



Executive Director's Recommendation

Commission Meeting: November 5, 2014

PROJECT Communication Tower Installation Project Mount Weather Emergency Operations Center 19844 Blue Ridge Mountain Road Bluemont, Virginia, 20135	NCPC FILE NUMBER 7655
SUBMITTED BY United States Department of Homeland Security/ Federal Emergency Management Agency	NCPC MAP FILE NUMBER 2306.00(38.30)44122
REVIEW AUTHORITY --Federal Project in the Environs	APPLICANT'S REQUEST Preliminary and final approval of site and building plans
	PROPOSED ACTION Approve as requested
	ACTION ITEM TYPE Consent Calendar

PROJECT SUMMARY

The Department of Homeland Security (DHS) and Federal Emergency Management Agency (FEMA) have submitted preliminary and final site and building plans to construct a Department of Defense (DoD) communication tower at the Mount Weather Emergency Operations Center (MWEOC) in Western Loudoun County, Virginia. The communication tower will be located approximately 75 feet from the facility fence line, on Mechanics Avenue adjacent to Building 315. The tower will be built within the footprint of two existing 55-foot tall water towers and a small pump building (Building 311) which are scheduled for demolition. The total area of the site for construction is approximately 700 square feet.

The tower will consist of five bolted steel sections, approximately 8-foot wide by 10-foot tall, two 16-foot by 16-foot work area platforms, surrounded by safety handrails will be at the top of the tower, and a 10-foot diameter radome located on top of the upper platform. The total tower height will be 73 feet, including lightning rod. Two red Federal Aviation Administration (FAA) hazard lights will be positioned on the radome.

Future project additions include a generator shelter (approximately 500 square feet) to contain two emergency generators for the tower, and a fuel tank area (approximately 400 square feet). These future additions will also be built within the footprint of the existing water towers.

KEY INFORMATION

- The project supports the current mission of the facility, and does not change the land use of the MWEOC campus.
- Construction is expected to begin in November 2015 and be completed by the end of December 2015.

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- The project is not manned and will have no impact on current or projected work site employment. Access to the tower will be restricted using a ladder keep-out/lock-out mechanisms.
 - The proposed tower will require a 26 feet by 26 feet foundation with structural mat footing depth of approximately 4 feet. Existing underground utilities will be avoided.
 - The Radio Frequency (RF) Analysis Report concludes that given the planned site installation, action distances, the antenna height, and the ability to control RF transmission for maintenance, there is no anticipated hazard to personnel in the surrounding area.
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RECOMMENDATION

The Commission:

Approves the preliminary and final site and building plans for the Communication Tower Installation Project located at the Mount Weather Emergency Operations Center (MWEOC), for a period not to exceed to ten (10) years.

Notes that the Communication Tower Installation Project is required to comply with guidelines established by the Federal Communications Commission (FCC), the Federal Aviation Administration (FAA) and the Occupational Safety & Health Administration (OSHA) procedures, consistent with the Commission "Guidelines and Submission Requirements for Antennas on Federal Property in the National Capital Region."

PROJECT REVIEW TIMELINE

Previous actions	– None
Remaining actions (anticipated)	– None

PROJECT ANALYSIS

Executive Summary

Staff has analyzed the proposed communications tower installation project and finds that the project is not inconsistent with the Federal Elements of the *Comprehensive Plan for the National Capital*. The project entails the replacement of two 55-foot tall water towers with a 73-foot tall communication tower. The approximate height difference of the proposed vertical structure will be approximately 20 feet on an already disturbed site. In addition, the project will not add any

employees/parking to the campus; will not remove any existing vegetation; and will not adversely impact any off-campus views. Therefore, **NCPC staff recommends that the Commission approve the preliminary and final site and building plans for the Communication Tower Installation Project located at the Mount Weather Emergency Operations Center (MWEOC), for a period not to exceed to ten (10) years.**

Analysis

Staff has determined that the communication tower installation project will not impact other federal facilities or federal interests. Since this is a replacement of two vertical structures by one vertical structure with a smaller diameter and an approximate height difference of approximately 20 feet, staff determined that minimal changes will occur to the existing conditions, as the site is already disturbed. The project will not affect existing underground utilities.

