

STAFF RECOMMENDATION



NCPC File No. 6037

**UNITED STATES BUREAU OF ALCOHOL, TOBACCO, FIREARMS AND
EXPLOSIVES, HEADQUARTERS BUILDING –
ROOFTOP COMMUNICATION ANTENNAS**
New York and Florida Avenues, NE,
Washington, D.C.

Submitted by the General Services Administration

September 28, 2006

Abstract

The General Services Administration has submitted plans for the installation of up to eight transmitting and receiving antennas at the U.S. Bureau of Alcohol, Tobacco, Firearms and Explosives headquarters building at New York and Florida Avenues, NE. The transmitting and receiving pole antennas will be installed at the mechanical screen level of the structure's roof at the west end of the building. The height of the antennas range from one-foot to eight feet in length and will not extend above the height of the mechanical penthouse screen.

Commission Action Requested by Applicant

Approval of preliminary and final building plans pursuant to 40 U.S.C. § 8722(b)(1) and (d).

Executive Director's Recommendation

The Commission:

Approves the preliminary and final building plans for the installation of up to eight fiberglass pole transmitting and receiving antennas on the U.S. Bureau of Alcohol, Tobacco, Firearms and Explosives headquarters building at New York and Florida Avenues, NE, as shown on NCPC Map File No. 42.00(38.30)-42113, for a period not to exceed 10 years.

Recommends to the General Services Administration that access to the building roof should be controlled and locked if possible. Moreover, radio frequency (RF) non-ionizing radiation warning signs should be placed at the rooftop access areas in a visible location near all roof access doors.

* * *

PROJECT DESCRIPTION

Site

The new U.S. Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) headquarters building at New York and Florida Avenues, NE building is bounded by 1st and 2nd Streets, NE on the west and east ends of the building respectively. To the north is New York Avenue, NE and to the south is N Street, NE. The proposed location of the antennas is limited to the western end of the building at the roof.

Background

The General Services Administration has submitted plans for the installation of in-building to mobile unit communication antennas at the roof of the building. The antennas function to provide complete broadcasting between personnel in the building as well as traveling within the city grid of the streets of Washington. The provided project information adheres to the Commission's submission requirements for antennas located at federal facilities and includes certification by the responsible agency representative that all equipment will operate within the Federal Communication Commission's licensing and operation certified parameters.

At its July 6, 2006 meeting, the Commission approved the preliminary and final site and building plans for 2 roof-top satellite dish receiving antennas for a period not to exceed ten years, one flagpole at the intersection of New York Avenue and 1st Street, NE, and four art panels incorporated in the storefront of the ground floor retail building on 2nd Street across from the New York Avenue Metrorail station, for the ATF Headquarters Building currently under construction at 99 New York Avenue, NE, in Washington, D.C., as shown on NCPC Map File No. 42.00(38.00)-42063.

The Commission also requested that the General Services Administration investigate, with the ATF, the feasibility of erecting a screen around the large dish antenna approved in July, so that it would not be visible from adjacent areas from the ground, and that GSA report back to the Executive Director on the findings of the evaluation of whether it is feasible and desirable to erect a screen and if not, explain why. This information was provided to NCPC staff finding that the extent of screening, due to setbacks and composition of the necessary signal-compatible structure, would create a larger and more extensive physical element on the roof than the 3-meter dish antenna itself. The large mass of the screen would be more visually intrusive. Staff concluded from the additional visual analysis photographs provided by ATF and GSA that the screen should not be the recommended course of action. Additionally, staff reviewed visual analysis of the dish location from the New York Avenue viaduct location, at over 200 feet from the building site, and found the angle and location of the pedestrian viewpoints provide a minimal sight-line to the dish antenna position (see ATF dish antenna views at page 6 and architect's letter on the issue, at page 7).

