



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@po.state.ct.us

Web Site: www.state.ct.us/csc/index.htm

February 20, 2002

Christopher B. Fisher, Esq.
Cuddy & Feder & Worby LLP
90 Maple Avenue
White Plains, NY 10601-5196

RE: **EM-AT&T-015-034-083-084-097-103-107-135-167-020131** - AT&T Wireless notice of intent to modify existing telecommunications facilities located in Bridgeport, Stamford, Milford, Danbury, Middletown, Orange, Newtown, Norwalk, and Woodbridge, Connecticut.

Dear Attorney Fisher:

At a public meeting held on February 14, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify eleven of the twelve existing telecommunications facilities, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies. The 38 Kaechele Place, Bridgeport site will be presented at a future Council meeting after requested information is received. Although no conditions have been placed on this approval, I am attaching a letter from the Town of Newtown, dated February 14, 2002, for your review and consideration.

The proposed modifications are to be implemented as specified here and in your notice dated January 29, 2002. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility sites that would not increase tower height, extend the boundaries of the tower sites, increase noise levels at any tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. These facilities has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on these towers.

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

Thank you for your attention and cooperation.

Very truly yours,


Mortimer A. Gelston
Chairman

MAG/RM/laf

Enclosure

c: See attached list.

Honorable Joseph P. Ganim, Mayor, City of Bridgeport
Honorable Michael P. Nidoh, City Planner, City of Bridgeport
Melanie J. Howlett, Assistant City Attorney, City of Bridgeport
Honorable Mark D. Boughton, Mayor, City of Danbury
Dennis Elpern, City Planner, City of Danbury
Honorable Herbert C. Rosenthal, First Selectman, Town of Newtown
Gary Frenette, Zoning Enforcement Officer, Town of Newtown
Honorable Domenique S. Thornton, Mayor, City of Middletown
Planning and Zoning Official, City of Middletown
Honorable James L. Richetelli, Jr., Mayor, City of Milford
Wade Pierce, City Planner, City of Milford
Honorable Alex A. Knopp, Mayor, City of Norwalk
Stephen Thomas, Planning Chairman, City of Norwalk
Honorable Mitchell R. Goldblatt, First Selectman, Town of Orange
Paul Dinice, Zoning Enforcement Officer, Town of Orange
Honorable Dannel P. Malloy, Mayor, City of Stamford
Robin Stein, Planning and Zoning Director, City of Stamford
Honorable Amey Marrella, First Selectman, Town of Woodbridge
Samuel Spielvogel, Town Planner, Town of Woodbridge

CUDDY & FEDER & WORBY LLP

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STAMFORD, CONNECTICUT
NORWALK, CONNECTICUT

CUDDY & FEDER
1971-1995

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ELISABETH N. RADOW
NEIL T. RIMSKY
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JENNIFER L. VAN TUYL
CHAUNCEY L. WALKER (also CA)
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LOUIS R. TAFFERA

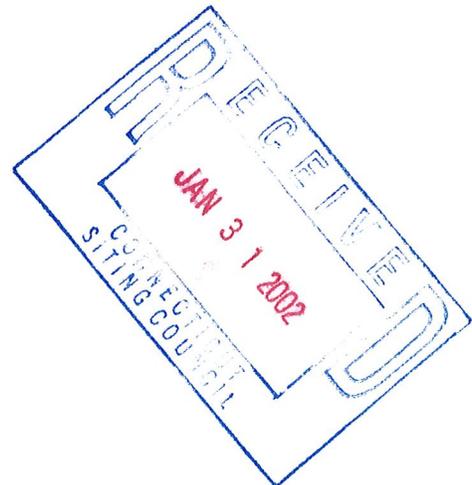
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KAREN G. GRANIK
JOSHUA J. GRAUER
WAYNE E. HELLER (also CT)
KENNETH F. JURIST
MICHAEL L. KATZ (also NJ)
JOSHUA E. KIMERLING (also CT)
DANIEL F. LEARY (also CT)
BARRY E. LONG

