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Rocky Hill, Connecticut 06067-3900
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Peter W. van Wilgen
Director – Real Estate Operations

January 5, 2001

Mr. Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: EM-SCLP-162-000727- Springwich Cellular Limited Partnership (SCLP) notice of intent to modify an existing telecommunications facility located off Oakdale Avenue, Winchester, Connecticut (Docket No. 138).

Dear Mr. Gelston:

Pursuant to our notice in EM-SCLP-162-000727, I enclose structural design drawings and calculations for SCLP's 180-foot replacement monopole tower at Oakdale Avenue in Winchester, which the Council approved on August 10, 2000. The analysis demonstrates that the new monopole has been designed to support planned antenna loading under normal and extreme weather conditions.

Please feel free to call me at (860) 513-7730 with questions concerning this submittal. Thank you for your consideration in this matter.

Respectfully yours,

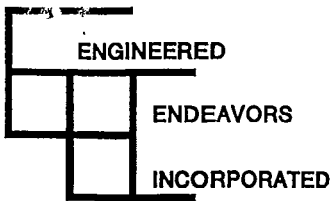
Peter W. van Wilgen
Director – Real Estate Operations

Enclosure

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SITING COUNCIL

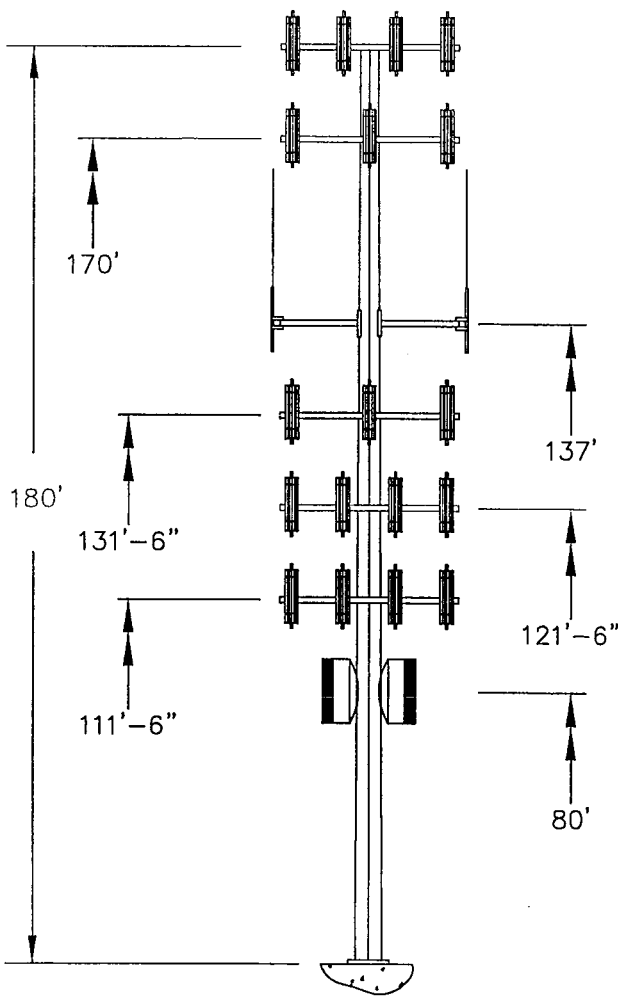


Customer URS GREINER By JOHN VOIKLIS 09/06/00
 Structure 180' MONOPOLE Checked LAP 7676
 Date
 Job/Quote No.

SITE LOCATION: LITCHFIELD COUNTY, CT
 SITE NAME: OAKDALE AVE

REVISION I

ANTENNA LOADING:

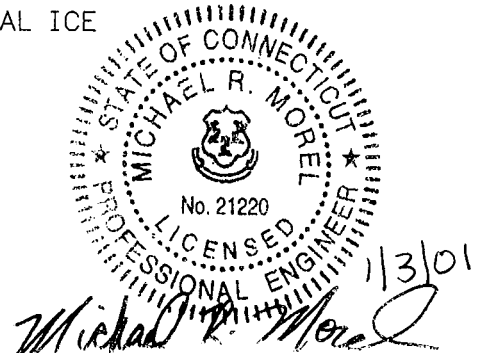


- (12) 7120.16 PANEL ANTENNAS
LOW PROFILE PLATFORM @ 180'
- (9) 7120.16 PANEL ANTENNAS
LOW PROFILE PLATFORM @ 170'
- (2) 21' OMNI ANTENNAS
SIDE ARMS @ 137'
- (9) 7120.16 PANEL ANTENNAS
LOW PROFILE PLATFORM @ 131'-6"
- (12) 7120.16 PANEL ANTENNAS
LOW PROFILE PLATFORM @ 121'-6"
- (12) 7120.16 PANEL ANTENNAS
LOW PROFILE PLATFORM @ 111'-6"
- (2) 6"Ø HP MW @ 80'

DESIGN NOTES:

- DESIGNED IN ACCORDANCE WITH TIA/EIA 222-F
- 80 MPH BASIC WIND SPEED
- 1/2" RADIAL ICE
- CASE I - 50 MPH OPERATIONAL WIND SPEED
ACTUAL ROTATION - 1.49° @ 80'
- CASE II - 80 MPH BASIC WIND SPEED
- CASE III - 75% OF 80 MPH WIND LOAD
WITH 1/2" RADIAL ICE

NOTE: IT IS THE RESPONSIBILITY OF THE PURCHASER TO VERIFY THAT THE WIND LOADS AND DESIGN CRITERIA SPECIFIED MEET THE REQUIREMENTS OF ALL LOCAL BUILDING CODES



Engineered Endeavors Inc.

7610 Jenther Drive
Mentor, Ohio 44060
Tel (440) 918-1101 Fax (440) 918-1108

Communications Structure Nonlinear Analysis and Design Program

10:19:59 09-06-2000
Revision 1.3 - 2/07/00
Engineer: JOHN E. VOIKLIS

Customer URS GREINER
Job Name 7676
Structure 180' MONOPOLE
Location LITCHFIELD COUNTY, CT
Site OAKDALE AVE

OD BOT	OD TOP	NUM. SIDES	THICK INCH	TAPER IN/FT	LENGTH FT	JOINT INCH	JOINT TYPE	YIELD KSI	WEIGHT LBS	JOINT HEIGHT
25.74	15.00	18	0.1875	0.224	47.88	45.00	SLIP	65.0	1933.	134.00
35.24	24.40	18	0.3125	0.224	48.33	59.00	SLIP	65.0	4755.	90.00
44.49	33.39	18	0.3750	0.224	49.50	73.00	SLIP	65.0	7637.	46.00
53.25	42.25	18	0.4375	0.224	49.04	0.00	BASEPL	65.0	10830.	-0.00
TOTAL TUBE WEIGHT								25155.	POUNDS	
POLE SHAFT LENGTH								180.00	FEET	

E = 29600.0 KSI

UNIT WGT = 0.283 LBS/CU IN

AISC constants are used for stress reductions.

TUBE SECTIONS HAVE 18 SIDES AND ARE TREATED AS ROUND

Internal bend radius = 3 X T

Tube diameters are measured flat to flat.

Tube diameters are increased by 1.020 for wind across points.

Drag coefficients are increase by 1.300 for steps on the pole.

AISC Tube Shape Coefficient of 1.000 is applied.

REVISED DATA FILE NAME 7676181

APPURTENANCES

DESCRIPTION	NUM.	ELEV.	Kz	< WITHOUT ICE >			< WITH ICE >			FACTOR
				AREA	WGT	Ca	AREA	WGT	Ca	
7120.16	12	180.	1.624	3.54	15.	1.4000	3.98	31.	1.4000	1.04
LOW PROFILE PLATFORM	1	180.	1.624	11.25	1500.	1.8000	14.10	2250.	1.8000	1.00
7120.16	9	170.	1.597	3.54	15.	1.4000	3.98	31.	1.4000	1.04
LOW PROFILE PLATFORM	1	170.	1.597	11.25	1500.	1.8000	14.10	2250.	1.8000	1.00
6' ARM (4" SQ. X 1/4	2	137.	1.502	2.00	80.	2.0000	2.50	160.	2.0000	1.00
PD 200	2	148.	1.535	1.13	20.	1.8000	1.70	40.	1.8000	1.00
7120.16	9	132.	1.484	3.54	15.	1.4000	3.98	31.	1.4000	1.04
LOW PROFILE PLATFORM	1	132.	1.484	11.25	1500.	1.8000	14.10	2250.	1.8000	1.00
7120.16	12	122.	1.451	3.54	15.	1.4000	3.98	31.	1.4000	1.04
LOW PROFILE PLATFORM	1	122.	1.451	11.25	1500.	1.8000	14.10	2250.	1.8000	1.00
7120.16	12	112.	1.416	3.54	15.	1.4000	3.98	31.	1.4000	1.04
LOW PROFILE PLATFORM	1	112.	1.416	11.25	1500.	1.8000	14.10	2250.	1.8000	1.00
HP 6 MW-2	2	80.	1.288	28.20	281.	0.0029	29.00	501.	0.0029	1.00

LOAD CASE 1

OPERATIONAL LOADING

DEAD LOAD FACTOR 1.00 WIND PSF REDUCTION 1.00 RADIAL ICE 0.00 IN.

