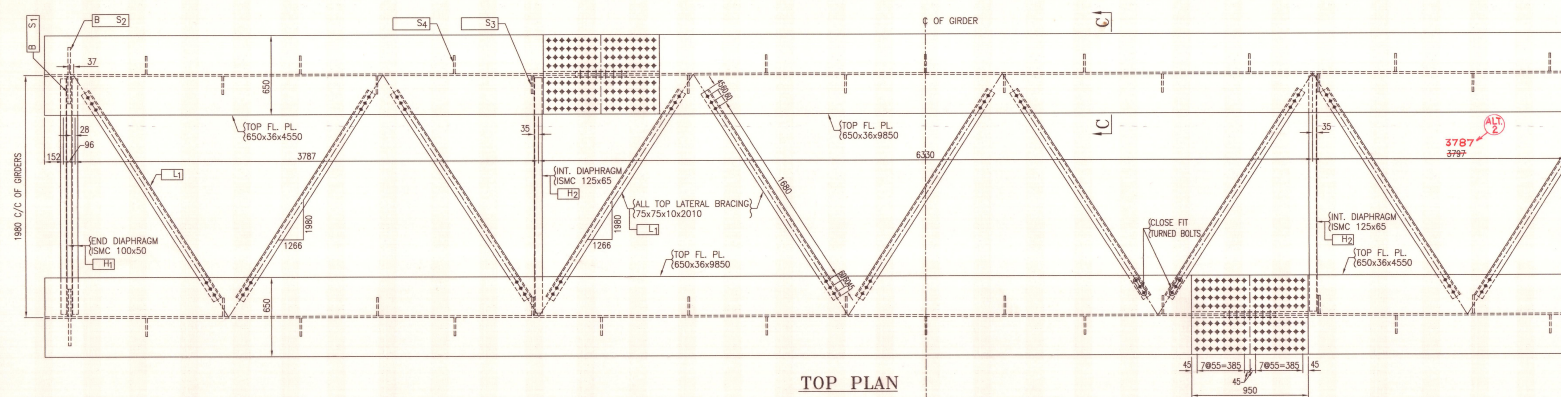
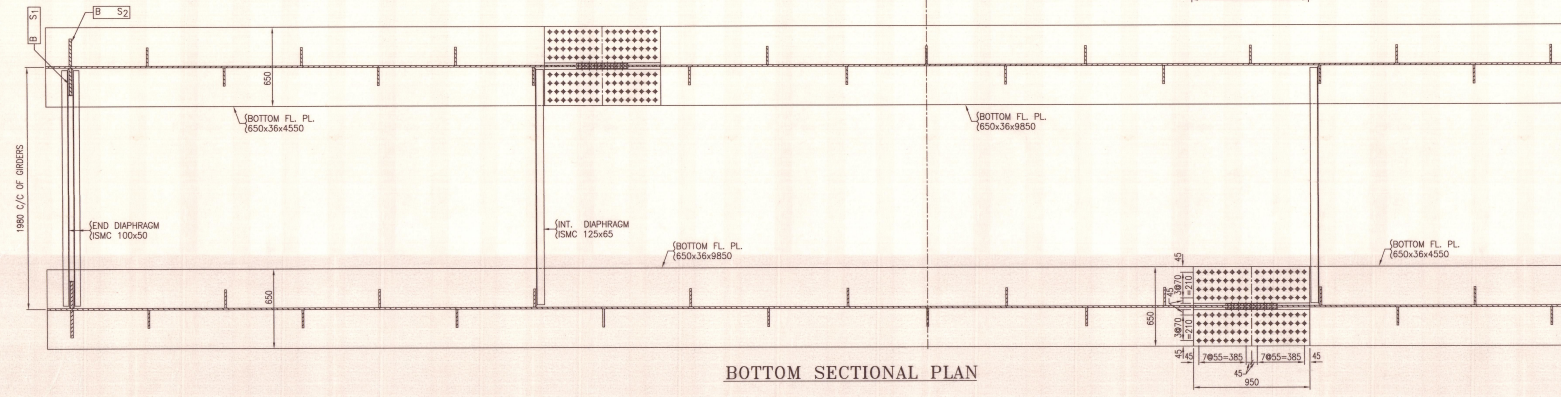