January 29, 2002

VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members
of the Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: AT&T Wireless Notice of Exempt Modification
38 Kaechele Place, Bridgeport, Connecticut
1590 Newfield Avenue, Stamford, Connecticut
111 School House Road, Milford, Connecticut
36 Sugar Hollow Road, Danbury, Connecticut
90 Industrial Park, Middletown, Connecticut
525 Orange Center Road, Orange, Connecticut
Berkshire Road, Newtown, Connecticut
10 Willard Road, Norwalk, Connecticut
1027 Racebrook Road, Woodbridge, Connecticut



Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

On behalf of AT&T Wireless, we respectfully enclose an original and twenty copies of its notice of exempt modification with respect to the above mentioned facilities together with a check in the amount of \$500.00. We would appreciate it if these matters were placed on the next available agenda for acknowledgment by the Council. Should the Council or staff have any questions regarding this matter, please do not hesitate to contact us.

Very truly yours,

Linda Grant

cc: Christopher B. Fisher, Esq.

EDMOND TOWN HALL
45 MAIN STREET
NEWTOWN, CONNECTICUT 06470
TEL. (203) 270-4201
FAX (203) 270-4205
e-mail: newtown@snet.net



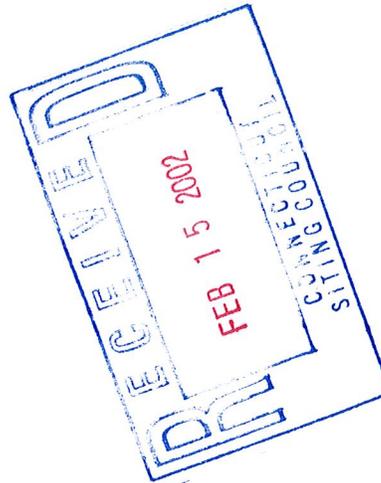
HERBERT C. ROSENTHAL
FIRST SELECTMAN

TOWN OF NEWTOWN
OFFICE OF THE FIRST SELECTMAN

VIA FAX AND FIRST CLASS MAIL

February 14, 2002

Mr. S. Derek Phelps, Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051



Re: EM-AT&T-015-034-083-097-103-107-167-020131 – AT&T Wireless notice of intent to modify existing telecommunications facilities located at nine sites throughout the State of Connecticut – Berkshire Road, Newtown

Dear Mr. Phelps:

The Town of Newtown would like to request that the Siting Council require AT&T Wireless to comply with any Newtown Zoning, inland wetland, sedimentation and erosion control requirements, as well as Building Official inspections for installation of the 14' by 8'6" pad and cabinets.

Sincerely,

Herbert C. Rosenthal
First Selectman

cc: Gary Frenette, Zoning Enforcement Officer, Town of Newtown

CUDDY & FEDER & WORBY LLP

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January 29, 2002

VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members
of the Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: AT&T Wireless - EM-CROWN-097-991115
Berkshire Road, Newtown, Connecticut
Notice of Further Exempt Modification



Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

Crown Atlantic Company LLC ("Crown") holds the Siting Council certificate for the existing communications tower and related facility located off Berkshire Road, Newtown, Connecticut (Docket No. 89). On December 8, 1999 Crown, on behalf of AT&T Wireless ("AT&T"), received the Council's acknowledgement of a notice to modify the existing facility pursuant to Section 16-50j-72 of the Regulations of Connecticut State Agencies (EM-CROWN-097-991115) permitting AT&T to install panel antennas at the 135' level on the existing tower, with associated equipment cabinets located on a 14' x 8'-6" concrete pad within the fenced compound.

This notice of further exempt modification is also being provided pursuant to Section 16-50j-72 of the Council's regulations. In order for AT&T to install an additional equipment cabinet (approximately 76"H x 76"W x 30"D) at the facility, the existing concrete pad must be extended. AT&T proposes to add an 8'-6" x 3' poured concrete pad to the existing pad within the existing fenced compound. See plans prepared by URS Corporation annexed hereto as Exhibit 1. There will be no other infrastructure changes to AT&T's facility.

January 29, 2002

Page 2

The proposed addition of an equipment cabinet and associated concrete pad to AT&T Wireless' facility does not constitute a "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d). The proposed addition to AT&T Wireless' facility will not result in an increase in the Tower's height or extend the boundaries of the existing fenced area surrounding the Tower. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. AT&T made measurements of the existing facility to confirm compliance with MPE limits and as set forth in a report prepared by Wireless Facilities, Inc., annexed hereto as Exhibit 2, the total radio frequency electromagnetic radiation power density at the Tower site's boundary will not be increased to or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes. For all the foregoing reasons, addition of AT&T Wireless' cabinet to its existing facility constitutes an exempt modification which will not have a substantially adverse environmental effect.

