

COMPATIBILITY DETERMINATION

Use: Right-of-Way (road)

Refuge Name: Savannah National Wildlife Refuge (NWR, refuge)

Date Established: April 6, 1927

Establishing and Acquisition Authority:

Executive Order # 4626, dated April 6, 1927

Executive Order # 5748, dated Nov 12, 1931

Executive Order # 7391, dated June 16, 1936

[16 U.S.C. 715d]

Migratory Bird Conservation Act -- (February 18, 1929)

[16 U.S.C. 742f(b)(1)]

Fish and Wildlife Act of 1956 -- (August 8, 1956)

[16 U.S.C. 460k-1]

Refuge Recreation Act, and amendments -- (September 28, 1962) [16 U.S.C. 460k-2]

PL 93-205 -- (December 28, 1973)

16 U.S.C. 3901(b), 100 Stat. 3583

(Emergency Wetlands Resources Act of 1986)

Refuge Purposes:

“...as a refuge and breeding ground for birds and wild animals subject to future use in navigation if necessary and to valid existing rights if any” (Executive Order 5748, April 6, 1927)

“...for lands acquired under the Migratory Bird Conservation Act “for use as an inviolate sanctuary, or for any other management purpose, for migratory birds” (16 U.S.C. §715d)

“...for lands acquired under the Refuge Recreation Act for “(1) incidental fish and wildlife- oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species” (16 U.S.C. §460k)

“...for “the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions” (16 U.S.C. §3901(b), 100 Stat. 3583, Emergency Wetlands Resources Act of 1968)

“...for the development, advancement, management, conservation, and protection of fish and wildlife resources” (16 U.S.C. §742f(a)(4))

“...for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude” (16 U.S.C. §742f(b)(1), Fish and Wildlife Act of 1956)

National Wildlife Refuge System Mission:

The mission of the National Wildlife Refuge System, as defined by the National Wildlife Refuge System Improvement Act of 1997, is:

...to administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Description of Use:

What is the use? The use is an amendment to an existing Right of Way (ROW) for State Route 25 on lands within Savannah NWR. The Georgia Department of Transportation (GDOT) proposes the demolition and replacement of bridges 051-0054-0 (known as the Houlihan Bridge) and 051-0055-0 (known as the Middle River Bridge) along State Route (SR) 25 in Chatham County, Georgia (Story, 2018a). In order to complete bridge demolition and construction, it is necessary to grant both temporary and permanent amendments to the GDOT Right of Way access for both the Savannah and Middle River Bridges. Illustrated below the total temporary and permanent easement expansions required to allow for these projects to be properly conducted.

	Savannah Crossing Bridge	Middle River Bridge	Per Site Easement Expansion Totals (Acres)
Permanent ROW (Acres)	0.144	0.340	0.484
Temporary ROW (Acres)	0.413	0.686	1.099
Combined ROW total	0.557	1.026	1.583

Table 1: This table provides a visual breakdown of the easements that will be needed to allow for construction of the SR 25 bridges to initially be built and then maintained after the fact.

As shown above, 1.099 acres of temporary easement will be necessary (.413 acres for the Savannah Crossing bridge and .686 acres for the Middle River bridge) and an additional .484 acres of permanent easement (.144 for the Savannah Crossing bridge and .340 for the Middle River bridge). In total, 1.583 acres of easements will be necessary to allow for bridge construction, deconstruction, and maintenance (E. Duff, personal communication, August 12, 2020a, personal communication, August 12, 2020b).

Where is the use conducted? The proposed project is approximately six miles North of Savannah, Georgia and will result in roadway structure changes along the SR 25 corridor commonly known as Alligator Alley (Story, 2018a). The primary ecosystem/habitat in the Project Study Area (PSA) is Tidal Freshwater Marsh. The marsh here plays a very important role as it provides excellent opportunities for high plant and structural diversity offering necessary resting, nesting, and feeding habitat for the numerous resident and migrating waterfowl, as well as, a variety of fur-bearing mammals including river otter, mink, and beaver (*Tidal Freshwater Marsh - Savannah - U.S. Fish and Wildlife Service*, 2014). Further highlighting the importance of this ecosystem is the presence of the iconic American Alligator (*Alligator mississippiensis*), two species of sturgeon, shortnose (*Acipenser brevirostrum*) and Atlantic (*A. oxyrinchus*), and the West Indian manatee (*Trichechus manatus*) (Fisheries, 2021). The last three of which are all listed under the Endangered Species Act (ESA) as endangered and are found in both waterways (*Manatee Reclassified from Endangered to Threatened as Habitat Improves and Population Expands - Existing Federal Protections Remain in Place*, 2017). Management for the West Indian manatee is seasonal as they historically reside in the Savannah and Middle Rivers from April to October. The Georgia Department of Transportation (GDOT) employs special provisions in the manatee habitats includes use of manatee spotters, stop-work conditions, speed restrictions for in-water work, and explosive charge size limitations.

Following these provisions will be required throughout the length of the project during the months of April to October.

