



# 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@ct.gov](mailto:siting.council@ct.gov)

Internet: [ct.gov/csc](http://ct.gov/csc)

Daniel F. Caruso  
Chairman

July 11, 2008

H. Karina Fournier  
Zoning Department  
T-Mobile  
35 Griffin Road South  
Bloomfield, CT 06002

RE: **EM-T-MOBILE-017-080604** – Omnipoint Communications, Inc. a.k.a. T-Mobile notice of intent to modify an existing telecommunication facility located at 371 Terryville Avenue, Bristol, Connecticut.

Dear Ms. Fournier:

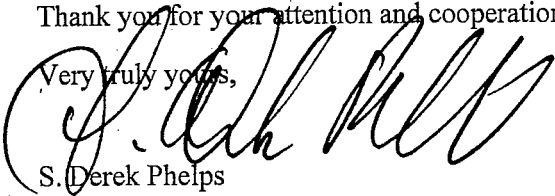
The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated May 29, 2008, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

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

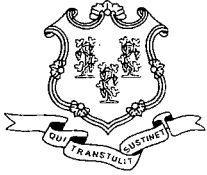
Thank you for your attention and cooperation.

Very truly yours,

  
S. Derek Phelps  
Executive Director

SDP/MP/cm

c: The Honorable Art Ward, Mayor, City of Bristol  
Alan Weiner, Planner/Dev. Coordinator, City of Bristol  
Christopher B. Fisher, Cuddy & Feder



Daniel F. Caruso  
Chairman

# 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@ct.gov](mailto:siting.council@ct.gov)

Internet: [ct.gov/csc](http://ct.gov/csc)

June 4, 2008

The Honorable Art Ward  
Mayor  
City of Bristol  
City Hall  
111 North Main Street  
P.O.Box 114  
Bristol, CT 06010-0114

RE: **EM-T-MOBILE-017-080604** -- Omnipoint Communications, Inc. a.k.a. T-Mobile notice of intent to modify an existing telecommunication facility located at 371 Terryville Avenue, Bristol, Connecticut.

Dear Mayor Ward:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

If you have any questions or comments regarding this proposal, please call me or inform the Council by June 18, 2008.

Thank you for your cooperation and consideration.

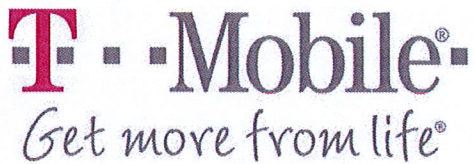
Very truly yours,

S. Derek Phelps  
Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Alan Weiner, Planner/Dev. Coordinator, City of Bristol



EM-T-MOBILE-017-080604

35 Griffin Road South  
Bloomfield, CT 06002

May 29, 2008

ORIGINAL

RECEIVED  
JUN 4 - 2008

CONNECTICUT  
SITING COUNCIL

**BY HAND**

Daniel F. Caruso, Chairman and  
Members of the Siting Council  
Connecticut Siting Council  
Ten Franklin Square  
New Britain, CT 06051

RE:           **Notice of Exempt Modification**  
                  **371 Terryville Avenue Bristol, CT**  
                  **Latitude:41 40 48 / Longitude:72 57 44**

Dear Chairman Caruso and Members of the Siting Council:

Omnipoint Communications, Inc. a.k.a. T-Mobile (formerly Voicestream Wireless Corp.) hereby requests an order from the Connecticut Siting Council ("Council") to approve the proposed ("AT&T 27074"), in Bristol, CT owned by AT&T.

Please accept this letter as notification pursuant to R.C.S.A. §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. §16-50j-72(b) (2).

AT&T 27074

The AT&T 27074 facility consists of a one hundred seventy (170') foot monopole ("Tower") owned and operated by AT&T. T-Mobile proposes to locate antennas at a centerline mounting height of one hundred thirty (130') feet. T-Mobile's equipment will be located within the compound at the base of the tower.

AT&T 27074

As shown on the enclosed plans prepared by including a site plan and tower elevation of the April 30, 2008, annexed hereto as Exhibit 1, T-Mobile proposes a shared use of the Facility by placing antennas on the tower and equipment needed to provide personal communications services ("PCS") within the existing site plan. T-Mobile will install nine (9) panel antennas at the one hundred thirty (130') foot level of the Tower. Three (3) associated unmanned equipment cabinets will be located at the base of the tower.

The proposed modification is structurally feasible. A structural opinion of the tower is attached as Exhibit 2. The structural opinion states that the tower can safely accommodate the proposed T-Mobile installation.

The planned modifications to this facility fall within the activities explicitly provided for in R.C.S.A. §16-50j-72(b)(2).

1. The proposed modification will not result in any increase in the overall height of the existing structure.
2. The proposed modification will not affect ground-mounted equipment and will not require the extension of the site boundaries.
3. The proposed modification will not increase noise levels at the facility by six decibels or more.
4. Operation of T-Mobile's antennas at this site would not exceed the total radio frequency electromagnetic radiation power density level adopted by the FCC and Connecticut Department of Health. The "worst case" exposure calculated for the operation of this facility for T-Mobile would be approximately 17.879% of the standard. See Radio Frequency Memo annexed hereto as Exhibit 3.

Conclusion

For the foregoing reasons, T-Mobile respectfully submits that the proposed modification to the above referenced telecommunication facility constitute an exempt modification under R.C.S.A §16-50j-72(b)(2).

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'H. Karina Fournier', written in a cursive style.

H. Karina Fournier  
Zoning Department  
35 Griffin Road South  
Bloomfield, CT 06002

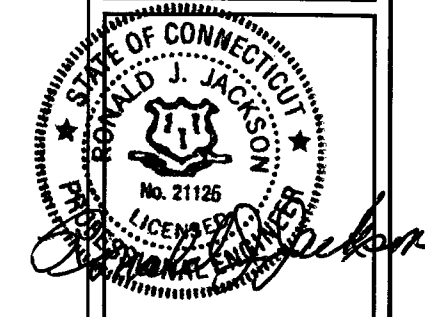
cc: Mayor, Art Ward  
City Planner, Alan Weiner  
Property Owner, Bristol Hospital, Inc

# Exhibit 1

OMNIPOINT COMMUNICATIONS INC.

A WHOLLY-OWNED SUBSIDIARY  
OF T-MOBILE USA, INC.  
35 GRIFFIN ROAD SOUTH  
BLOOMFIELD, CT 06002  
OFFICE: (860)-692-7100  
FAX: (860)-692-7159

**MAXTON**  
50 EASTMAN ST.  
SOUTH EASTON, MA 02375  
PHONE: (508) 936-6393  
FAX: (508) 936-6395



# AT&T 27074

## 371 TERRYVILLE AVE BRISTOL, CT 06010

### SITE NO.: CTHA114B

### SITE TYPE: COLOCATE

#### T-MOBILE TECHNICIAN SITE SAFETY NOTES

LOCATION	SPECIAL RESTRICTIONS
SECTOR A:	ACCESS NOT PERMITTED
SECTOR B:	ACCESS NOT PERMITTED
SECTOR C:	ACCESS NOT PERMITTED
GPS/LMU:	UNRESTRICTED
RADIO CABINETS:	UNRESTRICTED
PPC DISCONNECT:	UNRESTRICTED
MAIN CIRCUIT D/C:	UNRESTRICTED
NIU/T-1 DEMARC:	UNRESTRICTED
OTHER / SPECIAL:	UNRESTRICTED

#### GENERAL NOTES

- THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY, SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
- THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
- THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE PROJECT OWNER'S REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
- THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
- THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL OBTAIN AUTHORIZATION FROM THE PROJECT OWNER'S REPRESENTATIVE TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS / CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S / VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS, ESTABLISHING AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS AS SHOWN HEREIN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.
- THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
- THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
- THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
- THE CONTRACTOR SHALL NOTIFY THE PROJECT OWNER'S REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE PROJECT OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.
- ALL UNDERGROUND UTILITY INFORMATION WAS DETERMINED FROM SURFACE INVESTIGATIONS AND EXISTING PLANS OF RECORD. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO ANY SITE WORK. CALL THE FOLLOWING FOR ALL PRE-CONSTRUCTION NOTIFICATION 72-HOURS PRIOR TO ANY EXCAVATION ACTIVITY: DIG SAFE SYSTEM (MA, ME, NH, RI, VT): 1-888-344-7233 CALL BEFORE YOU DIG (CT): 1-800-922-4455

#### VICINITY MAP NO SCALE



#### DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE PROJECT OWNER'S REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

