| REVISION | DATE | REVISED DUE TO CHANGE IN TOP OF ROAD OVER RAILWAY PORTION |
|---|---|---|
| R3 | 21-12-13 | |
| R2 | 18-03-13 | REVISED DUE TO SPAN CHANGE IN RAILWAY PORTION |
| R1 | 12-07-12 | CHANGED WIDTH OF BRIDGE FROM THREE LANE TO FOUR LANE |
| | | PARTICULAR |

| SCALE | PROJECT NO. | DRG. NO. | REVISION |
|---|---|---|---|
| AS SHOWN | 2012-13/04 | SMC/UTN/GAD | R3 |

TITLE :

# GENERAL ARRANGEMENT DRAWING

| DRAWN BY | DESIGNED BY |
|---|---|
| KANAK | J.B.G. |
| DATE | CHECKED BY |
| 02-04-12 | H.M. |

CONSULTANT :

**CASAD Consultants.**
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CLIENT :

**SURAT MUNICIPAL CORPORATION,**
SURAT

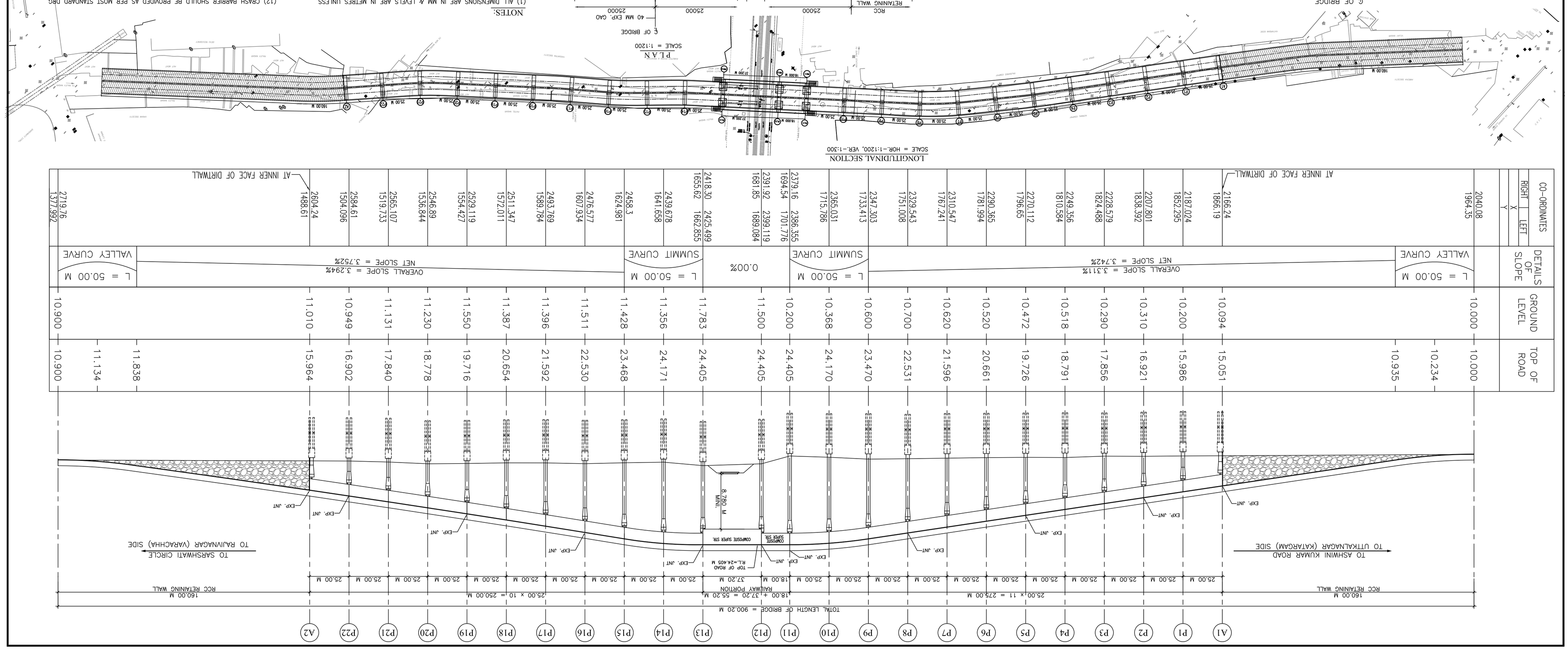
PROJECT :