WIND VELOCITY 50 BOTTOM 6.45 PSF TOP 10.40 PSF
 MAX BASE ROTATION 0.00 DEG

APPLIED APPURTENANCE FORCES

	ELEVATION FT	WEIGHT KIPS	WIND KIPS
7120.16	180.00	0.185	1.086
LOW PROFILE PLATFORM	180.00	1.500	0.356
7120.16	170.00	0.139	0.801
LOW PROFILE PLATFORM	170.00	1.500	0.350
6' ARM (4" SQ. X 1/4")	137.00	0.160	0.130
PD 200	148.00	0.040	0.068
7120.16	131.50	0.139	0.745
LOW PROFILE PLATFORM	131.50	1.500	0.325
7120.16	121.50	0.185	0.971
LOW PROFILE PLATFORM	121.50	1.500	0.318
7120.16	111.50	0.185	0.947
LOW PROFILE PLATFORM	111.50	1.500	0.310
HP 6 MW-2	80.00	0.562	0.890

LOAD CASE 1

OPERATIONAL LOADING

TUBE PROPERTIES			MEMBER FORCES			STRESSES		STRESS	TOTAL		
ELEV FT	DIAM IN	WALL IN	SHEAR K	BENDING K-FT	AXIAL K	AXIAL KSI	BEND. KSI	ALLOW KSI	RATIOS	DEFL IN	TILT DEG
180.00	15.00	0.1875	1.63	0.00	1.74	0.20	0.00	51.99	0.01	67.7	3.75
170.00	17.24	0.1875	3.05	16.25	3.67	0.36	4.60	51.99	0.10	60.0	3.67
159.00	19.71	0.1875	3.24	49.78	4.10	0.36	10.74	50.09	0.22	51.7	3.46
148.00	22.18	0.1875	3.52	85.41	4.63	0.36	14.51	48.56	0.31	44.1	3.15
137.00	24.65	0.1875	3.79	124.03	5.13	0.36	17.03	47.34	0.37	37.2	2.81
134.00	25.32	0.1875	3.79	135.40	5.13	0.35	17.60	47.05	0.38	35.5	2.71
TYPE OF JOINT: SLIP JOINT											
134.00	24.82	0.3125	3.78	135.53	5.61	0.23	11.17	51.99	0.22	35.5	2.71
131.50	25.38	0.3125	3.78	144.96	5.61	0.23	11.42	51.99	0.22	34.1	2.66
121.50	27.62	0.3125	5.13	196.34	7.75	0.29	13.02	51.99	0.26	28.8	2.45
111.50	29.86	0.3125	6.71	263.42	10.31	0.36	14.90	51.45	0.30	23.9	2.22
100.00	32.44	0.3125	8.27	358.48	13.05	0.41	17.14	50.26	0.35	18.8	1.95
90.00	34.69	0.3125	8.51	443.48	14.23	0.42	18.51	49.36	0.38	15.0	1.71
TYPE OF JOINT: SLIP JOINT											
90.00	33.94	0.3750	8.75	443.47	16.42	0.42	16.22	51.99	0.32	15.0	1.71
80.00	36.18	0.3750	8.75	530.93	16.42	0.39	17.05	51.31	0.34	11.6	1.49
68.00	38.87	0.3750	9.90	649.69	18.58	0.41	18.03	50.28	0.37	8.2	1.23
57.00	41.34	0.3750	10.15	761.30	20.37	0.42	18.65	49.45	0.38	5.7	1.00
46.00	43.81	0.3750	10.38	875.46	22.18	0.43	19.07	48.71	0.40	3.6	0.77
TYPE OF JOINT: SLIP JOINT											
46.00	42.93	0.4375	10.64	875.46	25.67	0.44	17.10	51.06	0.34	3.6	0.77
33.00	45.85	0.4375	10.64	1013.75	25.67	0.41	17.33	50.13	0.35	1.8	0.54
22.00	48.32	0.4375	10.87	1133.27	28.22	0.43	17.42	49.43	0.36	0.8	0.35
11.00	50.78	0.4375	11.07	1255.07	30.70	0.44	17.44	48.79	0.37	0.2	0.17
0.00	53.25	0.4375	11.44	1379.18	34.64	0.48	17.41	48.22	0.37	0.0	0.00

REACTION COMPONENTS (KIPS AND FT-KIPS)

TRANSVERSE SHEAR	VERTICAL FORCE	WIND SHEAR	MOMENT ABOUT TRANSVERSE	MOMENT ABOUT VERTICAL	MOMENT ABOUT WIND AXIS
0.000	34.643	-11.437	1379.181	0.000	0.000

LOAD CASE 2

80 MPH BASIC WIND SPEED

DEAD LOAD FACTOR 1.00 WIND PSF REDUCTION 1.00 RADIAL ICE 0.00 IN.

WIND VELOCITY 80 BOTTOM 16.52 PSF TOP 26.61 PSF
 MAX BASE ROTATION 0.00 DEG

APPLIED APPURTENANCE FORCES

	ELEVATION FT	WEIGHT KIPS	WIND KIPS
7120.16	180.00	0.185	2.781
LOW PROFILE PLATFORM	180.00	1.500	0.910
7120.16	170.00	0.139	2.052
LOW PROFILE PLATFORM	170.00	1.500	0.896
6' ARM (4" SQ. X 1/4")	137.00	0.160	0.333
PD 200	148.00	0.040	0.173
7120.16	131.50	0.139	1.907
LOW PROFILE PLATFORM	131.50	1.500	0.832
7120.16	121.50	0.185	2.485
LOW PROFILE PLATFORM	121.50	1.500	0.814
7120.16	111.50	0.185	2.425
LOW PROFILE PLATFORM	111.50	1.500	0.794
HP 6 MW-2	80.00	0.562	2.278

LOAD CASE 2

80 MPH BASIC WIND SPEED

TUBE ELEV FT	PROPERTIES		MEMBER FORCES			STRESSES		STRESS RATIOS	TOTAL		
	DIAM IN	WALL IN	SHEAR K	BENDING K-FT	AXIAL K	AXIAL KSI	BEND. KSI		ALLOW KSI	DEFL IN	TILT DEG
180.00	15.00	0.1875	4.12	0.00	1.20	0.14	0.00	51.99	0.01	169.3	9.43
170.00	17.24	0.1875	7.73	40.62	2.67	0.27	11.50	51.99	0.23	150.2	9.25
159.00	19.71	0.1875	8.22	124.60	3.13	0.27	26.89	50.09	0.54	129.9	8.71
148.00	22.18	0.1875	8.93	214.08	3.67	0.28	36.38	48.56	0.76	111.1	7.95
137.00	24.65	0.1875	9.55	311.57	4.17	0.29	42.77	47.34	0.91	93.9	7.11
134.00	25.32	0.1875	9.55	340.04	4.17	0.28	44.20	47.05	0.94	89.6	6.86
TYPE OF JOINT: SLIP JOINT											
134.00	24.82	0.3125	9.94	340.01	4.66	0.19	28.03	51.99	0.55	89.6	6.86
131.50	25.38	0.3125	13.08	364.58	6.54	0.27	28.72	51.99	0.56	86.1	6.73
121.50	27.62	0.3125	13.08	494.53	6.54	0.24	32.79	51.99	0.63	72.7	6.20
111.50	29.86	0.3125	17.11	664.73	8.86	0.31	37.60	51.45	0.74	60.4	5.64
100.00	32.44	0.3125	21.10	906.38	11.43	0.36	43.34	50.26	0.87	47.7	4.95
90.00	34.69	0.3125	21.72	1122.83	12.78	0.38	46.88	49.36	0.96	38.0	4.33
TYPE OF JOINT: SLIP JOINT											
90.00	33.94	0.3750	22.35	1122.86	14.87	0.38	41.06	51.99	0.80	38.0	4.33
80.00	36.18	0.3750	22.35	1345.74	14.87	0.35	43.21	51.31	0.85	29.6	3.78
68.00	38.87	0.3750	25.30	1648.81	17.08	0.38	45.77	50.28	0.92	20.9	3.12
57.00	41.34	0.3750	25.96	1933.98	19.10	0.40	47.38	49.45	0.97	14.4	2.53
46.00	43.81	0.3750	26.56	2225.94	21.15	0.41	48.49	48.71	1.00	9.2	1.96
TYPE OF JOINT: SLIP JOINT											
46.00	42.93	0.4375	27.24	2225.94	25.67	0.44	43.49	51.06	0.86	9.2	1.96
33.00	45.85	0.4375	27.24	2579.96	25.67	0.41	44.11	50.13	0.89	4.7	1.37
22.00	48.32	0.4375	27.83	2886.01	28.22	0.43	44.37	49.43	0.91	2.0	0.89
11.00	50.78	0.4375	28.36	3197.94	30.70	0.44	44.44	48.79	0.92	0.5	0.43
0.00	53.25	0.4375	29.29	3515.83	34.64	0.48	44.38	48.22	0.93	0.0	0.00

REACTION COMPONENTS (KIPS AND FT-KIPS)

TRANSVERSE SHEAR	VERTICAL FORCE	WIND SHEAR	MOMENT ABOUT TRANSVERSE	MOMENT ABOUT VERTICAL	MOMENT ABOUT WIND AXIS
0.000	34.638	-29.294	3515.828	0.000	0.000

LOAD CASE 3

BASIC LOADING PLUS ICE

DEAD LOAD FACTOR 1.00 WIND PSF REDUCTION 0.75 RADIAL ICE 0.50 IN.

