

Executive Director's Recommendation

Commission Meeting: December 3, 2020

PROJECT

Antenna Submissions Guidelines Update

SUBMITTED BY

National Capital Planning Commission

REVIEW AUTHORITY

Review of Plans and Projects for Consistency with the Comprehensive Plan per 40 U.S.C. § 8711(e)(2) and 8722(a)

NCPC FILE NUMBER

6947

NCPC MAP FILE NUMBER

00:00(38.30)45242

APPLICANT'S REQUEST

Adoption of the revised Submission

Guidelines

PROPOSED ACTION

Adopt the revised Submission

Guidelines

ACTION ITEM TYPE
Staff Presentation

PROJECT SUMMARY

The National Capital Planning Commission (NCPC) first adopted the antenna guidelines in January 1988 to address the impacts of new telecommunication infrastructure in the National Capital Region. The purpose of the guidelines is to protect the skyline, historic resources and scenic character of the nation's capital and provide a safe environment for employees, visitors, and residents. The guidelines were last updated in 2001. This update is necessary to address significant advances in technology, in addition to an increased demand for multiple types of telecommunication infrastructure. Staff is requesting adoption of the updated antenna guidelines, which will replace Chapter 5 of the existing NCPC Submission Guidelines.

The Commission released the draft antenna guidelines for a 60-day public comment period at its July 2020 meeting. During that period, NCPC hosted two outreach sessions, one focused on the public and industry professionals, and the other focused on federal and local government agencies. In addition, NCPC staff presented the antenna guidelines update to the Cellular Industry Wi-Fi Provider Working Group, which is managed by the District of Columbia Homeland Security and Emergency Management Agency. This working group is comprised of industry professionals, public safety organizations, and federal and local governmental representatives. Since the Commission's draft review, staff has revised the guidelines based on some of the comments received during the public comment period. The revisions, which are primarily focused on the design review criteria and the review process, are discussed in more detail in the staff analysis section.

KEY INFORMATION

• The antenna guidelines were first approved in 1988 and were last updated in 2001.

- The purpose of the guidelines is to protect the skyline, historic resources and scenic character of the nation's capital and provide a safe environment for employees, visitors, and residents.
- Proposed changes include antenna definitions, updated design review criteria and review processes.
- Staff held two meetings focused on the antenna update: one public meeting on August 4, 2020 and one agency meeting on August 26, 2020.
- The public comment period ended on September 14, 2020. GSA and the Committee of 100 on the Federal City were the two organizations that submitted comments on these guidelines.

RECOMMENDATION

The Commission:

Approves the final adoption of the updated *Submission Guidelines* per 40 U.S.C. § 8711 (e)(2) and 8722(a).

Notes the updated Submission Guidelines will be effective 60 days after the notice of final rulemaking is published in the Federal Register.

Notes following Commission adoption, staff will incorporate any changes as directed by the Commission and will complete minor editorial updates to the text and graphics to ensure document accuracy and consistency.

PROJECT REVIEW TIMELINE

Previous actions	January 1988 – First adoption of the guidelines.				
	June 2001 – Guidelines first updated.				
	July 2020 – Release of new update for public comment period.				
Remaining actions (anticipated)	None				

PROJECT ANALYSIS

Executive Summary

There have been significant changes in technology since these guidelines were last updated in 2001. The creation, proliferation and use of smart phones, tablets and GPS devices have increased the demand for cellular antennas. In addition, service providers are starting to deploy the 5th

generation or 5G network nationally, which will further increase the use of and reliance on cellular networks. In order to provide sufficient guidance for current and future antenna infrastructure, staff is proposing changes to the guidelines that will help protect significant viewsheds and historic resources, clarify the criteria the Commission uses to review antennas, and update the review process to simplify the review of temporary antennas.

Specifically, staff has identified three areas to address in this update:

- 1. *Antenna Types* Guidelines do not address the different antenna types that have emerged over the last several decades (e.g. small cells, temporary antennas, ancillary equipment).
- 2. *Design Review Criteria* Standards for evaluating installations do not adequately consider location, color, cumulative effects, or priority viewsheds.
- 3. Review Process Review process does not differentiate between temporary, permanent, and small cell antennas.

Staff notes the updated guidelines will apply in the following instances: installation of new antennas; modification/replacement of existing antennas; and renewal of existing antennas when their previous approval has expired. A summary of the major modifications made following the draft release of the submission guidelines is included in the analysis that follows. Staff supports these changes and therefore recommends the Commission approve the final adoption of the updated Submission Guidelines per 40 U.S.C. § 8711 (e)(2) and 8722(a).

Staff Analysis

Staff received several general comments from GSA and the Committee of 100 regarding health and safety concerns, existing and future antenna leases, and the NCPCs review process. These comments are listed in the attached spreadsheet of received comments along with NCPC staff responses. Some of the comments did not result in changes to the submission guidelines. A few examples include:

- GSA commented the guidelines identified viewsheds as important, but the guidelines did not provide enough emphasis on health and safety. Staff agrees that health and safety are very important and as a result the guidelines require an RF analysis from the applicant. NCPC staff, however, are not health and safety experts in the telecommunications field and therefore rely on regulations provided by the Federal Communications Commission (FCC) and the Occupational Safety and Health Administration (OSHA) to address these concerns.
- GSA also noted existing antenna leases are for 5 years with three, five-year lease extensions and it is likely during that time antenna equipment will be replaced. The concern is that past leases may not address changes as a result of the Commission's review. While NCPC has review authority for antennas on federal buildings regardless of lease agreements, staff understands there may have been leases in the past that did not include NCPC's jurisdiction and staff will work with GSA to find the best solution if a conflict arises. Moving forward, GSA will ensure that all new leases accommodate NCPC review of antennas, including renewals.

The Committee of 100 inquired whether it would be possible to coordinate termination dates so that the cumulative effect of all antennas on a site can be considered together. Staff has noted that since federal agencies submit antenna applications based on service provider requests and approvals are for fixed periods of time (5 or 10 years), coordination of their termination dates is not possible. However, the proposed guidelines address cumulative effects for new antennas and for renewals. See Section 5.4 Table 23, Multiple Antennas on a Single Building in the Design and Safety Criteria.

Comments Received on the Antenna Type

Staff's proposal to update the antenna guidelines includes the discussion of three categories of antennas and their review processes. The antenna categories include permanent, temporary and small cell antennas. The current guidelines do not distinguish between these antenna types which can be problematic when the installation of a temporary antenna is for less time than a Commission review cycle, or when there is a last minute need to install a temporary antenna and it does not align with the review cycle.

The draft antenna guidelines released in July proposed that temporary antennas installed for 90 days or less would not need to be reviewed by NCPC. It also included a proposal that staff would develop a list of excepted annual events that would not require NCPC review if the temporary antennas needed to be installed for a period greater than 90 days. After a discussion with the General Services Administration and the Smithsonian Institution, staff does not believe there are any events that meet this criterion so is therefore eliminating this option from the submission guidelines to keep things simple. In the future, if an event is identified that requires temporary antennas to be installed for longer than 90 days, staff will revisit this issue and may recommend an amendment to the guidelines.

The second change to this section of the guidelines is the addition of simple diagrams that details what is meant by "the infrastructure may either be permanently affixed to or free standing on a building." Staff agrees that diagrams are helpful and is adding them to illustrate what is meant by this statement.

