FINDING OF NO SIGNIFICANT IMPACT

Restore Visitor Access to Fort Pickens Area, Santa Rosa Island

GULF ISLANDS NATIONAL SEASHORE

1.0 Background and Need for the Project

The National Park Service (NPS) prepared an Environmental Assessment (EA) to assess impacts that could occur as a result of the reconstruction and repair of Fort Pickens Road at Gulf Islands National Seashore (GUIS). The Fort Pickens Road is a segment of NPS-owned and maintained road on Santa Rosa Island, Escambia County, Florida. The road extends approximately 7 miles between the town of Pensacola Beach and Fort Pickens. This road has been in place for over 50 years under State, and then Federal, ownership.

Access to the Fort Pickens Area of the park has been severely curtailed for 3 years due to the destruction of large portions of Fort Pickens Road by Hurricane Ivan in September 2004. The road was nearly completed in July 2005, but was damaged from subsequent wind storms (specifically, Tropical Storm Arlene, and Hurricanes Cindy and Dennis)prior to being reopened to the public. Thus, except for a brief period in 2005, the roadway has been closed to vehicular traffic since September 2004.

The purpose of this action is to restore public access to the Fort Pickens Area to pre-Hurricane Ivan levels. The need exists to restore full access to this area in order to provide access for the visiting public to enjoy, better understand, and appreciate barrier island ecology and vistas, as well as the rich history of Fort Pickens and the surrounding areas. The GUIS is the most visited of all the national seashores and among the top ten most visited units in the National Park System.

The NPS, in cooperation with the Federal Highway Administration, has decided to reconstruct and repair Fort Pickens Road generally within the road footprint and alignment that existed prior to the most recent storm damage in July 2005. No hardened structures or armoring will be used to reinforce the road. However, damaged and missing portions of the road will be designed and rebuilt in such a way as to permit full vehicular access. The rebuilt road sections may be more vulnerable to future damage, since low-cost construction designs (described below) will be implemented in these areas to achieve a sustainable road surface.

The purpose of this document is to record the decision of the NPS and Federal Highway Administration (FHWA) and to declare a Finding of No Significant Impact (FONSI) pursuant to the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act Of 1969 (NEPA).

2.0 Alternatives Considered

The NPS considered five alternatives in the Environmental Assessment process: a "no action" alternative and four action alternatives. Brief descriptions of these alternatives are provided below. The alternatives are described in more detail in the EA.

2.1 Alternative A (No Action)

Regulations promulgated by the President's Council on Environmental Quality (CEQ) require NPS to consider a "no action" alternative. The no action alternative serves as a baseline against which to compare the impacts of the other alternatives under consideration.

In the present instance, the no action alternative would entail leaving the roadway to Fort Pickens largely in its present, damaged condition. Some limited repairs would take place to surviving portions of the roadway serving unaffected visitor use areas. In addition, efforts would be made to remove asphalt debris. Under this alternative the public access to Fort Pickens and the unaffected visitor use areas on the west end of Santa Rosa Island would be by foot, bicycle, or private watercraft.

2.2 Alternative B – Provide Ferry Access to Fort Pickens

Under this alternative, a concessionaire would operate a ferry service between the mainland and Fort Pickens, similar to the ferry service which has shuttled passengers to Ship Island, Mississippi, since 1926. On the island itself, a shuttle service would transport visitors to recreational and cultural sites reachable on surviving or lightly damaged roadways.

2.3 Alternative C – Reconstruct Fort Pickens Road with Protective Sand Berms

Under Alternative C, the eastern four miles of Fort Pickens Road (from the Ranger Station at Langdon to the Fort Pickens entrance gate) would be reconstructed and/or repaired in a widened corridor that generally follows the northerly alignment approved in January 2005. At the western end of this project area, approximately 4,000 feet of the road would be realigned to the north. The roadway would be 4 feet above sea level and consist of two 11 foot lanes and 6 feet of stabilized shoulders (4 feet of which would be paved bike lanes). The roadbed along almost the entire 4-mile reach would have to be built up with sand in order to achieve the desired 4–foot elevation. On the south side of the road, a sand berm 4 feet high, about 8 feet above sea level, and 3 miles long would be placed seaward of the road as a protective measure. The berm would be about 5 to 6 feet above ground level in the area just west of the entrance station due to the extremely low elevations of the island in this area. The berm would be approximately 142 feet wide at the base, and located about 18 feet from and parallel to the road. In cross section this would be a low triangular shaped mound with acute angles of about 3° and an apex angle of around 174°.

On the north (sound) side the berm would be higher and shorter in length with approximately 2.2 miles of berm being constructed. These northern berm segments would be 4 to 5 feet high and about 10 feet above sea level. The north berm would be approximately 40 feet wide at the base, and would be placed within 10 feet and parallel to the road. The total width of the road corridor, including protective sand berms, would be approximately 250 feet. A sewer line to Fort Pickens would be installed, and phone and electric lines would be re-installed beneath or adjacent to the road.