#### SHEET INDEX

SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	0
A-1	PLAN & NOTES	0
A-2	ELEVATION & EQUIPMENT LAYOUT	0
A-3	DETAILS	0
E-1	POWER RISER, LAYOUT & NOTES	0
E-2	GROUNDING RISER DIAGRAM & DETAILS	0
<p>THE FOLLOWING SHEETS ARE USED ONLY FOR FEDERAL REGULATORY COMPLIANCE UNDER FCC AND OSHA STANDARDS. BUILDING CODE LIFE AND SAFETY PROVISIONS ARE NOT APPLICABLE AND THEREFORE THESE SHEETS HAVE BEEN OMITTED FOR STATE/LOCAL PERMITTING AND CONSTRUCTION CONTROL.</p>		
EME-1	SAFETY PLAN	0
EME-2	SIGNAGE PLAN	0
EME-3	DATA TABLE	0

#### PROJECT SUMMARY

SITE NUMBER:	CTHA114B
SITE NAME:	AT&T 27074
SITE ADDRESS:	371 TERRYVILLE AVE BRISTOL, CT 06010
ASSESSOR'S PARCEL NO.:	MAP: 61, BLOCK: 000, LOT: 67-1 DEED BOOK/PAGE: 1564/795
SITE TYPE:	COLOCATE
PROPERTY OWNER:	AT&T WIRELESS 6015 ATLANTIC BLVD, SUITE A NORCROSS, GA 30071 MATT BARR: (916) 868-6712
APPLICANT:	OMNIPOINT COMMUNICATIONS INC. 35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002

#### APPROVALS

LANDLORD \_\_\_\_\_  
LEASING \_\_\_\_\_  
R.F. \_\_\_\_\_  
ZONING \_\_\_\_\_  
CONSTRUCTION \_\_\_\_\_  
A/E \_\_\_\_\_

PROJECT NO: 2806.078

DRAWN BY: JS

CHECKED BY: RS

#### SUBMITTALS

NO.	DATE	DESCRIPTION
0	04/30/08	CONSTRUCTION

THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF OMNIPOINT COMMUNICATIONS, INC. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED. IF THIS DRAWING IS NOT 1/8"=1'-0", IT IS NOT TO SCALE.

SITE  
CTHA114B

AT&T 27074

371 TERRYVILLE AVE  
BRISTOL, CT 06010

SHEET TITLE

TITLE SHEET

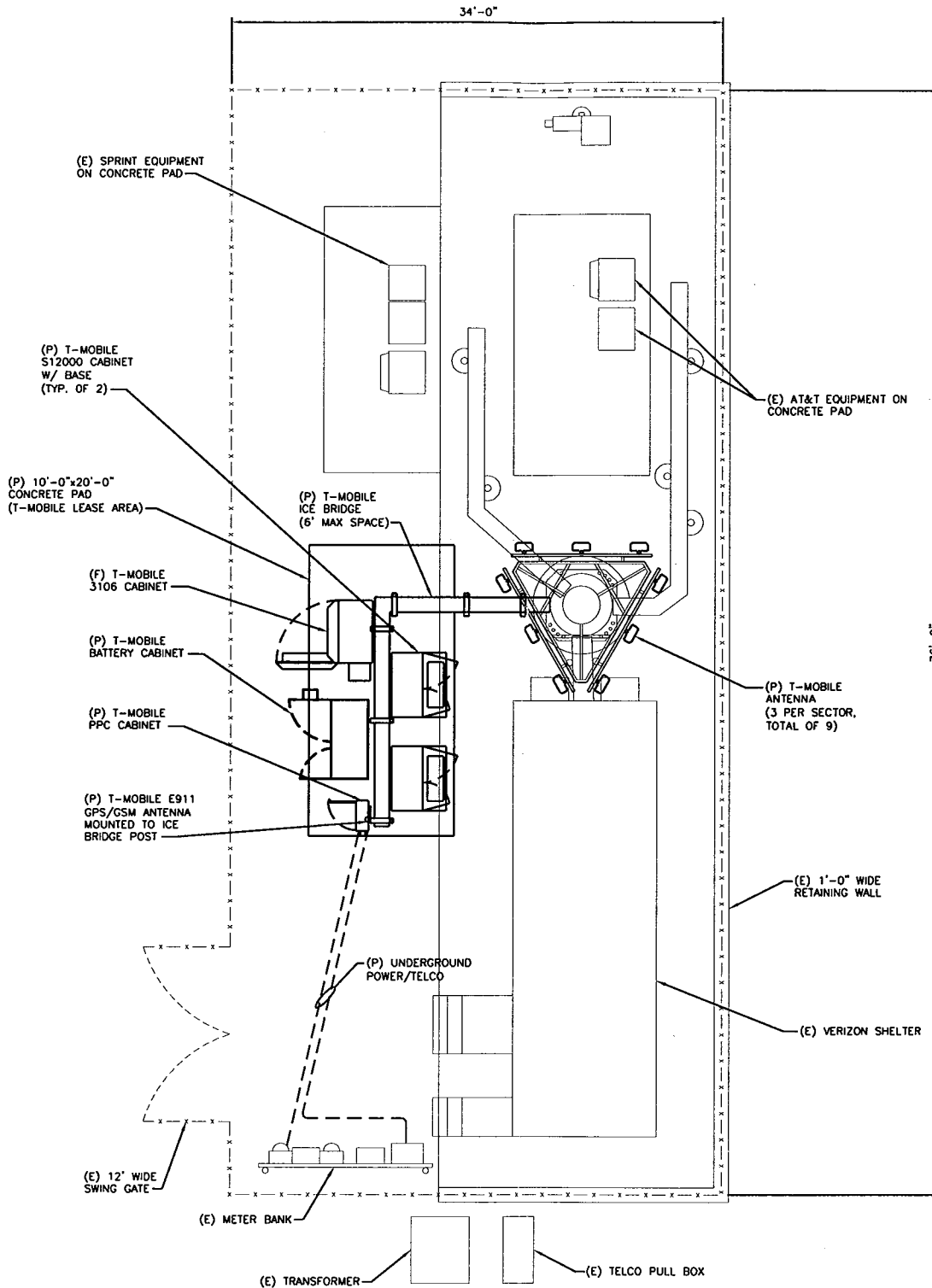
SHEET NUMBER

T-1

NOTES:

- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS SHOWN HEREIN.
- ALL DIMENSIONS SHOWN THUS ± ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS WHICH EFFECT THE CONTRACTORS WORK. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH PROJECT OWNER PRIOR TO CONSTRUCTION.
- NORTH ARROW SHOWN ON PLANS REFERS TO APPROXIMATE TRUE NORTH. CONTRACTOR SHALL RETAIN THE SERVICES OF A PROFESSIONAL SURVEYOR TO VERIFY TRUE NORTH AND PROVIDE AS-BUILT ANTENNA AZIMUTH, ANTENNA MECHANICAL DOWN-TILT AND ANTENNA RADIATION CENTER HEIGHT (AGL) CERTIFICATIONS FOR ANTENNA AZIMUTHS MUST BE WITHIN 3 DEGREES OF THE SPECIFIED SECTOR ORIENTATION ON THE RF BUILD SHEET.
- THE CONTRACTOR AND OR HIS SUB CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.
- ANTENNA INSTALLATION SHALL BE CONDUCTED BY FIELD CREWS EXPERIENCED IN THE ASSEMBLY AND ERECTION OF RADIO ANTENNAS, TRANSMISSION LINES AND SUPPORT STRUCTURES.
- COAXIAL CABLE CONNECTORS AND TRANSMITTER EQUIPMENT SHALL BE PROVIDED BY THE PROJECT OWNER AND IS NOT INCLUDED IN THESE CONSTRUCTION DOCUMENTS. A SCHEDULE OF PROJECT OWNER SUPPLIED MATERIALS IS ATTACHED TO THE BID DOCUMENTS (SEE EXHIBIT 3). ALL OTHER HARDWARE TO BE PROVIDED BY THE CONTRACTOR. CONNECTION HARDWARE SHALL BE STAINLESS STEEL.
- WHEN "PAINT TO MATCH" IS SPECIFIED FOR ANTENNA CONCEALMENT, PAINT PRODUCT FOR ANTENNA RADOME SHALL BE SHERWIN WILLIAMS COROTHANE II. SURFACE PREPARATION AND APPLICATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND PROJECT OWNER'S GUIDELINE'S.
- COORDINATION, LAYOUT, AND FURNISHING OF CONDUIT, CABLE AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
- ALL (E) ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR PIER DRILLING AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW.
- ALL (E) INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF UTILITY COMPANY ENGINEERING.
- THE AREAS OF THE PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE EQUIPMENT, DRIVEWAY OR GRAVEL, SHALL BE GRADED TO A UNIFORM SLOPE, FERTILIZED, SEEDED AND COVERED WITH MULCH UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN SOIL EROSION AND SEDIMENTATION CONTROLS AT ALL TIMES DURING CONSTRUCTION.
- PER FCC MANDATE, ENHANCED EMERGENCY (E911) SERVICE IS REQUIRED TO MEET NATIONWIDE STANDARDS FOR WIRELESS COMMUNICATIONS SYSTEMS. PROJECT OWNER'S IMPLEMENTATION REQUIRES DEPLOYMENT OF EQUIPMENT AND ANTENNAS GENERALLY DEPICTED ON THIS PLAN, ATTACHED TO OR MOUNTED IN CLOSE PROXIMITY TO THE BTS RADIO CABINETS. PROJECT OWNER RESERVES THE RIGHT TO MAKE REASONABLE MODIFICATIONS TO E911 EQUIPMENT AND LOCATION AS TECHNOLOGY EVOLVES TO MEET REQUIRED SPECIFICATIONS.

