



# County of Fairfax, Virginia

## MEMORANDUM

DATE: January 7, 2010

**TO:** David Marshall, Chief  
Facilities Planning Branch, Planning Division, DPZ

**FROM:** Kevin Guinaw, Chief *K. Guinaw*  
Special Projects/Applications Management Branch, Zoning Evaluation Division, DPZ

**SUBJECT:** Proposed Clearwire Telecommunications Facility at 11500 Fairway Drive;  
Tax Map 17-2 ((34)) 106; 2232 Application FS-H09-159

This is in response to a request for a determination as to whether the telecommunications facility proposed by Clearwire at 11500 Fairway Drive would be in substantial conformance with Rezoning RZ A-502 and associated Development Plan DP-107. As described in the 2232 application dated October 23, 2009, from Raymond Bright, agent for the applicant, three (3) panel antennas (each 42 inches high x 12 inches wide x 5 inches deep) and one (1) microwave dish antenna (7.6 inches in diameter) are proposed to be flush-mounted to the penthouse screen wall on the rooftop. The application states the antennas will be painted to match the building. In addition, one (1) equipment cabinet (54.25 inches high x 25.5 inches wide x 25.25 inches deep) is proposed to be placed adjacent to the penthouse and painted to match the building. A copy of the 2232 application with illustrations of the proposed locations of the telecommunications equipment is attached.

The Zoning Administration Division has determined that a telecommunications facility, as described above, is a permitted use pursuant to the provisions of Sect. 2-514 of the Zoning Ordinance provided that it is determined to be in substantial conformance with any applicable rezoning and development plan. It is my determination that the proposed telecommunications facility would be in substantial conformance with RZ A-502 and DP-107. Please note that this proposal is subject to 2232 review requirements and that Clearwire's ability to proceed is dependent upon the pending 2232 being approved by the Fairfax County Planning Commission. This determination has been made in my capacity as the duly authorized agent of the Zoning Administrator. If you have any questions regarding this memorandum, please call Carrie Lee at (703) 324-1290.

KG/CDL/O:\clee01\ActionAssignments\Antennas\11500 Fairway Dr\_rooftop\11500 Fairway Dr\_Clearwire2.doc

Attachments: A/S

cc: Catherine M. Hudgins, Supervisor, Hunter Mill District  
Frank de la Fe, Planning Commissioner, Hunter Mill District  
Regina C. Coyle, Director, Zoning Evaluation Division, DPZ  
Diane Johnson-Quinn, Deputy Zoning Administrator, Zoning Permit Review, ZAD, DPZ  
Raymond Bright, Ejaad Telecom, 901 N. Washington St., Suite 204, Alexandria, VA 22314  
File: RZ A-502, DP-107, ANT 0910 100, Imaging, Reading File



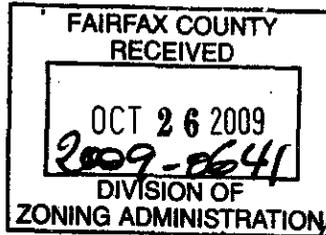
# County of Fairfax, Virginia

## MEMORANDU

TO: Lorrie Kirst, Deputy Zoning Administrator, ZAD  
Other: \_\_\_\_\_

DATE: 10-23-09

FROM: David B. Marshall, Chief  
Facilities Planning Branch, DPZ



RECEIVED  
Department of Planning & Zoning

OCT 28 2009

Zoning Evaluation Division

SUBJECT: Request for Review: 2232 Application

RE: Application Number: FS-1709-159 Tax Map: 11-2(34)(10)106

Attached for your review and comment is a 2232 Review application:

RECEIVED FROM: Clearwire  
PROPOSED USE: Roof Top Collection  
LOCATION OF USE: 11500 Fairway Dr., Reston  
ADDITIONAL COMMENTS: \_\_\_\_\_

Please send your comments to David Marshall by: 11/19/09  
Staff Coordinator: Conne Mares Phone: 703-324-1263

**\*\*ZAD COMMENTS:**

Property is zoned PRC  
 Proposed use is permitted by Zoning Ordinance and meets all zoning requirements.  
 Proposed use does not meet all Zoning requirements as follows:  
See attached

Referred to ZED for the following: Must be in substantial conformance with  
ZAD comments prepared by: Erion Parsons Date: 10/27/09

**\*\*ZED COMMENTS:** development plan associated with RZ A-502  
 Proposed use is in substantial conformance with all development conditions and/or proffers. DP 107  
 Proposed use is not in substantial accord with all development conditions and proffers.

\*\*ZED comments prepared by: \_\_\_\_\_ Date: \_\_\_\_\_



**Kirst, Lorrie**

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**To:** Maier, Constance A.  
**Cc:** Parsons, Brian S.  
**Subject:** FW: FS-H09-159, 11500 Fairway Dr.

RE: FS-H09-159

11500 Fairway Dr. (Waterford Square Condominiums), Reston

17-2 ((34))(01) 106

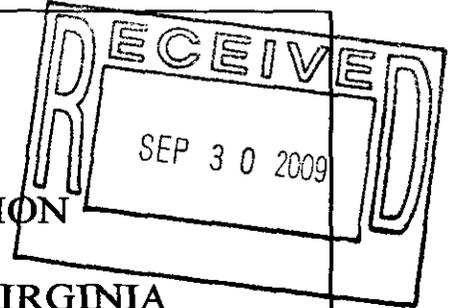
Clearwire - collocation on a multifamily residential building in excess of 35 feet

Zoned: PRC

The proposal meets Par. 1 of Sect. 2-514 of the Zoning Ordinance.

Refer To ZED: Must be in substantial conformance with the development plan associated with RZ A-502

COUNTY OF FAIRFAX, VIRGINIA  
APPLICATION FOR DETERMINATION  
PURSUANT TO  
SECTION 15.2-2232 OF THE CODE OF VIRGINIA



Application Number: FS-1109-159  
(assigned by staff)

The application contains three parts: I. Application Summary; II. Statement of Justification; and; III. Telecommunication Proposal Details Please do not staple, bind or hole-punch this application. Please provide at least one copy of all pages, including maps and drawings, on 8.5 x 11 inch paper.

(Please Type or Print All Requested Information)

**PART I: APPLICATION SUMMARY**

**ADDRESS OF PROPOSED USE**

Street Address: 11500 Fairway Drive

City/Town: Reston, VA

Zip Code: 20190

**APPLICANT(S)**

Name of Applicant: Clearwire US LLC

Street Address: 5808 Lake Washington Blvd. NE Suite 300

City/Town Kirkland State: WA Zip Code 21046

E-mail Address Raymond.Bright@ejaadtelecom.net

Name of Applicant's Agent/Contact (if applicable) Raymond Bright

Agent's Street Address: 901 N Washington Street Suite 204

City/Town: Alexandria State: VA Zip Code: 22314

Telephone: Work: (540-451-0171) Fax: (240) 597-1463

**PROPOSED USE**

Street Address: 11500 Fairway Drive Reston Virginia 20190

Fairfax Co. Tax Map and Parcel Number(s): 0172-34-010106 \_

**Brief Description of Proposed Use:** Clearwire US,LLC requests review and approval of a proposed communications facility. The proposed facility includes the location of three low profile antennas with a rad center of 70' and one dish antenna to be mounted 74' to an existing 74' building structure.

Total Area of Subject Parcel(s): 18288 Sq. ft (acres or square feet)

Portion of Site Occupied by Proposed Use: 49 square feet (acres or square feet)

Fairfax County Supervisor District Hunter Mill #5

Planned Use of Subject Property (according to Fairfax County Comprehensive Plan):  
**Medium rise apartments, condo 5 to 8 story**

Zoning of Subject Property PRC (Residential 3 Development)

List all applicable Proffer Conditions, Development Plans, Special Exceptions,  
Special Permits or Variances previously approved and related to this site:

No records found.

**PROPERTY OWNER(S) OF RECORD**

Owner Waterford Square Condominium Unit Owners Association

Street Address: C/O Harry Anderson, 14301 Climbing Roseway.

City/Town: Centreville State: VA Zip Code 20191

PART II, entitled "Statement of Justification," pages 4 through 6, shall be completed by all applicants and included as part of the application. PART III, entitled "Telecommunication Proposal Details," pages 7 through 9, also shall be completed and included for all proposed telecommunication uses.

Name of Applicant or Agent: Raymond Bright

Signature of Applicant or Agent: *Raymond Bright*

Date: 9/30/09

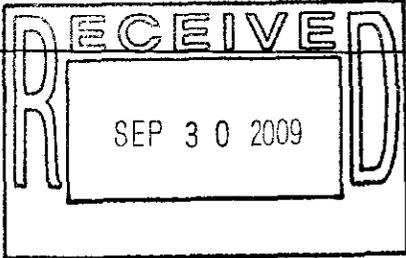
\*\*\*\*\*

Please do not staple, bind or hole-punch this application. Please provide at least one copy of all pages, including maps and drawings, on 8.5 x 11 inch paper.