Radiofrequency Radiation

The applicant provided a RF Safety Analysis report, which indicates that there is no anticipated hazard to personnel in the surrounding area. In addition, the applicant provided a Tower FAA Obstruction Analysis which indicated that the tower height of 73 feet is below the non-surface FAA regulatory notification height of 200 feet. Therefore no FAA notification filing is required.

CONFORMANCE TO EXISTING PLANS, POLICIES AND RELATED GUIDANCE

Comprehensive Plan for the National Capital

NCPC staff has determined that the proposed communication tower installation project is consistent with the antenna-related policies contained in the Federal Elements of the Comprehensive Plan, Federal Environment Element, Human Activities Policies related to “Radiofrequency Radiation and Electromagnetic Fields.”

National Historic Preservation Act

Due to the project’s location outside the District of Columbia, NCPC does not have independent Section 106 responsibility. The communication tower project was submitted for review to the Virginia Department of Historic Resources (DHR). By letter dated March 15, 2015, the DHR stated that the project would have an effect on historic resources, but based on the information provided, the effect will not be adverse.

National Environmental Policy Act

NCPC does not have an independent NEPA responsibility due to the project’s location in the environs. DHS/FEMA determined that the project meets the requirements of a categorical exclusion of its NEPA regulations which applies to “acquisition, installation, or operation of utility

and communication systems that use existing distribution systems of facilities, or currently used infrastructure rights-of-way.”

CONSULTATION

Coordinating Committee

In accordance with NCPC's "Procedures for Intergovernmental Cooperation in Federal Planning in the National Capital Region," the project was referred to the Loudoun County Department of Planning and Zoning for review and comment. By letter dated September 22, 2015, NCPC received a response to the referral. Loudoun County Department of Planning and Zoning expressed no objection to the proposal. Since the proposed 70-foot communications tower would be built within the existing footprint of two existing 55-foot water towers, both scheduled for demolition, the county expressed no issues with the proposed project as the increase in height is negligible and the area is already disturbed.

The applicant also referred the project to the Virginia Department of Environmental Quality. By email dated September 22, 2015, the DEQ stated that the air permitting regulations provide for permit exemptions for emergency generators based on size and fuel type. It appears that due to the size of the proposed generator units, and estimated emissions, the proposed generators would be exempt from construction permit review.

Additional coordination efforts include the Federal Aviation Administration (FAA), and the Virginia Utility Protection Service (Miss Utility of Virginia).

ONLINE REFERENCE

The following supporting documents for this project are available online:

- Submission Package
- Comment Letter from the Department of Planning and Zoning (Loudoun County, Virginia)
- Virginia Department of Historic Resources no adverse effect determination
- Correspondence from the Virginia Department of Environmental Quality

Prepared by Vivian Lee
October 20, 2015

POWERPOINT (ATTACHED)

7655

Preliminary and Final Submission

November 5, 2015

Commission meeting date: November 5, 2015

NCPC review authority: Federal Projects in the Environs 40 U.S.C. § 8722(b)(1)

Applicant request: Preliminary and final approval of site development plans

Delegated / consent / open / executive session: Consent

NCPC Review Officer: Lee

NCPC File number: 7655

Project summary:

Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA) has submitted preliminary and final site development plans for the construction of a Department of Defense (DoD) communication tower installation at Mount Weather Emergency Operations Center (MWEOC) in Western Loudoun County.