WIND VELOCITY 80 BOTTOM 12.39 PSF TOP 19.96 PSF
 MAX BASE ROTATION 0.00 DEG

APPLIED APPURTENANCE FORCES

	ELEVATION FT	WEIGHT KIPS	WIND KIPS
7120.16	180.00	0.366	2.345
LOW PROFILE PLATFORM	180.00	2.250	0.856
7120.16	170.00	0.275	1.730
LOW PROFILE PLATFORM	170.00	2.250	0.842
6' ARM (4" SQ. X 1/4")	137.00	0.320	0.312
PD 200	148.00	0.080	0.195
7120.16	131.50	0.275	1.608
LOW PROFILE PLATFORM	131.50	2.250	0.782
7120.16	121.50	0.366	2.096
LOW PROFILE PLATFORM	121.50	2.250	0.765
7120.16	111.50	0.366	2.045
LOW PROFILE PLATFORM	111.50	2.250	0.746
HP 6 MW-2	80.00	1.002	1.757

LOAD CASE 3

BASIC LOADING PLUS ICE

TUBE ELEV FT	PROPERTIES		MEMBER FORCES			STRESSES		STRESS RATIOS	TOTAL		
	DIAM IN	WALL IN	SHEAR K	BENDING K-FT	AXIAL K	AXIAL KSI	BEND. KSI		ALLOW KSI	DEFL IN	TILT DEG
180.00	15.00	0.1875	3.70	0.01	2.28	0.26	0.00	51.99	0.01	148.7	8.33
170.00	17.24	0.1875	6.95	36.68	4.75	0.47	10.39	51.99	0.21	131.7	8.17
159.00	19.71	0.1875	6.95	112.43	4.75	0.41	24.27	50.09	0.49	113.7	7.68
148.00	22.18	0.1875	7.92	192.35	5.80	0.45	32.69	48.56	0.68	97.0	7.00
137.00	24.65	0.1875	7.92	278.89	5.80	0.40	38.28	47.34	0.82	81.9	6.24
134.00	25.32	0.1875	8.55	304.35	6.45	0.44	39.56	47.05	0.85	78.1	6.02
TYPE OF JOINT: SLIP JOINT											
134.00	24.82	0.3125	8.80	304.15	6.95	0.29	25.07	51.99	0.49	78.1	6.02
131.50	25.38	0.3125	8.80	326.03	6.95	0.28	25.68	51.99	0.50	75.0	5.90
121.50	27.62	0.3125	11.55	440.72	9.79	0.37	29.22	51.99	0.57	63.2	5.43
111.50	29.86	0.3125	15.06	590.73	13.11	0.45	33.42	51.45	0.66	52.5	4.93
100.00	32.44	0.3125	18.50	802.78	16.67	0.53	38.38	50.26	0.77	41.4	4.32
90.00	34.69	0.3125	18.92	991.50	17.98	0.53	41.39	49.36	0.85	32.9	3.77
TYPE OF JOINT: SLIP JOINT											
90.00	33.94	0.3750	19.35	991.52	20.03	0.51	36.26	51.99	0.71	32.9	3.77
80.00	36.18	0.3750	19.35	1184.70	20.03	0.47	38.04	51.31	0.75	25.6	3.28
68.00	38.87	0.3750	21.61	1443.64	22.69	0.50	40.07	50.28	0.81	18.0	2.70
57.00	41.34	0.3750	22.05	1685.91	24.65	0.51	41.30	49.45	0.84	12.4	2.19
46.00	43.81	0.3750	22.45	1932.70	26.65	0.52	42.10	48.71	0.87	7.9	1.69
TYPE OF JOINT: SLIP JOINT											
46.00	42.93	0.4375	22.91	1932.69	30.89	0.53	37.76	51.06	0.75	7.9	1.69
33.00	45.85	0.4375	22.91	2230.40	30.89	0.49	38.13	50.13	0.77	4.0	1.18
22.00	48.32	0.4375	23.30	2486.61	33.44	0.51	38.23	49.43	0.78	1.8	0.77
11.00	50.78	0.4375	23.65	2746.70	35.91	0.52	38.17	48.79	0.79	0.4	0.37
0.00	53.25	0.4375	24.30	3010.73	39.85	0.55	38.01	48.22	0.80	0.0	0.00

REACTION COMPONENTS (KIPS AND FT-KIPS)

TRANSVERSE SHEAR	VERTICAL FORCE	WIND SHEAR	MOMENT ABOUT TRANSVERSE	MOMENT ABOUT VERTICAL	MOMENT ABOUT WIND AXIS
0.000	39.855	-24.304	3010.728	0.000	0.000

SUMMARY TABLE

ELEV	STRESS RATIO	AXIAL	BENDING	LOADING
180.00	0.01	1.20	0.0	2 80 MPH BASIC WIND SPEED
170.00	0.23	2.67	40.6	2 80 MPH BASIC WIND SPEED
159.00	0.54	3.13	124.6	2 80 MPH BASIC WIND SPEED
148.00	0.76	3.67	214.1	2 80 MPH BASIC WIND SPEED
137.00	0.91	4.17	311.6	2 80 MPH BASIC WIND SPEED
134.00	0.94	4.17	340.0	2 80 MPH BASIC WIND SPEED
131.50	0.56	6.54	364.6	2 80 MPH BASIC WIND SPEED
121.50	0.63	6.54	494.5	2 80 MPH BASIC WIND SPEED
111.50	0.74	8.86	664.7	2 80 MPH BASIC WIND SPEED
100.00	0.87	11.43	906.4	2 80 MPH BASIC WIND SPEED
90.00	0.96	12.78	1122.8	2 80 MPH BASIC WIND SPEED
80.00	0.85	14.87	1345.7	2 80 MPH BASIC WIND SPEED
68.00	0.92	17.08	1648.8	2 80 MPH BASIC WIND SPEED
57.00	0.97	19.10	1934.0	2 80 MPH BASIC WIND SPEED
46.00	1.00	21.15	2225.9	2 80 MPH BASIC WIND SPEED
33.00	0.89	25.67	2580.0	2 80 MPH BASIC WIND SPEED
22.00	0.91	28.22	2886.0	2 80 MPH BASIC WIND SPEED
11.00	0.92	30.70	3197.9	2 80 MPH BASIC WIND SPEED
0.00	0.93	34.64	3515.8	2 80 MPH BASIC WIND SPEED

MAXIMUM SUPPORT MOMENT K-FT 3515.83
 CORRESPONDING AXIAL FORCE KIPS 34.64
 CORRESPONDING SHEAR FORCE KIPS 29.29

BASE PLATE AT ELEVATION 0.00 FEET

TUBE DIAMETER 53.25 INCHES
 DESIGN MOMENT 3515.8 KIP FT
 DESIGN MOMENT IS 0. DEGREES FROM THE WIND DIRECTION
 BOLTS ARE ON THE KNUCKLES OF THE TUBE

APPLIED AXIAL FORCE 34.6 KIPS
 APPLIED SHEAR 29.29 KIPS

BOLT DATA

BOLT TYPE A615 GR75
 BOLTS ARE EVENLY SPACED
 DIAMETER 2.250 INCHES
 EFFECTIVE AREA 3.250 SQ IN
 TOTAL LENGTH 6.0 FEET DOUBLE-END THREADED
 End plates are required.

MINIMUM EMBEDMENT 5.0 FEET
 NUMBER OF BOLTS 16
 BOLT CIRCLE DIAMETER 62.00 INCHES
 ALLOWABLE STRESS 60.0 KSI
 APPLIED AXIAL STRESS 53.0 KSI
 MAX BOLT FORCE 172.3 KIPS
 BOLT BENDING STRESS 2.7 KSI
 COMBINED BOLT STRESS 55.7 KSI
 CLEARANCE UNDER PLATE 3.25 INCHES
 BOLT WEIGHT 1353.6 POUNDS

PLATE DATA

DIAMETER OF PLATE 68.00 INCHES
 MATERIAL A871 GR60
 PROVIDED THICKNESS 2.000 INCHES
 REQUIRED THICKNESS 1.817 INCHES
 BOLT HOLE DIAMETER 2.625 INCHES
 CENTER HOLE SIZE 42.00 INCHES
 NET WEIGHT 1222.4 POUNDS
 RAW STOCK WEIGHT 2617.2 POUNDS
 SURFACE AREA 30.00 SQ FT
 ALLOWABLE STRESS 59.99 KSI
 MAX APPLIED STRESS 49.49 KSI

CONCRETE STRENGTH 3000. PSI

Base Plate - use 68.00 inch ROUND x 2.000 inch A871 GR60
 with (16) 2.250 diameter x 6.00 foot caged A615 GR75 bolts
 on a 62.00 inch bolt circle. End plates are required.

TOWN OF WINCHESTER CITY OF WINSTED



RECEIVED
AUG 25 2000
CONNECTICUT
SITING COUNCIL

Peter W. van Wilgan, Director
Real Estate Operations
SNET Mobility, Inc.
500 Enterprise Drive
Rocky Hill, CT 06067-3900

August 22, 2000

RE: Tower Replacement and Additional Carriers-Springwich Ltd.
Partnership: Oakdale Avenue

Dear Mr. van Wilgan:

I am writing in response to your recent request to, and approval by, the CT Siting Council to rebuild the 180 foot tall monopole and add additional carriers and equipment buildings to the facility located on Oakdale Avenue.

As you may or may not be aware, elements of the above referenced proposal fall under local zoning jurisdiction. Specifically:

1. The reconstruction or replacement of existing towers and monopoles and construction of additional equipment buildings require Special Permit approval from the Planning & Zoning Commission;
2. Site Plan approval from the Planning & Zoning Commission is required for the addition of the Sprint Spectrum Limited and the State Police antennas and facilities. Site Plan approval is required because a) the monopole currently does not support PCS services and; b) the proposal calls for additional antennas and equipment.

I have attached a copy of Section 19 of the Zoning Regulations for your review. Please call me to discuss scheduling and permitting requirements.

Sincerely,


Raymond A. Carpentino
Town Planner

xc:Joel Rinebold, file, PZC

Office of the Town Planner

Town Hall
338 Main Street
Winsted, CT 06098

Raymond A. Carpentino
Town Planner

Phone: 860-379-2713 ext.311
email: townplanner@townofwinchester.org
Fax: 860-738-7053



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

August 11, 2000

Peter van Wilgen
Director-Real Estate Operations
Springwich Cellular Limited Partnership
500 Enterprise Drive
Rocky Hill, CT 06067

RE: EM-SCLP-162-000727 - Springwich Cellular Limited Partnership notice of intent to modify an existing telecommunications facility located on its Whalen's Hill telecommunications site off Oakdale Avenue, Winchester, Connecticut (Docket No. 138).

Dear Mr. van Wilgen:

At a public meeting held on August 10, 2000, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated July 27, 2000. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

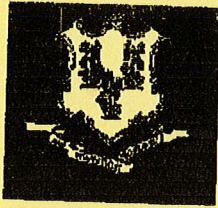
A handwritten signature in black ink, appearing to read "Mortimer A. Gelston".

