

**National Park Service
US Department of the Interior**



Wright Brothers National Memorial

**Finding of No Significant Impact
General Management Plan Amendment
Wright Brothers National Memorial, North Carolina**

October 2020

Recommended:

**DAVID
HALLAC**

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Approved:

For

Stan Austin
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Date

INTRODUCTION

The National Park Service (NPS) at Wright Brothers National Memorial (the park) proposes to amend the 1997 General Management Plan (GMP) to address issues and provide for new opportunities. Many aspects of the GMP, largely developed in anticipation of the 2003 Centennial of Flight (the centennial), have been implemented; however, some management measures were not implemented. A new set of issues and opportunities present themselves more than 20 years following the original development of the GMP. Issues and opportunities that the General Management Plan Amendment (GMPA) address include:

- There are few areas suitable for education of and programming for large groups or for holding events, especially in the case of inclement weather.
- The pavilion structures erected for the centennial were intended to be temporary, are located directly in the historic viewshed, and detract from the memorial landscape and setting.
- Administrative office and storage space areas are limited.
- A non-contiguous piece of land has not been developed or managed for any park or public use.
- Viewsheds between the Wright Brothers Monument (Monument) and First Flight Airstrip have been obscured by vegetation.
- Parking capacity is limited, the drop-off/pick-up area can be congested, and circulation through the parking lot is unclear.
- Opportunities exist for a more thorough visit through the memorial landscape with additional shade and rest areas available for visitors.
- There is limited wayfinding and interpretive messaging throughout the memorial landscape.

The NPS prepared the *Wright Brothers National Memorial General Management Plan Amendment Environmental Assessment / Assessment of Effect*¹ (EA/AOE) to evaluate alternatives that would amend the 1997 GMP and address the issues and opportunities described above. The EA described two alternatives: a no-action alternative and the proposed action. The EA also analyzed the potential impacts these alternatives would have on the park's natural and cultural resources and the human environment.

The EA and this finding of no significant impact (FONSI) have been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended [42 United States Code (USC) 4332(2) (C)]; the implementing regulations of the Council on Environmental Quality (CEQ) [40 Code of Federal Regulations (CFR) 1500-1508.9]; the Department of the Interior NEPA regulations (43 CFR Part 46); and NPS Director's Order (DO) 12: *Conservation Planning, Environmental Impact Analysis and Decision-making* (DO-12) and the accompanying NPS NEPA Handbook. As required by NPS *Management Policies 2006*, a finding of non-impairment is included as attachment A.

NPS SELECTED ALTERNATIVE

The alternative selected by the NPS for implementation is the proposed action/preferred alternative, as described on pages 14-24 and Figure 4 of the EA². The following summarizes the NPS selected alternative, details are provided in the EA.

Under the selected alternative, the NPS will implement the following changes throughout the park. The NPS will construct a new sheltered, open-air interpretive/educational pavilion able to accommodate up to 150 people. It will be located in the scrub-shrub area south of the visitor center parking lot and will include a paved access pathway. The NPS will also remove the remaining temporary structures located at the Centennial Pavilion area, which include the concrete foundation pads, restroom building, one trailer, and the associated structures sidewalks and driveway. The trailer used as office space will be relocated to

¹ National Park Service. 2020. *Wright Brothers National Memorial General Management Plan Amendment Environmental Assessment / Assessment of Effect*.

² Ibid., 14–24.

the maintenance area. After removal of the structures and the concrete pads, the site will be backfilled and seeded with grass. The NPS will repurpose the existing administrative building near the maintenance facilities located at the southern end of the park in order to expand park and partner office and storage space. The park may also repurpose some areas within the visitor center, which were previously used for office and administrative space, to meet park administrative needs. At the site of the former park housing, the park will construct up to eight recreational vehicle (RV) sites for park staff, volunteers, or administrative use. These sites will include pedestals for electric, water, and septic, as well as a designated area for outside seating located adjacent to each site. The RV area will accommodate associated administrative facilities including a laundry facility, shower, and restroom. The existing access road will be widened to allow for two-way travel. At the undeveloped 15-acre parcel of land on the east side of Highway 158, the park will work in conjunction with the town of Kill Devil Hills to evaluate developing the site for public use, such as for beach parking.

Vegetation screening and thinning will be implemented under the proposed action, as summarized in this paragraph. The NPS will visually screen the parking lot from the memorial landscape and Monument through the addition of new vegetation and a wood fence along the western and southern boundary of the visitor center parking lot, which will be designed in a similar appearance as the original Mission 66-era fence previously in place in this location. Vegetation will be selectively thinned in the scrub-shrub areas along the First Flight Air Strip and along Highway 158. This thinning will allow visitors to better view the airstrip and will also provide a greater ability to view the Monument from outside the park.

