



United States Department of the Interior

NATIONAL PARK SERVICE
GRAND CANYON NATIONAL PARK
P.O. Box 129
Grand Canyon, AZ 86023



IN REPLY REFER TO:
1.A.2 (GRCA 8217)

DEC 03 2019

Ms. Kathryn Leonard
State Historic Preservation Officer
1100 W. Washington Street
Phoenix, Arizona 85007-2935

RE: Section 106 Consultation for Telecommunications Plan/EA, Grand Canyon National Park

Dear Ms. Leonard:

In accordance with the Advisory Council on Historic Preservation (ACHP) regulations, 36 CFR Part 800 Protection of Historic Properties, and the National Environmental Policy Act (NEPA), the National Park Service (NPS) is continuing Section 106 and NEPA consultation for an undertaking, the development of a Telecommunications Plan/Environmental Assessment (EA) for Grand Canyon National Park (park). The Section 106 consultation is following the standard process identified in 800.3 through 800.5.

The NPS last consulted with you on this undertaking in a letter dated 7/23/19. In the response dated 8/15/19, SHPO concurred with the NPS finding of effect that effects on historic properties cannot be fully determined before the undertaking is approved and the need for a programmatic agreement (PA). We are preparing a PA in accordance with 800.14(b)(1)(ii).

The NPS is consulting with the park's traditionally associated tribes on the undertaking and the development of a PA. We have received comments from three tribes; the comments are enclosed. The tribes would be asked to be invited signatories to the PA.

We would notify the Advisory Council on Historic Preservation (ACHP) that the NPS would develop a PA for the undertaking in accordance with 800.14(b)(1)(ii), "When effects on historic properties cannot be fully determined prior to approval of an undertaking." The NPS would invite the ACHP to participate in the consultation in accordance with 800.6(a)(1)(C).

A summary of the undertaking, area of potential effect (APE), historic properties, and potential effects is enclosed, along with the plan/EA. Also enclosed is the first draft of the PA. After we receive the SHPO PA comments we would send the revised draft PA to the tribes for review and comment.

We seek your comments on the undertaking and the draft PA. If you have questions or need additional information please contact Catherine Lentz, Section 106 Coordinator, at 928-638-7327, catherine_lentz@nps.gov.

Sincerely,



Mary Risser
Acting Superintendent

Enclosures:

EA

Correspondence from Traditionally Associated Tribes

Draft PA

Telecommunications Plan/EA – Assessment of Effect
Grand Canyon National Park
12/02/2019

Description of the Undertakings relevant to Section 106 of the National Historic Preservation Act

The undertaking would improve telecommunications services within developed areas of the park by developing guidance for the future construction and operation of telecommunications infrastructure, including telecommunications towers, small-cell sites, and fiber optic communications cable (fiber), within developed areas of Grand Canyon National Park (park). The undertaking also includes the removal and/or potential relocation of some existing telecommunications infrastructure. Currently, there are deficiencies in wireless coverage (including cellular voice and data), data network capacity (bandwidth), and two-way radio communications within the park's developed areas. This inhibits NPS operations as well as the activities of visitors, NPS partners, and the community. The undertaking includes two alternatives, Alternative A and Alternative B.

Under Alternative A, the NPS would continue to review and may choose to approve Right of Way permit (ROW) applications. ROW applications would continue to be evaluated by the NPS in accordance with applicable laws, regulations, and policies, but without comprehensive, park-specific guidance as to where such services should be provided. Criteria for placement of associated infrastructure would be identified on a case-by-case basis with the goal of avoiding or minimizing effects to resources.

This alternative could result in minor expansion of wireless coverage (including cellular voice and data) and/or data network capacity, but could continue to be limited to only one or two cellular providers because of existing infrastructure limitations. The NPS would consider future ROW permit renewals on a case-by-case basis, with minor modifications and upgrades anticipated over time. New, minor telecommunications equipment, such as small-cell sites on existing infrastructure, could be considered and approved. No major telecommunications infrastructure, such as towers, would be authorized under this alternative.

The existing telecommunications equipment that is NPS-owned or authorized by a ROW permit would remain. This includes the five existing NPS radio towers: Hopi Fire Lookout area by West Rim Drive (80 ft. high), Station One (Emergency Operations Center) in Grand Canyon Village (60 ft.), Desert View Ranger Station (80 ft.), CC Hill near the North Rim developed area (180 ft.), and Mt. Emma west of Tuweep on the west side of the North Rim (20 ft.). Existing ROW authorized commercial cellular antennas are located on the Desert View tower and there is one commercial tower in Grand Canyon Village (107 ft.), which provides cellular phone and data service, and backhaul to the park.

These existing telecommunications towers have limited capacity to provide the suite of telecommunications services to support NPS and NPS partner operations, park visitors, and the community. The five existing NPS towers are generally considered adequate to support NPS two-way radio communications necessary for operations. However, commercial facilities co-

located on one of the NPS towers have created conflicts with NPS radio frequencies and raised issues concerning the physical security of the tower. The Grand Canyon Village Tower is approaching or at physical and technological capacity and is further limited by its location, which is at a lower elevation compared to the surrounding area. Towers on surrounding USFS lands, though helpful, cannot fully extend services into the park due to topography and line-of-sight requirements between antennas.

