



OPTASITE TOWERS LLC

TECHNICAL REPORT

PROPOSED ANSONIA
TOWER FACILITY

ANSONIA, CONNECTICUT

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Introduction

Optasite Towers LLC (“Optasite”) hereby submits this Technical Report to the Town of Ansonia and the Town of Woodbridge pursuant to Section 16-507 of the Connecticut General Statutes. Optasite proposes to install a wireless telecommunications facility (the “Facility”) on a 16 acre parcel owned by Macabee Properties, LLC located at 1 Deerfield Lane, Ansonia. This Facility is being proposed to allow Omnipoint Communications, Inc. (“T-Mobile”) and other federally licensed wireless carriers to provide service in this area. The purpose of this Technical Report is to provide the Towns of Ansonia and Woodbridge with information concerning the need for the proposed Facility (Section 1), the site selection process (Section 2), the Facility design and any environmental effects associated with the proposed Facility (Section 3).

SECTION 1

Site Justification

This Section provides information regarding the identification of a specific need for the proposed Facility.

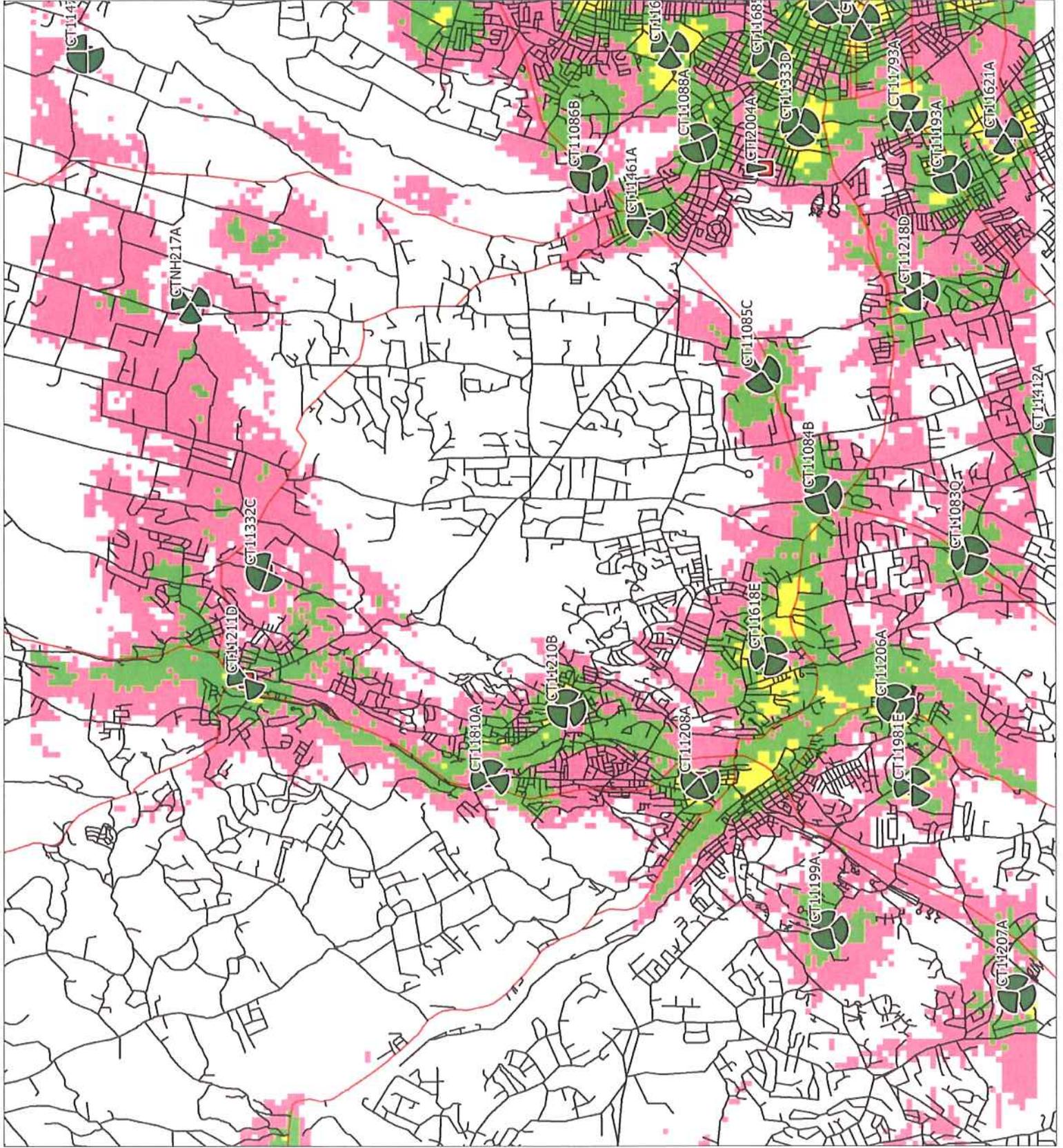
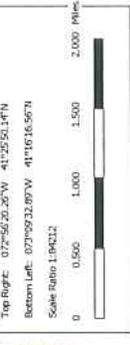
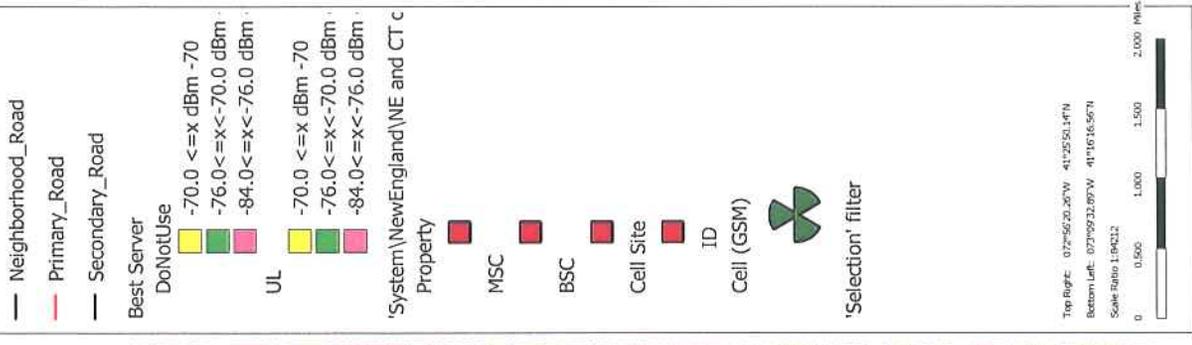
The Ansonia site is necessary to provide wireless coverage in the northeastern section of Ansonia and the western section of Woodbridge, specifically along Route 313, Peck Hill Road and the surrounding area.

