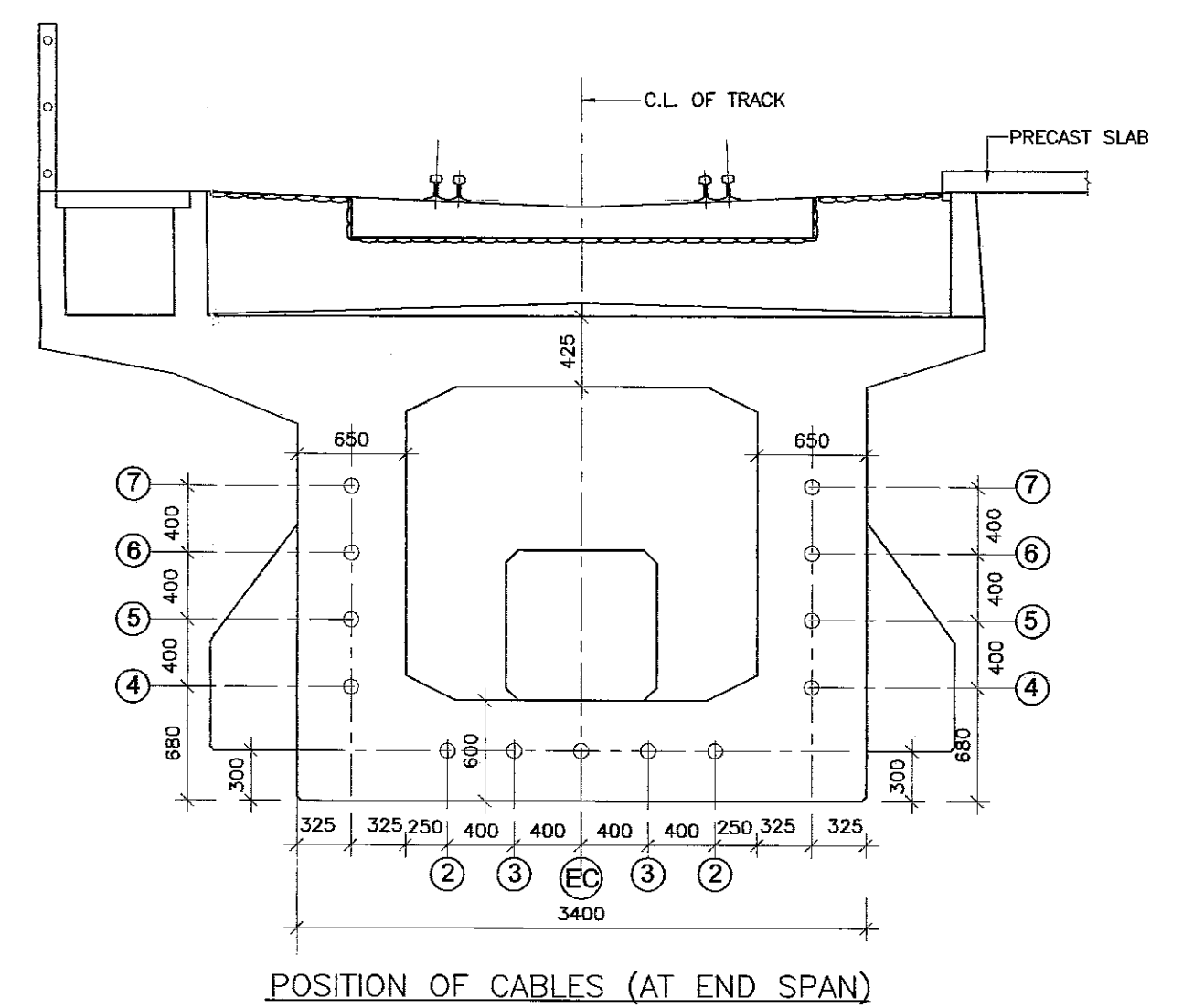


**NOTES**

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE MENTIONED.
- DESIGN CRITERIA ---i) I.R.S. BRIDGE RULES.  
ii) I.R.S. CONCRETE BRIDGE CODE  
iii) IS : 14268 - 1995.
- MATERIAL USED --- i) GIRDER, DIAPHRAGM INCLUDING CANTILEVER SLAB, WEARING COAT --- M-45.  
ii) BALLEST RETAINER --- M25.  
iii) REINFORCEMENT OTHER THAN PRESTRESSING STEEL-Fe500 CONFORMING TO IS. 1786-1985.  
iv) PRESTRESSING CABLES-19K13 & 19K15.
- 14 CABLES ARE PROVIDED TO MEET THE DESIGN REQUIREMENTS. CABLES MADE WITH UNCOATED STRESS RELIEVED LOW RELAXATION SEVEN-PLY CLASS-II STRANDS CONFORMING TO I.S: 14268:1995 SHALL BE USED AS PRESTRESSING STEEL.
- EMERGENCY CABLE 'EC' IS TO BE STRESSED IN CASE OF EMERGENCY ONLY
- TWO EXTERNAL CABLES HAS BEEN PROVIDED FOR FUTURE PRESTRESSING.
- ALL CABLES SHALL BE STRESSED SIMULTANEOUSLY FROM BOTH ENDS.
- FIRST STAGE OF PRESTRESSING OF CABLES SHALL BE DONE AFTER 7 DAYS AND SECOND STAGE OF PRESTRESSING AFTER 28 DAYS.
- ALL CORNERS SHALL HAVE A CHAMFER OF 25 mm EXCEPT OTHERWISE SHOWN.
- MAXIMUM SIZE OF COARSE AGGREGATE TO BE USED SHALL BE 20 mm.
- DESIGN TO BE MADE FOR A BALLAST CUSHION OF 400mm UNDER THE RAIL SEAT, HOWEVER IT IS TO BE CHECKED FOR A MINIMUM BALLAST CUSHION OF 300 mm.
- THE DESIGN IS SUITABLE FOR STRAIGHT TRACK ONLY AND MISALIGNMENT OF TRACK UP TO 100mm IS CONSIDERED FOR DESIGN.
- THE DESIGN TO BE FOR DERAILMENT LOADS WITH GUARD RAILS AS PER CLAUSE NO. 2.14 OF I.R.S. BRIDGE RULES. GUARD RAILS SHALL BE PROVIDED FOR ENTIRE LENGTH OF BRIDGE.
