### STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

IN RE:

APPLICATION OF MCF

COMMUNICATIONS bg, INC. AND

OMNIPOINT COMMUNICATIONS, INC.

FOR A CERTIFICATE OF ENVIRONMENTAL

COMPATIBILITY AND PUBLIC NEED FOR

THE CONSTRUCTION, MAINTENANCE AND

OPERATION OF A TELECOMMUNICATIONS

FACILITY AT 237 SANDY HOLLOW ROAD IN THE

TOWN OF GROTON, CONNECTICUT

DOCKET NO. 343

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INTERROGATORY RESPONSES TO CONNECTICUT SITING COUNCIL FROM CO-APPLICANTS MCF COMMUNICATIONS BG, INC.

AND OMNIPOINT COMMUNICATIONS, INC.

Co-applicants MCF Communications bg, Inc. ("MCF") and Omnipoint Communications, Inc. ("T-Mobile") (collectively the "Co-Applicants") submit the following responses to the interrogatories from the Connecticut Siting Council and supplemental information in connection with the above captioned Docket.

- Q1. Provide a hard copy of the Affidavit of Publication for the published legal notices that were published in The Day and The Norwich Bulletin.
- A1. See Affidavits of Publication attached hereto as Exhibit 1. Copies of these affidavits have been previously forwarded to the Council.
- Q2. Did the Applicants receive return receipts for all adjacent landowners listed behind Tab E of the application? If not, was any additional effort made to make sure that notice was received by these property owners?
- A2. The Co-Applicants have received return receipts from all adjacent landowners listed behind Tab E of the Application.
- Q3. Behind Tab C of the application, it appears that the Applicants notified State Representative Edward E. Moukawsher of the proposed project; however, the proposed site is in the 41<sup>st</sup> Assembly District under State Representative Ellisa Wright. Did the Applicants notify Representative Write of the proposed project also?

- A3. State Representative Ellisa Wright was mailed a copy of the Application.

  <u>See</u> Co-Applicants' Amended Certification of Service dated October 2,

  2007.
- Q4. Did the Applicants move the proposed site as far west as possible without disturbing the 50-foot wetland buffer, as requested by the Town of Groton?
- A4. Yes, the compound and tower were shifted as far west as possible without disturbing the 50' wetland buffer. The compound is at the edge of the 50' buffer and the tower was shifted as far west as possible within the compound so excavation for the tower foundation would not fall within the buffer.
- Q5. When was a search ring first established in the area of the proposed site?
- A5. Co-Applicant T-Mobile assigned this search ring to Co-Applicant MCF in May, 2005.
- Q6. Provide the boundaries of the site search ring on a topographic map at a scale of 1:1,000.
- A6. See map attached hereto as Exhibit 2.
- Q7. What is the size/area, shape and zoning of the search area?
- A7. See map attached hereto as Exhibit 2. The entire search area is zoned residential.
- Q8. Did the Applicants investigate any properties, other than the proposed site, within the site search area for the construction of a telecommunications structure? If yes, document analysis of those potential properties.
- A8. See summary of rejected sites attached hereto as Exhibit 3.
- Q9. Please clarify the apparent inconsistency between the size of the leased area for the proposed site, which on page 10 of the application [1,750 square feet] and in the lease behind Tab I of the application [2,400 square feet].
- A9. 2,400 square feet was stated in the original lease as the approximate size of the lease area. Once measured, the actual lease area was reduced to 35'x 50'=1,750 plus the 15'x 15' = 225 bump out area for a new total of

1,975 square feet. The shape of the compound, including the "bump-out" area, was primarily determined so that MCF could accommodate ground equipment for any co-location possibilities on the proposed Facility and accommodate the request of the Town of Groton to ensure that the compound did not infringe on the 50 foot wetlands buffer.

### Q10. Would the proposed landscaping on the southern side of the equipment compound be within the lease area for the proposed site?

A10. The proposed landscaping on the southern side of the equipment compound would not be within the leased area. However, the Property owner has granted MCF permission to landscape that area, in order to visually shield any potential views of the compound area.

### Q11. What would be the diameter of the proposed monopole at the base and top of the structure?

A11. Based on tower designs of similar height, the diameter at the base of the tower will be approximately 5' and the diameter at the top of the tower will be approximately 2'. Final tower diameters will be determined upon final tower design by the manufacturer.

### Q12. What structural standards would the proposed tower be designed in accordance with?

A12. The proposed tower will be designed in accordance with ANSI/TIA-222-G, Structural Standards for Steel Antenna Towers and Antenna Supporting Structures (EIA) in accordance with the International Building Code.

### Q13. At what height on the proposed tower would the pre-engineered fault point be located?

A13. The yield point will be located 40' AGL in order to maintain the tower on the primary parcel in the unlikely event of failure.

### Q14. Could the proposed tower be constructed as a flagpole or other camouflage design?

A14. The proposed Facility could be constructed utilizing a camouflage design, including a flagpole. However, as the Council is aware, a flagpole design does limit the future ability to co-locate additional carriers as well as co-locate emergency services equipment. In addition, T-Mobile indicates in its response to Interrogatory # 38 that, due to its anticipated traffic volume (the proposed Facility is providing coverage along Interstate I-95), T-Mobile is anticipating needing more than three antennas to handle its capacity needs. Therefore, a flagpole design would severely hinder not

only T-Mobile's anticipated capacity needs but also the ability to provide co-location opportunities.

### Q15. How many carriers would be accommodated by the proposed initial 35-foot by 50-foot equipment compound?

- A15. Three carriers can fit within the 35-foot by 50-foot area. However, the 15-foot by 15-foot area for T-Mobile is not for future expansion, it is included as part of the initial compound design. The compound was designed including this bump out area in order to provide the necessary ground space for equipment and to accommodate the request from the Town of Groton to refrain from placing the compound in the 50 foot wetland setback. By placing T-Mobile in the 15-foot by 15-foot area, the remaining 35-foot by 50-foot area of the compound remains open for three future carriers.
- Q16. According to the site drawings behind Tab A in the application, it appears that T-Mobile would install equipment in the 15-foot by 15-foot bump out area that would be developed in the future, if needed. Is this correct?
- A16. The 15-foot by 15-foot area for T-Mobile is not for future expansion, but rather is included as part of the initial compound design. Placing T-Mobile in the 15-foot by 15-foot area leaves the remaining 35-foot by 50-foot area open for three future carriers.
- Q17. Would the proposed site be located entirely within the paved portion of the property?
- A17. No, the site is located partially on the paved area and partially on the lawn/vegetated area. Approximately 49%, or 973 square feet, of the 1,975 square foot compound is located on the paved portion of the property.
- Q18. Do the Applicants expect blasting to be necessary for the construction of the proposed site?
- A18. Some ledge is visible within the vicinity of the proposed facility. If ledge is encountered during excavation for the tower foundation, chipping is preferred to blasting for removal of the ledge. Therefore, blasting will not be required if ledge is encountered. The presence of ledge will be confirmed upon completion of a geotechnical investigation.