NORTH



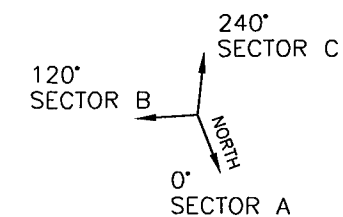
ABBREVIATIONS

ADJ	ADJUSTABLE	NTS	NOT TO SCALE
APPROX	APPROXIMATE	OC	ON CENTER
BTS	BASE TRANSMISSION STATION	OPP	OPPOSITE
C	CONDUIT	(P)	PROPOSED
CMU	CONCRETE MASONRY UNIT	SF	SQUARE FOOT
CONC	CONCRETE	SHT	SHEET
CONT	CONTINUOUS	SIM	SIMILAR
CJ	CONSTRUCTION JOINT	STL	STEEL
DIA	DIAMETER	TOC	TOP OF CONCRETE
DWG	DRAWING	TOM	TOP OF MASONRY
EGB	EQUIPMENT GROUND BAR	TYP	TYPICAL
EA	EACH	VIF	VERIFY IN FIELD
ELEC	ELECTRICAL	UON	UNLESS OTHERWISE NOTED
EL	ELEVATION	WWF	WELDED WIRE FABRIC
EQ	EQUAL	W/	WITH
EQUIP	EQUIPMENT	PCS	PERSONAL COMMUNICATIONS SERVICES
(E)	EXISTING	A-1	ANTENNA MARK NO.
EXT	EXTERIOR	CL	CENTERLINE
FF	FINISHED FLOOR	PL	PLATE
FG	FINISHED GRADE	&	AND
GA	GAUGE	AT	AT
GALV	GALVANIZED		
GC	GENERAL CONTRACTOR		
GWB	GYPSUM WALLBOARD		
LG	LONG		
LNA	LOW NOISE AMPLIFIER		
MAX	MAXIMUM		
MECH	MECHANICAL		
MFR	MANUFACTURER		
MGB	MASTER GROUND BAR		
MIN	MINIMUM		
MTL	METAL		
NIC	NOT IN CONTRACT		

SYMBOLS AND MATERIALS

[Symbol]	NEW ANTENNA	[Symbol]	GROUT OR PLASTER
[Symbol]	EXISTING ANTENNAS	[Symbol]	GWB
[Symbol]	ASPHALT	[Symbol]	(E)CONSTRUCTION
[Symbol]	NEW ACCESS EASEMENT	[Symbol]	CONCRETE
[Symbol]	CONCRETE	[Symbol]	EARTH
[Symbol]	ELECTRIC BOX	[Symbol]	GRAVEL
[Symbol]	LIGHT POLE	[Symbol]	PLYWOOD
[Symbol]	FND. MONUMENT	[Symbol]	SAND
[Symbol]	SPOT ELEVATION	[Symbol]	WOOD CONT.
[Symbol]	REVISION	[Symbol]	WOOD BLOCKING
[Symbol]	GRID REFERENCE	[Symbol]	STEEL
[Symbol]	DETAIL REFERENCE	[Symbol]	CENTER LINE
[Symbol]	ELEVATION	[Symbol]	PROPERTY LINE
[Symbol]	SECTIONS & DETAILS	[Symbol]	STEPPED FOOTING
[Symbol]	WORK ITEM NOTE	[Symbol]	MATCH LINE
		[Symbol]	WORK POINT
		[Symbol]	GROUND WIRE
		[Symbol]	COAXIAL CABLE
		[Symbol]	CHAIN LINK FENCE
		[Symbol]	WATER MAIN

ANTENNA ORIENTATION KEY



**OMNIPONT COMMUNICATIONS INC.**  
 A WHOLLY-OWNED SUBSIDIARY OF T-MOBILE USA, INC.  
 35 GRIFFIN ROAD SOUTH  
 BLOOMFIELD, CT 06002  
 OFFICE: (860)-692-7100  
 FAX: (860)-692-7159

**MAXTON**  
 50 EASTMAN ST.  
 SOUTH EASTON, MA 02375  
 PHONE: (508) 936-6393  
 FAX: (508) 936-6395

**STATE OF CONNECTICUT**  
**RONALD J. JACKSON**  
 No. 21126  
 LICENSED PROFESSIONAL ENGINEER

**APPROVALS**

LANDLORD \_\_\_\_\_

LEASING \_\_\_\_\_

R.F. \_\_\_\_\_

ZONING \_\_\_\_\_

CONSTRUCTION \_\_\_\_\_

A/E \_\_\_\_\_

PROJECT NO: 2806.078

DRAWN BY: JS

CHECKED BY: RS

**SUBMITTALS**

0	04/30/08 CONSTRUCTION

THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF OMNIPONT COMMUNICATIONS, INC. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED. IF THIS DRAWING IS NOT 24"x36", IT IS NOT TO SCALE.

SITE  
 CTHA114B  
 AT&T, 27074  
 371 TERRYVILLE AVE  
 BRISTOL, CT 06010

SHEET TITLE  
 PLAN & NOTES

SHEET NUMBER  
 A-1

SITE PLAN

SCALE: 3/16"=1'-0"



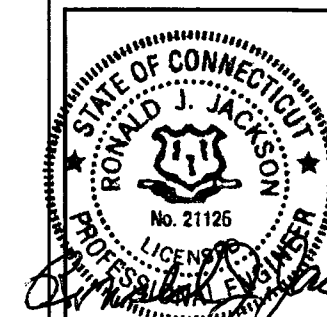
(E)-EXISTING  
(F)-FUTURE  
(P)-PROPOSED



OMNIPONT COMMUNICATIONS INC.

A WHOLLY-OWNED SUBSIDIARY  
OF T-MOBILE USA, INC.  
35 GRIFFIN ROAD SOUTH  
BLOOMFIELD, CT 06002  
OFFICE: (860)-692-7100  
FAX: (860)-692-7159

**MIXTON**  
50 EASTMAN ST.  
SOUTH EASTON, MA 02375  
PHONE: (508) 936-6393  
FAX: (508) 936-6395



APPROVALS

LANDLORD \_\_\_\_\_  
LEASING \_\_\_\_\_  
R.F. \_\_\_\_\_  
ZONING \_\_\_\_\_  
CONSTRUCTION \_\_\_\_\_  
A/E \_\_\_\_\_