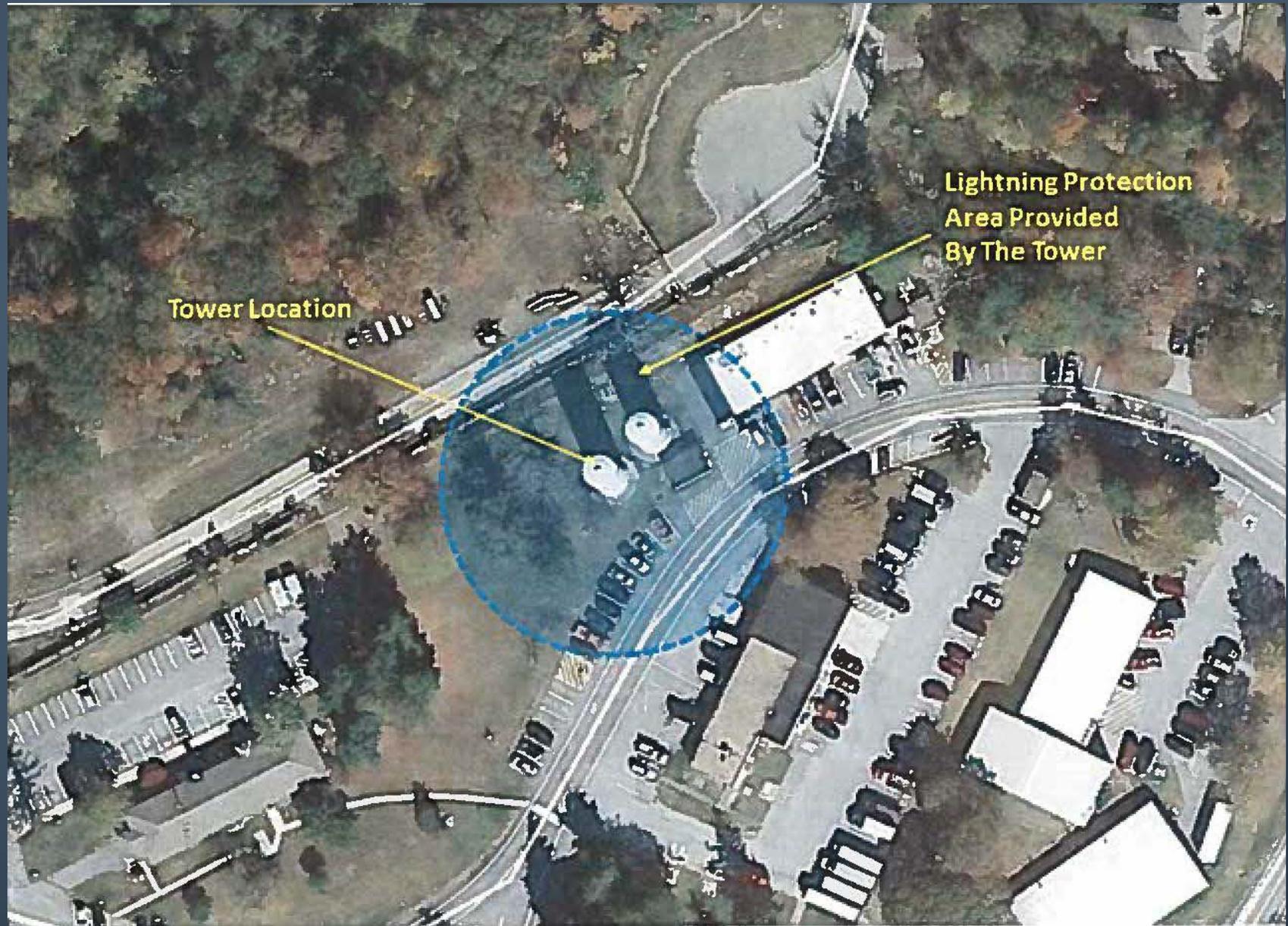
The communications tower will be constructed in a 8-foot by 8-foot by 10-foot high bolted steel sections with a **total height of 70 feet**. Two 16-foot by 16-foot platforms, surrounded by safety rails, will be at the top of the tower with a 10-foot diameter radome on the top most platform. Two red FAA hazard lights will be positioned on the radome. A ladder with body harnesses for two workers will run internally along the tower and includes a lock out system to restrict climbing access.

