

ATTACHMENT 1

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GENERAL STATEMENT OF PUBLIC NEED

The proposed facility in northwestern Ridgefield will provide reliable municipal emergency and wireless communications services to a large area of the Town including State Route 116/North Salem Road, Ridgebury Road, Bennetts Farm Road, Old Stagecoach and other local roads in northwestern Ridgefield. The proposed facility will also provide reliable service to several public schools and public recreation areas including the High School, Scotts Ridge Middle School, and Barlow, Scotland and Ridgebury Elementary Schools. The facility is needed in conjunction with other existing and proposed facilities for the Town, AT&T and other wireless carriers to provide reliable wireless services to the public that are not currently provided in this part of the State. Attached is a Radio Frequency Engineering Report with coverage plots depicting the "Current Coverage" provided by AT&T's existing facilities in this area of the state and "Proposed Coverage" as predicted from the proposed facilities together with existing coverage from adjacent sites. Additional statistics regarding the overall area, population and roadway miles of expanded coverage in the community are included in AT&T's report. Also attached are letters and statements of need from Town of Ridgefield police, fire and consultants supporting the Town's emergency communications network.



RADIO FREQUENCY ENGINEERING REPORT

Proposed Ridgefield, CT Wireless Facility - S1855 - Ridgefield, CT



Prepared by:

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Revision Date:

October 07, 2013

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Overview

This document is provided in support of AT&T's proposal to operate a ground mounted, wireless telecommunication facility in Ridgefield, CT.

This document addresses AT&T's need for the proposed facility and validates that there are no other existing structures that meet AT&T's coverage objective for this area. The proposed facility located at Ledges Road in the town of Ridgefield at a proposed antenna centerline height of 150 feet above ground level will best address the coverage objective and provide the needed interconnectivity to AT&T's existing neighboring sites and surrounding communities.

Introduction

As enabled under its Federal Communications Commission ("FCC") Licenses, AT&T seeks to design its wireless network to provide reliable and adequate wireless services to its customers, whether those customers are on the street, in a vehicle, or in a building. Providing reliable and adequate service to its customers in each context is critical for AT&T to provide the quality of wireless service that customers demand, and to meet objectives of Congress that a robust, competitive and low cost wireless communications capacity be developed to serve the entire nation.

In order to build out its network and meet customer demand for voice and data services, AT&T must have in place a system of low power "cell sites" to serve portable wireless communication handsets and mobile telephones. A typical cell site, such as the one proposed, consists of antenna mounted to a building, tower, church or other structure. The antennas are connected to radio operating equipment housed at or near the structure.

To maintain effective, reliable and uninterrupted service, there must be a continuous series of cell sites located within close proximity to each other so as to overlap in a system comparable to a honeycomb pattern. If there is no cell site available to accept/receive the signal, network service to the mobile telephone/data service will terminate involuntarily. Accordingly, the overlap of coverage is necessary for the signal to transfer from one cell to another cell site seamlessly and without involuntary termination.

A number of factors determine the distance between the cell sites, including, but not limited to, topography, physical obstructions, foliage, antenna height, operating frequency and line-of-site.

Coverage Objective

AT&T currently has a couple of existing facilities in Ridgefield that serve some parts of the town, with additional coverage provided by AT&T cell sites from neighboring town of Danbury. Map 1, titled, "AT&T Current Coverage at Ridgefield, CT", is a propagation plot that depicts current coverage at Ridgefield and the neighboring towns. In Map 1 Western part of Ridgefield has marginal or very poor

coverage and areas where there is no coverage at all. It also shows that there is inadequate coverage overlap between existing sites CT5054, CT5069, CT5244 and CT2123.

In the map, “green” (=>-74 dBm) represents “in-building” coverage which allows for signal penetration losses (solid walls, partitions, etc.) of 10 dB. Color “yellow” represents “in-vehicle” (=>-82 dBm) which takes into account 5 to 8 dB of vehicle penetration attenuation.

