



## Executive Director's Recommendation

Commission Meeting: March 7, 2019

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### PROJECT

**Sprint Telecommunications Facilities Upgrades: United States Department of Housing and Urban Development – Robert C. Weaver Building**  
**United States Department of Energy – Forrestal Building**  
**United States Department of Health and Human Services – Hubert H. Humphrey Building**  
**Export-Import Bank – Lafayette Building**  
**United States Department of Commerce – Herbert C. Hoover Building**  
Washington, DC

### NCPC FILE NUMBERS

8046 / 8047 / 8049 / 8050 / 8051

### NCPC MAP FILE NUMBERS

Multiple

### APPLICANT'S REQUEST

Approve preliminary and final building plans

### PROPOSED ACTION

Approval of preliminary and final building plans with comments

### ACTION ITEM TYPE

Consent Calendar

### SUBMITTED BY

U.S. General Services Administration

### REVIEW AUTHORITY

Federal Projects in the District  
per 40 U.S.C. § 8722(b)(1) and (d)

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## PROJECT SUMMARY

On behalf of Sprint, GSA has submitted five separate proposals to modify a total of 14 existing antenna sectors across five separate federal buildings in downtown Washington, DC. Each modification consists of replacing one 4'-7" x 1'-0" panel antenna with a smaller 2'-1" x 1'-7" combined antenna Remote Radio Head (RRH) unit, and removal of one RRH unit in each rooftop sector. The five sites are the: United States Department of Housing and Urban Development – Robert C. Weaver Building, United States Department of Energy – Forrestal Building, United States Department of Health and Human Services – Hubert H. Humphrey Building, Export-Import Bank – Lafayette Building, and United States Department of Commerce – Herbert C. Hoover Building. The new antennas will all use existing mounts, and all other ancillary equipment will be hidden from view. The replacement antennas will help to meet coverage and capacity objectives for the immediate area as part of its network.

## KEY INFORMATION

- There are multiple telecommunications providers – Verizon, T-Mobile, AT&T, Metro PCS, and Cricket Communications – that currently operate antennas on the rooftops of these federal buildings, in some cases, near the Sprint installations.
- GSA provided photo-simulations demonstrating views of the proposed and existing rooftop antennas from different vantage points around each building.

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- Radio Frequency (RF) analysis reports for the proposals conclude that each planned modification will operate within all applicable Federal Communications Commission (FCC) and Occupational Safety and Health Administration (OSHA) guidelines.
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## RECOMMENDATION

The Commission:

**Approves** the preliminary and final building plans for 14 antenna sector modifications in the following five building rooftop locations. Each antenna sector modification includes replacement of one panel antenna with a smaller 2'-1" x 1'-7" combined antenna/Remote Radio Head unit, and removal of one Remote Radio Head.

- NCPC File Number 8046: United States Department of Housing and Urban Development – Robert C. Weaver Building (3 antenna sectors),
- NCPC File Number 8047: United States Department of Energy – Forrestal Building (3 antenna sectors),
- NCPC File Number 8049: United States Department of Health and Human Services – Hubert H. Humphrey Building (3 antenna sectors),
- NCPC File Number 8050: Export-Import Bank – Lafayette Building (3 antenna sectors), and
- NCPC File Number 8051: United States Department of Commerce – Herbert C. Hoover Building (2 antenna sectors).

**Requires** GSA and Sprint to work with NCPC staff to finalize color selections for its new and existing antenna equipment, prior to installation, to best minimize visual impacts from surrounding perspectives.

**Notes** that NCPC staff is working with GSA to study antenna planning policies and concealment strategies within the context of downtown Washington, DC, with potential revised antenna policies planned for review by NCPC in the fall 2019.

## PROJECT REVIEW TIMELINE

<b>Previous actions</b>	None
<b>Remaining actions (anticipated)</b>	None

## PROJECT ANALYSIS

### Executive Summary

After review of the project submittal, based on the scope of the project and required antenna painting to help conceal their appearance, staff recommends that the **approve the preliminary and final building plans for 14 antenna sector modifications in the following five building rooftop locations. Each antenna sector modification includes replacement of one panel antenna with a smaller 2'-1" x 1'-7" combined antenna/Remote Radio Head unit, and removal of one Remote Radio Head.**

- **NCPC File Number 8046: United States Department of Housing and Urban Development – Robert C. Weaver Building (3 antenna sectors),**
- **NCPC File Number 8047: United States Department of Energy – Forrestal Building (3 antenna sectors),**
- **NCPC File Number 8049: United States Department of Health and Human Services – Hubert H. Humphrey Building (3 antenna sectors),**
- **NCPC File Number 8050: Export-Import Bank – Lafayette Building (3 antenna sectors), and**
- **NCPC File Number 8051: United States Department of Commerce – Herbert C. Hoover Building (2 antenna sectors).**

### Analysis

The General Services Administration submitted five separate proposals to modify a total of 14 existing rooftop antenna sectors (all operated by Sprint) on five different federal building rooftop locations, within downtown Washington, DC. Each antenna modification consists of replacing one 4'-7" x 1'-0" panel antenna with a smaller (2'-1" x 1'-7") combined antenna/RRH unit, and removal of one RRH in each sector. The new antennas will all use existing mounts, and all other ancillary equipment will be hidden from view. The following table summarizes the proposed changes at each site.

LOCATION	EXISTING	FUTURE
United States Department of Housing and Urban Development (451 7 <sup>th</sup> Street SW)	6 antennas and 6 RRHs (2 antennas and 2 RRHs / sector)	6 antennas and 3 RRHs (2 antennas and 1 RRH / sector)
United States Department of Energy (1000 Independence Ave. SW)	6 antennas and 6 RRHs (2 antennas and 2 RRHs / sector)	6 antennas and 3 RRHs (2 antennas and 1 RRH / sector)
United States Department of Health and Human Services (200 Independence Ave. SW)	6 antennas and 6 RRHs (2 antennas and 2 RRHs / sector)	6 antennas and 3 RRHs (2 antennas and 1 RRH / sector)
Export-Import Bank (811 Vermont Ave. NW)	9 antennas and 9 RRHs (3 antennas and 3 RRHs / sector)	9 antennas and 6 RRHs (3 antennas and 2 RRHs / sector)
United States Department of Commerce (1401 Constitution Ave. NW)	4 antennas and 4 RRHs (2 antennas and 2 RRHs / sector)	4 antennas and 2 RRHs (2 antennas and 1 RRH / sector)

Graphics are provided on the following pages to show existing and future simulated conditions after each antenna sector change. Staff notes that some antennas may be visible from the ground under proposed color schemes, so GSA and NCPC staff should work with Sprint to select colors that will best minimize views from nearby surrounding perspectives. Therefore, staff recommends that the Commission **require GSA and Sprint to work with NCPC staff to finalize color selections for its new and existing antenna equipment, prior to installation, to best minimize visual impacts from surrounding perspectives.**

With the proliferation of telecommunication equipment on building rooftops since the 1990's, some of which, are not reflected in NCPC records, NCPC antenna policies should be revisited to ensure their continued relevance. GSA staff is currently undertaking an effort to better understand modern concealment strategies for rooftop-mounted antennas and how to effectively meet the needs of the telecommunications industry while protecting downtown Washington's historic and culturally-significant setting. NCPC staff is currently coordinating with GSA in this effort, with potential revised antenna policies planned for review by NCPC in the fall 2019. Therefore, staff recommends that the Commission **note that NCPC staff is working with GSA to study antenna planning policies and concealment strategies within the context of downtown Washington, DC, with potential revised antenna policies planned for review by NCPC in the fall 2019.**

## **CONFORMANCE TO EXISTING PLANS, POLICIES AND RELATED GUIDANCE**

### **Comprehensive Plan for the National Capital**

The proposed antenna modifications comply with policies from the Comprehensive Plan for the National Capital. The policies pertain to the following antenna-specific issues:

- Considering joint-use of antennas and co-locating antennas to reduce aesthetic impacts and limit the area of radiofrequency exposure.
- Following a practice of "prudent avoidance" of radio-frequency exposure.
- Requiring adequate communication of potential risks where occupational/controlled exposure may be present.
- Minimizing visual impacts of telecommunication antennas proposed for building rooftops.

As part of the submission, GSA included a radio-frequency safety report and Categorical Exclusion documentation that find that the project will comply with relevant operational and safety requirements as mandated by the Federal Communications Commission (FCC) and Occupational Safety and Health Administration (OSHA).

### **National Historic Preservation Act**

GSA has determined that no further review of the project proposals is required under Section 106 of the National Historic Preservation Act. The DC State Historic Preservation Office submitted a letter dated December 31, 2018 determining that the projects will have no adverse effect on historic properties. Due to its review authority over the project, NCPC has an independent obligation to

carry out the requirements of Section 106 of the NHPA for each antenna modification proposal. NCPC has elected to designate GSA as lead agency pursuant to 36 CFR § 800.2(a)(2) to satisfy the Commission's Section 106 responsibility related to each proposal.

### **National Environmental Policy Act**

Pursuant to regulations implementing the National Environmental Policy Act, the General Services Administration concluded that each project proposal qualifies for a categorical exclusion based on GSA environmental review standards. Due to its review authority over the project, NCPC has an independent obligation to carry out the requirements of NEPA for each project. Staff finds that each project is in conformance with NCPC Categorical Exclusion requirements under § 601.12 (a)(5) of the Commission's National Environmental Policy Act Regulation. Staff examination finds the proposed antennas, with their location, design, and completed RF review, all adhere to the Commission's exclusion requirements.

### **CONSULTATION**

#### **Coordinating Committee**

The Coordinating Committee reviewed these proposals at its meeting on February 13, 2019 and forwarded the proposal to the Commission with the statement that the project has been coordinated with all agencies participating. Participating agencies were NCPC; the District of Columbia Office of Planning; the District of Columbia State and Historic Preservation Office; the General Services Administration; the District Department of Transportation; the District Department of the Environment; the National Park Service; and the Washington Metropolitan Area Transit Authority.

### **ONLINE REFERENCE**

The following supporting documents for each project submission are available online at [www.ncpc.gov](http://www.ncpc.gov):

- Submission Package

Prepared by Michael Weil  
2/28/2019

### **POWERPOINT (ATTACHED)**

# United States Department of Health and Human Services Building Telecommunications Facility Upgrades

451 7<sup>th</sup> Street, SW  
Washington, DC

Preliminary and Final Building Plans

United States General Services Administration

# Project Summary

**Commission Meeting Date:** March 7, 2019

**NCPC Review Authority:** Federal projects within the District of Columbia - 40 U.S.C. § 8722(b)(1) and (d))

**Applicant Request:** Approval of Preliminary and Final Building Plans

**Session:** Consent Calendar

**NCPC Review Officer:** M. Weil

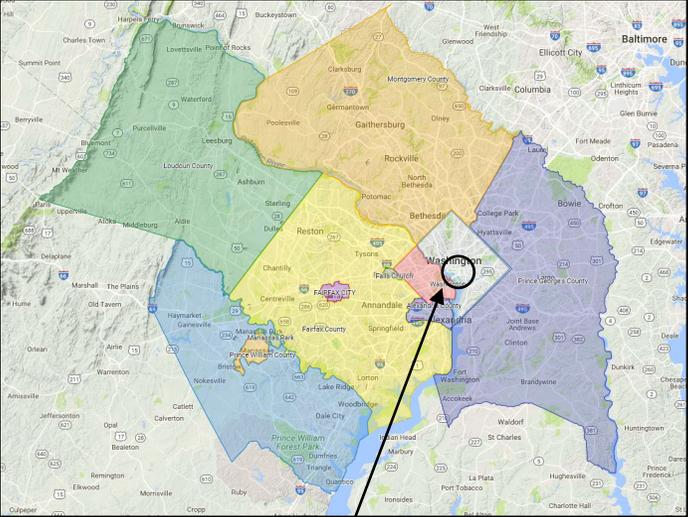
**NCPC File Number:** 8046

## Project Summary:

The building rooftop currently has three antenna sectors, each with two antennas and two Remote Radio Heads (RRHs). All sectors utilize weighted sleds for the antenna mounts. The antennas and RRHs are mounted on the upper machine room. The equipment cabinet is located on the south side of the mechanical room and is not visible from the ground.

Proposed Changes: The proposed modifications include replacement of one antenna and removal of one RRH in each sector, resulting in two antennas and one RRH per sector. The new replacement antennas have integrated radio heads, eliminating the need for a separate fixture. An auxiliary cabinet will be installed at the existing cabinet location and will remain out of view.

