



# Executive Director's Recommendation

Commission Meeting: March 7, 2019

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<b>PROJECT</b> <b>United States Office of Personnel Management, Theodore Roosevelt Federal Building - Sprint Telecommunications Facility Upgrades</b> 1900 E Street NW Washington, DC	<b>NCPC FILE NUMBER</b> 8041
<b>SUBMITTED BY</b> U.S. General Services Administration	<b>NCPC MAP FILE NUMBERS</b> 1.34(38.30)44871
<b>REVIEW AUTHORITY</b> Federal Projects in the District per 40 U.S.C. § 8722(b)(1) and (d)	<b>APPLICANT'S REQUEST</b> Approve preliminary and final building plans
	<b>PROPOSED ACTION</b> Approval of preliminary and final building plans with comments
	<b>ACTION ITEM TYPE</b> Consent Calendar

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## PROJECT SUMMARY

On behalf of Sprint, GSA has submitted a proposal to modify Sprint's telecommunications facility at the United States Office and Personnel Management Building, known as the Theodore Roosevelt Federal Building. Sprint currently operates 12 panel antennas in three sectors (with four antennas and four Remote Radio Head units in each sector), all located on the penthouse roof of the building. Sector 1 is situated in the northwest penthouse corner roof; Sector 3 is situated approximately midway along the western penthouse wall (facing 20<sup>th</sup> Street NW); and Sector 2 is located near the southwestern penthouse rooftop corner, along the southern roof edge (facing Virginia Avenue NW.) The modification will replace one (of four) existing panel antennas with a smaller combined antenna/Remote Radio Head (RRH) unit and remove one RRH unit in each sector. In response to staff's request, Sprint has agreed to remove the existing Remote Radio Head (RRH) equipment from antenna stands and set the equipment back so that it is no longer visible from the street which is an improvement from the current condition. The overall proposed changes will help Sprint meet its coverage and capacity objectives for the immediate area as part of its network.

## KEY INFORMATION

- There are multiple telecommunications providers – AT&T, T-Mobile, Verizon – that currently operate antennas on the rooftop of the Office of Personnel Management (OPM) Building, in some cases, near the Sprint installations.
- NCPC approved 12 new telecommunications antennas (on Consent Calendar) from Verizon in February 2019, noting that Verizon worked with GSA and NCPC staff to minimize the project's view impacts to the west of the building, from San Martin Park (Reservation 106). Verizon agreed to paint its penthouse antennas the same color as the background façade of the penthouse.

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- The February 2019 Commission Action (approving 12 Verizon antennas) noted the presence of 18 other rooftop antennas that are currently out of compliance with NCPC policies due to expired approvals, with a request for GSA to submit the antennas for Commission review. The current Sprint submission includes most of these “non-compliant” antennas with the remaining antennas owned by another provider.
  - GSA provided photo-simulations demonstrating views of the proposed and existing rooftop antennas from different vantage points around each building. One set of simulations shows the use of concealment boxes around each antenna sector and another set shows each location without Remote Radio Head equipment mounted on the antenna stands.
  - 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 the Sprint telecommunications facility modification on the penthouse rooftop of the United States Office of Personnel Management – Theodore Roosevelt Federal Building, located on downtown Washington, DC.

**Finds** the stealth box concealment alternatives should be eliminated from further consideration since they draw more attention to the building roof than the antennas alone.

**Notes** that none of the antenna sectors can be relocated, either further back on top of the penthouse roof or affixed to the penthouse wall, without diminishing their operation or due to existing spatial constraints.

**Notes** that Sprint will remove all existing Remote Radio Head equipment from antenna stands and set the equipment back so that it is no longer visible from the street which is an improvement from the current condition.

**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 working with Sprint, NCPC and GSA staff are satisfied that the current proposal to replace one existing panel antenna with a smaller combined Remote Radio Head (RRH)/antenna unit in each antenna sector will have negligible impacts to surrounding views on the ground. In addition, staff worked together to explore repositioning the existing rooftop sectors further back from the penthouse sides or locating the antennas to nearby building walls and painting them to match the wall facades. This was an attempt to further diminish the sight of the existing antennas from nearby vantage points on the ground, including nearby San Martin Park (National Park Service property), which is located immediately to the west of the OPM Building. Sprint analyzed the potential antenna relocations, concluding that repositioning would have unacceptable service impacts in the area. Although Sprint agreed to paint their antennas and stands a light gray to help blend with the background sky, and to relocate all Remote Radio Head (RRH) equipment on to the rooftop, with will reduce the visual impact of the antenna sectors. Therefore, NCPC staff recommends that the Commission **approve the preliminary and final building plans for the Sprint telecommunications facility modification on the upper rooftop of the United States Office of Personnel Management – Theodore Roosevelt Federal Building, located on downtown Washington, DC.**

### Analysis

The General Services Administration submitted a proposal to modify its existing telecommunications facility on the upper rooftop of the United States Office of Personnel Management – Theodore Roosevelt Federal Building, which consists of three antenna sectors (known as Sectors 1-3). Each sector consists of four panel antennas and four Remote Radio Head (RRH) units. In each sector, Sprint will replace one existing 4'-7" x 1'-0" panel antenna with a smaller 2'-1" x 1'-7" combined antenna/RRH unit and remove one existing RRH unit. The resulting number of antennas will remain the same (4), and the RRHs will be reduced from four to three in each sector. All new antenna/RRH units will be mounted on existing rooftop stands.

As part of the proposal, Sprint shows the possibility of installing concealment boxes around each antenna sector. Photo-simulations are included in the project submission to illustrate the sector modifications, both with and without use of concealment structures. After review, NCPC staff believes that use of concealment boxes would draw more attention to the building rather than leaving the antennas without concealment structures. Each of the structures appear substantial compared to existing and proposed antenna equipment. Therefore, staff recommends that the

Commission **find the stealth box concealment alternatives should be eliminated from further consideration since they draw more attention to the building roof than the antennas alone.**

During the proposal review process, GSA and NCPC staff discussed various visual reduction strategies with Sprint to minimize the visibility of existing and new antenna equipment including:

- Prioritizing wall-mounted locations over use of existing rooftop sleds, and painting potential wall-mounted antennas to match the color of their background facade;
- Painting all rooftop stand/sled-mounted antennas and their stands a light gray to help reduce their appearance (contrast) against the background sky;
- Removing separate RRH units from antenna stands and relocating the equipment further back on the rooftop, away from penthouse roof edges;
- Relocating stand-mounted antennas back from rooftop edges as far as possible; and
- Discouraging the use of concealment boxes.