Submit completed application to:  
Fairfax County  
Department of Planning and Zoning, Planning Division  
Herrity Building  
12055 Government Center Parkway, Suite 730  
Fairfax, Virginia 22035

FOR STAFF USE ONLY

Date application received: 9/30/09  
By: *[Signature]*

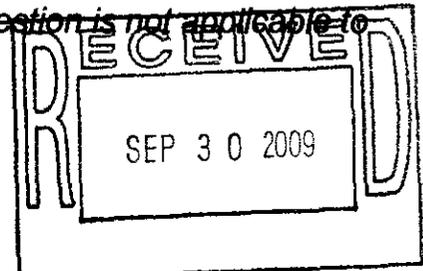


Additional information requested to complete application:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date application accepted:   /  /    
By: \_\_\_\_\_

### PART III: TELECOMMUNICATION PROPOSAL DETAILS

Please complete and provide all requested information. If question is not applicable to the proposed use, please indicate with N/A.



#### PROPOSED TELECOMMUNICATION USE

Use is (check one):

- New structure (monopole, tower or camouflaged facility)
- Replacement of existing pole or tower at same location with another pole or tower
- Antenna placement on building or penthouse façade
- Antenna placement on building or penthouse rooftop
- Collocation on other existing telecommunications structure (monopole or tower)
- Collocation on other non-telecommunications structure (such as an electric transmission tower/pole, utility pole, water tower, etc.)
- Modification to telecommunications facility previously approved for same applicant:  
Prior 2232 Review application number: \_\_\_\_\_  
Date of Planning Commission approval: \_\_\_\_\_

#### PROJECT DETAILS

##### **1. ANTENNA**

Number and Type: 3 LLPX310R 65 deg XX-pol Argus ANTENNAS AND 1 Andrews VHLP Dish

Dimensions: height 42" width 12" depth 5" -antennas

Dimensions: height 7.6" width 7.6" depth 3.7" diameter 7.6" -dish

Location / Placement: Mounted at 70' (antennas) and 74' (dish) AGL

Wattage: Maximum ERP (Effective Radiating Power): 54.5 dBm per Sector

Material and Color: Fiberglass, Grey

Material and Color of the Antenna Mounting: Galvanized steel, grey

Height Above Ground: 70' (antennas) and 74' (dish)

##### **2. EQUIPMENT**

Number and Type of Cabinets or Structures: One equipment cabinet.

Cabinet/Structure Dimensions: height 54 1/4" width 25 1/2" Depth 25 1/4" – Radio Cabinet

Height of wall mount: 1'2"

Material and Color: Grey steel

Location: Inside 7' by 7' lease area (Wall mount to be at the base of the penthouse)

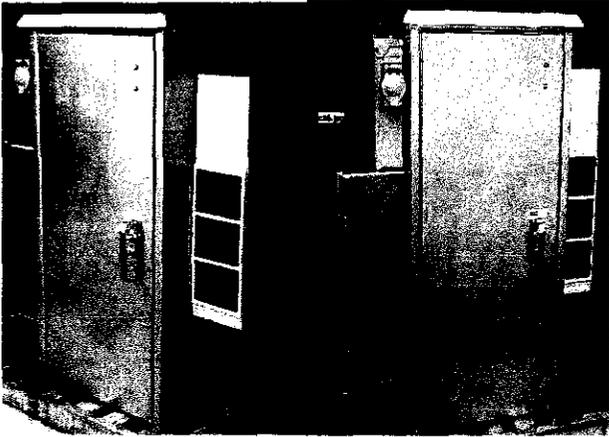
Method of Screening: All equipment, antennas, microwave dish will be painted to match existing exterior of the building.

DDB UNLIMITED INC.

R7-54DXCW

DDB UNLIMITED INC.

R7-54DXCW



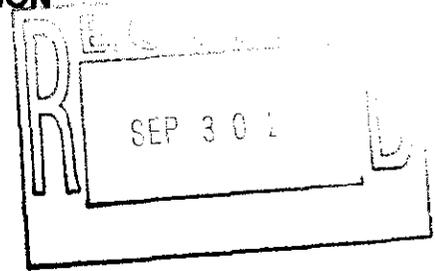
DDB UNLIMITED INC.

R7-54DXCW

Each unit is certified and conforms to CE, ENEC, UL, IEC, and CSA standards.	
Weight:	300 lbs. (136 kg)
Door:	Two doors for easy access to interior. Locks to prevent unauthorized access. Sealed with 1/2" neoprene gasket.
Materials:	4 1/2" ALUMINUM Steel for structure 22 gauge, 304 stainless steel for interior
Finish:	Primer and Paint with UV-resistant finish
Accessories:	Includes with 220VAC, 20A, 15A, 10A, 5A, 2.5A, 1.25A, 0.625A, 0.3125A, 0.15625A, 0.078125A, 0.0390625A, 0.01953125A, 0.009765625A, 0.0048828125A, 0.00244140625A, 0.001220703125A, 0.0006103515625A, 0.00030517578125A, 0.000152587890625A, 0.0000762939453125A, 0.00003814697265625A, 0.000019073486328125A, 0.0000095367431640625A, 0.00000476837158203125A, 0.000002384185791015625A, 0.0000011920928955078125A, 0.00000059604644775390625A, 0.000000298023223876953125A, 0.0000001490116119384765625A, 0.00000007450580596923828125A, 0.000000037252902984619140625A, 0.0000000186264514923095703125A, 0.00000000931322574615478515625A, 0.000000004656612873077392578125A, 0.0000000023283064365386962890625A, 0.00000000116415321826934814453125A, 0.000000000582076609134674071765625A, 0.0000000002910383045673370358828125A, 0.0000000001455191522836685179444140625A, 0.00000000007275957614183425897221703125A, 0.000000000036379788070917126486108515625A, 0.00000000001818989403545856324305428125A, 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**PART II: STATEMENT OF JUSTIFICATION**

Ms. Sandy Smith, Planner  
Fairfax County Office of Comprehensive Planning  
12055 Government Center Parkway, Suite 730  
Fairfax, VA 22035-5505



Applicant: Clearwire US, LLC.  
Site Name: WA33XC929 (WiMax)  
Site Number: DC-WSH5881-B  
Property Address: 11500 Fairway Drive  
Tax ID #: 0172-34-010106  
Book/Page: 19283/0276  
Zoning Designation: PRC (Residential Development)  
Land Use Code: Medium Rise Style Condo (5to8 Stry)  
District: Hunter Mill Dist. #5

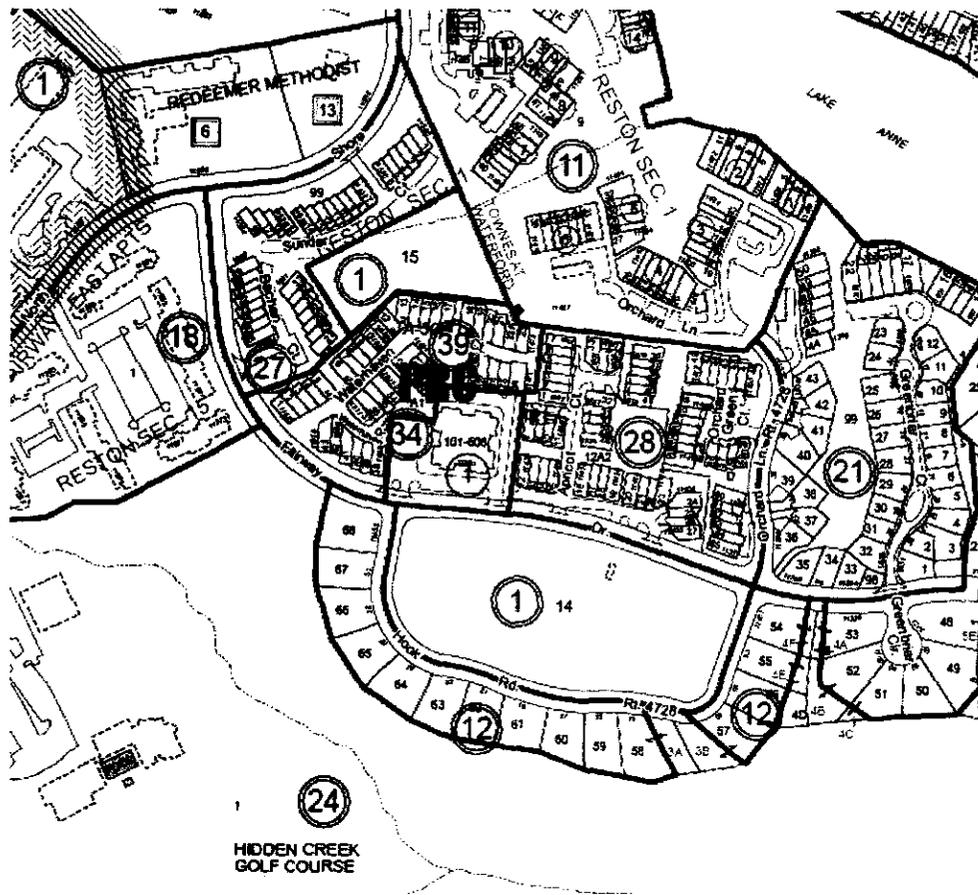
Dear Ms. Smith:

Pursuant to Section 15.2-2232 of the Code of Virginia, Sprint/Nextel, hereby requests a determination that the proposed wireless telecommunication collocation application described herein is in substantial accord with the Fairfax County Comprehensive Plan.