Encapsulating the waterways are saltmarshes which play an important role in the lives of bald eagles (*Haliaeetus leucocephalus*), osprey (*Pandion haliaetus*), the threatened wood stork (*Mycteria americana*), and the MacGillivray's seaside sparrow (*Ammodramus maritimus macgillivraii*) which is under review for federal protection. These bird species, as well as many others, rely on the saltmarshes to play an essential role in their nesting and foraging practices. In terms of the previously mentioned wood stork, work in this area may have increased implications as the project area and 3.5 miles around are known as a core foraging location for the species. Wood stork will often use the ditches, pond margins, coastal areas, and shallow wetlands in the area to feed. Continued maintenance or enhancement of the habitat and water resources during the project is of the utmost importance to allow the wood stork to continue cultivating prey species necessary to support wood stork chicks and overall recovery of the species (C. Cappola, personal communication, November 28, 2017).

As for the plant life in the area, the landscape is composed widely of giant cutgrass (*Zizaniopsis miliacea*). Giant cutgrass is a warm-season perennial grass that grows between 3-9 feet and generally grows during the late fall in dense bunches from large creeping underground stems which produce lateral shoots from which it grows. This plant persists as it thrives on the freshwater marshes that encapsulate the Savannah and Middle Rivers and does best in areas where water levels fluctuate from soil surface to 12" above (Magee, 2002). Also, important to note is the presence of the Carolina bishopweed (*Ptilimnium ahlesii*) which is currently under review by the USFWS for potential federal protection. This plant, if found, will be on the eastern end of the project survey corridor and will be in freshwater tidal marshes. If seen it can be described as a branched annual herb with leaves divided into filiform divisions sometimes appearing undivided and quill-like towards the base of the plant due to loss of leaflets while also flowering during the months of June to August (Punsalan, 2016).

Construction will be conducted on SR 25 crossing the Savannah and Middle Rivers adjacent to Savannah NWR. A permanent expansion of the ROW Outgrant by 0.48 acres, through a 50 year land use easement, will allow for long-term maintenance of these structures. Of this, 0.36 acres will be used to develop a maintenance road and the additional .12 acres will be necessary as a buffer area that will, over time, again become primarily a giant cutgrass habitat and be maintained as ROW. The proposed project would replace the bridges without widening the SR 25 roadway. Location of the proposed bridges would be offset 50 feet north of, and parallel to, the existing alignment. The bridges would be lengthened to reduce impacts to the SR 25 ROW and the impact to any environmentally sensitive areas. Total project length would be approximately 1.44 miles (Story, 2018a). The proposed ROW would require a minimum ROW expansion of 114 feet and a maximum 231 feet wide to the west of the Savannah River from the centerline of the proposed bridges. To the east of the Savannah River, the proposed ROW width would remain approximately 200 feet and would not require any expansion of the ROW. To allow for this project to commence it will be required that the NWR Realty team to work with the Refuge staff and GDOT to outline a new ROW to allow for the construction and future maintenance of the SR 25 roadway.

During construction of the new bridges, minimal traffic disturbances or access to the refuge or boat ramp are expected as the plan is to keep the Houlihan and Middle River bridges operational during construction. Following this, it is expected that some travel and access restrictions may occur, but will last no longer than 30 days. Plans for managing traffic disturbances and access to the recreation

and refuge site can be seen in Appendix B. As for material storage, it has been made clear by GDOT that the contractor will keep all materials off-site, or in a very limited capacity, at the Houlihan Boat Ramp with approval from Port Wentworth as they are responsible for the management of the site. If materials are stored in this area, they will follow along with all relationships associated with monitoring and maintaining the environmentally sensitive areas. In order to allow for construction, it is also possible that the use of a false bridge may occur as well. Use of this structure will allow for materials to be stored on a short-term basis and for construction purposes only. For permanent storage, it will be suggested that the contractor utilize an off-site storage facility to store any and all materials that may be needed during the construction of the Savannah Crossing bridge.

When is the use conducted? Construction on the bridges is planned to begin in 2022 and is expected to be open to traffic by April 2026 (Nelson, n.d.). Seasonal restrictions that are to be expected will come during the months of April to October when historically the West Indian manatee is present in the waters of the Savannah and Middle Rivers. During these months the methods at which certain aspects of this project will be limited and are identified in the section on the description of use. Public use programs are not expected to see any impacts as access to the Refuge and the Houlihan Boat Ramp will be limited or nonexistent.

How is the use conducted?

For the duration of the project, the use of the temporary easement land will be conducted using a Special-Use Permit (SUP) that will last through the construction period and will encompass an area of 1.099 acres (0.413 Savannah Crossing bridge, 0.686 Middle River bridge).

James P. Houlihan Bridge:

Existing Facility: The project is located at the crossing of SR 25 over the Savannah River in Chatham County, Georgia. The existing bridge is 33.6 feet wide by 1,465-feet long with one 12-foot lane in each direction and narrow unpaved shoulders ranging from 0 to 5 feet wide on both approaches to the bridge. There are no bike lanes or sidewalks currently present. The existing ROW along the project corridor is approximately 80 feet wide to the west of the Savannah River and 200 feet wide to the east of the Savannah River¹.