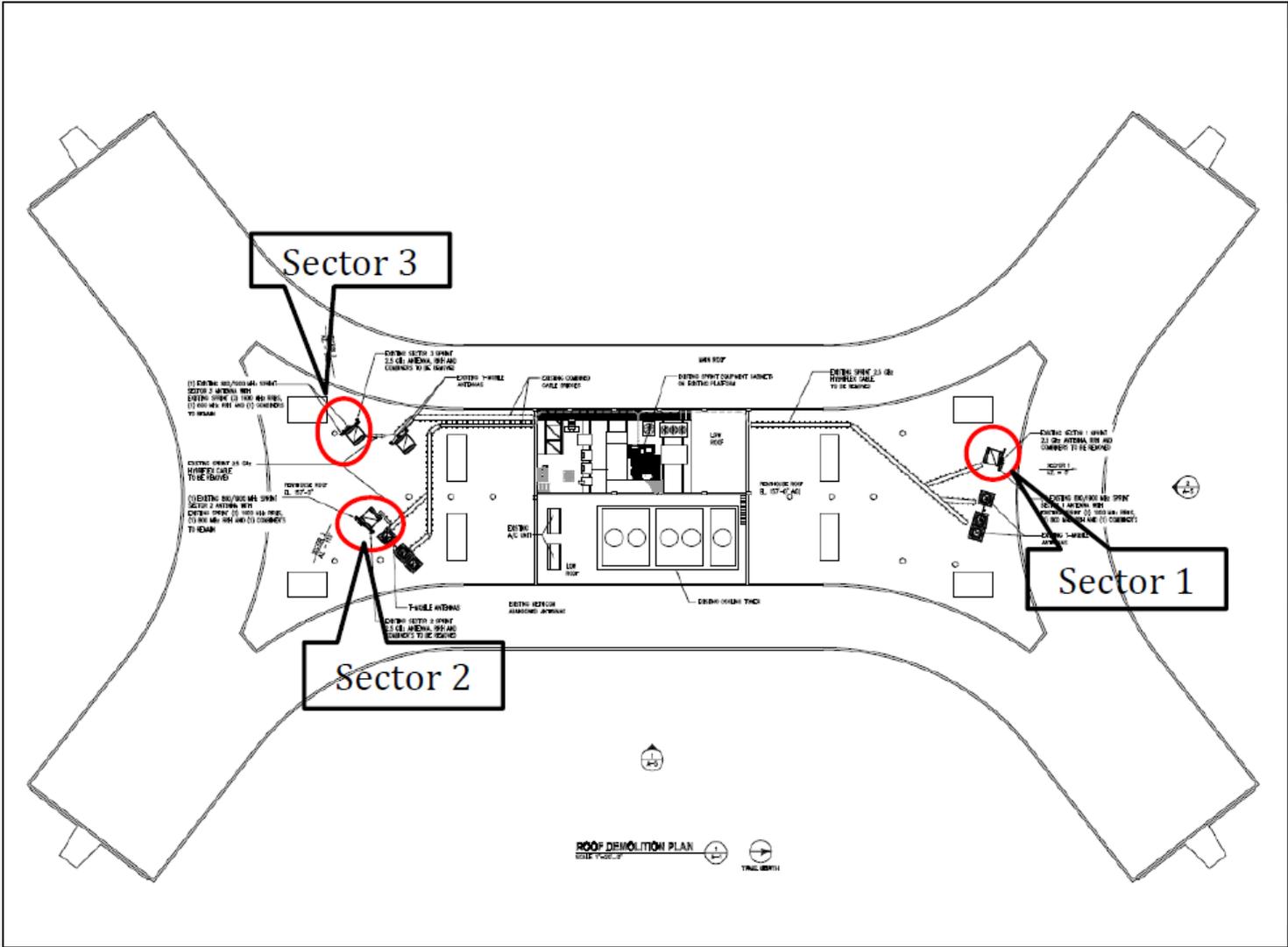
# Project Location



Site



# Existing Antenna Sector Locations

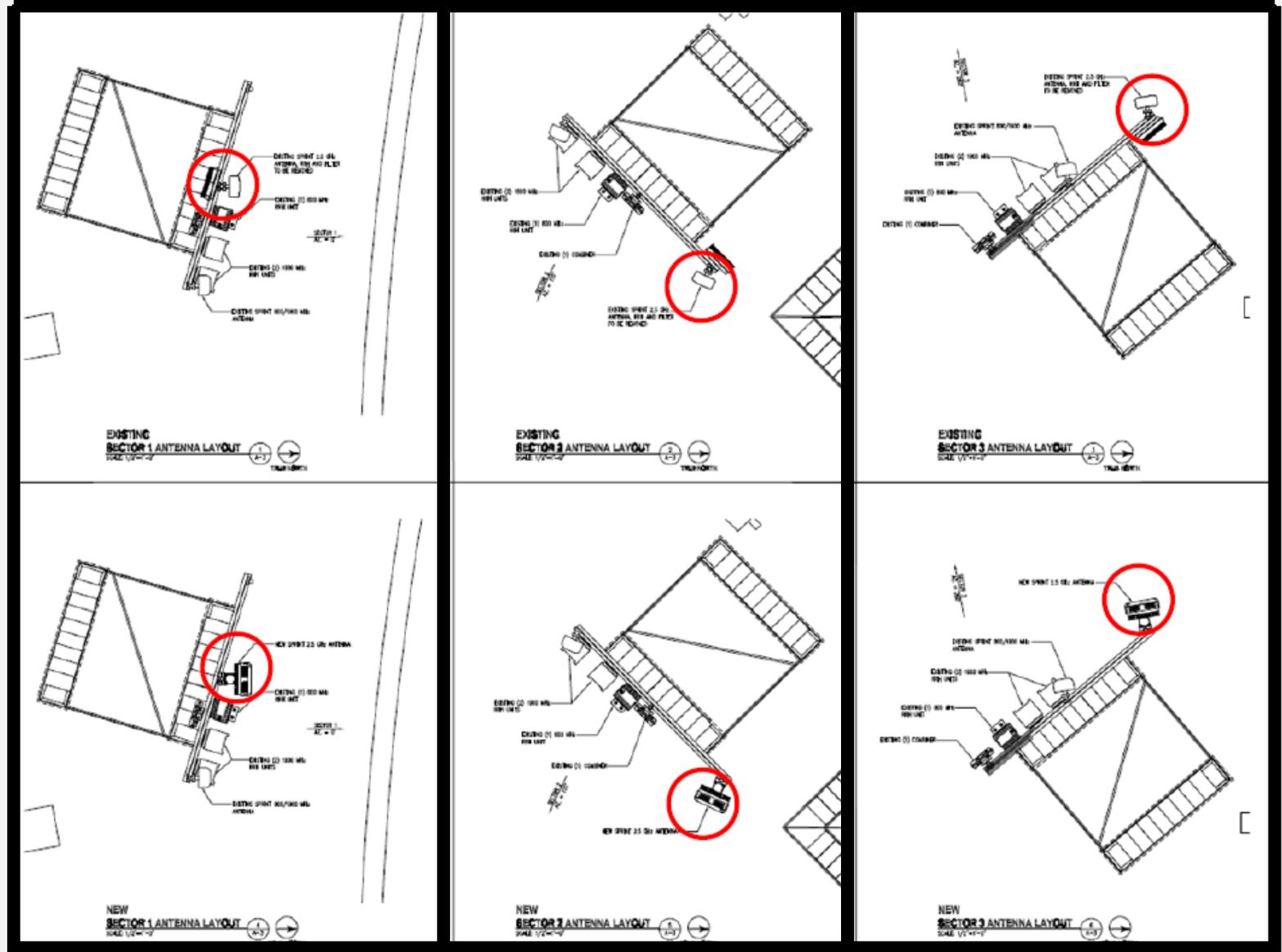


# Proposed Changes



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**EXISTING**

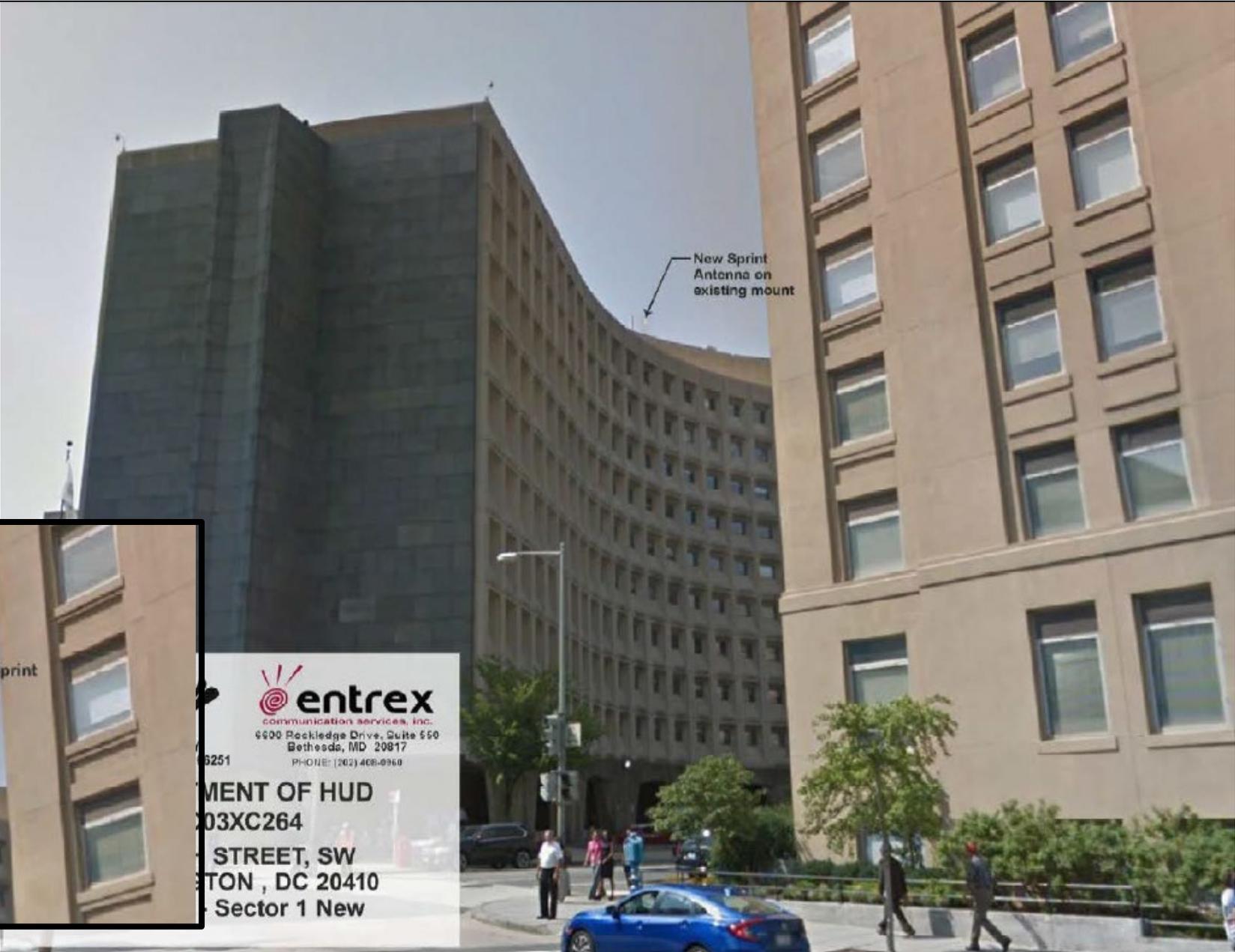
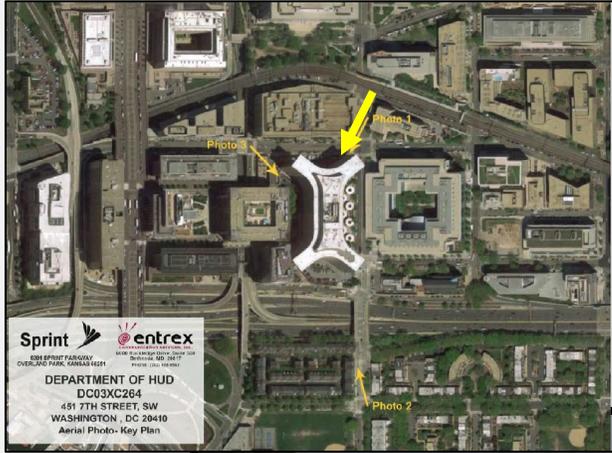


**PROPOSED**

# Visual Study



# Visual Study – (Photo 1)



# Visual Study – (Photo 2)



communication services, inc.  
6600 Rockledge Drive, Suite 550  
Bethesda, MD 20817  
PHONE: (202) 408-0063

