FARMINGTON NORTH 2

199 Town Farm Road Farmington, Connecticut

Description of Proposed Cell Site

Cellco Partnership d/b/a Verizon Wireless 99 East River Drive East Hartford, CT 06108

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SITE NAME: FARMINGTON NORTH 2 – 199 Town Farm Road, Farmington, CT

GENERAL CELL SITE DESCRIPTION

The proposed cell site would be located within a 60' x 60' fenced compound within a 100' x 100' leased area in the westerly portion of an approximately 9.9-acre parcel ("Property") owned by the Town of Farmington. The Property is known as the Simmons Family Farm and is located at 199 Town Farm Road in Farmington (the "Farmington North 2 Facility"). The Farmington North 2 Facility would consist of a 110-foot telecommunications tower disguised as a pine tree. Simulated branches of the monopine would extend an additional seven feet from the top of the tower to an overall structure height of 117-feet. Cellco would install a 12' x 30' equipment shelter near the base of the tower to house its radio equipment and a propane-fueled back-up generator. A 1,000 gallon propane tank would also be installed within the fenced compound. Cellco antennas would be mounted at the top of the tower with their centerline at the 110-foot level. Utility and vehicular access to the site would extend from Town Farm Road over a new gravel driveway a distance of approximately 580 feet to the site compound.

SITE EVALUATION REPORT

SITE NAME: FARMINGTON NORTH 2 – 199 Town Farm Road, Farmington, CT

I. LOCATION

- A. COORDINATES: 41°-45'-27.99" N 72°-49'-47.75" W
- B. GROUND ELEVATION: Approximately 189± feet AMSL
- C. USGS MAP: Avon, CT
- D. <u>SITE ADDRESS</u>: 199 Town Farm Road, Farmington, CT
- E. <u>ZONING WITHIN 1/4 MILE OF SITE</u>: Land within 1/4 mile of the cell site is zoned Residential.

II. <u>DESCRIPTION</u>

- A. SITE SIZE: 100' x 100' Leased Area
 - 60' x 60' Compound Area
- B. LESSOR'S PARCEL: Approximately 9.9-acres
- C. TOWER TYPE/HEIGHT: 110' Monopole Tower

117' overall structure height for "monopine" design

- D. <u>SITE TOPOGRAPHY AND SURFACE</u>: Topography in the site compound area is generally flat and slopes up to the west of the facility location. Minimal clearing and grading of the leased area and access driveway will be required. The site compound area has been situated so as to minimize, to the extent possible, the clearing of substantial trees. Clearing of twelve (12) trees with a six inch (6") diameter at breast height ("dbh") will be required for the site compound area.
- E. <u>SURROUNDING TERRAIN, VEGETATION, WETLANDS, OR WATER</u>: The monopine tower is located in the westerly portion of a partially wooded 9.9-acre parcel. No wetland areas exist within or near the site compound or access driveway.
- F. <u>LAND USE WITHIN 1/4 MILE OF SITE</u>: The Farmington North 2 Facility is located on an approximately 9.9-acre, partially wooded parcel. The Property is surrounded by farm land and residential land uses. (See Aerial Photograph at p. ii).

III. FACILITIES

- A. <u>POWER COMPANY</u>: The Connecticut Light and Power Company
- B. <u>POWER PROXIMITY TO SITE</u>: Approximately 580 feet to the east of the cell site.
- C. <u>TELEPHONE COMPANY</u>: AT&T
- D. PHONE SERVICE PROXIMITY: Same as power
- E. <u>VEHICLE ACCESS TO SITE</u>: Vehicle access to the site would extend from Town Farm Road over a new 14-foot wide gravel driveway to the site compound a total distance of approximately 580 feet.
- F. <u>CLEARING AND FILL REQUIRED</u>: Clearing and grading would be required for construction of the tower, site compound and for improving the access drive. Detailed construction plans would be developed after approval by the Siting Council.

IV. <u>LEGAL</u>

- A. PURCHASE [] LEASE [X]
- B. OWNER: Town of Farmington
- C. ADDRESS: 199 Town Farm Road, Farmington, CT 06032
- D. DEED ON FILE AT: Town of Farmington, CT Land Records

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FACILITIES AND EQUIPMENT SPECIFICATIONS (NEW TOWER & EQUIPMENT BUILDING)

SITE NAME: FARMINGTON NORTH 2 – 199 Town Farm Road, Farmington, CT

I. TOWER SPECIFICATIONS:

A. MANUFACTURER: To be determined

B. TYPE: Self-supporting monopine tree tower

(/2.60).10DD TEN AND CAVE. 44.50

DIMENSIONS:

"MONOPINE" HEIGHT: 117'

110'

Approx. 30" top

Approx. 60" base

II. TOWER LOADING:

C.

A. CELLCO EQUIPMENT:

TOWER HEIGHT:

- 1. Antennas (15)
 Six (6) Model LPA-80063/4CF (47.4" x 15.2" x 13.2") Cellular
 Six (6) Model LPA-185063/8CF_2 (47.2" x 6.6" x 5.8) PCS antennas
 Three (3) Model BXA-70063/4CF (47.4" x 11.2" x 5.0") 700 MHz
 Antenna Centerline 110' AGL
- 2. GPS Antenna: Mounted on the top of the equipment shelter
- 3. Transmission Lines:
 - a. MFG/Model: Andrews LDF5-50A
 - b. Size: 1 5/8"

III. ENGINEERING ANALYSIS AND CERTIFICATION:

The tower will be designed in accordance with Electronic Industries Association Standard EIA/TIA-222-F "Structural Standards for Steel Antenna Towers and Antenna Support Structures." The foundation designs would be based on soil conditions at the site. Details for the towers and foundation designs will be provided as a part of the final D&M Plan.

ENVIRONMENTAL ASSESSMENT STATEMENT

SITE NAME: FARMINGTON NORTH 2 – 199 Town Farm Road, Farmington, CT

I. PHYSICAL IMPACT

A. WATER FLOW AND QUALITY

No water flow and/or water quality changes are anticipated as a result of the construction or operation of the Farmington North 2 Facility. There are no lakes, ponds, rivers, streams, wetlands or other regulated bodies of water located in the area to be used for the access drive, tower or equipment shelter. The equipment used will not discharge any pollutants to area surface or groundwater systems.

B. AIR QUALITY

Under ordinary operating conditions, the equipment that would be used at the site would emit no air pollutants of any kind. For limited periods during power outages and periodically for maintenance purposes, minor levels of emissions from the on-site generator would result.

Pursuant to R.C.S.A. § 22a-174-3, the on-site emergency back-up generator proposed as a part of this application would require the issuance of a Connecticut Department of Environmental Protection Air Bureau permit for potential emissions. Cellco would obtain this permit prior to installing the generator at the approved cell site.

C. LAND

Clearing and grading of the tower compound and access drive will be required. The remaining land of the Lessor would remain unchanged by the construction and operation of the cell site.

D. NOISE

The equipment to be in operation at the site after construction would emit no noise of any kind, except for operation of the installed heating, air conditioning and ventilation systems and occasional operation of a back-up generator that would be run during power outages and periodically for maintenance purposes. Some noise is anticipated during cell site construction, which is expected to take approximately four to six weeks.

E. POWER DENSITY

The worst-case calculation of power density for Cellco's Cellular, PCS and 700 MHz antennas at the Farmington North 2 Facility would be 23.94% of the Standard.

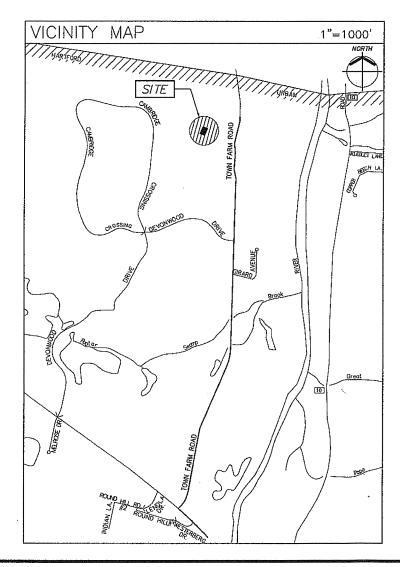
F. <u>VISIBILITY</u>

See Visual Resource Evaluation Report included as Attachment 10.



FARMINGTON NORTH 2

199 TOWN FARM ROAD FARMINGTON, CONNECTICUT 06032



SITE DIRECTIONS

EROM EAST HARTFORD: TAKE 1-84 W / US-6 W VIA THE RAMP ON THE LEFT TOWARD WATERBURY, MERGE ONTO CT-4 W / FARMINGTON AVENUE VIA EXIT 39 TOWARD FARMINGTON. TURN RIGHT ONTO TOWN FARM ROAD.

PROJECT DESCRIPTION

THE SCOPE OF THIS PROJECT INCLUDES THE INSTALLATION OF AN UNMANNED 12'-0" \times 30'-0" wireless communications equipment shelter located within a new 60'-0" \times 60'-0" gravel compound, with wireless communications equipment backup generator and THE INSTALLATION OF FIFTEEN (15) VERIZON WIRELESS PANEL ANTE

PROJECT SUMMARY

FARMINGTON NORTH 2

CONTACT PERSON:

GOVERNING CODE:

CONNECTICUT STATE BUILDING AND LIFE SAFETY CODE

APPLICANT:

CELLCO PARTNERSHIP DBA VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108

ARCHITECT:

URS CORPORATION A.E.S. 500 ENTERPRISE DRIVE, SUITE 3B ROCKY HILL, CT 06067



DESCRIPTION

SECTION OR DETAIL NUMBER SHEET WHERE DETAIL/SECTION OCCURS

SHEET WHERE ELEVATION OCCURS

ABBREVIATIONS

VERIFY IN FIELD V.J.F.

ON CENTER POUND/SQUARE FOOT

TYPICAL

TOP OF CONCRETE TOC

SHEET INDEX

SHT. NO.	DESCRIPTION
T1	TITLE SHEET — GENERAL NOTES AND LEGENDS
S-1	SURVEY .
AB 1	ABUTTERS MAP AND LIST FARMINGTON
AB-2	ABUTTERS MAP AND LIST AVON
SC-1	PARTIAL SITE PLAN, NOTES AND DETAIL
SC-2	COMPOUND PLAN, TOWER ELEVATION,
	AND ANTENNA ORIENTATION PLAN
SC-3	SITE DETAILS AND NOTES
SC-4	EQUIPMENT SHELTER FOUNDATION PLAN,

ELEVATIONS, DETAILS AND NOTES



URS CORPORATION AES

500 ENTERPRISE DRIVE, SUITE 3



PROJECT NO: 36931054.00002

KAP

VZ1 229

DRAWN BY: CHECKED BY:

0 01-03-08 SITING COUNCIL 1 D1-18-08 REVIEW 2 03~12-08 REVIEW 3 03-19-08 REVIEW

4 03-21-08 SITING COUNCIL 5 11-04-08 SITING COUNCIL 7 01-14-09 SITING COUNCIL

THE INFORMATION CONTAINED IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO VERIZON WIRE-

LESS IS STRICTLY PROHIBITE

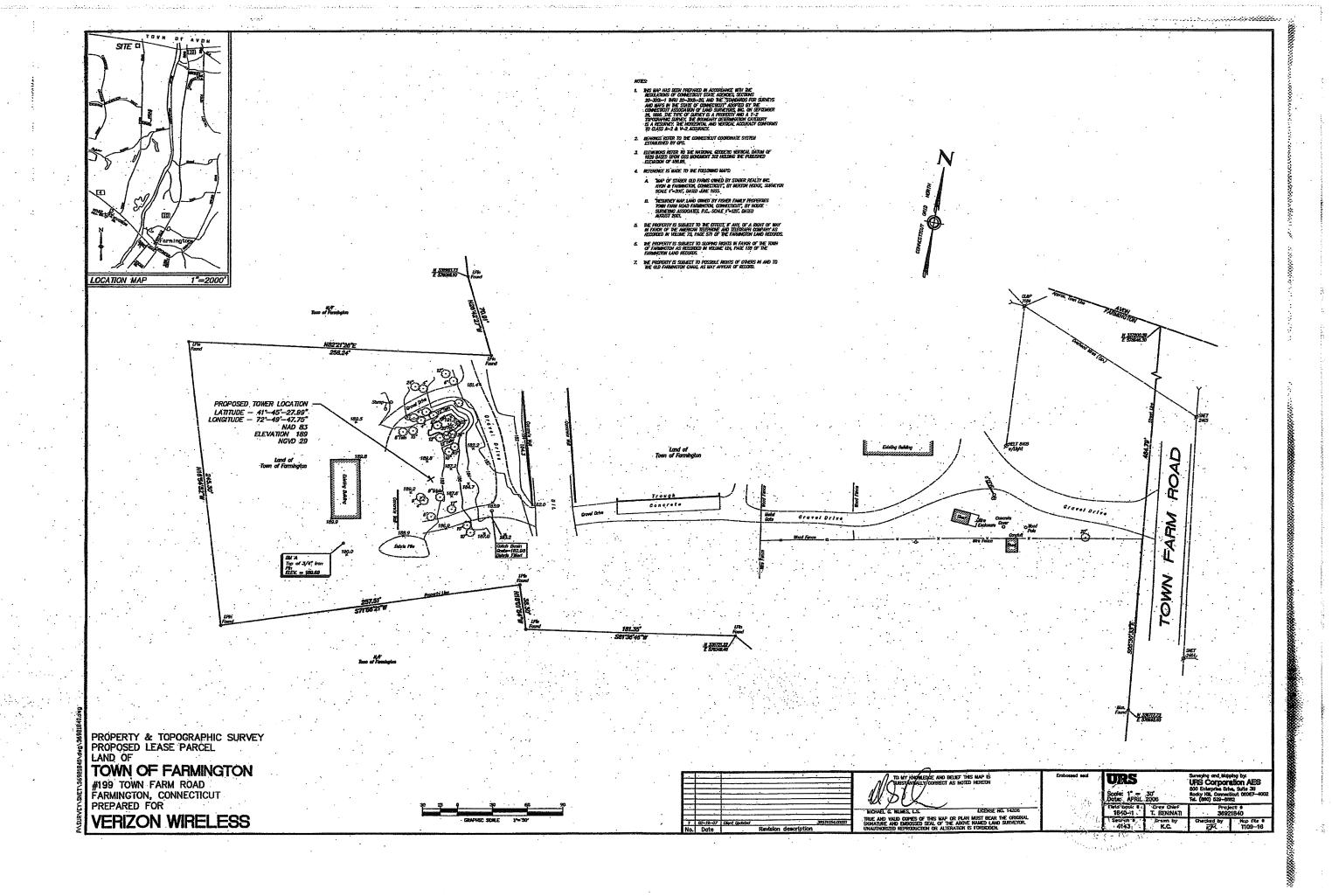
FARMINGTON NORTH 2

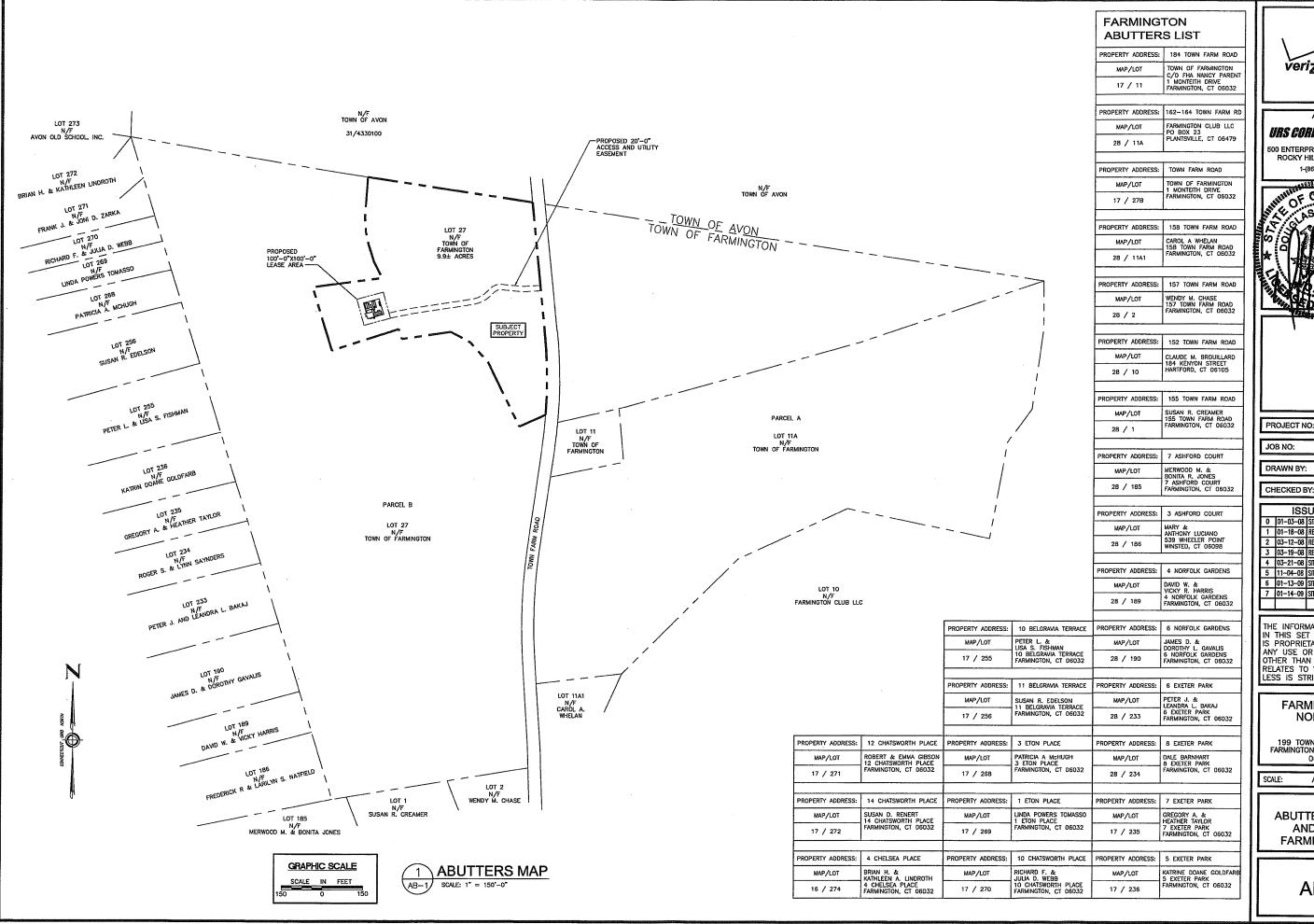
199 TOWN FARM ROAD FARMINGTON, CONNECTICUT 06032

AS NOTED

TITLE SHEET-**GENERAL NOTES** AND LEGENDS

T-1

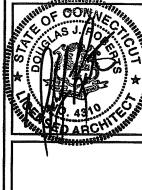






URS CORPORATION AES

500 ENTERPRISE DRIVE, SUITE 3B ROCKY HILL, CONNECTICUT



PROJECT NO: 36931054.00002

KAP

VZ1 229

1						
		ISSUED FOR				
			SITING COUNCIL			
	1	01-18-08	REVIEW			
		03-12-08				
	3	03-19-08	REVIEW			
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	6	01-13-09	SITING COUNCIL			
ı	7	01-14-09	SITING COUNCIL			
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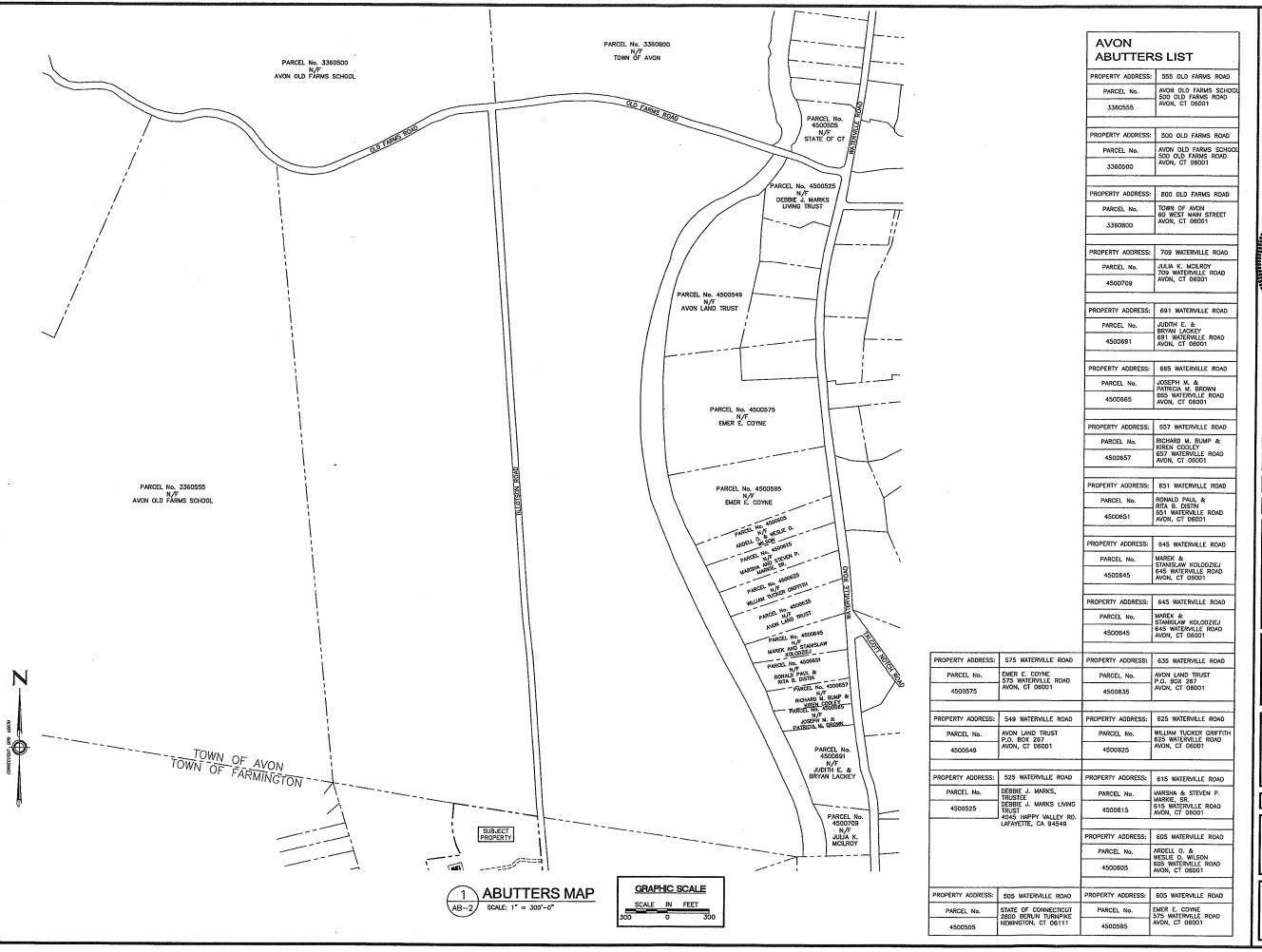
> **FARMINGTON** NORTH 2

199 TOWN FARM ROAD FARMINGTON, CONNECTICUT 06032

AS NOTED

ABUTTERS MAP AND LIST **FARMINGTON**

AB-1





FRA AARRAMANAN

URS CORPORATION AES

500 ENTERPRISE DRIVE, SUITE 36 ROCKY HILL, CONNECTICUT 1-(860)-529-8882



PROJECT NO: 36931054.00002

VZ1 229

JOB NO:

DRAWN BY: KAP

CHECKED BY:

	ISSUED FOR		
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	01-18-08		
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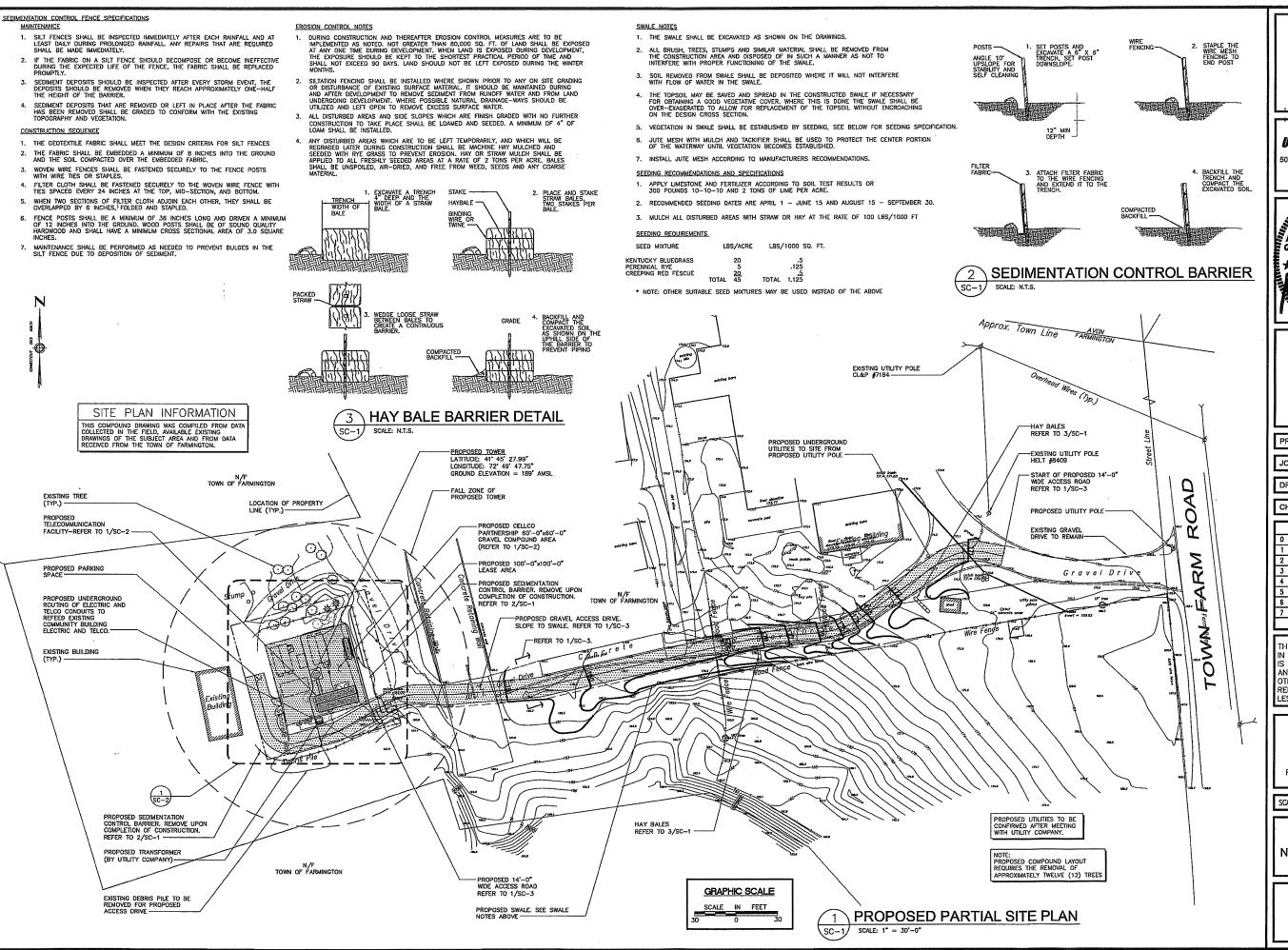
FARMINGTON NORTH 2

199 TOWN FARM ROAD FARMINGTON, CONNECTICUT 06032

SCALE: AS NOTED

ABUTTERS MAP AND LIST AVON

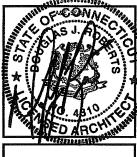
AB-2



verizon wireless

URS CORPORATION AES

500 ENTERPRISE DRIVE, SUITE 3B ROCKY HILL, CONNECTICUT 1-(860)-529-8882



PROJECT NO: 36931054.00002

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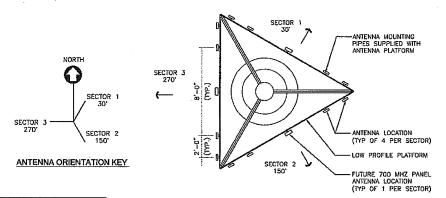
FARMINGTON NORTH 2