Proposal

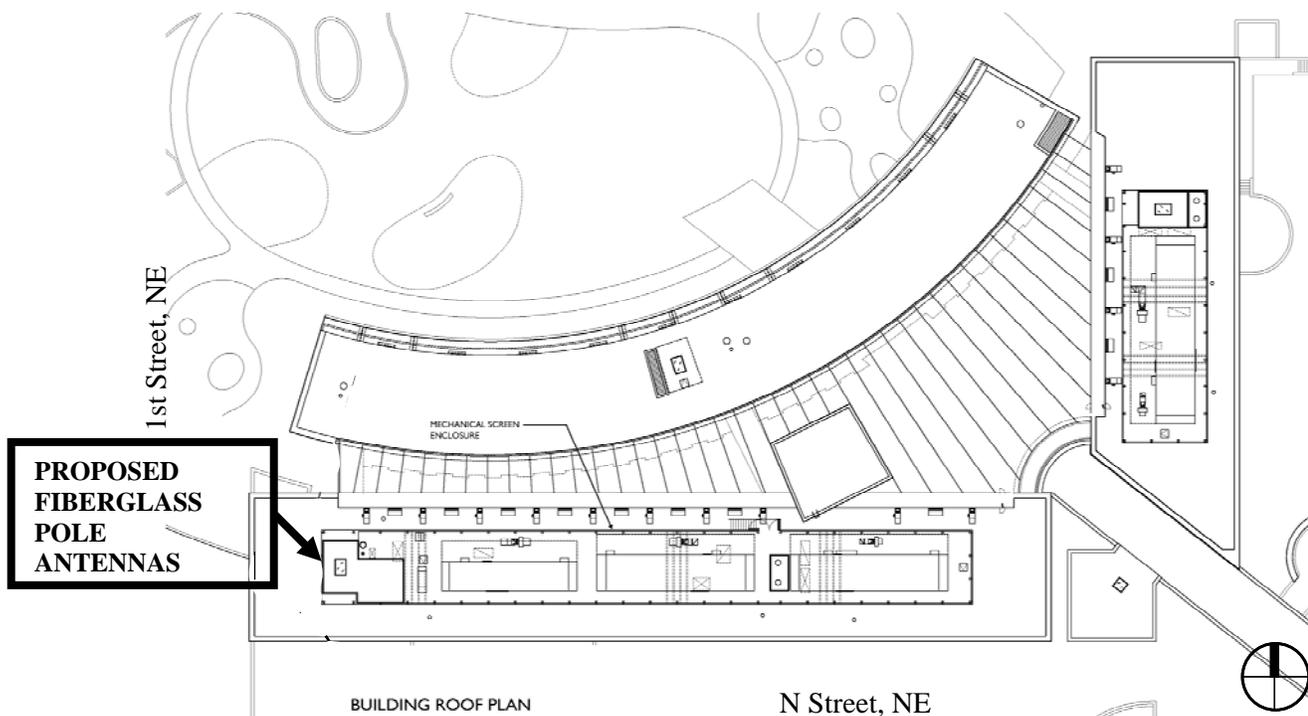
The provided roof plan and narrative material for the pole antennas indicates that up to eight exterior pole antennas of one to eight feet in height will be installed on the mechanical screen of the building. The fiberglass pole antennas are white in color and approximately two to three-inches in diameter. Installation of the antennas will also require the establishment of a base

station unit and a repeater station (located internally in the building). The maximum operation power of the stations is 50 and 125 watts respectively. All antennas operate within the VHF and UHF frequencies of 174 MHz to 970 MHz. The purpose of the antennas is to serve as internal agency-specific communication channels within the building and nearby adjacent area (vehicle units) and are repeated (amplified) to assure signal penetration into the building.