DEPARTMENT OF HUD  
DC03XC264  
7TH STREET, SW  
WASHINGTON, DC 20410  
Sectors 2 & 3 New

# Visual Study - (Photo 3)



# United States Department of Energy Building Telecommunications Facility Upgrades

1000 Independence Avenue, SW  
Washington, DC

Preliminary and Final Building Plans

United States General Services Administration

# Project Summary

**Commission Meeting Date:** March 7, 2019

**NCPC Review Authority:** Federal projects within the District of Columbia - 40 U.S.C. § 8722(b)(1) and (d))

**Applicant Request:** Approval of Preliminary and Final Building Plans

**Session:** Consent Calendar

**NCPC Review Officer:** M. Weil

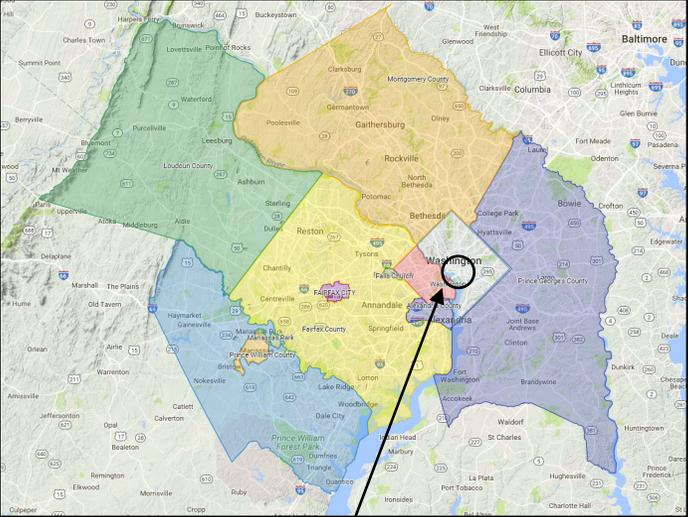
**NCPC File Number:** 8047

## Project Summary:

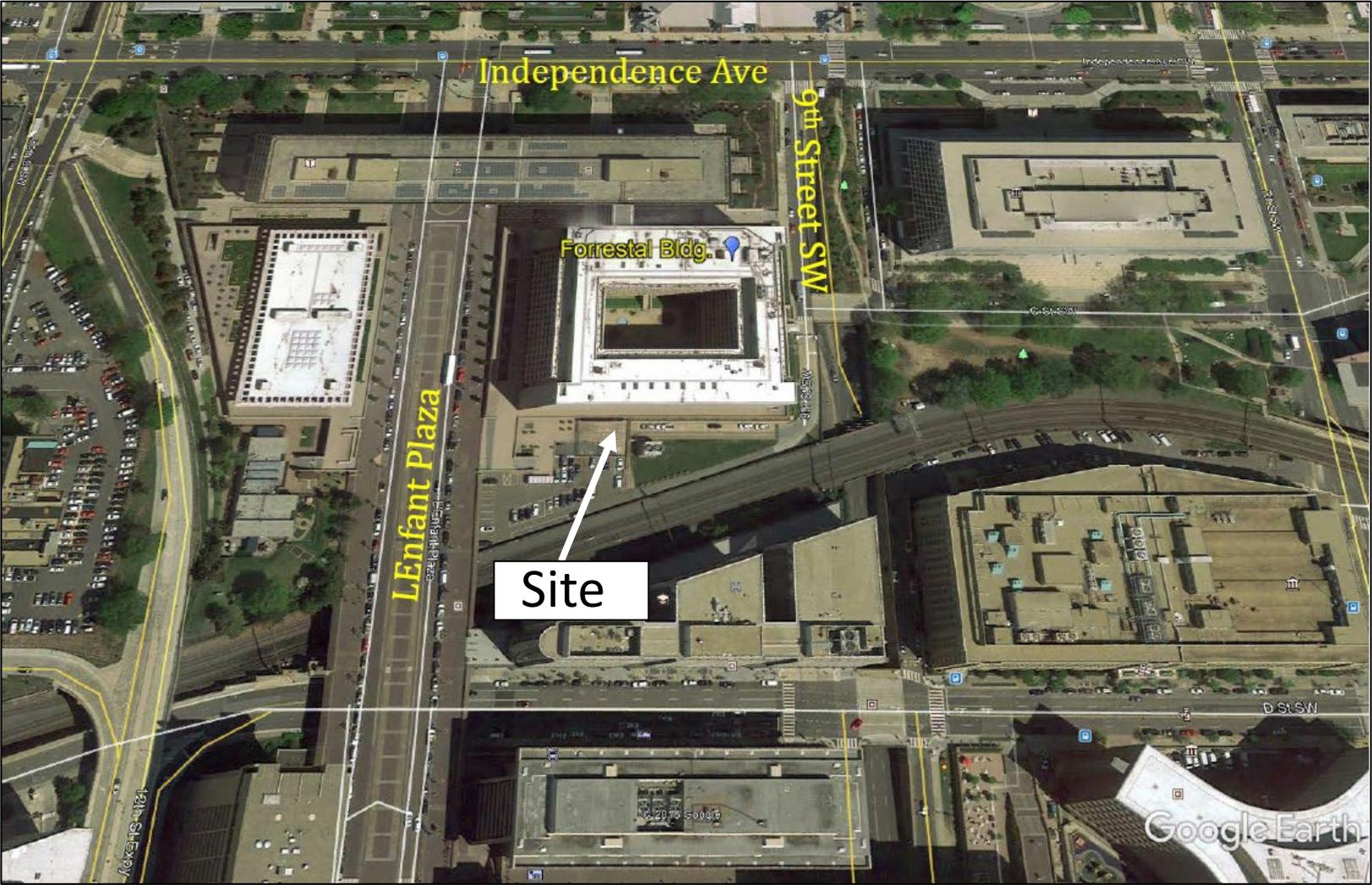
The building rooftop currently has three antenna sectors, each with two antennas and two Remote Radio Heads (RRHs). All sectors utilize weighted sleds for the antenna mounts. The equipment shelter that supports the antennas is centrally located on the rooftop and is not visible from the ground.

Proposed Changes: The proposed modifications include replacement of one antenna and removal of one RRH in each sector, resulting in two antennas and one RRH per sector. The new replacement antennas have integrated radio heads, eliminating the need for a separate fixture. An Auxiliary cabinet will be added to the existing equipment shelter and will not be visible from the ground.

# Project Location



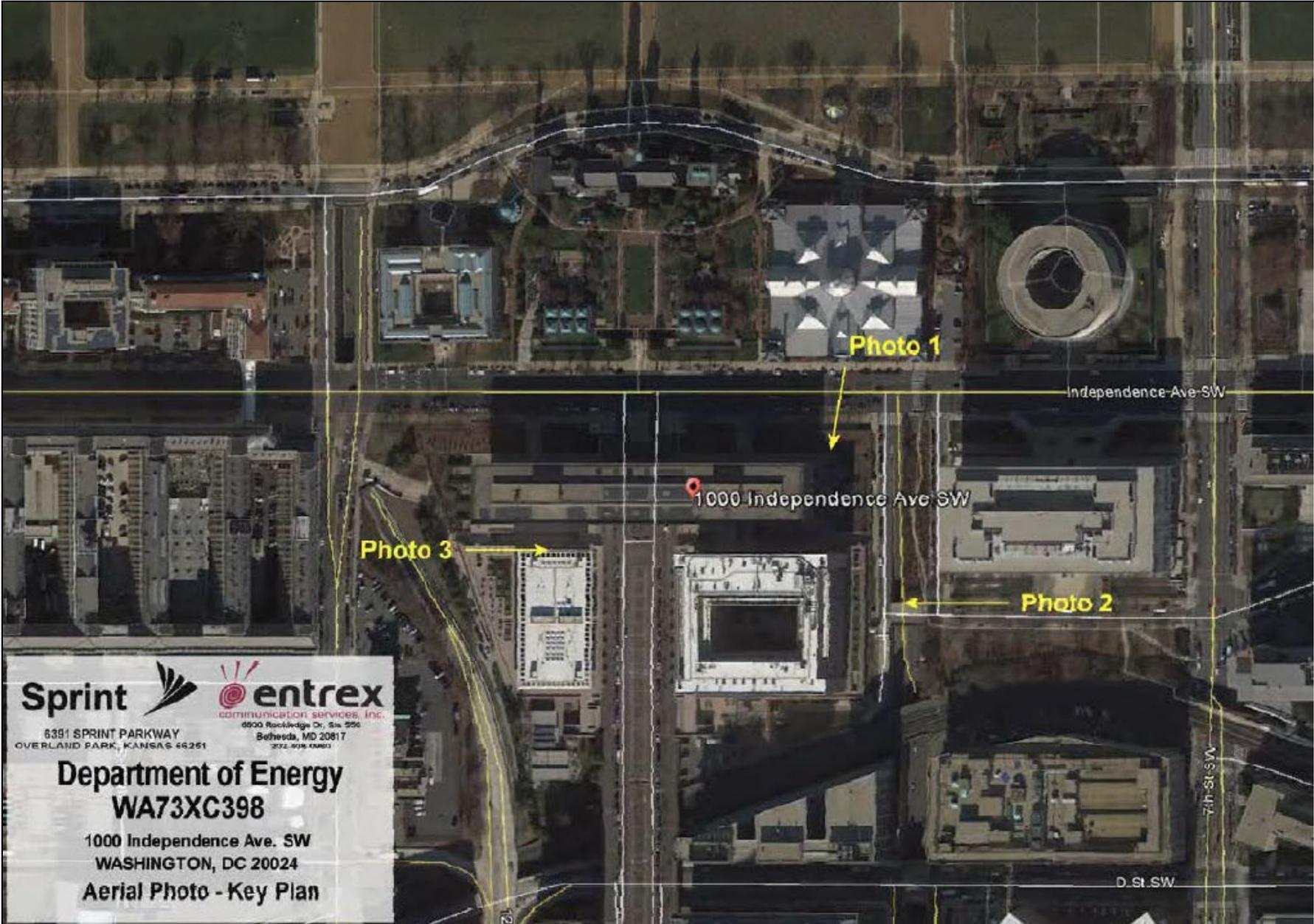
Site







# Visual Study



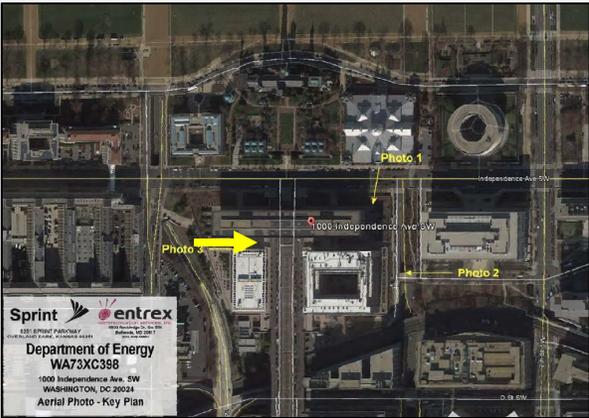
# Visual Study – (Photo 1)



# Visual Study – (Photo 2)



# Visual Study - (Photo 3)



# United States Department of Health and Human Services Building Telecommunications Facility Upgrades

200 Independence Avenue, SW  
Washington, DC

Preliminary and Final Building Plans

United States General Services Administration

# Project Summary

**Commission Meeting Date:** March 7, 2019

**NCPC Review Authority:** Federal projects within the District of Columbia - 40 U.S.C. § 8722(b)(1) and (d))

**Applicant Request:** Approval of Preliminary and Final Building Plans

**Session:** Consent Calendar

**NCPC Review Officer:** M. Weil

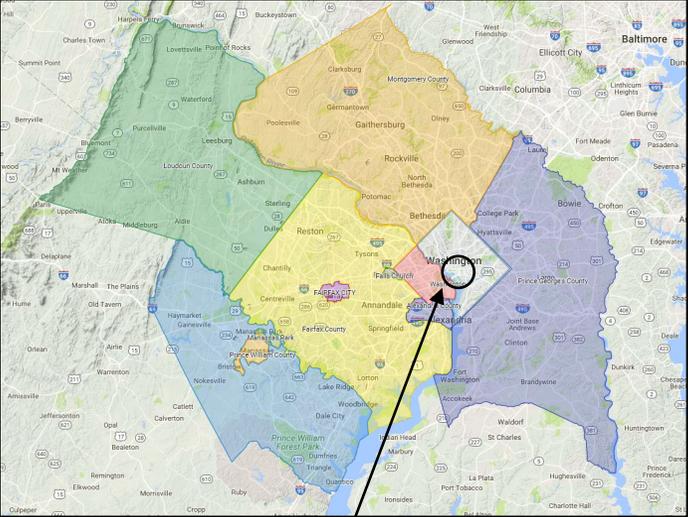
**NCPC File Number:** 8049

## Project Summary:

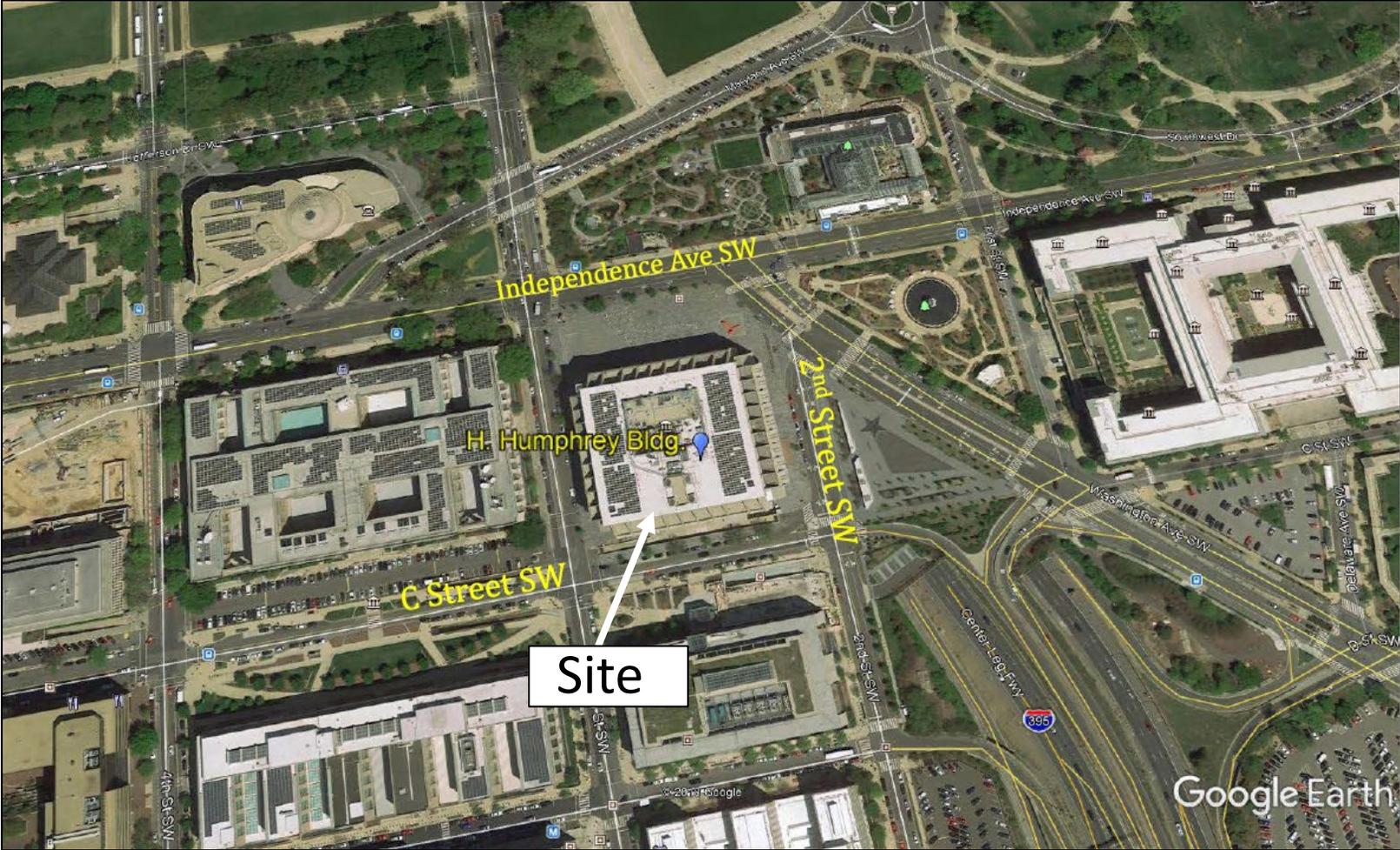
The building rooftop currently has three antenna sectors, each with two antennas and two Remote Radio Heads (RRHs). The antennas and RRHs are mounted on the upper machine room. The equipment cabinet is located on the south side of the mechanical room and is not visible from the ground.

