


**STAFF DRAFT – NOT APPROVED BY AGENCY**  
**THIS IS A TWO-SIDED DOCUMENT**

<div style="display: flex; align-items: center;"><div><b>Adirondack Park Agency</b></div></div> <p style="text-align: center; margin-top: 10px;">P.O. Box 99, 1133 NYS Route 86 Ray Brook, New York 12977 Tel: (518) 891-4050 Fax: (518) 891-3938 <a href="http://www.apa.ny.gov">www.apa.ny.gov</a></p>	<div style="text-align: center; padding: 10px;"><b>APA Project Permit</b> <b>2016-0048</b></div> <div style="padding: 10px;">Date Issued: ????</div>
<p>In the Matter of the Application of</p> <p><b>SARATOGA COUNTY</b></p> <p>for a permit pursuant to §809 of the Adirondack Park Agency Act</p>	<p>To the County Clerk: This permit must be recorded on or before _____. Please index this permit in the grantor index under the following names:</p> <ol style="list-style-type: none"><li><b>1. Saratoga County</b></li><li><b>2. Roger Q. Scott</b></li></ol>

**SUMMARY AND AUTHORIZATION**

Saratoga County is granted a permit, on conditions, authorizing a 15 foot extension to a 90 foot existing tower greater than 40 feet in height a involving a major public utility use in an area classified Rural Use by the Official Adirondack Park Land Use and Development Plan Map in the Town of Edinburg, Saratoga County.

This project may not be undertaken, and no transfer deed shall be recorded, until this permit is recorded in the Saratoga County Clerk's Office. This permit shall expire unless so recorded on or before \_\_\_\_\_ in the names of all persons listed on the first page hereof and in the names of all owners of record of any portion of the project site on the recordation date.

This project shall not be undertaken or continued unless the project authorized herein is in existence within four years from the date the permit is recorded. The Agency will consider the project in existence when the 15 foot extension has been constructed and the new antenna has been installed on the existing tower.

Nothing contained in this permit shall be construed to satisfy any legal obligations of the permittee to comply with all applicable laws and regulations or to obtain any governmental approval or permit from any entity other than the Agency, whether federal, State, regional or local.

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to undertake the authorized project or subdivision, nor does it authorize the impairment of any easement, right, title or interest in real or personal property held or vested in any person.

### **AGENCY JURISDICTION**

The Agency retained jurisdiction over the project site pursuant to Condition #4 in Agency Permit 2006-220, which stated “any future new land use and development on any of the six sites or other fee, lease or easement areas in the Adirondack Park that are part of the project site, including, but not necessarily limited to the cutting of trees, the construction of any new communications towers, or the addition of any new antennas, parabolic dishes or other equipment to the existing and authorized towers, shall require prior Agency review and approval in the form of a new or amended permit.” Permit 2006-220 involved a major public utility use, a structure over 40 feet in height, and fill in a wetland, all Class A regional projects requiring an Agency permit pursuant to § 810(1)(d)(1)(b),(5) & 18 of the Adirondack Park Agency Act and a regulated activity requiring a wetlands permit pursuant to 9 NYCRR §§ 578.2 and 578.3(n)(3)(i).

### **PROJECT SITE**

The project site is a 1600 square-foot (0.04± acres) portion of a 72.3± acre property located on the east side of Military Road in the Town of Edinburg, Saratoga County, in an area classified as Rural Use on the Adirondack Park Land Use and Development Plan Map. The project site is a portion of a parcel identified on Town of Edinburg Tax Map Section 54, Block 1, as Parcel 4. The site is owned by Roger Scott pursuant to a deed from Roger Scott to Roger Scott, dated May 7, 2007, and recorded in the Saratoga County Clerk’s Office on May 22, 2007, under Instrument Number 2007-020147.