- Q19. What is the land use of the properties to the south of the proposed site?
- A19. The land use of the properties to the south is virtually all residential.
- Q20. Please clarify the discrepancy between the cots listed under number 1, 2 and 3 on page 20 of the application and the total estimated cost of construction.
- A20. A detailed cost construction estimate is attached hereto as Exhibit 4.
- Q21. Provide details regarding sediment and erosion controls that would be installed on the proposed site to protect the wetland to the west.
- A21. The sedimentation and erosion controls would consist primarily of the installation of silt fencing. Details of the sedimentation and erosions controls are attached in a summary attached hereto as Exhibit 5.
- Q22. What is the nearest active airport to the proposed site? What is the distance and direction of that airport?
- A22. The nearest active airport is the Groton-New London Airport. It is located 3.5 miles southwest of the proposed facility.
- Q23. What is the distance and direction of the nearest area of year-round and seasonal visibility from the stretches along public streets listed behind Tab K of the application to the proposed tower?
- A23. The nearest street with year round visibility is Route 614 / Allyn Street, which is approximately 220' to the east of proposed tower to the center of the street. The nearest street with seasonal visibility is Sandy Hollow Road, which is approximately 340' to the northwest of the proposed tower to the center of the street.
- Q24. What is the land use in the area of year-round visibility? What is the land use in the area of seasonal visibility?
- A24. The land use within the area of year-round visibility as well as seaonsal visibility consists primarily of residential uses. There are several commercial uses and several undeveloped parcels as well.

- Q25. Explain why photo locations nos. 6 and 7 are within an area labeled "seasonal visibility" on the Viewshed Analysis Map, behind Tab K of the application but were determined "not visible" on photographs.
- A25. At the time of CHA's visibility study, the trees had their leaves on. Therefore, the study was completed during the time of year in which seasonal visibility is non-visible. Since the photos were taken during the non-visible condition, they were labeled as non-visible. However, the Viewshed map does indicate that the locations for photos 6 and 7 may experience seasonal visibility.
- Q26. Behind Tab O of the application, BL Companies estimates the tree heights near the proposed site range from 15 to 30 feet above ground level. The Viewshed Analysis estimates a uniform tree height of 65 feet in the surrounding area, clarify and estimate potential visibility of the proposed tower.
- A26. In the NEPA screen conducted by BL Companies, found behind tab O of the Application, BL is describing the tree canopy on and immediately adjacent to the Property. The wooded area near the proposed site contains trees in the range of 15 to 30 feet; however, it also contains trees near the 65 foot level. The overall tree canopy in the surrounding area is around the 65' level, obviously with smaller trees mixed in between. The results of the computer model, which utilized the 65 foot tree height, are accurate based on our field verification of the computer model results.
- Q27. What is the expected visibility from trails within Pequot Woods Park?
- A27. CHA expects no visibility from the Pequot Woods Park or the trails within the park.
- Q28. Page 19 of the application states that "final determination from the FAA will be forwarded to the Council upon receipt," has the final determination been received by the Applicants to date?
- A28. Yes. See final FAA determination attached hereto as Exhibit 6.
- Q29. Why was the height of the proposed monopole changed from 120 feet above ground level to 130 feet above ground level?
- A29. The height of the proposed Facility was changed from 120' AGL to 130' AGL shortly after the NEPA screen was commenced. The height was changed based upon the drive test conducted by T-Mobile at the Site.

- Q30. Would any nearby residences have a year-round view of the proposed facility?
- A30. Yes, approximately 14 residences will have a year round view of the tower, as can be seen from photos three and four in the Visibility Report.
- Q31. The site plans in the application show limits of clearing for the proposed site; however the application also states that no trees with diameters of six inches or greater would be removed for the construction of the proposed site or access road. What type of vegetation would be removed to accommodate the proposed site?
- A31. Clearing of light brush and trees smaller than 6" in diameter is required in the vicinity of the compound area.
- Q32. Has Heritage Consultants LLC consulted with the Office of State
  Archeology at UCONN as suggested by the State Historic
  Preservation Officer? What was the outcome of that consultation?
- A32. In the letter dated May 9, 2006, the State Historic Preservation Office (SHPO) concluded that no further archeological investigations were required and that the proposed project will have no effect upon Connecticut's archeological heritage. The recommended consultation with the Office of State Archeology at UCONN was for administrative purposes only and did not require a sign-off from UCONN. SHPO requested consultation with UCONN for the transfer of all field notes, photographs, and artifactual materials generated by the investigation for their records. The consultation was not a stipulation for a finding of no effect nor was it intended to receive approval from the Office of State Archeology at UCONN. Consultation with UCONN will not change the outcome determined by SHPO. To date, UCONN has not been contacted for the transferal of the archeological investigation materials; however, they will be contacted in the near future to initiate the transfer of archeological materials for their records.
- Q33. What is the tower type of each of the towers listed behind Tab G of the application?

A33.