Sand for the north and south berms would come from a spoil pile of existing sand near Fort Pickens and possibly other sources from off the island. The Seashore would not use local island borrow because this locks sand out of the dynamic sand budget of the island, an interference with natural processes that is contrary to NPS Management Policy Section 4.8.1.1 (2006). However, any sand within the 250 foot project corridor or road prism that must be removed as a result of construction activity could be repositioned as may be determined appropriate during reconstruction of the roadway. If the Army Corps of Engineers were to supply sand for the berms, any such activity would be carried out under an NPS-approved sand placement plan as required by the GUIS enabling statute, 16 U.S.C. § 459h-5. The sand from the Fort Pickens spoil site would also be further analyzed to assure compatibility of grain size and color to sand in the project corridor.

The berm system would not be a dune replacement or a beach restoration installation. This berm would be a roadway protective device composed of sand. Its function would be to provide material to cover the road when overwash events occur. During an overwash event, sand would be deposited over the roadway, thereby serving as a protective layer preventing the turbulent erosive action of flowing water that could damage the roadway. The berm would be a temporary source of sand placed as a sacrificial layer to be available until natural dune fields develop.

2.4 Alternative D – Reconstruct Fort Pickens Road with a Mix of Protective Elements

Alternative D follows the same alignment and adopts the same road/utility design as Alternative C, but uses a wider range of protective elements to protect the roadway against future storm damage. Alternative D calls for the use of a combination of protective berm, sheet pile, geoweb, articulated concrete block, and widening of the outside shoulders (asphalt aprons). Hardened protection measures would be installed at strategic locations only. The sand berms are described in detail in Alternative C. All told, approximately 2.22 miles of protective armoring (or 56% of the damaged 4 mile roadway) are contemplated under this alternative. The purpose of these hardened protection measures is to provide erosion control by reducing scour on the roadway slopes during storm events, thereby reducing the possibility of roadway damage. The total width of the road corridor, including protective sand berms and armoring, would be approximately 250 feet. Except for the buried armoring (i.e., sheet pile, geoweb mattresses, articulated concrete block, and asphalt aprons), this alternative is a replication of Alternative C.

The locations selected for armoring would be those areas that have failed repeatedly in the past and are most likely to fail in future storms. In general, these are areas where geologic conditions such as the absence of foredunes or the presence of offshore reflective (steep) zones render the island subject to major overwash or breaching. On the whole, half or more of the existing roadway was damaged in these locations by the storms of 2004 – 2005. However, the use of armoring would not necessarily guarantee that the road would survive future storms. The armoring could fail, or the road could be damaged or destroyed in new locations. Dunes present prior to 2004 are largely gone now, so areas previously less susceptible to damage could experience more intensive wave action in the future until new dunes are formed. Moreover, the geomorphology of barrier islands is dynamic and not entirely understood. It is possible that areas of high susceptibility have shifted as a result of the 2004-2005 storms.

2.5 Alternative E – Reconstruct Fort Pickens Road in Conjunction with Beach Renourishment and Dune Enhancement

This alternative would involve reconstructing and/or repairing Fort Pickens Road along the same alignment called for in alternatives C and D. The road corridor would be approximately 64 feet wide; repairs would involve replacing the road surface and sub-base that existed before the hurricane. However, unlike alternatives C and D, this alternative would protect the roadway primarily via a combination of beach renourishment and enhanced foredunes along the 4-mile reach from the Ranger Station at Langdon to the Fort Pickens entrance gate. Alternative E would take advantage of a planned maintenance dredging project at Pensacola Pass to be undertaken by the U.S. Army Corps of Engineers (the "Corps") on behalf of the Department of the Navy. Working in cooperation with the Corps, the park would accept approximately 1.75 million cubic yards of sand from the Pensacola Pass dredging project to be used for renourishment along the entire 4-mile segment of beach face from the Langdon Ranger Station to the Fort Pickens entrance gate. In addition, sand from an existing sand spoil site located in the Northwest quadrant of the Fort Pickens Area would be used to increase island elevation (approximately 8 feet above sea level) along the same 4-mile reach. The objective would be to regain elevation for purposes of road reconstruction while also providing adequate sand to enhance the natural restoration of the foredune areas lost to the 2004 – 2005 storm events. The replenished sand would be revegetated with native species to promote stability and continued foredune development. The foredune areas would be staggered, or designed in such a way to mirror the near natural landform that otherwise would occur through natural processes.

The road prism, particularly across the overwash areas, would be reconstructed to an elevation of approximately 4 feet above sea level using sand from the spoil site. Sand would be placed at a very shallow grade on the south side, and a slightly elevated protective sand berm (approximately 2 to 3 feet above road surface) would be constructed in appropriate areas on the north side of the roadway. Native vegetation would be transplanted on the berm and along the south side of the road. No hardened structures would be used, thereby allowing for the continuation of barrier island natural geomorphic processes to the greatest extent possible.

Beach renourishment would meet project objectives while facilitating recovery of the unit's flora and fauna in a manner that mirrors natural conditions. Similarly, sand replenishment in the foredune area would promote additional, natural dune building, and in so doing would provide road protection without jeopardizing infauna recruitment. The intent of the restoration approach would be to rebuild the foredunes only in those areas currently devoid of dune formations where natural sand deposition is significantly curtailed due to current conditions.