SECTION ON CC



TOP PLAN



BOTTOM SECTIONAL PLAN

RELATED DRAWINGS

DESCRIPTION	REFERENCE
DETAILS OF SPACE, DIAPHRAGMS, BEAMS & PART LIST	RDSO/B-11038/1
ASSEMBLY DRAWINGS & DESPATCH LIST	RDSO/B-11038/2

WEIGHT OF SPAN IN TONNES
TO IS: 2062

SPAN	BED PLATE	TOTAL
15.314	0.691	16.005

THE TOTAL WEIGHT OF SPAN INCLUDES
WEIGHT OF RIVET HEADS & WELDS @ 2%
BOLTS

MEMBER	ACTUAL STRESS kg/mm ²	PERM. STRESS kg/mm ²
TOP FLANGE	12.75	15.0
BOTTOM FLANGE	12.75	15.0
WEB PLATE	7.0	8.7

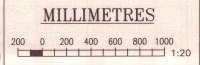
- THIS DESIGN IS SUITABLE FOR STRAIGHT TRACK ONLY.
- ALL STEEL FOR MAIN GIRDERS INCLUDING STIFFENERS SHALL BE AS PER IS: 2062 AS GIVEN IN PARA 8.2 OF IRS B1-2001. FOR OTHER MEMBERS AND BRACING, CROSS FRAMES AND DIAPHRAGMS, STEEL SHALL BE AS PER IS: 2062, AS GIVEN IN PARA 8.1 OF IRS B1-2001.
- ALL BOLTS ARE 20 MM NOMINAL DIAMETER (ACTUAL DIA. 21.2 MM). HOLES SHALL BE 21.5 MM.
- CALCULATED DEFLECTION UNDER DESIGN LOADS IS 35.933 mm WHICH IS MORE THAN THE MAXIMUM PERMITTED DEFLECTION 23.33 mm AS PER SBC CLAUSE 4.17. HOWEVER THE SAME HAS BEEN CONSIDERED OK FOR THE SLOW SPEEDS OVER RH GIDER, IN ORDER TO REDUCE THE WEIGHT OF GIRDER.
- SIMILARLY THE RAIL JOINT AT TEMPORARY PIERS SHALL BE AVOIDED AND SHALL BE MINIMUM 3m AWAY FROM THE CENTER LINE OF PIER.
- THE APPROACH TRACK WHERE THE RH GIDER IS USED SHALL BE COMPLIANT TO PROVISIONS OF PARA 277 OF IRPM. IT SHALL SPECIALLY BE ENSURE THAT THERE IS NO RAIL JOINT WITHIN 3m OF CENTER LINE OF ABUTMENT.
- GUARD RAILS SHALL BE PROVIDED ON THE BRIDGE AS PER PARA 275 OF IRPM AND EXTENDED STRAIGHT FOR THE LENGTH OF 15m BEYOND THE ABUTMENTS (TEMPORARY OR PERMANENT) OF THE BRIDGE.
- THE GIRDER SHALL BE INSPECTED BY A BRIDGE INSPECTOR AS PER IRM PARA 1107 ONCE IN FIVE YEARS. IF THE RH GIDER IS IN USE IN TRACK FOR MORE THAN SIX MONTHS CONTINUOUSLY, THEN IT SHALL BE INSPECTED IN DETAIL BY THE BRIDGE INSPECTOR AS PER ABOVE PARA.
- BEFORE USE OF THE GIRDER FOR ANY WORK, THE FOLLOWING SHALL BE CHECKED/ENSURED:
 - THAT THE ASSEMBLY OF GIRDER LEAVES HAS BEEN DONE PROPERLY, FOR THIS PURPOSE, CROSS-LEVELS OF THE GIRDER, AND PROPER FIXING OF TOP LATERAL BRACING, CROSS FRAMES AND SPICES SHALL BE ENSURED.
 - THAT BOLTS HAVE BEEN PROVIDED AND TIGHTENED PROPERLY.
 - THAT THE GIRDERS AND ITS COMPONENTS ARE NOT CORRODED.
- THE GIRDERS, WHEN NOT IN USE IN TRACK, SHALL BE KEPT PROPERLY ON WOODEN PACKING OVER GROUND/CRIB STAGING SUFFICIENTLY AWAY FROM GROUND SO THAT THE RAIN SPICES, SOIL, VEGETATION etc. DO NOT CORRODE THE GIRDER COMPONENTS & SHALL BE PROVIDED WITH LONG LIFE PAINTS INCLUDING METALLISING DURING INITIAL FABRICATION AND SUBSEQUENTLY WHEN SIGNS OF CORROSION APPEAR.
- BEING EMERGENCY RELIEFING GIRDER BRACING AND CROSS FRAMES ARE PROVIDED WITH CLOSE FITTED TURNED BOLTS 20mm DIA. TO IS: 3640 (ACTUAL DIA. 21.5mm). PROPERTY CLASS 4.6. THE SPICES HAVE BEEN GIVEN WITH SHOP RIVETS.
- THE MAIN FILLET WELDS CONNECTING FLANGES WITH WEB SHALL BE DONE USING AUTOMATIC SUBMERGED ARC WELDING WITH WIRE-FLUX COMBINATION TO IRS M-39 SPECIFICATIONS. THE WELDS IN STIFFENERS SHALL BE MADE WITH CO₂ WELDING. TACK WELD SHALL BE MADE PREVIOUSLY BY CO₂ WELDING, OR BY GOOD QUALITY MANUAL METAL ARC WELDING.
- ALL STEEL SHALL BE AS PER IS: 2062, GRADE E250 (QUALITY B) FULLY KILLED AND NORMALISED.
- THE DESIGN IS AS PER BRIDGE RULES, STEEL BRIDGE CODE AND WELDED BRIDGE CODE.
- THIS DESIGN IS FOR TEMPORARY RELIEFING GIRDER FIT FOR 25t LOADING-2008 WITH MAXIMUM SPEED 50 Km/h.
- ALL DIMENSIONS ARE IN MILLIMETRES.