Included herein are coverage propagation plots prepared by T-Mobile (1) existing coverage from surrounding sites; (2) predicted coverage from the proposed site with antennas mounted at a minimum centerline height of 177' above grade level ("AGL"); and (3) coverage from the proposed site with existing and approved sites.

Together, these propagation maps confirm the need for a site in the area and the effectiveness the proposed site in meeting the coverage needs for the area. These propagation plots clearly demonstrate a need for the proposed Facility in Ansonia.

Existing T-Mobile On Air Coverage

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SECTION 2

Site Search Process

Section 16-50j-74(j) of the Regulations of Connecticut State Agencies requires the applicant to submit a statement that describes “the narrowing process by which other possible sites were considered and eliminated.” In accordance with this requirement, the descriptions of the general site search process, the identification of the target search area and the alternative locations considered for development of the proposed Ansonia Facility are provided below.

As a tower developer, Optasite bases its decision to seek out a site in an area based on its knowledge and understanding of existing weaknesses in the systems of the several wireless carriers operating in the area and/or consultation with individual carriers. A target area is chosen central to the area in which the coverage and/or capacity needs have been identified. The area targeted is the geographical location where the installation of a site would, based on general radio frequency engineering and system design standards, be likely to address the identified problem. Optasite’s goal is to locate sites that will provide for orderly integration into the existing wireless systems of multiple carriers.

Optasite is sensitive to State and local desires to minimize the construction of new towers, and does not initiate searches in areas with known acceptable structures. In the northeastern section of Ansonia and the western section of Woodbridge, there are no existing towers or transmission line structures with sufficient height. The only existing structure is an 80 foot water tank on which the owners have rejected collocation possibilities.

In general, Optasite first studies the area to determine whether industrial or commercial areas or areas which have appropriate environmental and land use characteristics are present. Potential locations are studied by radio frequency engineers to determine whether the locations will meet the technical requirements for a site in the area. The list of potential locations is further refined based on the willingness of property owners to make their property available. Analysis of potential environmental effects and benefits may further narrow the alternatives. In each site search, the weight afforded to relevant factors may vary depending on the nature of the area and the availability of potential sites.

Optasite investigated numerous properties in the area of the Macabee Properties, LLC property at 1 Deerfield Lane. Because the area is mostly residential, Optasite focused its investigation on larger parcels of undeveloped land and non-residential uses within the area. Optasite investigated three properties in the area that are all owned by the Ansonia Rod and Gun Club; properties located at 89 Milan Street, 100 Milan Street and 101 Milan Street. The Ansonia Rod and Gun Club, however, was not interested in executing a lease due in part to concerns about the tax-exempt status of the organization the Club. Optasite discussed the possibility of locating the site at 99 Ford Street, which houses an 80 foot water tank. However, that property is a U.S. government Nike site and the U.S. government has rejected the possibility of locating a tower on the property or collocating on the existing water tank. The site at 23 Beaver Street was rejected because it is too far away from the center of the targeted area and the property in this area is listed as class 1

and 2 lands as they drain into the Quillinan Reservoir. Optasite considered properties located at 15 Osborne Lane and 154 Ford Street but ultimately rejected both properties because each contained extensive wetlands and had little vegetative screening to mask any potential visual impact. Optasite approached the owners of 140 Ford Road and 128 Ford Road and both owners were not interested in locating a facility on their property. Properties located at 14 Deerfield Land (the Audubon Society), 10 Deerfield Lane (local park and recreation fields) and 75 Ford Street (John C. Mead Elementary School) were all considered but rejected due to low ground elevation.

The property on which the proposed sites are located is superior to all others reviewed. Owned by Macabee Properties, LLC, it is approximately a 16 acre parcel that is used as a horse farm. Based on its elevation and location, a Facility within the property would provide adequate coverage along Route 313, Peck Hill Road and the surrounding area. The site is remote from surrounding properties. Topographical features and vegetation afford significant screening of the proposed site. In addition, Optasite will utilize an existing asphalt driveway and then construct a gravel access road such that there will be no visibility of the facility from area car traffic.