### **PROJECT DESCRIPTION AS PROPOSED**

The applicant proposed to extend an existing 90± foot tall monopole telecommunications tower on Fraker Mountain (known as the “Fraker Mountain tower”) to a maximum tower height of 105 feet. A five-foot lightning rod will be relocated to the top of the extended tower, increasing the total overall height to 110 feet above ground level (AGL). All existing tower infrastructure (whip antennas and a dipole array) will remain at their present respective mounting heights. A new 36-inch diameter microwave dish is proposed on the 15 foot tower extension, and will be located at a centerline mounting height of 100 feet AGL.

The project is shown on a set of plans (9 sheets) titled “Saratoga County, Fraker Mountain,” prepared by Infinigy Engineering of Albany, NY dated January 19, 2016. All plans are stamped “Final Plans, Adirondack Park Agency, P2016-48.” A reduced-scale copy of Sheet C5 is attached as part of this permit for easy reference. The original, full-scale maps and plans referenced above are the official plans for the project.

## **CONDITIONS**

### **BASED UPON THE FINDINGS BELOW, THE PROJECT IS APPROVED WITH THE FOLLOWING CONDITIONS:**

1. The project shall be undertaken as described in the completed application, the Project Description as Proposed and Conditions herein. All conditions in Permit 2006-220 remain in full force and effect except as modified herein. In the case of conflict, the Conditions control. Failure to comply with the permit is a violation and may subject the permittee, successors and assigns to civil penalties and other legal proceedings, including modification, suspension or revocation of the permit.
2. This permit is binding on the permittee(s), all present and future owners and lessees of the project site and all contractors undertaking all or a portion of the project. Copies of this permit and the site plan map(s) and plan(s) referred to herein shall be furnished by the permittee(s) to all subsequent owners or lessees of the project site prior to sale or lease, and by the permittee(s) or any subsequent owner or lessee undertaking construction to any contractors undertaking any portion of this project.
3. The Agency may conduct such on-site investigations, examinations, tests and evaluations as it deems necessary to ensure compliance with the terms and conditions hereof. Such activities shall take place at reasonable times and upon advance notice where possible.

### **Proposed Development**

4. The proposed project shall be undertaken as shown on the project plans referenced herein, and the 3 foot diameter microwave dish shall be located on the tower as shown on the plans, with the top of the tower to not exceed 105 feet AGL.

### **Review of Future Development**

5. Any future new land use and development on the project site involving the construction of any new communications towers or the addition of any new antennas, parabolic dishes, or other equipment to the authorized tower, shall require prior Agency review and approval in the form of a new or amended permit. Maintenance and/or "in-kind" replacement of the tower, antennas, simulated branching, equipment building and other appurtenant facilities authorized herein is allowed without a new or amended permit. Amendments to this permit may be processed by the Agency pursuant to an amendment request authorized by the tower owner/lessee.
6. No principal building shall be constructed on the project site without an Agency permit.

### **Visual/Open Space Impacts**

7. In order to minimize the visual appearance of the authorized microwave dish, all antennas, and support poles, including the authorized microwave dish shall be painted dark charcoal grey or black with a non-reflective flat or matte finish.
8. No portion of the tower, both existing and the extension authorized herein, shall contain any lighting without prior Agency review and approval in the form of a new or amended Agency permit.

### **Documentation of Construction**

9. The Agency shall be provided with color photographs (both 8x10 prints and digital files) showing the completed tower, antennas, and equipment compound within 30 days of project completion. Photographs shall be taken at the project site and from Location #4 on the water of Sacandaga Lake at a distance of 1 mile. At the project site, photographs showing the entire completed project shall be provided. From photostation #4, photos shall be taken using 55mm and 85mm (35mm film equivalent) lenses. All photographs must clearly identify the date the picture was taken, the location of the photograph, and the lens size employed. Compliance photographs shall be taken on a clear day with little cloud cover.
10. Within 30 days of receipt of the photos, the Agency shall provide written confirmation of permit compliance or shall specifically state the reason(s) for non-compliance. In the event of non-compliance, the permittee shall within 45 days submit a plan for Agency review and approval to modify the structure and achieve compliance. Such plan shall also include a good faith estimate regarding the time necessary to undertake such changes upon final approval by the Agency.