Under the proposed action, the park will rehabilitate the Mission 66-era visitor center parking lot to improve flow and safety. Parking lot construction will occur within the existing footprint and the design will be compatible with its historic character and original design. The park may also install automated fee kiosks in the vicinity of the parking lot for visitor convenience.

Under the proposed action, pedestrian flow and accommodations will be improved, as summarized in this paragraph. The park will construct a new multi-use paved pathway along the perimeter of the landscape that will provide a new pedestrian, bicycle, and possibly, tram, route. This pathway will provide a more immersive park experience by offering new vistas, interpretive and educational information, immersion around the landscape, and multimodal transportation options. Viewing platforms will be constructed adjacent to the multiuse pathway in the wooded area adjacent to the First Flight Air Strip to provide information and viewing opportunities related to modern flight. The park will also work collaboratively with the North Carolina Department of Transportation (NCDOT) and the town of Kill Devil Hills to construct a multiuse pathway along the park's eastern boundary located along the existing grassy road shoulder. To improve visitor comfort throughout the park, benches and shade structures will be strategically designed and placed at locations where they will not obscure or detract from historic features or important viewsheds.

RATIONALE FOR DECISION

The NPS identified the selected alternative for implementation, because it will provide improved visitor experiences and adequate administrative space for the NPS and partners. The NPS selected alternative will provide new experiences and facilities for visitors, including a sheltered space for education/programming and large-group events, improved wayfinding and circulation for both vehicles and pedestrians, and new multi-modal options for transportation throughout the park. Visitors will be able to experience a more thorough and immersive visit through the landscape with new circulation routes, additional interpretive media, and facilities for rest and shade than what is currently available. Important viewsheds will be improved under the selected alternative, because non-historic structures at the Centennial Pavilion will be removed, and vegetation will be either added or thinned in strategic locations to screen or open up views. Additionally, NPS and partner staff will have adequate space to conduct their administrative functions efficiently. Under the no-action alternative, facilities throughout the park would remain in their existing

configurations and generally under the same use and management, vegetation would be maintained under current management plans, the parking lot would remain in its current configuration, and no new pathways or pedestrian accommodations would be implemented. The no-action alternative would not meet the project's purpose and need, because: there would be no sheltered space for programming/education and large-group events; the Centennial Pavilion structures would remain within the historic landscape; NPS and partner administrative space would be limited; the 15-acre parcel of parkland across Highway 158 would remain undeveloped viewsheds would remain obscured by vegetation; parking capacity would remain limited and circulation through the parking lot would remain unclear; there would be limited pedestrian accommodations for shade and rest; and wayfinding and interpretive messaging would remain limited throughout the park.

MITIGATION

A variety of mitigation measures will be instituted as the actions are taken to implement this alternative. The NPS will review site specific designs and consult with Resource Management and Compliance staff to determine the appropriate level of monitoring throughout the construction process to help ensure that protective measures are being properly implemented and are achieving their intended results.

The exact mitigation measures to be implemented will depend upon the final design and approval of plans. The following is a list of measures that the park may implement:

- Instruct all personnel engaged in undertaking any of the proposed actions on the sensitivity of the general environment and monitor their activities in order to mitigate and minimize potential impacts on natural and cultural resources during construction. Corridors for construction vehicle movement will be established and defined on the ground. Staging of construction equipment will be restricted to the road corridor, parking lots, and other identified previously disturbed areas to avoid impacts on natural and cultural resources.
- State all protection measures in the construction specifications and instruct workers to avoid conducting activities beyond the fenced construction zone.
- Fence all areas in order to keep related disturbances within an NPS-defined and minimal impact area required for construction. Implement standard noise abatement measures during construction. Standard noise abatement measures could include the following elements: a schedule that minimizes impacts on visitors, the use of the best available noise control techniques wherever feasible, the use of hydraulically or electrically powered impact tools when feasible, and location of temporary noise sources as far from sensitive uses as possible.
- Minimize soil erosion by limiting the time that soil is left exposed and by applying other erosion control measures, such as erosion matting and silt fencing, in construction areas to reduce erosion, surface scouring, and discharge to water bodies.
- Implement measures to prevent undesired invasive plants from entering construction areas, such as ensuring that construction-related equipment arrives at the site free of mud or seed-bearing materials and certifying that all seeds and straw material are weed-free.
- Remove undesired invasive plants that may have entered construction areas using approaches prescribed in the park Integrated Pest Management Program.
- Rehabilitate areas that are disturbed, either during construction or areas that were previously disturbed, with NPS-approved vegetation, as per NPS standards and consistent with the cultural landscape report. Immediately implement National Historic Preservation Act (NHPA) Section 106 procedures if any unknown significant archeological resources are uncovered during ground-disturbing activities. If previously unknown archeological resources are discovered during construction, all work in the immediate vicinity of the discovery shall be halted until the resources are identified and documented and an appropriate mitigation strategy developed, if necessary, in accordance with pertinent laws and regulations, including the stipulations of the 2008 Programmatic Agreement Among

the park (US Department of the Interior), the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers.