199 TOWN FARM ROAD FARMINGTON, CONNECTICUT 06032

SCALE: AS NOTED

PARTIAL SITE PLAN, NOTES AND DETAIL

SC-1

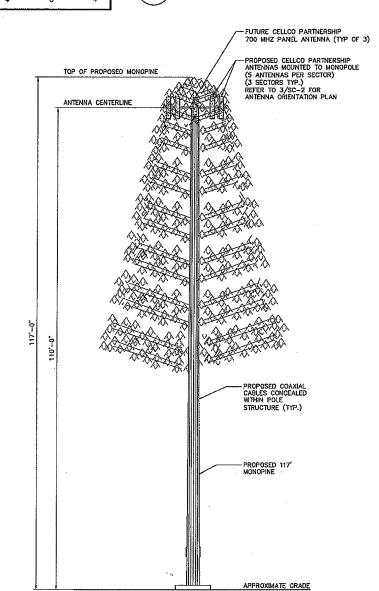


GRAPHIC SCALE

SCALE IN FEET

VERIZON WIRELESS

3 ANTENNA ORIENTATION PLAN

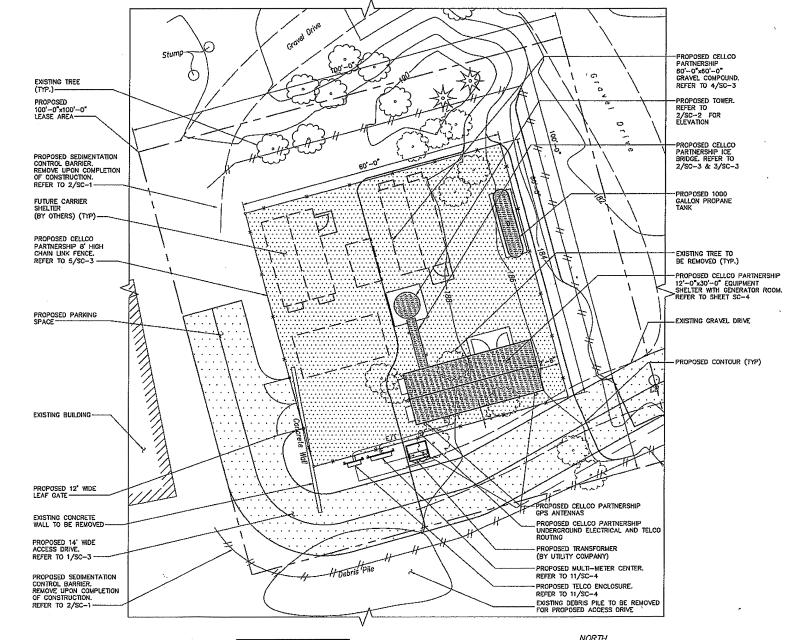


GRAPHIC SCALE

SCALE IN FEET

10 0 10





1 COMPOUND PLAN

SC-2 SCALE: 1" = 10'-0"

NOTE: PROPOSED COMPOUND LAYOUT REQUIRES THE REMOVAL OF APPROXIMATELY TWELVE (12) TREES GRAPHIC SCALE

SCALE IN FEET



A&E FIRM

URS CORPORATION AES

500 ENTERPRISE DRIVE, SUITE 3E ROCKY HILL, CONNECTICUT 1-(860)-529-8882



PROJECT NO: 36931054.00002

JOB NO: VZ† 229

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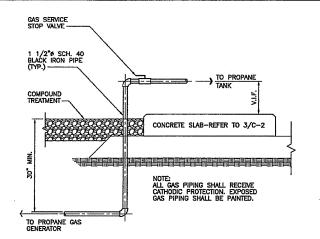
FARMINGTON NORTH 2

199 TOWN FARM ROAD FARMINGTON, CONNECTICUT 06032

SCALE: AS NOTED

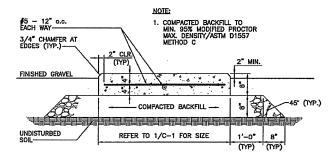
COMPOUND PLAN, TOWER ELEVATION, AND ANTENNA ORIENTATION PLAN

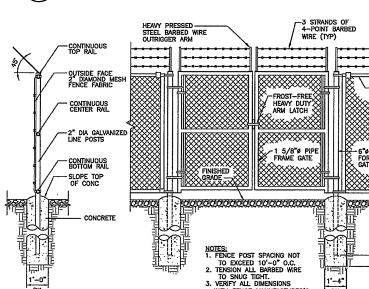
SC-2



- SCHEDULE 40 BLACK STEEL UNDERGROUND PIPING W/CATHODIC PROTECTION (TYP.). REFER TO DETAIL ABOVE FOR TRENCHING AND PIPING DETAILS
- 2. PROPANE TANK SHALL COMPLY WITH ASME CODE FOR PRESSURE VESSELS, (SECTION III DIMISION 1) MANUFACTURER SHALL X-RAY TEST THE TANK AS REQUIRED BY ASME CODE, FURNISH AND INSTALL ALL ACCESSORIES SUCH AS PRIMARY AND SECONDARY PRESSURE REGULATORS, PRESSURE GAUGES, PROPANE APPROVED CARBURETOR (FURNISHED WITH GENERATOR) GAS LEAK DETECTOR, SHUT-OFF VALVES, ISOLATION VALVES, APPROVED ROPANE GAS TRAIN, LEVEL SENSOR, CABLE, INDICATOR ETC. AS REQUIRED TO COMPLETE THE WORK. CONTRACTOR TO PROVIDE ADDITIONAL FLEXIBLE CONNECTION AT GENERATOR. GENERATOR COMES EQUIPPED WITH FUEL REGULATOR, FLEXIBLE HOSE AND FUEL SOLENOID.







CONCRETE SLAB DETAIL (PROPANE TANK) SC-3 SCALE: 3/4"=1"-0" 1 5/8°¢ TOP RAI -6"ø Post For 6'-0" Gate Leaf NOTES:

1. FENCE POST SPACING NOT TO EXCEED 10"-0" O.C.

2. TENSION ALL BARBED WIRE TO SNUC TIGHT.

3. VERIFY ALL DIMENSIONS WITH FENCE MANUFACTURER'S REQUIREMENTS.

CHAIN LINK FENCE DETAIL SC-3 SCALE: NTS

SITE NOTES

- THE FOLLOWING STANDARD SPECIFICATIONS ARE INCORPORATED INTO THE WORK SHOWN HEREON UNLESS SUPERSEDED BY LOCAL
- STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION
 "STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION" FORM 816 ENGLISH & METRIC
 FORM 816 ORIGINAL
 -FORM 818 SUMMARY OF CHANGES
 -SUPPLEMENT FORM 816 JANUARY 2005
 -SUPPLEMENT FORM 816 JULY 2005
- DEP BULLETIN 34, CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL DATED 2002.
- 2. THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENTATION CONTROL PRIOR TO ANY GRADING ACTIVITIES AND MAINTAIN SEDIMENTATION CONTROLS AT ALL TIMES DURING CONSTRUCTION. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ARE SUBJECT TO INSPECTION AND MOINTORING BY THE TOWN.
- ALL AREAS DISTURBED BY THE CONSTRUCTION OF IMPROVEMENTS SHOWN HEREON SHALL BE REESTABLISHED TO EXISTING CONDITIONS.
- COORDINATION, LAYOUT AND FURNISHING OF CONDUIT, CABLE AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS.
- 8. IF ANY FIELD CONDITIONS PRECLUDE COMPLIANCE WITH THE DRAWINGS AND/OR CONDITIONS PRECIFIED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THIS CELLULAR CARRIER AND SHALL NOT PROCEED WITH ANY AFFECTED WORK.
- 9. THE CONTRACTOR SHALL STABILIZE ALL UTILITY LINE TRENCHES WITHIN FIVE WORKING DAYS AFTER EXCAVATION UNLESS OTHERWISE APPROVED BY THIS CELLULAR CARRIER.

- 2. ALL SURFACES MUST BE FREE OF STANDING WATER PRIOR TO PLACING CONCRETE
- COMPACTED GRAVEL FILL PER CONNECTICUT DOT STANDARD SPEC. SECTION M.02.01 AND ASTM D1557.
- CONTACT THE ENGINEER IF GROUND WATER IS IN ENCOUNERED AND DEWATERING IS REQUIRED.

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318 AND THE SPECIFICATION CAST—IN—PLACE CONCRETE.
- 2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH C 3500 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. CONCRETE SHUBE AIR ENTRAINED TO (4% TO 6%) AND SLUMP OF 3" TO 5".
- 3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
- 4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

CONCRETE CAST AGAINST EARTH......3 IN. CONCRETE EXPOSED TO EARTH OR WEATHER:

#6 AND LARGER2 IN. #5 AND SMALLER & WWF1 1/2 IN. CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:

.....3/4 IN.1 1/2 IN.

- 5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
- CONTROLLE, UNIO, IN ALCURUANUE WITH ALL DUT SECTION 4.2.4.

 INSTALIATION OF CONCRETE EXPANSION/MEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REPAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE.
- 7. COLD WEATHER CONCRETE PLACING SHALL BE IN ACCORDANCE WITH ACI-306.
- 8. NO FOOTING SHALL BE PLACED ON FROZEN GROUND. UNCURED CONCRETE SHALL BE PROTECTED AGAINST FROST.
- 9. APPLY NON-SLIP BROOM FINISH IMMEDIATELY AFTER TROWEL FINISHING.

GEOTEXTILE NOTES: GEOTEXTILE SHALL BE USED BENEATH DESIGN HEAVY USE AREA GRAVEL LAYER AS NOTED IN THE DRAWINGS, OR AS SPECIFIED BY THE NRCS PROJECT ENGINEER.

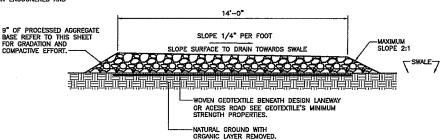
- THIS MATERIAL MUST MEET "HIGH SURVIVABILITY CRITERIA"

 GRAB STRENGTH: ASTM D-1682 = 320 LBS, OR BETTER

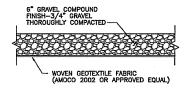
 PUNCTURE STRENGTH: ASTM D-751-68 = 290 PSI OR BETTER

 BURST STRENGTH: ASTM D-751-68 = 290 PSI OR BETTER

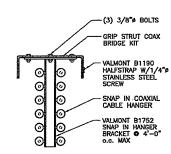
 TEAR STRENGTH: ASTM D-117 = 55 LBS. OR BETTER



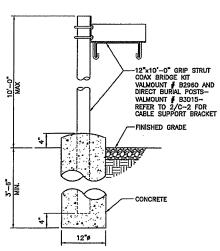
GRAVEL ACCESS DRIVE TYPICAL SECTION



GRAVEL COMPOUND DETAIL SCALE: 1/2" - 1'-0'



ICE BRIDGE DETAIL



1. MAXIMUM 10' SPACING BETWEEN POST SUPPORTS
2. 3 POSTS REQUIRED





URS CORPORATION AES

500 ENTERPRISE DRIVE, SUITE 3 ROCKY HILL, CONNECTICUT 1-(860)-529-8882



PROJECT NO: 36931054.00002

JOB NO: VZ1 229

DRAWN BY KAP

CHECKED BY:

ISSUED FOR 01-03-08 SITING COUNCIL 1 01-18-08 REVIEW 2 03-12-08 REVIEW 3 03-19-08 REVIEW 4 03-21-08 SITING COUNCIL 5 11-04-08 SITING COUNCIL 6 01-13-09 SITING COUNCIL 7 01-14-09 SITING COUNCIL

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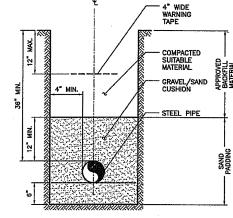
> **FARMINGTON** NORTH 2

199 TOWN FARM ROAD FARMINGTON, CONNECTICUT 06032

SCALE: AS NOTED

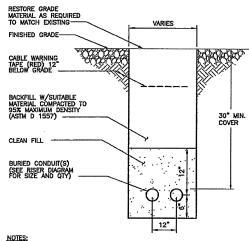
> SITE DETAILS AND NOTES

> > SC-3



WHERE EXISTING UTILITIES ARE LIKELY TO BE ENCOUNTERED, CONTRACTOR SHALL HAND DIG AND PROTECT EXISTING UTILITIES.