Proposed Changes: The proposed modifications include replacement of one antenna and removal of one RRH in each sector, resulting in two antennas and one RRH per sector. The new replacement antennas have integrated radio heads, eliminating the need for a separate fixture. An auxiliary cabinet will be installed at the existing cabinet location and will remain out of view.

# Project Location

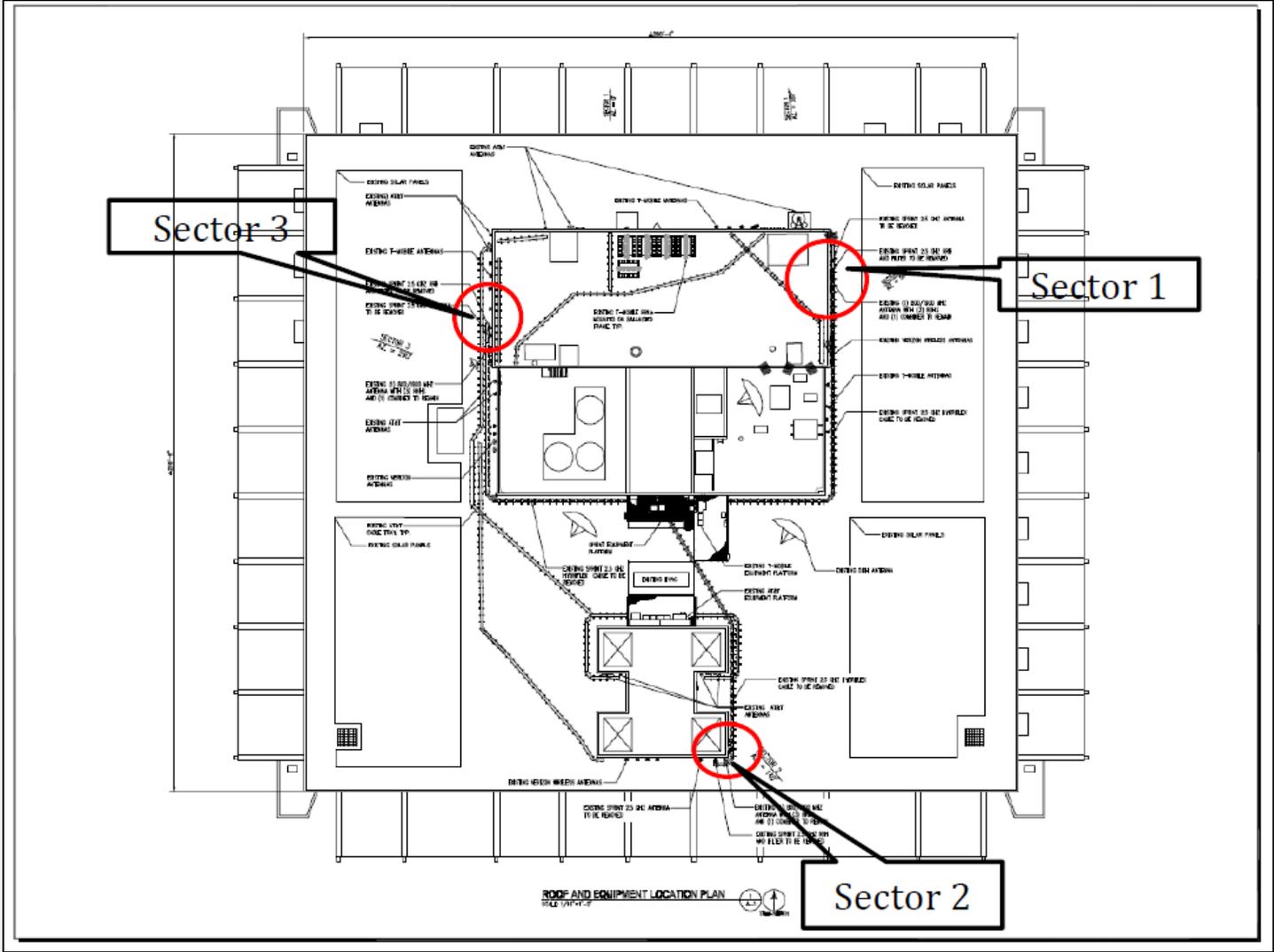


Site



Site

# Existing Antenna Sector Locations

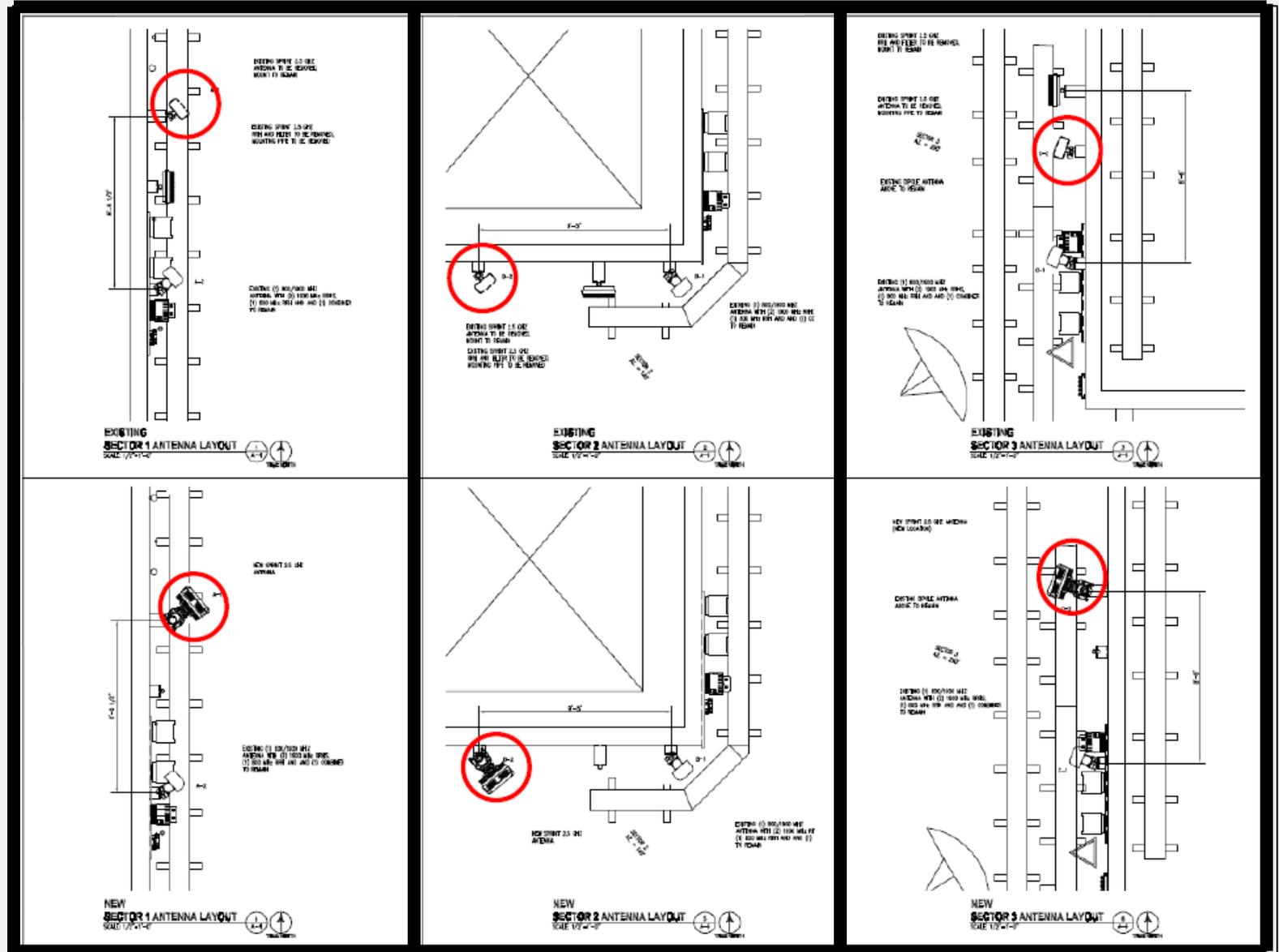


# Proposed Changes



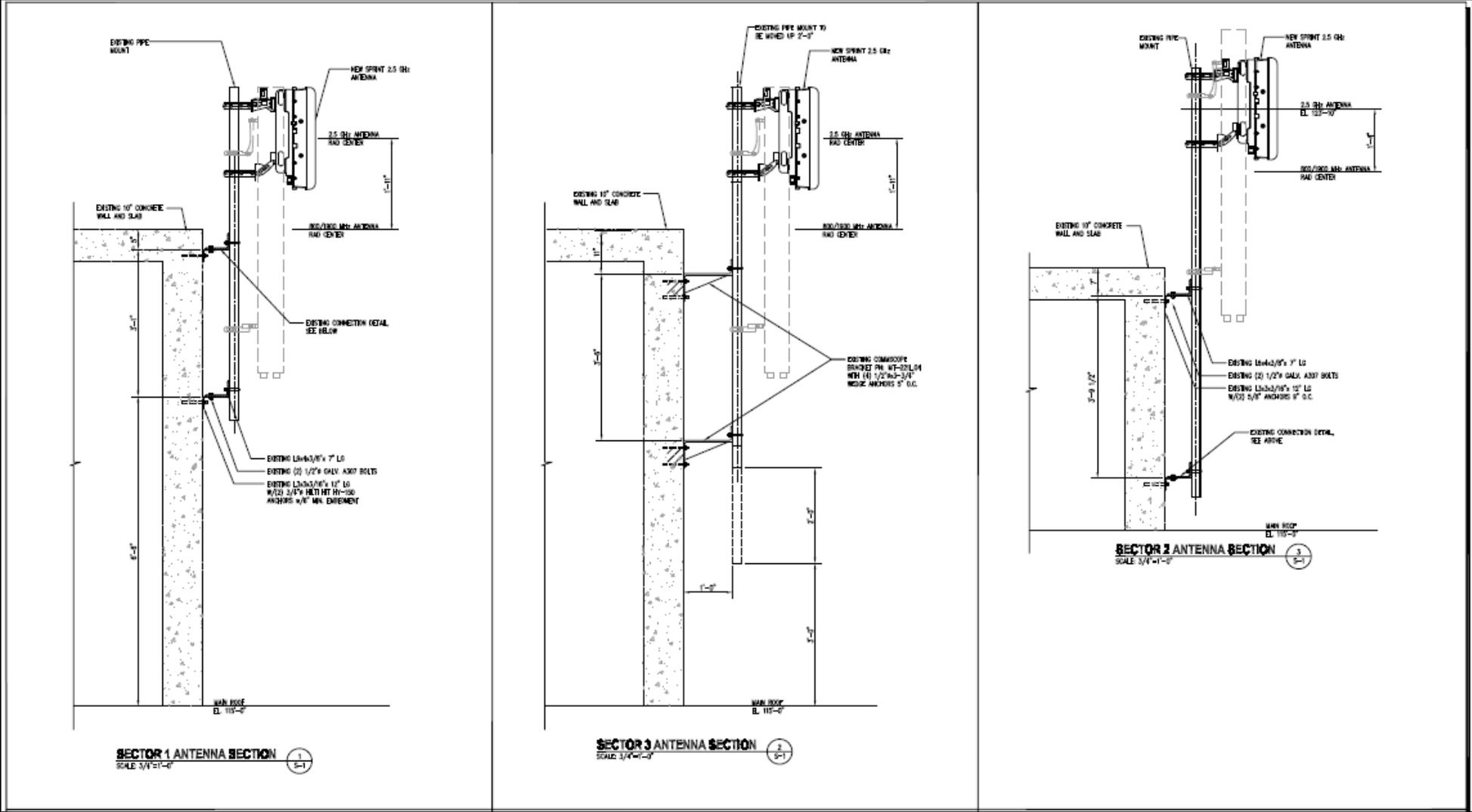
This replaced with this

**EXISTING**

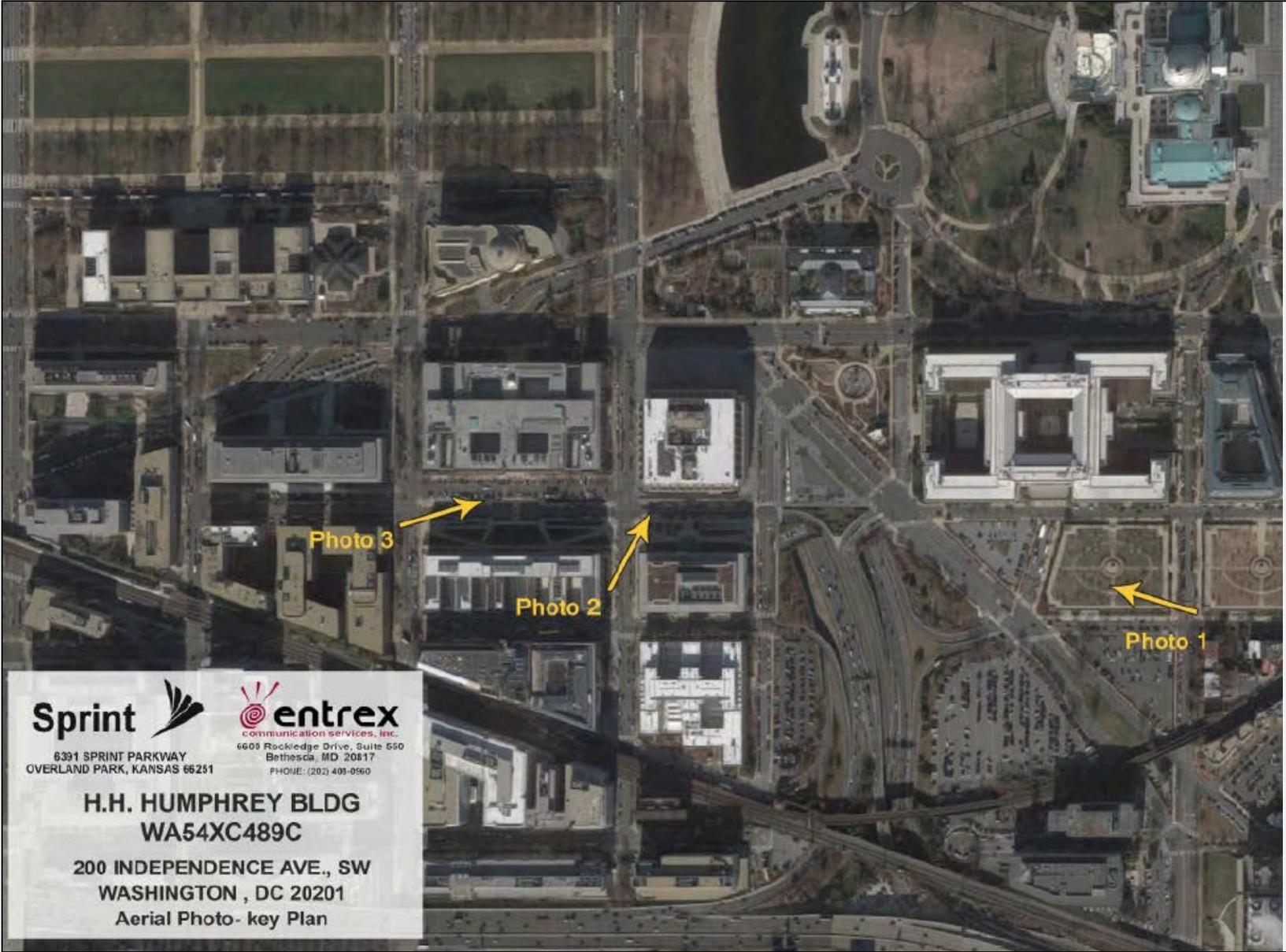


**PROPOSED**

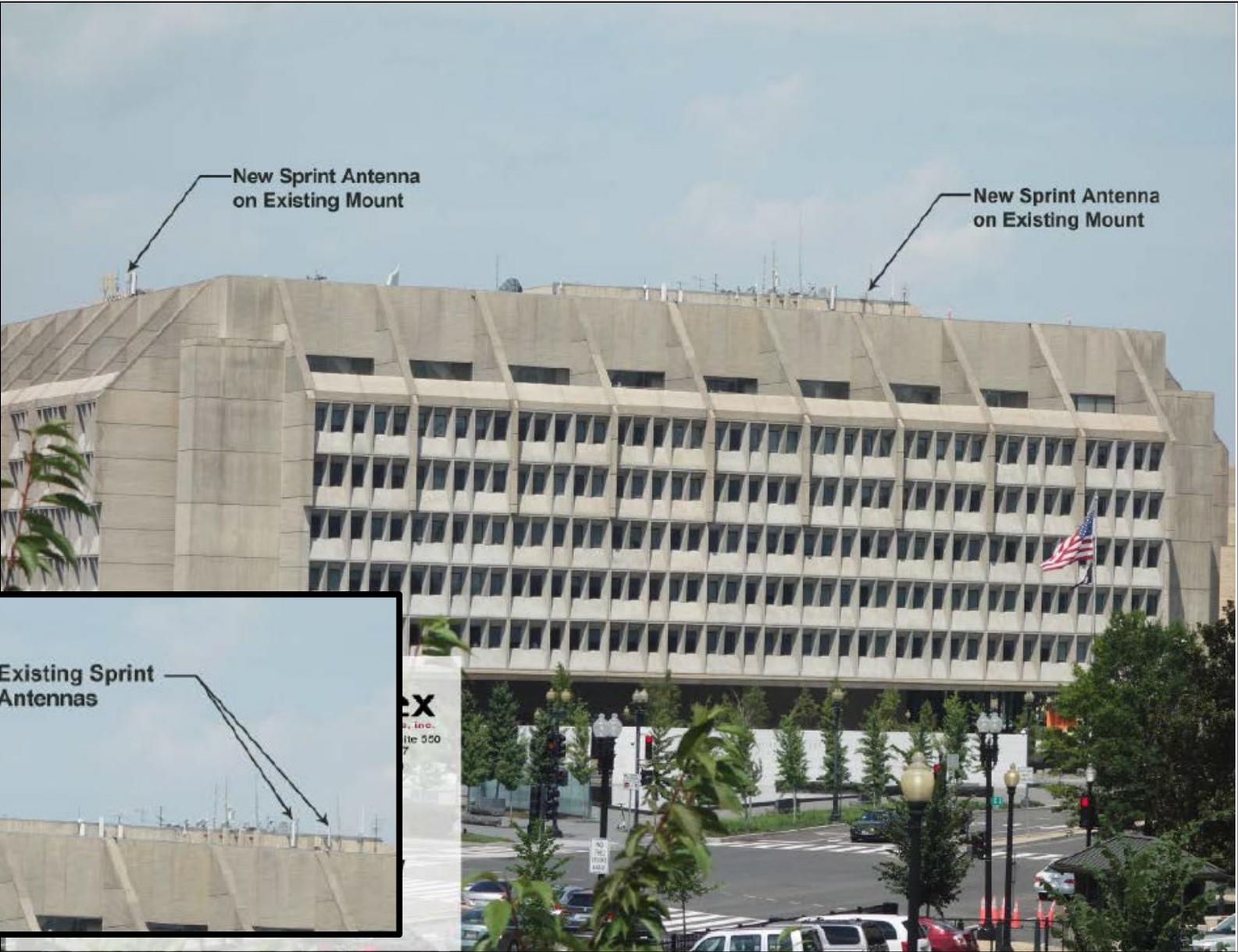
# Antenna Details



# Visual Study



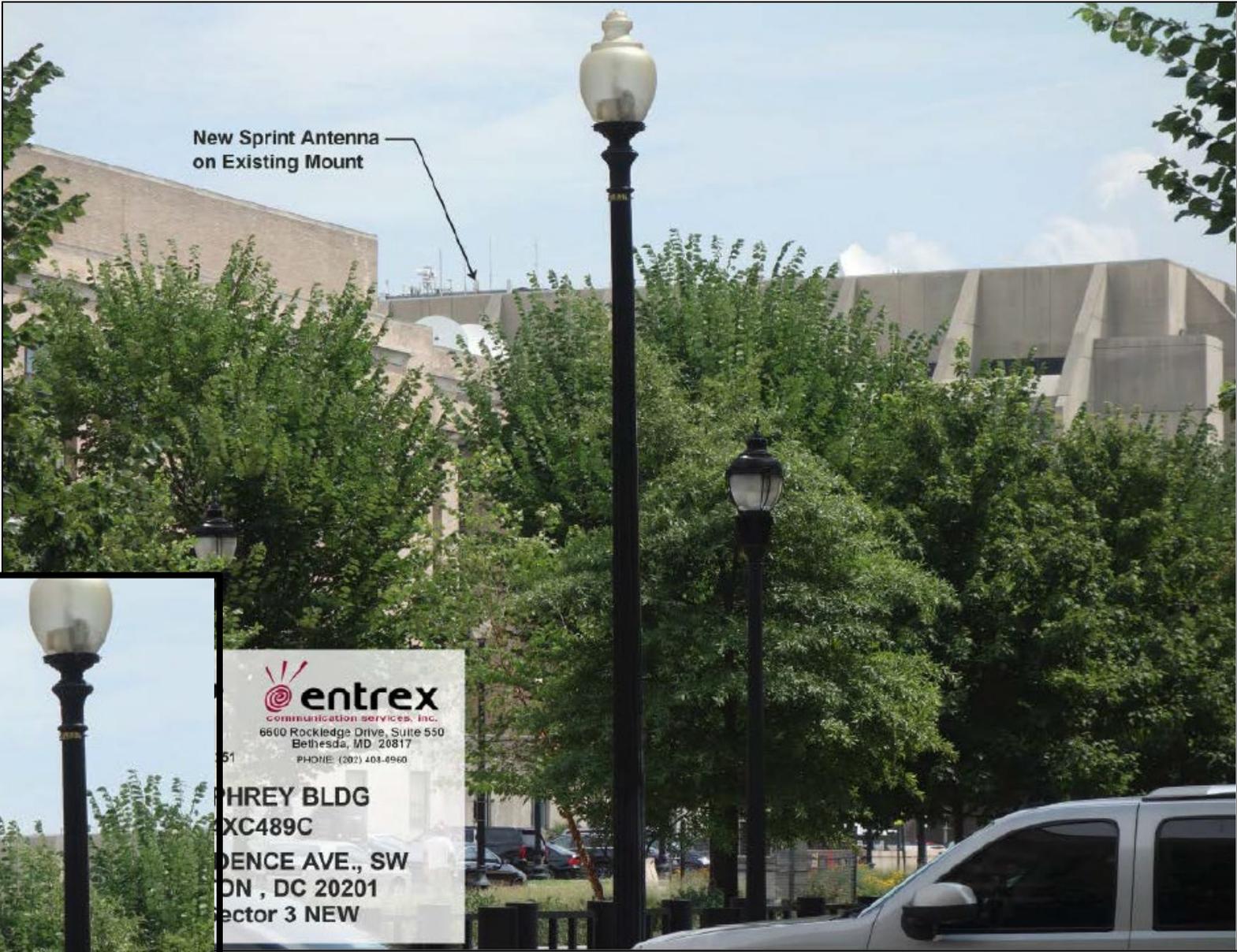
# Visual Study – (Photo 1)



# Visual Study – (Photo 2)



# Visual Study - (Photo 3)



# Lafayette Building Telecommunications Facility Upgrades

811 Vermont Avenue, NW  