**1. DESCRIPTION OF PROPOSED USE:**

Clearwire US, LLC requests review and approval of this application for installation of an unmanned wireless telecommunications facility at the above referenced site to include the location of 3 low profile antennas and one dish antenna to be located on an existing Roof Top penthouse and related equipment to be located on the penthouse wall's the purpose of the proposed installation is to provide in-building broadband service penetration to the area. The proposed facility will service the area within an approximate 1.5 mile radius of the site.

The subject parcel is zoned PRC and is surrounded by Residential use:



The proposed low profile antennas will be mounted on the existing penthouse walls at a height of approximately 70' and the dish antenna will be installed at the top of the structure at a height of 74', not to exceed the height of the existing structure. Additionally, Clearwire proposed the installation of one (1) DAP equipment cabinet and to be located on the penthouse walls as reflected on the attached plans prepared by Fullerton Engineering.

The existing building structure is 74' in height and constructed of concrete and brown brick. The proposed antennas will be painted to match the existing structure. As reflected in the photographs below, there are single family homes, townhouses surrounding the structure.

The proposed facility is an unmanned facility that will operate twenty-four hours (24) a day, three hundred sixty five days (365) per year. Because it is unmanned, no notable traffic will be generated. Once the facility is constructed, it will require an average of 1-2 visits per month as needed for routine maintenance or repair.

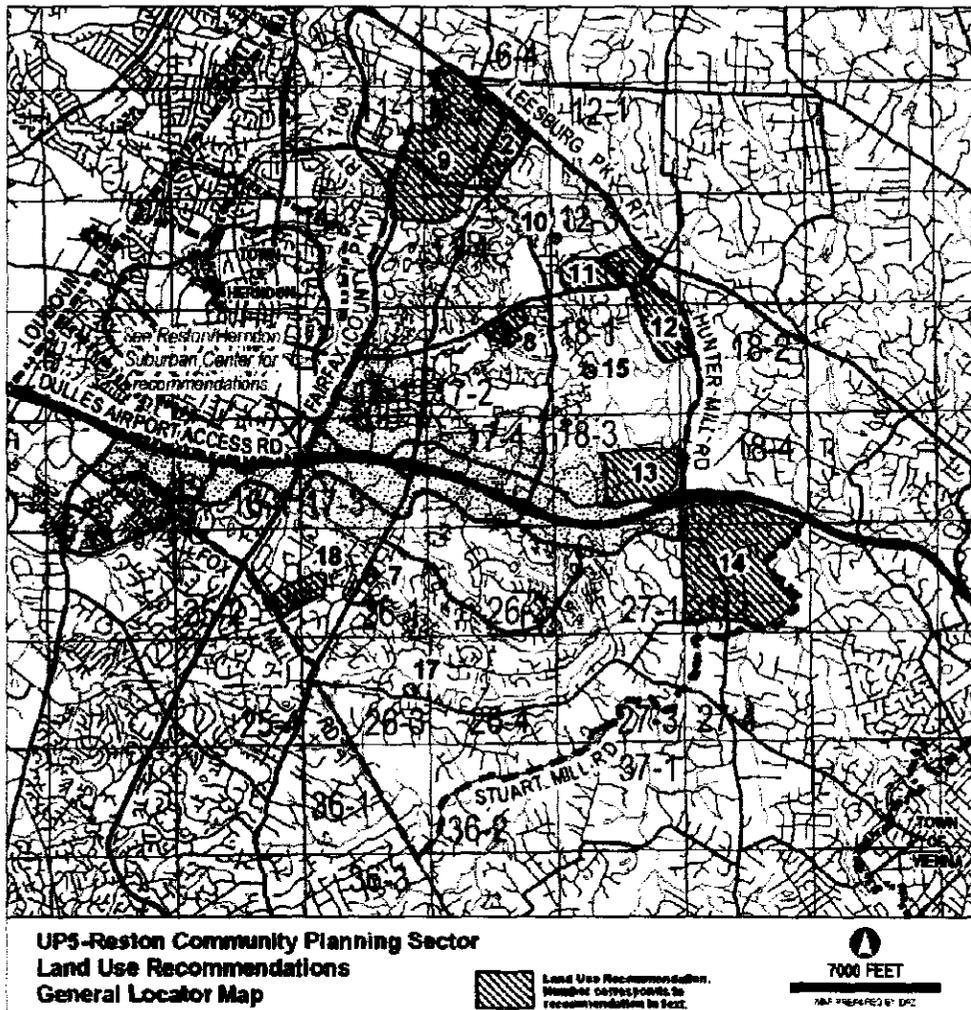
## **2. REQUIREMENT FOR PROPOSED USE:**

The proposed facility is a vital component of Clearwire's area wide wireless broadband network. This facility will serve the businesses and residents located within the coverage area which is approximately 1.5 miles. Clearwire proposes to locate its facility on the existing structure to eliminate the need for a new telecommunications tower in the search in keeping with the Fairfax County Comprehensive Land Use Plan and the Fairfax County Zoning Ordinance. We find that this is the best and least disruptive location from which to serve the community because the surrounding area is residential. The existing structure is the only viable solution for the area because it is an existing structure, mitigating the need for propagation of additional towers or structures in the area. Additionally, it is set upon a 18288 Sq. ft parcel. There is no better suited property in the area to serve the network, the needs of the community, and to satisfy the standards and objectives of Fairfax County.

Broadband service providers must locate antenna sites according to network design within relatively limited geographic parameters in order to provide uninterrupted coverage. When providers cannot locate a site within these geographic parameters, network users will experience disrupted or significantly slower wireless internet connection. Additionally, an incomplete system is inconsistent with Clearwater's business practice as well as its legal responsibility to provide coverage to a percentage of the population within specific time parameters as required by its FCC License.

### **RELATIONSHIP OF THE PROPOSAL TO THE COMPREHENSIVE PLAN:**

Clearwire's proposal is compatible with the goals, objectives and policies of Fairfax County's Comprehensive Plan for communications facilities. These requirements are outlined in the Policy Plan for "Mobile and Land Based telecommunications Services see below:



Clearwire's proposed facility has been sited and designed in accordance with the goals of the Fairfax County Land Use Plan and the applicable objectives as defined in the General Guidelines:

- Policy a:** **Avoid the construction of new structures by locating mobile and land-based telecommunication facilities on available existing structures such as building rooftops, telecommunication and broadcast poles and towers, electrical utility poles and towers, and water storage facilities when the telecommunication facilities can be placed inconspicuously to blend with such existing structures.**

The proposed installation is an addition to an existing facility on an existing structure. Because the surrounding area is residential, location on the existing structure is the best solution for providing service to the area.

**Policy b:** Locate new structures that are required to support telecommunication antennas on properties that provide the greatest opportunity to conceal the telecommunication facilities and minimize their visual impact on surrounding areas.

No new structure is proposed. The proposed facility to be located on the existing structure will have minimal visual impact on the surrounding areas as it will blend with the existing building structure. The related equipment will be located on the penthouse walls with the dap cabinet located at the base of the penthouse walls and will have minimal visibility due to the setback distance of the penthouse and antennas being painted to match existing structure.



**Policy c:** Subject to the availability and feasibility of a public site, when multiple sites have equal opportunity to minimize impacts, consider public lands as the preferred location for new structures.

The proposed is a location on an existing facility. With no other suitable options, Clearwire finds that siting it's facility on the existing building structure is the best solution for providing area coverage.

**Policy d:** Locate mobile and land based telecommunication facilities on public property only after a lease agreement between the County, or related board or authority, and service provider has been established.

The subject site is a privately owned structure. A lease agreement has been established with the property owner.

**Policy e:** **Locate mobile and land-based telecommunication facilities operated by different service providers on single sites and/or structures whenever appropriate. Locate single-use structures on a property when a collocation structure for multiple service providers is not desirable or feasible due to site limitations or visual impact concerns.**

Clearwire has selected a location that is appropriate for its network requirements. The facility has been designed in accordance with regulations and guidelines established by Fairfax County for the siting of such facilities. Clearwire allows other service providers to share its facilities wherever feasible.

**Policy f:** **Ensure that the height of towers and monopoles has the least visual impact and is no greater than required to achieve service area requirements and potential collocation, when visually appropriate.**

The requested facility includes the use of an existing structure, thus minimizing potential visual impact. The overall height of the facility will not be extended.