Mortimer A. Gelston
Chairman

MAG/RKE/laf

c: Honorable John F. Arcelaschi, Mayor, Town of Winchester
Paul Spurlock, AT&T Wireless
Brian Benito, CT State Police
Mike Loucy, Sprint PCS

Winchester *logged*



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC SAFETY
CTS UNIT

1111 Country Club Road
P.O. Box 2794
Middletown, CT 06457-9294



FAX

Date 08/7/2000

Number of pages including cover sheet 4

TO: Robert Erling

Phone 860-827-2951
Fax Phone 860-827-2950

FROM: Brian Benito, Planning Specialist
Department of Public Safety
STATE POLICE, CTS UNIT
1111 Country Club Road
P.O. Box 2794
Middletown, CT 06457-9294

Phone 860-685-8280
Fax Phone 860-685-8345

CC:

REMARKS: Urgent For your review Reply ASAP Please Comment

Connecticut State Police Power Density Analysis done for Wallens Hill, Winsted.

RECEIVED

AUG - 7 2000

CONNECTICUT
SITING COUNCIL

RADIO/ANTENNA SYSTEMS DATA

=====

SITE NAME:
TOWER HEIGHT:SPOONER HILL
180 FEETPREPARED BY: D.P.S.
ON DATE: 08-07-2000

No	OPERATING FREQUENCY (MHz)	TRANSMIT POWER (WATTS)	ANTENNA				ERP (W)
			HEIGHT (FEET)	TYPE	VERTICAL SIZE (FT)	GAIN (dB)	
1	6700.0000	1	80	SOLID DISH W/RADOME	6	39.6	5591
2	866.0000	5 x 25	144	WHIP	21	9.0	993
3	866.0000	5 x 25	144	WHIP	21	9.0	993

- NOTES: 1. TRANSMIT POWER ENTRIES SHOWN AS '5 x 25' SHOULD BE INTERPRETED AS '5 TRANSMITTERS, EACH HAVING A POWER OF 25 WATTS'. ENTRIES OF '0' MEAN 'RECEIVE ONLY'- i.e. NO TRANSMITTER. ALL OTHER ENTRIES REFER TO ONE TRANSMITTER WITH THE POWER SHOWN.
2. ERP (EFFECTIVE RADIATED POWER) IS THE PRODUCT OF ALL TRANSMITTER POWERS AND THE NUMERICAL VALUE OF THE GAIN (ANTILOG OF dB) RELATIVE TO A DIPOLE ANTENNA.

POWER DENSITY ANALYSIS
 =====
 AT THE TOWER BASE, FOR EACH RADIO/ANTENNA SYSTEM

SITE NAME: SPOONER HILL
 TOWER HEIGHT: 180 FEET

PREPARED BY: D.P.S.
 ON DATE: 08-07-2000

No	OPERATING FREQUENCY (MHz)	EIRP (WATTS)	DISTANCE TO BASE OF TOWER (FEET)	MAXIMUM PERMISSIBLE EXPOSURE (MW/SQ-CM)	AT THE BASE OF THE TOWER	
					POWER DENSITY (MW/SQ-CM)	PERCENT OF MAX. EXPOSURE
1	6700.0000	9172	80	1.000	0.0006416	0.0642
2	866.0000	1629	155	0.577	0.0023371	0.4050
3	866.0000	1629	155	0.577	0.0023371	0.4050

TOTAL PERCENT OF MAXIMUM PERMISSIBLE EXPOSURE FOR
 UNCONTROLLED ENVIRONMENTS FOR ALL 3 RADIO SYSTEMS = 0.8742

- NOTES: 1. THE POWER DENSITIES REPRESENTING THE 'MAXIMUM PERMISSIBLE EXPOSURE FOR UNCONTROLLED ENVIRONMENTS' ARE CALCULATED IN ACCORDANCE WITH IEEE C95.1-1991 (REVISION OF ANSI C95.1-1982).
2. POWER DENSITIES ARE CALCULATED IN ACCORDANCE WITH THE METHODS DEFINED IN FCC DOCUMENT 'OET BULLETIN NO.65', AUGUST 1997
3. EIRP (EFFECTIVE ISOTROPICALLY RADIATED POWER) REFERENCES THE RADIATED POWER TO A POINT SOURCE, WHICH YIELDS POWERS 1.6406 TIMES HIGHER THAN ERP.

POWER DENSITY ANALYSIS

=====

POWER DENSITY (% OF MAX. EXPOSURE VS DISTANCE FROM THE TOWER BASE

SITE NAME:	SPOONER HILL	PREPARED BY:	D.P.S.
TOWER HEIGHT:	180 FEET	ON DATE:	08-07-2000

DISTANCE (FEET)	POWER DENSITY (% OF MAX. EXPOSURE)
-----	-----
0	0.8742
100	0.6110
200	0.3058
300	0.1717
400	0.1064
500	0.0715
600	0.0510
700	0.0381
800	0.0295
900	0.0235
1000	0.0230
1100	0.0317
1200	0.0372
1300	0.0401
1400	0.0412
1500	0.0411
1600	0.0402
1700	0.0389
1800	0.0373
1900	0.0356
2000	0.0338
2100	0.0321
2200	0.0304
2300	0.0288
2400	0.0273
2500	0.0259



EM-SCLP-162-000727

500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7730
Fax: (860) 513-7614

RECEIVED

JUL 27 2000

CONNECTICUT
SITING COUNCIL

Peter W. van Wilgen
Director – Real Estate Operations

July 27, 2000

Mr. Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: Springwich Cellular Limited Partnership – Winchester Cell Site

Dear Mr. Gelston:

Springwich Cellular Limited Partnership (“SCLP”) plans to allow the following entities to install antennas and equipment on its Whalen’s Hill telecommunications site off Oakdale Avenue in Winchester, Connecticut:

- Connecticut State Police
- Sprint Spectrum Limited Partnership (“Sprint”)

Please accept this letter as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter is being sent to the First Selectman of the Town of Winchester.

Enclosed with this letter are a site location map, a site plan, and a proposed tower cross-section. Engineering information concerning the structural carrying capacity of the modified (replacement) tower will be provided to the Council as soon as it is available.

The existing facility consists of a 180 foot monopole and two equipment shelters located off Oakdale Avenue in Winchester, with tower coordinates of N 41° 55’ 18” and W 73° 02’ 58” (NAD 83). This facility was approved by the Connecticut Siting Council in its November 26, 1990 Decision and Order in Docket No. 138. The facility has been shared with AT&T Wireless (“AT&T”) since 1996.

The existing tower is structurally inadequate to accommodate all of the proposed additions and must be replaced. SCLP proposes to replace the existing 180 foot monopole with a more structurally sturdy monopole of equal height approximately 30 feet southeast of the existing tower (centerline-to-centerline distance). The existing 180 foot tower will be dismantled and removed.

SCLP and AT&T will relocate their existing antennas to centerlines of 180 feet and 170 feet, respectively, on the new tower, and will continue to use their existing equipment buildings measuring 12 feet by 26 feet and 12 feet by 20 feet, respectively. SCLP's antennas will project 2 feet above the tower, for a total height of 182 feet.

The Connecticut State Police propose to attach two 21 foot whip type antennas at a *transmitter segment* centerline height of 160 feet and a microwave dish at 80 feet height. They also plan a 12 foot by 34 foot equipment building, as well as a buried propane tank to fuel an emergency generator.

Sprint plans to attach to the tower nine (9) panel type antennas with centers at a tower height of 134.5 feet and to install equipment on an 8 foot by 20 foot pad adjacent to the tower.

The changes to the Winchester tower facility do not constitute a modification as defined in Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be significantly changed or altered. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b)(2) because they will not result in any substantial adverse environmental effect.

1. The height of the tower will be unaffected. The existing 180 foot monopole will be replaced with a new 180 foot monopole, and the existing tower will be removed.
2. The proposed changes will not extend the site boundaries. SCLP leases a parcel of land 100 feet by 100 feet in size. The existing fenced area is approximately 88 feet by 94 feet. All proposed changes will take place within the existing fenced area as shown on the attached site plan.
3. The proposed additions will not increase the noise level at the existing facility by six decibels or more. Except for noise resulting from construction, the only additional noise will be from equipment cooling systems.
4. Operation of the additional antennas will not increase the total radio frequency electromagnetic radiation power density, measured at the tower base, to a level at or above the Connecticut and ANSI standard. A "worst-case" calculation in accordance with FCC OET Bulletin No. 65 for a point at the base of the tower is as follows:

Company	Power Density (mW/cm²)	Height (feet)	Standard Limits (mW/cm²)	% of Standard
SCLP	0.02271	180	0.5867	3.87%
AT&T	0.01077	170	0.5793	1.86%
CT State Police	0.03034	160	0.5773	5.25%
Sprint	0.02948	134.5	1.0000	2.95%
Total				13.93%

Thus, the total radio frequency electromagnetic radiation power density for the site would be 13.93% of the state and federal standard after completion of the proposed modifications.

Moreover, the replacement tower will accommodate multiple users as shown on the enclosures, in order to further the intent of C.G.S. Section 16-50aa. Space for one additional platform is provided.

For the foregoing reasons, SCLP respectfully submits that the changes to implement expanded shared use at the Winchester site constitute an exempt modification under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (860) 513-7730 with questions concerning this application. Thank you for your consideration in this matter.