Washington, DC

Preliminary and Final Building Plans  
United States General Services Administration

# Project Summary

**Commission Meeting Date:** March 7, 2019

**NCPC Review Authority:** Federal projects within the District of Columbia - 40 U.S.C. § 8722(b)(1) and (d))

**Applicant Request:** Approval of Preliminary and Final Building Plans

**Session:** Consent Calendar

**NCPC Review Officer:** M. Weil

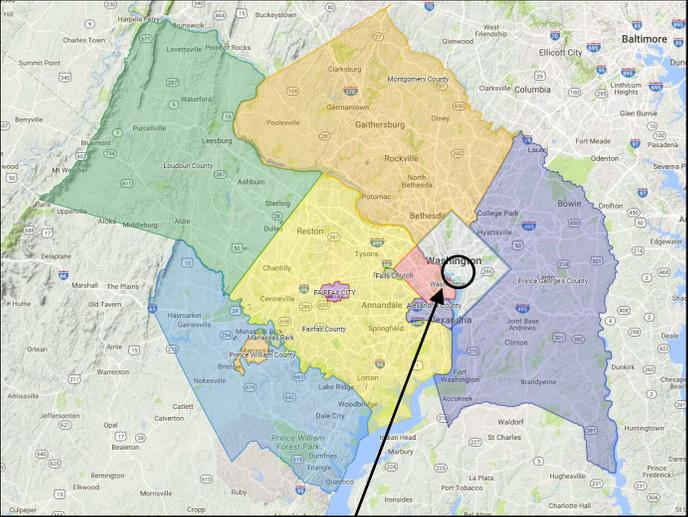
**NCPC File Number:** 8050

## Project Summary:

The building rooftop currently has three antenna sectors, each with three antennas and three Remote Radio Heads (RRHs). All antennas are sled mounted to avoid physical attachments to the building. The equipment cabinet that supports this facility is located in an interior room on the top floor of the Lafayette Building.