### **Discontinuance of Use**

11. If the Fraker Mountain tower is no longer necessary for the County's emergency communication system, the tower and associated equipment shall be removed within two years, unless an Agency permit for a change in use is issued within that two year period. The existence of the approved tower for emergency communication purposes will not establish any presumption that such tower is appropriate for any other, non-emergency use.
12. If there is a voluntary discontinuance other than by reason of equipment failure or unavailability for 90 days of the use of any of the antennas approved for this project (whip or microwave), or by any other Agency permit for any of these sites, any such antenna and associated structural supports shall be removed within 30 days thereafter.
13. If the County seeks to employ any material change in technology or equipment for its emergency communication system, it shall notify the Agency within 30 days, and apply for an appropriate amendment to the permit. If there is new technology that can be

employed which will lessen the height of or allow for the removal of any of the towers approved herein, the County shall notify the Agency and shall consider a plan to amend the system to lessen the tower heights or remove such towers within a reasonable time.

14. The microwave dish authorized herein shall be located as shown on the plans and shall not exceed the overall mounting height on the tower extension. Height shall be measured from the existing ground surface at the base of the tower to the top of the tower, including any antennas.

## **FINDINGS OF FACT**

### **Background/Prior History**

1. The 1600 square-foot project site is a portion of the 72.3± acre Fraker Mountain site described in Agency Permit 2006-220, re-issued on December 6, 2006.
2. The franchise area for the County-wide Emergency Services system is all lands of Saratoga County within the Park. The County has been licensed by the FCC to provide 800 MHz radio service throughout Saratoga County, and maintains various other licenses within the VHF public safety spectrum. The portion of the County located within the Adirondack Park can be generally described as all of the land area in the Towns of Day, Edinburg and Hadley, as well as significant portions of the Towns of Providence and Corinth. The permanent population of these Towns within the Park is approximately ±10,000; in the summer, the population of the area described above increases significantly. The overall system within the Park involves six sites totaling about 130± acres.
3. As part of Project 2006-220, Saratoga County originally sought approval for a 105 foot tall tower on the project site. During the November 2006 Agency Board's deliberations, the approved height of the tower was reduced to 90 feet AGL. Since issuance of that permit, Saratoga County has experienced and documented significant communications outages in maintaining an adequate level of service for the existing tower infrastructure, and is seeking to extend the height of the tower to provide improved communications between the Fraker Mountain and Spruce Mountain towers.

### **Existing Environmental Setting**

4. The project site is located on the east side of Military Road in the Town of Edinburg, and is located within the Rural Use land use area on the Adirondack Park Land Use and Development Plan Map. The 72.3± acre Fraker Mountain site is an irregularly shaped parcel with about 440 feet of frontage on Military Road, and extends southeasterly from the road about 3,760± feet to the top of Fraker Mountain. The top of Fraker Mountain reaches an elevation of 1,598 feet msl. Soils on the site are in the Becket, Hollis-Paxton-Rock outcrop and Hollis-Rock outcrop Associations. Becket Soils are deep, well- drained, moderately coarse textured soils developed in glacial till on uplands. The Becket Soils are located on the eastern portion of the site within 2,000± feet of the road. Hollis-Paxton and Hollis Rock outcrop soils are shallow, somewhat

excessively drained, moderately coarse textured soils on steep hillsides in glaciated uplands with bedrock at or near the surface. These soils are located on an upper portion of the mountain where the slopes are steep, at 15 to 35 percent. Wetlands are present on the 72.3± acre site, but are not located on the project site for this permit. Trees on the 72.3± acre site are 70± feet in height. An existing private dirt road extends into the site from the Military Road. There is an existing camp on the site adjacent to the private road.