Respectfully yours,



Peter W. van Wilgen
Director – Real Estate Operations

Enclosures

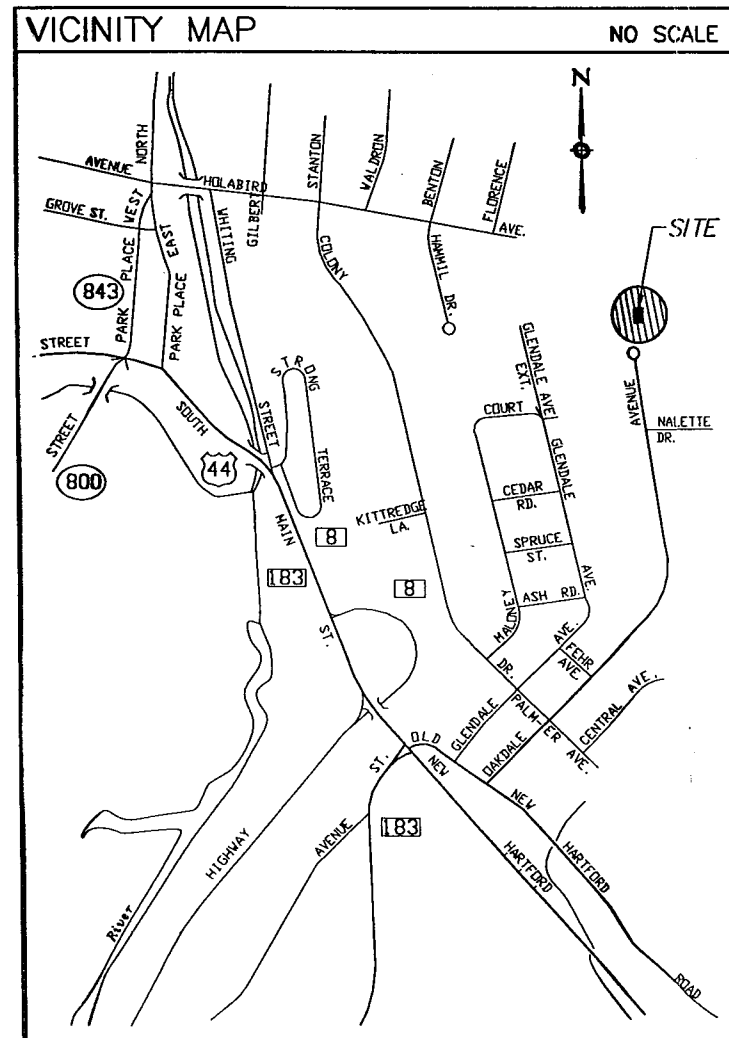
cc: Honorable John Arcelaschi, First Selectman
Town Hall
338 Main Street
Winsted, Connecticut 06098

SPRINGWICH CELLULAR LIMITED PARTNERSHIP

WIRELESS COMMUNICATIONS FACILITY

WHALEN'S HILL-TOWER SITE #1071

15 OAKDALE AVE. WINCHESTER, CONNECTICUT




PROJECT SUMMARY	
SITE NAME:	WHALEN'S HILL
SITE ADDRESS:	OAKDALE AVE. WINCHESTER, CONNECTICUT
CONTACT PERSON:	SNET MOBILITY-ROCKY HILL TOM FENTON (860) 513-7601
APPLICANT:	SPRINGWICH CELLULAR LIMITED PARTNERSHIP 500 ENTERPRISE DRIVE ROCKY HILL, CT. 06067
ARCHITECT:	URS GREINER WOODWARD CLYDE, A.E.S. 500 ENTERPRISE DRIVE ROCKY HILL, CT 06067
M/E/P ENGINEER:	URS GREINER WOODWARD CLYDE, A.E.S. 500 ENTERPRISE DRIVE ROCKY HILL, CT 06067
SURVEYOR:	URS GREINER WOODWARD CLYDE, A.E.S. 500 ENTERPRISE DRIVE ROCKY HILL, CT 06067

LEGEND	
SYMBOL	DESCRIPTION
=====	EXISTING CONSTRUCTION TO REMAIN
=====	NEW CONSTRUCTION

ABBREVIATIONS	
EXIST.	EXISTING
TYP.	TYPICAL
BIT.	BITUMINOUS

SHEET INDEX	
SHT. NO.	DESCRIPTION
T-1	TITLE SHEET
SC-1	SITE PLAN AND ELEVATION



A/E FIRM
**URS Greiner Woodward Clyde
A-E-S**
500 ENTERPRISE DRIVE
ROCKY HILL, CONNECTICUT
1-(860)-629-8882

A/E SEAL

PROJECT NO: F301804.10/F03

DRAWN BY: CRS

CHECKED BY:

ISSUED FOR	
06-06-99	SITING COUNCIL
12-23-99	REVIEW
01-21-00	REVIEW
05-08-00	REVIEW
06-16-00	FINAL

THE INFORMATION CONTAINED
IN THIS SET OF DOCUMENTS
IS PROPRIETARY BY NATURE.
ANY USE OR DISCLOSURE
OTHER THAN THAT WHICH
RELATES TO SNET IS
STRICTLY PROHIBITED.

**WHALEN'S HILL
TOWER SITE**

15 OAKDALE AVE.
WINCHESTER, CT

SCALE: NONE

DATE: 08-06-99

DRAWING 1 OF 2

TITLE
SHEET

T-1



A&E FIRM
**SBS Gruber Woodward Clyde
 A-E-S**
 500 ENTERPRISE DRIVE
 ROCKY HILL, CONNECTICUT
 1-(860)-629-8882

A&E SEAL

PROJECT NO: F301804.10/F03

DRAWN BY: HLM

CHECKED BY:

ISSUED FOR

08-06-99	SITING COUNCIL
12-23-99	REVIEW
01-21-00	REVIEW
05-08-00	REVIEW
06-16-00	FINAL

THE INFORMATION CONTAINED
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 ANY USE OR DISCLOSURE
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 RELATES TO SNET IS
 STRICTLY PROHIBITED.