Proposed Project: Construction of the new Savannah Crossing bridge will result in a new 2,681-foot-long by 43-foot-wide bridge with two 12-foot travel lanes with 8-foot shoulders. The proposed ROW on the west side of the Savannah River would range between 114 and 231 feet from the centerline of what will become the newly constructed roadway. To the east, the ROW will remain approximately 200 feet wide. To accommodate this, use of both temporary and permanent easements will be required within the refuge on both the north and south side of the existing SR 25 ROW. A chart above displays the breakdown of easement land for this project in the description of use section. As outlined earlier, 0.413 acres would be used for a temporary easement. This agreement would expire upon completion of the project and lands listed acreage would be restored to pre-construction conditions. The remaining 0.144 acres would be included in a minor expansion of the ROW Outgrant between the refuge and GDOT. Newly designated ROW would be used only for the maintenance of the SR 25 bridge and roadway slopes (Story, 2018a).

Middle River Bridge:

Existing Facility: The existing bridge is 33.6-feet wide and 1,819-feet long with one 12-foot lane in each direction and narrow unpaved shoulders ranging from 0 to 5 feet wide on both approaches to

the bridge. There are no bike lanes or sidewalks currently present. The existing ROW along the project corridor is approximately 200 feet wide (Story, 2018a).

Proposed Project: GDOT has proposed the construction of a 43.25-foot-wide bridge by 1,820 feet long bridge that would include two 12-foot travel lanes with 8-foot shoulders on either side. Positioning of the new bridge will be 50 feet north of and parallel to the existing bridge. Bridge construction will require the permanent expansion of the current ROW by 0.34 acres and an additional, 0.686 acres of temporary easement access needed during construction. Upon completion of the project, restoration of the temporary access will occur via natural regeneration of the giant cutgrass (Story, 2018a).

Over the course of bridge construction, it is important that visitors to the refuge are taken into consideration as well. Road closures associated with the project area are expected to be minimal and no longer than 30 days. Also, access to the Houlihan Boat Ramp will not be impeded as it is an important area for emergency river access, as well as for potential recreators choosing to experience more remote aspects of the refuge or simply utilize the waterway (Nelson, n.d.). The steps taken to minimize visitor impacts and potential detour routes can be seen in Appendix B.

Why is the use being proposed?

This roadway is classified as a Rural Minor Arterial which, according to the GDOT Design Policy Manual, has the service characteristic of traffic movements with trip length and density suitable for integrated interstate or inter-county service (Story, 2021). Of these amounts, approximately 42.50% of these vehicles in a 24-hour period were truck/semi-trailer traffic, in the highest peak hour, truck/semi-trailer traffic at the study location comprised approximately 29.5% of all vehicles. Due to the outdated load capacity and structural deficiencies explained below, replacement of each bridge has been seen as necessary to safely support the volume of truck/semi-trailer traffic and Refuge visitors utilizing the SR 25 corridor now and in the future (Story, 2018a).

James P. Houlihan Bridge:

The James P. Houlihan Bridge on SR 25 over the Savannah River, GDOT Bridge 051-0054-0, was built in 1922 and reconstructed in 1954. The bridge consists of a two-span truss swing bridge on a massive center column along with 49 spans of reinforced concrete deck girders (RCDGs) on concrete caps with concrete piles. As of now, the overall condition of the bridge can be classified as in fair condition although there are several justifiable reasons think otherwise including instances of having spalls with exposed rebar. The superstructure is in fair condition, with deflection cracking in the RCDGs. The substructure is in fair condition, with cracking in the concrete piles and spalling with exposed rebar. Furthermore, the bridge is rated to a maximum load capacity of 73,000 pounds which is below current design standards for bridges according to the GDOT (Georgia Department of Transportation, n.d.). The deficiencies outlined before are compounded by the fact that approximately 50% of the vehicle traffic using this roadway is composed of trucks/semi-trailers. The frequency of use and weight of these vehicles have caused significant impact to the bridges horizontal truss, requiring irregular bridge closures for emergency repairs. Alternatives considering rehabilitation and maintenance of the structure were investigated, but due to age, structural integrity, substandard load capacity, previous damage to the steel truss, and unknown foundation, bridge replacement has been suggested. Further highlighting a need for bridge replacement came during project-specific coordination with the U.S. Coast Guard (USCG) where it was determined that the current horizontal clearance (90 feet) does not meet recommended navigational clearance (100 feet) (Story, 2018a).