AT&T determined that significant coverage gaps exist particularly in the following roads:

- Ledges Rd., Ridgefield, CT
- Ridgebury Rd., Ridgefield, CT
- North Salem Rd., Ridgefield, CT
- Rt. 116, Ridgefield, CT
- Bennetts Farm Rd., Ridgefield, CT
- Old Stagecoach Rd., Ridgefield, CT
- Bob Hill Rd., Ridgefield, CT
- Mamasasco Rd., Ridgefield, CT
- Old Sib Rd., Ridgefield, CT

Improving the coverage on above mentioned roads would not only benefit commuters but also provides better signal penetration on houses and other establishments within the area as well. Map 2, titled, “AT&T Proposed Coverage at Ridgefield, CT with S1855 @ 150' AGL”, shows the AT&T coverage at Ridgefield with the proposed facility turned on. Comparing Map 1 and Map 2, clearly shows the roads mentioned above that will have coverage after adding the proposed site. The coverage area also includes several town schools including the high school, one of the middle schools and several elementary schools in the northwest part of the community which are active places of public assembly and include numerous athletic fields. This would mean better quality and uninterrupted service for subscribers travelling between these roads as well as better signal penetration for houses, business establishments, etc. The following tables will show the area and population in this area that will have service from the proposed facility.

Table 1 below shows the area analysis for current and proposed coverage. AT&T currently covers 5.851 square miles of Ridgefield and the proposed site will cover an additional 5.429 square miles, a gain of 92.79% relative to current coverage which also equates to 15.61% of the total area of Ridgefield, CT.

Area Coverage (sq mi)					
Ridgefield Total Area	Area covered by existing sites (=> -82 dBm)	Area not covered (< -82 dBm)	Area that will be covered with the proposed site (=> -82 dBm)	Remaining Area not covered (< -82 dBm)	Proposed Area Gain
34.79	5.851	28.939	11.28	23.51	5.429

Table 2 below shows the population analysis (2008 Census Block Data) for current and proposed coverage. AT&T currently covers 4,745 of Ridgefield population and the proposed site will cover an additional 5,213, a gain of 109.86% relative to population currently covered which also equates to 18.37% of Ridgefield total population.

Population Coverage (2008 Census Block Data)					
Ridgefield Total Population	Population covered by existing sites (=> -82 dBm)	Population not covered (< -82 dBm)	Population that will be covered with the proposed site (=> -82 dBm)	Remaining Population not covered (< -82 dBm)	Proposed Population Gain
28,379	4,745	23,634	9,958	18,421	5,213

Table 3 below shows the roads that will be covered by proposed site with average daily traffic data available from CT DOT website.

Street Name	Average Daily Traffic (2012)
Ridgebury Rd., Ridgefield, CT	11,200
North Salem Rd., Ridgefield, CT	9,900
Rt. 116, Ridgefield, CT	3,400
Bennetts Farm Rd., Ridgefield, CT	1,900
Old Stagecoach Rd., Ridgefield, CT	1,500
Bob Hill Rd., Ridgefield, CT	200

Table 4 below includes AT&T's existing surrounding sites.

Site ID	Longitude	Latitude	Address	Town	State	Structure Type	Antenna
							Centerline (ft)
CTV2123	-73.49936	41.281936	10 CATOONAH STREET	RIDGEFIELD	CT	MONOPOLE	58
CTV2133	-73.465471	41.35952	MOSES MOUNTAIN	DANBURY	CT	SELF SUPPORT	68
CTV2156	-73.526352	41.393239	119 MILL PLAIN ROAD	DANBURY	CT	ROOFTOP	50
CTV5054	-73.513299	41.375092	900 RIDGEBURY ROAD	RIDGEFIELD	CT	ROOFTOP	39
CTV5068	-73.486899	41.282492	95 HALPIN LANE	RIDGEFIELD	CT	UTILITY	115
CTV5069	-73.471099	41.336692	66 SUGAR HOLLOW ROAD	DANBURY	CT	MONOPOLE	108
CTV5070	-73.472499	41.377192	83 WOOSTER HEIGHTS ROAD	DANBURY	CT	ROOFTOP	64
CTV5072	-73.514999	41.388592	18 OLD RIDGEBURY ROAD	DANBURY	CT	ROOFTOP	106
CTV5244	-73.472499	41.312992	845 ETHAN ALLEN HIGHWAY	RIDGEFIELD	CT	STEALTH STRUCTURE	67

Summary

The significant coverage gap seen on Map 1, demonstrates the need for an additional site within the area. It clearly shows that current coverage does not provide sufficient coverage overlap between the sites within Ridgefield. In other words, existing sites and facilities will not cover the gap in AT&T's service in this area of Ridgefield.

Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate.



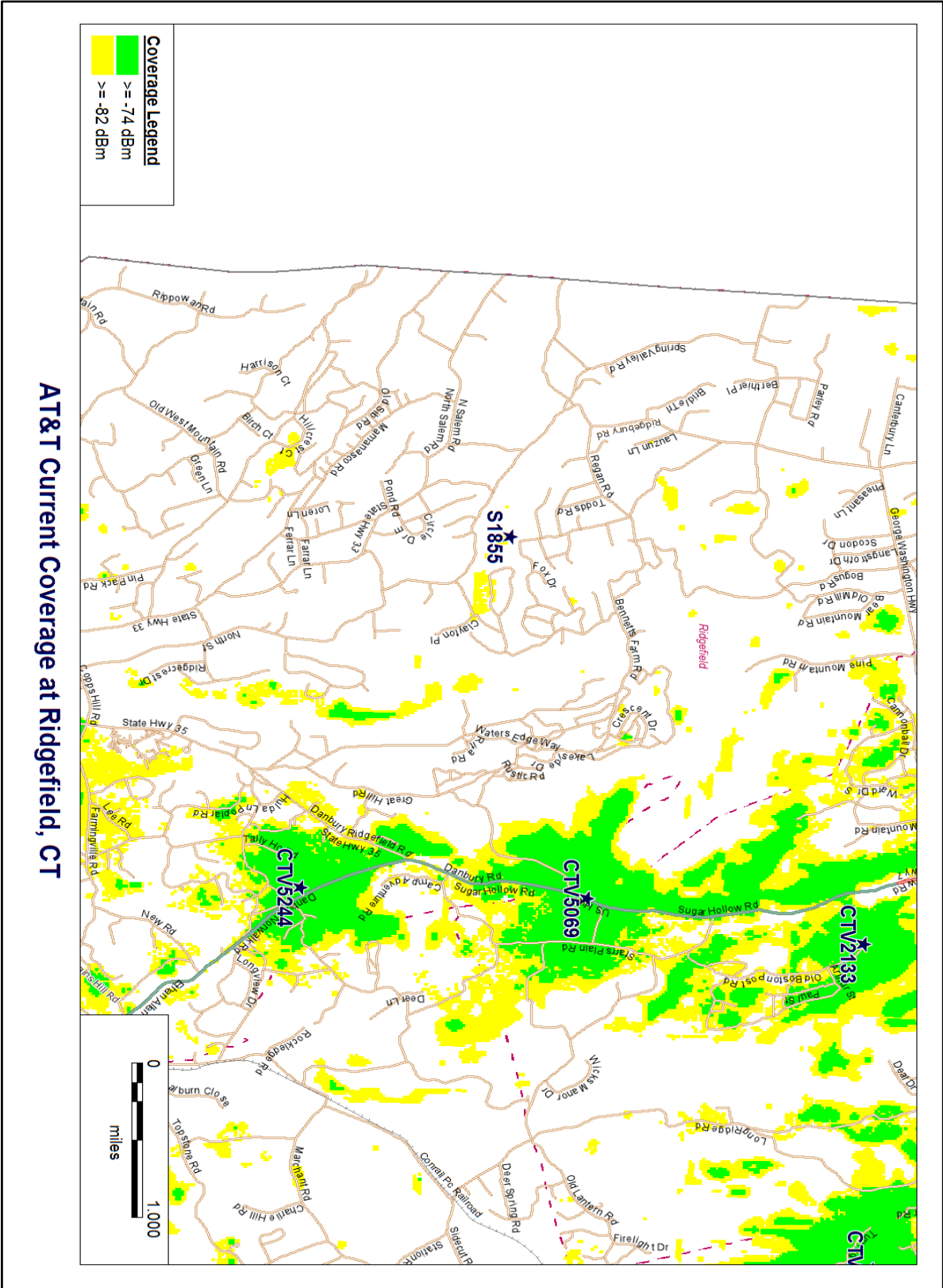
 Michael Lawton
 SAI Communications

October 07, 2013