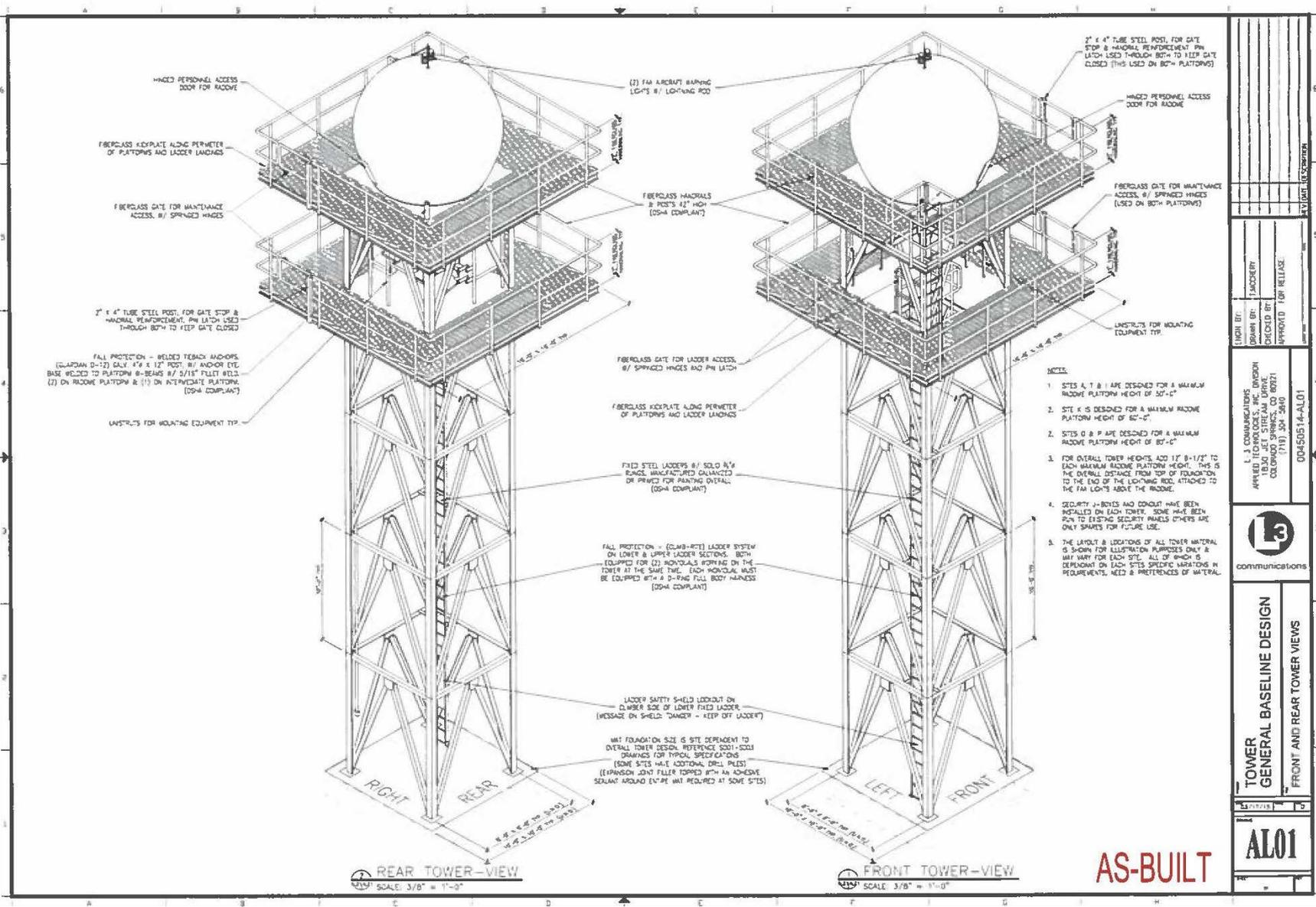
The tower will be built within the footprint of two existing 55-foot water towers which are scheduled for demolition. The total area of the site for construction is approx. 700 square feet. A proposed future project addition will include an additional contiguous 500 square feet for a generator building and 400 square feet for a propane tank. These future additions will also be built within the existing footprint of the two 55-foot water towers that will be demolished.

Construction is expected to begin in November 2015 and to be completed by the end of December 2015.









DRAWN BY: [] CHECKED BY: [] APPROVED FOR RELEASE: []	DATE: [] TIME: []
L-3 COMMUNICATIONS APPLIED TECHNOLOGIES, INC. DIVISION 1830 JET STREAM DRIVE COLORED, MD 20721 (703) 501-5840	00450514-AL01
communications	
TOWER GENERAL BASELINE DESIGN FRONT AND REAR TOWER VIEWS	
AL01	