- When possible, construction should be performed over the late fall and winter months when visitation is lowest in order to minimize the impact on the visitor experience.
- Surveys for state rare or sensitive plants will be conducted prior to or during future design phases of the project to ensure avoidance of these plant species.
- Facilities will be designed to be flood resilient and to impede flow of floodwaters as little as possible, in terms of materials, design, and siting.
- Facilities will be designed to be consistent with the intent of the standards and criteria of the National Flood Insurance Program (44 CFR Part 60).
- Follow the park's Severe Weather Plan in the event of severe weather to minimize the risk to human health and safety as well as to minimize potential property damage.
- Apply the *Secretary of the Interior Standards for Treatment of Historic Properties* to the extent practicable for all proposed new features on the landscape.

OTHER ALTERNATIVES CONSIDERED

In addition to the NPS selected alternative described above, the EA also analyzed a no-action alternative (pages 13-14 of the EA).³

FINDING OF NO SIGNIFICANT IMPACT

As described in chapter 3 of the EA⁴, the NPS selected alternative will result in beneficial and adverse impacts on park resources, including impacts to vegetation, cultural landscape and historic resources, and visitor use and experience. No significant impacts were identified that require analysis in an environmental impact statement. The anticipated impacts to the affected resources are summarized below.

Vegetation. The selected alternative will result in adverse impacts on the park's existing vegetation due to required removal of up to 0.9 acre of vegetation within the Significant Natural Heritage Areas (SNHA) for construction of the interpretive/educational facility, the RV sites, and associated facilities. Trees in these areas will be removed for vegetation thinning adjacent to the airstrip and along Highway 158. The species and extent of vegetation removal will be specified during a future project phase. However, the sensitive nature of the SNHA-designated areas will be considered when determining the specific locations and design of all proposed features and vegetation thinning within these areas. The specific location of each proposed new feature and extent of vegetation thinning will be chosen to avoid or minimize any impacts on the State-listed maritime pinweed and beach heather. Prior to any vegetation clearing within the SNHA-designated areas, surveys will be conducted to determine the presence of these species. If it is determined that these plant species are present, the park will coordinate with the North Carolina Natural Heritage Program to develop measures to avoid adverse impacts on these species. Overall, the vegetation removal within the 193-acre SNHA-designated areas will be relatively small at less than 10 acres.

Cultural Landscape and Historic Resources. The following summarizes the impacts on the cultural landscape and historic resources under NEPA. A summary of compliance with the NHPA Section 106 process is included in the Agency Consultation section below.

The selected alternative will result in both beneficial and adverse impacts on the cultural landscape and historic resources. Beneficial impacts will result from removal of the Centennial Pavilion structures and concrete pads, as well as the addition of vegetation screening and fencing adjacent to the visitor center parking lot. Removal of the non-historic structures will improve the appearance and feeling of the landscape and historic district and restore some of the historic character of the commemorative grassy

³ Ibid., 13–14.

⁴ Ibid., 23–49.

mall between the visitor center and the Monument. The addition of the vegetation and fencing will restore some Mission 66-era design elements and visually screen the commemorative landscape from the park entrance and parking lot, focusing visitor's attention on and guiding them to the visitor center, which was the original intent of the Mission 66-era visitor center and parking lot design. By adopting some aspects of the Mission 66 approach to vegetation, the selected alternative will restore some of the previously lost historic character and integrity of the Mission 66-era design of the Mission 66 visitor center area.

Other aspects of the selected alternative will introduce new elements onto the landscape, including the new interpretive/educational facility, the new multiuse paved pathway, and the benches and shade structures. These new elements have the potential to diminish the historic character of the landscape and historic district, but they will be designed and sited to have minimal impact on these resources. For example, the new interpretive/educational facility will be located within a wooded area and may be partially visible from within the mall or from the Monument on the top of Big Kill Devil Hill. The new multiuse pathway will be located along the perimeter of the commemorative mall and through wooded areas in order to minimize intrusion. Benches and shade structures will be designed to be compatible with the historic setting in terms of color, scale, and materials; and the specific location for each feature will be carefully considered to minimize intrusion on the landscape to the extent practicable. Selective vegetation thinning on the east side of the park along Highway 158 may increase the visibility of adjacent development from within the cultural landscape and historic district; however, it will be undertaken in a manner such that the overall historic character will not be diminished.

Modifications to the visitor center parking lot have the potential to impact the historic circulation patterns introduced during the Mission 66 era and as part of the overall Mission 66 visitor center design. However, as discussed in Chapter 2 of the EA⁵, design criteria would be incorporated into the new parking lot design to ensure its compatibility with the Mission 66 historic character and avoid or minimize any negative impacts on the historic circulation patterns, vegetation design, viewsheds, or character.

