

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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

April 13, 1999

Peter van Wilgen SNET Mobility Inc 500 Enterprise Drive Rocky Hill, CT 06067-3900

RE:

TS-SCLP-115-990315 - Springwich Cellular Limited Partnership request for an order to approve tower sharing at an existing telecommunications facility located off 54 Waterbury Road, Prospect, Connecticut.

Dear Mr. van Wilgen

At a public meeting held April 6, 1999, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures, conditioned with a requirement for landscaping around the equipment building.

This facility has been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequency now used on this tower. 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 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.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction.

The proposed shared use is to be implemented as specified in your letter dated March 15, 1999 and additional information dated March 25, 1999. Please notify the Council when all work is complete.

Selila Aur C

Very truly yours,

Mortimer A. Gelston

Chairman

MAG/RKE/kj

c: Honorable Robert J. Chatfield, Mayor, Town of Prospect



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

Peter W. van WilgenDirector - Real Estate Operations

March 29, 1999

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

CONNECTICUT SITING COUNCIL

RE: Springwich Cellular Limited Partnership--Prospect Cellular Communication Site

Dear Chairman Gelston:

In response to the Council's request at its March 24, 1999 meeting, this is to clarify the effectiveness of the lightning rod on the above referenced tower even though it may be slightly lower in height than the adjacent antennas. Due to the unique nature of a lightning rod with its direct route to the ground via a substantially sized grounding wire, the lightning is attracted to the rod rather than the antennas as the easiest and most direct route to the ground. Please note that usually all appurtenances attached to a tower are typically attached to the main ground, thereby insuring the safety of the other tower tenants and the neighborhood in the event of a lightning strike.

If you have any further questions or concerns, please do not hesitate to contact me.

Very truly yours,

Cow-y





MAR 25 1999

March 25, 1999

CONNECTICUT SITING COUNCIL SNET Mobility, Inc. 500 Enterprise Drive

Rocky Hill, Connecticut 06067-3900

Phone: (860) 513-7730 Fax: (860) 513-7614

Peter W. van WilgenDirector - Real Estate Operations

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

RE: Springwich Cellular Limited Partnership--Prospect Cellular Communication Site

Dear Chairman Gelston:

In response to the Councils' request at the March 24, 1999 meeting, the Council has asked SCLP to provide them with a structural analysis of the above referenced tower. Please find attached a structural analysis of the tower done by TECTONIC Engineering Consultants for SCLP on December 4, 1998. According to Section 6.0 <u>Conclusions and Recommendations</u> of the report it states "that the existing tower has sufficient capacity to support all of the existing antennas as well as those proposed by SNET Mobility."

Please note that the tower owner is actually removing two existing antennas currently at 124' and 117' to provide space for SCLP's antennas.

Thank you for time and if you have any further questions or concerns please do not hesitate to contact me at the above number.

Very truly yours,

SNET MOBILITY: PROSPECT
W.O. 2244.01
EXISTING 160' GUYED TOWER
PROSPECT, CT
STRUCTURAL ANALYSIS REPORT
DECEMBER 4, 1998

1.0 INTRODUCTION

The existing 160-foot guyed tower located behind a residence on Waterbury Road in Prospect, CT, is owned by Charles E. Bradshaw. It serves as a radio communications facility for the owner and numerous other companies. SNET Mobility anticipates installing their antennas on this tower in the near future.

Tectonic Engineering Consultants, PC has performed a detailed analysis of the tower to verify that it has adequate capacity to support SNET Mobility's proposed installation in accordance with current code requirements.

2.0 **EXISTING TOWER**

2.1 <u>Tower Structure</u>

The tower is a Model 480 SRMW originally designed by Utility Tower Company for another application and reportedly re-sold to Mr. Bradshaw in 1988 by North East Towers. No documentation about the original design or how the tower was re-erected was available from the owner. It is a conventional three-legged guyed tower with 20' long sections constructed of 2-1/2" diameter pipe leg members and 3/4" diameter pipe bracing members for its full height. The tower has a 2'-6" uniform width, tapering to a base pin at the 6'-8" long base section. An integral climbing ladder is built into one face of the tower and extends to the top. The steel is galvanized and was painted gray for the entire height approximately 3 years ago.

The tower is supported by single guys at two levels and double guys attached to a star mount at the top. The attachment points for the single guy wires are approximately at the 50' and 110' levels. All the guys are 7/16" diameter galvanized 7-wire strand except for the second level guys which are 1/2" diameter. The guys are attached to standard turnbuckles with cable clamps and connected to a common equalizer plate at each anchor strut.

All three sets of guys extend to anchor points approximately 110' from the tower. The anchor elevations are all within two feet of elevation difference with respect to the tower base. A diagram of the tower foundation and guy anchor details, apparently prepared by the tower manufacturer, was provided to Tectonic. However, no site identification or date was shown on the information provided. A diagram of the structure is presented in Figure 1, attached.

2.2 <u>Loading Criteria</u>

The original design was most likely based on RETMA Specifications, using a wind speed of 120 mph with no ice and 95 mph with 0.5" radial ice load. These assumptions are based on previous experience with Utility Tower Company.

No other information regarding the original loading is available.

3.0 **EXISTING TOWER**

3.1 Field Inspection

The tower was previously inspected on March 13, 1998 by representatives of Tectonic. A full-height climbing inspection was performed to identify the structural condition, existing antennas, and dimensions of the antenna mounts. The findings of our inspection are documented in our report dated March 26, 1998, which was prepared on behalf of Nextel Communications. No reinspection was made in conjunction with the present analysis.

We note that the tower foundation detail provided shows a bolted bearing plate at the base of the tower, which was not present when our inspection was done.

3.2 Existing Antennas & Equipment

At the time of our previous inspection, the tower was found to be supporting the items listed in Table 1 below. The south leg of the tower is designated as leg A, while the northwest and northeast legs are designated B and C, respectively.

Table 1
CURRENT ANTENNA / APPURTENANCE LOADING

Quantity	Antenna Type (or similar)	Mount	Mounting Height	Leg	Cable
2	ASP-682	Center of tower	160'	-	3/8"
1	ASP-682	Direct to leg	160'	С	3/8"
1	Lightning rod	Center of tower	160'	-	-
1	DB404	Direct to leg	160'	В	7/8"
1	PD455	Direct to star mount	160'	_	7/8"
1	TDE-6041A	Direct to star mount	160'	_	7/8"
3	Decibel DB810	5' Sidearm	145'	A, B, C	1-1/4"
1	PD1142	2' Sidearm	124'	Α	1/2"
1	TDE-6041A	5' Sidearm	117'	С	7/8"
1	ASP-602	Sidearm	50'	Α	7/8"

The existing cables are bundled to the tower legs.

4.0 PROPOSED INSTALLATION

It is our understanding that the existing antennas at the 124' and 117' level and their associated cables are to be removed and relocated to another tower. All other existing antennas and cables are expected to remain. The following items are proposed to be added to the tower by SNET Mobility:

- 9 Allgon 7120.16 panel antennas at the 120'-0" level (centerline) mounted on a 10' wide frame
- 9 1-1/4" cables to the 120'-0" level bundled in groups of 3, and strapped to each of the legs

5.0 STRUCTURAL ANALYSIS

5.1 Loading Criteria

In accordance with the provisions ANSI/TIA/EIA-222-F-1996 "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures", a

basic wind speed of 85 mph applies to New Haven County, CT. The 1994 Connecticut supplement to BOCA National Building Code – 1990 requires a wind speed of 80 mph within the Town of Prospect, which is less than the TIA requirement. Thus, a wind speed of 85 mph was used in our analysis.

Ice loads have been established based on a 0.5" radial ice thickness in accordance with industry standard practice. A reduced wind speed of 74 mph is used in conjunction with ice.

5.2 Procedure

The tower was analyzed with a general purpose, three-dimensional structural analysis program. Guy pretension was incorporated. Three (3) directions of wind incidence were considered (0°, 90°, and 180°). This analysis included the tower with the proposed antennas and cables as well as all of the existing antennas and cables, except for the two (2) that are being removed, as described above.

5.3 Assumptions

Several assumptions were made in order to perform the analysis. Each of these is considered by Tectonic to be both reasonable and consistent with current standards of practice.