**WHALEN'S HILL
 TOWER SITE**

15 OAKDALE AVE.
 WINCHESTER, CT

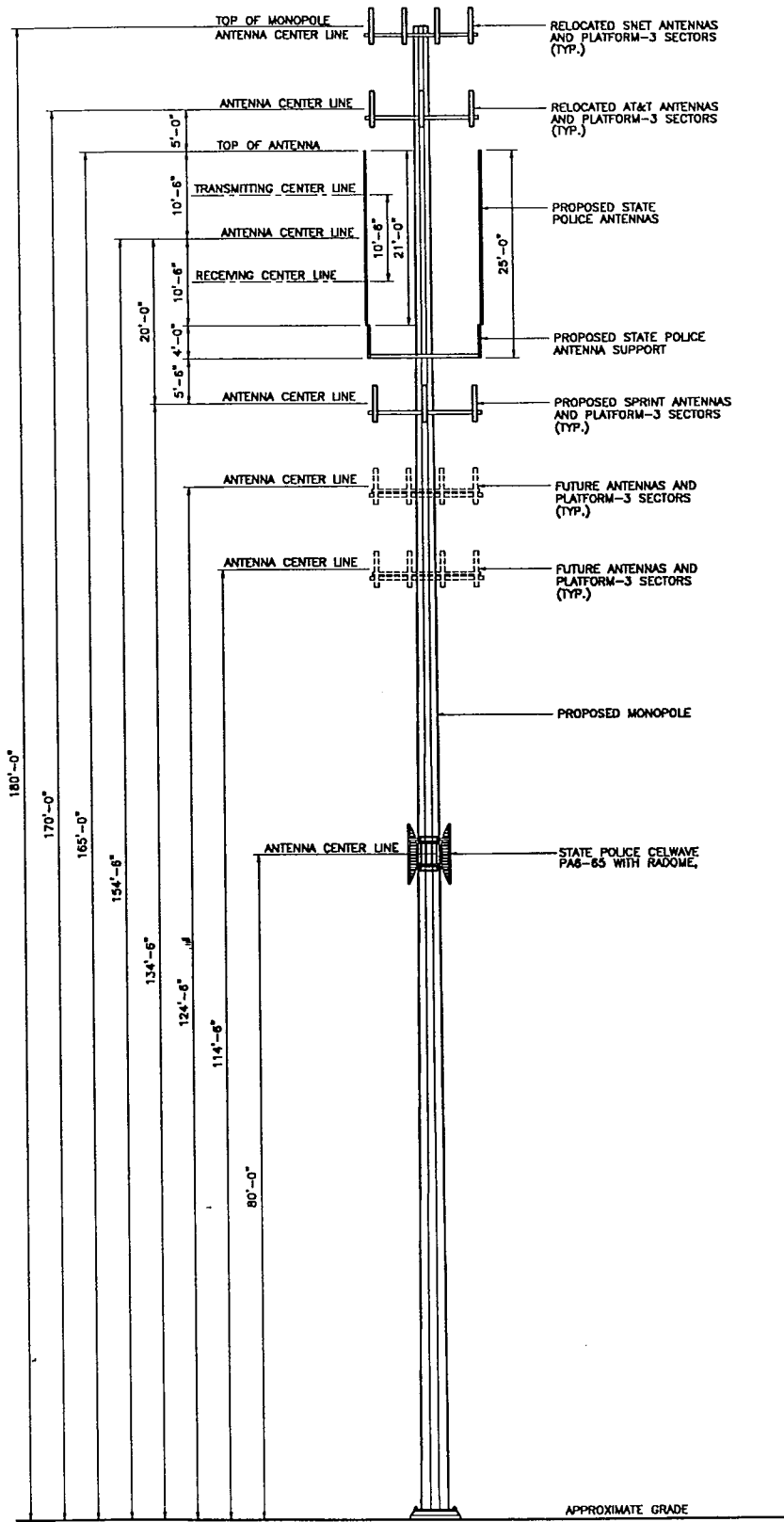
SCALE: AS NOTED

DATE: 08-06-99

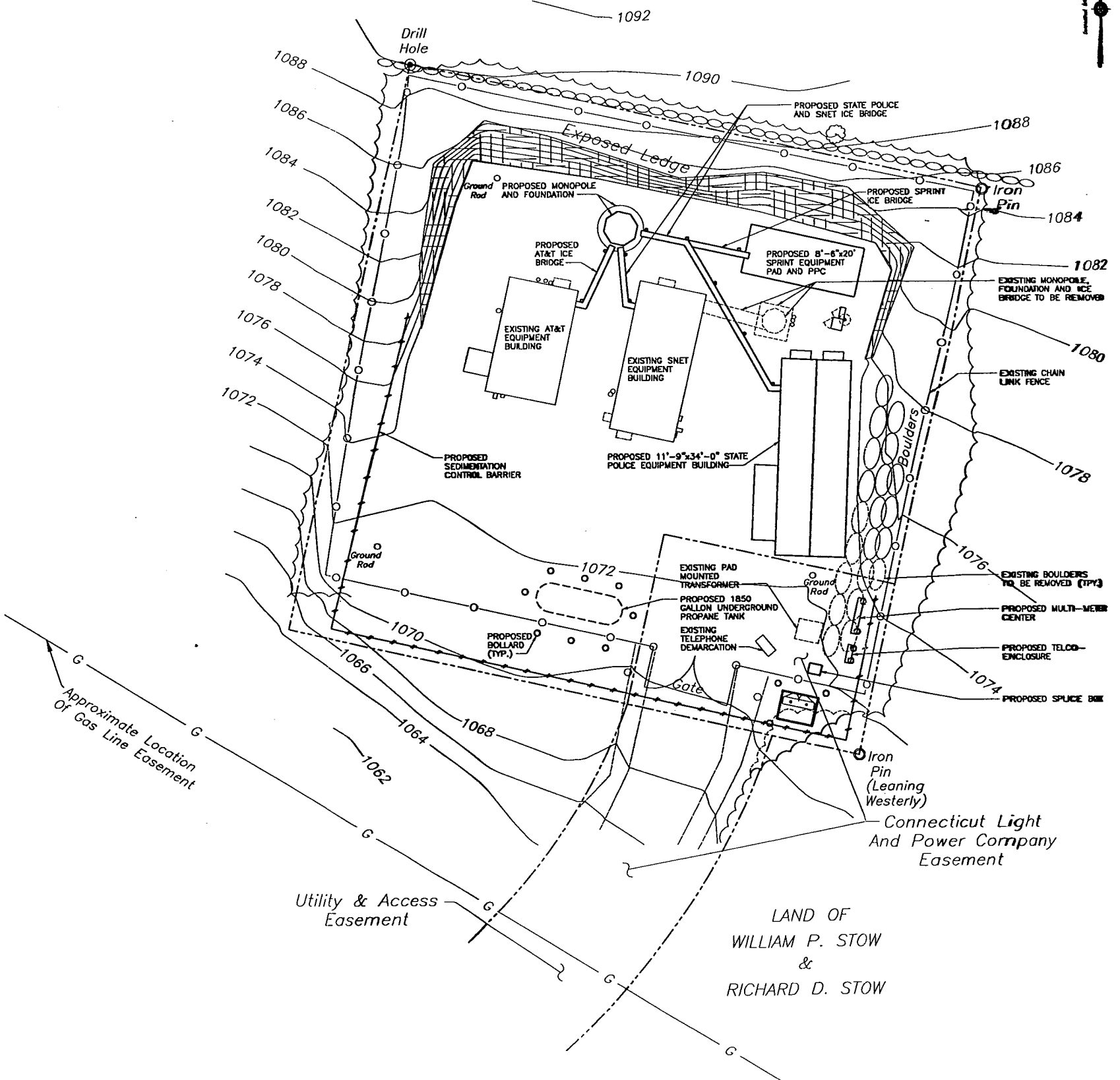
DRAWING 2 OF 2

**SITE PLAN
 AND
 ELEVATION**

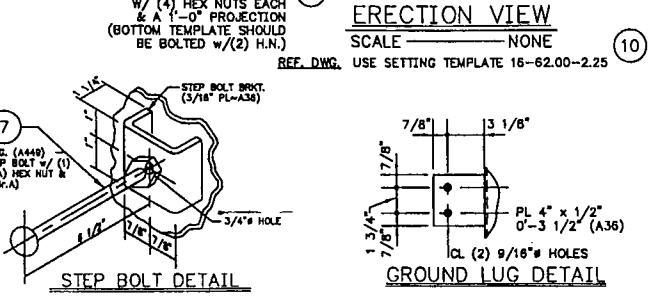
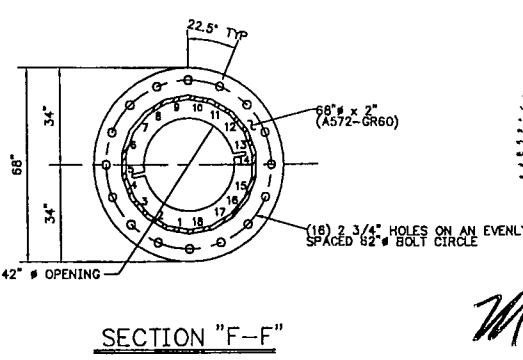
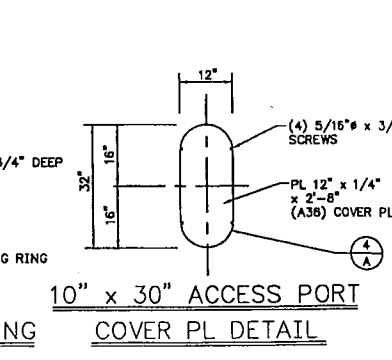
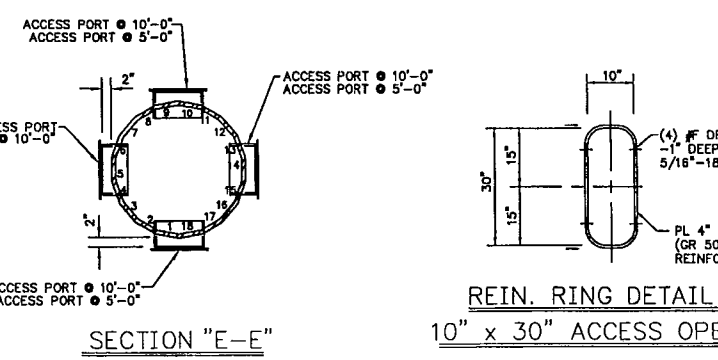
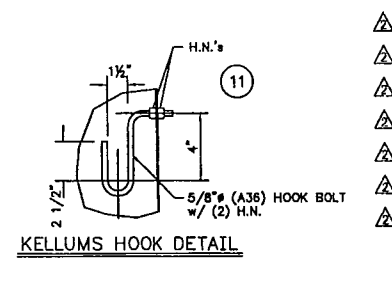
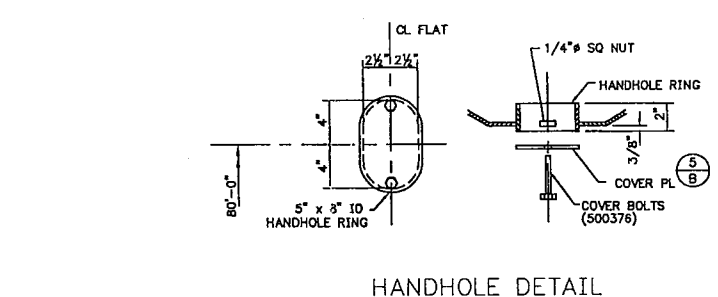
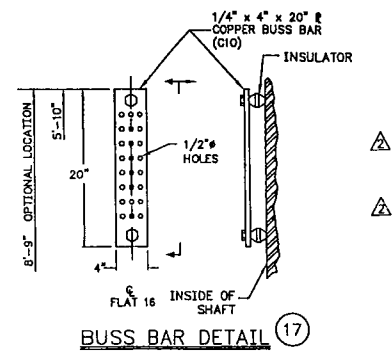
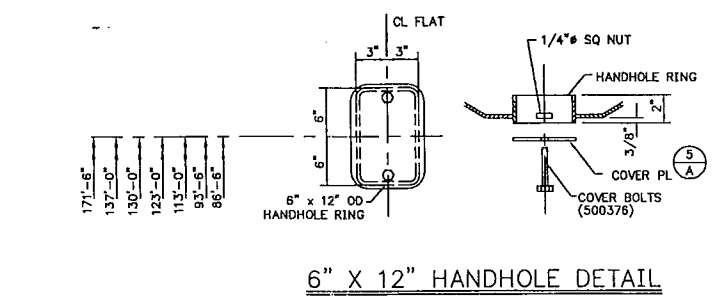
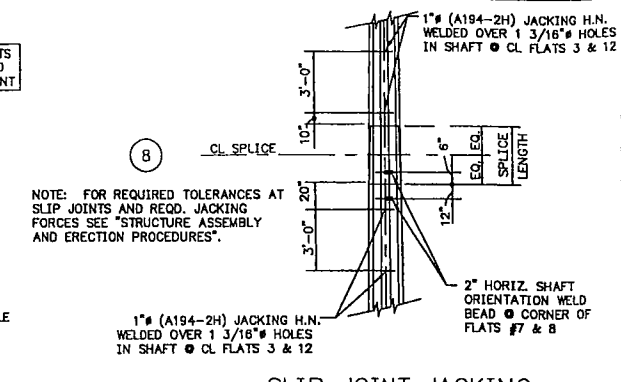
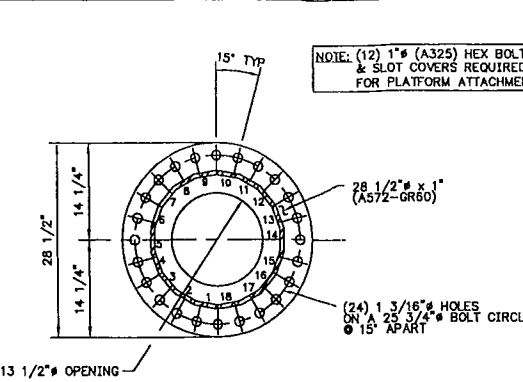
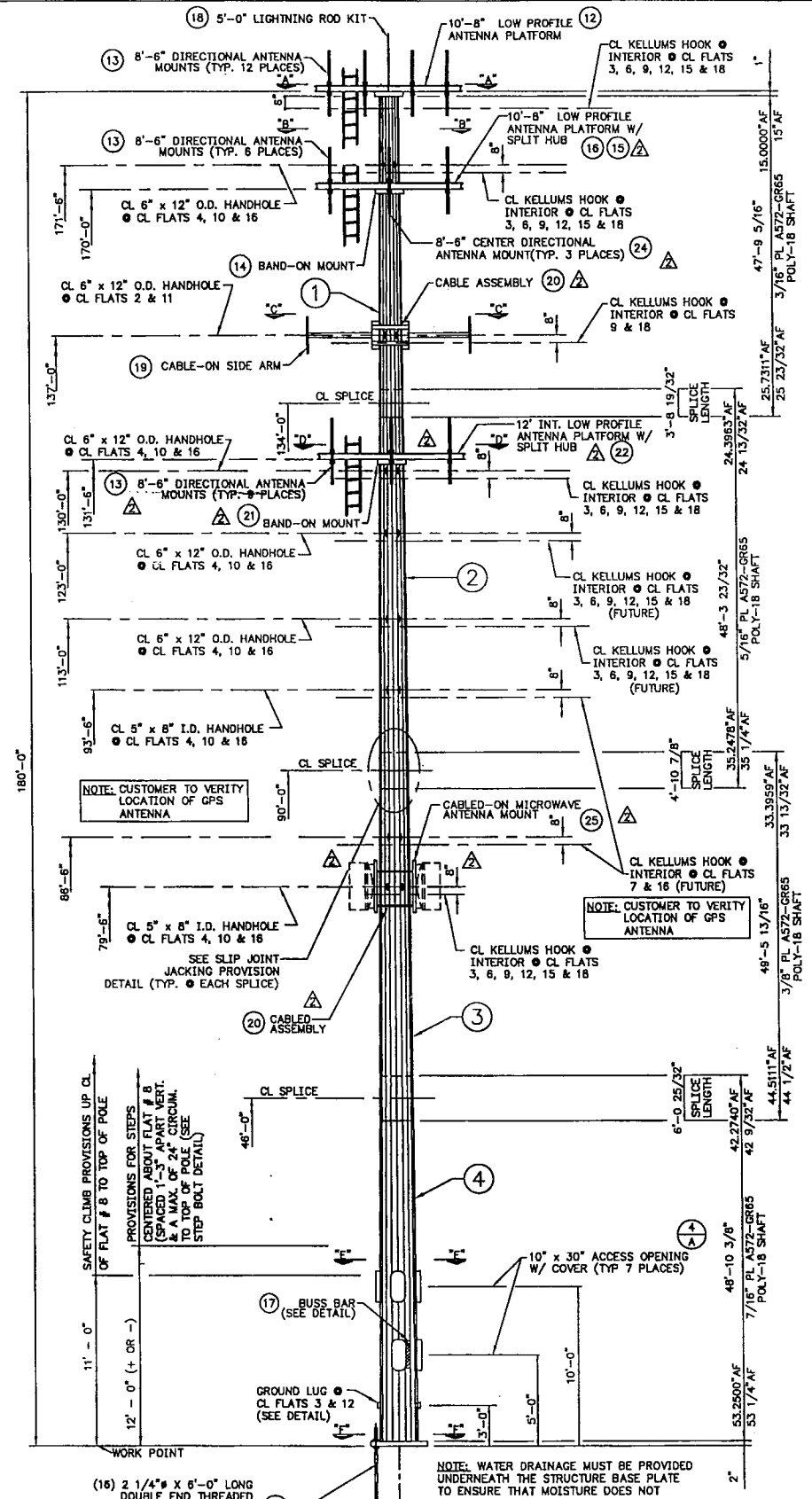
SC-1