Under Alternative B, the NPS would continue to review and may choose to approve all ROW applications (similar to Alternative A); however, Alternative B would provide a framework and guidance for reviewing them. As with Alternative A, implementation of this alternative would require site-specific review of ROW applications in compliance with Section 106 of the National Historic Preservation Act and other applicable laws, and approval in accordance with current NPS policies.

Guidelines to reduce effects to park resources would be developed for locations and designs of telecommunications towers, small-cell nodes, microwave and other antennas, two-way radio communications, backhaul, fiber optic cable, telecommunications-associated equipment and facilities, construction and installation, and operations and maintenance.

There could be five new telecommunication towers constructed and one existing tower relocated. Each tower could include antennas, associated equipment, cabinets and shelters, electrical wiring, lighting, and a fence. These towers would be self-supporting and include antennas (microwave, cellular, and/or radio), a shared equipment shelter and/or cabinets (typically approximately 33 ft. x 15 ft.) for all co-locators on the tower, a shared generator shelter (typically approximately 12 ft. x 15 ft.) and fuel tank (which could be outside or inside the generator shelter depending on fuel type), electrical service equipment and wiring, safety lighting, and a perimeter fence. The total disturbed footprint for each telecommunications tower, including construction and staging, would be approximately 180 ft. x 180 ft., or no more than approximately 0.75 acres in size; the final developed footprint would be no more than approximately 0.25 acres. All NPS radio towers, outlined under Alternative A would remain.

In addition to towers, the NPS could consider the placement of small-cell sites on existing infrastructure in four high visitor use areas. A small-cell site consists of an antenna panel and associated equipment that is mounted on or within existing infrastructure such as streetlights or buildings, generally at some elevation. A typical antenna panel could be 3 to 4 ft. tall, about 6 in. wide, and 4 to 6 in. thick, with two to four of these mounted and wrapped around a light pole.

The NPS would consider a mixture of microwave antennas on new telecommunications towers or, preferably, high capacity fiber optic communications cable (fiber), hung on existing utility lines, or buried in disturbed areas along existing utility corridors, roads, or other developed corridors within the park to provide backhaul. Above ground sections would be approved where resource effects are of particular concern (for example, archeological resources are present and effects to these resources would be unavoidable if the line is buried).

The enclosed EA Chapter 2 Alternative, pages 11-24, provides more information on the undertaking and the guidelines developed to minimize the potential to affect historic properties.

Identification and Description of Historic Properties

The area of potential effect (APE) includes the locations where telecommunications infrastructure is currently located; where it could be constructed, operated, and maintained; and areas from where the infrastructure is or could be visible. These locations include areas in and near Grand Canyon Village, by West Rim Drive, at Desert View, North Entrance Road area near Lindberg Hill, the Bright Angel peninsula near CC Hill, and Mt. Emma on the west side of the North Rim. As the undertaking is further defined during the ten to fifteen year implementation of the plan/EA, the APE would be defined in accordance with the PA that would be developed for this undertaking.

Historic properties within the APE include three National Historic Landmark (NHL) Districts, ten historic districts, and other historic properties including:

- Grand Canyon Village NHL District
- M.E.J. Colter Buildings NHL District (Hopi House and Desert View Watchtower)
- Grand Canyon Depot NHL (including tracks, platform, and passenger yard)
- Grand Canyon Railway Historic District
- Stables – Blacksmith Shop Historic District
- El Tovar NHL
- Grand Canyon Powerhouse NHL
- Grand Canyon Park Operations Building NHL
- West Rim Drive Historic District
- Hopi Fire Tower, Hermit Fire Tower Cabin
- Albright Training Center Historic District
- Mather Business Zone Historic District
- Desert View Watchtower Historic District
- North Rim Entrance Road Corridor Historic District
- Bright Angel Peninsula Historic District
- Grand Canyon North Rim Headquarters Historic District
- Grand Canyon Inn and Campground Historic District
- Grand Canyon Lodge NHL District

Other historic properties may be within the APE and they would be identified in accordance with the PA for the Telecommunications Plan/EA; the PA is currently being drafted. Please refer to the EA Chapter 1 Introduction, Issues and Impact Topics, pages 4-7; Chapter 2 Alternatives; Chapter 3 Impact Analysis, Cultural Resources, pages 34-44, and the draft PA for additional information.

Description of Potential Effects to Historic Properties

No telecommunications towers would be constructed within NHL Districts or historic districts. New towers and associated infrastructure could be visible from various historic properties, including districts, cultural landscapes, and various individually listed or eligible properties. Typically, these new towers and infrastructure would not be visible from every location within a

district or cultural landscape due to screening by other features such as trees, buildings, and topography. Tower visibility would be further minimized by the telecommunications infrastructure design guidelines.

Existing telecommunications infrastructure on historic buildings and structures may be upgraded or replaced and minor (non-tower) telecommunications infrastructure could be added (in addition to existing) within NHL Districts, historic districts, and cultural landscapes. These actions have the potential for visual and physical effects.

Ground disturbance for telecommunications infrastructure construction, including burying fiber optic cable or conduit, would have the potential to affect historic properties, including archaeological resources. Cable and conduit would be buried along existing utility corridors and in previously disturbed areas when possible. Archaeological surveys would occur as needed for areas within the APE that did not have an archaeological survey that was considered current. Projects would be designed to avoid archaeological resources to the extent possible.

