	
6.0	17.9938	1040.291	
7.0	24.8486	1229.062	
8.0	31.830	1619.067	

M. P. Verma
 20/11/14
 Assistant Executive Engineer
 Irrigation Section
 Jalgaon
 Gujarat

Dr. R. K. Shah
 Deputy Executive Engineer
 Irrigation Section
 Jalgaon
 Gujarat

PREPARED BY: M. P. Verma
 CHECKED BY: Dr. R. K. Shah
 DATE: 20/11/14
 PROJECT: ...
 DRAWING NO: ...