2.6 Revised Alternative E – Reconstruct Fort Pickens Road in Conjunction with Beach Renourishment Only (Selected Alternative)

After additional review of the alternatives and consideration of comments received from the public, various agencies, and interested stakeholders, the NPS has decided not to implement the preferred alternative (Alternative D) from the EA. Instead, the NPS has chosen a revised version of Alternative E as the selected alternative. This alternative has been selected because it has lower construction costs and fewer adverse environmental impacts than either Alternative D or the original Alternative E.

Under revised Alternative E, the NPS will rebuild the damaged portions of Fort Pickens Road using the design of the existing footprint, i.e., two-lane roadway (11-foot travel lanes), with 4-foot paved shoulders to accommodate bicyclists, and will install utility lines beneath or adjacent to the roadway. (Total width of pavement: 30 feet; total width of road corridor: 64 feet.) The road will not adopt the wider footprint and realigned sections called for in Alternatives C and D. In addition, under revised Alternative E the repaired/ reconstructed Fort Pickens road will take place within the existing alignment, with two exceptions, where the road would be realigned in order to avoid sensitive resources (see Figure A below).

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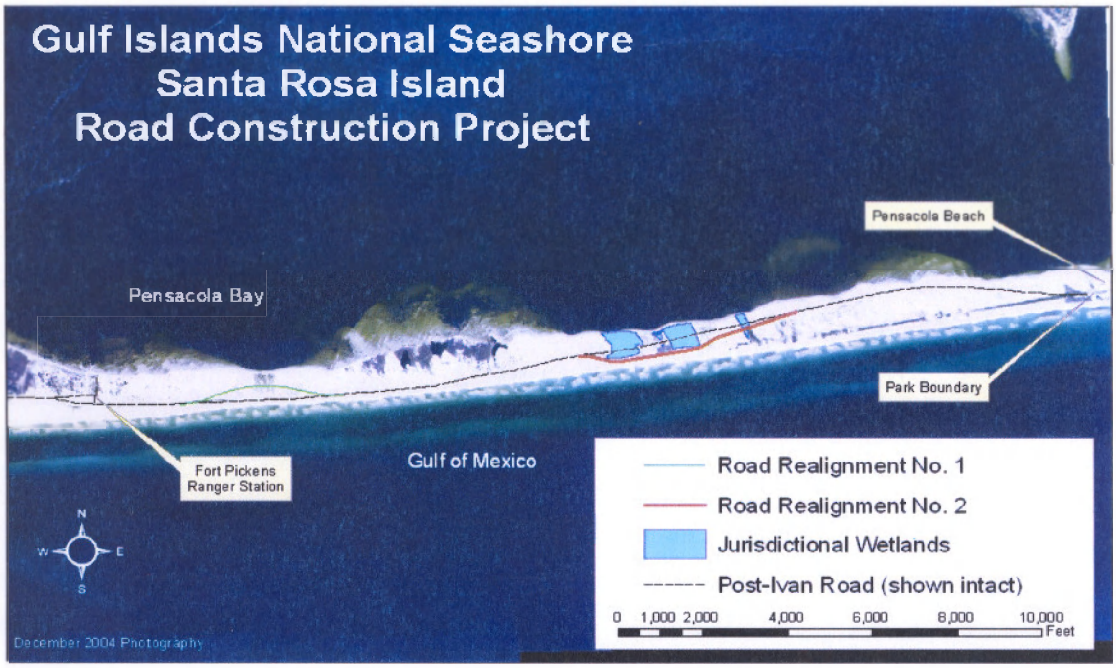
Figure A. (Note: Realignments for revised Alternative E appear in Green and Brown)



The two realignments called for in revised Alternative E would also allow the use of low cost construction designs to achieve a sustainable road surface. Details of the realignments are as follows:

Realignment No. 1: This realignment was proposed as part of the original Alternative E in the EA. It would be located to the west of the Three Ponds area, and would travel between stations 30+00 and 70+00 for a distance of 4,000 feet (Please see Table 2.5 (p. 17) and Figure 4A (p. 25) of the EA.) This realignment is needed because the existing alignment is very close to the active surf zone. In order to allow continued overwash and otherwise minimally interfere with natural processes, the road would be constructed at grade using a Sand Filled Cellular Confinement System (CCS). This CCS is commonly referred to as "EnviroGrid" or "GeoWeb" by manufacturers and is made of a polyethylene mat with 10- to 20-inch wide cells that range from 3 to 8 inches deep. Road construction for this realigned segment would involve (a) constructing a layer of 4-inch thick CCS filled with sand, (b) covering the filled CCS with a 2-inch layer of sand, and (c) covering the sand layer with 1 to 2 inches of asphalt concrete. The asphalt cap will

better accommodate the traffic volumes experienced at Fort Pickens and improve safety for motorists by preventing sand from washing or blowing out of the cells.

The NPS is also contemplating a demonstration project involving the installation, of no more than 100 feet, of articulated concrete block (ACB) as a horizontal road surface (no vertical armoring would be installed). Installation would occur along a short, washed-out segment of roadway to see how this road surface performs and responds to future storm events. While the specific location for the ACB demonstration project has yet to be confirmed and approved, it is probable the ACB would be installed contiguous to a salvageable portion of the roadway near the east or west end of the breach area.