- 1. Tower members have a yield strength of 36 ksi.
- 2. All guys are type EHS.
- 3. Only axial stresses are considered in the secondary members.
- 4. The tower foundation and guy anchors were constructed in accordance with the details provided.
- 5. Foundation design criteria utilized for the tower reflects actual subsurface conditions.

5.4 Results

- 1. The forces in the tower members resulting from the load case described in section 5.2 above are all within their allowable capacities. This is expected since the tower section that is used for this 160' tower is the same type that is usually supplied for towers of a much greater height. Specifically, the critical leg member is stressed to 57% of its capacity, the critical horizontal and diagonal bracing members are stressed to less than 50% of their capacity.
- 2. The critical guy is stressed to 56% of its allowable load.

December 4, 1998

3. The maximum reaction at the base of the tower, and the maximum reaction at the guy anchors are well within their allowable capacities, based on the information provided.

A copy of our final computer output is attached.

6.0 **CONCLUSIONS AND RECOMMENDATIONS**

As a result of our inspection and analysis, we find that the existing tower has sufficient capacity to support all of the existing antennas as well as those proposed by SNET Mobility. No structural problems for the tower, guys, foundation, or anchors are anticipated.

Any further changes to the proposed antenna configuration should be reviewed with respect to their effect on structural loads prior to implementation.

Prepared by:

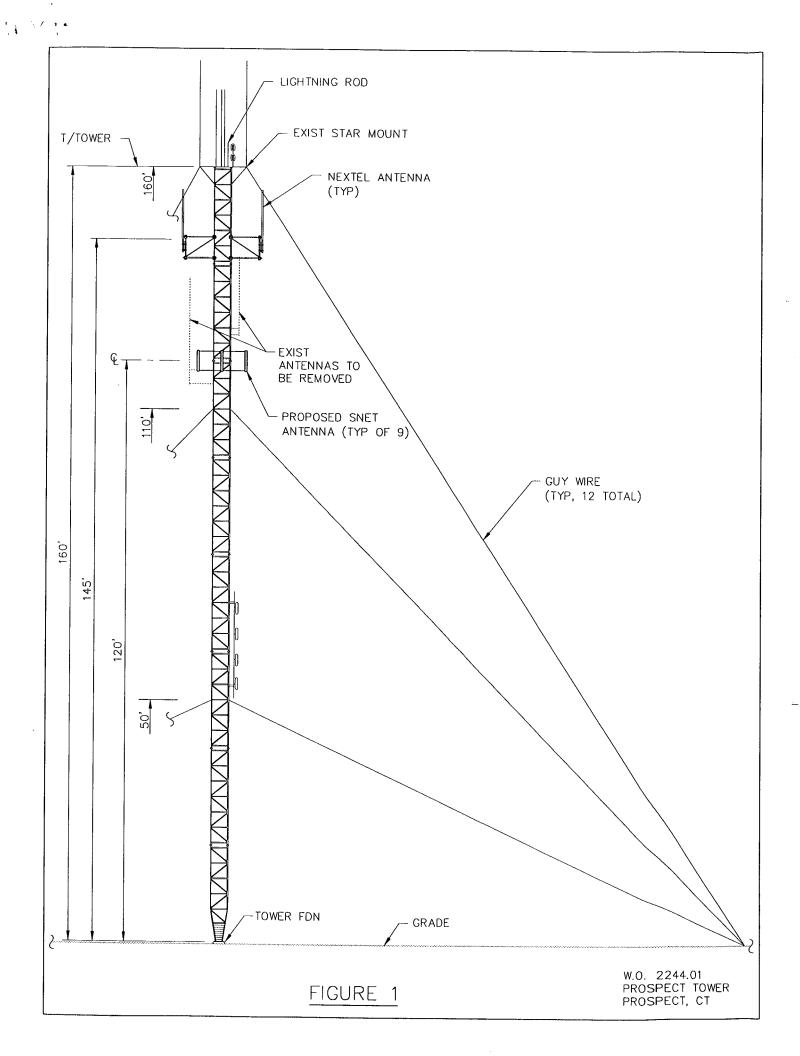
Tammy L. Rossie

Project Manager

Reviewed by

Managing Principa

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1. STAAD SPACE 2244.01 160' GUYED TOWER PROSPECT CT.
  2.
  3. *160' GUYED TOWER MODELED AS A STICK
  4. *INCLUDING ANTENNAS FOR SNET MOBILITY
5. *
  6. INPUT WIDTH 72
  7. *
  8. UNIT KIP FEET
 9. *
10. SET NL 3
 11.
 12. JOINT COORDINATES
13. *
14. *JOINTS OF SHAFT:
15. *
16. *BOTTOM SECTION:
17. 1000 0 0 0
18. 1001 0 1.67 0
19. 1003 0 3.35 0
20.100505.030
21. 1006 0 6.71 0
22. 1010 0 10 0
23. 1020 0 20 0
24. *
25. 1030 0 30 0
26. 1040 0 40 0
27. *
28. *GUY ATTACHMENT POINT #1:
2\,9\,\,.\quad 1\,0\,5\,0\quad 0\quad 5\,0\quad 0
30. *
31. 1060 0 60 0
32. 1070 0 70 0
3\ 3\ .\quad 1\ 0\ 8\ 0\quad 0\quad 8\ 0\quad 0
34. 1090 0 90 0
35. 1100 0 100 0
36. *
37. *GUY ATTACHMENT POINT #2:
38. 1110 0 110 0
39. *
40. 1120 0 120 0
41. 1130 0 130 0
```

```
4\ 2\ . \quad 1\ 1\ 4\ 0 \quad 0 \quad 1\ 4\ 0 \quad 0
 43. 1150 0 150 0
 44.
 45. *STAR MOUNT ATTACHMENT POINTS (GUY ATTACHMENT POINT #3):
 46. 1155 0 155.75 0
 47. 1160 0 160 0
 48.
 49. JOINT COORDINATES CYLINDRICAL REVERSE
 50. *OUTSIDE STAR MOUNT JOINTS:
 51. 20160 3.46 160 90

      52.
      30160
      3.46
      160
      330

      53.
      40160
      3.46
      160
      210

 54. *
 55. *GUY ANCHORS:
 56. *A:
57. 2000 113 0 150
 58. *B:
 59. 3000 113 0 30
60. *C:
61. 4000 113 0 270
62. *
 63. MEMBER INCIDENCES
64. *
65. 1000 1000 1001
66. 1001 1001 1003
 67. 1003 1003 1005
68. 1005 1005 1006
69. 1006 1006 1010
70. 1010 1010 1020
71. \ 1020 \ 1020 \ 1030
7\ 2\ .\quad 1\ 0\ 3\ 0\quad 1\ 0\ 3\ 0\quad 1\ 0\ 4\ 0
73. 1040 1040 1050
74. 1050 1050 1060
7\, 5 \; . \quad 1\, 0\, 6\, 0 \quad 1\, 0\, 6\, 0 \quad 1\, 0\, 7\, 0
76. 1070 1070 1080
77. 1080 1080 1090
78. 1090 1090 1100
79. 1100 1100 1110
80. 1110 1110 1120
81. 1120 1120 1130
82. 1130 1130 1140
83. 1140 1140 1150
84. 1150 1150 1155
85. 1155 1155 1160
86. *
87. *STAR MOUNT MEMBERS:

    89.
    30160
    1160
    30160

    90.
    40160
    1160
    40160

    91.
    20155
    1155
    20160

    92.
    30155
    1155
    30160

93. 40155 1155 40160
94. *
95. *GUYS:
96. *FOR ANCHOR A:
97. *1:
```

```
98. 2100 2000 1050

99. *2:

100. 2200 2000 1110

101. *3A:

102. 2300 2000 20160

103. *3B:

104. 2310 2000 40160

105. *
106. *FOR ANCHOR B:
107. *1:
108. 3100 3000 1050
109. *2:
110. 3200 3000 1110
111. *3A:
112. 3300 3000 30160
113. *4A:
114. 3310 3000 20160
115. *
116. *FOR ANCHOR C:
117. *1:
118. 4100 4000 1050
119. *2:
1\ 2\ 0\ .\quad 4\ 2\ 0\ 0\quad 4\ 0\ 0\ 0\quad 1\ 1\ 1\ 0
121. *3A:
122. 4300 4000 40160
123. *3B:
124. 4310 4000 30160
125. *
126. UNIT INCHES KIPS
127.
128. START USER TABLE
129. TABLE 1
130. PRISMATIC
131. SHAFT01
132. 5.1 100 141 141 0 0 0 0 0 0 133. SHAFT02 134. 5.1 100 269 269 0 0 0 0 0 135. SHAFT03
1\ 3\ 6\ .\quad 5\ .\ 1\quad 1\ 0\ 0\quad 4\ 3\ 8\quad 4\ 3\ 8\quad 0\quad 0\quad 0\quad 0\quad 0
137. SHAFT04
138. 5.1 100 652 652 0 0 0 0 0
139. SHAFT
1\ 4\ 0\ .\quad 5\ .\ 1\quad 3\ 5\ 8\quad 7\ 6\ 5\quad 7\ 6\ 5\quad 0\quad 0\quad 0\quad 0\quad 0
141. GUY1
1\ 4\ 4\ .\quad .\ 1\ 4\ 9\ 7\quad 0\quad 0\quad 0\quad 0\quad 0\quad 0\quad 0\quad 0
145. END
146. *
147. MEMBER PROPERTY AMERICAN
148. *
149. 1000 UPTABLE 1 SHAFT01
150. 1001 UPTABLE 1 SHAFT02
151. 1003 UPTABLE 1 SHAFT03
152. 1005 UPTABLE 1 SHAFT04
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153. *

```
154. 1006 1010 1020 1030 1040 1050 1060 1070 1080 UPTABLE I SHAFT
155. 1090 1100 1110 1120 1130 1140 1150 1155 UPTABLE I SHAFT
156.
157. 2100 2300 2310 UPTABLE 1 GUYI
158. 2200 UPTABLE I GUY2
159. 3100 3300 3310 UPTABLE 1 GUYI
160. 3200 UPTABLE 1 GUY2
161. 4100 4300 4310 UPTABLE 1 GUY1
162. 4200 UPTABLE 1 GUY2
163.
164. 20160 30160 40160 20155 30155 40155 TABLE ST L30306
165.
166. SUPPORT
167. *SHAFT BASE
168. 1000 PINNED
169. *GUY ANCHORS
170. 2000 3000 4000 PINNED
171. *
172. CONSTANT
173. E STEEL MEMBER 1000 1001 1003 1005 1006 1010 1020 1030 1040
174. E STEEL MEMBER 1050 1060 1070 1080 1090 1100 1110 1120 1130 175. E STEEL MEMBER 1140 1150 1155 20160 30160 40160
176. E STEEL MEMBER 20155 30155 40155
177. E 23000 MEMBER 2100 2200 2300 2310 3100 3200 3300 3310 178. E 23000 MEMBER 4100 4200 4300 4310
179. DENSITY STEEL ALL
180. *
181. MEMBER RELEASE
182. 2100 2200 2300 2310 3100 3200 3310 START MX MY MZ 183. 4100 4200 4300 4310 START MX MY MZ
184. 2100 2200 2300 2310 3100 3200 3300 3310 END MX MY MZ
185. 4100 4200 4300 4310 END MX MY MZ
186.
187. UNIT KIP FEET
188. *
189. *LOAD 1:
190. MEMBER CABLE
191. 2100 TENSION 2.261
192. 2200 TENSION 3.169
193. 2300 TENSION 4.070
194. 2310 TENSION 3.716
195. 3100 TENSION 1.831
196. 3200 TENSION 3.452
197. 3300 TENSION 4.303
198. 3310 TENSION 4.284
199. 4100 TENSION 1.641
200. 4200 TENSION 3.295
201. 4300 TENSION 3.745
202. 4310 TENSION 3.544
203. *
204. LOAD 1
205. SELFWEIGHT
206. *
207. *WIND ON TOWER
208. MEMBER LOAD
209. 1000 1001 1003 1005 1006 1010 UNI GZ -.033
```

```
210. 1020 1030 UNI GZ -.033
211. 1040 1050 UNI GZ -. 037
212. 1060 1070 UNI GZ -.040
213. 1080 1090 UNI GZ -.043
214. 1100 1110 UNI GZ -.046
215. 1120 1130 UNI GZ -.048
216. 1140 1150 1155 UNI GZ -.039
217.
218. *ICE AND CABLE WEIGHT
219. JOINT LOAD
2\ 2\ 0\ . \quad 1\ 0\ 0\ 0 \quad F\ Y \quad -\ .\ 3\ 8\ 6
221. 1020 FY - .386
222. 1040 FY - .383
223. 1060 FY - .380
224. 1080 FY -. 380
225. 1100 FY - .380
226. 1120 FY - .261
227. 1140 FY - .178
228. *
229. JOINT LOAD
230. *(3) ASP-682
231. 1160 FZ -.237 FY -.072 MX -1.896
232. *LIGHTNING ROD
233. 1160 FZ -. 024 FY -. 034 MX -. 059
234. *DB404
235. 1160 FZ -.047 FY -.053 MX -.140
236. *PD455
237. 1160 FZ -.116 FY -.107 MX -1.276
238. *TDE-6041A
239. 1160 FZ -.116 FY -.107 MX -1.276
240. *NEXTEL (3) DB810
241. 1140 FZ -1.019 FY -0.423 MX -7.131
242. *
243. **
244. JOINT LOAD
245. *SNET (9) - ALLGON ANTENNA
246. 1120 FZ -.832 FY -0.383 MX -4.160
247. MEMBER LOAD
248. *10' FRAME FOR SNET
249. 1120 CON GZ -1.919
250. 1120 CON GY -1.476
251. **
252. *PD1142(TO BE REMOVED)
253. *1140 CON GZ -0.063 2
254. *1140 CON GY -0.025 2
255. *TDE - 6041A(TO BE REMOVED)
256. *1110 CON GZ -0.177 7
257. *1110 CON GY -0.115 7
258. *ASP-602
259. JOINT LOAD
262. *
263. PERFORM ANALYSIS
```

11:35:16

11:35:16

11:35:17

11:35:17

11:35:17

++ Processing Element Stiffness Matrix.

++ Processing Global Stiffness Matrix.

++ Processing Triangular Factorization.