The undertaking is a plan for future implementation and the effects on historic properties cannot be fully determined at this time. The PA would record the terms and conditions agreed upon to continue Section 106 consultation for this undertaking and to minimize the potential for adverse effects. Please refer to the EA Chapter 1 Introduction, Issues and Impact Topics, pages 4-7; Chapter 2 Alternatives; Chapter 3 Impact Analysis, Cultural Resources, pages 34-44; and the draft PA for additional information.

Consultation with American Indian Tribes

Section 106 consultation with the park's traditionally associated tribes was initiated in a letter dated 7/23/19. Responses to this letter were received from two tribes, the Hopi and Navajo.

The Hopi Tribe response, dated 7/31/19, requested "continuing consultation including being provided with copies of the cultural resources survey reports, draft Programmatic Agreement, and draft Environmental Assessment for review and comment."

The Navajo Nation response, dated 8/12/19, stated "that there are no Navajo TCPs in the area and no further consultation is need[ed] for this project."

On 9/6/19, park staff met with staff from the Havasupai Tribe to discuss the project. NPS staff information from the meeting mention that the tribe is interested in providing broadband service to Supai Camp and utilizing the park's telecommunications infrastructure would be the easiest way to do this. The tribe's staff requested that tribal elders be able to complete a site evaluation of any proposed new telecommunications towers within the park to make sure the site is clear of any historical or archaeological resources or other resources valuable to the tribe.

The park would continue to consult with the tribes on the plan/EA and PA, as well as the implementation of the plan/EA over the next ten to fifteen years. The tribes would be asked to be invited signatories to the PA.

Discoveries

If previously unrecorded and or buried cultural deposits are encountered during any portion of the project, work at that location would immediately cease, and an assessment made by a qualified cultural resource specialist. The NPS would notify you and all concerned American Indian groups immediately.

Finding of Effect

After applying the criteria of adverse effect in accordance with 36 CFR Part 800.5, the NPS has determined that the effects on historic properties cannot be fully determined before the undertaking is approved. The NPS would prepare a programmatic agreement (PA) for this undertaking in consultation with SHPO and the traditionally associated tribes, and the Advisory Council on Historic Preservation (if the ACHP chooses to participate) in accordance with 36 CFR Part 800.6(a)(1)C and 800.14(b)(1)(ii). The PA would record the terms and conditions agreed upon to continue Section 106 consultation for this undertaking.

Additional Information Contact

Catherine Lentz, Section 106 Coordinator, 928-638-7327, catherine_lentz@nps.gov.

12/2/2019 Draft PA

**PROGRAMMATIC AGREEMENT
BETWEEN THE
NATIONAL PARK SERVICE AND THE ARIZONA STATE HISTORIC
PRESERVATION OFFICER
REGARDING THE TELECOMMUNICATIONS PLAN/ENVIRONMENTAL
ASSESSMENT
FOR GRAND CANYON NATIONAL PARK, ARIZONA**

WHEREAS, the National Park Service (NPS) plans to prepare a Telecommunications Plan/EA for Grand Canyon National Park (park) pursuant to its authority as the federal land manager of the park. The Telecommunications Plan/EA (plan/EA) is needed to 1) comprehensively address substantial telecommunications deficiencies within developed areas of the park that currently inhibit NPS operations as well as the activities of visitors, park partners, and the community; and 2) ensure that telecommunications infrastructure is designed and located in a manner that minimizes impacts to park resources; and

WHEREAS, the NPS is required by the Telecommunications Act of 1996 to consider all Right of Way (ROW) permit applications to install telecommunications infrastructure on NPS lands and this plan/EA will provide guidance in response to future applications that the NPS receives. The NPS is not proposing to directly develop new telecommunications infrastructure under this plan/EA. This infrastructure is typically proposed by private telecommunications companies through ROW permit applications. If and when ROW permits are approved and issued, the telecommunications company (permittee) is responsible for building and maintaining the related infrastructure according to the terms and conditions of the ROW permit.

WHEREAS, the NPS is evaluating two alternatives for the Telecommunications Plan/EA. These alternatives are the undertaking and they include a no action alternative and an action alternative, which includes multiple elements that collectively would accomplish the proposed action to develop a plan for future park telecommunications infrastructure; and

WHEREAS, NPS has developed this programmatic agreement (PA or Agreement) for the Telecommunications Plan/EA pursuant to Section 106 of the National Historic Preservation Act of 1966 as amended (NHPA), 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800, and NPS is a signatory to this PA; and

WHEREAS, the NPS defines the Area of Potential Effect (APE) as areas where telecommunications infrastructure is currently located; where it could be constructed, operated, and maintained; and areas from where the infrastructure is or could be visible.

WHEREAS, NPS has consulted with the State Historic Preservation Officer (SHPO) and SHPO is authorized to enter this Agreement in order to fulfill its role of advising and assisting Federal agencies in carrying out Section 106 responsibilities under the following federal statutes: Sections 101 and 106 of the NHPA, 54 U.S.C. 300101 *et seq.*, at 36 CFR Part 800.2(c)(1)(i), and 800.6(b), and SHPO is a signatory to this Agreement; and

WHEREAS, pursuant to 36 CFR Part 800.3(f)(2), the park has consulted with traditionally associated tribes including the Havasupai Tribe, Hopi Tribe, Hualapai Tribe, Kaibab Band of the Paiute Indians, Las Vegas Paiute Tribe of Paiute Indians, Moapa Band of Paiute Indians, Navajo Nation, Paiute Indian Tribe of Utah, Pueblo of Zuni, San Juan Southern Paiute Tribe, and Yavapai-Apache Nation (Tribes); and