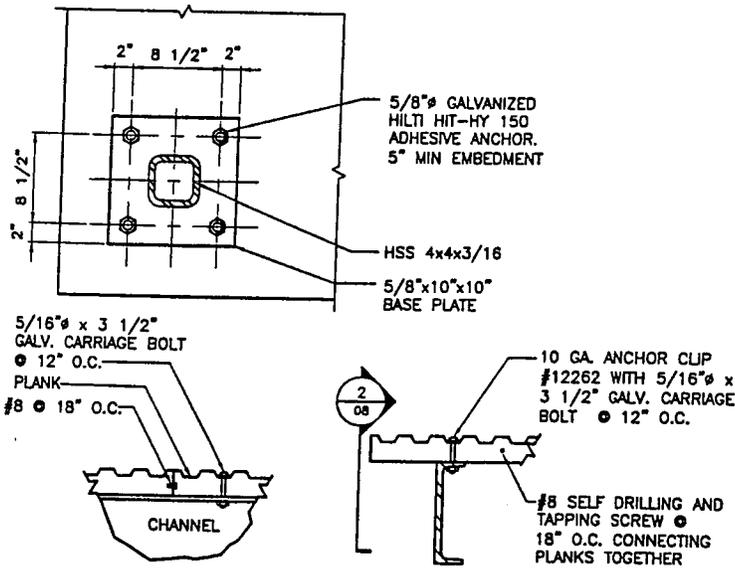
AT&T Wireless respectfully submits that the proposed extension of the existing equipment pad and addition of the cabinet to the Berkshire Road Facility meets the Council's exemption criteria and requests an acknowledgment of same.

Respectfully Submitted,



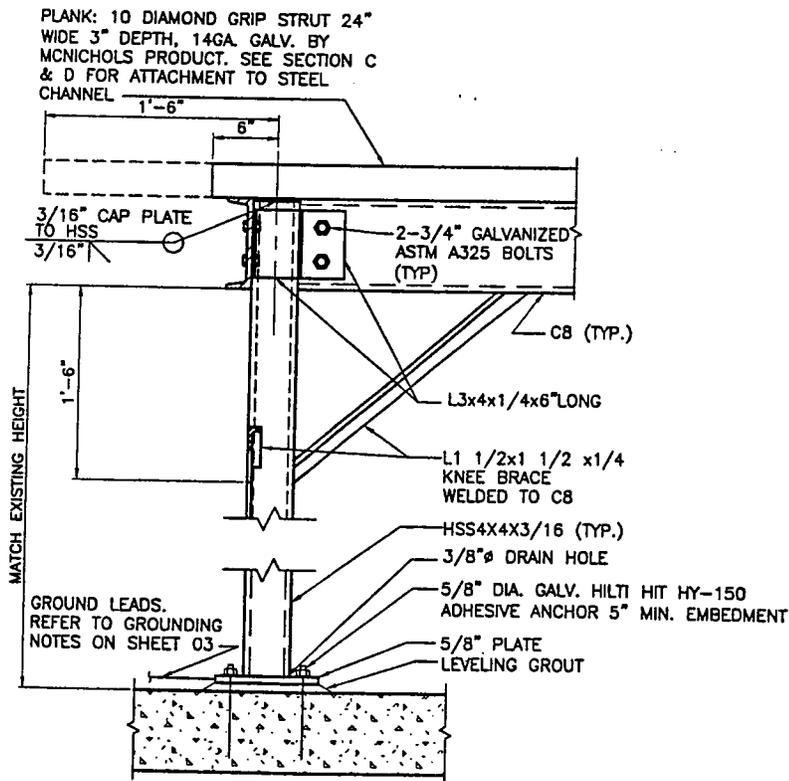
Christopher B. Fisher, Esq.
On behalf of AT&T Wireless

cc: First Selectman, Town of Newtown
Darryl Hendrickson, Bechtel Telecommunications
Kenneth C. Baldwin, Robinson & Cole



TYPICAL ICE CANOPY DETAILS

SCALE: 2
N.T.S.