9 TYPICAL BURIED GAS LINE DETAIL SC-3 SCALE: 3/4"=1'-0

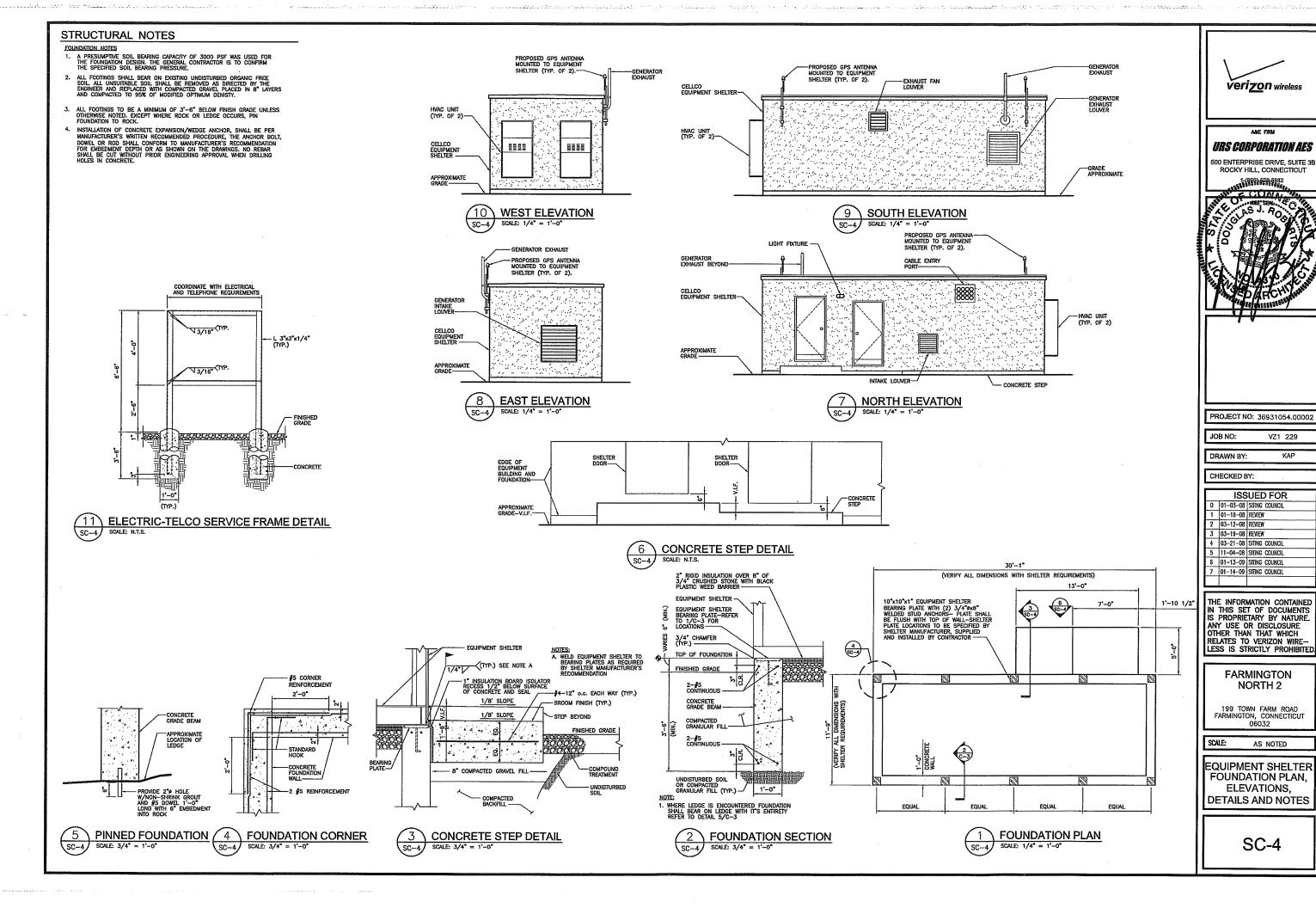


 THE CLEAN FILL SHALL PASS THROUGH A 3/8" MESH SCREEN
AND SHALL NOT CONTAIN SHARP STONES. OTHER BACKFILL SHALL NOT CONTAIN ASHES, CINDERS, SHELLS, FROZEN MATERIAL, LOOSE DEBRIS OR STONES LARGER THAN 2" IN MAXIMUM DIMENSION. THE TRENCH SHALL BE BACKFILLED IMMEDIATELY FOLLOWING PLACEMENT OF THE CONDUITS.

WHERE EXISTING UTILITIES ARE LIKELY TO BE ENCOUNTERED, CONTRACTOR SHALL HAND DIG AND PROTECT EXISTING UTILITIES.

SCALE: N.T.S. SC-3

8 TYPICAL UTILITY TRENCH DETAIL



APPLICATION GUIDE¹

App. P. i	(A)	An Executive Summary on the first page of the application with the address, proposed height, and type of tower being proposed. A map showing the location of the proposed site should accompany the description;
App. pp. 1-4	(B) ¹	A brief description of the proposed facility, including the proposed locations and heights of each of the various proposed sites of the facility, including all candidates referred to in the application;
App. pp. 1-2	(C)	A statement of the purpose for which the application is made;
App. p. 1	(D)	A statement describing the statutory authority for such application;
App. p. 4	(E)	The exact legal name of each person seeking the authorization or relief and the address or principal place of business of each such person. If any applicant is a corporation, trust association, or other organized group, it shall also give the state under the laws of which it was created or organized;
App. p. 4	(F)	The name, title, address and telephone number of the attorney or other person to whom correspondence or communications in regard to the application are to be addressed. Notice, orders, and other papers may be served upon the person so named, and such service shall be deemed to be service upon the applicant;
App. pp. 7-8 Attachments 1 and 7	(G)	A statement of the need for the proposed facility with as much specific information as is practicable to demonstrate the need, including a description of the proposed system and how the proposed facility would eliminate or alleviate any existing deficiency or limitation;
App. p. 12	(H)	A statement of the benefits expected from the proposed facility with as much specific information as is practicable;

¹ This Application Guide is copied directly from the "Connecticut Siting Council Application Guide," Section VI, as amended February 16, 2007. References to the Regulations of Connecticut State Agencies ("RCSA") contained in the Guide have been omitted.

App. pp. 1-4, 9-12 Attachments 1 and 7

- (I) A description of the proposed facility at the named sites including:
 - (1) Height of the tower and its associated antennas including a maximum "not to exceed height" for the facility, which may be higher than the height proposed by the Applicant;
 - (2) Access roads and utility services;
 - (3) Special design features;
 - (4) Type, size, and number of transmitters and receivers, as well as the signal frequency and conservative worst-case and estimated operational level approximation of electro magnetic radio frequency power density levels (facility using FCC Office of Engineering and Technology Bulletin 65, August 1997) at the base of the tower base, site compound boundary where persons are likely to be exposed to maximum power densities from the facility;
 - (5) A map showing any fixed facilities with which the proposed facility would interact;
 - (6) The coverage signal strength, and integration of the proposed facility with any adjacent fixed facility, to be accompanied by multi-colored propagation maps of red, green and yellow (exact colors may differ depending on computer modeling used, but a legend is required to explain each color used) showing interfaces with any adjacent service areas, including a map scale and north arrows; and
 - (7) For cellular systems, a forecast of when maximum capacity would be reached for the proposed facility and for facilities that would be integrated with the proposed facility.

Attachment 1

- (J) A description of the named sites, including:
 - (1) The most recent U.S.G.S. topographic quadrangle map (scale 1 inch = 2,000 feet) marked to show the site of the facility and any significant changes within a one-mile radius of the site;
 - (2) A map (scale not less than 1 inch = 200 feet) of the lot or tract on which the facility is proposed to be located showing the acreage and dimensions of such site, the name and location of adjoining public roads or the nearest public road, and the names of abutting owners and the portions of their lands abutting the site;
 - (3) A site plan (scale not less than 1 inch = 40 feet) showing the proposed facility, set back radius, existing and proposed contour elevations, 100-year flood zones, waterways, wetlands, and all associated equipment and structures on the site;
 - (4) Where relevant, a terrain profile showing the proposed facility and access road with existing and proposed grades; and
 - (5) The most recent aerial photograph (scale not less than 1 inch = 1,000 feet) showing the proposed site, access roads, and all abutting properties.

Attachment 1

- (K) A statement explaining mitigation measures for the proposed facility including:
 - (1) Construction techniques designed specifically to minimize adverse effects on natural areas and sensitive areas;
 - (2) Special design features made specifically to avoid or minimize adverse effects on natural areas and sensitive areas;
 - (3) Establishment of vegetation proposed near residential, recreation, and scenic areas; and
 - (4) Methods for preservation of vegetation for wildlife habitat and screening.

App. pp. 1-4 and 16 Attachment 10

(L) A description of the existing and planned land uses of the named sites and surrounding areas;

App. pp. 12-15 Attachments 10 and 11	(M)	A description of the scenic, natural, historic, and recreational characteristics of the names sites and surrounding areas including officially designated nearby hiking trails and scenic roads;
Attachment 10	(N)	Sight line graphs to the named sites from visually impacted areas such as residential developments, recreational areas and historic sites;
Attachment 9	(O)	A list describing the type and height of all existing and proposed towers and facilities within a four mile radius within the site search area, or within any other area from which use of the proposed towers might be feasible from a location standpoint for purposes of the application;
App. pp. 10-11 Attachment 9	(P)	A description of efforts to share existing towers, or consolidate telecommunications antennas of public and private services onto the proposed facility including efforts to offer tower space, where feasible, at no charge for space for municipal antennas;
App. p. 10 Attachment 1	(Q)	A description of technological alternatives and a statement containing justification for the proposed facility;
Attachment 9	(R)	A description of rejected sites with a U.S.G.S. topographic quadrangle map (scale 1 inch = 2,000 feet) marked to show the location of rejected sites;
Attachments 1 and 9	(S)	A detailed description and justification for the site(s) selected, including a description of siting criteria and the narrowing process by which other possible sites were considered and eliminated including, but not limited to, environmental effects, cost differential, coverage lost or gained, potential interference with other facilities, and signal loss due to geographic features compared to the proposed site(s);
App. p. 15	(T)	A statement describing hazards to human health, if any, with such supporting data and references to regulatory standards;
App. pp. 21-22	(U)	A statement of estimated costs for site acquisition, construction, and equipment for a facility at the various proposed sites of the facility, including all candidates referred to in the application;

App. p. 22

(V) A schedule showing the proposed program of site acquisition, construction, completion, operation and relocation or removal of existing facilities for the named sites;

App. p. 14

(W) A statement indicating that, weather permitting, the applicant will raise a balloon with a diameter of at least three feet, at the sites of the various proposed sites of the facility, including all candidates referred to in the application, on the day of the Council's first hearing session on the application or at a time otherwise specified by the Council. For the convenience of the public, this event shall be publicly noticed at least 30 days prior to the hearing on the application as scheduled by the Council;

App. pp. 16-21 Attachments 1 and 11 Bulk File Exhibits

- (X) Such information as any department or agency of the State exercising environmental controls may, by regulation, require including:
 - (1) A listing of any federal, state, regional, district, and municipal agencies, including but not limited to the Federal Aviation Administration; Federal Communications Commission; State Historic Preservation Officer; State Department of Environmental Protection; and local conservation, inland wetland, and planning and zoning commissions with which reviews were conducted concerning the facility, including a copy of any agency position or decision with respect to the facility; and
 - (2) The most recent conservation, inland wetland, zoning, and plan of development documents of the municipality, including a description of the zoning classification of the site and surrounding areas, and a narrative summary of the consistency of the project with the Town's regulations and plans.

Attachment 1 (Project Plans)

(Y) Description of proposed site clearing for access road and compound including type of vegetation scheduled for removal and quantity of trees greater than six inches diameter at breast height and involvement with wetlands;

 NI/Δ

(Z) Such information as the applicant may consider relevant.

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CERTIFICATION OF SERVICE

I hereby certify that on this 23rd day of January 2009, copies of the Application and attachments were sent by certified mail, return receipt requested, to the following:

STATE OFFICIALS:

The Honorable Richard Blumenthal Attorney General Office of the Attorney General 55 Elm Street Hartford, CT 06106

Regina McCarthy, Commissioner Connecticut Department of Environmental Protection 79 Elm Street Hartford, CT 06106-5127

J. Robert Galvin, M.D., M.P.H., M.B.A., Commissioner Department of Public Health 410 Capitol Avenue P.O. Box 340308, MS 13COM Hartford, CT 06134-0308

Karl J. Wagener, Executive Director Council on Environmental Quality 79 Elm Street Hartford, CT 06106

F. Philip Prelli, Commissioner Department of Agriculture 165 Capitol Avenue Hartford, CT 06106

Donald W. Downes, Chairman Department of Public Utility Control Ten Franklin Square New Britain, CT 06051

Robert L. Genuario, Secretary Office of Policy and Management 450 Capitol Avenue Hartford, CT 06106-1379 Joan McDonald, Commissioner Department of Economic and Community Development 505 Hudson Street Hartford, CT 06106-7106

Joseph F. Marie, Commissioner Department of Transportation 2800 Berlin Turnpike Newington, CT 06131-7546

Karen Senich
Executive Director and State Historic Preservation Officer
Connecticut Commission on Culture and Tourism
One Constitution Plaza, 2nd Floor
Hartford, CT 06103

FARMINGTON TOWN OFFICIALS:

Kathleen A. Eagen Town Manager Town of Farmington 1 Monteith Drive Farmington, CT 06032

The Honorable Jonathan A. Harris Senator – 5th District Legislative Office Building Room 3000 Hartford, CT 06106-1591

The Honorable Donald J. DeFronzo Senator – 6th District Legislative Office Building Room 2300 Hartford, CT 06106

The Honorable Beth Bye Representative – 19th District 99 Outlook Avenue West Hartford, CT 06119

The Honorable Demetrios Giannaros Representative – 21st District 56 Basswood Road Farmington, CT 06032 Paula B. Ray Town Clerk Town of Farmington 1 Monteith Drive Farmington, CT 06032

James H. Pogson, Chairman Town Plan, Zoning and Inland Wetlands Commission Town of Farmington 1 Monteith Drive Farmington, CT 06032

Edward Giannaros, Chairman Zoning Board of Appeals Town of Farmington 1 Monteith Drive Farmington, CT 06032

Jeffrey Ollendorf Town Planner/Zoning Enforcement Officer Town of Farmington 1 Monteith Drive Farmington, CT 06032

Robert J. Hannon, Chairman Conservation Commission Town of Farmington 1 Monteith Drive Farmington, CT 06032

AVON TOWN OFFICIALS:

Philip K. Schenck, Jr. Town Manager Town of Avon 60 West Main Street Avon, CT 06001

The Honorable Kevin Witkos Senator Legislative Office Building Room 3400 Hartford, CT 06106 The Honorable Beth Bye Representative – 19th District 99 Outlook Avenue West Hartford, CT 06119

The Honorable Tim LeGeyt Representative – 17th District Legislative Office Building Room 4200 Hartford, CT 06106

Ann L. Dearstyne Town Clerk Town of Avon 60 West Main Street Avon, CT 06001

Duane E. Starr, Chairman Town Planning and Zoning Commission Town of Avon 60 West Main Street Avon, CT 06001

John E. Drew, Chairman Zoning Board of Appeals Town of Avon 60 West Main Street Avon, CT 06001

Steven M. Kushner
Director of Planning and Community Development/Zoning Enforcement Officer
Town of Avon
60 West Main Street
Avon, CT 06001

Cliff S. Thier, Chairperson Inland Wetlands Commission Town of Avon 60 West Main Street Avon, CT 06001

Marianne Landers Clark, Chairman Natural Resources Commission Town of Avon 60 West Main Street Avon, CT 06001 Capitol Region Council of Governments 241 Main Street, 4th Floor Hartford, CT 06106-5310

Federal Communications Commission 445 12th Street SW Washington, DC 20554

Jey Lee Miranda, Esq.