Middle River Bridge:

The Middle River Bridge on SR 25 in Port Wentworth, Georgia, GDOT Bridge 051-0055-0, was built in 1922 and widened in 1953. The bridge consists of 69 spans of RCDGs on concrete caps with concrete piles and columns. This current bridge is rated to a maximum load capacity of 73,000 pounds which is below current design standards for bridges according to the GDOT (Georgia Department of Transportation, n.d.). The overall condition of this bridge would be classified as fair as the deck is in fair condition, but has instances of spalling with exposed rebar in every span. The superstructure is in fair condition, with delamination at numerous locations in the RCDGs and spalls with further exposed rebar. The substructure is in fair condition, with moderate to severe cracking and spalls with exposed rebar. This bridge is classified as having an unknown foundation and, therefore, could be at risk for scour. Within the river, signs of differential settlement have been seen at several bent locations. Due to the aforementioned structural concerns, it has been recommended that this bridge is replaced.

Availability of Resources: Refuge staff have to prepare this Compatibility Determination (CD) to evaluate refuge impacts and the need to issue a SUP to allow access to refuge lands during the construction period. Land that is necessary for the ROW Outgrant expansion will be permitted for use after working with the Service Realty office. GDOT has conducted and prepared a ROW application Form 299, required NEPA compliance, a Section 7 evaluation, and the required cultural and archaeological planning documents. During the planning process, the Ecological Services Office from Townsend, GA conducted field investigations to prepare the endangered species evaluation. From a personnel side, resources, staff time, and transportation expenses will be required for the necessary project monitoring during construction and is outlined below in Table 2. SNWR will not incur any costs associated with the project outside of the tasks listed in Table 2.

Task	Employee Hours	Estimated Costs
Preparation of Compatibility Determination	20	\$1,500
Preparation of Construction Phase Permit	6	\$450
Review of Construction Documents	10	\$750
Review of Section 7 and Archeological Documents	10	\$750
Ecological Services Field Investigations	12	\$900
Monitoring During Construction	30	\$2,250
Transportation (to and from site)	312	\$1,150
	Total	\$7,750

Table 2: Estimated expenses to administer and monitor the Houlihan Bridge and Middle River Bridge replacement along State Route 25 in Chatham County, Georgia, on Savannah National Wildlife Refuge.

Anticipated Impacts of the Use: Savannah NWR will experience impacts from replacement of both bridges through an expansion of the current ROW Outgrant by 0.484 acres and 1.099 acres of temporary access for the lifespan of the construction process. Temporary access is necessary for the purpose of bridge demolition, reconstruction, roadway tie-in work and other necessary construction activities that will directly alter the continuity of the land. Land that is used, post-construction will be regraded and restored to the natural function post-construction. Pursuit of this project will lead to short instances of roadway disruption (30 days or less) throughout the construction process. Refuge

lands that make up the ROW expansion have the sole purpose of providing maintenance to bridge abutments and roadway slopes. Because of these easements, a new ROW will need to be designated, one that will not affect any developed facilities (parking, recreational areas, boat ramps). The new ROW will lay adjacent to the current SR 25 ROW and consist of developing forests and tidally influenced estuarine wetlands. New ROW establishment for the Savannah Crossing and Middle River Bridges will be offset from their current locations and will allow GDOT to perform maintain these structures while having very minimal affects to off-refuge wetlands on the east and west sides of either bridge. While not in our jurisdiction, a Section 404 permit from the U.S. Army Corps of Engineers (Corps) would be required. In accordance with the Corps Section 404 requirement, these types of impacts would require mitigation. Planned mitigation would be provided through the purchase of wetland credits from a mitigation bank approved by the Corps, which is GDOT's preferred mitigation strategy. A map outlining the new ROW easements can be found in Appendix C.

In planning for these projects, numerous alternatives were considered (Story, 2018b). These alternatives were evaluated to explore options that would avoid Savannah NWR, avoid road closure for periods longer than 24 months, and limit environmental impacts. Upon evaluation of each alternative, it was determined that none proved to be effective to avoid the refuge during bridge construction or without altering the current ROW (Georgia Department of Transportation, 2020). Understanding this, the SR 25 bridge projects were deemed a "Section 4(f)" project by the Federal Highway Administration (FHWA). This distinction is made to safeguard that due diligence is made toward the integrity of recreation areas and waterfowl/wildlife refuges as well as other sensitive areas (*Section 4f | Legislation, Regulations, and Guidance | Environmental Review Toolkit | FHWA, n.d.*). As a recreation facility owned by the United States Government and managed by the Service, Savannah NWR is afforded special protections under Section 4(f) of the Department of Transportation Act (recodified in 49 U.S.C. 303 and 23 U.S.C. 138). Under the provisions of Section 4(f), if the proposed project would result in adverse effects to the park or recreation facility, the transportation agency must conduct an evaluation to demonstrate that there is no prudent and feasible alternative to the use of the 4(f) property (*Section 4f | Legislation, Regulations, and Guidance | Environmental Review Toolkit | FHWA, n.d.*). Because this evaluation can be expensive and potentially result in project delays, an exemption is provided in cases where the official with jurisdiction over the park or recreation area concurs with a determination that the proposed impacts are not adverse. This concurrence enables the FHWA to make a *de minimis* (minimal impact) finding, which satisfies the requirements of Section (4) and precludes the need for a Section 4(f) Evaluation (*Section 4f | Legislation, Regulations, and Guidance | Environmental Review Toolkit | FHWA, n.d.*). Additionally, the refuge agrees that the impacts associated with Savannah Crossing and Middle River bridge projects are minor and have been vetted adequately to accomplish the task. It is anticipated that upon review, the FHWA will agree and classify the project as a "*de minimis*" finding upon their review.