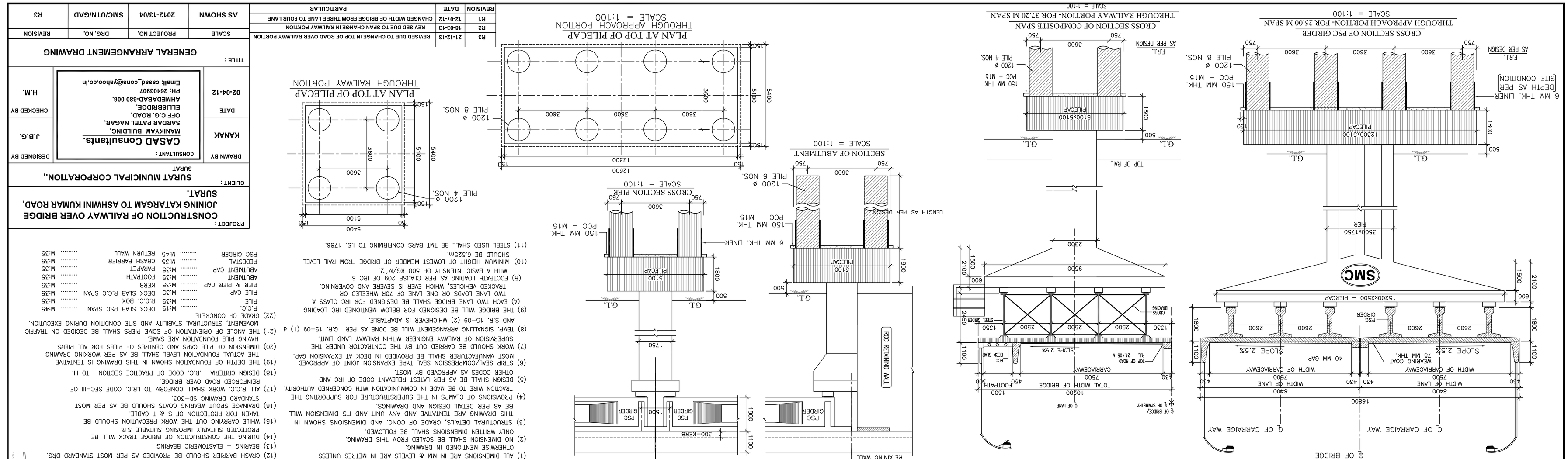
**CONSTRUCTION OF RAILWAY OVER BRIDGE JOINING KATARGAM TO ASHWINI KUMAR ROAD, SURAT.**

## NOTES.

(1) ALL DIMENSIONS ARE IN MM & LEVELS ARE IN METRES UNLESS OTHERWISE MENTIONED IN DRAWING.
(2) NO DIMENSION SHALL BE SCALED FROM THIS DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
(3) STRUCTURAL DETAILS, GRADE OF CONC. AND DIMENSIONS SHOWN IN THIS DRAWING ARE TENTATIVE AND ANY UNIT AND DIMENSION WILL BE AS PER DETAIL DESIGN AND DRAWINGS.
(4) PROVISIONS OF CLAMPS IN THE SUPERSTRUCTURE FOR SUPPORTING THE TRACTION WIRE TO BE MADE IN COMMUNICATION WITH CONCERNED AUTHORITY.
(5) DESIGN SHALL BE AS PER LATEST RELEVANT CODE OF IRC AND OTHER CODES AS APPROVED BY MOST.
(6) STRIP SEAL/COMPRESSION SEAL TYPE EXPANSION JOINT OF APPROVED MOST MANUFACTURER SHALL BE PROVIDED IN DECK AT EXPANSION GAP.
(7) WORK SHOULD BE CARRIED OUT BY THE CONTRACTOR UNDER THE SUPERVISION OF RAILWAY ENGINEER WITHIN RAILWAY LAND LIMIT.
(8) TEMP. SIGNALLING ARRANGEMENT WILL BE DONE AS PER G.R. 15-09 (1) d AND S.R. 15-09 (2) WHICHEVER IS ADAPTABLE.
(9) THE BRIDGE WILL BE DESIGNED FOR BELOW MENTIONED IRC LOADING
(A) EACH TWO LANE BRIDGE SHALL BE DESIGNED FOR IRC CLASS A TWO LANE LOADS OR ONE LANE OF 70R WHEELED OR TRACKED VEHICLES, WHICH EVER IS SEVERE AND GOVERNING.
(B) FOOTPATH LOADING AS PER CLAUSE 209 OF IRC 6 WITH A BASIC INTENSITY OF 500 KG/M^2.
(10) MINIMUM HEIGHT OF LOWEST MEMBER OF BRIDGE FROM RAIL LEVEL SHOULD BE 6.525m.
(11) STEEL USED SHALL BE TMT BARS CONFIRMING TO I.S. 1786.
(12) CRASH BARRIER SHOULD BE PROVIDED AS PER MOST STANDARD DRG.
(13) BEARING - ELASTOMERIC BEARING
(14) DURING THE CONSTRUCTION OF BRIDGE TRACK WILL BE PROTECTED SUITABLY IMPOSING SUITABLE S.R.
(15) WHILE CARRYING OUT THE WORK PRECAUTION SHOULD BE TAKEN FOR PROTECTION OF S & T CABLE.
(16) DRAINING SPOUT WEARING COATS SHOULD BE AS PER MOST STANDARD DRAWING SD-303
(17) ALL R.C.C. WORK SHALL CONFORM TO I.R.C. CODE SEC-III OF REINFORCED ROAD OVER BRIDGE.
(18) DESIGN CRITERIA I.R.C. CODE OF PRACTICE SECTION I TO III.
(19) THE DEPTH OF FOUNDATION SHOWN IN THIS DRAWING IS TENTATIVE THE ACTUAL FOUNDATION LEVEL SHALL BE AS PER WORKING DRAWING
(20) DIMENSION OF PILE CAPS AND CENTRES OF PILES FOR ALL PIERS HAVING PILE FOUNDATION ARE SAME.
(21) THE ANGLE OF ORIENTATION OF SOME PIERS SHALL BE DECIDED ON TRAFFIC MOVEMENT, STRUCTURAL STABILITY AND SITE CONDITION DURING EXECUTION.
(22) GRADE OF CONCRETE