- STEEL SHUTTERS MADE OF WIREMESH SHOULD BE PROVIDED FOR THE OPENING OF DIAPHRAGMS.
- WEARING COAT SHALL BE CASTED AT A SLOPE OF 1 IN 60 WITH 80mm THICK AT CENTRE.
- TWO LAYERS OF BITUMEN SHALL BE APPLIED ON TOP OF WEARING COAT.
- THE CONCRETING OF THE GIRDER SHALL BE CONTINUOUS AND CASTING SHALL BE IN ONE CAST.



**IMPORTANT NOTE:-**  
ALL DIMENSIONS, LEVELS AND OTHER DETAILS GIVEN IN THE DRAWING ARE INDICATIVE ONLY.

**DFC LOADING (32.5T AXLE LOADING)**

**CLIENT: DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.**

**NAME OF WORK: PROPOSED NEW SONE BRIDGE OVER RIVER SONE BETWEEN SONNAGAR AND DEHRI- ON- SONE STATION (93x30.726m C/C OF BEARING PSC BOX) GENERAL ARRANGEMENT TYPICAL POST TENSIONED PSC BOX GIRDER EFFECTIVE SPAN 30.726m**

|  |                                |            |
|--|--------------------------------|------------|
| SCALE                                    | DRG. NO.                       | REV. NO.   |
| 50 0 50 100 150cm<br>100 0 100 200 300cm | RITES/REGD/DFCC-SONE BRIDGE/GA | 4 OF 4     |
|  | DATE                           | APRIL-2013 |
|  | REV.                           | RO         |

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|------------------------------------|------------------------------------|---------------|-----------------|
|                                    |                                    |               |                 |
| (D.S. NEGI)<br>J.G.M./DESIGN/RITES | (ANIL KHANNA)<br>G.M./DESIGN/RITES | A.M./MGS/DFCC | C.P.M./M3S/DFCC |