Comments on the Design and Safety Criteria

The current antenna guidelines include a set of criteria staff uses to evaluate antenna submissions. Staff proposes to simplify and reorganize the criteria (see list of criteria below) according to new building design, general rooftop antenna siting, significant viewshed siting, multiple antennas on a single roof, materials, lighting, advertisement, health, and safety. Each antenna submission will need to describe how it meets the applicable criteria.

Staff is proposing several changes to the Design and Safety Criteria after reviewing the comments from GSA and the Committee of 100. Staff did not receive any comments on Design and Safety Criteria 5, 6, 7, 8, or 10, so these are not discussed below. The complete list of Design and Safety Criteria is included in Appendix C.

The updated Design and Safety Criteria are listed below, and changes are shown in **bold and underline**:

1. New building design/master plans - Federal agencies should anticipate the need for antennas on all new buildings and incorporate, as necessary, any screening or other components into the building's design to reduce their visibility. As much as they may be anticipated, locations or zones on installations that permit antennas requirements should also be considered, identified, and included as part of federal agency master plans.

<u>Comment</u> - GSA requested clarification of this criterion regard planning for antennas at an installation as the guideline was too vague. GSA noted the difficulty in determining where antennas may be anticipated, given these are requested by service providers when there is a gap in coverage.

<u>NCPC Staff Response</u> - Staff agrees with this comment and has changed the text accordingly. Staff believes the inclusion of such information on master plans has value since some installations have industrial, office, residential and recreation spaces, and there are likely locations where antennas are more appropriate.

General rooftop antenna siting - Consistent with technical communications requirements, rooftop antennas should be:

- a. Installed at the lowest possible elevation above the roof line and as a last resort located on top of any penthouse structure.
- b. Set back from the edge of the building at a minimum distance at least equal to the antenna's height above the roof (1:1 ratio).
- c. Screened as appropriate from any public views in a manner that is sensitive to the architectural character of the building unless the screening results in a greater impact on public views.
- d. <u>Installed such that the top of the antennas shall not exceed the wall height, when antennas are mounted on an existing mechanical penthouse.</u>
- e. <u>Installed to ensure the proposed stealth enclosure</u>, if needed, is the same height as the highest part of the enclosed equipment.

<u>Comment</u> - GSA provided comments clarifying how antennas should be attached to mechanical penthouses and the height of stealth enclosures, when they are proposed.

<u>NCPC Staff Response</u> - Staff agrees that providing clarifications to this text is important to ensure the submissions in the future will have sufficient guidance and applicants will know what is expected with their proposal.

2. Preeminent viewshed siting – rooftop antennas on buildings within preeminent viewsheds (as shown in Figure 8):

In consultation with the Commission staff, the submitting agency/service provider applicant should provide a viewshed analysis indicating how it will minimize viewshed impacts by either moving the antenna to a location of less visibility, camouflaging it by using a color to match the building, or installing a screen to hide the antennas. The analysis shall include photo simulations of the proposed equipment from the preeminent viewsheds.

<u>Comment</u> – GSA provided a comment there needed to be an explicit description of photo simulations from the adjacent preeminent viewshed/streets identified on Figure 8.

<u>NCPC Staff Response</u> – Staff agrees and has added language to require photo simulations from preeminent viewsheds.

3. Multiple antennas on a single building — <u>The applicant is required to submit</u> a rooftop antenna plan is required when multiple antennas on a building rooftop are visible from the street. The plan should include a coverage impact analysis indicating how antenna placement on the rooftop will affect coverage and address the cumulative <u>visual</u> impacts of several antennas on the building and mitigate for the effects by including greater setbacks or a screening solution.

NCPC Staff Comment – Staff is proposing a minor change to the proposed text.

9. Health—<u>Applicants</u> must provide a certification that proposed antennas are in compliance with radio frequency (RF) radiation emission guidelines established by the Federal Communications Commission (FCC) and the Occupational Safety and Health Administration (OSHA). If other emission sources are nearby, the cumulative effect of the additional proposed antenna must also follow the FCC guidelines.

NCPC Staff Comment – Staff is proposing a minor change to the proposed text.

Comments on the Review Process

The comments on this section were primarily focused on the clarification or addition of documentation that we are requesting with the antenna submissions. As part of NCPC's preliminary and final review processes, GSA noted the Commission should make several clarifications to the guidelines namely: request the service provider to submit a cell phone coverage map; include dimensions for existing and proposed antenna equipment; add impacts from RF to environmental review; and provide photo-simulations of the proposed equipment. Staff supports making these changes as they will provide a clearer understanding of future antenna proposals. The submission guidelines in Appendix A have been updated accordingly.

CONFORMANCE TO EXISTING PLANS, POLICIES AND RELATED GUIDANCE

Comprehensive Plan for the National Capital

The updated antenna guidelines are consistent with the Urban Design, Federal Workplace, Parks and Open Space, and Historic Preservation Elements of the Comprehensive Plan.

National Historic Preservation Act

This proposal does not sustain characteristics of a federal undertaking. The proposal of policy revision does not implement, contract, or take other actions that would preclude consideration of the full range of alternatives to avoid or minimize harm to federal historic properties. Consequently, the proposed action does not require review pursuant to the National Historic Preservation Act, Section 106 process.

National Environmental Policy Act

Staff reviewed the proposal in accordance with NCPC's implementation of the National Environmental Policy Act and determined that these guidelines which are in support of the Comprehensive Plan can be categorically excluded from further environmental analysis and documentation. The action is determined by the staff to qualify as NCPC's Categorical Exclusion: (4) Adoption of a Federal Element of the Comprehensive Plan or amendment thereto or broadbased policy or feasibility plans prepared and adopted by the Commission in response to the Comprehensive Plan.

CONSULTATION

The draft antenna guidelines have been coordinated internally and with various agencies. Staff held a public meeting on August 4, 2020 and an agency meeting was held on August 26, 2020.

ONLINE REFERENCE

The following supporting documents for this project are available online at www.ncpc.gov.

Prepared by Carlton Hart 11/25/2020

ATTACHED

Appendix A – Chapter 5 – Final Antenna Guidelines

Appendix B – Draft Antenna Guidelines – Comments and Responses

Appendix C – Design and Safety Criteria

APPENDIX A

Chapter 5 - Final Antenna Guidelines

Chapter 5. Antenna Submission Guidelines

5.1 Introduction

In accordance with federal law and the D.C. Code, the Commission has the authority to review and approve the placement of antennas and their structures, including monopoles, towers, equipment buildings, and shelters located on federal land in the National Capital Region and on District-owned land in the District ofto Columbia¹.

Similar to the Commission's review of site and building plans, the Commission exercises an approval authority for its review of antennas on federal land within the District of Columbia or on District-owned land in the Central Area. The Commission has an advisory authority for antenna projects located on federal land outside of the District in the National Capital Region or on District-owned land outside the Central Area. In general, the Commission's review focuses on:

- Protecting the skyline, historic resources and scenic character of the nation's capital
- Preserving the general appearance of federal buildings
- Providing employees, visitors visitors, and residents with a healthy and safe environment

The Commission reviews three categories of antennas: permanent, temporary, and those associated with small cell infrastructure. The following sections describe the different antennas and their relative review processes, in addition to the specific criteria which guide NCPC's review. The applicant for antenna submissions is a federal or District of Columbia agency with jurisdiction over the property for which an antenna is proposed. Service providers are private companies that usually own and install the antennas. While agencies may work with the service provider to develop the submission, the agencies are the applicant.