Antenna sector relocation was considered by Sprint (further back on the roof, away from the roof edge, or mounted on the lower building walls); however, potential service impacts were deemed too great to allow repositioning. In the case of Sector 1, repositioning the antennas to the lower penthouse wall was also determined to be impossible with spatial constraints from T-Mobile antennas (currently affixed to the wall) and a vent grill. NCPC staff recommends that the Commission **note that none of the antenna sectors can be relocated, either further back on top of the penthouse roof or affixed to the penthouse wall, without diminishing their operation or due to existing spatial constraints.**

Sprint was able to determine that removing existing RRH equipment from each antenna stand is possible, agreeing to relocate the equipment further back on the rooftop, away from the building edge, in an effort to reduce rooftop visual clutter. NCPC staff believes that this action would be beneficial to ground-level views based on the submitted photo-simulations. Therefore, staff recommends that the Commission **note that Sprint will remove all existing Remote Radio Head equipment from antenna stands and set the equipment back so that it is no longer visible from the street which is an improvement from the current condition.**

Based on the photo simulations, NCPC staff notes that some antennas may be visible from the ground under proposed color schemes, so both 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 balance the needs of the telecommunications industry with protecting downtown Washington's historic and culturally-significant resources. NCPC staff is currently coordinating with GSA in this effort, with potential

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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 proposal 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 project 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 the 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 the proposal.

### **National Environmental Policy Act**

Pursuant to regulations implementing the National Environmental Policy Act, the General Services Administration concluded that the 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 the project. Staff finds that the 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.

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## **CONSULTATION**

### **Coordinating Committee**

The Coordinating Committee reviewed the proposal 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, with specific project-related remarks submitted by the National Park Service regarding use of concealment boxes and attempting to mitigate visual impacts from antenna equipment to nearby parkland. 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 Office of Personnel and Management Building Telecommunications Facility Upgrades

1900 E Street, 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

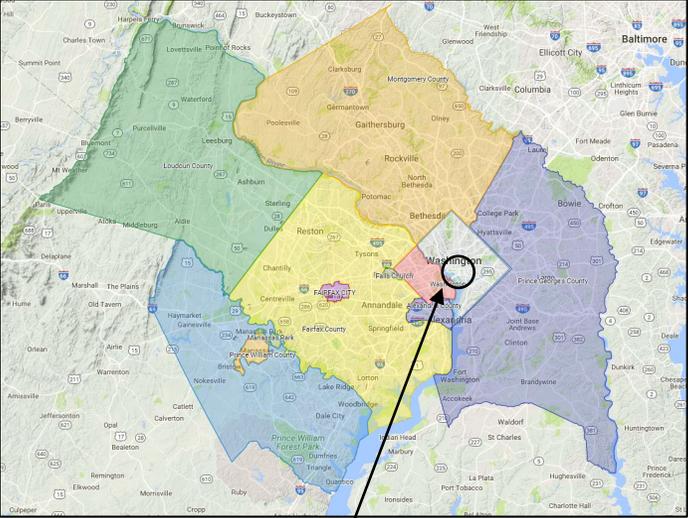
**NCPC File Number:** 8041

## Project Summary:

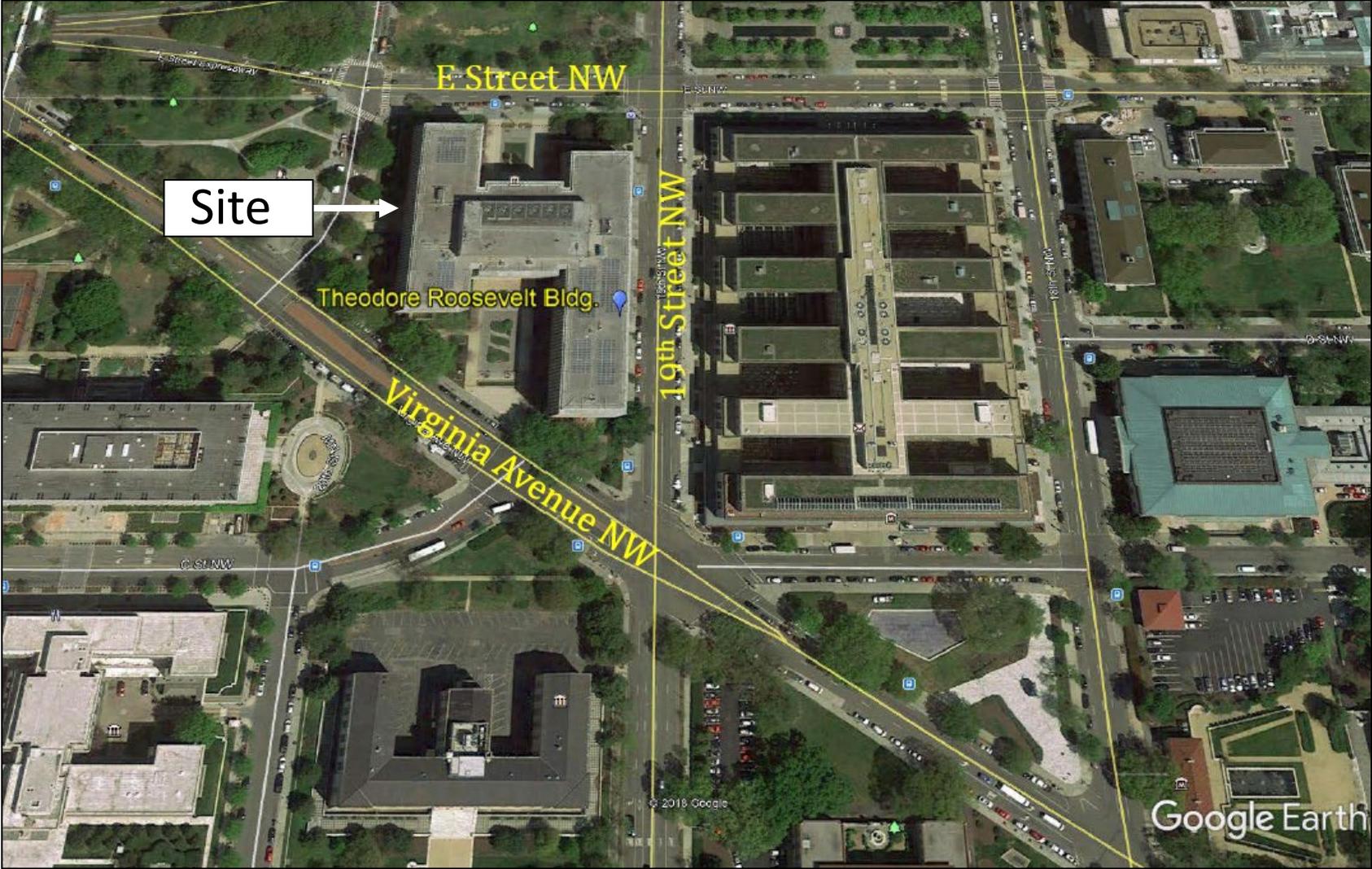
The building rooftop currently has three antenna sectors, each with four antennas and four Remote Radio Heads (RRHs). All antenna sectors are sled mounted and located on the upper penthouse roof area. The equipment cabinet is located inside the building and is not visible.