WHEREAS, the Tribes previously identified the Grand Canyon, from rim to rim, with the Colorado River and its associated elements as eligible for listing in the National Register of Historic Places (National Register) as a Traditional Cultural Property (TCP) and the SHPO concurred in a consensus determination of eligibility on July 28, 2011, with the National Register eligibility of this TCP; and

WHEREAS, the Tribes retain important prehistoric and historic cultural and spiritual connections to the Grand Canyon; and

WHEREAS, the Havasupai Tribe, Hopi Tribe, Hualapai Tribe, Kaibab Band of the Paiute Indians, Las Vegas Paiute Tribe of Paiute Indians, Moapa Band of Paiute Indians, Navajo Nation, Paiute Indian Tribe of Utah, Pueblo of Zuni, San Juan Southern Paiute Tribe, and Yavapai-Apache Nation are invited signatories to this Agreement and may sign this Agreement after its execution, without amendment; and

WHEREAS, the park will continue consultation with all Tribes regardless of their signature status unless a Tribe informs the park that they no longer wish to participate in consultation for this undertaking; and

WHEREAS, there are three National Historic Landmark Districts (NHL Districts), twelve historic districts, and other historic properties within the APE; and

WHEREAS, effects on historic properties cannot be fully determined because ROW permit applications, which would include specific proposals and site plans, have not yet been received by the NPS; and

WHEREAS, the NPS has used the procedures for public involvement under the National Environmental Policy Act to assist in satisfying the public involvement requirements under Section 106 of the NHPA pursuant to 36 CFR 800.2(d)(1-3); and

WHEREAS, NPS will continue to implement Section 106 for this undertaking following the process identified in 36 CFR Part 800 or the 2008 Programmatic Agreement Among the National Park Service (U.S. Department of the Interior), the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers for Compliance with Section 106 of the National Historic Preservation Act (NPS Servicewide PA), as applicable; and

WHEREAS, in accordance with 36 CFR Part 800.6(a)(1), NPS notified the Advisory Council on Historic Preservation (ACHP) of the intent to prepare this programmatic agreement, with specified documentation on XX/XX/XXXX; the ACHP did not respond within 15 days that it

would participate therefore the ACHP has chosen not to participate in the consultation pursuant to 36 CFR Part 800.6(a)(1)(C)(iii); and

NOW, THEREFORE, NPS and SHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

The NPS shall ensure that the following stipulations are carried out:

I. Continuing Section 106 Consultation

- A. NPS will continue to implement Section 106 for this undertaking following the process identified in the PA for the plan/EA, 36 CFR Part 800, or the NPS Servicewide PA, as applicable, as planning for the undertaking continues.
- B. If any new activities are proposed that are outside the scope of this undertaking, or if the APE is modified, NPS will consult on amending the PA or follow the 36 CFR Part 800 consultation process or the NPS Servicewide PA, as applicable.

II. Area of Potential Effects

- A. Direct effects: The APE for direct effects consists of the two alternatives and includes all areas likely to be affected by construction, operation, and maintenance activities. The APE includes access roads and trails, and staging areas.
- B. Indirect effects: The APE for indirect effects includes areas from which the undertaking is visible or audible.
- C. Cumulative effects: The APE for cumulative effects shall be the same as that for direct and indirect effects combined.

III. Telecommunications Infrastructure Planning

- A. The *Secretary of the Interior's Standards for the Treatment of Historic Properties – Guidelines for Preserving and Rehabilitating Historic Buildings* and *Guidelines for Preserving and Rehabilitating Cultural Landscapes*, and *NPS Director's Order (DO) 28: Cultural Resource Management* will be followed for this undertaking, the Telecommunications Plan/EA.
- B. The telecommunication infrastructure guidelines in accordance with III. A. of this PA will be followed for this undertaking.

- C. Projects to be implemented under this plan will be submitted for NPS cultural resources and Section 106 review and consultation with SHPO and other consulting parties, as appropriate.
- D. Additional information on the following items will be submitted to SHPO in appropriate sequence for the implementation schedule:
- Avoidance of eligible National Register archaeological sites within the APE. Before work begins, an archaeological survey would be conducted in all areas that have not been previously surveyed or do not have a survey considered current.
 - Avoid disturbance to and maintain cultural landscape features such as historic trails, curbs, walls, vegetation and other cultural landscape associated features in accordance with the Secretary of the Interior's Standards for Rehabilitation.
 - NHL Districts, historic districts, historic buildings, structures, and landscape features: Effects and compliance with the Secretary of the Interior's Standards for Rehabilitation.
 - Non-historic buildings, new construction, and amenities: Effects to NHL Districts, historic districts, other historic properties, and compliance with the Secretary of the Interior's Standards for Rehabilitation.

IV. Professional Qualifications

NPS shall ensure that all historic preservation work is conducted under the supervision of a professional who meets the Secretary of the Interior's standards, as per Section 112(a)(1)(A) of the NHPA and at 36 CFR Part 800.2(a)(1).

V. Identification and Evaluation of Historic Properties

- A. A Class III, Intensive Archaeological Inventory will occur in all areas of the APE not previously surveyed to current professional standards, before work begins in that area.
- B. Areas selected for staging equipment and materials are expected to be located in existing disturbed areas where there is no potential for archaeological resource disturbance.
- C. If any previously unknown archaeological resources are encountered during the project, all work in the immediate vicinity of the discovery would halt until the resources can be identified and documented and an appropriate mitigation strategy developed.
- D. As part of its identification efforts, the NPS has consulted with the Tribes. The NPS shall continue to consult with the Tribes regarding properties of traditional religious and cultural importance that might be affected by the undertaking, and shall provide opportunities for review and comment on draft and final versions of Class III Inventory Reports. The consultation process will remain open for any Tribe that expresses a desire to participate.