5.2 Small Cell Infrastructure Antennas

Small cell antennas are smaller, low-power cell antennas usually attached to existing streetlight poles or placed on new poles. These antennas are the main infrastructure of an emerging, integrated telecommunications system that is currently being used to deploy the 5th generation, or 5G, networks. The service providers note these smaller, lower-power cell antennas need to be deployed close to users along the street at more frequent intervals because the signals do not travel as far as previous generations due to the large amounts of data that they are able to handle.

Small cell antennas proposed on federal or District of Columbia property, and open space in and around this property, are reviewed in accordance with the submission guidelines for permanent antennas in the next section. Small cell antennas proposed on public rights-of-way in the District of Columbia follow the District's review process. In 2018, NCPC worked with the District Department of Transportation to develop a federal interest map (NOTE: add link to Federal Interest Map here) for the area around the monumental core in

¹ The review authority is based on provisions in Section 5 of the National Capital Planning Act of 1952, as amended, 40 USC § 8722(b) (1) and (d); D.C. Code § 6-641; and the International Center Act of 1968, as amended, P.L. 90-553(1968), Public Law 97-186 (1982) at Section 3, and the Telecommunications Act of 1966.

downtown Washington. The map identifies specific locations where small cell antennas are permitted on new and existing light poles. NCPC will review any proposed deviations to this map, as well as any installations in public rights-of-way adjacent to federal buildings or sites.

5.3 Permanent and Temporary Antennas

NCPC's Submission Guidelines categorize antennas as either temporary or permanent.

Permanent antennas

For the purpose of the submission guidelines, NCPC defines permanent antennas as antenna infrastructure located on a building, monopole or tower for a period greater than three months. The infrastructure may either be permanently affixed to or free standing on a building. Submissions for review of permanent antennas may include the relocation of an existing antenna, addition to an existing antenna, or a replacement antenna in addition to proposals for entirely new antenna equipment.

Temporary antennas

Temporary antennas refer to antenna infrastructure, most often installed on the roof or side of a building, for a period of less than 3 months. Temporary antennas can also be located in the public right-of-way (known as cell-on-wheels (COWs); however, COWs are not reviewed by NCPC.

The installation of temporary antennas has increased significantly with the use of cell phones and requires a different review process given the limited duration of their installation. Since the Commission's review cycle can sometimes be longer than 30 days and there are several recurring events/festivals requiring the same antennas infrastructure every year, NCPC does not require the submission of temporary antennas that are installed for less than 90 days or for large scale event such as the Smithsonian Folk-life festival or a Presidential Inauguration. In lieu of a submission, NCPC requests notification of the proposed infrastructure and duration of installation. Agencies installing temporary antennas will need to meet all other regulations, such as the National Historic Preservation Act and FCC guidelines, as required. If there as a recurring event that requires antenna infrastructure for longer than 90 days, the applicant can apply to be on NCPC's list of excepted events. Excepted events will be All other antenna installations for greater than 90 days will follow the permanent antenna process. See Section 5.67 for more detail.

5.4 Review Criteria

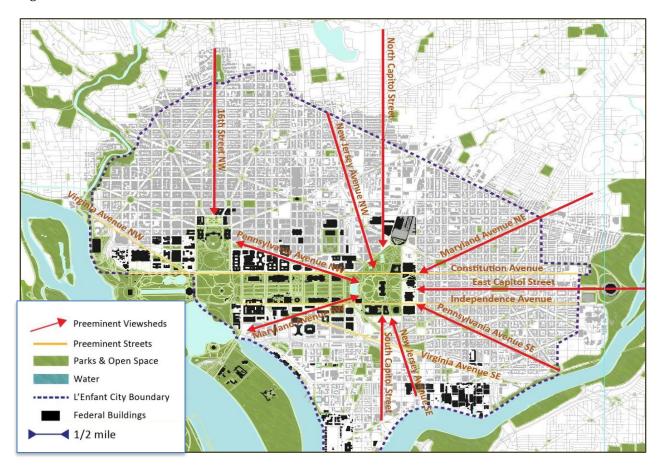
All proposals for the installation of permanent antennas and their support structures on federal property shall be consistent with the applicable policies contained in the Federal Elements of the Comprehensive Plan for the National Capital. Policies specific to antenna installations are located in the Federal Environment Element (Section M) and the Parks & Open Space Element. Furthermore, all antennas and support structures erected within the District of Columbia shall be consistent with provisions of the Height of Buildings Act of 1910.

In addition to the policies listed above, antenna installations must meet criteria related to visibility, viewsheds, location/siting, safety, and materials listed in the table below. For decades, NCPC has reviewed antennas in accordance with design and safety criteria; however, the recent increase in antenna installations has resulted in the need for additional criteria to address cumulative impacts of multiple antennas in one location and potential impacts to significant viewsheds.

Protecting Preeminent Viewsheds

While it is important to minimize the visibility impacts of antennas on all buildings in the city, NCPC recognizes a hierarchy of streets in the monumental core that deserve even greater protection given their importance in the nation's capital. As shown in the map below from NCPC's Urban Design Element of the Comprehensive Plan, there are a series of priority streets identified as Preeminent Streets where the siting of antennas should be carefully considered.

Figure 8



In order <u>to</u> protect these views, any new antennas placed on building rooftops in preeminent viewsheds need to adhere to the Design and Safety Criteria, including the #3 Preeminent Viewshed criteria, in Table 23.

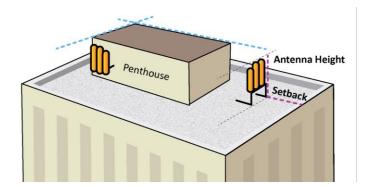
Cumulative Impacts of Several Antennas on A Single Building

While a single antenna on a building may not have a significant impact on its view from the street, multiple visible antennas will. As the need for more antenna infrastructure increases, the issue of cumulative impacts of multiple antennas is a growing concern. The best solution is identifying an overall rooftop strategy for buildings in high demand. For new buildings this should be done during the design phase. For existing buildings, this means the applicant shall catalogcataloging the number and location of rooftop antennas and developing an effecting screening strategy if they are visible from the ground or other important viewsheds. See Table 23 for specific criteria.

Table 23: Design and Safety Criteria

Design and Safety Criteria

- New building design Federal agencies should anticipate the need for antennas on all new buildings
 and incorporate, as necessary, any screening or other components into the building's design to
 reduce their visibility. As much as they may be anticipated, <u>locations or zones on installations that
 permit</u> antennas requirements should also be considered, identified, and included as part of federal
 agency master plans.
- 2. *General rooftop antenna siting-* Consistent with technical communications requirements, rooftop antennas should be:
 - a) Installed at the lowest possible elevation above the roof line and as a last resort located on top of any penthouse structure.
 - b) Set back from the edge of the building at a minimum distance at least equal to the antenna's height above the roof (1:1 ratio). See illustration below.
 - Screened as appropriate from any public views in a manner that is sensitive to the architectural character of the building unless the screening results in a greater impact on public views.
 - d) When antennas are mounted on an existing mechanical penthouse, the top of the antennas shall not exceed the wall height. (see illustration below)
 - e) Ensure the proposed stealth enclosure is not taller than the highest part of the enclosed equipment.