Proposed Changes: The proposed modifications include replacement of one antenna and removal of one RRH in each sector, resulting in four antennas (similar to existing) and three RRHs per sector. The new replacement antennas have integrated radio heads, eliminating the need for a separate fixture. All antenna sectors are sled mounted and located on the upper penthouse roof area. The equipment cabinet is located inside the building and is not visible.

# Project Location



Site



Site

E Street NW

Theodore Roosevelt Bldg.

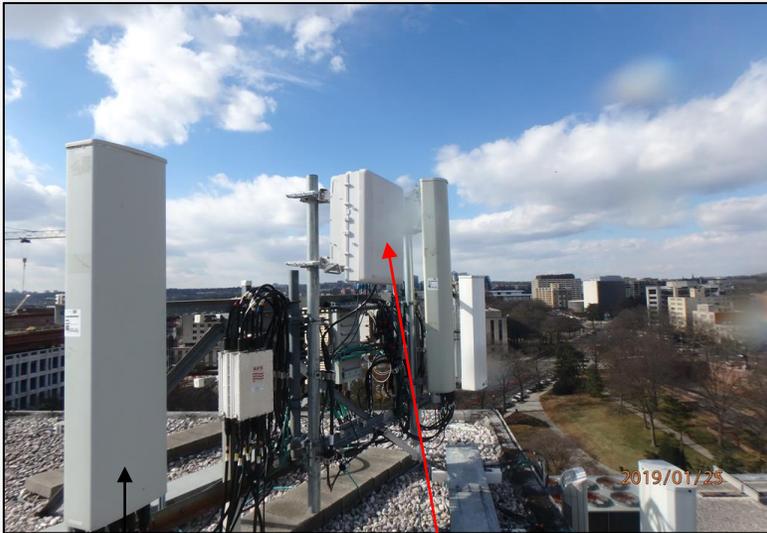
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19th Street NW