- E. All archaeological resources identified during Class III inventories and through Tribal consultation will be evaluated for eligibility for National Register listing, in consultation with the consulting parties.
- F. If the SHPO disagrees with the NPS's determination of eligibility, the NPS shall consult with the SHPO to resolve the objection. If a resolution cannot be agreed upon, the NPS shall forward the required documentation to the Keeper of the National Register for a formal determination of eligibility.

VI. Project Finding of Effect and Avoiding, Minimizing, or Mitigating Adverse Effects

- A. The NPS has determined through consultation with SHPO and Tribes that effects on historic properties cannot be fully determined because ROW permit applications, which would include specific proposals and site plans, have not yet been received by the NPS. The NPS will seek to avoid adverse effects to all types of historic properties, with input from consulting parties. Avoidance measures for historic properties may include (but are not limited to) redesigning project elements, fencing limits of construction, monitoring construction activities, and placing infrastructure away from archaeological site boundaries.
- B. If adverse effect to archaeological sites is unavoidable, the NPS shall minimize or mitigate adverse effects to historic properties through the development and implementation of a Historic Properties Treatment Plan (HPTP), which will be developed in consultation with the parties to the Agreement and will specify a program of measures to minimize and/or mitigate adverse effects. The NPS shall ensure that the HPTP is consistent with the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation (48 FR 44734-44737). A Memorandum of Agreement (MOA) would not be needed.
- C. For any activity that involves work in NHL Districts, historic districts, cultural landscapes, or on or by historic buildings or structures, the Secretary of the Interior's Standards for the Treatment of Historic Properties and Director's Order 28, Cultural Resources Management, would be followed.

VII. Monitoring

- A. NPS, in consultation with SHPO and Tribes, will prepare a monitoring and discovery plan (MDP) before ground-disturbing activities. The MDP will minimally include all locations and situations when monitoring is required. The Arizona State Museum Standards will be followed for determining the presence of isolated occurrences versus archaeological sites, and documenting findings. The 2007 Memorandum of Agreement Regarding Collections, Inadvertent Discovery, and Intentional Excavation of American Indian Human Remains, Funerary Objects, Sacred Objects, and Objects of Cultural Patrimony at Grand Canyon National Park, Arizona (2007 MOA), will be adhered to for protecting , document, and consult on discoveries of human remains.

- B. A cultural resources specialist will identify when and where ground-disturbing activities, including excavation or grading need to be monitored. Such work will only proceed when a cultural resource specialist is present to conduct the monitoring.
- C. Per any tribe's request, a tribal resource monitor will be invited to be on-site when ground disturbing work is occurring.

VIII. Discoveries

- A. If previously unrecorded and/or buried cultural resources are discovered during any portion of the project, work at that location will immediately cease, and an assessment made by a qualified cultural resource specialist. The NPS will notify SHPO. If American Indian-associated resources are discovered the Tribes would also be notified. Work in that area will not resume until the resources could be identified and documented, and an appropriate mitigation strategy developed and implemented in consultation with SHPO and, as appropriate, Tribes.
- B. In the unlikely event that human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during any portion of the project, provisions outlined in the Native American Graves Protection and Repatriation Act and the 2007 MOA would be followed.

IX. Review and Comment Process

The NPS will submit documentation related to the undertaking (e.g., survey reports, National Register determinations of eligibility, findings of effect, HPTPs, data recovery reports, etc.) to the consulting parties as applicable for a period of 30 calendar days for review and comment. There may be times when a review of less than 30 calendar days will be requested. If a party does not comment on a submittal during the 30-calendar day time period, or other agreed upon review period, as requested, the NPS will follow-up by telephone or e-mail with the party. If, after such reasonable and good faith efforts to reach an unresponsive consulting party, there has still been no response, the NPS will proceed to the next step prescribed by 36 CFR Part 800, or the NPS Servicewide PA, as applicable.

X. Communication among Parties to this PA

Electronic mail (e-mail) may serve as the official correspondence method for all communications regarding this Agreement and its provisions.

XI. Curation

The NPS shall ensure that all artifacts, samples, and records resulting from the undertaking are curated in accordance with 36 CFR Part 79, except as determined through consultations with Tribes and carried out in accordance with federal and state laws pertaining to the treatment and disposition of Native American Human Remains, Associated/Unassociated Funerary Objects, and Objects of Cultural Patrimony.

XII. Confidentiality

To the maximum extent allowed by federal and state law, the NPS will maintain confidentiality of sensitive information regarding historic properties that could be damaged through looting or disturbance, and/or to help protect a historic property to which a Tribe attaches religious or cultural significance. However, any documents or records the NPS has in its possession are subject to the Freedom of Information Act (FOIA) (5 U.S.C. 552 et. seq.) and its exemptions, as applicable. The NPS will evaluate whether a FOIA request for records or documents would involve a sensitive historic property, or a historic property to which a Tribe attaches religious or cultural significance, and if such documents contain information that the NPS is authorized to withhold from disclosure by other statutes including Section 304 of the NHPA, as well as the Archaeological Resources Protection Act. If this is the case, then the NPS will consult with the Keeper and the ACHP regarding withholding the sensitive information. If a Tribally sensitive property is involved, the NPS will also consult with the relevant Tribe prior to making a determination in response to a FOIA request.