5. The County provides an emergency services radio system intended to cover 95% of the County's population. The portion of the system servicing the Park includes eight sites: two sites outside of the Park (Providence and Mount McGregor) and six sites within the Park (Corinth School, Spruce Mountain, Lake Luzerne, Lakeview, Conklingville, and Fraker Mountain). The existing system includes: two-way emergency radio communications (mobile and fixed base), dispatch functions, personnel alerting and data transmission. Mobile units are in vehicles, portable units are hand-held, and dispatch functions occur from the County's Communications Center in Milton. Other than the improvements proposed herein, no additional tower sites are proposed.
6. As originally authorized in Permit 2006-220, the project site contains the 88.42 foot tall Fraker Mountain monopole tower. The infrastructure authorized for the tower included six vertical whip antennas, two half-parabolic dishes and a five foot lightning rod extending to a maximum height of 106 feet AGL. The Fraker Mountain tower was to provide both 800 MHz and VHF radio coverage and a 960 MHz microwave link to Lakeview and the Spruce Mountain tower.

Pursuant to the application materials, the actual installed tower infrastructure is comprised of three vertical whip antennas and one omni-directional dipole array. No grid dishes were installed, and the project site presently relies solely on a commercial T-1 copper land-line for communication between the other towers in the system. Although authorized to be extended to a height of 106 feet AGL, the existing lightning rod was only extended to a height of 102 feet AGL. In the fall of 2015, a 36 inch diameter solid microwave dish was temporarily installed at a height of 90 feet AGL on the existing tower for testing purposes. This temporary addition on the existing tower was to evaluate whether installation of a microwave dish at the maximum mounting height of the tower would improve the level of service for communications between the Fraker Mountain and Spruce Mountain towers. As a result of that temporary installation, the County determined the 90 foot mounting height of the microwave dish provided only moderate increase in performance due to interference from topography and existing vegetation, and reliance on the T-1 land line would still be necessary. Prior to submission of its application to the Agency, the microwave dish was removed. As a result of that preliminary evaluation involving installation of the microwave dish, Saratoga County is seeking a 15 foot extension to the tower. With a mounting height of 100 feet AGL of the microwave dish on the tower, topographic and tree interference will be eliminated, and the microwave dish will provide a reliable communications link between the Fraker and Spruce Mountain towers. The height increase is within the structural capacity of the existing tower which was designed to allow for future expansion up to a 110 foot height AGL.

7. To provide system interconnectivity between towers, the Fraker Mountain tower has relied on a T-1 line (commercial telephone line) from the tower site to the existing telephone lines on Military Road and throughout the Town of Edinburg. The existing T-1 line is antiquated, features old copper connections, and outages are often experienced during rain events. In the Spring of 2015, severe outages were experienced due to rain events and failures in the T-1 line. The T-1 line was repaired, but was considered a short term solution to a larger issue.

The proposed microwave dish alleviates reliance on the T-1 line, and provides communication between Fraker and Spruce Mountain towers. This link was originally proposed in the 2006 project utilizing a parabolic style dish, but that equipment is no longer utilized for communications in public safety networks. Advances in microwave technology have allowed for a smaller 36 inch diameter dish to be as effective as a 72 inch diameter dish as originally proposed in APA Project 2001-245. Project 2001-245 was directed to a public hearing by the Agency at its August 12, 2005 meeting and later withdrawn pursuant to a letter dated June 15, 2006.

Saratoga County has sought to improve the T-1 line; however, all upgrades to date have only yielded minor improvements in reliability, and do not meet the standards for public emergency communications. During times of outages, the Saratoga County Sheriff's Department, and particularly the Town of Edinburg Volunteer Fire Department and Ambulance Corps have been unable to communicate with other system users and the County Dispatch Center. The standard for public emergency communications involves a coverage goal of "95% coverage and 95% reliability." Placement of the microwave dish at 100 feet AGL on the tower extension will meet the standard.

8. No additional improvements or alterations to the access road, commercial electric services, site compound, equipment shelter, or fence are proposed as part of the proposed project involving the 15-foot extension to the existing Fraker Mountain tower. In addition, no changes to the vegetative cutting and easement provisions established in Permit 2006-220 are authorized as part of this proposal, and those conditions remain in effect.