Antenna Setback Illustration

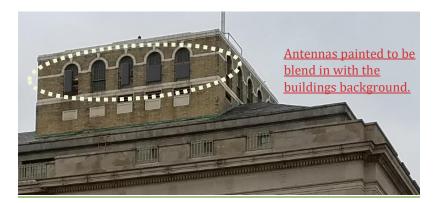
<u>Setback is, at a minimum, equal</u> <u>to the height of the sled-mounted</u> <u>antenna (1:1).</u>

- 3. Preeminent viewshed siting rooftop antennas on buildings within these viewsheds (<u>as seen in Figure 8</u>).
 - *a*) In consultation with the Commission staff, the submitting agency/serviceapplicant provider should shall provide a viewshed analysis indicating how the proposal it will minimize viewshed impacts through antenna location, screening, and /or material color

Design and Safety Criteria

that camouflages with the building.by either moving the antenna to a location of less visibility, camouflaging it by using a color to match the building or designing a screen to block views of it. The analysis shall include photo simulations of the proposed equipment from the preeminent viewsheds.

- 4. Multiple antennas on a single building The applicant is required to submit a A rooftop antenna plan is required when multiple antennas on a building rooftop are visible from the street. The plan should include a coverage impact analysis indicating how antenna placement on the rooftop will affect coverage, in addition to the analysis of and address—the cumulative visual impacts of several antennas on the building and mitigationte strategies for the effects by including (greater setbacks or a screening solution, etc.)
- 5. *Ground level antennas, including small cell siting* Consistent with technical communications requirements, ground level antennas should be:
 - a) Sited in locations that minimize public views,
 - b) Installed at the lowest possible elevation above grade where appropriate, and
 - c) Screened to the extent practicable by landscaping to reduce visual impacts.
- 6. Materials Antennas on existing federal buildings or ground level installations should not be bright, shiny, or reflective but should consist of materials that minimize their appearance from adjacent/nearby properties and public rights-of-way. Antennas on the side of a building or penthouse should be painted the same color as the building. When antennas are located on building rooftops such that the sky is the background, the antenna and related equipment should be painted light grey in color to minimize visibility.



6-7. Lighting - Maintenance lights, or illumination, shall only be permitted on antennas and support structures for the purpose of safe access to these facilities. This lighting shall remain off until access is needed. Illumination required by the Federal Communications Commission, the Federal Aviation Administration, or another federal government agency may also be permitted.

Submission Guidelines

Design and Safety Criteria

- 7.8. Advertisement No commercial advertising shall be allowed on an antenna or support structure.
- 8.9. Health Sponsoring federal agencies Applicants must provide a certification that proposed antennas are in compliance with radio frequency (RF) radiation emission guidelines established by the Federal Communications Commission (FCC) and the Occupational Safety and Health Administration (OSHA). If other emission sources are nearby, the cumulative effect of the additional proposed antenna must also follow the FCC guidelines.
- 9.10. Safety Antennas must be clearly marked and include screening, fencing, and/or another deterrent, to restrict public access and ensure safety.

5.5 Review Process for Permanent Antennas

The submission process for permanent antenna projects generally follows the same process for site and building plans with the exception that there is rarely a concept review. Depending on the scale and impact of the project, staff may decide to combine preliminary and final review into a single review. In some instances, the Commission may also delegate review to the Executive Director or except it from review. In accordance with Public Law 106-113, § 174 and NCPC's submission guidelines, the Commission will complete its full review process and take preliminary and final action on each proposed telecommunication facility no later than 120 days after receiving a complete project submission from the federal submitting agencyapplicant. Small cell antenna review is slightly different, pursuant to FCC guidelines, which includes a 60-day review period for an application to collocate small wireless facilities on an existing structure and 90 days for review of an application for attachment of small wireless facilities using a new structure. If the Commission does not take action within the mandated time frame it will constitute a failure to act and require an immediate issuance of an approval.

Pre-Submission Briefing



Figure 15: Submission Stages for Antennas: Pre-Submission Briefing

Pre-Submission Briefings, which occur prior to Commission review, provide NCPC staff and the applicant an opportunity to informally discuss the proposed project, identify potential issues, and establish coordination for planning/environmental/historic preservation review stages.

During the Pre-Submission Briefing, NCPC staff and applicants should discuss the following:

- Determine if the project requires Commission review.
- Determine which review stages are necessary.
- Identify whether the project meets the antenna criteria and the policies in the Comprehensive Plan.
- Establish a submission schedule.
- Identify if additional information is needed in the submission.
- Determine NEPA/Section 106 implications.



for all projects. At the discretion of staff,
Pre-Submission Briefings may be
conducted via phone or email for small
and less complex projects. For
particularly large, complex, or long-term
projects, additional consultations may
be necessary.

Applicants should contact the Director of the Urban Design and Plan Review Division, or the assigned NCPC staff member, if known, by phone or email, to request a briefing. Contact information is available at www.ncpc.gov.

Table 24: Pre-Submission Briefing Requirements for Antennas

Pre-Submission Briefing Requirements for Antennas				
Required?	A Pre-Submission Briefing is required for antenna submission. This may be conducted by phone or email.			

Pre-Submission Briefing Requirements for Antennas					
Timing	Briefings occur early in project development (e.g., 0-15 percent design development), prior to the initiation of NEPA/Section 106, substantial design, or location decisions.				
Submission Content	Applicants are not required to submit any information to NCPC staff prior to Pre-Submission Briefings. However, applicants should be prepared to discuss the subject matter identified above. Any information that can be shared in advance will better prepare NCPC staff for the briefing.				

Preliminary Review



Figure 16: Submission Stages for Antennas: Preliminary Review

The following table includes information that should be submitted with each antenna installation proposal at Preliminary Review, unless it is determined through the Commission's early consultation process that such information is not needed:

Table 25: Preliminary Review Requirements for Antenna Projects

Preliminary Review Requirements for Antenna Projects						
Required? Preliminary Review is required. Staff may decide to combine Preliminary Review for antenna projects.						
Timing Preliminary review occurs after tentative design decisions have been ma well before detailed design work begins (e.g., 25-35 percent design develop						
Application Form	The application form is required.					
NEPA	If the applicant has a NEPA responsibility, submit the draft NEPA document (Environmental Assessment (EA)/Environmental Impact Statement (EIS)) or the selection of a Categorical Exclusion (CATEX) applicable to the project. If only NCPC has a NEPA responsibility, NCPC will work with the applicant to develop this information.					
NHPA Section 106	If the applicant has a Section 106 responsibility, include the Assessment of Effects for the Section 106 if relevant or documentation of the consultation process. If only NCPC has a Section 106 responsibility, NCPC will work with the applicant to develop this information.					

Project Report (content listed below) Required. If the information below is not available, please describe why and whether it is forthcoming. Note: All documents should be accessible and adhere to Section 508 of the Rehabilitation Act of 1973, as amended in 1998 (29 U.S.C. § 794 (d)).