Short-Term and Long-Term Impacts: Construction of these bridges would require a temporary work trestle by GDOT which would encroach into the required ROW from Savannah NWR property. A work trestle is a temporary platform necessary to construct the proposed bridges. Trestle placement would be just north of the current bridges and would not cross the entirety of the waterway, allowing for continued boat navigation during construction. The impacts that will be seen from this project may include erosion, vegetative die-off, and aquatic soil disturbances. Erosion and vegetative die-off will likely occur from multiple sources including overshadowing from the trestle on either side of the river and trampling of the site from construction site workers (Forman et al., 2003).. Vegetative die-off may lead to significant erosion of the riverbank especially when combined

with high foot traffic from all parties involved in bridge construction. Loss of vegetation may also usher in further opportunities for erosion due to rain fall from seasonal storms. As vegetation decreases in an area opportunities for raindrop velocity also decrease offering more chances for significant erosion to occur (Forman et al., 2003). Instances of significant erosion may lead to loss of marshland habitat negatively impacting the previously mentioned bird species and other wildlife in the area.

It is expected that upon completion, that the giant cutgrass will most likely have a strong return to the area as it is generally a very hearty plant species and whose roots will most likely allow for revegetation over the course of the project allowing for a swift return in years following completion (Magee, 2002). Mitigation of erosion will come in the form of silt fencing, installation of hay bales, and other Best Management Practices should be used on road shoulders to prevent erosion and sedimentation in drainage ditches. To prevent the spread noxious weeds replacing the native giant cutgrass during construction, mulch/hay used on the project will be composed of certified weed-free and certified weed-free mulch. Sources must be approved by the refuge manager prior to purchase and copies of the applicable documentation must be provided to the refuge manager. Furthermore, the contractor will be responsible for regular cleaning of machinery associated with the project site. A log will be maintained that can be accessed by the Refuge Manager upon request.

Another consideration is how the presence of the trestle and pile installation may affect water quality. It must be noted that there is a possibility that water quality and habitat impact may be incurred due to factors associated with the trestle and other outside factors. Understanding this and a plan to utilize a similar placement as well as proper design and planning, it is expected that the impacts will be minimized (B.F. Birkitt & Dougherty, n.d.). Acknowledging this, it is important to mention that the basic presence of this structure could have negative implications on the shortnose and Atlantic sturgeon, as well as, West Indian manatee, all of which were previously stated as having Federal protection. The presence of the species will make for certain seasonal adjustments with how work can be conducted, especially during the months of April to October, as this is the most common time period when the West Indian Manatee is present in these waterways (C. Cappola, personal communication, November 28, 2017).

Access to Savannah NWR from eastbound SR 25 would be disrupted due to a temporary (30 days or less) off-site detour for roadway tie-in work; however, access to the Savannah NWR would be maintained throughout the duration of construction which is illustrated in Appendix B. For those wishing to use the waterway, minimal impact is expected as the trestle will not span the width of either river. There may be some instances of noise disturbance that may affect people's experiences when utilizing these lands. Trestle removal will be a top-down process and have a very limited effect as stated by the Corps (Forman et al., 2003). As described earlier, it is expected that the 1.099 acres that will be used as temporary easement land will, over time, naturally revegetate and reestablish the habitat to its pre-construction state.

Cumulative Impacts: For areas on the existing highway ROW, a restoration plan will be outlined by GDOT and will affect what would be the old SR 25 roadbed and shoulder. In this area, a total of 0.36 acres will be regraded to an elevation reminiscent to the surrounding wetlands and will be reseeded or left naturally to vegetate. Temporary access to 1.099 acres (0.413 for the Savannah Crossing bridge and 0.686 for the Middle River bridge) will be provided to the selected construction company via SUP throughout the duration of the project and will expire upon completion. These parcels of land will then be allowed to naturally revegetate upon project completion. As for the 0.484

(0.144 for the Savannah River and 0.340 acres for the Middle River) of permanent easement access, the use can be broken down succinctly. 0.21 acres will be used for the roadway slopes and the remaining 0.27 acres will allow for the continued maintenance of the slopes, including the bridge end rolls post-construction. Outside of the previously mentioned ROW and easement access, it is expected that this project area will see negligible impacts on refuge wildlife and habitats. Over the long-term much of the area is expected to naturally revegetate and be rehabilitated to a pre-construction state.

In considering the ROW expansion request, the Service Manual 603 FW2; 2.11 D allows “Maintenance of an existing right-of-way includes minor expansion or minor realignment to meet safety standards.” Examples of minor expansion or minor realignment include expansion of the width of a road shoulder to reduce the angle of the slope; expansion of the area for viewing on-coming traffic at an intersection; and realignment of a curved section of road to reduce the amount of curve in the road. The safety concerns with this bridge and roadway projects are defined in the “Why is the use being proposed?” section of this document.