Under the selected action, the overall historic character and commemorative feeling of the cultural landscape and historic district will remain intact and no changes would be made to the character-defining features of the cultural landscape or historic resources in a manner that would diminish their overall integrity; therefore, the impacts will not be significant when assessed under NEPA. Additionally, as discussed in the Assessment of Effect (pages 49–54 of the EA)⁶, it was determined that the undertaking will have *no adverse effect* on historic properties when assessed with criteria under NHPA Section 106.

Visitor Use and Experience. The selected alternative will result in an overall beneficial impact on visitor use and experience at the park, though there will be some temporary adverse impacts due to construction or user conflicts along the multi-use path. Beneficial impacts will result from improved circulation routes, both vehicular and pedestrian. Improvements to the entrance and parking lot will create more intuitive wayfinding and reduce potential queueing and traffic congestion upon entering the park. The proposed multi-use pathway will provide a new multimodal route through the park and provide access to new areas, particularly the vicinity of the airstrip. New interpretive opportunities will be available through creation of the interpretive/educational facility for large groups as well as through the viewing platforms, in the wooded area next to the First Flight Airstrip and interpretive waysides and throughout the park. Overall visitor comfort will be improved through the addition of benches and shade structures as well a future tram option along the multi-use pathway. Bicycle use will also be permitted along the multi-use pathway and will improve the visitor experience for some visitors. The NPS will consider measures to separate use such as not allowing bicycle or pedestrian use on the pathway during tram operation, either seasonally or on particular days, if there are conflicts. Construction activities will result in closures of specific areas and will add visual and noise intrusions into the commemorative atmosphere; however, these impacts will be

⁵ Ibid., 21.

⁶ Ibid., 49–54.

temporary and will cease at the completion of construction activities. The park will consider the impact on visitor use and experience when planning and designing construction activities, particularly if closures and other impacts will overlap with visitor use. When possible, construction may be performed over the late fall and winter months when visitation is lowest in order to minimize the impact on the visitor experience. When the selected action is implemented, the overall visitor experience will remain focused on the Wright brothers' story and the history of flight. Visitors will continue to be able to experience the commemorative landscape that was established in the 1920s and 1930s, when the park was created and developed. The park will continue to provide a variety of experiences for visitors, including museum exhibits, reconstructed buildings, commemorative markers, viewing of the modern airstrip, and visiting the Monument on the top of Big Kill Devil Hill.

Cumulative Impacts. As described in chapter 3 of the EA⁷, cumulative impacts were determined by combining the impacts of the actions under the NPS selected alternative with other past, present, and reasonably foreseeable future actions. In addition to actions described in the EA, cumulative actions include maintaining fuel breaks, vegetation maintenance on Kill Devil Hill, and the Colington Road Improvement Project. The adverse impact of fuel break maintenance and the selected action will result in an overall adverse impact on vegetation; however, this adverse cumulative impact will be relatively small, a total of less than 10 acres of the SNHA-designated areas when compared with the overall 193 acres of designated areas. For cultural landscape and historic resources, when considered together, the beneficial impacts of removing the remaining temporary Centennial Pavilion structures and of planting vegetation screening between the mall and the parking lot would outweigh the adverse impacts of introducing new features to the landscape such as a paved pathway, benches, shade structures, wayside exhibits, and an interpretive/educational facility. For visitor use and experience, when considered with the Colington Road Improvement Project bicycle lane extension, the proposed multiuse paved pathway throughout the park will provide additional bicycle connection and experiences throughout the park and the town of Kill Devil Hills. The selected action will result in an overall cumulative beneficial impact on visitor use and experience and there will be no significant cumulative impacts.

AGENCY CONSULTATION

During the NEPA process, the park contacted the following agencies and Tribes for consultation:

- Advisory Council on Historic Preservation
- North Carolina State Historic Preservation Officer
- Eastern Band of Cherokee Indians
- United Keetoowah Band of Cherokee Indians in Oklahoma
- Tuscarora Nation
- Cherokee Nation
- Catawba Indian Nation
- North Carolina Department of Transportation
- US Fish and Wildlife Service
- North Carolina Division of Coastal Management
- North Carolina National Heritage Program

As required by Section 106 of the NHPA, the park consulted with the Advisory Council on Historic Preservation, North Carolina State Historic Preservation Office and associated Tribes to assess the effect of the project on historic properties. The NEPA process was used to satisfy the requirements of the Section 106 process; therefore, an assessment of effect on historic properties was included in the EA. The NPS concluded that the undertaking would result in *no adverse effect* on historic properties, as discussed

⁷ Ibid., 23–49.

on pages 49–54 of the EA.⁸ In a letter dated October 7, 2020, the North Carolina State Historic Preservation Officer concurred with this finding.