DESCRIPTION	SYMBOL
FILLET WELD (ONE SIDE)	↗
FILLET WELD (BOTH SIDES)	↔
SHOP RIVETS	⊕
TURNED BOLTS	⊙
ANCHOR BOLTS	⊛

NOTE

- HEXAGON HEAD BLACK BOLT : IS: 1364
- HEXAGON HEAD FIT BOLT : IS: 3640
- STEEL Q-B FULLY KILLED & NORMALISED : IS: 2062
- SCHEME OF SYMBOLS FOR WELDING : IS: 813
- METAL ARC WELDING : IS: 5995
- SUB-MERGED ARC WELDING : IS: 4353
- ELECTRODES : IRS M-28
- WIRE FLUX COMBINATION FOR SAW : IRS M-39
- FABRICATION SPECIFICATION No. B1-2001/REVISED-2001

SPECIFICATION



SCALE

- NOTE ADDED
- DIMENSION ALTERED, NOTE ADDED
- NOTE NO. 14 ADDED

AL.T. DESCRIPTION

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R. D. S. O.

"25t LOADING-2008"
RESTRICTED HEIGHT PLATE GIRDER
WELDED TYPE (0.6x10⁶ CYCLES)
FOR TEMPORARY WORKS
14.4m OVERALL LENGTH
GENERAL ARRANGEMENT

PROVISIONAL

RDSO/B-11038

PART LIST

No. REQD.	DESCRIPTION	PART OR TEMP.No.	SIZE		
			L	B	D
2	WEB PLATES	W ₁	9850	620	14
2	WEB PLATES	W ₂	4550	620	14
2	TOP FLANGE PLATES	F ₁	9850	650	36
2	TOP FLANGE PLATES	F ₂	4550	650	36
2	BOTTOM FLANGE PLATES	F ₃	9850	650	36
2	BOTTOM FLANGE PLATES	F ₄	4550	650	36
4	OUTER FLANGE SPLICE PLATES (TOP & BOTTOM)	FS ₁	950	650	20
8	INNER FLANGE SPLICE PLATES (TOP & BOTTOM)	FS ₂	950	300	20
4	WEB SPLICE PLATE	WC	570	420	14
4	END BEARING STIFFENER INSIDE	S ₁	620	225	20
4	END BEARING STIFFENER OUTSIDE	S ₂	620	225	20
36	INT. STIFFENERS (WITHOUT DIAPHRAGM)	S ₃	580	150	14
4	INT. STIFFENERS WITH DIAPHRAGM	S ₄	580	150	14
11	TOP LATERAL BRACINGS 75x75x10	L	2010	75	75
4	END DIAPHRAGM CHANNELS HORIZONTAL (TOP)	H ₁	1926	50	100
4	END DIAPHRAGM CHANNELS HORIZONTAL (BOTTOM)	H ₂	1926	50	100
16	END DIAPHRAGM GUSSETS (TOP & BOTTOM)	G ₁	225	430	10
4	INT. DIAPHRAGM CHANNELS HORIZONTAL (TOP & BOTTOM)	H ₃	1926	65	125
8	INT. DIAPHRAGM GUSSETS (TOP & BOTTOM)	G ₂	580	280	10
4	BEARING PLATES	R ₁	650	400	40
4	BED PLATES	R ₂	800	550	50
4	LOCATION STRIPS	R ₃	300	50	25
8	LOCATION STRIPS	R ₄	300	50	25