The total distance/length of this realignment for floodplain impact is 4,100 feet, assuming the demonstration project is implemented. If the demonstration project is not built, the total distance/length of this realignment for floodplain impact is 4,000 feet.

Realignment No. 2: This realignment, which was not a part of the original Alternative E, is located to the east of three Ponds (see Figure B below). This realignment would involve shifting southward a 4,492-foot section of roadway that was completely washed out by the storms of 2004-2005 and now contains a large wetland where the road used to be. The purpose of the proposed realignment is to avoid this wetland as much as possible and allow the road surface to be constructed on higher natural ground. The route of the proposed realignment follows a temporary travel corridor that is currently being used by park staff and contractors for administrative purposes. The realignment would begin 2,874 feet west of the entrance station to Fort Pickens (at or near station number 178+00) and traverse the breach area in a westerly direction for approximately 5,201 feet, where it would connect with the existing road alignment (at or near station number 126+00). This recommended realignment is approximately 140 feet on average (maximum of 310 feet) to the south of the existing road alignment and, at its closest point, approximately 170 feet from the shoreline. Following this recommended alignment would avoid adverse impacts to wetland functions and values and piping plover habitat. Realignment No. 2 is still subject to occasional inundation by unusually high tides or moderate storm events but would eliminate the perennial flooding associated with the current alignment. Accordingly, it is believed that the use of the CCS (see description above) would be the best, low cost option for rebuilding this realigned section of roadway. The total distance/length of this realignment for floodplain impact is 5,201 feet.

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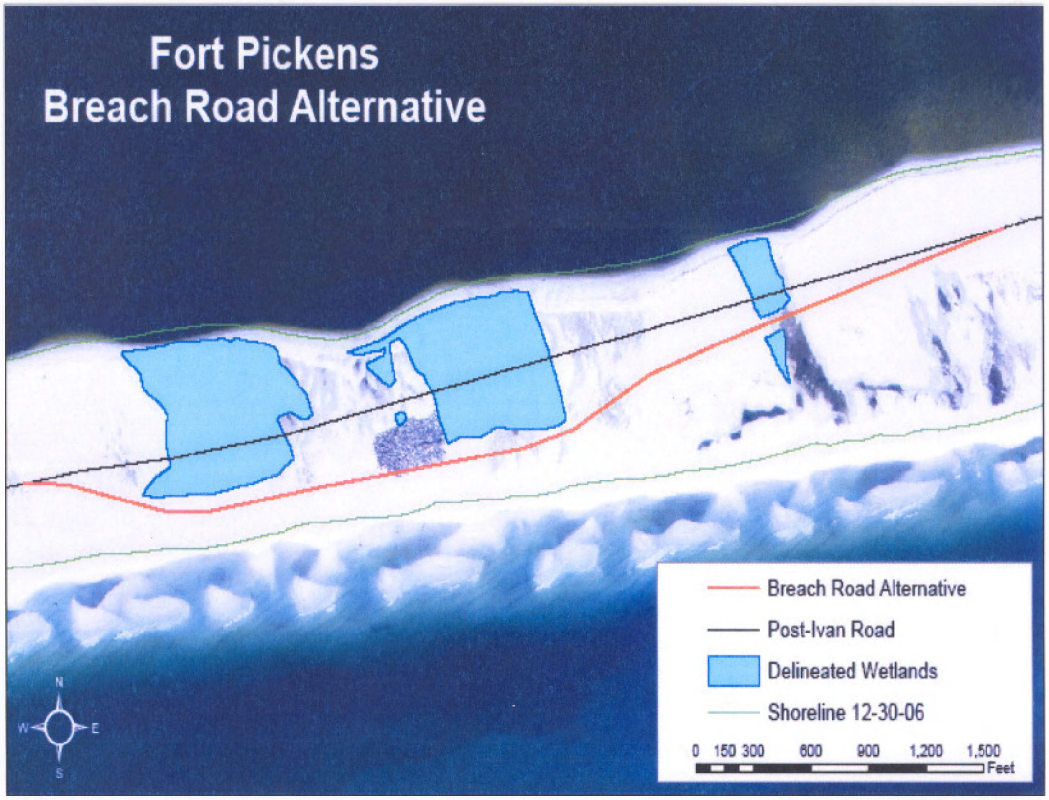
Figure B. (Note: Revised Alternative E appears in red)



Remainder of Fort Pickens Road: Those portions of the existing roadway that are high enough to escape inundation in all but major storms will be repaired by first saw-cutting and removing damaged pavement. Actual repair of damaged sections will be accomplished using a 6-inch cement-stabilized-sand subbase, with a 1- to 2-inch asphaltic concrete surface. The cement stabilized sand will consist of semi-hardened mixture of sand and cement. Compacted sand-cement, often referred to as simply sand-cement, is a mixture of sand and calculated amounts of portland cement and water that are compacted to a high density. The result is a rigid slab having moderate compressive strength and resistance to the disintegrating effects of wetting and drying and freezing and thawing.

As the road is repaired, utilities will be re-installed adjacent to the road surface, including sewer, water, phone, and electric lines. Most of the reconstruction activities will take place from October 2008 to April 2009. Finishing work such as road striping and signage may extend into July 2009.