Table 26: Project Report Content for Preliminary Review

Project Report Content for Preliminary Review						
Project Overview						
Project Description	Describe, the proposed antenna installation in plain, non-technical language, including information for all of the proposed elements such as towers, monopoles, and equipment buildings and shelters (if applicable). The description should include: Information on the building or site location; The tenant agency where the antenna or tower is located; The proposed antenna's physical dimensions and the dimensions of existing antennas if the proposed antennas are replacements; Transmitting frequency and frequency of operation; The potential for accommodating additional antennas on the support structure; and Any other appropriate data regarding the particular installation consistent with security considerations.					
Description of Existing Antennas (if applicable)	Describe any existing antennas located on the building and/or site, structure, or tower. The description should state the functional relationship of the proposed antenna (if applicable) to existing antennas as well as the status of any existing antennas proposed to remain.					
Alternatives	Discuss the alternatives that were considered to meet the telecommunications needs of the submitting agencyapplicant or the service provider and include a cell coverage map for the immediate vicinity of the proposed antenna showing the area that will be affected.					
Schedule	Describe the amount of time the antenna will be operational and in place.					
Public Engagement	Describe the plan and status for community engagement with the public for the project. Identify any community or local coordination initiated for the project, and include a summary of community viewscomments and concerns, if available.					
Coordination with Federal, State, and Local Jurisdictions	Describe the plan and status of coordination with affected federal agencies and state and local governments. If known, describe what coordination with federal, state, and local jurisdictions will be required or conducted voluntarily.					

Project Report Content for Preliminary Review				
Detailed Project Information and Drawings				
Site Plan/ Construction Drawings	Provide a site plan and building roof plans and elevations (for antennas mounted on a building, structure or tower) showing the form, dimensions, and location of the proposed antenna(s) and any existing antennas that are proposed to remain.			
Design Details	Describe the texture and color of antenna materials. Description of the screening plan, where appropriate, including proposed materials, color and texture of screening elements for rooftop and ground level installations.			
Renderings/ Photo Simulations	Include sight line studies and photo simulations of the proposed installation and alternatives considered, illustrating the extent to which the proposed antenna(s) will be visible from surrounding streets, public open spaces, and nearby residential areas. Determine whether the proposed antenna will impact any important viewsheds. The submission must contain high quality photo simulations of views within close proximity of the proposed antenna(s) (1-2 blocks away) and further proximity (several blocks away) in addition to simulations of important viewsheds/historic resources that may be impacted. These simulations should include appropriate context including the entire building façade, to better understand how the proposed antennas affect the building composition. Views to the building should be shown without clouds and trees blocking the view where possible.			
(may be cro	Environmental and Historical Considerations ss-referenced with any NEPA/NHPA documentation if available)			
Historic Preservation	Identify the Area of Potential Effect (APE), historic resources within the APE, and any potential impacts. If known resources are present, describe the project's approach to addressing the resource (e.g., avoidance, rehabilitation, preservation, restoration, or demolition).			
Natural Resources Environmental	Describe natural-resourcesenvironmental-impacts , including RF effects, on or near the project area, and the project's anticipated effect on these natural resources such as endangered and threatened species, and migratory birds,			

Final Review



Figure 17: NCPC Antenna Submission Stages

The purpose of Final Review is for NCPC to review any changes based on previous Commission comments. While most antenna submissions are processed in one review stage (combined Preliminary and Final Review), occasionally the Commission will ask the applicant to make refinements.

Table 27: Final Review Requirements for Antenna Projects

Final Review Requirements for Antenna Projects					
Required? Final Review is required. Staff will determine whether the submission will be revie combined Preliminary and Final Review.					
Timing	The Section 106 review process shall be complete prior to submitting the final proposal to the Commission for review. The NEPA process must be complete prior to submitting the final proposal to the Commission for review.				
Application Form	The application form is required				
NEPA	The final environmental document is required (Record of Decision or Finding of No Significant Impact) or a CATEX. Note: the MOA for Section 106 must be signed before a FONSI/ROD is issued.				
NHPA Section 106	The final executed documentation (e.g. Statement of Effects, Memorandum of Agreement or Programmatic Agreement) is required.				
Project Report	A project report is required. See content below. Note: All documents should be accessible and adhere to Section 508 of the Rehabilitation Act of 1973, as amended in 1998 (29 U.S.C. § 794 (d)).				

Table 28: Project Report Content for Final Review

Project Report Content for Final Review
Project Overview

Project Report Content for Final Review					
Project Description	Describe the proposed antenna installation in plain, non-technical language, including information for all of the proposed elements such as towers, monopoles, and equipment buildings and shelters (if applicable). The description should include: Information on the building or site location; The tenant agency where the antenna or tower is located; The proposed antenna's physical dimensions and the dimensions of existing antennas if the proposed antennas are replacements-; Transmitting frequency and frequency of operation; The potential for accommodating additional antennas on the support structure; and Any other appropriate data regarding the particular installation consistent with security considerations.				
Description of Existing Antennas (if applicable)	Describe any existing antennas located on the building and/or site, structure, or tower. The description should state the functional relationship of the proposed antenna (if applicable) to existing antennas as well as the status of any existing antennas proposed to remain.				
Commission Comments	Describe how refinements made to the previous antenna submission address the Commission's comments.				
Schedule	Describe the amount of time the antenna will be operational and in place.				
Public Engagement	Describe the plan and status for community engagement with the public for the project. Identify any community or local coordination initiated for the project, and include a summary of community views comments and concerns, if available.				
Coordination with Federal, State, and Local Jurisdictions	Describe the plan and status of coordination with affected federal agencies and state and local governments. If known, describe what coordination with federal, state, and local jurisdictions will be required or conducted voluntarily.				
	Detailed Project Information and Drawings				
Site Plan/Construction Drawings Provide an updated site plan and building roof plans and elevations (for antennas mounted on a building, structure or tower) showing the form, dimensions, and location of the proposed antenna(s) and any existing antenna that are proposed to remain.					
Design Details	Describe the texture and color of antenna materials. Description of the screening plan, where appropriate, including proposed materials, color and texture of screening elements for rooftop and ground level installations.				

Project Report Content for Final Review					
Renderings/ Photo Simulations	Include updated sight line studies and photo simulations of the proposed installation and alternatives considered, illustrating the extent to which the proposed antenna(s) will be visible from surrounding streets, public open spaces, and nearby residential areas. Determine whether the proposed antenna will impact any important viewsheds. The submission must contain high quality photo simulations of views within close proximity of the proposed antenna(s) (1-2 blocks away) and further proximity (several blocks away) in addition to simulations of important viewsheds/historic resources that may be impacted. These simulations should include appropriate context including the entire building façade, to better understand how the proposed antennas affect the building composition. Views to the building should be shown without clouds and trees blocking the view where possible.				
Environmental and Historical Considerations (may be cross-referenced with any NEPA/NHPA documentation if available)					
Historic Preservation	Identify the Area of Potential Effect (APE), historic resources within the APE, and any potential impacts. If known resources are present, describe the project's approach to addressing the resource (e.g., avoidance, rehabilitation, preservation, restoration, or demolition).				
Natural Resources Environmental	Describe natural resources environmental impacts of the project, including RF effects, on or near the project area, and the project's anticipated effect on these on natural resources such as endangered and threatened species, and migratory birds, humans, trees, etc. If there are impacts, describe how the project design mitigates the impacts.				
Safety Certifications					
Agency Certifications and Commitments	Provide a certification by the agency that the proposed transmitting antenna complies with the RF radiation guidelines adopted by the Federal Communications Commission and the health and safety regulations adopted by the-occupational Safety and Health Administration.				

5.6 Review Process for Temporary Antennas

Antennas installed for less than 90 days do not need to be reviewed by the Commission. The purpose of temporary antennas is most often to provide greater coverage for the public and support emergency responders during single-individual events that occur throughout the year. When a temporary antenna is to be located on a building rooftop, the federal agency with jurisdictionapplicant shall submit a temporary Antenna Notification Form to the Commission. The form includes the following information:

- Duration of the installation
- Location
- Removal date
- Certification in accordance with FCC guidelines.