PROJECT NO: 2806.078

DRAWN BY: JS

CHECKED BY: RS

SUBMITTALS

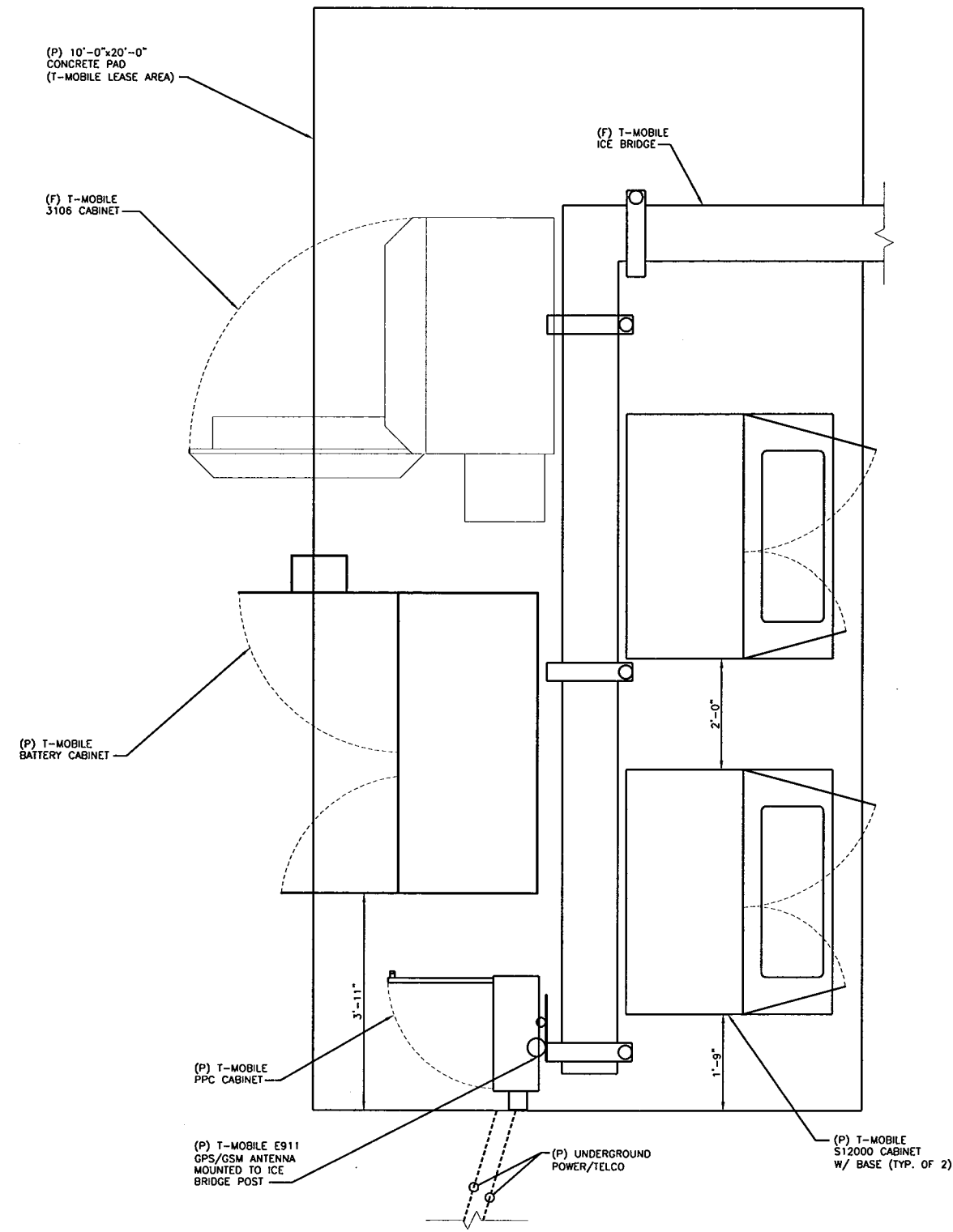
NO.	DATE	DESCRIPTION
0	04/30/08	CONSTRUCTION

THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF OMNIPONT COMMUNICATIONS, INC. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED. IF THIS DRAWING IS NOT 24"x36", IT IS NOT TO SCALE.

SITE  
CTHA114B  
AT&T 27074  
371 TERRYVILLE AVE  
BRISTOL, CT 06010

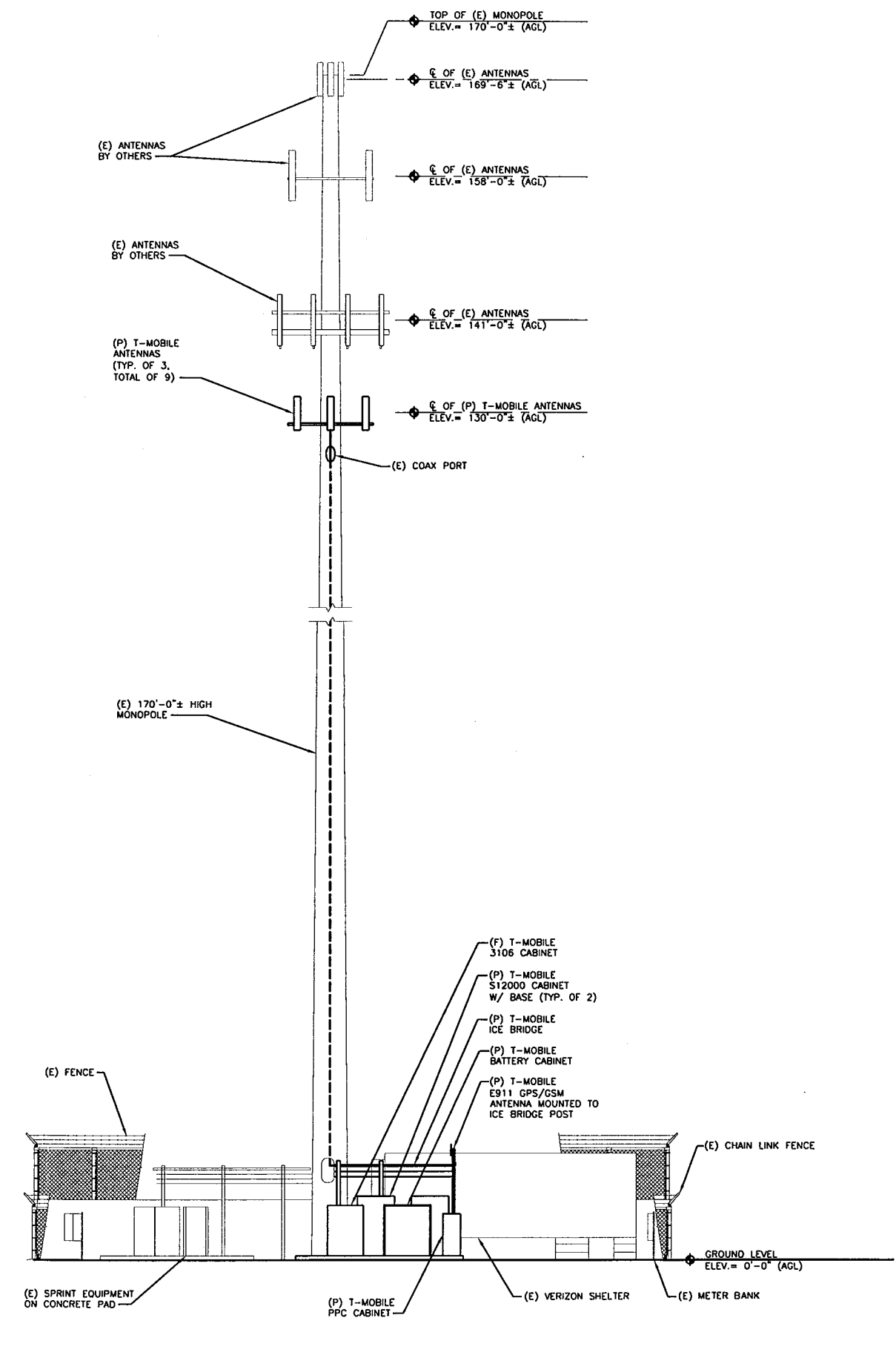
SHEET TITLE  
ELEVATION &  
EQUIPMENT  
LAYOUT

SHEET NUMBER  
A-2



**EQUIPMENT PAD LAYOUT**  
SCALE: 3/4" = 1'-0" 1

(E)-EXISTING  
(F)-FUTURE  
(P)-PROPOSED

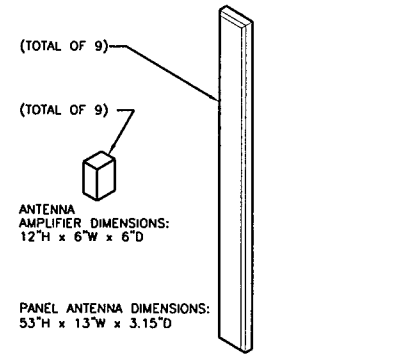
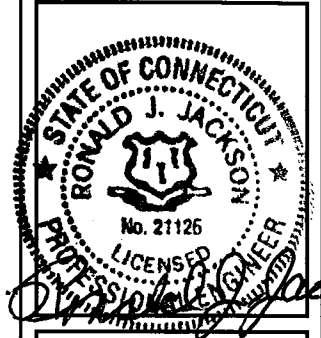