The right-of-way construction as described is determined to be a compatible use of the refuge. Potential impacts from the GDOT construction of the new bridges on the refuge’s fish and wildlife would be minimal and would not materially interfere with, or detract from, the achievement of the Refuge System mission or the purposes of the refuge.

Public Review and Comment:

A Notice of Availability for Comment on the Draft ROW for the replacement of the Houlihan and Middle River bridges was posted at the Savannah Coastal Refuges Complex headquarters, visitor center, and the Savannah Morning News for public review and comment starting on March 3, 2021 for a period of 14 days ending at close of business on March 17, 2021. A copy of the Notice and Draft CD were also posted on the refuge website and Facebook page.

Summary of Comments Received:

Determination (check one below):

Use is Not Compatible

Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. Granting of approximately 0.484 acre of ROW within the refuge and located adjacent to the existing SR 25 ROW. Approximately 1.099 acres would be temporary easement and would expire with completion of the project post construction.
2. The newly acquired 0.484 acre of permanent ROW would only allow access for GDOT to perform maintenance on the SR 25 bridges and roadway slopes to ensure safety requirements are met.
3. Materials will be stored off Refuge land, until the temporary structure is in place to allow for materials storage is constructed.

4. GDOT must grade and restore the temporary easement land post construction.
5. Temporary easement will expire after the construction project is complete.
6. GDOT must maintain access to SNWR for the duration of the project.
7. The GDOT and partners must complete the planned restoration of 0.36 acres of the former roadbed from GA 25, per the refuge manager's direction.
8. Prior to beginning construction, GDOT shall provide proof that all other required Federal and State permits were acquired.
9. GDOT shall ensure full compliance with all terms and conditions within, or attached to, the Right-of-Way Permit and all modifications or amendments thereof.
10. **Pre-Construction Measures**

Prior to construction, all associated parties, FWS, GDOT, and the contractor will agree with the guidelines associated with the outline Special-Use-Permit. Additionally, GDOT/contractor, prior to construction, acquire the permits necessary for construction and upon request present them to the Refuge Manager.

Seasonal considerations will be taken into account based on the presence of the West Indian manatee and the . This will prevent certain methods of construction and deconstruction to occur, providing the best opportunity for the West Indian manatee to thrive during the construction period.

11. **Construction Measures**

The contractor(s) will keep logs documenting the cleaning history of each piece of equipment and make the logs available to the refuge manager upon request. Any equipment found to be in noncompliance with the cleaning requirement will be removed from the project site until it has been adequately cleaned.

To prevent the spread of noxious weeds and invasive species during construction, mulch/hay used on the project will be composed of certified weed-free and certified weed-free mulch. Sources must be approved by the refuge manager prior to purchase and copies of the applicable documentation must be provided to the refuge manager.

During construction, erosion control measures such as silt fencing, installation of hay bales, and other Best Management Practices should be used on road shoulders to prevent erosion and sedimentation in drainage ditches.

Disturbed area will be maintained by the GDOT or contractor until stabilized by seeding or other Best Management Practices.

The contractor and subcontractors must notify their workers to watch for the presence of any prehistoric or historic remains, including but not limited to arrowheads, pottery, ceramics, flakes, bones, graves, gravestones, or brick concentrations during the construction phase of the project. If any such remains are encountered, the Resident Construction Engineer (RCE) will be immediately notified and all work in the vicinity of the discovered materials shall cease until the GDOT Archaeologist directs otherwise.

During the months of April to October special practices relating to the presence of West Indian manatee will persist. This includes the use of manatee spotters, stop-work conditions, speed restrictions for in-water work, and explosive charge size limitations.

12. Post-Construction Measures

Post-construction monitoring of the restored Right-of-Way will be conducted by GDOT and revegetation will be considered successful when the density and stabilizing vegetation are similar in density and cover to adjacent, undisturbed lands. If this monitoring indicates the presence of noxious weeds on the Right-of-Way, the contractor will take appropriate measures to control noxious weeds using Service-approved herbicides. The GDOT will have full responsibility for maintenance of the Right-of-Way.

Fifteen terms and conditions are specified in 50CFR 29.21-4. By reference, these terms and conditions are hereby considered to be a part of this Compatibility Determination and will be included (or minor variations thereof) in the Right-of-Way Permit.

Justification:

Right-of-Way (ROW) requests are reviewed through regulations 340 FW 3 and Compatibility Determinations (603 FW 2). Both evaluation methods are currently being employed.

Expansion of the ROW associated with the State Route 25 (SR 25) roadway is essential for the project as well as the health and safety of the people who regularly use the roadway. SR 25 and the associated Houlihan and Middle River bridges are classified as a Minor Rural Artery of which 42.5% of the users come in the form of truck/semi-trailer due to its proximity to the Garden City Terminal. Expansion of the ROW associated with this roadway is necessary and will come at a small cost of .48 acres. Transfer of this land will allow for improved safety and health of users and those who maintain the roadway as the expanded ROW will be restricted to Georgia Department of Transportation use to maintain the roadway and associated roadway slope. With a recent history of unplanned, irregular road closures, expansion of this ROW and eventual completion of the bridges will be essential for the continued use into the future.