NUMBER OF JOINTS/MEMBER+ELEMENTS/SUPPORTS = 28/39/4
ORIGINAL/FINAL BAND-WIDTH = 18/5
TOTAL PRIMARY LOAD CASES = 1, TOTAL DEGREES OF FREEDOM = 156
SIZE OF STIFFNESS MATRIX = 5616 DOUBLE PREC. WORDS
REQRD/AVAIL. DISK SPACE = 12.08/377.3 MB, EXMEM = 1966.5 MB

```
++ Calculating Joint Displacements.
++ Calculating Member Forces.
 264. *
 265. CHANGE
 266. *
267. *LOAD 2:
268. MEMBER CABLE
 269. 2100 TENSION 2.578
 270. 2200 TENSION 3.538
 271. 2300 TENSION 4.376
272. 2310 TENSION 4.022
273. 3100 TENSION 1.270
 274. *3200 TENSION 2.794
 2\,7\,5 . 3\,3\,0\,0 TENSION 3\,.\,7\,8\,7
 276. 3310 TENSION 3.768
277. 4100 TENSION 1.790
 278. 4200 TENSION 3.424
 279. 4300 TENSION 3.852
 280. 4310 TENSION 3.651
 281. *
 282. LOAD 2
 283. SELFWEIGHT
 284. *
285. *WIND ON TOWER
286. MEMBER LOAD
 287. 1000 1001 1003 1005 1006 1010 UNI GZ -.028
 2\; 8\; 8\; . \quad 1\; 0\; 2\; 0 \quad 1\; 0\; 3\; 0 \quad UN\; I \quad GZ \quad -\; .\; 0\; 2\; 8
 289. 1040 1050 UNI GZ -.032
290. 1060 1070 UNI GZ -.035
 291. 1080 1090 UNI GZ -.038
 292. 1100 1110 UNI GZ -.040
 293. 1120 1130 UNI GZ -.042
294. 1140 1150 1155 UNI GZ -.034
 295. 1000 1001 1003 1005 1006 1010 UNI GX .016
 296. 1020 1030 UNI GX .016
 297. 1040 1050 UNI GX .018
298. 1060 1070 UNI GX .020
299. 1080 1090 UNI GX .022
 300. 1100 1110 UNI GX .023
301. 1120 1130 UNI GX .024
302. 1140 1150 1155 UNI GX .020
```

```
303. *
304. *ICE AND CABLE WEIGHT
305. JOINT LOAD
306. 1000 FY - .386
307. 1020 FY - .386
308. 1040 FY - .383
309. 1060 FY - .380
310. 1080 FY - . 380
311. 1100 FY - .380
312. 1120 FY - .261
313. 1140 FY -.178
314. *
315. *(3) ASP-682
316. JOINT LOAD
3\,1\,7\,.\quad 1\,1\,6\,0\quad F\,Z\quad -\,.\,\,2\,0\,5\quad F\,Y\quad -\,.\,\,0\,7\,2\quad M\,X\quad -\,1\,\,.\,6\,3\,9
318. 1160 FX .118 FY -.072 MZ -.947
319. *LIGHTNING ROD
320. 1160 FZ -.021 FY -.034 MX -.048
321. 1160 FX .12 FY -.034 MZ -.028
3 2 2 . * DB 4 0 4
326. 1160 FZ -.100 FY -.107 MX -1.105
3\ 2\ 7\ . \quad 1\ 1\ 6\ 0 \quad F\ X \quad .\ 0\ 5\ 8 \quad F\ Y \quad -\ .\ 1\ 0\ 7 \quad M\ X \quad -\ 0\ .\ 6\ 3\ 8
328. *TDE-6041A
329. 1160 FZ -.100 FY -.107 MX -1.105
330. 1160 FX .058 FY -.107 MX -0.638
331. *NEXTEL (3) DB810
3\;3\;2\;.\quad 1\;1\;4\;0\quad F\;Z\quad -\;.\; 8\;8\;2\quad F\;Y\quad -\;.\; 4\;2\;3\quad M\;X\quad -\;6\;.\;1\;7\;5
333. 1140 FX 0.509 FY -.423 MX -3.565
334. ***
335. *SNET (9) - ALLGON ANTENNA
336. JOINT LOAD
339. *10' FRAME FOR SNET
340. MEMBER LOAD
341. 1120 CON GZ -1.662
342. 1120 CON GX 0.959
343. 1120 CON GY -1.476
344. *
345. *PD1142(TO BE REMOVED)
346. *1140 CON GZ -0.055 2
347. *1140 CON GX 0.032 2
348. *1140 CON GY -0.025 2
349. *TDE - 6041A(TO BE REMOVED)
350. *1110 CON GZ -0.153 7
351. *1110 CON GX 0.088 7
352. *1110 CON GY -0.115 7
353. **
354. *ASP-602
355. JOINT LOAD
356. 1050 FZ -.091 FY -0.142 MX -0.999
357. 1050 FX .052 FY -0.142 MX -0.577
358.
```

11:35:17

11:35:17

11:35:17

11:35:17

```
359. PERFORM ANALYSIS
++ Processing Element Stiffness Matrix.
++ Processing Global Stiffness Matrix.
++ Processing Triangular Factorization.
++ Calculating Joint Displacements.
++ Calculating Member Forces.
 360. *
 361. CHANGE
 362. *
363. *LOAD 3:
 364. MEMBER CABLE
 365. 2100 TENSION 2.450 366. 2200 TENSION 3.514
 367. 2300 TENSION 4.369
 368. 2310 TENSION 4.015
 369. 3100 TENSION 2.021
370. 3200 TENSION 3.797
371. 3300 TENSION 4.628
 372. 3310 TENSION 4.609
 373. *4100 TENSION 1.180
374. *4200 TENSION 2.036
375. 4300 TENSION 2.941
 376. 4310 TENSION 2.739
 377. *
 378. LOAD 3
379. SELFWEIGHT
 380.
 381. *WIND ON TOWER
 382. MEMBER LOAD
 383. 1000 1001 1003 1005 1006 1010 UNI GZ .033
 384. 1020 1030 UNI GZ .033
 385. 1040 1050 UNI GZ .037
 386. 1060 1070 UNI GZ .040
387. 1080 1090 UNI GZ .043
388. 1100 1110 UNI GZ .046
 389. 1120 1130 UNI GZ .048
 390. 1140 1150 1155 UNI GZ .039
 391. *
392. *ICE AND CABLE WEIGHT
 393. JOINT LOAD
 394. 1000 FY -.386
 395. 1020 FY -.386
396. 1040 FY -.383
397. 1060 FY -.380
 398. 1080 FY -.380
 399. 1100 FY - .380
400. 1120 FY - .261
401. 1140 FY - .176
 402. *
 403. *(3) ASP-682
404. JOINT LOAD
405. 1160 FZ .237 FY -.072 MX 1.893
 406. *LIGHTNING ROD
```

```
409. 1160 FZ .047 FY -.053 MX .140
 410. *PD455
 411. 1160 FZ .116 FY -.107 MX 1.276
412. *TDE-6041A
413. 1160 FZ .116 FY -.107 MX 1.276
414. *NEXTEL (3) DB810
  415. 1140 FZ 1.019 FY -.423 MX 7.131
 416. *
417. *SNET (9) - ALLGON ANTENNA
418. JOINT LOAD
 419. 1120 FZ 0.832 FY -0.383 MX 4.160
420. *10' FRAME FOR SNET
 421. MEMBER LOAD
422. 1120 CON GZ 1.919
  423. 1120 CON GY -1.476
  424. *
 424. *
425. *PD1142(TO BE REMOVED)
426. *1140 CON GZ 0.063 2
427. *1140 CON GY -0.025 2
428. *TDE - 6041A(TO BE REMOVED)
429. *1110 CON GZ 0.177 7
430. *1110 CON GY -0.115 7
431. *
  432. *ASP-602
 433. JOINT LOAD
 434. 1050 FZ 0.105 FY -0.142 MX 1.154
435. *
 436. PERFORM ANALYSIS
++ Processing Element Stiffness Matrix.
                                                                                      11:35:17
++ Processing Global Stiffness Matrix.
++ Processing Triangular Factorization.
                                                                                      11:35:17
                                                                                      11:35:17
++ Calculating Joint Displacements.
                                                                                      11:35:17
++ Calculating Member Forces.
                                                                                      11:35:18
```

437. *

438. LOAD LIST ALL

439. PRINT SUPPORT REACTIONS

SUPPORT REACTIONS -UNIT KIP FEET STRUCTURE TYPE = SPACE

JOINT	LOAD	FORCE - X	FORCE - Y	FORCE - Z	MOM - X	MOM - Y	MOM Z
1000	1	. 0 2	35.01	. 5 2	. 0 0	. 00	. 00
	2	2 2	36.48	. 4 2	. 0 0	. 00	. 00
	3	. 0 2	35.64	4 5	. 00	. 00	. 00
2000	1	- 3 . 8 6	- 5 . 2 2	- 2 . 2 2	. 0 0	. 00	. 00
	2	-6.95	- 8 . 6 5	- 4 . 0 1	. 0 0	. 00	. 00
	3	-10.11	-12.10	- 5 . 8 4	. 0 0	. 00	. 0 0
3000	1	3.84	- 5 . 2 2	-2.21	. 0 0	. 00	. 0 0
	2	1.68	-2.74	97	. 0 0	. 00	. 00
	3	10.09	-12.10	- 5 . 8 3	. 0 0	. 00	. 00
4000	1	. 0 0	-15.23	14.71	. 00	. 00	. 00
	2	. 0 0	-14.44	13.92	. 00	. 00	. 0 0
	3	. 0 0	-2.09	1.33	. 0 0	. 0 0	. 0 0