**EAST ELEVATION**  
SCALE: 1/8" = 1'-0" 2

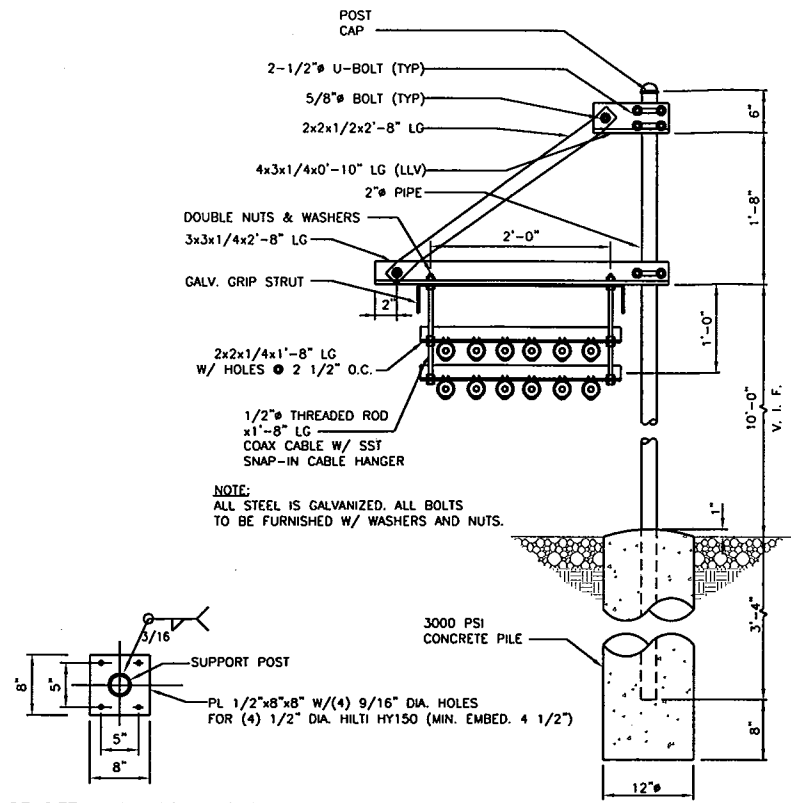
NOTE:  
MONOPOLE AND FOUNDATION  
ANALYSIS BY OTHERS

OMNIPONT COMMUNICATIONS INC.  
A WHOLLY-OWNED SUBSIDIARY  
OF T-MOBILE USA, INC.  
35 GRIFFIN ROAD SOUTH  
BLOOMFIELD, CT 06002  
OFFICE: (860)-692-7100  
FAX: (860)-692-7159

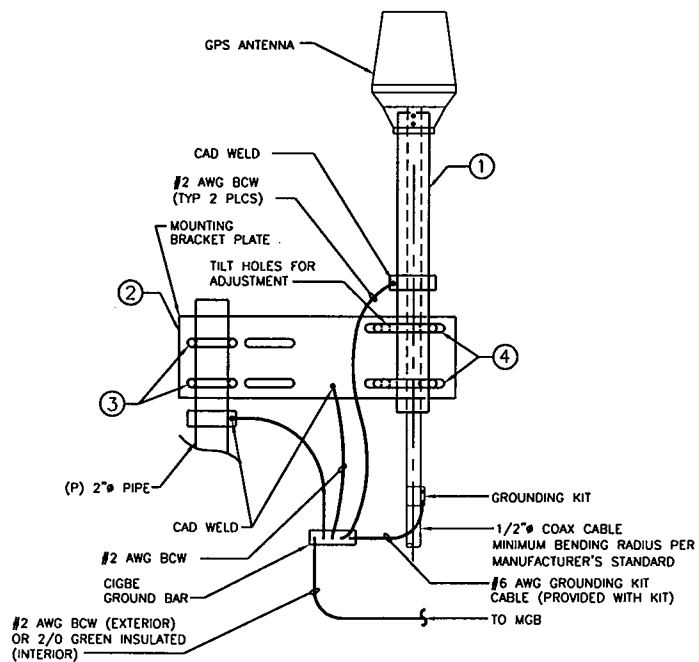
**MAXTON**  
50 EASTMAN ST.  
SOUTH EASTON, MA 02375  
PHONE: (508) 936-6393  
FAX: (508) 936-6395



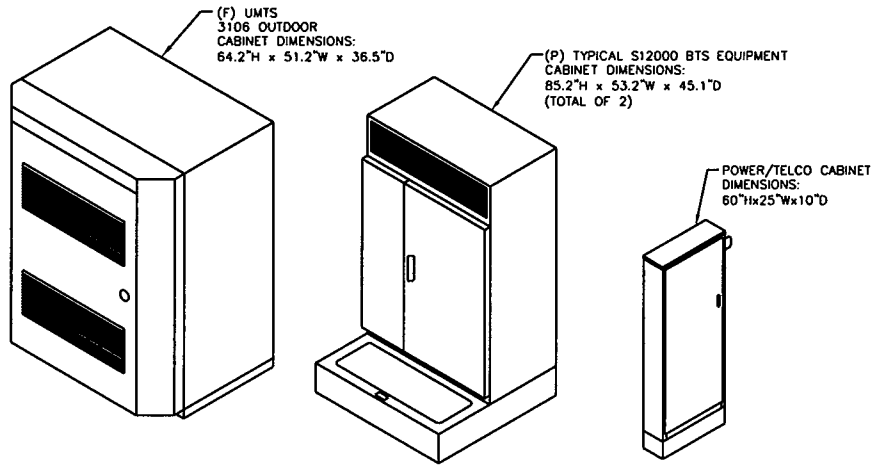
**AMPLIFIER & PANEL ANTENNA DETAIL**  
SCALE: N.T.S.



**ICE BRIDGE DETAIL**  
SCALE: 1"=1'-0"



**GPS ANTENNA DETAIL**  
SCALE: N.T.S.



**BTS EQUIPMENT DETAIL**  
SCALE: N.T.S.

APPROVALS

LANDLORD	_____
LEASING	_____
R.F.	_____
ZONING	_____
CONSTRUCTION	_____
A/E	_____

PROJECT NO: 2806.078  
DRAWN BY: JS  
CHECKED BY: RS

SUBMITTALS

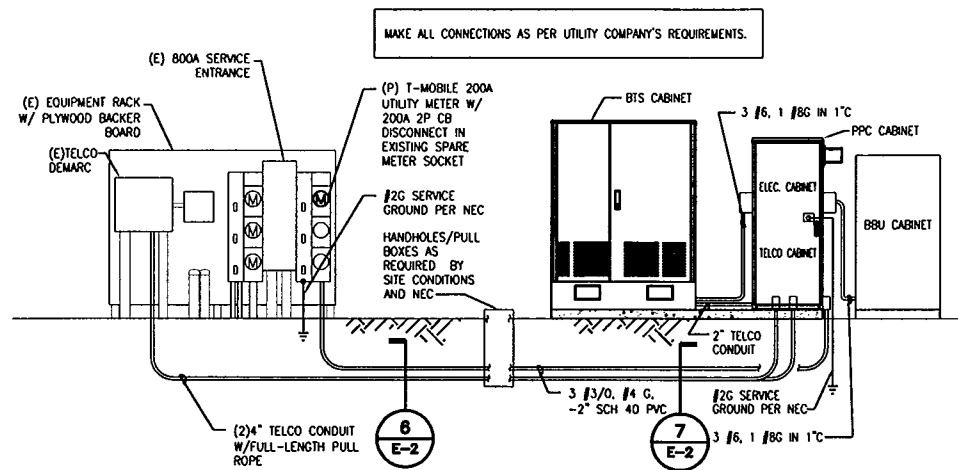
NO.	DESCRIPTION	DATE
0	04/30/08 CONSTRUCTION	

THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF OMNIPONT COMMUNICATIONS, INC. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED. IF THIS DRAWING IS NOT 24\"/>

SITE  
CTHA114B  
AT&T 27074  
371 TERRYVILLE AVE  
BRISTOL, CT 06010

SHEET TITLE  
DETAILS

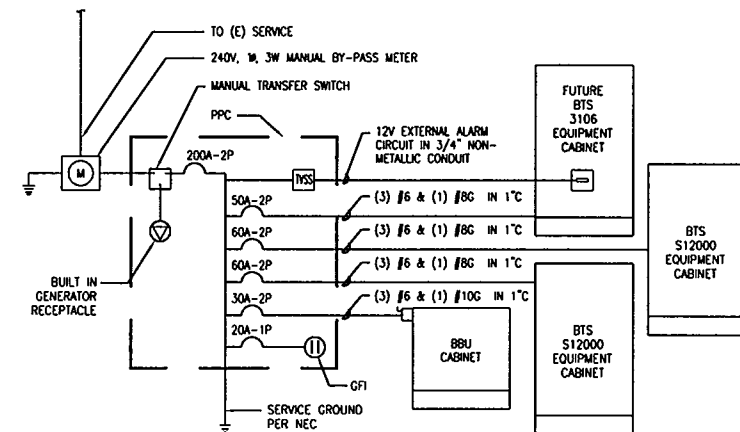
SHEET NUMBER  
A-3



**POWER RISER DIAGRAM**

SCALE: N.T.S.