2 TOWER ELEVATION
 SCALE: 1" = 10'-0"



1 SITE PLAN
 SCALE: 1" = 10'-0"



ASSEMBLY MARKING PROCEDURE
EACH INDIVIDUAL ASSEMBLY SHALL HAVE A METAL TAG WELDED TO IT WHICH WILL BE ENGRAVED WITH THE ASSEMBLY MARK NO. AS SHOWN IN THE MATERIAL BLOCK. (MINIMUM OF 5/8\"/>

MATERIAL REQ'D. PER ASSEMBLY

GALV. WT.	QTY.	ITEM	MK. NO.	DESCRIPTION
2,263.16	1	(1)	GSC27494	SHAFT ASSY. (TOP SECTION)
5,171.08	1	(2)	GSC27495	SHAFT ASSY. (UP. MID. SECTION)
8,139.86	1	(3)	GSC27496	SHAFT ASSY. (LOW. MID. SECTION)
12,847.45	1	(4)	GSC27497	SHAFT ASSY. (BOTTOM SECTION)
25.00	7	(A)	C12669	12\"/>
		(5)		HARDWARE AS FOLLOWS:
5.51	18	(S)	GS14842	6\"/>
2.64	3	(S)	P-10811	5\"/>
101.46	16	(6)	2.25-AB0600E-4	2 1/4\"/>
1.08	142	(7)	S10006	STRUCTURE ASSEMBLY AND ERECTION PROCEDURES
		(8)		170'-0\"/>
		(9)		10'-0\"/>
		(10)		SAFETY CLIMB HARNESS
155.64	2	(10)	16-62.00-2.25	SETTING TEMPLATE
1.50	26	(11)	GS13625	5/8\"/>
1235.15	1	(12)	K10008A	10'-8\"/>
41.71	27	(13)	K10944	8'-6\"/>
294.90	1	(14)	K10682	BAND-ON MOUNT (SM) 25 3/4\"/>
357.25	1	(15)	K10499	INTERMEDIATE SPLIT HUB (SM) 25 3/4\"/>
895.74	1	(16)	K10496	10'-8\"/>
7.50	1	(17)	K10062	BUSS BAR KIT
21.00	1	(18)	K10122	5'-0\"/>
84.96	2	(19)	ABD03	6'-0\"/>
9.55	8	(20)	K10843	CABLE FIT ASSEMBLY
442.46	1	(21)	K10688	BAND-ON PLATFORM MOUNT (L.G.) RANGE 23\"/>
549.45	1	(22)	K10501	SPLIT HUB FOR 12'-0\"/>
962.07	1	(23)	K10498	12'-0\"/>
35.37	3	(24)	K10946	8'-6\"/>
97.75	2	(25)	WA10600	MICROWAVE MOUNT
	1	(26)		STRUCTURE IDENTIFICATION TAG

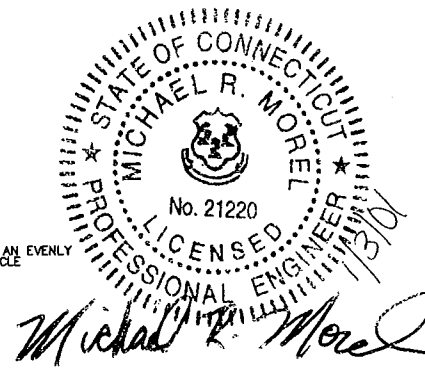
TOTAL GALV. STR. & ACCES. WT. 37,455.77#
TOTAL ANCHOR BOLT & TEMPLATE WT. 1,934.64#

- GENERAL NOTES**
- ALL WELDS SHALL BE IN ACCORDANCE WITH A.W.S. D.11.
 - LONGITUDINAL SEAM WELDS IN FEMALE SECTION OF THE SLIP JOINT SHALL BE FULL PENETRATION WELDS.
 - FOR PROPER SHAFT ALIGNMENT, A 2\"/>
 - FIELD ASSEMBLY NUTS (1\"/>
 - THE BOTTOM OF THE UPPER SECTION SHALL BE TELESCOPED IN THE FIELD TO WITHIN 12\"/>
 - A SLOT 1 1/2\"/>
 - GAP BETWEEN TOP OF FOOTING AND BOTTOM BASE PLATE SHALL BE FILLED WITH A NON-SHRINK GROUT.
 - POLES SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
 - POLE TAPER = 0.2218 IN./FT.

DESIGN NOTES
DESIGNED IN ACCORDANCE WITH TIA/EIA 222-F 80 MPH BASIC WIND SPEED 1/2\"/>

THIS DRAWING IS CONFIDENTIAL AND MAY NOT BE LOANED, REPRODUCED, COPIED EITHER WHOLLY OR IN PART, OR MADE PUBLIC IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF ENGINEER ENDEAVORS INC.-ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

LITCHFIELD COUNTY, CT
SITE: OAKDALE AVE



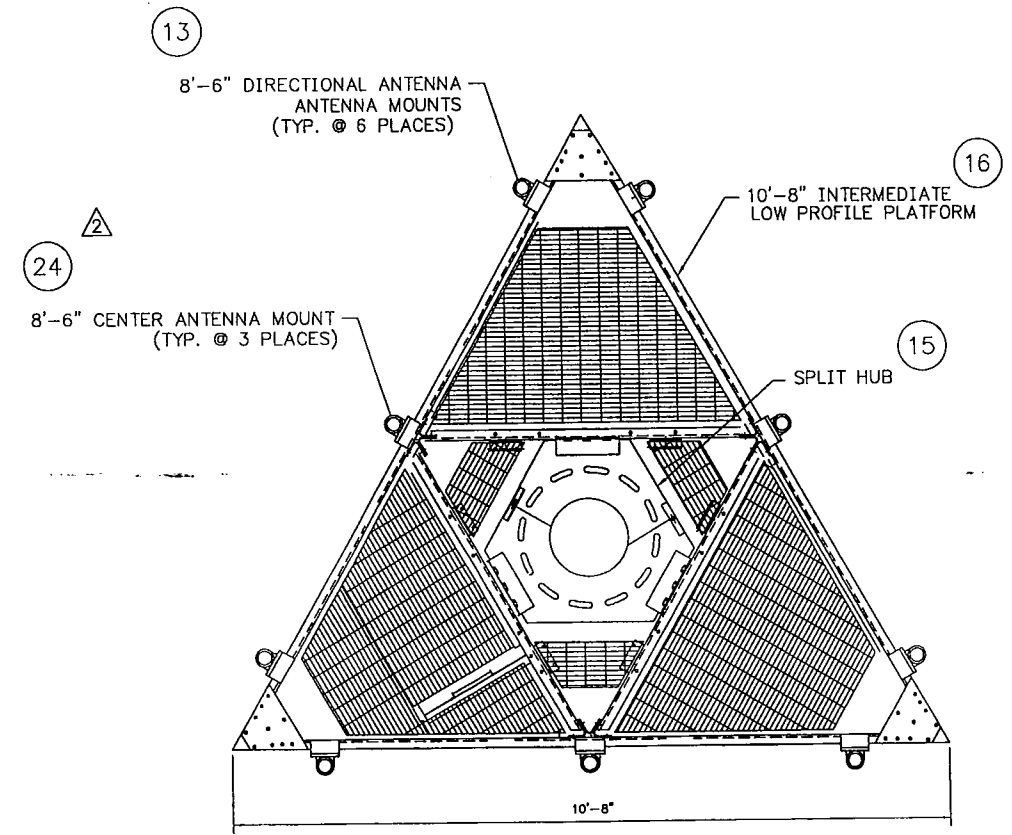
REV.	DESCRIPTION	DATE	DWN.	CHK.	APP.
2	ADDED EQUIPMENT	12/12/00	D.W.D.		
1	COMPLETED DETAILING	11/17/00	D.W.D.		