XIII. Duration

This PA will expire if its stipulations are not completed within ten (10) years of its execution, unless before its expiration the signatories agree in writing to an extension for carrying out its terms. In the event of expiration before completion of all stipulations, NPS shall comply with 36 CFR Part 800 or the NPS Servicewide PA as applicable, with regard to this undertaking that otherwise would have been covered by this PA.

XIV. Amendments

This PA may be amended when such an amendment is agreed to in writing by the signatories. An amendment may be executed in counterparts each of which shall be deemed an original and all of which together shall constitute one and the same instrument. The amendment will be effective on the date a copy signed by the signatories is provided to the ACHP.

XV. Dispute Resolution

- A. Should any signatory to this PA object at any time to any actions proposed or the manner in which the terms of this PA are implemented, NPS shall notify the signatories and concurring parties of the objection and consult with such parties to resolve the objection. If NPS determines that the objection cannot be resolved, NPS will forward all documentation relevant to the dispute, including the NPS proposed resolution, to the ACHP. The ACHP will be requested to provide NPS with its advice on the resolution of the objection within 30 calendar days after its receipt of the relevant documentation. Before reaching a final decision on the dispute, NPS shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP and any signatories and concurring parties and provide them with a copy of this written response. NPS will then proceed according to its final decision.

- B. If the ACHP does not provide its advice regarding the dispute within 30 calendar days, NPS may make a final decision on the dispute and proceed accordingly, after preparing its written response that takes into account any timely advice or comments and provide the signatories, concurring parties, and the ACHP with a copy of such written response.
- C. NPS responsibility to carry out all other actions subject to the terms of this PA that are not the subject of the dispute remain unchanged.

XVI. Termination

If any signatory to this PA determines that its terms will not or cannot be carried out, that party shall promptly consult with the other signatories to attempt to develop an amendment to the PA that would avoid termination. If after 30 calendar days (or another time period agreed to by all signatories) an amendment cannot be agreed upon, any signatory may terminate the PA upon written notification to the other signatories.

Once the PA is terminated, and before work continues on the undertaking, NPS must either a) execute a PA pursuant to 36 CFR Part 800.6 or b) request, take into account, and respond to the comments of the ACHP under 36 CFR Part 800.7. NPS shall notify the signatories as to the course of action they will pursue.

XVII. Withdrawal of Invited Signatories

Any invited signatory to this Agreement may withdraw its participation in this Agreement by providing 30 calendar days written notice to the other parties. During the 30-calendar day period the Agreement signatories and invited signatories will consult on amendments or other actions that would avoid termination of the invited signatory's participation in the Agreement. Withdrawal of an invited signatory does not terminate this Agreement.

XIII. Anti-Deficiency Act

This Agreement shall be subject to available funding, and nothing in this Agreement shall bind the State or Federal agencies to expenditures in excess of funds authorized and appropriated for the purposes outlined in this Agreement.

XIX. Counterpart Signatures

This PA may be executed in counterparts each of which shall be deemed an original and all of which together shall constitute one and the same instrument. Tribes are Invited Signatories to this Agreement and may sign this Agreement after its execution, without amendment.

EXECUTION

Execution and implementation of this Agreement by NPS and SHPO and implementation of its terms evidence that the NPS has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

**PROGRAMMATIC AGREEMENT
BETWEEN THE
NATIONAL PARK SERVICE AND THE ARIZONA STATE HISTORIC
PRESERVATION OFFICER
REGARDING THE TELECOMMUNICATION PLAN/ENVIRONMENTAL
ASSESSMENT FOR GRAND CANYON NATIONAL PARK, ARIZONA**

SIGNATORIES:

National Park Service

**Mary Risser, Acting Superintendent
Grand Canyon National Park**

Date

State Historic Preservation Officer

**Kathryn Leonard
State Historic Preservation Officer**

Date

DRAFT

**PROGRAMMATIC AGREEMENT
BETWEEN THE
NATIONAL PARK SERVICE AND THE ARIZONA STATE HISTORIC
PRESERVATION OFFICER
REGARDING THE
TELECOMMUNICATION PLAN/ENVIRONMENTAL ASSESSMENT
FOR GRAND CANYON NATIONAL PARK, ARIZONA**

INVITED SIGNATORIES:

Havasupai Tribe

Muriel Coochwyetewa-Uqualla, Chairwoman

Date

Hopi Tribe

Timothy Nuvangyaoma, Chairman

Date

**Stewart Koyiyumptewa,
Hopi Cultural Preservation Office**

Date

Hualapai Tribe

Damon Clarke, Chairman

Date

**Pete Bungart,
Tribal Historic Preservation Officer**

Date

Kaibab Band of the Paiute Indians

Ona Segundo, Chairwoman

Date

Las Vegas Paiute Tribe of the Paiute Indians

Benny Tso, Chairman

Date

Moapa Band of Paiute Indians

Gregory Anderson, Chairman

Date

Navajo Nation

Jonathan Nez, President

Date

**Richard Begay,
Tribal Historic Preservation Officer**

Date

Paiute Indian Tribe of Utah

Tamra Borchardt-Slayton, Chairwoman

Date

Pueblo of Zuni

Val. R. Panteah, Sr., Governor

Date

San Juan Southern Paiute Tribe

Carlene Yellowhair, President

Date

Yavapai-Apache Nation

Jane Russell Winiecki, Chairwoman

Date

Appendix A Cultural Resources - Telecommunications Infrastructure Guidelines

The following guidelines are based, in part, on the guidelines in the Telecommunications Plan/EA.