As required by Section 7 of the Endangered Species Act, the park made the determination that there will be *no effect* on the red-cockaded woodpecker or the northern long-eared bat. The NPS discussed with the US Fish and Wildlife Service the potential effects of the proposed action on these federally listed species.

As required by the Coastal Zone Management Act and the North Carolina Coastal Area Management Act, the park completed a Federal Consistency Determination to assess the project's consistency with these acts. In an email dated October 13, 2020, the North Carolina Division of Coastal Management concurred with the park's finding the proposed actions are fully in conformity and consistent to the maximum extent practicable with the standards and management objectives of North Carolina's State Guidelines for Areas of Environmental Concerns (15A NCAC 07H.0101, et seq.). A copy of the Federal Consistency Determination is available in appendix C of the EA.⁹

CONCLUSION

The NPS selected alternative does not constitute an action meeting the criteria that normally requires preparation of an environmental impact statement and, as noted above, impacts resulting from implementing the action will not have a significant effect on the human environment. Based on the foregoing, it has been determined that an environmental impact statement is not required for this project and thus will not be prepared.

⁸ Ibid., 49–54.

⁹ Ibid., Appendix C.

ATTACHMENT A: NON-IMPAIRMENT DETERMINATION

The NPS has developed *Guidance for Impairment Determinations and the NPS NEPA Process* (September 2011). That guidance builds upon the statutory direction of the NPS Organic Act to manage resources “unimpaired for future generations” and the interpretation by the NPS of legislative direction in the *NPS Management Policies 2006*.

The *NPS Management Policies 2006*, Section 1.4.4, explains the prohibition on impairment of park resources and values:

While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the NPS. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

WHAT IS IMPAIRMENT?

NPS Management Policies 2006, Section 1.4.5, What Constitutes Impairment of Park Resources and Values, and Section 1.4.6, What Constitutes Park Resources and Values, provide an explanation of impairment.

Impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values.

The NPS has discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the purposes of a park (*NPS Management Policies 2006*, Section 1.4.3). However, the NPS cannot allow an adverse impact that would constitute impairment of the affected resources and values (*NPS Management Policies 2006*, Section 1.4.3).

Section 1.4.5 of *Management Policies 2006* states:

An impact to any park resource or value may, but does not necessarily, constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park
- Key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- Identified as a goal in the park’s general management plan or other relevant NPS planning documents as being of significance.

An impact would be less likely to constitute impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values and it cannot be further mitigated.

Per Section 1.4.6 of *Management Policies 2006*, park resources and values that may not be impaired include the following:

- the park’s scenery, natural and historic objects, and wildlife, and the processes and conditions that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological

- resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;
- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- the park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- any additional attributes encompassed by the specific values and purposes for which the park was established.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. Impairment may also result from sources or activities outside the park, but this would not be a violation of the Organic Act, unless the NPS was in some way responsible for the action.

HOW IS AN IMPAIRMENT DETERMINATION MADE?

Section 1.4.7 of *Management Policies 2006* states, "[i]n making a determination of whether there would be an impairment, an NPS decision-maker must use his or her professional judgment." This means that the decision-maker must consider any environmental assessments or environmental impact statements required by the National Environmental Policy Act of 1969; consultations required under Section 106 of the National Historic Preservation Act; relevant scientific and scholarly studies; advice or insights offered by subject matter experts and others who have relevant knowledge or experience; and the results of civic engagement and public involvement activities relating to the decision.

Management Policies 2006 further define "professional judgment" as "a decision or opinion that is shaped by study and analysis and full consideration of all the relevant facts, and that takes into account the decision-maker's education, training, and experience; advice or insights offered by subject matter experts and others who have relevant knowledge and experience; good science and scholarship; and, whenever appropriate, the results of civic engagement and public involvement activities related to the decision."

The *General Management Plan Amendment Environmental Assessment / Assessment of Effect* analyzes impacts to the following resources: vegetation, cultural landscape and historic resources, and visitor use and experience. NPS *Guidance for Non-Impairment Determinations and the NPS NEPA Process* states that:

The impairment determination does not include discussion of impacts to visitor experience, socioeconomics, public health and safety, environmental justice, land use, park operations, etc., as those do not constitute impacts to park resources and values subject to the non-impairment standard.

As a result, for purposes of this document, impairment findings are required for the resources of vegetation and cultural landscape and historic resources.

NON-IMPAIRMENT DETERMINATION FOR THE SELECTED ALTERNATIVE

This non-impairment determination has been prepared for the NPS selected alternative described on pages 14-24 of the EA.¹⁰ A non-impairment determination is made for all relevant resource impact topics analyzed for the selected alternative.