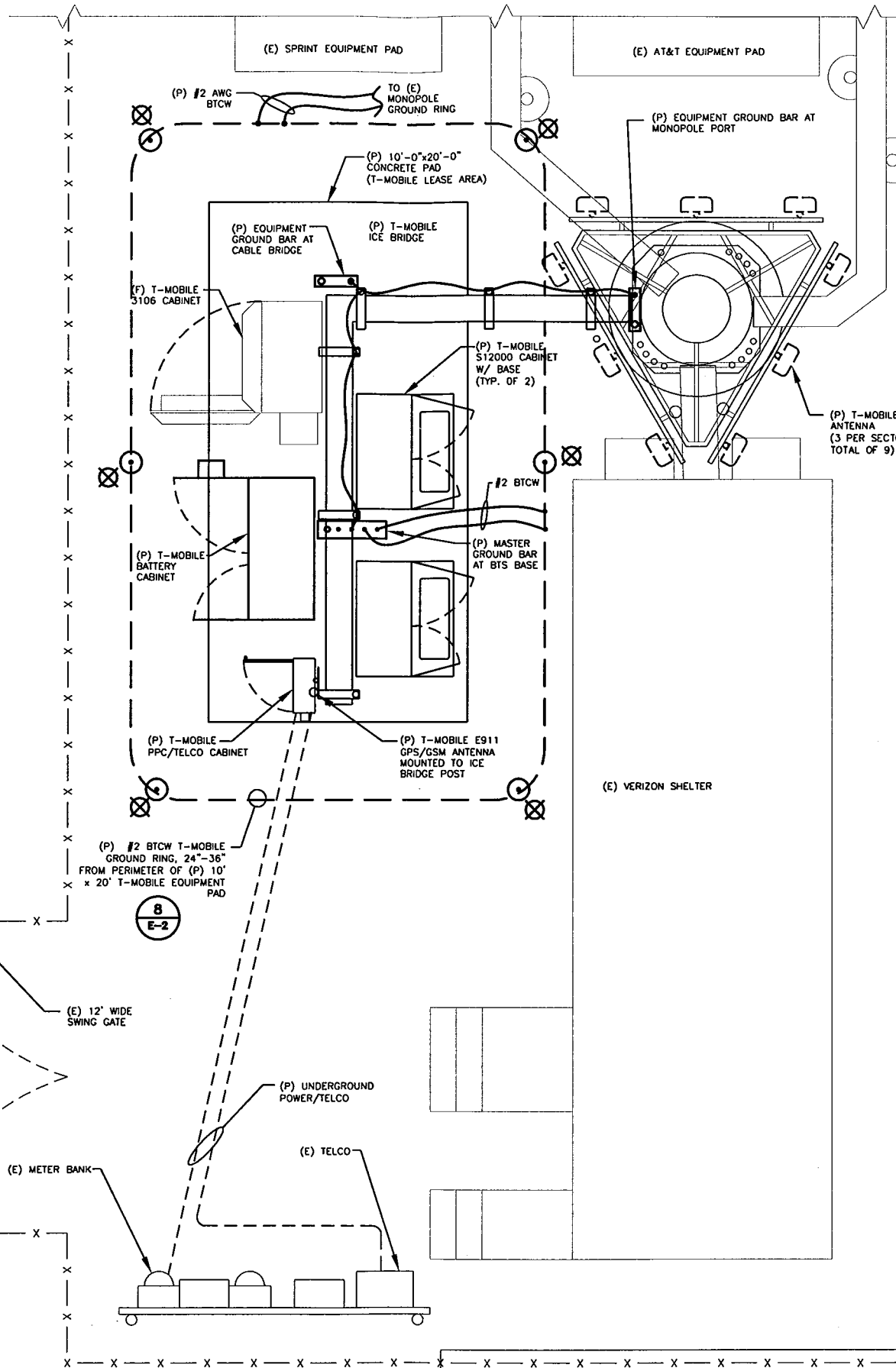
1



**ONE LINE DIAGRAM**

SCALE: N.T.S.

2



**EQUIPMENT LAYOUT AND GROUNDING PLAN**

SCALE: N.T.S.

3

**ELECTRICAL LEGEND**

- NEW PANEL BOARD, SURFACE MOUNTED
- EXISTING PANEL BOARD, SURFACE MOUNTED
- DRY TYPE TRANSFORMER
- METER
- CIRCUIT BREAKER
- NON-FUSIBLE DISCONNECT SWITCH, MOUNTED 54" A.F.F.
- FUSIBLE DISCONNECT SWITCH, MOUNTED 54" A.F.F.
- TRANSIENT VOLTAGE SURGE SUPPRESSOR WITH BUILT-IN FUSES, SURFACE MOUNTED
- DUPLEX OUTLET, SURFACE MOUNTED, 20 AMPS, 125 VOLTS, SINGLE PHASE
- JUNCTION BOX, SURFACE MOUNTED 18" A.F.F.
- EXPOSED WIRING
- HOME RUNS, MINIMUM 2#10 + 1#10G IN 3/4" CONDUIT U.O.N.
- A.F.F. ABOVE FINISHED FLOOR
- U.O.N. UNLESS OTHERWISE NOTED
- WP WEATHERPROOF
- GF1 GROUND FAULT INTERRUPTER
- A AMPERE
- V VOLT
- KWH KILOWATT - HOUR
- C CONDUIT
- GRC GALVANIZED RIGID CONDUIT
- G GROUND
- MECHANICAL CONNECTION
- WELDED CONNECTION
- MECHANICAL CONNECTION
- WELDED CONNECTION
- MECHANICAL CONNECTION
- WELDED CONNECTION
- GROUND COPPER WIRE, SIZE AS NOTED
- EXPOSED WIRING
- COAXIAL CABLE
- 5/8"x8" COPPER CLAD STAINLESS STEEL GROUND ROD
- EXOTHERMIC (CADWELD) OR MECHANICAL (COMPRESSION TYPE) CONNECTION
- POWER PROTECTION CABINET
- OMNI-DIRECTIONAL ELECTRONIC MARKER SYSTEM (EMS) BALL

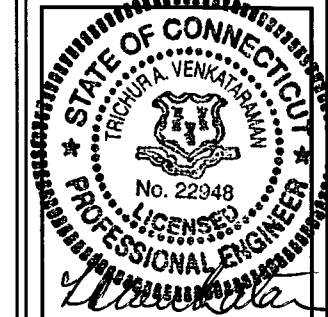
**ELECTRICAL AND GROUNDING NOTES**

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
2. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
3. THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
4. GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
5. ELECTRICAL AND TELCO WIRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALVANIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) AND WHERE REQUIRED IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUITS.
6. BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.
7. ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THHN, OR THHN INSULATION.
8. RUN ELECTRICAL CONDUIT OR CABLE BETWEEN ELECTRICAL UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE PPC AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE. COORDINATE INSTALLATION WITH UTILITY COMPANY.
9. RUN TELCO CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE TELCO SERVICE CABINET AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE IN INSTALLED TELCO CONDUIT. PROVIDE GREENLEE CONDUIT MEASURING TAPE AT EACH END.
10. WHERE CONDUIT BETWEEN BTS AND PROJECT OWNER CELL SITE PPC AND BETWEEN BTS AND PROJECT OWNER CELL SITE TELCO SERVICE CABINET ARE UNDERGROUND USE PVC, SCHEDULE 40 CONDUIT. ABOVE THE GROUND PORTION OF THESE CONDUITS SHALL BE PPC CONDUIT.
11. ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.
12. PPC SUPPLIED BY PROJECT OWNER.
13. GROUNDING SHALL COMPLY WITH NEC ART. 250. ADDITIONALLY, GROUNDING, BONDING AND LIGHTNING PROTECTION SHALL BE DONE IN ACCORDANCE WITH "T-MOBILE BTS SITE GROUNDING STANDARDS".
14. GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER.
15. USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING.
16. ALL GROUND CONNECTIONS TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
17. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 6 FEET OF PROJECT OWNER EQUIPMENT OR CABINET TO MASTER GROUND BAR OR GROUNDING RING.
18. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
19. APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
20. CONTRACTOR SHALL PROVIDE AND INSTALL OMNI DIRECTIONAL ELECTRONIC MARKER SYSTEM (EMS) BALLS OVER EACH GROUND ROD AND BONDING POINT BETWEEN EXISTING TOWER/ MONOPOLE GROUNDING RING AND EQUIPMENT GROUNDING RING.
21. CONTRACTOR SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION. A RESISTANCE OF 5 OHMS OR LESS IS REQUIRED.
22. CONTRACTOR SHALL CONDUCT ANTENNA, COAX, AND LNA RETURN-LOSS AND DISTANCE- TO-FAULT MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE-OUT.

OMNIPONT COMMUNICATIONS INC.