As a recreation facility owned by the U.S. Government and managed by the U.S. Fish and Wildlife Service (USFWS), Savannah National Wildlife Refuge is afforded special protections under Section 4(f) of the Department of Transportation Act (recodified in 49 U.S.C. 303 and 23 U.S.C. 138). Under the provisions of Section 4(f), if the proposed project would result in adverse effects to the park or recreation facility, the transportation agency must conduct an evaluation to demonstrate that there is no prudent and feasible alternative to the use of the 4(f) property. Because this evaluation can be expensive and potentially result in project delays, an exemption is provided in cases where the official with jurisdiction over the park or recreation area concurs with a determination that the proposed impacts are not adverse. This concurrence enables the Federal Highway Administration to make a de minimis (minimal impact) finding, which satisfies the requirements of Section (4) and precludes the need for a Section 4(f) Evaluation.

Biologists from the USFWS Ecological Services Office have investigated protective species occurrences within a three-mile radius of the project area. The project design has incorporated all concerns and recommendations from the associated consultation. As for the wetlands that will be affected within the current ROW, mitigation is the responsibility of the U.S. Army Corps of Engineers, Savannah Chapter, following Section 404 of the Clean Water Act.

Further, in considering the ROW expansion request, USFWS Manual 603 FW2; 2.11 D, allows “Maintenance of an existing right-of-way includes minor expansion or minor realignment to meet safety standards.” Examples of minor expansion or minor realignment include expansion of the width of a road shoulder to reduce the angle of the slope; expansion of the area for viewing on-coming traffic at an intersection; and realignment of a curved section of a road to reduce the amount of curve in the road.

NEPA Compliance for Refuge Use Description (Check on below):

- Categorical Exclusion without Environmental Action Statement
- Categorical Exclusion and Environmental Action Statement
- Environmental Assessment and Finding of No Significant Impact
- Environmental Impact Statement and Record of Decision

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Policy and Regulations

- Regulations: 50 CFR 29.21, et seq.
- Policy: 340 FW 3; 603 FW2, 2.11 D.

Appendix A: Equipment Cleaning Log

Form Completed By: _____

Date: _____ **Time:** _____

Location of Equipment: _____

Equipment Type: _____

Equipment ID: _____

(e.g., company, unique ID number)

Cleaning Method: (check all that apply):

Scrape Down Steam Wash

Blow Down (compressed air) Power/Pressure Wash (water)

Other (Describe):

Comments:

Approval of Compatibility Determination

Refuge Manager/Project Leader _____

Savannah NWR Signature Date

Concurrence:

Refuge Supervisor _____

Area III, Interior Regions 2 and 4 Signature Date

Concurrence:

Regional Compatibility _____

Coordinator, Interior Regions 2 and 4 Signature Date

Concurrence:

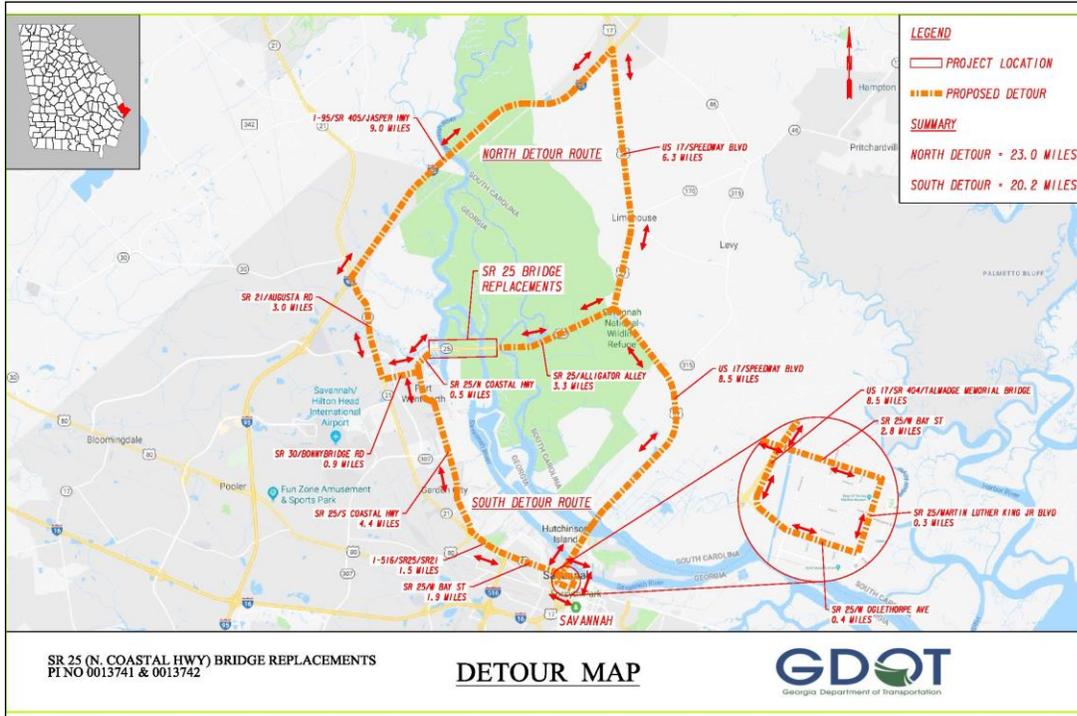
David Viker, Regional Refuge Chief _____