Vegetation

There will be no impairment to the park's vegetation under the selected alternative. Although some vegetation clearing will occur due to construction of the interpretive/educational facility, for the new RV

¹⁰ National Park Service. 2020. *Wright Brothers National Memorial General Management Plan Amendment Environmental Assessment / Assessment of Effect*, 14–24.

sites, and for selective vegetation thinning along the airstrip and Highway 158, the relatively small amount of vegetation loss will not substantially affect the characteristics of the overall vegetation communities within the park. Additionally, special status species surveys will be conducted prior to final site selection for all proposed features to avoid adverse impacts on the maritime pinweed and the beach heather. According to the park's 2017 Foundation Document, the park's purpose is to commemorate the first successful power-driven airplane flight, made by the Wrights on December 17, 1903, and vegetation in the park was intentionally planted to create or screen views and vistas to help tell the Wrights' story. Changes to vegetation that will occur under the selected action will assist in maintaining those important views and vistas. New vegetation screening will improve the memorial landscape, which is considered a fundamental resource and value in the Foundation Document, by visually screening the parking lot and guiding the visitor's view between the commemorative mall and the Monument. The airstrip is considered an "other important resource and value" in the Foundation Document and helps tell the story of the Wright brothers' legacy. Selective thinning of vegetation along the First Flight Airstrip will allow visitors to view planes take off and land, making the connection between the Wrights and modern flight. Under the selected action, the park will continue to maintain the natural character and integrity of the significant vegetative communities and the species they support in the park, as agreed upon under the SNHA designation agreement with the North Carolina Natural Heritage Program. Additionally, vegetation changes that will occur under the selected action will support the park's purpose to commemorate the Wright brothers' achievements and connect their legacy to modern flight. Because impacts to vegetation will be less than 10 acres within the 193 acres of the SHNA, the NPS has determined that the selected action will not result in an impairment of vegetation resources.

Cultural Landscape and Historic Resources

The following discusses impairment of the cultural landscape and historic resources under NEPA. An assessment of effect under NHPA Section 106 is included on pages 49–54 of the EA.¹¹

There will be no impairment to the park's cultural landscape or historic resources under the selected action. Historic resources within the area of potential effect include the Wright Brothers National Memorial Historic District, the Wright Brothers National Memorial Cultural Landscape, and the Wright Brothers National Memorial Visitor Center. The commemorative landscape is an important part of the park's significance and history. The park's Foundation Document identifies the Wright Brothers National Memorial Landscape as a fundamental resource and value of the park; the Wright Brothers National Memorial Visitor Center is considered one of the other important resources and values for the park, as well as being a National Historic Landmark.

Some aspects of the selected action will improve the appearance of the cultural landscape and historic resources, including removal of the remaining Centennial Pavilion structures and the reintroduction of Mission 66-era vegetation screening and fencing along the parking lot. These actions will allow the park to better convey its commemoration of the Wright brothers' achievements. The vegetation screening and fencing will restore some of the previously diminished Mission 66-era design of the visitor center and parking lot. These improvements will allow the NPS to continue to the park's purpose of commemorating the Wright brothers' story and protect the historic resources within the park.

Although some aspects of the landscape and historic district will be improved, other actions will result in adverse impacts on the cultural landscape and historic resources. These actions will introduce non-historic features into (or within view of) the cultural landscape and historic district (e.g. the new interpretive/educational facility, new paved pathway, benches, shade structures, and interpretive media), which could detract from the historic character, alter views, and change circulation patterns. However, impacts on the cultural landscape and historic resources will be mitigated through the design process to

¹¹ Ibid., 49–54.

the extent practicable. The sensitive nature of the landscape will be considered during future design of the features, including the specific location, orientation, size, materials, and color. The design and siting of these non-historic features will ensure that intrusions on the landscape are minimized and that the park's historic resources retain their historic integrity.

The overall historic character and commemorative feeling of the cultural landscape and historic district will remain intact under the selected action. No changes will be made to the character-defining features of the cultural landscape or historic resources in a manner that will diminish their overall integrity in terms of location, design, setting, materials, workmanship, feeling, or association. The park will apply the *Secretary of the Interior's Standards for the Treatment of Cultural Landscapes* to the extent practicable for all new elements on the landscape. The commemorative landscape will continue to represent its association with the Wright brothers, early flight, and the commemorative period in which the park was established. The visitor center will remain a National Historic Landmark with no alterations to its historic fabric. There will be no direct impacts on the Monument, the First Flight Marker, the Flight Line, the Boulder Road Trace, or the December 17, 1903 Sculpture. Therefore, the NPS has determined that the selected action will not result in impairment to the cultural landscape or historic resources at the park.