RELATED DRAWINGS

DESCRIPTION	REFERENCE
GENERAL ARRANGEMENT	RDSO/B-11038
ASSEMBLY DRAWING & DESPATCH LIST	RDSO/B-11038/2

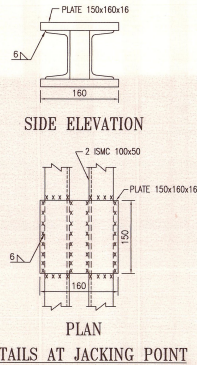
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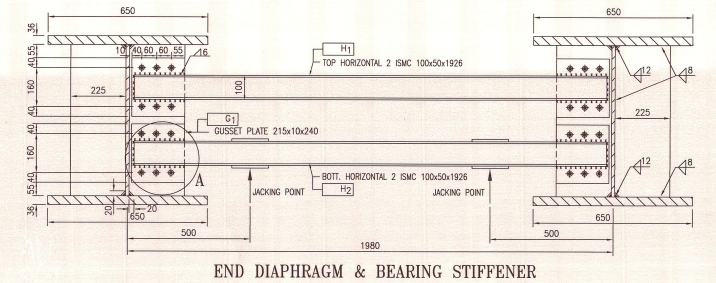
"25t LOADING-2008"
RESTRICTED HEIGHT (RH) PLATE GIRDER
WELDED TYPE (0.6x10⁶ CYCLES)
FOR TEMPORARY WORKS
14.4m OVERALL LENGTH

DETAILS OF SPLICE JOINT, DIAPHRAGMS, BEARINGS & PART LIST

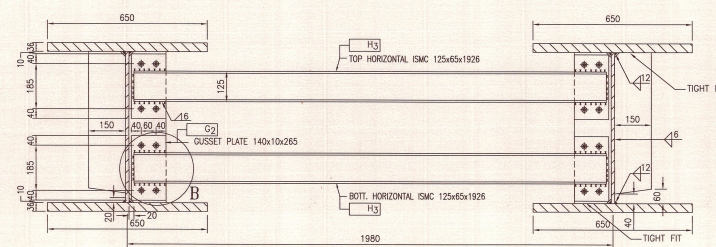
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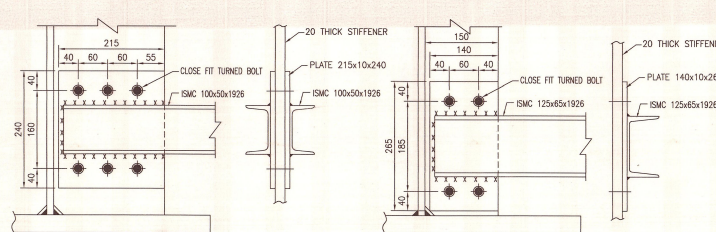
DETAILS AT JACKING POINT