Along with this notification form, the agency will also need to submit a site drawing or site photograph indicating the temporary antenna location. The form can be found at: www.ncpc.gov (add rest of website address).

If an applicant requires antenna infrastructure for a recurring event that lasts longer than 90 days, they may request to be on NCPC's list of excepted events. In order to be considered as an excepted event an agency must submit the Email the following: (1) name of the annual event the antenna infrastructure will support: (2) duration antennas will be installed: (3): and . name of the event, duration of antenna installation, and Δ a description of the infrastructure that is needed. NCPC staff will staff decides if it can be added to list of events, to NCPC to be considered for the list of excepted events.

5.7 APPROVAL TIME LIMITS

Commission approval of a permanent, non-federal antenna installation is limited to five years for. This time period may be extended to ten years at the Commission's discretion where the proposed antenna(s) will not have an adverse visual impact on the monumental core and surrounding lands, designated historic buildings and districts, or nearby residential areas. All antennas that are no longer in use need to be removed. The Commission must also be satisfied that the wireless telecommunication technology proposed is not likely to be replaced in the next ten years by new technology that could either reduce the equipment's visibility or RF radiation levels. Antennas installed by the government for secure or emergency communications, by both federal and local government, Federally owned antennas ordinarily do not have a time limit.

5.8 Renewal of Antenna Approvals

Federal agencies may submit requests to renew an existing antenna approval if the antenna is nearing its expiration date. This should be done through the NCPC submission portal several months prior to the antenna's expiration. Any antenna that does not receive reapproval by the Commission should be removed as soon as possible after the expiration of the Commission's approval period. Antennas no longer needed should be removed immediately and the sponsoring agency should notify NCPC in a letter that the antenna has been removed.

Each request for renewal should include the following information, unless it is determined through the Pre-Submission Briefing that such information is not needed:

- 1. A certification by the sponsoring agency or the telecommunication service provider that the proposed transmitting antenna complies with the RF radiation guidelines adopted by the Federal Communications Commission and applicable health and safety regulations adopted by the Occupational Safety and Health Administration.
- 2. A copy of the previous Commission approval.
- 3. A statement that:
 - i. All conditions of the original approval are, and continue to be, satisfied.
 - ii. The original installation is structurally sound and continues to meet all of the submission requirements.

APPENDIX B

Draft Antenna Guidelines - Comments and Responses



#	SECTION	PAGE	SECTION TITLE	COMMENT	AUTHOR	NCPC RESPONSE
1	General		General	The guidelines seem to be very heavy on viewsheds while being very light on health and safety Recommend a "plus-up" on health, safety and security measures throughout the document for prudence's sake e.g. Recommend moving "Safe and Healthy Environment" to the first bullet not the last in the Introduction Section. There is major controversy associated with the 5G rollout therefore we need to plus up the "safety through access control statements," or lack thereof, along with "barriers in place to safeguard human health" statements throughout the guidelines. Consequently, GSA NCR and NCPC will be consistent in our updated guidance to the wireless carriers.	General Services Adminstration	NCPC staff agree that health and safety are very important issues. The guidelines require agencies to submit certification that the antennas are following the FCC radio frequency guidelines. The burden is on the applicant to show they are meeting all health and safety standards because NCPC staff does not have expertise in this field.
2	General		General	Document does not address how agencies should handle existing or future long term leases (e.g. 20 year terms). In many cases the lease instruments are flexible in what they allow carriers to do to include upgrades of antenna equipment to (potentially) different types of antennas. This could potentially cause NCPC and agencies run afoul of legal issues if an upgrade or swap-out is disapproved but the request is covered by an existing 20 year lease. Further, even if the Commission approves with conditions, there could be potential ramifications.		NCPC has review authority for antennas on federal buildings and applicants must abide by NCPC guidelines and any conflicts within the least must be addressed. GSA will need to identify this with service providers as part of a lease discussion. Existing leases will need to be reviewed on a case by case basis to understand if these updated guidelines will affect them.
3	General		General	In general, antennas are getting larger as technology advances. NYC allows antennas with a maximum height not extending more than 6' above the height of the roof, or 6' above any penthouse (if mounted on such). DC Municipal Regulations stipulate that "an antenna may not exceed a total mounted height of twelve feet (12 ft.) above the roof." It will be helpful to consider the antenna height limitations on federal buildings located along significant viewsheds.	General Services Adminstration	NCPC's regulations are derived from the Height Act. The requirement that antennas must be set back from the roof line at a 1:1 ratio limits their visibility from adjacent streets and priority viewsheds and more importantly prevents them from being visible from adjacent streets and priority viewsheds. It is more difficult to hide antennas from longer viewsheds which is why NCPC proposes the other guidelines with regard to placement.
4	General		General	It will be helpful to remind the carriers that all unused or obsolete equipment should be removed.	General Services Adminstration	Minor text change made.
5	General		General	Capitalize all headings and sub-headings.	General Services Adminstration	Minor text change made.
6	General		General	Has NCPC ever denied an application? If so, on what grounds?	Committee of 100	NCPC staff has pre-submission meetings with applicants on antenna projects to understand if there are any issues of concern. If there are issues, staff works with the applicants to change the application to address the issue. For this reason, applications that might be denied will not typically come before the Commission.



#	SECTION	PAGE	SECTION TITLE	COMMENT	AUTHOR	NCPC RESPONSE
7	General		General	Is cumulative effect revisited when renewal on an individual application is sought?	Committee of 100	The proposed guidelines will address cumulative effects for new antennas and for renewals. See Section 5.4 Table 23, Multiple Antennas on a Single Building in the Design and Safety Criteria.
8	General		General	Is it possible to coordinate termination dates so that the cumulative effect of all antennas on a site can be considered together?	Committee of 100	Since federal agencies submit antenna applications based on service provider requests and approvals are for fixed periods of time (5 or 10 years), coordination of their termination dates in not possible.
9	General		General	Will NCPC mandate hoteling when approvals expire and need to be renewed?	Committee of 100	NCPC can not mandate co-location/hoteling, but during pre-submission meetings staff will recommend that antennas be co-located.
10	Section 5.1	49	Introduction	Change "District to Columbia" to "District of Columbia"	General Services Adminstration	Minor text change made.
11	Section 5.2	49	Small Cell Infrastructure Antennas	Recommend providing a link to the federal interest map. Ensure that the font type is consistent throughout the document.	General Services Adminstration	This link has been added for the Federal Interest Map.
12	Section 5.3	50	Permanent and Temporary Antennas	Please provide images to illustrate the following statement: "The infrastructure may either be permanently affixed to or free standing on a building." Does this mean antennas mounted on a mechanical penthouse or non-penetrating sled on the roof?	General Services Adminstration	These diagrams/illustrations can be added to the submission guidelines for clarification.
13	Section 5.3	50	Temporary Antennas	It will be helpful to remind applicants that temp antennas are still subject to other federal regulations, such as FCC and Section 106	General Services Adminstration	The following sentence has been added in Section 5.3: "Agencies installing temporary antennas will need to meet all other regulations, such as the FCC Guidelines and the National Historic Preservation Act, as required."
14	Section 5.3, Permanent and Temporary Antennas	50	Temporary Antennas	The text reads "See Section for more detail." The Section number is missing.	General Services Adminstration	Minor text change made.
15	Section 5.4, Review Criteria	51	Figure 8	Please provide a legend and indicate what the black footprints mean (federal buildings?)	General Services Adminstration	Staff will insert a map legend for this map.