**Policy g:** **Ensure that the use of public property by mobile and land based telecommunication facilities does not interfere with the existing or planned operational requirements of the public use.**

The proposed use will not interfere with any existing or planned operational requirements of the property or any surrounding uses.

**Policy h:** **Design, site and/or landscape mobile and land-based telecommunication facilities to minimize impacts on the character of the property and surrounding areas. Demonstrate the appropriateness of the design through facility schematics and plans which detail the type, location, height, and material of the proposed structures and their relationship to other structures on the property and surrounding areas.**

We find the proposed design to be the most appropriate location and design for the area. The proposed facility will utilize an existing structure and will not extend the height of the structure. The proposed antenna will be painted to match and will blend with the existing facility, eliminating negative impact to the character of the property and surrounding areas. The proposed location is the only reasonable location in the area due to the presence of an existing structure, existing natural screening, and suitable setback distances from adjoining properties or buildings.

**Policy i: Demonstrate that the selected site for a new monopole and tower provides the least visual impact on residential areas and the public way. Analyze the potential impacts from other vantage points in the area to illustrate that the selected site provides the best opportunity to minimize the visual impact of the proposed facility.**

Because surrounding area is residential use, the selected site provides the most inconspicuous location for the proposed facility. Due to the utilization of an existing building structure, the impact will be negligible.

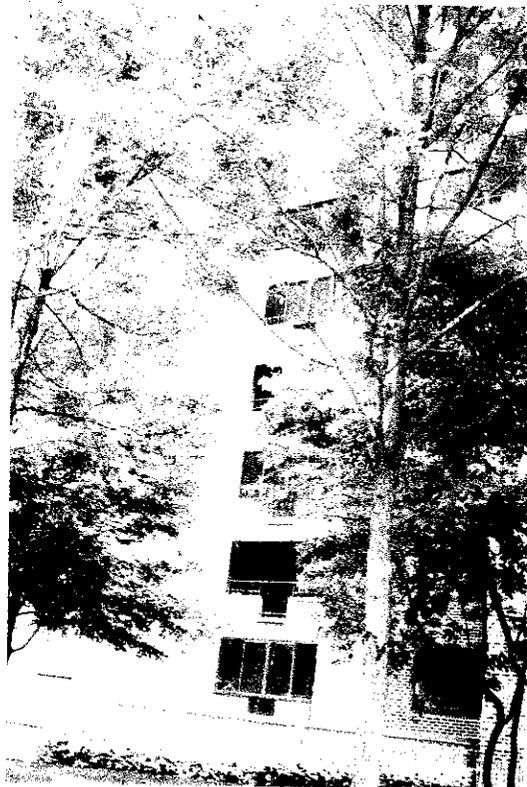
The following photographs indicate the residential nature of the surrounding area.



View South toward site



View East toward site from neighborhood



View West toward site



View North toward site



Neighborhood View



Neighborhood View



Neighborhood View



Neighborhood View



Neighborhood View

- Policy j: Mitigate the visual impact of proposed telecommunication structures, and their antennas and ancillary equipment, using effective design options appropriate to the site such as:**
- **locating facilities near to or within areas of mature vegetation and trees which effectively screen or provide an appropriate setting for the proposed structure or which, when viewed in context, considering perspective views, relative topography and other factors, mitigate their visual presence and prominence;**
  - **blending facilities with an existing pattern of tall structures;**
  - **obscuring or blocking the views of facilities with other existing structures, vegetation, treecover, or topographic features to the maximum extent feasible;**
  - **increasing the height of or replacing existing structures to reduce the need for another structure when such height increases or structure replacements are appropriate to the site and the surrounding area;**

Clearwire US, LLC proposes an effective design option that minimizes the visual impact of the proposed telecommunications facility by collocating on an existing structure, thus mitigating the need for a new structure to be located in the vicinity. The proposed antennas will blend with the existing structure. Additionally, Clearwire utilizes the smallest antennas possible at the lowest possible height required to serve the area. The proposed equipment provides for a low impact solution by locating the equipment at the base of the existing penthouse wall. This is more aesthetically acceptable than a shelter in this setting, as it is consistent with the standard practices for equipment location on an existing structure.

- Policy k: Locate telecommunication facilities to ensure the protection of historically significant landscapes. The views of and vistas from architecturally and/or historically significant structures should not be impaired or diminished by the placement of telecommunication facilities.**

The proposed facility will be located on the rooftop of an existing structure and the antennas will not present a negative aesthetic impact. From any location that the existing structure may be visible the requested change will not present a notable change in the landscape. Further, the location for the proposed facility will have no negative impact on any historically significant structures. Per the comprehensive as amended through July 13, 2009 the historic sites in the Upper Potomac Planning District as of 2009 are:

FIGURE 4  
INVENTORY OF HISTORIC SITES  
UPPER POTOMAC PLANNING DISTRICT  
(Inventory as of 2008)

Name	Address	Planning Sector	Parcel Number	Date
Appledore/Poplar Vale	3000C Fox Mill Road Oakton	UP7	36-3 ((1)) 29C	c. 1806
Bailey House*	13825 Sunrise Valley Drive Herndon	UP6	15-4 ((2)) 15A	c. 1903
Bowman, A. Smith, Distillery/Wishle Town Hall N, V	1890 Old Reston Avenue Reston	UP5	17-4 ((1)) 5B	c. 1890-1892
Bowman Store*	2628 Centreville Road Herndon	UP6	25-1 ((1)) 13	c. 1893
Brown's Chapel	1575 Browns Chapel Road Reston	UP5	11-4 ((1)) 8	c. 1879
Cameron Parish Church Ruins and Cemetery*	Powells Tavern Place Herndon	UP4	5-4 ((8)) G	1773
Cartersville Baptist Church*	1727 Hunter Mill Road Vienna	UP5	27-1 ((1)) 2	1903
Chantilly Plantation Stone House	13200 Lee Jackson Highway Chantilly	UP8	45-1 ((1)) 11	c. 1820
Cherok House *	2633 Centreville Road Herndon	UP7	25-1 ((1)) 19	c. 1889
Cockerille House *	Mares Neck Lane Herndon	UP7	25-3 ((14))	c. 1840
Colvin Run Community Center	10201 Colvin Run Road Great Falls	UP3	12-4 ((1)) 31	1908
Colvin Run Mill N,V,H	10017 Colvin Run Road Great Falls	UP3	18-2 ((1)) 24	c. 1810
Colvin Run Mill Miller's House H	10017 Colvin Run Road Great Falls	UP3	18-2 ((1)) 24	c. 1810

FIGURE 4  
INVENTORY OF HISTORIC SITES  
UPPER POTOMAC PLANNING DISTRICT  
(Inventory as of 2008)  
(continued)

Name	Address	Planning Sector	Parcel Number	Date
Cornwell Farm N,V	9414 Georgetown Pike Great Falls	UP2	13-1 ((1)) 58B	1831
Cornwell, Henry, House *	10010 Georgetown Pike Great Falls	UP2	12-2 ((1)) 20	c. 1890
Dranesville Methodist Church	1089 Liberty Meeting Court Herndon	UP4	6-4 ((1)) 66B	1852-1861
Dranesville Tavern N,V,H	11919 Leesburg Pike Herndon	UP4	6-3 ((1)) 19	c. 1823
Dunbarton	11554 Tralee Drive Great Falls	UP2	6-4 ((13)) (2) 13	c. 1764-1794
Eastern Shore House H	10026 Colvin Run Road Great Falls	UP3	18-2 ((1)) 19	c. 1782; moved here 1979
Feighery Store and House/ Thelma's Ice Cream*	10200 Colvin Run Road Great Falls	UP3	12-4 ((1)) 32	c. 1931
First Baptist Church of Herndon	681 Elden Street Herndon	UP4	16-2 ((2)) 198	1899
Floris Colored School, New*	2525 Squimel Hill Road Herndon	UP6	15-4 ((1)) 32	1932
Floris Presbyterian Church	2472 Centreville Road Herndon	UP6	16-3 ((1)) 7	1906
Floris United Methodist Church	2629 Centreville Road Herndon	UP7	25-1 ((1)) 17	c. 1895
Follin, J.N., House	1051 Walker Mill Road Great Falls	UP3	12-4 ((1)) 13	c. 1850
Forestville Colored School*	710 Walker Road Great Falls	UP2	7-4 ((1)) 64	c. 1886

FIGURE 4  
INVENTORY OF HISTORIC SITES  
UPPER POTOMAC PLANNING DISTRICT  
(Inventory as of 2008)  
(continued)