****** END OF LATEST ANALYSIS RESULT *********

440. PRINT MEMBER FORCES LIST 1000 1001 1003 1005 1006 1010 1020 1030

ALL UNITS ARE -- KIP FEET

MEMBER	LOA	D JT	AXIAL	SHEAR - Y	SHEAR - Z	TORSION	MOM - Y	MOM - Z
1000	1	1000	34.63	0 2	. 52	. 0 0	. 00	. 0 0
		1001	- 34.60	. 0 2	46	. 0 0	8 2	0 4
	2	1000	36.10	. 22	. 42	. 00	. 00	. 0 0
		1001	- 36.07	19	3 7	. 0 0	6 6	. 3 4
	3	1000	35.25	0 2	45	. 0 0	. 0 0	. 00
		1001	- 3 5 . 2 2	. 0 2	. 40	. 0 0	. 7 1	0 4
1001	1	1001	34.60	0 2	. 46	. 0 0	. 8 2	. 0 4
	•	1003	- 3 4 . 5 7	. 0 2	4 1	. 0 0	-1.55	0 7
	2	1001	36.07	. 19	. 3 7	. 0 0	. 66	3 4
	3	1003	- 3 6 . 0 4 3 5 . 2 2	1 6	3 2	. 0 0	-1.24	. 6 3
	3	1001	-35.22	0 2 . 0 2	4 0 . 3 4	. 0 0 . 0 0	7 1 1 . 3 3	. 0 4 0 8
		1003	-33.19	. 0 2	. 34	. 0 0	1.33	0 8
1003	1	1003	34.57	0 2	. 41	. 0 0	1.55	. 07
		1005	- 34 . 54	. 0 2	3 5	. 0 0	-2.19	11
	2	1003	36.04	. 16	. 3 2	. 0 0	1.24	63
		1005	- 36.01	14	28	. 0 0	-1.74	. 88
	3	1003	35.19	0 2	3 4	. 0 0	-1.33	. 08
		1005	- 35.16	. 0 2	. 29	. 0 0	1.86	1 2
1005	1	1005	34.54	0 2	. 35	. 0 0	2.19	. 1 1
		1006	- 34 . 51	. 0 2	3 0	. 0 0	- 2 . 7 4	1 4
	2	1005	36.01	. 14	. 28	. 0 0	1.74	8 8
		1006	- 35.98	1 1	23	. 0 0	- 2 . 1 7	1.09
	3	1005	35.16	0 2	29	. 0 0	-1.86	. 1 2
		1006	- 3 5 . 1 4	. 0 2	. 23	. 0 0	2.29	1 7
1006	1	1006	34.51	0 2	. 30	. 0 0	2.74	. 1 4
	_	1010	- 3 4 . 4 5	. 0 2	19	. 0 0	- 3 . 5 4	2 1
	2	1006	35.98	. 1 1	. 23	. 0 0	2.17	-1.09
	•	1010	- 35.92	0 6	1 4	. 0 0	- 2 . 7 7	1.36
	3	1006	35.14	0 2	2 3	. 0 0	- 2 . 2 9	. 17
		1010	- 3 5 . 0 8	. 0 2	. 12	. 0 0	2 . 8 7	25
1010	1	1010	34.45	0 2	. 19	. 0 0	3 . 5 4	. 2 1
		1020	- 34.28	. 02	. 14	. 0 0	- 3 . 7 9	4 2
	2	1010	35.92	. 0 6	. 14	. 0 0	2.77	-1.36
	_	1020	- 3 5 . 7 5	. 10	. 14	. 0 0	- 2 . 7 4	1.12
	3	1010	35.08	0 2	12	. 0 0	- 2 . 8 7	. 2 5
		1020	- 34.91	. 02	21	. 0 0	2 . 4 4	49
1020	1	1020	33.89	0 2	14	. 0 0	3.79	. 42
		1030	- 33.72	. 0 2	. 47	. 0 0	7 3	63

ALL UNITS ARE -- KIP FEET

MEMBER	LOA	TL O	AXIAL	SHEAR - Y	SHEAR - Z	TORS I ON	MOM - Y	MOM - Z
	2	1020	35.36	10	14	. 0 0	2.74	-1.12
		1030	-35.19	. 26	. 42	. 00	. 08	72
	3	1020	34.52	0 2	. 2 1	. 00	- 2 . 4 4	. 49
		1030	- 34 . 35	. 0 2	5 4	. 0 0	- 1 . 2 9	74
1030	1	1030	33.72	0 2	47	. 0 0	. 73	. 63
		1040	- 33 . 55	. 0 2	. 80	. 00	5.63	8 5
	2	1030	35.19	26	42	. 00	08	. 72
		1040	- 35.02	. 42	. 70	. 0 0	5.71	-4.16
	3	1030	34.35	0 2	. 5 4	. 0 0	1.29	. 74
		1040	- 34 . 17	. 0 2	87	. 00	-8.32	99

****** END OF LATEST ANALYSIS RESULT *********

441. PRINT MEMBER FORCES LIST 1040 1050 1060 1070 1080 1090 1100 1110

ALL UNITS ARE -- KIP FEET

MEMBER	LOAD	JТ	AXIAL	SHEAR - Y	SHEAR - Z	TORSION	MOM - Y	MOM - Z
1040	1 10		33.16	0 2	80	. 0 0	- 5 . 63	. 8 5
	10		-32.99	. 02	1.17	. 0 0	15.48	-1.06
	2 10		34.63	4 2	70	. 0 0	- 5 . 7 l	4.16
	10		- 34 . 46	. 60	1.02	. 0 0	14.34	- 9 . 3 0
	3 10		33.79	0 2	. 8 7	. 0 0	8.32	. 9 9
	1 0	5 0	- 33.62	. 0 2	-1.24	. 0 0	- 18.85	- 1 . 2 3
1050	1 10		30.61	. 0 2	1.22	. 0 0	-14.33	1.06
	1 0		- 30 . 44	0 2	8 5	. 0 0	4.00	8 7
	2 10		31.89	. 63	1.08	. 00	-12.76	9.30
	10		- 31 . 72	45	76	. 0 0	3.57	- 3 . 9 0
	3 10		30.96	. 0 2	-1.43 1.06	. 0 0	17.70 -5.24	1.23
	1 0	6 U	- 30 . 79	0 2	1.06	. 0 0	- 3 . 2 4	-1.00
1060	1 10	60	30.06	. 0 2	. 8 5	. 0 0	-4.00	. 8 7
	10	70	-29.89	0 2	4 5	. 00	- 2 . 4 9	67
	2 10	60	31.34	. 4 5	. 76	. 00	- 3 . 5 7	3.90
	10	70	-31.16	2 5	4 1	. 0 0	- 2 . 28	40
	3 10	60	30.41	. 0 2	-1.06	. 0 0	5.24	1.00
	1 0	7 0	- 30 . 23	0 2	. 66	. 0 0	3.37	76
1070	1 10	7 0	29.89	. 0 2	. 4 5	. 0 0	2.49	. 67
	10	8 0	-29.71	0 2	0 5	. 0 0	-4.97	48
	2 10	70	31.16	. 2 5	. 4 1	. 0 0	2.28	. 40
	1 0		-30.99	0 5	0 6	. 0 0	- 4 . 6 3	1.10
	3 10		30.23	. 0 2	6 6	. 0 0	- 3 . 3 7	. 76
	1 0	8 0	- 30.06	0 2	. 26	. 0 0	7.98	5 2
1080	1 10	8 0	29.33	. 02	. 0 5	. 0 0	4.98	. 48
	1 0		-29.16	0 2	. 38	. 0 0	- 3 . 3 1	29
	2 10		30.61	. 0 5	. 06	. 0 0	4.63	-1.10
	1 0		- 30 . 44	. 17	. 3 2	. 0 0	- 3 . 3 2	. 49
	3 10		29.68	. 0 2	26	. 0 0	- 7 . 98	. 5 2
	1 0	90	-29.51	0 2	17	. 0 0	8 . 4 5	29
1090	1 10	90	29.16	. 0 2	38	. 0 0	3.31	. 29
	1 1		-28.99	0 2	. 8 1	. 0 0	2.66	10
	2 10		30.44	17	3 2	. 0 0	3.32	49
	1 1		- 30 . 27	. 3 9	. 70	. 0 0	1.78	- 2 . 3 1
	3 10		29.51	. 02	. 17	. 0 0	- 8 . 4 5	. 29
	1 1	0 0	- 29 . 33	0 2	60	. 0 0	4 . 6 1	0 5
1100	1 11	0 0	28.61	. 02	8 1	. 0 0	- 2 . 6 5	. 10
	1 1		- 28 . 43	0 2	1.27	. 0 0	13.07	. 09
						·		