#	SECTION	PAGE	SECTION TITLE	COMMENT	AUTHOR	NCPC RESPONSE
16	Section 5.4, Review Criteria	51	Protecting Preeminent Viewsheds	Change the text to read "In order to"	General Services Adminstration	Minor text change made.
17	Section 5.4, Review Criteria	51	Several Antennas on a Single Building	Section 5.4 (Review Criteria / Multiple Impacts of Several Antennas on a Single Building) The text discusses "cataloging the number and location of rooftop antennas and developing an [effective] screening strategy if they are visible from the ground or other important viewsheds." Recommend specifying that the responsibility of cataloging rooftop antennas lies with the sponsoring agencies.		This section will be updated with the following: "For existing buildings, this means the applicant shall catalog the number and location of rooftop antennas and developing an effective screening strategy if they are visible from the ground or other important viewsheds.
18	Section 5.4, Table 23	52	Design and Safety Criteria #2 - General rooftop antenna siting	For some reason, the 1:1 setback requirement is confusing for the carriers. Providing simple diagrams will be helpful, similar to the diagrams included in the Urban Design Element Technical Addendum (page 5)	General Services Adminstration	This diagram can be added to the submission guidelines for clarification.
19	Section 5.4, Table 23	52	Design and Safety Criteria #2 -General Rooftop Antenna Siting	Recommend adding the following: d) when antennas are mounted on an existing mechanical penthouse, the top of the antennas shall not exceed the wall height	General Services Adminstration	The following sentence has been added to the Design and Safety Criteria/ General Rooftop Antenna Siting: d) When antennas are mounted on an existing mechanical penthouse, the top of the antennas shall not exceed the wall height. e) Ensure the proposed stealth enclosure is not taller than the highest part of the enclosed equipment.
20	Section 5.4, Table 23	52	Design and Safety Criteria #2 -General Rooftop Antenna Siting	Recommend adding the following language: c) Ensure that the proposed stealth enclosure is not taller than the highest point of the enclosed equipment	deneral services	The following sentence has been added to the Design and Safety Criteria/ General Rooftop Antenna Siting: d) When antennas are mounted on an existing mechanical penthouse, the top of the antennas shall not exceed the wall height. e) In sure the proposed stealth enclosure is not taller than the highest part of the enclosed equipment.
21	Section 5.4, Table 23	53		Please add text that makes it clear that applicants are responsible for providing photo simulations of proposed equipment from these preeminent views, if the proposed equipment will fall within one or more of those viewsheds.	General Services Adminstration	The following changes (in bold) will be made to the Design and Safety Criteria #3: "In consultation with the Commission staff, the applicant shall provide a viewshed analysis indicating how the proposal will minimize viewshed impacts through antenna location, screening, and/or material color that camouflages with the building. The analysis shall include photo simulations of the proposed equipment from the preeminent viewsheds."
22	Section 5.4, Table 23	53	Design and Safety Criteria #4 - Multiple Antennas on a Single Building	Table 23, Box 4 (Multiple Antennas on a Single Building) The text discusses the development of a rooftop antenna plan, but does not specify whether said plan would be developed by agencies or service providers. Recommend that the Guidelines be updated to indicate that the Building Antenna Plan should be provided by the Agency when multiple antennas (likely from multiple Service Providers) are proposed for a single building.	General Services Adminstration	The section will be updated with the following: "The applicant is required to submit a rooftop antenna plan when multiple antennas are located on a building due to their location."



#	SECTION	PAGE	SECTION TITLE	COMMENT	AUTHOR	NCPC RESPONSE		
23	Section 5.4, Table 23	53	Design and Safety Criteria #4 - Multiple Antennas on a Single Building	Change text to read "A rooftop antenna plan is required when multiple antennas are located on a building due to the building's location."	General Services Adminstration	The following changes (in bold) will be made the Design and Safety Criteria #4: "The applicant shall submit a rooftop antenna plan when multiple antennas on a building rooftop are visible from the street. The plan should include a coverage impact analysis indicating how antenna placement on the rooftop will affect coverage and address the cumulative visual impacts of several antennas on the building and mitigate for the effects by including greater setbacks or a screening solution"		
24	Section 5.4, Table 23	53	Design and Safety Criteria #4 - Multiple Antennas on a Single Building	Add the word "visual" after the word "cumulative" since the term "cumulative impacts" by itself could imply many different things.	General Services Adminstration	The following changes (in bold) will be made the Design and Safety Criteria #4: "The applicant shall submit a rooftop antenna plan when multiple antennas on a building rooftop are visible from the street. The plan should include a coverage impact analysis indicating how antenna placement on the rooftop will affect coverage and address the cumulative visual impacts of several antennas on the building and mitigate for the effects by including greater setbacks or a screening solution"		
25	Section 5.4, Table 23	54	#9 - Health	Table 23, Box 9 (Health) The text discusses consideration of cumulative effects with regards to public health, but does not specify whether sponsoring agencies refers to the Service Provider or Federal Agency. Recommend that the text be updated to place responsibility on the Federal Agency (especially given the Carriers' refusal to coordinate cumulative effects with their competitors).	General Services Adminstration	This section will be updated with the following: Applicants must provide a certification that proposed antennas are in compliance with radio frequency (RF) radiation emission guidelines established by the Federal Communications Commission (FCC) and the Occupational Safety and Health Administration (OSHA).		
26	Section 5.5, Table 24	55	Pre-Submission Briefing Requirements for Antennas	Add the word "be" after the word "may."	General Services Adminstration	Minor text change made.		
27	Section 5.5, Table 26	57	Project Report Content for Preliminary Review, Project Description	Please add a bullet point stating that the project description must be written in plain language and not in technical language.	General Services Adminstration	The following changes (in bold) will be made to the Project Report Content section, Table 26: Describe, the proposed antenna installation in plain, non-technical language , including information for all of the proposed elements such as towers, monopoles, and equipment buildings and shelters (if applicable).		
28	Section 5.5, Table 26	57	Troject Report Content	As part of the project description, recommend requesting an antenna palette to compare existing and proposed equipment and better understand the changes in size and scale.		The following change will be made to the Table 26 Project Description, 3rd bullet: * The proposed antenna's physical dimensions and the dimensions of existing antennas if the proposed antennas are replacements.		



