DOCKET NO. 94 - AN APPLICATION OF METRO MOBILE CTS OF FAIRFIELD COUNTY, INC., FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR CELLULAR TELEPHONE ANTENNAS AND ASSOCIATED EQUIPMENT IN THE TOWN OF WILTON, CONNECTICUT.	:	CONNECTICUT SITING COUNCIL May 3, 1988

FINDINGS OF FACT

1. Metro Mobile CTS of Fairfield County, Inc. (Metro Mobile) in accordance with the provisions of Sections 16-50g to 16-50z of the Connecticut General Statutes (CGS) applied to the Connecticut Siting Council (Council) on February 5, 1988, for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of a telecommunications tower and associated equipment to provide domestic public cellular radio telecommunication service (cellular service) in the Town of Wilton within the Bridgeport New England County Metropolitan Area (Bridgeport NECMA). (Record)

2. The fee as prescribed by Section 16-50v-1a of the Regulations of State Agencies (RSA) accompanied the application. (Record)

3. The Council and its staff made an inspection of the proposed D-Wilton site (Richdale Drive) and alternative D/A-Wilton site (Quail Ridge Road) on December 14, 1987. The Council made an inspection of the alternative D/AA-Wilton site (Mather Street) on March 21, 1988. During both of these field reviews, Metro Mobile flew balloons at the proposed and alternative tower sites at heights representative of the proposed towers. (Record)

4. Pursuant to Section 16-50m of the CGS, the Council, after giving due notice thereof, held public hearings on the proposed and alternative Wilton tower sites on December 14, 1987, beginning at 4:00 P.M. and continuing at 6:30 P.M. in the Middlebrook Middle School in Wilton, and on March 21, 1988, beginning at 3:00 P.M. and continuing at 6:30 P.M. in the Middlebrook Middle School in Wilton. (Record)

5. The parties in the proceeding are the applicant and those persons and organizations whose names are listed in the Decision and Order which accompanies these Findings. (Record)

6. The Department of Environmental Protection (DEP) filed written comments with the Council pursuant to Section 16-50j of the CGS. (Record)

7. Cellular service consists of small, overlapping broadcast regions, two to ten miles in diameter, known as cells. Each cell is served by a transmitter limited by the Federal Communications Commission (FCC) to no more than 100 watts effective radiated power per channel. Each cell is connected to a central switching point containing electronic apparatus uniting the cells into a system. Mobile units are limited by the FCC to a maximum of seven watts of effective radiated power. (Docket 79, finding 8)

8. Conventional mobile telephone service has long been limited by insufficient frequency availability, inefficient use of available frequency, and poor quality of service. These limitations have resulted in congestion, blocking of transmission, interference, a lack of coverage, and high costs. (Metro Mobile 1, p. 6)

9. In 1981 the FCC recognized the public need for technical improvement, wide area coverage, high quality service, and competitive pricing in mobile telephone service. (Metro Mobile 1, p. 6)

10. The FCC has determined that the public interest requires two licenses for cellular service be made available in each market area or NECMA. (Metro Mobile 1, p. 7)

11. Applicants for FCC cellular system authorizations are not required to demonstrate a public need for the service, since the FCC has pre-empted this issue through the exercise of this primary jurisdiction, and determined there is a need for such a service generally. (Metro Mobile 1, p. 7)

12. The FCC has pre-empted state regulation of technical standards to assure technical integrity of systems and nationwide compatibility. (Metro Mobile 1, p. 7)

13. The FCC exercises exclusive jurisdiction over cellular radio frequency interference, thus pre-empting state and local action in that area. (Metro Mobile 1, p. 7)

14. The FCC has authorized Metro Mobile and its affiliates to construct cellular systems in the Bridgeport, New Haven, and Hartford NECMA's. (Metro Mobile 1, p. 8)

15. Coverage by a cellular tower site in the Wilton area is constrained by a valley that Route 7 lies within. Acceptable coverage would best be achieved by choosing a cell site location which would allow signals to travel in straight lines along the valley in which Route 7 lies. (Metro Mobile 1, Riley testimony, p. 10)