ATTACHMENT B: PUBLIC COMMENT RESPONSE

The *General Management Plan Amendment Environmental Assessment/Assessment of Effect* (the EA) was released for public review on August 25, 2020, and was available via the park's Planning, Environment, and Public Comment (PEPC) website (<https://parkplanning.nps.gov/wrbr>) and hard copies were available upon request. An open public comment period was held from August 25 through September 24, 2020.

According to NPS policy, substantive comments are those that 1) question the accuracy of the information in the EA, 2) question the adequacy of the environmental analysis, 3) present reasonable alternatives that were not presented in the EA, or 4) cause changes or revisions in the proposal. During the comment period, 15 pieces of correspondence were received. The majority of comments were in favor of the project, and no comments were substantive to warrant changes to the environmental assessment. However, a few comments that reasonably questioned the project or were a frequent comment are addressed below.

ACTION: NEW FACILITIES

Concern Statement: The use of environmentally friendly materials and practices should be considered when constructing the new facilities and parking areas.

Response: The National Park Service is required by Executive Order (EO) 13834, Regarding Efficient Federal Operations, to meet a wide range of statutory requirements related to energy and environmental performance with respect to facilities, vehicles, and overall operations. One of the many goals of this EO is to ensure new construction and major renovations conform to applicable energy efficiency requirements and sustainable design principles. In addition, in the EA on page 14, the NPS states the parking surface of the new parking area would be a mixture of pervious sand, clay and sand.

Concern Statement: There is not a program building in the plan which would have included comfort facilities. The restroom facility that is part of the bicentennial Complex should be considered for retention.

Response: During the planning of this project, the NPS had considered whether the temporary restroom facility, which was constructed in 2002 specifically for the 2003 Centennial of Flight celebration events, should continue to remain or if the same number of restrooms should be maintained in the park, but placed out of the cultural landscape. In determining appropriate number of restrooms for public areas, the park looked to its peak daily visitation numbers and National Standard Plumbing Code Guidelines. From 2017-2018, during peak times, the park welcomed between 600 to 1150 visitors a day¹². The park also noted that in the decade prior to the Centennial event, Wright Brother's welcomed a yearly average of 435,267 visitors from 1992-2002¹³. In the last decade, 2009-2019, the park welcomed 437,644 visitors annually. This visitation data shows only a 1% increase in annual visitation from the time period before the temporary Centennial restrooms were built and the last couple of years. This 1% increase in annual visitation does not warrant the continued use of the existing temporary restrooms nor the construction of the same number of restrooms in a new location. In the EA, on

¹² NPS 2019. Wright Brothers Daily Visitor Counts. Calendar year 2017-2018.

¹³ NPS 2020. Annual Park Recreation Visitation, Wright Brothers NME. Accessed October 2, 2020. <https://irma.nps.gov/STATS/Reports/Park/WRBR>.

page 17, the park states in the selected action the new pavilion will have an enclosed climate-controlled space, which will include restroom facilities.

ACTION: DEVELOPING THE 15-ACRE PARCEL

Concern Statement: The development of the 15-acre parcel for parking is concerning as it will increase traffic on the roads and be a safety issue to crossing Highway 158. It is also important to identify the management responsibility and monitoring of the site.

Response: Although the park did not conduct a traffic analysis as part of this proposal, as stated in the EA on page 17, the park will work in conjunction with the town of Kill Devil Hills to evaluate developing the site for public use. The specific layout and design of these improvements will be determined during a future design phase of the project in coordination with the town of Kill Devil Hills and may be subject to an agreement between the park and the town. The development of this parcel in collaboration with Kill Devil Hills was first introduced in the 1997 General Management Plan for Wright Brothers which was publicly reviewed and approved. Since this site still had not been developed, the town of Kill Devil Hills reaffirmed their interest and engagement in discussions to “designing and permitting a beach parking on the east side of the National Park Service property located on Prospect Avenue” by submitting a resolution to continue the partnership with the park and its general management planning on August 12, 2019.

IMPACT TOPIC: CULTURAL LANDSCAPE

Concern Statement: The removal of vegetation will allow the views of outside development to diminish the memorial character.

Response: Currently, when one stands at the monument or even within the park’s landscape, the vegetation does not obscure one’s view of the development around the park unit. As stated in the EA on page 28, although many areas of the park are now vegetated, historically, the land that is now the park was open sand dunes with limited vegetation. The vegetation on the commemorative landscape was designed and planted beginning in the 1920s in order to stabilize the naturally shifting sand dunes and create the monument. These plantings were not to obscure development. This landscape is considered a cultural landscape as described in the EA on page 33. The cultural landscape generally encompasses Kill Devil Hill, the Mall, the air strip, and the visitor center. The park’s cultural landscape is designed as a commemorative landscape, rather than one preserving its original appearance. Character-defining features of the cultural landscape include spatial organization, circulation patterns, vegetation, views, structures, and small-scale features.