Revised Alternative E would restore two-way public access along the entire 7-mile travel corridor in a manner compatible with the natural processes of a barrier island, such as overwash, while also minimizing impacts to wetlands created in the aftermath of the 2004-2005 storm events.

Unlike Alternatives C, D, and E, revised Alternative E would protect the roadway solely via beach renourishment along the 4-mile reach from the Ranger Station at Langdon to the Fort Pickens entrance gate. Revised Alternative E would take advantage of a planned maintenance dredging project at Pensacola Pass to be undertaken by the U.S. Army Corps of Engineers (the "Corps") on behalf of the Department of the Navy. Working in cooperation with the Corps, the park would accept approximately 1.75 million cubic yards of sand from the Pensacola Pass dredging project to be used for renourishment along the entire 4-mile segment of beach face from the Langdon Ranger Station to the Fort Pickens entrance gate. Elevations resulting from the beach renourishment project would be approximately 5+ feet in the breach areas, and approximately 8+ feet in the remaining areas. The intent of the renourishment design is to tie into the existing beach profile as much as possible; there will be no artificially-created foredunes. Specific prescription parameters for sand covering grain size, color, and absence of contamination would have to be adhered to before NPS would accept sand from the Corps.

It is understood that the Environmental Assessment for the Pensacola Pass maintenance dredging project will address a recommendation that the U.S. Navy convert to a biennial (or similar) maintenance dredging operation once the initial dredging operation is completed. Doing so would avoid the large pulses of sand that otherwise must be deposited when this activity is conducted once per decade. Under this revised dredging operation, the Seashore would be the recipient of beach quality sand in more manageable volumes. The result would be that the Seashore would have a reliable source of sand to renourish beach areas lost to past storm events. The park could continue renourishment until further island recovery/stabilization from the 2004-2005 hurricane events is reached. The achievement of full recovery and restoration would be determined through monitoring protocols to be established in cooperation with subject matter experts, government agencies, and cooperating universities enlisted to study project results.

Revised Alternative E will allow Fort Pickens Road to be repaired between Pensacola Beach and Fort Pickens at relatively low cost, while interfering as little as possible with natural processes. No hardened road armoring will be constructed under this alternative. In some places sand may have to be imported in order to create new roadbed. Any imported sand would be subjected to strict quality assurance and quality control measures to assure compatible grain size and color as the naturally occurring substrate. On the

whole, however, natural processes such as overwash will be minimally impeded, short of what would occur were there no road at all.

2.9 Mitigation and Minimization Measures of the Selected Alternative

The route of the reconstructed Fort Pickens Road was selected to avoid critical sea turtle and shore bird nesting habitat, archaeological sites, remnant dunes, wetlands, and dune and swale structures. By reconstructing the road on this alignment, two major mitigations occur: (a) the road is taken out of the primary dunes and sea turtle nesting habitat; and (b) the route of the preferred alternative is configured to avoid any new dunes and potential vegetation areas. Its vertical alignment would place it at a lower elevation, 4 feet above sea level, which is more protective from the erosive effects of overwash. Best management practices for road construction would be used. All travel areas would be delineated to avoid construction traffic paths through potentially sensitive areas.

Care has been taken to assure as little damage occurs to the natural setting as possible; for example, any needed fill will *not* be taken from sands adjacent to the road prism, the island's sand budget will be maintained, and fill will be from compatible sources. Only enough natural material (sand) necessary to accommodate the needed roadway elevation and fill will be introduced. The remainder of the overwash areas will be allowed to accrete and fill in by natural means. No permanent structural devices will be utilized or installed, such as head walls, culverts, bridges, or other devices common to road construction. To mitigate the effects of this alternative on threatened and endangered species, speed limits will be controlled and adjusted as necessary, particularly during the nesting season.

To deal with the problem of "lag" (i.e., foreign material on the beach that impedes the free movement of sand), the road contractor will be required to remove all asphalt (brick-size and above) in non-vegetated areas along the road corridor, as well as those former road sections now located in the surf. The NPS will subsequently filter non-vegetated sand to remove smaller (brick size and below) pieces of asphalt.

In order to mitigate and minimize potential impacts to natural and cultural resources during construction, contractor employees will be instructed on the sensitivity of the general environment and their activities will be monitored by NPS staff. Corridors for construction vehicle movement will be established and defined on the ground. No work will be done during night time hours. Work outside the road prism will be completed before or after shore bird nesting season in early April.

Additional "Conservation Measures" for protected species affected by this project are listed in a letter dated June 26, 2007, from Janet Mizzi, Deputy Field Supervisor, United States Fish and Wildlife Service (USFWS), to Jerry Eubanks, Superintendent, GUIS (copy attached). All of the Conservation Measures identified by USFWS are hereby incorporated by reference in this FONSI.

2.10 Alternatives Considered but Dismissed

The following alternatives were considered by the project team but were dismissed from further analysis as being unfeasible:

- *Land bridge, with some realignment and protection measures.* This alternative would involve reconstructing the Fort Pickens Road on pilings for the length of the island. It was dismissed due to being cost prohibitive, as well as physical dynamics and the impacts that individual pilings would have on natural erosive processes.
- *Reconstruct the Fort Pickens Road using a combination of alternative materials.* Such an approach has been pursued in places at Assateague Island National Seashore. Alternative materials could include coral (no clay base), geoweb with no surface, and articulated concrete block with no surface. A possible configuration would involve approximately 2 miles of coral road (no clay base), 1 mile of geoweb with no surface, and 1 mile of articulated concrete block. This alternative was dismissed because it would not allow the traffic speeds and traffic volumes of alternatives C, D, or E. In addition, this alternative would have high life cycle costs and high maintenance costs.