- 1. Free standing tower (based on FCC database information)
- 2. Self-supporting lattice tower (based on CSC database information)
- 3. Monopole (based on CSC database information)
- 4. Monopole (based on CSC database information)
- Monopole (based on CSC database information)
- 6. Monopole (based on CSC database information)

- 7. Monopole (based on CSC database information)
- 8. Monopole/Other (based on CSC database information)
- 9. Monopole (based on CSC database information)
- 10. Monopole (based on CSC database information)
- 11. Monopole (based on CSC database information)
- Q34. What is the distance and direction of the towers listed behind Tab G of the application to the proposed site?
- A34. See map attached hereto as Exhibit 7.
- Q35. Does T-Mobile have equipment located on any of the existing towers listed behind Tab G of the application? At what height?
- A35. T-Mobile has equipment on the following towers:
  - Omnipoint and Town of Groton Tower, 741 Flanders Road, Groton, CT Antenna Height: 150 feet AGL
  - Candid Communications, 75 Roberts Road, Groton, CT Antenna Height: 128 feet AGL
  - 7) SBA Tower, 37-55 Taugwank Rd, Stonington, CT Antenna Height: 175 Feet AGL
  - 8) SBA Tower, 72 Jerry Brown Road, Stonington, CT Antenna Height: 135 Feet AGL
  - Optasite, 107bWilcox Road, Stonington, CT Antenna Height: 97 feet AGL
- Q36. Which of the existing towers listed behind Tab G of the application would interact with the proposed facility?
- A36. 3) Omnipoint and Town of Groton Tower, 741 Flanders Road, Groton, CT Antenna Height: 150 feet AGL
  - 7) SBA Tower, 37-55 Taugwank Rd, Stonington, CT Antenna Height: 175 Feet AGL
  - 8) SBA Tower, 72 Jerry Brown Road, Stonington, CT Antenna Height: 135 Feet AGL

- Q37. Identify each site shown in the coverage plot behind Tab F by address.
- A37. See list of sites attached hereto as Exhibit 8.
- Q38. Could T-Mobile install internally or externally flush mounted antennas at the proposed site?
- A38. T-Mobile could install internally mounted or flush mount antennas; however, with the anticipated traffic in this area, T-Mobile will more than likely need added antenna ports to accommodate future data and voice traffic. This would mean that additional antennas would have to be installed above the initial antennas to achieve the added capacity.
- Q39. Could T-Mobile install t-bar antenna platforms at the proposed site?
- A39. T-Mobile could install t-bar antenna platforms.
- Q40. What type of equipment would T-Mobile install at the proposed site? What are the dimensions of this equipment?
- A40. T-Mobile would install equipment cabinets on a concrete slab. The equipment cabinets measure: Height: 6'- 3.25"; Width: 4' 5.25"; Depth: 2'.
- Q41. What frequency band is T-Mobile licensed to operate under in this area?
- A41. upper 2/3 A Band

Transmit: 1935.000 MHz to 1945.000 MHz Recieve: 1855.000 MHz to 1865.000 MHz

776 to 781 (C4 Band)

Transmit: 1983.000 MHz to 1984.000 MHz Receive: 1903.000 MHz to 1904.000 MHz

- Q42. What is T-Mobile's minimum signal level threshold to provide adequate service in Groton?
- A42. T-Mobile's minimum design receive signal level threshold is -84 dBm. This level is the lower limit to where T-Mobile can provide in vehicle coverage to its network users. A more robust signal level is required to provide reliable coverage to subscribers inside building structures. The

- lower limit for in building design is -76 dBm for average residential and business dwelling environments.
- Q43. Would T-Mobile require a generator or battery back up in the case of power failure?
- A43. T-Mobile would utilize battery back up power.
- Q44. Would T-Mobile be willing to use a fuel cell at the proposed site?
- A44. T-Mobile is currently investigating the use of fuel cells as an alternate back up power source. However, at this time, T-Mobile's corporate headquarters have not approved any fuel cells as acceptable and reliable power sources. T-Mobile will be willing to utilize fuel cells once they are fully tested and approved.
- Q45. Does T-Mobile have any plans to install fuel cells at any existing or future sites in Connecticut?
- A45. T-Mobile does not have plans to install any fuel cells at any existing or future sites in Connecticut at the present time.
- Q46. What is the length of T-Mobile's existing gap in coverage along I-95?
- A46. T-Mobile's existing gap in coverage along I-95 measures 1.37 miles.
- Q47. What is the length of adequate T-Mobile coverage along I-95 that the proposed site would provide?
- A47. The length of adequate T-Mobile coverage along I-95 that the proposed site would provide is 3.1 miles.
- Q48. What would be the total footprint area of T-Mobile coverage provided by the proposed site?
- A48. The total footprint area of T-Mobile coverage provided by the proposed site is 2.87 square miles.
- Q49. What is T-Mobile's existing signal strength in this area?
- A49. T-Mobile's existing signal strength in this area ranges from -84 to -105 dBm.

- Q50. Provide a multi-signal level propagation plot (including the signal levels T-Mobile designs for), at a scale of 1:40,000, depicting existing coverage in the area.
- A50. See propagation map attached hereto as Exhibit 9.
- Q51. Provide a multi-signal level propagation plot (including the signal levels T-Mobile designs for), at a scale of 1:40,000, depicting coverage from the following:
  - a) existing sites and the proposed site at an antenna height of 130 feet above ground level.
  - b) existing sites and the proposed site at an antenna height of 120 feet above ground level.
  - c) existing sites and the proposed site at an antenna height of 110 feet above ground level.
- A51. See propagation map attached hereto as Exhibit 10.

By: Co Co Co Attorneys for the Applicant Julie D. Kohler, Esq. jkohler@cohenandwolf.com Carrie L. Larson, Esq. clarson@cohenandwolf.com Cohen and Wolf, P.C. 1115 Broad Street Bridgeport, CT 06604 Tel. (203) 368-0211 Fax (203) 394-9901

#### Certification

This is to certify that a copy of the foregoing has been mailed, this date to all parties and intervenors of record.

NOTICE

Attorneys for the /

#### Notice is hereby given, pursuant PUBLISHER'S CERTIFICATE 16-501(b) of the Connecticut General Section 16-504 4(2) and Section 16-501-1(e) of the Re Connecticut State Agencies of an to be submitted to the Connec Council ("Siting Council") on June State of Connecticut, thereafter by MCF Communication ("MCF") and Omnipoint Communic ss. Norwich a subsidiary of T-Mobile USA, Inc. bile ("T-Mobile") (collectively the "County of New London, The Applicants will request a certi vironmental compatibility and I from the Siting Council for the maintenance and operation of a te cations facility in Groton, Conne Applicants are proposing to con On this 25th day of June 2007 monopole tower at 237 Sandy H Groton Connecticut and is ownedpersonally appeared before the undersigned, a Notary Public, within and for tic River Ambulance Association "Property"). The Applicants property". struct a 130 foot, self-supporting Joann A. Butler, Proof of Publication antennas, associated equipment site improvements integral to a w of the "NORWICH BULLETIN" a daily newspaper published at Norwich, munications facility. The location other features of the proposed County of New London, State of Connecticut, who, being duly sworn, states subject to review and potential cl provisions of the Connecticut Gon oath that utes § 16-50g et. seq. The proposed Facility will provid NOTICE the Town of Groton, along Inters' well as in adjacent areas. The Ap Notice is hereby given, pursuant to Section explain the need, purpose and be facility and will also describe the 16-501 (b) of the Connecticut General Statutes tal impacts of the proposed facility A balloon representative of th height will be flown on the day Council public hearing on the at true copy of which is hereto annexed, was published in said newspaper which will take place in the Tow The balloon will be flown from a in its issue of the 8:00 a.m. to 6:00 p.m. Notice of hearing date will be provided by 2007 23 June Council. Interested parties and residents of Groton are invited to review the during normal business hours a following offices: Connecticut Siting Counci 10 Franklin Square Subscribed and sworn to before me this New Britain, CT 06051 A.D.2007 Town Clerk Town Hall 45 Fort Hill Road Groton, CT 06340 or the offices of the undersigned. should be addressed to the Col ing Council or to the undersigned Notary Publicly M. Lisee Julie D. Kohler, Es NOTARY PUBLIC Carrie L. Larson, E My Commission Expires State of Connecticut Cohen and Wolf, F My Commission Expires 06/30/08 1115 Broad Street Bridgeport, CT 060 Tel. (203) 368-021 Fax (203) 394-990