16. Metro Mobile considered and rejected 20 sites in the Wilton area. These sites were rejected for reasons including dense residential development, inadequate coverage, an unwillingness by property owners to lease or sell property, and access difficulties. (Metro Mobile 1, Attachment 1, pp.1-2)

17. The proposed Wilton site on Richdale Drive is a 50-foot by 70-foot parcel of land owned by Richard W. Knapp. The proposed site is on land used for storage and garage space by the Knapp Tree Service, and is zoned R-2A Residential. (Metro Mobile 1, Exhibit 1, p. 3)

18. The proposed Richdale Drive site is 750 feet west of the Wilton Junior High School and has an elevation of 390 feet above mean sea level (AMSL). (Metro Mobile 1, Exhibit 1, p. 19)

19. Access into the proposed Richdale site would be from an existing access road 20 feet west of the proposed site. (Metro Mobile 1, Exhibit 1, p. 3)

20. The proposed Richdale Drive tower would be a 140-foot SSV Heavy Series lattice tower. Including antennas, this would be a 153-foot structure. (Metro Mobile 1, Exhibit 1, p. 15, p. 17)

21. There are two buildings within the fall zone of the proposed Richdale Drive tower. One is the lessor's office and residence leased to an employee of the tree service, and the other is a garage on the lessor's property. (Metro Mobile 1, Exhibit 1, p. 19)

22. There are approximately 30 residences within a 2,000-foot radius of the proposed Richdale Drive site. The nearest residence, within 100 feet, is owned by the lessor of the proposed site. The next closest residence is 250 feet northwest of the proposed site. (Metro Mobile 1, Exhibit 1, p. 4)

23. The proposed Richdale Drive tower would be shielded from view along High School Road, except for a 300 foot section of road near the Wilton Community Center, where the upper 10 to 60 feet of the proposed tower would be visible. Visibility of the tower would be shielded from along Hunting Ridge Road, Catalpa Road, Warncke Road, and Turner Lane. The upper 40 to 80 feet of the proposed tower would be visible from the portion of Route 7 between Cannon Road and Pimpewaug Road. It would also be visible along Route 7 south of the Cannondale Station. (Metro Mobile 1, Exhibit 1, p. 4; Tr., 12/14/87, pp. 69-71)

24. The proposed Richdale Drive tower would provide coverage to Routes 7, 33, 35, and 53 from northern Norwalk into Ridgefield, and to portions of Wilton, Weston, Redding, and Easton. (Metro Mobile 1, Exhibit 1, p. 12, p. 26, p. 28)

25. The alternative Quail Ridge Road site is a 75-foot by 100-foot parcel of land owned by Katherine G. Sabia, Trustee. The alternative site is zoned Two Acre Residential. (Metro Mobile 1, Exhibit 1A, pp. 2-3)

26. The alternative Quail Ridge Road site is 400 feet AMSL. (Metro Mobile 1, Exhibit 1A, p. 3)

27. A 600-foot access road into the alternative Quail Ridge Road site would cross designated wetlands. The area contains a forested wetland with soils consisting of shallow peats and mucks. The property has been the subject of the Town of Wilton wetlands violations since 1977. (Metro Mobile 1, Exhibit 1A, p. 3; Wilton Exhibit 1, Environmental Analysis; Metro Mobile Late File 7, Docket 86)

28. To construct the alternative tower site, approximately 13,000 square feet of the parcel would be cleared and leveled. (Metro Mobile 1, Exhibit 1A, p. 3)

29. The alternative Quail Ridge Road tower would be a 200-foot SSV-Heavy Series tower. Including antennas, this would be a 213-foot structure. (Metro Mobile 1, Exhibit 1A, p.17)

30. Under Federal Aviation Administration regulations, the alternative Quail Ridge Road tower would be obstruction marked and lighted with a mid-intensity strobe light mounted on the top of the tower. (Metro Mobile 1, Exhibit 1A, p. 14, pp. 17-18)