2.11 Environmentally Preferred Alternative

Of the alternatives described above, Alternative A (no action) was identified as environmentally preferred in the draft EA. The environmentally preferred alternative is determined by applying the criteria stated in NEPA, which is guided by Council on Environmental Quality (CEQ) regulations. CEQ regulations provide direction that "[t]he environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101(b). Generally this means the alternative which causes the least damage to the biological and physical environment. It also means the alternative that best protects, preserves, and enhances historic, cultural, and natural resources." This includes alternatives that:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- Assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;

- Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;

- Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and

- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Alternative A is the environmentally preferred alternative because it would cause the least damage to critical nesting habitat for sea turtles and shorebirds. It also would avoid damage to nascent dune and swale structures. However, Alternative A does not meet the objective of providing public access to GUIS. The selection of revised Alternative E is based on the need to provide public access while interfering as little as possible with natural shoreline processes. Revised Alternative E would have fewer adverse environmental impacts than the original Alternative E because it does not call for the construction of foredunes for road protection or otherwise entail artificially raising island elevations. Revised Alternative E would also have fewer adverse environmental impacts than Alternative D because it would forego the use of hardened structures or berms to protect the roadway. Building the road without these structures would allow shoreline processes to proceed relatively unimpeded. The selected alternative would thus achieve a balance between resource protection and public access.

3.0 Why the Selected Alternative will not have a Significant Effect on the Human Environment

Consideration of the effects described in the draft EA, and a finding that they are not significant, is a necessary and critical part of this FONSI, as required by 40 CFR §1508.13. Significance criteria are defined in 40 CFR § 1508.27. These criteria direct NPS to consider direct, indirect, and cumulative impacts of the proposed action, as well as the context and intensity of impacts.

Context. This measure of significance considers the setting within which an impact was analyzed in the draft EA, such as the affected region, society as a whole, affected interest, and/or a locality. The selected alternative affects only the immediate local area, in terms of resources, employees, and/or visitors. Therefore, any possible impact is limited to this level of least significance.

Intensity. This measure of significance refers to the severity of impacts, which may be both beneficial and adverse, and considers measures that will be applied to minimize or avoid impacts. As directed by 40 CFR § 1508.27, intensity is evaluated by considering the following factors:

1. Impacts that may be both beneficial and adverse. The selected alternative will have no or negligible impacts on air quality, water resources, archeological resources, cultural landscapes, ethnographic resources, lightscape management, or environmental justice. No wetlands will be affected by the proposed repair of Fort Pickens Road, but minor impacts to floodplains could occur. A Statement of Findings for Floodplains has been prepared; NPS has determined that there are no practicable alternatives for locating the road outside of the floodplain. The selected alternative is not likely to adversely affect any special status species, including federally-listed threatened or endangered species. Impacts to geology and topography, soils, vegetation, and wildlife will be minor, long-term, and adverse. Moreover, these impacts will be less than those that would occur under either original Alternative E or Alternative D (see discussion of the Environmentally Preferred Alternative above). Impacts to the socioeconomic environment are likely to be moderate, long-term, and beneficial. Impacts to park operations and visitor use and experience will be major, long term, and beneficial.

2. Degree of Effect on Public Health and Safety. Restoration of the roadway will allow visitors to once more obtain safe access to GUIS. It will also allow rapid evacuation of park visitors during storm events. The selected alternative will thus have important long-term benefits for public health and safety.

3. Unique Characteristics of the Geographic Area Such as Proximity to Historic or Cultural Resources, Park Lands, Prime Farmland, Wetlands, Wild and Scenic Rivers, or Ecologically Critical Areas. Lands at GUIS contain ecologically critical wildlife habitat, wetlands, and archaeological sites. Through careful location and alignment of the existing roadway, these unique characteristics have been avoided. The selected alternative will follow the existing alignment and stay within the existing footprint, except in two locations where the road has been re-aligned to avoid wetlands. Moreover, measures will be implemented to mitigate and avoid impacts to transient or variable values that may exist or could occur, such as birds, emergent vegetation, wetlands, and inadvertent contact with previously unknown archaeological resources (see discussion of mitigation measures above).

4. Degree to Which Effects on the Quality of the Human Environment Are Likely to be Highly Controversial. GUIS received 54 comments objecting to Alternative D, including 26 comments suggesting another approach to restoring access to Santa Rosa Island. Many of those objecting to Alternative D were experts in the field of coastal geomorphology. Of those objecting to the former preferred alternative, a number suggested that Alternative E or something like it would have much less impact on coastal geomorphic processes and would be less costly. Having considered these comments, the NPS has selected a revised version of Alternative E. The selected alternative is not likely to be highly controversial.