National Wildlife Refuge System Signature Date

Interior Regions 2 and 4

Mandatory 10-Year Reevaluation Date: _____

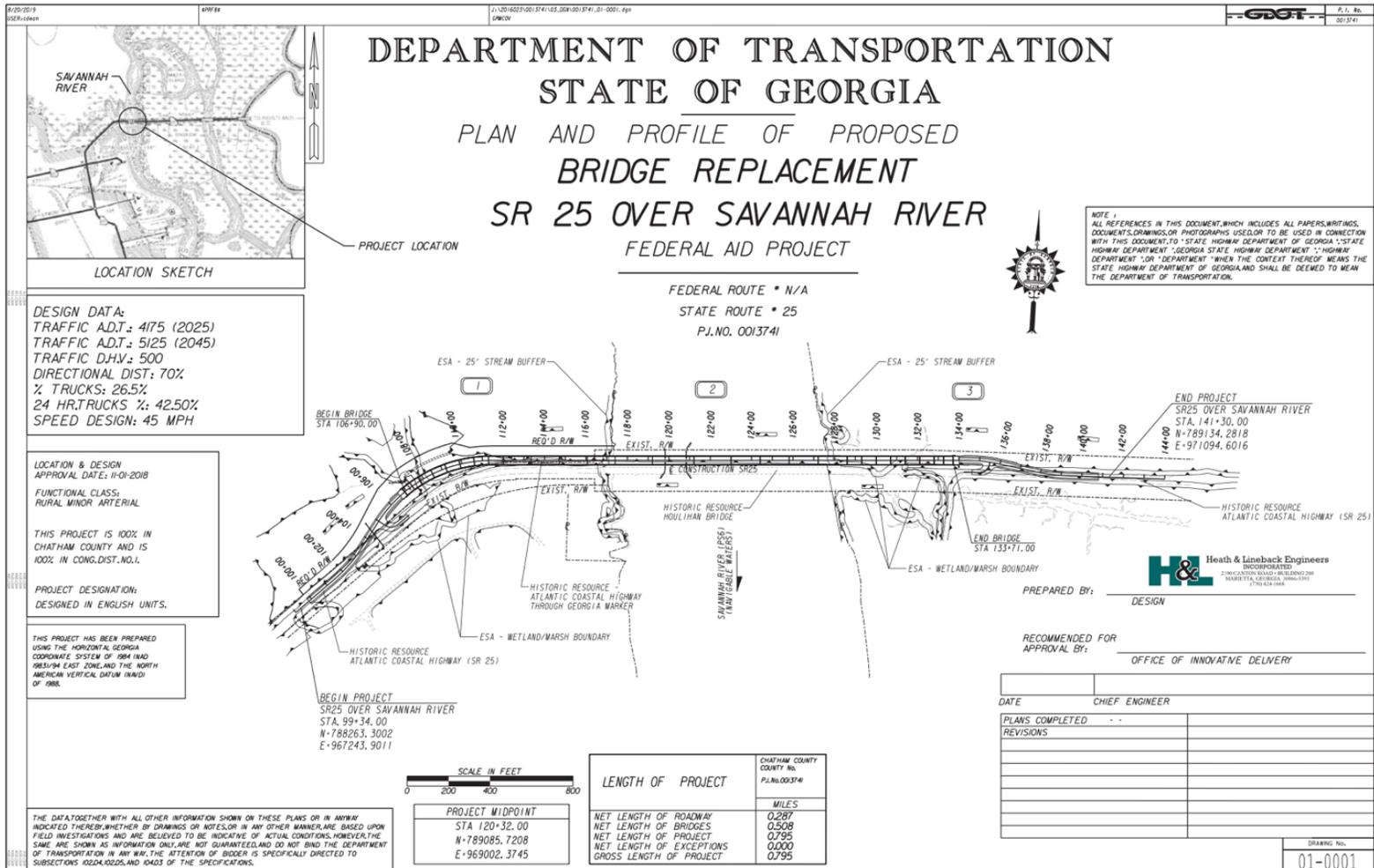
Appendix B: Route detour plan & Houlihan Boat Ramp and SNWR Impact Plan



PI Nos. 0013741 & 0013742—Potential Impacts to the Houlihan Landing Boat Ramp

(Nelson, n.d.)

Appendix C: Bridge Replacement Plan



(E. Duff, personal communication, August 12, 2020a, personal communication, August 12, 2020b)