State of Connecticut County of New London, ss. New London

Personally appeared before the undersigned, a Notary Public within and for said County and State, Priscilla Melecio, Legal Adverising Clerk, of The Day Publishing Company Classifieds dept, a newspaper published at New London, County of New London, state of Connecticut who being duly sworn, states on oath, that the Order of Notice in the case of

4084 Public Notice Notice is hereby given, pursuant to Se

A true copy of which is hereunto annexed, was published in said newspaper in its issue(s) of

06/20/2007, 06/22/2007

Cust: COHEN AND WOLF PC.

Ad #: d00040757

Subscribed and sworn to before me

This Friday, June 22, 2007

Notary Public

My commission expires

Interested parties and residents of the Town of Groton are invited to vill explain the need, purpose and review the Application during nor- lenefits of the facility and will

following offices:

Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

Town Clerk Town Hall 45 Fort Hill Road Groton, CT 06340

or the offices of the undersigned. All inquiries should be addressed to the Connecticut Siting Council or to the undersigned.

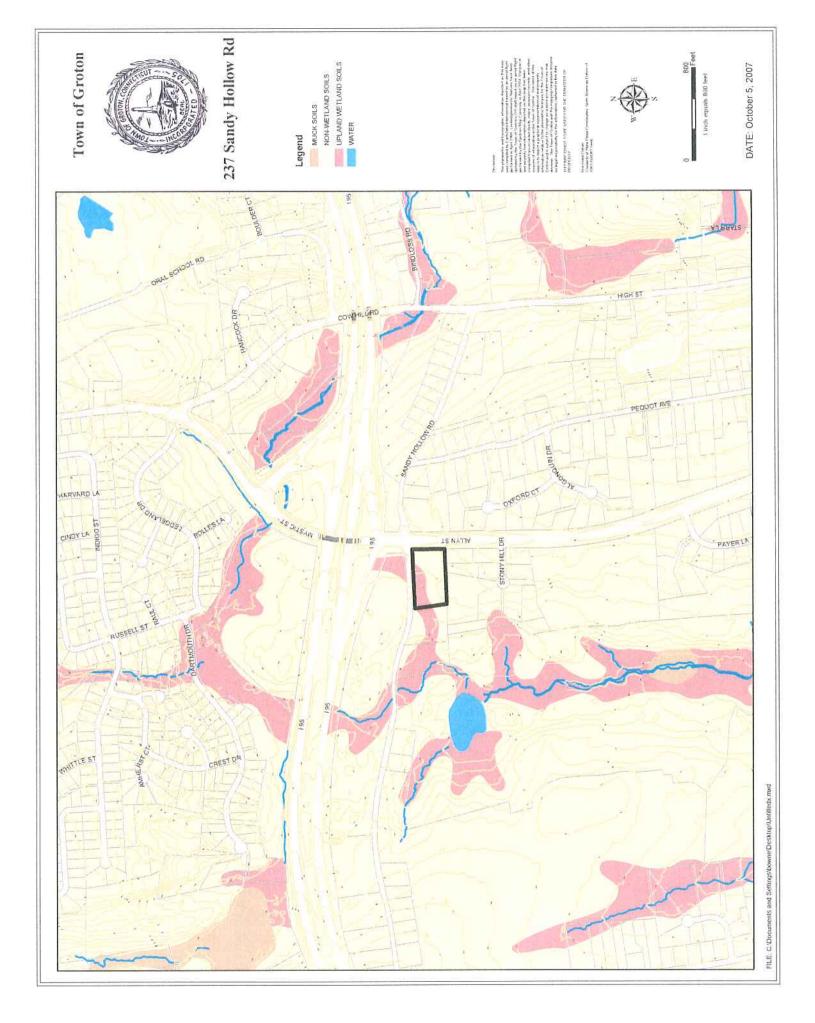
Julie D. Kohler, Esq. Carrie L. Larson, Esq. Cohen and Wolf, P.C. 1115 Broad Street Bridgeport, CT 06604 Tel. (203) 368-0211 Fax (203) 394-9901