END DIAPHRAGM & BEARING STIFFENER

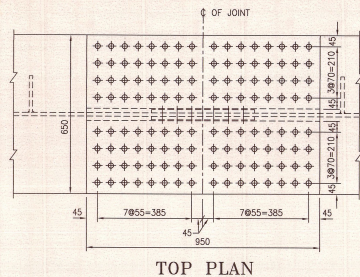


INT. DIAPHRAGM & INT. STIFFENER

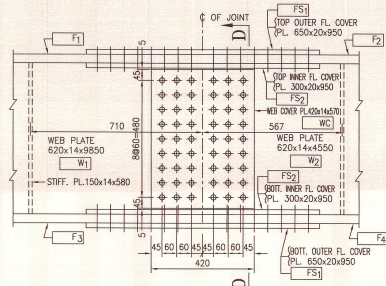


DETAILS AT A

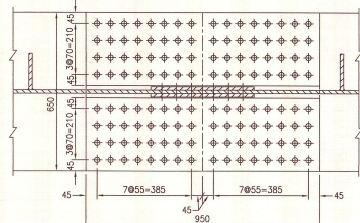
DETAILS AT B



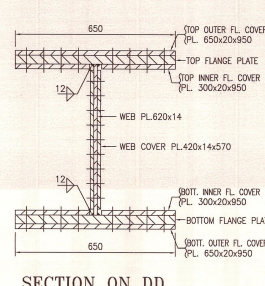
TOP PLAN



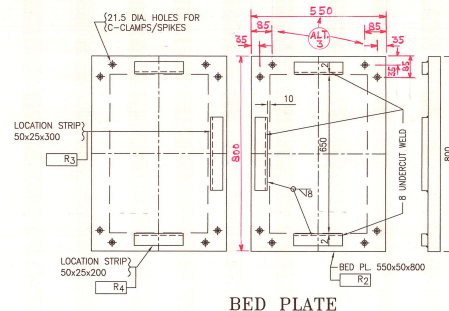
DETAILS OF JOINT



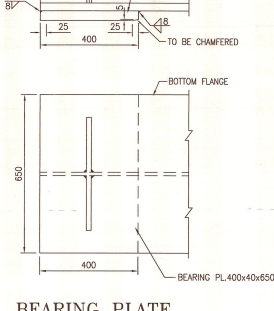
BOTTOM SECTIONAL PLAN



SECTION ON DD



BED PLATE



BEARING PLATE

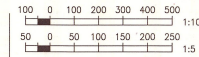
DESCRIPTION	SYMBOL
FILLET WELD (ONE SIDE)	~
FILLET WELD (BOTH SIDES)	~
SHOP RIVETS	+
TURNED BOLTS	+
ANCHOR BOLTS	+

- BEFORE LOWERING THE GIRDER IN POSITION, THE BED PLATE SHALL BE CLEANED PROPERLY AND GRAPHITE GREASE GRADE 3 AS PER IS: 508 SHALL BE APPLIED.
- THE BED PLATE MUST BE KEPT IN POSITION BY PROVIDING SUFFICIENT NUMBER OF C-CLAMPS OR WOODEN SPIKES CONNECTING THE BED PLATE TO THE WOODEN BLOCKS ON PIER/ABUTMENT.
- THE BED PLATE (50mm THICK) MUST BE PROVIDED BELOW THE BEARING TO DISTRIBUTE THE LOAD TO MINIMUM THREE WOODEN BLOCKS. THE WOODEN BLOCKS DIRECTLY UNDER BED PLATE SHALL BE OF GOOD QUALITY HARD-WOOD WHICH SHALL NOT GET CRACKED/CRUSHED UNDER LOADS.
- ALL HOLES ARE 21.5 DIA. FOR 20 DIA. BOLTS, OR 20 DIA. SHOP RIVETS.
- ALL DIMENSIONS ARE IN MILLIMETRES.