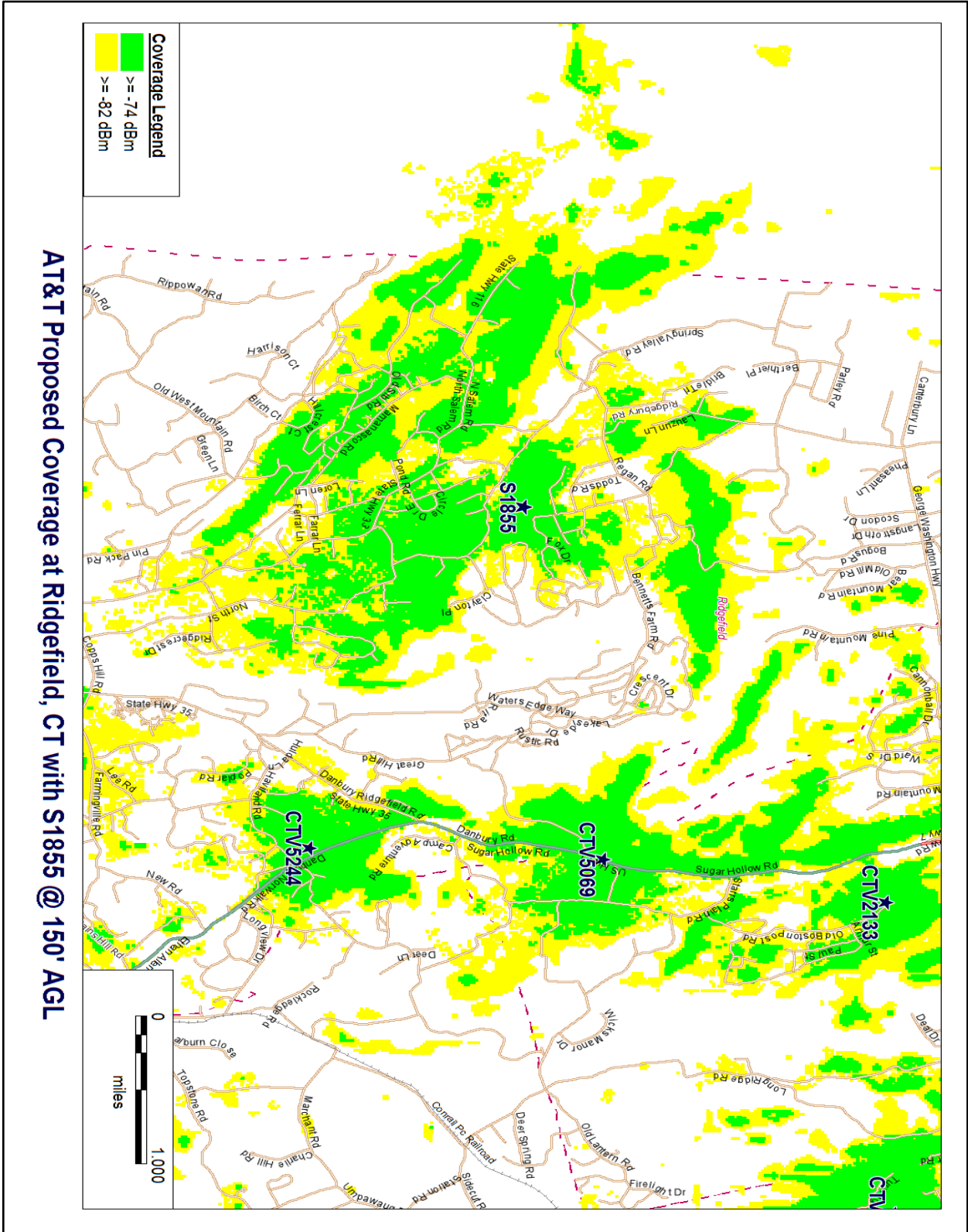
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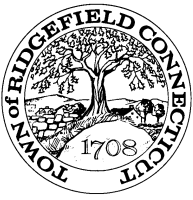
Attachments