Google Earth

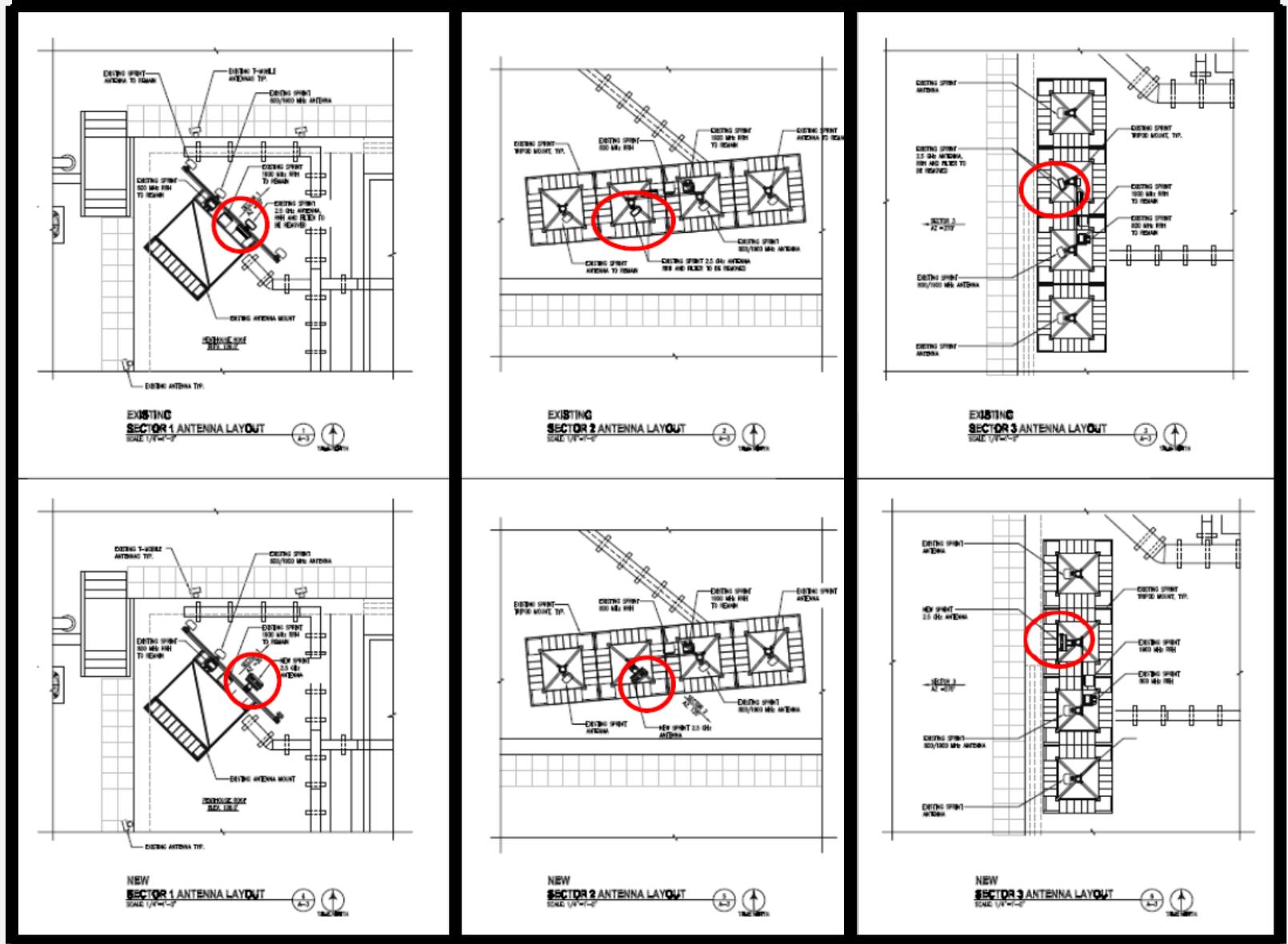


# Proposed Changes



This replaced with **this**

**EXISTING**



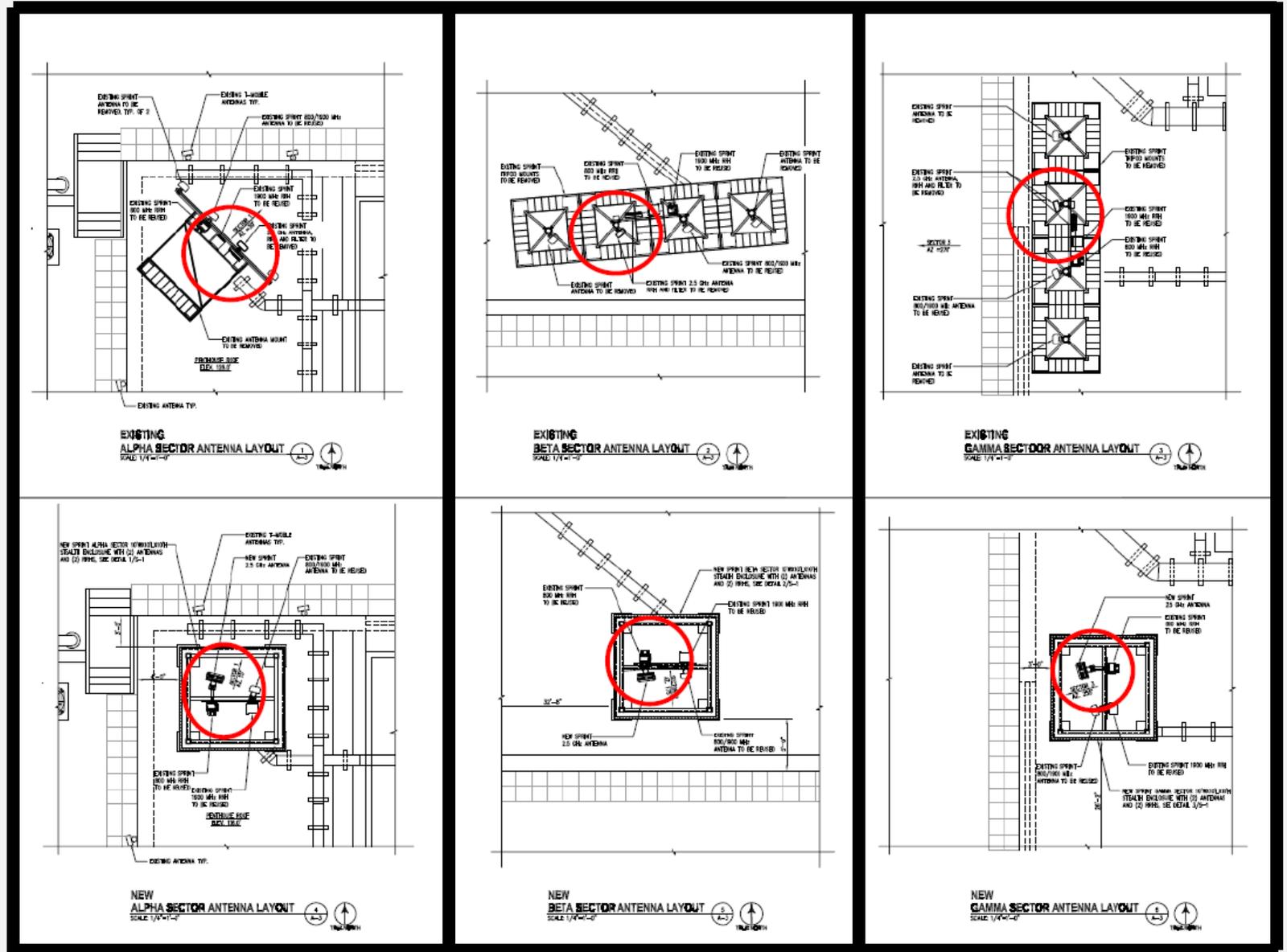
**PROPOSED**

# Proposed Changes (w/ Stealth Enclosures)



This replaced with **this**

**EXISTING**

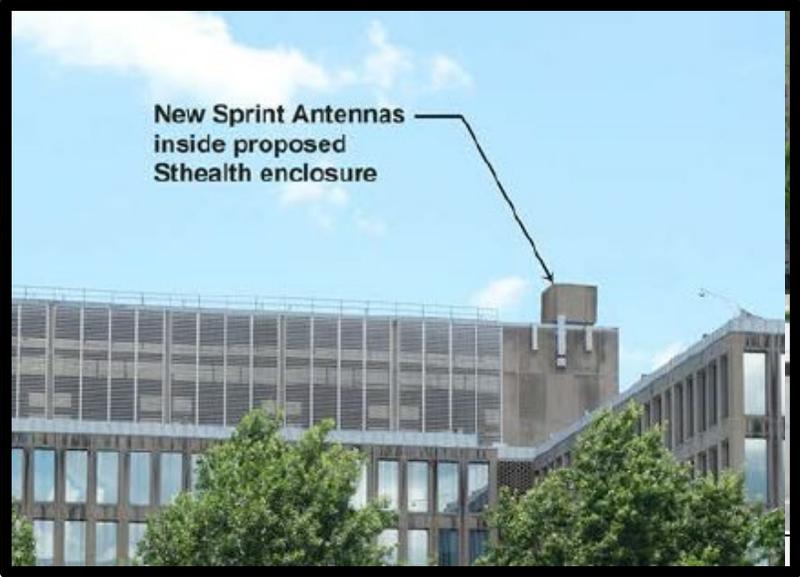
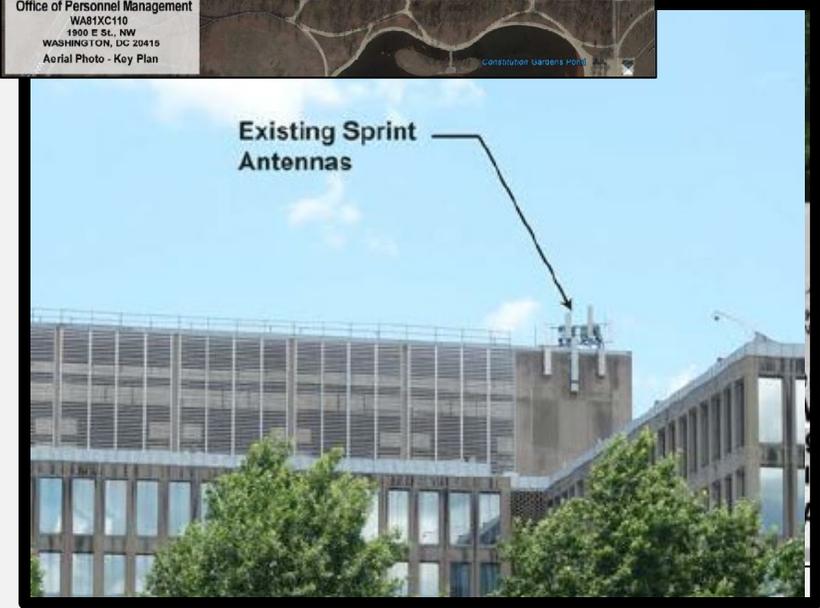
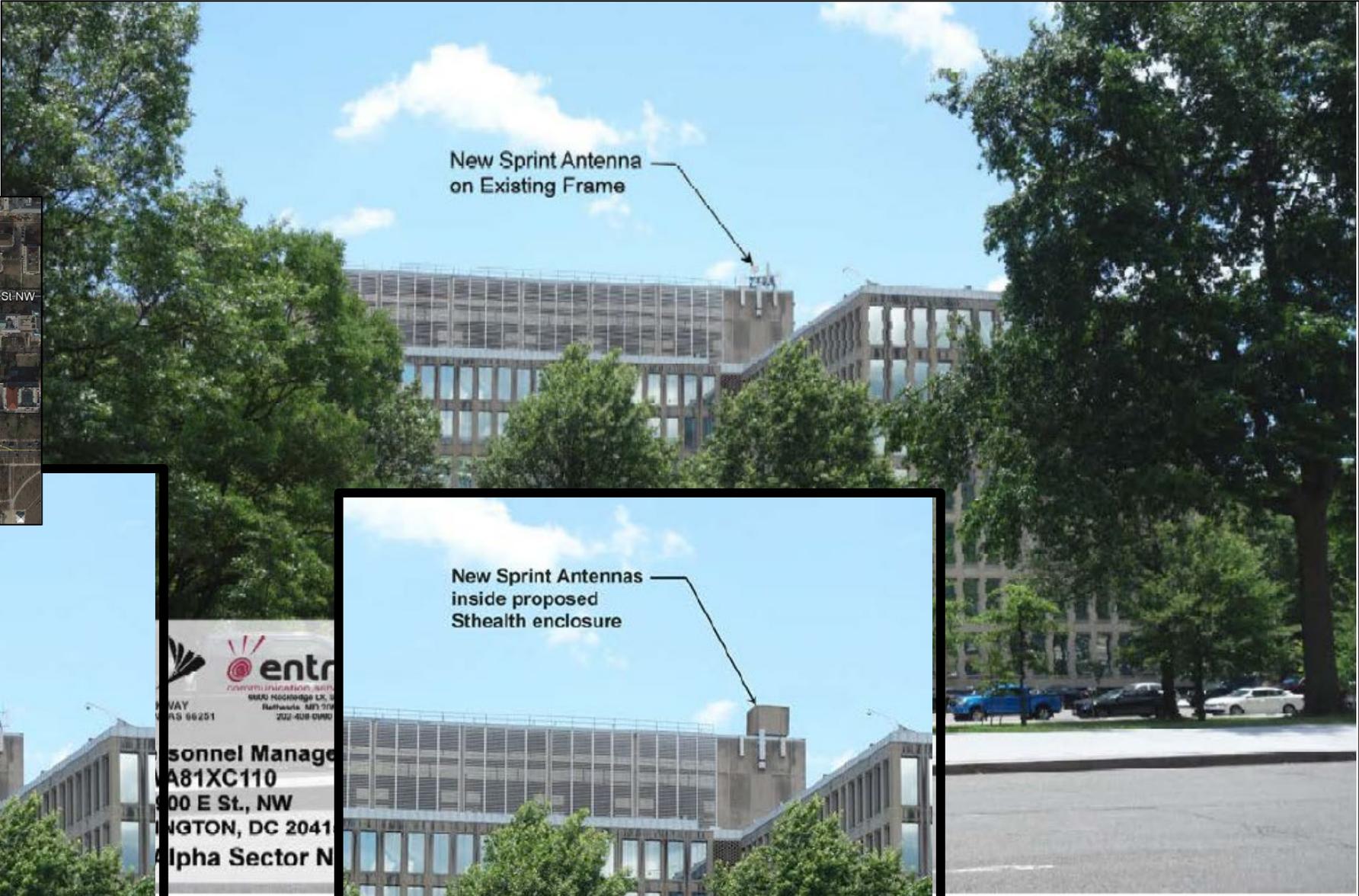