SECTION 3

PROPOSED SITE

**1 DEERFIELD LANE
Ansonia, Connecticut**

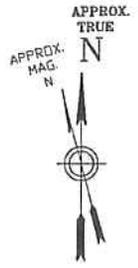
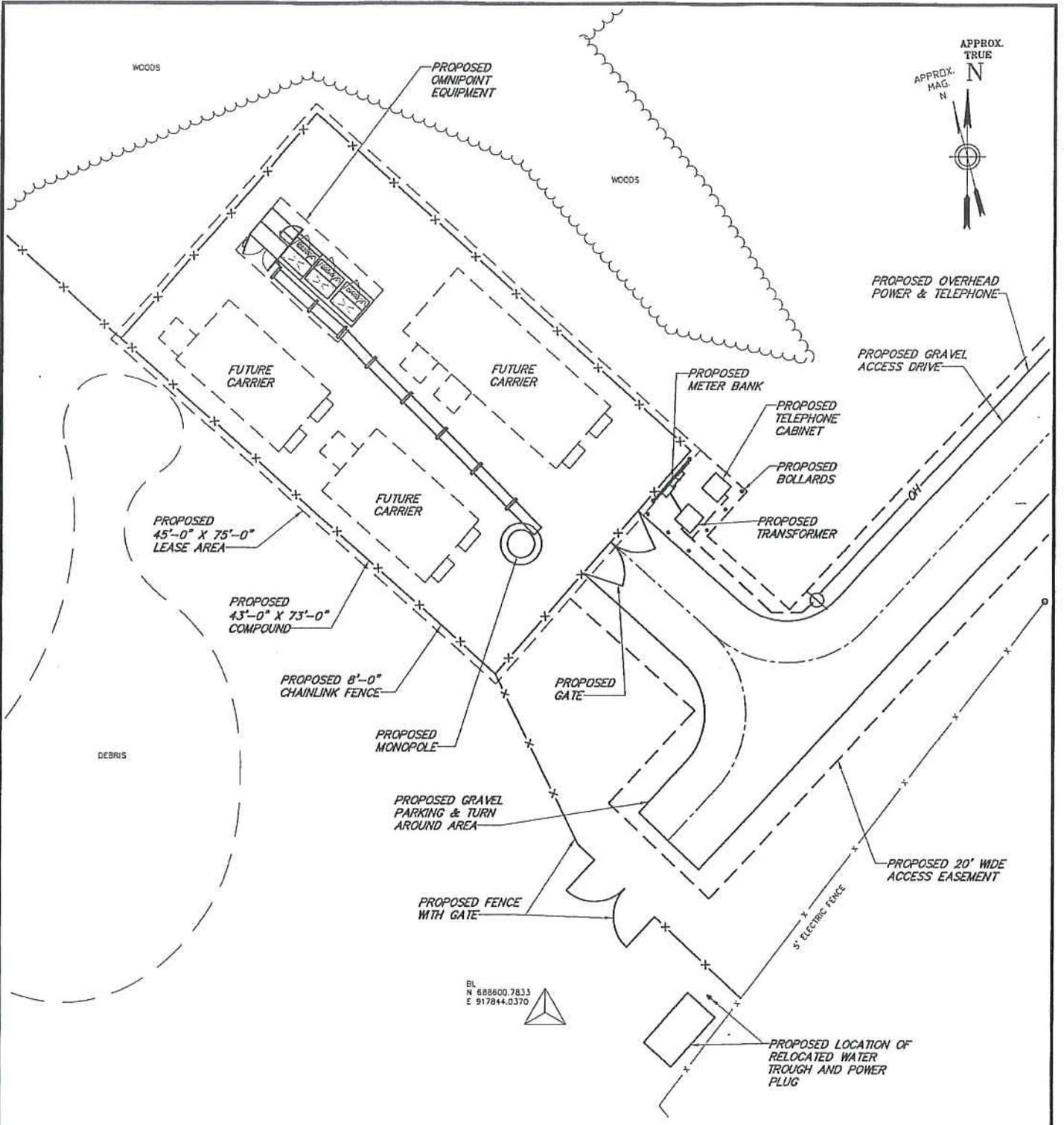
Land of
Macabee Properties, LLC

Assessor's Map 100, Lot 2

16 Acres

GENERAL FACILITY DESCRIPTION

The proposed Ansonia Facility is a 45' x 75' leased area located in the central portion of an approximately 16 acre parcel at 1 Deerfield Lane in Ansonia ("Site"). The parcel is currently used as a horse farm. The Site would consist of a 180-foot self-supporting monopole tower designed to accommodate four sets of antennas and a 45' x 75' site compound designed to accommodate the related equipment either in single-story equipment buildings or on concrete pads. Initially, antennas and related equipment for T-Mobile's use would be installed. The tower and equipment buildings would be enclosed by an 8-foot high security fence and gate, which could be screened. Vehicle access to the Site would extend from Deerfield Lane along an existing asphalt driveway continuing over a new gravel driveway. Overhead utility connections would extend from existing utility service along Osborne Lane and Deerfield Lane.