Map:1



Map:2





Town of Ridgefield

FIRE DEPARTMENT

6 Catoonah Street
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Office: (203) 431-2726
Fax: (203) 431-2562
www.ridgefieldct.org

Raymond Vergati
Site Development Manager
Homeland Towers
22 Shelter Rock Lane, Building C
Danbury, CT 06810

September 26, 2013

Dear Raymond,

As the Fire Chief and Director of Emergency Management for the Town of Ridgefield, I am writing this letter to express my full support for the installation of a cell tower in the Ridgebury section of Ridgefield, Connecticut.

For years the community has struggled with cellular communications in the Ridgebury section of Town and public safety agencies have remained concerned about poor cell coverage for the purpose of 911 calls. As residents and responders alike rely more heavily on cell phone communications it is imperative that reliable cell communications be available throughout the Town. The installation of a cell tower in the north end of Town will greatly improve our ability to provide rapid emergency services to those placing 911 calls via cell phones. In addition, our ability to transmit critical medical data directly to Danbury Hospital via cell modems will improve.

We are also please that you have committed to providing the necessary space on the cell tower and height required for future public safety two-way radio equipment. This commitment will help ensure that public safety responders are kept safe during emergency response.

Sincerely,

Heather L. Burford
Heather L. Burford

UTILITY COMMUNICATIONS, INC.

920 Sherman Avenue • Hamden, Connecticut • 06514
Phone: (203)287-1306 (800)443-1306 Fax: (203)248-9167

October 11, 2013

Mr. Ray Vergati
Homeland Towers
22 Shelter Rock Ln. Bldg. C
Danbury, CT 06810

Dear Mr. Vergati,

As you are aware my company has been responsible for the installation and service of the present public safety wireless system utilized by the Ridgefield Police Department, Fire Department along with other agencies in the town for many years. We have been engaged to oversee and protect the town's interests and make recommendations related to Homeland's proposed tower project and how it could benefit and impact the public safety wireless communications systems in Ridgefield, CT.

Our recommendation to the Town of Ridgefield is to install various antennas on the proposed tower which will support the communication technologies utilized today and also the next generation of RF systems that will be installed in the future. Present RF coverage will be dramatically enhanced when the town's antenna systems are installed. In addition to the town's antennas being placed on the tower, Homeland Towers has offered enough space within the compound for a shelter and generator pad.

It has been our recommendation to the town that the proposed tower by Homeland Towers on Ledges Road will meet the requirements that have been identified and will only benefit the public safety wireless network in place today and moving forward to the future. Public safety is improved by the power of mobile communications and is a critical tool for first responders in emergency situations. Increased mobile communications coupled with the town's public safety enhancement is all the more reason we support this project in Ridgefield.

In short, residents of, and visitors to Ridgefield need to stay connected in case of emergencies, which is why ongoing network upgrades and expansions of mobile communications are so important.

Utility Communications supports this proposed infrastructure as it will certainly enhance the town's public safety communications system and will allow for a critical link between first responders and the public.

Sincerely,


Robert J. Manfield Jr.
Vice President
Utility Communications, Inc.



TOWN OF RIDGEFIELD
Police Department

October 25, 2013


Rudy Marconi
First Selectman

Board of Selectmen
Town of Ridgefield

Dear First Selectman Marconi and Board of Selectman:

I am writing this letter in support of the proposed installation of a cell tower off of Ledges Road.

The installation of a cell tower at this location would greatly enhance the Ridgefield Police Department's mobile technological abilities by increasing the signal strength for our mobile environment. More importantly, this cell tower would give the Community of Ridgefield an improved cellular performance in an area of Ridgefield which requires this need. The experiences of three super storms which struck Ridgefield solidified the need of this tower for police/citizen communication in an emergency. Additionally, the proposed Homeland Tower would augment the Ridgefield Police Department's existing radio system and planning for future communications for the Department.



John S. Roche
Chief of Police

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