A WHOLLY-OWNED SUBSIDIARY OF T-MOBILE USA, INC. 35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 OFFICE: (860)-692-7100 FAX: (860)-692-7159

**MAXTON**  
50 EASTMAN ST. SOUTH EASTON, MA 02375 PHONE: (508) 936-6393 FAX: (508) 936-6395



APPROVALS

LANDLORD \_\_\_\_\_

LEASING \_\_\_\_\_

R.F. \_\_\_\_\_

ZONING \_\_\_\_\_

CONSTRUCTION \_\_\_\_\_

A/E \_\_\_\_\_

PROJECT NO: 2806.078

DRAWN BY: MS

CHECKED BY: RS

SUBMITTALS

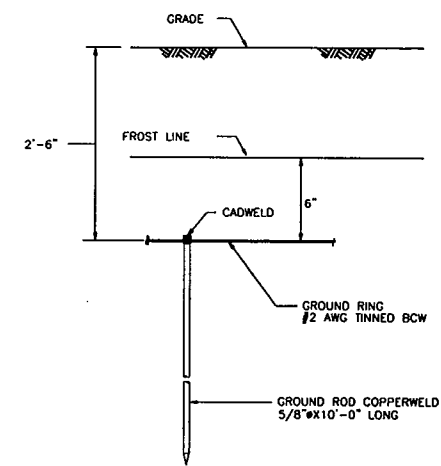
NO.	DATE	DESCRIPTION
0	04/30/08	CONSTRUCTION

THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF OMNIPONT COMMUNICATIONS, INC. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED. IF THIS DRAWING IS NOT 24"x36", IT IS NOT TO SCALE.

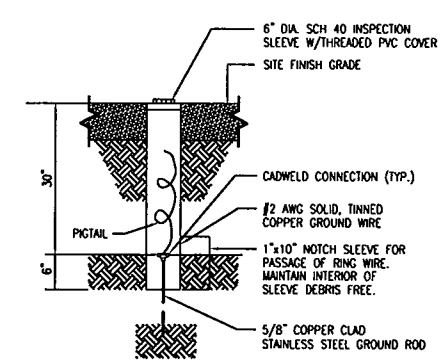
SITE  
CTHA114B  
AT&T 27074  
371 TERRYVILLE AVE  
BRISTOL, CT 06010

SHEET TITLE  
POWER RISER,  
LAYOUT, & NOTES

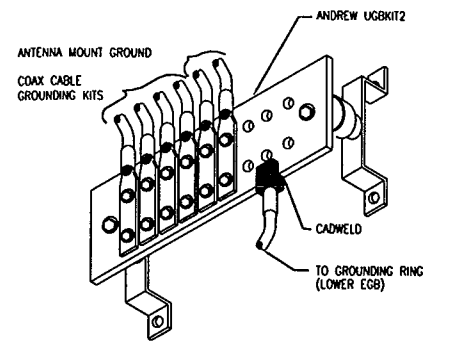
SHEET NUMBER  
E-1



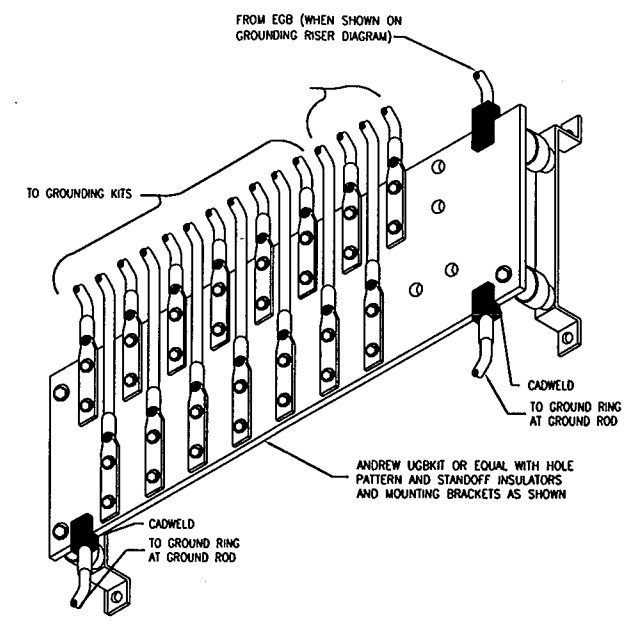
**STANDARD GROUND ROD**  
SCALE: NTS



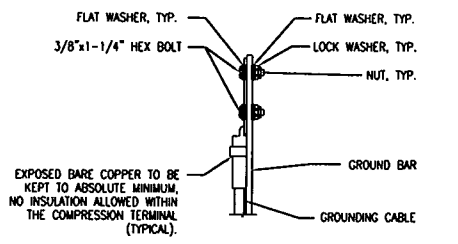
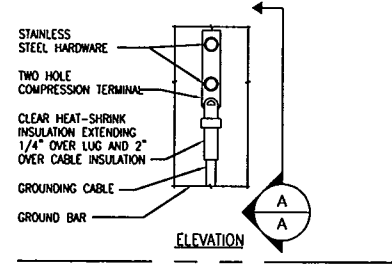
**GROUND ROD TEST WELL DETAIL**  
SCALE: N.T.S.



**EQUIPMENT GROUND BAR (EGB)**  
SCALE: N.T.S.

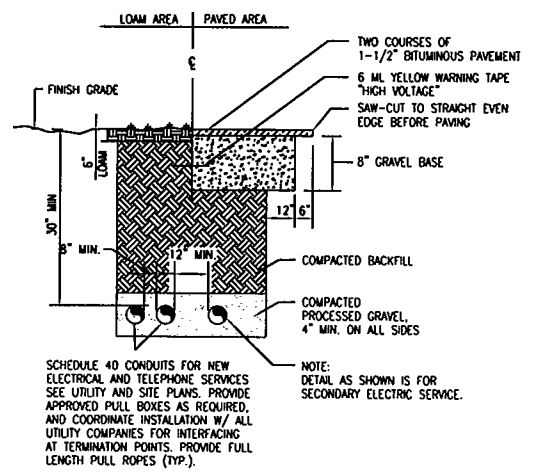


**MASTER GROUND BAR (MGB)**  
SCALE: N.T.S.

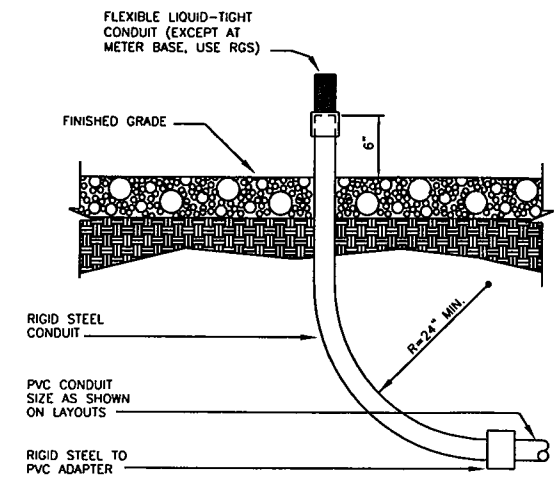


- NOTES:**
- "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED.
  - OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.
  - CADWELD DOWNLEADS FROM UPPER EGB, LOWER EGB AND MGB.