### **Alternatives**

9. Other than the existing T-1 copper land line which presently serves the existing tower, there are few alternatives which could mitigate the need for extension of the existing tower. Alternatives which were evaluated included:
  - No-action: This alternative would leave Saratoga County and local first responders vulnerable to continuing communication failures that could potentially have serious implications in the event of a large scale emergency or disaster.
  - Repair of the existing T-1 copper land line would be a temporary measure, and would likely contribute to future problematic reliability.
  - Due to the lack of redundant fiber optic communication in the Town of Edinburg and the Adirondack region, fiber optic cable is not available to serve the existing tower site. Additionally, it is not cost effective for the County to undertake an upgrade of the regional commercial land line telephone system. If an upgrade

- were sought by the County, the cost would be extensive, and the timeframe for improvements to that line would be 3 to 5 years – dependent upon the telephone company. The County does not view this as a practical investment of its resources, since telephone line service provides the least advanced (slower) form of telecommunications technology, and would provide for limited advancements over time.
- No commercial wireless service exists in the northern portion of Saratoga County and the southern Adirondacks for the County to use as a secondary option for communications. The County has pursued investigations into this alternative, but the discussions have not yielded a cellular/wireless carrier to date.
  - Since issuance of Permit 2006-220, there are no other tall structures in or around the Fraker Mountain service area that could be utilized as an additional structure to supplement the existing radio system on Fraker Mountain. Construction costs for installation of a new intermediate tower site to improve communications between the Fraker Mountain tower site and Spruce Mountain tower site would greatly increase costs relative to seeking a 15 foot extension on the existing Fraker Mountain tower.
  - During its review of Saratoga County's 2006 project, Agency staff evaluated whether concealment of the then-proposed tower would be a viable alternative. As part of its recommendation to the Board, staff did not recommend a simulated tree tower since a monopole would be less visible, and the pine tree would be considered out of character with the predominantly deciduous tree cover located on Fraker Mountain. Accordingly, staff is not recommending that an alternative involving concealment branching for the existing tower and proposed tower extension be considered as part of its recommendation for approval of the project.

#### **Public Notice and Comment**

10. The Agency notified all adjoining landowners and those parties as statutorily required by § 809 of the Adirondack Park Agency Act and published a Notice of Complete Permit Application in the Environmental Notice Bulletin. No comments have been received.

#### **Pertinent Requirements and Conditions of Local Program**

11. The Town of Edinburg administers an Agency-approved local land use program. In a letter dated August 24, 2016, the Agency sought consultation with the Town to determine the scope of Town jurisdiction, any advice regarding the project's conformance to dimensional and other technical requirements of the Town's land use program, any restrictions and/or prohibitions that may apply, and any other comments the Board may share. Pursuant to a letter dated September 18, 2016, the Chairman of the Town of Edinburg Planning Board advised the Agency that the Planning Board unanimously supports the proposed project and did not state any concerns.



### **Other Regulatory Permits and Approvals**

12. The tower authorized herein is licensed by the Federal Communications Commission (FCC).

### **PROJECT IMPACTS**

#### **Wetlands, Water Resources, and Land Resources**

13. No impacts to wetlands, water resources, or land resources will occur as a result of the proposed project.

#### **Visual Analysis**

14. Mapping showing areas of existing visibility based upon topography for the existing tower were submitted with the application materials. A second visibility map was submitted showing areas of potential visibility based upon topography for the proposed project. Comparison of these two maps show:
- The existing visibility map shows the area of closest visibility to the tower as seen from Sacandaga Lake is 1 1/2 to 2 miles east and southeast of the tower site. Additional areas of visibility are present and range from 2 miles to 5 miles from the tower site.
  - The potential visibility map shows an area of increased visibility from the modified tower proposal occurring from 1 to 1 1/2 miles east and southeast of the tower site on Sacandaga Lake. Visibility of the modified tower from 2 to 5 miles from the tower site is identical.