Name	Address	Planning Sector	Parcel Number	Date
Four Stairs N, V	840 Leigh Mill Road Great Falls	UP3	13-3 ((1)) 20Z	c. 1737
Fox House	2703 West Ox Road Herndon	UP7	25-1 ((1)) 20	1897/1898
Franklin Farm House/Oak Hill	3020 West Ox Road Herndon	UP7	35-2 ((8)) (25) 4	c. 1790
Frying Pan Meeting House N, V	2615 Centreville Road Herndon	UP7	25-1 ((1)) 11	c. 1783
Frying Pan Farm Park	2709 West Ox Road Herndon	UP7	25-1 ((1)) 9	c. 1920
Great Falls Grange N, V	9818 Georgetown Pike Great Falls	UP2	13-1 ((1)) 15	1929
Great Falls Post Office/Forestville School N, V	9812 Georgetown Pike Great Falls	UP2	13-1 ((1)) 18	1889
Greek Revival House H	10030 Colvin Run Road Great Falls	UP3	18-2 ((1)) 19A	c. 1850; moved here 1974
Gunnell, John, House N, V	489 Arnon Meadow Road Great Falls	UP2	8-3 ((1)) 3	1853
Gunnell's Run N, V	600 Innsbruck Avenue Great Falls	UP2	8-3 ((12)) A	c. 1750
Herndon Historic District N, V	Herndon	UP4	16-2 ((2))	1855-1940
Herndon Depot N, V	717 Lynn Street Herndon	UP4	16-2 ((2)) 23 - adjacent	c. 1861

FIGURE 4  
INVENTORY OF HISTORIC SITES  
UPPER POTOMAC PLANNING DISTRICT  
(Inventory as of 2008)  
(continued)

Name	Address	Planning Sector	Parcel Number	Date
Hidden Springs Farm	438 River Bend Road, Great Falls	UP2	8-4 ((1)) 33Z	1820s
Higgins, R., House	2705 West Ox Road Herndon	UP7	25-1 ((1)) 21	1903/1904
Holly Knoll/Bloomfield H	12000 Leesburg Pike Herndon	UP2	96-3 ((1)) 6	c. 1858
Ivy Chimney	11706 Leesburg Pike Herndon	UP2	6-4 ((1)) 40	1856-1860
Jackson, Verlinda, House	700 River Bend Road Great Falls	UP2	13-2 ((1)) 11	c. 1785
Jefferson School	11105 Beach Mill Road Great Falls	UP2	3-3 ((10)) 1	pre 1930
Kalorama Springs* H	11030 Colvin Run Road Great Falls	UP3	18-2 ((1)) 19A	unknown
Keyes House	2516 Squirrel Hill Road Herndon	UP7	15-4 ((1)) 28	1884/1885
King Subdivision	Elizabeth Street and Jackson Lane, Great Falls	UP1	13-2 ((2)) (1) and (2)	1910-1925
Kitchen, Kitty, Cottage	681 Monroe Street Herndon	UP4	16-2 ((2)) 194	c. 1861
Lake Anne Village Center H	Washington Plaza and Chimney House Road Reston	UP5	17-2 ((6)) ((7)) ((9)) ((31))	1963-1967
Lawyers Road *	b/t Hunter Station and Hunter Mill Roads Vienna	UP5	27-3; 27-4	Pre-1800

FIGURE 4  
INVENTORY OF HISTORIC SITES  
UPPER POTOMAC PLANNING DISTRICT  
(Inventory as of 2008)  
(continued)

Name	Address	Planning Sector	Parcel Number	Date
Lee, Edward, House	2625 Centreville Road Herndon	UP7	25-1 ((1)) 16	c. 1891
Leigh, Dr. Alfred, House	1148 Walker Road Great Falls	UP3	12-4 ((1)) 15A	c. 1890, 1910
Lewis-Oliver House	1032 Towiston Road McLean	UP3	19-2 ((12)) 9A	c. 1750
Matildaville Ruins N,V	9200 Old Dominion Drive Great Falls Park, Great Falls	UP1	13-2 ((1)) 35	1790-1839
Mayfield	11700 Leesburg Pike Herndon	UP2	6-4 ((1)) 41	c. 1804
McMillen Farm	1521 Dranesville Road Herndon	UP4	10-2 ((1)) 5	1905-1908; barn pre 1850
Methodist Episcopal Church	800 Elden Street Herndon	UP4	16-2 ((2)) 33	1872
Middle Turnpike Bridge Ruins	Difficult Run Great Falls	UP3	19-1 ((1)) 2A, 19-1 ((9)) D	1818-1838
Middleton, John, Farm *	13801 Frying Pan Road Herndon	UP6	24-2 ((1)) 1	1871
Mosby's Rock	2525 Squirrel Hill Road Herndon	UP6	15-4 ((1)) 32	significant 1863-1865
Mount Pleasant Baptist Church, Old* and Cemetery	13614 Coppermine Road Herndon	UP6	15-4 ((1)) 18	1882
Murphy, Hazel, Farm *	13900 Frying Pan Road Herndon	UP6	15-4 ((1)) 25	1852-1854
Navy School	3510 West Ox Road Fairfax	UP8	45-2 ((1)) 6	1887-1888

**FIGURE 4**  
**INVENTORY OF HISTORIC SITES**  
**UPPER POTOMAC PLANNING DISTRICT**  
(Inventory as of 2008)  
(continued)

Name	Address	Planning Sector	Parcel Number	Date
Old Ox Road Trace *	Near Squirrel Hill Road Herndon	UP6	15-4 ((1)) 32	1729
Patowmack Canal at Seneca Falls	Potomac River Great Falls	UP1	3-1 ((1)) 1, 2	1785-1802
Patowmack Canal Historic District/Lock Ruins at Great Falls N.V.L.	9200 Old Dominion Drive Great Falls Park, Great Falls	UP1	13-2 ((1)) 35	1785-1802
Peck House *	3106 Centreville Road Herndon.	UP6	24-4 ((1)) 6C2	c. 1853
Piscataway Farm	11524-9 Seneca Farm Way Great Falls	UP2	6-2 ((16)) 2	c. 1800
Ratcliffe-Hanna House N. V	2346 Centreville Road Herndon.	UP6	16-3 ((1)) 39A4	c. 1820
St. Joseph's Church	718 Pine Street Herndon.	UP4	16-2 ((2)) 273	1925
St. Timothy's Church	820 Elden Street Herndon.	UP4	16-2 ((2)) 40A	1877-1880
Smith, Jesse, Farm	315 Seneca Road Great Falls	UP1	2-2 ((1)) 8	1854-1856
Smith's Chapel	11321 Beach Mill Road Great Falls	UP2	2-4 ((1)) 19	1890
Summer Road	Near 1319 Millfarm Drive Vienna	UP3	18-2 ((19)) 1	Early 19 <sup>th</sup> century
Sunset Hills	1856 Old Reston Avenue Reston	UP5	17-4 ((1)) 1	1899
Thompson, Arthur, House	12500 Thompson Road Fairfax	UP7	35-4 ((1)) 73	c. 1898

FIGURE 4  
INVENTORY OF HISTORIC SITES  
UPPER POTOMAC PLANNING DISTRICT  
(Inventory as of 2008)  
(continued)

Name	Address	Planning Sector	Parcel Number	Date
Toll Gate House*	9404 Georgetown Pike Great Falls	UP2	13-2 ((1)) 7	c. 1920
Turley Hall *	3318 Centreville Road Chantilly	UP6	34-2 ((1)) 10A	c. 1821
Turner, Mark, Dairy Farm	10609 Georgetown Pike Great Falls	UP3	12-1 ((1)) 24C	1869
Vale School/Vale Community House	3124 Fox Mill Road Oakton	UP7	36-4 ((1)) 8	c. 1885
Vale United Methodist Church	11528 Vale Road Oakton	UP7	36-4 ((1)) 19	1896
White, Elijah, House*	13141A Lazy Glen Court Herndon	UP7	25-3 ((7)) 126	c. 1884
Wichle, Robert, House	1830 Old Reston Avenue Reston	UP5	17-4 ((1)) 3	c. 1895
Wine, William, House	1319 Millfarm Drive Vienna	UP3	18-2 ((19)) 1	1915/1916
Woodbury House	10307 Saddle View Court Vienna	UP5	27-2 ((4)) A	c. 1760, possibly 1747
Wrenn, Samuel, House at Franklin Farms	13223 Wrenn House Lane Herndon	UP7	35-1 ((4)) (17) 31	c. 1810-1820
Wrenn, "Flatlick" James, House*	13622 Lee Jackson Memorial Highway Chantilly	UP8	34-4 ((1)) 60	c. 1800

\* indicates demolition: potential remains for archaeological site  
N National Register of Historic Places  
V Virginia Landmarks Register  
H Historic Overlay District  
L National Historic Landmark

**Policy l: Site proposed facilities to avoid areas of environmental sensitivity.**

Areas of environmental sensitivity have been avoided in the siting of the proposed facility.

**Policy m: Site proposed facilities to allow for future expansion and maintain levels of screening to accommodate expansion.**

Clearwire will provide reasonable cooperation with the property owner and other service providers in the event of future co-location on the site.