Concern Statement: Unsure of the impacts of the proposed view of the Mall with multiuse path and the new structures and installation of appropriate fencing and vegetation.

Response: The EA describes the impacts of these features with the context of the cultural landscape on pages 39-41 and pages 49-54. Beneficial impacts under the selected action would result from the removal of the remaining Centennial Pavilion area structures from the mall, which would improve the appearance of the cultural landscape and historic setting. Additionally, vegetation screening and fencing would visually screen the development from view from the mall. The addition of a new interpretive/educational facility will introduce a new structure into the landscape; however, it will be located outside of the mall/commemorative landscape and would be mostly screened from view by existing vegetation. The multiuse paved pathway will introduce a new circulation pattern within the cultural landscape and historic

district. The installation of new benches, shade structures, and interpretive media along the pedestrian sidewalks and multiuse pathway will result in the introduction of non-historic small-scale features onto the cultural landscape and within the historic district. However, these will be designed to be compatible with the historic setting in terms of color, scale, and materials. Additionally, the specific location for each feature will be carefully considered to minimize intrusion on the landscape to the extent practicable. Therefore, the park has determined that there would be no adverse effect on historic properties, which includes the cultural landscape.

IMPACT TOPIC: VISITOR USE AND EXPERIENCE

Concern Statement: Concern regarding bicycle use and visitor use conflicts, including issues related to the adjacent future high-speed bike lane on Colington Road.

Response: Bicycle use currently takes place at the park, while mostly on roads. However, many pedestrians also walk on the roadways, increasing the amount of conflict with bicycles and other moving vehicles. The newly designed paths will aim to provide a wider and more convenient walking route that will encourage pedestrians away from roadways and separate them from higher speed moving vehicles. The multi-use pathway will be 10-12 feet wide and will easily accommodate both pedestrian and bicycle traffic. The park will strive to limit user conflicts through educational materials such as bicycle and pedestrian etiquette posted in some areas. The high-speed bike lane proposed along Colington Road by the North Carolina Department of Transportation will only be constructed on the east bound side of the road and will not enter the park where visitors are walking.

ATTACHMENT C ERRATA

These errata document changes to the text of the environmental assessment (EA). Changes to the EA text below are noted by page number; additions to the text are denoted by bold text and deletions are denoted by strikeouts.

CHAPTER 1, PROPOSED ACTION, PAGE 6

... Parking and vehicular circulation would be improved through reconfiguration of the visitor center parking lot ~~and overflow parking area~~, as well as through the removal of fee booths and installation of automated fee kiosks.

CHAPTER 2, ALTERNATIVE 1: NO ACTION, PARKING AND VEHICULAR CIRCULATION, PAGE 14

... Additionally, the grassy area southeast of the parking lot would continue to be used for overflow parking without a formal entry/exit area or parking spaces (identified as “C” in Figure 3).

CHAPTER 2, ALTERNATIVE 2: PROPOSED ACTION, FIGURE 4, PAGE 15

Delete from figure and legend item “I: Create Formal Entrance to Overflow Parking Area”

CHAPTER 2, ALTERNATIVE 2: PROPOSED ACTION, FACILITIES, PAGE 17

The overall site would be designed to accommodate associated administrative facilities including the possibility of a laundry facility, ~~outside~~ shower, **and** ~~or small~~ restroom.

CHAPTER 2, ALTERNATIVE 2: PROPOSED ACTION, VEGETATION, PAGE 18

Under the proposed action, the park would visually screen the parking lot from the memorial landscape and monument through the addition of new vegetation and a wood **fence along the western and southern boundary of the visitor center parking lot, which would be** designed in a similar appearance as the original Mission 66-~~era~~ fence (see photo below) ~~along the southwestern boundary of the visitor center parking lot previously in place in this location.~~

CHAPTER 2, ALTERNATIVE 2: PROPOSED ACTION, PARKING AND VEHICULAR CIRCULATION, PAGE 21

In addition to the modifications to the main parking lot, the park would also create a formal entrance/exit to the existing grassy overflow parking area (identified as “I” on Figure 4). This would include a paved apron where cars enter/exit, and the park may utilize removable bollards or other methods to define the parking area as needed.

CHAPTER 2, MITIGATION MEASURES OF THE ACTION ALTERNATIVES, PAGE 24

... Exact mitigation measures to be implemented would depend upon the final design and approval of plans ~~by relevant agencies~~ and would be determined during future design and construction phases. The following is a list of actions that the park may implement ~~directly or may require of contractors~~:

CHAPTER 3, VISITOR USE AND EXPERIENCE, ALTERNATIVE 2: PROPOSED ACTION, IMPACTS, PAGE 45

... ~~At the overflow parking area, a formalized entrance/exit would reduce visitor confusion and improve wayfinding into the lot.~~