Robinson & Cole LLP

280 Trumbull Street

Hartford, CT 06103

Telephone: (860) 275-8200

Attorneys for Cellco Partnership d/b/a Verizon Wireless

/ 2

LEGAL NOTICE

Notice is hereby given, pursuant to Section 16-50*l*(b) of the Connecticut General Statutes and Regulations pertaining thereto, of an Application to be submitted to the Connecticut Siting Council ("Council") on or about January 23, 2009, by Cellco Partnership d/b/a Verizon Wireless ("Cellco" or the "Applicant"). The Application proposes the installation of a wireless telecommunications facility in the Town of Farmington, Connecticut. The installation would consist of a 100' x 100' leased area within a 9.9-acre parcel at 199 Town Farm Road. At this site, Cellco proposes to construct a 117-foot monopine tower. Access to the site will extend from Town Farm Road, a distance of approximately 580 feet, to the cell site. Cellco will also install a new 12' x 30' shelter located near the base of the tower to house its radio equipment and an emergency back-up generator. A 1000 gallon propane tank will also be installed within the fenced compound. The location and other features of the proposed facility are subject to change under provisions of Connecticut General Statutes § 16-50g et. seq.

On the day selected for the Siting Council public hearing on this proposal, Cellco will fly a balloon at the height of the proposed tower described above, between the hours of 8:00 a.m. and 5:00 p.m. Interested parties and residents of the Town of Farmington are invited to review the Application during normal business hours at any of the following offices:

Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

Cellco Partnership d/b/a Verizon Wireless 99 East River Drive East Hartford, CT 06108 Town Clerk
Town of Farmington
Town Hall
1 Monteith Drive
Farmington, CT 06032

Town Clerk Town of Avon Town Hall 60 West Main Avon, CT 06001

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

CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS

Joey Lee Miranda, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103-3597 (860) 275-8200 Its Attorneys

	·		

JOEY LEE MIRANDA

280 Trumbull Street Hartford, CT 06103-3597 Main (860) 275-8200 Fax (860) 275-8299 jmiranda@rc.com Direct (860) 275-8227

Also admitted in District of Columbia and Massachusetts

January 20, 2009

Via Certified Mail Return Receipt Requested

«Name and Address»

Re: Cellco Partnership

Cellco Partnership d/b/a Verizon Wireless Proposed Telecommunications Facility Farmington, Connecticut

Dear «Salutation»:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") will be submitting an application to the Connecticut Siting Council ("Council") on or about January 23, 2009, for approval of the construction of a telecommunications facility in the Town of Farmington, Connecticut.

The facility would consist of a new 117-foot self-supporting monopole tower, disguised as a pine tree, and a 12' x 30' equipment shelter located on a 9.9 acre parcel at 199 Town Farm Road. The parcel is owned by the Town of Farmington. An onsite backup generator would also be installed inside Cellco's shelter. A 1000 gallon propane tank will be installed within the fenced compound. The tower would be designed to accommodate multiple carriers. Access to this site will extend from Town Farm Road.

The location and other features of the proposed facility are subject to change under the provisions of Connecticut General Statutes § 16-50g et seq.

State law provides that owners of record of property that abuts a parcel on which the proposed facility may be located must receive notice of the submission of this application. This notice is directed to you either because you may be an abutting land owner or as a courtesy notice.

January 20, 2009 Page 2

If you have any questions concerning the application, please direct them to either the Connecticut Siting Council or me. My address and telephone number are listed above. The Siting Council may be reached at its New Britain, Connecticut office at (860) 827-2935.

Very truly yours,

Joey Lee Miranda

ADJACENT PROPERTY OWNERS

SITE NAME:

FARMINGTON NORTH 2

OWNER NAME:

TOWN OF FARMINGTON

OWNER ADDRESS: 1 MONTEITH DRIVE, FARMINGTON, CONNECTICUT 06032

ASSESSOR'S REFERENCE:

MAP: 17

LOT: 27

THE FOLLOWING INFORMATION WAS COLLECTED FROM THE TAX ASSESSOR'S RECORDS AND LAND RECORDS OF FARMINGTON TOWN HALL, FARMINGTON, CONNECTICUT AND AVON TOWN HALL, AVON, CONNECTICUT. THE INFORMATION IS CURRENT AS OF JANUARY 6, 2009.

THE PARCEL IS ZONED R-40 – RESIDENTIAL.

FARMINGTON

	Map/Lot	Property Address	Property Owner
1.	17/11	184 Town Farm Road	Town of Farmington c/o FHA Nancy Parent 1 Monteith Drive Farmington, CT 06032
2.	28/11A	162-164 Town Farm Road	Farmington Club LLC P.O. Box 23 Plantsville, CT 06479
3.	17/27B	Town Farm Road	Town of Farmington 1 Monteith Drive Farmington, CT 06032
4.	28/11A1	158 Town Farm Road	Carol A. Whelan 158 Town Farm Road Farmington, CT 06032
5.	28/2	157 Town Farm Road	Wendy M. Chase 157 Town Farm Road Farmington, CT 06032
6.	28/10	152 Town Farm Road	Claude M. Brouillard 184 Kenyon Street Hartford, CT 06105

7.	28/1	155 Town Farm Road	Susan R. Creamer 155 Town Farm Road Farmington, CT 06032
8.	28/185	7 Ashford Court	Merwood M. and Bonita R. Jones 7 Ashford Court Farmington, CT 06032
9.	28/186	3 Ashford Court	Mary and Anthony Luciano 539 Wheeler Point Winsted, CT 06098
10.	28/189	4 Norfolk Gardens	David W. and Vicky R. Harris 4 Norfolk Gardens Farmington, CT 06032
11.	28/190	6 Norfolk Gardens	James D. and Dorothy L. Gavalis 6 Norfolk Gardens Farmington, CT 06032
12.	28/233	6 Exeter Park	Peter J. and Leandra L. Bakaj 6 Exeter Park Farmington, CT 06032
13.	28/234	8 Exeter Park	Dale Barnhart 8 Exeter Park Farmington, CT 06032
14.	17/235	7 Exeter Park	Gregory A. and Heather L. Taylor 7 Exeter Park Farmington, CT 06032
15.	17/236	5 Exeter Park	Katrine Doane Goldfarb 5 Exeter Park Farmington, CT 06032
16.	17/255	10 Belgravia Terrace	Peter L. and Lisa S. Fishman 10 Belgravia Terrace Farmington, CT 06032

17.	17/256	11 Belgravia Terrace	Susan R. Edelson 11 Belgravia Terrace Farmington, CT 06032 With a copy to:
			Richard P. Weinstein, Esq. Weinstein & Wisser, PC 29 South Main Street, Suite 207 West Hartford, CT 06107
18.	17/268	3 Eton Place	Patricia A. McHugh 3 Eton Place Farmington, CT 06032
19.	17/269	1 Eton Place	Linda Powers Tomasso 1 Eton Place Farmington, CT 06032
20.	17/270	10 Chatsworth Place	Richard F. and Julia D. Webb 10 Chatsworth Place Farmington, CT 06032
21.	17/271	12 Chatsworth Place	Robert and Emma Gibson 12 Chatsworth Place Farmington, CT 06032
22.	17/272	14 Chatsworth Place	Susan D. Renert 14 Chatsworth Place Farmington, CT 06032
23.	16/274	4 Chelsea Place	Brian H. and Kathleen A. Lindroth 4 Chelsea Place Farmington, CT 06032

<u>AVON</u>

	Parcel No.	Property Address	<u>Property Owner</u>
1.	3360555	555 Old Farms Road	Avon Old Farms School 500 Old Farms Road Avon, CT 06001
2.	3360500	500 Old Farms Road	Avon Old Farms School 500 Old Farms Road Avon, CT 06001

3.	3360800	800 Old Farms Road	Town of Avon 60 West Main Street Avon, CT 06001
4.	4500709	709 Waterville Road	Julia K. McIlroy 709 Waterville Road Avon, CT 06001
5.	4500691	691 Waterville Road	Judith E. and Bryan Lackey 691 Waterville Road Avon, CT 06001
6.	4500665	665 Waterville Road	Joseph M. and Patricia M. Brown 665 Waterville Road Avon, CT 06001
7.	4500657	657 Waterville Road	Richard M. Bump and Kiren Cooley 657 Waterville Road Avon, CT 06001
8.	4500651	651 Waterville Road	Ronald Paul and Rita B. Distin 651 Waterville Road Avon, CT 06001
9.	4500645	645 Waterville Road	Marek and Stanislaw Kolodziej 645 Waterville Road Avon, CT 06001
10.	4500635	635 Waterville Road	Avon Land Trust P.O. Box 267 Avon, CT 06001
11.	4500625	625 Waterville Road	William Tucker Griffith 625 Waterville Road Avon, CT 06001
12.	4500615	615 Waterville Road	Marsha and Steven P. Markie, Sr. 615 Waterville Road Avon, CT 06001
13.	4500605	605 Waterville Road	Ardell O. and Weslie O. Wilson 605 Waterville Road Avon, CT 06001
14.	4500595	595 Waterville Road	Emer E. Coyne 575 Waterville Road Avon, CT 06001

15.	4500575	575 Waterville Road	Emer E. Coyne 575 Waterville Road Avon, CT 06001
16.	4500549	549 Waterville Road	Avon Land Trust P.O. Box 267 Avon, CT 06001
17.	4500525	525 Waterville Road	Debbie J. Marks, Trustee Debbie J. Marks Living Trust 4045 Happy Valley Road Lafayette, CA 94549
18.	4500505	505 Waterville Road	State of Connecticut 2800 Berlin Turnpike Newington, CT 06111

CERTIFICATION OF SERVICE

I hereby certify that a copy of the foregoing letter was sent by certified mail, return receipt requested, to each of the parties on the attached list of abutting landowners.

Date

Joey Lee Miranda, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103

Attorneys for CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS

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ULS License

Cellular License - KNKA404 - Cellco Partnership

Call Sign

KNKA404

Radio Service

CL - Cellular

Status

Active

Auth Type

Regular

Market

Market

CMA032 - Hartford-New Britain-

Channel Block

Α

Submarket

Ω

Phase

2

Dates

Grant

02/05/2008

Bristol, CT

Expiration

01/22/2018

Effective

02/08/2008

Cancellation

Five Year Buildout Date

10/16/1992

Control Points

1

500 W. Dove Rd., TARRANT, Southlake, TX

P: (800)264-6620

Licensee

FRN

0003290673

Type

General Partnership

Licensee

Cellco Partnership

1120 Sanctuary Pkwy, #150 GASA5REG

Alpharetta, GA 30004

ATTN Regulatory

P:(770)797-1070 F:(770)797-1036

E:Network.Regulatory@VerizonWireless.com

Contact

Verizon Wireless

Sonya R Dutton

1120 Sanctuary Pkwy #150 GASA5REG

Alpharetta, GA 30004 ATTN Network Regulatory P:(770)797-1070 F:(770)797-1036

E:Network.Regulatory@VerizonWireless.com

Ownership and Qualifications

Radio Service Type

Mobile

Regulatory Status

Common Carrier

Interconnected

Yes

Alien Ownership

Is the applicant a foreign government or the representative of any

foreign government?

No

Is the applicant an alien or the representative of an alien?

No

Is the applicant a corporation organized under the laws of any foreign government?

No

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?

IVC

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or

Ye

representative thereof, or by any corporation organized under the laws of a foreign country?

If the answer to the above question is 'Yes', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Demographics

Race

Ethnicity

Gender

ULS License

Cellular License - KNKA404 - Cellco Partnership - Frequencies

Call Sign

KNKA404

Radio Service CL - Cellular

Return to Main

A Block

824.04 - 834.99 paired with 869.04 - 879.99 845.01 - 846.48 paired with 890.01 - 891.48

ULS License

PCS Broadband License - KNLH251 - Cellco Partnership

Call Sign

KNLH251

Radio Service

CW - PCS Broadband

Status

Active

Auth Type

Regular

Market

Market Submarket BTA184 - Hartford, CT

Channel Block F

Associated Frequencies

(MHz)

001890.00000000-001895.00000000 001970.000000000-

001975.00000000

Dates

Grant

07/23/2007

Expiration

06/27/2017

Effective

07/23/2007

Cancellation

Buildout Deadlines

1st

06/27/2002

2nd

Notification Dates

1st

05/17/2002

2nd

Licensee

FRN

0003290673

Type

Joint Venture

Licensee

Cellco Partnership

1120 Sanctuary Pkwy, #150 GASA5REG

Alpharetta, GA 30004

ATTN Regulatory

P:(770)797-1070

F:(770)797-1036

E:Network.Regulatory@VerizonWireless.com

Contact

Verizon Wireless Sonya R Dutton

1120 Sanctuary Pkwy, #150 GASA5REG

Alpharetta, GA 30004 **ATTN Regulatory**

P:(770)797-1070 F:(770)797-1036

E:Network.Regulatory@VerizonWireless.com

Ownership and Qualifications

Radio Service Type Mobile

Regulatory Status Common Carrier

Interconnected

Yes

Alien Ownership

Is the applicant a foreign government or the representative of

any foreign government?

No

Is the applicant an alien or the representative of an alien?

No No

Is the applicant a corporation organized under the laws of any

foreign government?

Is the applicant a corporation of which more than one-fifth of

No

the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?

If the answer to the above question is 'Yes', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

Demographics

Race

Ethnicity

Gender

REFERENCE COPY

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC-license.



Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
1120 SANCTUARY PKWY #150 - GASA5REG
ALPHARETTA, GA 30004

Call Sign WQJQ689	File Number 0003382444
Radio	Service
WU - 700 MHz Up	per Band (Block C)

FCC Registration Number (FRN): 0003290673

Grant Date 11-26-2008	Effective Date 11-26-2008	Expiration Date 02-17-2019	Print Date 12-03-2008
Market Number REA001	Channe	l Block	Sub-Market Designator 0
	Market I		
st Build-out Date 02-17-2013	2nd Build-out Date 02-17-2019	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

If the facilities authorized herein are used to provide broadcast operations, whether exclusively or in combination with other services, the licensee must seek renewal of the license either within eight years from the commencement of the broadcast service or within the term of the license had the broadcast service not been provided, whichever period is shorter in length. See 47 CFR §27.13(b).