ALL UNITS ARE -- KIP FEET

MEMBER	LOA	D JT	AXIAL	SHEAR - Y	SHEAR - Z	TORSION	MOM - Y	MOM - Z
	2	1100	29.89	3 9	70	. 0 0	-1.78	2.31
		1110	-29.71	. 62	1.10	. 0 0	10.78	- 7 . 3 6
	3	1100	28.95	. 02	. 60	. 0 0	-4.61	. 0 5
		1110	- 28.78	0 2	-1.06	. 0 0	- 3 . 6 8	. 19
1110	1	1110	22.11	. 00	3.62	. 0 0	-13.07	09
		1120	-21.93	. 00	- 3 . 16	. 0 0	-20.83	. 10
	2	1110	23.08	1.92	3.04	. 0 0	-10.78	7.36
		1120	-22.90	-1.69	-2.64	. 0 0	-17.61	10.69
	3	1110	21.88	. 00	- 3 . 46	. 0 0	3.68	19
		1120	-21.71	. 0 0	3.00	. 0 0	28.61	. 16

****** END OF LATEST ANALYSIS RESULT *********

442. PRINT MEMBER FORCES LIST 1120 1130 1140 1150 1155

ALL UNITS ARE -- KIP FEET

MEMBER	LOAD	JT	AXIAL	SHEAR - Y	SHEAR - Z	TORS ION	MOM - Y	MOM - Z
1120	1	1120	21.29	. 0 0	2.33	. 0 0	24.99	10
		1130	-19.64	. 0 0	. 07	. 0 0	- 36.28	. 10
		1120	21.88	1.27	1.92	. 0 0	21.21	-12.77
		1130	- 20 . 23	0 8	. 16	. 00	-29.98	19.52
		1120	21.06	. 00	- 2 . 1 7	. 0 0	- 32.77	16
	1	1130	-19.41	. 0 0	2 3	. 0 0	42.46	. 1 4
1130	1 1	1130	19.64	. 0 0	0 7	. 0 0	36.28	10
		140	-19.47	. 0 0	. 5 5	. 0 0	- 33.18	. 10
		130	20.23	. 08	16	. 0 0	29.98	-19.52
		140	- 20.05	. 16	. 58	. 0 0	- 26.24	19.08
		130	19.41	. 00	. 2 3	. 0 0	-42.46	14
	1	140	-19.24	. 00	71	. 0 0	37.74	. 1 2
1 1 4 0		140	18.87	. 00	- 1 . 5 7	. 0 0	40.31	10
		150	-18.69	. 00	1.96	. 0 0	-22.66	. 1 1
	2 1	140	19.03	67	-1.47	. 0 0	35.98	-19.08
	1	150	-18.86	. 8 7	1.81	. 00	-19.62	11.34
	3 1	140	18.64	. 00	1.73	. 0 0	-44.87	1 2
	1	150	-18.47	. 0 0	-2.12	. 0 0	25.62	. 10
1150	1 1	150	18.69	. 00	-1.96	. 0 0	22.66	11
	1	155	-18.59	. 00	2.18	. 0 0	-10.75	. 11
	2 1	150	18.86	87	-1.81	. 00	19.62	-11.34
	1	155	-18.76	. 99	2.00	. 0 0	- 8 . 6 7	5.99
	3 1	150	18.47	. 00	2.12	. 0 0	- 25 . 62	10
	1	155	-18.37	. 00	- 2 . 3 4	. 0 0	12.78	. 08
1155	1 1	155	. 5 6	0 3	- 3 . 0 7	. 0 0	8.75	12
	1	160	48	. 0 3	3.23	. 00	4.63	. 0 0
	2 1	155	. 9 3	-1.35	-2.80	. 00	6.87	-4.94
	1	160	8 5	1.43	2.95	. 00	5.35	98
	3 1	155	. 5 5	0 2	3.54	. 0 0	-10.75	0 9
	1	160	48	. 0 2	- 3 . 70	. 0 0	- 4 . 6 3	. 0 0

****** *** END OF LATEST ANALYSIS RESULT *********

443. PRINT MEMBER FORCES LIST 2100 2200 2300 2310 3100 3200 3300 3310

ALL UNITS ARE -- KIP FEET

		AD	JT	A	XIAL	SHEAR - Y	SHEAR - Z	TORSION	MOM - Y	MOM - Z
2100	1	2 0	0.0		89	. 0 2	. 0 0	. 0 0	. 0 0	. 00
		1.0	50		. 91	. 0 2	. 0 0	. 0 0	. 0 0	. 0 0
	2	2 0	0.0		1.83	. 0 2	. 00	. 0 0	. 0 0	. 0 0
		1.0	50		1.85	. 02	. 00	. 0 0	. 00	. 0 0
	3	2 0	0.0	-	3.04	. 0 2	. 0 0	. 00	. 00	. 0 0
		1 0	50		3.06	. 0 2	. 0 0	. 0 0	. 0 0	. 0 0
2200	1		0.0		65	. 0 3	. 0 0	. 0 0	. 0 0	. 00
			10		. 70	. 0 3	. 00	. 0 0	. 00	. 0 0
	2		0.0		3.21	. 0 3	. 00	. 0 0	. 00	. 00
			10		3.26	. 0 3	. 00	. 00	. 00	. 00
	3		0.0		5.29	. 0 3	. 00	. 00	. 00	. 00
		1 1	10		5 . 3 5	. 0 3	. 0 0	. 0 0	. 0 0	. 00
2 3 0 0	1		0 0		2.88	. 0 2	. 0 0	. 0 0	. 00	. 00
		201			2.95	. 0 2	. 00	. 0 0	. 00	. 00
	2	2 0			3.71	. 0 2	. 00	. 0 0	. 00	. 00
		201			3.77	. 0 2	. 00	. 0 0	. 00	. 00
	3	2 0			4.35	. 0 2	. 00	. 0 0	. 00	. 00
		201	60		4 . 4 2	. 0 2	. 0 0	. 0 0	. 00	. 00
2310	1		0.0		2.57	. 0 2	. 00	. 0 0	. 00	. 00
		401			2.63	. 0 2	. 0 0	. 00	. 00	. 0 0
	2		0 0		3.28	. 0 2	. 0 0	. 00	. 00	. 0 0
		401			3.34	. 0 2	. 00	. 0 0	. 00	. 0 0
	3		0 0		4.47	. 0 2	. 0 0	. 00	. 00	. 00
		401	60	•	4 . 5 4	. 0 2	. 0 0	. 0 0	. 0 0	. 0 0
3 1 0 0	1		0 0		8 4	. 0 2	. 00	. 0 0	. 0 0	. 00
			5 0		. 86	. 0 2	. 0 0	. 00	. 0 0	. 00
	2	3 0	0 0		20	. 0 2	. 00	. 00	. 00	. 0 0
			5 0		. 22	. 0 2	. 0 0	. 00	. 00	. 00
	3		0 0		2.98	. 0 2	. 0 0	. 00	. 00	. 00
		1 0	5 0		3.00	. 0 2	. 00	. 0 0	. 00	. 00
3 2 0 0	1	3 0	0 0		68	. 0 3	. 00	. 0 0	. 00	. 00
			10		. 73	. 0 3	. 0 0	. 0 0	. 00	. 0 0
	2	3 0	0 0		. 89	. 0 3	. 00	. 0 0	. 00	. 00
			1 0		8 3	. 0 3	. 00	. 0 0	. 00	. 00
	3		0 0		5.33	. 0 3	. 00	. 0 0	. 00	. 00
		1 1	1 0		5.39	. 0 3	. 0 0	. 0 0	. 0 0	. 0 0
3 3 0 0	1	3 0	0 0		2.55	. 0 2	. 0 0	. 0 0	. 00	. 00
		3 0 1	6 0	:	2 . 6 2	. 0 2	. 0 0	. 0 0	. 0 0	. 00