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1 COMPOUND PLAN
SCALE: 1" = 20'
0 10 20
SCALE IN FEET

BASEMAP NOTES:
1. BASEMAP INFORMATION OBTAINED FROM A SURVEY PERFORMED BY CLOUGH HARBOUR & ASSOCIATES LLP IN JANUARY 2007.

<p>Drawing Copyright © 2007 Clough Harbour & Associates LLP</p>  <p>CLOUGH HARBOUR & ASSOCIATES LLP 2130 Silas Deane Highway, Suite 212 - Rocky Hill, CT 06067-2320 Main: (860) 257-4517 - www.cloughharbour.com</p> <p>CHA PROJ. NO. - 15383-1018</p>	 <p>OPTASITE, INC. 1 RESEARCH DRIVE, SUITE 200C WESTBOROUGH, MA 01581</p>	<p>SITE ID: CT-999-0099</p> <p>SITE NAME: WOODBIDGE</p> <p>SITE ADDRESS: 1 DEERFIELD LANE ANSONIA, CT 06401 NEW HAVEN COUNTY</p>	<p>SHEET TITLE: COMPOUND PLAN</p> <p>DATE: 03/13/07</p> <p>REVISION: 1</p>
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SITE EVALUATION REPORT

I. LOCATION

- A. COORDINATES: 41° -21' -02.7" N, 73 °02' -53.7" W
- B. GROUND ELEVATION: 481' AMSL
- C. USGS MAP: Ansonia, CT
- D. SITE ADDRESS: 1 Deerfield Lane, Ansonia , CT
- E. ZONING WITHIN ¼ MILE OF SITE: Land within ¼ mile of the proposed site is zoned AA.

II. DESCRIPTION

- A. SITE SIZE: 45' x 75'
LESSOR'S PARCEL: 16 acres
- B. TOWER TYPE/HEIGHT: Monopole/180' AGL
- C. SITE TOPOGRAPHY AND SURFACE: The site topography is somewhat hilly. The proposed site is located in the north-central portion of the parcel.
- D. SURROUNDING TERRAIN, VEGETATION, WETLANDS, OR WATER: The lessor's parcel is largely undeveloped except for horse stables, paddocks, and residential rental property. The nearest wetlands are 226 feet from the proposed access road and 435 feet from the nearest corner of the compound.
- E. LAND USE WITHIN ¼ MILE OF SITE: Some of the ¼ mile radius surrounding the site is residential. Most of the area around the Site is owned by a recreational club.

III. FACILITIES

- A. POWER COMPANY: United Illuminating.
- B. POWER PROXIMITY TO SITE: Power is available from a distribution line that runs along Deerfield Lane to the Macabee Property.
- C. TELEPHONE COMPANY: AT&T.
- D. PHONE SERVICE PROXIMITY: same as power.

- E. VEHICLE ACCESS TO SITE: Vehicular access to the Site would utilize existing access from Deerfield Lane, then extend along an existing asphalt driveway 514 feet, then extend along an a new gravel driveway 375 feet.
- F. OBSTRUCTION: None.
- G. CLEARING AND FILL REQUIRED: No clearing and minimal grading would be required for development of the access drive. No trees larger than 6" diameter would be removed. The site only requires a 375 foot addition to an existing driveway. Development of the site compound will require minimal clearing and minimal grading. Detailed plans would be provided to the Connecticut Siting Council in a Development and Management Plan after Council approval of the proposed Facility.