Guidelines for Telecommunications Towers and Associated Facilities

Any new or relocated telecommunications towers within Grand Canyon National Park (park) would adhere to the following guidelines. These guidelines may be modified and additional guidelines may be developed in the future.

Location and Siting Requirements

- Telecommunications towers would be constructed in or immediately adjacent to developed and/or previously disturbed areas that have available power in close proximity and are accessible from existing roads.
- Telecommunications towers would be constructed outside NHL Districts and historic district boundaries, and, to the extent possible, located to minimize impacts to National Register eligible or listed historic properties.
- Telecommunications towers would be located away from prominent views or features, such as ridgelines, to minimize visibility of towers to the greatest extent possible.
- Telecommunications towers and associated facilities would be designed and constructed to avoid or minimize disturbance to and removal of trees.
- All electrical power service, fiber, and other communications lines to new telecommunications towers would be buried, when feasible
- Telecommunications towers would be located in close proximity to existing towers as long as the operation of the new tower would not interfere with the existing.
- Towers would be designed to accommodate current or future co-locations in order to minimize the number of additional towers that could be proposed by ROW applicants who would otherwise not be accommodated.

Design Requirements

- Telecommunications towers would be no higher than the minimum height necessary to provide telecommunications services to developed areas of the park and no higher than the height guidelines identified in Table 2.1 in the plan/EA.
- Table 2.1: Locations for New Telecommunications Towers, Alternative B

Area	Existing Tower		Additional Tower	
	Height (ft.)	Distance from Rim (ft.)	Max. Height (ft.)	Min. Distance from Rim (ft.)
West Rim Drive (Vicinity of Hopi Fire Lookout Area)	80*	~520	80	500
Grand Canyon Village	107	~800	120	1,500-6,999
			OR	180
				7,000

Area	Existing Tower		Additional Tower	
	Height (ft.)	Distance from Rim (ft.)	Max. Height (ft.)	Min. Distance from Rim (ft.)
Desert View	80*	~1,500	80	750
Entrance Station to North Rim (Vicinity of Lindberg Hill)	N/A	N/A	180	> 20,000
Visitor Services Area on North Rim (Vicinity of CC Hill)	180*	~600	180	500
* Existing NPS radio tower				

- All tower designs must be self-supporting; no guy lines would be permitted.
- Lattice towers may be necessary to accommodate telecommunications facilities; however, alternative designs, such as trees, could be appropriate if located within a forested area and the height would not greatly exceed the surrounding vegetation. Monopoles would be preferable to lattice towers at locations within 1,500 ft. of the rim unless alternative designs demonstrated better blending with the environment.
- Telecommunications towers and associated facilities would be located and designed to blend into the surroundings as much as possible to reduce the effects to National Register eligible or listed historic properties, scenic resources, and other resources.
 - Design and materials would be selected to blend with the existing landscape, for example through selecting appropriate colors, surface treatments, and use of non-reflective coatings to reduce color contrast with the surrounding environment.
 - All antennas would adhere to the USDOJ-BLM camouflage guidelines to improve aesthetics (for example, two-way radio antennas are often sky blue or white in color to blend in with the skyline). Final colors would be determined on a case-by-case basis as part of permitting, and would be dependent on the location.
- Tower lighting would be considered on a case-by-case basis for safety purposes. If lighting is deemed necessary, measures would be identified to ensure the tower is lit only during emergency situations such as when aircraft are needing to access a nearby helibase at night.
- Facilities surrounding the tower would remain unlit except when lighting would be required for safety or security purposes. Lighting would be designed to minimize impacts and would be motion- or heat-sensitive, down-shielded, and of a minimum intensity (lumens and color) to reduce nighttime bird attraction and eliminate constant nighttime illumination. External lighting would meet the standards utilized by the International Dark-Sky Association.

Equipment Requirements

- All new telecommunications towers would be designed to promote facility and site sharing by multiple users. All telecommunications equipment including, but not limited to, towers, equipment shelters, outdoor cabinets, radios, backup power, and fuel supply would be co-located within the telecommunications site.
- The generator at each tower location would operate only during utility power failures and as required for proper maintenance and testing (per manufacture requirements). The generator would be fitted with a muffler, or equivalent, to reduce noise to a level that does not exceed 60 dBA within 50 ft. of the generator. Diesel tanks would be double walled with leak detection.

- All wires would be contained or cleanly attached and colored to blend in with the surrounding setting.

Guidelines for Small-Cell Nodes, Microwave Antennas, and Associated Facilities

Any new or relocated small-cell nodes and associated facilities within the park would adhere to the following guidelines. These guidelines may be modified and additional guidelines may be developed in the future.