**PROPOSED**

# Visual Study

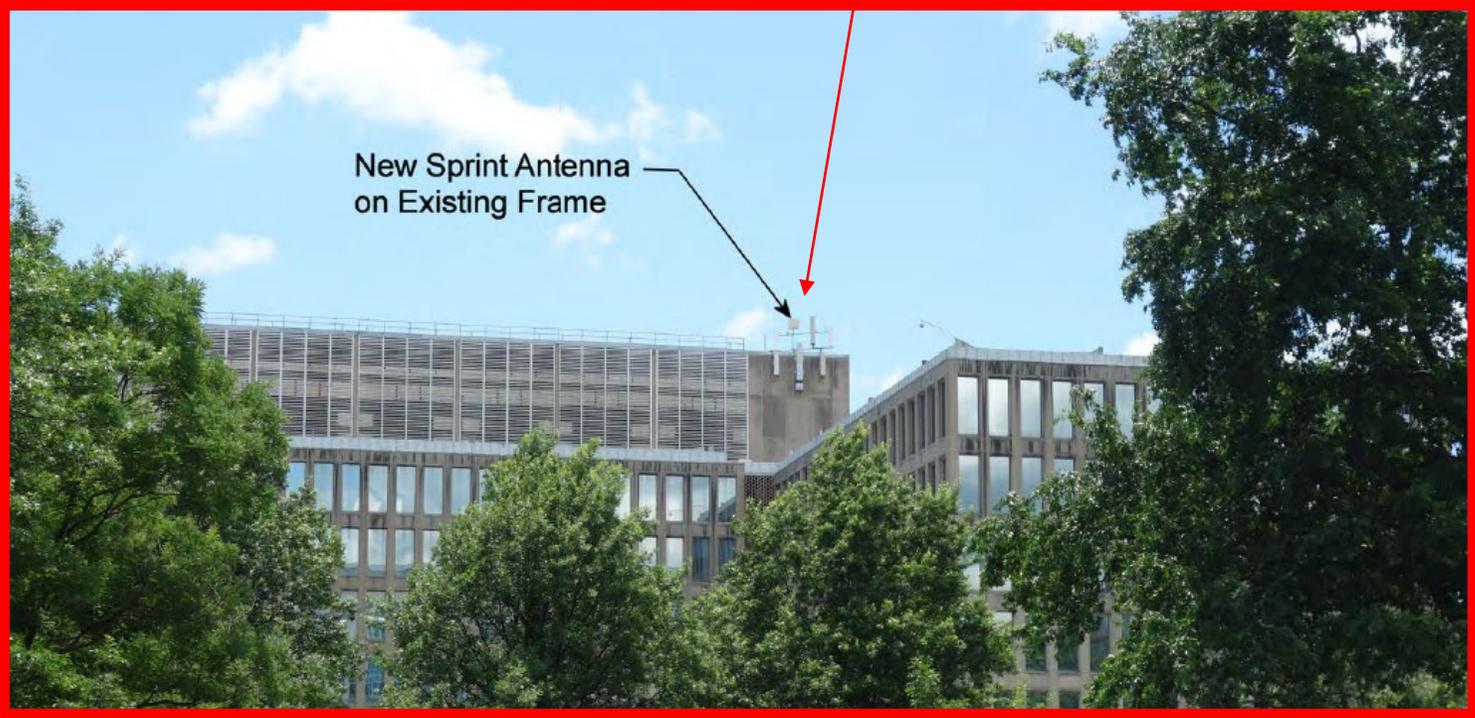


# Visual Study – (Photo 1)



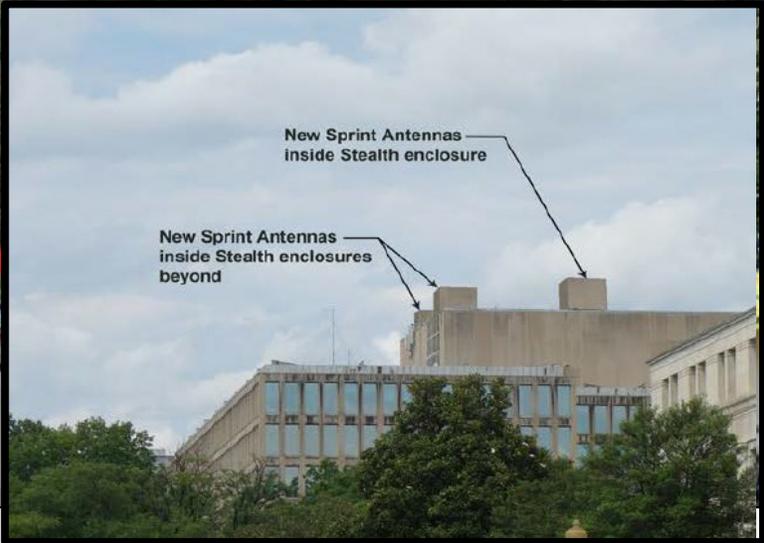
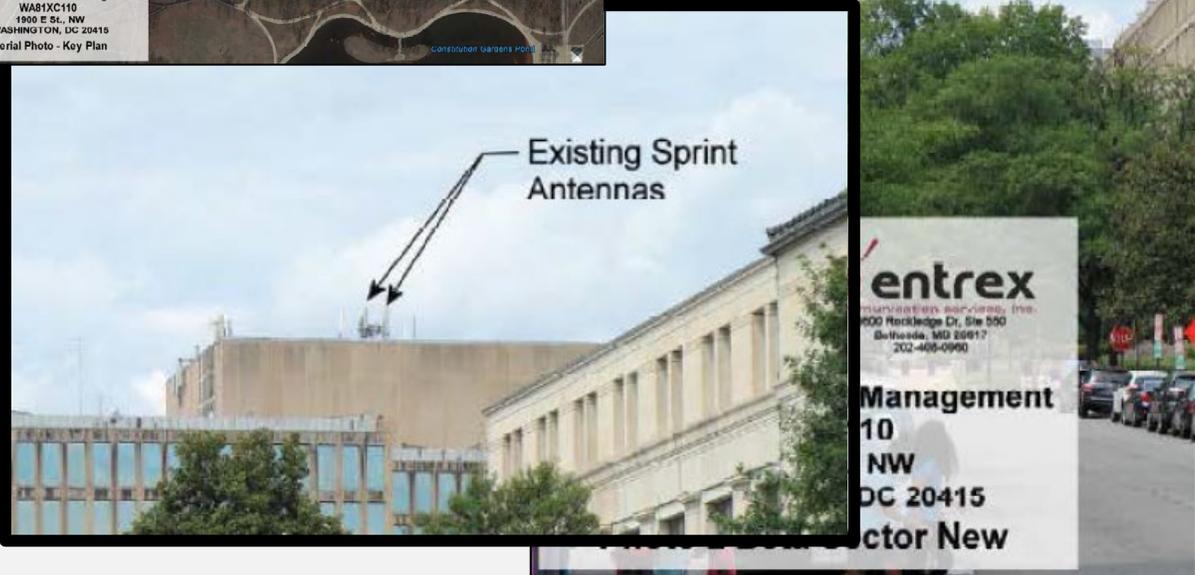