SUPPORT POST FOR ICE CANOPY EXTENSION DETAIL

SCALE: 3
N.T.S.

SITE PLAN

URS CORPORATION AES

795 BROOK STREET, BUILDING 5
ROCKY HILL, CONNECTICUT
1-(860)-529-8882

URS JOB NUMBER: F302099.64

**BERKSHIRE
CT-181**

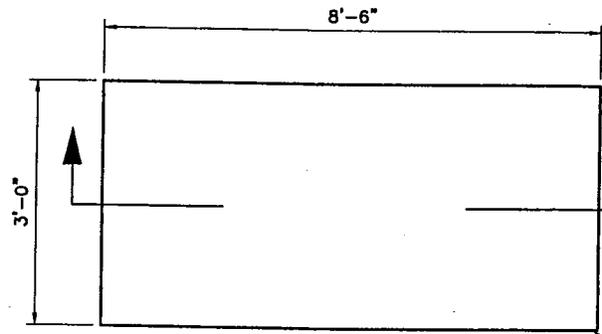
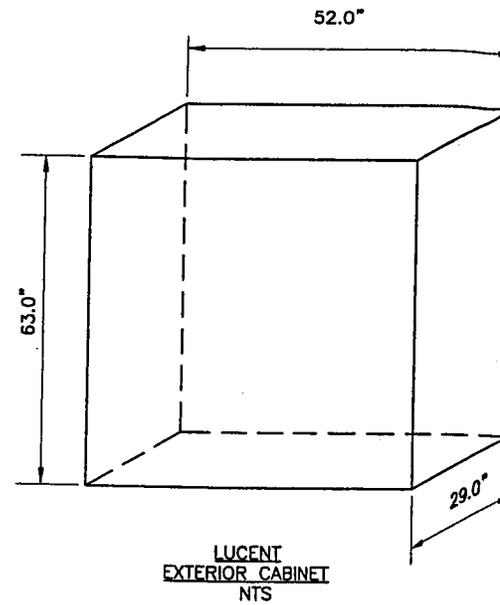
21 BERKSHIRE AVENUE
SANDY HOOK, CONNECTICUT



AT&T WORLD WIDE
15 F P

GENERAL NOTES:

1. ALL WORK SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF NATIONAL, STATE, CITY AND LOCAL CODES, STANDARDS AND AMENDMENTS.
2. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM INFORMATION AND DRAWINGS PROVIDED BY BECTEL. SUBCONTRACTOR SHALL NOTIFY THE BECTEL CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
3. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED.
4. ALL ITEMS OTHER THAN WHAT IS NOTED IN THE BILL OF MATERIALS FOR ANTENNAS, WILL BE PROVIDED BY THE SUBCONTRACTOR.
5. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE BECTEL CONSTRUCTION MANAGER.
6. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF SPECIFICATIONS LISTED BELOW.
7. FIELD ROUTE ALL CONDUITS, CABLES, ETC. AS REQUIRED. CONFIRM THE EXACT ROUTING WITH THE ON-SITE BECTEL CONSTRUCTION MANAGER PRIOR TO THE START OF WORK.
8. ALL DAMAGE TO THE EXISTING STRUCTURE DURING THE CELL SITE UPGRADE MUST BE MADE GOOD TO THE PRE-CONSTRUCTION CONDITION OR BETTER.
9. REMOVE AND CLEAN UP ANY DEBRIS OR MATERIAL FROM THE SITE THROUGHOUT THE DURATION OF THE CONTRACT UPON COMPLETION OF THE WORK AS DIRECTED BY THE BECTEL CONSTRUCTION MANAGER.
10. THIS CELL SITE IS IN FULL COMMERCIAL OPERATION, THE SUBCONTRACTOR IS NOT TO DISRUPT THE EXISTING SITES NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH BECTEL AND AWS AND SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT. SINCE THIS SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

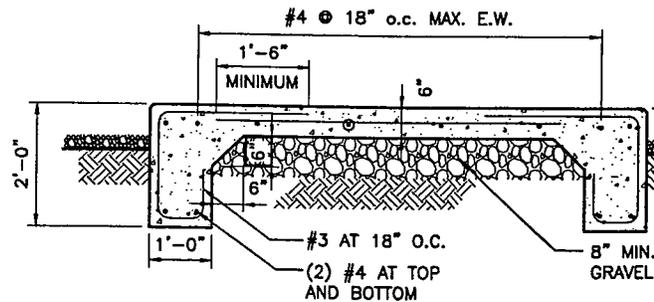


REFERENCE SPECIFICATIONS:

1. 24623-033-3PS-A00Z-00002, SCOPE OF WORK (EXHIBIT "D") FOR GENERAL CONSTRUCTION SERVICES.
2. 24623-033-3PS-A00Z-0005, (EXHIBIT "E") FOR GENERAL CONSTRUCTION SERVICES.