| | | | |
|---|---|---|---|
| P.C.C. | M:15 | DECK SLAB PSC SPAN | M:45 |
| PILE CAP | M:35 | R.C.C. BOX | M:35 |
| PIER & PIER CAP | M:35 | KERB | M:35 |
| ABUTMENT | M:35 | FOOTPATH | M:35 |
| ABUTMENT | M:35 | PARAPET | M:35 |
| PEDESTAL | M:35 | CRASH BARRIER | M:35 |
| PSC GIRDER | M:45 | RETURN WALL | M:35 |




| CO-ORDINATES | | | DETAILS OF SLOPE | GROUND LEVEL | TOP OF ROAD |
|---|---|---|---|---|---|
| | RIGHT | LEFT | | | |
| | X | X | | | |
| | Y | Y | | | |
| AT INNER FACE OF DIRTWALL | 2166.24 | 2040.08 | L = 50.00 M VALLEY CURVE | 10.094 | 15.051 |
| | 1866.19 | 1964.35 | | 10.000 | 10.000 |
| | 2187.024 | 2329.543 | OVERALL SLOPE = 3.311% NET SLOPE = 3.742% | 10.200 | 15.986 |
| | 1852.295 | 1751.008 | | 10.310 | 16.921 |
| | 2207.801 | 2310.547 | | 10.200 | 17.856 |
| | 1838.392 | 1767.241 | | 10.290 | 18.791 |
| | 2228.579 | 2290.365 | | 10.518 | 19.726 |
| | 1824.468 | 1781.994 | | 10.472 | 20.661 |
| | 2249.356 | 2270.112 | | 10.520 | 21.596 |
| | 1810.584 | 1796.65 | | 10.620 | 22.531 |
| | 2347.303 | 2379.16 2386.355 | SUMMIT CURVE L = 50.00 M | 10.700 | 23.470 |
| | 1733.413 | 1694.54 1701.776 | | 10.600 | 24.405 |
| | 2365.031 | 2391.92 2399.119 | 0.00% | 10.368 | 24.170 |
| | 1715.786 | 1681.85 1689.084 | | 10.200 | 24.405 |
| | 2418.30 2425.499 | 2379.16 2386.355 | SUMMIT CURVE L = 50.00 M | 11.500 | 24.405 |
| | 1655.62 1662.855 | 1694.54 1701.776 | | 11.783 | 24.405 |
| | 2439.678 | 2458.3 | OVERALL SLOPE = 3.294% NET SLOPE = 3.752% | 11.356 | 24.171 |
| | 1641.658 | 1624.981 | | 11.428 | 23.468 |
| | 2476.577 | 2493.769 | | 11.511 | 22.530 |
| | 1607.934 | 1589.784 | | 11.396 | 21.592 |
| | 2511.347 | 2529.119 | | 11.387 | 20.654 |
| | 1572.011 | 1554.427 | | 11.550 | 19.716 |
| | 2546.89 | 2565.107 | | 11.230 | 18.778 |
| | 1536.844 | 1519.733 | | 11.131 | 17.840 |
| | 2584.61 | 2604.24 | | 10.949 | 16.902 |
| | 1504.096 | 1488.61 | | 11.010 | 15.964 |
| AT INNER FACE OF DIRTWALL | 2719.76 | | L = 50.00 M VALLEY CURVE | 10.900 | 11.838 |
| | 1377.992 | | | 11.134 | 10.935 |
| | | | | 10.900 | 10.234 |
| | | | | | 10.000 |