- Small-cell nodes would be considered only when there is a demonstrated need for additional capacity on the network.
- All small-cell nodes would be able to accommodate multiple wireless telecommunications carriers.
- All small-cell nodes, microwave antennas, and equipment would be mounted to existing buildings or features (such as a light pole) and would be sited to reduce their visibility when possible.
- No small-cell nodes, microwave antennas, or equipment would be placed on the roofs of historic structures that have no other modern equipment. Should a historic structure have existing modern equipment on the roof, small-cell antenna, microwave antenna, and equipment would be placed in close proximity to this other equipment.
- If located within NHL Districts or historic districts, small-cell node, microwave antennas, and equipment would be located to avoid or minimize visual effects. Wireless carriers would be required to make installations blend with existing architecture or background.
- All small-cell antennas would be backhauled by high capacity fiber, or other technology such as T-1 lines or copper, that would be buried in conduit to the extent feasible. Any boring or trenching to install fiber and conduit in areas where it does not currently exist would adhere to the description outlined in Guidelines for Fiber Optic Communications Cable.
- Power would be fed from a connected building or facility (such as a light pole). Solar could also be used if installed out of sight and on existing structure (like a roof).
- All wires would be contained or cleanly attached and colored similarly to blend in with the setting.
- Exterior equipment would be painted to blend into the environment.
- Any exterior support equipment such as cabinets or electronics would be sited close to the ground and adjacent to the small-cell nodes and microwave antennas unless the equipment is placed on top of a building. Exterior support equipment would need to be located sited to minimize the visual effect to historic properties.

Guidelines for Fiber Optic Communications Cable

- Fiber optic cable would be installed along existing trails or within rights-of-way for roads, railways, and utility lines, when possible.
- Buried fiber optic cable routes would be placed in previously disturbed ground to the extent possible and designed to avoid archaeological sites.

Fiber optic cable that would be hung from utility poles would utilize existing utility poles when possible.

Appendix B
Telecommunications Plan/EA
Cultural Resources References

Hasbargen, Jim Paul Leatherbury, and Sandra Wadsworth

2005 Grand Canyon National Park, Partial Parkwide Inventory of Archaeological Resources (SAIP) 2005 Annual Report Cedar Mountain Road [Desert View]. Project Number GRCA-2005A. Report Number 05-GRCA-01. Science and Resource Management, Grand Canyon National Park, Arizona.

Hasbargen, Jim and Amy Horn

2006 Grand Canyon National Park, Partial Parkwide Inventory of Archaeological Resources (SAIP) 2006 Annual Report. Project Number GRCA-2006A. Report Number 06-GRCA-01. Science and Resource Management, Grand Canyon National Park, Arizona.

John Milner Associates Inc.

2003 Bright Angel Peninsula HD National Register Form. Grand Canyon National Park, Arizona.

2004 Grand Canyon Village National Historic Landmark District Cultural Landscape Report. Grand Canyon National Park, Arizona.

McIntyre, M. and Jan Balsom

1993 Cedar Prescribed Burn Block, Grand Canyon National Park, Arizona. Project Number GRCA 1993 D. Report Number 071-93-GRCA. Science and Resource Management, Grand Canyon National Park, Arizona.

National Park Service

1974 Stables – Blacksmith Shop Complex National Register Nomination Form. Grand Canyon National Park, Arizona.

1975 Grand Canyon Village Historic District National Register Nomination Form. Grand Canyon National Park, Arizona.

1982a Grand Canyon Inn, North Rim Inn, and NPS Campground National Register Nomination Form. Grand Canyon National Park, Arizona.

1982b Grand Canyon Lodge Historic District National Register Nomination Form. Grand Canyon National Park, Arizona.

1982c North Rim Headquarters Area National Register Nomination Form. Grand Canyon National Park, Arizona.

1987a – M.E.J. Colter Buildings National Register of Historic Places Inventory-Nomination Form. Grand Canyon National Park, Arizona.

1987b Grand Canyon Lodge National Historic Landmark National Register Nomination Form. Grand Canyon National Park, Arizona.

1994 Desert View Watchtower Historic District National Register of Historic Places Registration Form. Grand Canyon National Park, Arizona.

1997 Grand Canyon Village National Historic Landmark Nomination Form. Grand Canyon National Park, Arizona.

2000 Grand Canyon Railway Historic District National Register Nomination Form. U.S. Forest Service and National Park Service, Grand Canyon National Park, Arizona.

2005 Cultural Landscapes Inventory West Rim Drive 1998, Revised 2005. Grand Canyon National Park, Arizona.

2006 Cultural Landscape Inventory North Rim Historic Entrance Road Corridor. Grand Canyon National Park, Arizona.

2007 Memorandum of Agreement Regarding Collections, Inadvertent Discovery, and Intentional Excavation of American Indian Human Remains, Funerary Objects, Sacred Objects, and Objects of Cultural Patrimony at Grand Canyon National Park, Arizona. Science and Resource Management, Grand Canyon National Park, Arizona.

2011a Bright Angel Peninsula Historic District Cultural Landscape Inventory and National Register Form. Grand Canyon National Park, Arizona.

2011b North Rim Entrance Road National Register Form. Grand Canyon National Park, Arizona.

2013 Horace M. Albright Training Center National Register of Historic Places Registration Form. Grand Canyon National Park, Arizona.

2015 National Park Service Mission 66 Era Resources National Register Multiple Property Documentation Form. Grand Canyon National Park, Arizona.

2016 Draft Mather Business Zone National Register Form. Grand Canyon National Park, Arizona.

2018 Archaeological Site Database and GIS data. Cultural Resource Program, Grand Canyon National Park. Science and Resource Management, Grand Canyon National Park, Arizona.

2019 Grand Canyon National Park Telecommunications Plan. Planning, Environment, and Projects, Grand Canyon National Park, Arizona.