ELECTRICAL NOTES:

1. POWER:
SUBCONTRACTOR SHALL PROVIDE AND INSTALL ONE (1) 80A-2P BRANCH CIRCUIT BREAKER IN EXISTING AT&T POWER DISTRIBUTION PANEL IN AVAILABLE POSITION. PROVIDE TWO (2) #4 AWG AND ONE (1) #4 AWG (NEUTRAL) AND ONE (1) #4 AWG, GROUND IN 1" GRC FROM EXISTING AT&T DISTRIBUTION PANEL TO NEW 3G, GSM OUTDOOR CABINET. REFER TO SHEET 06 FOR ROUTING CONDUIT AND LOCATION OF EQUIPMENT. ROUTE CONDUIT UNDERGROUND TO EQUIPMENT PAD EXTENSION, STUB UP CONDUIT AND CONTINUE ROUTING ON EQUIPMENT PAD TO 3G GSM CABINET. FINAL TERMINATION OF WIRES WILL BE MADE BY LUCENT. REFER TO SHEET 08 (DETAIL 1) FOR CIRCUITING.
2. TELCO:
SUBCONTRACTOR SHALL PROVIDE (1.5 MBIT/S) CAT 5E, T-1 TELEPHONE CABLE IN 1" GRC FROM EXISTING TELCO BOX TO NEW 3G, GSM OUTDOOR CABINET. REFER TO SHEET 06 FOR ROUTING CONDUIT AND LOCATION OF EQUIPMENT. ROUTE CONDUIT UNDERGROUND TO EQUIPMENT PAD EXTENSION, STUB UP CONDUIT AND CONTINUE ROUTING ON EQUIPMENT PAD TO 3G GSM CABINET. FINAL TERMINATION OF WIRES WILL BE MADE BY LUCENT.
3. GROUND:
SUBCONTRACTOR SHALL PROVIDE #2 AWG STRANDED COPPER WIRE FOR GROUNDING THE LUCENT GSM CABINET FRAMES TO EXISTING GROUND RING. CONNECTION TO CABINET WILL BE MADE BY LUCENT. EXISTING GROUND BAR (IF CONVENIENTLY LOCATED) CAN BE USED FOR EQUIPMENT GROUNDING. REFER TO SHEET 06 FOR MORE INFORMATION. 2 GROUND CONNECTIONS TO BE PROVIDED. GROUND ICE CANOPY EXTENSION SUPPORT POSTS TO EXISTING AT&T MAIN GROUND BAR USING #2 AWG, BCW.



NOTES:

1. GRAVEL SHALL BE NATURAL OR CRUSHED GRAVEL WITH 100 PERCENT PASSING 1 INCH SIEVE.

EQUIPMENT PAD EXTENSION DETAIL
NTS

GENERAL NOTES

SCALE:
N.T.S. 2

URS CORPORATION AES

795 BROOK STREET, BUILDING 5
ROCKY HILL, CONNECTICUT
1-(860)-529-8882

URS JOB NUMBER: F302099.64

**BERKSHIRE
CT-181**

21 BERKSHIRE AVENUE
SANDY HOOK, CONNECTICUT



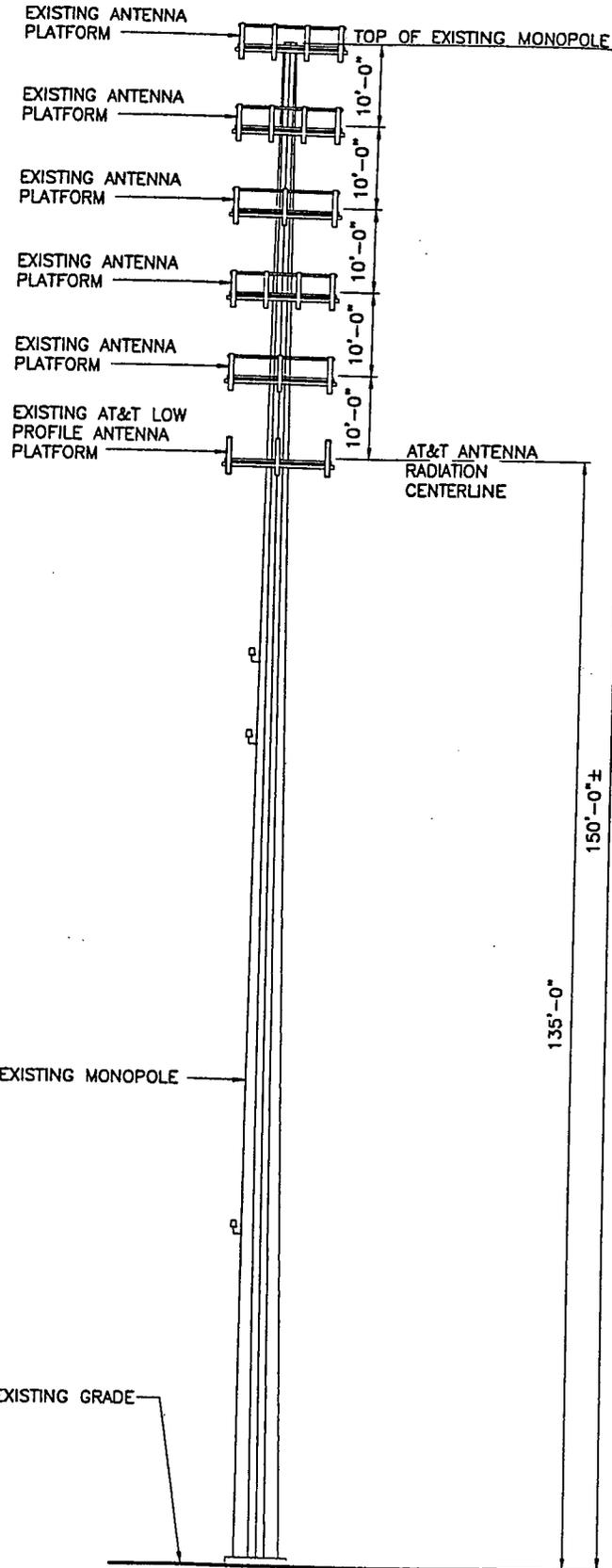
AT&T

CABLE INSTALLATION:

1. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL FOR SAFETY AND PROTECTION
COAXIAL CABLES SHALL BE PROTECTED FROM DAMAGE AND SHALL HAVE MINIMUM BEND RADIUS FOR THE SIZE AND MANUFACTURER OF THAT CABLE.
3. SLACK SHALL BE LEFT IN CABLES LEAVING THE RACK TO THEIR TERMINATION POINTS. THIS IS DONE IN ORDER TO PROVIDE A STRESS RELIEF ON THE BALES AND CONNECTIONS IN THE EVENT OF SEISMIC ACTIVITY.
4. ALL CABLES SHALL BE ROUTED AND INSTALLED IN A MANNER AS TO PROTECT THE CABLES FROM DAMAGE OF SHARP FIBER PAPER OR SPLIT PVC FIBER TUBING MAY BE USED.
5. SUBCONTRACTOR SHALL NOT ROUTE CABLES THROUGH CABLE LADDER RACK RUNGS.
6. SUBCONTRACTOR SHALL PROVIDE OR MODIFY CABLE TRAY AS REQUIRED TO FACILITATE EQUIPMENT INSTALLATION BASED ON THE LOCATION OF THE NEW EQUIPMENT.
7. SUBCONTRACTOR SHALL VERIFY THE ACTUAL LENGTHS OF EACH JUMPER AND COAXIAL CABLE BEFORE INSTALLATION.