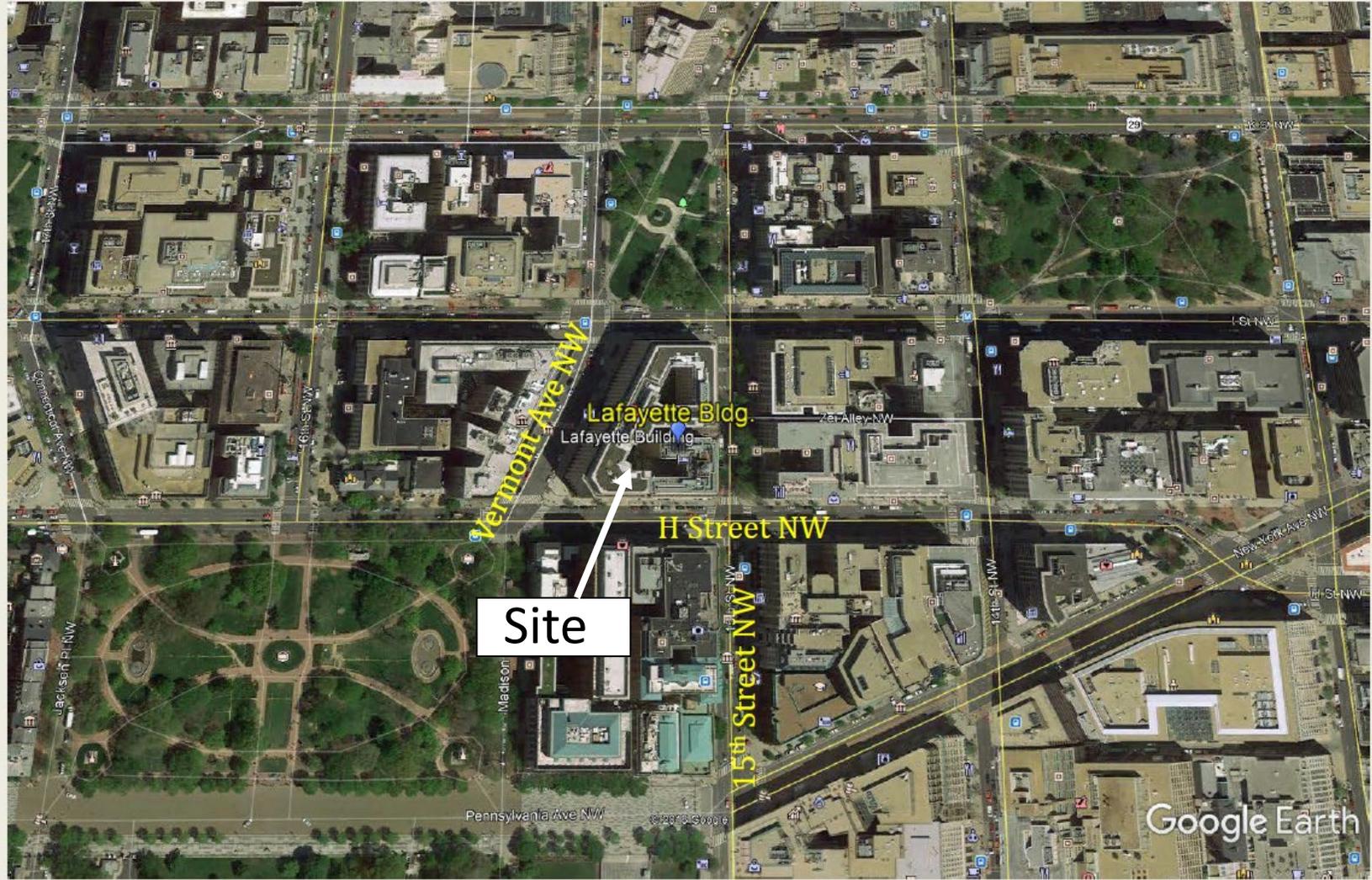
Proposed Changes: The proposed modifications include replacement of one antenna and removal of one RRH in each sector, resulting in three antennas and two RRHs per sector. The new replacement antennas have integrated radio heads, eliminating the need for a separate fixture. No changes are planned for the supporting equipment cabinet.

# Project Location



Site

Site Location – Export Import Bank – Lafayette Building



Site

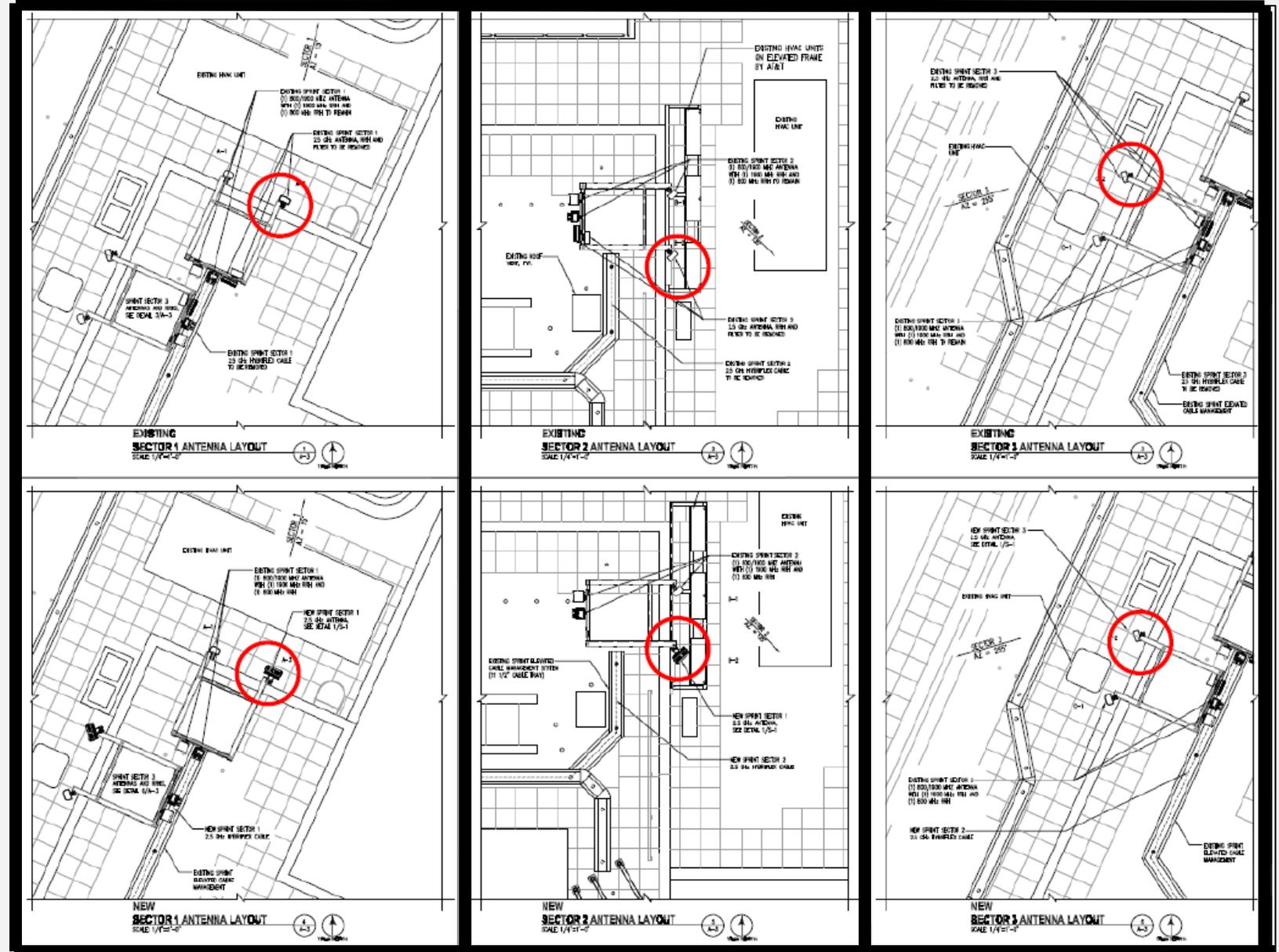


# Proposed Changes



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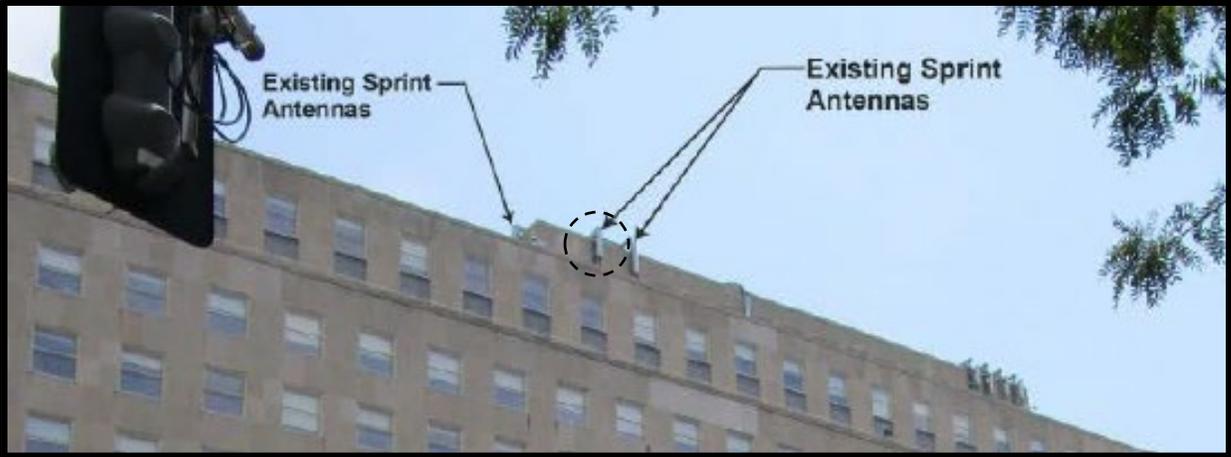


**PROPOSED**

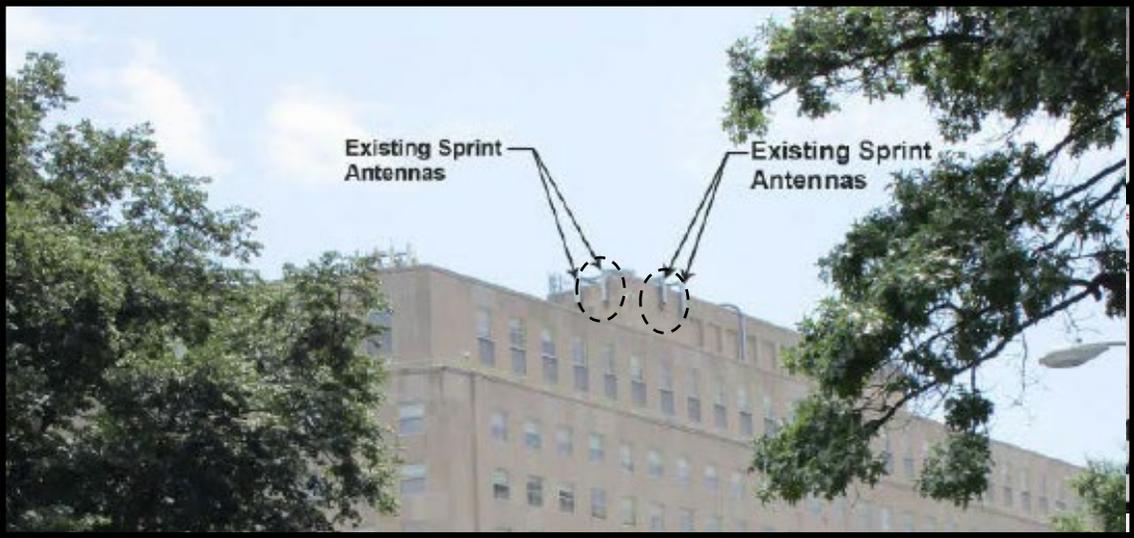
# Visual Study



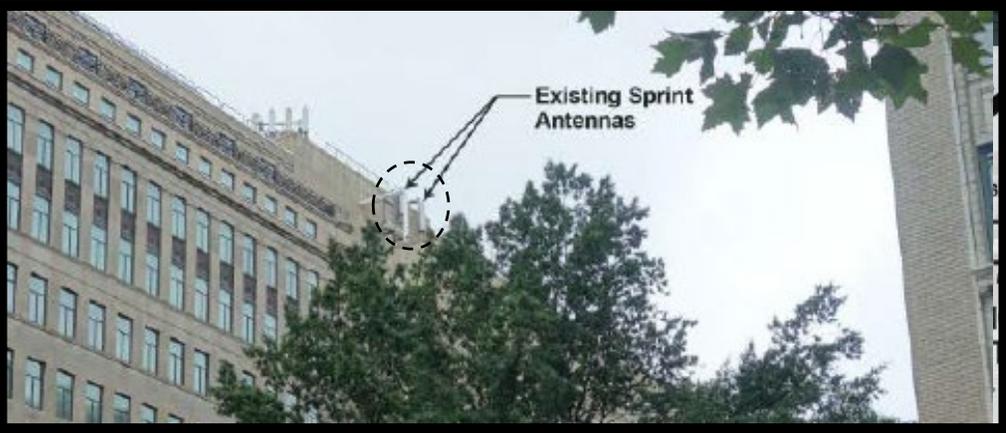
# Visual Study – (Photo 1)



# Visual Study – (Photo 2)



# Visual Study - (Photo 3)



# United States Department of Commerce Building Telecommunications Facility Upgrades

1401 Constitution Avenue, NW  
Washington, DC

Preliminary and Final Building Plans

United States General Services Administration

# Project Summary

**Commission Meeting Date:** March 7, 2019

**NCPC Review Authority:** Federal projects within the District of Columbia - 40 U.S.C. § 8722(b)(1) and (d))

**Applicant Request:** Approval of Preliminary and Final Building Plans

**Session:** Consent Calendar

**NCPC Review Officer:** M. Weil

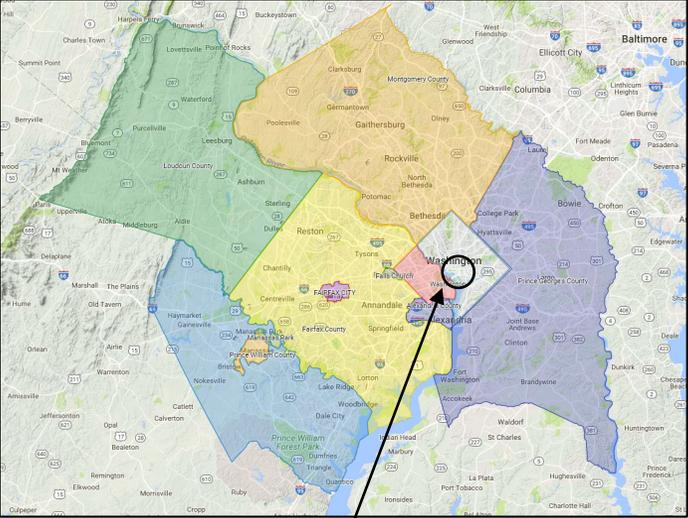
**NCPC File Number:** 8051

## Project Summary:

The building rooftop currently has two antennas sectors, each with two antennas and two Remote Radio Heads (RRHs). The first (Alpha) and second (Beta) sectors are located at the balustrade at the northeast and southeast corners of the building. The third sector (Gamma) is located on the 15th Street side of the roof. The equipment cabinets that support sectors one (Alpha) and two (Beta) are small in scale and located behind the balustrade. The equipment cabinet for the third (Gamma), roof top sector is located on the interior of the building.