IV. LEGAL

- A. PURCHASE [] LEASE [X]
- B. OWNER: Macabee Properties, LLC
- C. ADDRESS: 1 Deerfield Lane, Ansonia CT 06401
- D. DEED ON FILE AT: Town of Ansonia
Vol. 435, page 195

FACILITIES AND EQUIPMENT SPECIFICATION
(NEW TOWER & EQUIPMENT)

I. TOWER SPECIFICATIONS:

A. MANUFACTURER: TBD

B. TYPE: Monopole

C. HEIGHT: 180' DIMENSIONS: Approx. 5' diameter at base
Approx. 1 ½' diameter at top

II. TOWER LOADING:

A. T-MOBILE – up to 12 panel antennas

1. MODEL: Panel antennas, model TBD

2. DIMENSIONS: Approximately 5' in length

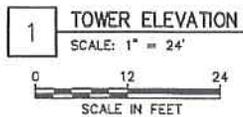
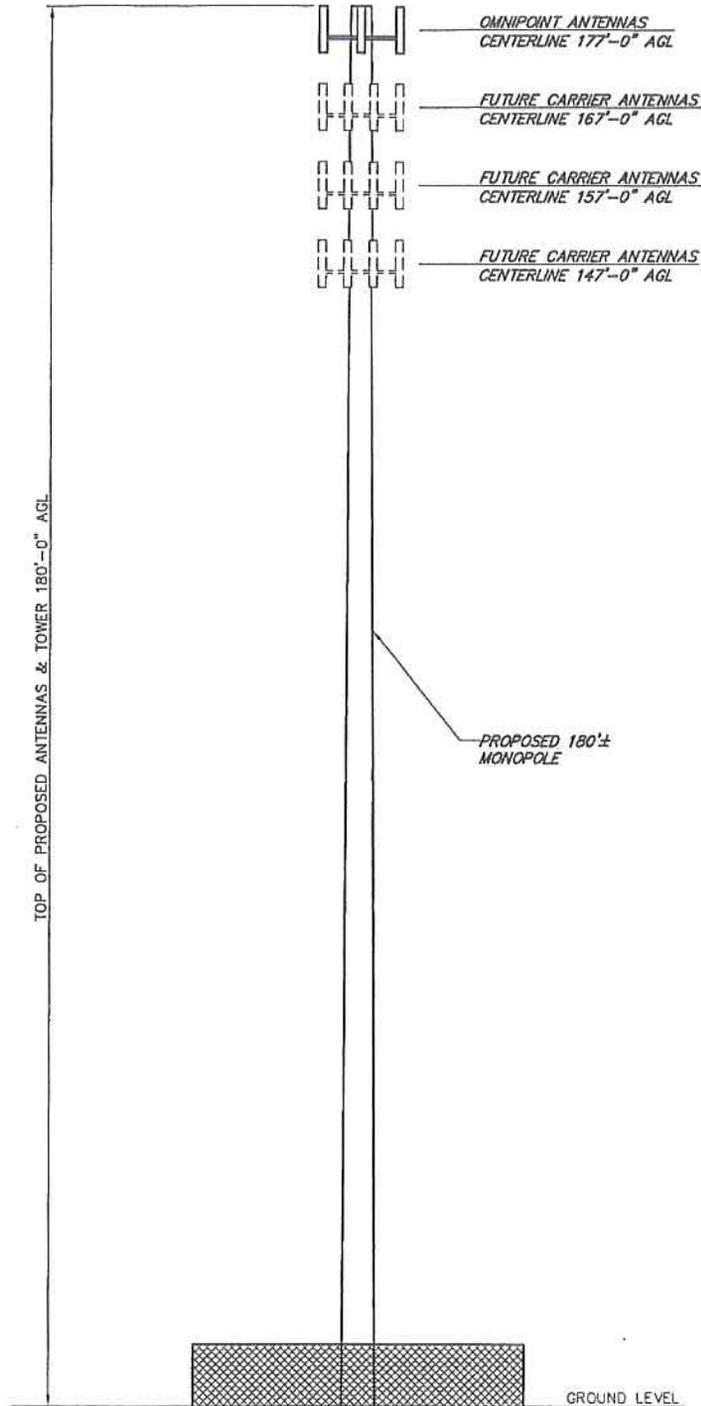
3. POSITION ON TOWER: Antenna centerline of 177' AGL on full platforms