**TYPICAL GROUND BAR CONNECTIONS DETAIL**  
SCALE: N.T.S.

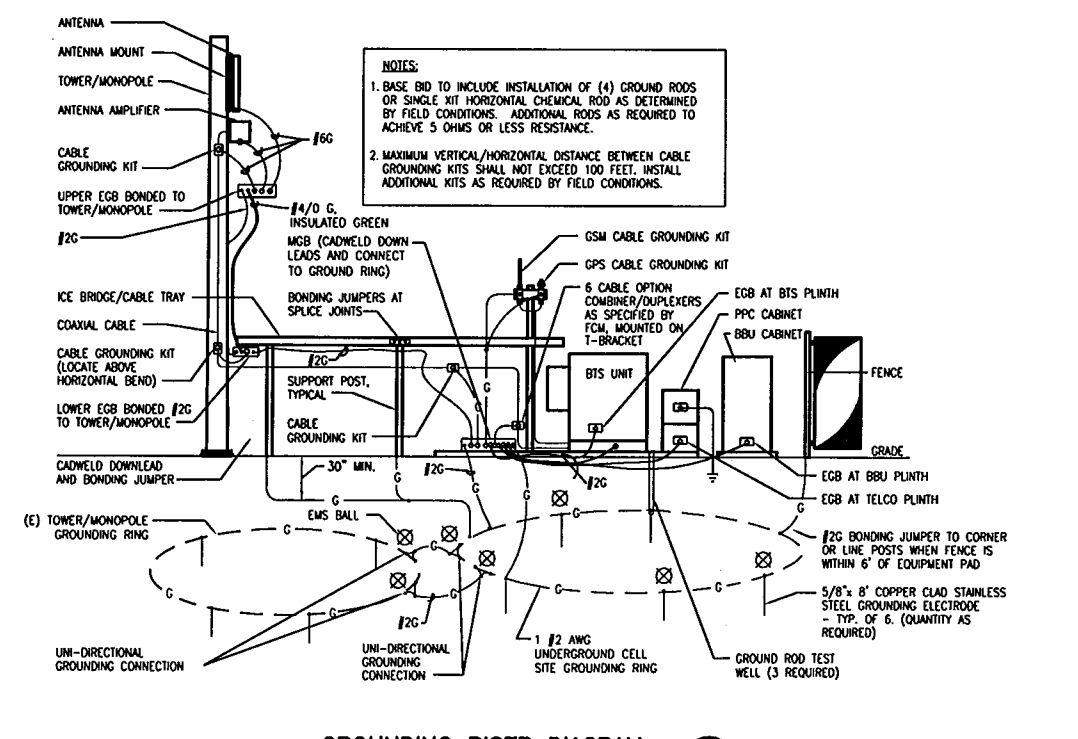


**BURIED CONDUIT DETAIL**  
SCALE: N.T.S.



- NOTE:**  
CONTRACTOR TO FIELD VERIFY EXACT LOCATION OF CONDUIT STUB-UP.

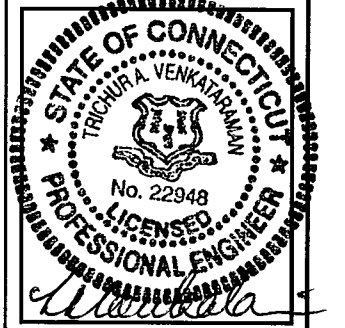
**CONDUIT STUB-UP**  
SCALE: NTS



**GROUNDING RISER DIAGRAM**  
SCALE: N.T.S.

OMNIPPOINT COMMUNICATIONS INC.  
A WHOLLY-OWNED SUBSIDIARY OF T-MOBILE USA, INC.  
35 GRIFFIN ROAD SOUTH  
BLOOMFIELD, CT 06002  
OFFICE: (860)-692-7100  
FAX: (860)-692-7159

**MAXTON**  
50 EASTMAN ST.  
SOUTH EASTMAN, MA 02375  
PHONE: (508) 936-6393  
FAX: (508) 936-6395



**APPROVALS**

LANDLORD \_\_\_\_\_

LEASING \_\_\_\_\_

R.F. \_\_\_\_\_

ZONING \_\_\_\_\_

CONSTRUCTION \_\_\_\_\_

A/E \_\_\_\_\_

PROJECT NO: 2806.078

DRAWN BY: MS

CHECKED BY: RS

**SUBMITTALS**

0	04/30/08	CONSTRUCTION
---	----------	--------------

THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF OMNIPPOINT COMMUNICATIONS, INC. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED. IF THIS DRAWING IS NOT 24"x36", IT IS NOT TO SCALE.

**SITE**  
CTHA114B  
AT&T 27074  
371 TERRYVILLE AVE  
BRISTOL, CT 06010

SHEET TITLE  
**GROUNDING RISER DIAGRAM & DETAILS**

SHEET NUMBER  
**E-2**

## Exhibit 2

BAY STATE  
DESIGN



May 8, 2008

Mr. Gordon Govalet  
Maxton Technology, Inc.  
50 Eastman Street  
South Easton, MA 02375

Reg: CTHA114B  
T-Mobile Facility at Bristol, CT  
BSD Job No.: 2806.078

Dear Mr. Govalet,

As per your request, Bay State Design (BSD) engineers have reviewed all the structural analysis performed for the monopole at the above site.

The original design by engineered Endeavors, Inc accounted for six (6) antennas at EL 169'-0", twelve (12) antennas at EL 160'-0", six (6) antennas at EL 150'-0" and EL 140'-0", three (3) antennas at EL 130'-0" and EL 120'-0".

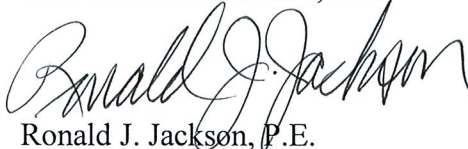
At the present there are only three (3) antennas at EL 169'-0", six (6) antennas at EL 160'-0", twelve (12) antennas at EL 140'-0", there are no antennas at EL 120'-0". It is proposed to install nine (9) antennas for T-Mobile. The proposed loading is lot less than designed loading. As such, it is concluded that the existing monopole is capable of supporting T-Mobile antennas.

The monopole is designed for TIA/EIA222F.

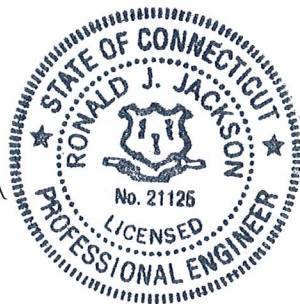
If you have any questions, please contact our office.

Sincerely yours,

BAY STATE DESIGN, INC.



Ronald J. Jackson, P.E.  
President



## Exhibit 3

## Technical Memo

To: Karina Fournier  
From: Scott Heffernan - Radio Frequency Engineer  
cc: Jason Overbey  
Subject: Power Density Report for CTHA114B  
Date: April 25, 2008

---

### 1. Introduction:

This report is the result of an Electromagnetic Field Intensities (EMF - Power Densities) study for the T-Mobile PCS antenna installation on a Monopole at 371 Terryville Rd, Bristol, CT. This study incorporates the most conservative consideration for determining the practical combined worst case power density levels that would be theoretically encountered from locations surrounding the transmitting location.

### 2. Discussion:

The following assumptions were used in the calculations:

- 1) The emissions from T-Mobile transmitters are in the 1935-1945 MHz frequency band.
- 2) The antenna array consists of three sectors, with 2 antennas per sector.
- 3) The model number for each antenna is APXV18-209014-C.
- 4) The antenna center line height is 130 ft.
- 5) The maximum transmit power from any sector is 2123.39 Watts Effective Radiated Power (EiRP) assuming 8 channels per sector.
- 6) All the antennas are simultaneously transmitting and receiving, 24 hours a day.
- 7) Power levels emitting from the antennas are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
- 8) The average ground level of the studied area does not change significantly with respect to the transmitting location

Equations given in "FCC OET Bulletin 65, Edition 97-01" were then used with the above information to perform the calculations.

### 3. Conclusion:

Based on the above worst case assumptions, the power density calculation from the T-Mobile PCS antenna installation on a Monopole at 371 Terryville Rd, Bristol, CT, is 0.0303 mW/cm<sup>2</sup>. This value represents 3.03% of the Maximum Permissible Exposure (MPE) standard of 1 milliwatt per square centimeter (mW/cm<sup>2</sup>) set forth in the FCC/ANSI/IEEE C95.1-1991. Furthermore, the proposed antenna location for T-Mobile will not interfere with existing public safety communications, AM or FM radio broadcasts, TV, Police Communications, HAM Radio communications or any other signals in the area.



## New England Market



### Worst Case Power Density

Site:	CTHA114B
Site Address:	371 Terryville Rd
Town:	Bristol
Tower Height:	168 ft.
Tower Style:	Monopole
Base Station TX output	25 W
Number of channels	8
Antenna Model	APXV18-209014-C
Cable Size	1 5/8
Cable Length	150 ft.
Antenna Height	130.0 ft.
Ground Reflection	1.6
Frequency	1945.0 MHz
Jumper & Connector loss	4.50 dB
Antenna Gain	16.5 dBi
Cable Loss per foot	0.0116 dB
Total Cable Loss	1.7400 dB
Total Attenuation	6.2400 dB
Total EIRP per Channel (In Watts)	54.24 dBm 265.42 W
Total EIRP per Sector (In Watts)	63.27 dBm 2123.39 W
nsg	10.2600
Power Density (S) =	0.030298 mW/cm <sup>2</sup>
T-Mobile Worst Case % MPE =	3.0298%
Equation Used :	$S = \frac{(1000)(grf)^2 (Power) * 10^{(nsg/10)}}{4 \pi (R)^2}$
	Office of Engineering and Technology (OET) Bulletin 65, Edition 97-01, August 1997

### Additional Carriers

Cingular - 880 MHz	3.94%
Cingular - 1900 MHz	1.61%
Verizon Wireless - 1900 MHz	1.41%
Verizon Wireless - 800 MHz	6%
Sprint - 1900 MHz	1.89%
<b>Total Power density - All Carriers</b>	<b>17.879%</b>