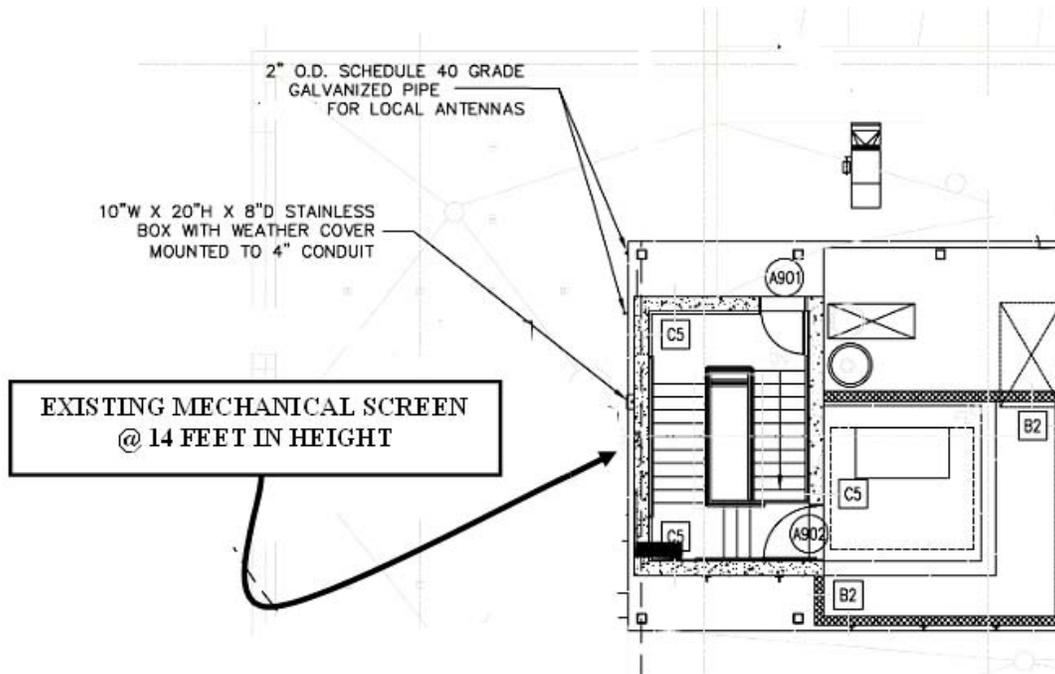
PROJECT ANALYSIS

Executive Summary

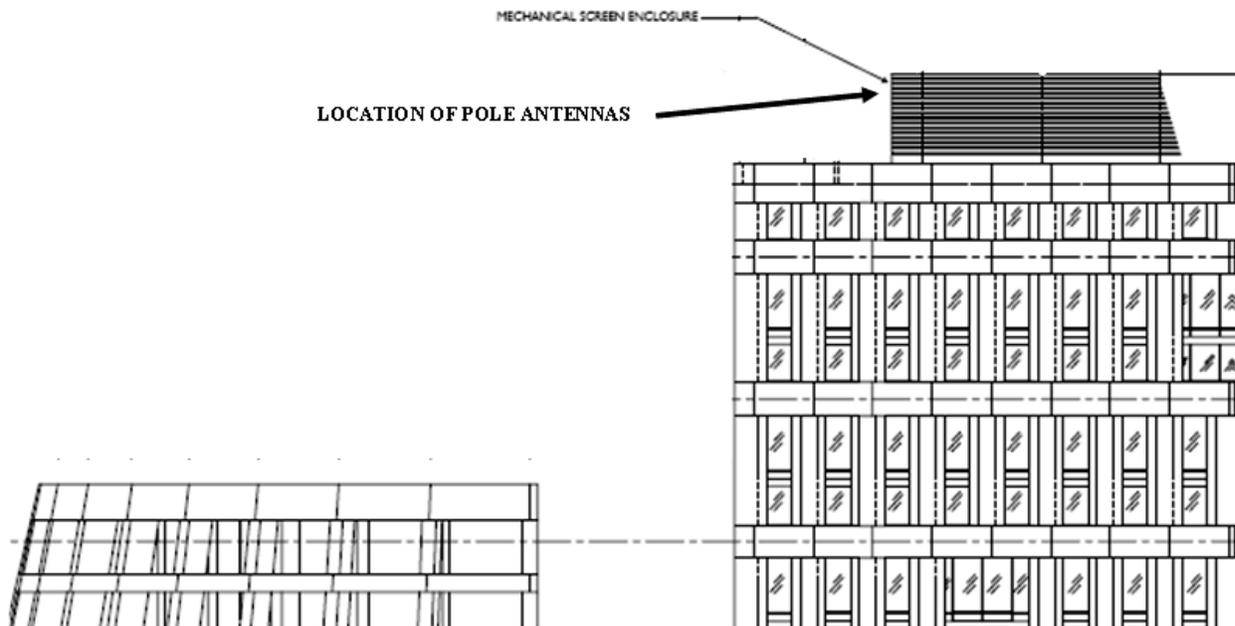
The **staff recommends that the proposed antennas be approved.** The applicant will locate the antennas to minimize their appearance, and they will not be readily apparent to the public at ground level. The antennas, with their small diameter and limited size, would not be visible from the street. The proposal is consistent with the Commission's Antenna Guidelines. Staff recommends that the antennas be approved for a period of 10 years, in concert with the Commission's recommendations in the Antenna Guidelines for buildings located outside the monumental core. Staff finds the extent of possible radio frequency (RF) radiation exposure generated from the antennas is very low and is well isolated from the general public by their location at the roof. However, staff does believe that the Commission should highlight to the General Services Administration that RF warning sign should be placed at the rooftop access areas in a visible location near doors at the penthouse to alert rooftop workers to the presence of RF radiation at that building location.



ATF HEADQUARTERS BUILDING ROOF PLAN INDICATING LOCATION OF POLE ANTENNAS



ENLARGED ROOF PLAN SHOWING DETAIL AT WEST END OF MECHANICAL PENTHOUSE SCREEN WHERE POLE ANTENNAS WOULD BE LOCATED



BUILDING SOUTH ELEVATION INDICATING LOCATION OF FIBERGLASS POLE ANTENNAS

Radiofrequency Radiation

An analysis determining the potential effects of radiofrequency non-ionizing radiation on the general public and occupational personnel was prepared and reviewed by staff. This analysis used an evaluation process to determine the electromagnetic power surrounding the proposed antennas and demonstrated that the proposed antennas and operation frequencies are at such low power levels that the Federal Communications Commission (FCC) categorically excludes, from detailed environmental review, these types of omni-directional narrowband VHF and UHF antennas which maintain power outputs in the range of 25 to 2000 watts at frequency ranges up to 900 MHz.