In May 2015, the applicant's authorized representative conducted a visual analysis of the proposed tower extension. The analysis included a balloon test to identify the tower location, height and actual areas of visibility, and photographs of the balloon test.

15. Presently, the existing authorized tower is visible and skylit as seen from Sacandaga Lake. Based upon the May 2015 balloon test which confirms the potential visibility map, increased visibility of the tower as seen from Sacandaga Lake occurs from a distance of 1 mile to 1 1/2 miles east/southeast from the tower site in limited areas. There was no increase in visibility of the tower as seen from any other vantage points surrounding the tower site outward to a 5 mile radius. The proposed tower extension will constitute a minor increase in height above the tree canopy compared with the existing tower as seen at a distance of one mile.

#### **Towers Policy**

16. On February 15, 2002, the Agency adopted a policy titled "Policy on Agency Review of Proposals for New Telecommunications Towers and Other Tall Structures in the Adirondack Park" (Towers Policy). This policy is intended to protect aesthetic, open space and other resources, while providing for telecommunications systems consistent with federal law.

### **Compliance with the Agency's Towers Policy**

The existing Fraker Mountain tower is located on a mountain ridgeline overlooking the Sacandaga Lake within a site containing predominantly mature deciduous trees. The existing monopole structure is screened by 70± foot tall trees surrounding the tower. The existing equipment shelter and fencing are well screened by existing vegetation and is not visible from off-site locations. Presently, only the whip antennas, dipole array, and lightning rod are above the tree tops (skylit) and visible from certain vantage points on Sacandaga Lake, at mid to long-range distances. The existing tower and associated equipment are colored black or a dark gray to blend with the existing deciduous trees and skyline. Because of improvements in microwave technology since the prior approval, the proposed 36 inch diameter microwave dish is one-half the size of technology introduced 15 years ago. The proposed dish is reduced in height and bulk, and darker colors will assist with it blending in with the tower extension.

The proposed project will comply with the Agency's Towers Policy, taking into account the health and safety needs of the County to provide consistent and comprehensive emergency communications for the County's public safety network area inside the Adirondack Park. The proposed 15 foot extension to the existing tower will constitute a minor increase in visibility of an existing tower as seen from all significant potential public viewing points and as documented by simulation and other visual analysis methods.

17. As a result of Agency review of the project based upon the pertinent development considerations set forth in § 805(4) of the Adirondack Park Agency Act and applicable regulations, it has been determined that the project will not result in any undue adverse impacts on the Park's visual and open space resources because the proposed tower extension and microwave dish will not be more readily apparent as viewed from off-site locations, provided the tower, antennas, microwave dish, and support poles are painted dark charcoal grey or black with a non-reflective flat or matte finish.

### **Historic Sites or Structures**

18. The project as proposed and authorized herein will not cause any change in the quality of "registered," "eligible," or "inventoried" property as those terms are defined in 9 NYCRR Section 426.2 for the purposes of implementing § 14.09 of the New York State Historic Preservation Act of 1980.

- a. will be consistent with the land use and development plan;
- b. will be compatible with the character description and purposes, policies, and objectives of the Rural Use land use area;
- c. will be consistent with the overall intensity guidelines for the Rural Use land use area;
- d. will comply with the shoreline restrictions of § 806 of the Adirondack Park Agency Act; and
- e. will not have an undue adverse impact upon the natural, scenic, aesthetic, ecological, wildlife, historic, recreational or open space resources of the Park or upon the ability of the public to provide supporting facilities and services made necessary by the project.

PERMIT issued this                      day  
of                      , 2016

ADIRONDACK PARK AGENCY

BY:

Richard E. Weber III  
Deputy Director (Regulatory Programs)

STATE OF NEW YORK  
COUNTY OF ESSEX

On the \_\_\_\_\_ day of \_\_\_\_\_ in the year 2016, before me, the undersigned, a Notary Public in and for said State, personally appeared Richard E. Weber III, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that they executed the same in their capacity, and that by their signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Notary Public

REW:VY:MJG:slp