31. All three proposed towers would meet the immediate service objectives of the system. However, use of the alternative Mather Street site or alternative Quail Ridge Road site would result in the need for a future New Canaan tower site. (Metro Mobile 1, Exhibit 1A, p. 30, Tr., 12/21/87, pp. 241-242)

32. There are 20 residences within a 2,000-foot radius of the alternative Quail Ridge Road tower. The two closest residences are approximately 600 feet from the alternative site. (Metro Mobile 1, Exhibit 1A, p. 4)

33. The alternative Quail Ridge Road tower would not be visible along Mather Street or the first quarter mile of Honey Hill Road. The upper portion of the tower would be visible along the entire length of Quail Ridge Road. (Metro Mobile 1, Exhibit 1A, p. 4; Tr., Docket 86, 12/14/87, p. 69)

34. The alternative Mather Street site is a 60-foot by 60-foot parcel of land within the Town of Wilton landfill. The property is zoned R-2A Residential and is owned by the Town of Wilton. (Metro Mobile 1, Exhibit 1A, p.4)

35. The alternative Mather Street site has an elevation of 420 feet AMSL. (Metro Mobile 1, Exhibit 1B, p. 31)

36. The Wilton landfill was closed in January 1975. The Town of Wilton plans to continue operating this property as a transfer station and recycling center. (Metro Mobile 3, Q.1)

37. The DEP has stated the alternative Mather Street tower site would neither have impact on nor be affected by the closed landfill. The DEP granted approval for Metro Mobile's use of the landfill on March 24, 1987. (Metro Mobile 1, Exhibit 1B, p. 17)

38. Metro Mobile hired a consultant to study the use of the Wilton landfill as a tower site. Six test borings were drilled to determine if buried refuse existed at the tower site. All of the borings penetrated through brown to gray fine to medium sands and silt to bedrock. Refuse was found at a depth of six feet below grade at one boring east of the proposed foundation of the tower. (Metro Mobile 1, Exhibit 1B, pp. 5-9)

39. The alternative Mather Street tower site does not contain buried refuse. After conducting the study, Metro Mobile moved the location of the entire parcel 10 feet to the west to an area which does not contain refuse. (Metro Mobile 1, Exhibit 1B, pp. 8-9; Metro Mobile 3, Q.4)

40. No methane gas seepage is expected at the alternative Mather Street site. Should a change in the direction of leachate movement occur, numerous monitoring wells on site should detect such movement. (DEP Comments, 3/16/88)

41. The construction and maintenance of the alternative site would have no effect on local groundwater. Drilling to a depth of 10 to 12 feet into the bedrock of the site to secure tower lattice footings would not affect groundwater movement or quality. The foundations for a monopole would reach a greater depth, perhaps 12 to 20 feet. (Tr., 3/21/88, pp. 32-32; p. 103, pp. 106-110)

42. The holes for rock anchors would be drilled with a diamond bit, which would not cause rock to fracture. After drilling, these holes would be filled with a rock anchor, cement, and plugs. (Tr., 3/21/88, p. 109)

43. The alternative Mather Street site is presently covered with small trees, brush, and bedrock and is on a small ridge. (Tr., 3/21/88, pp. 23-24; pp. 106-108)

44. The alternative Mather Street tower would be a 180-foot SSV-Heavy series lattice tower. Including antennas, this would be a 193-foot structure. Metro Mobile would, if ordered by the Council, construct a monopole instead of the lattice tower, of a similar height. (Tr., 3/21/88, pp. 41-42; Metro Mobile 1, Exhibit 1B, p. 27)

45. There are 10 residences within a 2,000-foot radius of the alternative Mather Street site. The nearest residence is 1,000 feet to the southeast. (Metro Mobile 1, Exhibit 1B, p. 5, p. 31)

46. Access to the alternative Mather Street site would be via an existing landfill access road off of Mather Street. (Metro Mobile 1, Exhibit 1B, p. 32)

47. The Town of Wilton plans to use the alternative Mather Street tower to mount antennas for fire, police, and emergency communications purposes. (Metro Mobile 1, Exhibit 1B, p. 4)