No areas off the roof, either extending down toward the streets or outward beyond the building perimeter, exceed either the general public or occupational worker exposure levels. None of the proposed antennas create an adverse exposure level exceeding the 100-percent MPE beyond five feet to eight feet distance from the antennas. No person can reach less than that distance toward the antenna locations due to their position on the vertical side of the mechanical screen elevated above the roof surface.

Cumulative effects of any exposure levels have been factored by the evaluation of the FCC requirements. The analysis also determined that it is extremely unlikely that any personnel would come in contact with areas that exceed the occupational MPE. The exposures areas are very inaccessible.

Staff recommends that the Commission highlight to the General Services Administration that RF warning signs should be placed at the rooftop access areas in a visible fashion near doors at the roof level to alert anyone at that location to the presence of RF signals.

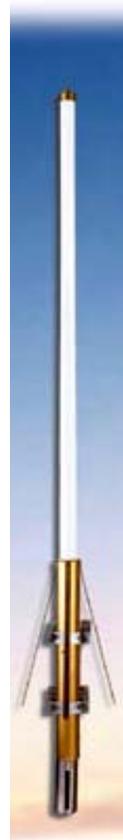
CONFORMANCE

Comprehensive Plan for the National Capital: Federal Elements

Staff has determined that the antenna installation would not have an effect on other federal facilities or on L'Enfant Streets and is consistent with the Federal Elements of the Comprehensive Plan.

National Environmental Policy Act

Pursuant to the regulations implementing the National Environmental Policy Act, the General Services Administration



ANTENNA PROFILE AND APPEARANCE



ANTENNA MOUNT AND CONNECTION DETAIL

submitted a conclusion that the project is a categorical exclusion based on both the GSA environmental review standards, and in conformance with the NCPC Categorical Exclusion requirements under §8(C)(20) of the Commission’s Environmental and Historic Preservation Policies. Staff examination finds the proposed antennas, with their location and design, adhere to the Commission’s exclusion requirements.

National Historic Preservation Act

GSA has concluded that no National Historic Preservation, Section 106, review of the antennas is required. The building is not eligible for listing in the National Register of Historic Places. Because of limited effect to the streetscapes of the surrounding area, the agency determined that no impact to any L’Enfant street was present.

NCPC staff finds the visual impact is minimal and believes the potential affect from the antenna installations would not adversely impact the L’Enfant street plan viewsheds.

COORDINATION

Coordinating Committee

The Coordinating Committee reviewed and coordinated the proposal at its June 14, 2006 meeting, and forwarded the proposal to the Commission with the statement that the project has been coordinated with all agencies participating. The participating agencies were NCPC; the District of Columbia Office of Planning; the Department of Housing and Community Development; The Department of Transportation, the General Services Administration and the Washington Metropolitan Area Transit Authority.



ANALYZED VIEWS OF DISH ANTENNA DEMONSTRATING NO EFFECT OF INSTALLED DISH ON NEW YORK AVENUE CORRIDOR

**ATTACHMENT OF
ARCHITECT'S REVIEW OF ATF DISH ANTENNA SCREENING ISSUE**

Moshe Safdie and Associates Inc.
Architects and Planners

Memorandum

Project: GSA Federal Building, Washington, D.C.
Date: 30 August 2006
To: Rick Hamilton, GSA
From: Victoria Steven
Re: Rooftop Satellite

Rick,

You have requested that we respond to the suggestion that the best way to "conceal" the rooftop satellite dish for the ATF Headquarters Building is to 'wrap' it in a signal-transparent fabric enclosure. We have a few concerns regarding this proposed solution, which I have outlined below:

1. As you can see from the attached series of images taken along New York Avenue - which illustrate the views of the rooftop satellite dish from various vantage points - the satellite is barely visible except from a distance over 200 feet away from the site. This leads us to question the necessity of shielding the dish from view at all.
2. Should you want to 'wrap' the satellite dish, we believe this will only draw more attention to the area of the roof where the satellite is located. Typically these wraps are relatively simple tensile structures that appear solid from the outside. Therefore enclosing the satellite using this method will add a 'box' to the far east end of the roof.
3. The mechanical screen at the roof, which encircles the air-handling units, is an open horizontal slat design, and this design cannot be mimicked using the signal-transparent fabric enclosure without compromising its signal transparency.

It is for these reasons that we cannot endorse 'wrapping' the rooftop satellite dish at the ATF Headquarters. In short, we do not believe the dish needs to be concealed and any attempt to do so will only result in drawing more attention the dish's location.

Please call if there are more images you need or if I can be of any further assistance.

Regards,

Victoria A. Steven

Moshe Safdie and Associates, Inc.