4. TRANSMISSION LINES: up to 18 internal to the monopole

B. Future carriers - TBD

III. ENGINEERING ANALYSIS AND CERTIFICATION:

In accordance with the 2005 Connecticut State Building Code and the Electronic Industries Association Standard EIA/TIA-222-G “Structural Standards for Steel Antenna Towers and Antenna Support Structures” for Ansonia (New Haven County), the tower would be designed to withstand pressures equivalent to an 105 MPH wind with 0 inches of ice and 50 MPH wind with 3/4 inch solid ice accumulation. The foundation design would be based on soil conditions at the site.



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Optasite
 OPTASITE, INC.
 1 RESEARCH DRIVE, SUITE 200C
 WESTBOROUGH, MA 01581

SITE ID:
 CT-999-0099
 SITE NAME:
 WOODBRIDGE
 SITE ADDRESS:
 1 DEERFIELD LANE
 ANSONIA, CT 06401
 NEW HAVEN COUNTY

SHEET TITLE:
 TOWER ELEVATION

DATE:
 03/13/07

REVISION:
 1

ENVIRONMENTAL ASSESSMENT STATEMENT

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 Facility. The equipment used will discharge no pollutants to wetland and watercourse areas or to area groundwater. Best management practices will be used during construction to control storm water and erosion.

B. AIR QUALITY

Under ordinary operating conditions, the equipment that would be used at this Facility would emit no air pollutants of any kind. For limited periods during power outages, a portable generator might be utilized.

C. LAND

Minimal clearing and minimal grading would be required for development of the access drive. Development of the site compound will require minimal clearing and grading. The remaining land of the lessor would remain unchanged by the construction and operation of the Facility.

D. NOISE

The equipment to be in operation at the proposed site after construction would emit no noise other than the installed heating, air conditioning and ventilation systems. A generator would be employed during power outages. 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 operation of T-Mobile's antennas at the Facility would be approximately 1.394% of the applicable FCC/ANSI standards.

F. VISIBILITY

The potential visibility of the proposed Facility was assessed using a viewshed map (attached) with an approximate two-mile radius. As shown, the tower will only be visible from approximately 10 acres due in large part to the existing vegetation at the Site and neighboring properties. The primary areas of visibility would be in the immediate vicinity of the Site.