48. To prevent soil erosion during the construction of the alternative Mather Street site, staked hay bales would be used. Minimal clearing and leveling would be required. Additional subsurface reconnaissance would be performed before commencement of construction. (Metro Mobile 1, Exhibit 1B, p. 4; Metro Mobile 3, Q.6)

49. There would be little or no visibility of the alternative Mather Street tower from Upper Parish Drive, Quail Ridge Road, Honey Hill Road, and Mather Street. The tower would be visible from the ridge across Route 7, and intermittently along Route 7 near the landfill. (Metro Mobile 1, Exhibit 1B,pp.5-6; Tr.,3/21/88, p.23)

50. Lattice towers are proposed at all three Wilton sites to accommodate the anticipated demands of the Town of Wilton's loading requirements as well as the anticipated shared use of the towers by other cellular carriers.(Tr., 3/21/88, p. 38)

51. The Mather Street tower could be a monopole designed to hold Metro Mobile's antennas mounted at the 180-foot level, additional antennas at the 150-foot level, and the Town of Wilton antennas at the 160-foot level. (Tr., 3/21/88, pp. 42-43)

52. At each of the three sites proposed in this application, Metro Mobile would mount two 15-foot omnidirectional whip transmit antennas on two to three foot sidearms at the top of the tower. Six 11.5 - foot directional receive antennas with reflectors would be mounted on three six-foot sidearms. (Metro Mobile 1, p.9)

53. At the proposed Richdale site or alternative Quail Ridge Road site, Metro Mobile would construct a 22.5-foot by 21-foot equipment building to house receiving, transmitting, switching, processing, and monitoring equipment. At the alternative Mather Street site, Metro Mobile would construct a 21-foot by 30-foot building. (Metro Mobile 1, p. 10)

54. At each of the three proposed Wilton sites, the tower and equipment building would be surrounded by an eight-foot chain link fence. (Metro Mobile 1, p. 10)

55. Electromagnetic radio frequency power density levels would be as follows: proposed Richdale site, 0.0459 mW/cm^2 for 64 channels at 100 watts at the 140-foot level; alternative Quail Ridge Road site, 0.0225 mW/cm^2 for 64 channels at 100 watts at the 200-foot level, and alternative Mather Street site, 0.0278 mW/cm^2 for 64 channels at 100 watts at the 180-foot level of the tower. (Metro Mobile 1, Exhibit 1, p. 4, Exhibit 1A, p. 4, Exhibit 1B, p.5)

56. The power density levels at the sites proposed in this application would be below the Connecticut safety standard of the frequency ranges used in cellular systems. (Metro Mobile, pp. 22 - 23)

57. There are no existing records of federally endangered or threatened species or Connecticut species of special concern occuring at any of the sites proposed in this application. (Metro Mobile 1, Exhibit E, p. 12)

58. Construction of the towers proposed in this application would have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places. (Metro Mobile 1, Exhibit E, pp. 22 - 23)

59. Facility costs at the proposed Richdale site are estimated as follows:

Radio equipment	$175,300.00
Tower and antennas	34,200.00
Power systems	6,000.00
Building	68,300.00
Miscellaneous (including site preparation and installation)	142,200.00
	$426,000.00

(Metro Mobile 1, Exhibit 1, p. 16)

60. Facility costs at the alternative Quail Ridge Road site are estimated as follows:

Radio equipment	$175,300.00
Tower and antennas	45,600.00
Power systems	6,000.00
Building costs	68,300.00
Miscellaneous (including site preparation and installation)	182,200.00
Total Cost	$477,400.00

(Metro Mobile 1, Exhibit 1A, p. 18)

61. Facility costs at the alternative Mather Street site are estimated as follows:

Radio equipment	$175,300.00
Tower and antennas	40,200.00
Power systems	37,500.00
Building costs	120,000.00
Miscellaneous (including site preparation and installation)	157,200.00
Total Cost	$530,200.00

(Metro Mobile 1, Exhibit 1B, p. 28)