ALL UNITS ARE -- KIP FEET

MEMBER	LO	A D	JT	AXIAL	SHEAR - Y	SHEAR - Z	TORS ION	MOM - Y	MOM - Z
	2	3 (000	-1.96	. 0 2	. 00	. 0 0	. 0 0	. 0 0
		30	160	2.02	. 0 2	. 00	. 00	. 00	. 0 0
	3	3 (000	-4.46	. 02	. 00	. 00	. 00	. 0 0
		3 0	160	4 . 5 2	. 0 2	. 0 0	. 0 0	. 0 0	. 0 0
3 3 1 0	1	3 (000	-2.90	. 02	. 00	. 0 0	. 00	. 0 0
		20	160	2.96	. 0 2	. 00	. 00	. 00	. 00
	2	3 (000	-2.11	. 0 2	. 00	. 00	. 00	. 00
		201	160	2.18	. 02	. 00	. 00	. 00	. 00
	3	3 (000	-4.36	. 0 2	. 00	. 00	. 00	. 00
		20	160	4 . 4 2	. 02	. 00	. 0 0	. 00	. 00

******* END OF LATEST ANALYSIS RESULT **********

444. PRINT MEMBER FORCES LIST 4100 4200 4300 4310

17 10 10 10 10 10 10 10 TOWER PROSPECT CT.

MEMBER END FORCES STRUCTURE TYPE = SPACE ALL UNITS ARE -- KIP FEET

MEMBER	LO	A D	JT	AXIAL	SHEAR - Y	SHEAR - Z	TORSION	MOM - Y	MOM - Z
4100	1	4 (000	- 3 . 5 9	. 0 2	. 00	. 0 0	. 00	. 00
			50	3.61	. 0 2	. 0 0	. 0 0	. 0 0	. 0 0
	2		000	- 3 . 4 1	. 0 2	. 0 0	. 0 0	. 0 0	. 0 0
		1 0	50	3 . 4 3	. 0 2	. 0 0	. 0 0	. 0 0	. 0 0
	3	4 (000	. 0 2	. 0 2	. 0 0	. 0 0	. 0 0	. 0 0
		1 (50	. 0 0	. 0 2	. 0 0	. 0 0	. 0 0	. 0 0
4 2 0 0	1	4 (000	-7.49	. 03	. 0 0	. 0 0	. 0 0	. 0 0
		1 1	110	7.54	. 0 3	. 00	. 00	. 00	. 0 0
	2	4 (000	-6.94	. 0 3	. 0 0	. 0 0	. 00	. 0 0
		1 1	10	6.99	. 0 3	. 0 0	. 00	. 0 0	. 0 0
	3	4 (000	. 99	. 0 3	. 00	. 0 0	. 00	. 0 0
		1 1	10	9 4	. 0 3	. 0 0	. 0 0	. 0 0	. 0 0
4 3 0 0	1	4 (000	- 5 . 26	. 0 2	. 0 0	. 0 0	. 0 0	. 0 0
		401	60	5.33	. 02	. 00	. 00	. 00	. 0 0
	2	4 (000	-4.91	. 02	. 00	. 0 0	. 0 0	. 0 0
		401	60	4.97	. 0 2	. 00	. 0 0	. 0 0	. 00
	3	4 (000	-1.75	. 0 2	. 0 0	. 0 0	. 00	. 00
		401	160	1.81	. 0 2	. 0 0	. 0 0	. 0 0	. 0 0
4310	1	4 (000	- 5 . 2 4	. 0 2	. 0 0	. 00	. 0 0	. 0 0
		301	60	5.30	. 0 2	. 0 0	. 0 0	. 0 0	. 0 0
	2	4 (000	- 5 . 18	. 0 2	. 0 0	. 0 0	. 0 0	. 0 0
		301	160	5.25	. 0 2	. 0 0	. 0 0	. 00	. 00
	3	4 (000	-1.73	. 0 2	. 0 0	. 0 0	. 0 0	. 0 0
		301	160	1.80	. 0 2	. 0 0	. 0 0	. 00	. 0 0

****** *** * END OF LATEST ANALYSIS RESULT *********

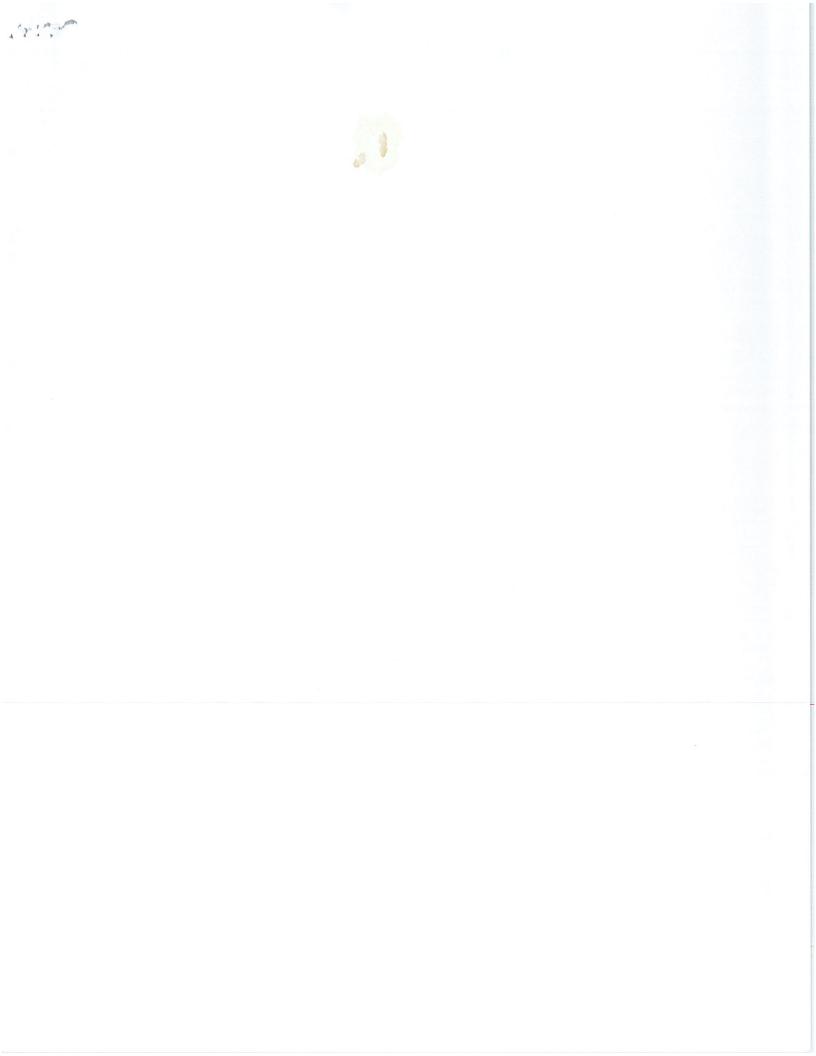
445. *

446. FINISH

******** END OF STAAD-III *********

**** DATE= DEC 4,1998 TIME= 11:35:18 ****

For questions on STAAD-III, contact:





March 15, 1999

SNET Mobility, Inc.

500 Enterprise Drive Rocky Hill, Connecticut 06067-3900

Phone: (860) 513-7730 Fax: (860) 513-7614

Peter W. van WilgenDirector - Real Estate Operations

RECEIVED

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

MAR 15 1999

CONNECTICUT SITING COUNCIL

RE: Springwich Cellular Limited Partnership--Prospect Cellular Communication Site

Dear Chairman Gelston:

Springwich Cellular Limited Partnership (SCLP) plans to install cellular antennas and a related equipment building at the tower facility owned by Charles E. & Averyll B. Bradshaw of Prospect, CT. Please accept this letter as notice of intent, pursuant to R.C.S.A. Section 16-50aa, of the placement of associated equipment on an existing non-facility tower pursuant to R.C.S.A. Section 16-50aa. In further compliance with R.C.S.A. Section 16-50aa, a copy of this letter is being sent to the Mayor of Prospect.

The existing non-facility tower is a 160' guyed tower located on 54 Waterbury Road, Prospect, Connecticut. SCLP plans to install up to twelve panel-type cellular antennas on the tower. SCLP will also install a single story, approximately 12'x26' equipment building, which will contain radio transmission equipment.