**Policy n: Design and site proposed facilities to preserve areas necessary for future right-of-way dedication and ancillary easements for construction of road improvements.**

As reflected in the attached drawings, the proposed facility is located on an existing roof top structure and is well set back from the roadways.

**Policy o: Locate and construct antennas used for purposes other than mobile and land-based telecommunication services in accordance with the same guidelines established in this "Mobile and Land-Based Telecommunications Services" section.**

The proposed facility has been located in accordance with these guidelines and will be constructed accordingly.

The proposed facility is also consistent with the objectives found under the Policy Plan of the Comprehensive Plan concerning "Mobile and Land Based Telecommunication Services":

**OBJECTIVE 42: In order to provide for the multiple and land-based telecommunication network or wireless telecommunications systems licensed by the Federal Communications Commission, and in order to achieve opportunities for the collocation of related facilities and the reduction of their visual impact, locate the network's necessary support facilities which include antennas, monopoles, lattice tower and equipment buildings in accordance with the following policies:**

**Policy b: Utilize the following types of existing monopoles and towers for telecommunication facilities to avoid construction of new monopoles and towers:**

- **Communication towers and monopoles**

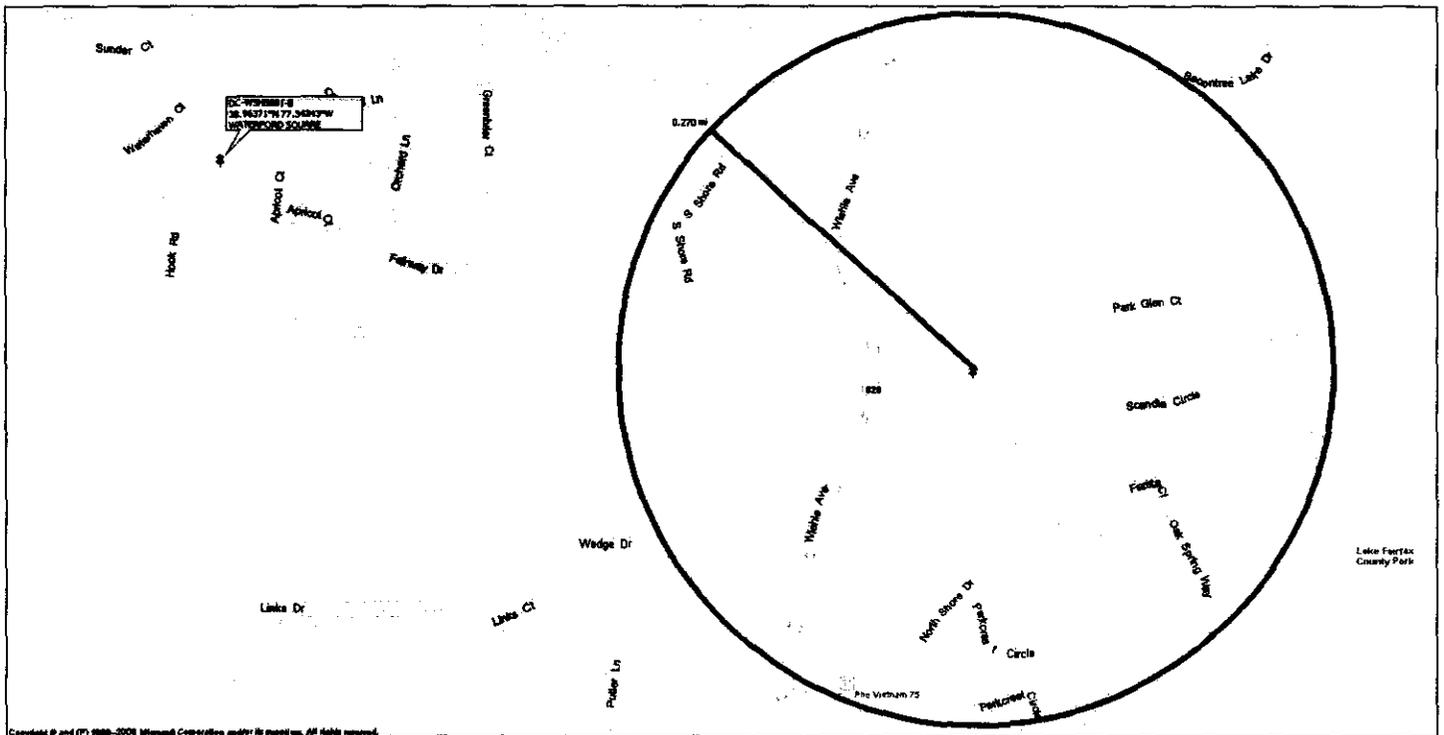
In accordance with the Policy Plan, Clearwire strives to utilize existing structures whenever possible and to cooperate with other carriers and property owners to maximize collocation opportunities in order to minimize the proliferation of new telecommunications towers or structures.

### 3. ANTICIPATED IMPACTS ON ADJOINING PROPERTIES AND ON- AND OFF-SITE ENVIRONMENTAL FEATURES

The proposed use is passive and will not generate noise, dust, light, glare, vibrations, traffic or odors. The proposed facility will pose no threat to public health, safety or welfare and will not affect area telephone, radio or television reception. The proposed facility includes the use of an existing structure. This is the least obtrusive solution, mitigating adverse impact on surrounding properties.

### 4. ALTERNATIVE SITES CONSIDERED FOR THE PROPOSAL

Due to the residential character of the area, Clearwire found very few feasible options for siting its facility. The map below indicates the targeted search area for the proposed facility. The subject parcel is located west of the search area:



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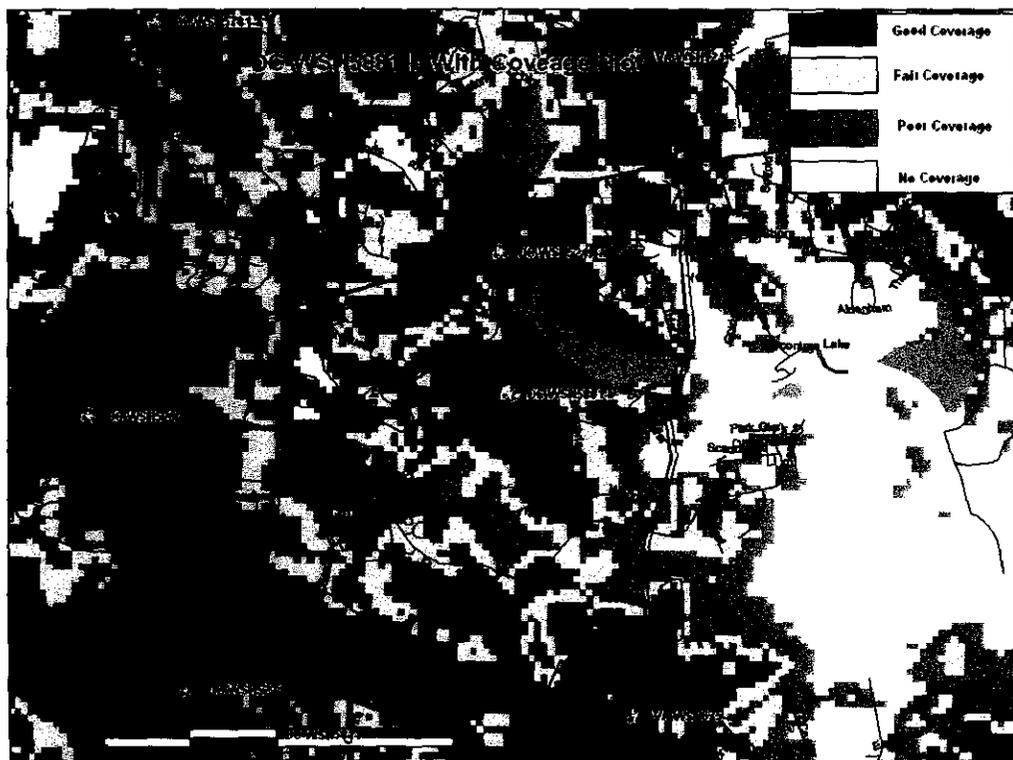
The aerial view below reflects the neighborhood housing surrounding the subject parcel and the general vicinity:



As previously discussed, the proposed facility will serve the area within a 1.5 mile radius. In order for the Clearwire network to operate effectively we needed to find a suitable location in the area being careful to distance the sites for maximum coverage and minimal overlap, thus reducing the overall number of sites required. The image below reflects the search area for the proposed facility as well as some of the surrounding search areas. You can see that in each case, due to the residential character of the area and the limited siting options, many of the candidates for each search area are located well outside of the targeted areas:

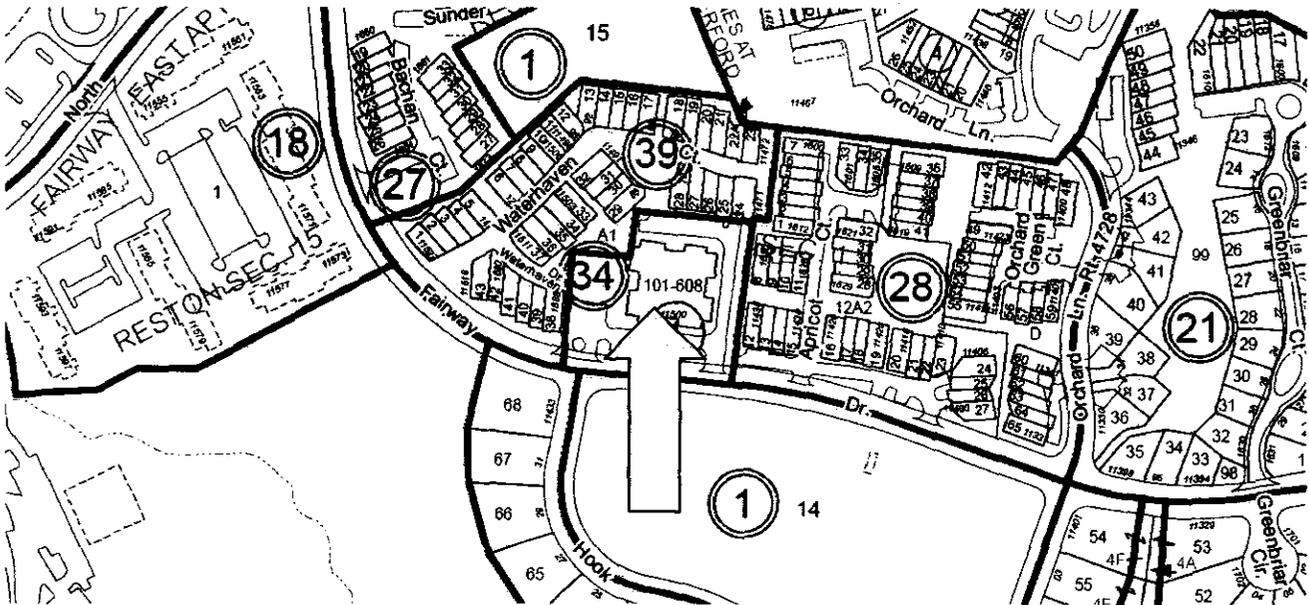


In surveying the area, we found that the existing structure provide for the least obtrusive solution. We considered the existing structure at 12052 N Shore. Clearwire would be required to locate its antennas too low on the structure to meet its network requirements. The proposed location at 11500 Fairway Drive is the most reasonable location for the proposed Clearwire facility. The following propagation map indicates that the proposed location will provide acceptable coverage to the area:



**5. PROPERTY IDENTIFICATION MAP(S) AT A SCALE OF 1"=500'  
IDENTIFYING THE PROPOSED SITE FOR THE FACILITY OR USE**

See Plans prepared by Fullerton Engineering, attached.



**6. PROPOSED FACILITY PLAN (AT A SCALE OF 1"= NOT MORE THAN 50')**

Please find plans prepared by Fullerton Engineering attached.

**7. REDUCED COPY OF PLANS**

Please find 8-1/2" x 11" black-and-white reduction (1 copy) attached.

**8. OTHER INFORMATION AS MAY BE DEEMED APPROPRIATE BY THE 2232  
REVIEW COORDINATOR**

Please feel free to contact me with any questions or concerns or if additional information is required.

END OF APPLICATION







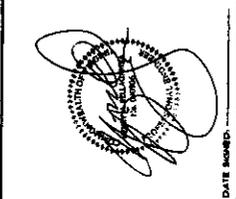


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THE ENGINEER & ARCHITECT OF RECORD FOR THIS PROJECT HAS REVIEWED THIS PLAN AND APPROVES IT AS SHOWN. ANY CHANGES TO THIS PLAN MUST BE APPROVED BY THE ENGINEER & ARCHITECT OF RECORD FOR THIS PROJECT.  
 FULLERTON ENGINEERING CONSULTANTS, INC. IS PROVIDING THESE SERVICES UNDER A PROFESSIONAL ENGINEERING CONTRACT.

NO.	DATE	DESCRIPTION	BY	CHKD.
1		ISSUED		
2		REVISED		
3		REVISED		
4		REVISED		
5		REVISED		
6		REVISED		
7		REVISED		
8		REVISED		
9		REVISED		
10		REVISED		



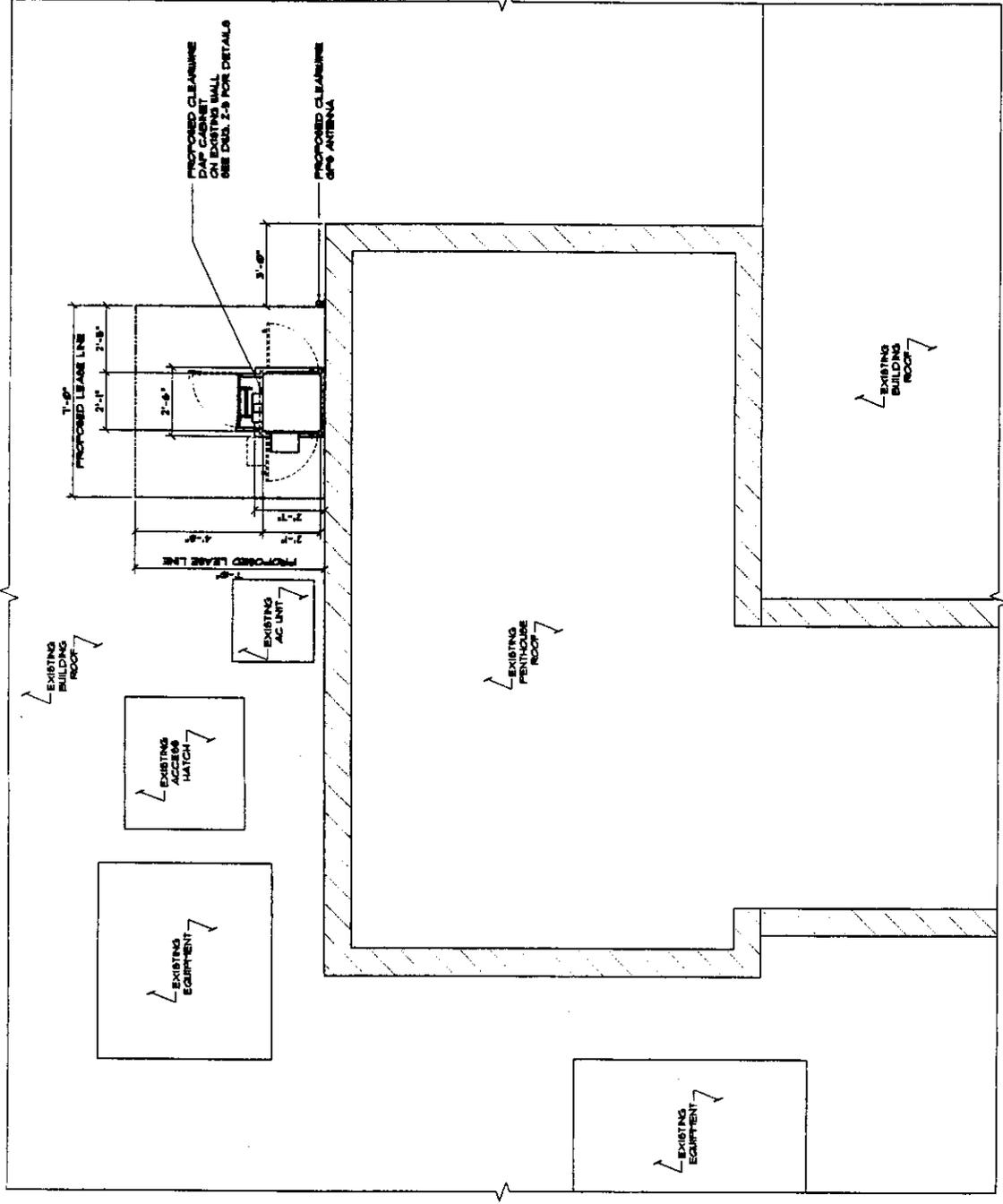
DATE ISSUED: \_\_\_\_\_  
 SITE NAME:  
**WA33XC929 (WIMAX)**

SITE NUMBER:  
**DC-U6H5001-B**

SITE ADDRESS:  
**1800 PARKWAY DR  
 RESTON, VA 20190**

SHEET NAME:  
**ENLARGED SITE PLAN**

SHEET NUMBER:  
**Z-2**



**ENLARGED SITE PLAN**  
 SCALE: 1/8" = 1'-0"

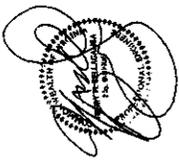
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DATE	DESCRIPTION	BY	CHK
07/28/09	200908		