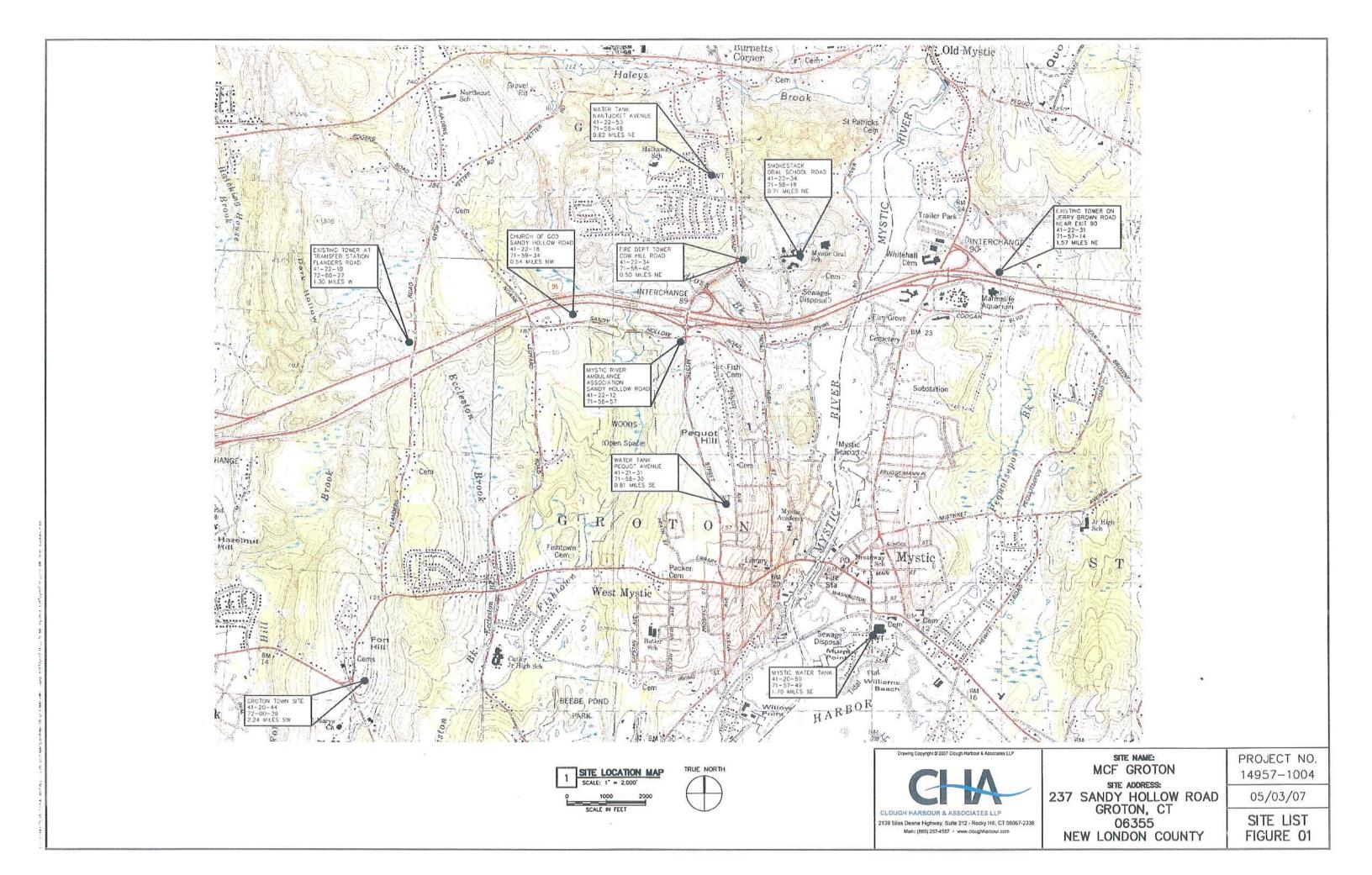
#### Public Notice

Notice is hereby given, pursuant to Section 16-501(b) of the Connecticut General Statutes and Section 16-501-1(e) of the Regulations of Connecticut State Agencies of an Application to be submitted to the Connecticut Siting Council ("Siting Council") on June 25, 2007, or thereafter by MCF Communications bg, Inc. ("MCF") and Omnipoint Communications, Inc., a subsidiary of T-Mobile USA, Inc. d/b/a T-Mobile ("T-Mobile") (collectively the "Applicants"). The Applicants will request a certificate of environmental compatibility and public need from the Siting Council for the construction, maintenance and operation of a telecommunications facility in Groton, Connecticut. The Applicants are proposing to construct a new monopole tower at 237 Sandy Hollow Road, Groton Connecticut and is owned by the Mystic River Ambulance Association Inc. (the "Property"). The Applicants propose to construct a 130 foot, selfsupporting monopole, antennas, associated equipment and other site improvements integral to a wireless communications facility. The location, height and other features of the proposed facility are subject to review and potential change under provisions of the Connecticut General Statutes § 16-50g et. seq.

The proposed Facility will provide cervice in the Town of Groton, long Interstate I-95 as well as in diacent areas. The Application mal business hours at any of the ilso describe the environmental mpacts of the proposed facility.

> A balloon representative of the proposed height will be flown on the day of the Siting Council public hearing on the Application, which will take place in the Town of Groton. The balloon will be flown from approximately 8:00 a.m. to 6:00 p.m. Notice of the public hearing date will be provided by the Siting Council.





#### Rejected Sites Summary

No alternative sites were available for new tower construction within the functional area.

As discussed in the Application, search area was limited by the residential uses and the existence of wetlands. Because of the dominant residential character of the area, MCF focused its site search on non-residential uses within the search area.

The following non-residential lots were rejected:

From the proposed Ambulance site going west on Sandy Hollow Rd the first non-residential parcel (other than Pequot Woods Park) is Church of God at 500 Sandy Hollow Rd. Most of the parcel is in or borders wetlands, and T-Mobile's radio frequency engineers rejected this site because it was too far west.

From the proposed Ambulance site going North on Allyn Street the first non-residential parcel is the Old Mystic Fire Department at 295 Cow Hill Rd. After meeting with their Board, they did not want to enter into a lease and RF advised that the Hill due east would require any tower there to be a lot higher than the proposed site.

From the proposed Ambulance site going East on Sandy Hollow Rd there are two non-residential uses. One is Precious Memories Daycare at 195 Sandy Hollow Rd, the owner of which was not interested in leasing for the development of a Facility. MCF also investigated the possibility of locating the proposed Facility at the Sandy Hollow Professional Bldg at 200 Sandy Hollow Road. This site was rejected because it did not have enough usable ground space for an equipment compound, it has substantial wetlands on the property and an low ground elevation, which would require a much taller Facility.

From the proposed Ambulance site going South on Allyn Street toward Mystic Center, virtually all of the properties are developed with residential uses. MCF did investigated locating on the existing water tank on Pequot Avenue which RF advised was too far South to fill its gap on Interstate I-95 and to connect existing sites.



May 1, 2007

Mr. Michael McFadden MCF Communications, Inc. 733 Turnpike Street, Suite 105 North Andover, MA 01845

**Construction Cost Estimate** RE:

> Site: Groton 237 Sandy Hollow Road Groton, CT 06355 CHA # 14957-1004-1601

Dear Mr. McFadden:

Estimated construction costs based on 2005 RSMeans Heavy Construction Cost Data for the telecommunications facility at 237 Sandy Hollow Road in Groton, CT are listed below. All costs include the material, labor, and construction equipment required to build the facility.

