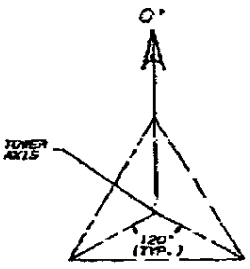


TOWER DESIGN LOADING		
DESIGN WIND LOAD PER ANSI/TIA/EIA-222-F-1988, 88 MPH BASIC WIND SPEED (1/2" RADIAL ICE LOAD). THIS TOWER IS DESIGNED TO SUPPORT THE FOLLOWING LOADS:		
ELEVATION (FT)	ANTENNA TYPE	LINE SIZE (INCH)
380	LIGHTS	(1)5/8"X(1)3/4"
375	(6)SRL100 ON (3)6" SIDE ARMS & TIE-BACKS	(6)1-5/8"
350	(2)10" HP DISHS (0)(180)	(2)EVSZ
250	(2)10" HP DISHS (0)(180)	(2)EVSZ
150	(2)10" HP DISHS (0)(180)	(2)EVSZ

SEE STRESS ANALYSIS FOR A COMPLETE LISTING OF ALL LOADS ON TOWER  
 NOTE: ANTENNA AZIMUTH IS SHOWN IN DEGREES WITHIN THE BRACKETS

TUBULAR MEMBER PROPERTIES			
MEMBER	SIZE	O.D. (IN)	THICK. (IN)
PIPE 2 E.H	2.375	2.375	0.218
PIPE2.BSTD	2.875	2.875	0.203
PIPE 3 E.H	3.500	3.500	0.300
PIPE 3 STD	3.500	3.500	0.216
PIPE3.BE.H	4.000	4.000	0.318
PIPE1.BSTD	4.000	4.000	0.228
PIPE 4 E.H	4.500	4.500	0.337
PIPE 5 E.H	5.563	5.563	0.373
PIPE 6 E.H	6.625	6.625	0.436
PIPE 7 E.H	6.625	6.625	0.375
PIPE 8 E.H	6.625	6.625	0.500
PIPE10.E.H	10.750	10.750	0.500



TOWER CONFIGURATION  
 N.T.S.