DATE PLOTTED: \_\_\_\_\_

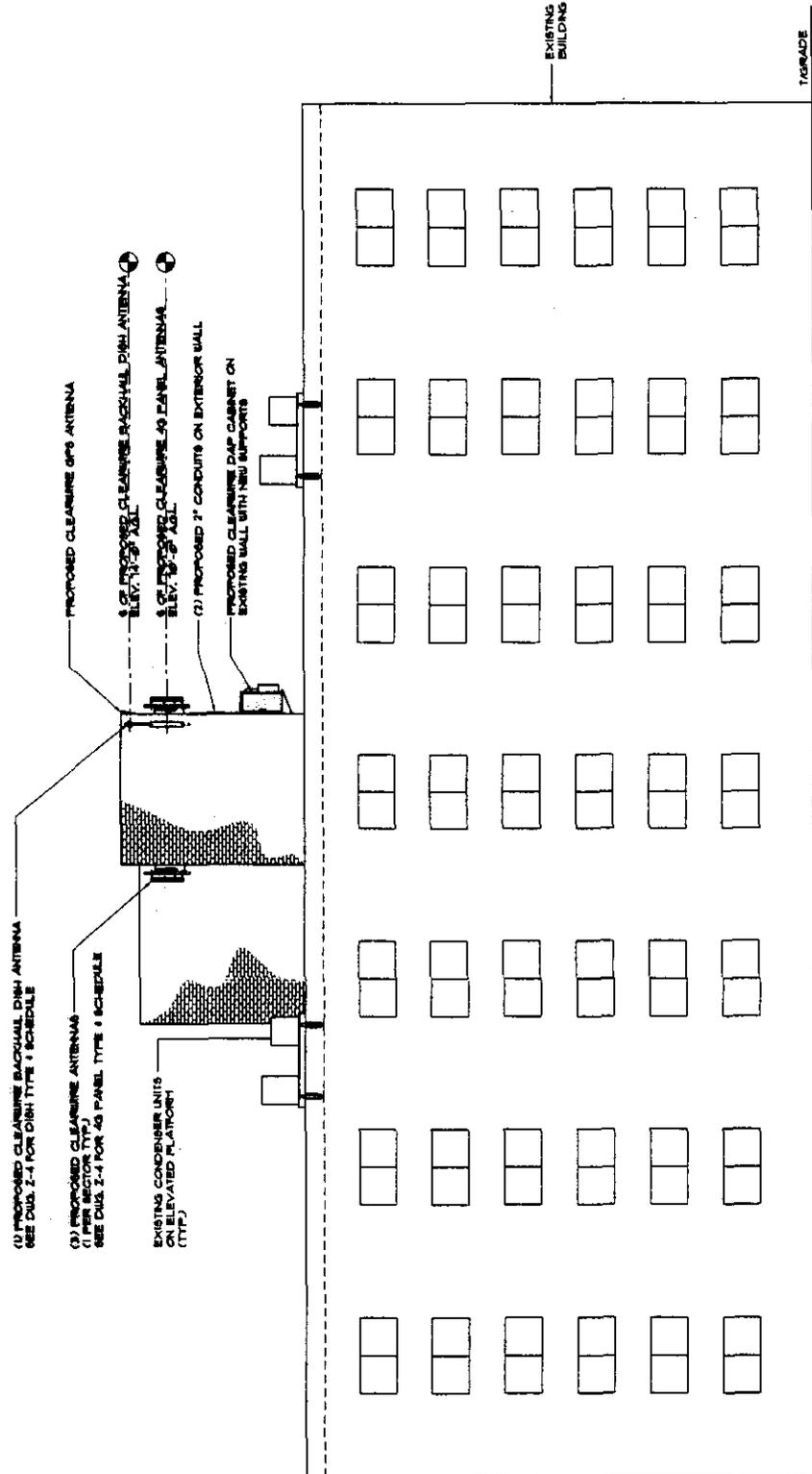
SITE NAME  
**WA33XC929 (WIMAX)**

SITE NUMBER  
**DC-W5H5881-B**

SITE ADDRESS  
**1800 PARKWAY ONE  
RESTON, VA 20190**

SHEET NAME  
**SITE ELEVATION**

SHEET NUMBER  
**Z-3**



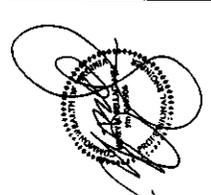
**SITE ELEVATION**  
SCALE: NTS

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MEANS, ELECTRONIC OR MECHANICAL,  
INCLUDING PHOTOCOPYING, RECORDING,  
OR BY ANY INFORMATION STORAGE  
RETRIEVAL SYSTEM, WITHOUT THE  
WRITTEN PERMISSION OF PULLERTON  
ENGINEERING CONSULTANTS, INC.

DESIGNED BY:	PD
APPROVED BY:	PD
DATE:	12/15/09
DESCRIPTION:	2010S
NO:	04



DATE BORN: WA33XC929 (WIMAX)

SITE NAME: DC-W5H5881-B

SITE ADDRESS: 1800 PARKWAY DR RESTON, VA 20190

SHEET NAME: ANTENNA DETAILS

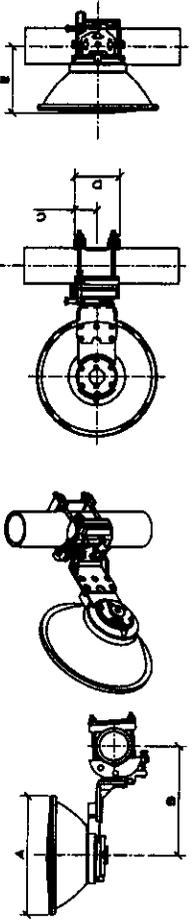
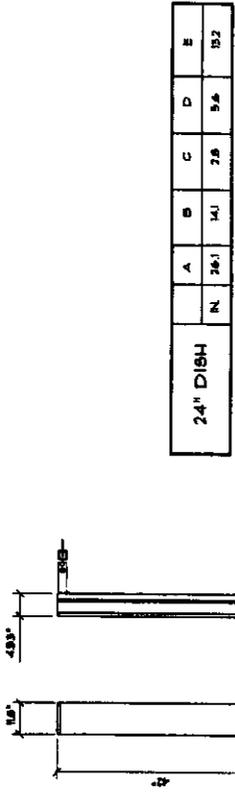
SHEET NUMBER: Z-4

SEC	ANTENNA TYPE	TECH	QTY	HEIGHT	WIDTH	DEPTH	COLOR	TRK	ANTENNA CODE
1	4G	4G	2	1/2	1/2	1/2	PURPLE	YB	TH/ROD
2	4G	4G	2	1/2	1/2	1/2	ORANGE	YB	TH/ROD
3	4G	4G	2	1/2	1/2	1/2	ORANGE	YB	TH/ROD

**4G PANEL ANTENNA & CABLE SCHEDULE**

DISH ID	MODEL NO.	DISH TYPE	DISH DIA (FT)	ASSTH (CM)	FREQ (MHz)	CHM #	CABLE GTY	CABLE SIZE	CABLE LENGTH (FT)	RADIO TYPE	COLOR CODE	S END ANTE ID NUMBER
DISH 1	ANORON VALP17-28	HIGH PERFORMANCE	3	TBD	28	14	2	LYR-600	10	HD 1P	ORANGE	TBD

**BACKHAUL DISH ANTENNA & CABLE SCHEDULE**

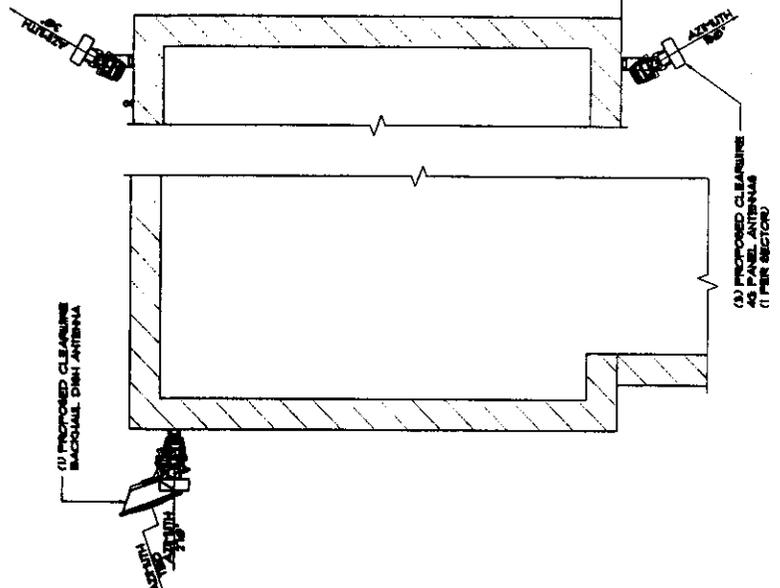


**4G/BACKHAUL DISH ANTENNA DETAILS**

SCALE: NTA

ANTENNA TYPE

(P) 4G	(P) BH
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**PROPOSED ANTENNA CONFIGURATION**

SCALE: NTA