#### **Civil Site Development:**

| RS Means Ref.  | Description                            | Unit | Quantity | Un | it Cost  | Tot | al Cost |
|----------------|--|------|----------|----|----------|-----|---------|
| 02720-200-0050 | 3" Crushed Stone Surface for Compound  | SY   | 220      | \$ | 3.83     | \$  | 843     |
| 02820-130-0920 | 8'-0" High Chainlink Fencing           | LF   | 200      | \$ | 38.00    | \$  | 7,600   |
| 02820-130-5060 | 12'-0" Wide Double Swing Gate          | EA   | 1        | \$ | 1,100.00 | \$  | 1,100   |
| 03310-240-4700 | Concrete Equipment Pads, 6" Thick      | CY   | 2.5      | \$ | 159.00   | \$  | 398     |
| 03310-240-4700 | Concrete Piers for Fence & Ice Bridge  | CY   | 4        | \$ | 159.00   | \$  | 636     |
| 02315-432-2220 | Cuts for Compound                      | CY   | 18       | \$ | 4.65     | \$  | 84      |
| 02200-259-5050 | Asphalt Removal for Compound           | SY   | 108      | \$ | 6.55     | \$  | 707     |
| 02370-700-1100 | Silt Fencing                           | LF   | 300      | \$ | 1.05     | \$  | 315     |
| 02315-620-0750 | Trenching for Utilities, 36" Deep      | LF   | 400      | \$ | 1.51     | \$  | 604     |
| 02315-620-1750 | Trench Backfill & Compaction, 36" Deep | LF   | 400      | \$ | 2.74     | \$  | 1,096   |
| 02315-640-0050 | Bedding for Utilities                  | CY   | 8        | \$ | 30.50    | \$  | 244     |
| 02910-710-0200 | Finish Grading                         | MSF  | 3.5      | \$ | 186.00   | \$  | 651     |
| 02920-320-0800 | Seeding                                | MSF  | 3.5      | \$ | 57.50    | \$  | 201     |
| 02315-490-0100 | Remove Excess Soil From Site           | LCY  | 23       | \$ | 6.95     | \$  | 160     |
| N/A            | Evergreen Plantings                    | EA   | 9        | \$ | 100.00   | \$  | 900     |
|                | Civil Site Development Subtotal        |      |          |    |          | \$  | 14,638  |

#### Tower:

| RS Means Ref.  | Description                             | Unit | Quantity | Unit Cost    | Tot | al Cost |
|----------------|---|------|----------|--------------|-----|---------|
| N/A            | 120' Monopole                           | EA   | 1        | \$ 35,000.00 | 1\$ | 35,000  |
| 03310-240-3850 | Tower Foundation w/ Forms & Reinforcing | CY   | 56       | \$ 320.00    | \$  | 17,920  |
| 01590-600-1500 | Crew for Tower Erection                 | DAY  | 3        | \$ 3,325.00  | \$  | 9,975   |
|                | Tower Subtotal                          |      |          |              | \$  | 62,895  |

#### **Utilities:**

| RS Means Ref.  | Description                        | Unit | Quantity | Unit Cost    | Tota | al Cost |
|----------------|------------------------------------|------|----------|--------------|------|---------|
| 16310-700-0160 | Conductor, Per Wire                | Mile | 0.1      | \$ 16,300.00 | 1\$  | 1,630   |
| 02580-420-5600 | Conduits for Underground Utilities | LF   | 1200     | \$ 18.85     | \$   | 22,620  |
| 16270-610-0200 | Transformer                        | EA   | 1        | \$ 19,600.00 | \$   | 19,600  |
| 16210-600-2050 | Meterbank                          | EA   | 1        | \$ 4,875.00  | \$   | 4,875   |
| 02580-420-0800 | Handhole                           | EA   | 1        | \$ 1,100.00  | \$   | 1,100   |
| N/A            | Grounding System                   | LF   | 500      | \$ 12.00     | \$   | 6,000   |
| 16210-600-2200 | Main Panel                         | EA   | 1        | \$ 5,000.00  | \$   | 5,000   |
|                | Utilities Subtotal                 |      | *        |              | \$   | 60,825  |
|                |                                    |      |          |              |      |         |

#### **Telecommunications Equipment:**

| RS Means Ref. | Description                           | Unit | Quantity | Unit Cost    | Tot | tal Cost |
|---------------|---------------------------------------|------|----------|--------------|-----|----------|
| N/A           | BTS Cabinet                           | EA   | 3        | \$ 32,500.00 | \$  | 97,500   |
| N/A           | Quad Pole Antenna                     | EA   | 9        | \$ 820.00    | \$  | 7,380    |
| N/A           | Antenna Control Unit                  | EA   | 18       | \$ 125.00    | \$  | 2,250    |
| N/A           | Antenna Control Cable - 60 Meters     | EA   | 1        | \$ 122.00    | \$  | 122      |
| N/A           | 1-5/8" Coaxial Cable                  | LF   | 5760     | \$ 2.72      | \$  | 15,667   |
| N/A           | TMA Set of 6                          | EA   | 1        | \$ 5,789.00  | \$  | 5,789    |
|               | Telecommunications Equipment Subtotal |      |          |              | \$  | 128,708  |

Subtotal: \$ 267,066

Construction Contingency @ 10%: \$ 26,707

Regional Adjustment: \$ 16,024

Total Estimated Construction Cost: \$ 309,797

Very truly yours,

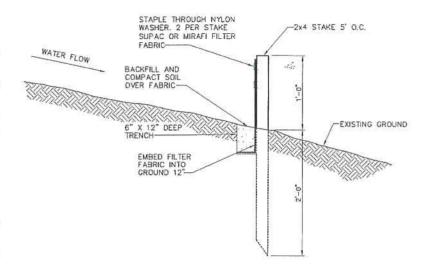
CLOUGH HARBOUR & ASSOCIATES LLP

Paul Lusitani

Project Engineer IV



- 1. THE GOETEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES.
- 2. THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 12" INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
- 3 WOVEN WIRE FENCES SHALL BE EASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH SHALL BE FASTENED SECURELY TO THE WOVEN WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP, MID-SECTION, AND BOTTOM.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN ONE ANOTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
- 6. FENCE POSTS SHALL BE A MINIMUM OF 36" LONG AND DRIVEN A MINIMUM OF 24" INTO THE GROUND. WODD POSTS SHALL BE OF SOUND QUALITY HARDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED TO PREVENT BULGES IN THE SILT FENCE DUE TO DEPOSITION OF SEDIMENT.