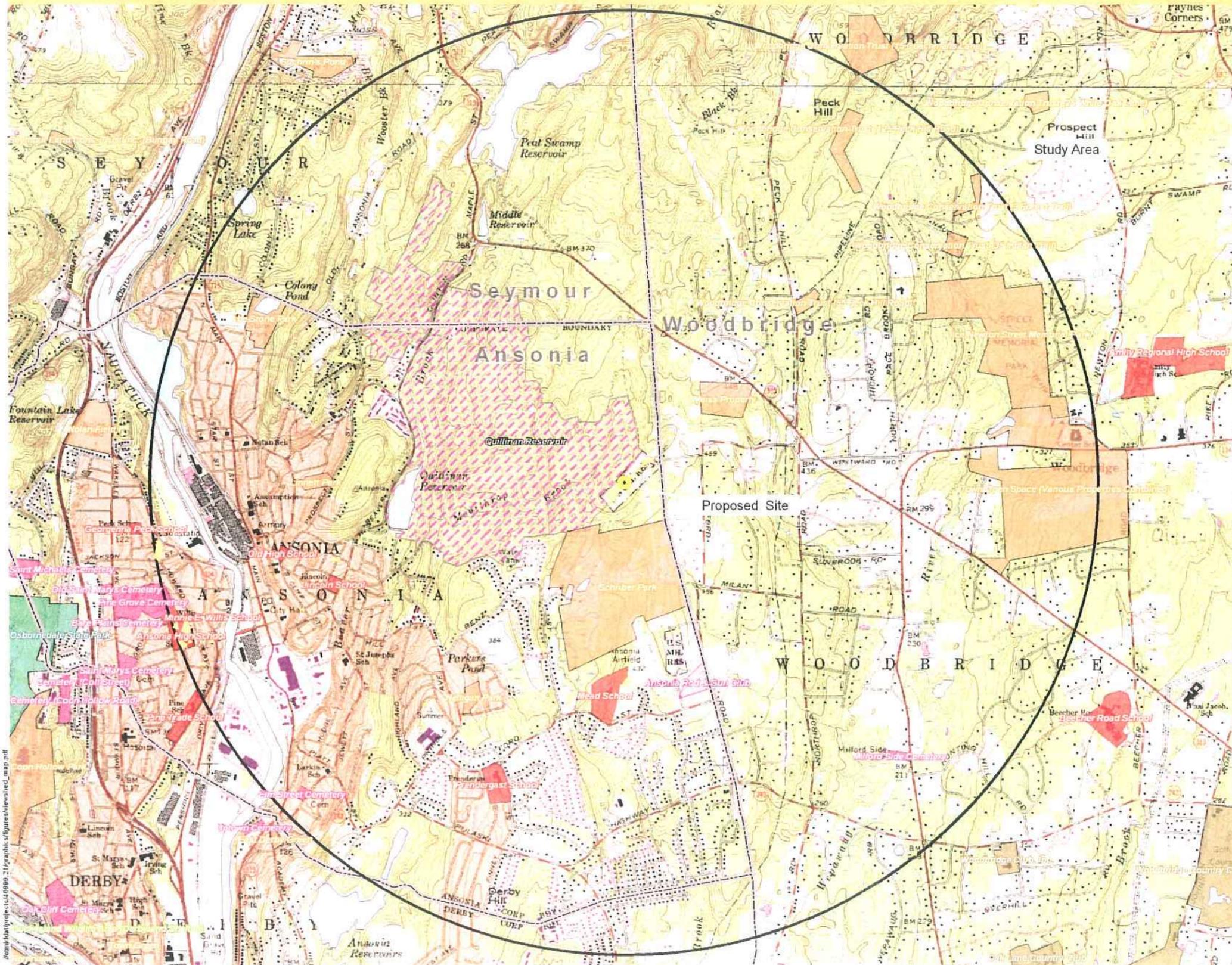
II. SCENIC, NATURAL, HISTORIC & RECREATIONAL VALUES

The parcel on which the site is located appears to exhibit no scenic, natural or recreational characteristics that would be affected by the proposed site. Review under the National Environmental Policy Act, including the Connecticut Department of Environmental Protection Natural Diversity Data Base and the State Historic Preservation Officer, is pending.

Preliminary Viewshed Map

Topography and Forest Cover as Constraints

Town of
Ansonia
Connecticut



Proposed Optasite Facility CT-999-0099 - Woodbridge 1 Deerfield Lane Ansonia, Connecticut

NOTE:

- Viewshed analysis conducted using ESRI's Spatial Analyst.
- Proposed Facility height is 180 feet.
- Existing tree canopy height estimated at 65 feet.

DATA SOURCES:

- 7.5 minute digital elevation model (DEM) with 30 meter resolution produced by the USGS, 1982
- Forest areas derived from 2005 color digital orthophotos with 2-meter pixel resolution; digitized by VHB, 2007
- Base map comprised of Ansonia and Naugatuck USGS Quadrangle Maps
- Protected properties data layer provided CTDEP, 2003
- Scenic Roads layer derived from available State and Local listings.

Map Compiled March, 2007