SECTION	LEGS		BRACE	
	SIZE	BOLTED CONNECTION NO. & SIZE (IN)	SIZE	BOLTED CONNECTION NO. & SIZE (IN)
01	PIPE2.E.H	4	PIPE2.E.H	4
02	PIPE2.E.H	4	PIPE2.E.H	4
03	PIPE2.E.H	4	PIPE2.E.H	4
04	PIPE2.E.H	4	PIPE2.E.H	4
05	PIPE2.E.H	4	PIPE2.E.H	4
06	PIPE2.E.H	4	PIPE2.E.H	4
07	PIPE2.E.H	4	PIPE2.E.H	4
08	PIPE2.E.H	4	PIPE2.E.H	4
09	PIPE2.E.H	4	PIPE2.E.H	4
10	PIPE2.E.H	4	PIPE2.E.H	4
11	PIPE2.E.H	4	PIPE2.E.H	4
12	PIPE2.E.H	4	PIPE2.E.H	4
13	PIPE2.E.H	4	PIPE2.E.H	4
14	PIPE2.E.H	4	PIPE2.E.H	4
15	PIPE2.E.H	4	PIPE2.E.H	4
16	PIPE2.E.H	4	PIPE2.E.H	4
17	PIPE2.E.H	4	PIPE2.E.H	4
18	PIPE2.E.H	4	PIPE2.E.H	4
19	PIPE2.E.H	4	PIPE2.E.H	4
20	PIPE2.E.H	4	PIPE2.E.H	4
21	PIPE2.E.H	4	PIPE2.E.H	4
22	PIPE2.E.H	4	PIPE2.E.H	4
23	PIPE2.E.H	4	PIPE2.E.H	4
24	PIPE2.E.H	4	PIPE2.E.H	4
25	PIPE2.E.H	4	PIPE2.E.H	4
26	PIPE2.E.H	4	PIPE2.E.H	4
27	PIPE2.E.H	4	PIPE2.E.H	4
28	PIPE2.E.H	4	PIPE2.E.H	4
29	PIPE2.E.H	4	PIPE2.E.H	4
30	PIPE2.E.H	4	PIPE2.E.H	4
31	PIPE2.E.H	4	PIPE2.E.H	4
32	PIPE2.E.H	4	PIPE2.E.H	4
33	PIPE2.E.H	4	PIPE2.E.H	4
34	PIPE2.E.H	4	PIPE2.E.H	4
35	PIPE2.E.H	4	PIPE2.E.H	4
36	PIPE2.E.H	4	PIPE2.E.H	4
37	PIPE2.E.H	4	PIPE2.E.H	4
38	PIPE2.E.H	4	PIPE2.E.H	4
39	PIPE2.E.H	4	PIPE2.E.H	4
40	PIPE2.E.H	4	PIPE2.E.H	4
41	PIPE2.E.H	4	PIPE2.E.H	4
42	PIPE2.E.H	4	PIPE2.E.H	4
43	PIPE2.E.H	4	PIPE2.E.H	4
44	PIPE2.E.H	4	PIPE2.E.H	4
45	PIPE2.E.H	4	PIPE2.E.H	4
46	PIPE2.E.H	4	PIPE2.E.H	4
47	PIPE2.E.H	4	PIPE2.E.H	4
48	PIPE2.E.H	4	PIPE2.E.H	4
49	PIPE2.E.H	4	PIPE2.E.H	4
50	PIPE2.E.H	4	PIPE2.E.H	4
51	PIPE2.E.H	4	PIPE2.E.H	4
52	PIPE2.E.H	4	PIPE2.E.H	4
53	PIPE2.E.H	4	PIPE2.E.H	4
54	PIPE2.E.H	4	PIPE2.E.H	4
55	PIPE2.E.H	4	PIPE2.E.H	4
56	PIPE2.E.H	4	PIPE2.E.H	4
57	PIPE2.E.H	4	PIPE2.E.H	4
58	PIPE2.E.H	4	PIPE2.E.H	4
59	PIPE2.E.H	4	PIPE2.E.H	4
60	PIPE2.E.H	4	PIPE2.E.H	4
61	PIPE2.E.H	4	PIPE2.E.H	4
62	PIPE2.E.H	4	PIPE2.E.H	4
63	PIPE2.E.H	4	PIPE2.E.H	4
64	PIPE2.E.H	4	PIPE2.E.H	4
65	PIPE2.E.H	4	PIPE2.E.H	4
66	PIPE2.E.H	4	PIPE2.E.H	4
67	PIPE2.E.H	4	PIPE2.E.H	4
68	PIPE2.E.H	4	PIPE2.E.H	4
69	PIPE2.E.H	4	PIPE2.E.H	4
70	PIPE2.E.H	4	PIPE2.E.H	4
71	PIPE2.E.H	4	PIPE2.E.H	4
72	PIPE2.E.H	4	PIPE2.E.H	4
73	PIPE2.E.H	4	PIPE2.E.H	4
74	PIPE2.E.H	4	PIPE2.E.H	4
75	PIPE2.E.H	4	PIPE2.E.H	4
76	PIPE2.E.H	4	PIPE2.E.H	4
77	PIPE2.E.H	4	PIPE2.E.H	4
78	PIPE2.E.H	4	PIPE2.E.H	4
79	PIPE2.E.H	4	PIPE2.E.H	4
80	PIPE2.E.H	4	PIPE2.E.H	4
81	PIPE2.E.H	4	PIPE2.E.H	4
82	PIPE2.E.H	4	PIPE2.E.H	4
83	PIPE2.E.H	4	PIPE2.E.H	4
84	PIPE2.E.H	4	PIPE2.E.H	4
85	PIPE2.E.H	4	PIPE2.E.H	4
86	PIPE2.E.H	4	PIPE2.E.H	4
87	PIPE2.E.H	4	PIPE2.E.H	4
88	PIPE2.E.H	4	PIPE2.E.H	4
89	PIPE2.E.H	4	PIPE2.E.H	4
90	PIPE2.E.H	4	PIPE2.E.H	4
91	PIPE2.E.H	4	PIPE2.E.H	4
92	PIPE2.E.H	4	PIPE2.E.H	4
93	PIPE2.E.H	4	PIPE2.E.H	4
94	PIPE2.E.H	4	PIPE2.E.H	4
95	PIPE2.E.H	4	PIPE2.E.H	4
96	PIPE2.E.H	4	PIPE2.E.H	4
97	PIPE2.E.H	4	PIPE2.E.H	4
98	PIPE2.E.H	4	PIPE2.E.H	4
99	PIPE2.E.H	4	PIPE2.E.H	4
100	PIPE2.E.H	4	PIPE2.E.H	4

NOTE: 00 REPRESENTS THE HORIZONTAL BRACE  
 NOTE: SECTION NUMBERS ARE FOR REFERENCE ONLY FOR ADVANCE FACE WIDTH DIMENSIONS, REFER TO STRESS ANALYSIS.