5. Degree to Which the Possible Effects on the Human Environment are Highly Uncertain or Involve Unique or Unknown Risks. The proposed action restores the status quo by repairing and reconstructing Fort Pickens Road within its existing footprint and along the existing alignment, except in two areas where the road has been re-aligned to

avoid wetlands. The risks from this action are well known based on prior efforts to rebuild the road in an inherently shifting and unstable environment. The selected alternative attempts to compensate for these risks by using a method of repair that is low-cost and protects as much as possible the natural processes of Santa Rosa Island.

6. Degree to Which the Action Establishes a Precedent for Future Actions with Significant Effects or Represents a Decision in Principal about a Future Consideration. Nothing in the proposed action establishes a precedent that would result in significant effects in the management of GUIS or any other areas in the National Park System. The selected alternative merely allows for the in-kind repair (with minor deviations) of a pre-existing road on Santa Rosa Island. Fort Pickens Road has been restored after previous storms, e.g., Hurricane Opal in 1995.

7. Whether the Action is Related to Other Actions with Individually Insignificant but Cumulative Significant Impacts. There are no significant cumulative impacts associated with the selected alternative.

8. The Degree to Which the Action May Adversely Affect Districts, Sites, Highways, Structures, or Objects Listed on National Register of Historic Places or May Cause Loss or Destruction of Significant Scientific, Cultural, or Historic Resources. The NPS, as a Federal land-holding agency, is required to locate, inventory, and nominate properties to the National Register, and to exercise caution to protect such properties under Section 106 of the ***National Historic Preservation Act*** (16 U.S.C. § 470). The site of the proposed action has been surveyed and examined and found to be devoid of resources eligible for listing on the National Register, or of other significant cultural or historic resources.

9. Degree to Which the Action May Adversely Affect an Endangered or Threatened Species or Critical Habitat. In accordance with Section 7 of the ***Endangered Species Act of 1973***, as amended, (16 U.S.C. §§ 1531-1543) (ESA), the USFWS was contacted in July 2006 regarding potential impacts of the project on federally listed threatened and endangered species and their critical habitat. In November 2006, GUIS initiated formal consultation with the USFWS. Consultation involved the potential effect of Alternative D (the former preferred alternative) on the following species: Leatherback Sea Turtle, Green Sea Turtle, Loggerhead Sea Turtle, Kemp's Ridley Sea Turtle, Piping Plover, Wilson's Plover, Snowy Plover and Santa Rosa Beach Mouse. During the course of consultation, NPS decided to choose revised Alternative E as the selected alternative. After this decision was made, the NPS determined that the proposed action was not likely to adversely affect federally-listed threatened and endangered species. By letter dated August 21, 2007, the USFWS concurred with NPS' determination, subject to NPS' adherence to Conservation Measures outlined in the letter. As noted above, those Conservation Measures are incorporated by reference in this FONSI.

10. Whether the Action Threatens a Violation of Federal, State, or Local Environmental Law. This action violates no Federal, State, or local environmental law. The Florida Department of Environmental Protection has reviewed this project for consistency with

Florida law and has determined that, at this stage of the project, the proposed activities are consistent with the Florida Coastal Management Program. See letter dated August 1, 2007, from Sally B. Mann, Director, Office of Intergovernmental Programs to Jerry Eubanks, Superintendent, GUIS (copy attached).

Impairment

In addition to reviewing the list of significance criteria, the NPS has determined that implementation of the proposal will not constitute an impairment to GUIS' resources and values. This conclusion is based on a thorough analysis of the environmental impacts described in the draft EA, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in NPS *Management Policies 2006*. Because there would be no major, adverse impacts to a resource or value the conservation of which is (1) necessary to fulfill specific purposes identified in the enabling legislation of GUIS; (2) key to the natural or cultural integrity of GUIS; or (3) identified as a goal in GUIS' General Management Plan or other relevant NPS planning documents, there will be no impairment of GUIS' resources or values.

Public Involvement

The draft EA entitled *Restore Visitor Access to Fort Pickens Area, Santa Rosa Island* was released for public review on November 2, 2006. Availability of the EA was announced through local and regional news media, mailings to a list of interested parties, and GUIS' web page. Public meetings were held in November 2006 to explain the alternatives in the draft EA and accept public comment.

A total of 134 comments were received on the draft EA. Comments were received for and against Alternative D (NPS' former preferred alternative). There were 79 comments in favor of Alternative D (or in favor of just restoring access generally), and 54 comments against Alternative D. Of the latter, 43 advocated a means of access that, in their opinions, would be less costly and less environmentally damaging than Alternative D. The only substantive comments received outlined objections to Alternative D. These comments set forth alleged deficiencies in the analysis supporting Alternative D as the NPS' preferred alternative. Based in part on consideration of these substantive comments, the NPS has chosen revised Alternative E as its selected alternative, as discussed above.

Conclusion

The selected alternative does not constitute an action that normally requires preparation of an Environmental Impact Statement (EIS). The selected alternative will not have a significant effect on the human environment. Adverse environmental impacts that could occur are minor in intensity. There are no unmitigated adverse impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, or elements

of precedence have been identified. Implementation of the action will not violate any Federal, State, or local environmental protection law.

Based on the foregoing, it has been determined that there is no significant impact associated with the selected alternative. Accordingly, an EIS is not required for this project and will not be prepared.