The addition of SCLP's antennas and equipment to the tower site does not constitute a substantial environmental affect since such additions do not cause a significant change or alteration in the physical and environmental characteristics of the site (see attached site plan). Rather, the planned changes to the existing non-facility tower falls squarely within those activities explicitly provided for in R.C.S.A. Section 16-50aa.

First, the height of the existing tower will be unaffected. Twelve antennas, ALP Model 11011N, will be mounted four per sector on a triangular platform to be attached to the tower. The center of radiation will be 120' AGL and the top of the antennas will be 122' high. The tower will not require any structural modification to support the proposed attachments.

Second, the proposed addition will not extend the site boundaries. The proposed equipment building will be located next to the tower on a parcel of land of approximately 312 square feet in size, which will be leased to SCLP (see attached site plan).

Third, the proposed addition will not increase the noise levels at the existing facility by six decibels or more.

Fourth, 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 ANSI standard. The following table summarizes the power densities at the site from the various sources on the tower (including proposed herein) in relation to the standard.

FREQUENCY	POWER DENSITY	HEIGHT	ANSI/IEEE STANDARD LIMITS (mW/cm2)	% OF MPE
SCLP 880-894	0.0531	120'	0.5867	9.05
F&S Oil Co 456.8125-451.8125	0.0031	160'	0.3012	1.01
New Haven Transit 452.850-451.850	0.0031	160'	0.3012	1.01
US Post Office 415.050	0.0031	160'	0.2767	1.10
Central Comm. 454.150	0.0031	160'	0.3028	1.01
Central Comm. 452.075	0.0031	160'	0.3014	1.01
CT Motor Club 150.920	0.0381	50'	0.2000	19.06
Nextel 851	0.0115	145'	0.5673	2.02
HOUAL	N/A		N/A	3527

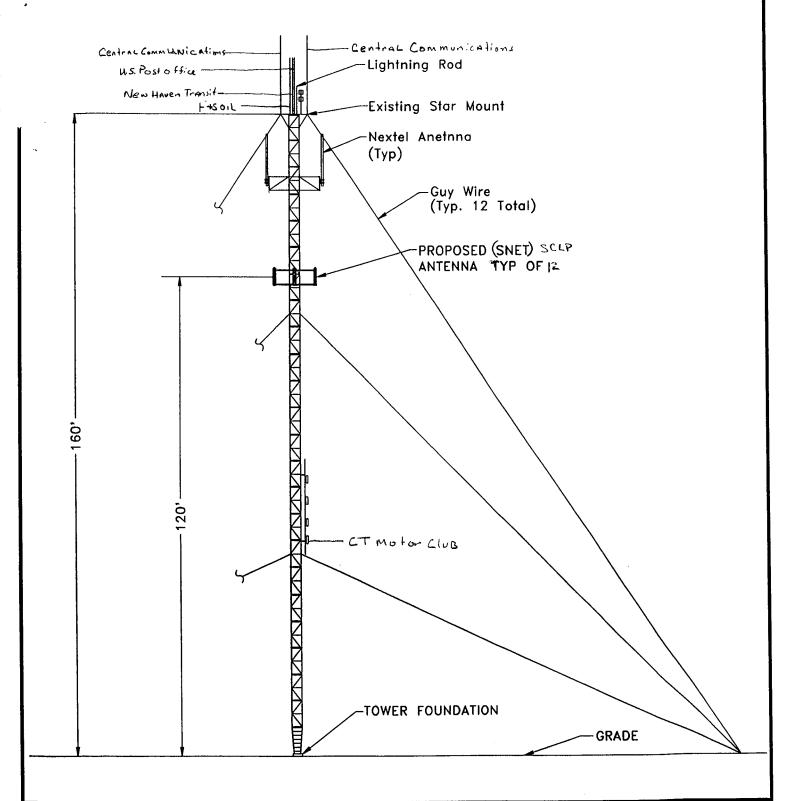
As the table demonstrates, SCLP's proposed antennas would contribute 9.05% of the ANSI standard for the cellular frequency range, bringing the site total to 35.27% of the standard as calculated for a mixed frequency site.

Finally, SCLP will obtain the necessary municipal approvals and permits for the project once Connecticut Siting Council approval has been received, as the City of Prospect requires proof of CSC approval before any permits will be issued.

SCLP submits that the proposed additions would not cause a significant change or alteration in the physical and environmental characteristics of the site and comply with R.C.S.A. Section 16-50aa. For the foregoing reasons, SCLP therefore requests a determination that the placement of the antennas and equipment on the existing non-facility tower site does not constitute a substantial environmental effect under R.C.S.A. Section 16-50aa, and that the requested tower sharing be approved.

Thank you for your consideration.

Sincerely,



SNET MOBILITY PRELIMINARY DESIGN EXHIBIT NORTH SITE NAME: EXISTING GUYED TOWER

ADDRESS:

WATERBURY ROAD PROSPECT, CT 06712

DRAWN: MDJ CHECKED: GMP SCALE: N.T.S.

Maguire Group Inc.
Architects-Engineers-Planners
One Court Street
New Britoin, Connecticut 06051

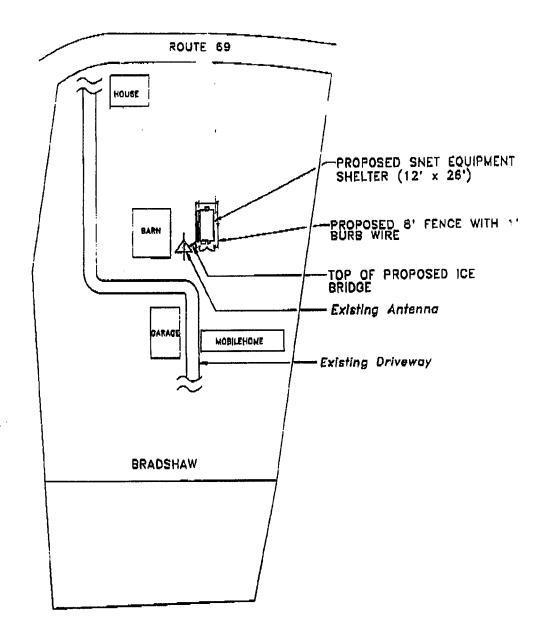
THIS DRAWING AND ALL DATA CONTAINED HEREIN IS FOR INFORMATIONAL PURPOSES ONLY. NOT INTENDED FOR DESIGN OR CONSTRUCTION USE. ALL DATA SHOULD BE VERIFIED

SNET #: MGI #:14777

TASK #: 2090 DATE: 12/18/98







PLAN VIEW

SNET MOBILITY	NORTH	SITE NAME: E	XISTING GUYED	TOWER	SNET #: MGI #: 14777
PRELIMINARY DESIGN EXHIBIT			WATERBURY ROPEROSPECT, CT		TASK #: 2090 DATE: 12/17/98
	1	DRAWN: MDJ	CHECKED:GMP	SCALE: N.T.S.	
Maguire Group Architects English One Court Street New British, Conne	ers-Pionners	INCOMPANATIONAL	BIIDDARER ANIY.	TTAINED HEREIN IS FOR NOT INTENDED FOR DESIGN SHOULD BE VERIFIED	SNET



March 15, 1999

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

Peter W. van WilgenDirector - Real Estate Operations

The Honorable Robert J. Chatfield, Mayor Town of Prospect 36 Center Street Prospect, Connecticut 06712

Dear Mayor Chatfield:

Springwich Cellular Limited Partnership (SCLP) plans to install antennas and associated equipment at the existing tower facility owned by Charles E. & Averyll B. Bradshaw of Prospect located at 54 Waterbury Road in Prospect, Connecticut. As required by Section 16-50j-73 of the Regulations of Connecticut State Agencies (R.C.S.A.), please accept this letter and the attached letter to the Connecticut Siting Council dated March 15, 1999.

The attached letter fully describes SCLP's proposal. However, if you have any questions or require any further information on our plans or the Siting Council's procedures, please call me at (860) 513-7730 or Mr. Joel Rinebold, Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

Enclosure