ABBREVIATIONS

AGL	ABOVE GRADE LEVEL
BTS	BASE TRANSCIEVER STATION
(E)	EXISTING
	MINIMUM
N.T.S.	NOT TO SCALE
REF	REFERENCE
RF	RADIO FREQUENCY
T.B.D.	TO BE DETERMINED
T.B.R.	TO BE RESOLVED
TYP	TYPICAL
REQ	REQUIRED
V.I.F.	VERIFY IN FIELD
AWG	AMERICAN WIRE GAUGE
BCW	BARE COPPER WIRE



TOWER ELEVATION

URS CORPORATION AES

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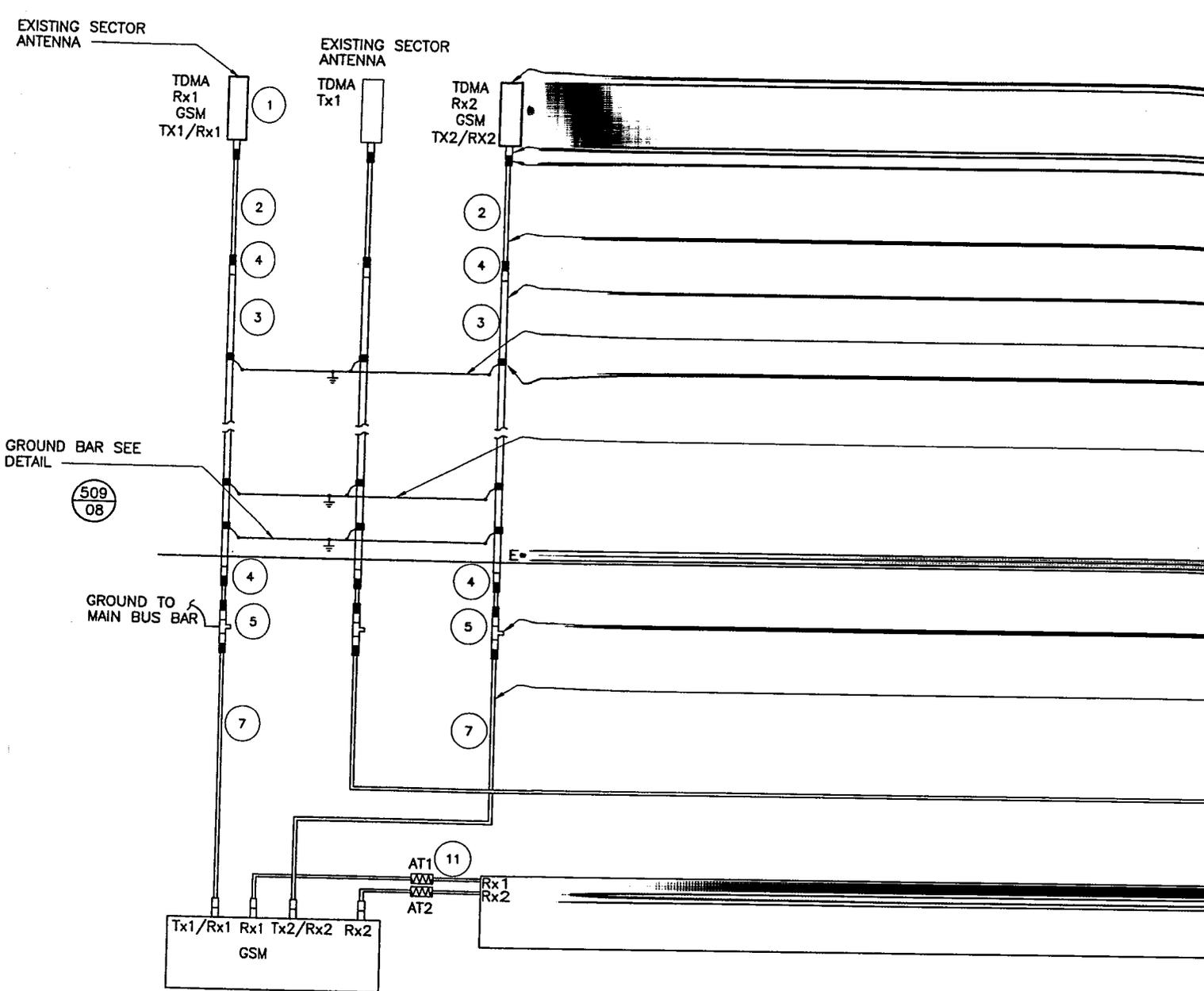
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 CT-181**

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SCALE
 N.T.S.