# Visual Study – (Photo 1)

all RRH equipment  
removed



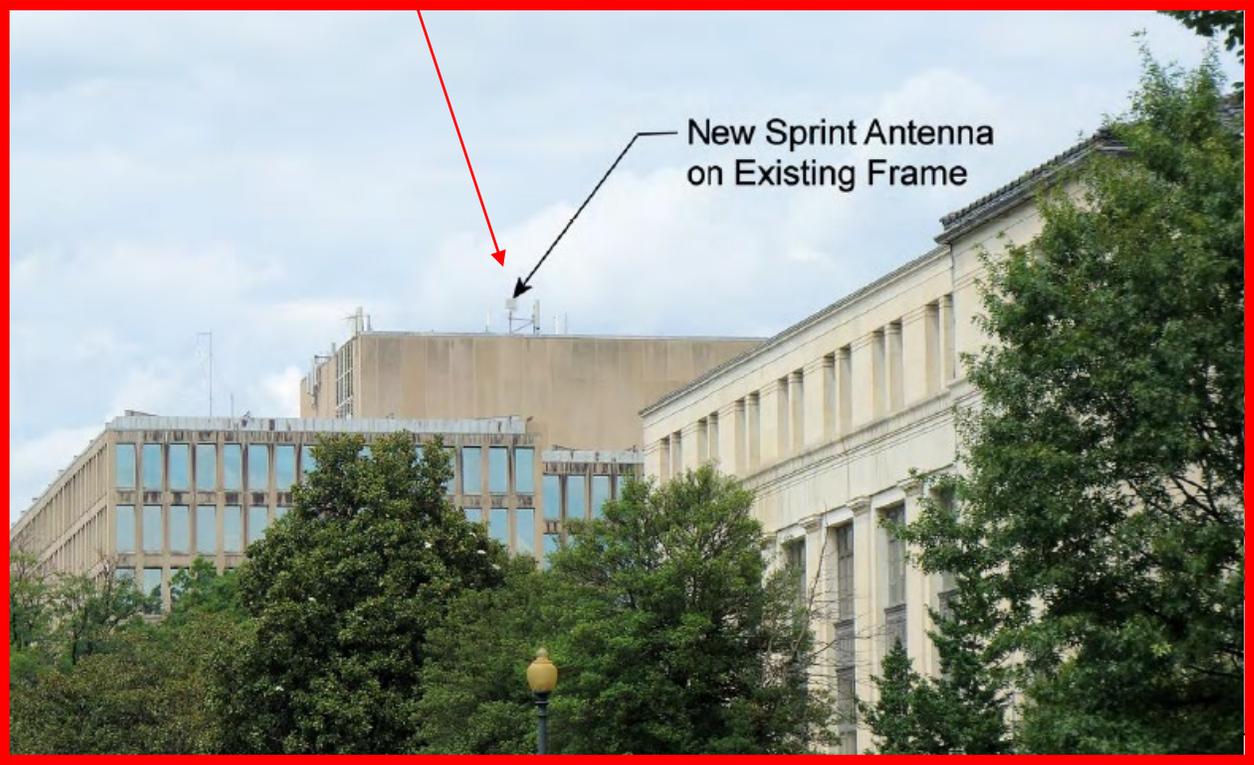
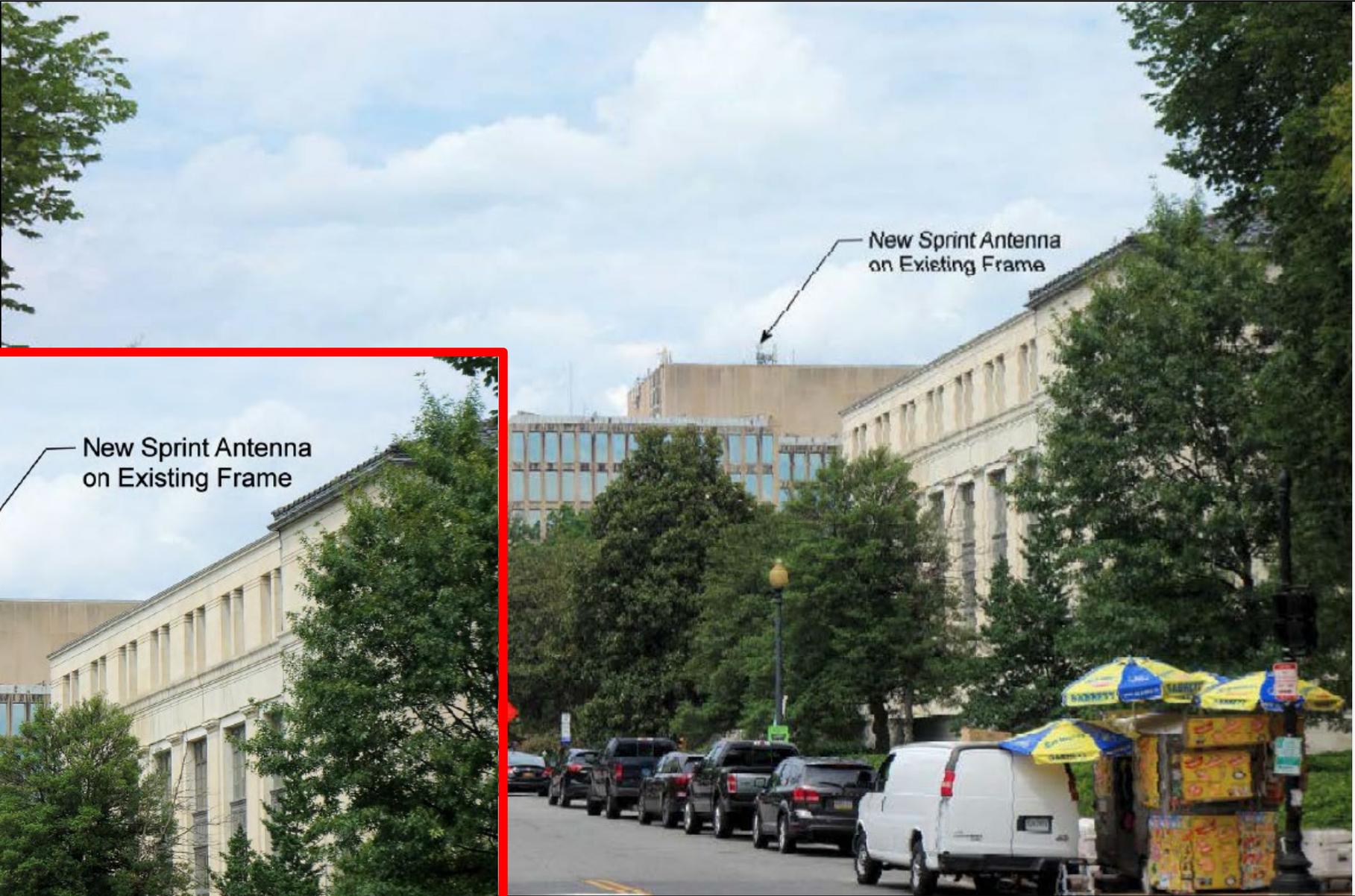
15  
New

