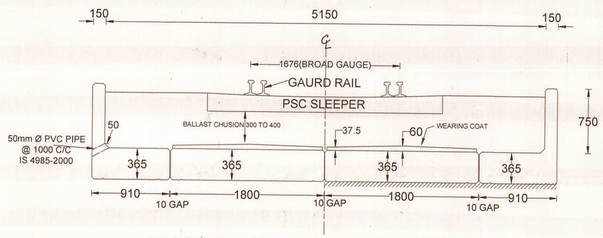
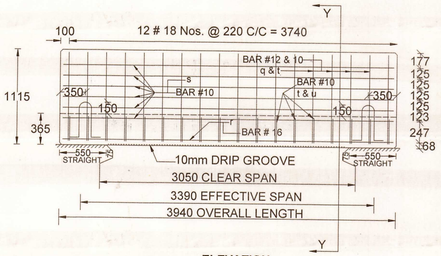
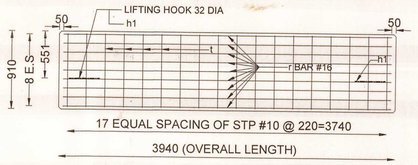


HALF SECTION AT CENTRE HALF SECTION AT SUPPORT

GENERAL ARRANGEMENT FOR SINGLE TRACK



ELEVATION

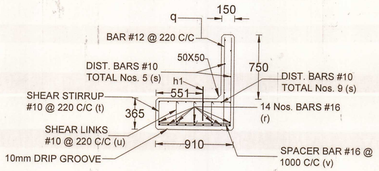


BOTTOM PLAN

DETAILS OF BALLAST RETAINER

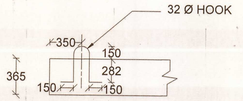
BAR BENDING SCHEDULE FOR BALLAST RETAINER

BAR MARK	DIA OF BAR	LENGHT mm	TOTAL NOS. REQUIRED	BENDING SHAPE DIMENSION SHOWN ARE OVER OUTER EDGES	WEIGHT PER METER IN Kg.	TOTAL WEIGHT IN Kg.
q	12	2230	18	840, 280, 1030, 80	0.888	35.64
r	16	3840	14	3840	1.58	84.94
s	10	3840	14	3840	0.617	33.17
t	10	3050	18	280, 1030, 840	0.617	33.87
u	10	430	54	280	0.617	14.33
v	16	840	5	840	1.58	6.64
h1	32	1269	2	184, 92, 340, 150, 450	6.31	16.01



SECTION ON Y-Y

* CLEAR COVER
35 SIDES AND TOP
50 BOTTOM



POSTION OF LIFTING HOOK (h1)

NOTES:

1. **All Dimensions** are IN **Millimeters**.
2. Drawing **Not to be Scaled**, only written Dimensions to be followed.
3. All corners shall have **chamfer** of **25mm**.
4. Concrete for Ballast Retainer shall be of **Grade M-35**.
5. Steel shall be of High Strength Deformed **(HSD)/TMT Bars**, **Fe-415** OR Higher Grade Confirming to **IS 1786:2008** shall be used.
6. Units shall be provided with a **Uniform Bedding** by placing it over a layer of cement and cast iron borings in 1:1 proportions the paste should be of uniform consistency.
7. A layer of suitable **Water Proofing** treatment may be provided over ballast retainer.
8. All **Bends** and **Hooks** should be of standard confirming to **IS:2502-1963**.
9. For 3.05m Span Post Tensioned PSC Slab refer: **RDSO/B-10277**.
10. Weight of Ballast Retainer unit is 4.48 t.

REFERENCES:

1. **I.R.S Concrete Bridge Code 2014** (Revised) including latest ACS read in conjunction with relevant I.S Specifications mentioned therein.
2. **I.R.S Bridge Rules - 2014** including latest ACS.
3. Indian Railways Unified Standards Specification for materials and work 2019.
4. Engineering Standing Order No: 87 Dated 21.05.2020.

FOOTPATH:

1. RCC Footpath shall be provided adjacent to the Ballast Retainer.
2. For 'h' Type Footpath (to be cast separately) refer to Drg.No: GM(W)SC/BR/TR/RCC/STD/148/2020.

SOUTH CENTRAL RAILWAY

DRG. NO. GM(W)SC/BR/TR/RCC/STD/ 156 /2020

(DRAWING NOT TO SCALE)

DETAILS OF ARRANGEMENT FOR BALLAST RETAINER FOR POST-TENSIONED PSC SLAB WITH 2-UNITS SPAN - 3.05m (RDSO/B-10277) FOR 25t - 2008 LOADING STD.

CBE/SC	23/9/2020 (K.RAMAKRISHNA)
DY.CE/BR.D/SC	23/9/2020 (P. RAJAGOPAL RAO)
AXEN/BR.D/SC	23.09.2020 (P. SRINIVAS)
SSE/W/BR.D/HQ/SC	(G. M. SARMA)
SSE/DESIGNS/BR.D/HQ/SC	(MITHUN KUMAR SINGH)
SSE/DRG/BR.D/HQ/SC	(V.M. DANIEL TENET)