SILT FENCE DETAIL NO SCALE

- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES SHALL BE IN CONFORMANCE WITH STATE OF CONNECTICUT GUIDELINES FOR EROSION AND SEDIMENT CONTROL AND COORDINATED WITH THE TOWN/COUNTY CODE ENFORCEMENT OFFICE.
- TEMPORARY SILT FENCE EROSION CONTROL BARRIER SHALL BE MAINTAINED THROUGHOUT SITE CONSTRUCTION. STOCK PILE ON SITE 100 FT. OF SILT FENCE FOR EMERGENCY USE. TEMPORARY EROSION BARRIERS SHALL REMAIN IN PLACE UNTIL PERMANENT VEGETATIVE GROUND COVER IS ESTABLISHED.
- ALL DISTURBED AREAS OUTSIDE THE LIMITS OF THE EQUIPMENT LEASE AREA AND ACCESS ROADWAY SHALL BE PERMANENTLY ESTABLISHED WITH A VEGETATIVE GROUND COVER.
- STILLING BASIN SHALL BE UTILIZED FOR ANY DE-WATERING DISCHARGE WHICH MAY OCCUR DURING CONSTRUCTION OPERATIONS.
- 5. PROPOSED CONSTRUCTION IMPACTS AND PERMANENT IMPROVEMENTS SHALL NOT SIGNIFICANTLY IMPACT STORM WATER RUNOFF PATTERNS, VOLUME OR PEAK FLOW RATES. THE FLAT GRADE OF THE EQUIPMENT COMPOUND AND STONE SURFACE WILL PROMOTE STORM WATER INFILTRATION.
- 6. CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENTATION CONTROL MEASURES PRIOR TO ANY GRADING ACTIVITIES IN LOCATIONS SHOWN ON THIS PLAN.

- SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL, ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
- 8. IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE—HALF THE HEIGHT OF THE BARRIER.
- 10. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATION.
- 11. NOT GREATER THAN 80,000 SQUARE FEET OF LAND SHALL BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME AND SHALL NOT EXCEED 90 DAYS. LAND SHOULD NOT BE LEFT EXPOSED DURING THE WINTER MONTHS.
- 12. ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION. HAY OR STRAW MULCH SHALL BE APPLIED TO ALL FRESHLY SEEDED AREAS AT A RATE OF 2 TONS PER ACRES. BALES SHALL BE UNSPOILED, AR-DRIED, AND FREE FROM WEED, SEEDS, AND ANY COARSE MATERIAL.

**EROSION CONTROL NOTES** NO SCALE

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CLOUGH HARBOUR & ASSOCIATES LLF

2139 Stas Deane Highway, Suite 212 - Rocky Hill, CT 05057-2336 Main: (505) 227-4337 - Ware coughtertour com

CHA PROJ. NO. - 14957-1004

#### MCF Communications, Inc.

733 TURNPIKE STREET, SUITE 105 NORTH ANDOVER, MA 01845 OFFICE: (978) 687-2536 FAX: (978) 258-8850

#### SITE NAME: MCF GROTON

SITE ADDRESS: 237 SANDY HOLLOW ROAD GROTON, CT 06355 NEW LONDON COUNTY

#### SHEET TITLE: **EROSION & SEDIMENT** CONTROL DETAILS

DATE: 10/04/07

REVISION: 0

Fee A 1295" DIED 1004 (ROSEIN COC MINER COLOMBE FRONCIA CONTROLS DATE OF A 200" S. 4-32 AM. Fighted III. A 200" 9-24 D. 40. User Application From

### JOHN P. ALLEN AIRSPACE CONSULTANTS, INC.

Mary C. Lowe 290 MARSH LAKES DRIVE FERNANDINA BEACH, FL 32034 Ph: (904) 261-6523 Fax: (904) 277-3651 maryjpa@bellsouth.net

July 16, 2007

Mr. Mike McFadden MCF Communications, Inc. 733 Turnpike Street, Suite 105 North Andover, MA 01845

Dear Mike:

Pursuant to your request an aeronautical evaluation was conducted near the Groton site area, CT for your proposed antenna tower application. The aeronautical evaluation was conducted in accordance with the standards for determining obstructions to the navigable airspace as set forth in Subpart C of Part 77 of the Federal Aviation Regulations. This aeronautical evaluation is based on published information available from the FAA. All proposed procedures that are not yet published are not taken into account in this evaluation.

COORDINATES: Latitude 41-22-09.40 N - Longitude 71-58-56.70 W (NORTH AMERICAN DATUM - 1983)

HEIGHT: 122 feet AMSL 130 feet AGL 252 feet AMSL

The evaluation disclosed that the proposed site was located 3.69 nautical miles from the Groton-New London Airport reference point. The proposed structure does not exceed the standards of Part 77. Notice to the FAA has been provided and the FAA will not require marking and lighting.

Note: The "no notice height" for this site using FAA/FCC criteria is 130' AGL - 252' AMSL.

The nearest private airport is the Stonington Airpark Airport located 4.55 nautical miles from the proposed site. The nearest AM Radio Station is WSUB located 7,498 meters from the proposed site and is operating with a non-directional type antenna system.

Mr. Mike McFadden June 16, 2007 Pag -2-

If there are any questions regarding the evaluation, please do not hesitate to call.

Sincerely

Mary C. Lowe President

### Notice of Proposed Construction or Alteration (7460-1)

#### Notice of Proposed Construction or Alteration (7460-1)

Project Name: MCF C-000072091-07

Spongor: MCF COMMUNICATIONS INC.

