



NOTES:

- 1 ALL WELDING AND WELDING SYMBOLS SHALL CONFORM TO SANS 10044 PART 1 TO 5.
- 2 ALL STRUCTURAL USE OF STEEL TO CONFORM TO SANS 10162.
- 3 ALL STEEL TO BE GRADE S355JR/350WA (EXCEPT ANGLES $\leq 45\text{mm}$ TO BE MILD STEEL).
- 4 ALL WELDS TO BE SEALED WELDED.
- 5 STEELWORK TO BE HOT DIP GALVANIZED TO SANS 121.
- 6 STEELWORK TO BE CHECKED AND STRAIGHTENED AFTER GALVANIZING.
- 7 BOLTS, NUTS & WASHERS TO BE IN ACCORDANCE WITH SANS 1700.
- 8 ALL MARKINGS TO BE STAMPED ONTO STEELWORK AND SHALL BE CLEARLY LEGIBLE AFTER GALVANIZING.
- 9 NO STEEL EXTENSIONS WILL BE ALLOWED ON ANY STEELWORK.
- 10 NO SECTIONS TO BE BUTT WELDED.
- 11 ALL STEELWORK TO BE FABRICATED, ERECTED AND LEVELLED TO A TOLERANCE OF $\pm 15\text{mm}$.
- 12 ALL HOLES TO BE 18mm DIA UNLESS OTHERWISE STATED.

BEAM RATING SCHEDULE				
ITEM	DESCRIPTION	MOUNTING HEIGHT (m)	MAXIMUM LOADING PER PHASE (kN)	DIMENSIONS (mm)
132/40/1	STRINGER STRAIN	10.668	4.5	

BOLT SCHEDULE									
MARK	BOLT SIZE mm	MILD STEEL GRADE	PITCH mm	LENGTH mm	NO OFF BOLTS	NO OFF NUTS	NO OFF WASHERS	TORQUE Nm	TOTAL MASS KG
1	M16	4.8	2	40	72	72	144	120	12.24
2	M16	4.8	2	40	8	8	8	120	1.27
3	M16	4.8	2	45	128	128	256	120	22.78
4	M16	4.8	2	50	8	8	16	120	1.49
5	M20	4.8	2	50	16	16	16	225	4.90
6	M20	4.8	2	55	4	4	8	225	1.34
MASS OF BOLTS, WASHERS AND NUTS									39.53

STEEL SCHEDULE AND MASS					
ITEM	QTY	DESCRIPTION	CUTTING LENGTH (mm)	TOTAL LENGTH (m)	TOTAL MASS (kg)
B41 1	4	MILD STEEL ANGLE 70 x 70 x 6	9340	37.36	238.35
B41 2	4	MILD STEEL ANGLE 70 x 70 x 6	2104	8.42	53.46
B41 5	4	MILD STEEL ANGLE 70 x 70 x 6	596.5	2.39	15.22
B41 6	4	MILD STEEL ANGLE 50 x 50 x 6	544	2.18	9.73
B41 7	24	MILD STEEL ANGLE 50 x 50 x 6	648	15.55	69.52
B41 8	32	MILD STEEL ANGLE 50 x 50 x 6	637	20.38	91.12
B41 9	8	MILD STEEL ANGLE 50 x 50 x 6	639	5.11	22.85
B41 10	8	MILD STEEL ANGLE 50 x 50 x 6	644	5.15	23.03
B41 11	12	TF CHANNEL 178 x 54 x 15kg/m	526	6.31	92.78
B41 12	4	MILD STEEL ANGLE 80 x 80 x 10	552	2.21	26.27
B41 13	12	MILD STEEL ANGLE 50 x 50 x 6	648	7.78	34.76
B41 14	8	MILD STEEL ANGLE 50 x 50 x 6	648	5.18	23.17
B41 15	16	MILD STEEL ANGLE 50 x 50 x 6	637	10.19	45.56
B41 16	16	MILD STEEL ANGLE 50 x 50 x 6	637	10.19	45.56
B41 17	4	MILD STEEL ANGLE 50 x 50 x 6	640	2.56	11.44
UB 1	0	"U" BOLT MILD STEEL ROUND BAR ϕ 16	385	385	-
TOTAL MASS =					802.82