NOTE

SPECIFICATION

MILLIMETRES



SCALE

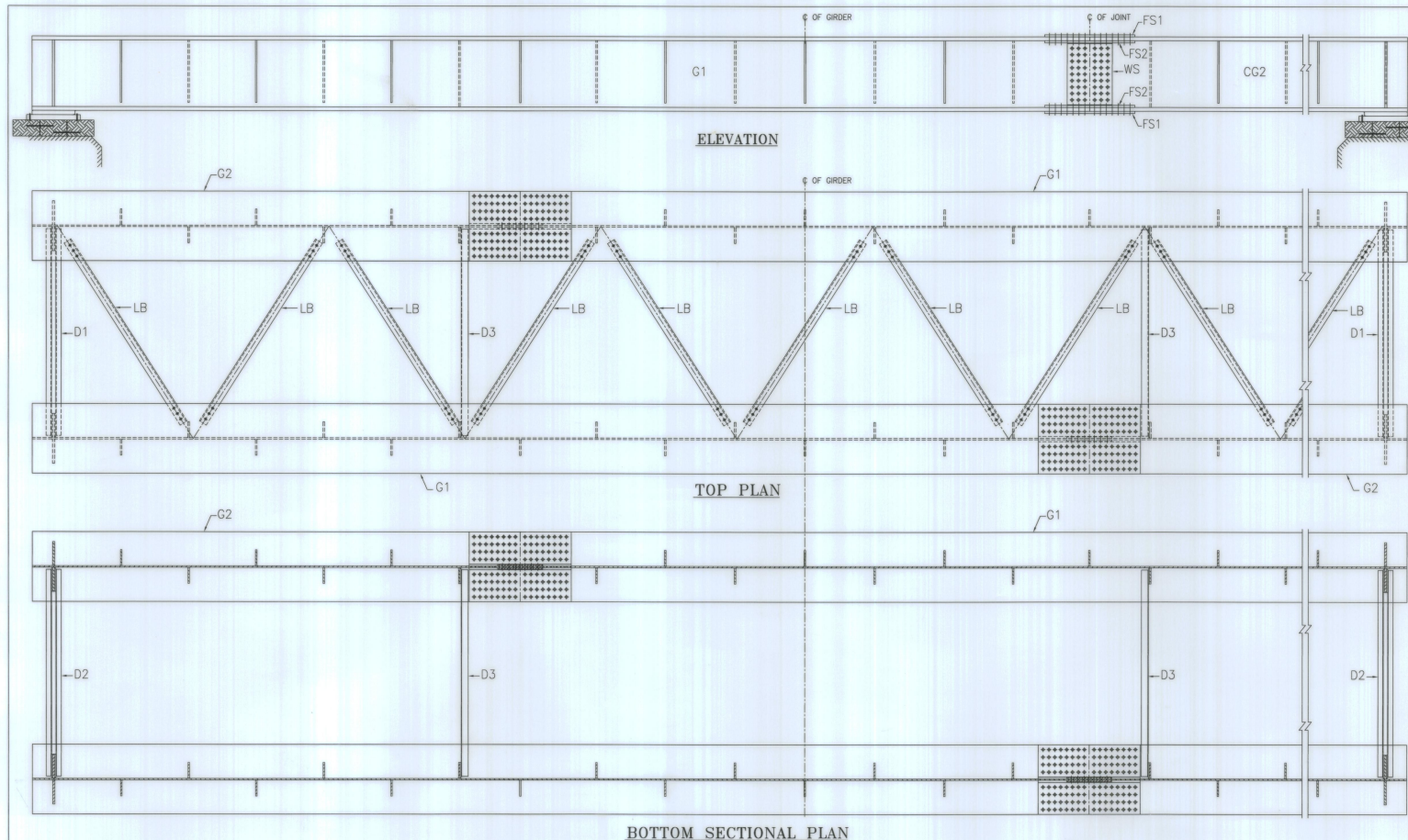
3. DIMENSIONS ADDED

2. DIMENSIONS ALTERED

1. TURNED BOLT DIA. ALTERED

ALT. DESCRIPTION

DATE



DESPATCH LIST

ERECTION MARK	DESCRIPTION	SIZE			NO. REQD.
		L	B	D	
G1	GIRDER COMPLETE	9850	650	732	2
G2	GIRDER COMPLETE	4550	650	732	2
D1	END DIAPHRAGM TOP HORIZONTAL	1926	-	-	4
D2	END DIAPHRAGM BOT. HORIZONTAL	1926	-	-	4
D3	INT. DIAPHRAGM TOP & BOT. HORIZONTAL	1926	-	-	4
FS1	FLANGE SPICE COVER PL. OUTSIDE	950	650	20	4
FS2	FLANGE SPICE COVER PL. INSIDE	950	300	20	8
WS	WEB SPICE COVER PL.	570	420	14	4
LB	TOP LATERAL BRACING L75x75x10	2010	-	-	11
BP	BED PLATES	600	550	50	4

RELATED DRAWINGS

DESCRIPTION	REFERENCE
GENERAL ARRANGEMENT	RDSO/B-11038
DETAILS OF SPICE, DIAPHRAGMS, BEARINGS & PART LIST	RDSO/B-11038/1

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RESTRICTED HEIGHT PLATE GIRDER
WELDED TYPE (0.6x10⁶ CYCLES)
FOR TEMPORARY WORKS
14.4m OVERALL LENGTH
ASSEMBLY DRAWING & DESPATCH LIST

PROVISIONAL

RDSO/B-11038/2

NOTE

SPECIFICATION

NOT TO SCALE

SCALE

ALT.

DESCRIPTION

DATE

CALCULATION REGISTER No. DD/2011/
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