Details for Case : GROTON

Show Project Summary

Case Status

ASN: 2007-ANE-1359-OE

Status: Accepted

Date Accepted:

07/16/2007 Date Determined:

and the state of t

Letters:

Construction / Alteration Information

Notice Of:

Construction Permanent

if Temporary: Honths: Days: Work Schedule - Start: 07/30/2007

Work Schedule - End: 08/30/2008

:State Filing:

Structure Summary

Structure Type: Antenna Tower Structure Name: GROTON

FCC Numbers

Prior ASN:

Structure Details

Latitudet

41° 22' 9,4" N

Longitude:

71° 58' 56.7" W NADB3

: Horizontal Datum: Site Elevation (SE):

122 (nearest foot)

Structure Height (AGL): 130 (nearest foot)

Marking/Lighting:

None

Other:

Nearest City:

WEST MYSTIC Connecticut

Nearest State: Traverseway:

No Traverseway

Description of

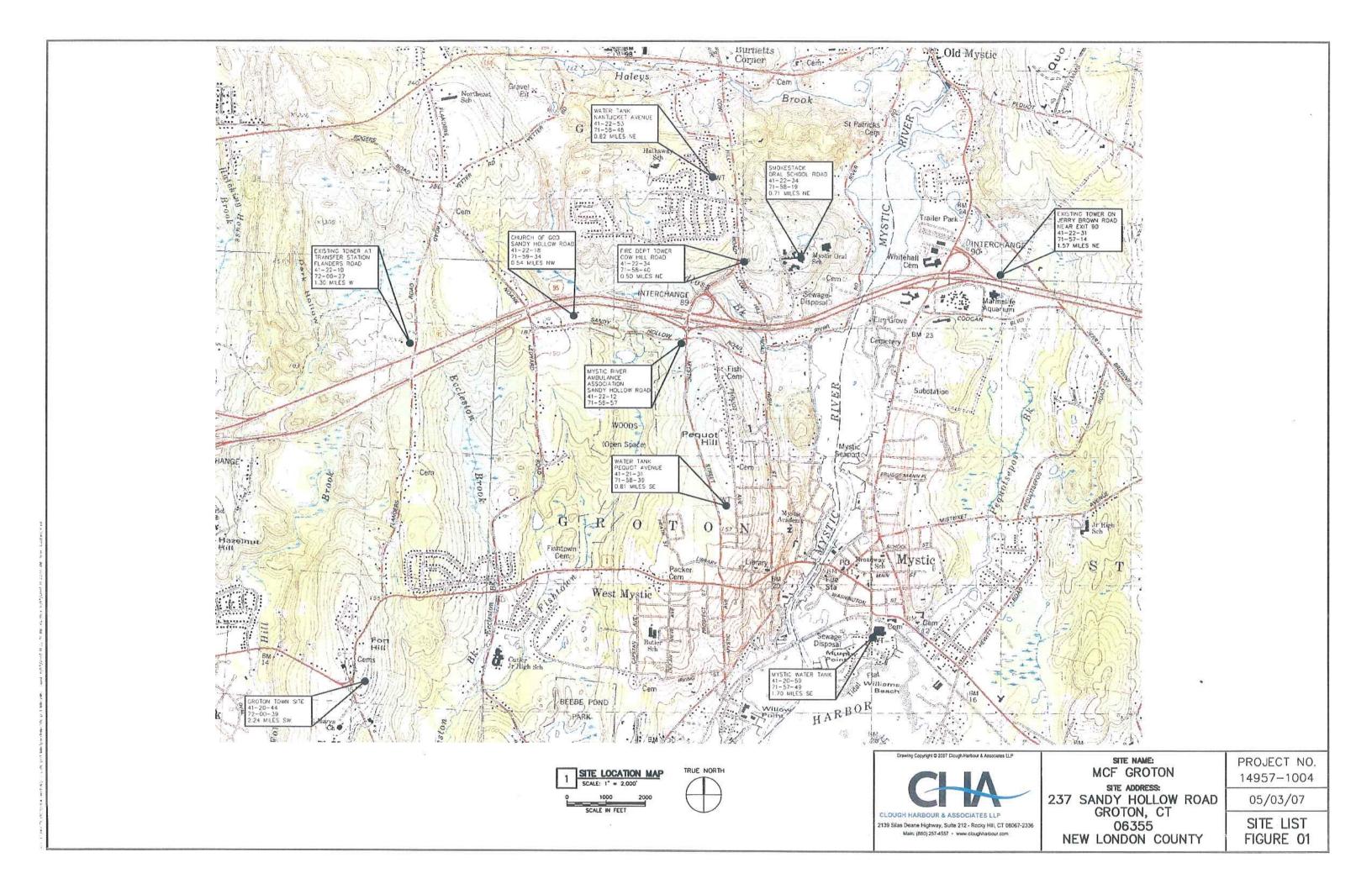
237 SANDY HOLLOW ROAD

Description of

Common Frequency Bands

Low Freq High Freq Freq Unit ERP ERP Unit

Specific Frequencies



| Site     |                                       | Address                       | Town             | TowerTyoe            | AntennaHeight |
|----------|---------------------------------------|-------------------------------|------------------|----------------------|---------------|
| CT11266A | North Stonington-3_1                  | 118 Wintechog Hill Road       | North Stonington | Self Support         | 120 feet AGL  |
| CT11312A | N. Stonington/ RT 2                   | 267 Norwich Westerly Road     | North Stonington | Self Support         | 147 feetAGL   |
| CT11046D | Stonington/ I-95/ X91_1               | 2 Taugwonk Spur               | Stonington       | Monopole             | 175 feet AGL  |
| CT11310A | SBA Stonington                        | 811 Stonington Road           | Stonington       | Flag pole - Monopole | 137 feet AGL  |
| CT11045D | Stonington/ I-95/ X90/ Jerry Brown Rd | 72 Jerry Brown Road           | Stonington       | Flag pole - Monopole | 135 feet AGL  |
| CT11166A | Mystic/ Downtown_1                    | 1 Broadway Extention          | Mystic           | WaterTank            | 125 feet AGL  |
| CT11044E | Groton/ I-95/ X89/ Noa_1              | 725 Flanders Rd               | Groton           | Monopole             | 150 feet AGL  |
| CT11329A | Groton South                          | 118 New London Road           | Groton           | WaterTank            | 72 feet AGL   |
| CT11428A | Groton/I-95/Buddington Rd             | 75 Roberts Road               | Groton           | Self Support         | 128 feet AGL  |
| CT11438B | GW&L / Pfizer                         | 135 Brandegee Avenue          | Groton           | WaterTank            | 64 feet AGL   |
| CT11043C | Quality Inn Groton_1                  | 404 Bridge St                 | Groton           | Billboard            | 60 feet AGL   |
| CT11616B | Groton Utilites Watertank             | 29 Skyview Terrace            | Groton           | WaterTank            | 65 feetAGL    |
| CT11042B | NewLondon/ I-95/ X84/ S_1             | 281 State St Mohican Building | New London       | Rooftop              | 157 feet AGL  |
| CT11339C | I awrence & Memorial Hospital         | 365 Montarik Avenue           | New London       | Rooffon              | 84 feet AGI   |