AT&T WI
 15



ANTENNA SECTORS 1, 2 AND 3
53_3/3VP SCHEMA

ANTENNA RISER

URS CORPORATION AES
 795 BROOK STREET, BUILDING 5
 ROCKY HILL, CONNECTICUT
 1-(860)-529-8882
 URS JOB NUMBER: F302099.64



Wireless Facilities, Inc.
 1840 Michael Faraday Drive
 Suite 200
 Reston, VA 20190

December 20, 2001

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

RE: FCC Compliance Statement for AT&T Site CT-181 (Berkshire)

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed in-field RF measurements and office analyses for the above referenced site to determine compliance with FCC mandated Maximum Permissible Exposure (MPE) limits as defined in 47 CFR § 1.1310.

The table below gives a brief summary of the site location, its configuration and associated technical parameters.

Summary of the site configuration and technical parameters:

Site ID	CT-181
Site Name	Berkshire
Latitude	41.41305
Longitude	-73.27027
Address of structure	21 Berkshire Avenue, Sandy Hook, CT
Type of structure	Monopole
Antenna structure owner	AT&T Wireless services
Address of antenna owner	149 Water street, Norwalk, CT
FCC class and Type of service	PCS TDMA (IS-136)
Operating frequency	D, E bands (PCS)
Azimuths	50,170,290
Elevation (ft)	135
Antenna manufacturer	EMS Wireless
Antenna type	Panel

The mathematical equations used in evaluating the power density values are exactly as outlined in the Office of Engineering & Technology (OET) Bulletin Number 65 which contains the FCC guidelines for evaluating human exposure to radio-frequency electromagnetic fields.

In the case of a single radiating antenna, a prediction for power density in the far field of the antenna can be written as:

$$S = \frac{EIRP}{4\pi D^2} = \frac{1.64 * ERP}{4\pi D^2}$$

Where: S = Power density in W/m²
 EIRP = Effective isotropic radiated power (W)
 ERP = Effective radiated power (W)
 D = Distance in meters

Using the EPA's recommended factor of 1.6 for 100 % reflection, the worst case power density can be obtained by incorporating this factor into the above equation. If the distance, D, is in meters, the ERP is in Watts, then the worst case power density in μW/cm² is given by

$$S = \frac{33.4 * ERP}{D^2} \text{ (Section 2, OET bulletin 65).}$$

Where: S = Power density in μW/cm²
 ERP = Effective radiated power (W)
 D = Distance in meters

WFI's analysis considered both the current configuration as well as the future GSM deployment AT&T is proposing. For the current configuration, both in-field measurements and a predictive analysis tool were used to determine compliance. For the future deployment, only a predictive analysis was performed. The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Point of Worst Case Predicted Level	Predicted Value μW/cm ²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm ²	% of the Standard
Current PCS TDMA configuration	1400 feet away in front of the antenna	0.42	1000	0.04
Future PCS TDMA and GSM configuration	1400 feet away in front of the antenna	0.45	1000	0.05

In addition to predictive analysis, on-site data was recorded at different locations around the monopole. In all areas, less than 3.25 % of the MPE for public/uncontrolled limits was recorded. The reason the actual measurements are higher than the predicted values is because the actual measurements include emissions from the other carriers at that site while the theoretical study focused on the level of emissions contributed by AT&T only.

On-site measuring point	Worst Case Measured Value $\mu\text{W}/\text{cm}^2$	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC $\mu\text{W}/\text{cm}^2$	% of the Standard
25 meters in front of sector 1	16.5	1000	1.65
40 meters in front of sector 2	32.5	1000	3.25
15 meters in front of sector 3	21.5	1000	2.15

The results of these analyses indicate that output power levels for the AT&T owned equipment deployed at the above referenced facility meets FCC approved exposure limits for all uncontrolled areas where general population exposure may exist. Thus, the maximum level of RF radiation in all uncontrolled areas (Assuming a worst case scenario and a 100 % duty cycle for all the transmitters.) is less than 3.25 % of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

To the best of my knowledge, the statements made and information disclosed in this study are complete and accurate.

Sincerely,
Wireless Facilities, Inc.

Dan Hardiman
Senior Engineer II
Fixed Network Engineering