This authorization is conditioned upon compliance with section 27.16 of the Commission's rules

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

To view the geographic areas associated with the license, go to the Universal Licensing System (ULS) homepage at http://wireless.fcc.gov/uls and select "License Search". Follow the instructions on how to search for license information.

REFERENCE COPY

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY CELLCO PARTNERSHIP 1120 SANCTUARY PKWY #150 - GASA5REG ALPHARETTA, GA 30004

File Number 0003382435			
Radio Service WY - 700 MHz Lower Band (Blocks A, B, E)			

FCC Registration Number (FRN): 0003290673

Grant Date 11-26-2008	Effective Date 11-26-2008	Expiration Date 02-17-2019	Print Date 12-03-2008
Market Number BEA010	Channe A	el Block	Sub-Market Designator 0
	Market I New York No. Ne		
1st Build-out Date 02-17-2013	2nd Build-out Date 02-17-2019	3rd Build-out Date	4th Build-out Dat

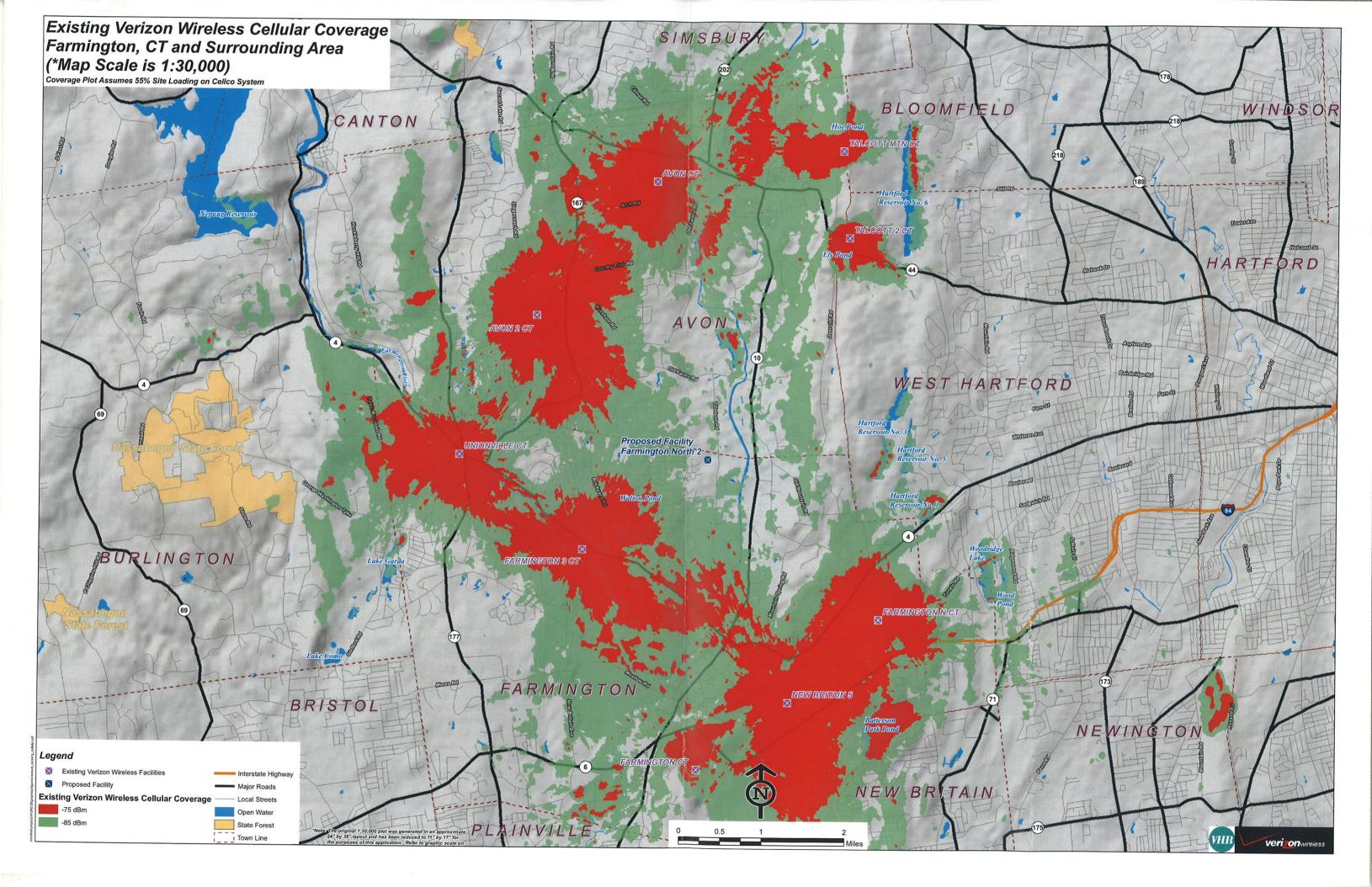
Waivers/Conditions:

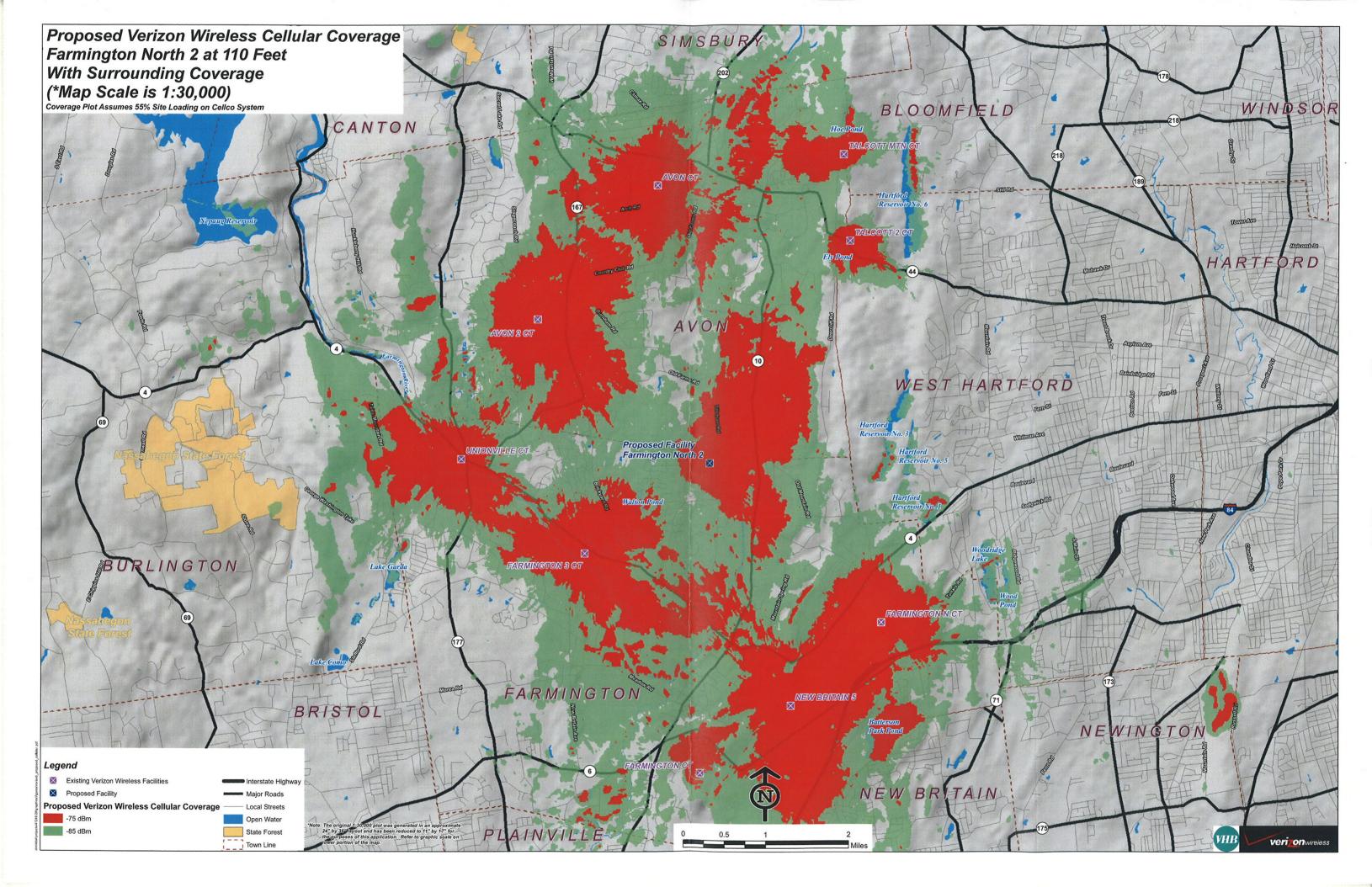
If the facilities authorized herein are used to provide broadcast operations, whether exclusively or in combination with other services, the licensee must seek renewal of the license either within eight years from the commencement of the broadcast service or within the term of the license had the broadcast service not been provided, whichever period is shorter in length. See 47 CFR §27.13(b).

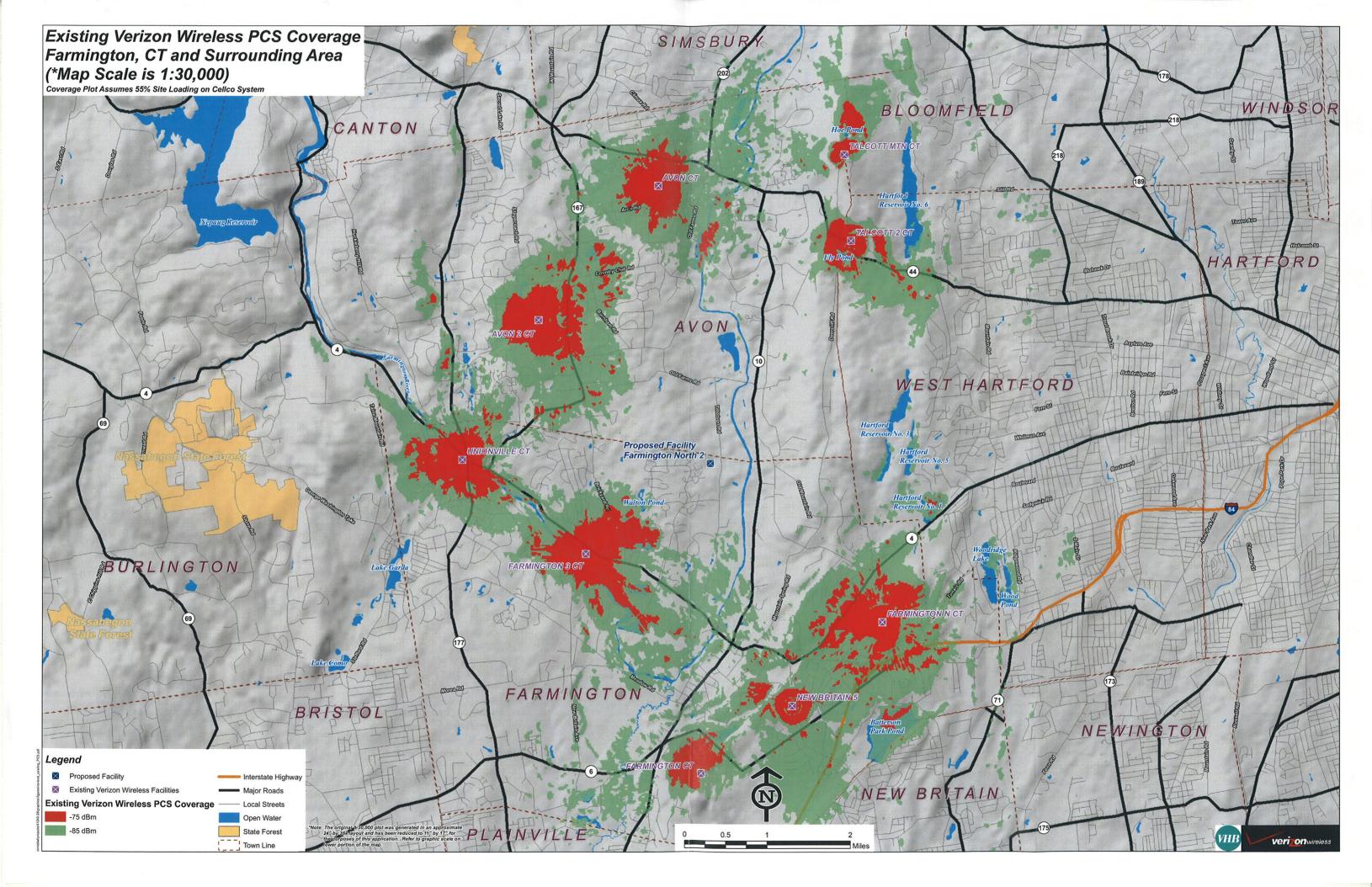
Conditions:

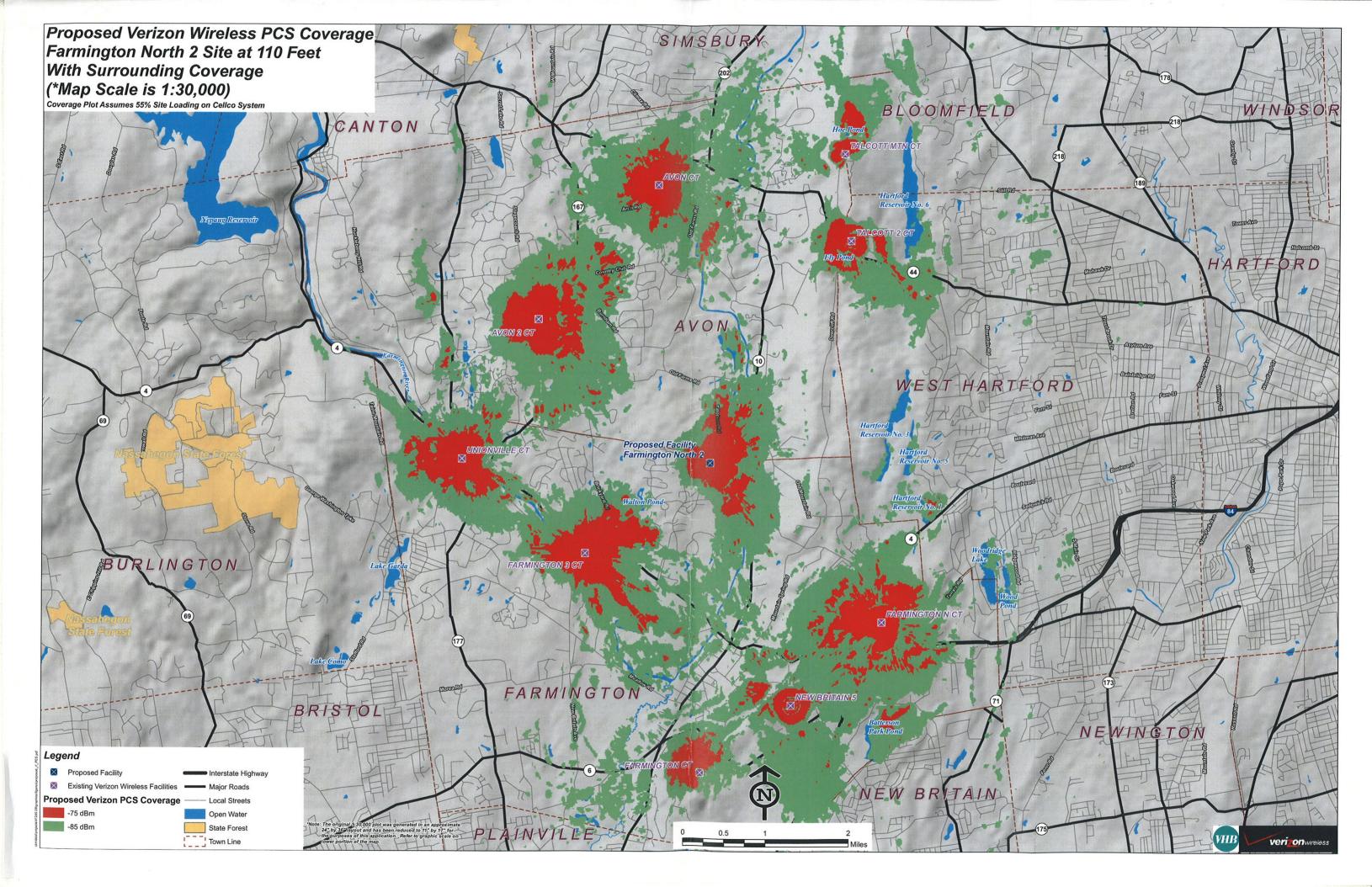
Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

To view the geographic areas associated with the license, go to the Universal Licensing System (ULS) homepage at http://wireless.fcc.gov/uls and select "License Search". Follow the instructions on how to search for license information.









LPA-80063/4CF

When ordering replace "___" with connector type.

Mechanical specifications

Length	1205	mm	47.4	in
Width	386	mm	15.2	in
Depth Depth with z-bracket	335 375		13.2 14.8	
4) Weight	9.1	kg	20.0	lbs
Wind Area Fore/Aft	0.47	m ²	5.0	ft²
Side	0.40	m ²	4.4	ft ²

Rated Wind Velocity (Safety factor 2.0) >265 km/hr >165 mph

Wind Load @ 100 mph (161 km/hr) Fore/Aft 665 N 149.5 lbs Side 577 N 129.6 lbs

Antenna consisting of aluminum alloy with brass feedlines covered by a UV safe fiberglass radome.

Mounting and Downtilting

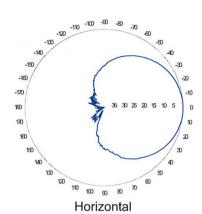
Mounting brackets attach to a pipe diameter of Ø50-102 mm (2.0-4.0 in). If the lock-down brace is used, the maximum diameter is Ø88.9 mm (3.5 in)

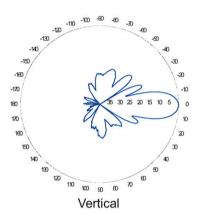
Mounting Bracket and Downtilt Bracket Kit #21699999

Electrical specifications

	Frequency Range	806-960 MHz
	Impedance	50Ω
3)		NE or E-DIN 1 port / center
1)	VSWR	≤ 1.4:1
	Polarization	Vertical
1)	Gain	13 dBd
2)	Power Rating	500 W
1)	Half Power Angle	
	H-Plane	63°
	E-Plane	15°
1)	Electrical Downtilt	0°
1)	Null Fill	10%
	Lightning Protection	Direct Ground

Radiation pattern¹⁾

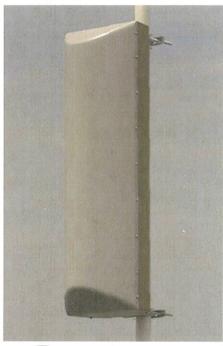




Featuring upper side lobe suppression.

Radiation patterns for all antennas are measured with the antenna mounted on a fiberglass pole.

Mounting on a metal pole will typically improve the Front-to-Back ratio.





Amphenol Antel's **Exclusive 3T (True Transmission Line** Technology) Antenna Design:

- True log-periodic design allows for superior front-to-side characteristics to minimize sector overlap.
- Unique feedline design eliminates the need for conventional solder joints in the signal
- A non-collinear system with access to every radiating element for broad bandwidth and superior performance.
- Air as insulation for virtually no internal signal loss.

This Amphenol Antel antenna is under a fiveyear limited warranty for repair or replacement.

Antenna available with center-fed connector only.

- 1) Typical values.
- 2) Power rating limited by connector only.
- 3) NE indicates an elongated N connector. E-DIN indicates an elongated DIN connector.
- The antenna weight listed above does not include the bracket weight.

Improvements to mechanical and/or electrical performance of the antenna may be made without notice.

CF Denotes a Center-Fed Connector.

806-960 MHz



LPA-185063/8CF 2°

When ordering replace "___" with connector type.

Mechanical specifications

Length	1200	mm	47.2	in
Width	167	mm	6.6	in
Depth Depth with t-bracket	1000	mm mm	5.8 6.9	
4) Weight	4.1	kg	9.0	lbs
Wind Area Fore/Aft	0.20	m ²	2.2	ft²
Side	0.18	m²	1.9	ft ²
Datad Wind Valacity	/Cofe	tu foot	0 2 0	

Rated Wind Velocity (Safety factor 2.0) >548 km/hr >341 mph

Wind Load @ 100 mph (161 km/hr)
Fore/Aft 299 N 67.2 lbs
Side 267 N 60.0 lbs

Antenna consisting of aluminum alloy with brass feedlines covered by a UV safe fiberglass radome.

Mounting and Downtilting

Mounting brackets attach to a pipe diameter of Ø50-102 mm (2.0-4.0 in).

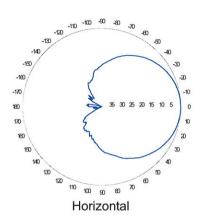
Mounting bracket kit #26799997 Downtilt bracket kit #26799999

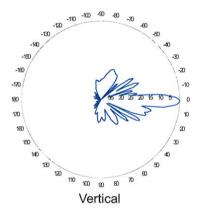
The downtil bracket kit includes the mounting bracket kit.

Electrical specifications

5.00	4050 4000 MIL
Frequency Range	1850-1990 MHz
Impedance	50Ω
3) Connector(s)	NE or E-DIN 1 port / center
1) VSWR	≤ 1.4:1
Polarization	Vertical
1) Gain	18 dBi
2) Power Rating	250 W
1) Half Power Angle	
H-Plane	63°
E-Plane	8°
1) Electrical Downtilt	2°
1) Null Fill	10-20%
Lightning Protection	Direct Ground

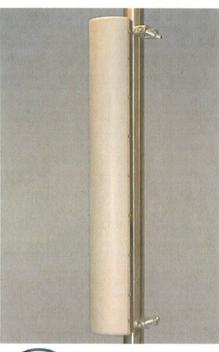
Radiation pattern1)





Radiation patterns for all antennas are measured with the antenna mounted on a fiberglass pole.

Mounting on a metal pole will typically improve the Front-to-Back ratio.





Amphenol Antel's Exclusive 3T (True Transmission Line Technology) Antenna Design:

- True log-periodic design allows for superior front-to-side characteristics to minimize sector overlap.
- Unique feedline design eliminates the need for conventional solder joints in the signal path.
- A non-collinear system with access to every radiating element for broad bandwidth and superior performance.
- Air as insulation for virtually no internal signal loss.

This Amphenol Antel antenna is under a fiveyear limited warranty for repair or replacement.

Antenna available with center-fed connector only.

Typical values.

2) Power rating limited by connector only.

NE indicates an elongated N connector.
 E-DIN indicates an elongated DIN connector.

 The antenna weight listed above does not include the bracket weight.

Improvements to mechanical and/or electrical performance of the antenna may be made without notice.

CF Denotes a Center-Fed Connector.

1850-1990 MHz



Mechanical specifications

ACCRECATE VALUE OF STREET OF STREET OF STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET,		4000		
Length	1205	mm	47.4	in
Width	285	mm	11.2	in
Depth	126	mm	5.0	in
Depth with z-bracket	166	mm	6.5	in
Weight 4)	4.5	kg	9.9	lbs
Wind Area Fore/Aft	0.36	m ²	3.9	ft ²
Wind Area Side	0.15	m ²	1.7	ft ²
Max Wind Survivability	>201	km/hr	>125	mph
Wind Load @ 100 n	nph (1	61 km/	hr)	
Fore/Aft	522		117	lbf
Side	244	N	55	lbf

Antenna consisting of aluminum alloy with brass feedlines covered by a UV safe fiberglass radome. RoHS compliant.

Mounting & Downtilting

Mounting hardware attaches to pipe diameter Ø50-160 mm; Ø2.0-6.3 in.

Mounting Bracket Kit	36210002
Downtilt Bracket Kit	36114003

Electrical specifications

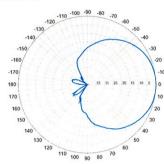
Frequency Range	696-900 MHz
Impedance	50Ω
Connector 3)	NE or E-DIN Female 2 ports / Center
VSWR 1)	≤ 1.4:1
Polarization	Slant ±45°
Isolation Between Ports 1)	< -30 dB
Gain 1)	13.0 dBd 15.0 dBi
Power Rating 2)	500 W
Half Power Angle 1)	
Horizontal Beamwidth Vertical Beamwidth	63° 15°
Electrical downtilt 5)	0°
Null fill 1)	5%
Lightning protection	Direct ground

- 1) Typical values.
- 2) Power rating limited by connector only.
- 3) NE indicates an elongated N connector. E-DIN indicates an elongated DIN connector.
- 4) Antenna weight does not include brackets.5) Add'l downtilts may be available. Check website for details.

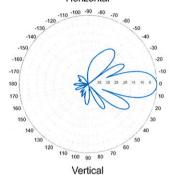
Patented Dipole Design: U.S. Patent No. 6,608,600 B2

Improvements to mechanical and/or electrical performance of the antenna may be made without notice.

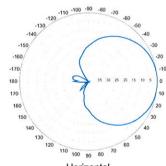
Radiation-pattern¹⁹ 750 MHz

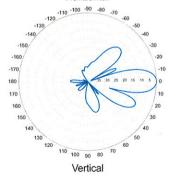


Horizontal



850 MHz

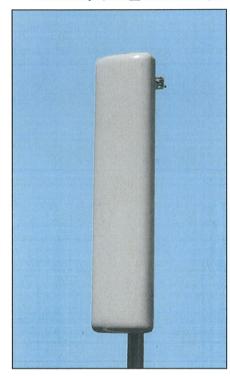




696-900 MHz

BXA-70063/4CF

When ordering replace "__" with connector type.





Featuring our Exclusive 3T Technology™ Antenna Design:

- · Watercut brass feedline assembly for consistent performance.
- · Unique feedline design eliminates the need for conventional solder joints in the signal path.
- · A non-collinear system with access to every radiating element for broad bandwidth and superior performance.
- · Air as insulation for virtually no internal signal loss.

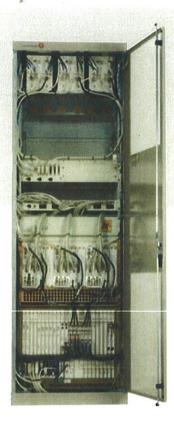
Warranty:

This antenna is under a five-year limited warranty for repair or replacement.

Revision Date: 10/27/08



Lucent CDMA Modular Cell 4.0B Indoor



Lucent CDMA Modular Cell 4.0B is a high capacity base station equipped with the state-of-the-art technologies developed by Bell Labs. The product brings you outstanding carrier density and immediate OPEX savings. This indoor product can support up to 8 carriers/3 sectors per frame. It is twice the density of Modular Cell 4.0 (indoor). Modular Cell 4.0B offers full spectrum coverage in a single frame, dramatically simplifying growth patterns. As the leader in spread spectrum technology, Lucent Technologies continues to introduce innovations to the market: Multi-Carrier Radio (15MHz), Block Filters/Wideband Filters, and 40W Power Amplifier Modules are the latest assets integrated in the base station.

Features

The Modcell 4.0B indoor version offers a small footprint with exceptional carrier density in a standard ETSI cabinet.