ENGINEERED BY: 7810 Jeather Drive, Mentor, Ohio 44060
ENDEAVORS • (440) 918-1101
INCORPORATED

180'-0" MONOPOLE
URS GREINER

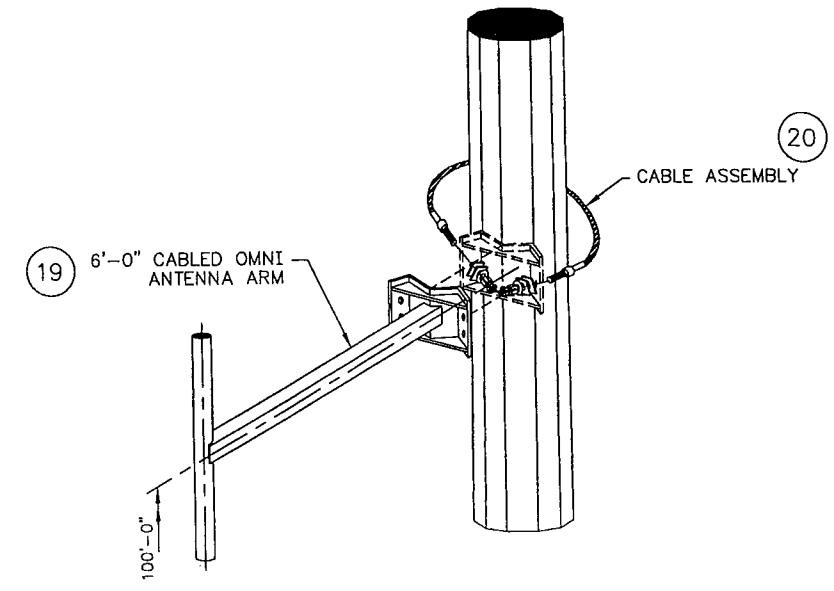
D.W.D. DATE 08-22-00
SCALE NONE
G552614

EUI WILL NOT HONOR ANY BACKCHARGES WHICH HAVE NOT RECEIVED PRIOR WRITTEN AUTHORIZATION phone (440) 918-1101

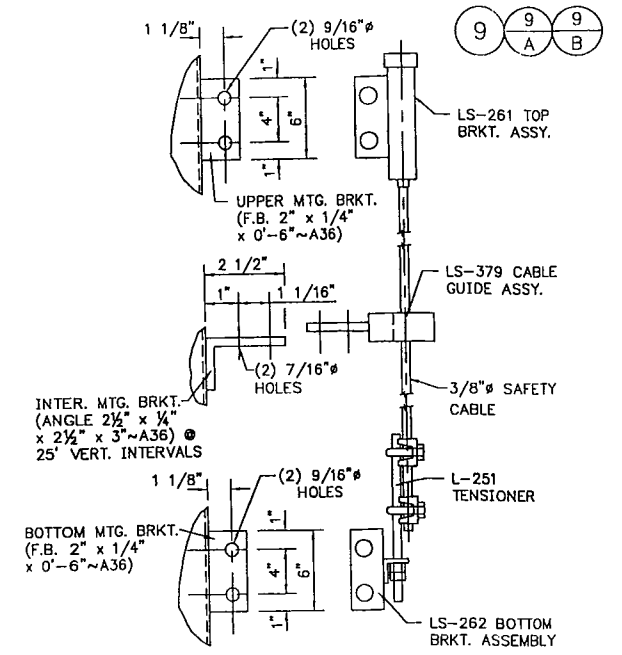


SECTION "B-B"

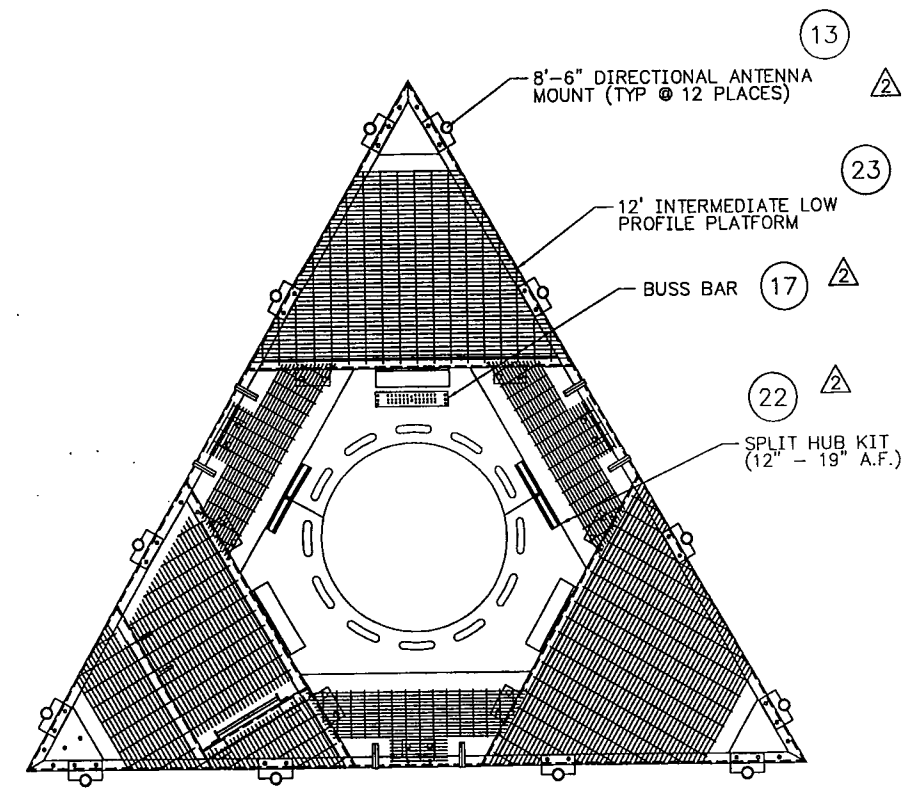
NOTE: (12) 1" (A325) HEX BOLTS & SLOT COVERS REQUIRED FOR PLATFORM ATTACHMENT



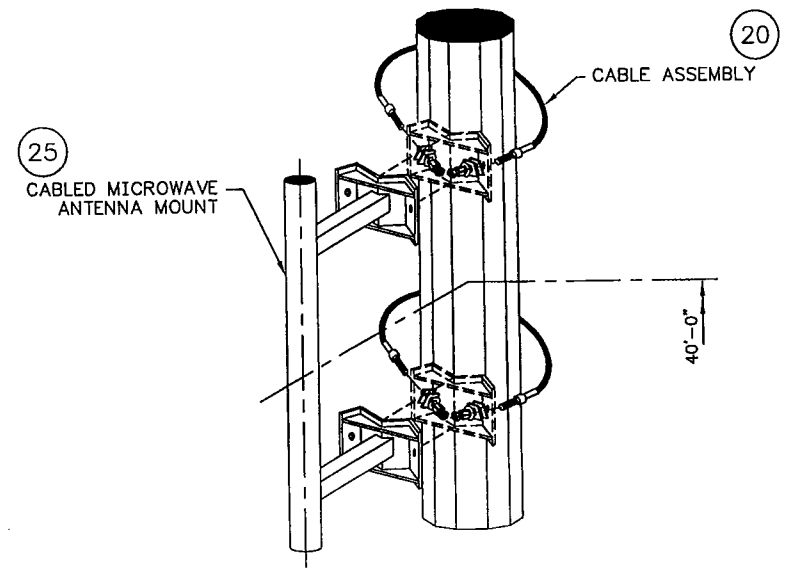
SECTION "C-C"



SAFETY CLIMB ATTACHMENT DETAILS (LOCATED ALONG CL OF FLAT #8)



VIEW "D-D"



MICROWAVE MOUNT DETAIL

STATE OF CONNECTICUT
 MICHAEL R. MOREL
 No. 21220
 LICENSED PROFESSIONAL ENGINEER
 1/3/01
Michael R. Morel

ASSEMBLY MARKING PROCEDURE
 EACH INDIVIDUAL ASSEMBLY SHALL HAVE A METAL TAG WELDED TO IT WHICH WILL BE ENGRAVED WITH THE ASSEMBLY MARK NO. AS SHOWN IN THE MATERIAL BLOCK. (MINIMUM OF 5/8" HIGH LETTERS)

LITCHFIELD COUNTY, CT
 SITE: OAKDALE AVE.

REV.	DESCRIPTION	DATE	DRW.	CHK.	APP.
1	UPDATED DRAWING	12/13/00	D.W.D.		
1	COMPLETED DETAILING	12/13/00	D.W.D.		

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ENGINEERED
 ENDEAVORS INCORPORATED
 7810 Jenther Drive
 Mentor, Ohio 44060
 (440) 918-1101

180'-0" MONOPOLE
 URS GREINER

DATE: 8/22/00
 DATE: 12/13/00
 SHEET: 2 OF 2
 PROJECT: GS52614

EEL WILL NOT HONOR ANY BACKCHARGES WHICH HAVE NOT RECEIVED PRIOR WRITTEN AUTHORIZATION phone (440) 918-1101