GENERAL NOTES

1. Rohn COMMUNICATION TOWER DESIGN CONFORM TO ANSI/TIA/EIA-222-F UNLESS OTHERWISE SPECIFIED UNDER TOWER DESIGN LOADING.
2. THE DESIGN LOADING CRITERIA INDICATED HAS BEEN PROVIDED TO Rohn. THE DESIGN LOADING CRITERIA HAS BEEN ASSUMED TO BE BASED ON SITE-SPECIFIC DATA IN ACCORDANCE WITH ANSI/TIA/EIA-222-F AND MUST BE VERIFIED BY OTHERS PRIOR TO INSTALLATION.
3. ANTENNAS AND LINES LISTED IN TOWER DESIGN LOADING TABLE ARE PROVIDED BY OTHERS UNLESS OTHERWISE SPECIFIED.
4. TOWER MEMBER DESIGN DOES NOT INCLUDE STRESSES DUE TO ERECTION SINCE ERECTION EQUIPMENT AND CONDITIONS ARE UNKNOWN. DESIGN ASSUMES COMPETENT AND QUALIFIED PERSONNEL WILL ERECT THE TOWER.
5. WORK SHALL BE IN ACCORDANCE WITH ANSI/TIA/EIA-222-F, "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES".
6. THE MINIMUM YIELD STRENGTH OF STRUCTURAL STEEL MEMBERS SHALL BE 50 KSI EXCEPT AS NOTED BELOW.  
 ANGLE BRACES 1.1.75X1.75 THRU 1.25X1.75 SHALL BE 36 KSI.  
 STRUCTURAL PLATES SHALL BE 36 KSI.
7. FIELD CONNECTIONS SHALL BE BOLTED. NO FIELD WELDS SHALL BE ALLOWED.
8. STRUCTURAL BOLTS SHALL CONFORM TO ASTM A-325, EXCEPT WHERE NOTED.
9. GAL NUTS SHALL BE PROVIDED FOR ALL TOWER BOLTS.
10. STRUCTURAL STEEL AND CONNECTION BOLTS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION, IN ACCORDANCE WITH ANSI/TIA/EIA-222-F.
11. ALL HIGH STRENGTH BOLTS ARE TO BE TIGHTENED TO A "SNUGTIGHT CONDITION AS DEFINED IN THE NOVEMBER 13, 1988, AISC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS". NO OTHER MINIMUM BOLT TENSION OR TORQUE VALUES ARE REQUIRED.
12. PURCHASER SHALL VERIFY THE INSTALLATION IS IN CONFORMANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS FOR OBSTRUCTION MARKING AND LIGHTING.
13. TOLERANCE ON TOWER STEEL HEIGHT IS EQUAL TO PLUS 1X OR MINUS 1/2X.
14. DESIGN ASSUMES THAT, AS A MINIMUM, MAINTENANCE AND INSPECTION WILL BE PERFORMED OVER THE LIFE OF THE STRUCTURE IN ACCORDANCE WITH ANSI/TIA/EIA-222-F.
15. DESIGN ASSUMES LEVEL GRADE AT TOWER SITE.
16. THE PURCHASER SHALL VERIFY THAT ACTUAL SITE SOIL PARAMETERS MEET OR EXCEED E.T.A. "NORMAL" SOIL PARAMETERS.

TOWER SITE: RAPID CITY SKYLINE RELO  
 COUNTY: PENNINGTON, SD

No. & Revision Description		A Date & Rev. By A Date & Rev. By	
THIS DRAWING IS THE PROPERTY OF Rohn. IT IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.			
<b>ROHN</b>			
Scale: N&S	By: [Signature]	Date: 08/28/01	380' SSVW TOWER DESIGN FOR WESTERN WIRELESS
Drawn: [Signature]	Checked: [Signature]	App. Eng.: [Signature]	REV. FILE: 49440TR
Percent Filed:			ISS. NO.: A012311 SHEET 1 OF 1

TOWER REACTIONS	
COMPRESSION =	589.7 KIPS
TENSION =	494.3 KIPS
TOTAL SHEAR =	58.9 KIPS
D.T.M.,	20205.6 FT-KIPS