Proposed Changes: The proposed modifications include replacement of one antenna and removal of one RRH in each sector, resulting in two antennas and one RRH per sector. The new replacement antennas have integrated radio heads, eliminating the need for a separate fixture. An auxiliary cabinet will be installed at the existing cabinet location and will remain out of view.

# Project Location



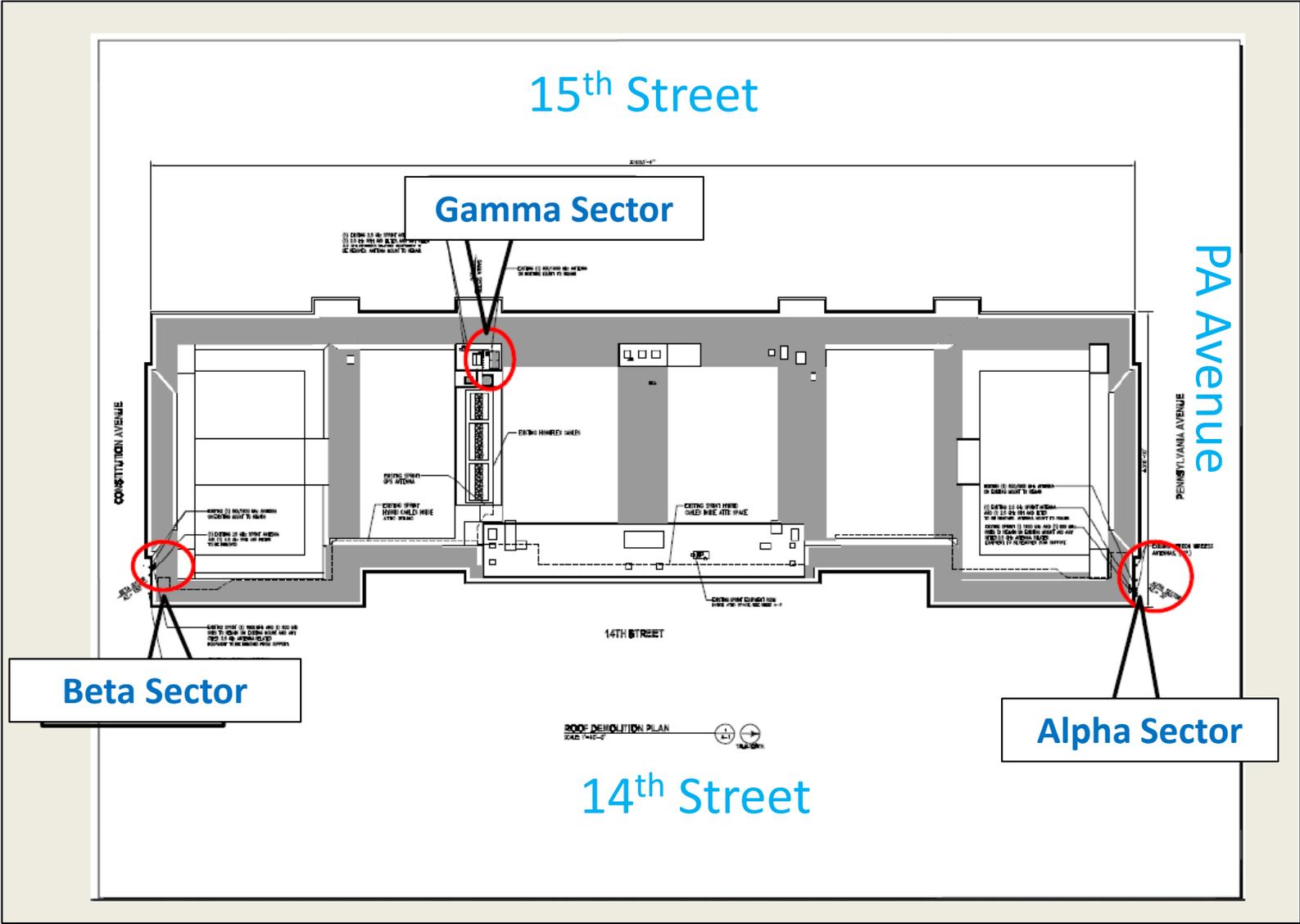
Site

Site Location – Department of Commerce – Hoover Building



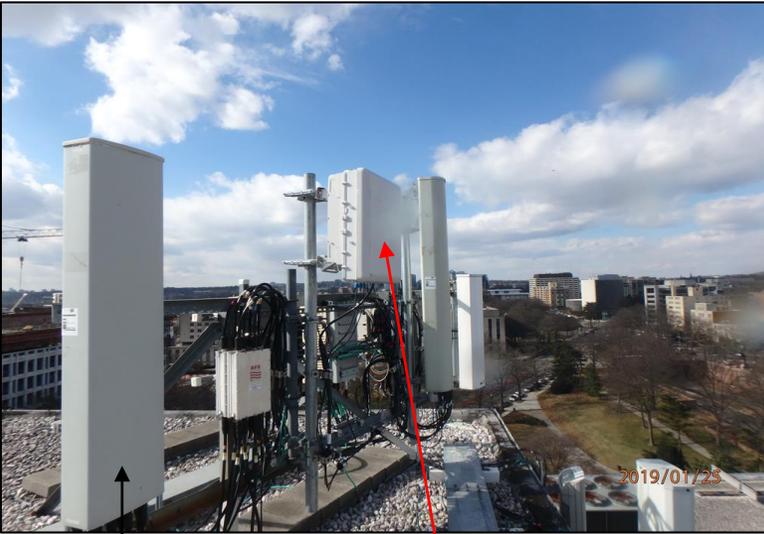
Site

# Existing Antenna Sector Locations

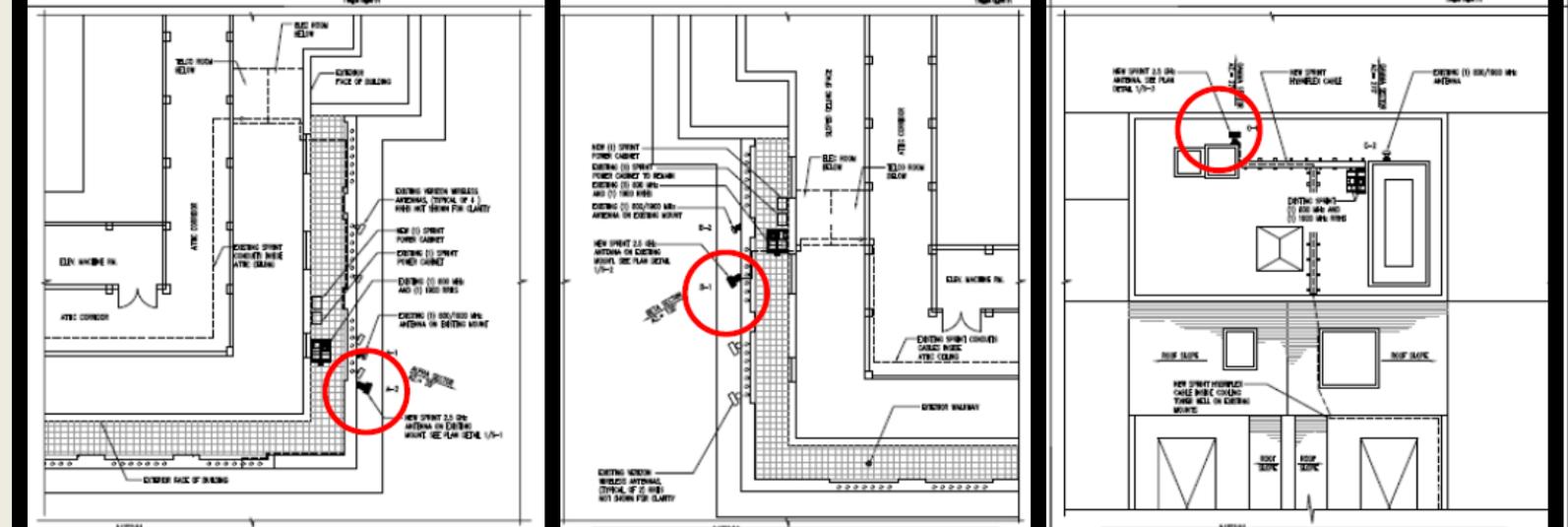
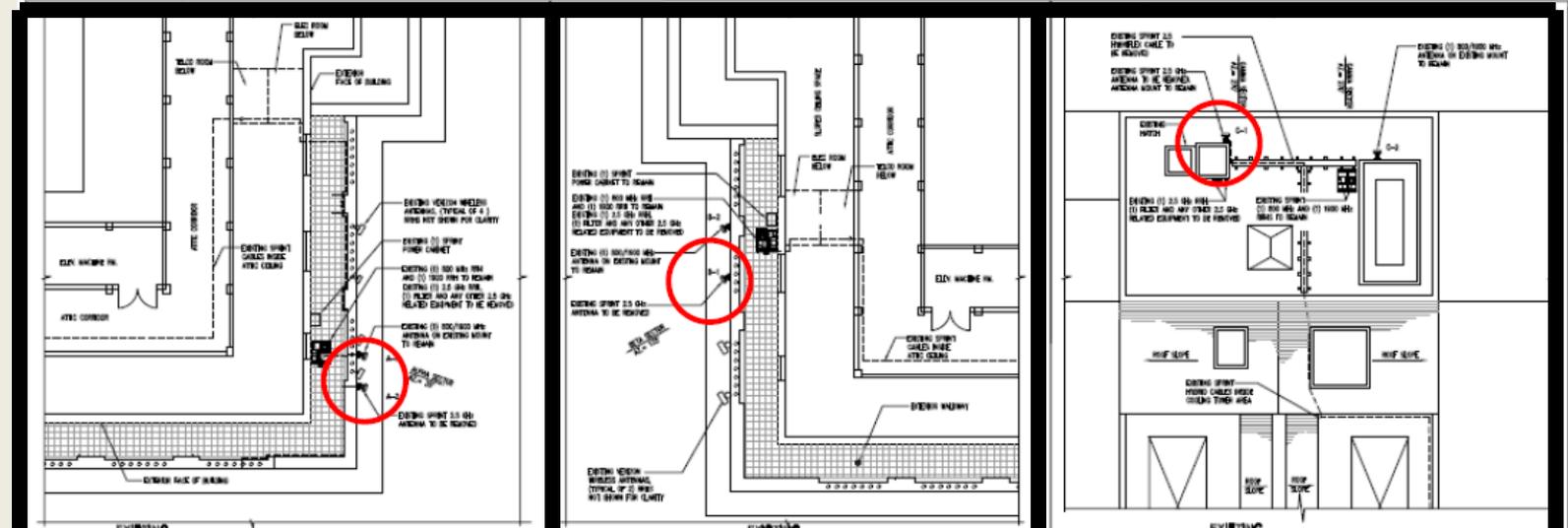