#	SECTION	PAGE	SECTION TITLE	COMMENT	AUTHOR	NCPC RESPONSE
29	Section 5.5, Table 26	57		Do we want to require a coverage map for each alternative considered? Doing so would probably hold the carriers more accountable regarding antenna siting and placement.	General Services Adminstration	The following changes (in bold) will be made to the Project Report Content section, Table 26, Alternatives: "Discuss the alternatives that were considered to meet the telecommunications needs of the applicant or the service provider and include a cell coverage map for the immediate vicinity around the proposed antenna showing the area that will be affected.
30	Section 5.5, Table 26	57	Project Report Content for Preliminary Review, Public Engagement	Does "community views" refer to "community comments?" Please clarify what you mean by "views" here.	General Services Adminstration	The following changes (in bold) will be made to the Project Report Content section, Table 26: Describe the plan and status for engagement with the public for the project. Identify any community or local coordination initiated for the project, and include a summary of community comments and concerns, if available.
31	Section 5.5, Table 26	57	Photo Simulations	The photo simulations should include appropriate context, including the entire building facade, to better understand how the proposed antennas affect the building composition. The proposed antennas should be clearly shown and avoid blocking them with existing trees.	I .	The following will be added to the Table 26/photo simulations section: These simulations should include appropriate context including the entire building façade, to better understand how the proposed antennas affect the building composition. Views to the building should be shown without clouds and trees blocking the view where possible.
32	Section 5.5, Table 26	58	Project Report Content for Preliminary Review, Environmental and Historical Considerations	Table 26, Environmental and Historical Considerations Recommend that RF effects (from all existing/proposed antennas installed on the rooftop) be included as an environmental consideration. (Same comment applies for Final Report)	General Services Adminstration	Change "natural resources" and replace with "Environmental". The following will be added to this section: "Describe environmental impacts of the project, including RF effects, on natural resources such as endangered and threatened species, and migratory birds, humans, etc. If there are impacts, describe how the project design mitigates the impacts.
33	Section 5.5, Table 26	58	Safety Certifications, Agency Certifications and Commitments	Insert the word "the" before OSHA.	General Services Adminstration	Minor text change made.
34	Section 5.5, Table 27	59	Final Review Requirements for Antenna Projects, NEPA	Change text to read "Record of Decision or"	General Services Adminstration	Minor text change made.



#	SECTION	PAGE	SECTION TITLE	COMMENT	AUTHOR	NCPC RESPONSE
35	Section 5.5, Table 28	59	Project Report Content for Final Review, Project Description	Please add a bullet point stating that the project description must be written in plain language and not in technical language.	1	The following changes (in bold) will be made to the Project Report Content section, Table 28: Describe, the proposed antenna installation in plain, non-technical language , including information for all of the proposed elements such as towers, monopoles, and equipment buildings and shelters (if applicable).
36	Section 5.5, Table 28	59	i roject neport content	Does "community views" refer to "community comments?" Please clarify what you mean by "views" here.	General Services Adminstration	Minor text change made.
37	Section 5.5, Table 28	60	Safety Certifications, Agency Certifications and Commitments	Insert the word "the" before OSHA.	General Services Adminstration	Minor text change made.
38	Section 5.6	60	Review Process for Temporary Antennas	How would an applicant go about applying to be on NCPC's list of excepted events? Please explain and/or provide links to more information.	Marc Poling	After discussing this further with GSA, staff is not proposing to have a list of excepted events since is it unable to identify what these might be.
39	Section 5.6	60	Review Process for Temporary Antennas	Please include a link to the Temporary Antenna Notification Form.	Marc Poling	Minor text change made.
40	Section 5.6	61	Review Process for Temporary Antennas	How would an applicant go about applying to be on NCPC's list of accepted events? Please explain and/or provide links to more information.	Marc Poling	After discussing this further with GSA, staff is not proposing to have a list of excepted events.
41	Section 5.7	61	Approval Time Limits	Please clearly explain that it is non-federally owned antennas that have a time limit and federally owned antennas do not.	Marc Poling	The following changes (in bold) will be made in Section 5.7 Approval Time Limits: "Commission approval of a permanent antenna installation is limited to five years. This time period may be extended to ten years at the Commission's discretion when the proposed antenna(s) will not have an adverse visual impact on the monumental core and surrounding lands, designated historic buildings and districts, or nearby residential areas. The Commission must also be satisfied that the wireless telecommunication technology proposed is not likely to be replaced in the next ten years by new technology that could either reduce the equipment's visibility or RF radiation levels. Antennas installed by the government for secure or emergency communications, by both federal and local government, ordinarily do not have a time limit."
42	Section 5.8	61	Renewal of Antenna Approvals	Just to clarify, the Request for Renewal will not be submitted through the NCPC Submission Portal, correct?	Marc Poling	This is not correct. Renewal antennas will be submitted through the NCPC Submission Portal.

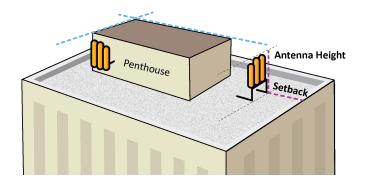
APPENDIX C

Design and Safety Criteria

Table 23: Design and Safety Criteria

Design and Safety Criteria

- New building design Federal agencies should anticipate the need for antennas on all new buildings
 and incorporate, as necessary, any screening or other components into the building's design to
 reduce their visibility. As much as they may be anticipated, locations or zones on installations that
 permit antennas should be considered, identified, and included as part of federal agency master
 plans.
- 2. *General rooftop antenna siting-* Consistent with technical communications requirements, rooftop antennas should be:
 - a) Installed at the lowest possible elevation above the roof line and as a last resort located on top of any penthouse structure.
 - b) Set back from the edge of the building at a minimum distance at least equal to the antenna's height above the roof (1:1 ratio). See illustration below.
 - c) Screened as appropriate from any public views in a manner that is sensitive to the architectural character of the building unless the screening results in a greater impact on public views.
 - d) When antennas are mounted on an existing mechanical penthouse, the top of the antennas shall not exceed the wall height. See illustration below.
 - e) Ensure the proposed stealth enclosure is not taller than the highest part of the enclosed equipment.



Antenna Setback Illustration

Setback is, at a minimum, equal to the height of the sled-mounted antenna (1:1).

- 3. Preeminent viewshed siting rooftop antennas on buildings within these viewsheds (as seen in Figure 8):
 - *a*) In consultation with the Commission staff, the applicant shall provide a viewshed analysis indicating how the proposal will minimize viewshed impacts through antenna location, screening, and /or material color that camouflages with the building. The analysis shall include photo simulations of the proposed equipment from the preeminent viewsheds.
 - 4. Multiple antennas on a single building The applicant is required to submit a rooftop antenna plan when multiple antennas on a building rooftop are visible from the street. The plan should include a coverage impact analysis indicating how antenna placement on the rooftop will affect coverage, in

Design and Safety Criteria

addition to the analysis of the cumulative visual impacts of several antennas on the building and mitigation strategies (greater setbacks or a screening solution, etc.)

- 5. *Ground level antennas, including small cell siting* Consistent with technical communications requirements, ground level antennas should be:
 - a) Sited in locations that minimize public views,
 - b) Installed at the lowest possible elevation above grade where appropriate, and
 - c) Screened to the extent practicable by landscaping to reduce visual impacts.
- 6. *Materials* Antennas on existing federal buildings or ground level installations should not be bright, shiny, or reflective but should consist of materials that minimize their appearance from adjacent/nearby properties and public rights-of-way. Antennas on the side of a building or penthouse should be painted the same color as the building. When antennas are located on building rooftops such that the sky is the background, the antenna and related equipment should be painted light grey in color to minimize visibility.



- 7. *Lighting* Maintenance lights, or illumination, shall only be permitted on antennas and support structures for the purpose of safe access to these facilities. This lighting shall remain off until access is needed. Illumination required by the Federal Communications Commission, the Federal Aviation Administration, or another federal government agency may also be permitted.
- 8. *Advertisement* No commercial advertising shall be allowed on an antenna or support structure.
- 9. Health Applicants must provide a certification that proposed antennas are in compliance with radio frequency (RF) radiation emission guidelines established by the Federal Communications Commission (FCC) and the Occupational Safety and Health Administration (OSHA). If other emission sources are nearby, the cumulative effect of the additional proposed antenna must also follow the FCC guidelines.

Submission Guidelines

Design and Safety Criteria

10. Safety – Antennas must be clearly marked and include screening, fencing, and/or another deterrent, to restrict public access and ensure safety.