# Visual Study – (Photo 2)

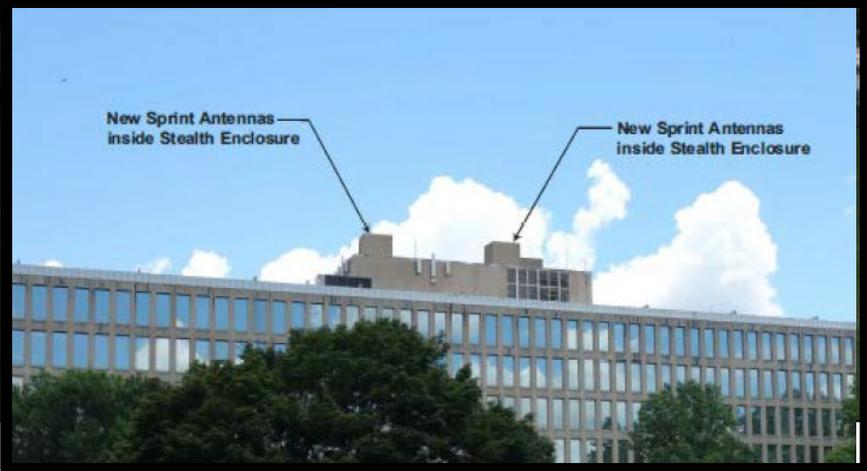
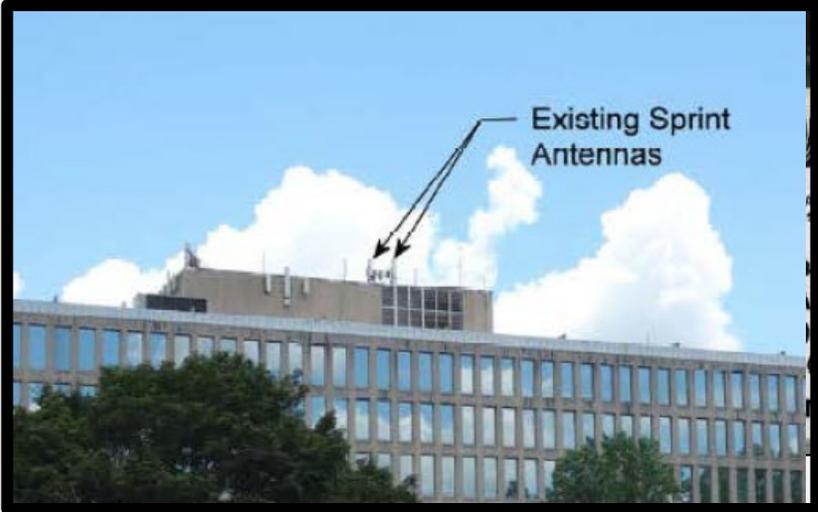


# Visual Study – (Photo 2)

all RRH equipment  
removed



# Visual Study - (Photo 3)



# Visual Study - (Photo 3)

all RRH equipment  
removed