# Proposed Changes

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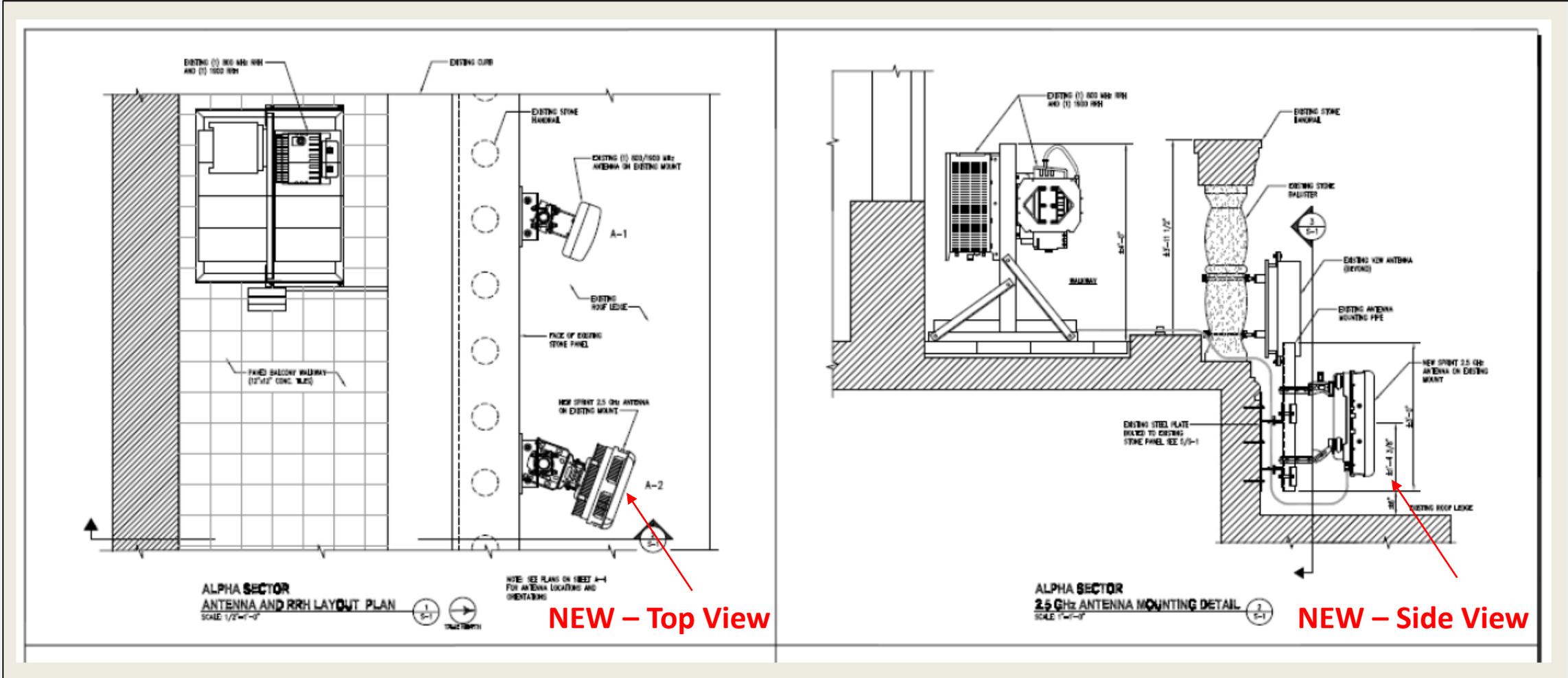
Alpha Sector

Beta Sector

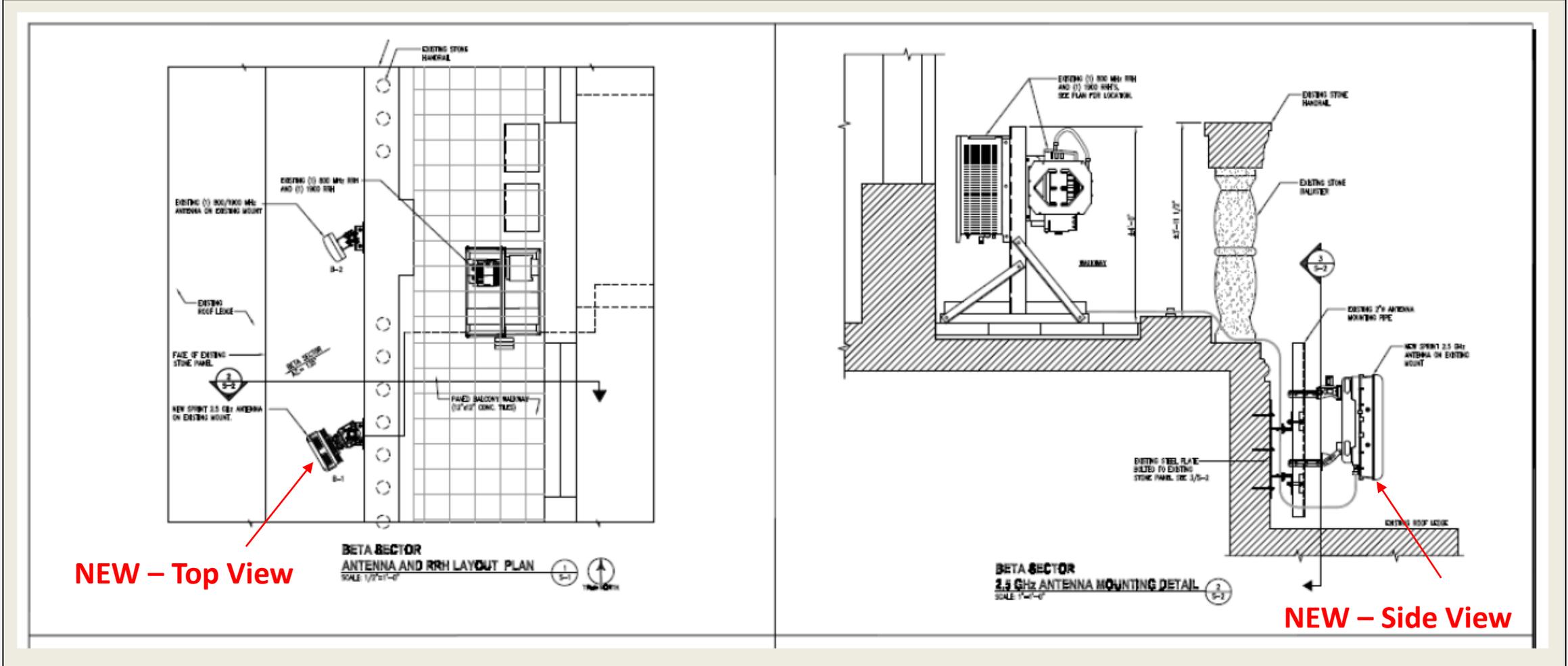
Gamma Sector

PROPOSED

# Location Detail – Alpha Sector (NE)



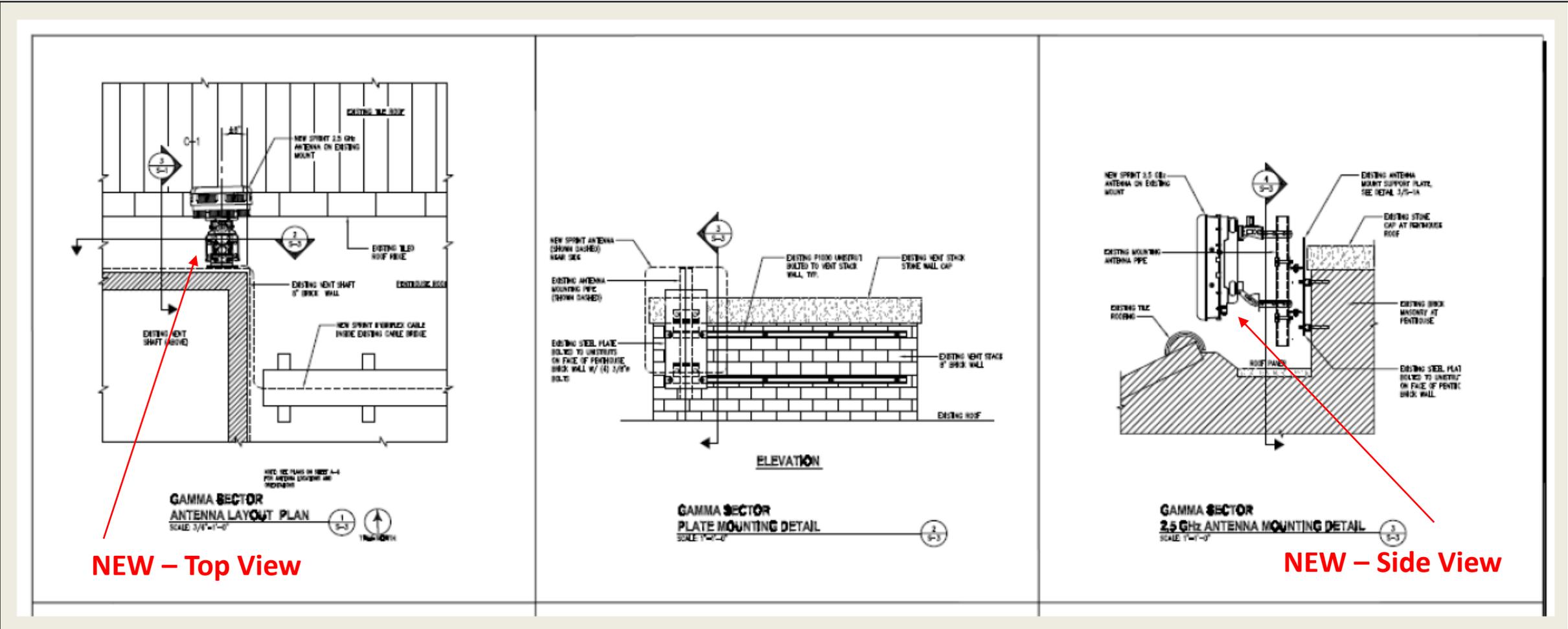
# Location Detail – Beta Sector (SE)



**NEW – Top View**

**NEW – Side View**

# Location Detail – Gamma Sector (15<sup>th</sup> Street)



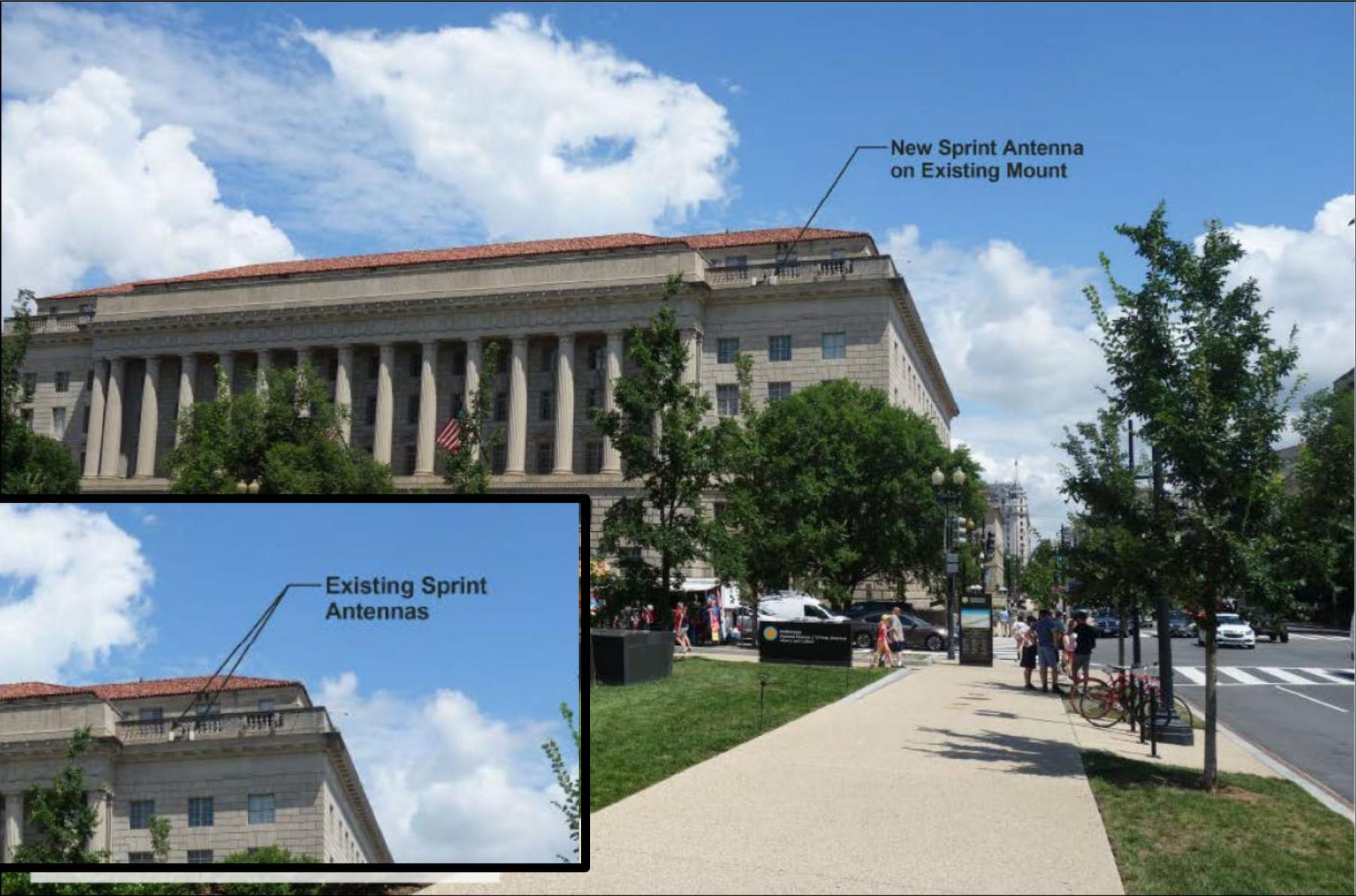
**NEW – Top View**

**NEW – Side View**

# Visual Study – (NE Corner)



# Visual Study – (SE Corner)



# Visual Study - (15<sup>th</sup> Street)