Approved:

Art Frederick
Acting Regional Director, Southeast Region, National Park Service

9/19/07
Date

Melisa Ridenouer
Division Engineer, Federal Highway Administration

20 Sep 07
Date

GULF ISLANDS NATIONAL SEASHORE

ENVIRONMENTAL ASSESSMENT

RESTORE VISITOR ACCESS TO FORT PICKENS AREA, SANTA ROSA ISLAND

ERRATA

As required by National Park Service Director's Order No. 12, the following errata sheets respond to all substantive comments submitted on the environmental assessment (EA) entitled "Restore Visitor Access to Fort Pickens Area, Santa Rosa Island."

Substantive comments from various individuals and organizations have been consolidated and paraphrased for purposes of this document. The comments, with NPS' responses, are set forth below. They follow a brief description of how the selected alternative (revised Alternative E) differs from the preferred alternative in the EA (Alternative D).

Summary of Differences: The selected alternative (Revised Alternative E) differs from Alternative D as follows:

Under revised Alternative E, the NPS will *not* adopt the wider footprint called for in Alternative D. NPS will rebuild the damaged portions of Fort Pickens Road using the design of the existing footprint, i.e., two-lane roadway, with 4-foot paved shoulders to accommodate bicyclists. In addition, NPS will not adopt the realigned sections called for in Alternative D. Instead, the reconstructed Fort Pickens Road will generally follow the alignment that existed as of July 2005, the date the road was last open for public use. In two places the road will be re-aligned to avoid wetlands. Furthermore, NPS will not use sand berms or hardened protective measures to reinforce the road, as contemplated in Alternative D. Under revised Alternative E, the road will be replaced essentially in kind, using a low-cost approach in order to minimize the amount of investment that would be vulnerable to future washouts. Repair of realigned sections will be accomplished using a Sand Filled Cellular Confinement System (CCS) made of polyethylene mat with 10- to 20-inch wide cells that range from 3 to 8 inches deep. Road construction for the realigned segments would involve (a) constructing a layer of 4-inch thick CCS filled with sand, (b) covering the filled CCS with a 2-inch layer of sand, and (c) covering the sand layer with 1 to 2 inches of asphalt concrete. For repair of damaged roadway outside of the realigned areas, a 6-inch cement-stabilized-sand subbase, with a 1- to 1.5-inch asphaltic concrete surface will be used. The cement stabilized sand will consist of semi-hardened mixture of sand and cement.

1. Comment: The NPS concluded in January 2006 (at the Value Analysis/Choosing by Advantages workshop) that hardened structures would severely interfere with natural processes. Alternative D calls for an untested design, with a non-scientific justification, that will cause clear environmental degradation. The proposed hardened structures are essentially buried sea walls. The literature describes in some detail the adverse effects of these structures on coastal geomorphological processes. The EA does not adequately assess the associated impacts or justify selection of an alternative (Alternative D) that incorporates hardened structures.

For the reasons described in the Finding of No Significant Impact, NPS has chosen not to implement Alternative D. The selected alternative, revised Alternative E, does not call for the use of armoring or sand berms. Apart from two re-aligned sections designed to avoid wetlands, the road will be repaired and reconstructed in the existing footprint, on the existing alignment.

2. Comment: The EA should not have dismissed the alternative of replacing the road with alternative materials. One stated reason for dismissal – that these materials would not allow desired road speeds – is arbitrary.

The reconstruction/repair of Fort Pickens Road with alternative materials was dismissed because the use of such materials is not feasible. In addition to the reasons outlined in the draft EA, a local ordinance prohibits the use of clay on Santa Rosa Island. Also, the United States Fish and Wildlife Service (USFWS) has expressed concern that shell scatter and other foreign materials could have adverse impacts on threatened or endangered species. Achievement of desired road speeds on Fort Pickens Road is a relevant consideration given the high level of visitation at this unit. NPS retains the ability to regulate road speeds as needed to protect threatened and endangered species.

3. Comment: Alternative C would impede overwash and thus adversely affect piping and snowy plovers. The GUIS is critical habitat for these birds from a range-wide perspective. Contrary to the EA, Alternative D would harm park resources, particularly threatened and endangered birds (piping plover and snowy plover).

As noted above, NPS has chosen not to implement Alternative D, but has selected revised Alternative E instead. The NPS has determined that revised Alternative E is not likely to adversely affect any federally-listed threatened or endangered species. The USFWS has concurred in this determination.

4. Comment: The fact that NPS will seek a policy waiver means that it is knowingly choosing the worst environmental alternative (Alternative D), in contradiction of the stated objectives of the project.

The NPS has decided not to implement Alternative D. Revised Alternative E minimizes impacts to natural shoreline processes and is consistent with NPS Management Policies.

5. Comment: The EA does not present a full range of alternatives. Examples include a cheaper sacrifice road, and bus-sized dune buggies with beach sand compatible tires that could travel on sand, not asphalt.

The EA analyzes all alternatives deemed feasible given the purpose and need for the project, as well as such factors as funding constraints, the need to connect local communities with the Fort, etc. Alternative E from the EA calls for what amounts to a sacrificial road. Revised Alternative E is a lower-cost version of the original Alternative E.