- Indoor Single Frame Configuration
- 1-8 carriers per frame at 3 sectors (will support up to 11 carriers with Auxiliary Amplifier Frame)
- Dual Band: one cell to the ECP & mobile
- Close Loop Gain Control
- Timing and Controller Redundancy
- Integrated Power option
- Support CDMA2000™1X, and EV-DO Rev.0, with future support to EV-DO Rev. A
- IP Backhaul and Ethernet Backhaul capable
- 6-Sector option ready
- Intelligent Antenna option ready

Benefits

- Optimized for highest carrier density, smooth growth in one frame
- Conserves indoor footprint, reducing hardware and floor space requirements
- Minimizes configuration complexity
- Software-Only Carrier Add at certain carrier counts
- · Flexible channel growth planning
- Designed to use existing power supply
- Grow CDMA carriers on only 2 antennas/sector
- Multi-Carrier Radio (15MHz), Block Filters/ Wideband Filters, and 40W Power Amplifier Modules



Technical Specifications

2. CDMA Channel Card Capacity

Description

1. Configurations a. Sectors

b. Carriers

3. T1, E1 Facilities

4. User Alarms

5. GPS Antenna

6. Air Interface Standards

7. Frequency Bands

8. Vocoder

9. Environmental Cabinet Housing

10. Cabinet Access

11. Operating Temperature Range

12. Dimensions

13. Estimated Installed Weight

14. Power Options

15. Power Consumption

b. 6 Carrier/3 Sectors c. 11 Carrier/3 Sectors

16. RF Power (at J4)

17. Minimal Antenna Configuration

18. Filter

19. Growth Frame

20. Operational Accessories

21. Channel Elements

Specification

3, 4 and 6

1-8 per frame at 3 sectors (up to 11 with

Auxiliary Amplifier Frame)

12 slots; CMU IVB capable

Maximum of 20 per cabinet when equipped

with URC-II's

7 Power Alarms, 25 User Alarms

Yes

T1A/E1A 95-A plus TSB-74; T1A/E1A 95-B for

850 MHz; CDMA 2000

850MHz/1900 MHz:

300 to 2100 MHz capable

8 Kbps; 8 Kbps EVRC; 13 Kbps; SMV-ready

Standard ETSI cabinet; UL50 compliant;

zero rear clearance

Front Access

Range: -5 to +40°C (continuous)

600 mm W x 600 mm D x 1880 mm H

(23.6 x 23.6 x 74) inches

365 kg (785 lbs.) DC [8 carriers in one cabinet]

Integrated Power, AC 120/240 Volt Input,

-48V or +24 V DC Conversion Non-integrated Power requires either + 24 VDC Input or - 48 VDC Input

a. 3 Carrier/3 Sectors 2167 W 5449 W

10026 W

25 W per carrier (850) FCC Rated

short-term average

20 W per carrier (850) FCC Rated

long-term average

20 W per carrier (1900) FCC Rated

short-term average

16 W per carrier (1900) FCC Rated

long-term average

2 antennas/sector

Block and Wide Band Dual Duplex

PCS AUX Frame, Dual Band

Growth Frame

Integrated Power

Channel pooling across sectors or carriers

To learn more about our comprehensive portfolio, please contact your Lucent Technologies Sales Representative or visit our web site at http://www.lucent.com.

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MOB-Mod4B-i 0106

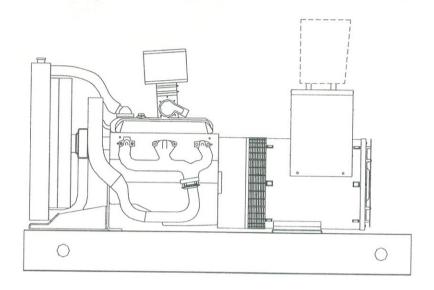




60 kW @ 60 Hz. Stand-By Power

60F*G4

45 kW @ 60 Hz. Prime Power



- ► Katolight's commitment to quality has been an industry standard since 1952
- ► Katolight specializes in custom designing any application to meet the most difficult specifications
- ► Each and every unit is factory tested. This can eliminate costly startup and installation delays
- ► Katolight supplies a broad range of accessories to match any requirement worldwide
- Katolight generator sets come standard with a 2 year, 1500 hour limited warranty
- ► Optional warranty periods are also available, contact factory for details
- ► This model accepts 100% of nameplate rating, per NFPA 110

Model #	Volts	Hz	Phase	Power Factor	Natural Gas Standby Ratings		Natural Gas Prime Ratings		LP Gas Standby Ratings		LP Gas Prime Ratings		
					Amps	kW/kVA	Amps	kW/kVA	Amps	kW/kVA	Amps	kW/kVA	Connection
60FRG4	277/480	60	3	0.8	90	60/75	68	45/56.25	90	60/75	68	45/56.25	12 LEAD HI WYE
60FPG4	120/208	60	3	0.8	208	60/75	156	45/56.25	208	60/75	156	45/56.25	12 LEAD LOW WYE
60FJG4	120/240	60	3	0.8	180	60/75	135	45/56.25	180	60/75	135	45/56.25	12 LEAD HI DELTA
60FNG4	347/600	60	3	0.8	72	60/75	54	45/56.25	72	60/75	54	45/56.25	4 LEAD WYE
60FGG4	120/240	60	1	1.0	250	60/60	188	45/45	250	60/60	188	45/45	12 LEAD ZIG-ZAG
60FDG4	120/240	60	1	1.0	250	60/60	188	45/45	250	60/60	188	45/45	4 LEAD





STANDARD EQUIPMENT

CONTROL PANEL

- Model #45 control panel
- AC voltmeter, 3 1/2", 2% accuracy
- AC ammeter, 3 1/2", 2% accuracy
- Combination VM/AM selector switch, 4 position
- Frequency meter, 3 ½", 55-65 Hz.
- Vibration shock mounts (4)
- Engine control KASSEC-12 VDC, with cyclic cranking timer
- 4 engine shutdowns with separate failure lights
 - High water temperature
 - Low oil pressure
 - Engine overspeed
 - Engine overcrank
- Engine gauges 2"
 - Battery voltmeter
 - Water temperature
 - Oil pressure
 - Running time meter 5 digits
- 3 position mode switch (auto-off-manual)

ENGINE

- Air cleaner
- Oil pump
- Full flow oil filter
- Jacket water pump
- Thermostat
- Exhaust manifold dry
- Blower fan & fan drive
- Radiator unit mounted
- Vibration isolators pad type
- Electric starting motor 12V

ENGINE (cont.)

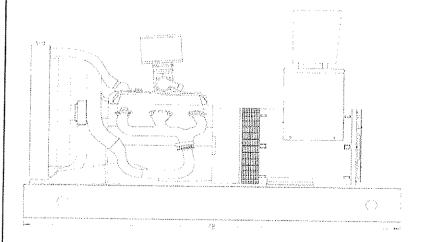
- Governor Electric Isochronous
- Base formed steel
- Flywheel & Enclosure
- Charging alternator 12V
- Battery box & cables
- Flexible fuel & exhaust connectors

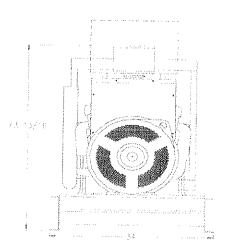
GENERATOR

- A.C. Generator
- Brushless design
- Single bearing
- Direct connection with flex plate
- Class H insulation
- All models manufactured to meet NEMA MG1- 22.4 and CSA standards
- Telephone influence factor is well within NEMA standards
- Wave form deviation factor is no more than 5%, well within NEMA standards
- Harmonic content is 3.0% maximum
- Permanently lubricated ball type bearings
- Generator is self-ventilated
- Drip-proof construction

VOLTAGE REGULATOR

- Voltage adjust rheostat
- EMI filter (Internal Electromagnetic Interference)
- Underspeed protection
- Overexcitation protection
- Fully encapsulated
- Regulation 1%





Drawing above for illustration purposes only, based on standard open power 480 volt generator.

Lengths may vary with other voltages.



ENGINE TECHNICAL DATA Model:		60 H	łz
Туре:		5./	
Agrication:	*******	4-Cy	cie
Aspiration:	*****************	Natur	ally
Cylinder Arrangement: (Number, inline, V. etc.)		8-\	
Displacement - Cu. In. (lit)		350 (5	5.7)
Bore - in. (cm) x stroke - in. (cm)		4.0 (10.2) x	3.5 (8.8)
Compression Ratio:		9.1:	1
Rated RPM		180	D _r
Rating		Standby	Prime
BMEP: psi (kPa)		110 (758)	107 (737)
Maximum Power at Rated RPM - bhp (kW)		88 (66)	85 (64)
INSTALLATION DATA *			
Exhaust System			
Gas Temp. (Stack): °F (°C)		1,403 (762)	1.306 (708)
Gas volume at Stack Temp.: CFM (mº/min)		571 (16.2)	
iviaximum Allowable Back			
Pressure: in. H ₂ 0 (kPa)	*******************	40.7 (10.1)	40.7 (10.1)
Cooling System			•
Ambient Capacity of Radiator: F (%)		122 (50)	122 /50\
Maximum Allowable Static		(30)	
Pressure on Rad. Exhaust: in, H ₂ O (kPa)		1.5 (0.37)	15 (0.37)
Water Pump Capacity: gpm (lit/min)		31 (117)	21 /1171
Heat Rejection to Coolant: BTUM (kW)		2 999 (52 7)	2.702.740.43
Heat Radiated to Ambient: BTUM (kW)		2 429 /42 71	2 229 (40.0)
Air Requirements		4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	
		180 (5.1)	470 (4.0)
Air Flow Required for Rad.	******************	100 (3.1)	172 (4.9)
Cooled Unit: CFM (m³/min)		7.115 (201)	7.050 (000)
Air Flow Required for Heat	**********************	7.113 (201)	7,059 (200)
Exchanger/Remote Rad.			
		6 747 (101)	0.407.44001
Fuel Consumption: (NG-1000 BTU/ft ³ / LP-2500 BTI	1 \$7 E & 3 \	6,747 (191) NG IPG	
At 100% of Power Rating: ft ³ /hr (m ³ /hr)	U/it /	NG LPG	NG LPG
At 75% of Power Rating: ft ³ /hr (m ³ /hr)	*****************	748 (21.2) 299 (8.5).	
	**********************	639 (18.1) 256 (7.2).	615 (17.4) 246 (7.0)
Sound Level Data Sound Level Data		510 (14.4)204 (5.8).	486 (13.8) 194 (5.5)
	z 21 t		
	Full Load	No Load	Full Load No Load
23 ft (7m) opu w/ critical grade muffler (dBA)	79		78 75
23 ft (7m) Sound Attenuated Enclosure (dBA)	73	68	72 68

Dimensions & Weight	Remote Radiator System
Length: in. (cm)	Connection sizes:
Width: in. (cm)	Jacket water radiator inlet in. (cm)2 (5.1)
Height: in. (cm)43.8 (111)	Jacket water radiator outlet in. (cm)2 (5.1)
Weight (dry): lb. (kg)	Static head allowable
Liquid Capacity	above engine - ft H ₂ O (kPa)
Total oil system: gal (lit)	Total system friction pressure
Engine jacket water capacity: gal (lit) 2.0 (7.6)	max. allowable psi (kPa)
System coolant capacity: gal (lit)	Heat Exchanger System
Fuel Inlet	Connection sizes:
Fuel connection size: 37 NPT	Heat ex. inlet in. (cm)
Fuel supply pressure	Heat ex. outlet in. (cm)1.5 (3.8)
in H ₂ O (mm H ₂ O)	Water consumption:
Electrical System	@ 60 °F (16 °C) gpm (lit/min)
Electric volts DC12	
Cold cranking Amps	
under 0 °F (-17.8 °C) 600	

*Installation data based on 480 volt. 60 HZ. application and open power unit.

• For sound level readings with other enclosures, please contact factory.

Sound level data acquired per Test Method SAE J1074. Installation factors and site conditions can affect sound levels.

Deration Factor: Altitude: Derate: 3% per 1,000 ft (305 m) above 328 ft (100 m). Temperature: Derate: 1% per 10 ft (5.5 ft) above 77 ft (25 ft)



Control Panel

- ** NOTE: #45 series control panel is standard on all units, see page 2 of spec sheet for standard features.
 - o Model #45 Series Control Panel Options
 - o Emergency stop button
 - o Alarm buzzer with silencing switch
 - Auxiliary relay for dry contacts (2 max.)
 - O A separate low water level light is optional
 - O Hooded panel lights (2) and on/off switch
 - o NEMA 12 Panel Face
 - Additional LED lights (4 max.) One or two of the following conditions may be indicated:
 - unit not in auto
 - a low fuel level
 - □ low water level
 - low water temp.
 - EPS supplying load
 - pre-alarm oil
 - pre-alarm temp.
 - u charger malfunction
 - Model #50 Series Control Panel

STANDARD FEATURES: same as #45 series control panel except for these added features:

- O Hooded panel lights (2) and on/off switch
- o 4 Engine shutdowns
- 12 light engine control package meeting NFPA-110 requirement
- o Repetitive alarm buzzer and silencing switch
- O Light and alarm press to test #50 SERIES OPTIONS
- Emergency stop button
- O Additional space for one 3 1/2" meter
- O Auxiliary relay for dry contacts (2 max.)
- A separate low water level light is optional
- Additional LED lights (4 max.) One to four additional conditions may be indicated: customer to specify
- o NEMA 12 Panel Face
- Model #60 and #80 Series Custom Control Panels
 It may be necessary to use a 60 or 80 series control panel on certain units where numerous options are required.
- o Microprocessor Control Panel KDGC

GEN-SET OPTIONS

Cooling System

- o Remote Radiator
- High Ambient Radiator
- Heat Exchanger Cooling
- Radiator Duct Flange

DISTRIBUTED BY:

Fuel System

- o Fuel Strainer
- o Dual Fuel
 - o Manual Change-over
 - o Auto Change-over

Exhaust System

- o Residential Grade Muffler
- o Critical Grade Muffler
- Hospital Grade Muffler
- o Rain Cap

Engine Electrical System

- o Battery
 - o Lead-Acid
 - o NiCad
- Battery Warmer Plate
- Battery Rack
- o Battery Charger
 - o Automatic
 - o Trickle
 - o Mounted & Wired

Generator

- Main Line Circuit Breaker
 - o Shunt trip
 - o Auxiliary switch
- o PMG Excitation & DVR 2000 Regulator
- o Space Heaters 120/240 volt
- Special Testing
- o Additional Temperature Rise Generators Available (80℃, 105℃, & 130℃)

Additional Optional Equipment

- Spring vibration isolators
- o Oil Drain Extension
- Enclosures
 - Sound Attenuated
 - Weather Proof
 - o Aluminum
 - o Interior lights AC or DC
 - o Floor Plate
- Jacket Water Heater
- O Crankcase Oil Heater
- Remote Annunciator
- o 12 Light Annunciator
 - Flush Mounted
 - Surface Mounted
 - o 4 additional lights, if needed
- o Export Boxing
- o Warranties
 - o 2 Year
 - o 5 Year
- Operating instructions under plexi-glass
- Service indicator light
- Wind rated enclosure

Materials and specifications subject to change without notice. © Katolight Corporation, 100 Power Drive, Mankato, MN 56001

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